

# E-TON

## ECO Electric Bycycle OWNER'S MANUAL



# WELCOME

Thank you for purchasing an E-TON electrical bike. E-TON takes pride in a worldwide reputation for quality research, design , production and service .We wish you have many years of enjoyable and safe riding.

E-TON electrical bike are designed for safety and comfortable. The Users Manual contains maintenance schedule, maintain procedures you can easily precede and basic information of daily uses. For replacing parts and accessories, we strongly recommend using genuine E-TON products because they've been specially designed for your electrical bike and manufactured to meet E-TON's demanding standards.

When you need service, please remember that the dealer closest to you knows your electrical bike best and is interested in serving you complete satisfaction.

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## **SAFETY PRECAUTION**

★ Read this manual and all labels carefully and follow the operating procedures described.

1. Don't exceed line of minimum insertion as adjusting the seat post.
2. Always inspect all quick-release each time you use it to make sure the electric bike is in safe operating condition.
3. Don't dis-assembly by yourself.
4. Don't make a turn substantially to avoid any possible danger.
5. Always ride slowly and be extra careful when operating on harsh terrain.
6. Don't dash with lowering your head and never disperse your attention.
7. Don't operate on excessively icing, slippery or hilly terrain.
8. Never consume alcohol or drugs before or while riding electric bike.
9. Don't wear long skirt or wide clothing that might be drawn into rotating parts.
10. Never attempt stunts, such as wheelies or jumps. Don't try to show off.
11. Always keep both hands on the handlebar and both feet on the pedals while riding.
12. Don't wear high-heeled shoes the some unfavorable ride shoes.
13. Operating electric bike on well paved Bike-Road is recommended.
14. Release throttle grip when riding on downhill road.
15. Be sure of the battery is proper charged before every ride.
16. Do not ride on the electrical bike as if there is anything abnormal.
17. Use genuine spare parts by E –TON.

Please take a note of all warning items written on the owner's manual.

**! WARNING** indicates that serious injury or death may result.

**! CAUTION** indicates possible equipment or property damage could occur.

## DESCRIPTION WARNING STICKER LOCATIONS

- (1) Handlebar quick-release warning sticker
- (2) Stem quick-release warning sticker
- (3) Frame quick-release warning sticker
- (4) Seat post quick-release warning sticker
- (5) Battery pack pull out sticker
- (6) Power Indicator sticker



## PARTS LOCATION

- (1) Handle bar
- (2) Rear brake lever
- (3) Front brake lever
- (4) Throttle grip
- (5) Speed grip
- (6) Safety switch
- (7) Handlebars
- (8) Handlebars quick- release
- (9) Stem quick- release
- (10)Front wheel quick- release
- (11)Frame quick-release
- (12)Seat quick-release
- (13)Battery lock ring
- (14)Power Indicator
- (15)Folding pedals
- (16)Tires
- (17)Brakes
- (18)Mudguard
- (19)Kickstand
- (20)Battery Pack
- (21)Saddle



## SERIAL NUMBER

Please record the frame and engine serial numbers for future reference. The frame serial number is stamped underneath of the frame where the nick name is B-B end.

The motor serial number is shown on the left side of the motor cover with a bar code sticker pasted.  
FRAME NO: MOTOR NO:



(1) Frame serial number



(2)Motor serial number 7

## PARTS FUNCTION

### POWER SWITCH

ECO is driven by electric motor and the power switch is on the right hand side. Turn the switch to position means power is energized. Turn the switch to , power will be disconnected. 8

**! WARNING**

**The switch can also be used as an emergency switch for safety.**



### THROTTLE GRIP

The throttle grip is on the right hand side of handlebar and operated by the rider's palm. Turning the throttle grip toward rider opens the throttle.

When the throttle grip is released, spring tension shuts the throttle automatically



### **SPEED GRIP**

Speed grip is on the left handlebar and controls 6-speed freewheel by hand turn. When numeral a “6”, the chain engages at the smallest gear of freewheel. If you want to change speed, just turn speed grip toward rider’s side. If the chain is engaged on small gear, you have to pedal heavily and gain higher speed. On the contrary, speed is slower and pedaling easier if chain is on big gear.



### **! WARNING**

Never turn speed grip by compulsion if the chain located at “1” or “6” gear. Otherwise, it will result parts damage or cause chain to fall off. It may possible to get rider injured if the condition occurred.

**BRAKE LEVER Rear Brake** Rear Brake lever is on the left hand side of handlebar. Pull the rear brake lever to stop the bicycle by clipping the rim.

**Front Brake** The front brake is operated by front brake lever near right hand side of the handlebar.



### **! CAUTION**

There is a contact switch equipped on each of rear and front brake lever and it will cut off power supply once apply brake lever. The throttle grip will actuate only after releasing brake lever. DO NOT rotate throttle grip while applying brake.



## KEY SWITCH

1. The key switch has 3 settings, “ON”, “LOCK”, “OPEN”

“ON” represents power is energized.

“LOCK” represents power is disconnected and battery pack is locked for security.

“OPEN” represents power is disconnected and battery pack is free to take away from bicycle.



## INSPECTION

Before riding, please check following items. Make sure you are familiar with all controls and their operation. Check the ECO condition before and after every riding. It only takes a few minutes and could make you riding safely.

1. Check grips whether cracked and come off.
2. Check tires pressure and condition.
3. Check throttle grip whether operating smoothly.
4. Check handlebar whether secured.
5. Check brake pad wearing situation.
6. Insure brake parts operating normally
7. Check engagement and tension of the chain
8. Check speed-change gears' operation.
9. Check each quick release and other securing parts.
10. Check folding pedals if in correct position.
11. Check battery pack if in correct position.
12. Check power indicator if illumination.
13. Check saddle if secure



## OPERATION

### TO TURN ON THE POWER

1. Position ECO on flat road and stand on left hand side of the bicycle.
2. Turn the key switch to “ON” position.

### RIDING

1. Push bicycle forward slightly and let kickstand bounce by spring.
  2. Riding on the saddle.
  3. Change power switch to position and make sure the power indicator is illuminated.
  4. Check road condition and stamp pedals for 2 rounds.
  5. Rotate the throttle grip, motor starts running.
- ★ Power will be cut off when apply front or rear brake. After releasing brake, pedal again if bicycle's speed is too slow to  $\hookrightarrow$  make throttle grip having no function.
  - ★ When power indicator flashes every 1 second, power remains for riding 4-6 km and it will be cut off within short time if flashes every 1/8 second.
  - ★ Keep charging battery whenever you are not riding.

