PLEASE READ BEFORE STARTING INSTALLATION!

RACE CHIP




XLR

# User Manual

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### *Overview and explanation of symbols*

⚠ **Warnings** and important information – please read!

i **General information** on installation and use

**Tips** to assist installation and use

# 1 Scope of delivery



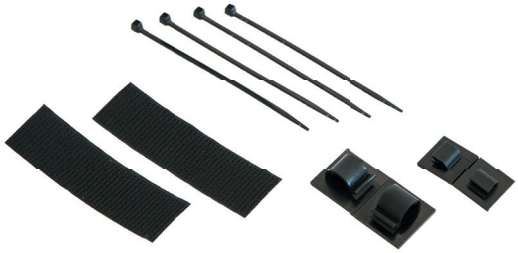
## Brainbox

Specifically modified to suit your car.




## Controller

7 separate stages to choose from.



## Fasteners

Material to fix the Brainbox and the Controller in place.




## User Manual

Installation and operation.

# 2 Installation

### *Step 1 of 6 – Preparation*

1. Open the driver's door as far as possible.
2. Remove any mats and move the driver's seat all the way back.
3. Switch the ignition off, remove the key.
4. Ensure the footwell is properly illuminated with an inspection lamp.
5. With the driver's door open, lock the car.
6. **Wait about 10 minutes** before starting ***Step 2***, as all current consumers must have switched themselves off.

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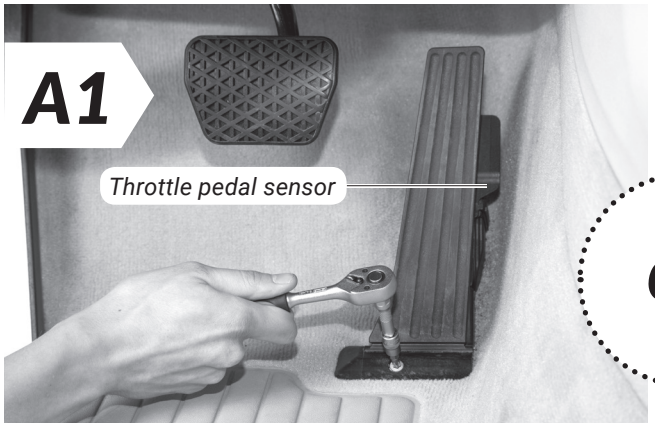
- For cars with **"Keyless Go"**: after locking the car, place the key out of signal range (about 10 m from the car).
- If an **alarm system** is fitted: disable the alarm before starting installation.

# 2 Installation

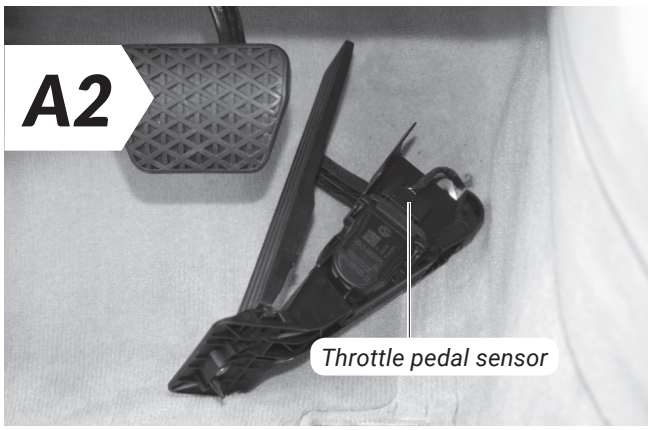
### *Step 2 of 6 – Disconnect throttle pedal sensor*

There are two types of throttle pedal: **floor-mounted** or **hanging**. We'll explain how to disconnect the throttle pedal sensor for both types.

**A. Floor-mounted throttle pedal**



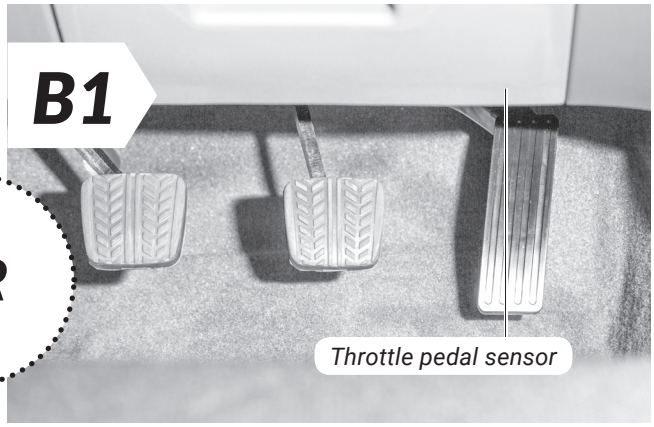

- Disassemble the throttle pedal with the appropriate tools.

