

**AIRSOFT SYSTEMS**

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# **ASHU** **HOP-UP UNIT**

for AR15/M16/M4 AEG with ASCU

**ATTENTION!** PLEASE READ CAREFULLY THIS INSTRUCTION AND USER MANUAL BEFORE YOU PROCEED WITH THE INSTALLATION OF THE ASHU.

## AIRSOFT SYSTEMS HOP-UP CHAMBER WITH EMPTY MAGAZINE DETECTION FUNCTION

For M16/M4/AR15 Marui type of AEG with ASCU GEN.2

**PLEASE READ THIS MANUAL ENTIRELY BEFORE THE INSTALLATION!**

**ATTENTION!** We do recommend that this installation is done by a skilled airsoft technician.

**ATTENTION!** Before starting the installation check the gap between the back side of the bolt-catch lever and the upper. It needs to be at least 3 mm (0,12 inch) If you do not have that gap or your Bolt Catch lever or the lever is fixed with no movement in it, you will need a Dremel tool to amend it in order to be possible to install the Bolt-Catch switch on it.

**WARNING!** For improved air seal the hop-up rubber sits closer to the nozzle. This is why this hop-up chamber may not feed properly if the magazine used is with a weakened spring.

### Installing The Hop-up Chamber To The Inner Barrel:



1. Push out the adjustment slider. Be careful not to loose the spring.
2. Insert the inner barrel with the hop-up rubber into the hop-up chamber and click the C-lock to fix the barrel in place.

3. Make sure that the bucking is 3.5 mm (0,138 inch) long. If it is longer cut it with cardboard/utility knife. (This is in order to optimize the the effective surface of contact between the hop-up rubber and the BB).



\* The pictures above only illustrate why the bucking will work better if it is 3,5 mm long

4. Place the bucking in the adjustment arm and push the arm in the chamber

5. Slide back the adjustment slider.

### Installing the ASHU in the AEG with ASCU Gen.2

#### Tools needed:

- Set of Philips screwdrivers.
- Super-Glue.

#### Tools that may be needed:

- Set of small files
- On some AEG models a Dremel tool may be need.

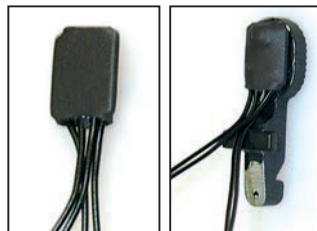
6. Remove the gearbox from your lower receiver.

7. Remove the Bolt-Catch button.

If the Bolt catch is fixed to the receiver with a pin, it does not need any modifications. If it is fixed with notches then you need to file a bit of the Bolt-Catch as shown on the picture.



8. Take the Hop-Up line wire and using a drop of Super-Glue on the back flat surface of the Bolt Catch Switch, fix the switch plate on the back of the Bolt-Catch lever. **Before applying the glue make sure to degrease the surface and clean it with sandpaper if needed.**



9. Pass the long hop-up line wire through the back opening of the receiver where the other ASCU wires go.

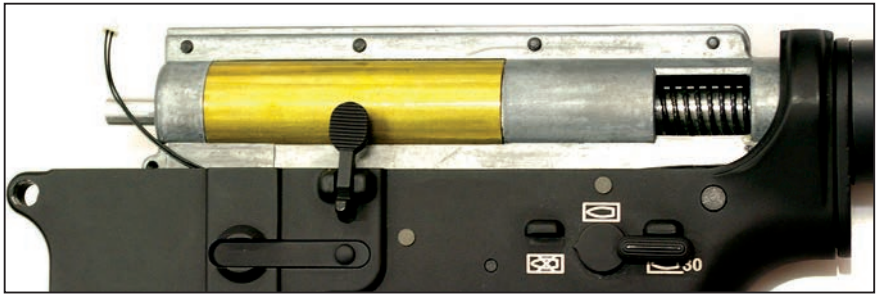


10. Connect the hop-up line wire to the ASCU

11. Put back and fix the Gearbox in the lower receiver. Make sure not to damage the hop-up line wire when inserting the rear receiver pin.







