



**2019-2022 Toyota Corolla Hatch
and 2020-2022 Sedan BIG MOUTH
"LIT KIT" Ram Air Intake
Installation Guide**



Kit Contents (Full LIT KIT)

Please review this document before attempting installation.

You will need basic hand tools and 2 hours of installation time.

Kit Contents	Qty
Push-style retainer clip (10mm)	1
Push-style retainer clip (7mm)	1
Push-style mud skirt retainer clip	1
Bluetooth controller	1
Rocker switch	1
Positive cable w/ in-line fuse	1
Remote	1
Cable clip	8
8" zip tie	10
M6 x 12mm socket head screw	1
M6 lock nut	3
Assembled BIG MOUTH kit	1





Kit Contents (LIT Flare Only)

Please review the table below and make sure you have received the kit contents.

Kit Contents	Qty
Bluetooth controller	1
Rocker switch	1
Positive cable w/ in-line fuse	1
Remote	1
Cable clip	8
8" zip tie	10
M6 x 12mm socket head screw	1
M6 lock nut	3
Assembled LIT flare	1





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Stock Components Removal

It is best to Google “how to remove bumper” for your particular trim.

BIG MOUTH Installation

There are 3 fastening points that require 3 distinct fasteners. Check out the graphic below to match each fastener to its fastening point.



