EBMX X-9000

Installation Guide

Bike: Eride 3.0

V1.1

EBMX Eride 3.0 Kit Contents:

1. Top Trim
2. Side Plate Trim - Left
3. Side Plate Trim - Right
4. Mounting Hardware - 4 Mushroom Cap Screws; 4 Washers
5. eRide V3 Power Loom (Battery Harness)
6. eRide V2 Adaptor (X-9000 Adaptor)

EBMX X-9000 Kit Contents:

1. X-9000 Controller
2. 2-1 Harness
3. SW102 Display
4. Bluetooth Module
5. Thumb Throttle
6. 5 Bolts, 5 Flat Washers, and 5 Lock Washers

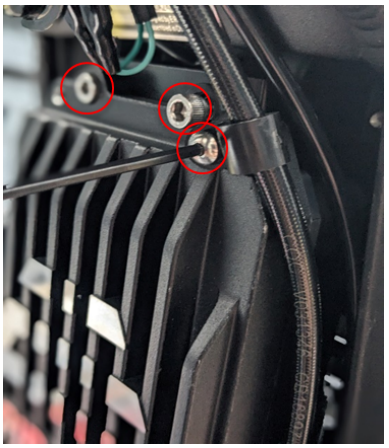
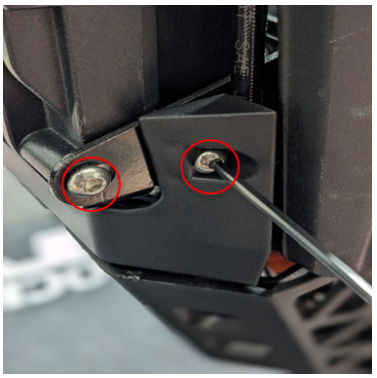
Required Tools and Other Parts (not supplied):

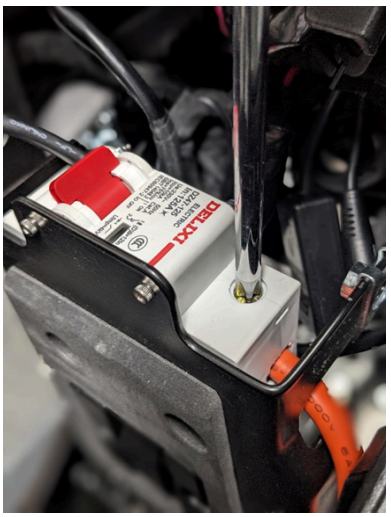
1. 2.5mm, 3mm, 4mm, 5mm Hex Key, T Handle or Socket
2. 10mm Socket and Ratchet Wrench
3. Philipshead Screwdriver

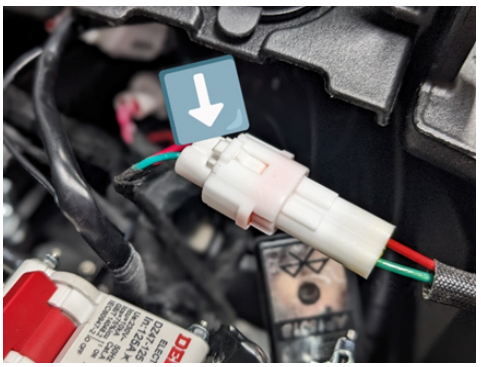
IMPORTANT PRIOR TO INSTALL

Ensure the key switch is OFF; Breaker is in the OFF position and the battery is REMOVED.

Please review the Eride owners manual if you are not familiar with this process.

