

*****EVT-168 Electric Scooter Operation Manual*****

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1. Introduction:

Dearest User:

1. Thank you for choosing the EVT Electric Scooter. We hope you have a pleasant time riding it.
2. This manual will help you understand the operation, basic inspection and maintenance of your scooter. It will also explain how to get the best performance and how to make your riding safer.
3. The contents of this manual may be slightly different from your scooter.
4. EVT Technology Co., Ltd. reserves the right of final explanation and modification of contents and specifications of this manual without notice.

2. Operation:

● Launch

1. Hold the left handle bar and brake lever with your left hand, hold the lift bar with your right hand. Push the scooter forward; the main stand will jump up. The side stand will jump while the scooter is moving forward.
2. Mount the scooter from the left side and sit well, keep your left foot on the ground to balance the scooter.
3. Turn the key to “ON” position to turn the power on and wait till the flashing LEDs on the dashboard and starting beep sound stop in about 3 seconds, and then gently twist the throttle to pull away the scooter. Do not twist the throttle while the LEDs are still flashing, if so, the warning beep shall sound. Please re-turn the key to “ON” position and wait till the flashing LEDs and starting beep sound stop.
4. Do not leave the key in the “ON” position when the rider is not seated. Be sure to turn the key to “OFF” when the rider is not seated.

● On Driving

1. Release the brake lever; gently twist the throttle to pull away the scooter.
2. While braking, apply front and rear brakes together to prevent the scooter becoming unbalanced.
3. Keep the light on while driving at night or in dark condition. Always switch to low beam when on-coming traffic is approaching.
4. The driving range will be reduced in different driving conditions, i.e. : quick acceleration, excessive braking, lights on driving, head-wind, carrying heavy loading, slope climbing, low tire pressure, low temperature and insufficient recharge.
5. If power shut off whilst braking, release the brakes and power supply resumes automatically in 0.5 seconds.
6. Over heat and over current will reduce the power by half or shut it off completely. Please turn the key to “OFF” position, wait for few minutes till the system to cool down then turn the key to “ON” position to start driving again.
7. Quick acceleration from standstill, high degree slope climbing or heavy loading driving will make the battery voltage drop quickly. The controller will detect the battery low voltage and cut the power to protect the battery. Please turn the key to “OFF” position, wait for few seconds then turn the key to “ON” position to start driving again.
8. When around 10% of battery energy left (yellow LED on), quick acceleration may cut off the power. Strongly recommend to fully recharge when around 10% of battery energy left (yellow LED on).

● Parking

1. When the scooter is at a standstill, put your left foot on the ground and turn the key to “OFF” position.
2. Get off the scooter from left side, hold the left handle bar and brake lever with your left hand. Hold the lift bar by your right hand, step on the paddle on the main stand with your right foot, pull the scooter backwards.
3. Turn the handle bar to the leftmost position and shake it a little bit, turn the key to “LOCK” position and then take the key out.

● Scooter Charging

1. Make sure the scooter is at “OFF” position and with the key out.
2. The Charging time depends on the battery energy left. The standard charging time is 5 to 6 hours as power almost drained and will provide on average up to 90% battery energy. To fully charge up to 100% battery energy level shall take another 2 to 3 hours.

3. Charger working with Lead-Acid Battery

(A) Off-Board Charger

- a. Charger shall be put in the dry and ventilated area.

Rain or moisture will damage the charger.