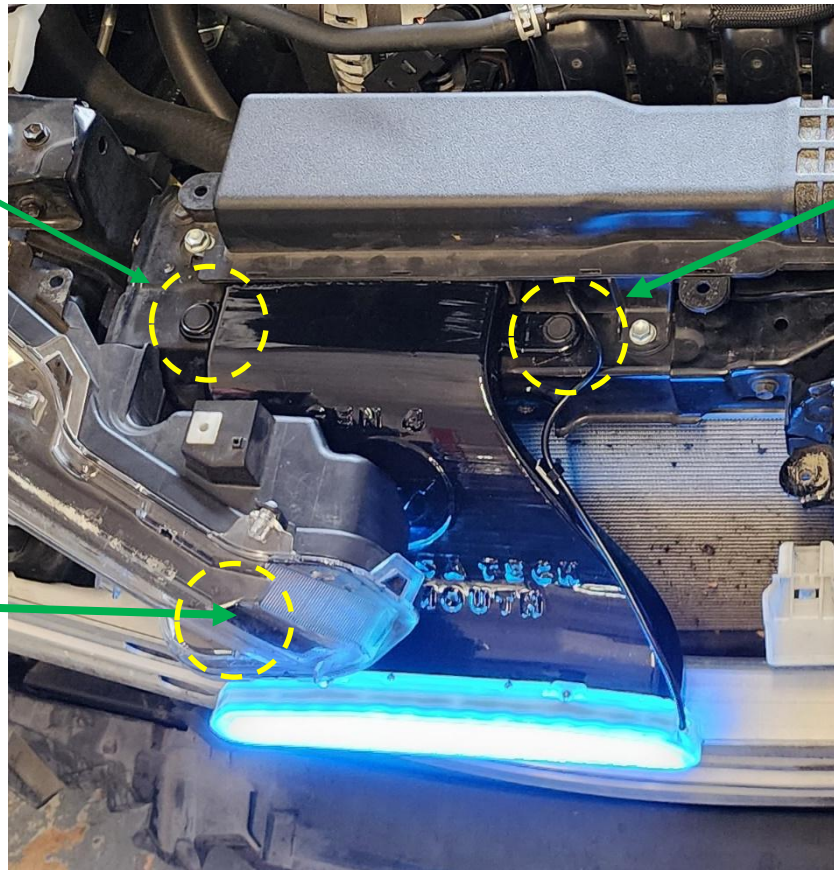
**Left ear: 7mm
retainer clip**



**Right ear: 10mm
retainer clip**



**Lower ear:
mud skirt clip**

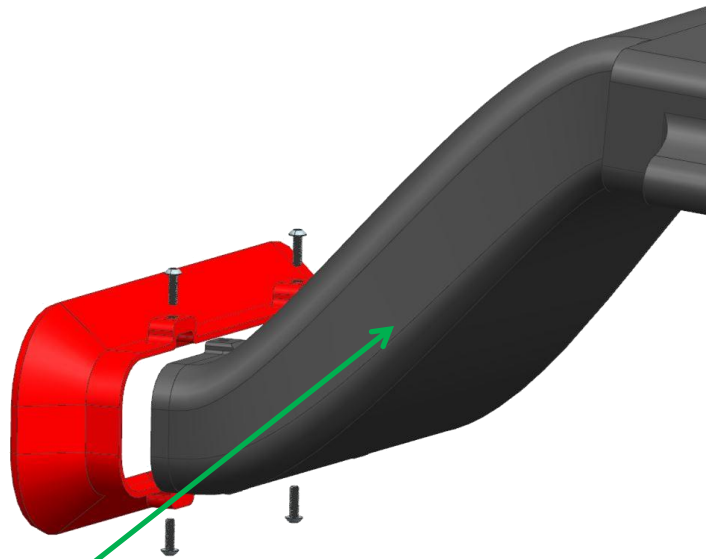




Install the LIT BIG MOUTH Flare

SKIP THIS SLIDE IF YOU PURCHASED A FULL "LIT KIT"

Attach the supplied cable clip to your BIG MOUTH as shown. Fasten the cable and provide enough slack to not strain the cable.