### RIDING POSTURE

For comfort, balancing, controlling and safety,

- ★ Keep head and eyes up, looking ahead, rather than at the ground.
- ★ Keep shoulders relaxed and back straight.
- ★ Bend elbows slightly and hold them away from body.
- ★ Always keep hands on the handlebars..

### MAKE A STOP

1. Choose a flat ground.
2. Stand left side of the bicycle.
3. Steps on the kickstand bottom by right foot.
4. Pull bicycle, by both hands, backward and kick up the stand.



### ! WARNING

1. Under any circumstance, always apply rear brake first and then front brake.
2. Don't speed up when riding on a downhill path
3. Pay more attention to road condition and obey traffic regulation.

## HOW AND WHEN TO CHANGE SPEED

ECO has a 6-speed (derailleur) system. Rider changes speed only by turning speed rig on the left hand side of handlebar.

Road condition	Proper speed
Flat	5 or 6
Gentle slope	3 or 4
Steep or hilly slope	1 or 2

### ! CAUTION

1. **To prevent the chain falling off, do NOT pedal backward while changing speed**
2. **To prevent the parts damage, do not turning speed grip as the bike stop.**
3. **To prevent the parts damage, change the gear gradually.**
4. **For long-term storage, engage speed at 6 for releasing mechanical tension.**

## CHARGING

**ECO can be charged in two ways.**

- (1) Directly charging: Remain battery pack on bicycle and connecting with charger. Plug charger into power outlet on wall.
- (2) Charging separately from bicycle: take away the battery from bicycle and charging wherever power is available.

## INSTRUCTIONS FOR CHARGING

### Directly charging:

- (1) Turn the key switch to “LOCK” position.
- (2) Connect charger cable to the battery pack and then plug into power outlet.
- (3) Turn on the switch of charger.
- (4) During charging process, green light goes flashing continuously until battery is fully charged after 4 ~ 5 hours.



Green light illuminates steadily represents charging process has been accomplished.

### 2. Charging Separately from Bicycle:

- (1) Loose the seat quick-release and pull up the seat posts slightly.
- (2) Turn the key switch to “OPEN” position and take out the battery pack.
- (3) Lay down the battery pack and connect the charging wire.
- (4) Put the battery pack back to bicycle and turn the key switch to “LOCK” position.
- (5) Lock the seat quick-release firmly after adjusting the seat posts. 2



### **! CAUTION**

1. The charging process is preceded inadequately if the red light illuminates while charging. Check connector/wire if red light still illuminates and please contact the dealer closest to you.
2. Keep the battery pack away from direct sunshine, rain or heavy moisture while charging.
3. Keep children free from the area of charging battery.
4. Even though there is a built-in fuse in battery pack, for better life of parts, do not charge battery continuously more than 24 hours.
5. Make sure switch off power when you are going to inspect or replace fuse.
6. If there is any peculiar smell or high temperature while charging, please stop charging and contact your dealer for repair.
7. Don't use the same power outlet with other electric equipment when charging battery.
8. Don't lift electric socket with wet hand.
9. Don't let battery pack fall down and neither heavily impact battery pack.
10. Don't disassemble the battery pack without professional instructions.

## FOLDING AND ASSEMBLING PROCEDURES

### Folding

1. Slightly pull the pedals inwards, then fold.
2. Loosen the seat quick release and lower the height of the seat.



### ! CAUTION

As folding any part, please watch out your hands for the safety reason.

3. Release the quick-release of the handlebar and lower it.



4. Release stem quick-release and bend.



5. Release the frame quick-release and press fixing pillar.



6. Folding the frame.



7. Firm the frame with fixed ribbon.



## ASSEMBLING

1. Loosen the ribbon.



2. Straight the frame.



3. Secure the frame and fix quick-release



### **! CAUTION**

**As folding any part, please watch out your hands for the safety reason.**

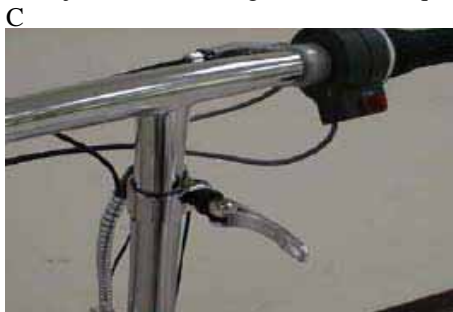
4. Straight and secure the stem quick release



5. Adjust the handlebar to a suitable height.



6. Adjust handlebar angle then fix the quick release



**CAUTION** !  
There is “Minimum Insertion” line marked on the post of seat and handlebar and don’t pull to exceed it.

7. Adjust the height of seat.



8. Centering the saddle, secure the quick-release.



9. Reset the pedals.



**! CAUTION**

Thoroughly inspect again after assembly the bicycle.



## MAINTENANCE

1. Wipe bicycle by dry cloth and use neuter cleaning agent to clean if necessary.
2. Wiping with thin lubrication oil on metal parts if ever cleaned by water.
3. Wipe plastic, painted parts by dry cloth.
4. Increasing maintenance frequency if riding in heavy moisture or rainy area. Apply greases on the function and rotating components.



## MAINTENANCE

### CHECK ITEMS

1. Check front and rear brake if brake pads having any serious wearing. Check brake cables if rusted or broke.
2. Check wearing condition of rims.
3. Inspect operation of speed change gears if those are normal.
4. Check all quick-release of bicycle if secured firmly.
5. Check tire pressure.
6. Cleaning bicycle and parts.
7. Check power plug and socket if loose or oxidized.
8. Check speed grip if turning normally.

## Specifications

<b>Vehicle Model</b>	<b>ECO</b>	<b>Series</b>	<b>EB1</b>
<b>Type</b>	<b>Foldable</b>	<b>Standards</b>	<b>20"</b>
<b>Total length</b>	<b>1640 mm</b>	<b>Total width</b>	<b>550mm</b>
<b>Seat height</b>	<b>860mm ~ 970mm</b>	<b>Weight</b>	<b>34kg</b>
<b>Axle Distance</b>	<b>1140 mm</b>	<b>Front fork</b>	<b>Shock absorb type</b>
<b>Battery type</b>	<b>Airtight battery</b>	<b>Battery</b>	<b>2 pieces</b>
<b>Battery Power</b>	<b>12V-12Ah</b>	<b>Battery durability</b>	<b>6 month</b>
<b>Charging time</b>	<b>4 –8 hour</b>	<b>Input voltage</b>	<b>95V – 250V (AC)</b>
<b>Rims size</b>	<b>20" × 1.75</b>		
<b>Motor type</b>	<b>Brushless DC motor</b>		
<b>Rated power</b>	<b>200W</b>		
<b>Speed change</b>	<b>6 speeds</b>		
<b>Max climbing angle</b>	<b>12°</b>		
<b>Max speed</b>	<b>25km/hr</b>		
<b>Cruising Range</b>	<b>25km</b>		
<b>Size after folding</b>	<b>Length 860mm</b>	<b>Width 890mm</b>	<b>Height 460mm</b>

## **WARRANTY**

### **OBLIGATION**

Under this limited warranty, E-TON will repair or replace, at our option, any part proven to be defective in material or factory workmanship under normal use for the applicable period stated below. Parts will be repaired or replaced without cost only during the warranty period.