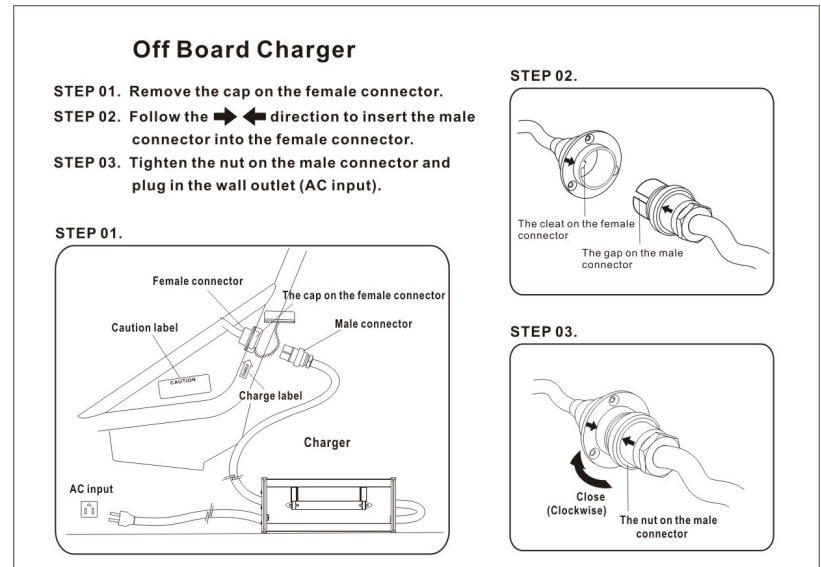
- b. Insert the DC connector into the scooter firmly, and

the AC connector into the standard outlet.

- c. Check the 4 LEDs on the charger to realize the charging condition.

- d. Unplug the AC and DC connector after charging is completed.

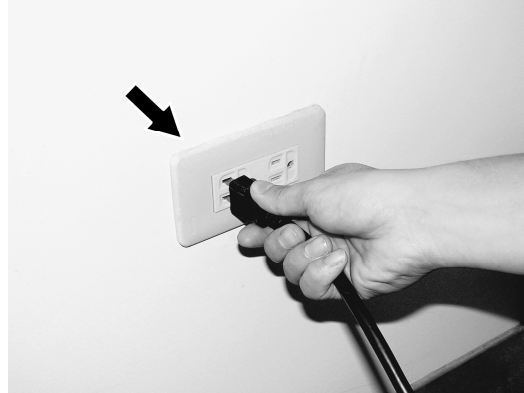
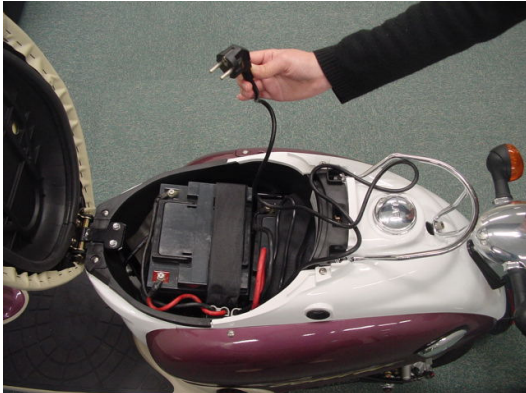
4Leds on Charger	Status
Orange LED on	Charging in progress
Green LED on	Fully Charged
No LED on	Charger failure



(B) On-Board Charger

- a. Do not Charge the scooter outside in the rain. Rain or moisture will damage the charger.
- b. Insert the AC connector into the standard outlet.
- c. Check the 4 LEDs on the dashboard to realize the charging condition.
- d. Unplug the AC connector after charging is completed.

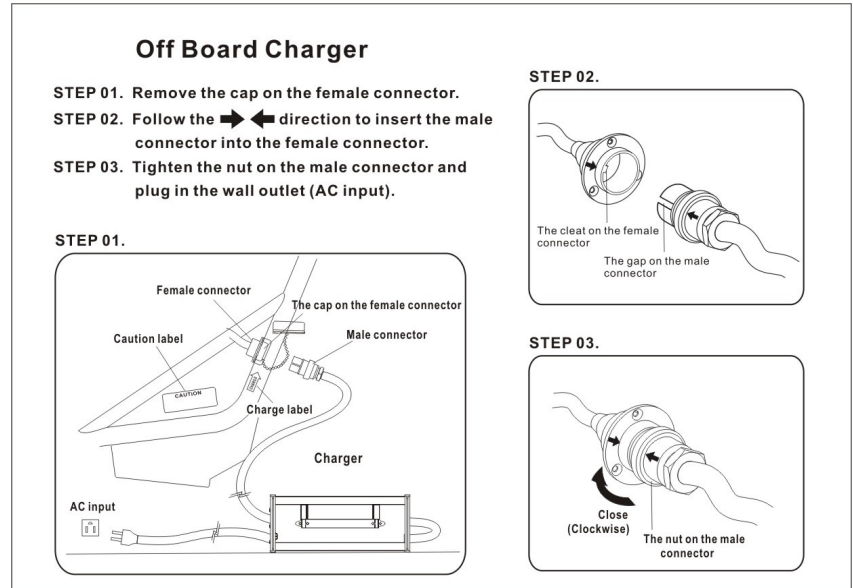
4Leds on Dashboard	Status
LEDs constantly flashing in 2 seconds.	Charging in progress
LEDs on	Fully Charged
No LED on	Charger failure