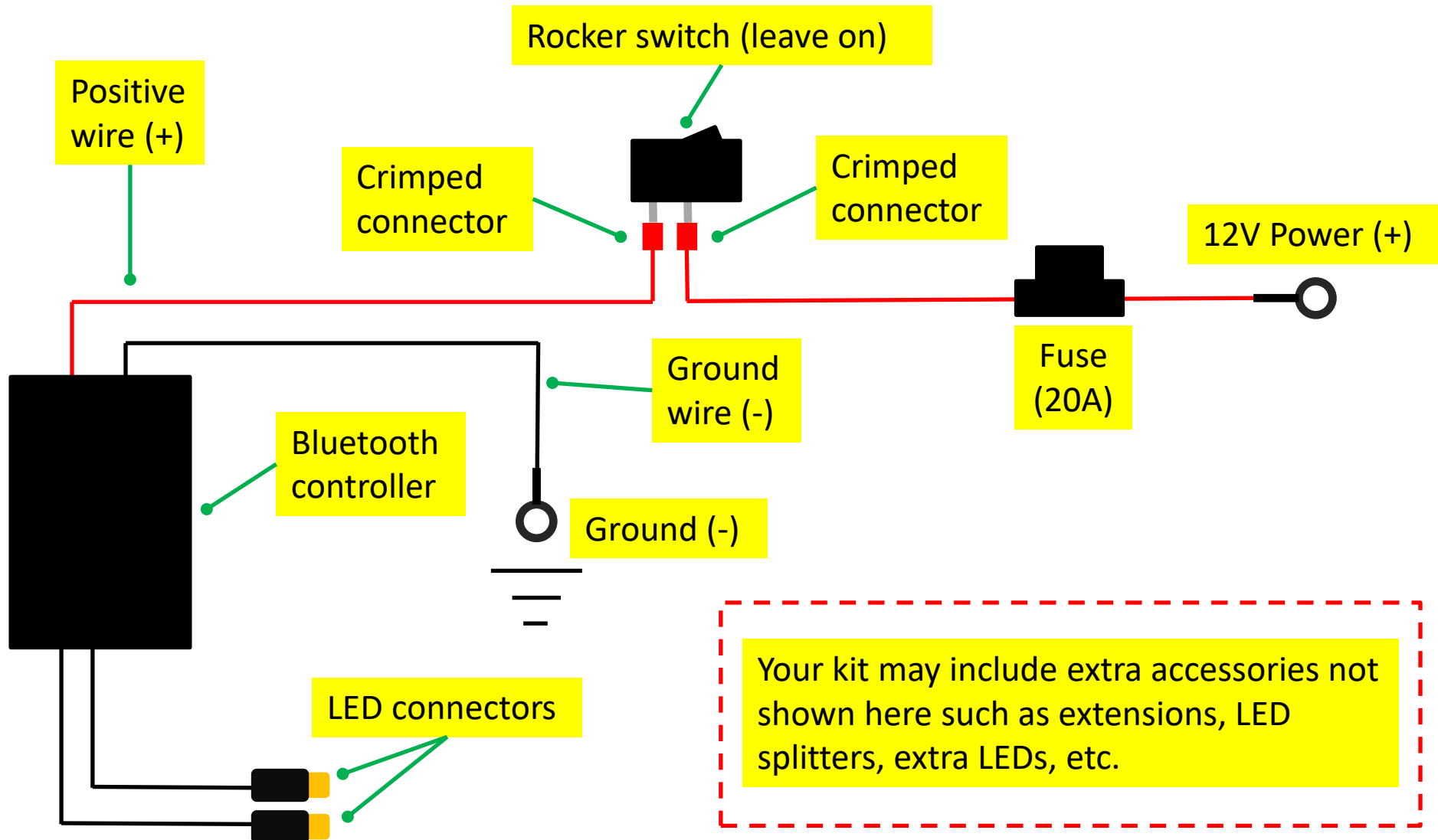
Attach the 3M cable clip here

If you purchased a LIT flare-only and already have a Gen 4 BIG MOUTH. Remove old flare and install the LIT flare with the 4 screws as shown.



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Wiring Harness Schematic





LIT KIT TIPS: Controller Placement

When considering where to place your Bluetooth controller, pay attention to the following factors:

- **Distance:** The controller leads need to be able to reach the LEDs so proximity to the BIG MOUTH is important.
- **Bluetooth signal:** Placing the controller as close as possible to the driver will help with signal strength. Place the controller in a location where there is minimal metal mass in between the driver and controller.
- **Heat and weathering:** Avoid subjecting your controller to excessive heat and limit its exposure to environmental wear.

Some commonly found solutions for controller placement include:

- Adhere to a flat spot on the cowl, inside or near battery box, radiator support (driver side if possible), behind headlight, airbox, etc. using the supplied double-sided tape
- If using a location near the hood latch, take the necessary precautions to ensure the wiring will not get entangled with the hood latch.
- Using zip ties to attach the controller to a thick wire loom is also a handy solution
- Some locations near the firewall/battery tend to be good locations for signal and low temperature.

LIT KIT TIPS: Ground

When considering where to ground the circuit, pay attention to the following factors:

- **Location:** The best and most reliable ground connections exist on the chassis, on the engine block or on the negative terminal of your battery. These can exist as a threaded hole, shoulder bolt or stud.
- **Conductivity:** The ground point should be clean, unpainted and free of rust or grease for a solid connection. Fasten it securely to avoid vibration loosening the connection.
- **Distance:** Make sure the location of your chosen ground point is within range of the provided ground wiring.

Reference images only, your vehicle may vary slightly!



LIT KIT TIPS: Power

When considering the power side of the circuit, pay attention to the following factors:

- **Location:** By default, our LIT KIT is powered using the positive terminal on the battery. If you decide to re-configure your kit for a switchable power source, we recommend you research the use of a fuse tap and follow best practices outlined online.
- **Conductivity:** The connection to the battery must be tight and secure. Loose connections create excess heat and shorten the life of the electronics. Ensure the terminal is free from corrosion, damage or debris.
- **Safety:** When working with a car battery, exercise best safety practices such as using insulated tools and wearing the correct protective equipment.

Reference images only, your vehicle may vary slightly!



LIT KIT TIPS: Wiring Best Practices

When considering how to route the wiring through your engine bay, consider the following:

