

# MY20 Quick Neo SL, Treadwell Neo

w/ Ebikemotion® X35 Drive System

## About Technical Supplements

This document is intended only for competent, experienced bicycle mechanics familiar with bicycle terminology, service techniques and equipped with proper tools.

This document is not an Owner's Manual or Owner's Manual Supplement. These resources can be found as downloadable Adobe PDFs from our website : [www.cannondale.com](http://www.cannondale.com)

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## Symbols in Use



- NGLI-2 synthetic grease



- Loctite® 242 (blue) or equivalent

**N·m** - Newton meter

## OTHER RESOURCES

### Ebikemotion® Drive System Manuals

The following internet links will direct you to the drive manufacturer's website and a specific user manual or quick guide you will need to read and consult:

#### URL

<https://www.ebikemotion.com>

<http://iWocONE-Quick-User-Guide>

<http://User-Guide-X35-Connection+Mount>

<http://User-Guide-X35-Care+Maintenance>

Periodically, check back with the manufacturers' website for revisions and/or additions to drive system manuals.

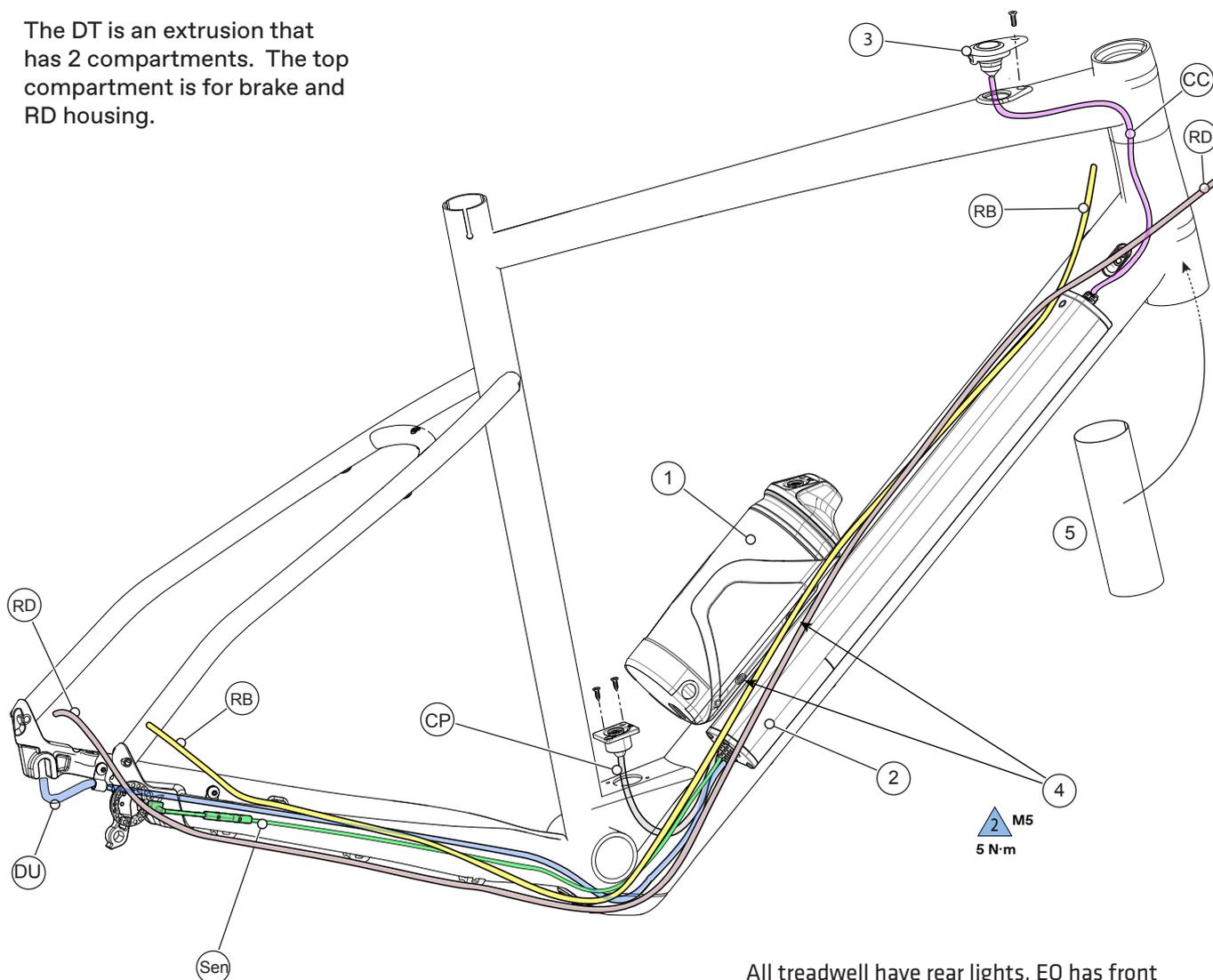
## WARNING

**Information intended for service professionals only.** Improper mechanical work increases the risk of an accident. Any bicycle accident has risk of serious injury or death.