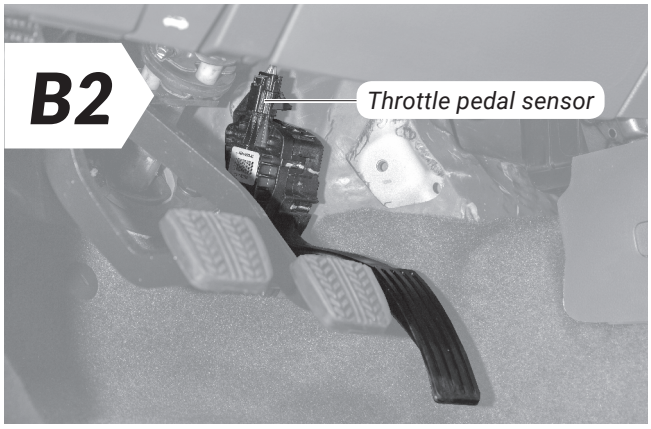



- The throttle pedal sensor is on the right-hand side of the throttle pedal. Carefully pull off the connector of the throttle pedal sensor.

OR

**B. Hanging throttle pedal**




- The throttle pedal sensor is on the right-hand side of the throttle pedal. Carefully pull off the connector of the throttle pedal sensor.

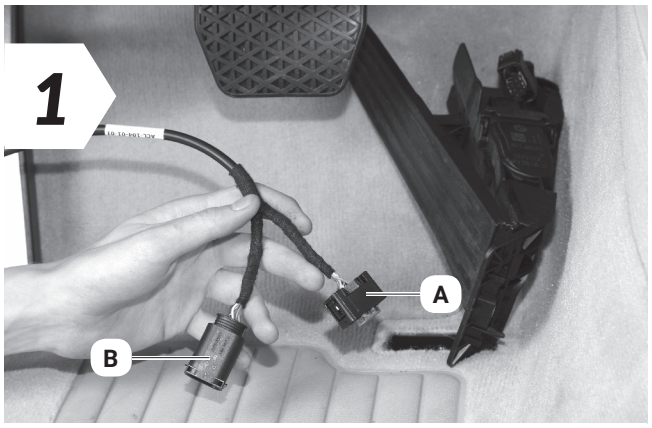
| | |
|---|---|
| i | You might have to remove part of the trim to get to the connector. |

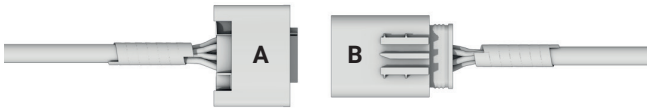
| | |
|---|---|
|  | If you need assistance in detaching the throttle pedal sensor connector, see the additional instructions **"Detaching the connector correctly"** |

# 2 Installation

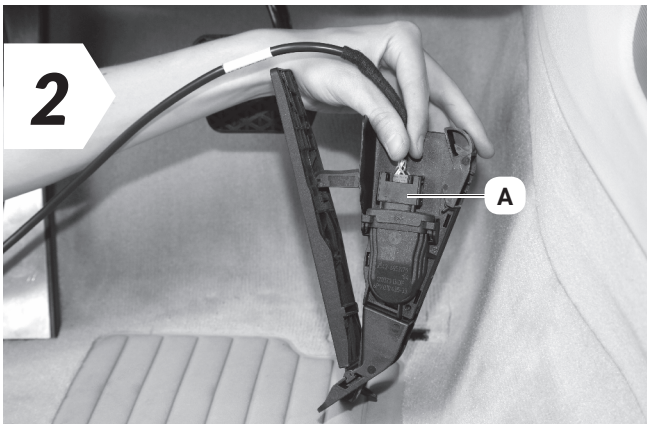
### *Step 3 of 6 – Connect the Brainbox*

The car used to illustrate these instructions is for demonstration purposes only. The basic procedure is exactly the same even if the details of your car look different.