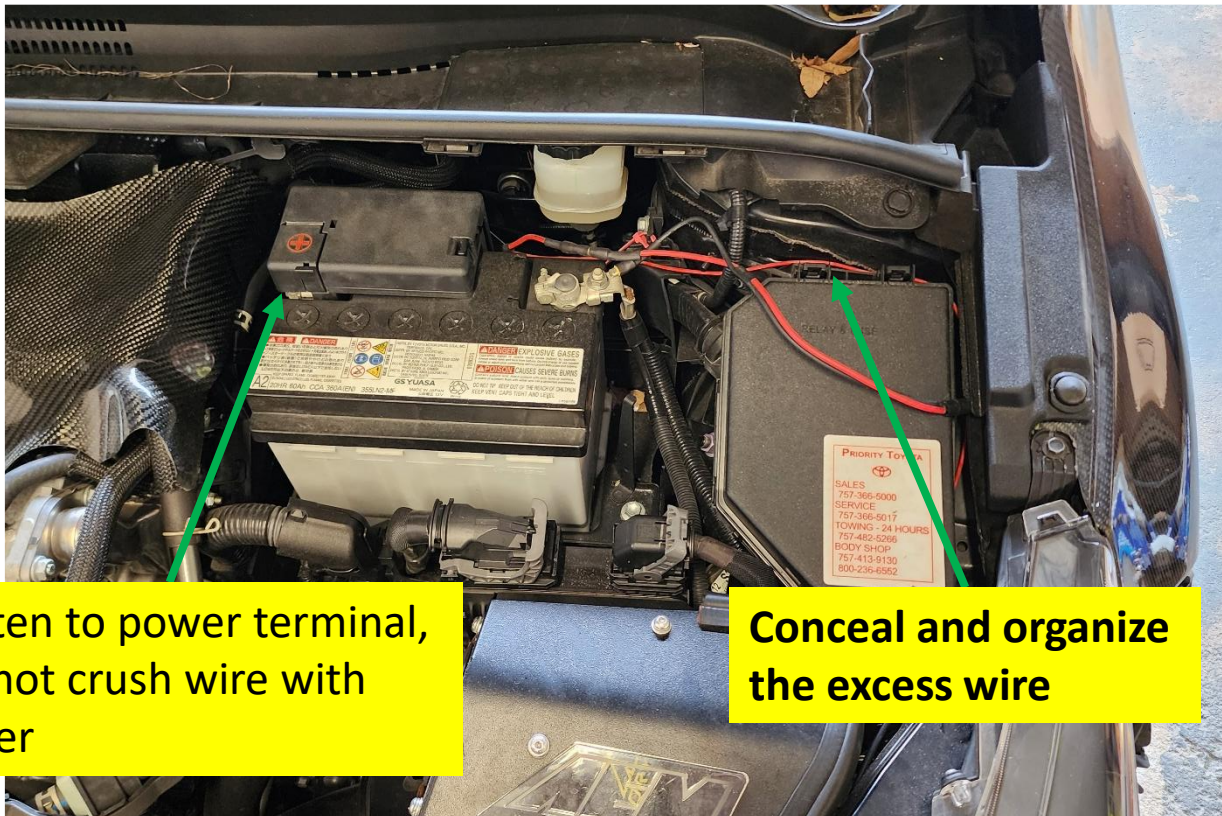
- **Strain relief:** Use the provided zip ties and cable clips to secure wiring to its environment while maintaining slack at each point. All wiring should be free from strain and tension.
- **Components to avoid:** Avoid moving parts, such as hood latches and pulleys, and exhaust components that can melt wiring. Also take care to avoid pinch points.
- **Routing:** Whenever possible, route the wiring along factory harnesses, underneath trim or along the perimeter of the engine bay. Bundles of wire should be tucked underneath plastic covers and secured using zip ties.

Reference images only, your vehicle may vary slightly!