If you have any questions about this supplement please call:

**Your Warranty/Technical Representative**

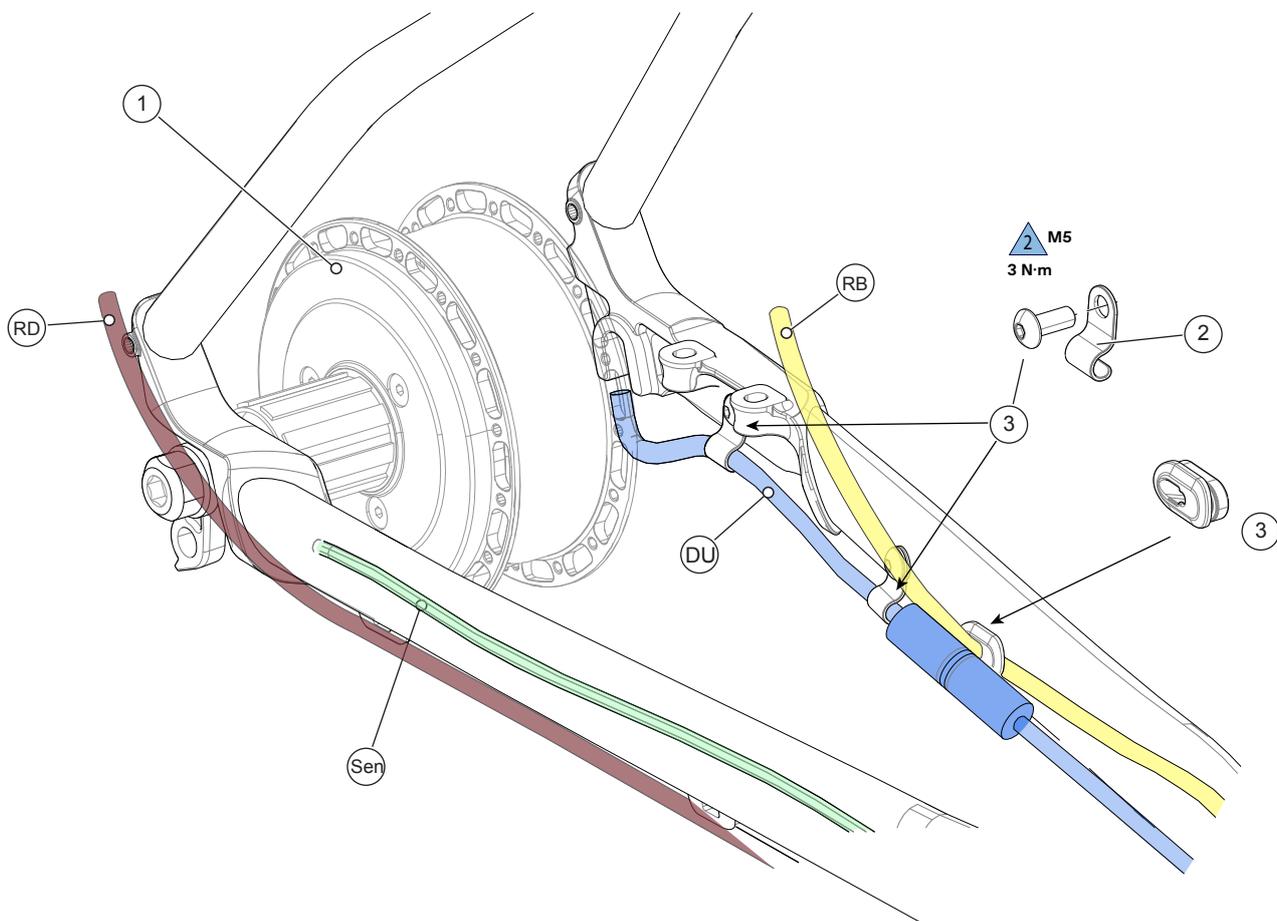
The DT is an extrusion that has 2 compartments. The top compartment is for brake and RD housing.



All treadwell have rear lights. EQ has front and rear. Light wire comes out bottom of battery.

