## **ELECTRIC TAILGATE FOR BMW 1 SERIES (UPPER) 2021**

### **INSTALLATION PRECAUTIONS**

- For safety and to ensure the normal use of the product, please install it by a professional installer. Do not disassemble the machine without permission to avoid damage to the machine and accident.
- Before installing the product, start the engine first, check the function display
  of the car dashboard, the operation of the buttons in the car is normal, and the
  surface of the car is not scratched. If you have any questions, please report to car
  owner in time.
  - Check whether the tailgate opens and closed normally, check whether the lights are normal.
- Turn off the engine and prepare related tools.
   Installer should first remove the metal objects and other hard objects on their bodies to prevent damage to the car seat or interior during installation.
- During the installation process, the removed automobile components should be
  put away to avoid scratching the instrument panel in the car. Debris left in the
  wiring should be disposed of in time and not left in the car. The joint must be
  insulated to prevent short circuit.
  - According to our wiring method, avoid affecting the moving parts of the car during the wiring process, such as the steering wheel drive shaft, accelerator and brake pedal and other vehicle control prats. Each wiring harness needs to be fixed after being routed to prevent it from coming loose.
- Please connect each wiring harness according to our wiring method (Noted the position of the ground wire).
- Do not insert or remove the connected plug while the power is on, otherwise the host or accessories may be damaged during plugging and unplugging.

 If the key fob has a tailgate open button, press this button for 3s to open and close the tailgate. If don't have, you need to press the unlock button 3 times to open and close the tailgate. If you have any problems, please contact our after-sales:

orders@emeraldstruts.com

### WIRING DIAGRAM



### **INSTALLATION INSTRUCTION**



1. Open the tailgate, and then remove the tailgate trim.



2. Remove the tailgate latch trim panel.



3. Open the tailgate, and then remove the tailgate trim.



4. Install our electric struts with the outgoing end facing down.



5. Install our electric struts on the right with the outgoing end facing down.



6. Route the strut line from the original car waterproof rubber plug to the position of the compartment.



7. Route the strut line from the original car waterproof rubber plug to the position of the compartment.



9. The rectangular control box connects the gray electric suction lock signal wire to the green wire of the sixth interface.



11. Route the power cable along the original car roof to the main driving position.



8. Remove the tailgate lock machine under the original car and install our electric suction lock machine.



10. Connect the lock machine and motor plugs, and secure the lock machine and motor.



12. Pass the power cable from the main driver's position to the co-driver's position, and find the original car insurance position in the storage box.



13. Unplug the 30A normal power fuse of the original car and plug it into the empty foot of our electrical take-off, and then plug it back into the insurance hole of the original car to take power.

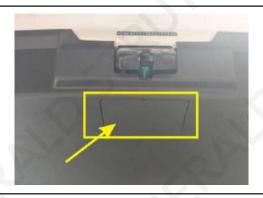


14. After connecting all the wiring harnesses, fix the control box at the lower left corner of the tail box.



15. The right side of the tailgate trim is drilled to install the special tailgate button.

After then installation is completed, you must set the tailgate learning. Make sure that the door can be opened and closed in place. (Raise the tailgate to ideal height. Then press the tailgate button for 3-5 seconds. You will hear a sound "Deep — —" and then loose your hand. Press the tailgate button again and close it. You will hear a sound again "Deep". Tail gate learning is finished.





When the tailgate cannot be opened normally, find the original car emergency safety lock in the trunk, open the emergency cover and pull the emergency switch to open.

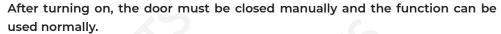
### **CHECK THE POINTS BEFORE THE TRIM PANEL IS RESTORED**



### After the installation is completed, please check:

- 1. Are all screws replaced with special screws?
- 2. Is the socket inserted?
- 3. Does the electric suction lock work?
- 4. Whether the harness is damaged or pinched during routing process.
- Whether the remote control and the front switch can open or close the tailgate.

### **FUNCTION DESCRIPTION**



Note: Do not use screwdriver or other tools to lock the secondary lock as a door closing, otherwise a series of problems such as abnormal door opening and closing.

# CONTROL MODE OF DOOR OPENING AND CLOSING

(1) Remote control door opening and closing: Press the remote control unlock key 3 times (some models press the trunk key for a long time) to control the trunk.

Note: When pressing the unlock key, press 3 times at a constant speed within 4 seconds.