4. Charger working with Lithium Battery

- a. Charger shall be put in the dry and ventilated area.
Rain or moisture will damage the charger.
- b. Insert the DC connector into the scooter firmly, and the AC connector into the standard outlet.
- c. Check the LEDs on the charger to realize the charging condition.
- d. Unplug the AC and DC connector after charging is completed.

Led on Charger	Status
Red LED on	Charging in progress
Green LED on	Fully Charged
No LED on	Charger failure



5. Different battery pack should work with different charger to assure the best recharging performance. Recharging battery with wrong charger may cause serious damage to charger or to battery.
6. The battery life cycle will be reduced or damaged if insufficient charge status is retained for a long period of time. Please keep charging the batteries in the sufficient status.
7. If the scooter is not going to be used for a long period, keep recharging the batteries at least once every two weeks.

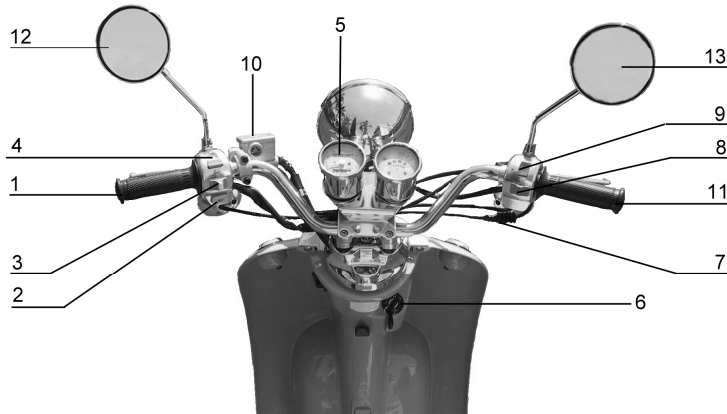
3. Parts Position



★Side View



- 1.Front Wheel 2.Front Cover 3.Direction Indicator 4.Front Lamp 5.Instrument Panel 6.Main Stand 7.Seat
8.Seat Lock 9.Rear Shock Absorber 10.Tail Lamp 11.Rear Direction Indicator 12.Rear Steel Holder 13.Rear Disk Brake
14.Rear Wheel 15.Rear Brake Lever 16.Front Brake Lever 17.Fairing 18.Front Fender 19.Side Cover

★Back View



- 1.Left Handle Bar 2.Horn 3.Direction Lamp Switch 4.Hi-Lo Beam Switch 5.Instrument Panel 6.Main Switch
7.Acceleration Cable 8.  Head Lamp Switch 8.  Kill Switch(US model) 9.P/E Mode Switch
10.Rear Brake Fluid Reservoir 11.Throttle 12.Rear View Mirror, Left 13.Rear View Mirror, Right 14.Controller

4. Basic Functions

★Instrument Panel



1. Speedometer 2~3.Odometer 4.Overheat Indicator (O.H)
 5. High Beam Indicator 6.Direction Lamp Indicator
 7. Battery Energy Indicator (E-F) & Charging Status

Item	Name	Functions
1	Speedometer	Driving speed
2~3	Odometer	Mileage Recorder (km)
4	Overheat Indicator (O.H)	On - when temperature reaches upper limit
5	High Beam Indicator	On - when switch to high beam
6	Direction Lamp Indicator	On - when direction indicator selected
7	Battery Energy Indicator (E-F)	1. Full Energy: First green light on 2. 50% Energy Left: Second green light on 3. 10% Energy Left: Yellow light on and warning beep sound (charging recommend) 4. Reached Lower Safety Limit: Red Light on (N.B). No energy (charging immediately)

★Main Switch



LOCK

Handlebar is locked. The key can be pulled out.

