POLYGON

POLYGONBIKES.COM

COLLOSUS N8e

CONGRATULATIONS!

Congratulations for buying Polygon Bikes! A bicycle is a great tool for transportation and recreation. Hopefully, you can find enjoyment and have a great deal of use in every ride. This manual contains important information which includes safety, performance, and maintenance.

IMPORTANT   Read this manual before taking your first ride and use it for future reference as well.

Additional safety, performance, and service information related to specific components such as suspension; pedals; and other accessories, such as helmets or lights you have purchased. Make sure your nearest authorized dealer has given all the manufacturing literature which includes in your bicycle and accessories. In case of conflict between the instructions and information provided in this manual, always follow the component manufacturer's instructions.

If you have any questions or do not understand something within this guide, take responsibility for your safety and consult with your nearest authorized dealer or the bicycle's manufacturer.

NOTE

This manual is not intended for comprehensive use, service repair, or service manual. Please see your nearest authorized dealer for all service, repairs, and maintenance-related action. Your dealer is also able to refer you to classes, clinics, or books for service or maintenance.

WARNING

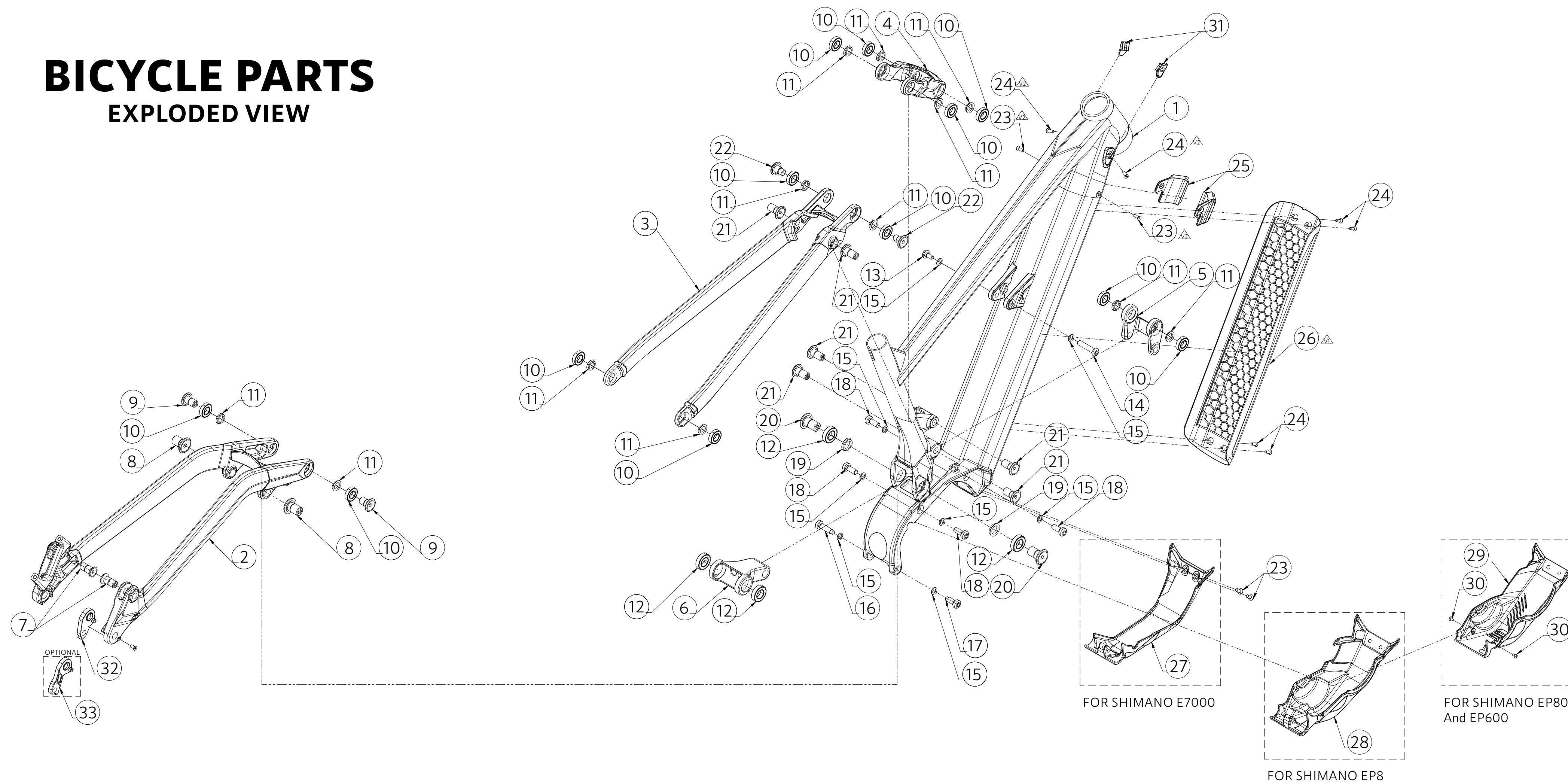To ensure the warranty of your bicycle, be sure to only use the original spare parts.

CONTENT

COLLOSUS N8ε

BICYCLE PARTS
EXPLODED VIEW

FOR SHIMANO E7000

FOR SHIMANO EP8

FOR SHIMANO EP801
And EP600

OPTIONAL

COLLOSUS N8E - FRAME KITS

ARTICLE CODE	PART #	ITEM	ITEM DETAILS	TORQUE (N.m)	QTY / FRAME	SOLD
733699	4	SHOCK LINK	IS19PFK14	-	1	PER PIECE
733700	5	SECOND LINK	IS19PFK13	-	1	PER PIECE
733701	6	FIRST LINK	IS19PFK12	-	1	PER PIECE
735299	7	REAR PIVOT BOLT IS17PFK32	M12X1.25, L26, T12, HEX5	15	2	PER 2 PIECES
735295	8	PIVOT BOLT IS19PFK23	M15X1.5, L25.5, T15, HEX6	25	2	PER 2 PIECES
735296	9	PIVOT BOLT IS19PFK24	M12X1.25, L22.5, T11, HEX5	15	2	PER 2 PIECES
733707	10	6901V2RS SEALED BEARING	6901V2RS SEALED BEARING 12X24X6mm	-	12	PER PIECE
735301	11	BEARING SPACER IS16PFK18	ID12, OD16, L3	-	12	PER 4 PIECES
733708	12	6902V2RS SEALED BEARING	6902V2RS SEALED BEARING 15X28X7mm	-	4	PER PIECE
733713	13	REAR SHOCK BOLT & NUT SET	BOLT IS16FMS03 M6X1.0, L18, T9.5, HEX5	12	1	AS A SET
	14		SHAFT IS17PFK05 8XM6X1.0, L41, T30, HEX6	12	1	
	15		WASHER ID8, OD12.5	-	2	

COLLOSUS N8E - FRAME KITS

ARTICLE CODE	PART #	ITEM	ITEM DETAILS	TORQUE (N.m)	QTY / FRAME	SOLD
733717	15	DRIVE UNIT/MOTOR BOLT SET	WASHER ID8, OD12.5	-	6	AS A SET
	16		BOLT INS-IS19PFK03 M8X1.25, L37, T22.2, HEX6	10 - 12.5	1	
	17		BOLT INS-IS19PFK02 M8X1.25, L28, T13.2, HEX6	10 - 12.5	1	
	18		BOLT INS-IS19PFK01 M8X1.25, L26, T16.7, HEX6	10 - 12.5	4	
735300	19	BEARING SPACER IS20PFK01	ID15, OD20, L3.5	-	2	PER 2 PIECES
735297	20	PIVOT BOLT IS19PFK29	M15X1.5, L29, T15, HEX6	25	2	PER 2 PIECES
735298	21	PIVOT BOLT IS16PFK19	M12X1.25, L26.5, T16.2, HEX5	15	6	PER 2 PIECES
735303	22	REAR SHOCK TRUNNION BOLT	BOLT IS21PFK31 M10X1.0, L20, T8, HEX5	12	2	PER 2 PIECES
733719	23	DRIVE UNIT BOTTOM COVER FOR DU-E7000	BOLT M5X0.8, L12, HEX3	4	2	AS A SET
	27		DRIVE UNIT COVER IS19PFK25 BK FOR E7000	-	1	
733720	23	DRIVE UNIT BOTTOM COVER FOR DU-EP800	BOLT M5X0.8, L12, HEX3	4	2	AS A SET
	28		DRIVE UNIT COVER VLD-I-904 BK FOR EP8	-	1	

COLLOSUS N8E - FRAME KITS

ARTICLE CODE	PART #	ITEM	ITEM DETAILS	TORQUE (N.m)	QTY / FRAME	SOLD
736846	23	DRIVE UNIT BOTTOM COVER FOR DU-EP801 & DU-EP600	BOLT M5X0.8, L12, HEX3	4	2	AS A SET
	29		IS19PFK32 PLASTIC	-	1	
	30		BOLT M3X0.5, L6, HEX2	2	2	
733722	24	COLLOSUS SERIES FORK BUMPER & BOLTS SET	BOLT M4X0.7, L12, HEX2.5	4	2	AS A SET
	25		IS19PFK21 RUBBER	-	1	
736849	24	BATTERY COVER & BOLTS SET	BOLT M4X0.7, L12, HEX2.5	4	4	AS A SET
	26		IS19PFK30-1 PLASTIC	-	1	
729761	24	CABLE PORT SET	BOLT M4X0.7, L12, HEX2.5	4	2	AS A SET
	31		CABLE PORT	-	2	
725047	32	2HRU DROP OUT DIRECT ATTACH	-	1	1	PER PIECE
728308	33	2HRU DROP OUT DIRECT MOUNT	-	1	1	PER PIECE
728713	-	2HRU AXLE 12x148	M12X1.5, L174, T20, HEX6	10-12.5	1	PER PIECE
736496001	-	POLYGON BOTTLE 425ml	EBON IS20AOT01-B, PE PLASTIC	-	1	PER PIECE
729413001	-	ENTITY BOTTLE CAGE	BC45, GLASS FIBRE-REINFORCED POLYAMIDE, SIDE LOAD	-	1	PER PIECE

