



# SHIMANO STOPS

## SERVICE MANUAL

E5000 / E6100 / E7000 / E8000

SHIMANO  
STOPS

SERVICE MANUAL

E5000 / E6100 / E7000 / E8000

## SHIMANO

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SHIMANO TOTAL ELECTRIC POWER SYSTEM

SHIMANO  
STEPS

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# SHIMANO DNA



Shimano e-bike systems have been carefully crafted over a century of extensive research and development, coupled with many decades worth of experience and innovation in cycling. Now we've put all of our expertise into one of the most revolutionary e-bike systems available today. If you truly want to feel the essence of e-biking, you have to experience SHIMANO STEPS.

# SHIMANO SYSTEM ENGINEERING



For e-bike systems development, Shimano has made maximum use of our accumulated expertise in bicycle parts development over the years. And we bring riders superb ride quality generated by optimal cooperation between conventional bike components and e-bike systems. We have worked to create new value by studying the total balance of bicycles and riders.

# Energize your lifestyle

## SHIMANO STEPS THE E-BIKE SYSTEM FOR RIDERS

We develop and produce a wide range of E-biking systems to match the needs and desires of riders. Whether you're an adventurous mountain biker, an urban commuter, or anyone in between, there is sure to be an E-bike system that suits you.

### City and trekking

E-bike systems for day-to-day use

### Mountain bike

E-bike systems for adventurers

#### E-MTB SYSTEMS

Nimble enough to tackle that steep, tricky bit of trail, and precise enough to give you just the right amount of support to hit technical single-tracks with confidence. Our e-MTB systems are designed to let you maneuver your bike as if you were riding a normal mountain bike.

#### CITY AND TREKKING E-BIKE SYSTEMS

Our City and Trekking systems are so intuitive and efficient that you'll hardly notice that you're riding an E-bike. We put a great deal of effort designing and building these systems to retain the natural essence and control of conventional bikes.

## HEALTHY LIVING

We believe that highly refined E-bike systems can tempt more people to ride further and connect deeply with nature. No matter where, when, or how you ride; we make systems to help riders experience more of the world and enjoy every moment on their bike to the fullest.



## NATURAL ENJOYMENT

We focus so much on the human factor when designing our E-bike systems because riders deserve the most authentic and comfortable biking experience possible. Our rider-first approach helps you stay confidently in control of your cycling experience by providing the optimal amount of assist exactly when you need it.



# THE RIGHT POWER, AT THE RIGHT TIME

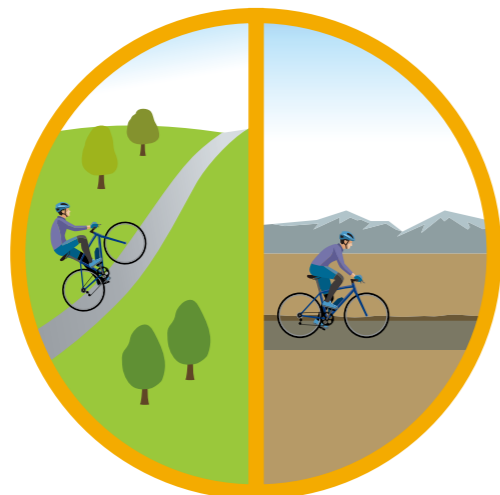
## 1. RIDE LONGER & RIDE SMOOTHER



### RIDE LONGER

Enjoy longer and more enjoyable rides whether you take the scenic way home, venture farther, or tackle mountain trails.

Automatically-applied assist output characteristics (Powerful and Natural) make the most of every pedal stroke and battery charge. Greater system efficiency means more riding range on fewer charges, and longer overall battery life.



### RIDE SMOOTHER

The optimal amount of support provided at the right time reduces harsh and unnatural surges of power, keeps pedaling smooth, and supports a more natural cycling experience in any environment. Real-time riding data from the torque, cadence, and speed sensors are analyzed to detect the optimal assist for every moment.

SHIMANO STEPS relies on the combination of its sensors, drive unit tuning and efficient pedaling mechanics to deliver a riding experience that is both highly sophisticated and intuitive at the same time.

## 2. COMFORTABLE IN ANY SITUATION

With dedicated systems for City, Trekking and MTB riding, we help keep you in control while providing optimal assist when you need it most. By receiving the right power at the right time, you can dedicate more focus to enjoying the cycling experience.

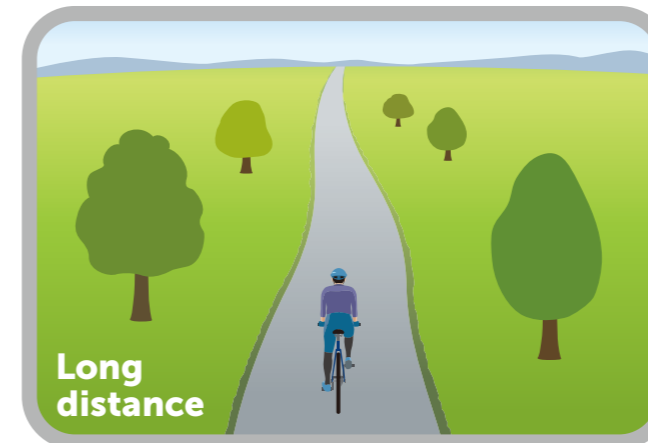
So no matter if you are riding short or long distances, on flat or hilly routes, in windy or calm conditions, with no gear or cargo packed to the max; our E-bike systems will give you a boost when you need it, while keeping you comfortably in control.



### Flat cruising



### Trail Riding



### Long distance



### Steep hill climbing

## 3. MORE NATURAL BIKE CONTROL



There are no shortcuts when creating a truly enjoyable E-bike riding experience. It is only when every part of the system is engineered and balanced together, that it becomes possible to provide the level of comfort, control and response that delights riders.

Just like all our groupsets, SHIMANO STEPS works in perfect harmony with our bike components. With every stroke of the pedal, you can practically feel the years of hard work that went into creating more synergy between rider, pedaling and assist.

## MOUNTAIN BIKE E8000 / E7000

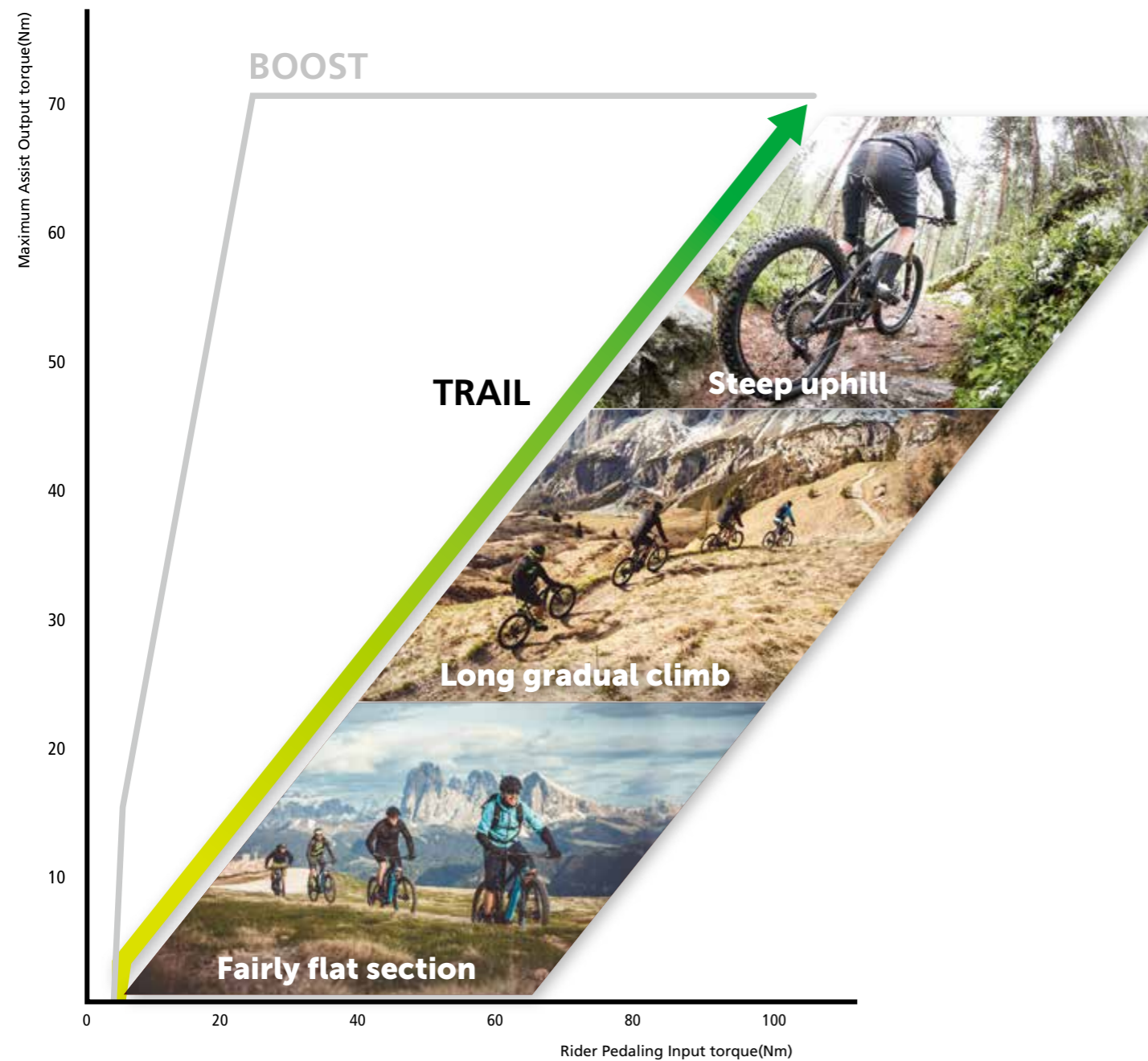
SHIMANO E-MTB TRAIL mode sets its assist output characteristics to focus on bike control in the fast-changing conditions of MTB. This system delivers optimal assist power when riders need the best performance.

### SHIMANO TRAIL MODE, MORE LINEAR RESPONSE, MORE BIKE CONTROL

Why is TRAIL assist mode suitable for a wide range of riding conditions? It provides linear response output assist without sudden changes or idle spinning of output torque by maintaining a consistent output ratio.

#### TRAIL mode characteristics

**E8000** (DYNAMIC riding characteristic)



## CITY AND TREKKING E6100 / E5000

SHIMANO STEPS preserves a more natural and organic City and Trekking riding experience by providing the right amount of power at the right time. The system continuously and precisely monitors the rider's pedaling input, interprets the riding conditions based on this data, and adjusts the output profile accordingly. Zoom to your local café or glide through the countryside in comfort, control and style.

### Comfortable pedaling

Natural and efficient pedaling positioning provides a more linear response.

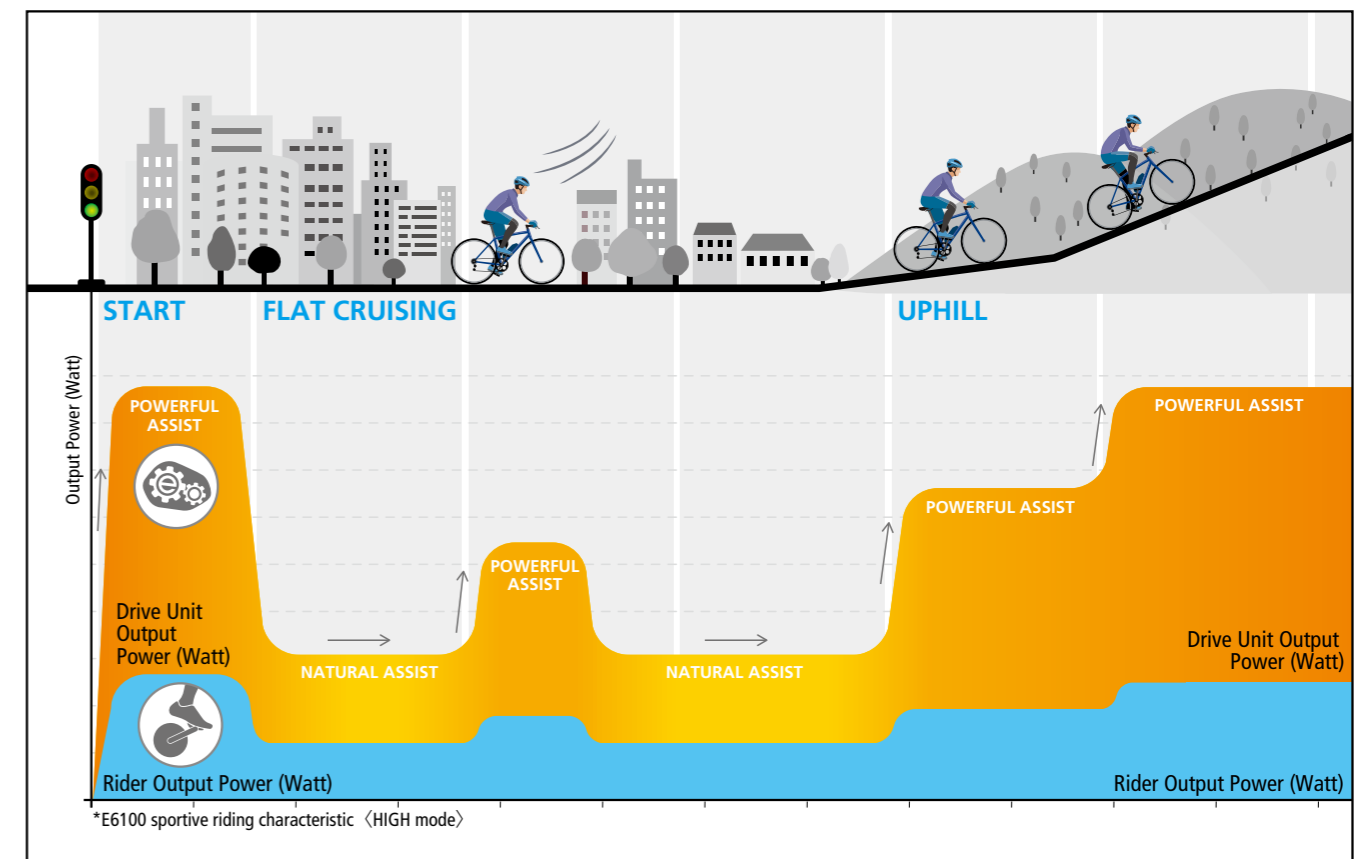
### Longer range, longer life

Optimized setting of assist output characteristic uses battery power more intelligently.

### Greater focus on riding

Our drive units' two output power characteristics (Powerful & Natural) are automatically set according to riders' cadence sensor data.

### Output power characteristic automatically managed based on actual riding conditions





# SHIMANO STEPS E-BIKE TECHNOLOGY

With SHIMANO STEPS the rider's pedaling mechanics and the drive unit assist system are co-developed for peak integration and efficiency. Total bike system efficiency is maximized when each of the following three factors is both individually optimized, and together as a complete system.



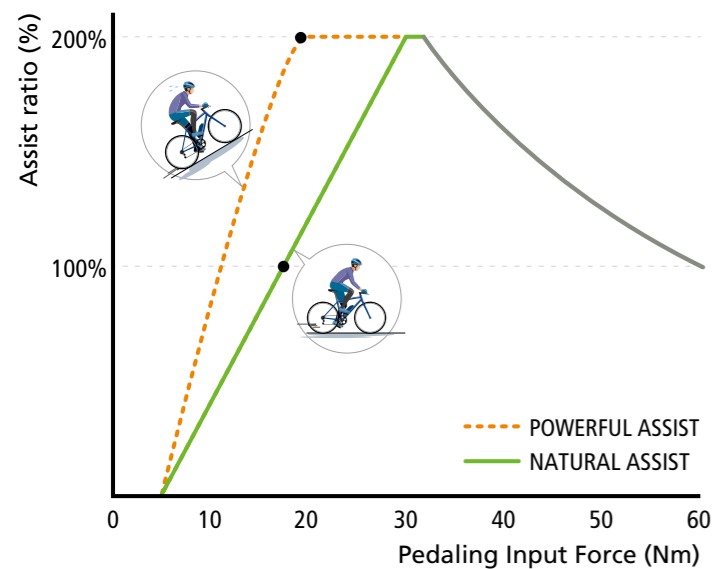
# INPUT & OUTPUT POWER TOTAL MANAGEMENT

## ◆ THE OPTIMAL SETTING OF ASSIST OUTPUT CHARACTERISTICS FOR EVERY SITUATION.

Our E-bike system is so intuitive and efficient, you'll hardly realize that you're riding an E-bike.

The integrated sensors monitor your pedaling input, cadence, and speed to automatically set either a POWERFUL or NATURAL assist for the optimal level of support.

### E6100 HIGH Mode



Whether you're zipping around city corners, crossing steep bridges, or coasting through the suburbs, our high-end E-bike system will be with you every step of the way. Not only will it transform your ride, it will also transform your life.

Powerful assist gives riders more powerful support when starting out, climbing hills, or facing strong headwinds.

Natural assist is utilised while comfortably cruising to preserve the natural feeling of riding a bike and extend range.

In addition to detecting and analysing pedaling force, our system also detects and calculates rider cadence to optimally set the assist power characteristic that best matches the current riding conditions.

Data from the cadence sensor allows dynamic and real-time setting of the right output characteristic at every moment, which increases battery usage efficiency and riding range between charges.

## ◆ PEDALING INPUT AND MOTOR OUTPUT MATCHED FOR MAXIMUM EFFICIENCY.

Designing the optimal system for enjoyable bike riding control requires extensive and intimate knowledge of bike components design. Based on extensive rider data and testing, SHIMANO STEPS drive unit systems are designed to optimally match the efficient rotation output of the motor with the optimal pedaling cadence range for the average E-bike rider.

Every style of riding, from city commuting to muddy MTB, requires a different approach. Size, noise and efficiency must all be carefully balanced in order to create a smooth, natural and efficient assist system that provides the support riders need, when they need it.

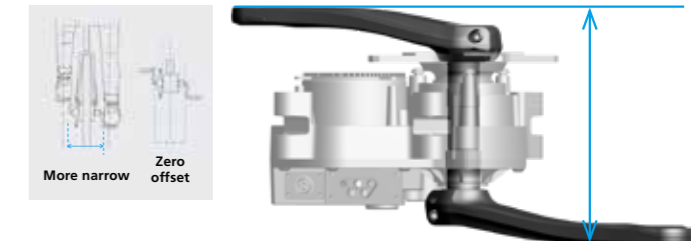
## ◆ A BIKE ENGINEERED PEDALING INTERFACE FOR MORE NATURAL BIKE CONTROL.

A lightweight and compact motor and battery design, along with a short chain stay, help retain the natural look and handling of E-bikes.

### Zero offset and narrower Q-factor

Our E-bike systems have zero offset and the same Q-factor as conventional bikes. This enables a more direct linear delivery of rider power from their hips, down through their legs, and transferred to the pedals.

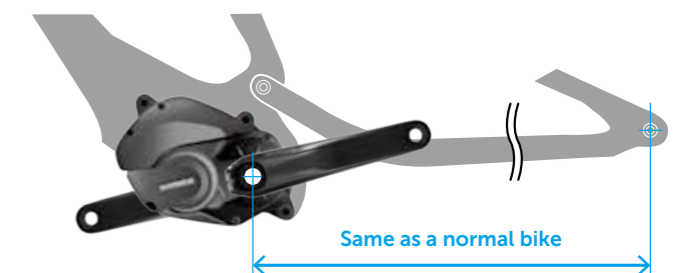
When you exceed the motor-assist limit of 25 km/h, you'll appreciate this natural feel as you get the most out of each pedal stroke.



### Short chain stay

The drive unit has been designed so that frames can have the same chain stay length as conventional bikes.

The short chain stay specification allows frame makers to design power-assisted bikes that provide the same maneuverable handling, and authentic feel of standard conventional bikes.



SHIMANO STEPS allows you to go further, climb higher and arrive fresher, while offering uncompromised maneuverability and riding feel.

### Compact & integrated design

Our latest generation drive units are our lightest and most compact to date. In addition to a smaller footprint, the integrated mounting platform blends in more naturally with the frame.

Different drive unit covers are also available to better match different bike styles.



E6000

E6100

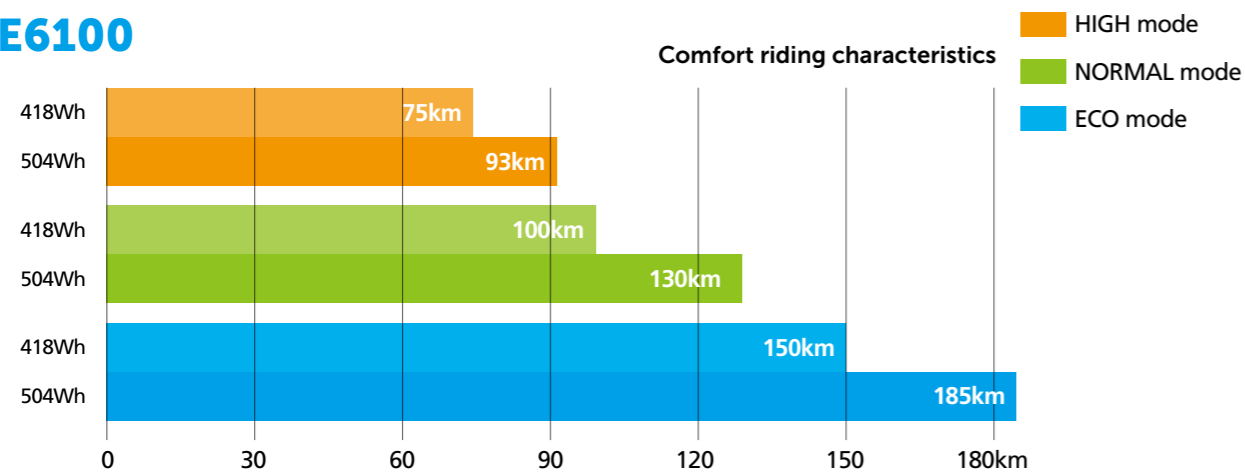
# SHIMANO ORIGINAL E-BIKE TECHNOLOGY

## 20% LONGER RIDING DISTANCE

Optimal setting of the assist output characteristic adds up to 20% more range per charge. (compared with E6002)

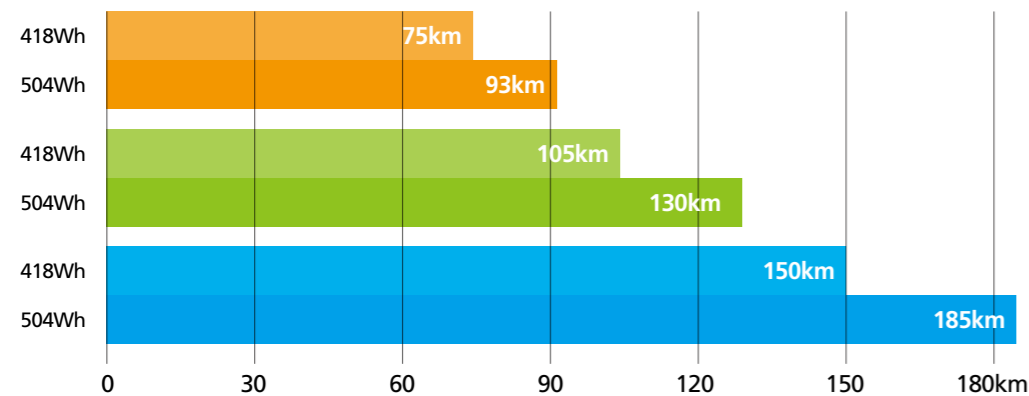
### E6100

Comfort riding characteristics



### E5000

Comfort riding characteristics



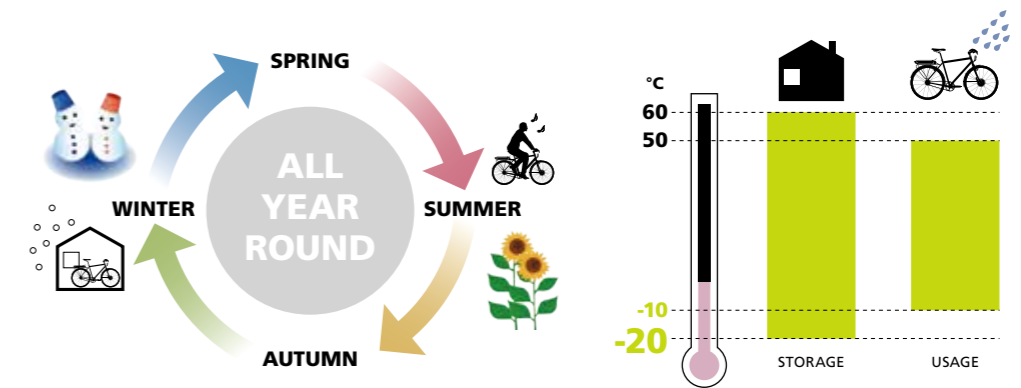
TEST CONDITIONS: (Shimano original riding pattern)

Flat paved road, riding speed: 23 km/h, stop/go 2 times/770m, optimal gear shifting cadence 60 rpm, rider weight: 80 kg, trekking bike tire 38C, outside temperature: 15 degree - 25 degree, without electronic shifting, without lights.

## LONG BATTERY LIFE

### BATTERY SYSTEM

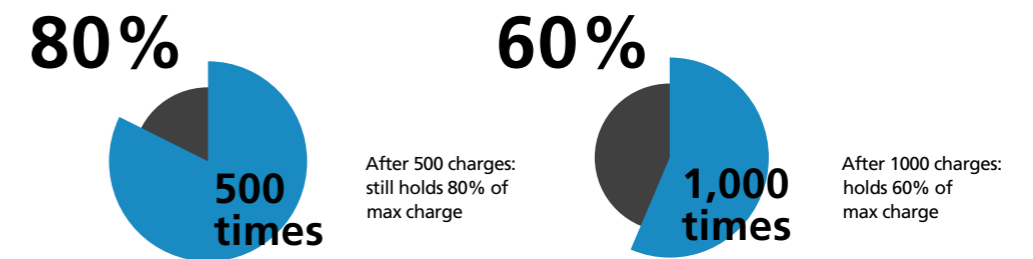
To supply year-round enjoyment under any conditions, the Shimano battery system features long-life operation at a wide range of temperatures.



### Anti-aging battery

SHIMANO STEPS utilises a long-life battery to maintain sufficient output, even after a 1,000 charges.

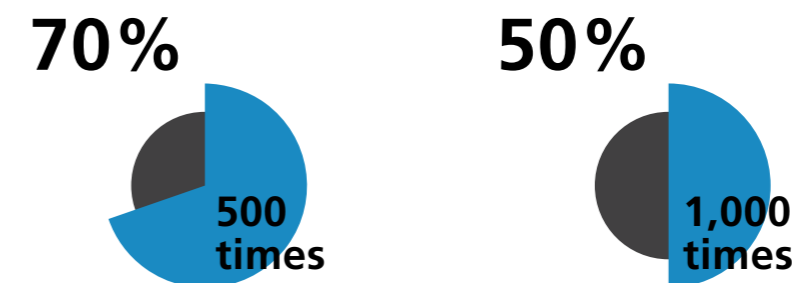
◆ The durable battery retains a greater charge for a longer time



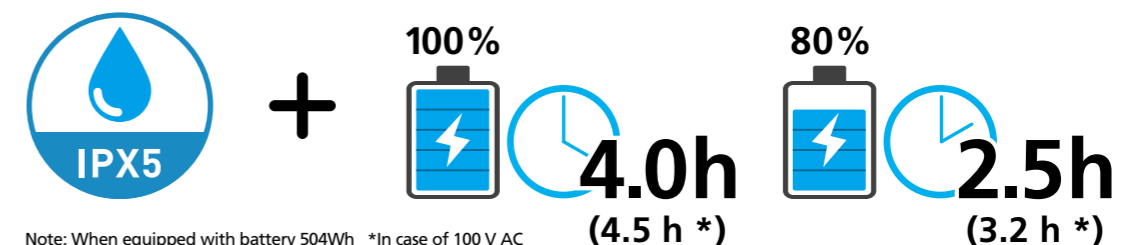
### Reliable low-temperature battery performance

SHIMANO STEPS batteries last longer at low temperatures. Even while riding outside in the freezing cold (0°C) of winter, our batteries continue to perform near peak capacity.

◆ Cold-Temperature Usage (0°C)



### Our new battery charger feature a high level of water-resistant performance and quick charging (EC-E8004)



Note: When equipped with battery 504Wh \*In case of 100 V AC

## AUTOMATIC SHIFT

E6100 and E5000 Series drive units in combination with a DI2-compatible 8/5 speed internal geared hub offer full automatic shifting. The SHIMANO STEPS system automatically selects and shifts into the optimum gear, based on the number of crank rotations and speed.

Also, riders can always manually shift into the gear they want, even in auto mode. When they do, the SHIMANO STEPS system uses a learning function to recognize the manual shift operation and automatically fine-tunes future automatic shift timing to the rider's liking. This offers a stress-free ride, eliminating the need for the rider to worry about whether they're in the right gear or have to change gears after an abrupt stop.



## SYMPHOMATIC

SHIMANO STEPS computer-assisted shifting system provides a more responsive and stable shifting performance. This innovative system monitors rider's motion and determines the optimal timing to momentarily decrease power to the pedal-assist motor. The temporary reduction of chain tension allows the gear movement of drive train to function smoothly and unimpeded.

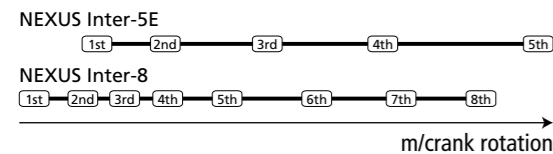
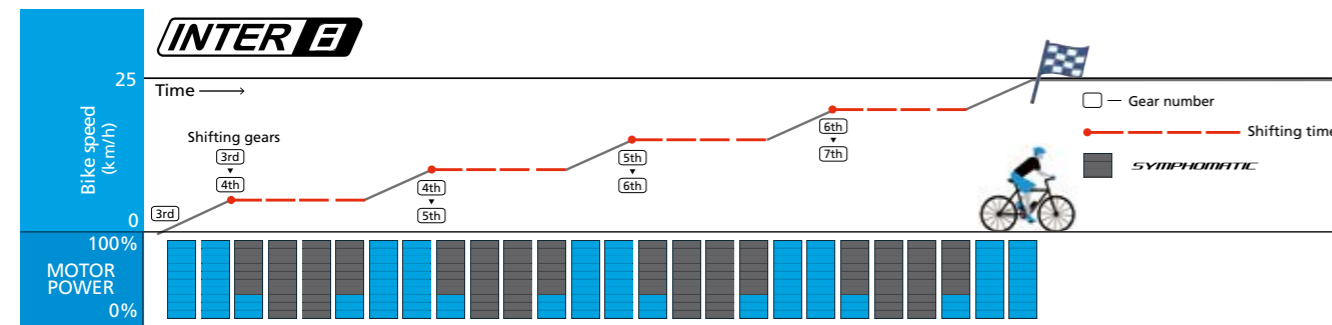
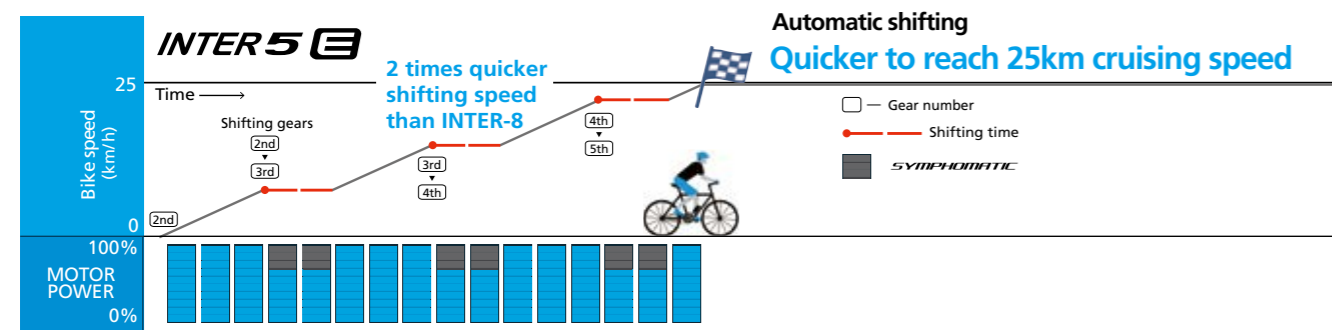


## E-BIKE SPECIFIC INTERNAL HUB GEAR (Inter-5E)

The NEXUS Inter-5E is a revolutionary internal gear hub designed specifically for the unique demands of e-bike riding. It can withstand much higher pedaling forces, even while shifting.

It also offers an enormous gear range with optional automatic shifting. With DI2 electronic shifting, there is the added benefit of automatic shifting as well as automatic gear adjustment after stopping so you are quickly back up to speed.

- 50% more durable (compared with SG-C6000 series)
- Shifting even under 3 times heavier pedaling torque (vs. SG-C6000 series)



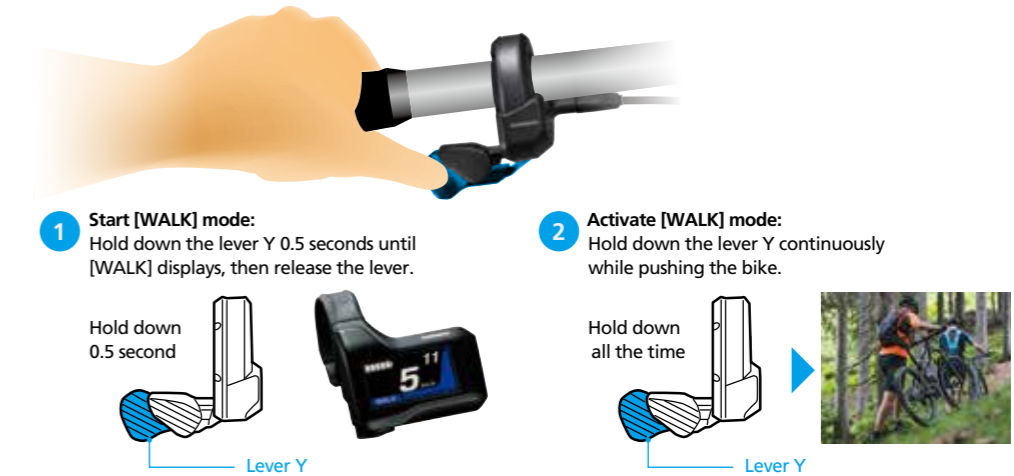
### <Comparison of gear steps>

The NEXUS Inter-5E shift faster under higher load compared to other internal gear hubs as it doesn't need to decrease assist power to 0%. Wide gear steps between the 3rd and 5th gear ensure you reach 25km/h twice as fast as the NEXUS Inter-8 and with fewer shifting actions.

## WALK ASSIST FUNCTION

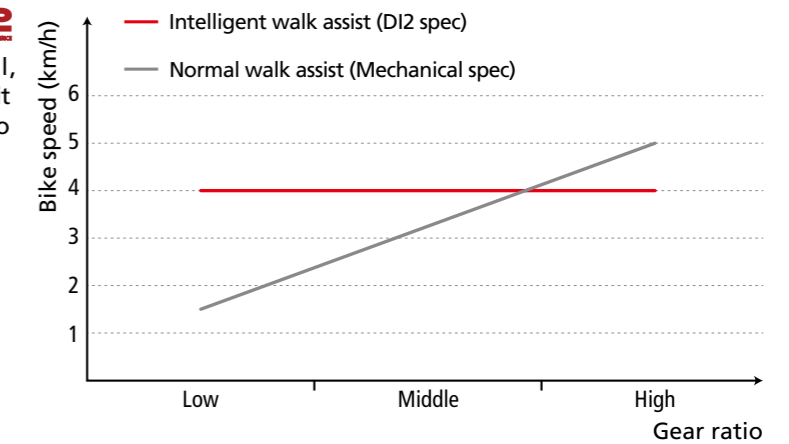
The Walk Assist Mode provides electrically driven assistance when traveling at 6 km/h or less. This is particularly helpful when pushing your bicycle up a steep slope, such as when exiting an underground parking area.

\*The walk assist mode function may not be able to be used in certain regions.



### Intelligent walk assist

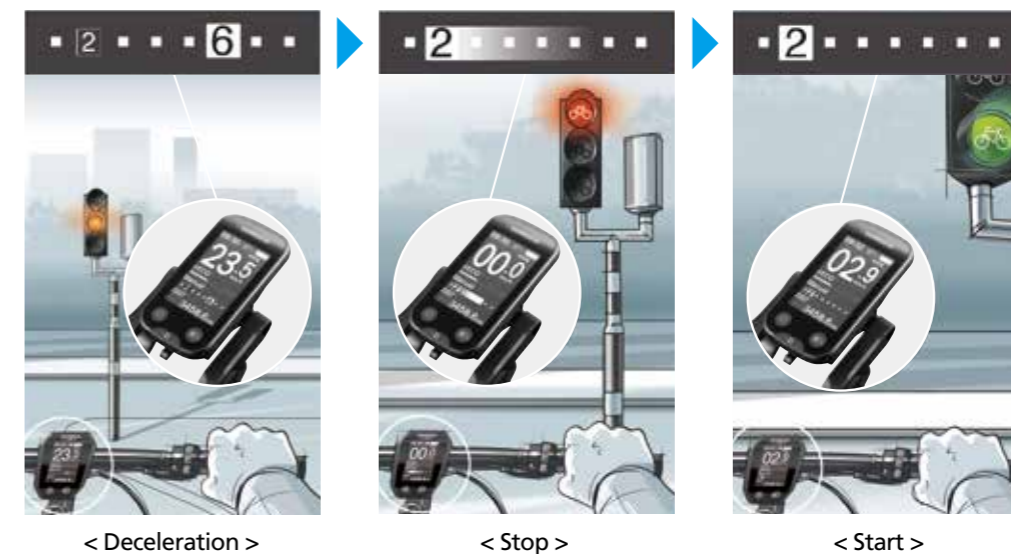
When walking the bike up a mountain trail, intelligent walk assist automatically adjusts drive unit output torque to keep the bike speed at 4 km/h no matter which gear ratio is used.



## START MODE

The drive unit automatically switches to a lower gear to provide the rider with an easier restart when stopping for traffic lights, crowds, or other situations. This makes it easy to start off again without wobbling forward while struggling to pedal, in case you forget to shift down when coming to a stop.

This unique SHIMANO DI2 technology is especially useful in urban areas, which require frequent stopping and starting. Use the e-cycle computer or the E-TUBE PROJECT to set the rider's proper gear when starting off.



# USER INTERFACE

The user interface is a colorful, easy to read, smart and selectable display by E-TUBE PROJECT and an E-TUBE RIDE application via smartphone or compatible 3rd party cycle computers.



## E-TUBE PROJECT

E-TUBE PROJECT is an application that allows you to update your bicycle's firmware and change DI2 settings when connected to a PC, tablet, or smartphone.

\*(Smartphone doesn't include the "Run Error check" function.)



Customize

to settings of your choice



Update your  
firmware



Notice something unusual?  
Run Error check

## Choose your display

SHIMANO STEPS empowers riders of any style to take control of how they see their riding data by providing multiple viewing options.

Connect seamlessly to a SHIMANO original cycle computer or a compatible device made by one of our official display partners, or via the beautiful new E-TUBE RIDE smartphone app.



## E-TUBE RIDE

The E-TUBE RIDE app easily turns your smartphone into a SHIMANO STEPS cycling display and beautifully visualizes your favorite real-time riding data.

DISPLAY PARTNERS	SMARTPHONE APPLICATIONS
<p><b>GARMIN</b> EDGE 1030 EDGE EXPLORE</p> <p><b>SIGMA</b> ROX 12.0 SPORT</p>	<p><b>E-TUBE RIDE</b></p> <p>This new app easily turns your smartphone into a cycling display with beautiful riding data.</p> <p> </p>

# VISUALIZE A NEW EXPERIENCE

Use your smartphone as a SHIMANO STEPS Display.



## E-TUBE RIDE

\*Compatible with SHIMANO STEPS SC-E6100 or SC-E7000 cycle computers, and wireless unit EW-EN100.

<https://e-tuberide.shimano.com/>

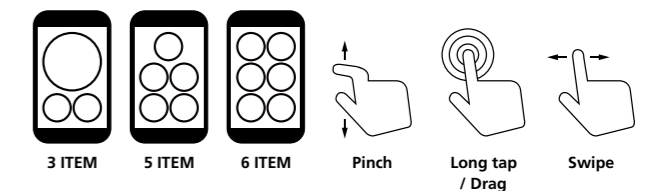


## 9 Selectable items

Speedometer	Gear Position	Trip Distance	Total Distance	Remaining Assist	Trip Time	Pedal Rate	Current Time	Battery Status

## Customizable display options

- Pinch in/out to scale view - 3/5/6 item display.
- Press and hold an item to select it, then drag it to a new position.
- Swipe between up to 5 preset views.



## Real-time display of speed & power assist

Colors change dynamically to highlight current speed and assist mode type/level.

ECO	HIGH	NORMAL	WALK

## 3 Preset Layouts.

1. For Trekking	2. For City	3. Overall

## System error notifications

- Displays Error code.
- Generates link to troubleshooting site.
- Provides possible remedies for the issue.

## Regular maintenance reminders

CONCEPT

CONCEPT

# Choose your riding style

CONCEPT

CITY COMFORT



CITY



CITY & TREKKING  
SHIMANO STEPS | E6100



FOR SPORTY OFF-ROAD ADVENTURES



ALLROUND E-MTB  
SHIMANO STEPS | E7000

FOR CONQUERING MOUNTAINS AND EXPLORING NEW TRAILS



PREMIUM E-MTB  
SHIMANO STEPS | E8000

TRAIL



PREMIUM MTB

FOR COMMUTES THROUGH THE CITY AND BEYOND



XC & CASUAL MTB

CITY COMFORT  
SHIMANO STEPS | E5000



FOR HASSLE-FREE EVERYDAY RIDES IN THE CITY



## Browse your favourite bike brands

Shimano STEPS e-bike and e-MTB systems come pre-installed on a wide variety of bike brands. Browse your favourite at [shimano-steps.com](https://shimano-steps.com)

## Customise your ride

Shimano STEPS e-bike and e-MTB systems can be easily configured to suit your needs. Ask your dealer about the possibilities. And to customise your ride further – via Shimano E-TUBE apps – visit [e-tubeproject.shimano.com](https://e-tubeproject.shimano.com)



# E-MOUNTAINBIKE

E8000 / E7000

## EXPLORE NEW GROUNDS

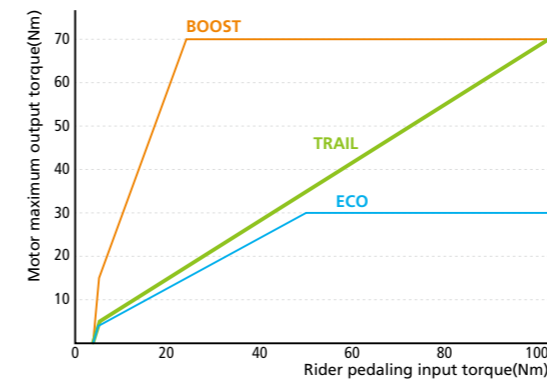
SHIMANO STEPS helps you to push on beyond your limits, to go further and higher than ever before.

### DRIVE UNIT OUTPUT FEATURE

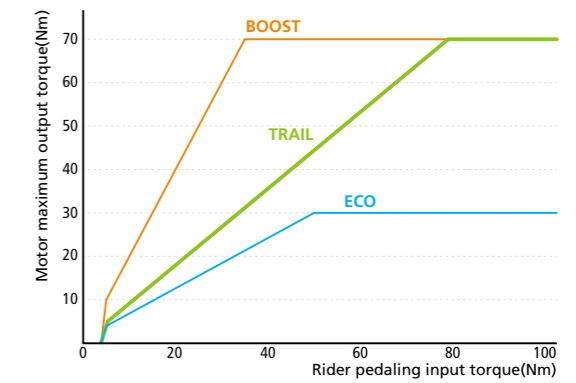
#### Motor Assist Maximum Torque / Rider Pedaling Input Torque

**E8000**

DYNAMIC riding characteristic

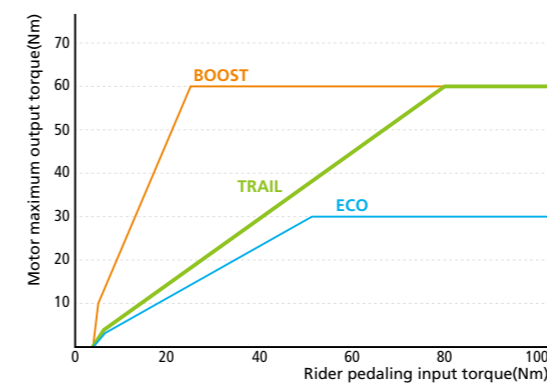


EXPLORER riding characteristic

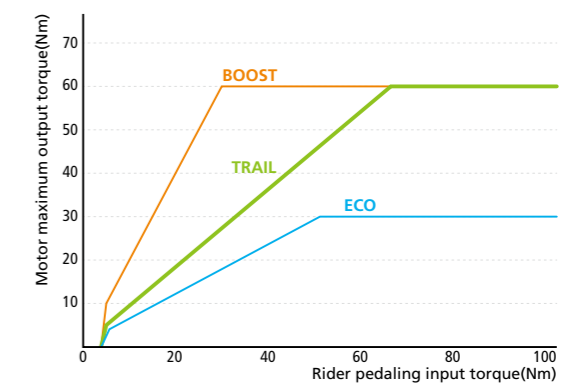


**E7000**

DYNAMIC riding characteristic

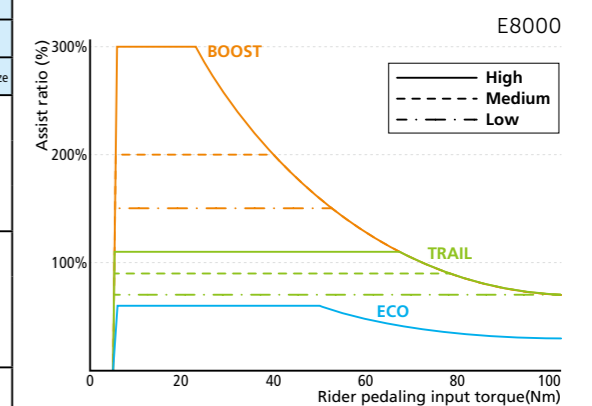


EXPLORER riding characteristic



#### Assist characteristics variation √=Yes \*Choose one riding characteristic in this mode

Assist mode	Riding characteristic level (Set by E-TUBE Project)	E8000				E7000			
		Assist ratio	Riding Characteristic			Assist ratio	Riding Characteristic		
			Dynamic	Explorer	Customize		Dynamic	Explorer	Customize
BOOST	High	300% 70Nm	√	-	-	250% 60Nm	√	-	-
	Medium	200% 70Nm	-	√	*√	200% 60Nm	-	√	*√
	Low	150% 70Nm	-	-	-	150% 60Nm	-	-	-
TRAIL	High	110% 70Nm	-	-	-	110% 60Nm	-	-	-
	Medium	90% 70Nm	-	√	*√	95% 60Nm	-	√	*√
	Low	70% 70Nm	√	-	-	80% 60Nm	√	-	-
ECO	-	60% 30Nm	√	√	√	60% 30Nm	√	√	√



### SWITCH UNIT

The Firebolt Switch Unit control with intuitive operation is ergonomically designed for a MTB. While blasting through the trails and switching between modes, it's the ultimate in comfort and reliability.

**FIREBOLT**



### CYCLE COMPUTER

Extensive power-assist settings match the rider's unique riding style. The compact, easy-to-read display provides dynamic visuals when switching between support settings.

**Di2**



E-MOUNTAINBIKE

# E8000 Series



## E8000 Recommended Electronic derailleurs specification (11-speed)

Drive Unit	Drive Unit Cover	Crank Arm	Chainring	Chain Device	Assist Switch	Shifting Switch	Rear Derailleur
DU-E8000	SM-DUE80-A Standard cover SM-DUE80-B Mount bolt cover	FC-M8050	SM-CRE80-B SM-CRE80	SM-CDE80 DU mount/ Frame mount SM-CDE80	SW-M8050-L	SW-M8050-R	RD-M8050-GS
Battery Mount	Battery	Speed Sensor System		Hydraulic Disc Brake Set	Cycle Computer	Chain	Cassette MTB 11-Speed
External type for down tube		SM-DUE11 RT-EM900 RT-EM800		BL-M8000 BR-M8020	SC-E8000	CN-E8000-11	CS-M8000 11-40T 11-42T 11-46T
BM-E8010	BT-E8014 418Wh BT-E8010 504Wh	Speed Sensor					
Integrated type for down tube		SM-DUE10					
BM-E8020 For conventional key unit	BT-E8020 504Wh						

## E7000 Recommended Electronic derailleurs specification (11-speed)

Drive Unit	Drive Unit Cover	Crank Arm	Chainring	Chain Device	Assist Switch	Shifting Switch	Rear Derailleur
DU-E7000	SM-DUE70-A Standard cover SM-DUE70-B Mount bolt cover	FC-E8000 FC-E8050 FC-M8050	SM-CRE80 SM-CRE80-B SM-CRE70-B	SM-CDE80 DU mount/ Frame mount SM-CDE70 DU mount/ Frame mount	SW-E8000-L SW-E7000-L	SW-M8050-R SW-E7000-R	RD-M8050
Battery Mount	Battery	Speed Sensor System		Hydraulic Disc Brake Set	Cycle Computer	Chain	Cassette MTB 11-Speed
External type for down tube		SM-DUE11 RT-EM900 RT-EM800		BL-MT501 BR-MT520	SC-E7000	CN-E8000-11 CN-HG701-11	CS-M7000 11-40T 11-42T
BM-E8010	BT-E8014 418Wh BT-E8010 504Wh	Speed Sensor					
Integrated type for down tube		SM-DUE10					
BM-E8020 For conventional key unit	BT-E8020 504Wh						

E-MOUNTAINBIKE

# DRIVE UNIT

### E8000 SERIES



DU-E8000  
E tube

#### DU-E8000 Drive Unit

- Compact drive unit
  - » Shorter chain stay possible
  - » More clearance (suspension/tire)
- Power output
  - » 70Nm (max.), 250W
- Lightweight
  - » Improves bike handling
- DU characteristics
  - » Direct pedaling feel in on and off assist power
  - » Stable Assist Power output
- Weight: 2,880 g

#### SM-DUE80-A Drive Unit Cover (Standard Cover)



#### SM-DUE80-B Drive Unit Cover (Mount Bolt Cover)



### E7000 SERIES



DU-E7000  
E tube

#### DU-E7000 Drive Unit

- Compact drive unit
  - » Shorter chain stay possible
  - » More clearance (suspension/tire)
- Power output
  - » 60Nm (max.), 250W
- Lightweight
  - » Improves bike handling
- Drive unit characteristics
  - » Direct pedaling feel both on/off assist power
  - » Stable assist power output
    - Water and mud resistant
- Same frame mount as DU-E8000
- Weight: 2,790 g

#### SM-DUE70-A Drive Unit Cover (Standard Cover)



#### SM-DUE70-B Drive Unit Cover (Mount Bolt Cover)



# E7000 Series





# E-MOUNTAINBIKE CYCLE COMPUTER / ASSIST SWITCH

## E8000 SERIES



**SW-M8050-L**  
**SW-E8000-L**  
FIREBOLT Shifter

- Intuitive operation
  - » Vivid click feeling = FIREBOLT
  - » Power mode change "like normal shifting"
  - » Ergonomic switch position for MTB riding
- Walk assist mode
  - » Motor assist available to push bike

**SW-M8050-R**  
FIREBOLT Shifter

- Easy operation and accurate shifting
  - » Ergonomic rotary switch
  - » Wide comfort lever with position adjust
  - » Short stroke perfect click
  - » Effortless Multi-shift

**SC-E8000**  
Cycle Computer

- Assist mode
  - » BOOST ≠ TRAIL ≠ ECO ≠ OFF, WALK
- Wireless programmability
  - » Customize through E-TUBE project application with smartphone and tablet



## E-MTB DEDICATED DESIGN

Compact, easy-to-read display with dynamic visuals.

- Computer designed for compact, durable MTB riding.
- Easy-to-read LCD
- Each support setting is assigned a unique colour.(E8000)
- Sleek bar-mounted computer with dynamic LCD display shows gear number, power assist mode and battery range information.