### **OBLIGATION OF BICYCLE OWNER**

The owner must, at his own expense, perform all the scheduled maintenance in accordance with the maintenance schedule in this Owner's Manual to be covered under this warranty.

### **TERM OF WARRANTY**

This warranty covers this bicycle for a period of six months from the date of purchase.

### **EXCLUSIONS**

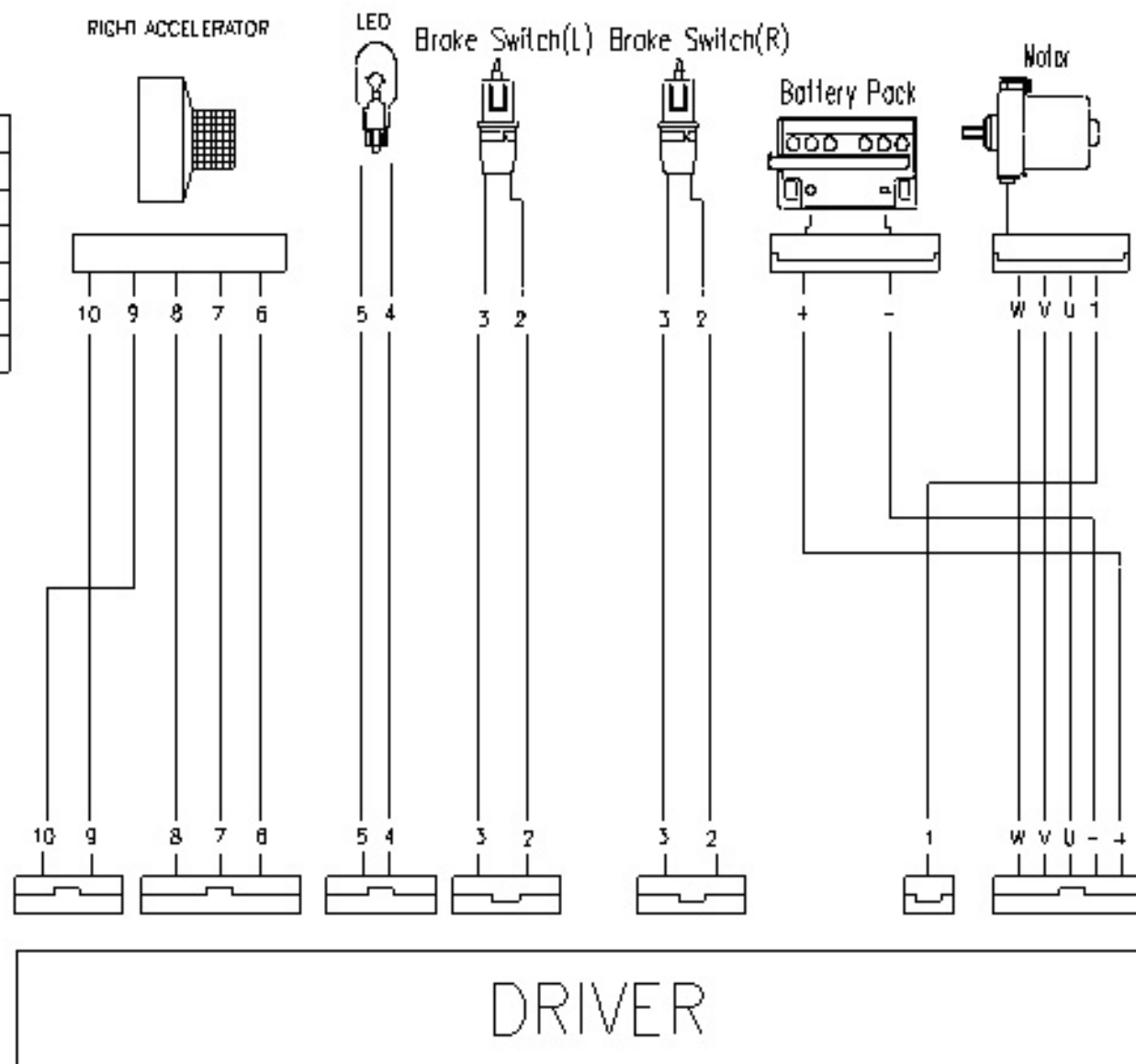
This warranty does not cover failures other than those resulting from defects in material or factory workmanship. This warranty does not cover replacement of expendable maintenance items made in connection with required maintenance services including, but not limited to: tires/inner tubes, brake shoes, control cables, grips, spokes & nipples, battery. In addition, this warranty does not extend to the bicycle used for racing, competition, and commercial uses, including rentals.