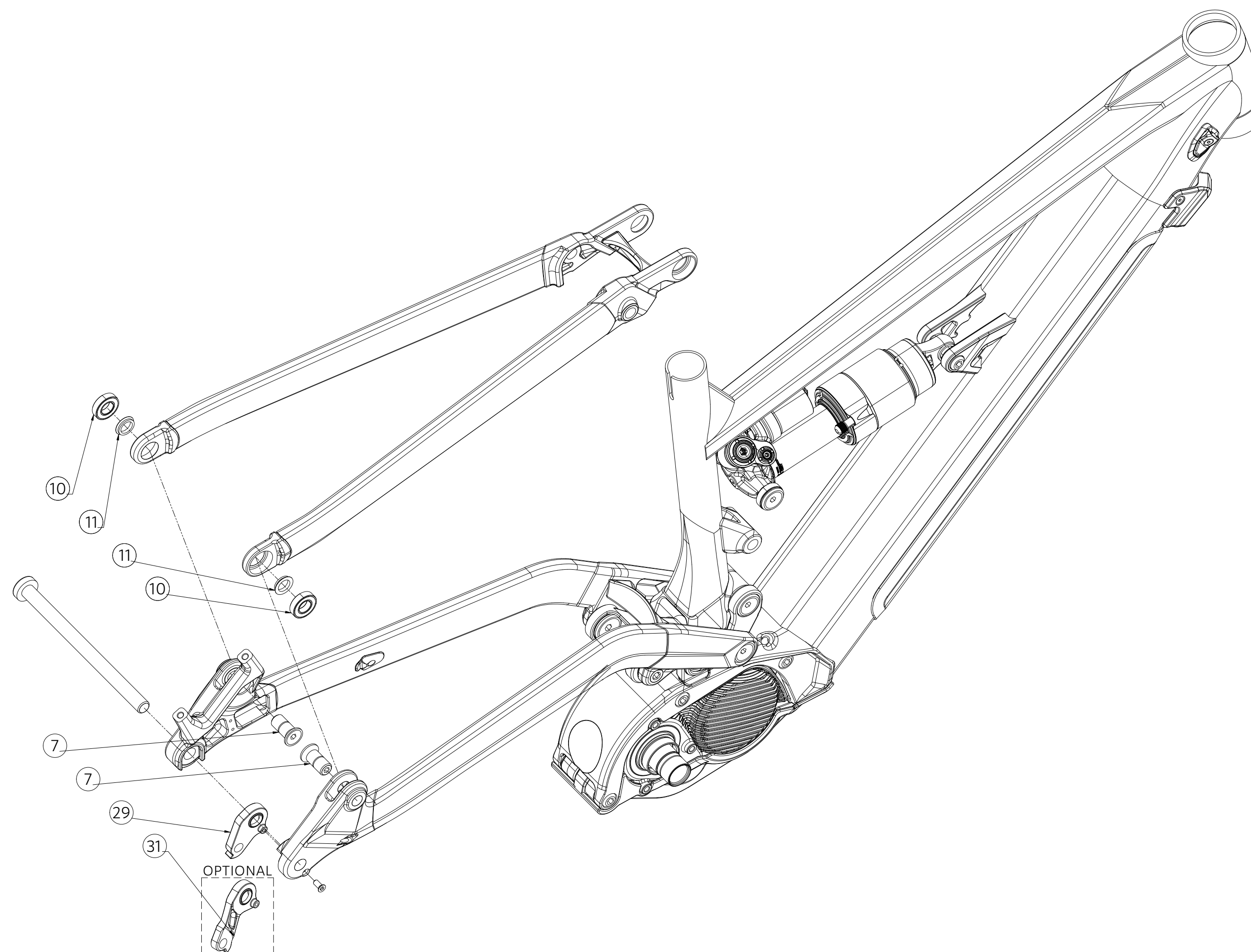# BICYCLE PARTS
DRIVE UNIT COVER &
DOWNTUBE AREA ASEEMBLY

16

15

18

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18

23

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FOR SHIMANO EP8

FOR SHIMANO E7000

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23

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FOR SHIMANO EP801 And EP600
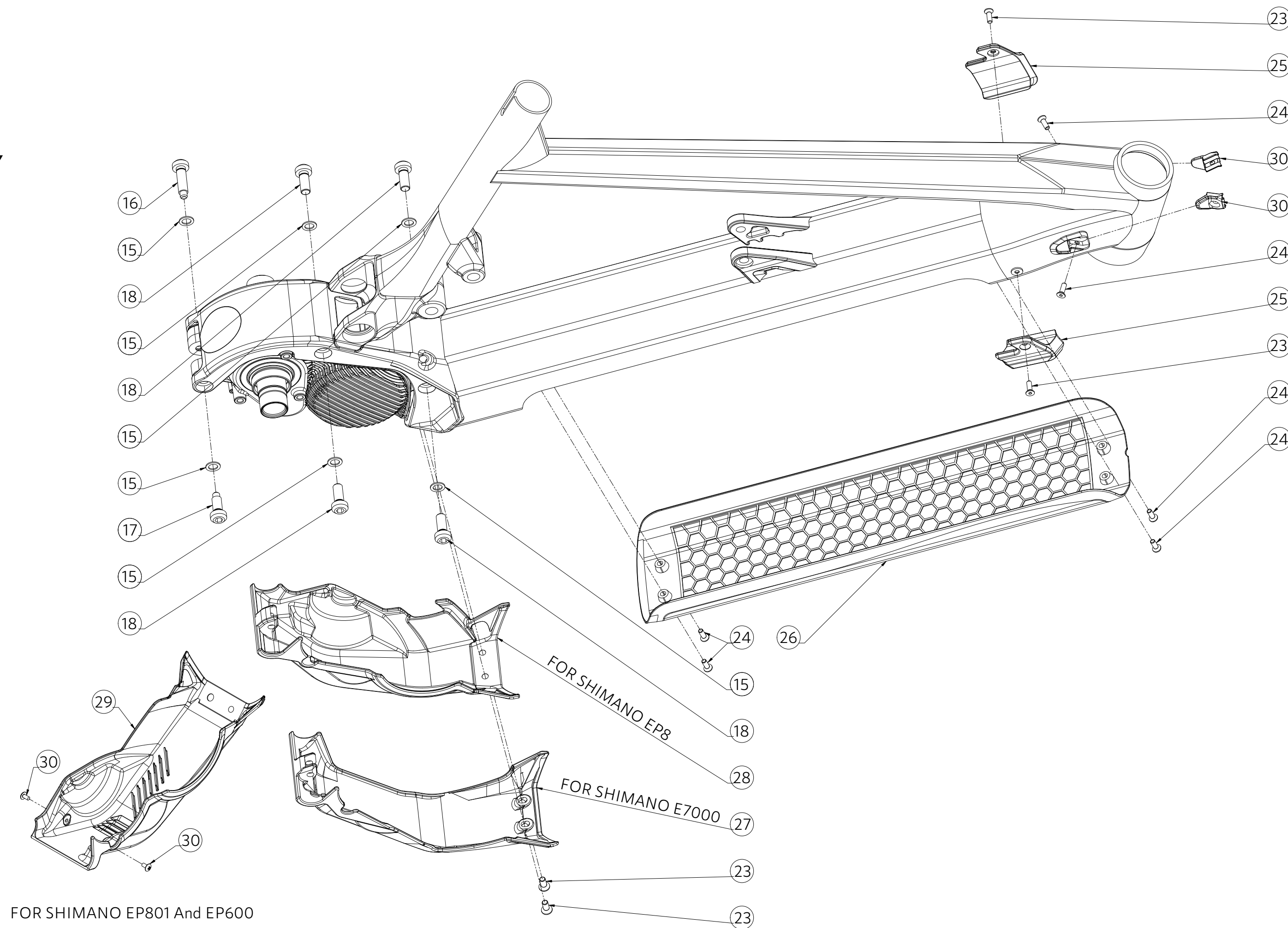
BICYCLE PARTS
**FIRST LINK AND
SECOND LINK ASEEMBLY**
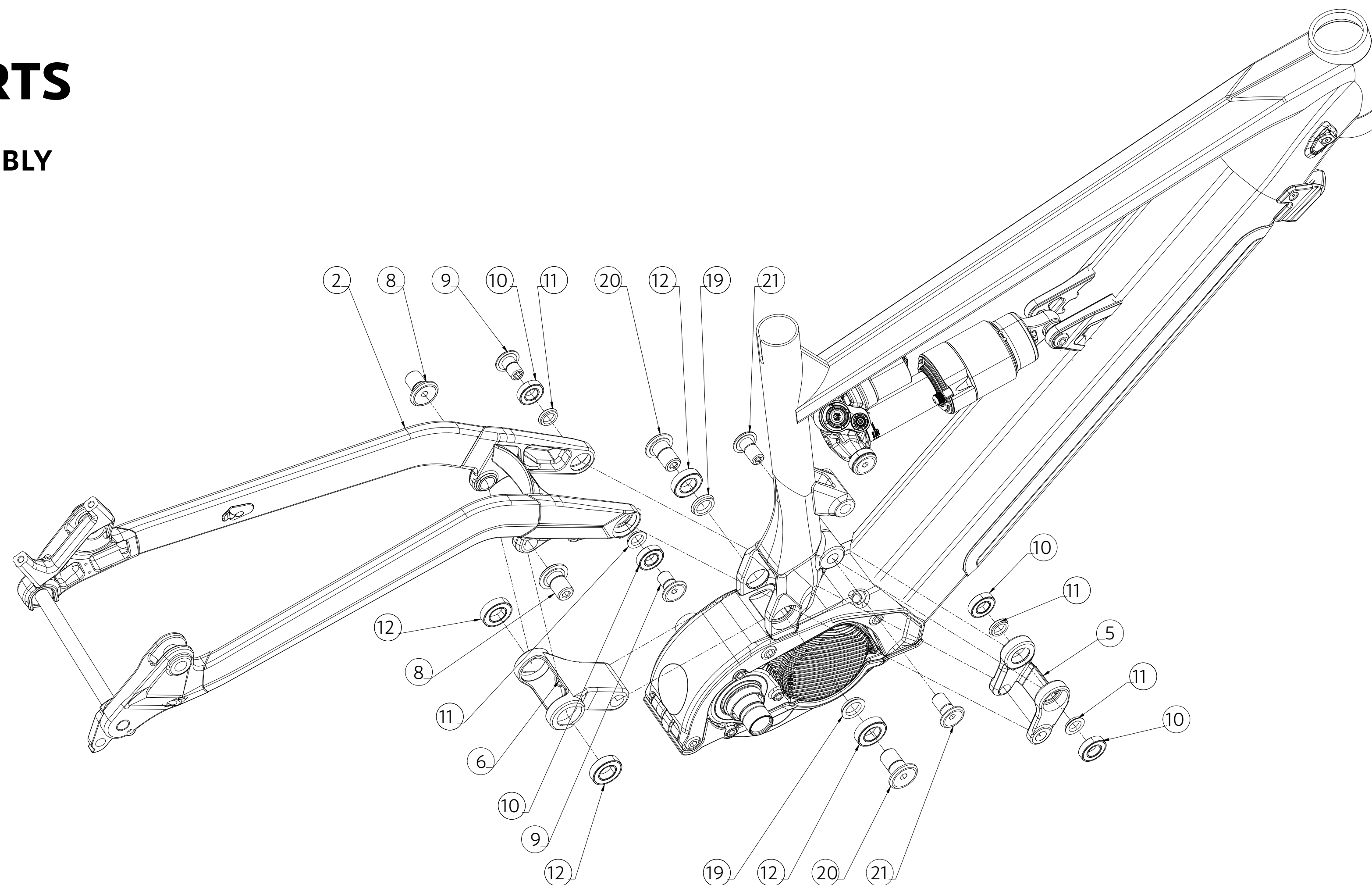
BICYCLE PARTS
REAR PIVOT HARDWARE
ASSEMBLY