## E7000 SERIES



**SW-E7000-L**  
Assist Switch  
**SW-E7000-R**  
Shifting Switch

- Easy, simple operation
  - » Power mode change
- Walk assist mode (left switch)
  - » Motor assist available to push bike up to 6 Km/h

**SC-E7000**  
Cycle Computer

- Assist mode
  - » BOOST ≠ TRAIL ≠ ECO ≠ OFF, WALK
- Wireless function
  - » Customize through E-TUBE PROJECT application with smartphone and tablet
- Low profile for MTB riding

**EW-EN100**  
Junction-A

- Assist mode (w/o cycle computer)
  - » HIGH ≠ NORM ≠ ECO ≠ OFF, WALK
- Expanded communication by wireless connectivity
  - » Minimal display option for a simpler cockpit
  - » Wireless connection with 3rd party displays and smartphone applications
  - » E-TUBE PROJECT total support for cycling lifestyles

# E-MOUNTAINBIKE CRANK ARM / CHAIN RING / CHAIN DEVICE

## E8000 / E7000 SERIES



√=Yes

Model No.		FC-M8050	FC-E8050	FC-E8000
Series		SHIMANO DEORE XT	SHIMANO	SHIMANO
Arm length	165mm	√	-	√
	170mm	√	√	√
	175mm	√	√	√
Crank arm type		HOLLOWTECH	HOLLOWTECH	Solid



SM-CDE80



SM-CDE70

√=Yes

Model No.		SM-CDE80	SM-CDE70
Series		SHIMANO	SHIMANO
Color	1	Standard	Standard
	2	-	-
	3	-	-
Chainline (mm)	53	√ (w/ plate type) √ (w/o plate type)	√
	50	- (w/ plate type) √ (w/o plate type)	-
Chain compatibility	12-Speed	√	√
	11-Speed	√	√
	10-Speed	√	√
	9-Speed	-	√
Top Gear Teeth	38T	√	√
	34T	√	√
Assumed Rear Sprocket Teeth	11-36	√	√
	11-40	√	√
	11-42	√	√
	11-46	√	√
Direct Mount to Drive Unit		√ (w/ plate type) - (w/o plate type)	√
Compatible Drive Unit		DU-E8000	DU-E7000 / DU-E8000



SM-CRE80-12-B (34T)

SM-CRE80-B/SM-CRE80 (34T, 38T)



SM-CRE80 (44T)

SM-CRE70-B (34T)

### SM-CRE80-12-B

Chainring for Chainline 53 mm (12-speed)

### SM-CRE80-B

Chainring for Chainline 53 mm (for 10/11-speed)

### SM-CRE80

Chainring for Chainline 50 mm (for 10/11-speed)

### SM-CRE80-R NEW

Chainring for Chainline 50 mm (for 10/11-speed)

### SM-CRE70-12-B NEW

Chainring for Chainline 53 mm (12-speed)

### SM-CRE70-12 NEW

Chainring for Chainline 50 mm (12-speed)

### SM-CRE70-B

Chainring for Chainline 53 mm (9/10/11-speed)

### SM-CRE70 NEW

Chainring for Chainline 50 mm (9/10/11-speed)

Please refer to page 42 for specification details.



# CITY/TREKKING

## E6100 / E5000

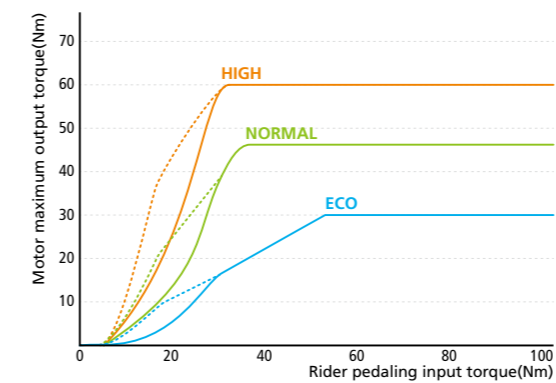
You might wonder how riding a bike with a Shimano e-bike system can feel just like riding a normal bike. But that's exactly how it is. Thanks to the intuitive pedaling assistance, you will hardly notice that you're riding an e-bike. On top of that we've put a great deal of effort into the design of our e-bike system – with a satisfying result. Our components are more integrated with your favorite bicycle brand than ever. So now you can zoom to your local café or glide through the countryside in style. Ready to energize your ride?

### DRIVE UNIT OUTPUT FEATURE

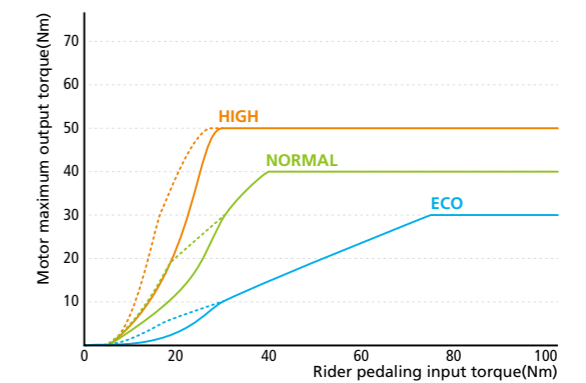
#### Motor Assist Maximum Torque / Rider Pedaling Input Torque

**E6100**

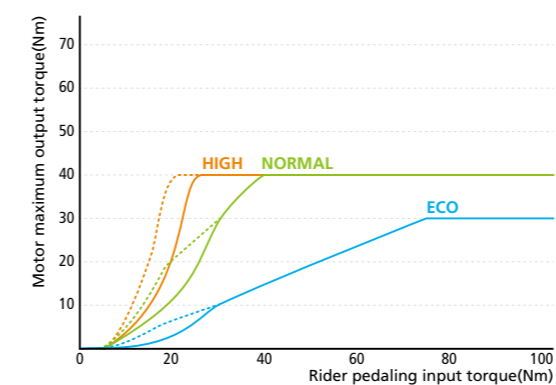
SPORTIVE riding characteristic



COMFORT riding characteristic


**E5000**

COMFORT riding characteristic



#### Assist characteristics variation

√=Yes

Model	E6100		E5000
	Sportive	Comfort	Comfort
Riding characteristic level (set by E-TUBE Project)			
Maximum Torque	60Nm	50Nm	40Nm
Shifting system	INTER-5E	√	√
	IHG type (except Inter-5E)	-	√
	RD type	√	√
Assist mode	High	200%	200%
	NORMAL	125%	100%
	ECO	60%	40%

### CYCLE COMPUTER

Customize your ride, right down to the data you view – and how you view it. The choice is yours.



## CITY / TREKKING

## E6100 Series



## E6100 Recommended Electronic Internal Geared Hub specification (5-speed)

Drive Unit	Drive Unit Cover	Crank Arm	Chainring	Assist Switch	Shifting Switch	Internal geared hub	Motor unit
DU-E6100 for disc brake, V-BRake, roller brake	SM-DUE61-T/C Trekking cover	FC-E6100	SM-CRE61 38T	SW-E6010-L SW-E7000-L	SW-E6010-R SW-E7000-R	SG-C7050-5D/5V/5D/5C	MU-UR500
DU-E6110 for coaster brake	SM-DUE61-C City cover	FC-E8000	SM-CRE61 44T				
Battery Mount & Battery Set							
External type for down tube		BM-E8010	BT-E8014 418Wh BT-E8010 504Wh				
Integrated type for down tube		BM-E6010	BT-E6010 418Wh				
External type for rear carrier		BM-E8020	BT-E8020 504Wh				
		BM-E6000	BT-E6000 418Wh BT-E6001 504Wh				
				Cycle Computer	Chain	Single gear	
				SC-E6100 SC-E7000	CN-HG71	CS-C7000 24T/27T/30T	

## E5000 Recommended Mechanical Internal Geared Hub specification (8-speed, 7-speed)

Drive Unit	Drive Unit Cover	Crank Arm	Chainring	Assist Switch	Shifting Switch	Internal geared hub	Motor unit
DU-E5000	SM-DUE50-T Trekking cover SM-DUE50-C City cover	FC-E5010 FC-E5000	SM-CRE50 38T 44T	SW-E6010-L SW-E7000-L	SW-E6010-R SW-E7000-R	SG-C6011-8R SG-C3001-7R	SM-8S31 SM-7R45 SM-7C25
Battery Mount & Battery Set							
External type for down tube		BM-E8010	BT-E8014 418Wh BT-E8010 504Wh				
Integrated type for down tube		BM-E6010	BT-E6010 418Wh				
External type for rear carrier		BM-E8020	BT-E8020 504Wh				
		BM-E6000	BT-E6000 418Wh BT-E6001 504Wh				
				Cycle Computer	Chain	Single gear	
				SC-E6100 SC-E7000	CN-HG71	SM-GEAR 18/19/20/21/22/23T	

## CITY / TREKKING

## DRIVE UNIT

## E6100 SERIES



DU-E6100 / DU-E6110



## DU-E6100

Drive Unit for Rim Brake, Roller Brake, Disc Brake

## DU-E6110

Drive Unit for Coaster Brake

- Easy to access cable terminal without removing chainring and chain case
- Integrated drivetrain and assist
  - » Full-automatic shifting for a more natural riding experience
  - » Efficient battery consumption increases riding range
  - » Adjustable cutoff speed setting with E-TUBE PROJECT · SYMPHOMATIC
- Optimized pedaling environment
  - » Narrow and Symmetrical Q-factor
  - » Shorter rear center provides responsive and maneuverable handling
  - » Compact and lightweight
- Power output
  - » 60Nm(max.), 250W
- Weight: 2,760 g (DU-E6100) 2,700 g (DU-E6110)

## SM-DUE61-T

Drive Unit Cover for Trekking

## SM-DUE61-C

Drive Unit Cover for City

## E5000 SERIES



DU-E5000

## DU-E5000

Drive Unit for all brakes

- Easy to access cable terminal without removing chainring and chain case
- Integrated drivetrain and assist
  - » Full-automatic shifting for a more natural riding experience
  - » Efficient battery consumption increases riding range
  - » Adjustable cutoff speed setting with E-TUBE PROJECT · SYMPHOMATIC
- Optimized pedaling environment
  - » Narrow and Symmetrical Q-factor
  - » Shorter rear center provides responsive and maneuverable handling
  - » Compact and lightweight
- Power output
  - » 40Nm(max.), 250W
- Weight: 2,500 g

## SM-DUE50-T

Drive Unit Cover for Trekking

## SM-DUE50-C

Drive Unit Cover for City

## E5000 Series



CITY / TREKKING

# CYCLE COMPUTER / ASSIST SWITCH SHIFT SWITCH / SHIFT LEVER

E6100 / E5000 SERIES

SC-E6100  
D-FLY  
Bluetooth



**SC-E6100**  
Cycle Computer

- Assist mode
  - » HIGH ≥ NORM ≥ ECO ≥ OFF, WALK
- Expanded communication by wireless connectivity
  - » Large, easily viewable display
  - » Wireless connection with 3rd party displays and smartphone applications
  - » E-TUBE PROJECT total support for cycling lifestyles
  - D-FLY

EW-EN100  
D-FLY  
Bluetooth



**EW-EN100**  
Junction-A

- Assist mode (w/o cycle computer)
  - » HIGH ≥ NORM ≥ ECO ≥ OFF, WALK
- Expanded communication by wireless connectivity
  - » Minimal display option for a simpler cockpit
  - » Wireless connection with 3rd party displays and smartphone applications
  - » E-TUBE PROJECT total support for cycling lifestyles
  - D-FLY



SW-E6010-L

SW-E6010-R



**SW-E6010-L**  
Assist Switch

- Attractive styling
- Ergonomic shape and intuitive operation
- Tactile click feel

**SW-E6010-R**  
Switch

- Attractive styling
- Ergonomic shape and intuitive operation
- Tactile click feel



SW-E7000-L

SW-E7000-R

**SW-E7000-L**  
Assist Switch

- Easy, simple operation
  - » Walk assist mode
  - » Power mode change
  - » Motor assist available when walking with bike

**SW-E7000-R**  
Shifting Switch

- Easy, simple operation
  - » Power mode change

CITY / TREKKING

# CRANK ARM / CHAIN RING

E6100 / E5000 SERIES



FC-E6100 Black

FC-E6100 Silver

FC-E5010 Black

FC-E5000 Silver

Model No.	FC-M6100	FC-E5010	FC-E5000
Series	SHIMANO	SHIMANO	SHIMANO
Arm length	165mm	√	√
	170mm	√	√
	175mm	√	√
Crank arm type	Solid	Solid	Solid
BB type	24mm axle	Square type	

√=Yes



SM-CRE61 (38T, 44T)

SM-CRE61 (38T, 44T)

SM-CRE61 (38T, 44T)



SM-CRE50 (38T, 44T)

SM-CRE50 (38T, 44T)

SM-CRE50 (38T, 44T)

√=Yes

Model No.	SM-CRE61	SM-CRE50*
Speed	9/10/11-speed	9/10/11-speed
Chain line	46.5 mm	46.5 mm
Chaining teeth	38T, 44T	38T, 44T
	-	-
Chaining material	Steel	Steel
Chain guard type	Double	√
	Single	√
	w/o CG	√

\* Used with DU-E5000 only

CITY / TREKKING

# INTERNAL GEARED HUB SPEC

## MECHANICAL SHIFTING

### INTER-5E INTERNAL GEARED HUB RELATED BEST FIT FOR E-BIKE



SG-C7000-5C

**SG-C7000-5C**  
E-BIKE Dedicated Mechanical Internal Geared Hub for Coaster Brake (5-speed)

**SG-C7000-5D**  
E-BIKE Dedicated Mechanical Internal Geared Hub for Disc Brake (5-speed)

**SG-C7000-5R**  
E-BIKE Dedicated Mechanical Internal Geared Hub for Roller Brake (5-speed)

**SG-C7000-5V**  
E-BIKE Dedicated Mechanical Internal Geared Hub for Rim Brake (5-speed)

**SM-C7000-5**  
Small Parts Set for SG-C7000-5

- E-BIKE dedicated IHG
  - » Higher shifting performance for mid-ship motor
  - » Greater strength and durability
- Gear ratio: 263%
- Color options: Black, Silver



SL-C7000-5 Black

SL-C7000-5 Silver

**SL-C7000-5**  
REVOSHIFT Shifter for Inter-5E

- Ergonomic and light operation for E-BIKE dedicated use
- Color options: Black, Silver

## ELECTRIC SHIFTING

### INTER-5E INTERNAL GEARED HUB RELATED BEST FIT FOR E-BIKE



SG-C7050-5C

**SG-C7050-5C**  
E-BIKE Dedicated DI2 Internal Geared Hub for Coaster Brake (5-speed)

**SG-C7050-5D**  
E-BIKE Dedicated DI2 Internal Geared Hub for Disc Brake (5-speed)

**SG-C7050-5R**  
E-BIKE Dedicated DI2 Internal Geared Hub for Roller Brake (5-speed)

**SG-C7050-5V**  
E-BIKE Dedicated DI2 Internal Geared Hub for Rim Brake (5-speed)

**SM-C7050**  
Small Parts Set for SG-C7050

- Integrated drivetrain and assist
  - » Full-automatic shifting for a more natural riding experience
  - » Efficient battery consumption increases riding range
  - » Higher shifting performance for mid-ship motor
  - SYMPHOMATIC
- Optimized pedaling environment
  - » Higher shifting performance for mid-ship motor
  - » Greater strength and durability
- Gear ratio: 263%
- Color options: Black, Silver

## MOTOR UNIT



MU-UR500

**MU-UR500**  
Motor Unit for SG-C7050

- Integrated drivetrain and assist
  - » Full-automatic shifting for a more natural riding experience
  - SYMPHOMATIC
- Compact motor unit
- Silent motor noise
- Compatible with 8/11 gear hub

## MECHANICAL / ELECTRIC SHIFTING

### SINGLE GEAR



CS-C7000

**CS-C7000**  
Single Gear for SG-C7000 / C7050-5

- Integrated drivetrain and assist
  - » For E-BIKE dedicated Internal Geared Hub
- Gear combination: 24T, 27T, 30T

## Drive Unit Specification

√=Yes

Model No.	DU-E8000	DU-E7000	DU-E6100	DU-E6110	DU-E5000
Output characteristics	MTB	MTB	City/Trekking	City/Trekking	City/Trekking
Maximum rated power (Watt)	250	250	250	250	250
Maximum torque (Nm)	70	60	60/50	60/50	40
Maximum power output (W)	500W	500W	500W	500W	420W
Compatible Brake Type	Disc brake, V-BRAKE	Disc Brake, V-BRAKE	V-Brake, Roller brake, Disc brake	Coaster brake	V-Brake, Roller brake, Disc brake, Coaster brake
Compatible BB type	24mm axle serration	24mm axle serration	24mm axle serration	24mm axle serration	Square sealed
Cable connector	Left side	Right side	Right side	Right side	Left side
Drive unit chain device	SM-CDE80/70	SM-CDE80/70	-	-	-
Chain case	-	-	√	√	√
Drive unit cover design	E8000 (SM-DUE80A/B)	E7000 (SM-DUE70A/B)	E6100 (SM-DUE61-T/C)	E6100 E6100 (SM-DUE61-T/C)	E5000 E6100 (SM-DUE50-T/C)
Bearing type	Double sealed	Double sealed	Single sealed	Single sealed	Single sealed
Chain line (mm)	50 / 53 mm	50 / 53 mm	46.5 / 50 / 53 mm	46.5 / 50 / 53 mm	46.5mm
Q-factor	177 mm	180 mm	180mm	180mm	185mm
DI2 compatible	INTER-11	-	-	√	√
	INTER-8	-	-	Automatic available	Automatic available
	INTER-7	-	-	√	√
	INTER-5	-	-	Automatic available	Automatic available
	Derailleur Type	√	√	√	-
Maximum support bike speed	25km/h	√	√	√	√
	20 mph	√	√	√	√
	Adjustable (15km-25km, 12-20mph setting by E-TUBE PROJECT)	-	-	√	√
Assist mode	BOOST, TRAIL, ECO	BOOST, TRAIL, ECO	HIGH, NORMAL, ECO	HIGH, NORMAL, ECO	HIGH, NORMAL, ECO
Riding Characteristics (Set by E-TUBE PROJECT)	Dynamic	√	√	-	-
	Explorer	√	√	-	-
	Customize	√	√	-	-
	Sportive	-	-	√	√
Walk assist function	Comfort	-	-	√	√
	ON/OFF (Set by E-TUBE PROJECT)	√	√	√	√
	Standard (Mechanical spec)	√	√	√	√
Intelligent (only compatible with DI2)	Intelligent (only compatible with DI2)	√	√	√	√
	Power supply for front light	DC 6V	DC 12V	DC 12V	DC 12V
Power supply for rear light	DC 6V	DC 12V	DC 12V	DC 12V	
Maximum current supply front and rear light total (A)	2	2	2	2	
Safe way home function	√	√	√	√	
Terminal for Light (pcs)	1	1	1	1	
Port for Speed Sensor (pcs)	1	1	1	1	
Torque sensor	√	√	√	√	
Crank arm position sensor	√	√	√	√	
Bike speed sensor (By using SM-DUE10/DUE11)	√	√	√	√	
Cadence sensor	√	√	√	√	
Weight (kg) w/o cover	2.88	2.79	2.76	2.7	

# SHIMANO STEPS SYSTEM COMPONENTS

## Battery

√=Yes

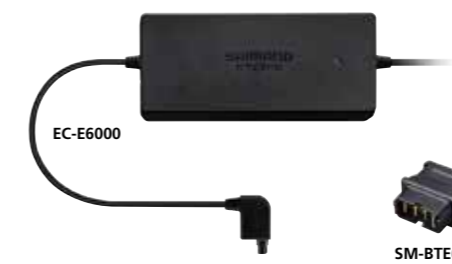
Model No.							
Compatible drive unit							
E8000/E7000	√	√	√	√	√	-	-
E6100/E5000	√	√	√	√	√	√	√
Rated capacity (Wh)	504Wh	√	√	√	-	-	√
	418Wh	-	-	-	√	√	√
Rated voltage	36	36	36	36	36	36	36
Mount type	Down tube type	-	-	√	√	√	-
	Integrated type	√	√	-	-	-	-
	Rear carrier type	-	-	-	-	-	√
Compatible battery mount	BM-E8030-A BM-E8030-B BM-E8031-A BM-E8031-B	BM-E8020	BM-E8010		BM-E6010	BM-E6000	
Charge level display	√	√	√	√	√	√	√
Error signal	√	√	√	√	√	√	√
Charging port	-*	√	√	√	√	√	√
System on/off switch	-*	√	√	√	√	√	√
Compatible charger	EC-E6000 EC-E6002 EC-E8004	EC-E6000 EC-E6002 EC-E8004	EC-E6000 EC-E6002 EC-E8004	EC-E6000 EC-E6002 EC-E8004	EC-E6000 EC-E6002 EC-E8004	EC-E6000 EC-E6002 EC-E8004	EC-E6000 EC-E6002 EC-E8004
Average weight	2.9kg	3.05kg	2.6kg	2.55kg	2.65kg	2.65kg	2.58kg

## Battery Mount

√=Yes

Model No.	BM-E8010	BM-E8020	<b>NEW</b> BM-E8030-A	<b>NEW</b> BM-E8030-B	<b>NEW</b> BM-E8031-A	<b>NEW</b> BM-E8031-B	BM-E6000-A	BM-E6000-B	BM-E6010
Color	1 Black	Black	Standard	Standard	Standard	Standard	Black	Black	Black
	2 -	-	-	-	-	-	Gray	Gray	-
Position	Down tube	Integrated	Integrated	Integrated	Integrated	Integrated	Rear carrier	Rear carrier	Rear carrier
Key hole	√	√	√	√	-	-	√	√	√
Connect to EW-CP100	-	-	√	-	√	-	-	-	-
Compatible battery	BT-E8010	BT-E8020	BT-E8035	BT-E8035	BT-E8035	BT-E8035	BT-E6000 BT-E6001	BT-E6000 BT-E6001	BT-E6010
Compatible tool	TL-BME02	TL-BME03	TL-BME04	TL-BME04	TL-BME04	TL-BME04	-	-	TL-BME01

## Battery Charger & Related



**EC-E6000**  
Battery Charger

- Charge without removing battery
- Fast charging - rapid charge to 80% of total capacity
- Small connector

**SM-BTE60**  
Battery Charger Adapter

- Adapter for charging battery (BT-E6000/E6001/E6010) with charger (EC-E6000/E6002/E8004)

**SM-BTE80** **NEW**  
Battery Charger Adapter

- Adapter for charging battery (BT-E8035) with charger (EC-E6000/E6002/E8004)



**EC-E6002**  
Battery Charger

- Compact size & light weight for easy to bring
- Charge without removing battery
- Small connector

**EC-E8004** **NEW**  
Battery Charger

- Lightweight and portable battery charger
- Same compact size and weight as EC-E6002
- Rapid charging
- Quick charge from half to 80% in 1 hour
- Charge from empty to 80% in 2.5 hour
- Go from empty to fully charged in 4.5 hours
- Equivalent or higher to waterproof grades 5 (IPX5)

**SM-BCC1**  
Battery Charger Cord

- Need to purchase separately with battery charger (EC-E6002)

## Charge Time

√=Yes

Model No.	<b>NEW</b> EC-E8004	EC-E6000	EC-E6002
Equipped with battery 504Wh	Full charge	4.0h (4.5h *)	5h
	80% charge	2.5h (3.2h *)	2.5h
Equipped with battery 418Wh	Full charge	3.0h (3.5h *)	4h
	80% charge	2.0h (2.5h *)	2h
Compatible voltage	AC 100V-240V 50-60Hz	AC 100V-240V 50-61Hz	AC 100V-240V 50-62Hz
Plug in charging type	√	√	√
Charging temperature	0-40 °C	0-40 °C	0-40 °C
Storage temperature	-20-60 °C	-20-60 °C	-20-60 °C
Error signal	√	√	√
Compatible AC power cable	-	-	SM-BCC1
Built-in AC cable (m)	1m / 2m	2m	-
Size (mm) (LxWxH)	162x73x44	204x84x45	160x70x40
Average weight	550g (target weight)	930g	523g

\* In case of 100 V AC

## Satellite Charging Port

√=Yes

Model No.	<b>NEW</b> EW-CP100
Position	Integrated
Compatible battery	BT-E8035
Compatible battery mount	BM-E8030-A BM-E8031-A
Compatible battery charger	EC-E6000 EC-E6002 EC-E8004
Firmware update by E-TUBE PROJECT	-
Cable length to BM-E803* (mm)	200 550

### Crank Arm

√=Yes

Model No.						
Brand	SHIMANO <b>DEORE XT</b>	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Crank arm type	HOLLOWTECH	√	√	-	-	-
	Solid	-	-	√	√	√
Q factor (mm)	177, 180*	177, 180*	177, 180*	180	185	185
BB type	24mm axle serration	24mm axle serration	24mm axle serration	24mm axle	Square type	Square type
Crank arm length (mm)	160 mm	-	-	<b>NEW</b> √	-	-
	165 mm	√	-	√	-	√
	170 mm	√	√*	√	√	√
	175 mm	√	√	√	√	√
Color	Series color	Standard	Standard	Silver/Black	Silver	Black
Note	*in case with DU-E6100/E6110/E7000	*in case with DU-E6100/E6110/E7000	*in case with DU-E6100/E6110/E7000			

### Chainring

√=Yes

Speed	12-speed			10/11-speed			9/10/11-speed		9/10/11-speed	
Model No.	SM-CRE80-12-B	<b>NEW</b> SM-CRE70-12-B	<b>NEW</b> SM-CRE70-12	SM-CRE80-B	<b>NEW</b> SM-CRE80-R	SM-CRE80	<b>NEW</b> SM-CRE70	SM-CRE70-B	SM-CRE61	SM-CRE50
Chain line	53 mm	53 mm	50 mm	53 mm	50 mm	50 mm	50 mm	53 mm	46.5 mm	46.5 mm
Chainring teeth	34T	√	-	√	-	√	-	√	-	-
	36T	<b>NEW</b> √	√	-	-	-	-	-	-	-
	38T	<b>NEW</b> √	-	-	√	-	√	√	-	√
	42T	-	-	√	-	-	-	-	-	-
	44T	-	-	-	-	-	√	-	-	√
	47T	-	-	-	-	√	-	-	-	-
DYNAMIC CHAIN ENGAGEMENT Plus	√	-	√	√	-	√	√	-	-	-
Chainring material	Steel	Steel	Steel	Steel	Aluminum	Steel	Steel	Steel	Steel	Steel
Chain guard type	Double	-	-	√	-	√*	√	-	√	√
	Single w/o CG	-	-	-	-	-	-	-	√	√
Chain device compatible	√	√	-	√	SM-CDE80 (frame mount)	√	√ w/o CG, w/o back plate	√	-	-
Chain case compatible	-	-	-	-	-	-	-	-	√	√
Note										* 44T only

### Recommended Hydraulic Disc Brake System

√=Yes

Model No.					
Brand	<b>XTR</b>	<b>XTR</b>	<b>DEORE XT</b>	SHIMANO	
Disc Brake Caliper related	High brake power SERVOWAVE	√	√	√	
	Piston type	2-piston	4-piston	4-piston	
	Brake power % with different size rotor	160mm	146%	146%	146%
		180mm	168%	168%	168%
		203mm	191%	191%	191%
Brake Pad	Fin or not	w/o Fin	w/o Fin	w/o Fin	
	Material	Resin/Metal	Resin/Metal	Resin/Metal	
Brake lever related	Material	CFRP	Aluminum	Aluminum	
	Finger	2-finger	2-finger	2-finger	
	Technology	I-SPEC EV	I-SPEC EV	I-SPEC II	
Oil bleeding	ONE WAY BLEEDING	√	√	√	
	Funnel bleeding tool	√	√	√	

### Disc Brake Rotors for E-BIKE Speed Sensor

√=Yes

Model No.						
Rotor type	Narrow type	Narrow type	Narrow type	Narrow type	Narrow type	Wide type
Function	ICE TECHNOLOGIES FREEZA	√	√	√	-	-
	ICE TECHNOLOGIES	√	-	√	√	-
Rotor size	203 mm	√	IRTEM900L	√	-	IRTEM600L
	180 mm	√	IRTEM900M	√	IRTEM800M	IRTEM600M
	160 mm	√	IRTEM900S	√	IRTEM800S	IRTEM600S
	140 mm	-	-	-	-	-
Rotor Material	Stainless steel + Aluminum + Stainless steel	Stainless steel + Aluminum + Stainless steel	Stainless steel + Aluminum + Stainless steel	Stainless steel + Aluminum + Stainless steel	Stainless steel	Stainless steel
Pad compatibility	Metal	√	√	√	√	-
	Resin	√	√	√	√	-
Alloy lock ring	√	√	√	√	-	-
Note	* for rear only with magnet bracket; painted fin	* for rear only with magnet bracket;	* for rear only with magnet bracket; painted fin	* for rear only with magnet bracket;	* for rear only with magnet bracket;	* for rear only with magnet bracket;

### Chain

√=Yes

Speed	11/12-speed	9/10/11-speed					
Type	HYPERGLIDE+	HG-X11	HG-X11	HG-X11	HG-X	HG	HG/UG
Model No.	CN-M9100	CN-E8000-11	CN-HG701-11	CN-HG601-11	CN-E6090-10	CN-E6070-9	CN-HG71
Outer link plate surface treatment	<b>SIL-TEC</b>	<b>SIL-TEC</b>	<b>SIL-TEC</b>	Gray	<b>SIL-TEC</b>	Gray	Gray
Inner link plate surface treatment	Chromizing	<b>SIL-TEC</b>	<b>SIL-TEC</b>	<b>SIL-TEC</b>	<b>SIL-TEC</b>	Gray	Gray
Directional design	√	√	√	√	√	-	-
Perforated Ultra light Plate	-	-	-	-	-	-	-
Chromizing Treatment link pin	√	√	√	√	√	√	√
Hollow pin	√	-	-	-	-	-	-
Connecting pin	QUICK-LINK (SM-CN910-12)	QUICK-LINK (SM-CN900-11)	QUICK-LINK (SM-CN900-11)	QUICK-LINK (SM-CN900-11)	Two Lines	Silver color	Black color
Weight (114 link)	242 g	257 g	257 g	257 g	276 g	276 g	324 g
Code no.	ICNM9100116Q ICNM9100126Q ICNM9100138Q	ICNE80001116Q ICNE80001126Q ICNE80001138Q	ICNHG7011126Q ICNHG7011138Q	ICNHG6011126Q ICNHG6011138Q	ICNE609010118I ICNE609010126I ICNE609010138I	ICNE60709118I ICNE60709126I ICNE60709138I	ECNHG71C116I ECNHG71C138I
Replacement/ Remark		116 Links 126 Links 138 Links	126 Links 138 Links	126 Links 138 Links	Front single only 118 Links 126 Links 138 Links	Front single only 118 Links 126 Links 138 Links	CN-HG91 CN-HG70

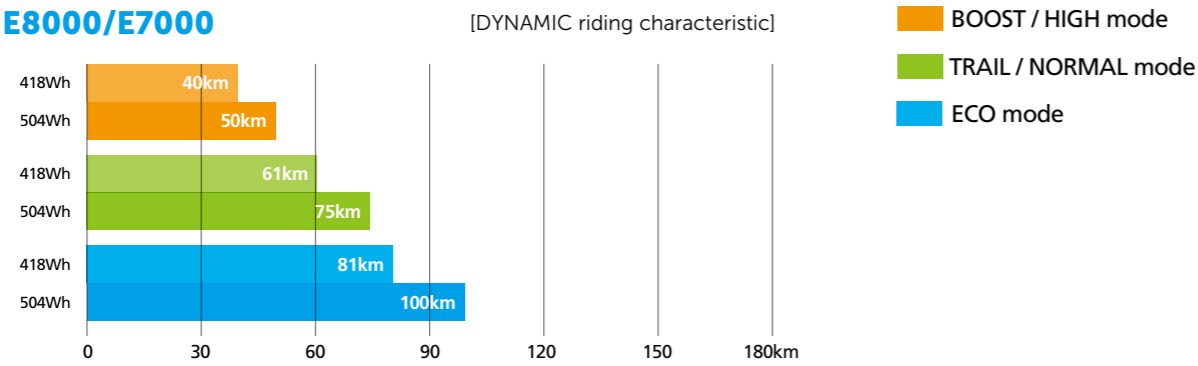
CONCEPT

CONCEPT

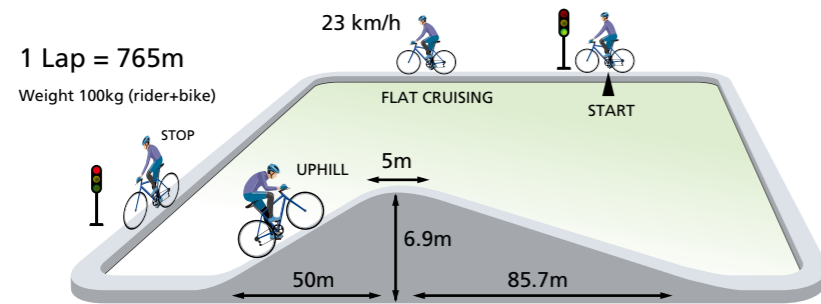
# RIDING DISTANCE

## E8000/E7000

[DYNAMIC riding characteristic]

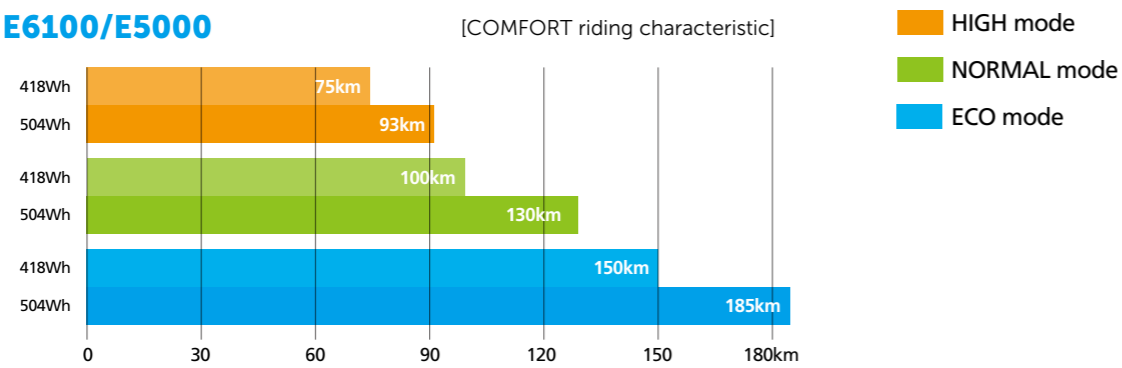


### Test conditions

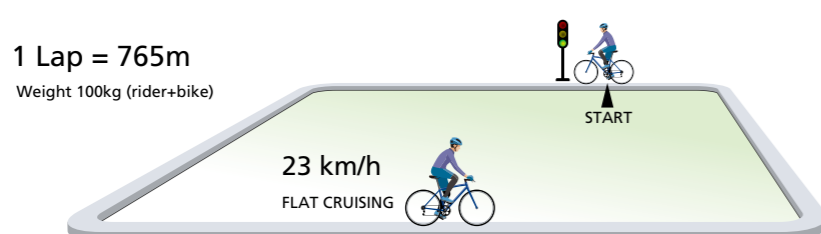


## E6100/E5000

[COMFORT riding characteristic]



### Test conditions



E8000 / E7000 / E6100 / E5000 Series

# DEALER'S MANUAL

### IMPORTANT NOTICE

This booklet is an excerpt from the user's manual and dealer's manual.

For the latest version of each manual, visit our website at:  
<https://si.shimano.com>



































This booklet shows the steps for assembly. For disassembly, perform these steps in reverse order.



# LIST OF TOOLS

The following tools are needed for installation/removal, adjustment, and maintenance purposes.

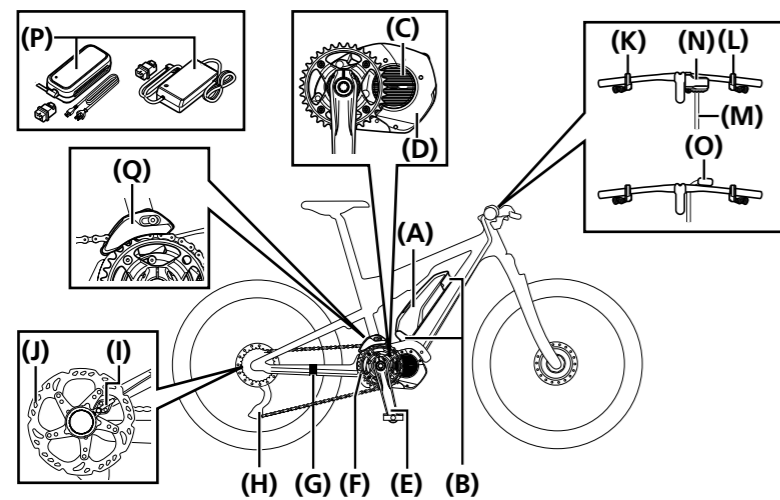
Component	Location used / bolt type	Tool	
Electric wire	Plug		TL-EW02
Cycle computer (handlebar-mounted)	Clamp bolt		3 mm hexagon wrench
Cycle computer (stem-mounted)	Clamp bolt Mounting bolt Angle adjustment bolt		Screwdriver [#2]
Switch unit	Clamp bolt Lever fixing bolt		3 mm hexagon wrench
Battery mount (BM-E8020)	Mount lower case Key unit		5 mm hexagon wrench
	Mount upper case Key unit cover		Screwdriver [#2]
	Key cylinder		2 mm hexagon wrench
	Key unit (determine the installation location)		TL-BME03
Battery mount (BM-E8010)	Mount lower case		3 mm hexagon wrench
			8 mm spanner
	Key unit		3 mm hexagon wrench
	Key unit cover Mount upper case		2.5 mm hexagon wrench
	Key unit		TL-BME02
Battery mount (BM-E6010)	Mount lower case Key unit		3 mm hexagon wrench
	Key unit cover Mount upper case		Screwdriver [#1]
	Key unit (determine the installation location)		TL-BME01

Battery mount (BM-E6000)	Key unit		Screwdriver [#2] Slotted screwdriver (6.4 mm)
	Mount lower case		Screwdriver [#2]
	Mount upper case		Hexalobular [#10]
Speed sensor (SM-DUE10)	Speed sensor mounting bolt		4 mm hexagon wrench/ Hexalobular [#10]
	Magnet unit mounting bolt		Screwdriver [#2]
Speed sensor (SM-DUE11)	Speed sensor mounting bolt		Hexalobular [#10]
Disc brake rotor	Lock ring		TL-LR15 + 24 mm wrench TL-LR15 + 1/2 inch socket wrench
Drive Unit	Drive unit mounting bolt	-	Contact the bicycle manufacturer.
	Drive unit cover (other company product)	-	Contact the bicycle manufacturer.
	Drive unit cover (SHIMANO drive unit cover)		Screwdriver [#2]
Light cable	Light cable mounting bolt	-	-
Crank arm (Splined axle type)	Cap		TL-FC16/TL-FC18
	Cramp bolt		5 mm hexagon wrench
Crank arm (Square axle type)	Crank arm mounting bolt		8 mm hexagon wrench
Chain device	Back plate mounting bolt		4 mm hexagon wrench
	Guide mounting bolt		3 mm hexagon wrench
Chainring	Lock ring		TL-FC39 + TL-FC33 (with 1/2 inch socket wrench)
			TL-FC39 + TL-FC36
	Chain guard Arm cover		Screwdriver [#2]

# COMPONENT OVERVIEW

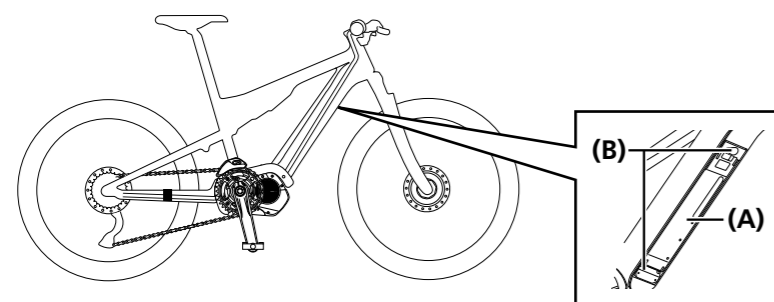
## E-MOUNTAINBIKE

### Down tube Battery type



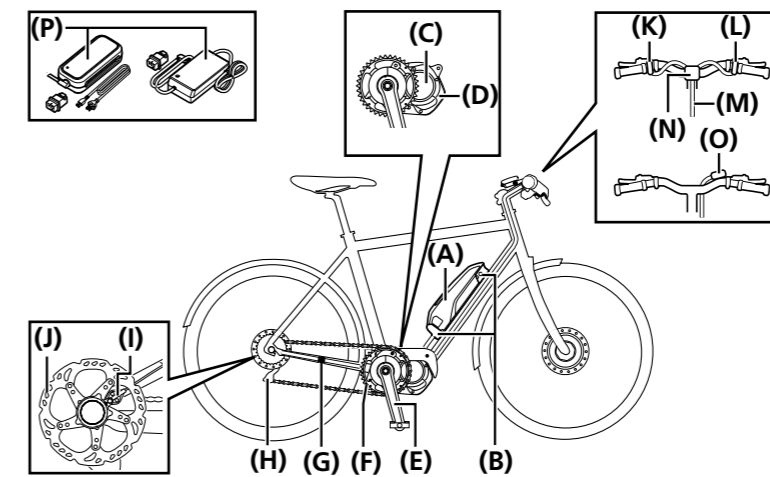
- (A) Battery
- (B) Battery Mount
- (C) Drive Unit
- (D) Drive Unit Cover
- (E) Crankarm
- (F) Chainring
- (G) Speed Sensor
- (H) Rear Derailleur
- (I) Speed Sensor (for Disc Brake Rotor with magnet)
- (J) Disc brake Rotor with magnet
- (K) Switch Unit for Assist
- (L) Switch Unit for Shifting (DI2)
- (M) Electronic Wire
- (N) Cycle computer
- (O) Junction [A] (Wireless Unit)
- (P) Battery Charger
- (Q) Chain Device

### Integrated Battery type



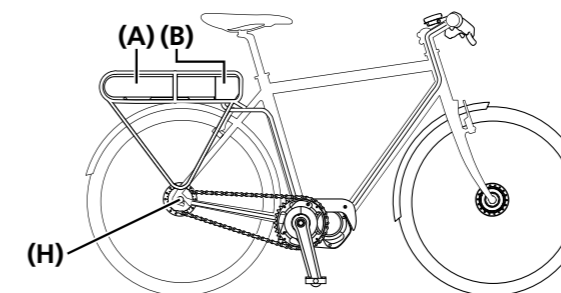
## CITY/TREKKING

### Down tube Battery type



- (A) Battery
- (B) Battery Mount
- (C) Drive Unit
- (D) Drive Unit Cover
- (E) Crankarm
- (F) Chainring
- (G) Speed Sensor
- (H) Rear Derailleur / Motor unit + Internal Geared Hub
- (I) Speed Sensor (for Disc Brake Rotor with magnet)
- (J) Disc brake Rotor with magnet
- (K) Switch Unit for Assist
- (L) Switch Unit for Electronic shifting
- (M) Electronic Wire
- (N) Cycle computer
- (O) Junction [A] (Wireless Unit)
- (P) Battery Charger

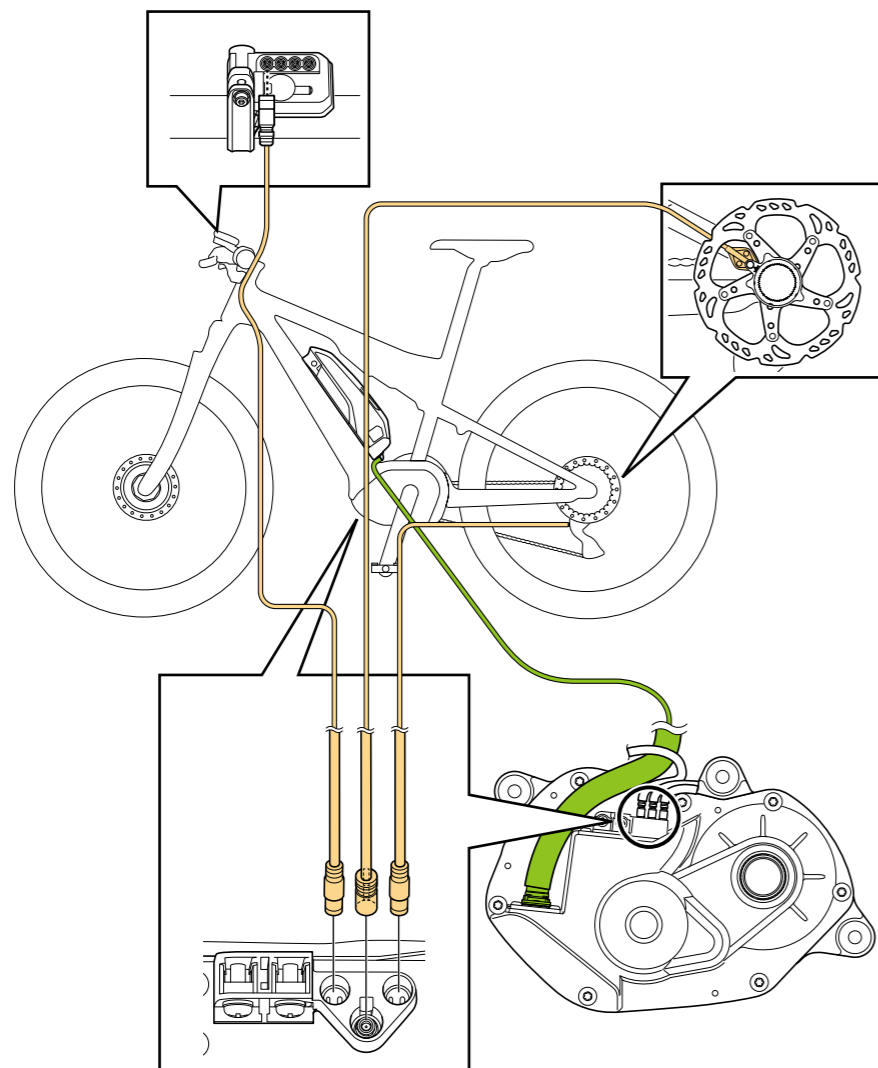
### Rear carrier Battery type



# INSTALLING ELECTRICAL PARTS

## Overall Wiring Diagram

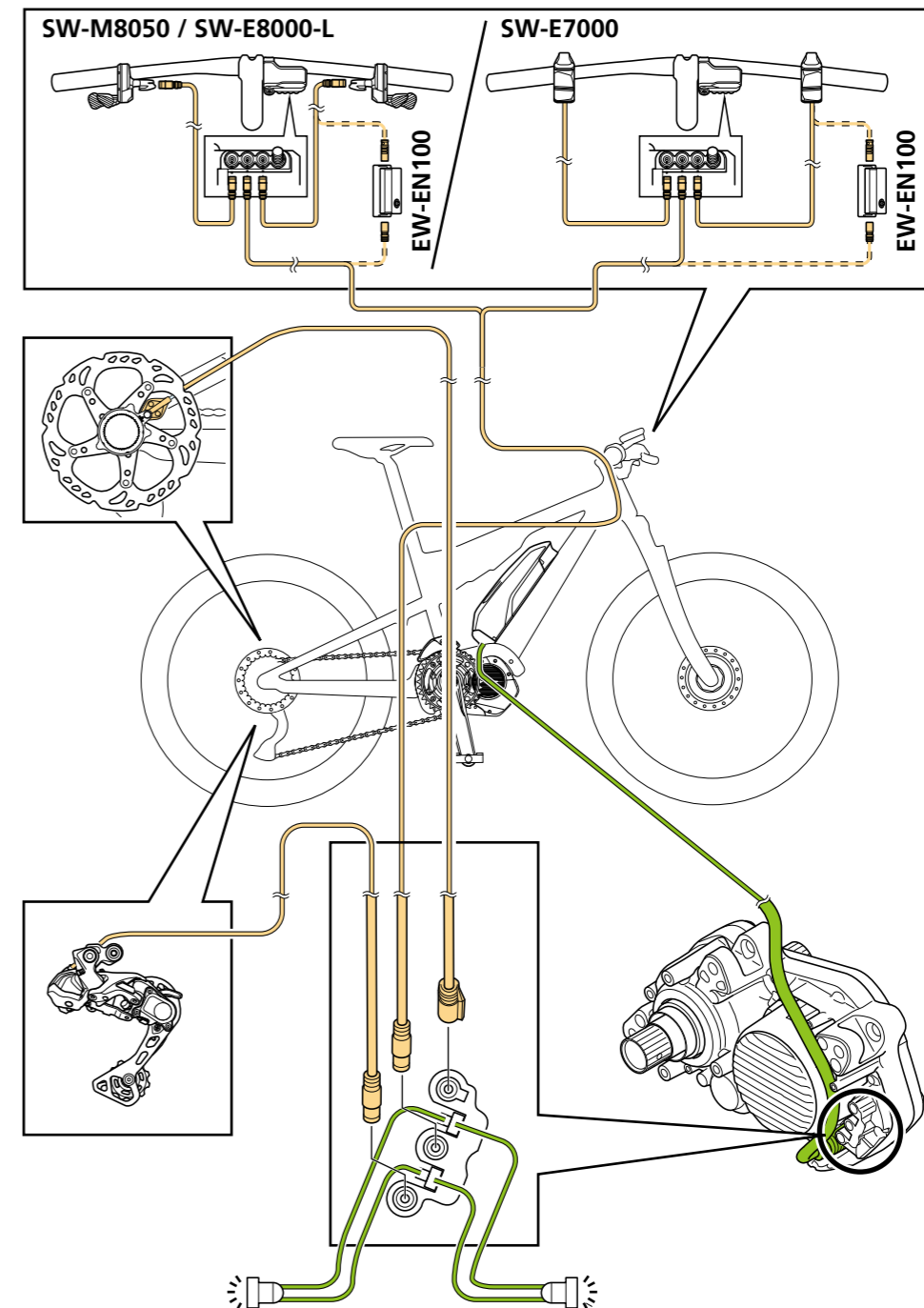
E8000



### TECH TIPS

- The maximum cable length of the electric wire (EW-SD50) is 1,600 mm.
- When routing wires, take care to ensure that the cables and electric wires are not twisted.

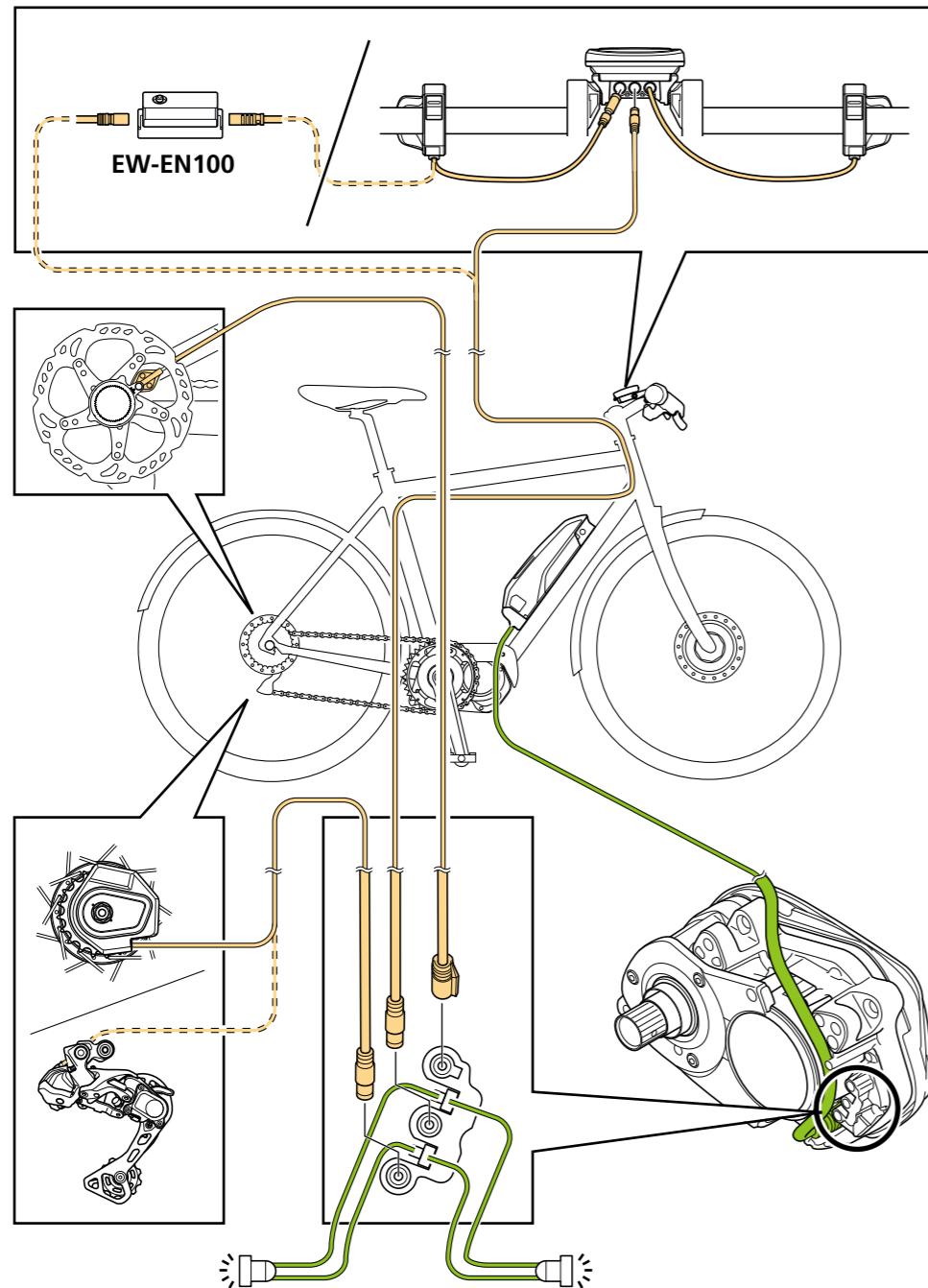
E7000



### TECH TIPS

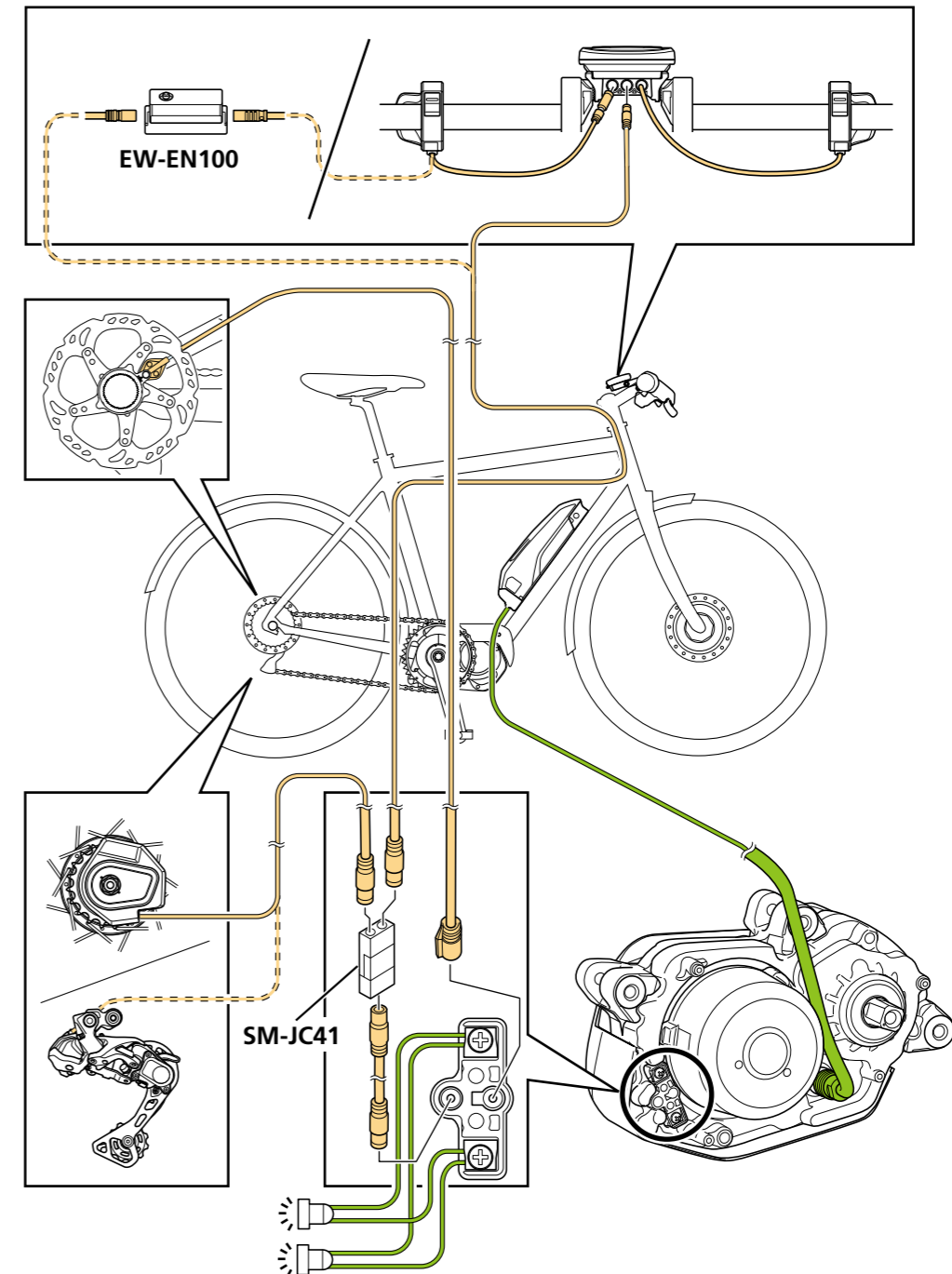
- The maximum cable length of the electric wire (EW-SD50) is 1,600 mm.
- When routing wires, take care to ensure that the cables and electric wires are not twisted.