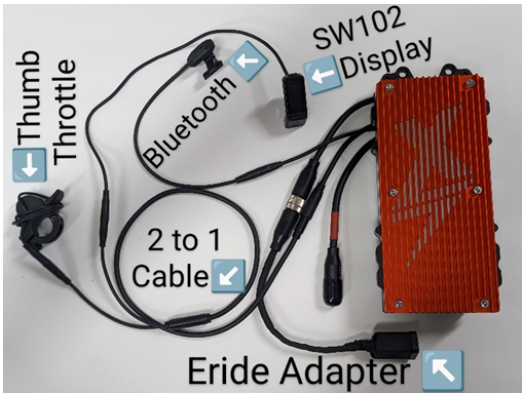
Step1: Use a 3mm hex key to remove the brake hose holder. *This will not be re-used.* Use a 5mm hex key to remove the (2) upper controller mounting bolts. *Set aside for reuse.*	
Step 2: Use a 4mm hex key to remove the lower controller bolts. Use a 3mm hex key to remove the skid plate extension. *Will not be reused.*	
Step 3: Use a 5mm hex key to remove the (2) upper skid plate bolts.	

Step 4: Lower the front of the skid plate down.	
Step 5: Use a 5mm hex key to remove the (2) bolts in the upper portion of the frame.*This allows you to hinge the battery support plate back to get better access to the breaker.*	
Step 6: Remove the (2) wires going into the breaker with a Phillipshead Screwdriver.	

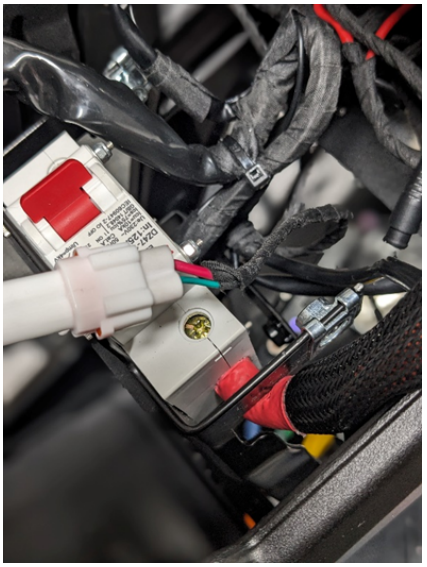
Step 7: Disconnect the 2-pin connector coming off the battery harness by pressing down on the release button and lightly pulling.	
Step 8: Unbolt the (5) wires from the OEM controller using a 10mm socket. Unplug the main connector at the top.	
Step 9: Use the X-9000 box to support the X-9000 and a 5mm hex key to install the (3) phase wires. Blue to B, Green to G and Yellow to Y. *Ensure you use a spring and a flat washer on each bolt.*	

Overview

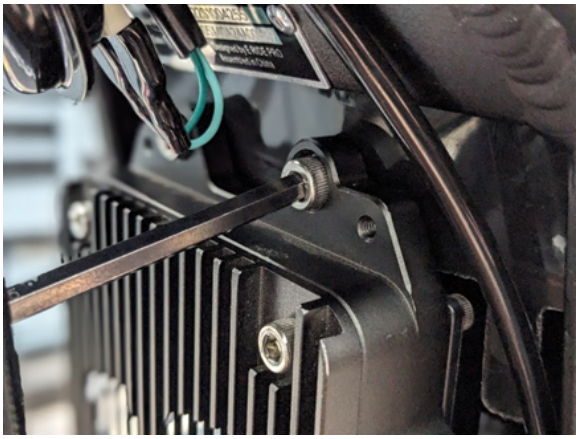
Note: When plugging in the connectors in the upcoming steps, take your time. Make sure the arrows are aligned and the connectors are plugged in fully. DO NOT FORCE THEM.



Step 10: Remove the battery lid and key switch plate with a 4mm hex key to provide access to the wires in the following steps.

Step 11: Install the new battery harness wires into the breaker.	
Step 12: Route the Positive and Negative battery harness wires down the back side of the battery support plate. Be sure to plug in the 2-pin connector. Then install them to the controller with a 5mm hex key. *Make sure the + wire coming from breaker goes to + on the controller and ground goes to -*	
Step 13: Route all of the X-9000 wires up through the middle hole by the breaker.	