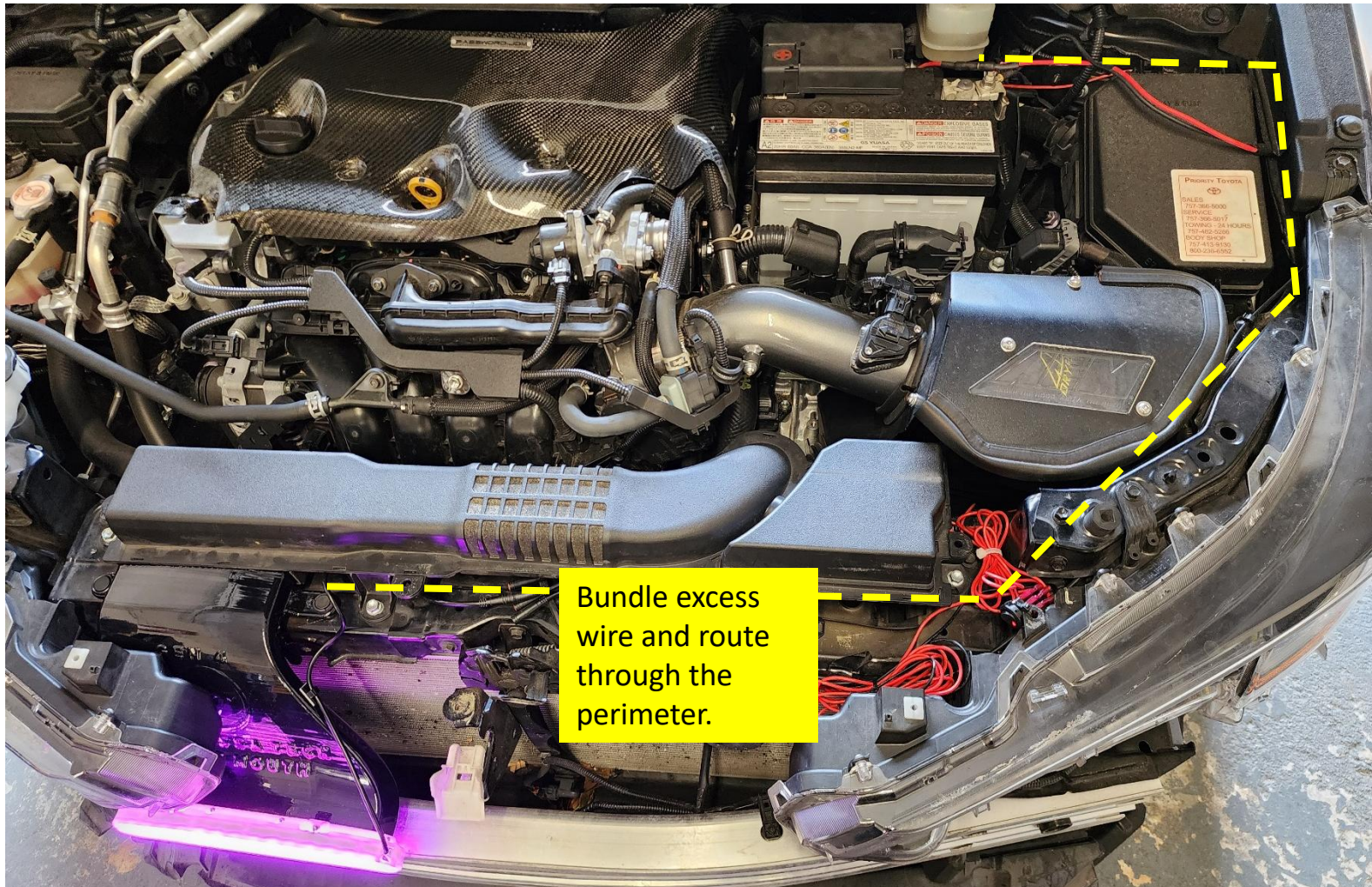
LIT KIT: Power and Wiring

Use the car battery to supply power to the "LIT KIT". Undo the nut located on the positive terminal of the battery and fasten the power cable to it as shown. Take care to avoid damaging the wire when reinstalling the terminal cover. Use any leftover zip ties and cable clips to organize and conceal any excess wire.