## E6100

**TECH TIPS**

- The maximum cable length of the electric wire (EW-SD50) is 1,600 mm.
- When routing wires, take care to ensure that the cables and electric wires are not twisted.

## E5000

**NOTICE**

- SM-JC41 is required if using SHIMANO STEPS E5000 Series for DI2 electronic gear shifting.

**TECH TIPS**

- The maximum cable length of the electric wire (EW-SD50) is 1,600 mm.
- When routing wires, take care to ensure that the cables and electric wires are not twisted.

# INSTALLING THE DRIVE UNIT AND PERIPHERAL PARTS

Use the following procedure to install the drive unit and peripheral parts.

- (1) Installing the drive unit
- (2) Wiring to the drive unit
- (3) Installing the drive unit cover
- (4) Install the chainrings and crank arms

## TECH TIPS

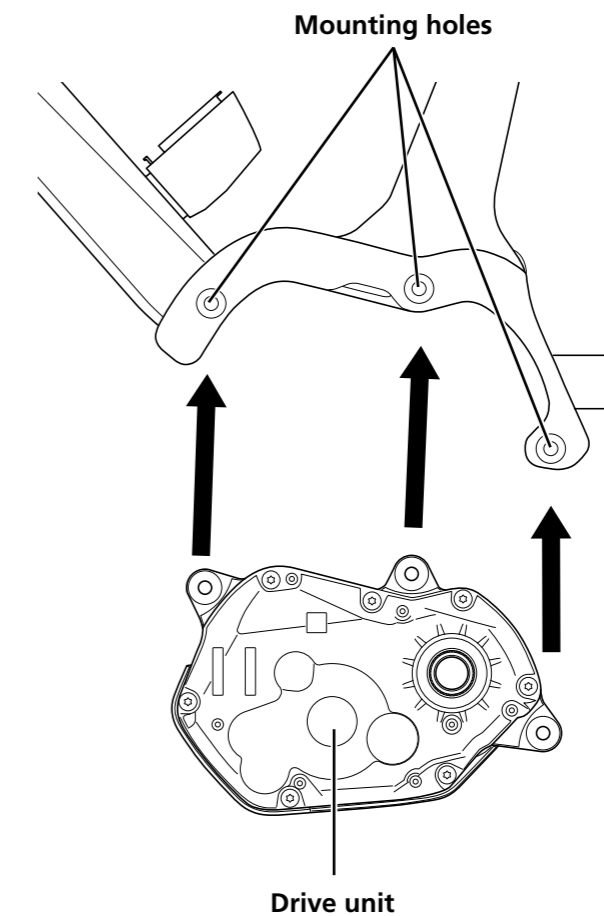
- To check the wiring of the drive unit on a completed bicycle, you will need to first remove the drive unit cover.
- DU-E8000 / DU-E5000: Remove the left cover to access the power cord and terminal block.
- DU-E7000 / DU-E6100: Remove the right cover (front side) to access the power cord and terminal block.
- To remove the drive unit, follow the procedure above in reverse.

## Installing the Drive Unit

Before installing the drive unit to the frame, first check that all electric wires and cables to connect to the drive unit have been routed to the installation area of the drive unit of the frame.

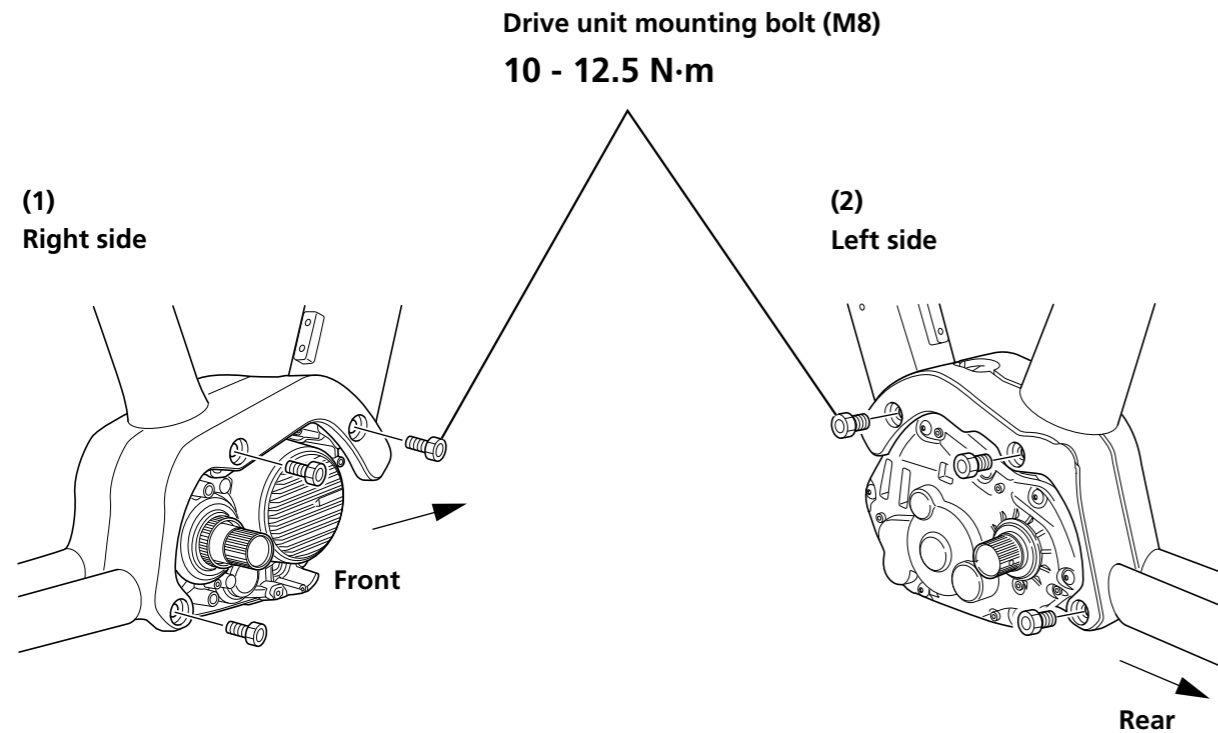
- 1. Check the three mounting holes on the left and right of the frame, and then secure the drive unit.**

Be careful not to pinch electric wires or cables between the frame and drive unit, or to forcefully bend them.



## 2. Secure the drive unit to the frame.

- (1) Tighten the mounting bolt on the right side so that the drive unit makes firm contact with the inner surface on the right side of the frame.
- (2) Tighten the mounting bolt on the left side of the frame.



### TECH TIPS

- Drive unit mounting bolts (M8) are not included with SHIMANO products. Use the bolts supplied by the bicycle manufacturer.

## Connecting the Power Cord

The power port is located on ;

- DU-E8000 / DU-E5000: left side of the drive unit.
- DU-E7000 / DU-E6100: Right side of the drive unit.

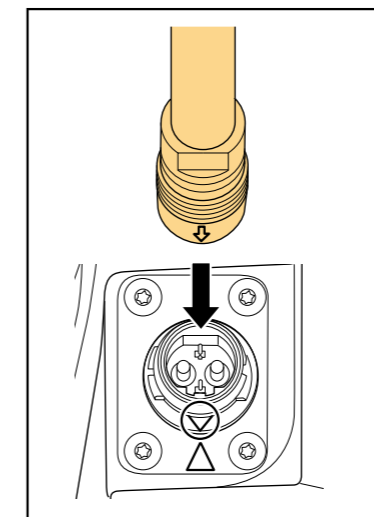
### Connection method

#### 1. Connect the power cord.

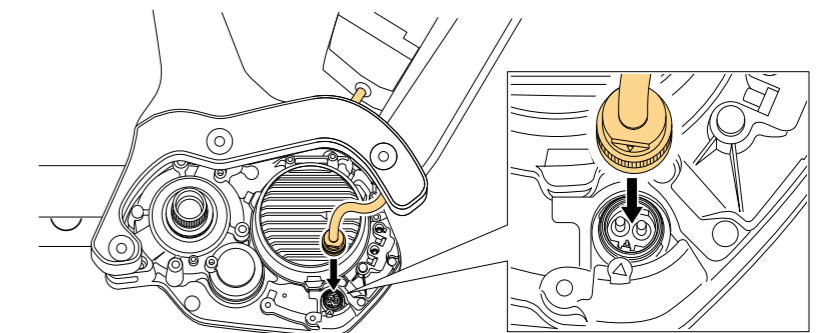
Align the triangle marking on the drive unit's power port with the arrow marking on the tip of the power cord, and then insert the power cord.

\* Check that it is securely connected.

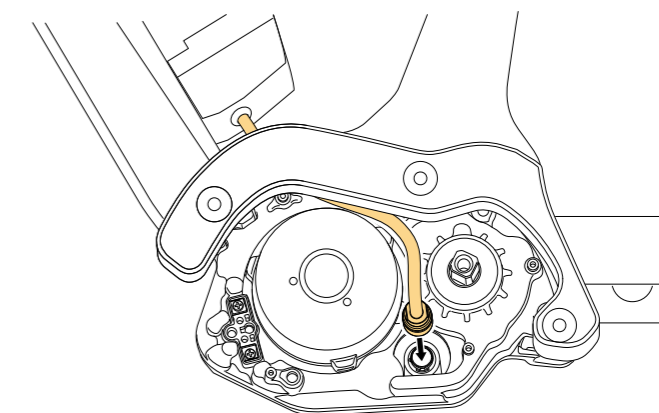
#### DU-E8000



#### DU-E7000 / DU-E6100



#### DU-E5000



### NOTICE

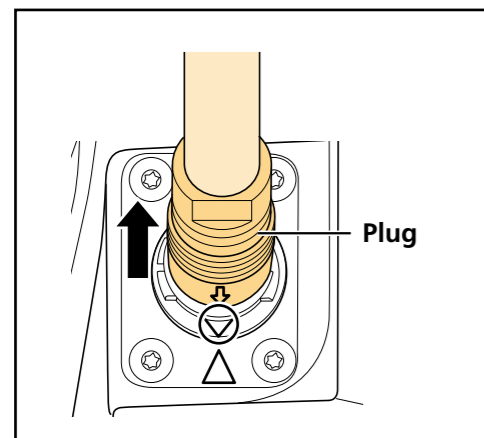
- When routing wires, take care to ensure that the power cord is not twisted.

## Removal method

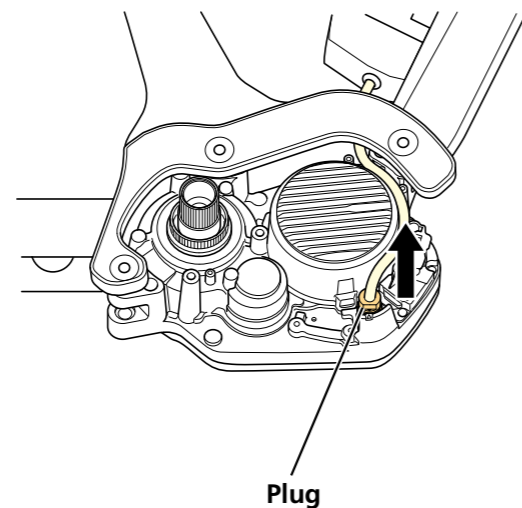
### 1. Remove the power cord.

Grab the plug part of the power cord, and pull it toward you to remove it.

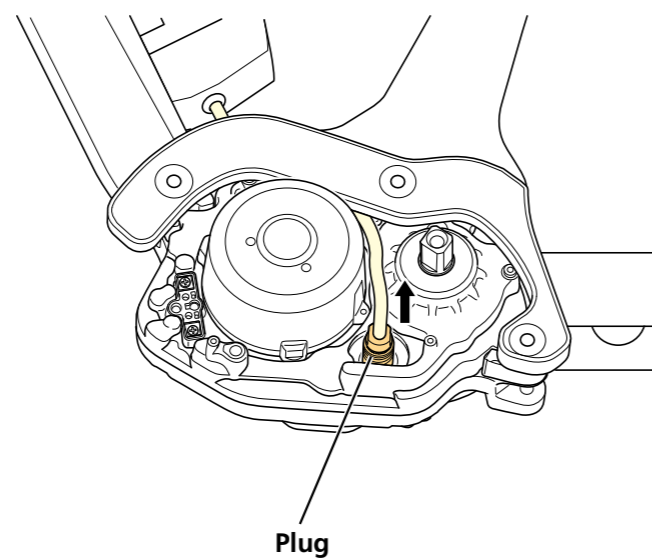
DU-E8000



DU-E7000 / DU-E6100



DU-E5000

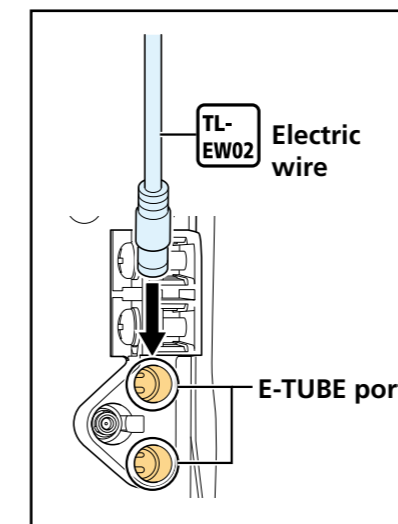


## Connecting Cockpit Peripheral Parts and Electronic Gear Shifting Components

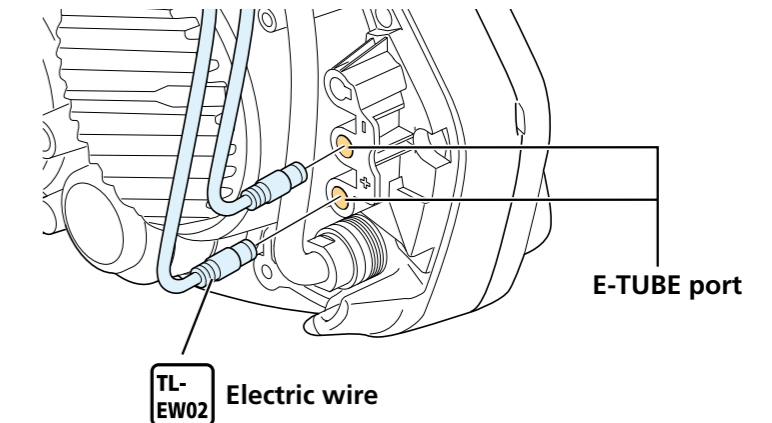
Connect wires from the cockpit peripheral parts (such as the cycle computer and junction [A]) and wires from electronic gear shifting components to the drive unit's terminal block.

### 1. Connect the electric wires to the drive unit's E-TUBE ports.

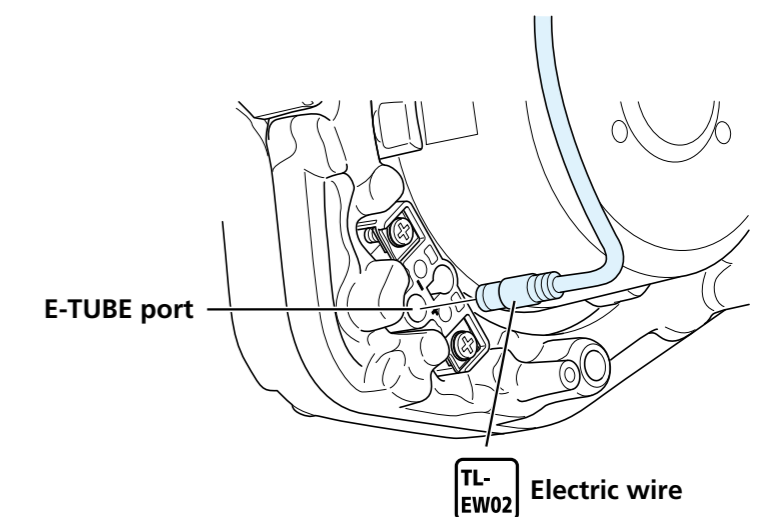
DU-E8000



DU-E7000 / DU-E6100



DU-E5000



#### NOTICE

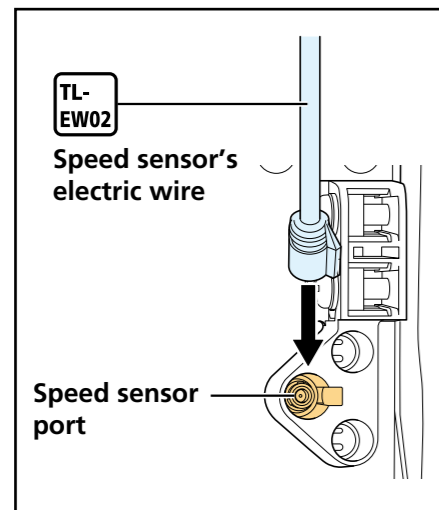
- Be sure to attach dummy plugs to any unused E-TUBE ports.
- If using SHIMANO STEPS E5000 Series for electronic gear shifting, refer to the overall wiring diagram and connect the electric wire connected to DU-E5000 to SM-JC41.
- When routing wires, take care to ensure that the electric wires are not twisted.

# Connecting the Speed Sensor

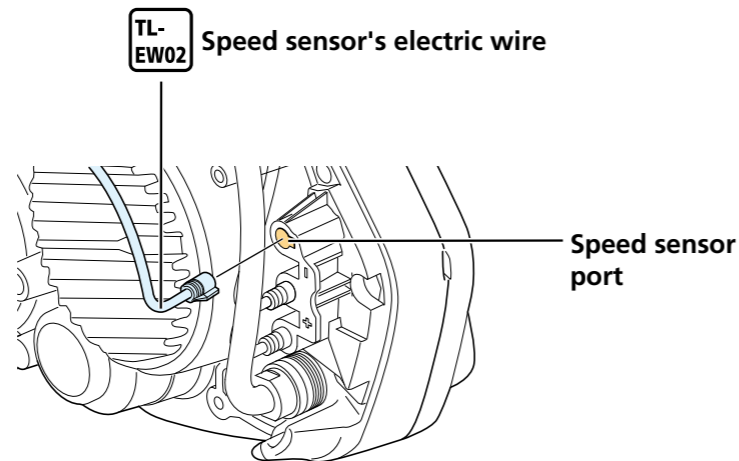
Connect the speed sensor's electric wire to the drive unit's terminal block.

1. Connect the electric wire to the drive unit's speed sensor port.

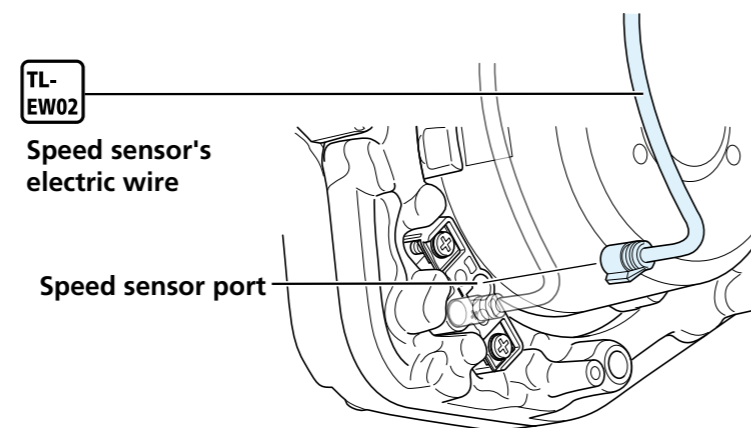
## DU-E8000



## DU-E7000 / DU-E6100



## DU-E5000



### NOTICE

- When routing wires, take care to ensure that the electric wires are not twisted.

# Connecting the Light Cables

The drive unit contains terminals to supply power for the front and rear lights. Connect the wires connected to the front and rear lights to the drive unit.

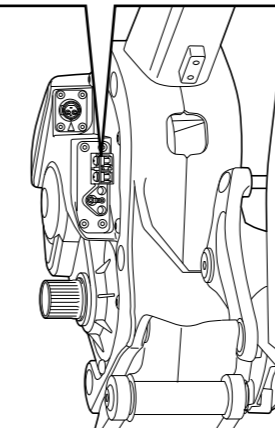
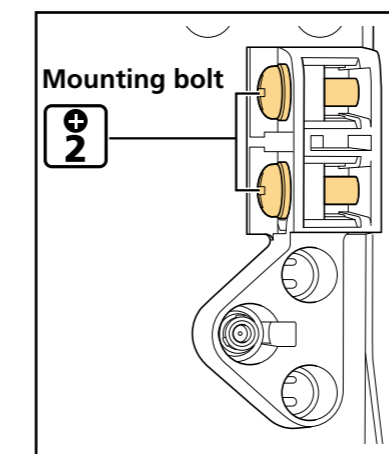
### NOTICE

- [Light connection] may need to be configured in E-TUBE PROJECT. Refer to the help manual for E-TUBE PROJECT for details.
- A light of the following specifications can be connected to the drive unit.

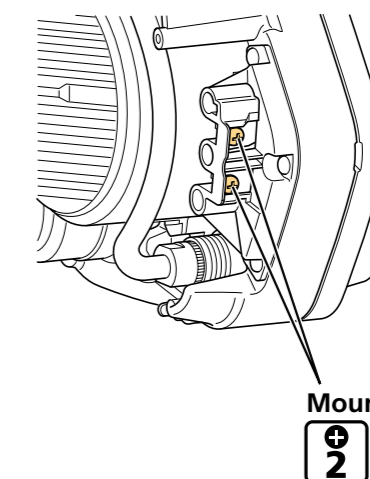
DU	Light specification
DU-E8000	DC 6V 2000 mA
DU-E7000	DC 12V 2000 mA
DU-E6100	DC 12V 2000 mA
DU-E5000	DC 12V 2000 mA

1. Loosen the mounting bolts.

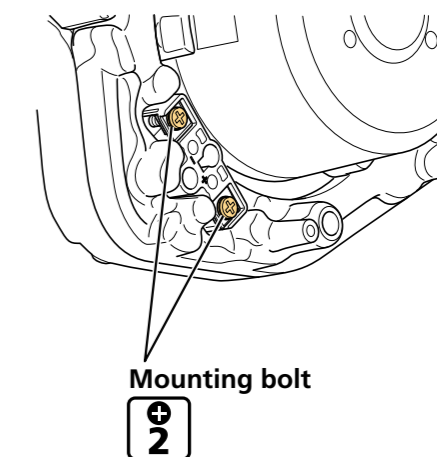
## DU-E8000



## DU-E7000 / DU-E6100



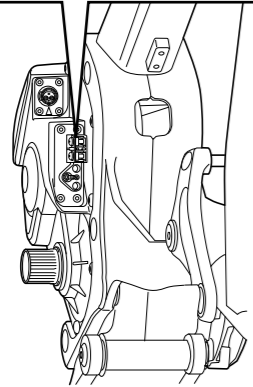
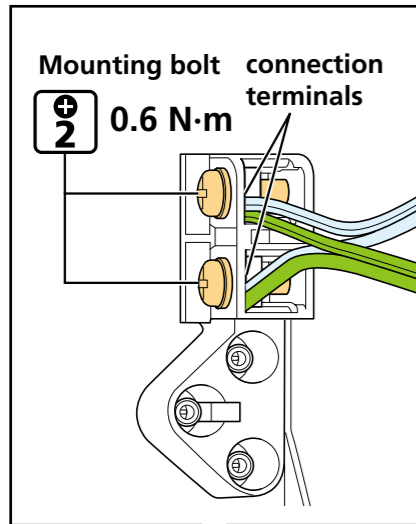
## DU-E5000



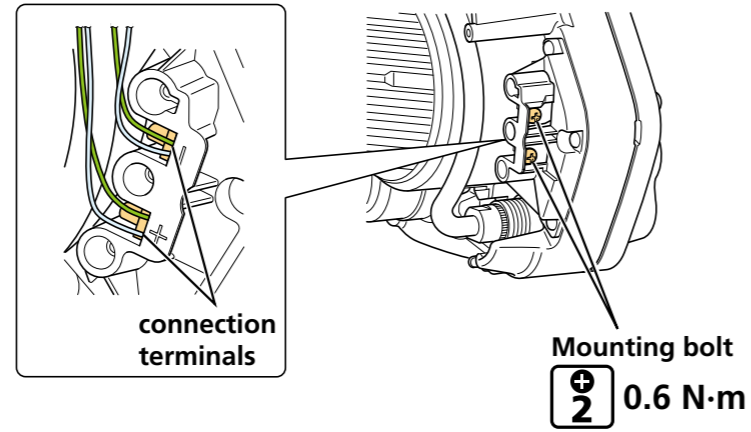


2. Connect the light cables to the connection terminals, and then tighten the mounting bolts.

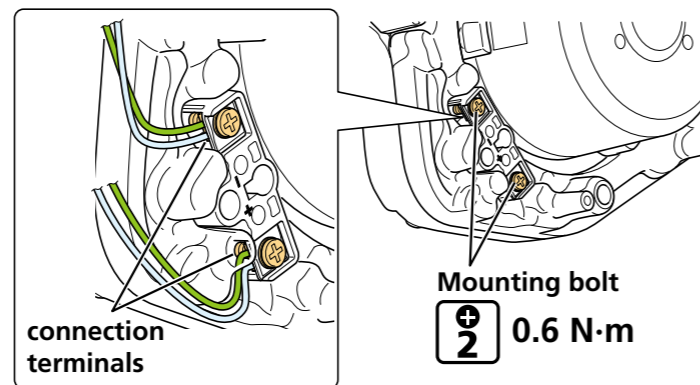
## DU-E8000



## DU-E7000 / DU-E6100



## DU-E5000



## Installing the Drive Unit Cover

### SHIMANO drive unit cover only

#### ▶ DU-E8000

1. Refer to the latest dealer's manual for details.



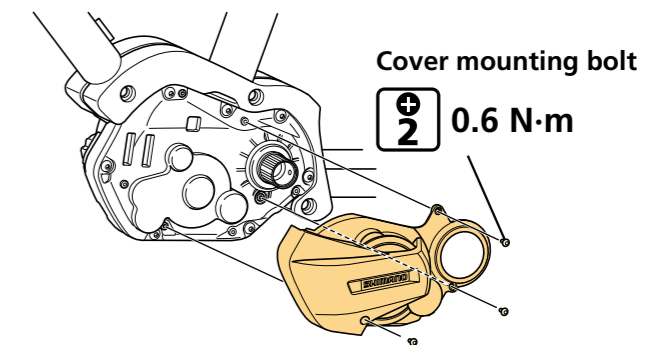
<http://si.shimano.com/dm/E8000>

#### ▶ DU-E7000

This section explains how to install SM-DUE70-A or SM-DUE70-B. Although the appearance varies by model, the example shown here is for SM-DUE70-A.

1. Install the left cover (front side).

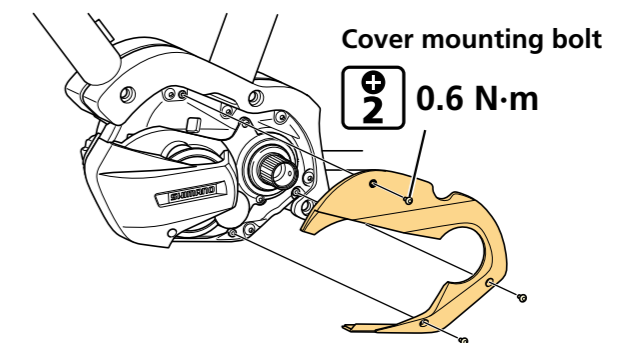
Secure the left cover using the three cover mounting bolts.



2. Install the left cover (rear side).

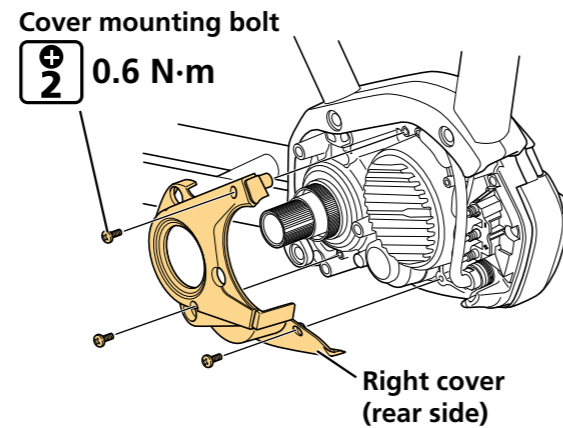
(1) Set the left cover (rear side) to the drive unit from below the bicycle.

(2) Secure the left cover (rear side) using the three cover mounting bolts.



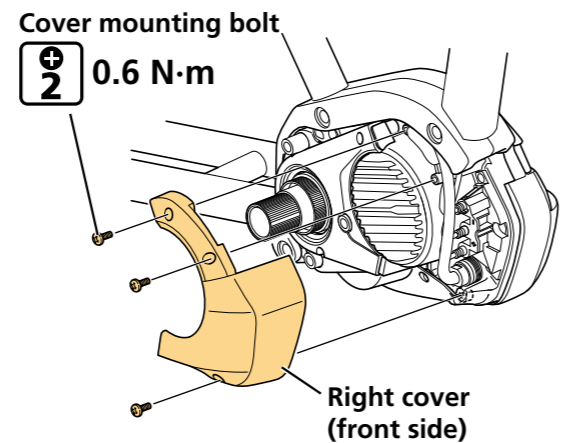
### 3. Install the right cover (rear side).

Secure the right cover (rear side) using the three cover mounting bolts.



### 4. Install the right cover (front side).

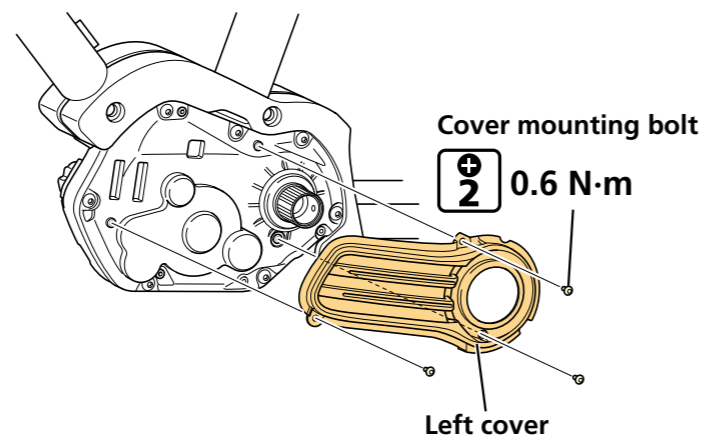
Secure the right cover (front side) using the three cover mounting bolts.



## ▶ DU-E6100

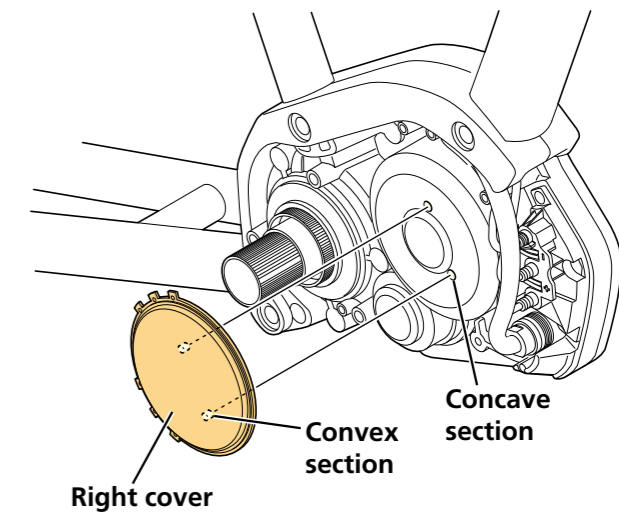
This section explains how to install SM-DUE61-TC or SM-DUE61-CC. Although the appearance varies by model, the example shown here is for SM-DUE61-TC.

### 1. Install the left cover.



### 2. Install the right cover.

- (1) Peel the release liner from the right cover.
- (2) Align the positions of the convex section on the right cover and the concave section on the drive unit, and then attach the right cover to the drive unit.



#### NOTICE

- Check that there is no oil or other foreign matter on the adhesive surface of the adhesive tape on the right cover or on the adhesion surface on the drive unit. Remove any oil or other foreign matter before attaching.

## ▶ DU-E5000

### 1. Refer to the latest dealer's manual for details.

E5000



<http://si.shimano.com/dm/E5000>

# Installing the Chainring and Crank Arms

In SHIMANO STEPS, there is an axle in the drive unit. Because of this, the front chainring and left/right crank arms should be installed individually to the drive unit. Set the rear wheel to the bicycle prior to performing the following procedure.

## Spline axle type

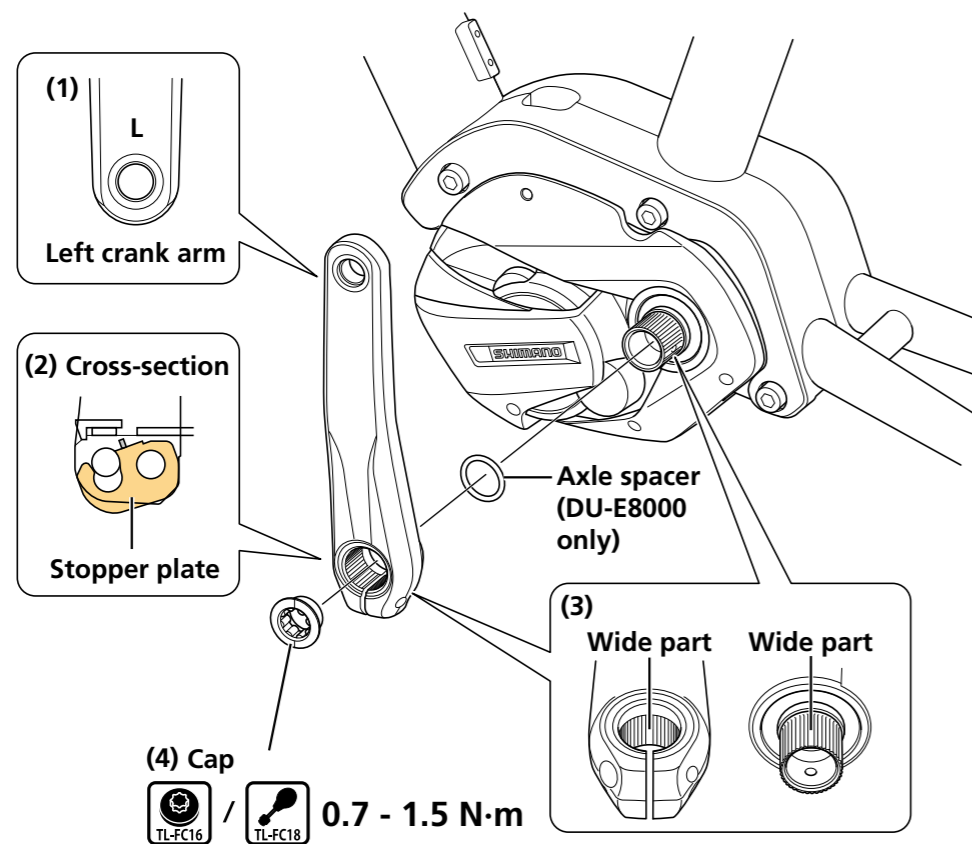
E8000

E7000

E6100

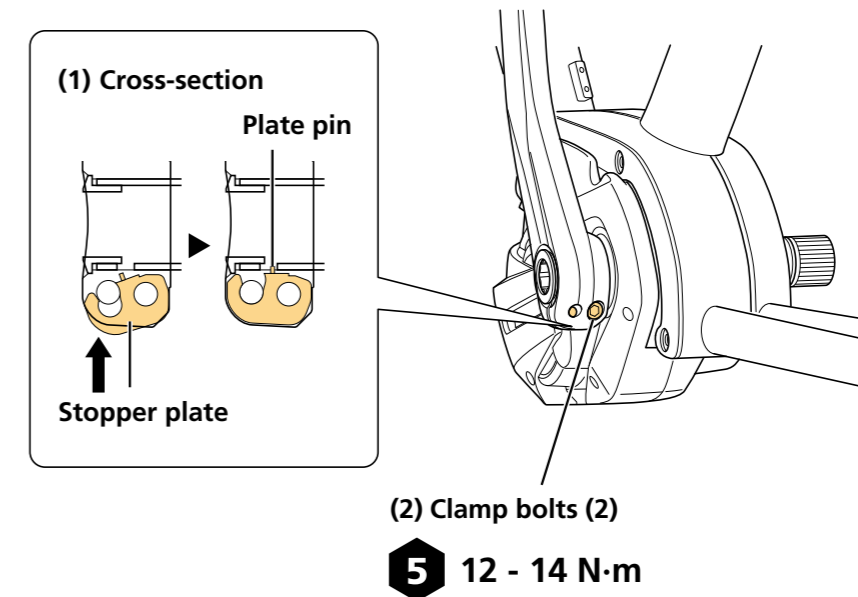
### 1. Set the left crank arm.

- (1) The left crank arm has an "L" marking on one end (the side where the pedal is installed).
- (2) Check that the stopper plate on the left crank arm is sticking out.
- (3) Set the left crank arm with the wide part of the spline on the left crank arm aligned with the wide part of the spline on the axle.
- (4) Tighten the cap.



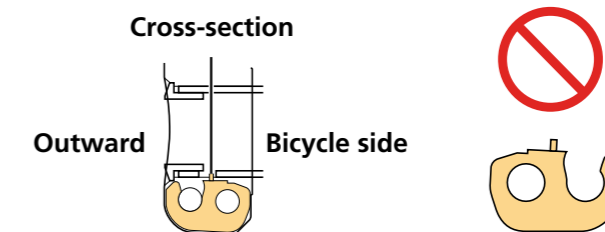
### 2. Secure the left crank arm.

- (1) Press the stopper plate in.  
\* Check that the plate pin is firmly set.
- (2) Tighten the two clamp bolts alternately.

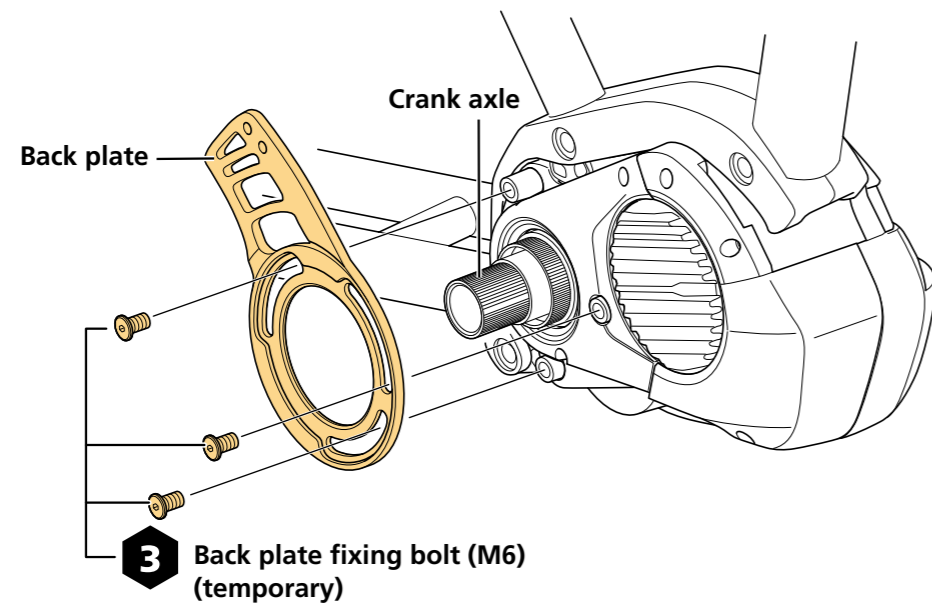


#### NOTICE

- Set the stopper plate in the correct direction as shown in illustration. For the left crank arm, the figure depicts the part as looking from the back of the bicycle.



### 3. Temporarily install the chain device's back plate.

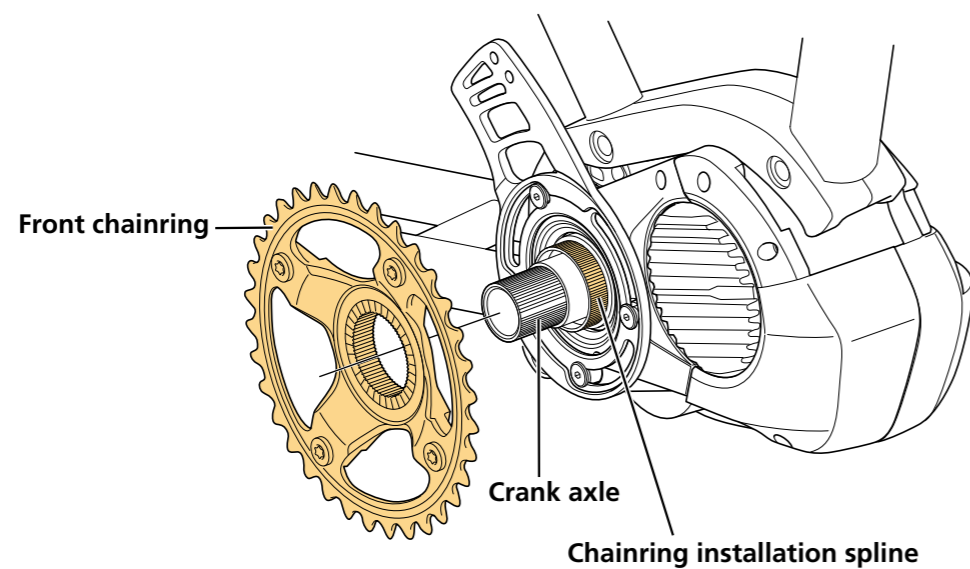


#### NOTICE

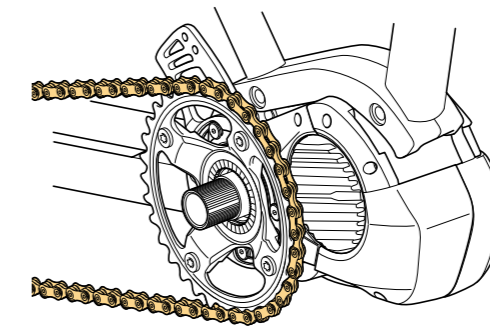
- DU-E6100 does not support chain devices.
- A back plate may not be required depending on the front chainring and frame specifications.  
For details, refer to the latest dealer's manual at [si.shimano.com](http://si.shimano.com).

### 4. Set the chainring.

Set with the spline on the chainring aligned with the chainring installation spline on the drive unit axle.

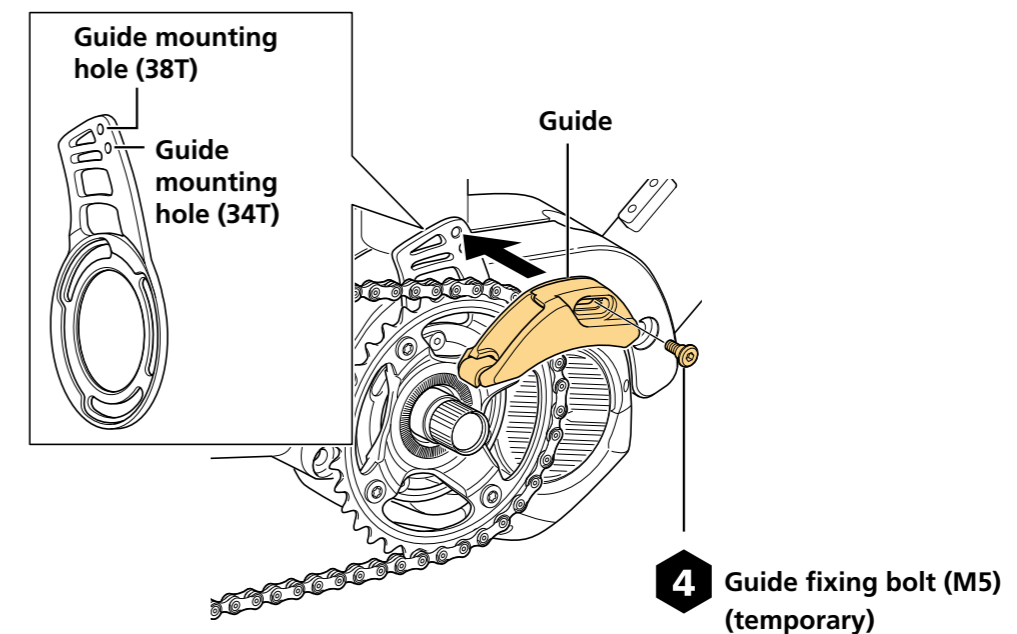


### 5. Set the chain.



### 6. Install the guide.

- Set the guide to the guide mounting hole on the back plate, and tighten the guide fixing bolt (M5) to temporarily install the guide.
- If a back plate is not installed, temporarily install the guide to the installation location specified by the bicycle manufacturer.

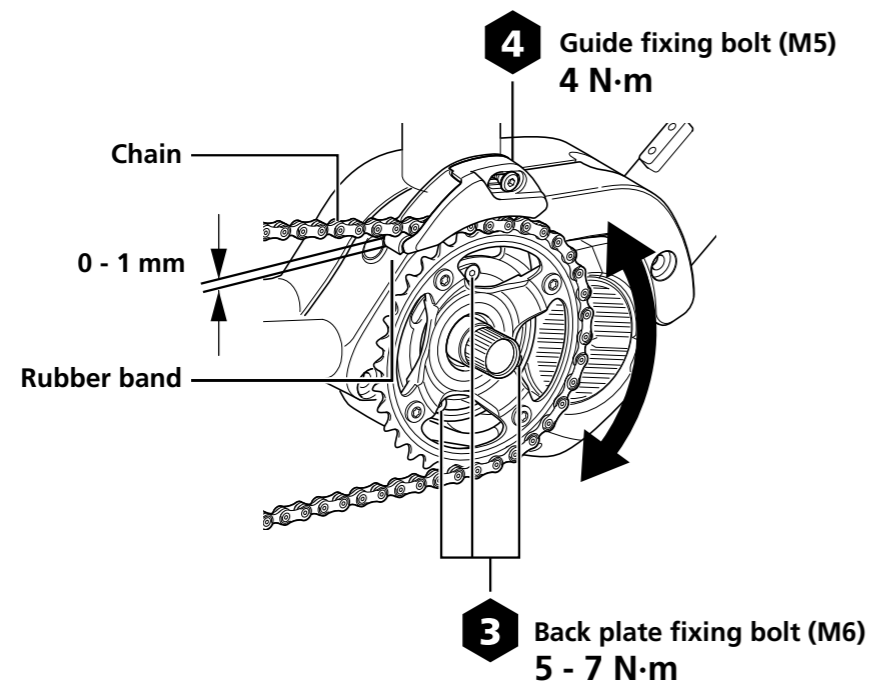


## 7. Adjust the positioning of the guide and chain.

- (1) Align the position of the chain with the smallest sprocket.
  - (2) Adjust so that there is a clearance of 0 to 1 mm between the chain and the rubber band.
- If a back plate is installed, rotate the back plate as shown in the figure below, and then adjust.
  - If the guide is installed directly to the frame, move the guide along the elongated hole in the installation area, and then adjust.
- (3) After adjusting, tighten the back plate and guide.

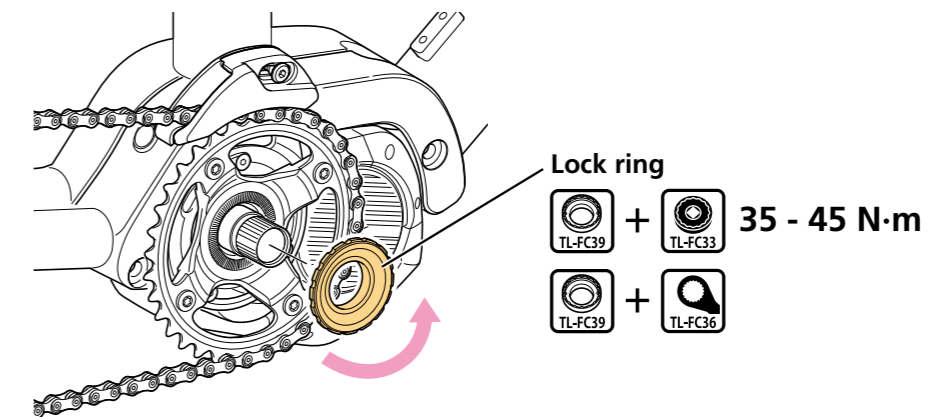
### NOTICE

- On bicycles with rear suspension, if the chain and guide make contact at the rear suspension sag position, adjust the clearance between the chain and rubber band with the chain aligned to the largest sprocket.



## 8. Secure the chainring.

- (1) Install the lock ring (left screw) by hand.
- (2) Tighten the lock ring while firmly pressing the left crank.

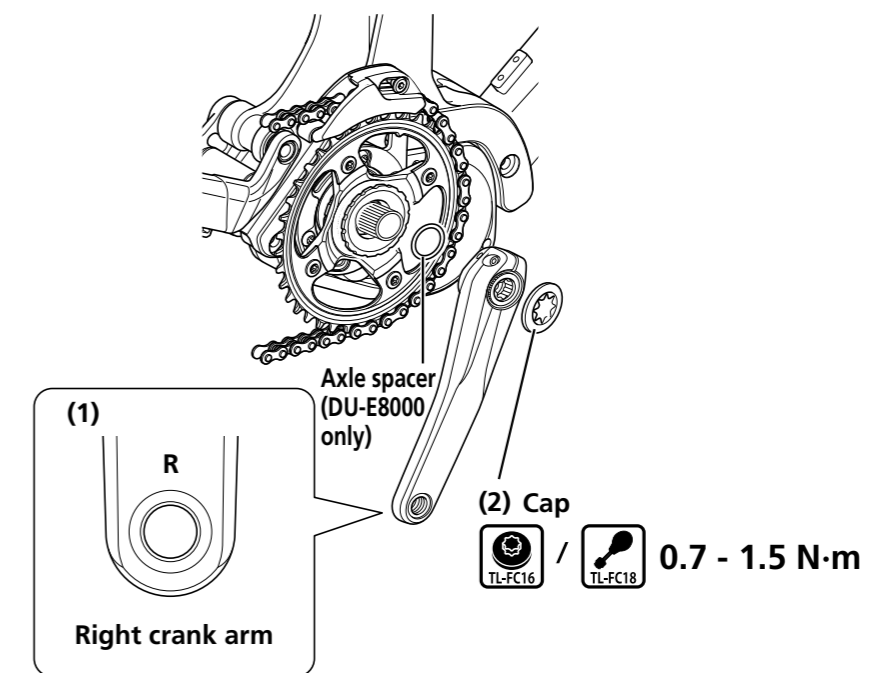


### TECH TIPS

- An impact wrench cannot be used.