	(2) The original driver of the trunk picks the key: Control the opening and closing of the trunk.  Note: The control mode is the same as that before installation, and will not take effect until the vehicle is unlocked.		be that the electro-suction is stuck or not in good contact).
		ELECTRO-SUCTION FUNCTION	In the process of closing the trunk, it has the characteristics of stable speed, low sound and the like, so that the user experience is more comfortable.
	(3) Front key/central control unlock key: Press the front key for about 15s to control the opening and closing of the trunk; If the front key is not installed, press the central control unlock key of the original car 3 times to control the opening and closing of the trunk.  Note: The function of opening the trunk by the front key will only take effect in the state of flameout or P gear, and the function of closing the trunk will take effect at any time. The functions of opening and closing the trunk by the central control unlock key will only take effect under the flameout state.	HEIGHT SETTING FUNCTION	The rear key adjusts the opening height of the trunk: When opening the door, manually adjust the trunk to the ideal height. Press the rear key for a long time and release it after hearing a long sound of the buzzer. The memory of the trunk height is successful. The trunk will open to this position next time.  Note: The set height cannot exceed the preset height, otherwise it may cause the door to be unable to open and close normally.
		COMMON PROBLEMS	
	(4) Trunk rear button: Press to control the trunk to close.	A. Bracket installing reverse: The trunk door will not be closed properly.	
ANTI-PINCH FUNCTION	In the process of opening and closing the door, if obstructions are encountered, the trunk will immediately stop to avoid accidents.	B. The bracket screws are not replaced as required:  The trunk door will not closed properly and the struts will be damaged.	
BUZZER REMINDER	A. After the electro-suction lock is completed, the beeper will "beep" four times quickly, indicating that the electro-suction is normally	C. The control box connector is not inserted into the correct position or is loose:  Anti-pinch pressure sensor is not sensitive.	

(During the process of opening and closing the trunk, there are corresponding sound reminders at different stages. When the electric absorption is abnormal, the buzzer will give an alarm).

- locked in place at the secondary level.
- B. After the completion of the electro-suction, the buzzer does not sound, indicating that the electro-suction is normal and the secondary lock is not in place.
- C. After the electro-suction or spit out, hear a long cry of the buzzer for about 10 seconds, indicating the electro-suction failure (it may

## correct position or is

### D. Strut ball head and compression springs are not installed properly:

Strut will fall off during us (check it after installation).

### E. The connector is not inserted into the correct position or is loose: Functional failure.

F. The electric suction lock and the lock cannot be deviated, otherwise the door will not be closed and the door gap is too large, resulting in a loud sound.

### G. The car has not been started for a long time, resulting in low power:

When the door is opening and closing, the electric tailgate does not work properly and it is necessary to restart the engine.

H. Installing more than 5kg of soundproof cotton on the tailgate, it will affect the switch gate force and need the controller to increase the force.

I. **First installation:** Press the tailgate closing button for 3-5 seconds to hear a long beep —, then press it again to hear 2 sound "Deep Deep". Finally, the installation is successful. (If there is no such operation, the electric tailgate will be abnormal when it is running.)

FAULT PHENOMENON	TROUBLESHOOTING METHOD		
The original key fob does not work	Check if the yellow central control wire is connected.		
Not work after installation	<ol> <li>Check if the positive power supply is connected with 12V-16V.</li> <li>Check if the power fuse is inserted.</li> <li>Check if the ground wire is connected.</li> </ol>		
Closing the tailgate not in place	<ol> <li>Check if the left and right bracket are</li> <li>installed reversed.</li> <li>Check if the control box wire is inserted.</li> <li>Check if the brackets are fixed with our screws.</li> <li>There are two rubbers on the left and right sides of the original tailgate cover. Check if they are loose and need to tightened.</li> </ol>		
The original car key fob does not work	Is there any learning after installing? You need to press the tailgate switch button to learn.		
The tailgate can only open to half	<ol> <li>Check if the left and right bracket are installed reversed.</li> <li>Check if the control box wire is inserted.</li> <li>Check if the brackets are fixed with our screws.</li> </ol>		



### Anti-Pinch

#### **Anti-Pinch Function:**

When the obstacle is directly below the tailgate, it will bounce back in the opposite direction when it hits the obstacle.

Note: When the door is closed, the anti-clamping force on both sides of the strut is heavy. Do not try the side anti-clip. We are not be responsible for injury.