## **WIRING DIAGRAM**



	Color
+	RED
-	BLACK
U	WHITE
V	BLACK
W	RED
1	GREEN
2	BLUE
3	Yellow
4	Blue

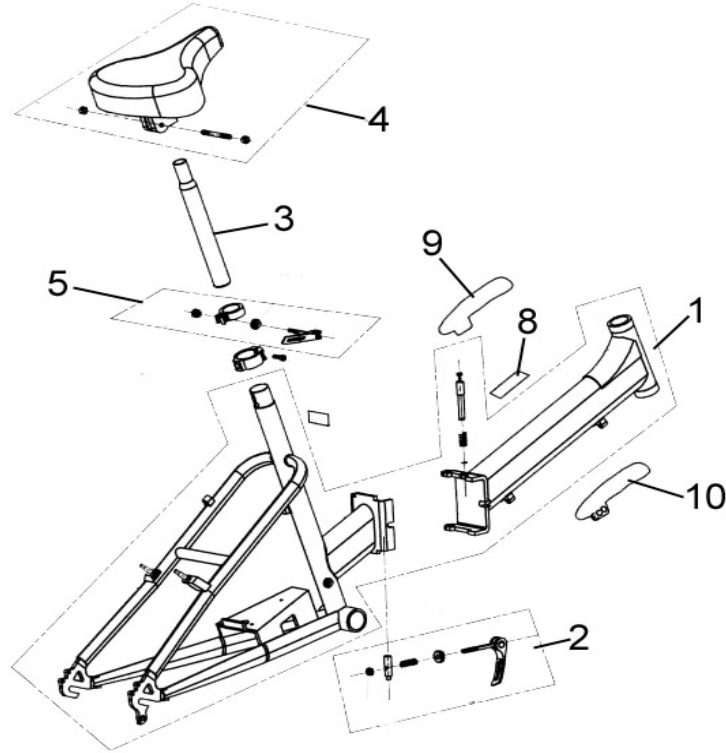
	Color
5	PURPLE
6	YELLOW
7	WHITE
8	BLUE
9	BROWN
10	RED



# E-TON ECO

## Electrical Bicycle

### 01. Seat & Frame



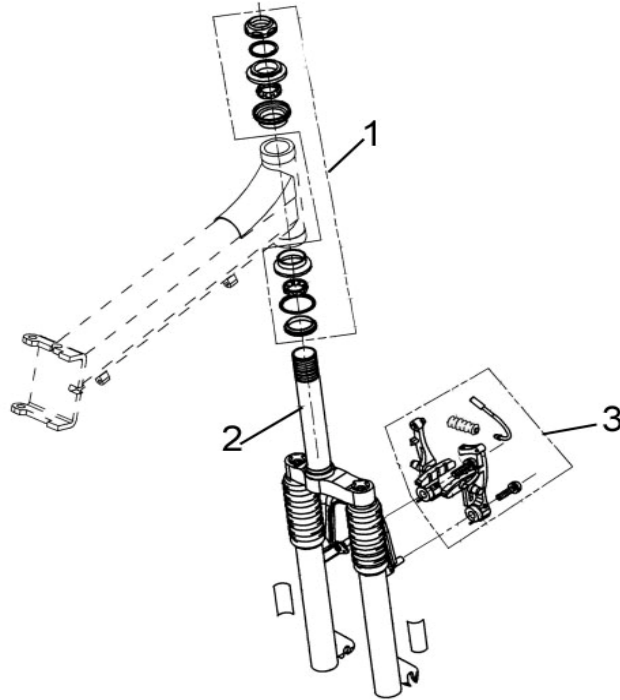
ECO-01

Page	Ref#	Part No.	OEM	Description	Required Qty
1	1		E0100-3JB0-1700	FRAME ASSY.,(SILVER)	1
1	1		E0100-3JB0-2200	FRAME ASSY.,(RED)	1
1	1		E0100-3JB0-3400	FRAME ASSY.,(BLUE)	1
1	2		E012A-3JB0-0000	FRAME FOLDING QUICK RELEASE	1
1	3		G7240-3JB0-1000	SADDLE STEM	1
1	4		G720A-3JB0-0000	SEAT ASSY.	1
1	5		G741A-3JB0-0000	STEM POST QUICK RELEASE	1
1	6		E0121-3JB0-0000	HOLDER BATTERY BAND	1
1	7		H7144-3JB0-0000	SADDLE STEM WARNING	1
1	8		H7143-3JB0-0000	FRAME FOLDING WARNING	1
1	9		H7145-3JB0-0000	STICKER,E-CO (L)	1
1	10		H7146-3JB0-0000	STICKER,E-CO (R)	1

# E-TON ECO

## Electrical Bicycle

### 02. Front Suspension & Steering Column



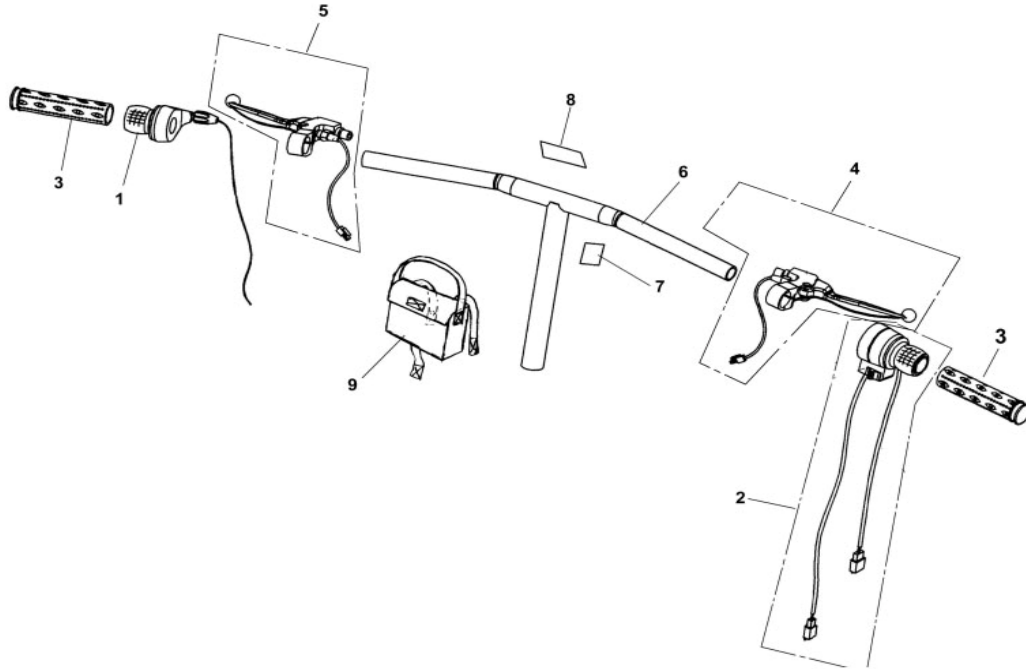
ECO-02

Page	Ref#	Part No.	OEM	Description	Required Qty
2	1		E030A-3JB0-0000	HEAD PARTS	1
2	2		E3200-3JB0-0000	SUSPENSION FRONT ASSY.,	1
2	3		D3620-3JB0-0000	V-BRAKE ASSY.,(HJ-806AD)	1