OFF

Power is off. The key can be pulled out.

ON

Power is on. The key can not be pulled out.

To prevent theft, remember to turn the key to the correct position and take the key out when parked.

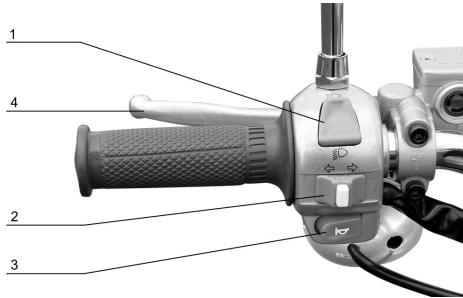
★Lock Method

Turn the turning bar fully to left, press the key and then release, turn the key to the lock and shake a little bit. The key can be turned to the correct position and pulled out.



★Release the Lock

Insert the key, shake the turning bar a little bit. The key can be turned to the correct position and the lock is then released.



★ Left Handle Bar Control and Switch



1. Hi-Lo Switch for Headlamp: When front lamp switch is on

- (1)  -Front lamp is on high beam
- (2)  -Front lamp is on low beam

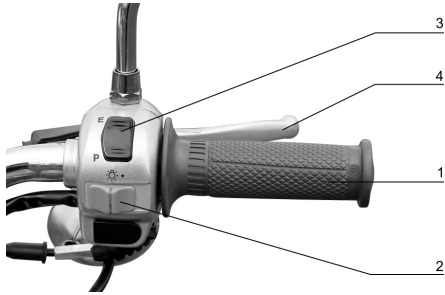
2. Switch of direction lamp:

- (1)  -Front right, rear right direction lamp flashing and intermittent beep sound.
- (2)  -Front left, rear left direction lamp flashing and intermittent beep sound.

Note: After turning, push the bottom on the switch to switch off.

- 3. Horn Button: Horn sound while pressing down.
- 4. Rear Brake Lever: Hold tight to break the rear wheel and cut off the power. If the power cut off while braking, release the lever and the power will resume automatically.

★Right Handle Bar Control and Switch



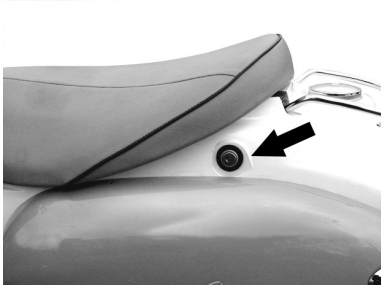
1. Acceleration Throttle: Will vary the speed and power when twist by different amount.
2. Headlamp Switch:
 - ☀ -Front Lamp, display panel lamp and tail lamp on.
 - -Front Lamp, display panel lamp and tail lamp off.
2. Kill Switch: (US model)
 - ⊗ -Kill Switch “ON”- Scooter will sound an alarm if started in this position.
 - -Kill Switch “OFF”- Normal operations position for this switch.
3. Switch for Power/Economic (P/E) Mode.
Selected by user when driving on different road conditions.
4. Front Brake Lever: Hold tight to break the front wheel and cut off the power, If the power cut off while braking, release the lever and the power will resume automatically.

Notes:

- *Twist the acceleration throttle slowly when pulling away. When the scooter starts to move the throttle can be turned more to reach the required speed.
- *When the scooter is parked and no one is seated or the rear wheel is on the ground, do not twist the throttle. Otherwise, it is possible for the rear wheel to be driven.
- *Release the throttle before applying the brake levers and release the levers before reapplying the throttle to drive.

*There is no sound when the main switch is at “ON” position; the motor is also on and in standby position. For safety reason, the yellow LED shall be flashing and with beep warning 10 seconds while the scooter is at “ON” position for 5 minutes without any moving. Return the key to “ON” position to restart the scooter. Always take the key out to prevent serious damage or injury happen if there is no rider on the scooter.

★Seat Lock



1. Insert the key to the seat lock and turn to the right, the lock will release.
2. Lift up the seat.
3. Close the seat with a little pressure and it will lock automatically, try to lift the seat to make sure it is well locked.