Step 14: Temporarily hold the controller in place using (2) of the side plate bolts**.**	
Step 15: Mount the SW102 display and optionally the thumb throttle to the bars if you would like to be able to control regen braking with your thumb.	
Step 16: Plug the 2 to 1 cable into the display and thumb throttle. Carefully route the 2 to 1 cable under the ignition plate and plug it into the X-9000. Plug in the Bluetooth and X-9000 adapter.	
Step 17: Carefully arrange the connectors and Bluetooth module behind the breaker and then slowly move the battery support plate back. Take your time to make sure none of the wires are getting pinched. Once the plate will hinge back into place, reinstall the (2) bolts with a 5mm hex key. **Be sure to leave out the battery connector and coms plug as shown in the picture. You can reinstall the ignition key plate and battery lid.**	

Step 18: Position the plastic trim behind the top tab of the controller and loosely install the (2) OEM bolts.	
Step 19: Reinstall the (2) skid plate bolts with a 5mm hex key.	
Step 20: Use the included (4) 6mm bolts and washers to install the side trim plates with a 4mm hex key. You can route the brake hose behind the trim plates.	
Step 21: Snug up the top controller bolts and check to make sure all the other bolts are tight. Reinstall the battery.	

X-9000 App Setup and Settings:

1. Download the X-9000 App on your phone

Android:

https://play.google.com/store/apps/details?id=com.ebmx.ridecontrol

Apple:

https://apps.apple.com/us/app/ebmx/id1660497388

Flip the breaker on, turn the key switch on and connect to the bike.

2. Check for firmware updates on the firmware page.
3. Go to the Throttle page in the app. Turn the thumb throttle to off if you will not be using it.
4. Go to the calibration page and do a twist throttle calibration.
5. Go to the general page in the app. Select Eride Pro for the Bike, 20s for the battery series, Eride Stock Battery for the Battery model, and the Eride 3.0 motor.

   IMPORTANT you must select the correct battery to ensure the pre programed settings are loaded onto your controller

6. Complete the motor calibration when prompted.

Max Settings:

150 Battery Amps

15KW *(Motor Power and Field Weakening are separate settings. Total Peak Power will equal 20KW with field weakening turned to maximum)*

600 Phase Amps

100% Field Weakening (Calibration Page)

25% Regen

Stock tire height 620 mm

Stock Gear Ratio 9.18

Field Weakening adds additional battery amps and KW, so peak output will be higher than 15kw / 150 battery amps.

Eride Pro SS 2.0 and 3.0 w/ Belt Gear Ratio Chart

Rear Sprocket	Front Sprocket	Secondary Reduction	Primary Reduction	Final Ratio
40	14	2.86	2.216	6.33
41	14	2.93	2.216	6.49
42	14	3.00	2.216	6.65
43	14	3.07	2.216	6.81
44	14	3.14	2.216	6.96
45	14	3.21	2.216	7.12
46	14	3.29	2.216	7.28
47	14	3.36	2.216	7.44
48	14	3.43	2.216	7.60
49	14	3.50	2.216	7.76
50	14	3.57	2.216	7.91
51	14	3.64	2.216	8.07
52	14	3.71	2.216	8.23
53	14	3.79	2.216	8.39
54	14	3.86	2.216	8.55
55	14	3.93	2.216	8.71
56	14	4.00	2.216	8.86
57	14	4.07	2.216	9.02
58	14	4.14	2.216	9.18
59	14	4.21	2.216	9.34
60	14	4.29	2.216	9.50
61	14	4.36	2.216	9.66
62	14	4.43	2.216	9.81
63	14	4.50	2.216	9.97
64	14	4.57	2.216	10.13
65	14	4.64	2.216	10.29
66	14	4.71	2.216	10.45
67	14	4.79	2.216	10.61
68	14	4.86	2.216	10.76

Note: The speed displayed on the E-Ride OEM display may vary significantly from actual speed measurements recorded via GPS. This discrepancy may be influenced by factors such as wheel size calibration, sensor accuracy, and environmental conditions. Users should refer to GPS data for the most precise speed readings.

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