LIT KIT: Overview

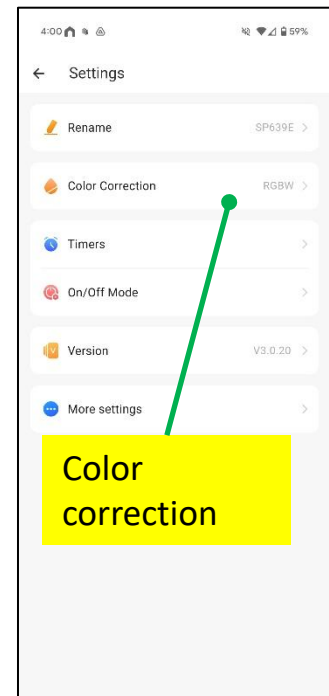
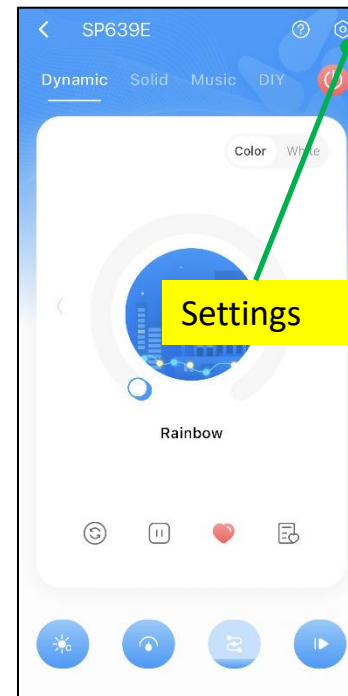
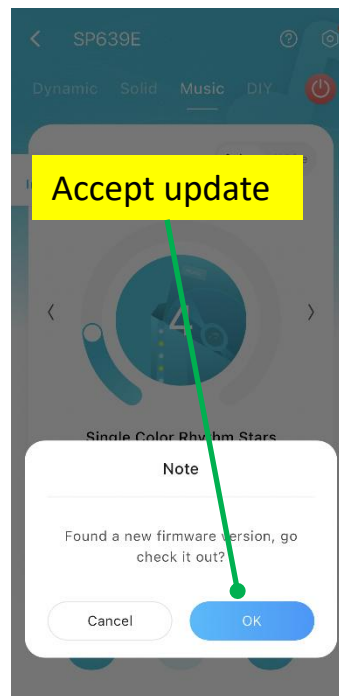
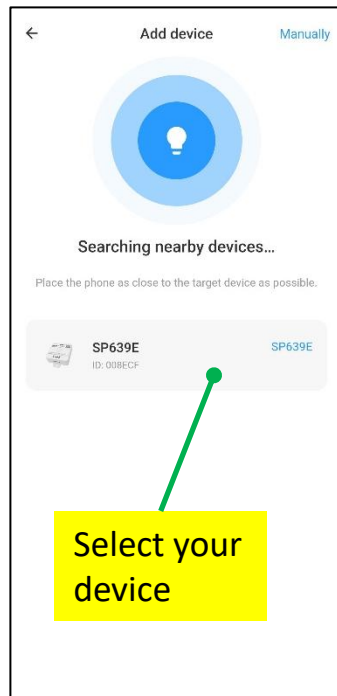
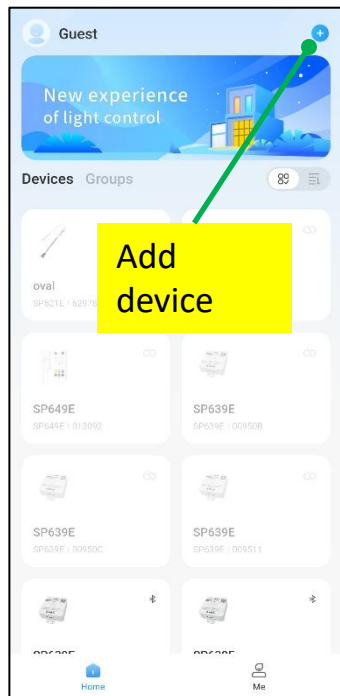
Use the remaining zip ties and cable clips keep wiring tidy and free from strain.





Phone App: Initialization

Download the **BanlanX** app from your app store and turn on your LIT KIT through the switch. Open the app and select the + sign at the top right of your screen. If you are within range and Bluetooth is on, your phone will search for nearby devices, and you will likely see your Bluetooth controller available as SP639E. Select your SP639E Bluetooth controller. Once selected, it is very likely that you will be prompted to update the firmware. Once the update is complete, navigate to the Settings -> Color Correction. Choose the colors that are displayed on your LEDs and once the calibration is done, go back to the 'Home' screen.



Phone App: Control

Once on the 'Home' screen, go to the 'Dynamic' tab, familiarize yourself with the interface and have fun with the presets! There are many ways to customize your LIT KIT, including DIY configurations.

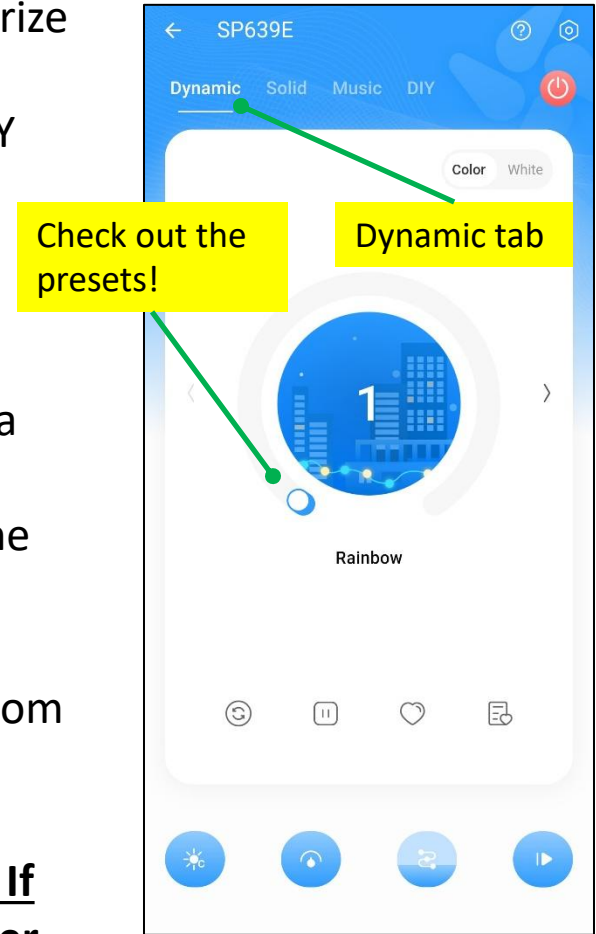
Troubleshooting

If you are having trouble connecting, cycle the power to the Bluetooth controller by toggling the power switch and wait a few seconds, then turn it back on.