# E-TON ECO

## Electrical Bicycle

### 03. Handlebar and Controls



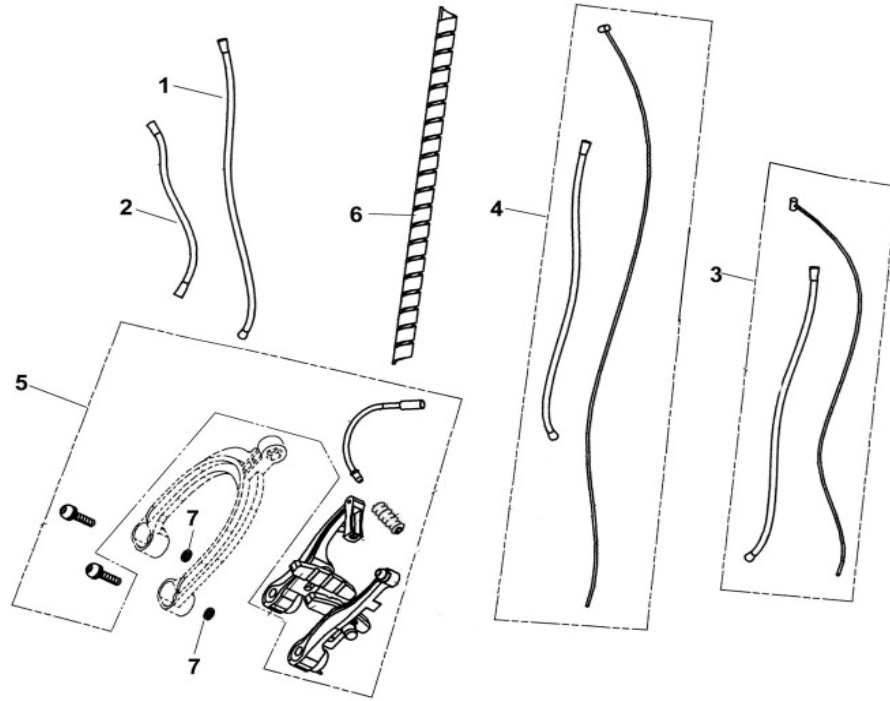
ECO-03

Page	Ref#	Part No.	OEM	Description	Required Qty
3	1		E317A-3JB0-0000	LEFT SHIFTER ASSY.	1
3	2		E316A-3JB0-0000	RIGHT ACCELERATOR ASSY.	1
3	3		E3166-3JB0-0000	L/R GRIP HANDLE	2
3	4		E3180-3JB0-0000	BRAKE LEVEL ASSY. (R)	1
3	5		E3170-3JB0-0000	BRAKE LEVEL ASSY. (L)	1
3	6		E3100-3JB0-0000	HANDLE BAR COMP	1
3	7		H7141-3JB0-0000	HANDLE BAR WARNING STICKER	1
3	8		H7153-3JB0-0000	POWER INDICATOR STICKER	1
3	9		C1803-3JB0-0000	CHARGER BAG	1

# E-TON ECO

## Electrical Bicycle

### 04. Brakes and Cables



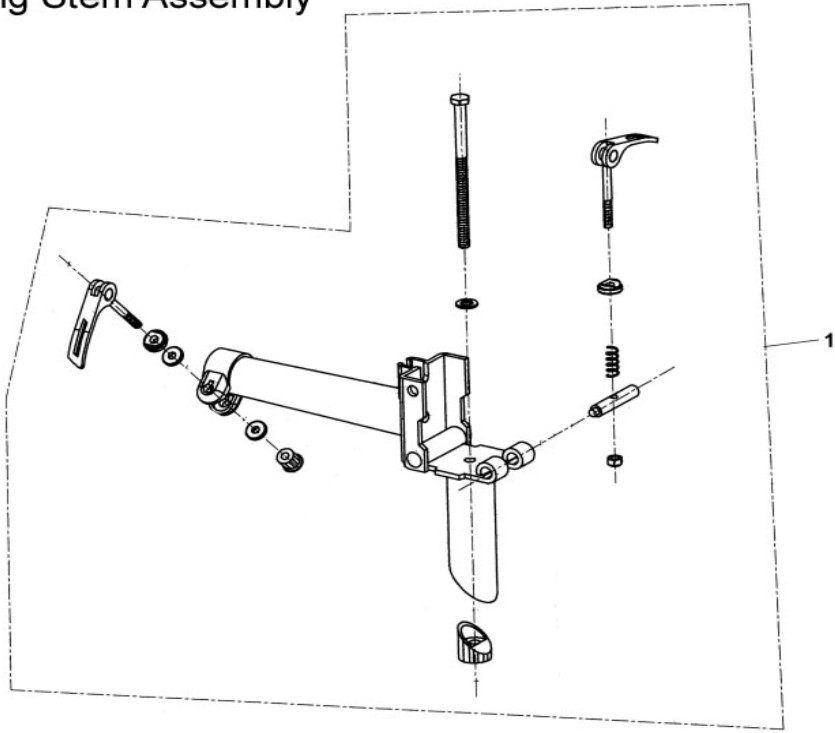
ECO-04

Page	Ref#	Part No.	OEM	Description	Required Qty
4	1		E3172-3JB0-0000	SPEED CABLE-OUTER CASING(F)	1
4	2		E3173-3JB0-0000	SPEED CABLE-OUTER CASING(R)	1
4	3		E545A-3JB0-0000	BRAKE-CABLE ASSY(F)	1
4	4		E345A-3JB0-0000	BRAKE-CABLE ASSY(REAR)	1
4	5		D3620-3JB0-0000	V-BRAKE ASSY.,(HJ-806AD)	1
4	6		H3938-3JB0-0000	SPIRAL WRAPPING BAND(10A×850)	1
4	7		I2140-60001	WASHER	2