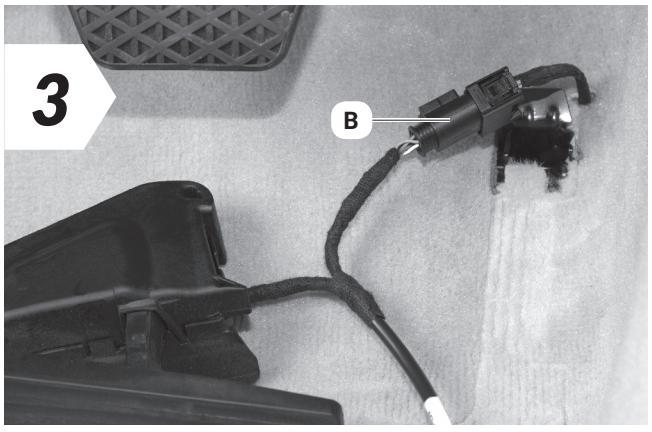




- The cable leading from the Brainbox has two connectors (marked **A** and **B**).



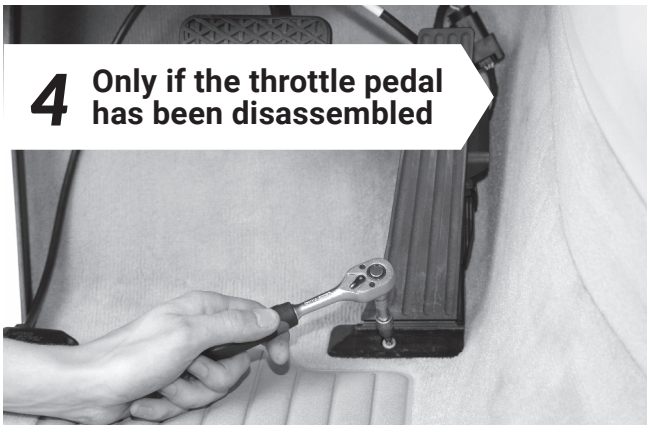

- Attach connector **A** from the Brainbox to the gas pedal sensor.

> ⚠ **A sharp click indicates that the retaining clip has engaged fully.**




- Now attach connector **B** to the connector you pulled off the gas pedal.

> ⚠ **A sharp click indicates that the retaining clip has engaged fully.**




- Re-assemble the throttle pedal.
- Make sure the cable is not trapped and does not interfere with the pedals.
- Ensure the throttle pedal is firmly fixed in the proper position.

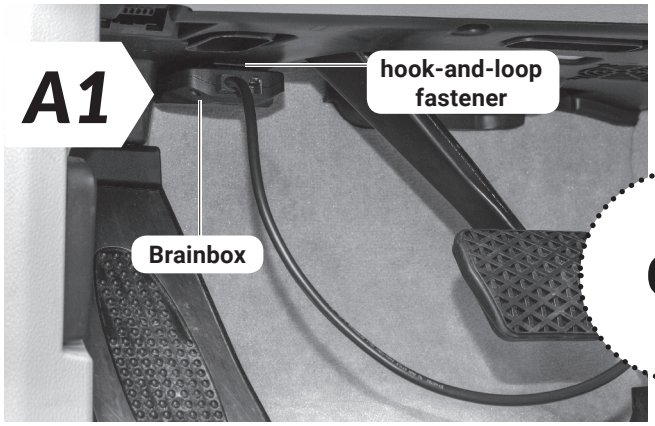
# 2 Installation

### *Step 4 of 6 – Fix the Brainbox*

**We recommend two places for fixing the Brainbox** (although there may be other possibilities). Before you fix the Brainbox, decide where you want to fix the Controller (if you want to fix it in place permanently).

**A. On the left of the footwell next to the footrest.**

If you fix the Controller to the left of the steering wheel.




**1x hook-and-loop fastener**

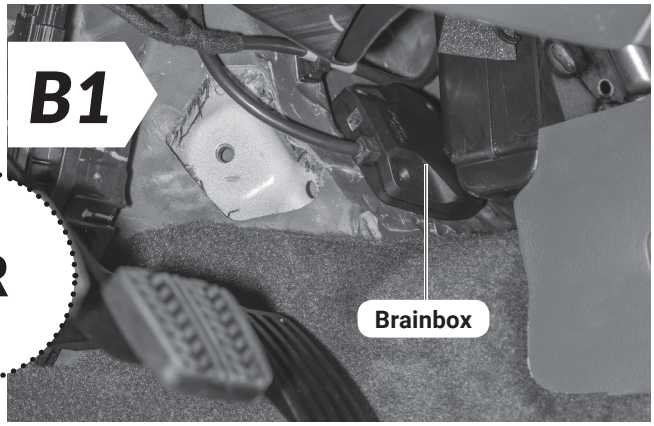


- Fix one part of the hook-and-eye fastener tape to the bottom of the Brainbox.
- Fix the other part of the fastener tape to the site indicated in the footwell. Make sure the site is free of dust and grease first.
- Now press the two halves of the fastener together (see picture for Brainbox position).