Wait for the app to detect the controller. It will pop up on the app screen as a Bluetooth controller. If necessary, cycle the power once more to refresh the controller.

If the problem persists, reach out to support@velossatech.com

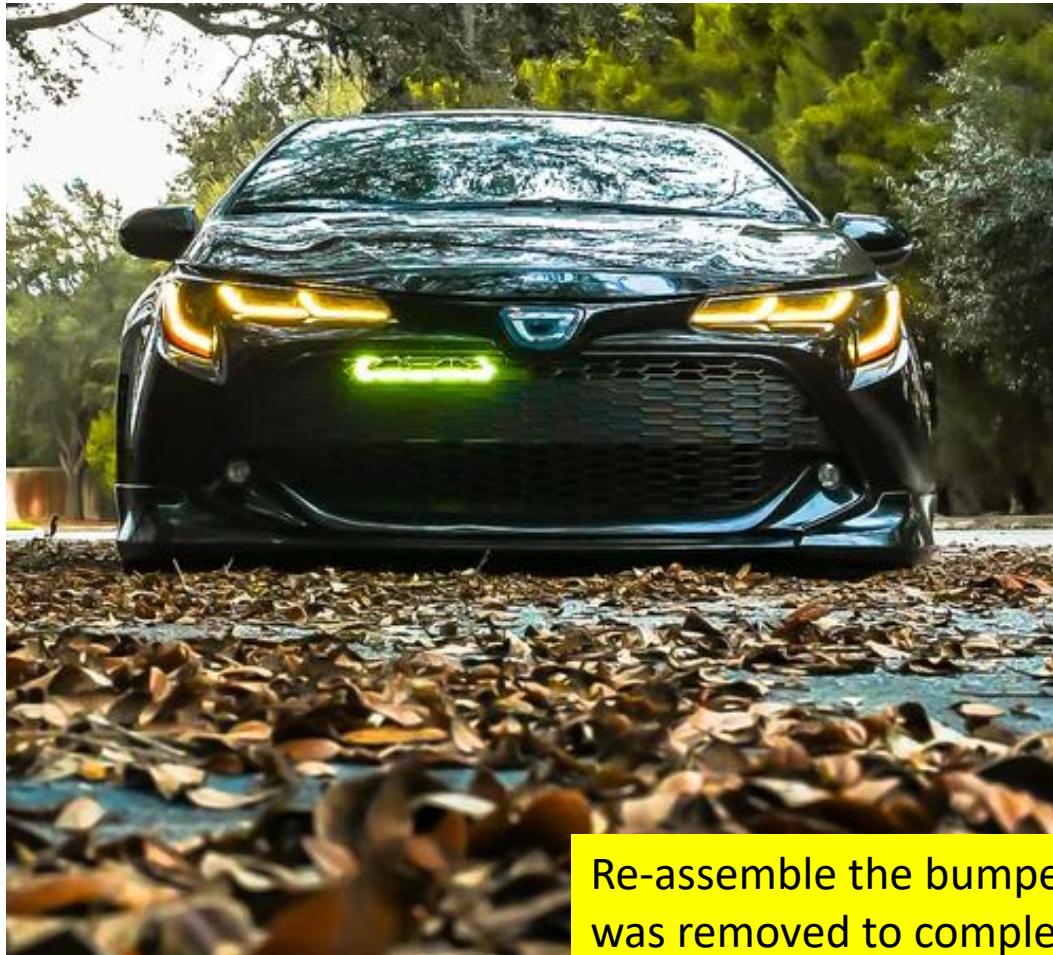
Note that if you mounted your controller behind a lot of metal components, this may degrade the signal and range. If this is your case, reconsider the placement of your controller.





Final Assembly Review

Review the install and make sure nothing is binding or causing any preload on any parts, loosen and retighten if adjustment is necessary.



Re-assemble the bumper the same way it was removed to complete installation.