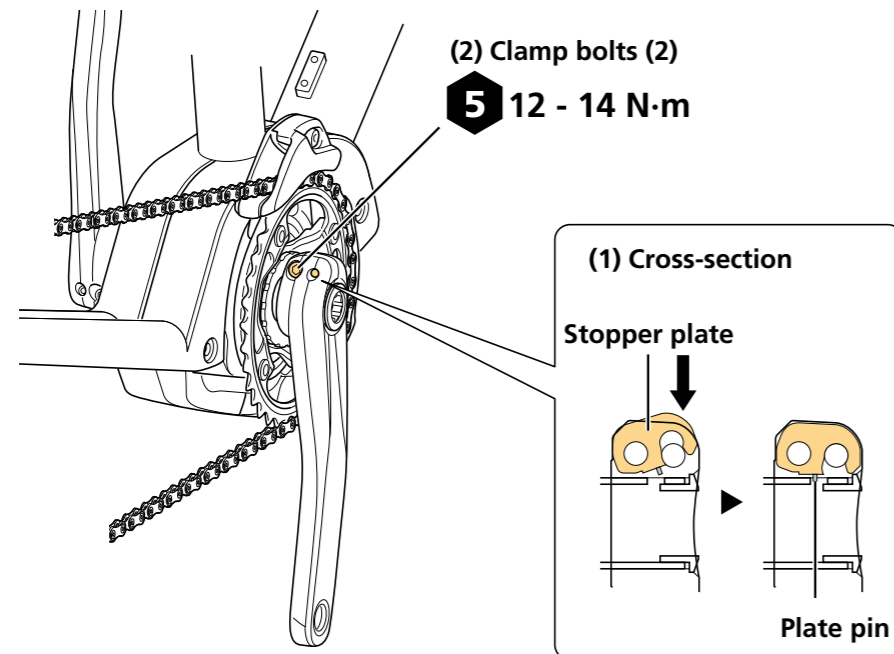
## 9. Set the right crank arm.

- (1) The right crank arm has an "R" marking on one end (the side where the pedal is installed).
- (2) As with the left crank arm, set the right crank arm and tighten the cap.



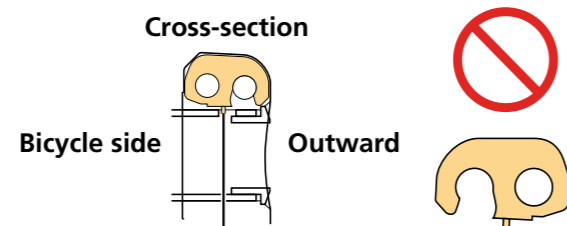
## 10. Secure the right crank arm.

- (1) Press the stopper plate in.
  - \* Check that the plate pin is firmly set.
- (2) Tighten the two clamp bolts alternately.



### NOTICE

- Set the stopper plate in the correct direction as shown in the illustration.

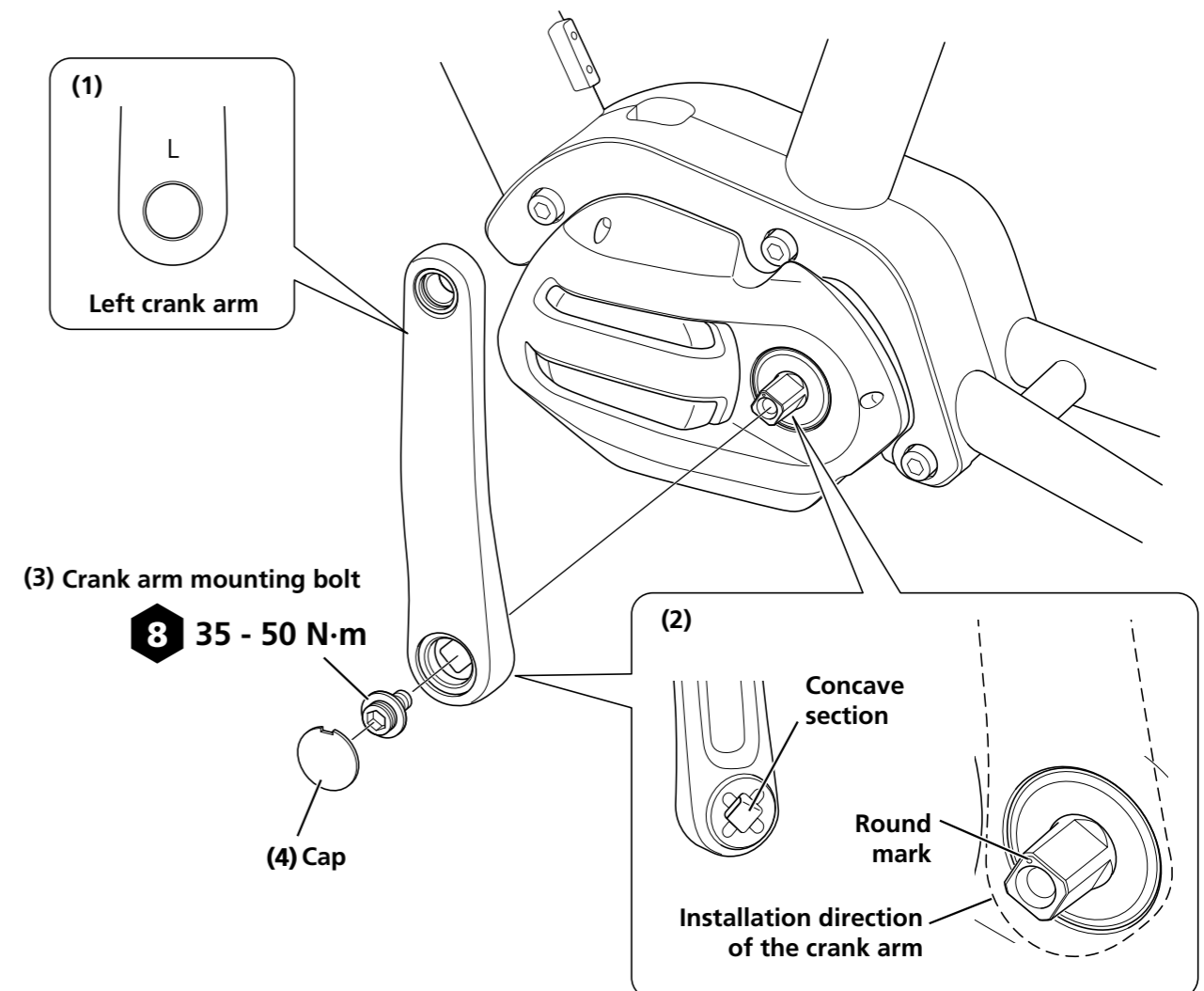


## Square axle type

E5000

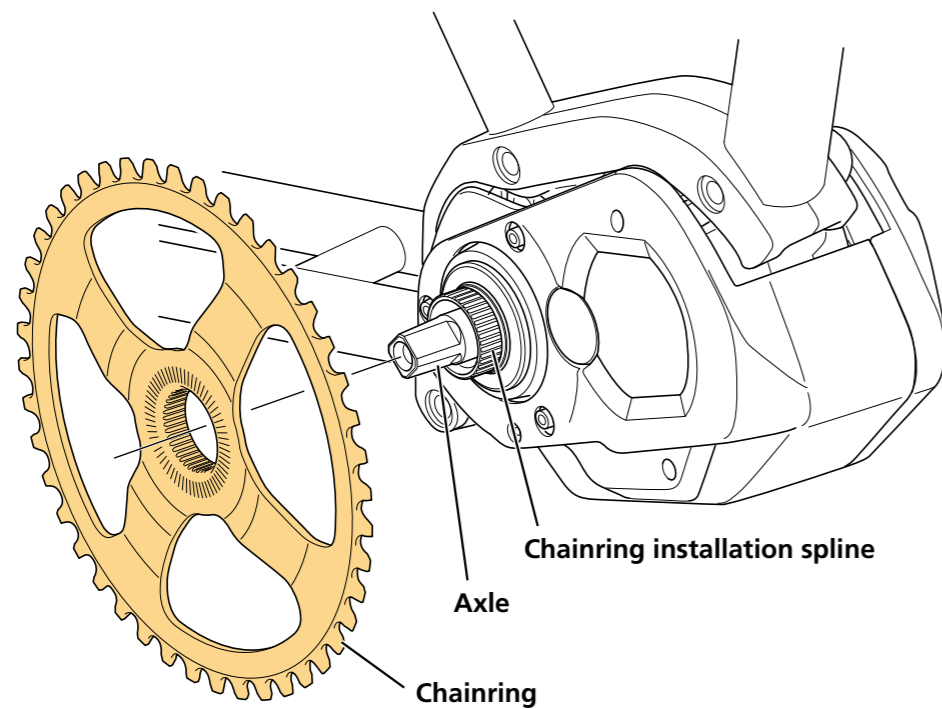
### 1. Install the left crank arm.

- (1) The left crank arm has an "L" marking on one end (the side where the pedal is installed).
- (2) Set with the concave section of the left crank arm aligned with the shape of the crank axle.
  - Set so that the round mark on the drive unit crank axle and installation direction of the crank arm are in the position shown in the figure. If these positions are not aligned, the system will not be able to provide assistance properly.
- (3) Tighten the crank arm mounting bolt.
- (4) Install the cap.



## 2. Set the chainring.

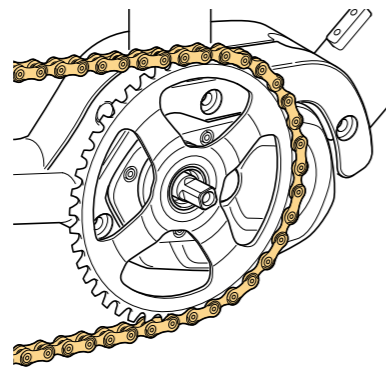
Set with the spline on the chainring aligned with the chainring installation spline on the drive unit axle.



### TECH TIPS

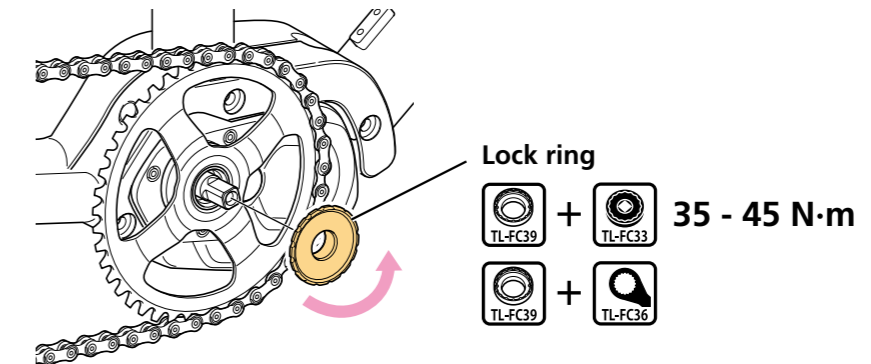
- There are three types of chainrings:
  - with double chain guard
  - with single chain guard
  - without chain guard
 The explanation in this section uses one without a chain guard.

## 3. Set the chain.



## 4. Secure the chainring.

- (1) Prepare the SHIMANO original tool.
- (2) Install the lock ring (left screw) by hand.
- (3) Use the SHIMANO original tool to tighten the lock ring while firmly pressing the left crank.

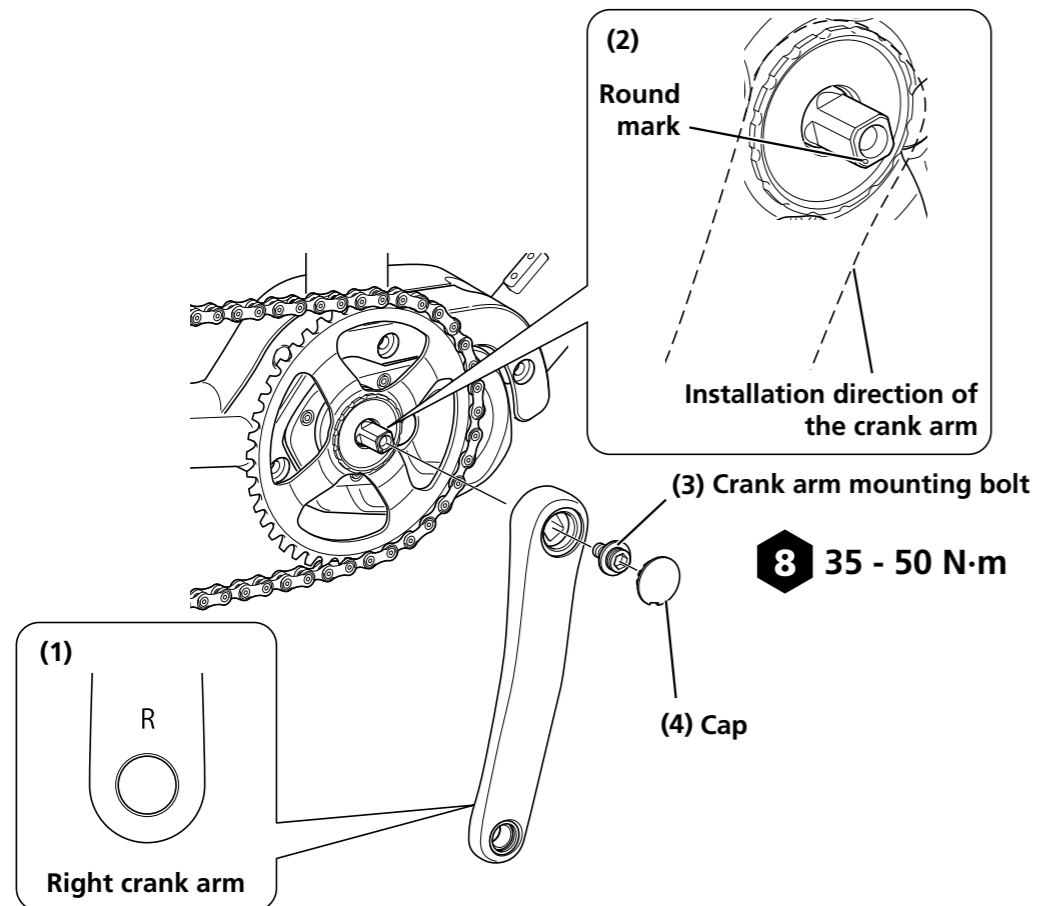


### TECH TIPS

- If using a torque wrench, use TL-FC39 in combination with TL-FC33.
- An impact wrench cannot be used.

## 5. Set the right crank arm.

- (1) The right crank arm has an "R" marking on one end (the side where the pedal is installed).
- (2) As with the left crank arm, set the right crank arm.  
Set so that the round mark on the drive unit axle and installation direction of the crank arm are in the position shown in the figure.
- (3) Tighten the crank arm mounting bolt.
- (4) Install the cap.

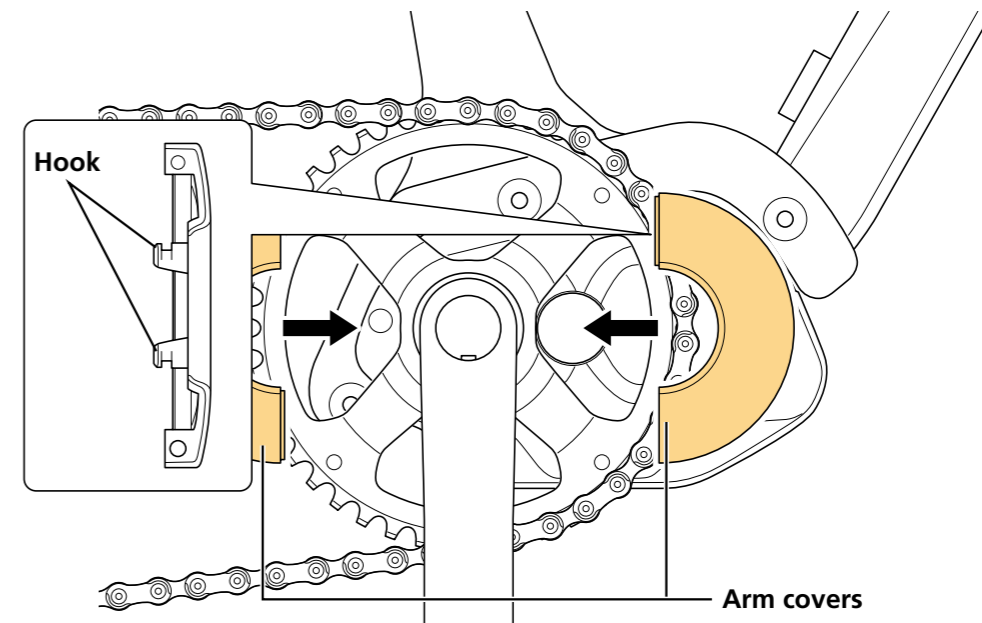


## Installing the Arm Covers

If arm covers are included with the chainring, install the arm covers after installing the chainring to the drive unit.

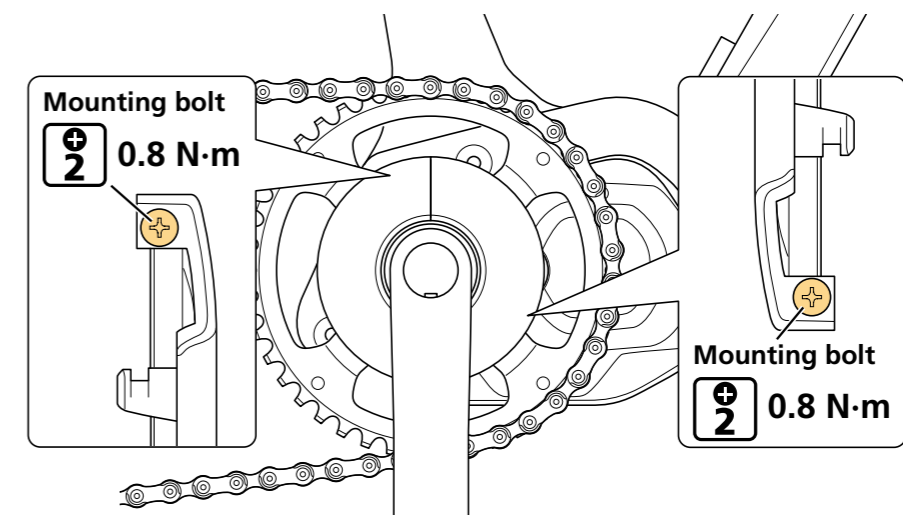
### 1. Set the arm covers to the left and right sides of the chainring.

Install so that the hooks catch the spider arm on the chainring.



### 2. Tighten the two mounting bolts from the left and right.

For internal geared hub models, proceed to the next section ("Measuring and Adjusting the Chain Tension").





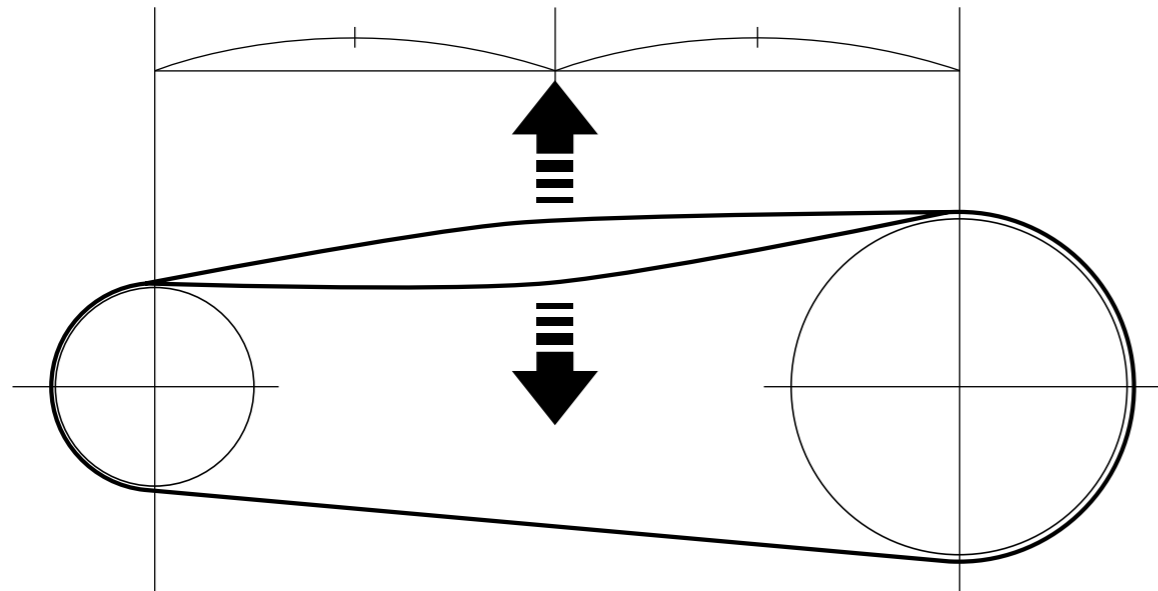
# Measuring and Adjusting the Chain Tension

The chain tension must be adjusted for internal geared hub models.

## Manual adjustment

### 1. Check and adjust the chain tension.

Pull the upper side of the chain up and down with a force of around 10 N (1 kgf), roughly in the middle between the crank axle and wheel axle. Adjust the chain tension so that the chain has a slack of 15 mm or more.

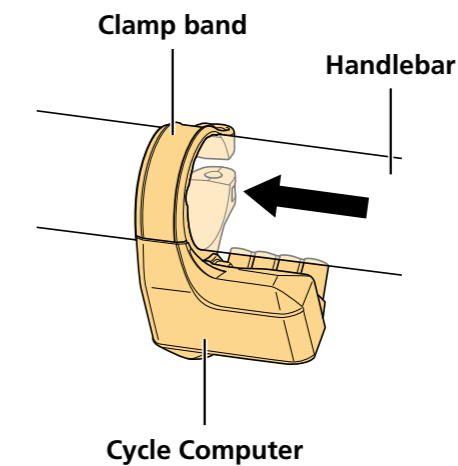


# Installing the Cycle Computer/Junction [A]

## Handlebar-mounted cycle computer

### ▶ Installing the cycle computer

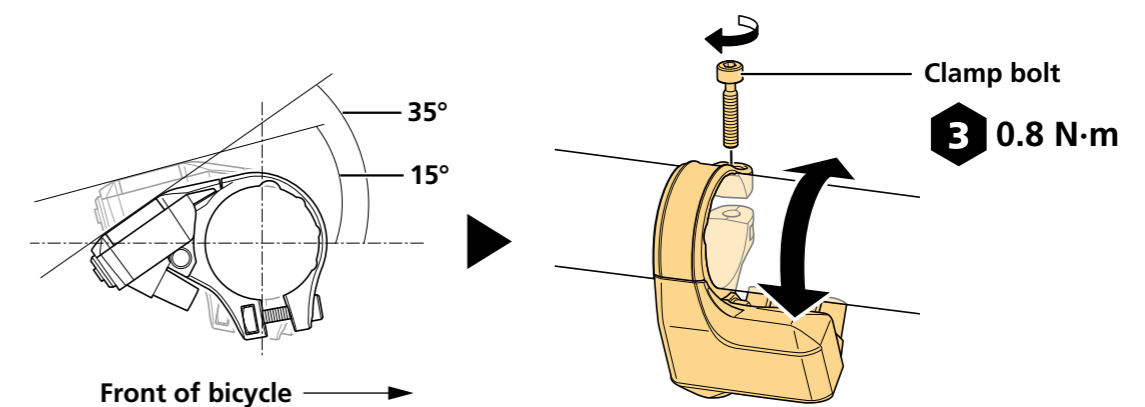
#### 1. Pass the cycle computer's clamp band around the handlebar.



#### 2. Adjust the installation angle of the cycle computer.

As shown in the figure, adjust the cycle computer to an angle that is visible when riding, and then tighten the clamp bolt to secure it in place.

\* A display angle between 15° and 35° from the horizontal surface is recommended.



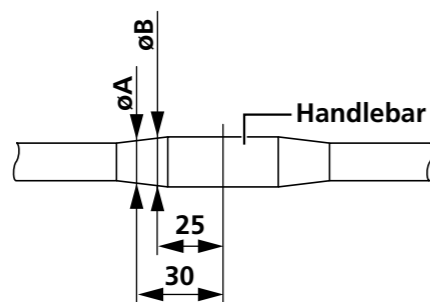
## Stem-mounted cycle computer

The bracket used to secure the cycle computer to the handlebar, and the cycle computer itself are separate parts.

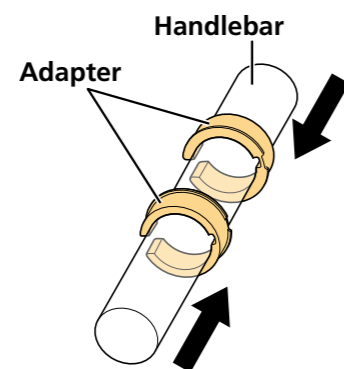
### ▶ Installing the bracket and cycle computer

1. Check the diameter of the handlebar to determine whether an adapter is needed, and then select the clamp bolt.

$\phi A$	$\phi B - \phi A$	Adapter	Clamp bolt
23.4-24	0-1.1	Required	Length: 15.5 mm
24-25.5	0-1.1	Required	Length: 20 mm
31.3-31.9	0-0.6	Not necessary	Length: 20 mm

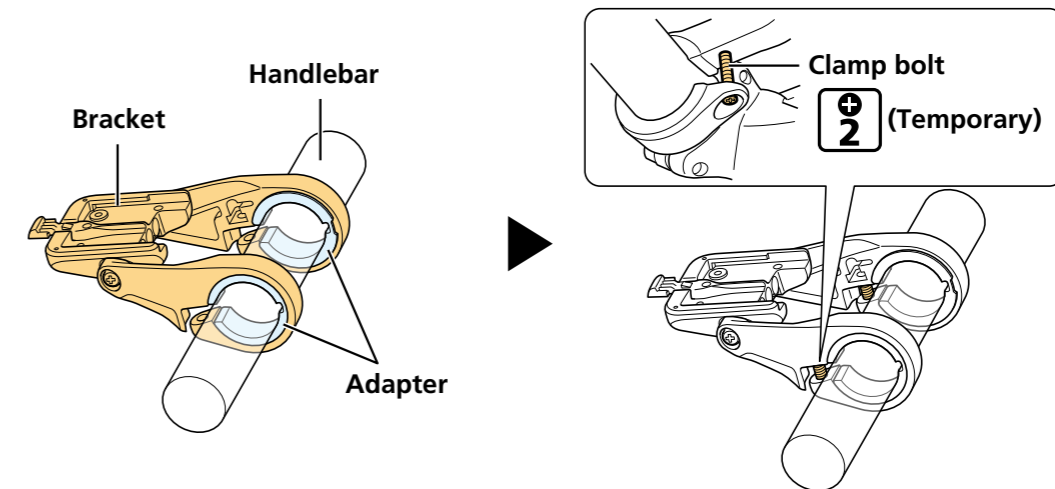


2. If adapters are required, push them along to the center of the handlebar.



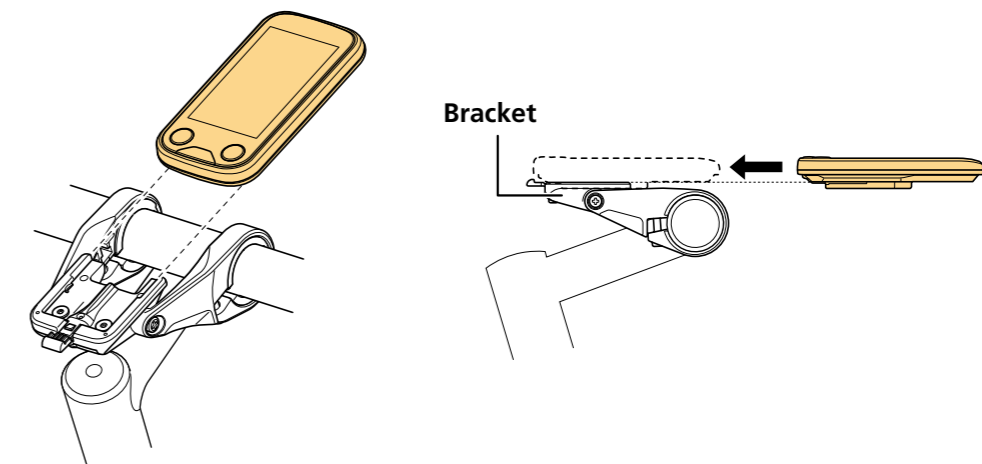
### 3. Temporarily install the bracket.

- (1) Push the clamp area open, and then install the bracket to the center of the handlebar.
- (2) Temporarily install the clamp bolt (of the length selected in step 1).



### 4. Install the cycle computer to the bracket.

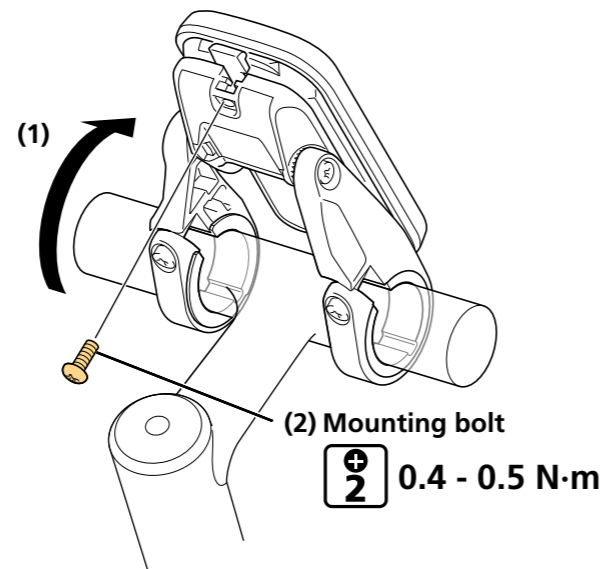
- Slide the cycle computer and install it to the bracket.  
Insert it firmly until you hear it click.



## 5. Secure the cycle computer if necessary. (SC-E6100 only)

If the cycle computer will not be secured to the bracket, this step is not necessary.

- (1) Stand the cycle computer and bracket up on the stem (as though you are turning the cycle computer around).
- (2) Tighten the mounting bolt.

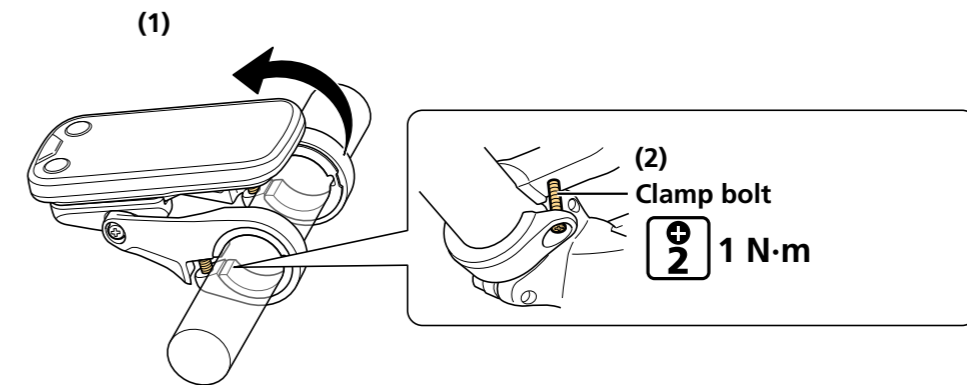


### TECH TIPS

- This procedure is used to secure the cycle computer to the bracket, so that it cannot be easily removed. This is useful for displaying the product.
- Ask the user if they will secure the cycle computer when the product is delivered. If necessary, explain how to do as (as described above).

## 6. Secure the bracket to the handlebar.

- (1) Return the cycle computer to its installation position (the cycle computer was stood up on the stem in step 5).
- (2) Secure the bracket.



## Junction [A] (wireless unit)

EW-EN100 is Junction [A] with simple operation/display functionality.

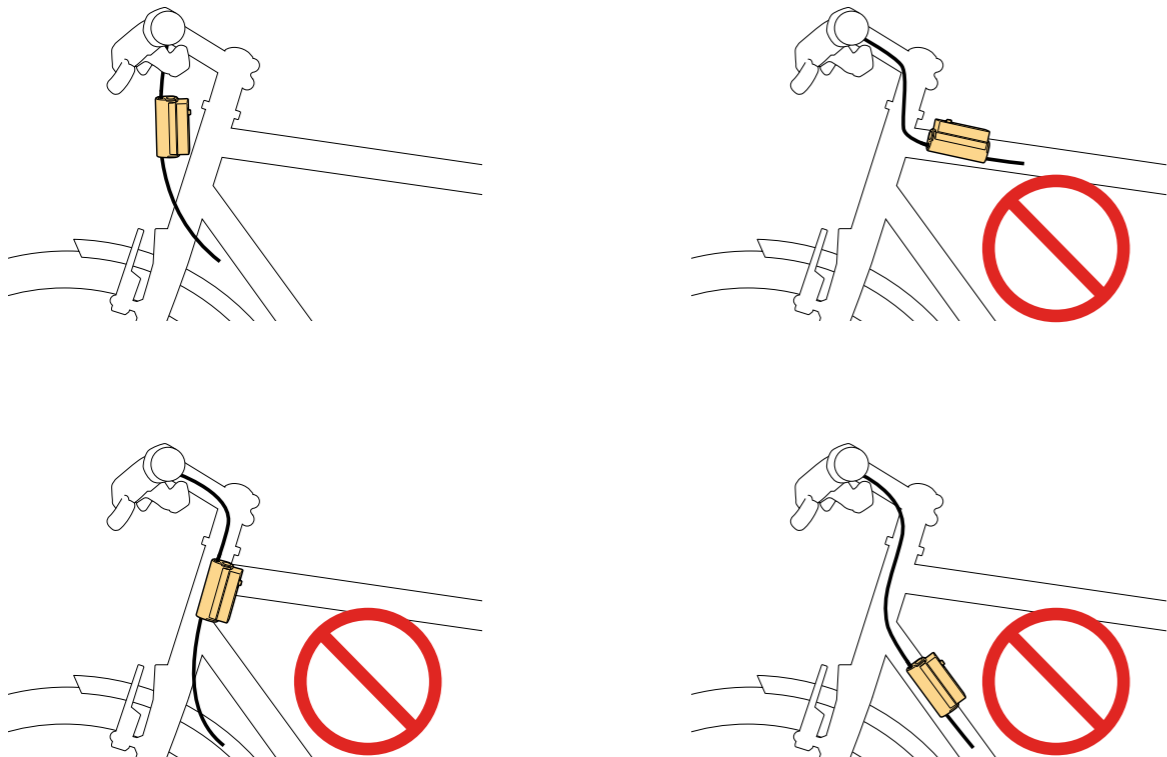
Instead of a cycle computer, install it in a location around the cockpit from which the LED can be seen while riding.

This section explains how to install Junction [A] to the brake hose. It can be installed to the brake outer casing using the same procedure.

### NOTICE

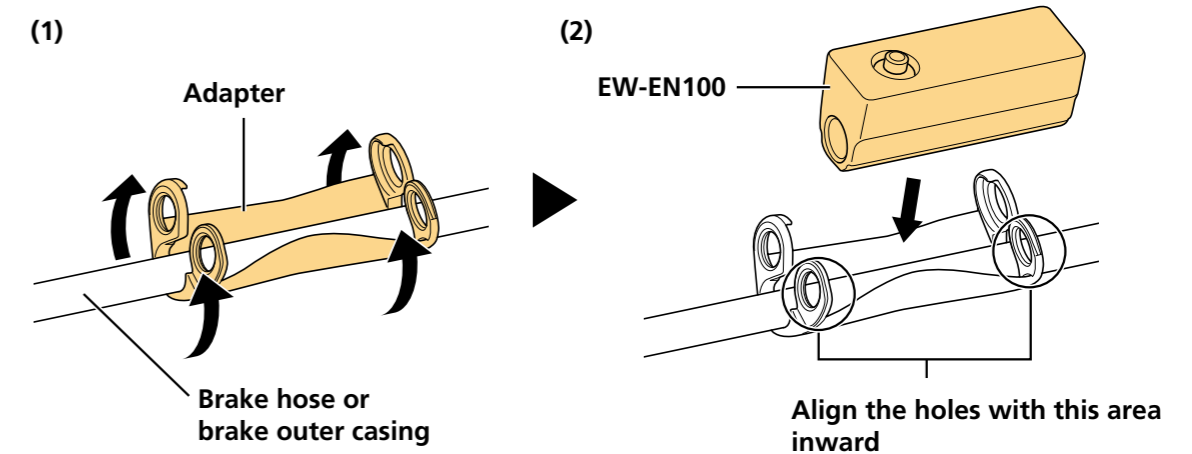
#### EW-EN100 Installation location

- As shown in the figure, install EW-EN100 so that it does not reach the side of the frame. Otherwise, it could be damaged if the bicycle tips over and it is pinched between the frame and curb.

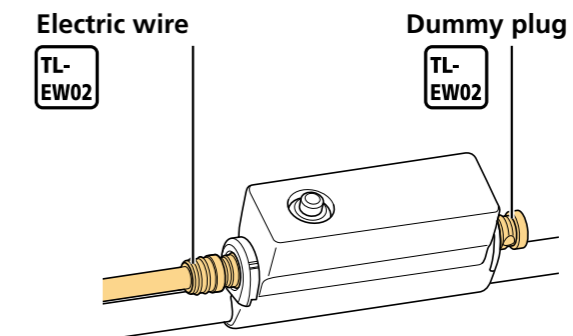


## 1. Determine the EW-EN100 installation location, and then set the adapter.

- Open up the adapter and set it to the brake hose.
- Bend the adapter along the brake hose.



## 2. As shown in the figure, set EW-EN100 and then connect the electric wire or dummy plug.



### NOTICE

- Be sure to connect either an electric wire or a dummy plug to the two E-TUBE ports on EW-EN100. Connecting both will secure EW-EN100 to the brake hose or brake outer casing.

### TECH TIPS

- When removing EW-EN100, reverse the procedure.

# Installing the Switch Unit

Install the assist switch and shift switch (for electronic gear shifting) to the handlebar.

## MTB switch unit

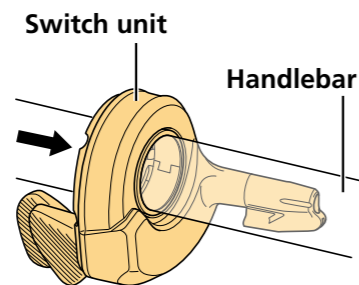
- Install SW-M8050-L / SW-E8000-L to the left side of the handlebar (the assist side by default) and SW-M8050-R to the right side (the shift side by default).
- SW-M8050 / SW-E8000-L can be installed to  $\varnothing 22.2$  to  $\varnothing 22.5$  handlebars.

### 1. Confirm the wiring method for the handlebar.

If the electric wire to the switch unit will be inside the handlebar, wire it ahead of time.

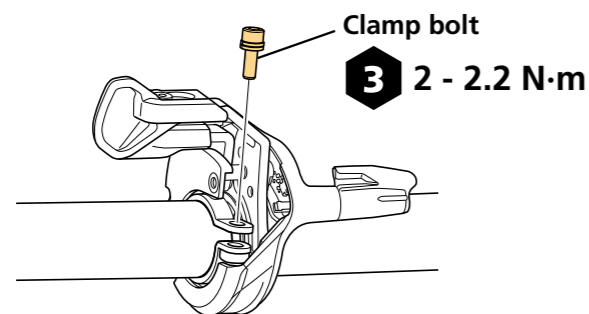
### 2. Push the switch unit along the handlebar.

To place the electric wire inside the handlebar, pass the electric wire between the switch unit and handlebar.



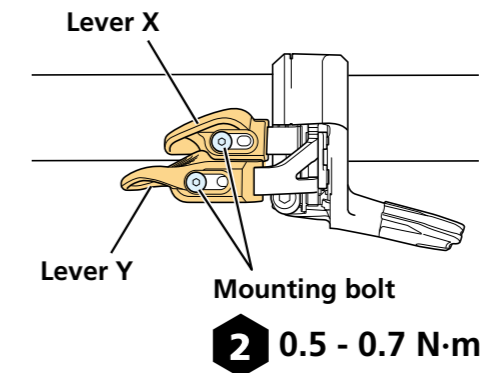
### 3. Secure the switch unit.

- (1) Adjust the installation location and angle of the switch unit.
- (2) Tighten the clamp bolt.



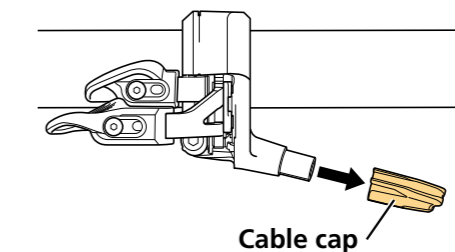
### 4. Adjust the locations of lever X and lever Y.

- (1) Loosen the mounting bolts.
- (2) Adjust the locations of lever X and lever Y so that they are easy to operate.
- (3) Tighten the mounting bolts.



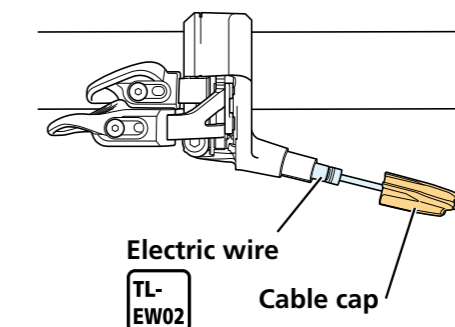
## ▶ Connecting the electric wire

### 1. Remove the cable cap.



### 2. Connect the electric wire to the switch unit.

- (1) Pass the electric wire through the cable cap.
- (2) Connect the electric wire to the switch unit.



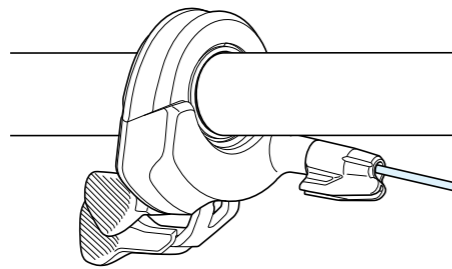
**NOTICE**

- If the electric wire is connected to the switch unit without passing it through the cable cap, the plug part of the electric wire may be damaged.

**3. Install the cable cap.**

**When routing the electric wire in the direction of the stem**

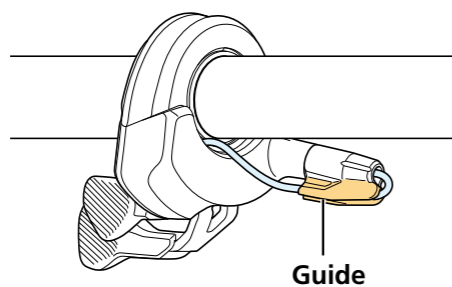
Install as shown in the figure.



**When routing the electric wire in the direction of the tip of the handlebar and placing it inside**

Route the electric wire as shown below.

- (1) After installing the cable cap, route the electric wire along the guide on the cable cap.
- (2) Draw the electric wire into the handlebar.

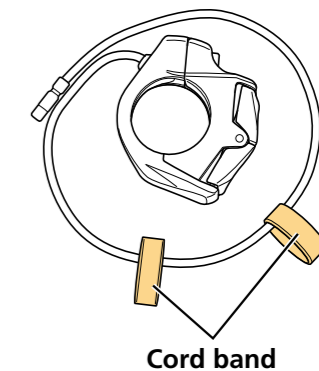
**E-BIKE switch unit**

- Install SW-E7000-L / SW-E6010-L to the left side of the handlebar (the assist side by default) and SW-E7000-R / SW-E6010-R to the right side (the shift side by default).
- SW-E7000 can be installed to  $\varnothing 22.0$  to  $\varnothing 22.4$  handlebars.
- SW-E6010 can be installed to  $\varnothing 22.2$  handlebars.

**1. Temporarily attach the cord bands.**

Cord bands are included with the switch unit.

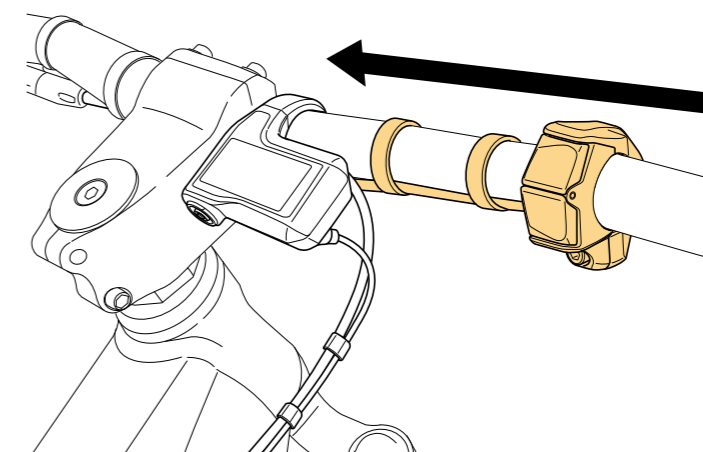
- Temporarily attach the cord bands to the switch unit cable.
- Adjust the number of cord bands according to the length of the handlebar.



Cord band

**2. Push the cord bands and switch unit along from the edge of the handlebar.**

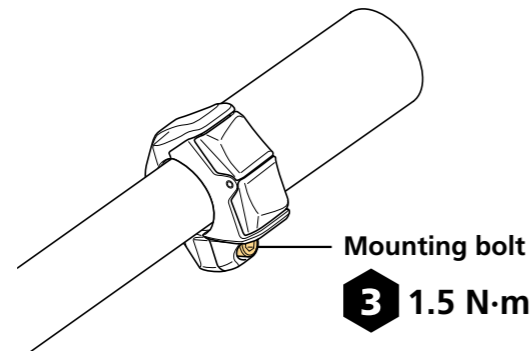
For the switch unit, the electric wire must be facing downward.



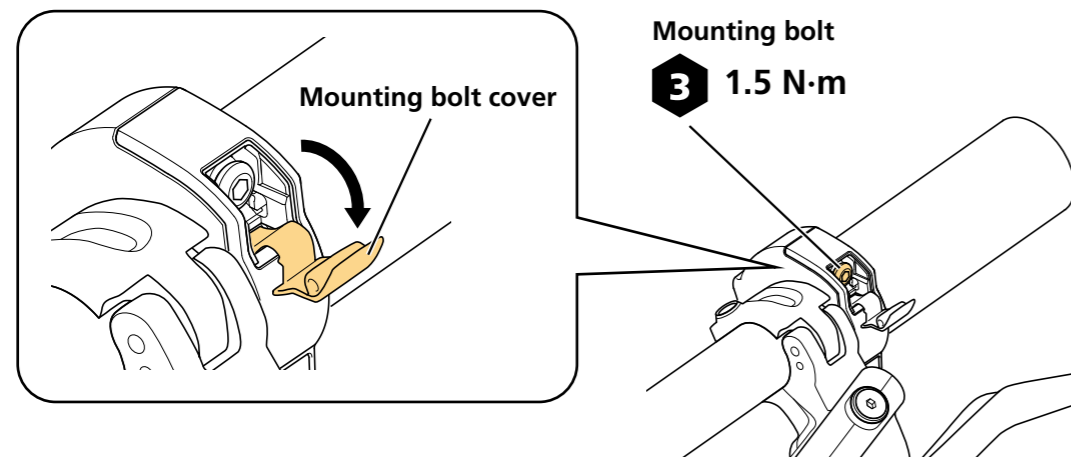
### 3. Tighten the mounting bolt.

\* In case of SW-E6010, need to open the mounting bolt cover.

#### SW-E7000



#### SW-E6010



#### TECH TIPS

- When removing the switch unit, reverse the procedure.

## Wiring around the Cockpit

### Handlebar-mounted cycle computer

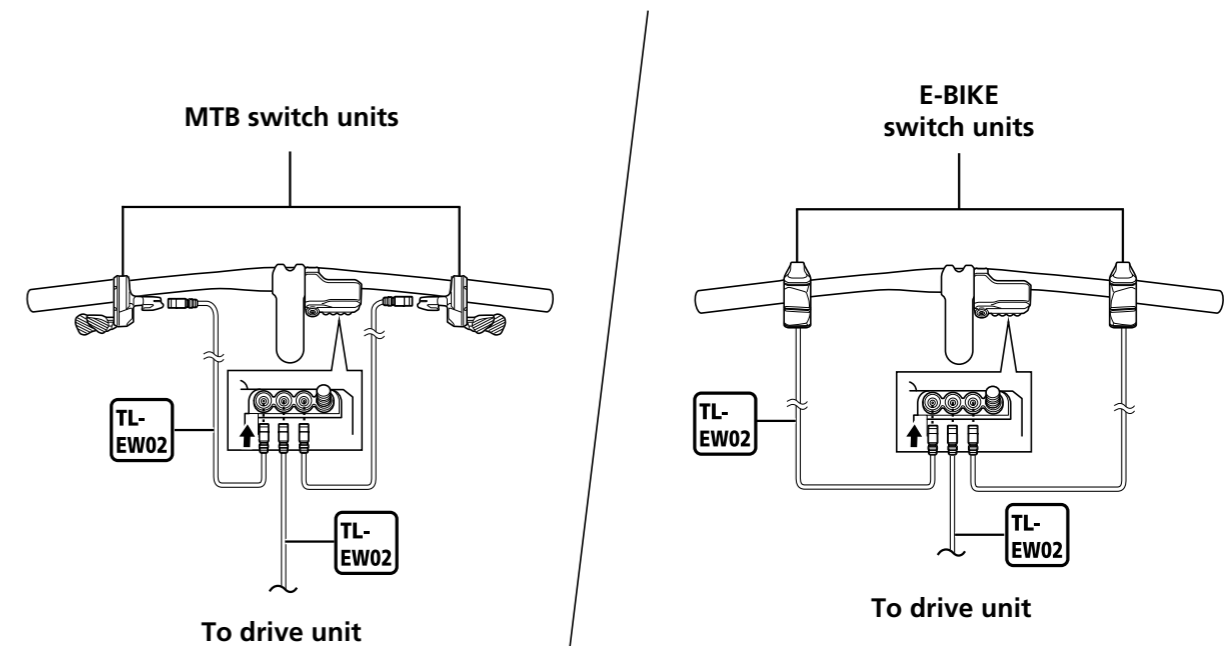
SC-E8000 / SC-E7000 have four E-TUBE ports. One E-TUBE port must be connected to the drive unit. Connect switch units to the remaining three E-TUBE ports as necessary. As an example, this section explains how to connect two switch units.

#### NOTICE

- Be sure to attach dummy plugs to any unused E-TUBE ports.

### 1. Wire around the cockpit.

- Connect the electric wires between cycle computer and the switch units.
- Switch units and drive units can be connected to any of the E-TUBE ports on cycle computer. However, it is recommended to connect as shown in the figure.



### 2. Prepare to wire to the drive unit.

Pass the following wires through the frame, and leave them hanging from the drive unit installation section on the frame.

- Electric wire to connect cycle computer and the drive unit
- Electric wire to connect the light and drive unit if installing a light that will use the main battery as the power source

## Stem-mounted cycle computer

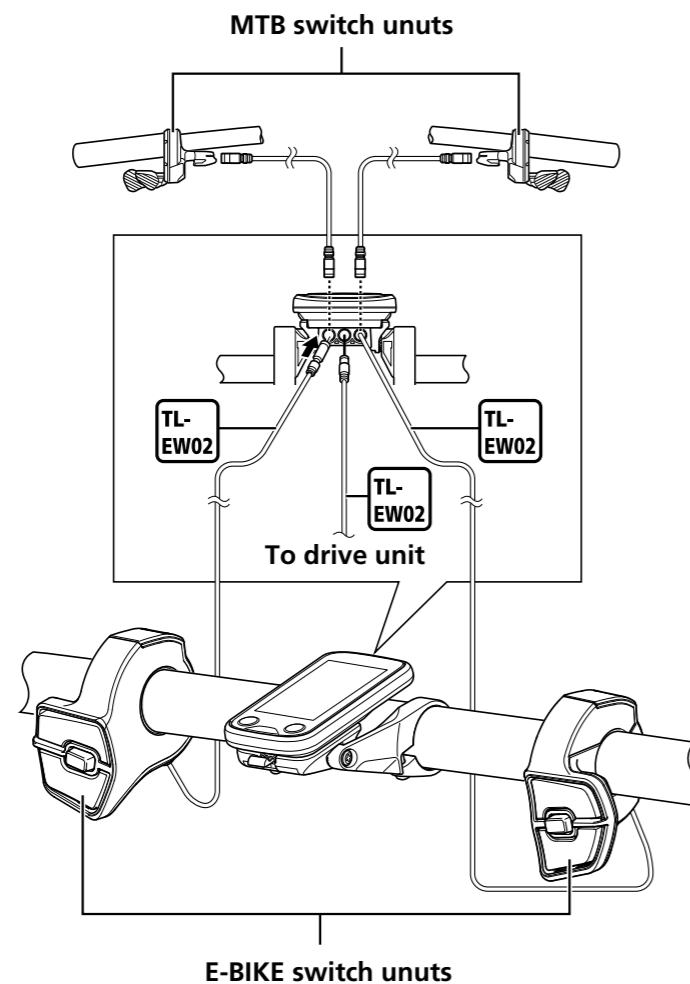
There are three E-TUBE ports in the cycle computer bracket. One E-TUBE port must be connected to the drive unit. Connect switch units to the remaining two E-TUBE ports as necessary. As an example, this section explains how to connect two switch units.

### NOTICE

- Be sure to attach dummy plugs to any unused E-TUBE ports.

