

# BunnyFlip

**Installation Guide** 



# Important!

It is important that you have a functional and stable 12V system.

# What you need:

- The BunnyFlip System
  - Basic tools
- Your own screws (2x M5, and screws to fasten the plate to the bike)
  - Thread locker (e.g., Loctite)

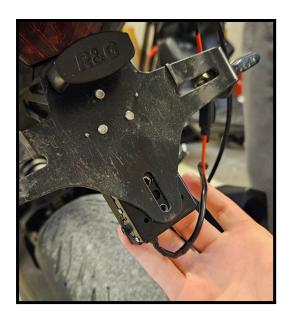
If you have any questions, contact us at: support@bunnyflip.se

## Step 1:

Check that everything fits your bike (this should already be done before purchase, but verify again before starting the installation).

Ensure that the control box fits under the seat and that the motor fits in your intended mounting location (also check that the plate doesn't hit the wheel — remember that the rear fender lowers toward the wheel when you sit on the vehicle).

See our mounting suggestions in Step 6.



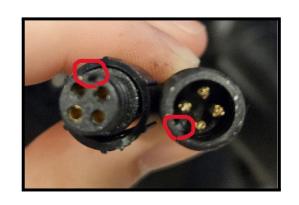


## Step 2:

Mount the button wherever you want (handlebar or hidden).

Connect the button's connector to the control box's connector (the longest cable from the control box).

Make sure the connector is aligned properly! (Then screw on the waterproof seal.)



Route the button cable to the control box, for example down through the steering head and around the tank. Zip ties are included if needed.



Example image with button: "Button for brake lever mount"

#### Step 3:

Place the motor wherever suitable (see example locations in Step 6).

Then route the cable under the seat to the control box.



Place the control box under the seat and connect the motor to the control box (short cable).

Note: Consider how you mount the motor to the plate. If the motor is mounted at the top of the plate, it will create more force on the motor. So think carefully before mounting!

#### Power Options

There are mainly three alternatives:

Option 1 (Recommended):

Take power from the license plate light and connect it to the control box so it knows when ignition is on.

It's also possible to connect it so the license plate light turns on/off based on the flipper's position.

#### Option 2:

Take power from the tail light or another +12V signal that activates with ignition.

This is recommended if you don't have a license plate light.

#### Option 3:

Connect a switch between the positive battery terminal and the control box.

This is recommended if your electrical system isn't working, but you have a stable 12V battery (just remember to turn off the flipper so the battery doesn't drain).

After choosing an option, continue with the instructions below.

#### Option 1:

Locate the license plate light cable.

Disconnect the positive wire to the lamp (usually the non-black wire - verify with a multimeter to be safe).

You can either cut the wire or unplug just the positive wire if a connector allows it (keep the ground wire connected).

The control box has a white and a yellow wire:

- Connect the yellow wire to the cut wire leading to the battery (the wire going into the bike).
  - Connect the white wire to the cut wire going to the lamp (IMPORTANT to get this right!).
- We recommend soldering for best connection. If not available, use the included clip connector or another method.

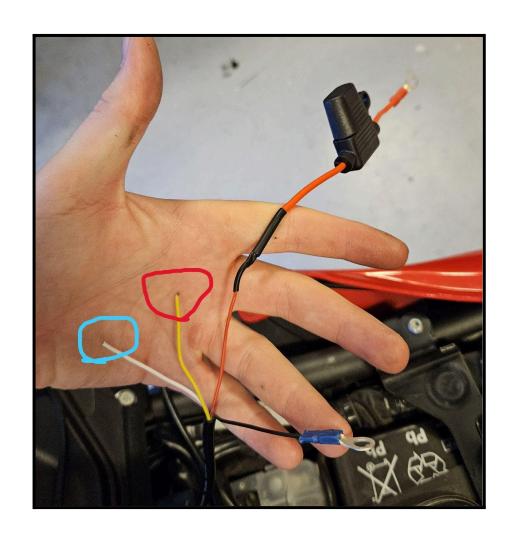
## Option 2:

- Find a +12V wire that is live when ignition is on (e.g., tail light).
  - Connect the yellow wire from the control box to this positive wire (you are tapping power from e.g., the tail light).

#### Option 3:

Run a wire from the positive battery terminal through a switch, then to the yellow wire on the control box.

When the switch is flipped, power is sent to the yellow wire and the flipper activates.



#### Note:

The yellow wire (red ring) is always required.
The white wire (blue ring) is only used with
Option 1 (controlling license plate light).
Ensure no wires are pinched!

#### Step 5:

Connect the control box to the battery. Connect the red (+) and black (-) wires directly to your 12V battery.

Turn on the ignition — the system should power up (the motor will activate and the button will blink).

Now it's time to set the angle.

In the included bag there is a gray gear disc (one with teeth and one without).

Press it onto the motor (over the golden shaft).

The motor has a movement range of 180°. You want the extended (visible) position to be at the edge of this range (around 0° or 180°).

Start the system and check that the button light is not solid (if it is, press the button once).

Hold the button for 15 seconds until you hear 3 clicks (license plate light flashes three times). You can now adjust the motor angle by pressing the button (1 press = 1°). Press until the motor stops and reverses direction (i.e., reaching the motion limit).

#### IMPORTANT!

Watch the wheel attached to the motor. It should spin clockwise toward the up (hidden) position. If not, hold the button for a few seconds again to reverse direction.

Once at the edge, go a bit further to allow fine tuning.

Release the button and wait 30 seconds until the button light becomes solid — this saves the new angle.

#### Step 6:

Mount the arm on the license plate. Either directly on the plate or on a license plate holder (note: holders may vibrate more than mounting directly on the plate).

Position the arm so the plate sits at a good height when attached to the motor. Use thread locker (e.g., Loctite) and 2-4 screws (not included - ensure they're not too long and don't hit the motor).

#### <u>Mounting Suggestions:</u>

You can mount the motor however it best fits your vehicle.

Here are two examples:

Directly on existing holder — Recommended for basic installation with minimal modification.



Custom mount - Requires more planning for optimal results.



An angled arm is also included if you want to use it for mounting the motor.

#### Step 7:

Mount the arm that the plate attaches to with the motor.

Take the other metal plate included and place it on the opposite side of the motor.

Push on the arm and align the holes with the threads. Mount it in the extended position we set earlier.

If the holes don't line up perfectly, remove the metal disc on the golden shaft and adjust it.

Use the included screws (5 per side) and secure with thread locker (e.g., Loctite).

## Example:



Then screw the motor securely into the holder using thread locker and 2x M5 screws.

#### Final Step - Step 8:

Reprogram the angle, same steps as before:

Turn on the ignition and ensure the light is not solid (so it's in extended mode).

Hold the button for 15 seconds, then press it to set the exact angle (IMPORTANT: ensure the plate is not pressing against the holder — avoid the motor working against itself).

To change direction, hold the button for a few seconds (light becomes solid for 2 seconds when changed).

Once done, wait 30 seconds without touching anything — light becomes solid.

Turn ignition off and on again.

Now repeat the same for retracted position: Press the button once (light becomes solid), then hold for 30 seconds.

Ensure the plate is as far from the wheel as possible when retracted!

#### Recommendation:

We recommend installing a magnet in the extended position to keep the plate steady and reduce vibrations.

Make sure the motor isn't working against the magnet (not included).

The motor handles up to 25kg, so it can break free from the magnet without issue.

Want to impress your friends?

Hold the button for 3 seconds to activate
auto-flip mode — the plate flips up and down every

4 seconds automatically!

You're now done!

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