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OPTIONAL

BICYCLE PARTS
SHOCK LINK HARDWARE
ASSEMBLY
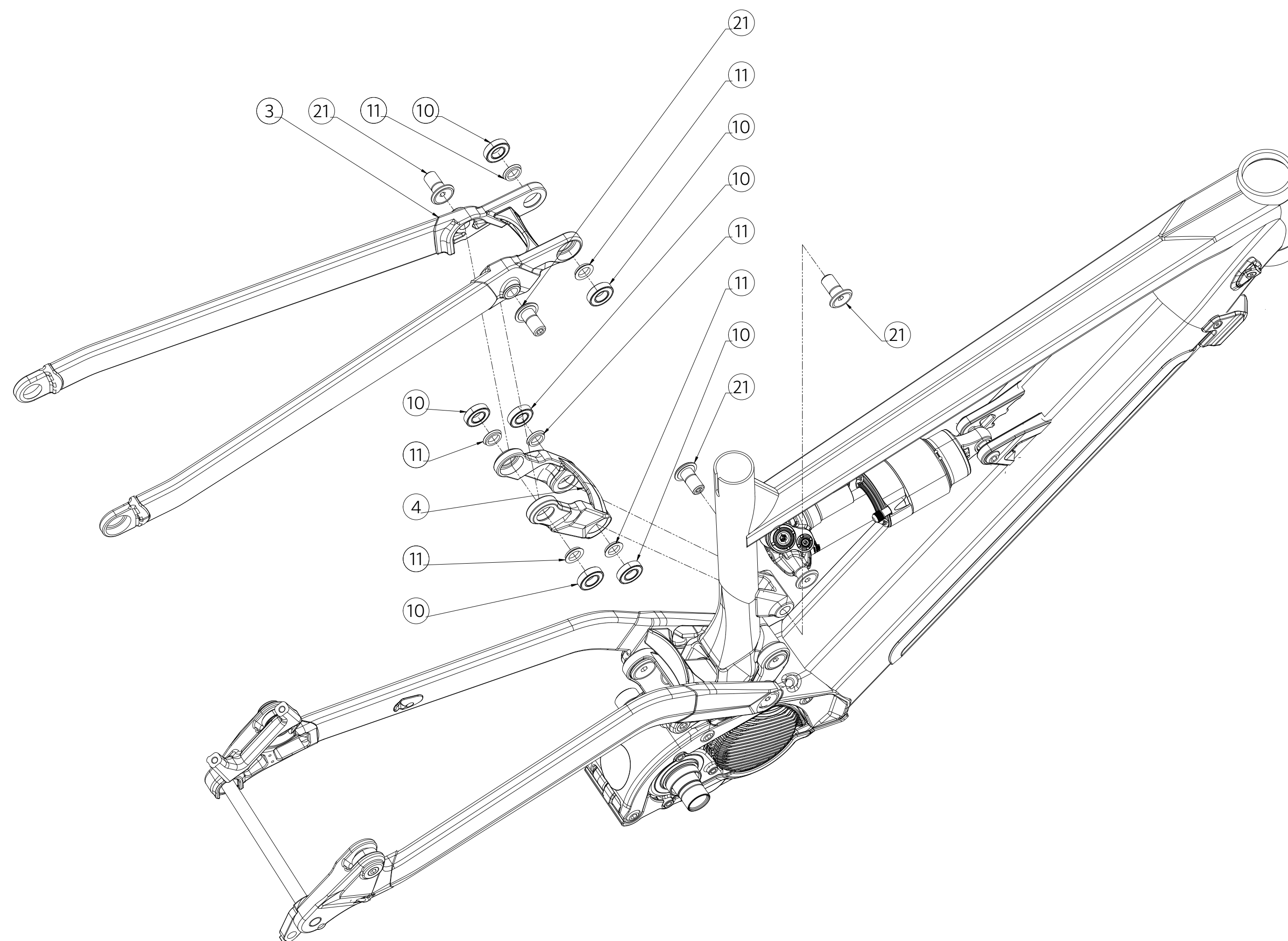
BICYCLE PARTS
SHOCK HARDWARE
ASSEMBLY

CABLE ROUTING
REAR BRAKE RIGHT
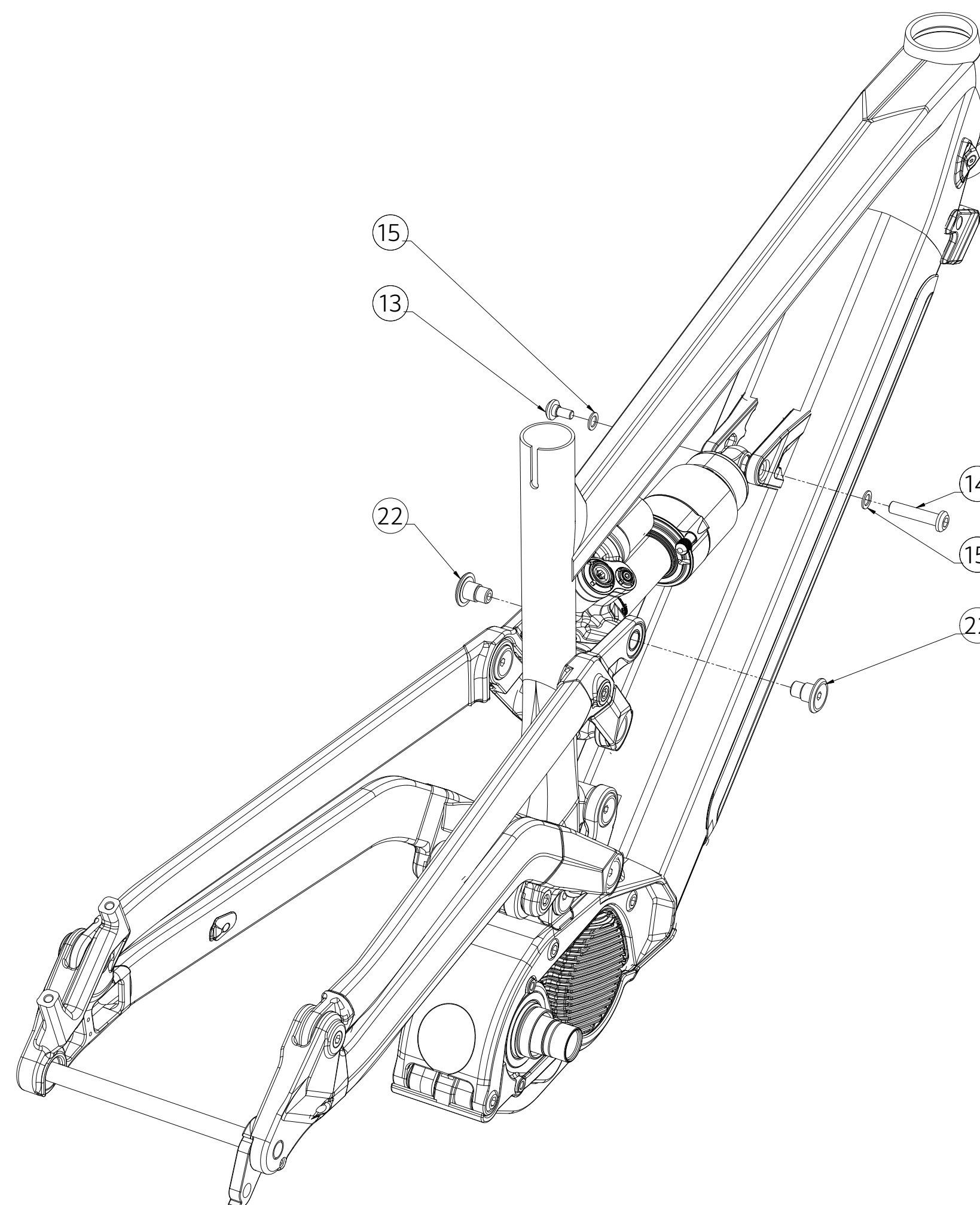
CABLE ROUTING
REAR BRAKE LEFT

LEGEND
RD Cable
Rear Brake Hose
Dropper Post Cable
Cycle Computer Cable
Speed Sensor Cable

Charging port
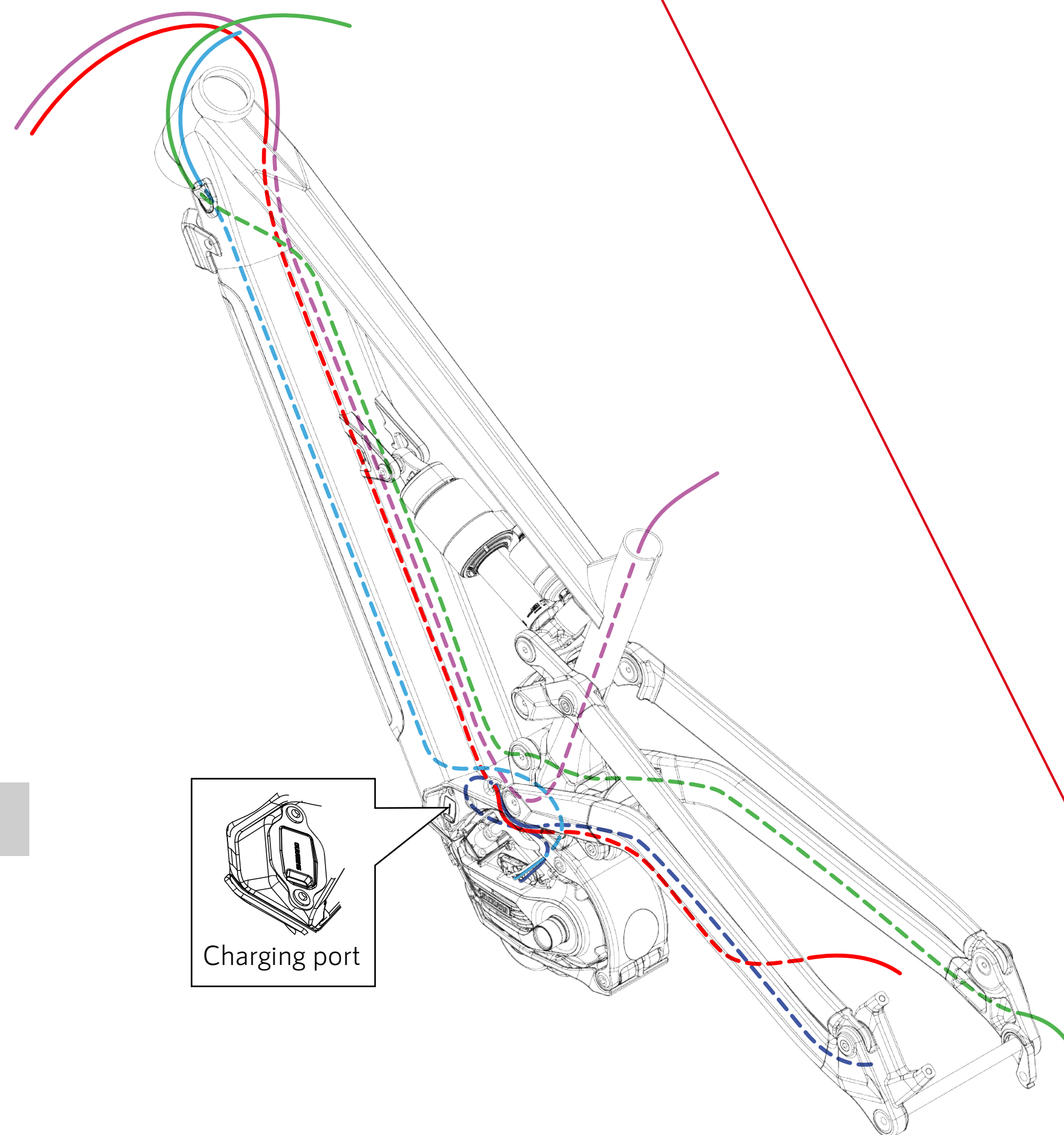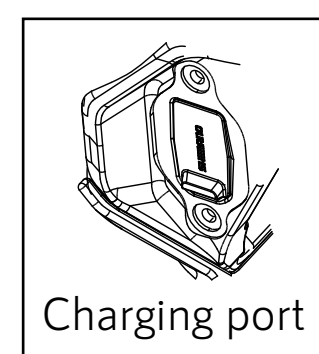
Charging port
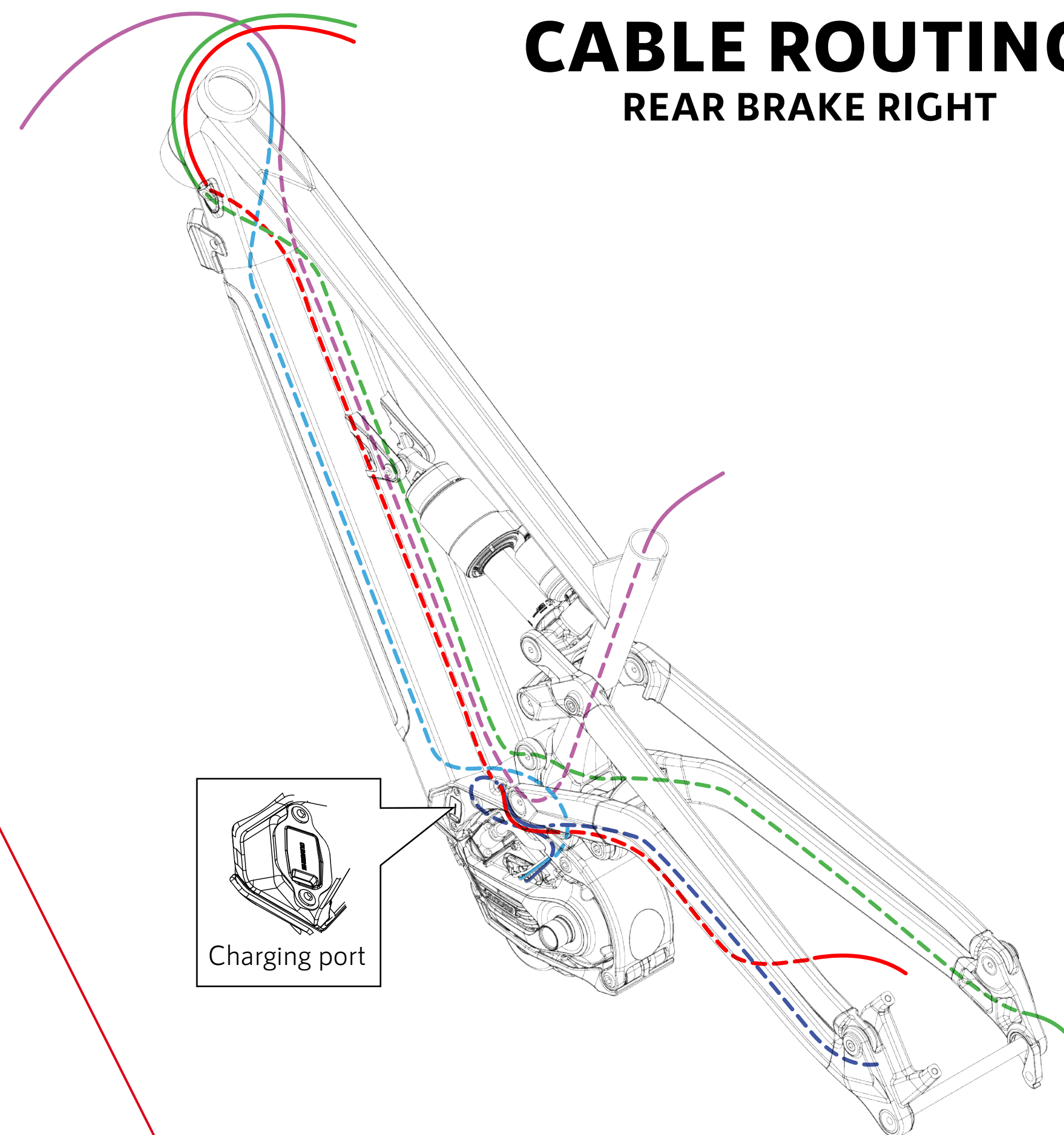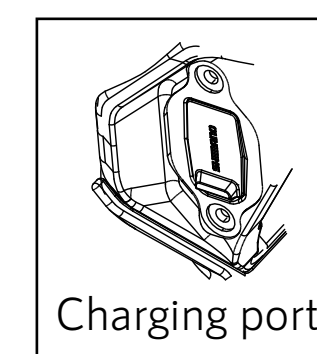
REGULAR INSPECTIONS
BEFORE RIDING THE BICYCLE