### 1. Wire around the cockpit.

- Connect the electric wires between cycle computer bracket and the switch units.
- Switch units and drive units can be connected to any of the E-TUBE ports on the bracket. However, it is recommended to connect the left and right ports to each switch unit, and the center port to the cycle computer (as shown in the figure).



### 2. Prepare to wire to the drive unit.

Pass the following wires through the frame, and leave them hanging from the drive unit installation section on the frame.

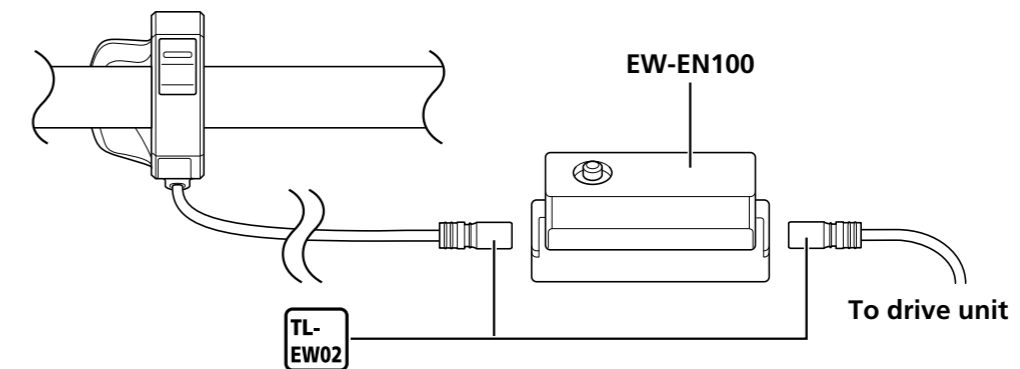
- Electric wire to connect cycle computer and the drive unit
- Electric wire to connect the light and drive unit if installing a light that will use the main battery as the power source

## Junction [A] (wireless unit)

As an example, this section explains how to connect a switch unit to EW-EN100.

### 1. Wire around the cockpit.

To connect the switch unit, use the electric wire to connect EW-EN100 and the switch unit.



### 2. Prepare to wire to the drive unit.

Pass the following wires through the frame, and leave them hanging from the drive unit installation section on the frame.

- Electric wire connecting EW-EN100 and the drive unit
- Electric wire to connect the light and drive unit if installing a light that will use the main battery as the power source



# Installing the Battery Mount

## BM-E8020

The SHIMANO original tool can be used to easily determine the installation location of the key unit.

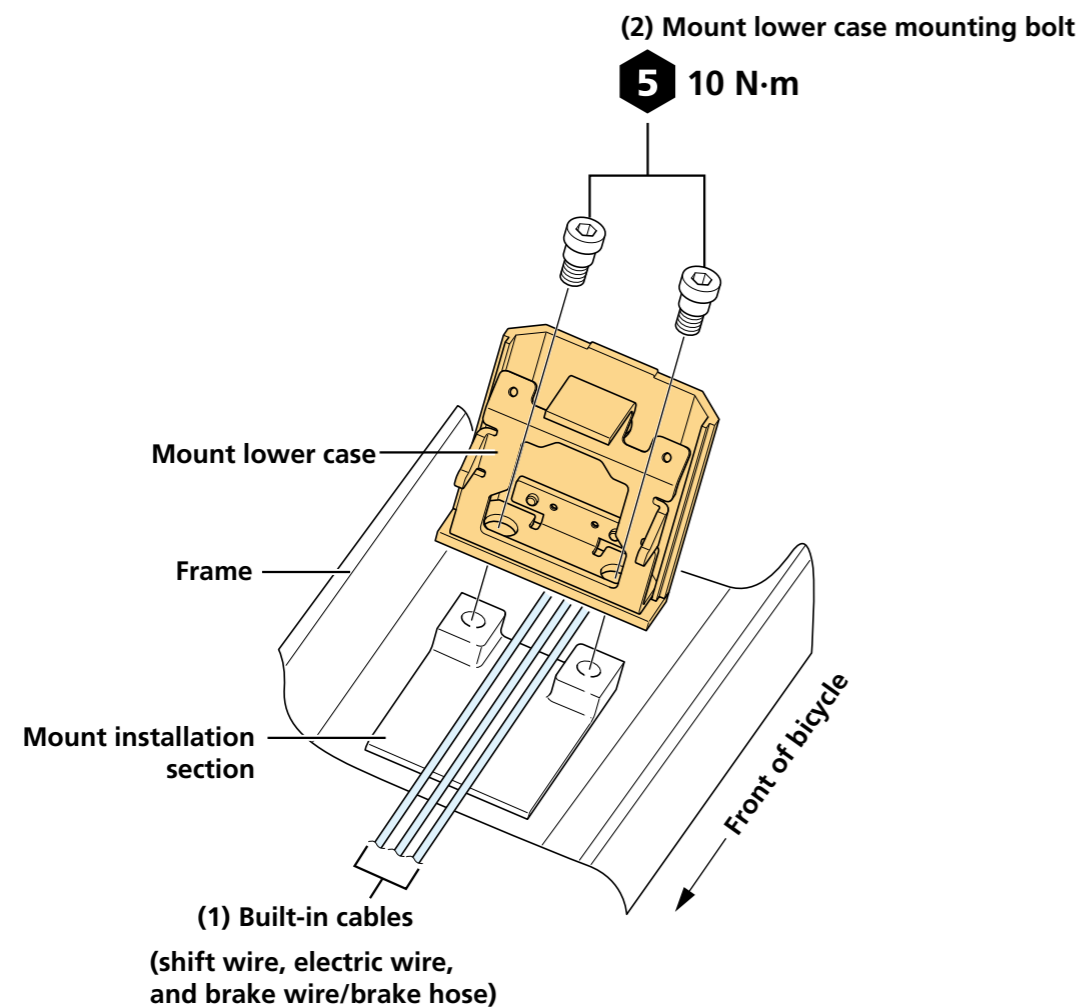
If the following cables will be placed inside, pass them through first before installing BM-E8020.

- Electric wire
- Brake hose, brake cable, and shift cable

When installing BM-E8020 inside the frame, be careful that the cables listed above are not pinched.

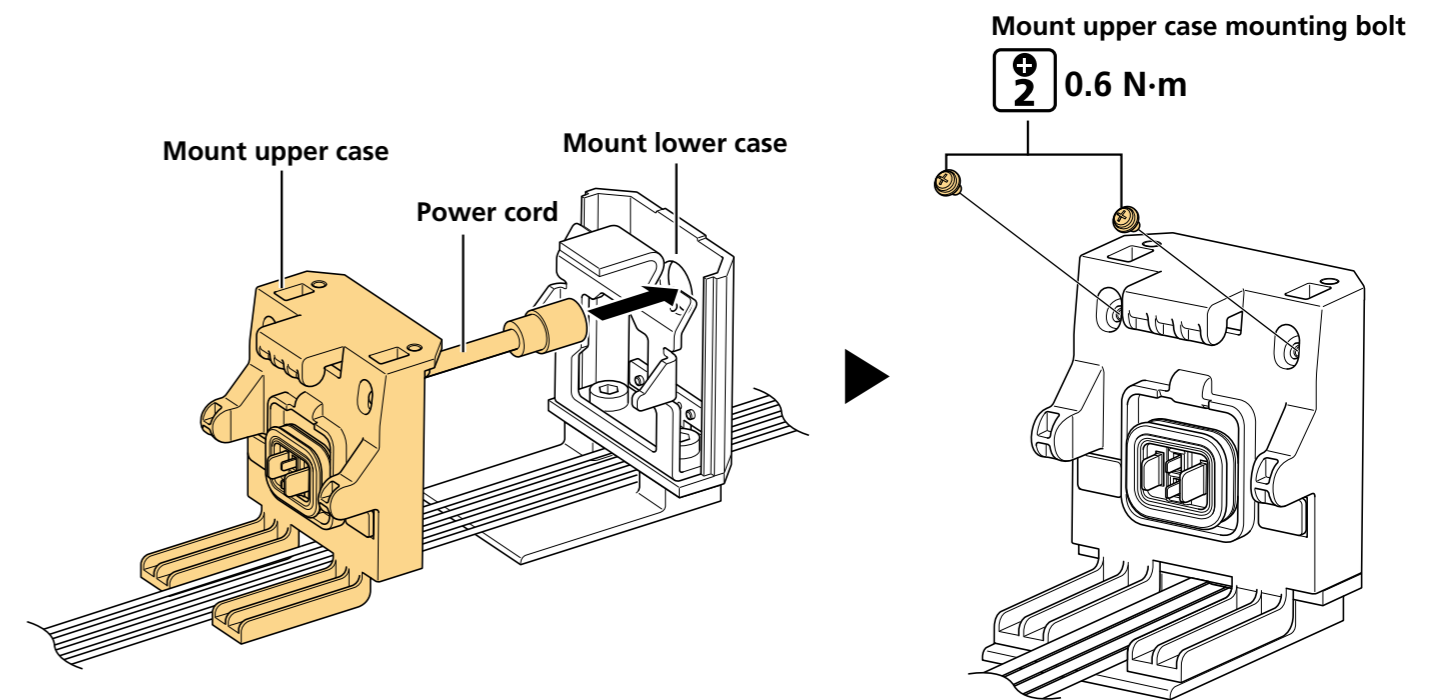
### 1. Install the mount lower case to the frame.

- (1) Set so that any cables built into the down tube pass between the mount installation area on the frame.
- (2) Install the mount lower case on the lower side of the down tube.



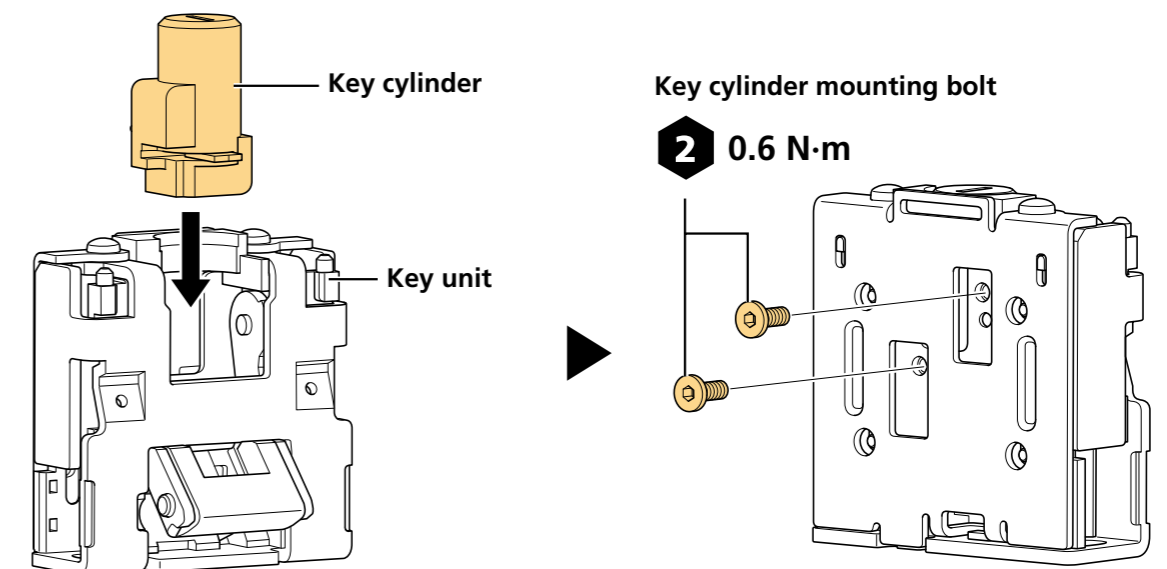
### 2. Install the mount upper case.

- (1) Pass the power cord from the mount upper case through the hole in the mount lower case.
- (2) Install the mount upper case to the mount lower case.



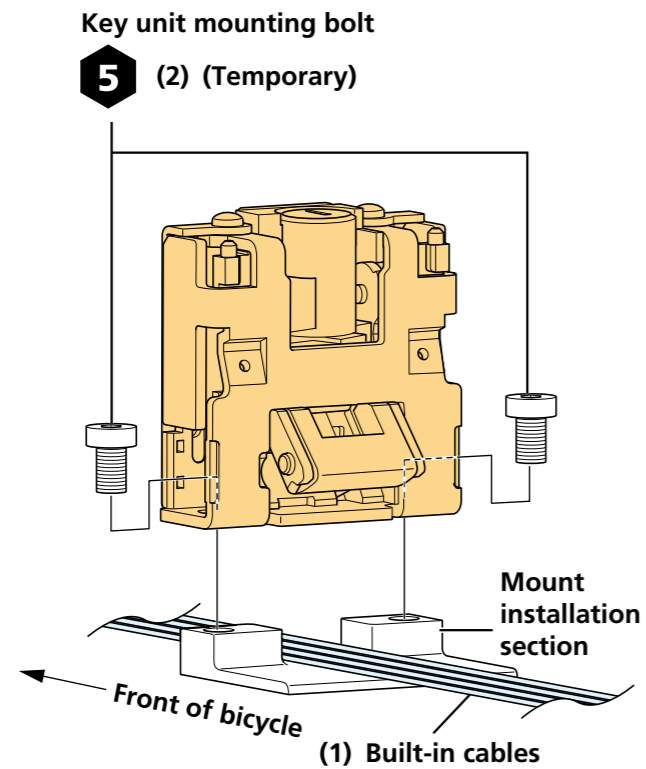
### 3. Install the cylinder to the key unit.

Key cylinders are not included with SHIMANO products.



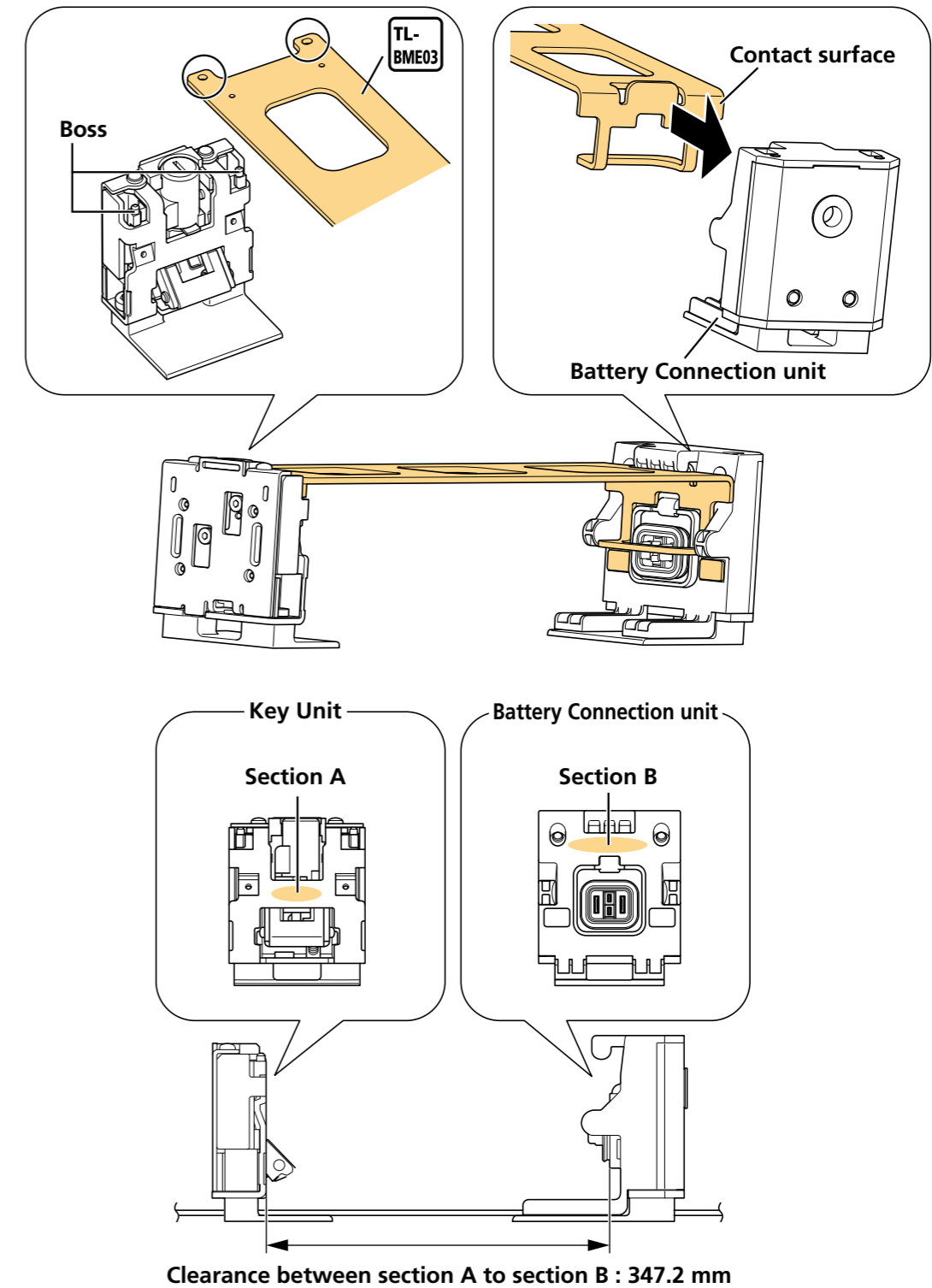
#### 4. Temporarily install the key unit.

- (1) Make sure that any cables built into the down tube pass between the mount installation area on the frame.
- (2) Temporarily install the key unit on the upper side of the down tube.



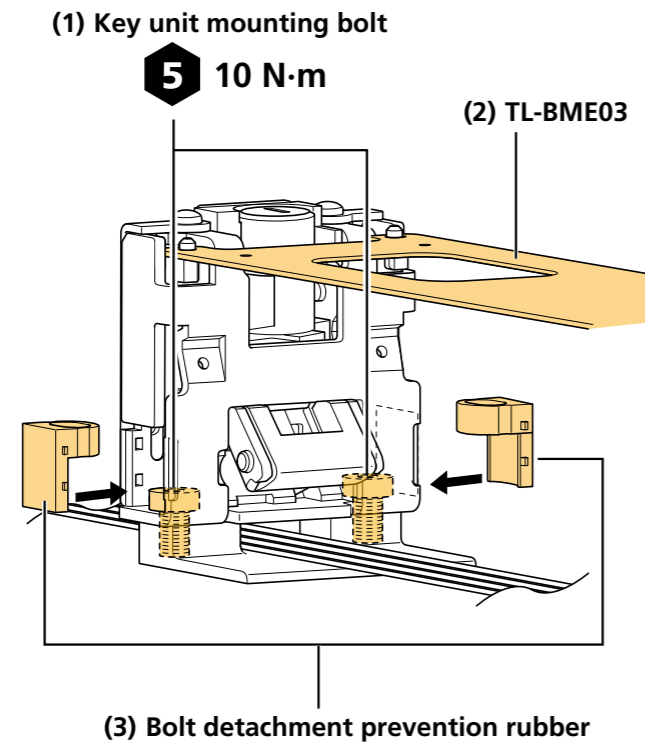
#### 5. Use the TL-BME03 to position the key unit.

- (1) Fit the two bosses of the key unit into the holes in the TL-BME03.
- (2) Adjust the position of the key unit so that the contact surface of the TL-BME03 will be pushed against the mount lower case as shown in the illustration.  
Make sure that it is not pushed too forcibly.



## 6. Fully tighten the key unit mounting bolt.

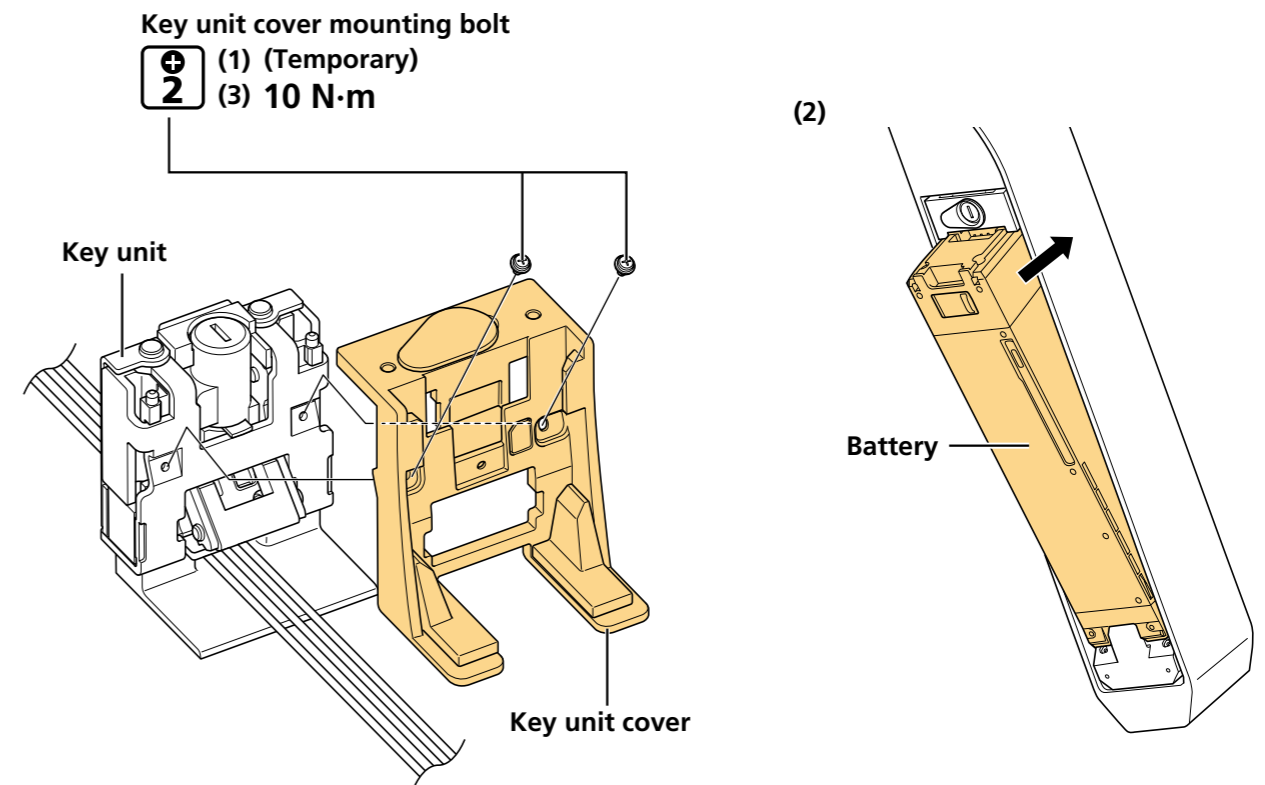
- (1) Fully tighten the key unit mounting bolt.
- (2) Remove the TL-BME03.
- (3) Install the bolt detachment prevention rubber



## 7. Install the key unit cover.

- (1) Temporarily install the key unit cover.
- (2) Try attaching and removing the battery, and check the following.
  - The battery can be smoothly attached and removed
  - There is no rattling in the key unit cover or battery that could result in abnormal noise when riding
- (3) Secure the key unit cover.
 

Pass the power cord through the frame and leave it hanging over the drive unit installation area.



## BM-E8010

The SHIMANO original tool can be used to easily determine the installation location of the key unit.

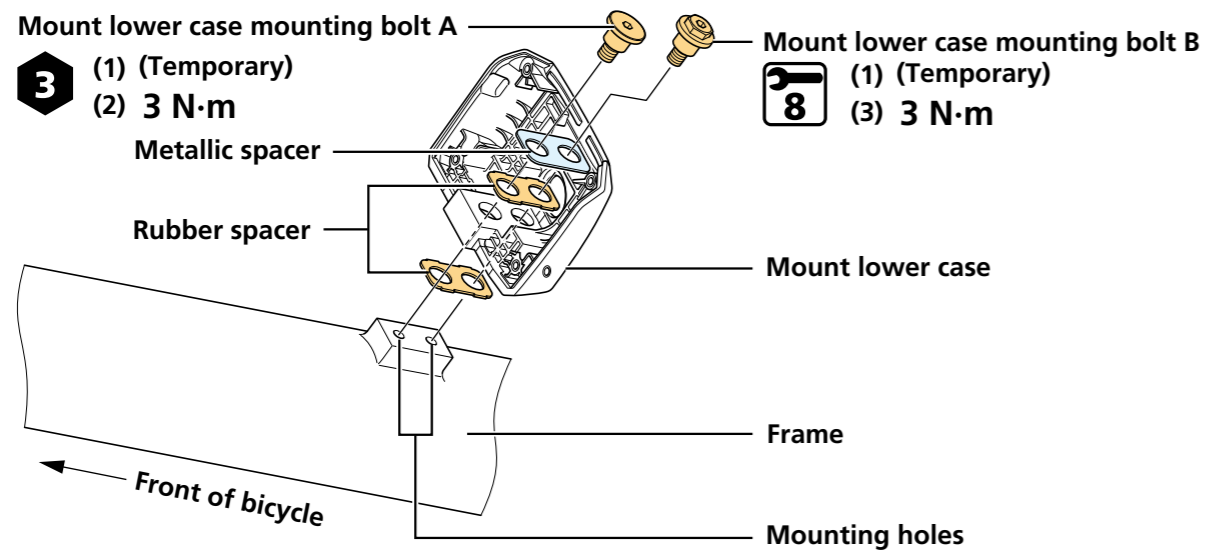
### 1. Install the mount lower case.

- (1) Set the mount lower case on the lower side of the down tube, and then temporarily install the mounting bolts.

\* Temporarily install the two types of bolts as shown in the figure.

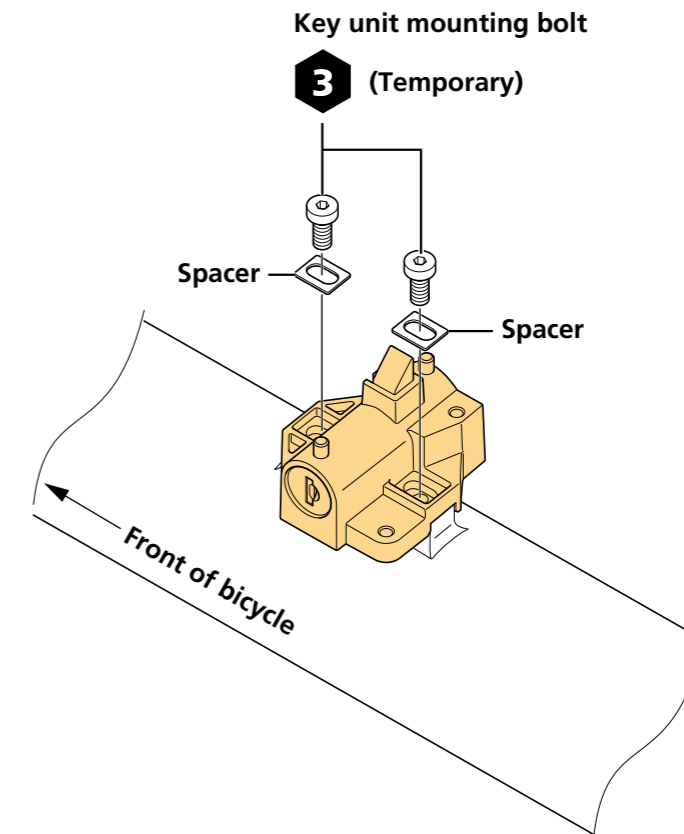
- (2) Tighten mount lower case mounting bolt A.

- (3) Tighten mount lower case mounting bolt B.



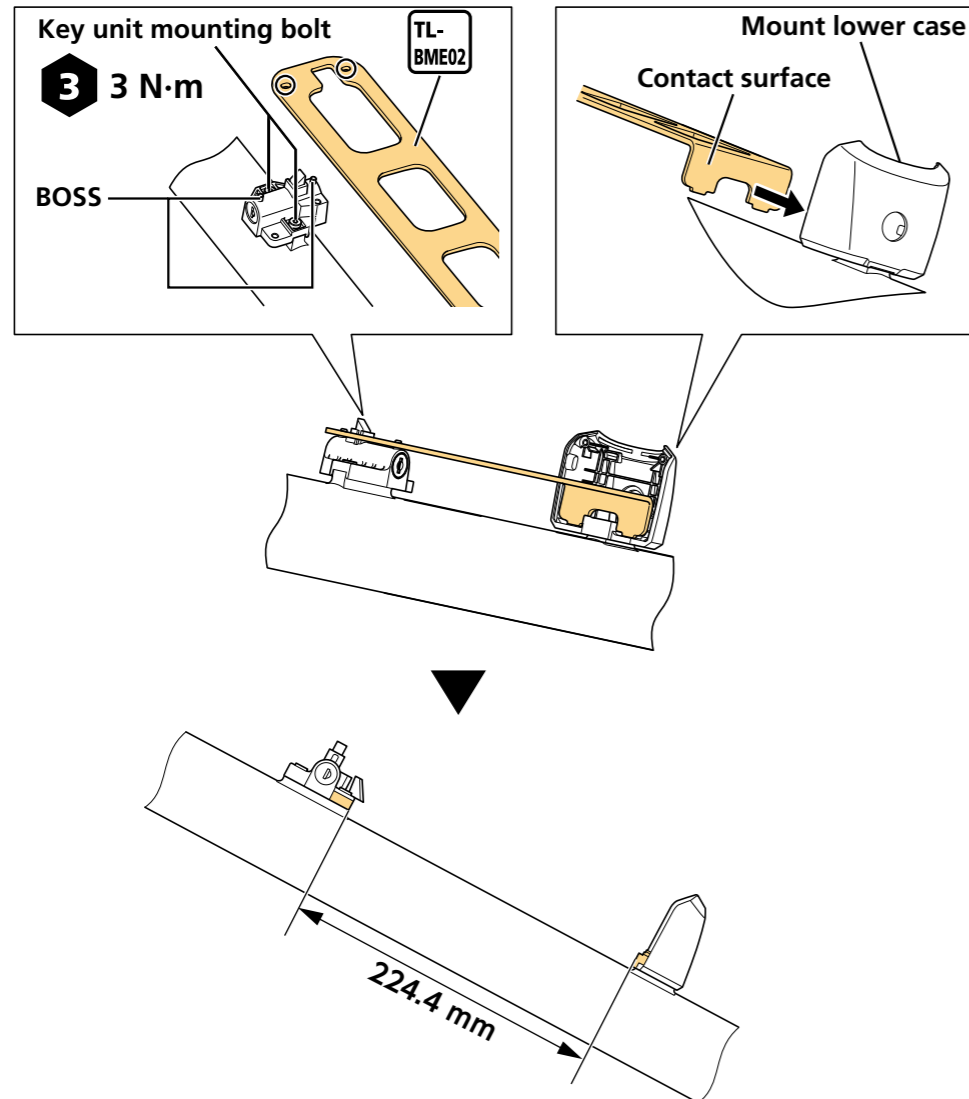
### 2. Temporarily install the key unit.

Key units are not included with SHIMANO products.



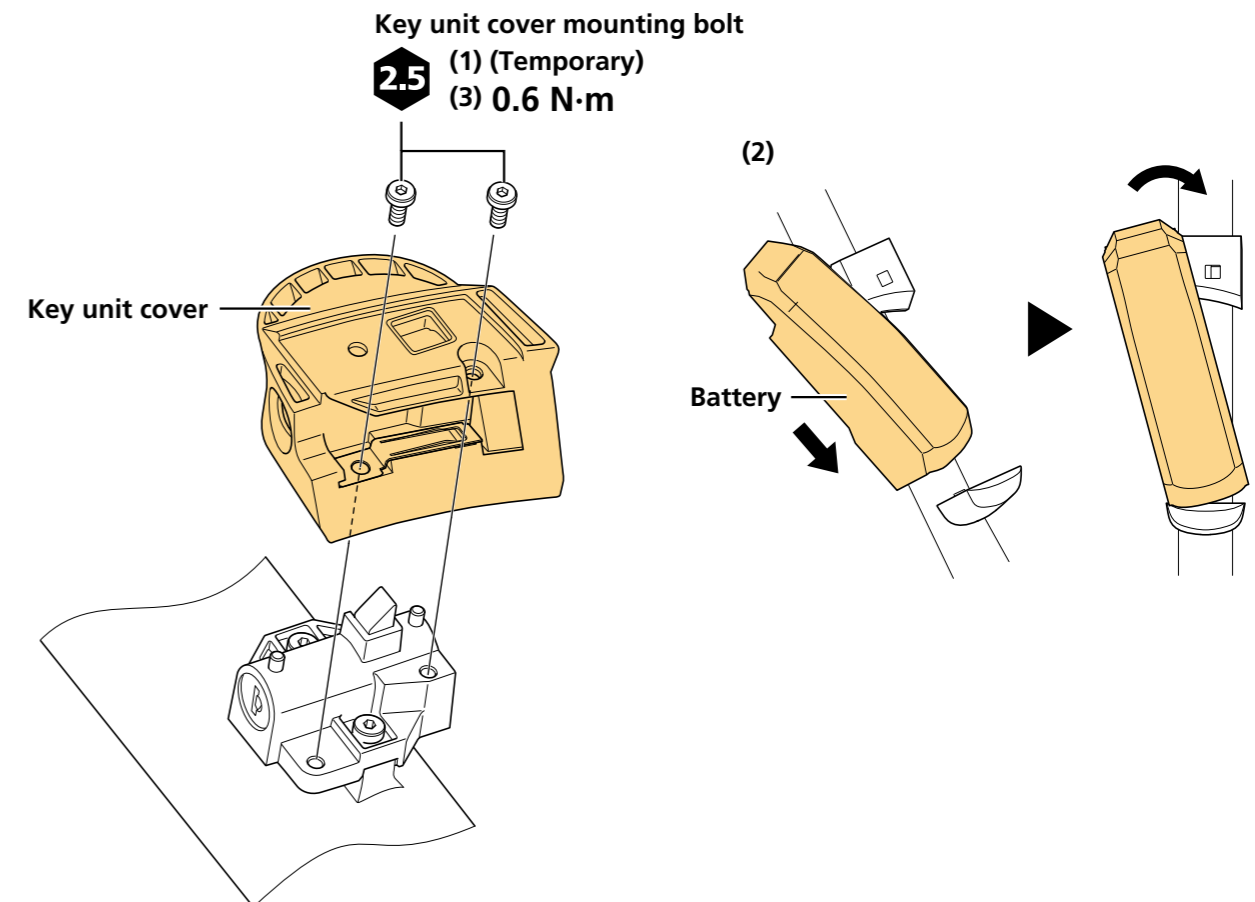
### 3. Use the TL-BME02 to position the key unit.

- (1) Fit the two bosses of the key unit into the holes in the TL-BME02.
- (2) Adjust the position of the key unit so that the contact surface of the TL-BME02 will be pushed against the mount lower case as shown in the illustration.
- (3) Fully tighten the key unit mounting bolt.
- (4) Remove the TL-BME02.



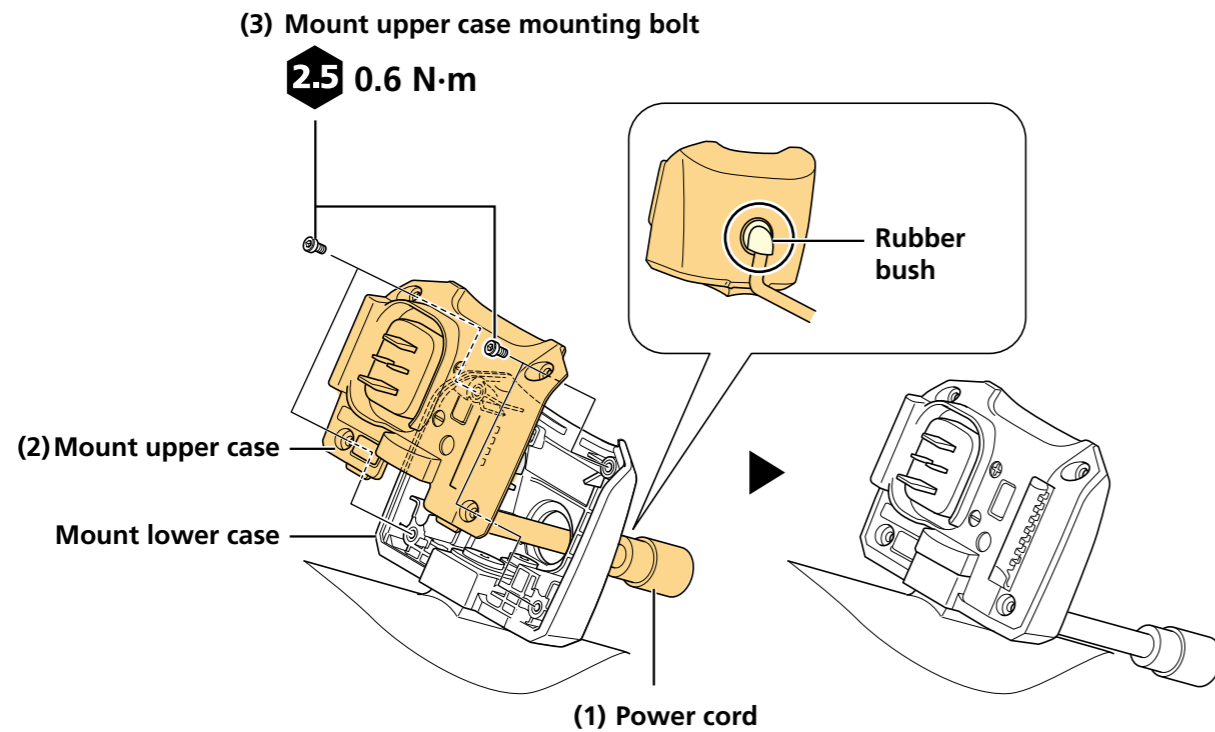
### 4. Install the key unit cover.

- (1) Temporarily install the key unit cover.
- (2) Try attaching and removing the battery, and check the following.
  - The battery can be smoothly attached and removed
  - There is no rattling in the key unit cover or battery that could result in abnormal noise when riding
- (3) Secure the key unit cover.



## 5. Install the mount upper case.

- (1) Pass the power cord from the mount upper case through the hole in the mount lower case.
- (2) Set the mount upper case to the mount lower case.
  - \* Make sure that the rubber bush on the base of the power cord is exposed from below the mount lower case.
- (3) Secure the mount upper case.
- (4) Pass the power cord through the frame and leave it hanging over the drive unit installation area.



## BM-E6010

### 1. Refer to the latest dealer's manual for details.



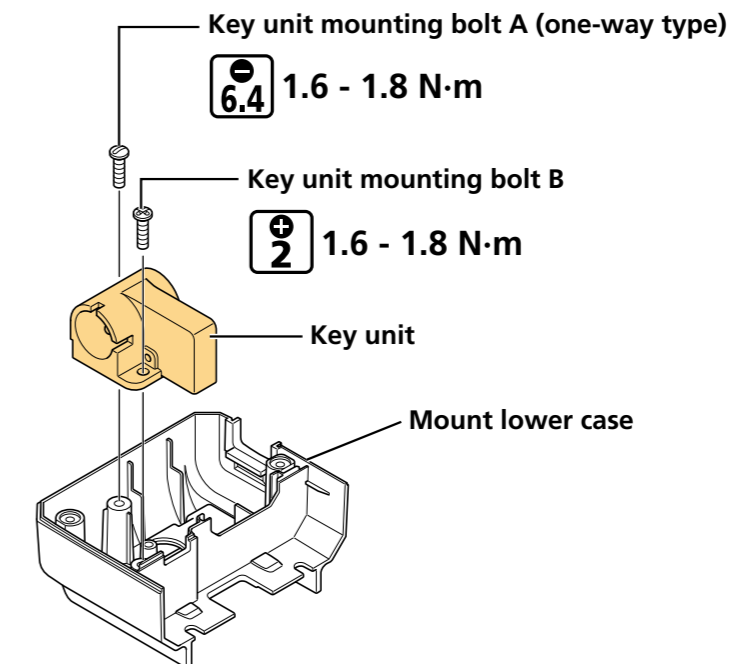
<http://si.shimano.com/dm/E6100>



<http://si.shimano.com/dm/E5000>

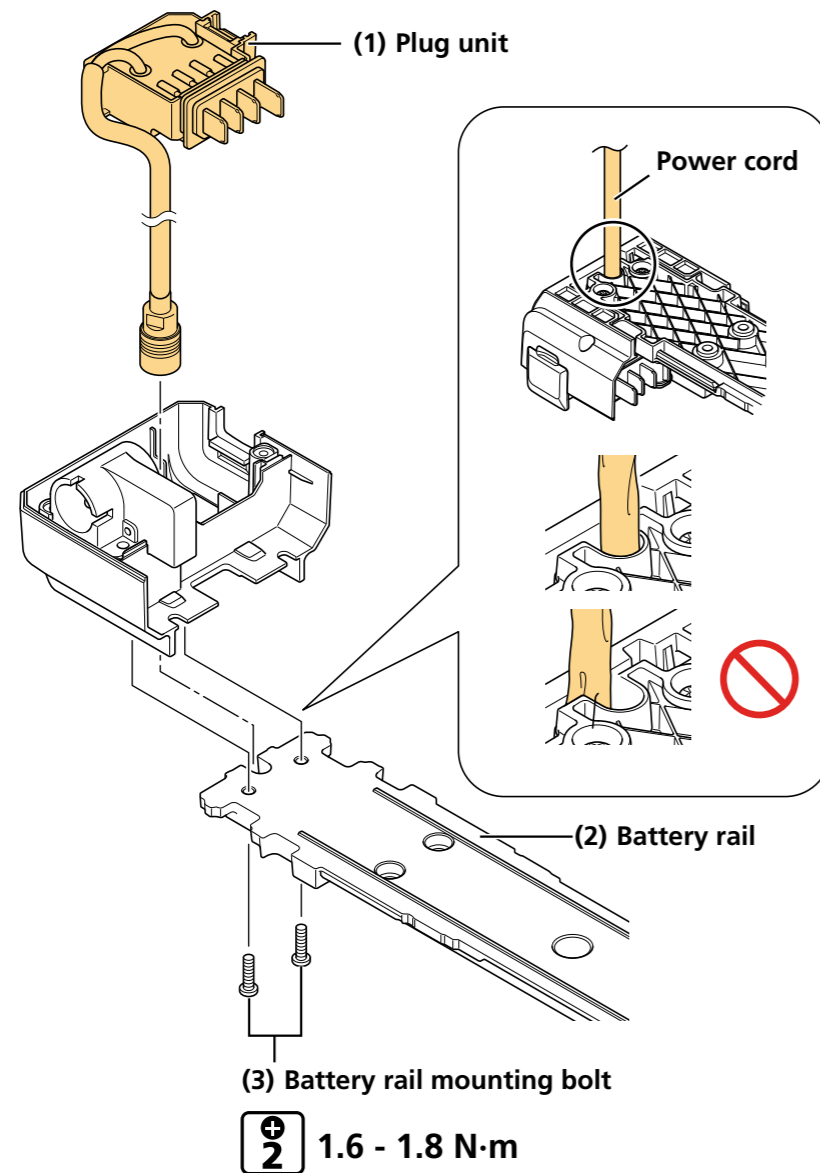
## BM-E6000

### 1. Install the mount lower case to the key unit.

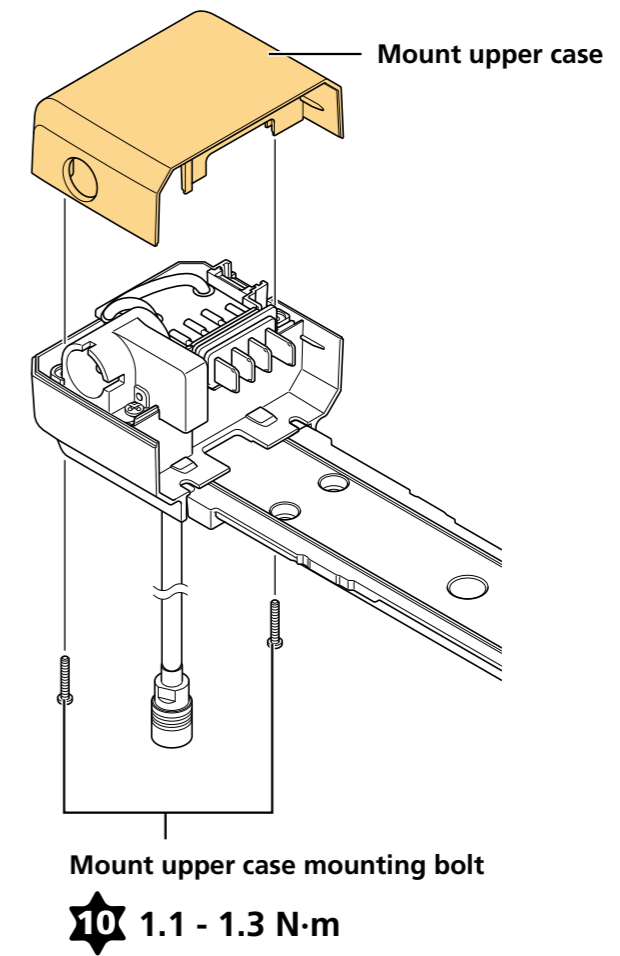


## 2. Set the plug unit to the mount lower case, and install it to the battery rail.

- (1) Set the plug unit to the mount lower case.
- (2) Set the battery rail to the mount lower case. Be careful not to pinch the power cord between the mount lower case and battery rail.
- (3) Secure the battery rail.

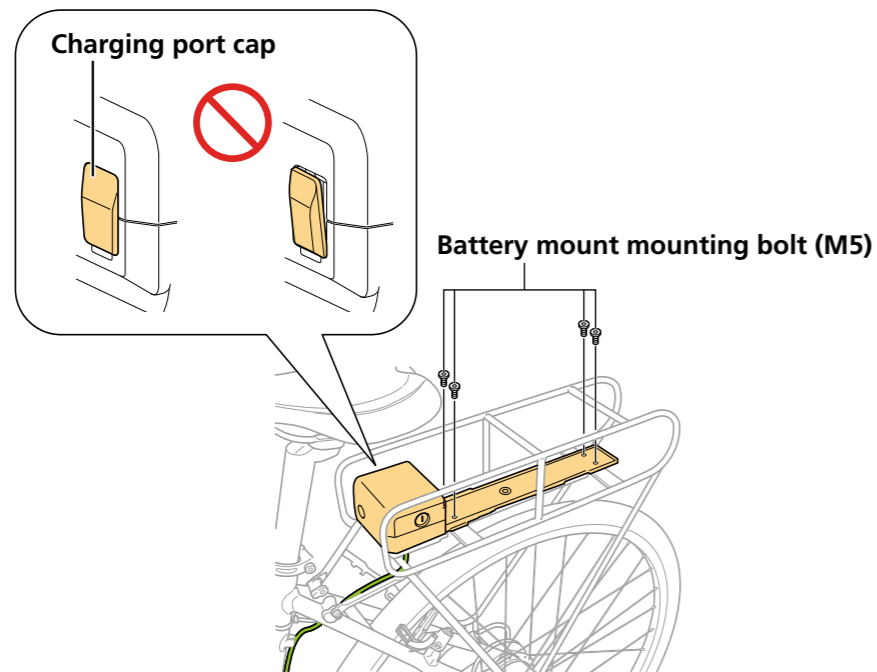


## 3. Install the mount upper case.



## 4. Install the battery mount to the rear carrier.

- (1) Set the battery mount aligned with the mounting hole on the rear carrier.
- (2) Secure the battery mount. Use the bicycle manufacturer's standard tightening torque.
- (3) After installing the battery mount, perform the following.
  - Firmly close the charging port cap.
  - Pass the power cord through the frame and leave it hanging over the drive unit installation area.



### NOTICE

- Battery mount mounting bolts (M5) are not included with SHIMANO products. Use the bolt supplied by the bicycle manufacturer. Contact the bicycle manufacturer for the tightening torque.

## Installing the Speed Sensor and Magnet Unit

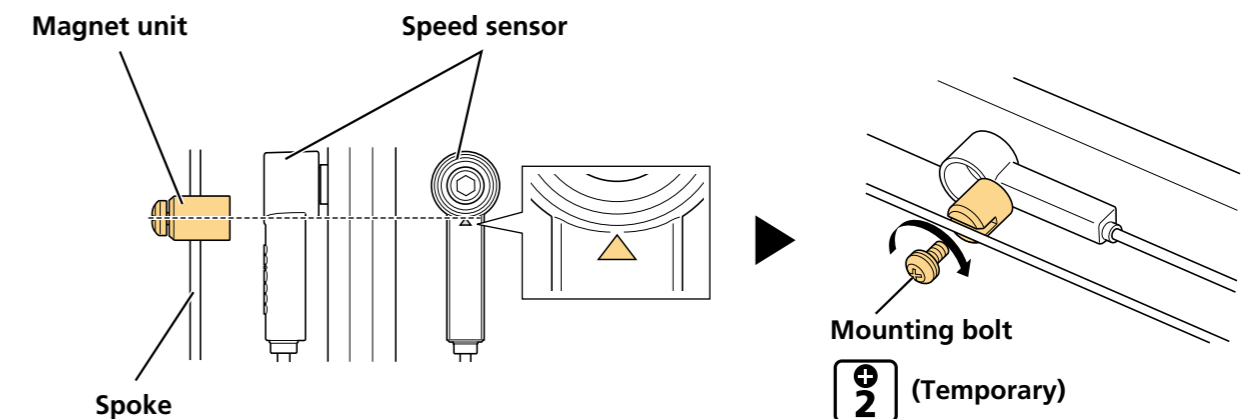
### SM-DUE10

If using the speed sensor SM-DUE10, set the magnet unit on a spoke on the rear wheel.

The SM-DUE10 installation location is on the inner side of the left side chainstay.

### 1. Temporarily install the magnet unit to the spoke.

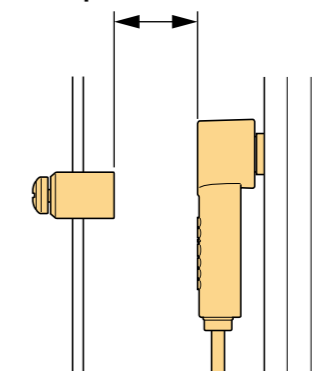
- (1) Try pressing the speed sensor to the installation location on the frame, and determine the installation location of the magnet so that the center of the magnet is aligned over the tip of the triangle symbol.
- (2) Temporarily install the mounting bolt.



### 2. Check the clearance between the speed sensor and magnet unit.

Press the speed sensor to the installation location on the frame, and then check the approximate clearance with the magnet unit. Also take wheel play and frame warping into consideration.

Clearance between speed sensor and magnet unit

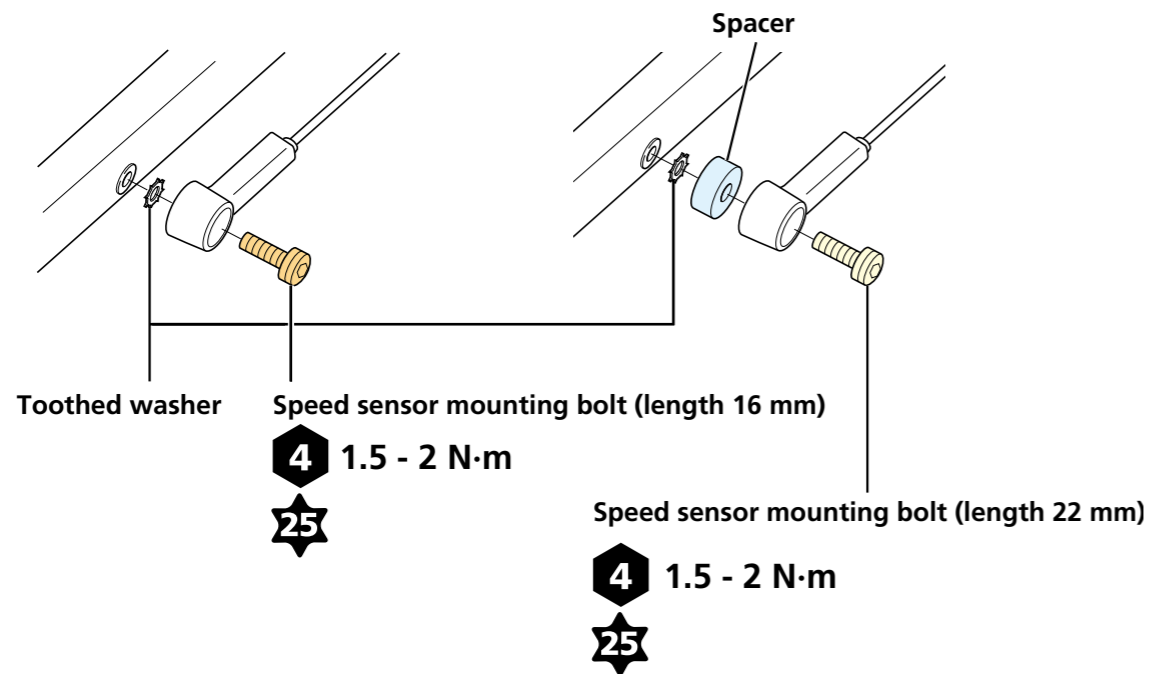




### 3. Install the speed sensor.

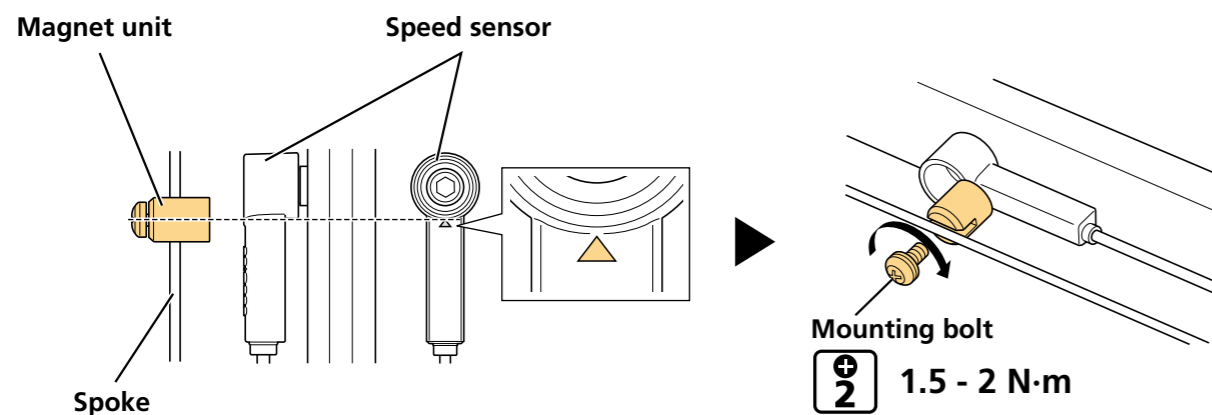
Clearance between speed sensor and magnet unit is 3 to 17 mm

Clearance between speed sensor and magnet unit exceeds 17 mm



### 4. Secure the magnet unit.

- (1) Re-check the positioning of the magnet unit and speed sensor.
- (2) Secure the magnet unit.