OR

**B. Under the trim on the centre tunnel**

If you fix the Controller to the right of the steering wheel/on the centre console.

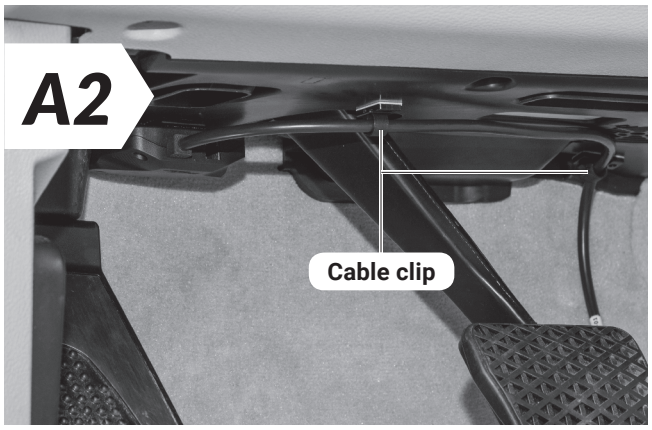



- First test carefully to see if the Brainbox will fit under the trim.
- If the Brainbox fits, slide it carefully under the trim.

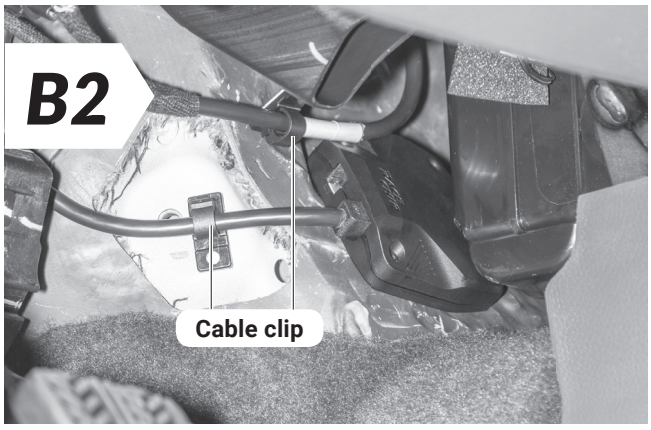
⚠ **Secure the Brainbox and its wiring so that they do not interfere with the pedals and cannot slide into the footwell.**

# 2 Installation

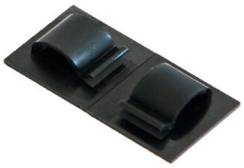
**A. On the left of the footwell next to the footrest**




**B. Under the trim on the centre tunnel**




**2x cable clips**



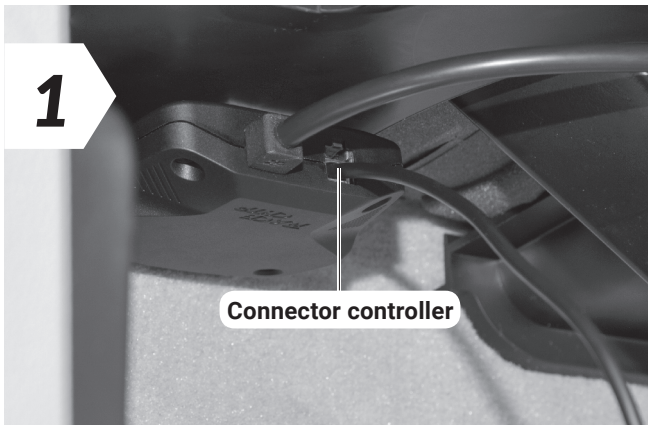
**4x cable ties**



- Use the cable clips and/or cable ties to secure the cable between the Brainbox and the Controller, ensuring that nothing interferes with the pedals.

# 2 Installation

### *Step 5 of 6 – First function test*




- Before continuing with the installation, check that the Brainbox is properly connected.
- Connect the Controller to the Brainbox. You should hear a distinct click.




- Turn the ignition of your car on. **The LEDs on the controller should light up.**
- Now you can start the engine as normal. It should function as normal at idle running and react normally to inputs from the throttle pedal.
- Turn the engine and the ignition off.