Before riding the bicycle, check the following items. If any problems are found, consult your place of purchase or a distributor.

☐ Does the drive train perform gear shifting smoothly?

☐ Is there any looseness or damage in the component parts?

☐ Are the components securely installed to the frame/ handlebar/ stem, etc.?

☐ Do any abnormal noises occur while riding?

☐ Is there sufficient charge remaining in the battery?

AVOID Avoid wearing clothing that may get caught in a chain or wheel, as this may cause an accident.

HOW TO HANDLE AN ASSIST BICYCLE
QUICK GUIDE

❶ Charge the battery

Example of built-in type battery
*According to the assist bicycle, the location of the charging port
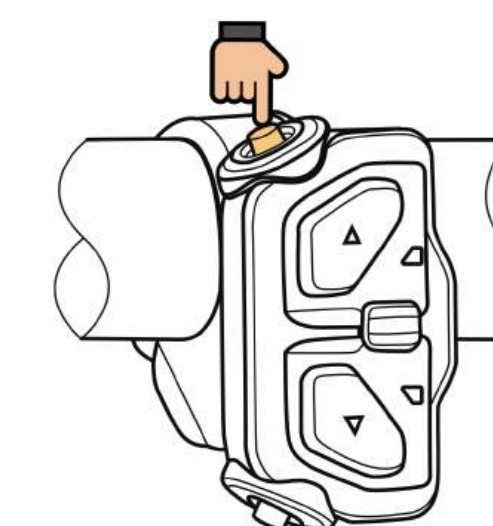may be different from the one shown in the figure.
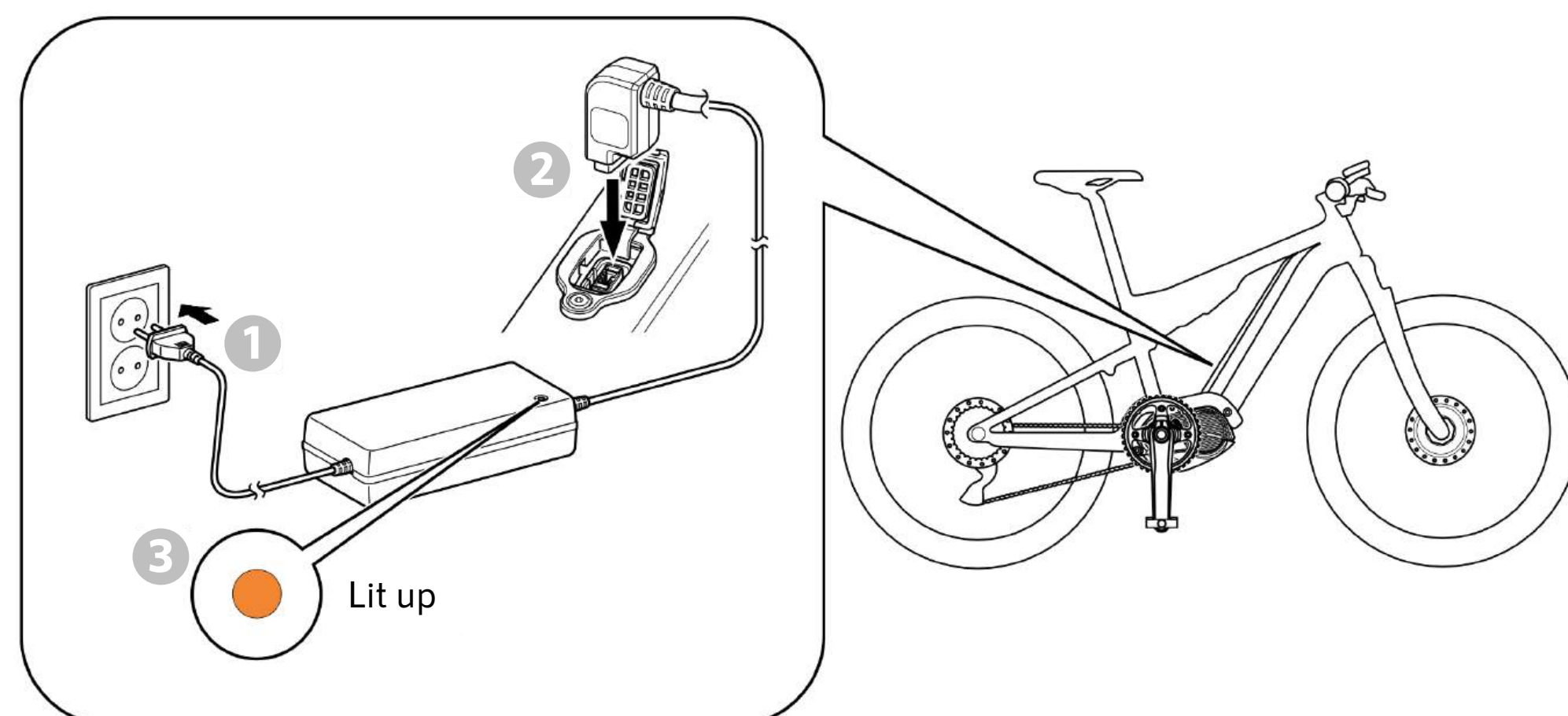
Lit up

🟠	Lit up	Charging
🔆	Flashing	Charge error

❷ Turn the power ON

To turn OFF the power, repeat this procedure.

Wait a while before pressing the power button when turning the power ON again after the power has been turned OFF.

Example of 5-switch type switch unit
(left side of the handlebar)

TECH TIPS

Depending on the assist bicycle used, the installed battery, cycle computer, and switch unit may differ from what is listed here. Also refer to the user's manual of the components you are using listed in "Booklet Structure"

HOW TO HANDLE AN ASSIST BICYCLE
QUICK GUIDE

❸ Select assist mode

• When the power is turned OFF, the assist mode resets to [OFF].

• The below shows the display for the [BASIC] assist profile.
For the [Fine tune] assist profile display, refer to the user's manuals
for your cycle computer and switch unit.

Cycle computer example

Assist mode
display

Switch Unit

X

LED2

Y

5-switch type
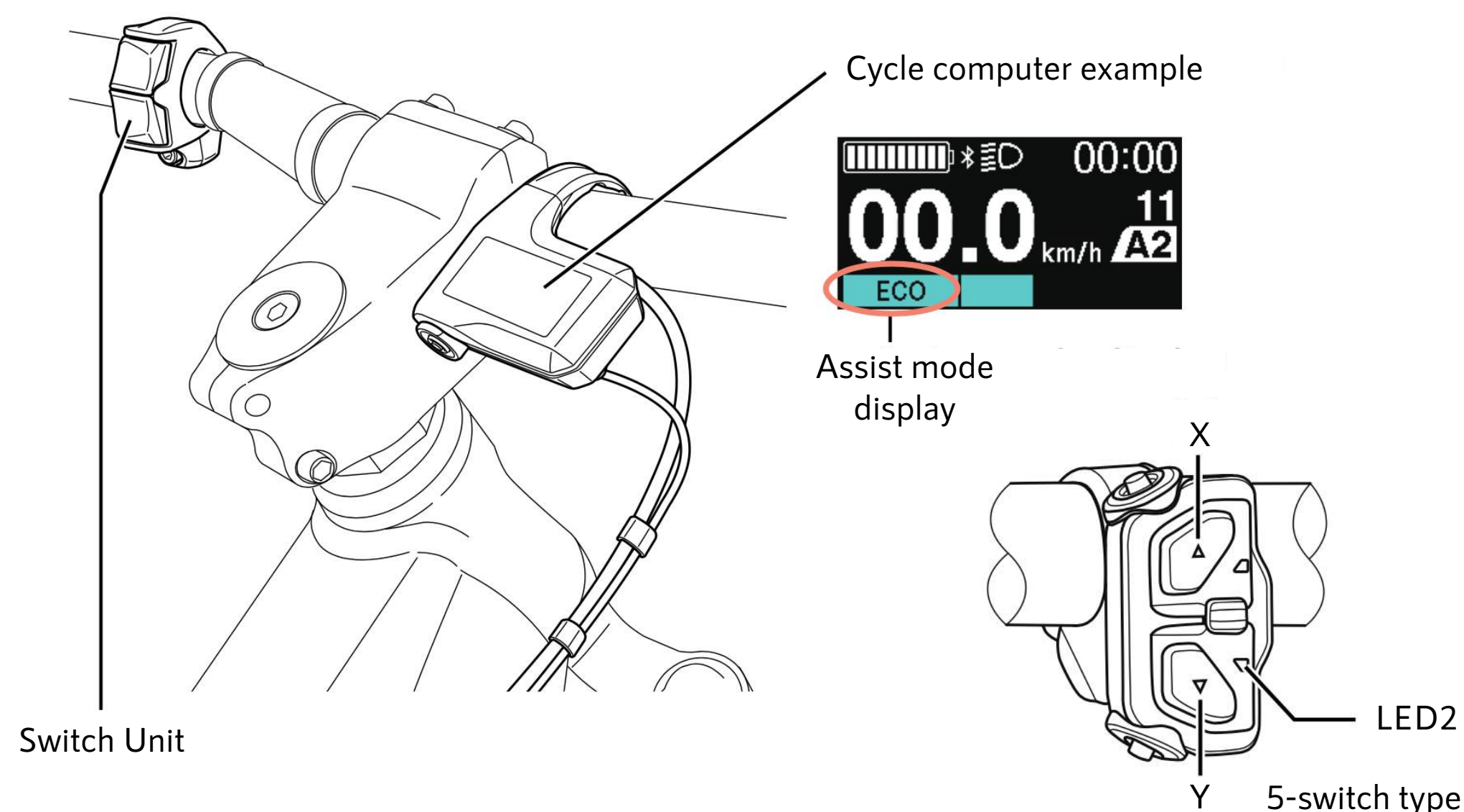
LED2	Assist mode display
OFF	[OFF]
Light blue	[ECO]
Green	[TRAIL] / [NORMAL]
Yellow	[BOOST] / [HIGH]

Select the level of assistance from three modes according to riding conditions. One of the following two combinations is set by default:

• [BOOST] / [TRAIL] / [ECO]
A combination of assist modes for sport riding.