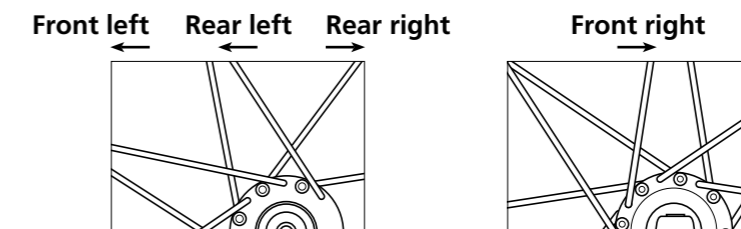
### 5. Set the electric wire from the speed sensor along the chainstay to the frame, and wire it to the drive unit.

## SM-DUE11

If using SM-DUE11 as the speed sensor, a special disc brake rotor with a built-in magnet must be installed to the rear wheel. The SM-DUE11 installation location is near the rear wheel axle on the inside of the left side chainstay.

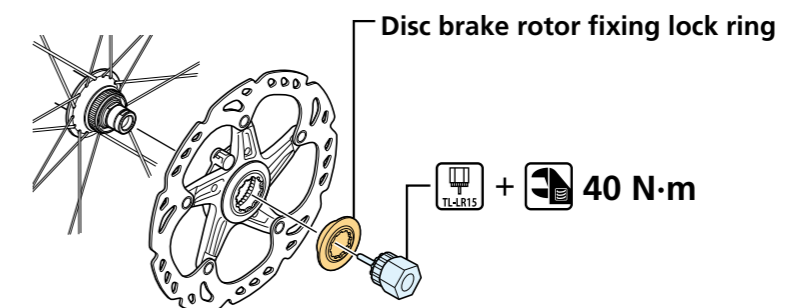
### 1. Check that the spokes on the rear wheel have been laced as shown in the figure.

A disc brake rotor cannot be installed to a wheel with radial lacing.

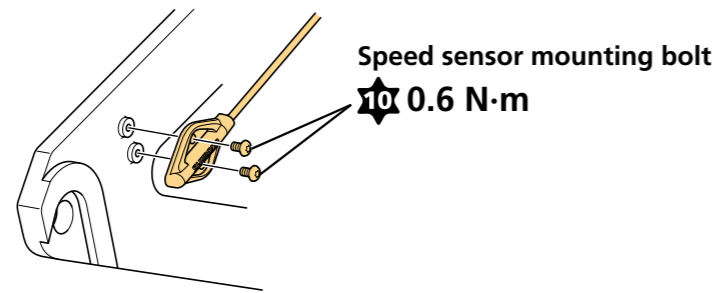


### 2. Install the disc brake rotor.

- (1) Set the disc brake rotor to the hub on the rear wheel.
- (2) Tighten the disc brake rotor fixing lock ring.



### 3. Install the speed sensor to the frame.



### 4. Set the electric wire from the speed sensor along the chainstay to the frame, and wire it to the drive unit.

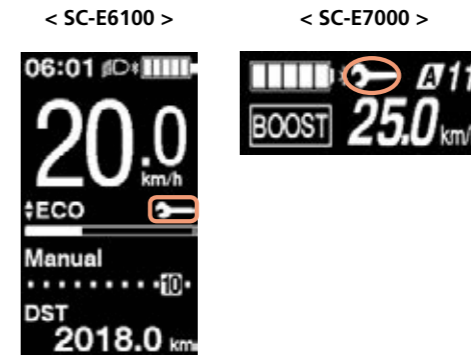
### 5. Set the rear wheel to the frame.

## MAINTENANCE

### Introducing the [Maintenance Alert] Menu

SC-E7000 and SC-E6100 feature the Maintenance Alert function.

This notifies the user that the bicycle requires maintenance. An icon is displayed on the cycle computer screen when the bicycle reaches the set odometer or date. You must connect to E-TUBE PROJECT for this setting. Refer to the help manual for E-TUBE PROJECT for details.

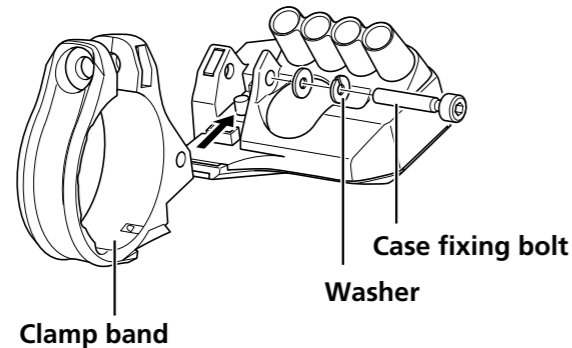


## Replacing the Clamp Band

When replacing the clamp band, install a new clamp band.

Refer to "Installing the Cycle Computer/Junction [A]" for detailed instructions.

### 1. Remove the case fixing bolt.



### 2. Replace the clamp band.

Remove the clamp band, and install a new clamp band.

## Replacing the Chainring

When replacing the chainring, make sure that the chain is attached.

Refer to the "Installing the Chainring and Crank Arms" and "Installing the Arm Covers" sections for detailed instructions.

### 1. Remove the left and right crank arms.

### 2. Remove the arm cover if it is attached.

### 3. Remove the lock ring (left screw).

Remove the lock ring, with the rear wheel held firmly so that it does not move.

### 4. Replace the chainring.

Remove chainring, and then install a new chainring.

## Replacing the Chain Guard

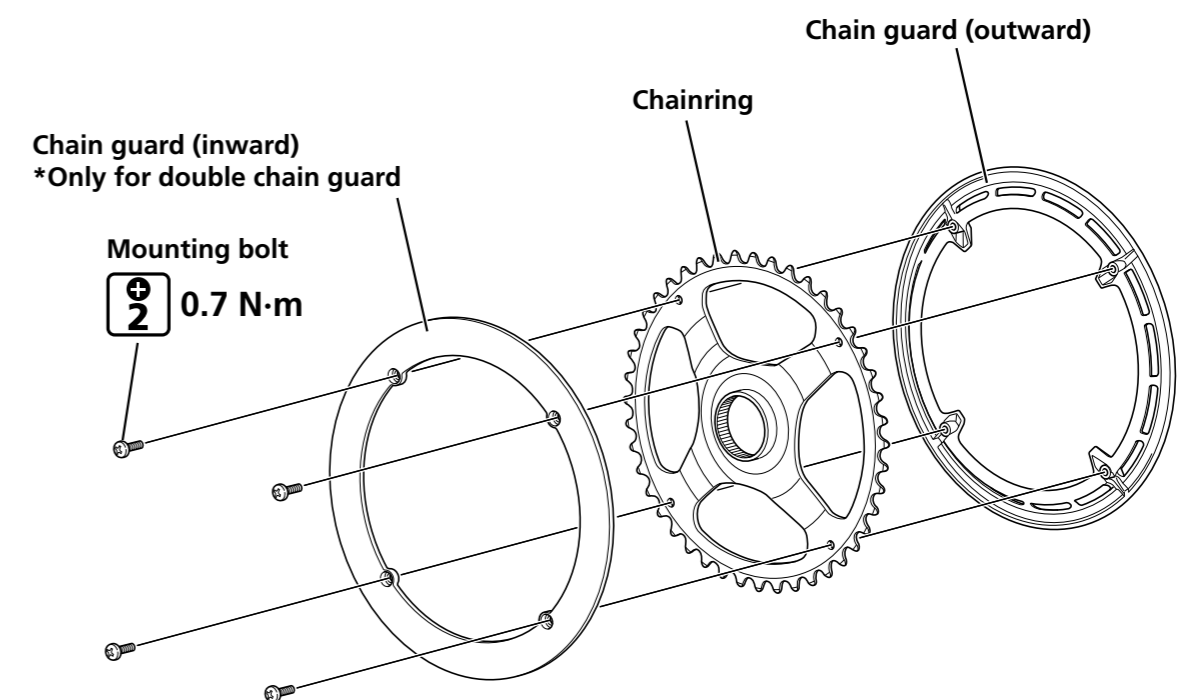
To remove the chain guard, first remove the chainring from the bicycle.

Refer to the previous section, "Replacing the Chainring," for information on how to remove the chainring.

### 1. Remove the chainring.

### 2. Remove the chain guard and then replace it with a new chain guard.

The figure below shows a double chain guard. The procedure is the same for replacing a single chain guard.



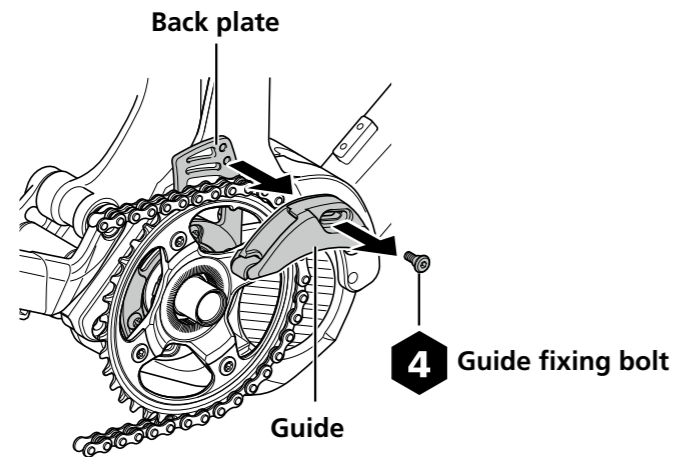
## Replacing the Arm Cover

The arm cover can be replaced with the chainring attached to the drive unit. Refer to "Installing the Arm Covers" in "INSTALLING THE DRIVE UNIT AND PERIPHERAL PARTS."

## Replacing the Chain Device Guide

The chain device guide can be replaced with the chainring attached to the drive unit. Refer to "Installing the Chainring and Crank Arms" for detailed instructions.

### 1. Remove the guide fixing bolt (M5).



### 2. Remove the guide and replace it with a new guide.

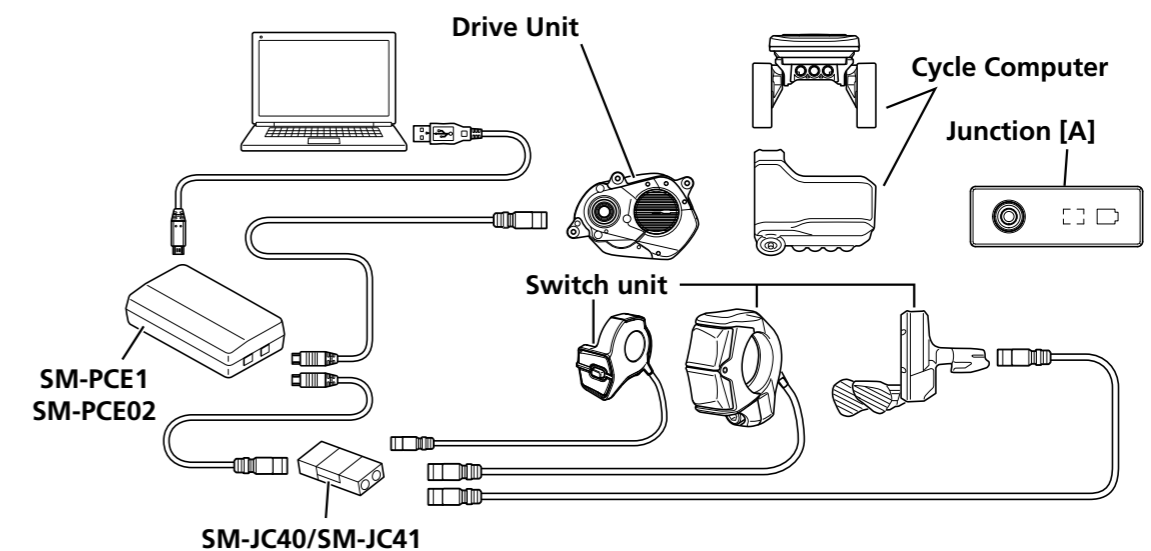
## CONNECTION AND COMMUNICATION WITH DEVICES

### Connecting to a PC

Connect the PC to SHIMANO STEPS. You can either connect a single SHIMANO STEPS component unit, or connect all SHIMANO STEPS components installed on the bicycle at the same time.

#### Connection with single unit

### 1. Connect the unit's E-TUBE port and the PC using the PC linkage device.



#### NOTICE

- SM-JC40 or SM-JC41 is required to connect a single switch unit to a PC.

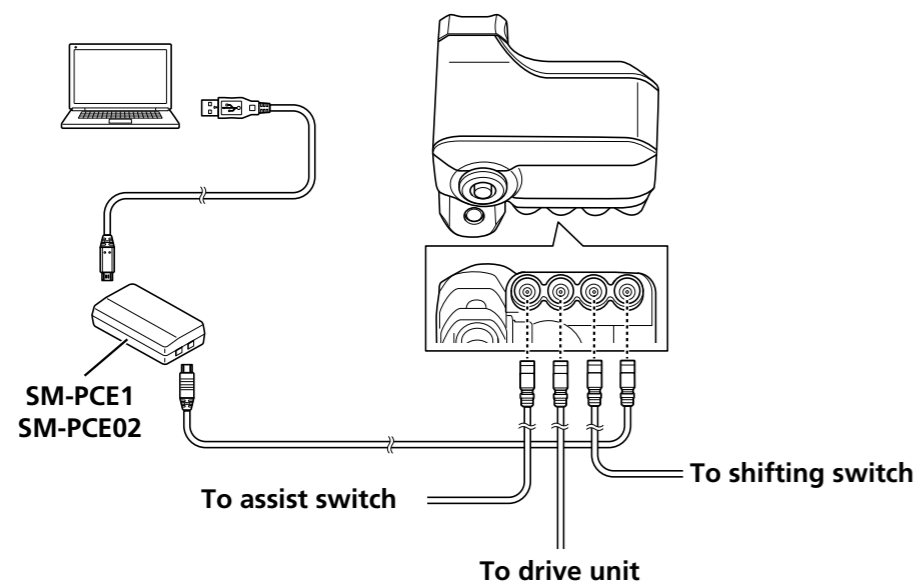
## Connection with all SHIMANO STEPS components

To connect all SHIMANO STEPS components installed to the bicycle, connect the cycle computer or junction [A] to the PC. If there are no free E-TUBE ports, use either SM-JC40 or SM-JC41.

### ▶ Handlebar-mounted cycle computer

#### 1. Connect the PC linkage device to a free port on the cycle computer.

- (1) Remove the dummy plug from a free port on the cycle computer.
- (2) Connect the free port on the cycle computer and the PC linkage device.

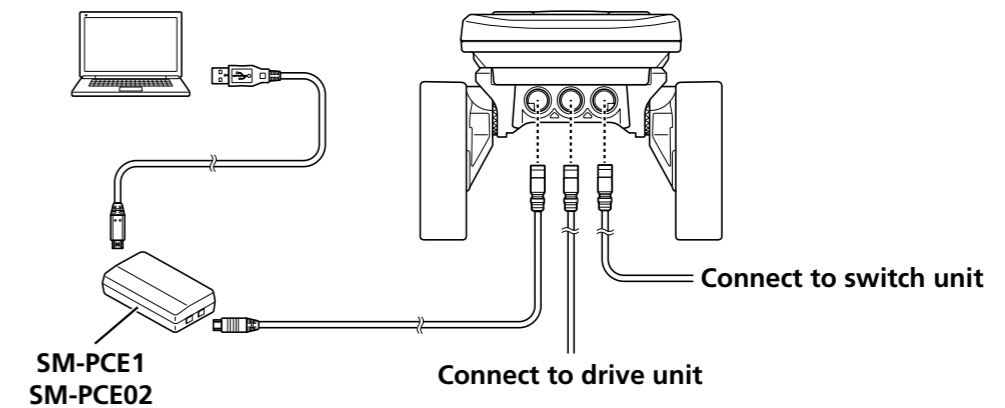


### ▶ Stem-mounted cycle computer (with free port)

Connect as follows for configurations using mechanical gear shifting with a free E-TUBE port.

#### 1. Connect a free port on the cycle computer to the PC linkage device.

- (1) Remove the dummy plug from a free port on the cycle computer.
- (2) Connect the free port on the cycle computer and the PC linkage device.

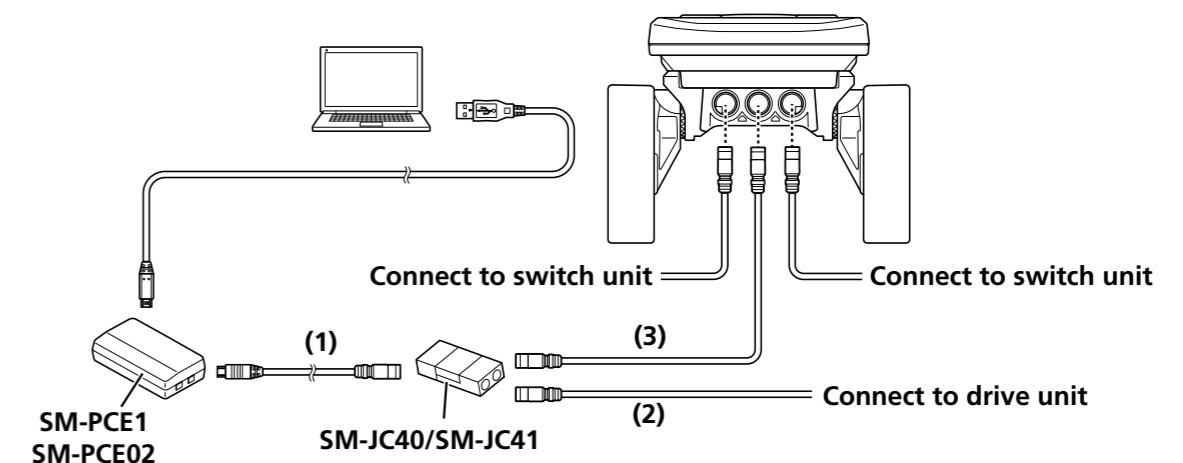


### ▶ Stem-mounted cycle computer (without free port)

Connect as follows for configurations using electronic gear shifting without a free E-TUBE port.

#### 1. Reconnect the wires from SC-E6100 to the PC as follows.

- (1) Connect SM-JC40/SM-JC41 to the PC linkage device.
- (2) Disconnect the electric wire connected to the drive unit from the center port of the cycle computer, and connect it to SM-JC40/SM-JC41.
- (3) Connect the center port of the cycle computer and SM-JC40/SM-JC41 with an electric wire.

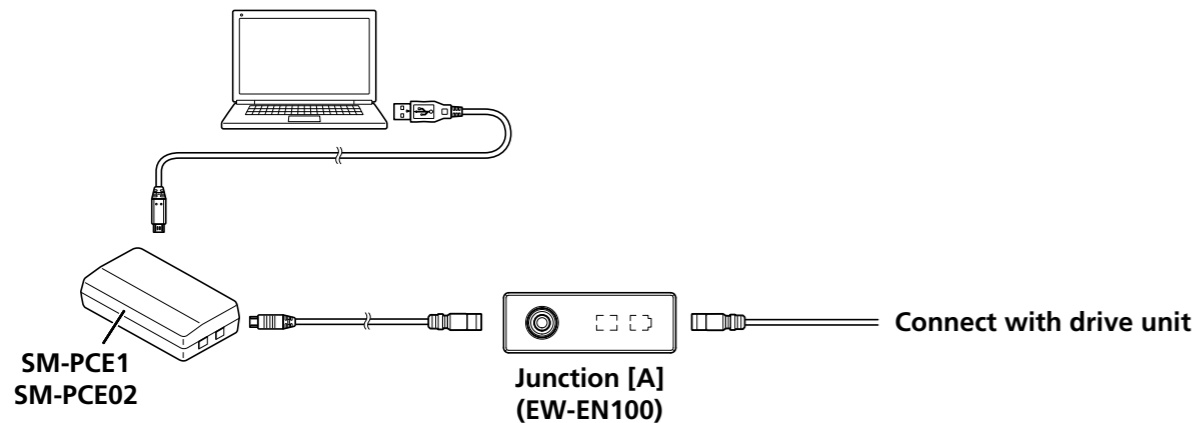


## ▶ Junction [A] (with free port)

Connect as follows if EW-EN100 is not connected to anything other than a drive unit.

### 1. Connect the PC linkage device to a free port on Junction [A].

- (1) Remove the dummy plug from a free port on Junction [A].
- (2) Connect the free port on Junction [A] with the PC linkage device.

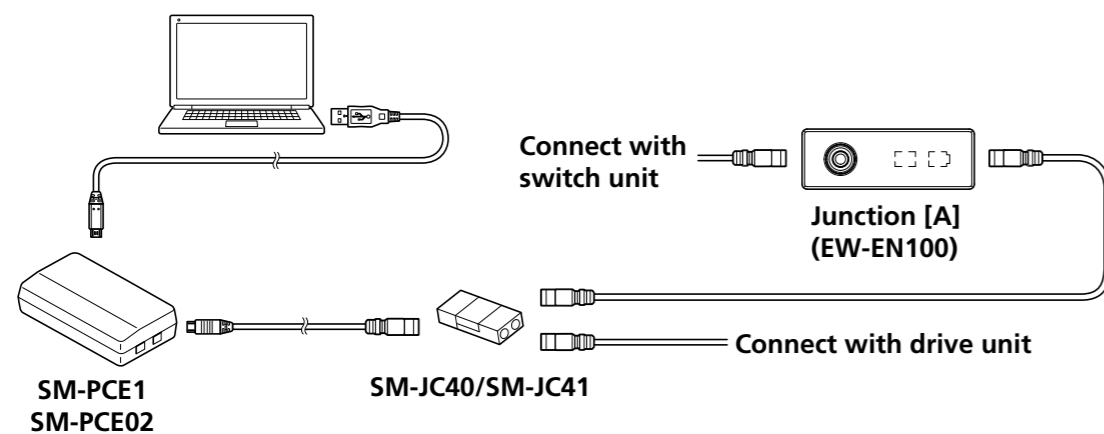


## ▶ Junction [A] (without free port)

Connect as follows if a switch unit is connected and there are no free E-TUBE ports on junction [A].

### 1. Reconnect the wires from Junction [A] to the PC as follows.

- (1) Connect SM-JC40/SM-JC41 to the PC linkage device.
- (2) Disconnect the electric wire connected to the drive unit from Junction [A], and connect it to SM-JC40/SM-JC41.
- (3) Connect a free port on Junction [A] and SM-JC40/SM-JC41 using an electric wire.



## Wireless communication (Bluetooth® LE)

E-TUBE PROJECT for smartphones/tablets may be used if a Bluetooth LE connection is established with a smartphone/tablet. E-TUBE RIDE app can be used to check traveling data on a smartphone connected over Bluetooth LE, even when using junction [A].

This section explains how to connect a cycle computer and junction [A] to an external device over Bluetooth LE. Refer to the latest dealer's manual for details on using the Setting Menu.

### Manual connection (SC-E8000)

#### NOTICE

- SC-E8000 does not support E-TUBE RIDE. In order to use E-TUBE RIDE with SHIMANO STEPS E8000, recommend replacing the cycle computer with SC-E7000 or a similar product.

Before setting up a connection, turn on Bluetooth LE on the smartphone/tablet.

### 1. Open E-TUBE PROJECT app.

Set it to listen for Bluetooth LE signals.

### 2. Starts Bluetooth LE pairing.

- (1) Open setting menu, and then select [Bluetooth LE].
- (2) Select [Start].

When connection is successful, SHIMANO STEPS logo is displayed on screen. If the [Connection failure] message is displayed, restart from step 1.



### Automatic connection (SC-E7000/SC-E6100/ Junction [A])

Communication can only be received under the following conditions. Switch the external device to connection mode in advance.

- Within 15 seconds of the main power for SHIMANO STEPS turning ON
- Within 15 seconds of operating any button other than the SHIMANO STEPS power switch

# ERROR MESSAGES

## Cycle Computer Warnings and Errors

### Warnings

If the situation is resolved, this indication will disappear. If the situation does not improve, contact a SHIMANO distributor or any of the SHIMANO offices.

Code	Indication condition	Operational restrictions being displayed	Remedy	DU-E8000	DU-E7000	DU-E6100	DU-E5000
W010	Temperature of the drive unit is higher than it is during times of normal operation.	Assistance will be lower than normal.	Stop using the assist function until the temperature of the drive unit drops.	✓	—	—	—
W011	The traveling speed cannot be detected.	The maximum speed up to which power assistance is provided may be lower than usual.	Check that the speed sensor is correctly installed and that the magnet attached to the disc brake rotor is fixed certainly.	✓	✓	✓	✓
W013	Initialization did not complete normally for the torque sensor.	Assistance will be lower than normal.	Press the battery power button without stepping on the pedal to turn on the power again.	✓	✓	✓	✓
W032	<DU-E8000/E7000> An electronic derailleur may have been installed in place of a mechanical derailleur.	Assistance will be lower than normal in [WALK] mode. * The walk assist mode function may not be able to be used in certain regions.	Switch the installed derailleur for a derailleur that is configured in the system. Or, confirm the current system status on E-TUBE PROJECT.	✓	✓	✓	✓
	<DU-E6100/E5000> The installed derailleur differs from the derailleur configured in the system.	Unable to perform gear shifting.					

### Errors

If an error message is displayed on the entire screen, follow one of the procedures below to reset the display.

- Press the battery power switch to turn the power OFF.
- Remove the battery from the mount.

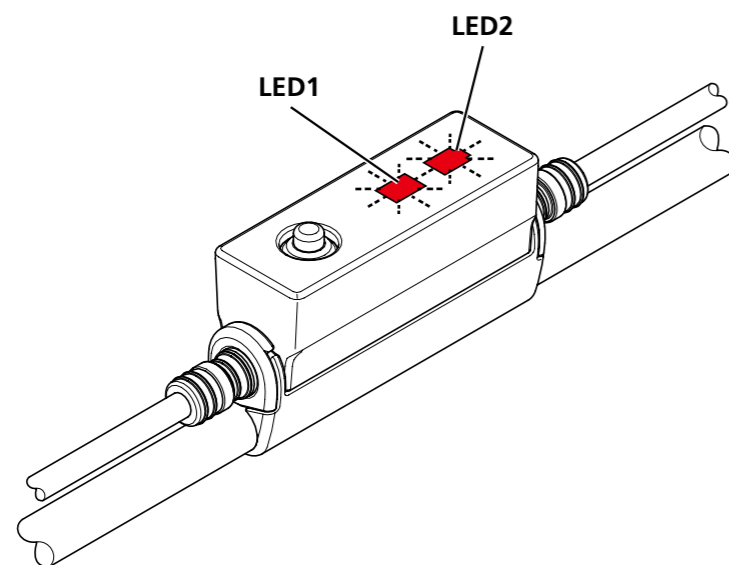
If the situation does not improve even after turning the power back ON, contact a SHIMANO distributor or any of the SHIMANO offices.

Code	Indication condition	Operational restrictions being displayed	Remedy	DU-E8000	DU-E7000	DU-E6100	DU-E5000
E010	A system error was detected.	Assist will not be provided when riding.	Use the battery power button to turn the power OFF, and then turn the power back ON.	✓	✓	✓	✓
E011	An error occurred in system operation.	Assist will not be provided when riding.	Use the battery power button to turn the power OFF, and then turn the power back ON.	✓	—	—	—
E013	An error was detected in the drive unit's firmware.	Assist will not be provided when riding.	Contact a SHIMANO distributor or any of the SHIMANO offices.	✓	✓	✓	✓
E014	The speed sensor may be installed in the wrong position.	Assist will not be provided when riding.	Check that the speed sensor is correctly installed and that the magnet attached to the disc brake rotor is fixed certainly.	✓	✓	✓	✓
E020	A communication error between the battery and drive unit was detected.	Assist will not be provided when riding.	Check that the cable between the drive unit and battery is properly connected.	✓	✓	✓	✓
E021	The battery connected to the drive unit is compliant with system standards, but is not compatible.	Assist will not be provided when riding.	Use the battery power button to turn the power OFF, and then turn the power back ON.	✓	✓	✓	✓

E022	The battery connected to the drive unit is not compliant with system standards.	All system functions will stop.	Use the battery power button to turn the power OFF, and then turn the power back ON.	✓	✓	✓	✓
E030	The installed derailleur differs from the derailleur configured in the system.	Assist will not be provided when riding.	Connect to E-TUBE PROJECT and update to the correct settings.	—	—	✓	✓
E033	The current firmware is not compatible with this system.	Assist will not be provided when riding.	Connect to E-TUBE PROJECT and update all units for the assist bicycle to their latest firmware versions.	✓	✓	✓	✓
E043	The cycle computer's (display's) firmware may be partially corrupt.	Assist will not be provided when riding.	Contact a SHIMANO distributor or any of the SHIMANO offices.	✓	✓	✓	✓

## Junction [A] (wireless unit) Error Indication

When an error occurs, the two LEDs on EW-EN100 will quickly flash red at the same time.



If this occurs, follow one of the procedures below to reset the indication.

- Press the battery power switch to turn the power OFF.
- Remove the battery from the mount.

If the situation does not improve even after turning the power back ON, contact a SHIMANO distributor or any of the SHIMANO offices.

## Battery LED Error Indications

Although the shape of the battery LEDs varies by battery model-no., the lighting patterns used to indicate errors are identical.

The battery LEDs are used to notify the user of system malfunctions, etc.

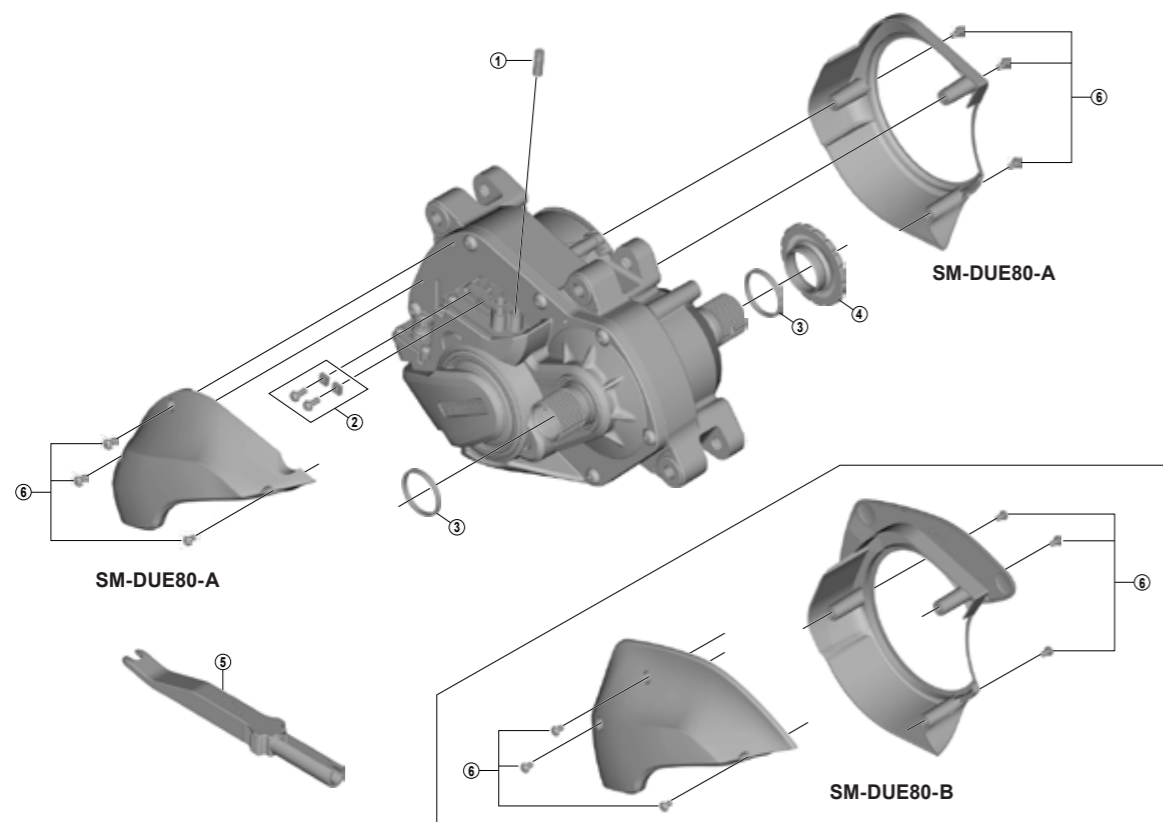
Error indication type	Indication condition	LED indication*1	Remedy
System malfunction	Communication error with the bicycle system		Check that the electric wire is not loose, and that it is appropriately connected. If the situation is not improved, contact a distributor.
Temperature protection	If the temperature exceeds the guaranteed operating range, the battery output is turned OFF.		Leave the battery in a cool place away from direct sunlight until the internal temperature of the battery decreases sufficiently. If the situation is not improved, contact a distributor.
Security authentication error	<ul style="list-style-type: none"> <li>• Genuine drive unit not connected</li> <li>• Cable disconnected</li> </ul>		Connect a genuine drive unit and battery. Check the status of the electric wire. If the situation is not improved, contact a distributor.
Charge error	An error occurred during charging		Detach the connector between the battery and the battery charger, and press the power switch with only the battery connected. If an error appears with only the battery connected, contact a distributor.
Battery malfunction	Electrical failure inside the battery		Temporarily connect the battery charger to the battery, remove it, and then press the power switch with only the battery connected. If an error appears with only the battery connected, contact a distributor.

\*1 Off Lit Flashing



# EXPLODED VIEW

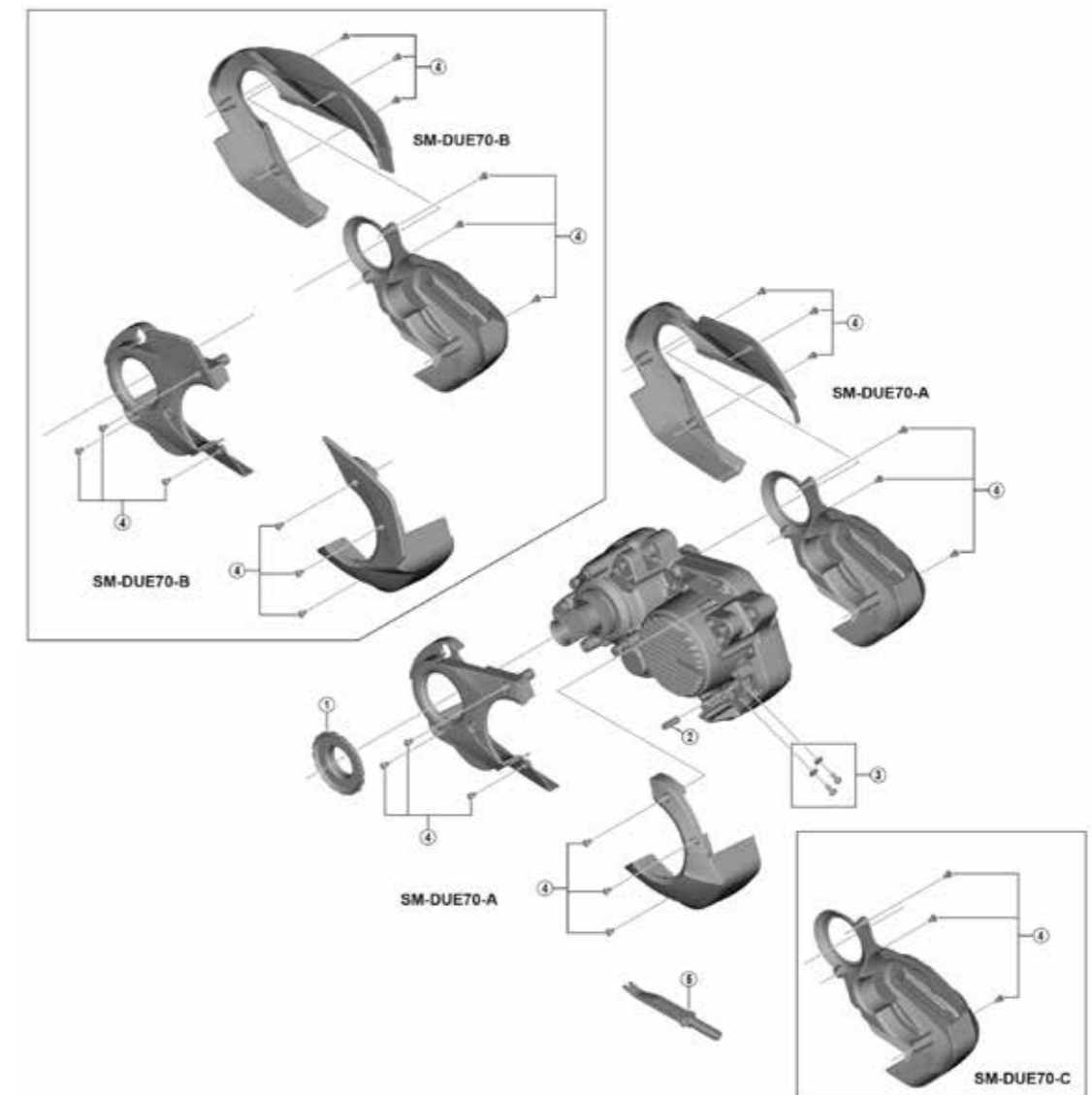
## DU-E8000 Drive Unit SM-DUE80 Drive Unit Cover



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y6VE15000	Dummy Plug
2	Y72F98010	Screw (2 pcs.) & Nut (2 pcs.)
3	Y72F00018	SPACER SPINDLE
4	Y72F00002	LOCK RING
5	Y6VE16000	TL-EW02 Plug Tool
* 6	Y72G98020	Cover Fixing Bolts (3 pcs.)
	Y72G98010	Cover Fixing Bolts (6 pcs.)

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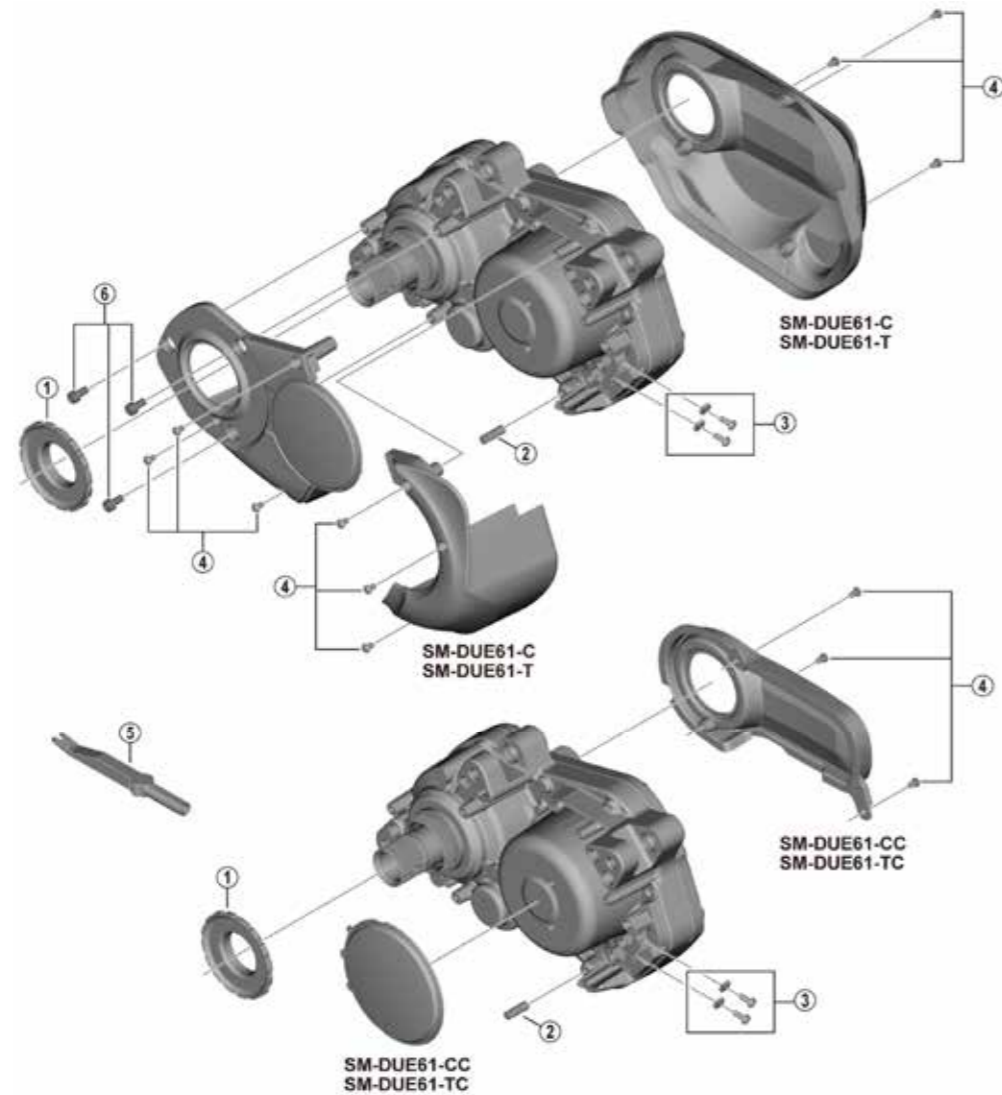
## DU-E7000 Drive Unit SM-DUE70 Drive Unit Cover



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y78N00085	Lock Ring
2	Y6VE15000	Dummy Plug
3	Y72F98010	Screw (2 pcs.) & Nut (2 pcs.)
* 4	Y72G98020	Cover Fixing Bolts (3 pcs.)
	Y72G98010	Cover Fixing Bolts (6 pcs.)
5	Y6VE16000	TL-EW02 Plug Tool

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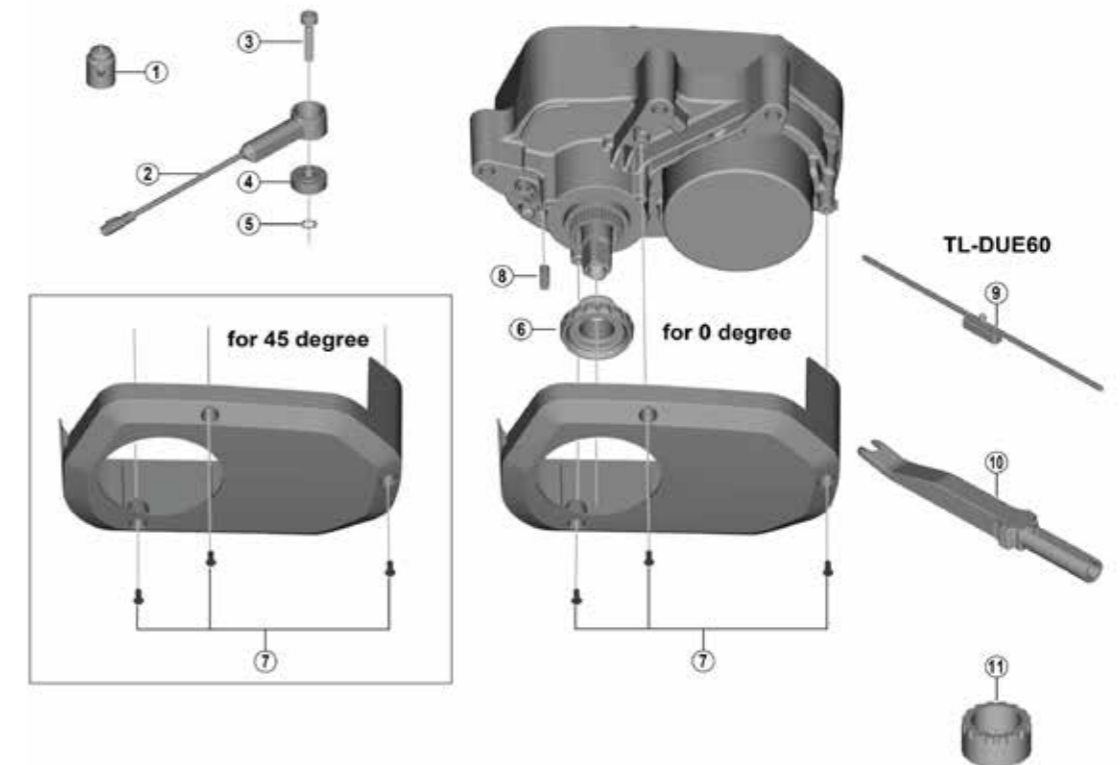
## DU-E6100 Drive Unit SM-DUE61 Drive Unit Cover



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
* 1	Y78N00085	Lock Ring
2	Y6VE15000	Dummy Plug
3	Y72F98010	Screw (2 pcs.) & Nut (2 pcs.)
* 4	Y72G98020	Cover Fixing Bolts (3 pcs.)
	Y72G98010	Cover Fixing Bolts (6 pcs.)
5	Y6VE16000	TL-EW02 Plug Tool
* 6	Y78N98010	Cover Fixing M4 Bolts (3 pcs.)

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## DU-E6002/DU-E6012 SM-DUE60 0 degree/45 degree Drive Unit Cover SM-DUE10 Speed Sensor Unit



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION	INTERCHANGE-ABILITY	
			DU-E6000	DU-E6001
* 1	Y72H98010	Magnet Unit	A	A
* 2	Y72H00007	Speed Sensor L550	A	A
* 2	Y72H00010	Speed Sensor L1410	A	A
3	Y70L000G0	Speed Sensor Fixing Bolt L16 (4 mm Hexagon Head)	A	A
	Y70L000U0	Speed Sensor Fixing Bolt L22 (4 mm Hexagon Head)	A	A
4	Y70L000F0	Spacer	A	A
5	Y70L000M0	Toothed Washer	A	A
6	Y70L00010	Lock Ring	A	A
7	Y70L98030	Fixing Bolts (M3 x 8) set for SM-DUE60 0 degree and 45 degree	A	A
8	Y6VE15000	Dummy Plug	A	A
9	YEZY00002	Chain tension measurement tool TL-DUE60	A	A
10	Y6VE16000	TL-EW02 Plug Tool	A	A
* 11	YEZY00010	TL-FC38 Adapter Removal Tool	A	A

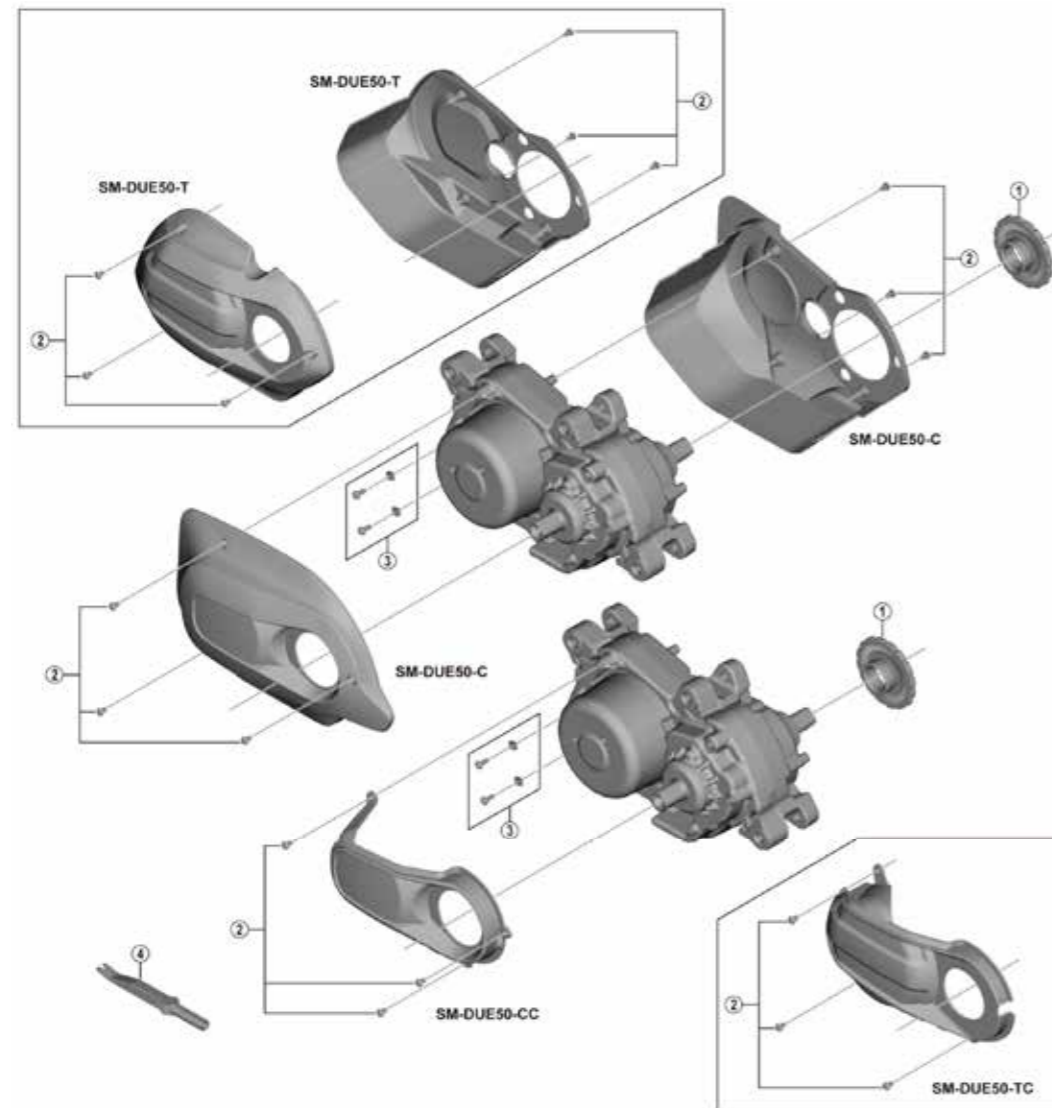
A: Same parts.

B: Parts are usable, but differ in materials, appearance, finish, size, etc.  
Absence of mark indicates non-interchangeability.