★Helmet Clip



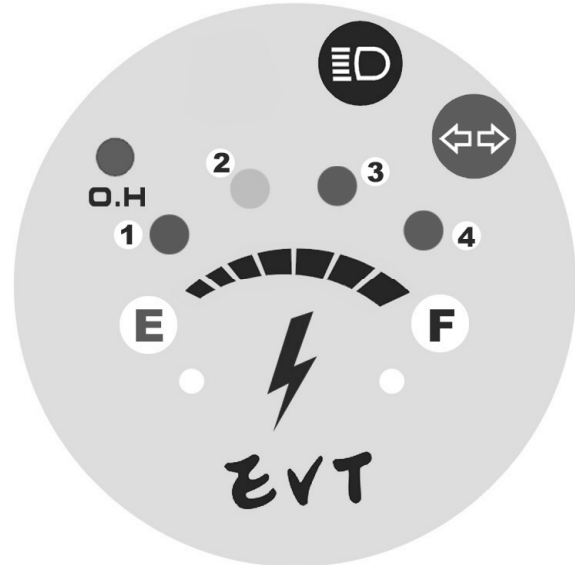
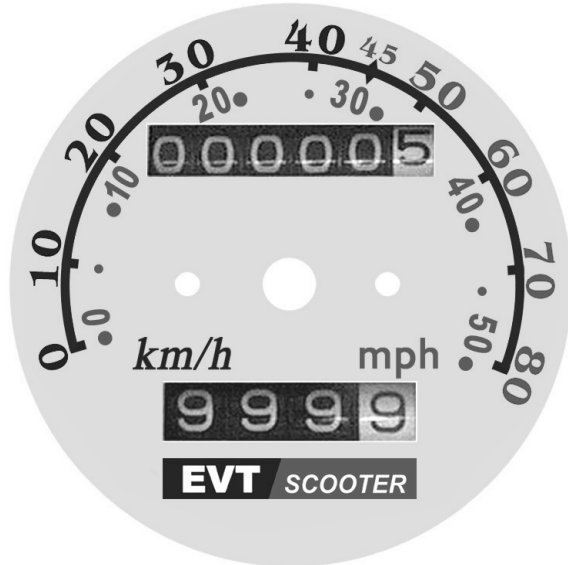
1. Place the helmet clip ring on the clip (1).
2. Place the helmet clip ring on the clip (2).

5. Inspections (Prior to driving)

Maintaining regular inspection will improve driving safety.

1. Tire: Pressure, Gaps, Any Cut, Damaged.
2. Brakes: Gaps of left and right brakes are normal (1-2cm is normal). Sufficient brake fluid.
3. Lamps: Direction Lamps, Brake Lamps, Front Lamp.
4. Rear View Mirrors: The angles are correct.
5. Turning Bar: Operating smoothly.
6. Energy Indicator: Battery energy is sufficient for reaching to the destination.

Instrument Panel (Trouble Shooting and Repair)



6. Trouble Shooting and Repair (1)

Conditions	Inspect	Repair
Instrument Panel LED is working, but there is no move while twisting throttle.	<ol style="list-style-type: none"> 1.The power will cut off while braking 2. Brake switch breakdown. 3. Motor breakdown. 4. Controller breakdown. 	<ol style="list-style-type: none"> 1.Release the brake and then gently twisting throttle. 2~4.See your agent
Instrument Panel LED is not working or no starting beep sound while you turn the switch to the “ON” position.	<ol style="list-style-type: none"> 1.Has the fuse blown? 2.Serious insufficient energy left. 3.Key switch breakdown. 4.Controller breakdown. 5.Display panel breakdown. 	<ol style="list-style-type: none"> 1. Remove the fuse and replace or see your agent 2. Recharge battery 3~5.See your agent
The first red LED flashing (1)	<ol style="list-style-type: none"> 1.Serious insufficient energy left 2.The battery is aged or useless 	<ol style="list-style-type: none"> 1.Recharge battery immediately 2.Replace the battery
The second yellow LED flashing (2)	Insufficient energy left	Recharge battery
The third green LED flashing (3)	DC converter	See your agent