• [HIGH] / [NORMAL] / [ECO]
A combination of assist modes for comfortable riding in urban settings.

Assist mode	Level of assistance	Main application
[BOOST] / [HIGH]	Increase	Precipitous mountain roads and steep slopes
[TRAIL] / [NORMAL] [1]	Intermediate	Gentle ascending slopes and level ground
[ECO]	Decrease	Long distance riding on level ground, level parks with signals

[1] Depending on the cycle computer, [NORM] is displayed.

HOW TO HANDLE
AN ASSIST BICYCLE
QUICK GUIDE

④ Get on the bicycle and start riding

Turn the pedals to start assist.

CAUTION
Be sure to learn the brake control characteristics and other characteristics. Brake handling may vary slightly depending on the bicycle you are using.

⑤ Turn the power OFF and park your bicycle when you arrive at your destination

MAKING WALKING AND PUSHING
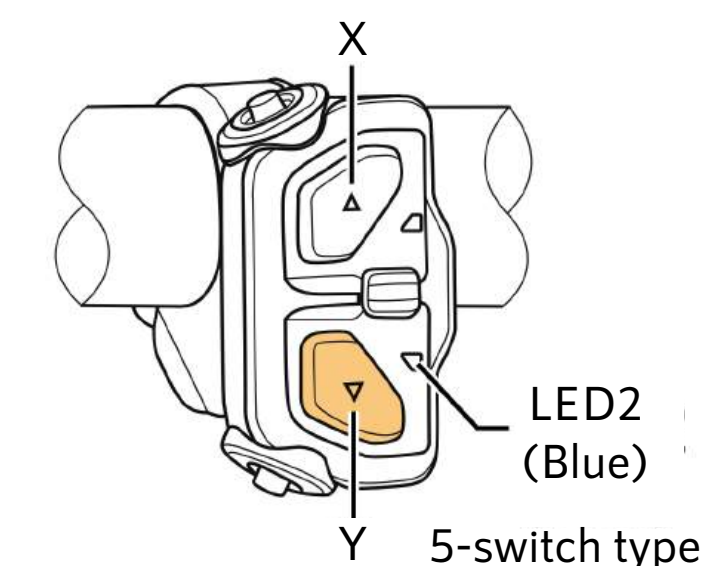# THE BICYCLE EASY (WALK ASSIST)
QUICK GUIDE

SHIMANO STEPS has a function where assist works even when you are walking and pushing the assist bicycle.

Depending on the region of use, you may not be able to use it due to the laws of the region. In this case, the operations described here are disabled.

❶ Stop and switch to walk assist mode

Press and hold Y on the assist switch
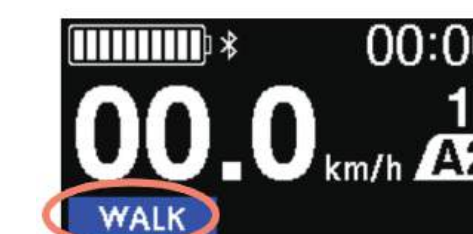(left side of the handlebar)
until it reaches the following state:

- Cycle computer: [WALK] is displayed
- 3-switch type: LED2 lights up blue

X
LED2
(Blue)
Y   5-switch type

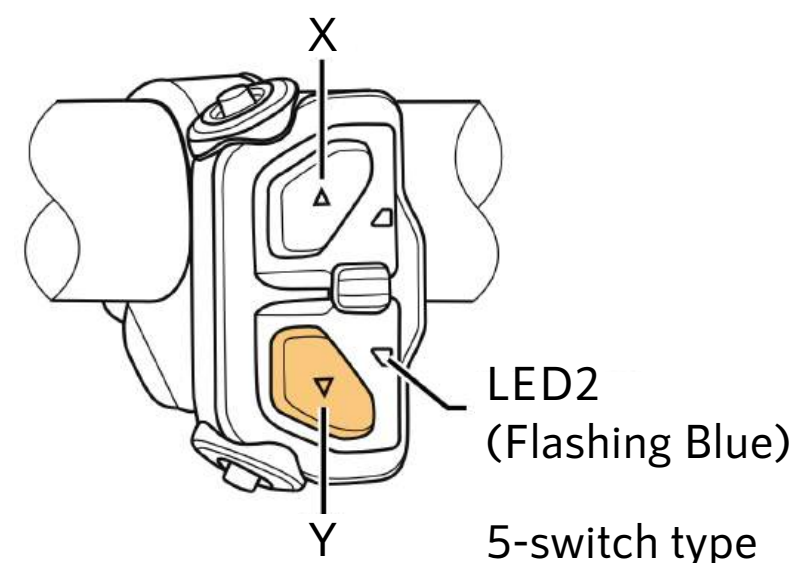| TECH TIPS |
| --- |
| If nothing is done for one minute after switching to walk assist mode, it will switch back to the assist mode that was selected before switching. |

Cycle computer example

MAKING WALKING AND PUSHING THE BICYCLE EASY (WALK ASSIST)
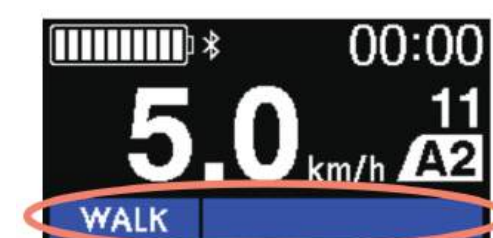## QUICK GUIDE

❷ Carefully push the bicycle while pressing Y again

The drive unit operates while Y is pressed to assist you in pushing the bicycle.

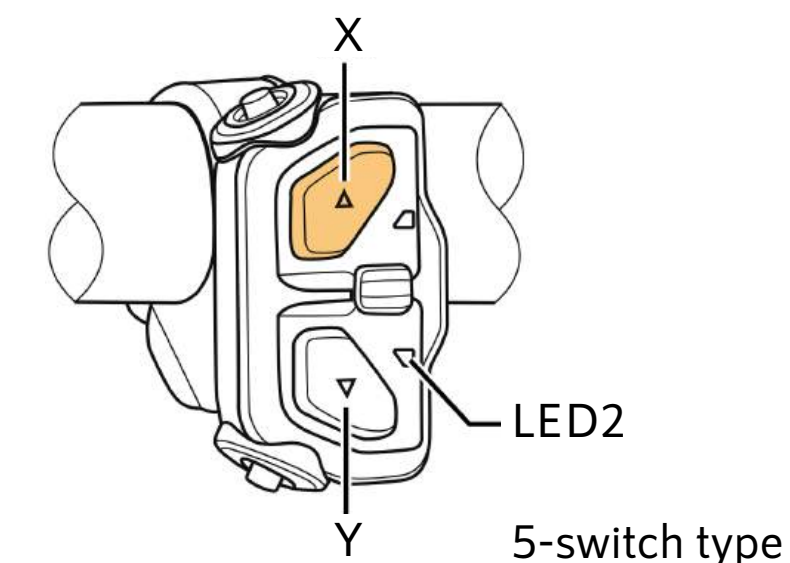When the drive unit is operating, the LED and screen displays change as shown in the figure.

X

LED2
(Flashing Blue)

Y   5-switch type

Cycle computer example

00:00

5.0 km/h   11
A2

WALK

NOTICE	TECH TIPS
Walk assist operates at a maximum of 6 km/h. Be careful because the bicycle starts moving just by pressing Y.	During electronic gear shifting, the level of assistance of walk assist and speed are controlled by the current gear position.

❸ Exit walk assist mode

Press the button (X button) on the upper side of the assist switch (left side of the handle).

X

LED2

Y   5-switch type

# SWITCHING BETWEEN AUTOMATIC AND MANUAL GEAR SHIFTING

QUICK GUIDE

Depending on the assist bicycle used, you may be able to switch between automatic and manual gear shifting.

- Automatic gear shifting: Automatically shifts gears based on riding conditions. Manual gear shifting operations are possible even when automatic gear shifting is set.
- Manual gear shifting: This is standard electronic gear shifting. Gears are shifted by operating the shift switch.

The shift switch (right side of the handlebar) is operated as follows, depending on the type.

- 3-switch type or MTB type shift switch: Press the A button
- 2-switch type shift switch: Press and hold X and Y until the display of the cycle computer switches

Shifting switches between automatic and manual gear shifting as shown aside.
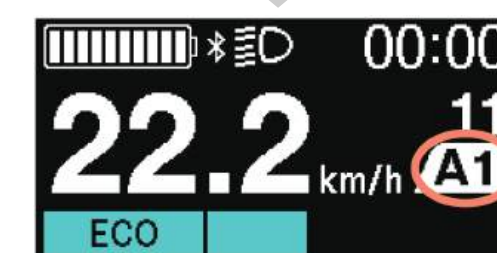
A   X   Y
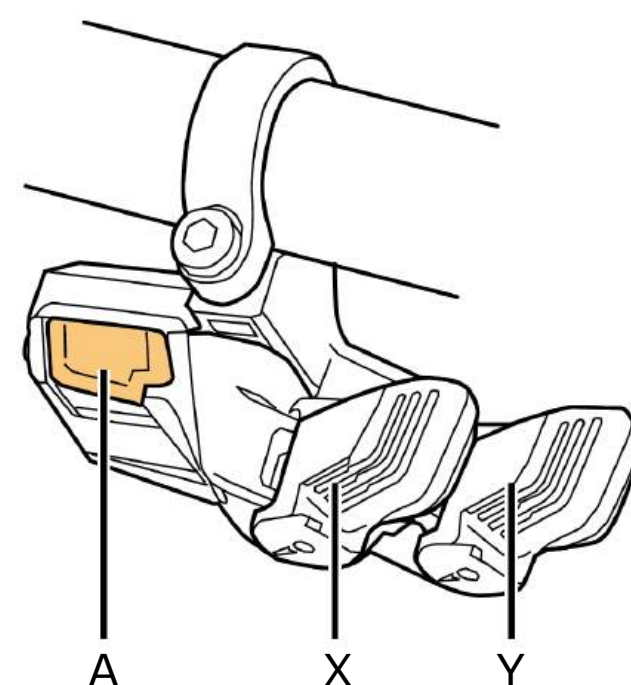
MTB type