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# DU-E5000 Drive Unit

## SM-DUE50 Drive Unit Cover

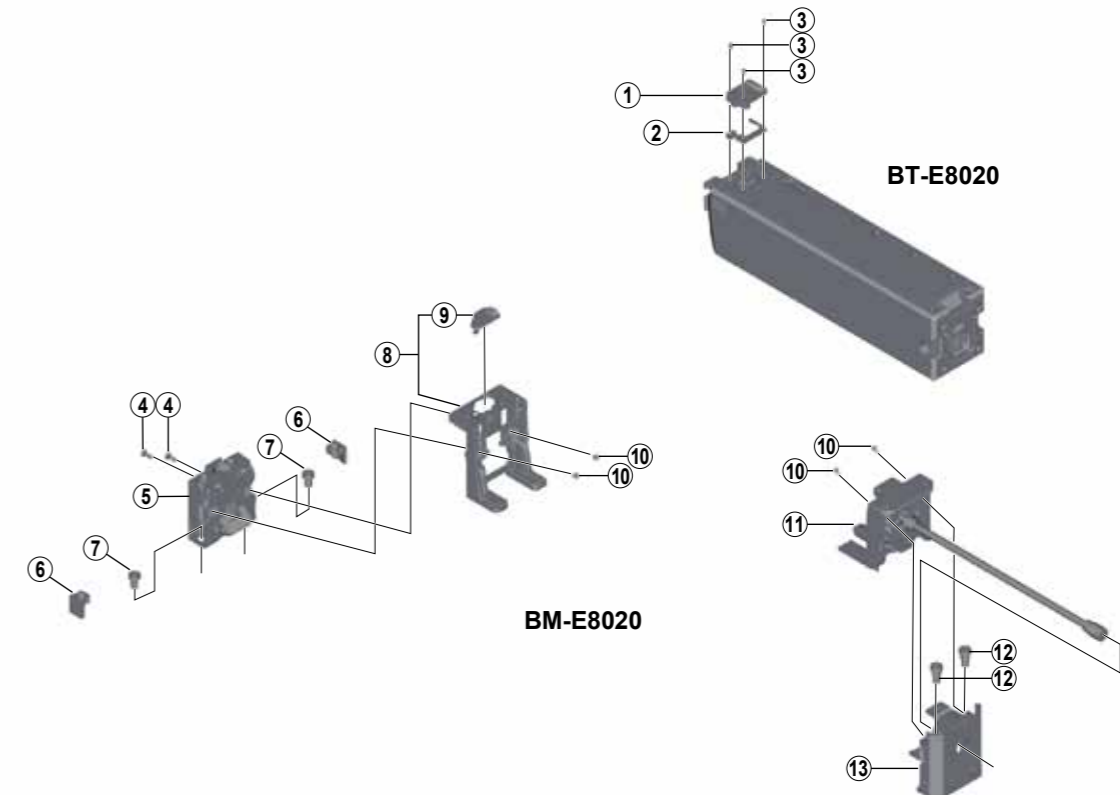


ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y79H00480	Lock Ring
2	Y72G98020	Cover Fixing Bolts (3 pcs.)
	Y72G98010	Cover Fixing Bolts (6 pcs.)
3	Y72F98010	Screw (2 pcs.) & Nut (2 pcs.)
4	Y6VE16000	TL-EW02 Plug Tool

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# BT-E8020 Battery

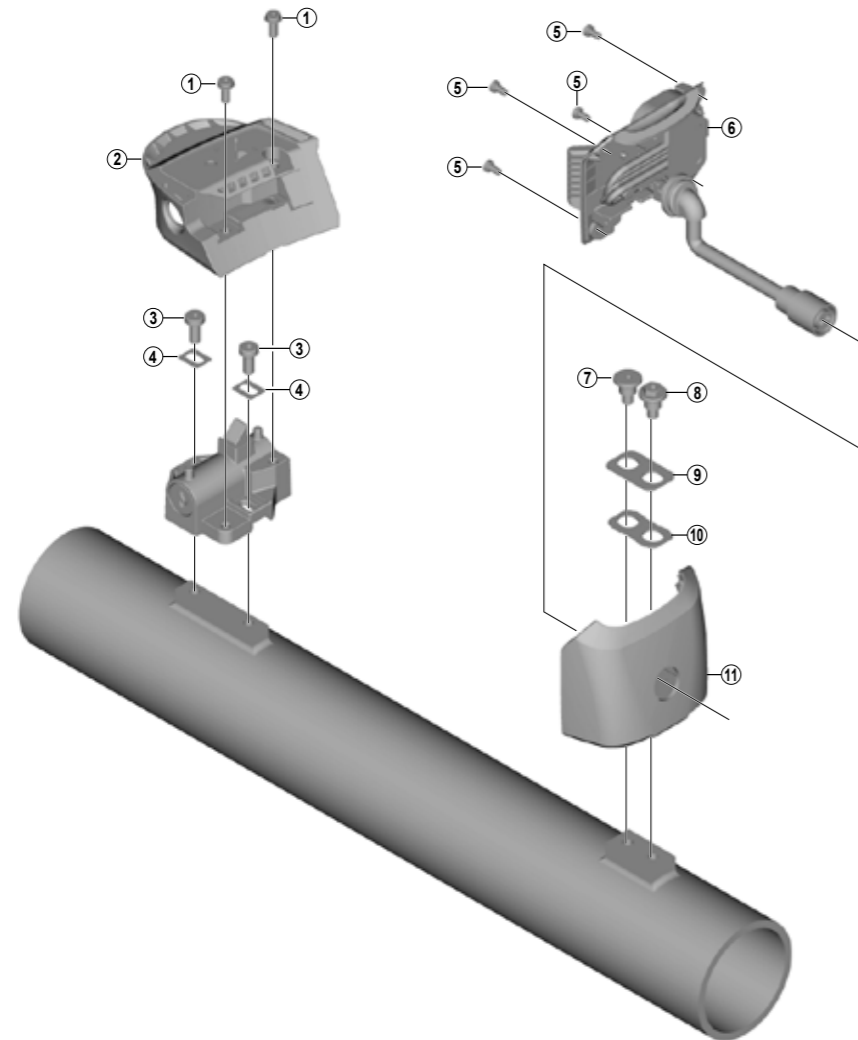
## BM-E8020 Battery Mount



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y72V00007	CG PORT CAP
2	Y72V00008	FRAME CG PORT CAP
3	Y72V00006	M2.6 BOLT CG PORT
4	Y72W00002	M4 BOLT KEY UNIT
5	Y72W00001	RATCHET ASSY
6	Y72W00004	RUBBER M8 FIXING
7	Y72W00003	M8 BOLT RATCHET
8	Y72W00014	RAIL ASSY
9	Y72W00015	KEY CAP
10	Y72W00006	M3 BOLT
	Y72W00009	CONNECTOR ASSY 250
11	Y72W00013	CONNECTOR ASSY 400
12	Y72W00011	M8 BOLT LOW ER FRAME
13	Y72W00008	HOLDER FRAME ASSY

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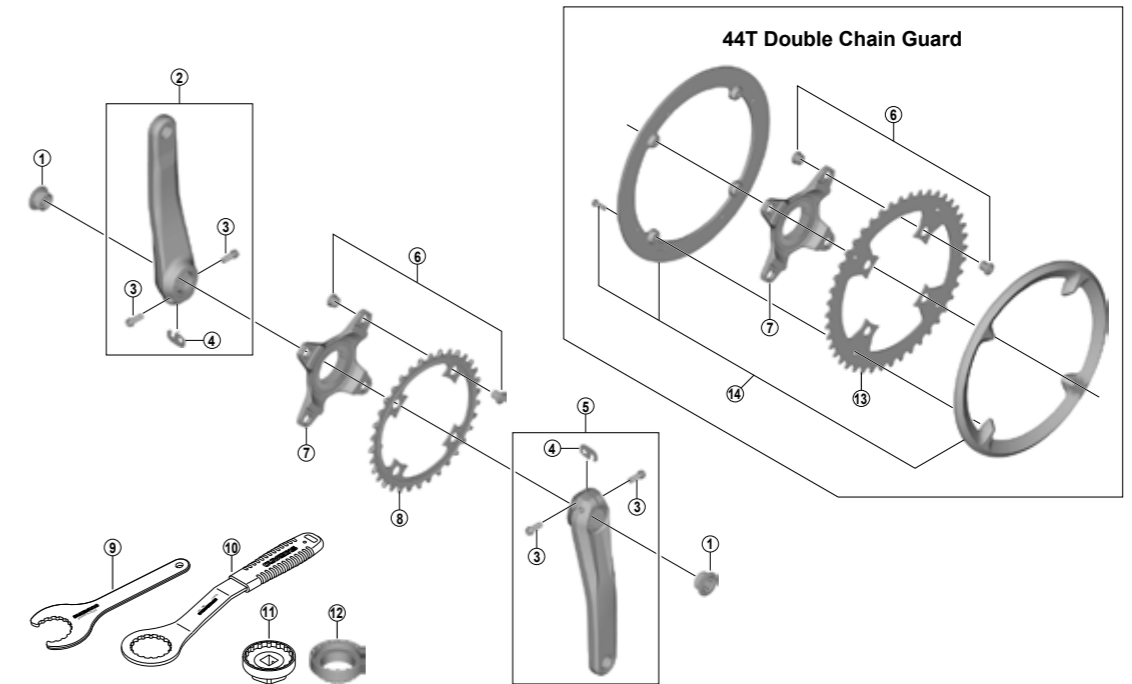
## BM-E8010 Battery Mount



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y72U00003	M4 BOLT KEY COVER
2	Y72U00008	KEY UNIT COVER ASSY
3	Y72U00001	M5 BOLT KEY UNIT
4	Y72U00007	SPACER KEY UNIT
5	Y72U00004	M3 BOLT LOWER CASE
* 6	Y72U00018	UPPER CASE ASSY 200
	Y72U00015	UPPER CASE ASSY 250
	Y72U00014	UPPER CASE ASSY 300
	Y72U00017	UPPER CASE ASSY 600
7	Y72U00005	M5 BOLT LOWER CASE F
8	Y72U00006	M5 BOLT LOWER CASE R
9	Y72U00010	SPACER LOWER CASE
10	Y72U00011	RUBBER LOWER CASE
11	Y72U00012	LOWER CASE ASSY

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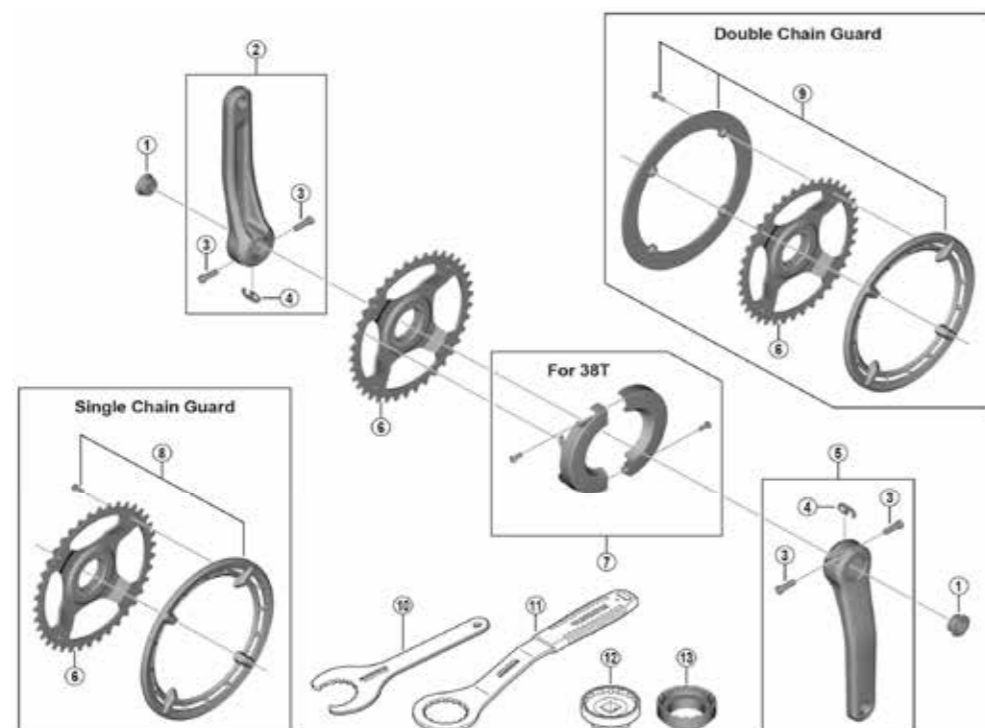
## FC-E8050/FC-E8000/FC-M8050 SM-CRE80/SM-CRE80-B/SM-CRE80-12-B SM-CRE70-B E8000 Series Crankset



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y1F811100	Crank Arm Fixing Bolt
2	Y1WY98010	Left Hand Crank Arm Unit 165 mm for FC-M8050
	Y1WY98020	Left Hand Crank Arm Unit 170 mm for FC-M8050
	Y1WY98030	Left Hand Crank Arm Unit 175 mm for FC-M8050
	Y1VW98010	Left Hand Crank Arm Unit 170 mm for FC-E8050
	Y1VW98020	Left Hand Crank Arm Unit 175 mm for FC-E8050
	Y1VX98050	Left Hand Crank Arm Unit 165 mm for FC-E8000
	Y1VX98010	Left Hand Crank Arm Unit 170 mm for FC-E8000
3	Y1VX98020	Left Hand Crank Arm Unit 175 mm for FC-E8000
	Y1G521000	Clamp Bolt (M6 x 21) with Washer for FC-M8050 / FC-E8050
	Y1G500030	Clamp Bolt (M6 x 19) for FC-E8000
4	Y1FU98120	Plate
5	Y1WY98040	Right Hand Crank Arm Unit 165 mm for FC-M8050
	Y1WY98050	Right Hand Crank Arm Unit 170 mm for FC-M8050
	Y1WY98060	Right Hand Crank Arm Unit 175 mm for FC-M8050
	Y1VW98030	Right Hand Crank Arm Unit 170 mm for FC-E8050
	Y1VW98040	Right Hand Crank Arm Unit 175 mm for FC-E8050
	Y1VX98060	Right Hand Crank Arm Unit 165 mm for FC-E8000
	Y1VX98030	Right Hand Crank Arm Unit 170 mm for FC-E8000
* 6	Y1VX98040	Right Hand Crank Arm Unit 175 mm for FC-E8000
	Y1VY98010	Gear Fixing Bolt (M8 x 8.5 / 1 Unit = 4 pcs.) & Nut (1 Unit = 4 pcs.) for SM-CRE80/SM-CRE80-B/SM-CRE80-12-B
* 7	Y0J498010	Gear Fixing Bolt (M8 x 8.5 / 1 Unit = 4 pcs.) & Nut (1 Unit = 4 pcs.) for SM-CRE70-B
	Y1VY00010	4 Arm Adapter (SM-CRE80)
* 8	Y1VY00020	4 Arm Adapter (SM-CRE80-B/SM-CRE80-12-B/SM-CRE70-B)
	Y1VY00030	Chainring 34T (SM-CRE80/SM-CRE80-B)
	Y0J534000	Chainring 34T (SM-CRE80-12-B)
	Y0J434000	Chainring 34T (SM-CRE70-B)
9	Y1VY00040	Chainring 38T (SM-CRE80/SM-CRE80-B)
	Y13009210	TL-FC32 Adapter Tool
10	Y13098000	TL-FC36 Adapter Tool
11	Y13009230	TL-FC33 Adapter Tool
12	YEZY00016	TL-FC39 FC Installation Tool
13	Y1VY44000	Chainring 44T (SM-CRE80)
14	Y1VY98020	44T Double Chain Guard Unit

Aug.-2018-4068B  
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## FC-E6100/SM-CRE61 Crankset

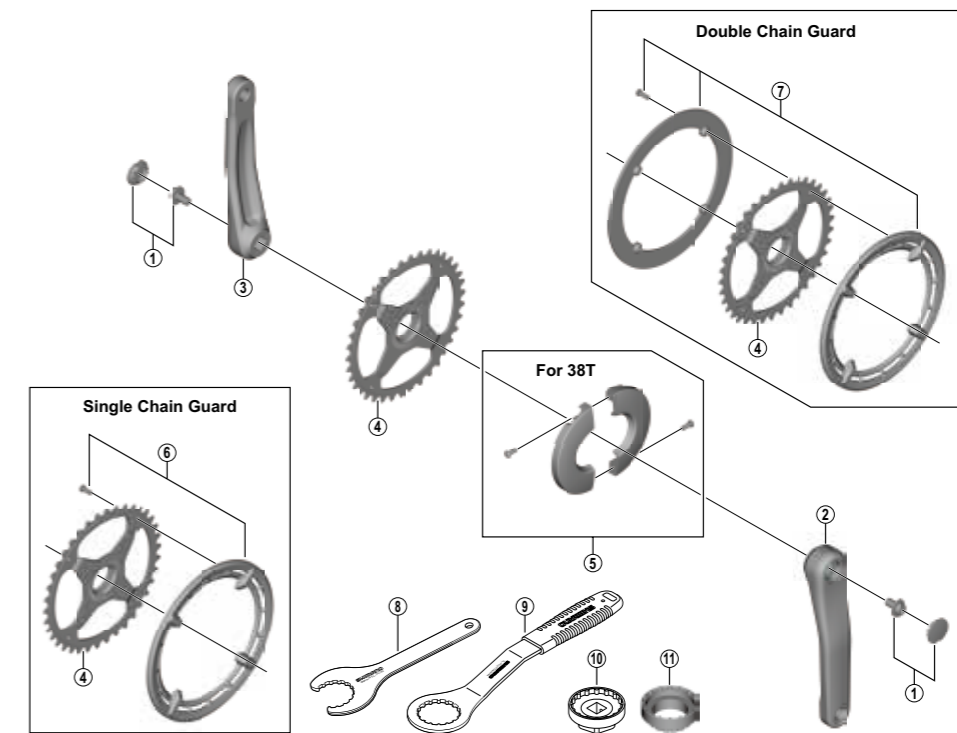


ITEM NO.	SHIMANO CODE NO.	DESCRIPTION	INTERCHANGE-ABILITY
1	Y1KS13000	Crank Arm Fixing Bolt	B
2	YOJ098010	Left Hand Crank Arm Unit 170 mm (Silver)	
	YOJ098020	Left Hand Crank Arm Unit 170 mm (Black)	
	YOJ098030	Left Hand Crank Arm Unit 175 mm (Silver)	
	YOJ098040	Left Hand Crank Arm Unit 175 mm (Black)	
3	Y1G500030	Clamp Bolt (M6 x 19)	A
4	YOJ098050	Plate	B
5	YOJ098060	Right Hand Crank Arm Unit 170 mm (Silver)	
	YOJ098070	Right Hand Crank Arm Unit 170 mm (Black)	
	YOJ098080	Right Hand Crank Arm Unit 175 mm (Silver)	
	YOJ098090	Right Hand Crank Arm Unit 175 mm (Black)	
6	YOJ138000	Chainring 38T (SM-CRE61)	
	YOJ144000	Chainring 44T (SM-CRE61)	
7	YOJ198010	38T Cover (Silver) & Fixing Bolt	
	YOJ198060	38T Cover (Black) & Fixing Bolt	
8	YOJ198020	38T Single Chain Guard Unit	
	YOJ198030	44T Single Chain Guard Unit	
9	YOJ198040	38T Double Chain Guard Unit	
	YOJ198050	44T Double Chain Guard Unit	
10	Y13009210	TL-FC32 Adapter Tool	A
11	Y13098000	TL-FC36 Adapter Tool	A
12	Y13009230	TL-FC33 Adapter Tool	A
13	YEZY00016	TL-FC39 FC Installation Tool	A

A: Same parts.  
B: Parts are usable, but differ in materials, appearance, finish, size, etc.  
Absence of mark indicates non-interchangeability.

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## FC-E5000/FC-E5010/SM-CRE50 Crankset

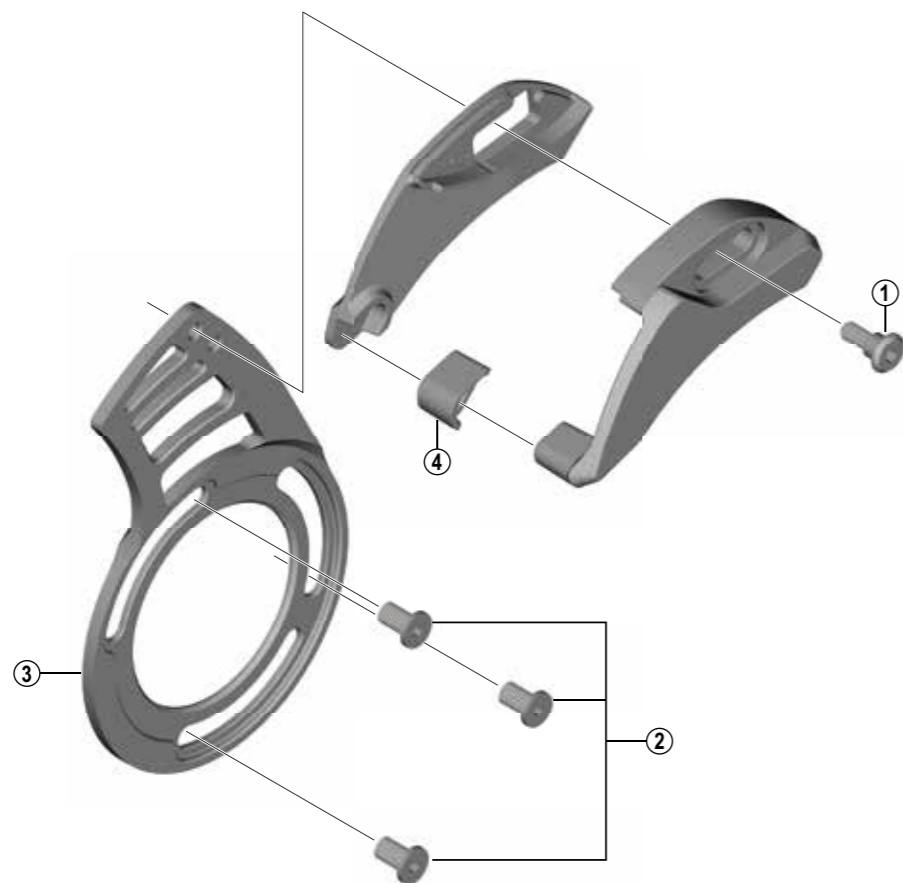


ITEM NO.	SHIMANO CODE NO.	DESCRIPTION	INTERCHANGE-ABILITY
1	Y0GC98010	Crank Arm Fixing Bolt & Cap for FC-E5000	B
	Y0GD98010	Crank Arm Fixing Bolt & Cap for FC-E5010	B
2	Y0GC07000	Right Hand Crank Arm Unit 165 mm for FC-E5000	
	Y0GC05000	Right Hand Crank Arm Unit 170 mm for FC-E5000	
	Y0GC03000	Right Hand Crank Arm Unit 175 mm for FC-E5000	
	Y0GD07010	Right Hand Crank Arm Unit 165 mm for FC-E5010	
	Y0GD05010	Right Hand Crank Arm Unit 170 mm for FC-E5010	
	Y0GD03010	Right Hand Crank Arm Unit 175 mm for FC-E5010	
3	Y0GC07100	Left Hand Crank Arm Unit 165 mm for FC-E5000	
	Y0GC05100	Left Hand Crank Arm Unit 170 mm for FC-E5000	
	Y0GC03100	Left Hand Crank Arm Unit 175 mm for FC-E5000	
	Y0GD07110	Left Hand Crank Arm Unit 165 mm for FC-E5010	
	Y0GD05110	Left Hand Crank Arm Unit 170 mm for FC-E5010	
	Y0GD03110	Left Hand Crank Arm Unit 175 mm for FC-E5010	
4	YOJ338000	Chainring 38T (SM-CRE50)	
	YOJ344000	Chainring 44T (SM-CRE50)	
5	YOJ398010	38T Cover & Fixing Bolt	
6	YOJ398020	38T Single Chain Guard Unit	
	YOJ398030	44T Single Chain Guard Unit	
7	YOJ398040	38T Double Chain Guard Unit	
	YOJ398050	44T Double Chain Guard Unit	
8	Y13009210	TL-FC32 Adapter Tool	A
9	Y13098000	TL-FC36 Adapter Tool	A
10	Y13009230	TL-FC33 Adapter Tool	A
11	YEZY00016	TL-FC39 FC Installation Tool	A

A: Same parts.  
B: Parts are usable, but differ in materials, appearance, finish, size, etc.  
Absence of mark indicates non-interchangeability.

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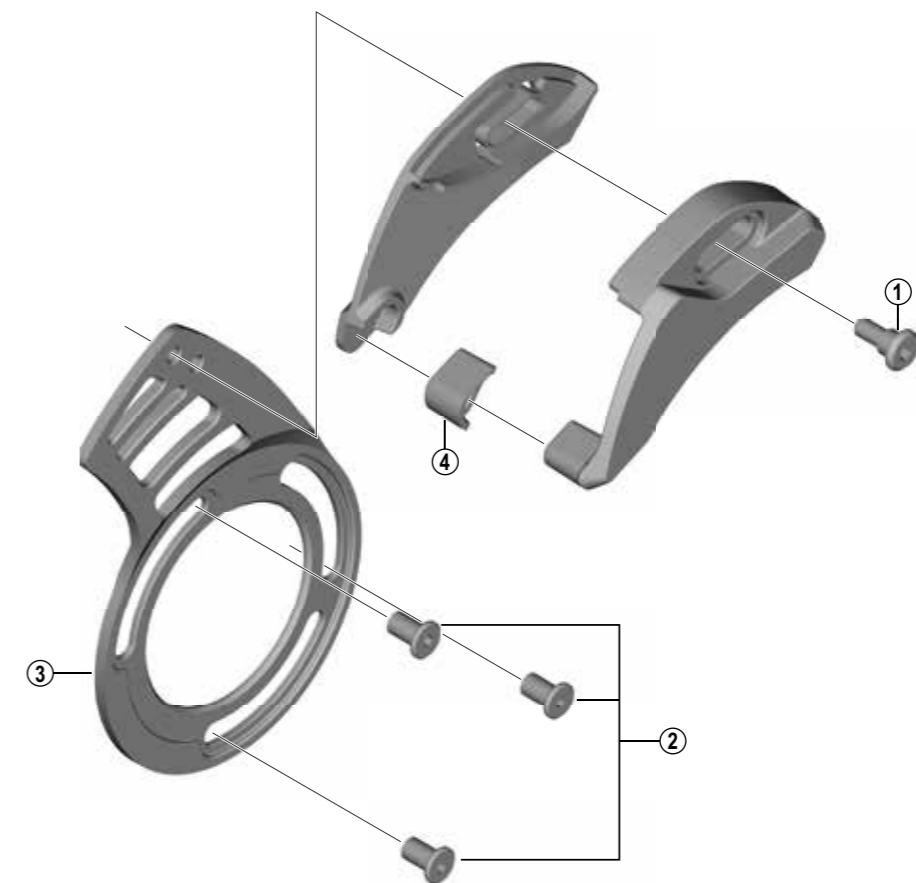
## SM-CDE80 Chain Device



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y1VV00005	Bolt M5
2	Y1VV98010	Back Plate Fixing Bolts (3 pcs.)
* 3	Y1VV00009	Back Plate
* 4	Y1VV00008	Rubber Band

Jan.-2018-4151A  
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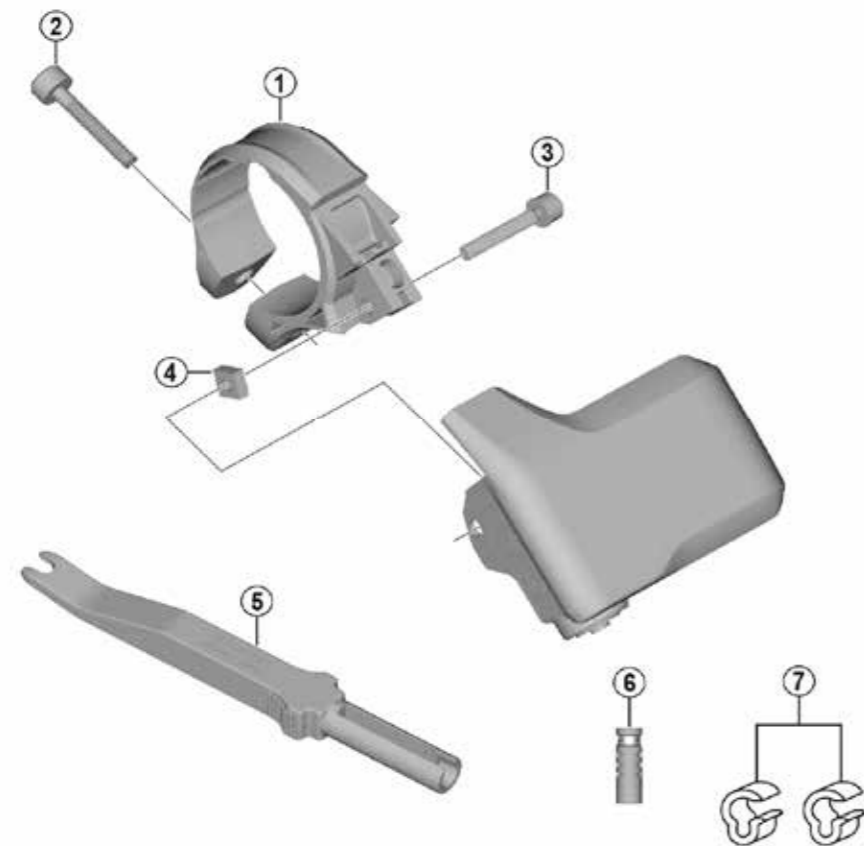
## SM-CDE70 Chain Device



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y1VV00005	Bolt M5
2	Y1VV98010	Back Plate Fixing Bolts (3 pcs.)
3	Y0GS00001	Back Plate
4	Y1VV00008	Rubber Band

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## SC-E8000 Cycle Computer (Information Display)



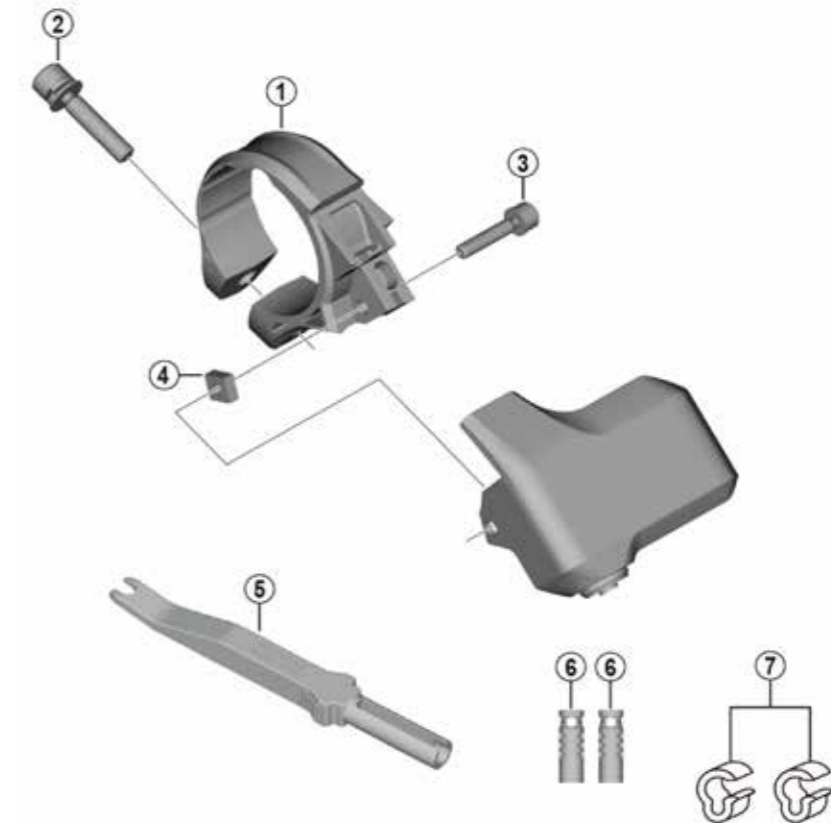
SC-MT800

ITEM NO.	SHIMANO CODE NO.	DESCRIPTION	INTERCHANGE-ABILITY
1	Y71F00002	Stay A (Ø31.8)	A
	Y71F00003	Stay B (Ø35)	A
2	Y7GC00700	Stay Fixing Bolt	A
3	Y72K00002	Case Fixing Bolt	
4	Y7GC00600	Case Nut	A
5	Y6VE16000	TL-EW02 Plug Tool	A
6	Y6VE15000	Dummy Plug	A
* 7	Y70H98040	Band A (2 pcs.)	

A: Same parts.  
B: Parts are usable, but differ in materials, appearance, finish, size, etc.  
Absence of mark indicates non-interchangeability.

Feb.-2017-4069A  
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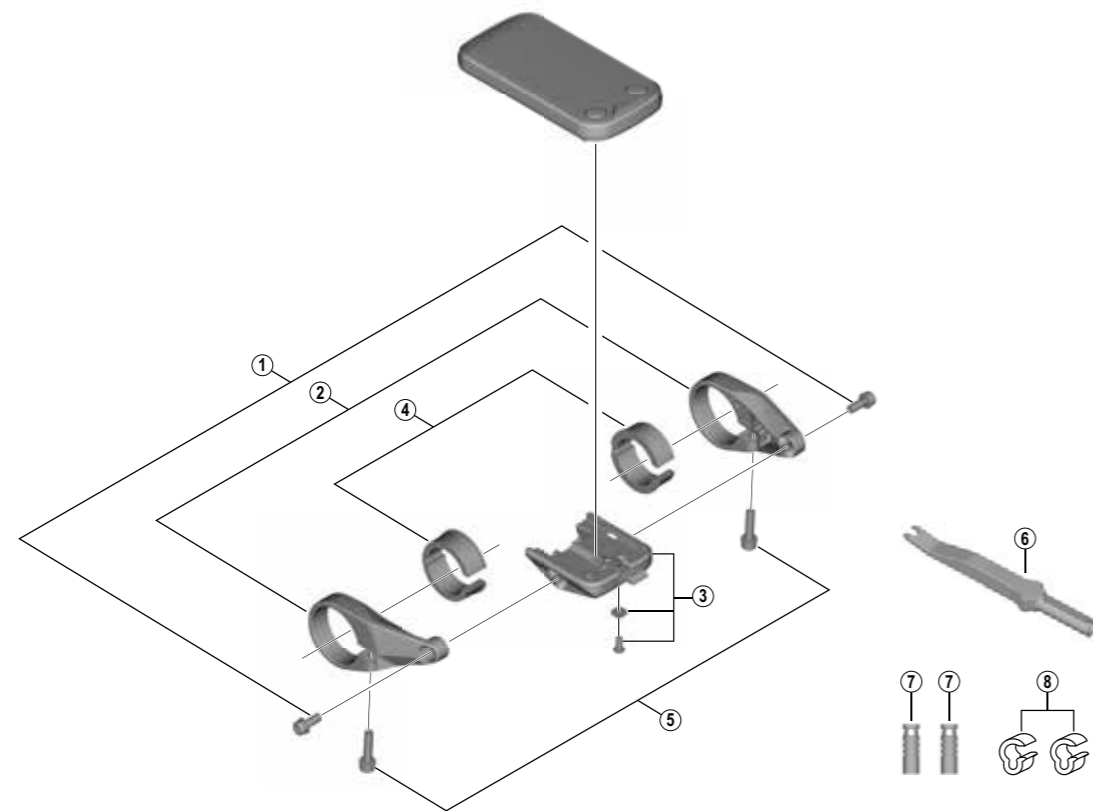
## SC-E7000 Cycle Computer (Information Display)



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y79G01020	Stay A (Dia. 31.8 mm) w/Nut
	Y79G01030	Stay B (Dia. 35 mm) w/Nut
2	Y79G01050	Stay Fixing Bolt
3	Y79G01040	Case Fixing Bolt
4	Y7GC00600	Case Nut
5	Y6VE16000	TL-EW02 Plug Tool
6	Y6VE15000	Dummy Plug
7	Y70H98040	Band A (2 pcs.)

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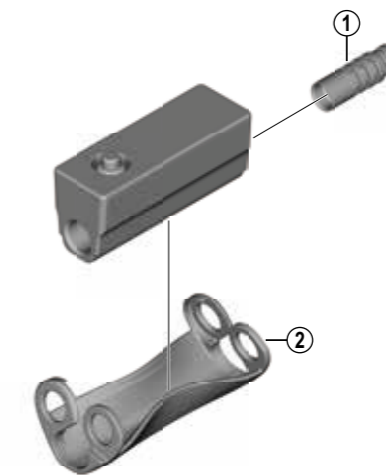
## SC-E6100 Cycle Computer (Information Display)



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y78S98010	Stay Fixing Screw (M4 x 11 mm) 2 pcs.
2	Y78S98020	Stay R & Stay L
3	Y78S98030	Bracket Terminal
4	Y70Z98040	Adapter (Dia. 25.4 mm) 2 pcs.
5	Y70Z98050	Clamp Screw (M4 x 20 mm) 2 pcs.
	Y70Z98010	Clamp Screw (M4 x 15.5 mm) 2 pcs.
6	Y6VE16000	TL-EW02 Plug Tool
7	Y6VE15000	Dummy Plug
8	Y70H98040	Band A (2 pcs.)

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## EW-EN100 Junction

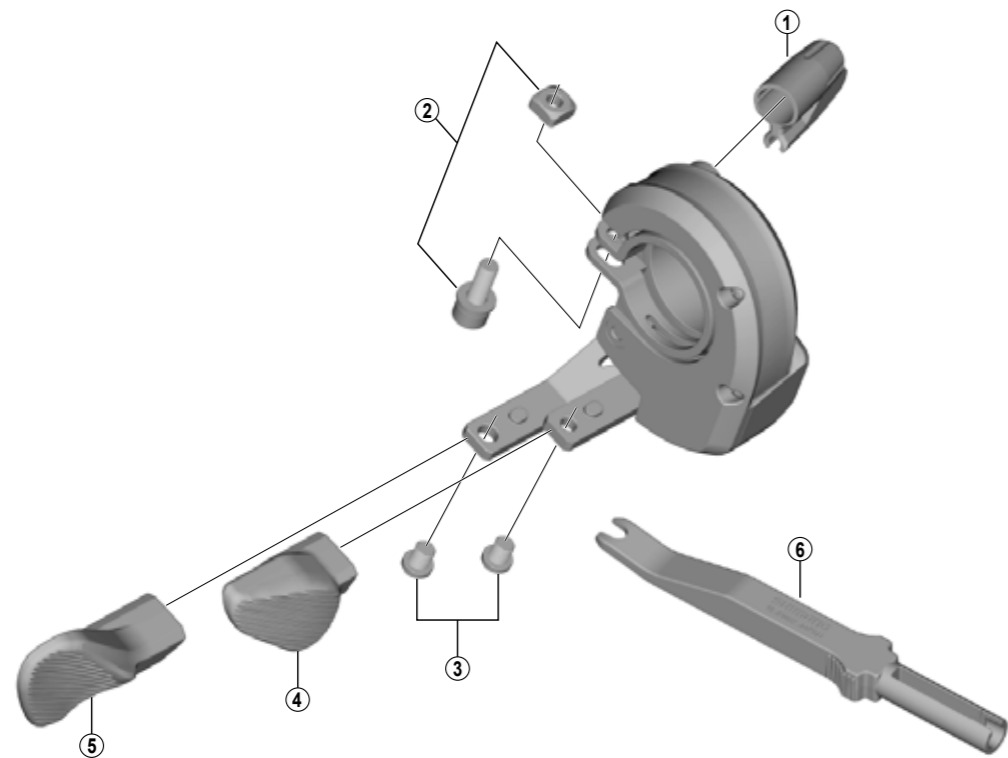


ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y6VE15000	Dummy Plug
2	Y78T00050	Adapter

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## SW-E8000-L Switch Unit for Assist



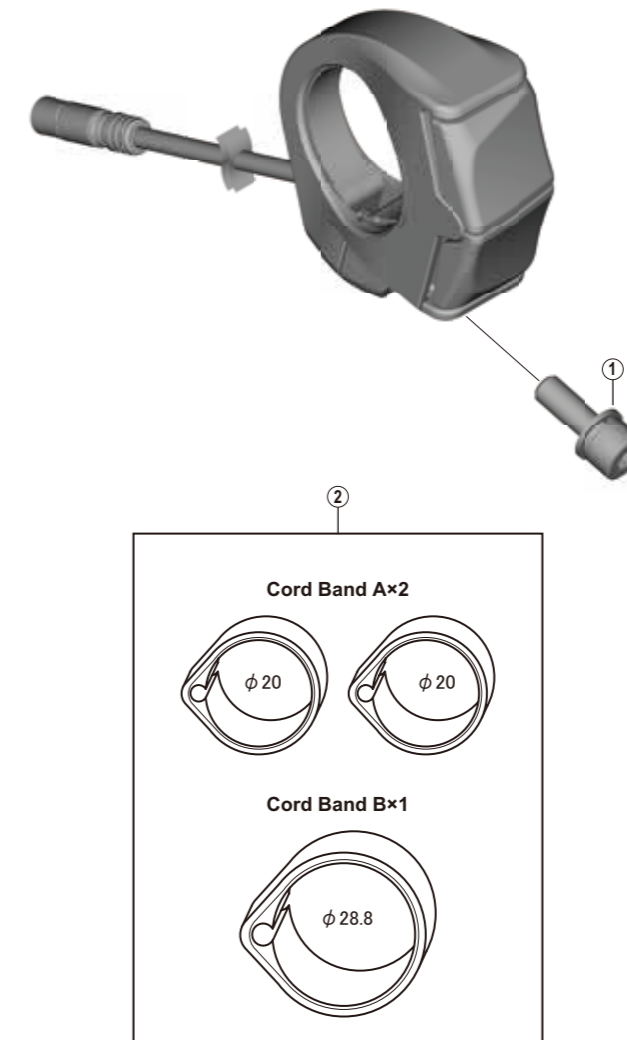
SW-M8050

ITEM NO.	SHIMANO CODE NO.	DESCRIPTION	INTERCHANGE-ABILITY
1	Y0B200019	Cable Cap	A
2	Y0B298010	Clamp Bolt (M4 x 12) & Nut	A
3	Y01W98010	Lever Slide Fixing Bolt (2 pcs.)	A
4	Y0B300010	A Lever L	A
5	Y0B300002	B Lever L	A
6	Y6VE16000	TL-EW02 Plug Tool	A

A: Same parts.  
 B: Parts are usable, but differ in materials, appearance, finish, size, etc.  
 Absence of mark indicates non-interchangeability.

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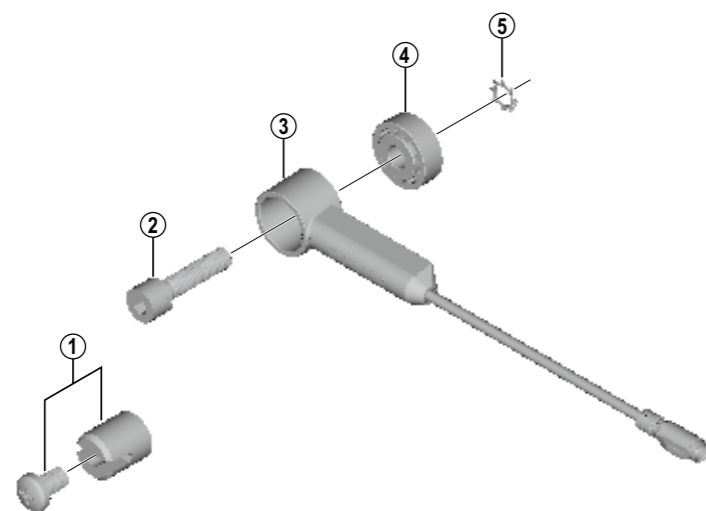
## SW-E7000 Switch



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y0GP11000	Clamp Bolt (M4 x 12)
2	Y7EU98010	Cord Band Unit

Sep.-2018-4484  
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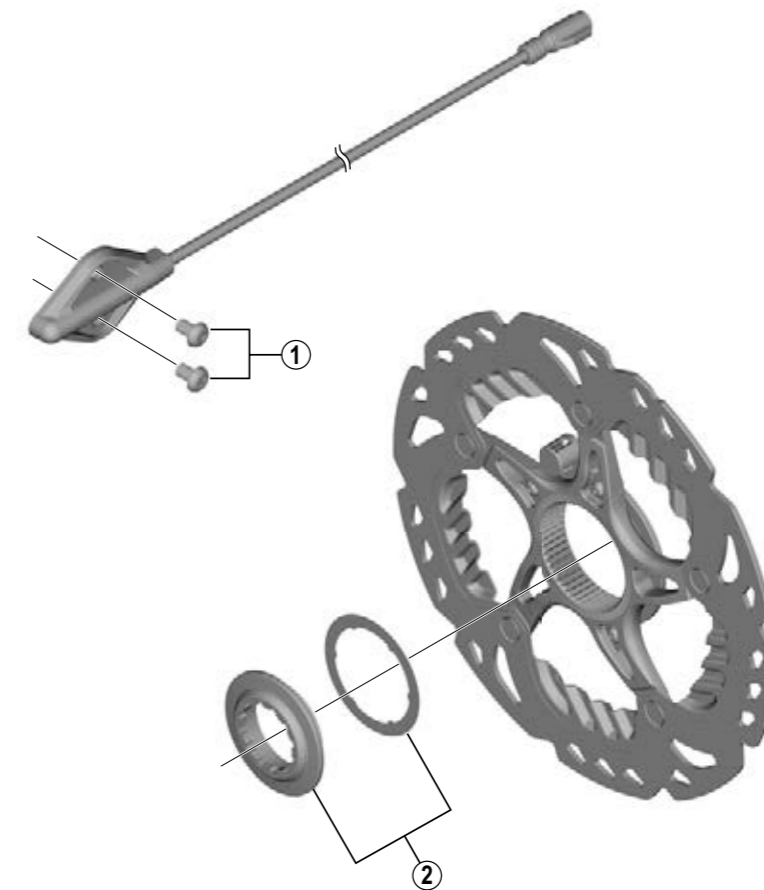
## SM-DUE10 Speed Sensor Unit



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y72H98010	Magnet Unit
2	Y70L000G0	Speed Sensor Fixing Bolt L16 (4 mm Hexagon Head)
	Y70L000U0	Speed Sensor Fixing Bolt L22 (4 mm Hexagon Head)
3	Y72H00007	Speed Sensor L550
	Y72H00010	Speed Sensor L1410
4	Y70L000F0	Spacer
5	Y70L000M0	Toothed Washer

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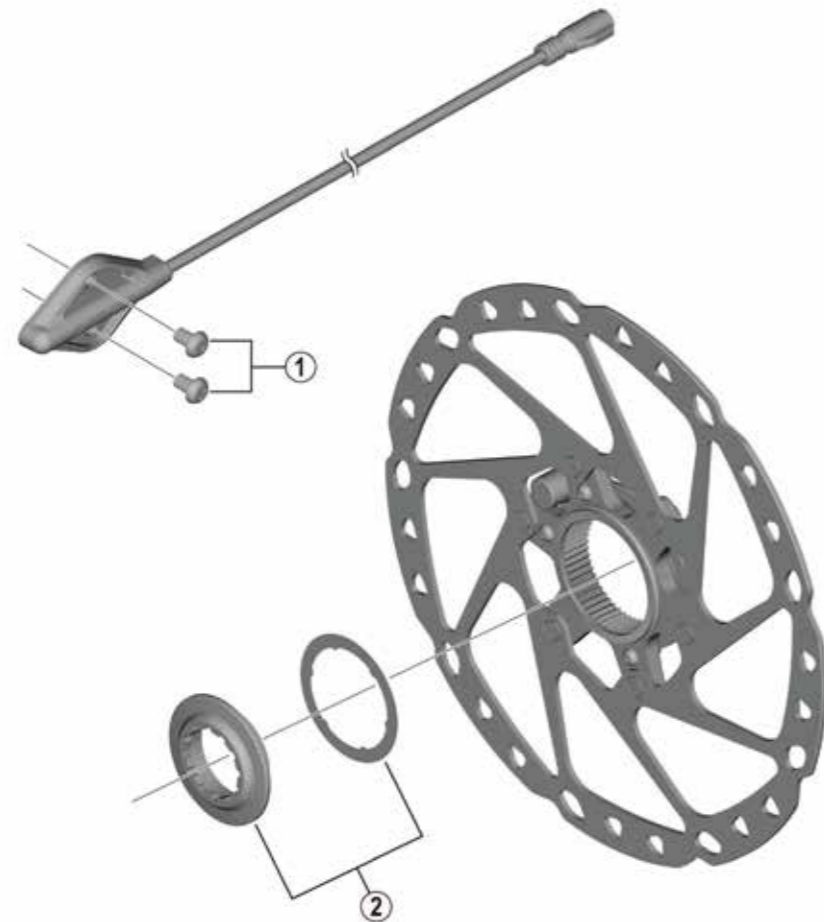
## SM-DUE11 Speed Sensor Unit RT-EM900/EM800 Disc Brake Rotor



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y72J98010	Speed Sensor Fixing Bolt (M3) 2 pcs.
2	Y8K198010	Lock Ring & Washer

Aug.-2017-4279  
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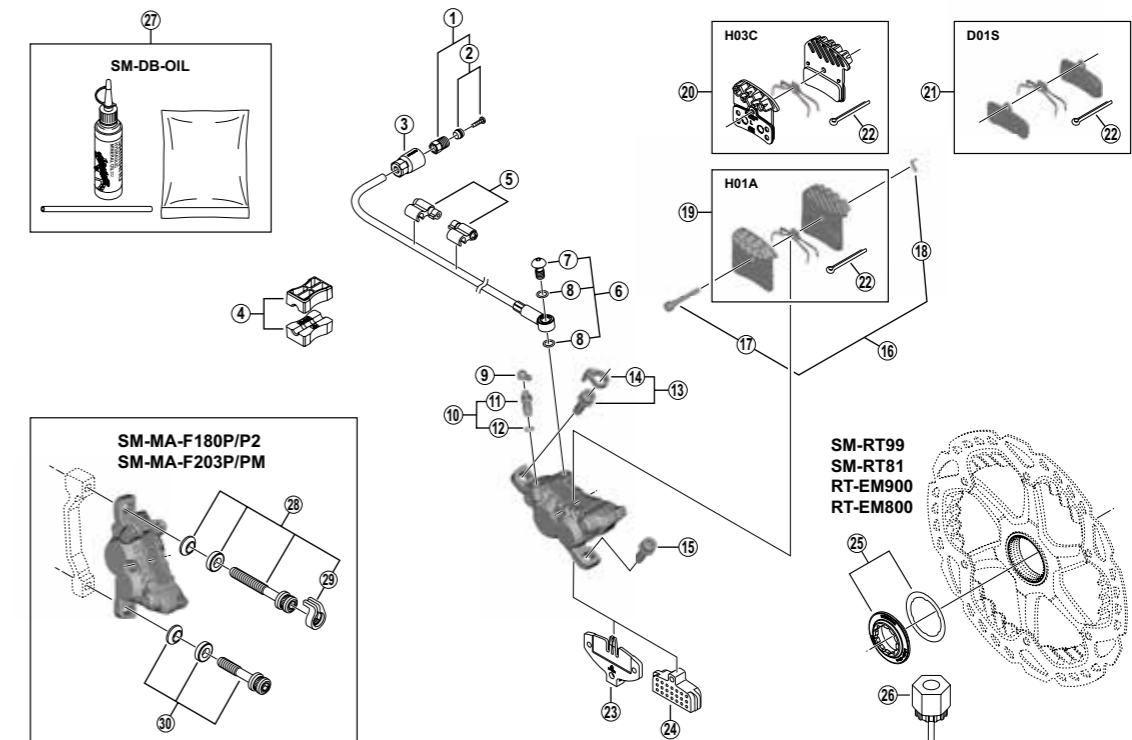
## SM-DUE11 Speed Sensor Unit RT-EM600 Disc Brake Rotor



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y72J98010	Speed Sensor Fixing Bolt (M3) 2 pcs.
2	Y8K998010	Lock Ring & Washer

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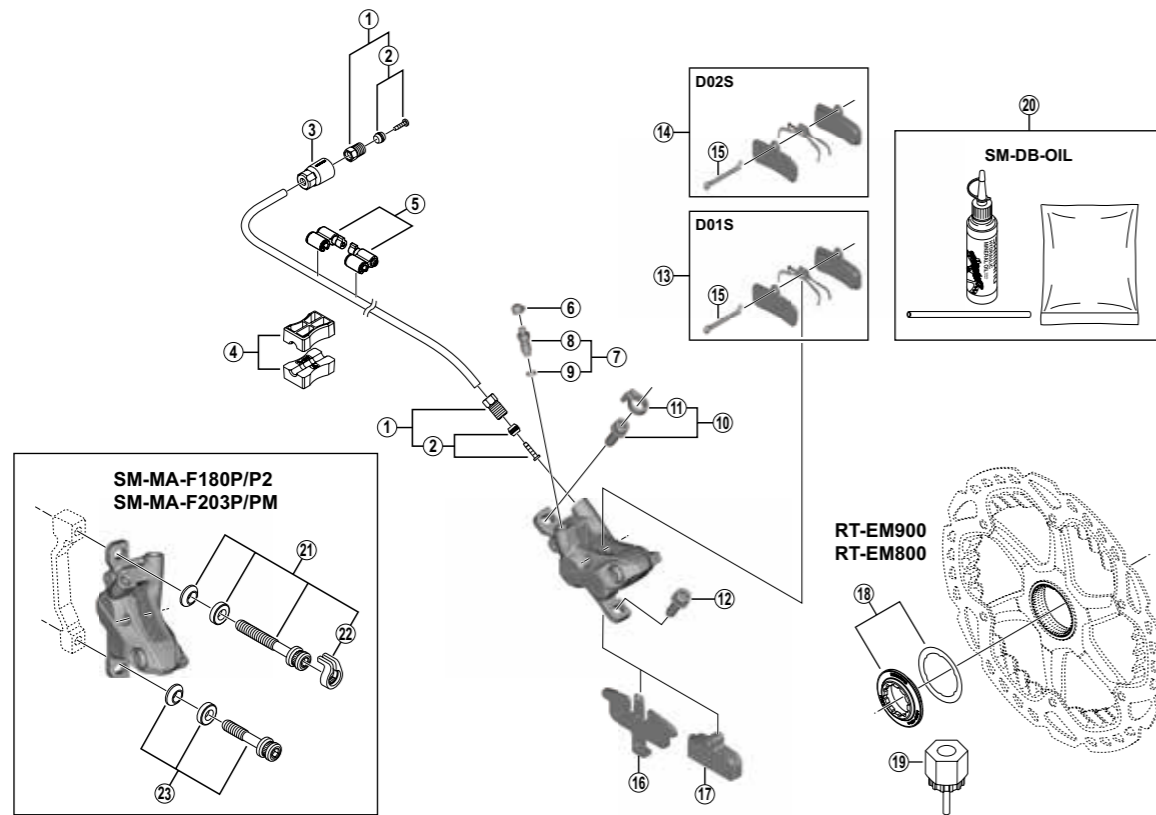
## BR-M8020 Brake Caliper SM-BH90-SBLS Brake Hose SM-RT99/SM-RT81/RT-EM900/RT-EM800 Disc Rotor



ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y8JA98010	Connecting Bolt Unit
2	Y8JA98020	Olive & Connector Insert
3	Y8JA07000	Cover
4	Y8H198030	TL-BH61 Special Tool (2 pcs.)
5	Y83098040	SM-HANG Hose Supporter A & B
6	Y8H098010	Banjo Bolt & O-Ring
7	Y8H001500	Banjo Bolt
8	Y8SY28000	O-Ring
9	Y8B214000	Bleed Nipple Cap
10	Y8CL98050	Bleed Nipple & Seal Ring
11	Y8CL24200	Bleed Nipple
12	Y8B511001	O-Ring for Bleed Nipple
13	Y8DS98010	Caliper Fixing Bolt (M6 x 18.7) & Snap Ring
14	Y8C511000	Snap Ring
15	Y8C509020	Caliper Fixing Bolt (M6 x 18.7)
16	Y8JZ98010	Pad Axle & Snap Ring
17	Y8JZ05000	Pad Axle
18	Y8J716000	Snap Ring
19	Y8VT98010	Resin Pad (H01A) w/Fin & Spring w/Split Pin
20	Y8VT98020	Metal Pad (H03C) w/Fin & Spring w/Split Pin
21	Y8FF98020	Resin Pad (D01S) & Spring w/Split Pin
22	Y8DB06100	Split Pin
23	Y8FF18000	Pad Spacer
24	Y8FF19000	Bleeding Spacer
25	Y8K198010	Lock Ring & Washer
26	Y12009230	TL-LR15 Lock Ring Removal Tool
27	Y83998010	Mineral Oil Bleed Kit (50 ml)
28	Y8G498020	Caliper Fixing Bolt Unit (M6 x 37.9) for SM-MA-F180P/P2
29	Y8J498010	Caliper Fixing Bolt Unit (M6 x 40.2) for SM-MA-F203P/PM
30	Y81703000	Snap Ring
	Y8G498030	Caliper Fixing Bolt Unit (M6 x 32.1) for SM-MA-F180P/P2
	Y8J498020	Caliper Fixing Bolt Unit (M6 x 34.4) for SM-MA-F203P/PM

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# BR-MT520 Brake Caliper **SM-BH90-SS** Brake Hose RT-EN900/RT-EM800 Disc Rotor



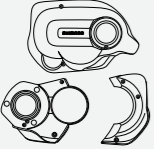

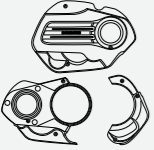

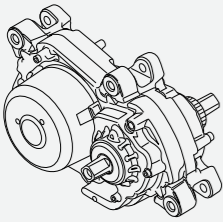
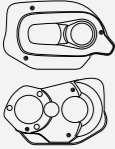
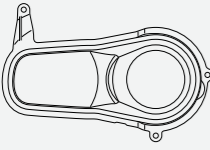
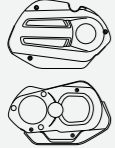
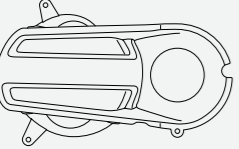
ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
1	Y8KH98010	Connecting Bolt Unit
2	Y8JA98020	Olive & Connector Insert
3	Y8WM14000	Cover
4	Y8H198030	TL-BH61 Special Tool (2 pcs.)
5	Y83098040	SM-HANG Hose Supporter A & B
6	Y8B214000	Bleed Nipple Cap
7	Y8E598020	Bleed Nipple & Seal Ring
8	Y8CL24100	Bleed Nipple
9	Y8B511000	O-Ring for Bleed Nipple
10	Y8DS98010	Caliper Fixing Bolt (M6 x 18.7) & Snap Ring
11	Y8C511000	Snap Ring
12	Y8C509020	Caliper Fixing Bolt (M6 x 18.7)
13	Y8FF98020	Resin Pad (D01S) & Spring w/Split Pin
14	Y8FF98010	Metal Pad (D02S) & Spring w/Split Pin
15	Y8DB06100	Split Pin
16	Y1Y003000	Pad Spacer
17	Y8FF19000	Bleeding Spacer
18	Y8K198010	Lock Ring & Washer
19	Y12009230	TL-LR15 Lock Ring Removal Tool
20	Y83998010	Mineral Oil Bleed Kit (50 ml)
21	Y8G498020	Caliper Fixing Bolt Unit (M6 x 37.9) for SM-MA-F180P/P2
22	Y8J498010	Caliper Fixing Bolt Unit (M6 x 40.2) for SM-MA-F203P/PM
23	Y81703000	Snap Ring
	Y8G498030	Caliper Fixing Bolt Unit (M6 x 32.1) for SM-MA-F180P/P2
	Y8J498020	Caliper Fixing Bolt Unit (M6 x 34.4) for SM-MA-F203P/PM

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# ORIGINAL SERVICE PARTS & TOOLS

## Drive Unit / Drive Unit Cover

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	DU-E8000	Drive unit without cover (SM-DUE80)	IDUE8000A	✓	-	-	-
	SM-DUE80	Drive unit cover for DU-E8000 standard with screw	ISMDUE80A	✓	-	-	-
		Drive unit cover for DU-E8000 large with screw	ISMDUE80B	✓	-	-	-
	DU-E7000	Drive unit without cover (SM-DUE70)	IDUE7000	-	✓	-	-
	SM-DUE70	Drive unit cover for DU-E7000 standard with screw	ESMDUE70A	-	✓	-	-
		Drive unit cover for DU-E7000 large with screw	ESMDUE70B	-	✓	-	-
		Drive unit cover for DU-E7000 custom cover with screw	ESMDUE70C	-	✓	-	-
	DU-E6100	Drive unit without cover (SM-DUE61)	IDUE6100	-	-	✓	-
	DU-E6110	Drive unit for coaster brake without cover (SM-DUE61)	IDUE6110	-	-	✓	-

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	SM-DUE61	Drive unit cover for DU-E6100 city with screw	ESMDUE61C	-	-	✓	-
		Drive unit cover for DU-E6100 city custom cover with screw	ESMDUE61CC	-	-	✓	-
		Drive unit cover for DU-E6100 trekking with screw	ESMDUE61T	-	-	✓	-
		Drive unit cover for DU-E6100 trekking custom cover with screw	ESMDUE61TC	-	-	✓	-
	DU-E5000	Drive unit without cover (SM-DUE50)	IDUE5000	-	-	-	✓
		Drive unit for coaster brake without cover (SM-DUE50)	IDUE5000	-	-	-	✓
	SM-DUE50	Drive unit cover for DU-E5000 city with screw	ESMDUE50C	-	-	-	✓
		Drive unit cover for DU-E5000 city custom cover with screw	ESMDUE50CC	-	-	-	✓
		Drive unit cover for DU-E5000 trekking with screw	ESMDUE50T	-	-	-	✓
		Drive unit cover for DU-E5000 trekking custom cover with screw	ESMDUE50TC	-	-	-	✓

## Battery / Battery charger / Charging port

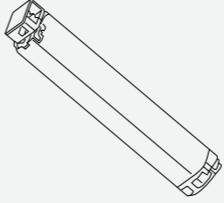
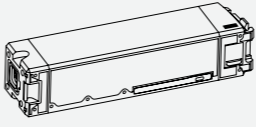
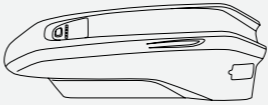
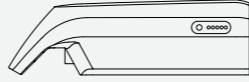
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	BT-E8035	Battery BT-E8035 for frame type (down tube integrated) 504Wh	IBTE8035B	✓	✓	✓	✓
	BT-E8020	Battery BT-E8020 for frame type (down tube integrated) 504Wh black	IBTE8020B	✓	✓	✓	✓
	BT-E8010	Battery BT-E8010 for frame type (down tube) 504Wh black	IBTE8010B	✓	✓	✓	✓
	BT-E8014	Battery BT-E8014 for frame type (down tube) 418Wh black	IBTE8014B	✓	✓	✓	✓
	BT-E6010	Battery BT-E6010 for frame type (down tube) 418Wh gray	IBTE6010GB	✓	✓	✓	✓
		Battery BT-E6010 for frame type (down tube) 418Wh black	IBTE6010LB	✓	✓	✓	✓

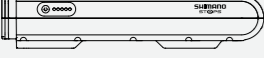
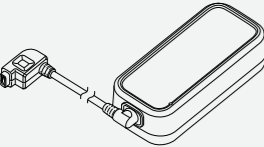
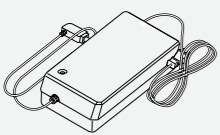
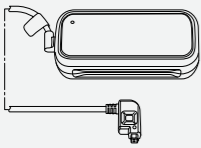
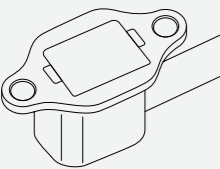
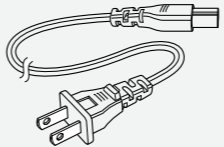
Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	BT-E6001	Battery BT-E6001 for rear carrier type 504Wh gray	IBTE6001GB	-	-	✓	✓
		Battery BT-E6001 for rear carrier type 504Wh black	IBTE6001LB	-	-	✓	✓
	BT-E6000	Battery BT-E6000 for rear carrier type 418Wh gray	IBTE6000GB	-	-	✓	✓
		Battery BT-E6000 for rear carrier type 418Wh black	IBTE6000LB	-	-	✓	✓
	EC-E8004	Portable Battery Charger EC-E8004 without SM-BCC1	IECE80044	✓	✓	✓	✓
	EC-E6000	Battery charger built in AC power	IECE60004X	✓	✓	✓	✓
	EC-E6002	Battery charger EC-E6002 without SM-BCC1	IECE6002C	✓	✓	✓	✓
	EW-CP100	Satellite Charging Port EW-CP100 cable length 200mm	IEWCP100A	✓	✓	✓	✓
		Satellite Charging Port EW-CP100 cable length 550mm	IEWCP100B	✓	✓	✓	✓

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	SM-BCC1	Power cable for EC-E6002 220V for EU (Type-C)	ISMBC14	✓	✓	✓	✓

## Speed Sensor

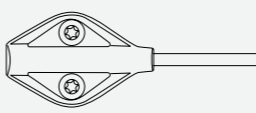
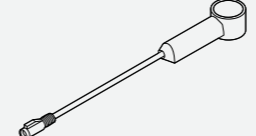
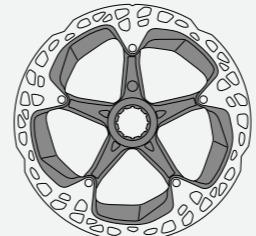
Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	SM-DUE11	Speed sensor unit cable 760mm length	ISM DUE11A	✓	✓	✓	✓
	SM-DUE10	Speed sensor unit cable 540mm length	ISM DUE10	✓	✓	✓	✓
	RT-EM910	Rotor L size 203mm lock ring (external serration) ICETECHNOLOGIES FREEZA	IRTEM910LE	✓	✓	✓	✓
		Rotor L size 203mm lock ring (internal serration) ICETECHNOLOGIES FREEZA	IRTEM910LI	✓	✓	✓	✓
		Rotor M size 180mm lock ring (external serration) ICETECHNOLOGIES FREEZA	IRTEM910ME	✓	✓	✓	✓
		Rotor M size 180mm lock ring (internal serration) ICETECHNOLOGIES FREEZA	IRTEM910MI	✓	✓	✓	✓
		Rotor S size 160mm lock ring (external serration) ICETECHNOLOGIES FREEZA	IRTEM910SE	✓	✓	✓	✓
		Rotor S size 160mm lock ring (internal serration) ICETECHNOLOGIES FREEZA	IRTEM910SI	✓	✓	✓	✓

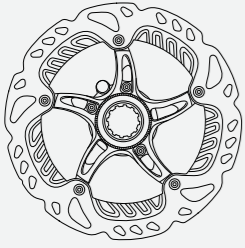
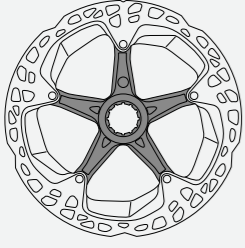
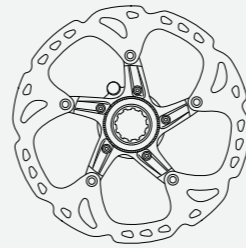
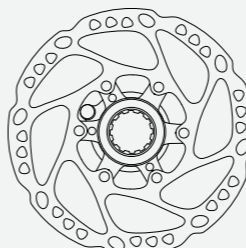
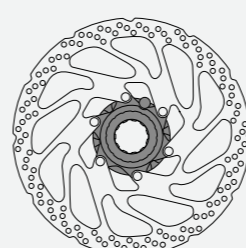
Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	RT-EM900	Rotor L size 203mm lock ring ICETECHNOLOGIES FREEZA	IRTEM900L	✓	✓	✓	✓
		Rotor M size 180mm lock ring ICETECHNOLOGIES FREEZA	IRTEM900M	✓	✓	✓	✓
		Rotor S size 160mm lock ring ICETECHNOLOGIES FREEZA	IRTEM900S	✓	✓	✓	✓
	RT-EM810	Rotor L size 203mm lock ring (external serration) ICETECHNOLOGIES FREEZA	IRTEM810LE	✓	✓	✓	✓
		Rotor L size 203mm lock ring (internal serration) ICETECHNOLOGIES FREEZA	IRTEM810LI	✓	✓	✓	✓
		Rotor M size 180mm lock ring (external serration) ICETECHNOLOGIES FREEZA	IRTEM810ME	✓	✓	✓	✓
		Rotor M size 180mm lock ring (internal serration) ICETECHNOLOGIES FREEZA	IRTEM810MI	✓	✓	✓	✓
		Rotor S size 160mm lock ring (external serration) ICETECHNOLOGIES FREEZA	IRTEM810SE	✓	✓	✓	✓
		Rotor S size 160mm lock ring (internal serration) ICETECHNOLOGIES FREEZA	IRTEM810SI	✓	✓	✓	✓

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	RT-EM800	Rotor M size 180mm lock ring ICETECHNOLOGIES	IRTEM800M	✓	✓	✓	✓
		Rotor S size 160mm lock ring A/C	IRTEM800S	✓	✓	✓	✓
	RT-EM600	Rotor L size 203mm lock ring	ERTEM600L	✓	✓	✓	✓
		Rotor M size 180mm lock ring	ERTEM600M	✓	✓	✓	✓
		Rotor S size 160mm lock ring	ERTEM600S	✓	✓	✓	✓
	RT-EM300	Rotor L size 203mm lock ring (Internal and External serration)	ERTEM300L	✓	✓	✓	✓
		Rotor M size 180mm lock ring (Internal and External serration)	ERTEM300M	✓	✓	✓	✓
		Rotor S size 160mm lock ring (Internal and External serration)	ERTEM300S	✓	✓	✓	✓

### Cycle Computer (Information Display) / Junction

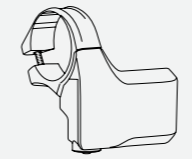
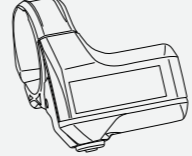

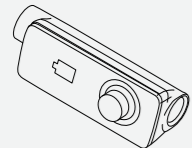
Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	SC-E8000	Cycle computer SC-E8000 including band A (2pcs) and clamp band (31.8mm & 35mm)	ISCE8000B	✓	-	-	-
	SC-E7000	Cycle computer SC-E7000 including band A (2pcs) and clamp band (31.8mm & 35mm)	ISCE7000D	✓	✓	✓	✓

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	SC-E6100	Cycle computer SC-E6100 (display only)	ISCE6100DF	✓	✓	✓	✓
	EW-EN100	Junction-A E-Tube port x2	IEWEN100A	✓	✓	✓	✓

### Assist Switch / Shift Switch

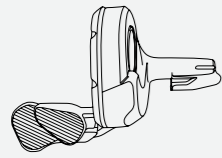
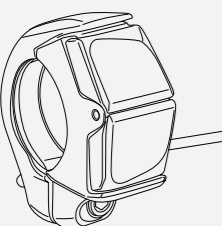
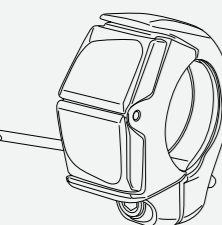


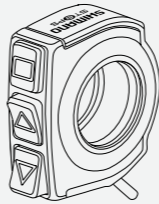
Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	SW-E8000-L	Switch unit (left) for power mode change FIREBOLT	ISWE8000L	✓	✓	✓	✓
	SW-E7000-L	Switch unit (left) for power mode change wire length 300mm	ISWE7000L300	✓	✓	✓	✓
		Switch unit (left) for power mode change wire length 400mm	ISWE7000L400	✓	✓	✓	✓
		Switch unit (left) for power mode change wire length 700mm	ISWE7000L700	✓	✓	✓	✓
	SW-E7000-R	Switch unit (right) for SEIS shift wire length 300mm	ISWE7000R300	✓	✓	✓	✓
		Switch unit (right) for SEIS shift wire length 700mm	ISWE7000R700	✓	✓	✓	✓

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	SW-E6010-L	Switch unit (left) for power mode change wire length 357mm	ISWE6010L	✓	✓	✓	✓
	SW-E6010-R	Switch unit (right) for SEIS shift wire length 357mm	ISWE6010R	✓	✓	✓	✓
	SW-E6000	Switch gray for assist (initial setting) compatible with SEIS by E-TUBE PROJECT including cord band A x2, cord band B x1	ISWE6000A1	✓	✓	✓	✓
		Switch black for assist (initial setting) compatible with SEIS by E-TUBE PROJECT including cord band A x2, cord band B x1	ISWE6000A1L	✓	✓	✓	✓

### Chain Device / Chainring


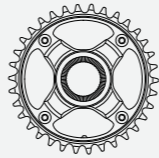
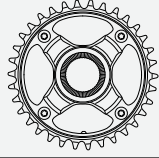
Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	SM-CDE80	Chain device for FC-E8000/E8050 drive unit mount with plate	ISMCD80	✓	✓	-	-
	SM-CRE80-12-B	Chainring for FC-M8050/E8050 34T without CG for 12spd, chainline 53mm, DYNAMIC CHAIN ENGAGEMENT	ISMCRE8012BA4X	✓	✓	✓	-
		Chainring for FC-M8050/E8050 36T without CG for 12spd, chainline 53mm, DYNAMIC CHAIN ENGAGEMENT	ISMCRE8012BA6X	✓	✓	✓	-
		Chainring for FC-M8050/E8050 38T without CG for 12spd, chainline 53mm, DYNAMIC CHAIN ENGAGEMENT	ISMCRE8012BA8X	✓	✓	✓	-
	SM-CRE70-12-B	Chainring for FC-M8050/E8050 36T without CG for 12spd, chainline 53mm	ESMCRE7012BA6XL	✓	✓	✓	-



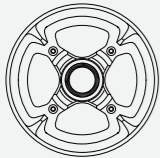
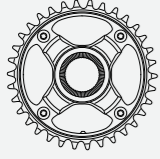
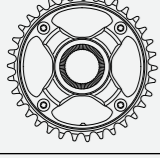
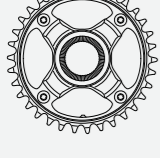
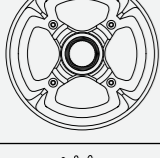
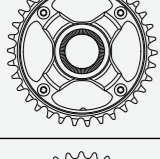
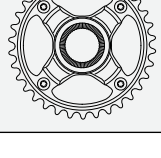
Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	SM-CRE70-12	Chainring for FC-E8000/E8050 42T with CG for 12spd, chainline 50mm	ESMCRE7012B2DGL	✓	✓	✓	-
	SM-CRE80	Chainring for FC-E8000/E8050 34T without CG for chainline 50mm, DYNAMIC CHAIN ENGAGEMENT	ISMCRE80A4X	✓	✓	✓	-
		Chainring for FC-E8000/E8050 38T without CG for chainline 50mm, DYNAMIC CHAIN ENGAGEMENT	ISMCRE80A8X	✓	✓	✓	-
		Chainring for FC-E8000/E8050 44T with CG for chainline 50mm, DYNAMIC CHAIN ENGAGEMENT	ISMCRE80B4DG	✓	✓	✓	-
	SM-CRE80-R	Chainring for FC-E8000/E8050 47T without CG for 10/11spd, chainline 50mm	ISMCRE80R7XL	✓	✓	✓	-
	SM-CRE80-B	Chainring for FC-E8000/E8050 34T without CG for chainline 53mm, DYNAMIC CHAIN ENGAGEMENT	ISMCRE80BA4X	✓	✓	✓	-
		Chainring for FC-E8000/E8050 38T without CG for chainline 53mm, DYNAMIC CHAIN ENGAGEMENT	ISMCRE80BA8X	✓	✓	✓	-
	SM-CRE70	Chainring for FC-E8000/E8050 38T with CG for 11spd, chainline 50mm	ESMCRE70A8DGL	✓	✓	✓	-
		Chainring for FC-E8000/E8050 38T without CG for 11spd, chainline 50mm	ESMCRE70A8XL	✓	✓	✓	-
	SM-CRE70-B	Chainring for FC-E8000/E8050 34T without CG for chainline 53mm	ESMCRE70BA4X	✓	✓	✓	-

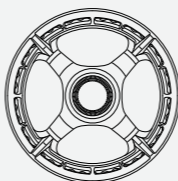
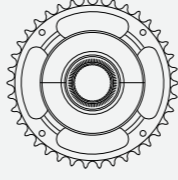
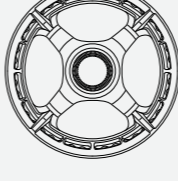
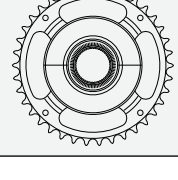


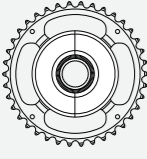

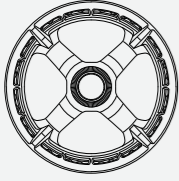

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	SM-CRE61	Chainring for FC-E8000/E6100 38T W/CG(Double) for chainline 46.5mm	ESMCRE61A8DG	-	-	✓	-
		Chainring for FC-E8000/E6100 38T W/CG(Single) for chainline 46.5mm	ESMCRE61A8SG	-	-	✓	-
		Chainring for FC-E8000/E6100 38T W/O CG for chainline 46.5mm black	ESMCRE61A8XL	-	-	✓	-
		Chainring for FC-E8000/E6100 38T W/O CG for chainline 46.5mm silver	ESMCRE61A8XS	-	-	✓	-
		Chainring for FC-E8000/E6100 44T W/CG(Double) for chainline 46.5mm	ESMCRE61B4DG	-	-	✓	-
		Chainring for FC-E8000/E6100 44T W/CG(Single) for chainline 46.5mm	ESMCRE61B4SG	-	-	✓	-
		Chainring for FC-E8000/E6100 44T W/O CG for chainline 46.5mm black	ESMCRE61B4X	-	-	✓	-

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	SM-CRE50	Chainring for FC-E5000 38T W/CG(Double) for chainline 46.5mm	ESMCRE50A8DG	-	-	-	✓
		Chainring for FC-E5000 38T W/CG(Single) for chainline 46.5mm	ESMCRE50A8SG	-	-	-	✓
		Chainring for FC-E5000 38T W/O CG for chainline 46.5mm	ESMCRE50A8X	-	-	-	✓
		Chainring for FC-E5000 44T W/CG(Double) for chainline 46.5mm	ESMCRE50B4DG	-	-	-	✓
		Chainring for FC-E5000 44T W/CG(Single) for chainline 46.5mm	ESMCRE50B4SG	-	-	-	✓
		Chainring for FC-E5000 44T W/O CG for chainline 46.5mm	ESMCRE50B4X	-	-	-	✓

## Chain



Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	CN-M9100	12 speed chain (HG) 1pcs 116 links W/QUICK-LINK	ICNM9100116Q	✓	✓	-	-
		12 speed chain (HG) 1pcs 126 links W/QUICK-LINK	ICNM9100126Q	✓	✓	-	-
		12 speed chain (HG) 1pcs 138 links W/QUICK-LINK	ICNM9100138Q	✓	✓	-	-
	CN-E8000-11	11 speed chain (HG-X11) for E-Bike 1pcs SIL-TECH surface treatment (outer link plate) 116 links	ICNE800011116	✓	✓	✓	✓
		11 speed chain (HG-X11) for E-Bike 1pcs SIL-TECH surface treatment (outer link plate) 116 links W/QUICK-LINK	ICNE800011116Q	✓	✓	✓	✓
		11 speed chain (HG-X11) for E-Bike 1pcs SIL-TECH surface treatment (outer link plate) 138 links	ICNE800011138	✓	✓	✓	✓
		11 speed chain (HG-X11) for E-Bike 1pcs SIL-TECH surface treatment (outer link plate) 138 links W/QUICK-LINK	ICNE800011138Q	✓	✓	✓	✓

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	CN-HG701-11	11 speed chain (HG-X11) 1pcs SIL-TECH surface treatment (outer/inner link plate) 116 links QUICK-LINK (SM-CN900-11)	ICNHG70111116Q	✓	✓	✓	✓
		11 speed chain (HG-X11) 1pcs SIL-TECH surface treatment 138 links QUICK-LINK (SM-CN900-11)	ICNHG70111138Q	✓	✓	✓	✓
	CN-HG601-11	11 speed chain (HG-X11) 1pcs SIL-TECH surface treatment (inner link plate) 116 links QUICK-LINK (SM-CN900-11)	ICNHG60111116Q	✓	✓	✓	✓
		11 speed chain (HG-X11) 1pcs SIL-TECH surface treatment (inner link plate) 138 links QUICK-LINK (SM-CN900-11)	ICNHG60111138Q	✓	✓	✓	✓
		11 speed chain (HG-X11) 20pcs SIL-TECH surface treatment (inner link plate) Work shop package 138 links QUICK-LINK (SM-CN900-11)	ICNHG60111116QS	✓	✓	✓	✓
		CN-E6090-10	10 speed chain (HG-X) 1pcs 118 links front single only two lines connecting pin	ICNE609010118I	✓	✓	✓
10 speed chain (HG-X) 1pcs 138 links front single only two lines connecting pin			ICNE609010138I	✓	✓	✓	✓
10 speed chain (HG-X) 20pcs Work shop package 118 links front single only two lines connecting pin			ICNE609010118IS	✓	✓	✓	✓
	CN-E6070-9	9 speed chain (HG) 20pcs Work shop package 118 links front single only two lines connecting pin	ICNE60709118IS	-	✓	✓	✓
		9 speed chain (HG) 1pcs 138 links front single only two lines connecting pin	ICNE60709138I	-	✓	✓	✓

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	CN-HG71	8/7/6 speed chain (HG) 1pcs 116 links QUICK-LINK (SM-UG51)	ECNHG71C116Q	-	-	✓	✓
		8/7/6 speed chain (HG) 1pcs 116 links black connecting pin	ECNHG71C116I	-	-	✓	✓
		8/7/6 speed chain (HG) 1pcs 138 links black connecting pin	ECNHG71C138I	-	-	✓	✓
		8/7/6 speed chain (HG) 20pcs Work shop package 116 links black connecting pin	ECNHG71C116IS	-	-	✓	✓
	QUICK-LINK	For 12-speed chain QUICK-LINK SM-CN900-12 single use, 2 pairs	ISMEN91012A	✓	✓	-	-
		For 12-speed chain QUICK-LINK SM-CN900-12 single use, 50 pairs work shop jar	ISMEN91012BS	✓	✓	-	-
	QUICK-LINK	For 11-speed chain QUICK-LINK SM-CN900-11 single use, 2 pairs	ISMEN90011A	✓	✓	✓	✓
		For 11-speed chain QUICK-LINK SM-CN900-11 single use, 50 pairs work shop jar	ISMEN90011BS	✓	✓	✓	✓
	QUICK-LINK	For 6/7/8-speed chain QUICK-LINK SM-UG51 single use, 2 pairs	ESMUG51A	-	-	✓	✓
		For 6/7/8-speed chain QUICK-LINK SM-UG51 single use, 50 pairs work shop jar	ISMUG51BS	-	-	✓	✓
	Chain Pin	For 11-speed chain (with sharp nose) 3pcs.	Y0AH98030	✓	✓	✓	✓
		For 11-speed chain (with sharp nose) 50pcs.	Y0AH98010	✓	✓	✓	✓
		For 10-speed chain (except CN-7800, with two lines) 3pcs.	Y08X98031	✓	✓	✓	✓
		For 10-speed chain (except CN-7800, with two lines) 50pcs.	Y08X98021	✓	✓	✓	✓

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	Chain Pin	For 9-speed chain (silver color) 3pcs.	Y06998030	-	✓	✓	✓
		For 9-speed chain (silver color) 50pcs.	Y06998020	-	✓	✓	✓
		For 8/7/6-speed chain (black color) 3pcs.	Y04598010	-	-	✓	✓
		For 8/7/6-speed chain (black color) 50pcs.	Y04598020	-	-	✓	✓

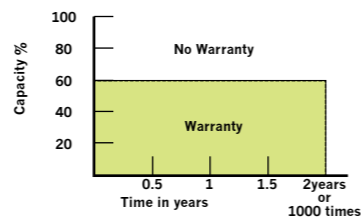
## Others

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	EW-SD50	E-TUBE electric wire black (1600mm) for connecting cycle computer (SC) and drive unit (DU)	IEWSD50L160	✓	✓	✓	✓
		E-TUBE electric wire black (550mm) for connecting drive unit (DU) and motor unit (MU) for Di2 shifting	IEWSD50L55	✓	✓	✓	✓
	EW-SD50-I	Wire holder (cable-tie) for electric wire EW-SD50-L for internal routing. 1unit = 20pcs	IEWSD50ISM1	✓	✓	✓	✓
	Case kit	E-TUBE PROJECT connecting & setting device case kit including: - SM-PCE02 (PC Linkage device USB cable 1pcs PC link cable 1pcs) - EW-SD50 (electric wire 1400mm) - SM-JC41 (Junction B) - TL-EW02 (plug tool)	IETUBEKIT3EA	✓	✓	✓	✓
	SM-PCE02	PC Linkage device USB cable 1pcs PC link cable 1pcs	ISMPC02A	✓	✓	✓	✓

## Tool

Image	Model Number	Description	Code No	E8000	E7000	E6100	E5000
	TL-FC32	TL-FC32 adapter removal tool	Y13009210	✓	✓	✓	✓
	TL-FC36	TL-FC36 adapter removal tool	Y13098000	✓	✓	✓	✓
	TL-FC33	TL-FC33 adapter removal tool	Y13009230	✓	✓	✓	✓
	TL-FC39	TL-FC39 adapter removal tool for FC-E8000/E8050	YEZY00016	✓	✓	✓	✓
	TL-CN10	Chain tool for connecting and removing SHIMANO QUICK-LINK	Y13022000	✓	✓	✓	✓
	TL-CN28	Chain tool for cutting and connecting SHIMANO 6-11 speed chain	Y13098500	✓	✓	✓	✓
	TL-CN29	Chain tool for cutting and connecting SHIMANO 9-12 speed chain	Y13098700	✓	✓	✓	✓
	TL-EW02	Plug tool for connection and disconnection of E-TUBE electric wires	Y6VE16000	✓	✓	✓	✓
	TL-DUE60	Chain tension measurement tool	YEZY00002	-	-	✓	✓
	TL-BME02	TL-BME02 battery mount setting tool for BM-E8010 & BT-E8010 (down tube type)	YEZY00014	✓	✓	✓	✓
	TL-BME03	TL-BME03 battery mount setting tool for BM-E8020 & BT-E8020 (integrated type)	YEZY00015	✓	✓	✓	✓

# FAQ

Subject	Series	Question	Answer
BATTERY & BATTERY MOUNT	BT-E8010 / E8014	Can BT-E8014 be used as a spare battery for a bicycle with BT-8010?	It can be inserted into the same battery mount and used.
BATTERY & BATTERY MOUNT	ALL	I'd like to know the compatibility among a battery, a battery mount, and a drive unit.	Refer to the compatibility chart for details on Annex-1 (page 172).
BATTERY & BATTERY MOUNT	ALL	Where can I find the charging port?	BM-E6000, BM-E6010 on battery mount ,BM-E8010 on battery.
BATTERY & BATTERY MOUNT	ALL	Why does it lose power off road?	Check mount spacing.
BATTERY	ALL	How many % is the battery charged by Shimano (shipping condition from Shimano)?	Around 30%. Refer to <b>Graph-1</b> (page 173) for the detail.
BATTERY	ALL	How to release a brand new battery from deep sleep mode?	Charge the battery, turn on the power of SC-E6100 / E6010, or connect to E-TUBE PROJECT.
BATTERY	ALL	Is it possible to set the battery to deep sleep mode again?	No
BATTERY	ALL	What does deep sleep mode mean?	The shipment condition from Shimano is under deep sleep mode to minimize battery consumption. Charge on the charger before first usage to wake up battery from deep sleep mode.
BATTERY	ALL	How fast does the battery self-discharge (shipping condition from Shimano)?	In 5.9 years. Refer to <b>Graph-1</b> (page 173) for the detail.
BATTERY	ALL	What is the battery storage characteristic (after start using / wake up from deep sleep mode)?	The 100% voltage will be zero after 13.6months under sleep mode. Refer to <b>Graph-2</b> (page 173) for the detail.
BATTERY	ALL	What is the estimated lifetime of the battery?	up to 1000 times of charge or 2 years still keeping 60% battery capacity 

Subject	Series	Question	Answer
BATTERY	ALL	Is it necessary to charge the battery to a certain level when you don't use the battery over the wintertime?	Yes, charge the battery to around 70% (three marks are illuminated on the battery level indicator.)
BATTERY	ALL	Is it possible to get replacement keys for the battery lock?	Contact key maker with key number information (tag)
BATTERY	ALL	What will happen when the battery is not charged before winter storage? How long can the battery survive after engine is turned off due to low voltage?	Under normal winter conditions, the battery can retain its charge until spring. During the winter, we strongly recommend charging the battery to 70% before storing.
BATTERY	ALL	After long time of storage, does the battery wake up by just pushing the ON/OFF button? Is it necessary to put it on the charger?	Push the button to wake up the battery. It takes 10 minutes for it to start up from sleep mode w/o any operation. If it does not turn on, it is necessary to charge it using the charger.
BATTERY	ALL	How many charges does the battery need before it gets the full capacity?	Only one charge.
CHARGER / BATTERY	ALL	Does the charger go off ones the battery is full, or does it go on trickle charge?	It goes on trickle charging.
CYCLE COMPUTER	ALL	Can I change display language?	Yes, you can choose specific language among 6 languages, English, French, German, Dutch, Italian and Spanish.
CYCLE COMPUTER	ALL	Is the display detachable?	SC-E6100 and SC-E6010 are detachable.
CYCLE COMPUTER	ALL	Can I check the mileage on the display that is apart from the bicycle?	No, the system shuts down in 30 seconds after the display is taken off from the bicycle. After it is re-attached, full functions are back.
CYCLE COMPUTER	ALL	Is it possible to set the ODO to 0 km?	No
CYCLE COMPUTER	SC-E7000/ E6100	Will there be a service interval on the display? Means the display should advise the customer to go to workshop for example after 6 months.	Yes.
CYCLE COMPUTER	ALL	The display does not show correct speed or distance.	E-TUBE PROJECT can be used to adjust the display.

Subject	Series	Question	Answer
CYCLE COMPUTER	ALL	Display is blank.	Check the connection of the electric wire.
DI2	ALL	Can I change a mechanical SHIMANO STEPS bike to DI2?	Yes. Contact the assembly manufacturer or SHIMANO for details.
CRANK SET	E8000	What is basic difference between FC-E8050 and FC-E8000?	The basic difference is FC-E8050 is a light weight hollow crank and FC-E8000 is a solid crank.
DRIVE UNIT	E6000/E8000	No power assist.	Stop. Turn off power. Spin cranks back a few times. Restart with NO PRESSURE ON CRANKS.
DRIVE UNIT	ALL	Power assistance is not supplied to drive unit.	Removed battery from mount and reinstall after few seconds.
DRIVE UNIT	ALL	The bottom bracket in the drive unit has gradually moved.	Please contact your local dealer to check the frame mounting bolts.
DRIVE UNIT (Speed sensor)	ALL	What happens when the wheel magnet is off?	1/ There will be warning on the display "W011" (cannot determine accurate speed). 2/ Drive unit still support the rider up to the speed calculated from the gear ratio and cadence.
E-TUBE PROJECT	ALL	Is the E-TUBE PROJECT available for both tablet and smart phone?	Yes. Please make sure to use the latest version of the application.
E-TUBE PROJECT	ALL	Do I have to pay for E-TUBE PROJECT on a tablet or a smart phone?	No, it is free of charge.
E-TUBE PROJECT	ALL	Can a dealer change the tire diameter?	No, it is not possible. DU setting must be done by assembly manufacturers or us.
E-TUBE PROJECT	ALL	Do the SHIMANO STEPS components have an individual part number (running number) which is shown in the diagnosis report?	The individual parts have this number.
E-TUBE PROJECT	ALL	Is it possible to print out the diagnosis report with the found defect? It is necessary as evidence for a dealer to show it to customer.	Yes

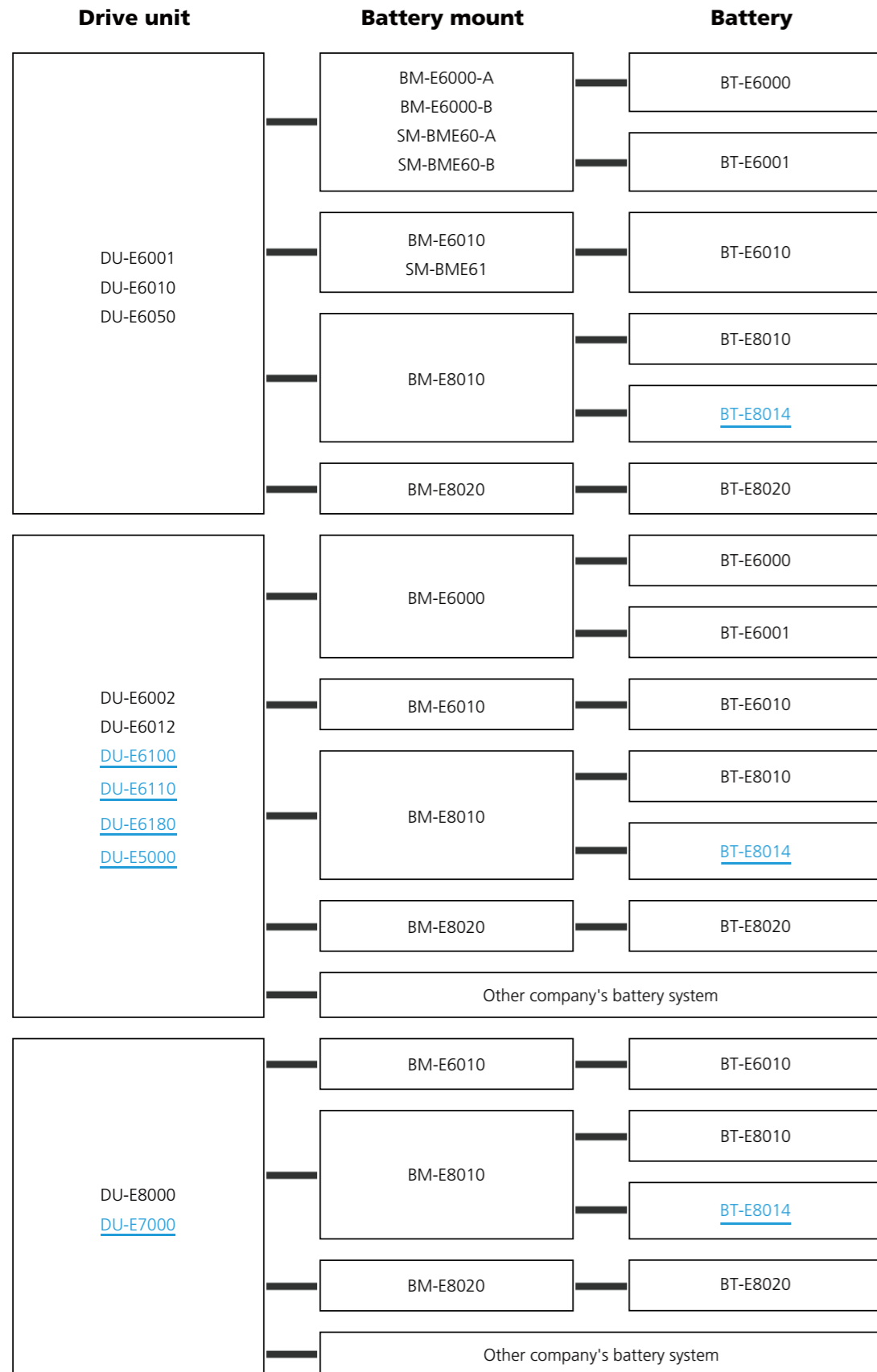
Subject	Series	Question	Answer
E-TUBE PROJECT	ALL	Dealer wants to input the Address and Name of the shop in the header of the diagnosis report.	Not possible.
E-TUBE PROJECT	E8000/E7000/ E6100	Can the assist pattern be changed?	Riding characteristics can be changed in E-TUBE PROJECT.
E-TUBE PROJECT	ALL	Firmware update stops during process and system shuts down.	Use the latest version of E-TUBE PROJECT (Windows version) with SM-PCE1 or SM-PCE02 to restore the firmware.
LIGHT SYSTEM	ALL	Can I change the front and tail light of a SHIMANO STEPS Bike?	Yes, but please change to same spec light.
SYSTEM	ALL	How to start the system?	Press the power ON button on the Battery. In the case of SC-E6100/E6010, press the power button on SC-E6100/E6010 or on the battery.
SYSTEM	ALL	What to do if E-Bike can not be switched by pressing the display button?	1. Press the power button on the battery 2. Remove the battery and re-install it on the battery mount
SYSTEM	ALL	Which shifting units are compatible with SHIMANO STEPS?	The DI2 rear derailleur supports a speed of 1x11. The mechanical rear derailleur supports speeds of 1x12, 1x11, and 1x10.
SYSTEM	E8000/E7000/ E6000	Can AUTO gear shifting mode be used?	AUTO gear shifting mode can be used with bicycle systems equipped with an 8/5 speed internal geared hub (DI2).
SYSTEM	ALL	How much speed can the drive unit assist?	Drive unit can assist up to 25km/h. *It can assist up to 20 mph depending on the region.
SYSTEM	ALL	How does the motor stop generating assist power at 25 km/h? Suddenly cut off or fade out?	Not suddenly, gradually.
SYSTEM	ALL	Does Shimano offer walk assist?	Yes, walk mode is available. (E-TUBE firmware ver.2.7.0 onwards) *The walk assist mode function may not be able to be used in certain regions.

Subject	Series	Question	Answer
SYSTEM	E8000/E7000	How many assist modes are available for E8000/E7000 series?	4 Modes are available (BOOST, TRAIL, ECO and WALK)
SYSTEM	ALL	How many distance does each mode provide in average with each battery?	Please view the figure on page 18.
SYSTEM	ALL	How many percentage is the power assist level for each mode?	Please view the figure and table on page 27.
SYSTEM	ALL	How much torque is the power assist level for each mode?	Please view the figure and table on page 27.
SYSTEM	ALL	How many watts can the drive unit produce?	250W (rated power)
SYSTEM	ALL	Can I buy the fixing bolts on the frame for E8000 series drive unit (DU-E8000) from SHIMANO?	No, you can't. You should contact the bike brand maker or importer.
SYSTEM	ALL	Can I connect two batteries at same time?	No, you can't. The system doesn't accept.
SYSTEM	ALL	Can I change the gear combinations?	No, you can't. Only OEM manufacturers or SHIMANO can change the gear combination.
SYSTEM	ALL	Can I replace the chain ring or cassette sprocket with same gear combinations?	Yes, you can.
SYSTEM	ALL	Will there be an error code, if sprocket has more teeth than it is stored in the SHIMANO STEPS computer?	No error code. However while in walk assist mode, there will be a difference in assist speed.
SYSTEM	E8000/E7000/ E6000	Does Q-factor with chain ring SM-CRE80-B become wider than with SM-CRE80?	No, Q-factor is same.
SYSTEM	ALL	Do I have to use the chain device?	Yes. Use a double chain guide or chain device.
SYSTEM	E6100/E5000	Can a chain device (SM-CDE70/SM-CDE80) be used?	There is no installation mount, so it cannot be installed.

Subject	Series	Question	Answer
SYSTEM	E8000/E7000	Where can I put the chain device?	Normally it can be fixed on the drive unit directly with chain ring SM-CRE80-B / CRE70-B, or on the frame SM-CRE80 / CRE70.
SYSTEM	ALL	Can I use SHIMANO STEPS without switch unit?	Yes. But you need SC-E7000, SC-E6100 or EW-EN100.
SYSTEM	ALL	Can I use my smart phone as cycle computer?	Yes, you can use it by connecting with wireless unit like EW-EN100, SC-E7000 and SC-E6100.
WARRANTY	ALL	How long is the warranty period of the system?	2 years, SHIMANO follows European warranty regulation.

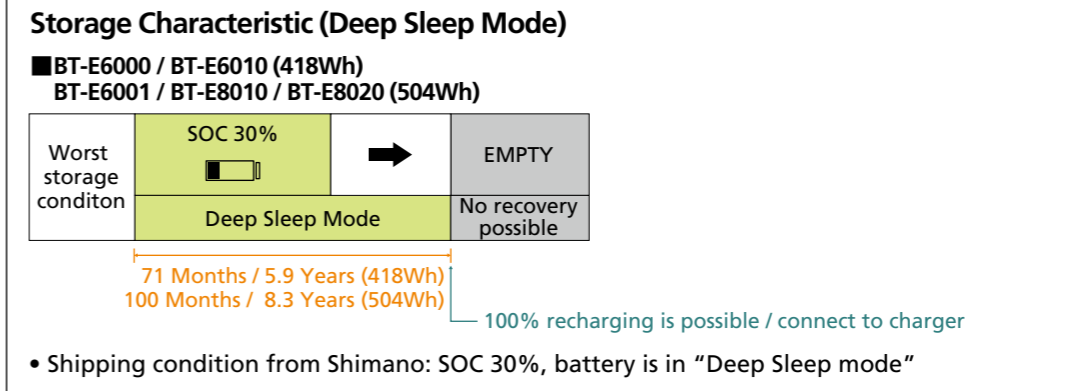
**Annex-1**

**Battery and battery mount compatibility**



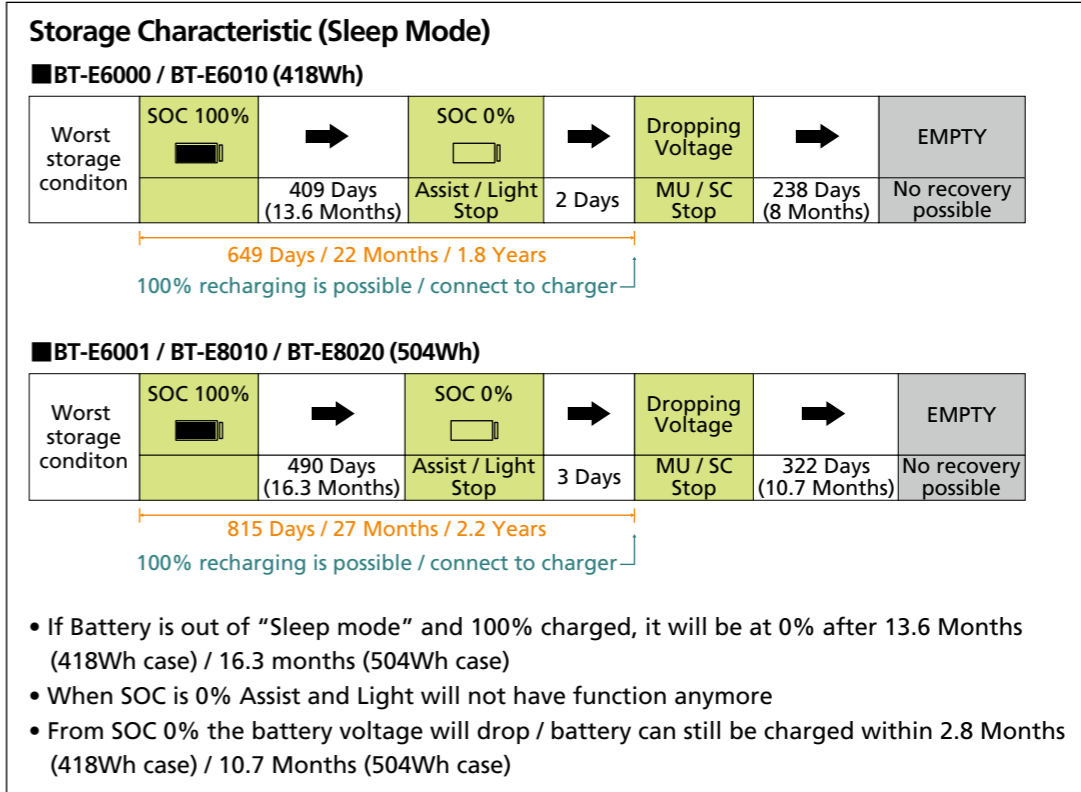
**Graph-1**

SOC: State of charge



**Graph-2**

SOC: State of charge



**Worst Storage Condition (In a day):**

- 4 hours when temperature between 40°C and 60°C
- 20 hours when temperature between -20°C and 40°C



# SHIMANO BICYCLE COMPONENT WARRANTY

Shimano® bicycle components come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Shimano Australia Pty. Ltd. A.B.N. 19 056 284 710, whose business address is 2 Wurrook Circuit, Caringbah, NSW 2229, telephone 1300 731 077, Email: info@shimano.com.au ("Shimano") gives the following warranty which is additional to other rights and remedies available under the Australian Consumer Law.

## SHIMANO® ADDITIONAL WARRANTY

Shimano warrants to the original retail purchaser who purchases in Australia a new Shimano® bicycle product ("Product") (not being a component of a purchase of a complete bicycle) that:

- If the Product is found to be defective due to faulty materials or workmanship and has only been used in Australia in accordance with the manufacturer's instructions under normal use and reasonable care (in the opinion of Shimano); and
- The warranty claim is made within 2 years, or for Dura-Ace and XTR components within 3 years, or for Shimano® wheels, shoe products and soft goods within 1 year, of original purchase ("Warranty Period");and
- Within the Warranty Period the defective Product is sent insured to Shimano with (i) the original retailer's sale document and receipt identifying the Product and date of purchase, and (ii) details of the defect and (iii) a return address within Australia; then

Shimano will, subject to the following conditions, repair or replace (at its option) the defective Product and send it insured to the return address provided.

## WARRANTY EXCLUSIONS

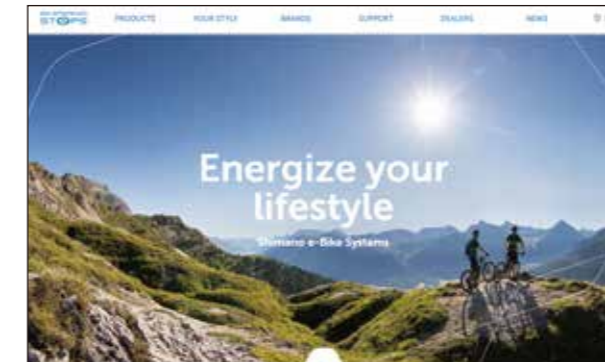
This warranty will not apply where the defect arises due to any of the following:

- use of the Product in an assembly for which it was not designed;
- the incorrect installation or removal of or attempt to repair the Product;
- damage in transit in forwarding the Product to Shimano;
- lack of technical skill, competence or experience of the user;
- poor maintenance, unauthorised modification, or improper, negligent or careless use of the Product;
- use of the Product outside Australia or in a competition or for commercial purposes;
- the Product, or bicycle of which it is a component, being abused or involved in an accident; or
- Damage or deterioration to the surface finish, aesthetics or appearance of the Product.

## WARRANTY FURTHER CONDITIONS

- Shimano's liability under this warranty is limited to repairing or replacing and returning the defective Product to the purchaser. A purchaser making a claim must bear the cost of sending the Product to Shimano and any cost in removing, refitting or readjusting the Product in a bicycle assembly;
- This warranty will not apply to a Product that is a component in a sale of a complete bicycle whether pre-assembled or subsequently assembled. In such instance any claim should be made to the retailer or other entity from whom the bicycle was purchased or the manufacturer or other entity liable at law.
- Retailers and wholesale outlets for Shimano® Products cannot modify this warranty in any way. Any alteration will only be binding on Shimano if it is in writing and signed by a Director.
- It is the purchaser's responsibility to regularly examine a Product to determine the need for, and attend to, normal service or replacement.

# WEBSITE



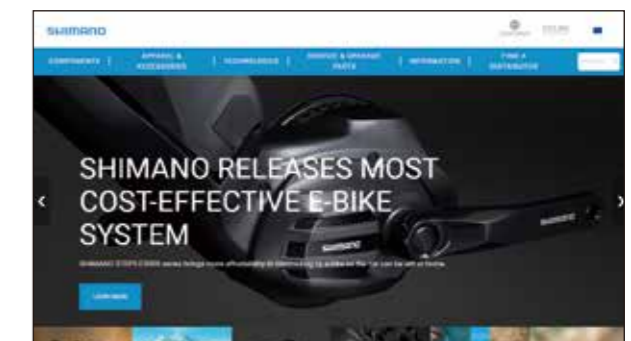
SHIMANO STEPS PRODUCT INFORMATION SITE

<https://shimano-steps.com/>



E-TUBE SITE

<http://e-tubeproject.shimano.com>



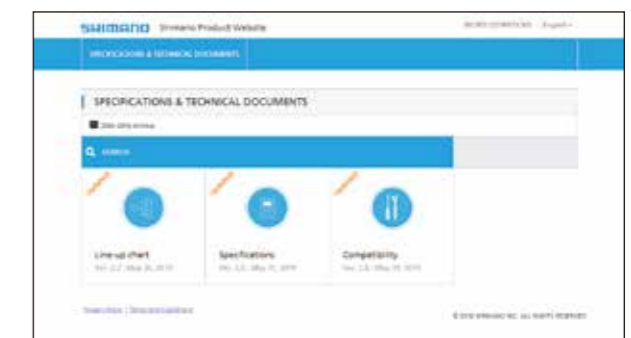
bike.shimano.com

<https://bike.shimano.com/>



MANUAL DOWNLOAD SITE

<https://si.shimano.com>



PRODUCT INFORMATION SITE

<https://productinfo.shimano.com/#/>