E-TON ECO

Electrical Bicycle

05. Folding Stem Assembly



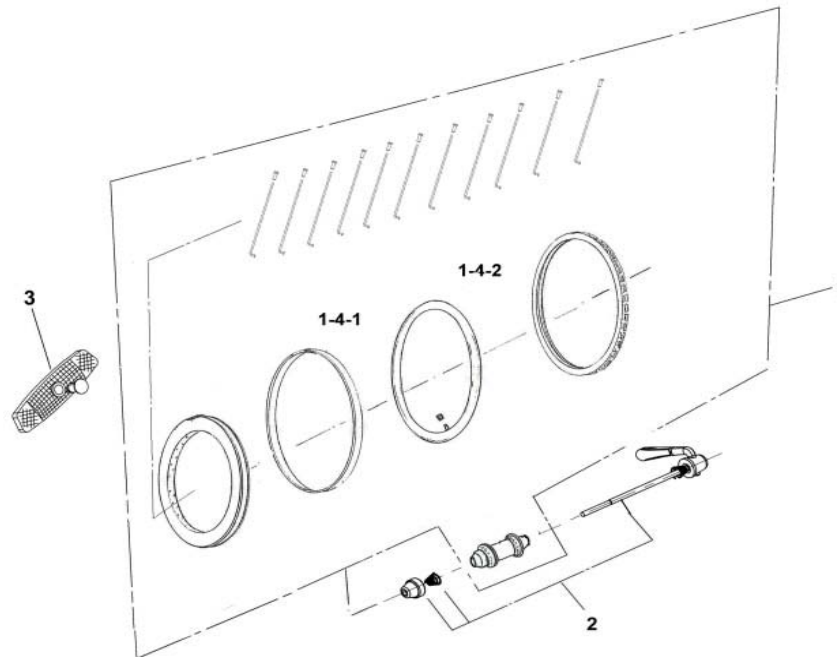
ECO-05

Page	Ref#	Part No.	OEM	Description	Required Qty
5	1		E3300-3JB0-0000	FOLDING STEM	1

# E-TON ECO

## Electrical Bicycle

### 06. Front Wheel Assembly



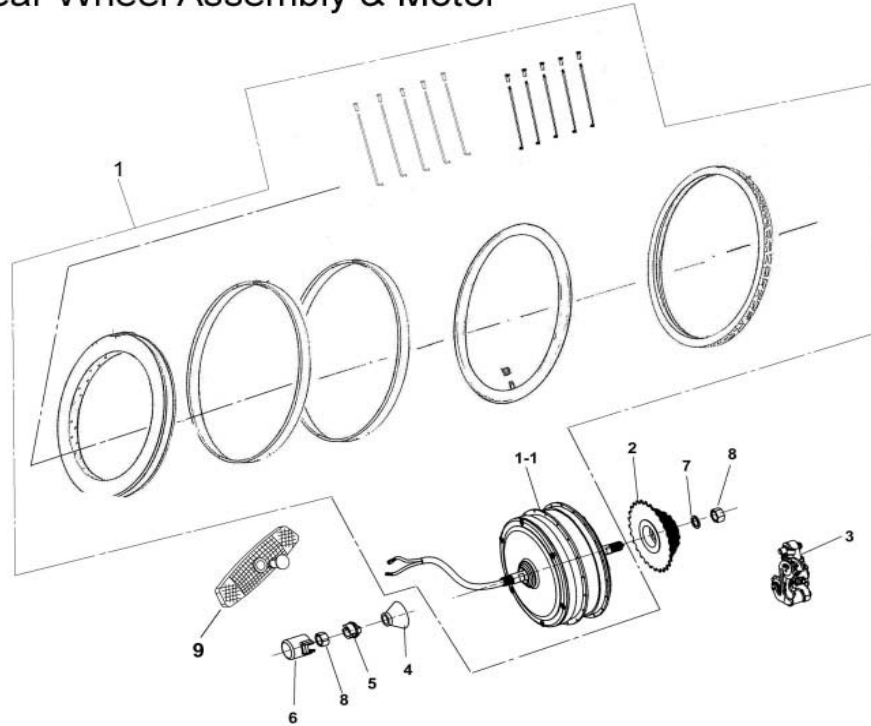
ECO-06

Page	Ref#	Part No.	OEM	Description	Required Qty
6	1		D471A-3JB0-0000	FRONT WHEEL ASSY.	1
6	2		D4303-3JB0-0000	FRONT WHEEL QUICK RELEASE	1
6	3		C3743-3JB0-0300	REFLECTOR (WHITE)	1

# E-TON ECO

## Electrical Bicycle

### 07. Rear Wheel Assembly & Motor



ECO-07

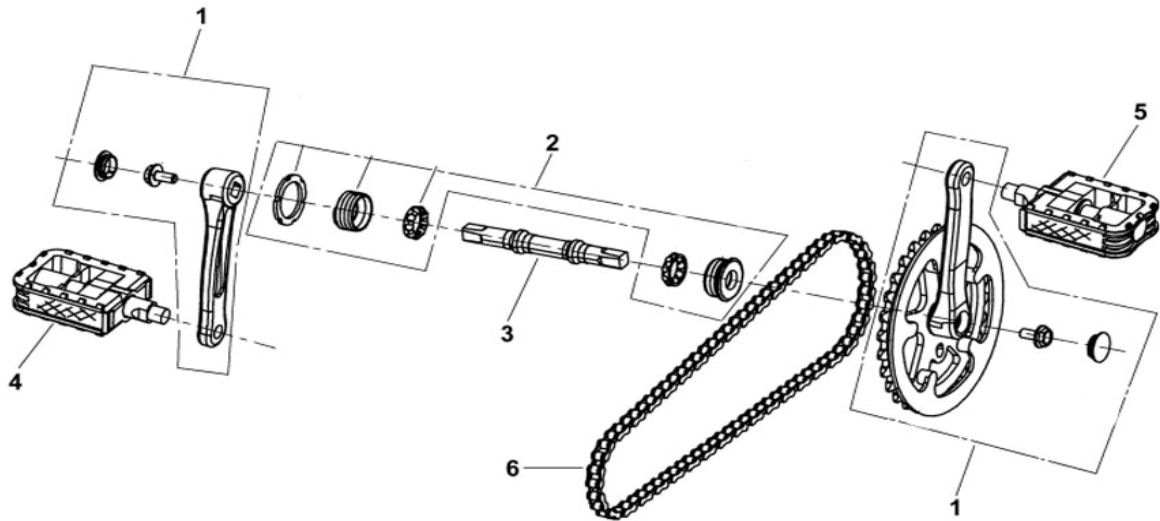
Page	Ref#	Part No.	OEM	Description	Required Qty
7	1		D471B-3JB0-0000	REAR WHEEL ASSY.	1
7	1-1	*		Motor	1
7	2		D4120-3JB0-0000	FREEWHEEL SPROCKET	1
7	3		D4121-3JB0-1000	REAR DERAILLEUR	1
7	4		C1324-3JB0-0000	REAR AXLE RUBBER CAP	1
7	5		C1323-3JB0-0000	WIRE COLLAR	1
7	6		C1322-3JB0-0000	WATERPROOF RUBBER CAP	1
7	7		I9905-14200	WASHER	1
7	8		I5601-14010	NUT, HEXAGON HEAD	2
7	9		C3743-3JB0-0100	REFLECTOR (YELLOW)	1