When there is one automatic gear shifting setting
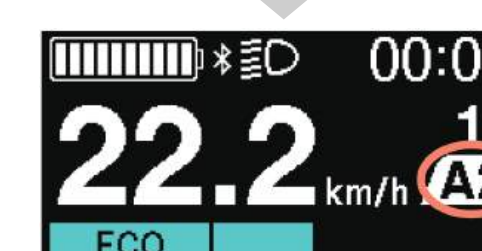

Manual gear shifting

Automatic gear shifting

When there are two automatic gear shifting settings

Manual gear shifting
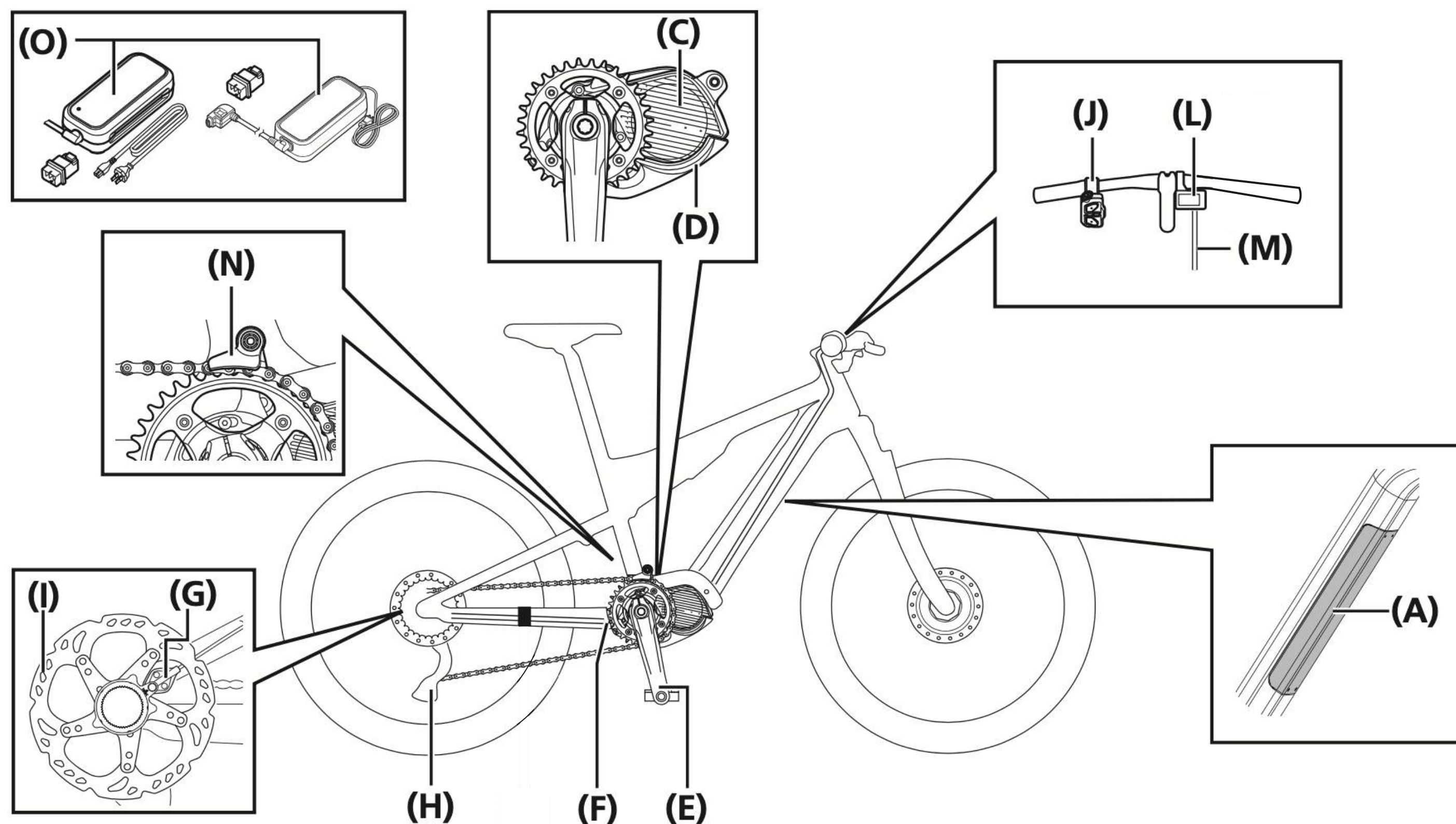
Automatic gear shifting (AUTO1)
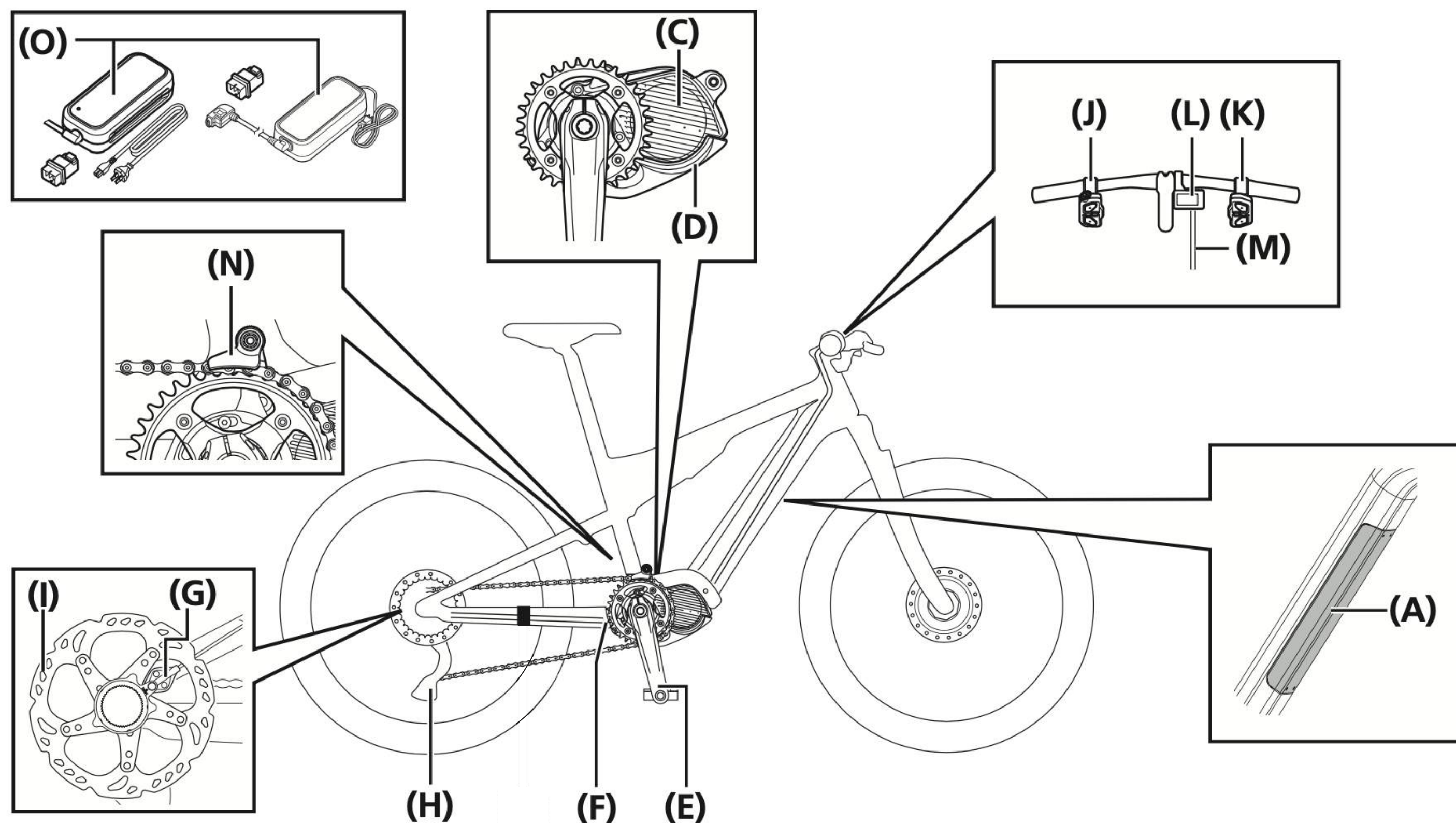
Automatic gear shifting (AUTO2)

TECH TIPS

The display will differ depending on the model of cycle computer. Refer to the user's manual of your cycle computer.

ELECTRICAL PARTS - COLLOSUS N8E

(A)	Built-in type battery[1]	BT-EN806 630 Wh
(B)	Battery mount[1]	BM-EN801-A
(C)	Drive unit	DU-EP801
(D)	Drive unit cover (left side and bottom side)	DC-EP801-A
(E)	Crank arm	FC-M8150 160mm
(F)	Chainring unit	SM-CRE80-12-B 34T
(G)	Speed sensor[2]	EW-SS301
(H)	Shifting unit[3]	RD-M8100-SGS
(I)	Disc brake rotor	RT-EM810 203mm
(J)	Switch unit (assist switch)	SW-EN600-L
(K)	Switch unit (shift switch) or shift lever	SL-M8100-IR
(L)	Cycle computer	SC-EN600
(M)	Electric wire	EW-SD300
(N)	Chain device	e13 E-SPEC PLUS
(O)	Battery charger	EC-E6002
		SM-BTE80
		SM-BCC1

ELECTRICAL PARTS - COLLOSUS N8XE

(A)	Built-in type battery[1]	BT-EN806 630 Wh
(B)	Battery mount[1]	BM-EN801-A
(C)	Drive unit	DU-EP801
(D)	Drive unit cover (left side and bottom side)	DC-EP801-A
(E)	Crank arm	FC-M8150 160mm
(F)	Chainring unit	SM-CRE80-12-B 34T
(G)	Speed sensor[2]	EW-SS301
(H)	Shifting unit[3]	RD-M8150-SGS
(I)	Disc brake rotor	RT-EM810 203mm
(J)	Switch unit (assist switch)	SW-EN600-L
(K)	Switch unit (shift switch) or shift lever	SW-M8150-IR
(L)	Cycle computer	SC-EN600
(M)	Electric wire	EW-SD300
(N)	Chain device	e13 E-SPEC PLUS
(O)	Battery charger	EC-E6002
		SM-BTE80
		SM-BCC1