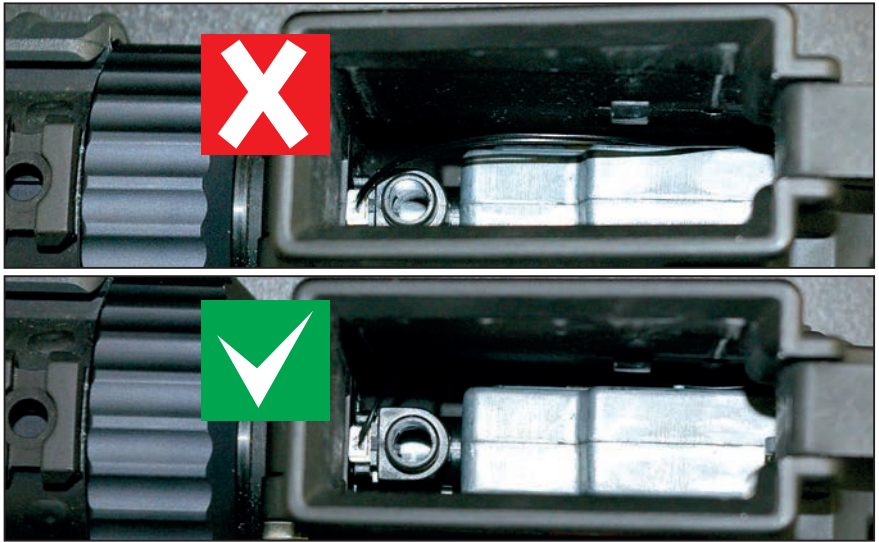
12. Place the Bolt Catch at its place in the lower receiver

13. Connect the other end of the hop-up line wire to the connector in the hop-up chamber.

14. Insert the Barrel and the gearbox together in the upper receiver. Pay attention not to damage the bolt catch micro switch with the wide back end of the upper receiver. Insert the front receiver pin.

16. Look through the mag well. Pay attention of the hop-up line wire between the bolt catch and the hop up chamber. With a set of tweezers push the wire in the gap between the walls of gearbox and the upper receiver.





\* Push the wire in the gap between the walls of gearbox and the upper receiver

## SETTING UP THE ASCU IN TO EMPTY MAGAZINE DETECTION MODE.

1. Set the fire selector to SEMI

2. Connect the battery and within 3 seconds pres the trigger. You will hear a long beep indicating that you are entering into program mode for the hop-up. Then will follow a single beep, a pause and then a double beep. Right after you hear the double beep press the trigger. A longer beep will indicate that you are exiting the program mode and the AEG is ready to fire. Once you set up a mode the ASCU will remember it until you manually change it. Disconnecting the battery will NOT make the ASCU forget its settings.

**\* To set the ASCU back into “factory” mode where it does not read the signals from the Hop-Up chamber follow the next steps:**

1. Set the fire selector in to SEMI
2. Connect the battery and within 3 seconds press the trigger. You will hear a long beep indicating that you are entering into program mode for the hop-up. Then will follow a single beep. Right after you hear that beep press the trigger. A longer beep will indicate that you are exiting the program mode and the AEG is ready to fire.

### **USING AN AIRSOFT ELECTRIC GUN WITH INSTALLED ASCU & ASHU**

For all general ASCU functions and use please refer to your ASCU original User Manual, which you can also download from our web page: [www.airsoftsystems.com](http://www.airsoftsystems.com)

When the Empty Magazine Detection mode is activated, the AEG will stop firing when the magazine is empty. In order to resume firing, a new full magazine has to be loaded and the Bolt-Catch lever pushed.

**ATTENTION! According to the manufacturer of the sensor micro-switch used in the ASHU the life of the sensor is 100 000 cycles. Because of the fact that in the ASHU that switch is used under extremely heavy conditions it can fail in less the the specified cycles.**

**When the sensor micro-switch in the ASCU fails to work, it can be easily relapsed. For a replacement ASHU Sensor check your nearest airsoft store or on the internet for shops of our distributors.**

If the ASHU Sensor fails during a game, continue shooting while holding the bolt catch pressed. When you reach a safe area, switch the ASCU in to Hop-Up program 1 and continue your game without the Empty Magazine Detection function.

# **ASHU** HOP-UP UNIT

For AR15/M16/M4 AEG with ASCU

- When connected to the ASCU, the ASHU will detect when the magazine is empty and will stop the AEG from dry-firing.
- Bolt-Catch function to resume firing.
- **Precise adjustments with clicks.**
- **Optimized for High-Performance Hop-Up rubbers.**
- **Made from Shock-Resistant Reinforced Technopolymer.**

\*Hop-Up rubber NOT included!

\* Use with High-Performance Hop-Up Rubber

 **ASHU**  
HOP-UP UNIT for AR15/M16/M4 AEG with ASCU  
Made in EU by Airsoft Systems Ltd