# E-TON ECO

## Electrical Bicycle

### 08. Pedals and Crank Assembly



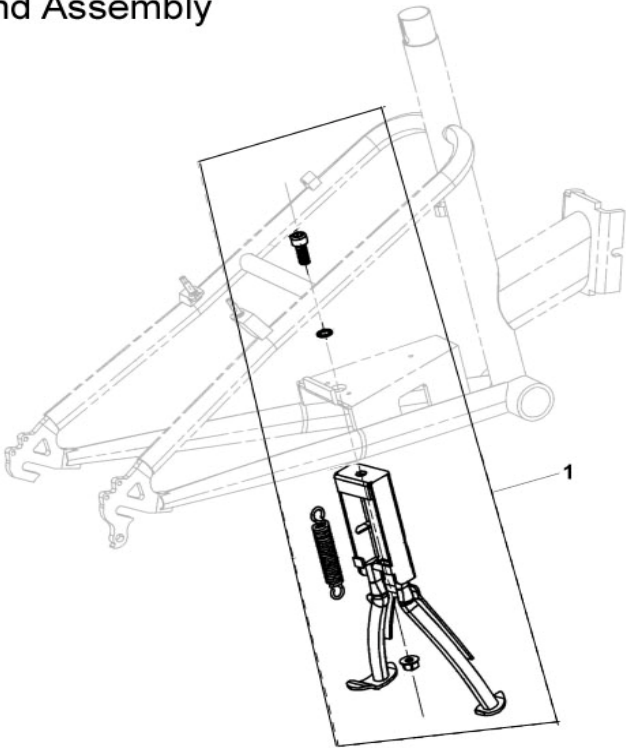
ECO-08

Page	Ref#	Part No.	OEM	Description	Required Qty
8	1		D600A-3JB0-0000	CHAIN WHEELS&CRANKS(S105P)	1
8	2		D610A-3JB0-0000	BOTTOM BRACKET SET	1
8	3		D6104-3JB0-0000	COTTERLESS AXLE	1
8	4		D6110-3JB0-0000	FOLDING PEDAL(L)	1
8	5		D6111-3JB0-0000	FOLDING PEDAL(R)	1
8	6		D0100-3JB0-0000	DRIVE CHAIN(Z50x116)	1

# E-TON ECO

## Electrical Bicycle

### 09. Kick Stand Assembly



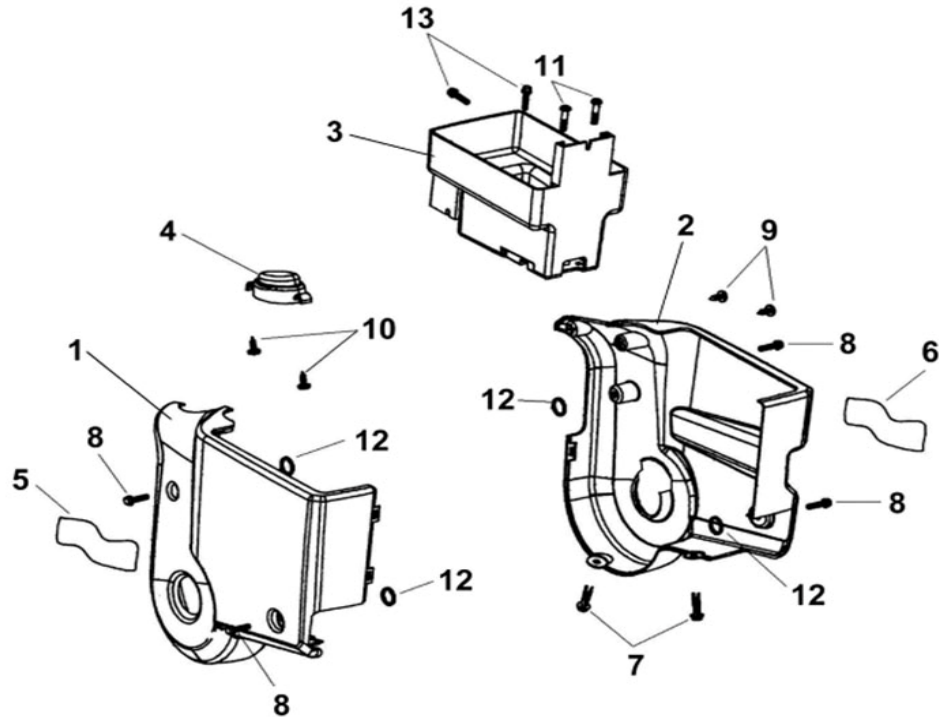
ECO-09

Page	Ref#	Part No.	OEM	Description	Required Qty
9	1		E050A-3JB0-0000	KICKSTANDS ASSY.	1