WIRING DIAGRAM

Collosus N8e

Collosus N8Xe

CAN

Collosus N8Xe only
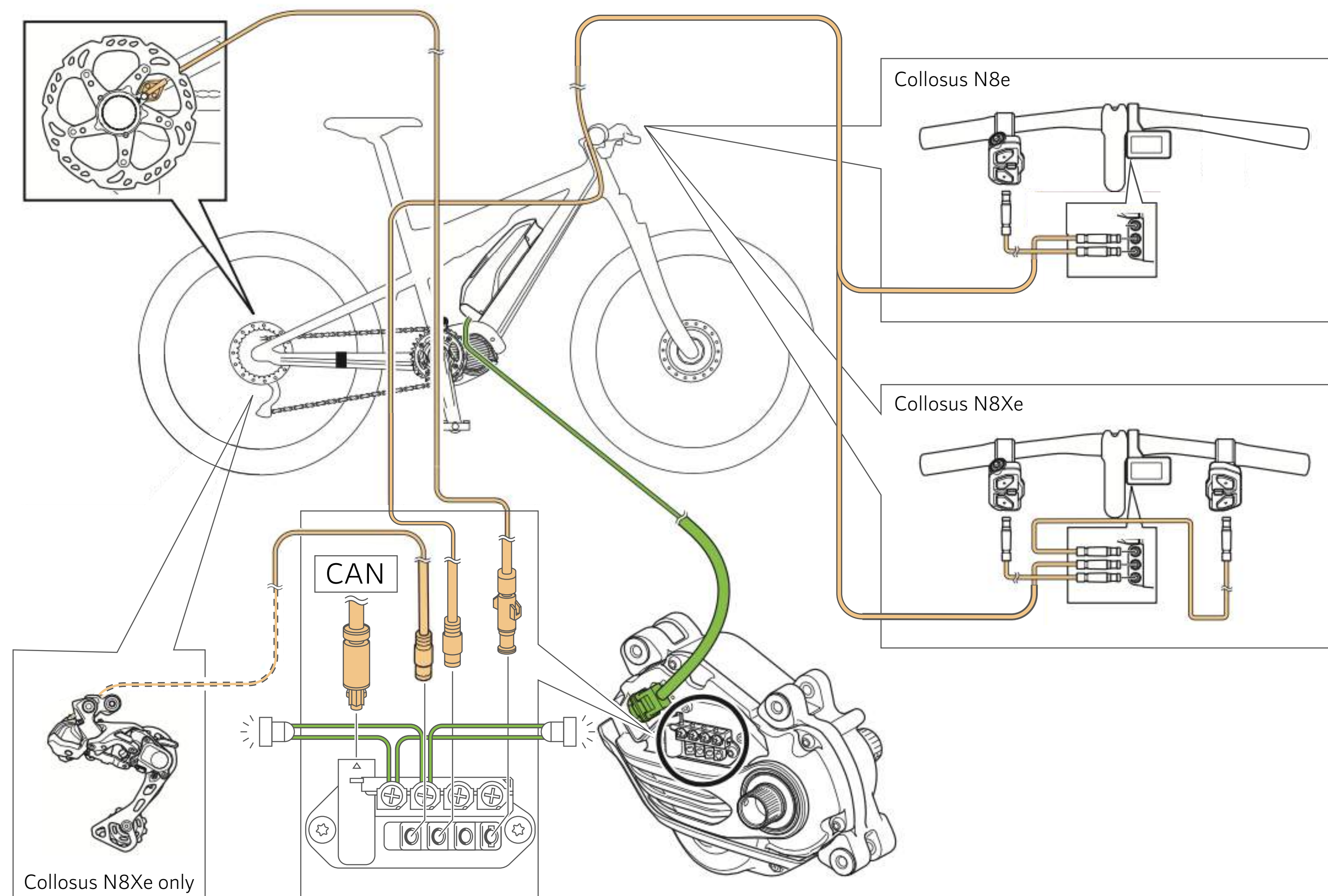
ERROR/WARNING INDICATION
TROUBLESHOOTING

For details on error/warning codes, check the latest versions below:
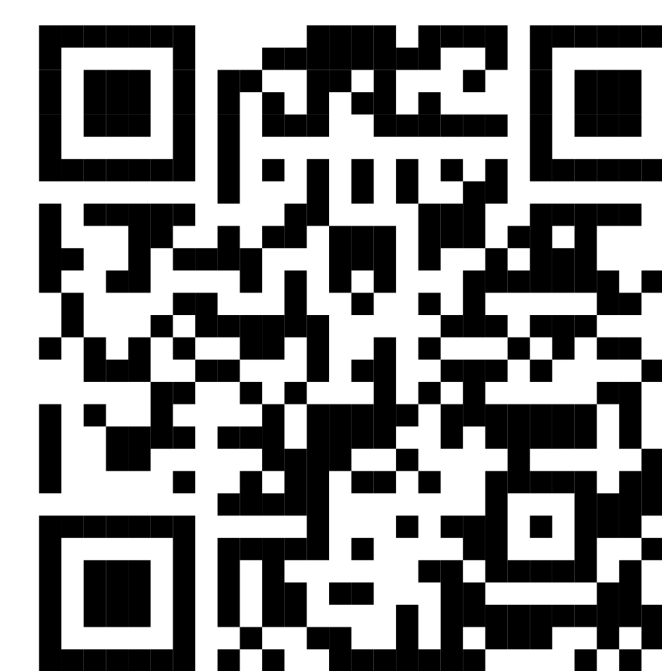

https://si.shimano.com/error

NOTICE
If the error persists, stop using the bicycle and swiftly contact your place of purchase or a distributor for assistance.

WHEN A PROBLEM OCCURS
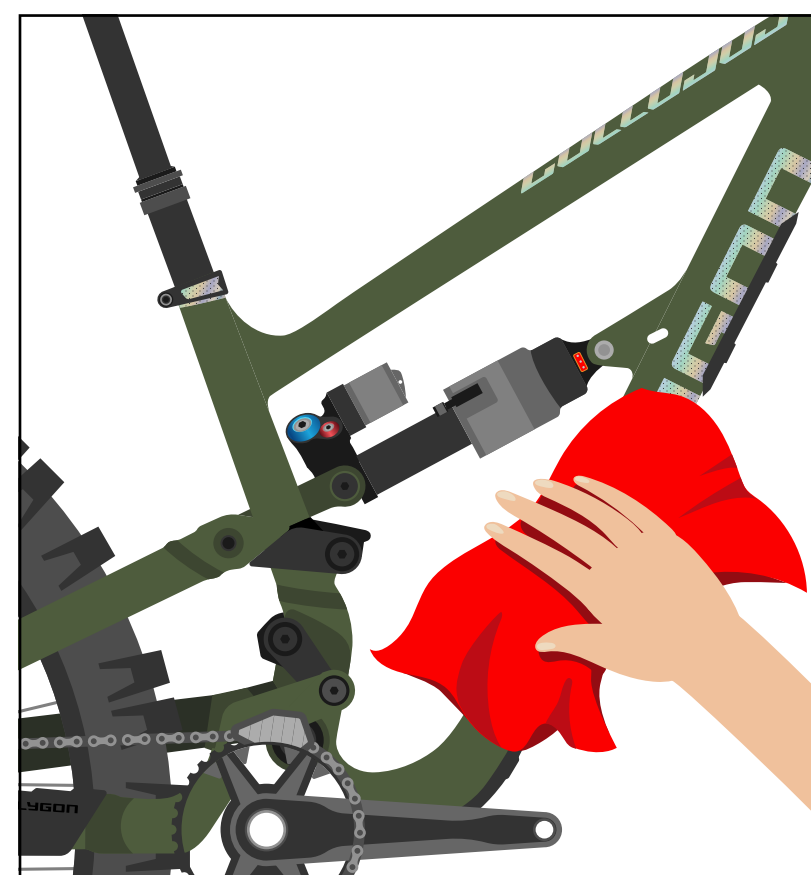## TROUBLESHOOTING

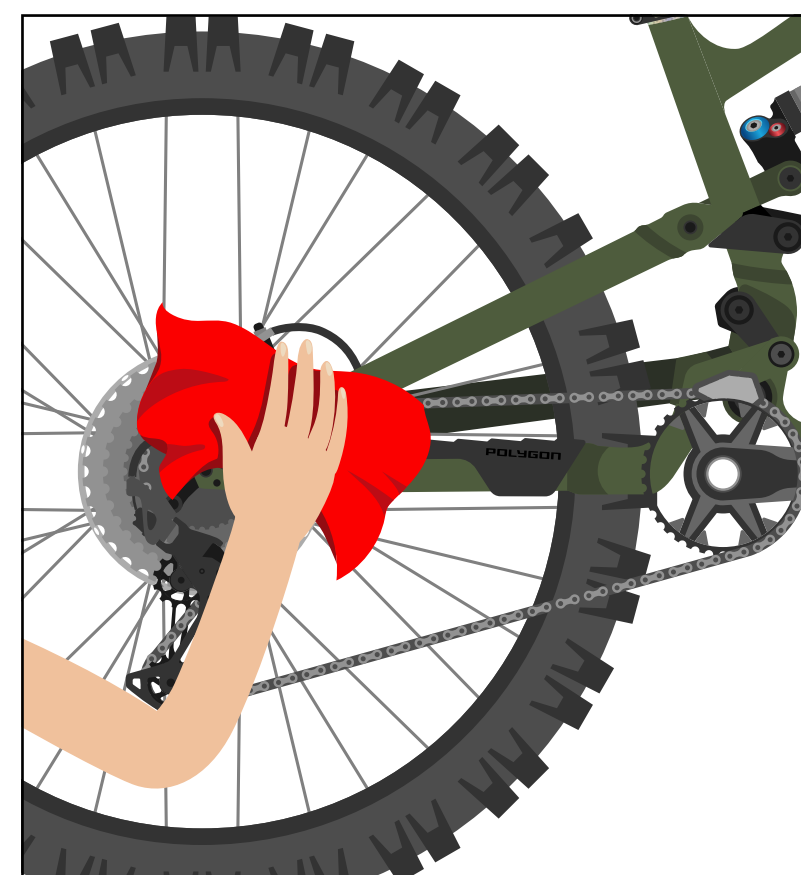The FAQ for SHIMANO STEPS can be accessed with the following:

https://bike.shimano.com/faq/STP0A
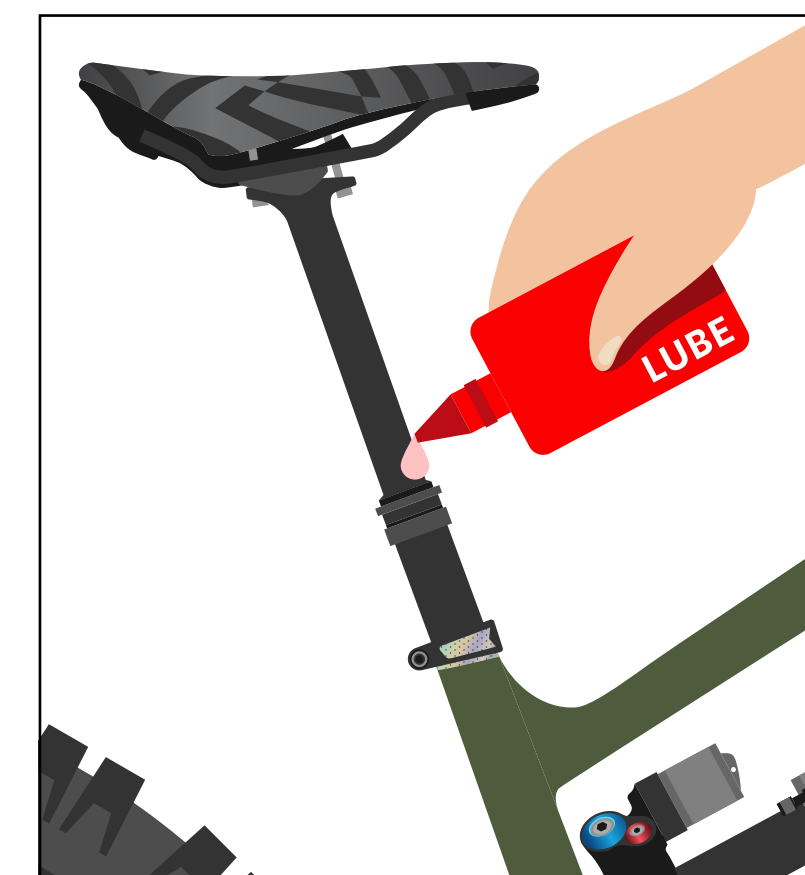
HOW TO CLEAN THE BIKE

①
Use a bike wash or wet cloth to clean up every part of your bike. Preferably using a specific cleaner for the bike.

②
Wipe the bike immediately until it's dry. Do not leave it in wet conditions for a long time.

③
Clean up the drivetrain with a clean and dry cloth.

④
Check and lubricate every component if needed, especially 2 or more components that rub against each other, such as the seat post, bottom bracket, hub, pivot frame suspension, etc.

NOTE

- Use the right bike wash to make sure your every bike component and frame is safe.

- Avoid washing the bike using high-pressure water.

- It is highly recommended to use specific lubricants for bicycle parts, not with engine vehicles or other oil since it might lead to component performance reduction.