7. Trouble Shooting and Repair (2)

Conditions	Inspect	Repair
4 LEDs flashing sequentially	1.Throttle stuck 2.Twisting throttle to pull away after the panel indicator stops flashing or the starting beep sound stops	1.See your agent 2.Switch the power to “OFF” position, and wait for few seconds to restart
The OH indicator lit(5)	1.Controller over heat 2.Controller breakdown	1.Switch the power to “OFF” position, and wait for several minutes than restart. 2.See your agent
The OH indicator flashing	1.Motor over heat. 2.Motor breakdown.	1.Switch the power to “OFF” position, and wait for several minutes than restart. 2.See your agent.
The first red LED lit (For scooter working with lithium battery only)	Battery pack breakdown.	See you agent.

Notes: (US model)

Switch on “Kill Switch” should cut off the power, switch off “Kill Switch” and return the key to “ON” position to start moving scooter. Scooter must be started with “Kill Switch” in the off position to function.

8. Periodic Maintenance Table

A: Inspection C: Clean T: Tighten

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Mileage(km)	400	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	More
A. Controller							A						A	REPEATITEM2-13
B. Battery			A				A			A			A	
C. Charger			A				A			A			A	
D. Safety	1.Pressure		A	A	A	A	A	A	A	A	A	A	A	
	2.Tire							A			A		A	
	3.Brakes	A	A	A	A	A	A	A	A	A	A	A	A	
	4.Brake Linings							A			A		A	
E. Lamp, Horn	A	A	A	A	A	A	A	A	A	A	A	A	A	
F. Screws	T	T	T	T	T	T	T	T	T	T	T	T	T	
G. Turning & Transmission	A		A				C			A			C	

9. Specifications (1) EVT-168 *Lead-Acid Battery

BRAND		EVT	FRAME		UNDER BONE		
MODEL		EVT-168	TXS	TYPE	DIRECT DRIVEN		
DIMENSION	LEN T	1652 mm		BATTERY	EAR RAT O	DIRECT DRIVEN	
	DT	740 mm	TYPE		SEALED LEAD-ACID		
	E T	1090 mm	VOL ME		12V/50Ah x 4		
	AXLE LEN T	1230 cm					
S SPENS ON		FRONT	T R E S E		FRONT	3.00-10	
		REAR			REAR	100/60-12	
PERFORMANCE	MAX SPEED		BRA E		FRONT	DISK BRAKE	
	L MB N θ				12°	REAR	DISK BRAKE
	RAN E		40~50 km	SPEEDO METER		80 km/hr	
MOTOR	TYPE	DC48V BRUSHLESS	LAMP	FRONT LAMP		12v 35w/35w 12v 55/60w(US model)	
	ONTROLLER	PWM		PLATE LAMP		12v/5w	
	PO ER			RATED1500W	BRA E LAMP		12v/21w
					D R E T ON LAMP		12v/10w x 4 12v 20w x4 (US model)

10.Specifications (2) EVT-168 *Lithium Polymer Battery

BRAND		EVT	FRAME		UNDER BONE	
MODEL		EVT-168	TXS	TYPE	DIRECT DRIVEN	
DIMENSION	LEN T	1652 mm		EAR RAT O	DIRECT DRIVEN	
	DT	740 mm	BATTERY	TYPE	LITHIUM POLYMER	
	E T	1090 mm		VOL ME	49.4V/30Ah	
	AXLE LEN T	1230 cm			49.4V/40Ah	
S SPENS ON		FRONT	T R E S E		FRONT	3.00-10
		REAR			REAR	100/60-12
PERFORMANCE	MAX SPEED		BRA E		FRONT	DISK BRAKE
	L MB N θ				12°	REAR
	RAN E		40~50km(30Ah) 60~70km(40Ah)	SPEEDO METER		80 km/hr
MOTOR	TYPE	DC48V BRUSHLESS	LAMP	FRONT LAMP		12v 35w/35w 12v 55/60w(US model)
	ONTROLLER	PWM		PLATE LAMP		12v/5w
	PO ER RATED1500W			BRA E LAMP		12v/21w
D R E T ON LAMP				12v/10w x 4 12v 20w x4 (US model)		