# E-TON ECO

## Electrical Bicycle

### 10. Side Covers & Battery Holder



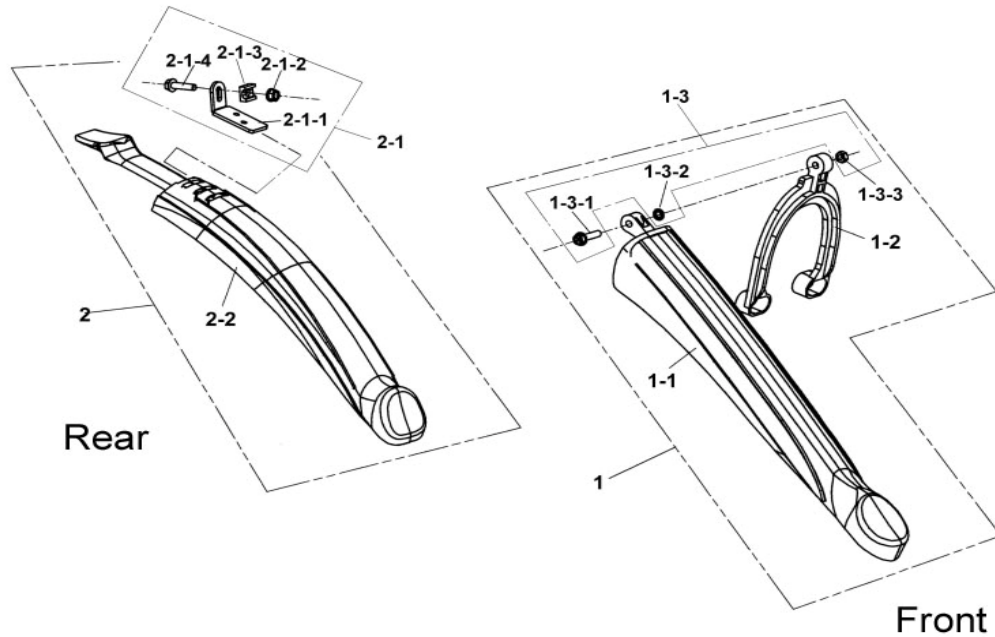
ECO-10

Page	Ref#	Part No.	OEM	Description	Required Qty
10	1		F4300-3JB0-0800	SIDE COVER LEFT(BLACK)	1
10	2		F4400-3JB0-0800	SIDE COVER RIGHT(BLACK)	1
10	3		F0701-3JB0-0000	BATTERY SEAT	1
10	4		F2101-3JB0-0000	POWER METER UPPER	1
10	5		H7149-3JB0-0000	STICKER, SIDE COVER LEFT	1
10	6		H7150-3JB0-0000	STICKER, SIDE COVER RIGHT	1
10	7		I8320-3JB0-0000	PUSH RIVET	2
10	8		I8556-05015	SCREW,CROSS RECESS HEAD WITH WASHE	4
10	9		I2804-04013-5C	SCREW	2
10	10		I3901-42110	SELF-TAPPING SCREW(M3×8)	2
10	11		I8501-05012	SCREW(M5×12)	2
10	12		C510C-FIA0-0000	RUBBER PAD	4
10	13		I8556-05012	SCREW,CROSS RECESS HEAD WITH WASHE	2

# E-TON ECO

## Electrical Bicycle

### 11. Front and Rear Mud Guards



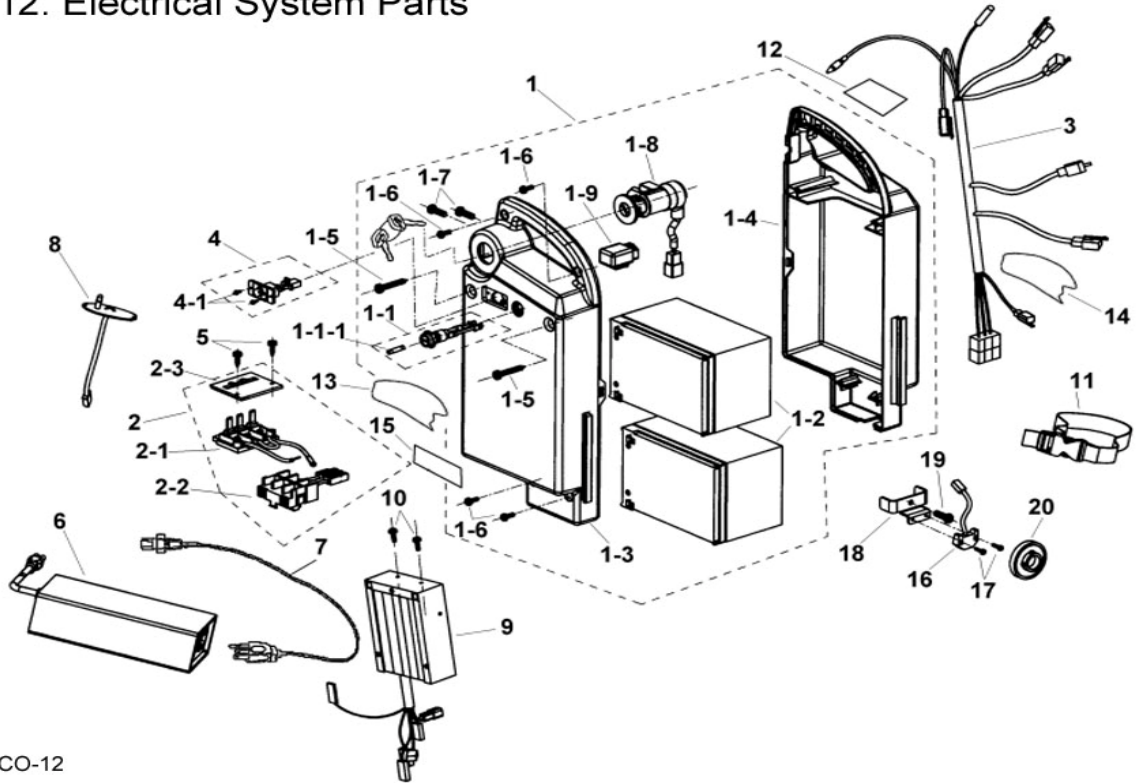
ECO-11

Page	Ref#	Part No.	OEM	Description	Required Qty
11	1		E211A-3JB0-0000	REAR FENDER ASSY	1
11	1-1	*	E2110-3JB0-0000	REAR FENDER	1
11	1-2	*	E2112-3JB0-0000	HOLDER	1
11	1-3	*	E211B-3JB0-0000	REAR FENDER PARTS	1
11	2		E111A-3JB0-0000	FRONT FENDER ASSY	1
11	2-1	*	E111B-3JB0-0000	FRONT FENDER PARTS	1
11	2-2	*	E1110-3JB0-0000	FRONT FENDER	1

# E-TON ECO

## Electrical Bicycle

### 12. Electrical System Parts



Page	Ref#	Part No.	OEM	Description	Required Qty
12	1		C150A-3JB0-0000	BATTERY ASSY.	1
12	1-1-1	*	C1511-3JB0-0000	FUSE(30A)	1
12	1-6	*	I7707-04016	SCREW, TAPPING	4
12	2-1	*	C1505-3JB0-0000	BATTERY SOCKET OUT	1
12	2-3	*	C1507-3JB0-0000	BATTERY SOCKET COVER	1
12	4		C1802-3JB0-0000	BATTERY CHARGER SOCKET	1
12	5		I3903-42520	SELF-TAPPING SCREW (M3×20)	2
12	6		C180A-3JB0-0000	CHARGER COMP ASSY	1
12	7		C1801-3JB0-0000	CHARGER WIRE	1
12	8		C7301-3JB0-0000	POWER METER ASSY	1
12	9		C650A-3JB0-0000	DRIVER ASSY	1
12	10		I3600-04012	SCREW,CROSS RECESS HEAD(M4×12)	2
12	11		H3937-3JB0-0000	BELT BAND	1
12	12		H7152-3JB0-0000	STICKER, BATTERY PACK PULL OUT INDICA	1
12	13		H7147-3JB0-0000	STICKER, BATTERY COVER LEFT	1
12	14		H7148-3JB0-0000	STICKER, BATTERY COVER RIGHT	1
12	15		H7154-3JB0-0000	BATTERY USE ATTENTION STICKER	1