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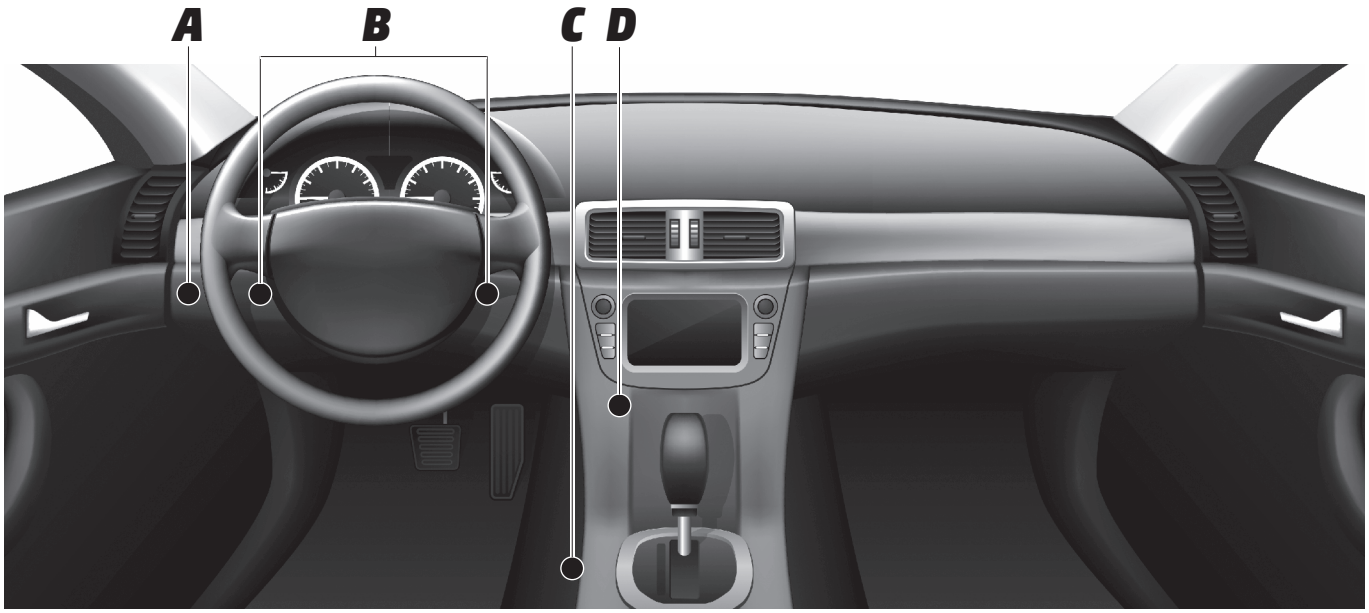
- If the car doesn't start as normal, refer to the section on **Trouble Shooting** for assistance.
- Our Customer Service is of course always ready to help. See **Contact** for details.

# 2 Installation

### *Step 6 of 6 – Fix the Controller (optional)*

You only need to leave the Controller connected with the Brainbox until you've selected the tuning stage you want (see **Operation** for more information). Once you've chosen a stage, the Brainbox saves your choice and you can disconnect the Controller. If you want to select a different stage later, simply re-connect the Controller.

The locations marked in the picture below are good places to fix the Controller. Ideally, it should be mounted on an even metal or plastic surface.




**A** Position on the dashboard to the left of the steering wheel.

**B** Fixing on either side of steering column (ideally with wiring routed through steering column without fouling).

**C** Fixing on centre console (wiring can often be routed behind centre console trim).

**D** That's it. Enjoy your drive!

⚠

- **The Controller must not obstruct with the driver's view of the car's controls or interfere with their functioning.**
- **This also applies to the cable connecting the Controller with the Brainbox.**

# 3 Operation

### *The Controller*

Use the rotary control to choose between **4 stages offering sharper throttle response** and **2 stages with diminished response**. The currently active stage is indicated by a lit LED.




**R+** — Race Plus
Throttle responsiveness like a sports car

**R** — Race
Perfect for enthusiastic driving

**S+** — Sport Plus
Significantly improved throttle responses

**S** — Sport
No lethargy in throttle responses

**N** — Neutral
Stock throttle responsiveness

**E** — Eco
Relaxed throttle responses

**E+** — Eco Plus
For maximum fuel efficiency

- Different driving situations and different driving styles need different throttle responses.
- Try each tuning stage for yourself before you decide on your favourite.