- It is recommended to use a bike cleaner rather than detergent, solvent like acetone, and thinner to clean the bike parts.
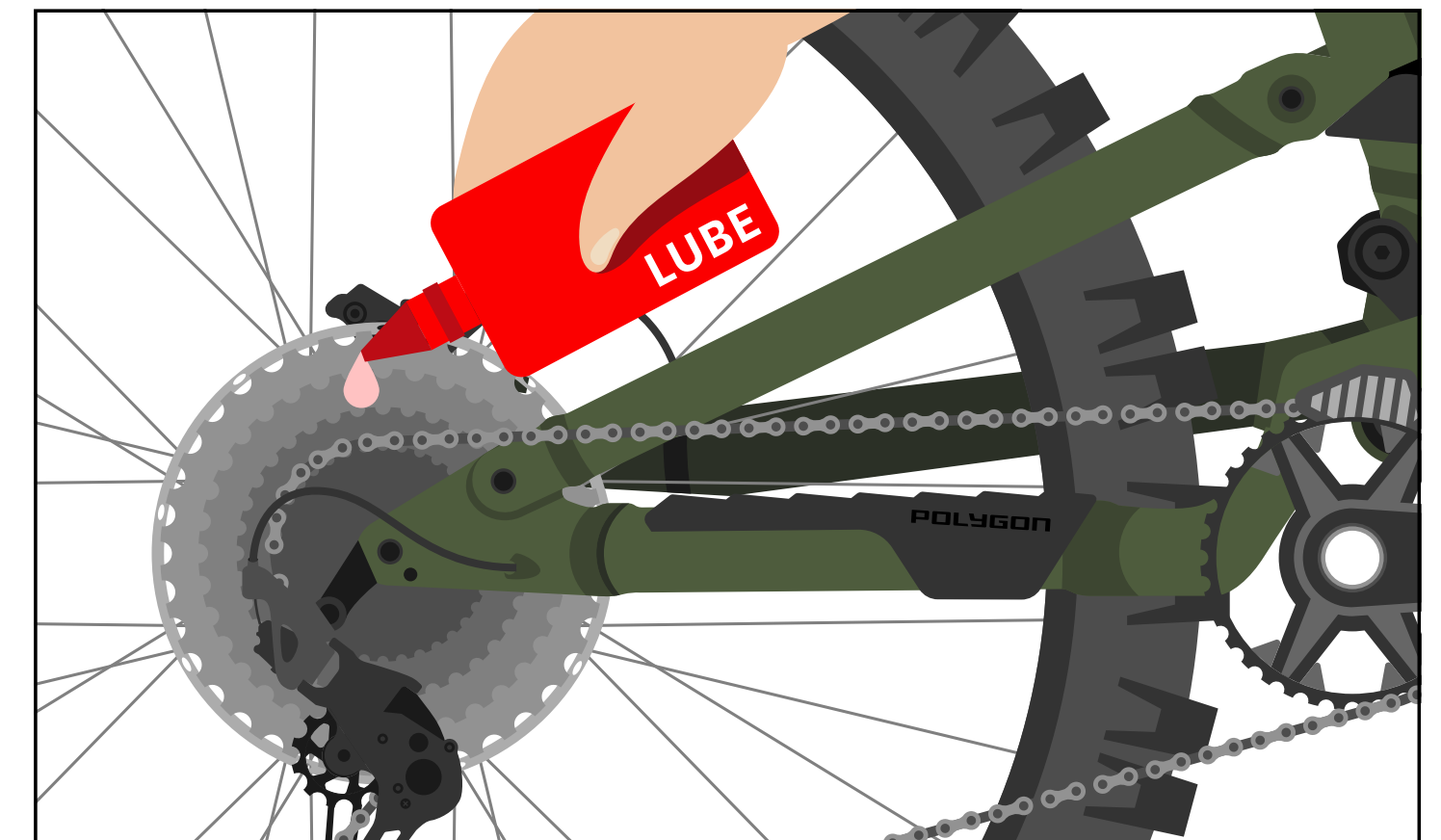
HOW TO MAINTAIN THE BIKE'S CHAIN

❶
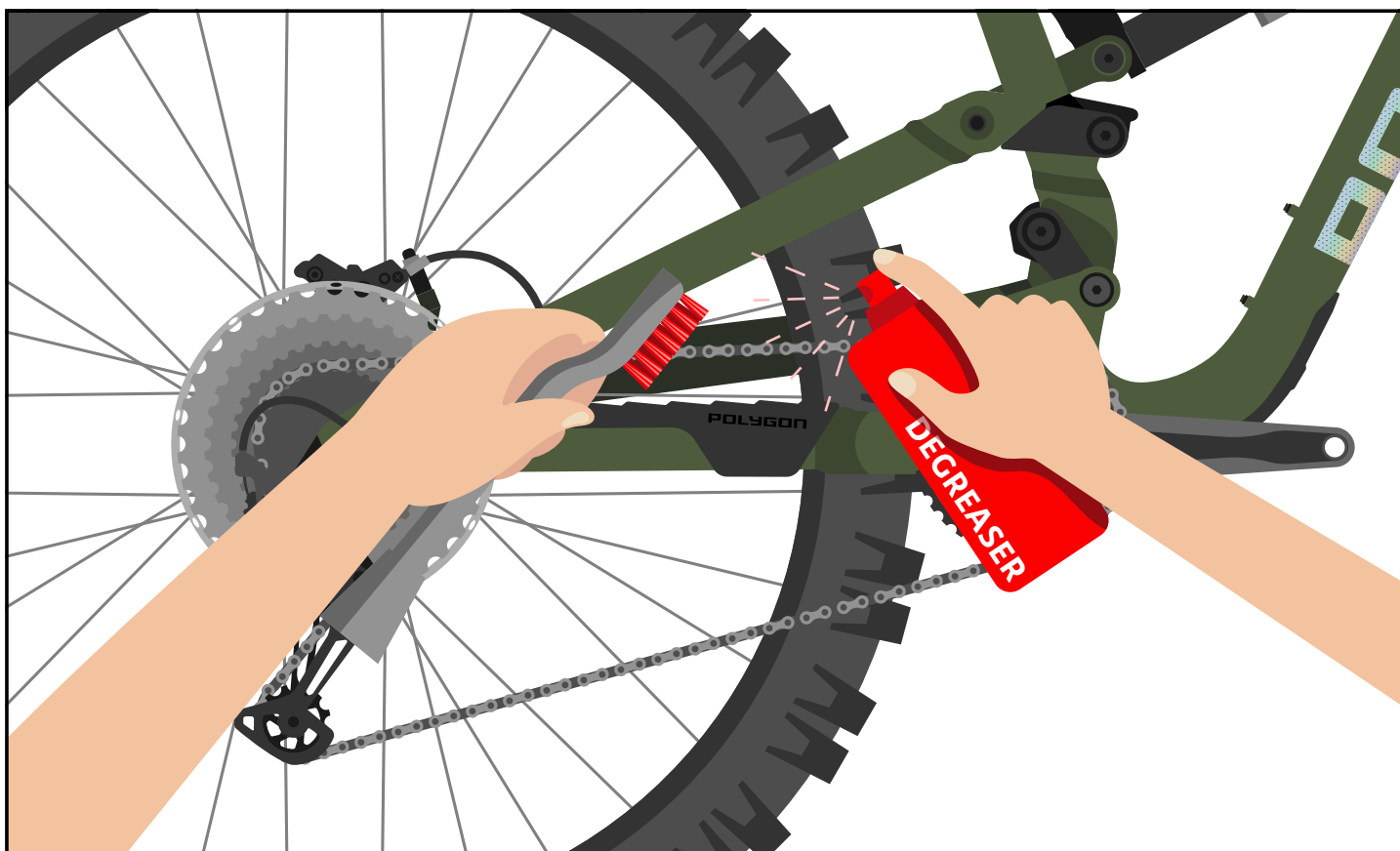
Use a bike chain cleaner and
gently brush it.

❷
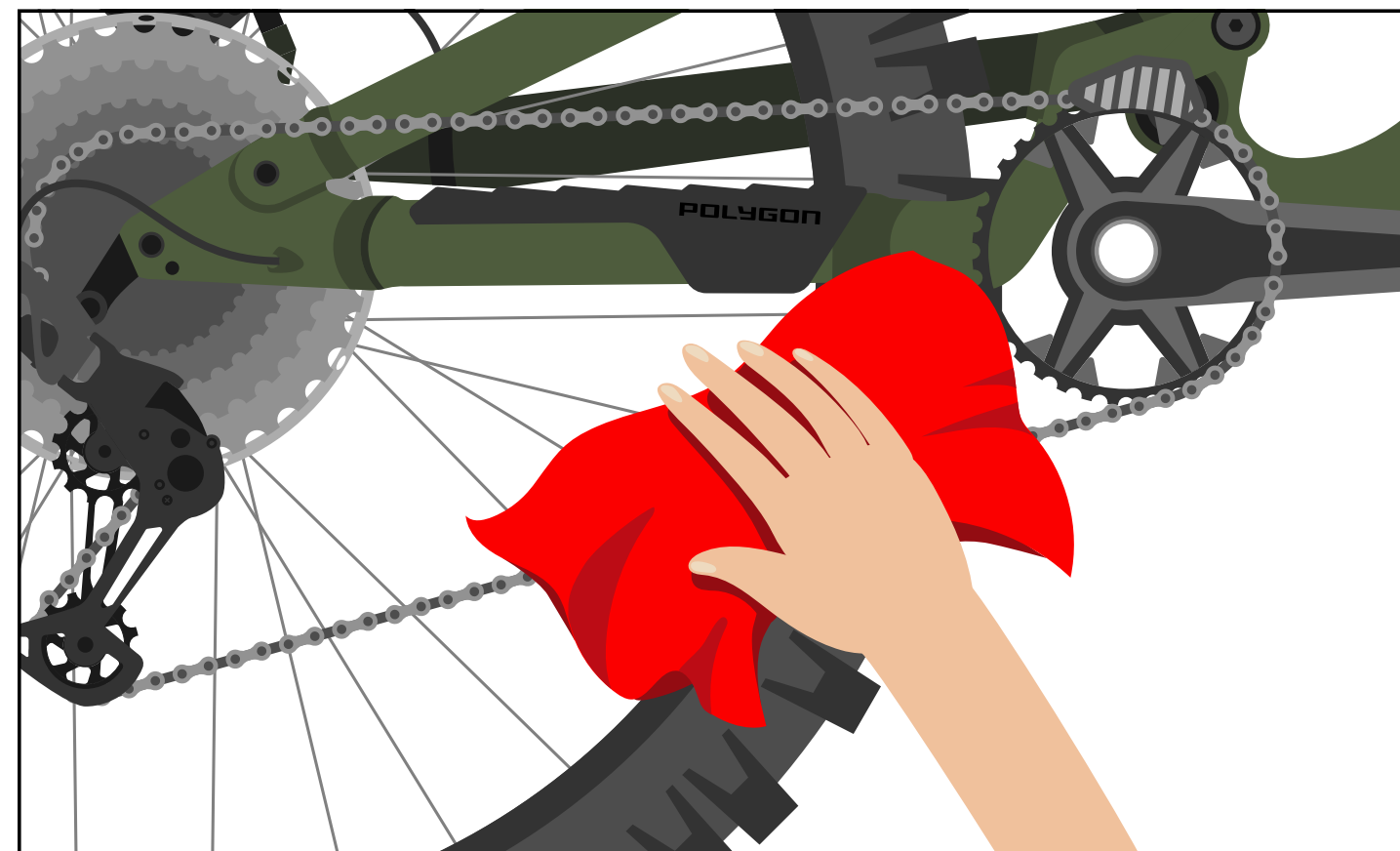
Wipe with a clean and dry cloth,
and let it dry for minutes.

❸

Lube the chain regularly.