**Please do not switch tuning stages while you are accelerating.**

# 4 Trouble Shooting

If your RaceChip XLR doesn't function as it should, here are some trouble shooting tips.

| Description of problem | What to do |
|---|---|
| Check engine warning light<br><br><br>also preheat warning light on diesel engines<br><br><br>remains on after installation | • Switch off the engine and remove the key. Check that all connectors are engaged.<br>• If the problem persists after restarting the engine, contact our Customer Service. |
| No/poor throttle response, or engine responds with interruptions | • De-install the Brainbox of RaceChip XLR.<br>• Return your car to stock tuning by reconnecting the stock pedal sensor directly with the throttle pedal.<br>• Check the throttle response, with the car stationary at first and then on an empty road. If the throttle response is still bad or patchy, we recommend not driving the car. The problem is probably not caused by RaceChip XLR but by a malfunction in a component in the throttle pedal. |
| Car is jerky at constant throttle | • First check to see if the jerkiness occurs in all tuning stages or only certain ones.<br>• When you have done this, please contact our Customer Service and give us as much detail as possible. We can help you much better if you give us precise information.<br>• Please do not activate RaceChip XLR in your car until we have found a solution. |

# 4 Trouble Shooting

| Description of problem | What to do |
|---|---|
| Automatic gearbox changes gear jerkily | • First check to see if the jerkiness occurs in all tuning stages or only in certain ones.<br>• When you have done this, please contact our Customer Service and give us as much detail as possible. We can help you much better if you give us precise information.<br>• Please only use the RaceChip XLR's tuning stage **N** until a solution has been found. |
| Revs too high at idle running | • Please de-install the Brainbox of RaceChip XLR.<br>• Return your car to stock tuning by reconnecting the stock pedal sensor directly with the throttle pedal.<br>• Check the revs at idle running again. If they are still too high, we recommend not driving the car. The problem is probably not caused by RaceChip XLR but by a malfunction of a component in the throttle pedal.<br>• Please contact our Customer Service. Based on the information you give us, we will help to find a solution and tell you whether you need to take your car to a specialist. |
| Car does not start | • Switch off the ignition and remove the key. Check that all the connectors are securely engaged.<br>• Try to start the car again. Does the Controller light up? What colour is the light?<br>• Please make a note of this information and contact our Customer Service.<br>• If the problem occurs when you first install RaceChip XLR, please de-install the Brainbox completely. There may be a problem in the system caused by residual current in the throttle pedal when you unplugged it. To reset the system, lock the car and leave it for at least 30 minutes before trying to start it again. If the engine still does not start, the car's fault memory must be reset (any professional garage or repair shop can do this). Once this has been done, you can repeat the Brainbox installation. Make sure that the ignition is off and that you wait at least 10 minutes before disconnecting the throttle pedal. |

# 4 Trouble Shooting

| Description of problem | What to do |
|---|---|
| Connectors do not fit or do not click securely into place | • Check that you are trying to connect the correct pair of connectors and that they are correctly aligned.<br>• The connectors should fit together easily – don't force them.<br>• If the connectors are incompatible, please take a picture of the connector on the throttle pedal in your car and contact our Customer Service. |
| The Controller does not show any tuning stages or does not light up | • Make sure that all the connectors are properly secured.<br>• The Controller will only light up with the ignition switched on or the engine running.<br>• If the problem persists, please contact our Customer Service. |
| The **N** stage on the Controller flashes white | • RaceChip XLR detected a problem with signal transmission and went into its safe mode.<br>• This means your car is now in stock tune and can be driven. However, we recommend that you do not ignore the problem for a long period.<br>• Please contact our Customer Service.<br>• If the problem did not occur immediately after you installed RaceChip XLR, it could be caused by a malfunction in the throttle pedal or in another related assembly (i.e. RaceChip is not the cause). In this case, please take the car to a specialist workshop. |
| Tuning stages cannot be selected on the Controller | • Check that the Controller and the Brainbox are properly connected. One of the tuning stages should light up when the ignition is switched on or the engine is running.<br>• If you still cannot select a tuning stage, please contact our Customer Service. |

# 5 Contact



***Our Customer Service is ready to help!***

Find out how to contact us at:
**www.racechip.com/service-support**

Please have your customer details close by when you contact us.

***Follow us on:***

/racechipchiptuning @racechipDE

***Legal notice***

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