**Identification**

- |                                   |                               |
|-----------------------------------|-------------------------------|
| 1. Battery, External (optional)   | RB - Rear Brake Line          |
| 2. Battery, Internal              | RD - Rear Derailleur Housing  |
| 3. iWoc® ONE<br>(drive interface) | DU - Drive Unit Cable         |
| 4. Water Bottle Mounting Bolts    | FD - Front Derailleur Housing |
| 5. Headtube Plastic Cable Sheet   | CP Charge Port Cable          |
|                                   | CC - iWoc® ONE Cable          |
|                                   | Sen - PAS Sensor Cable        |

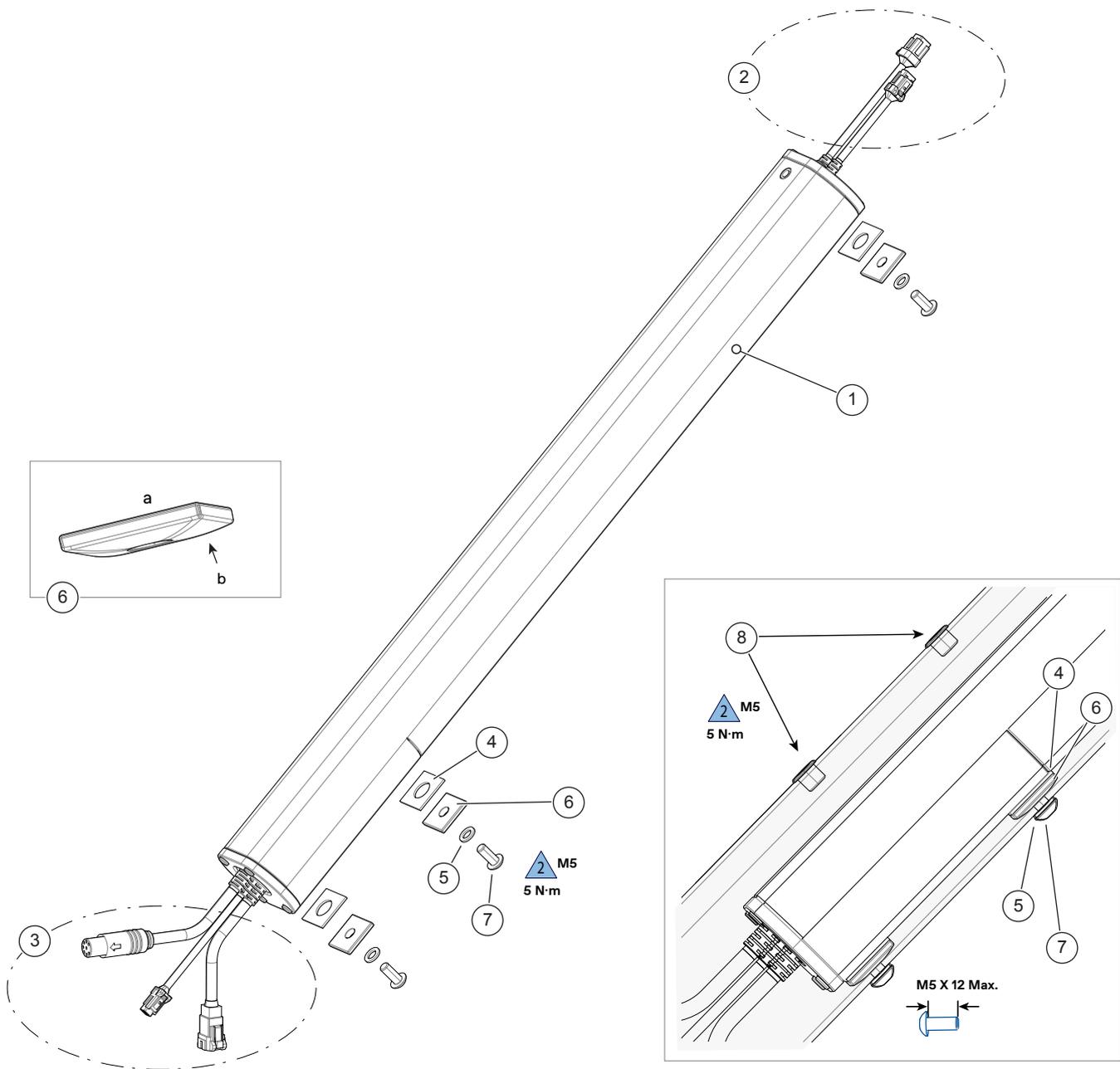


**WARNING**  
 Secure drive unit cable (DU) to frame with clips.  
 Prevent cable from contacting brake rotor.

**Identification**

- 1. X35 Drive Unit (rear hub)
- 2. Cable Clip
- 3. Bolt
- 4. Grommet

- RB - Rear Brake Line
- RD - Rear Derailleur Housing
- DU - Drive Unit Cable
- FD - Front Derailleur Housing
- Sen - PAS Sensor Cable



**Identification**

- |                         |                   |                |
|-------------------------|-------------------|----------------|
| 1. Battery, Internal    | 6. Battery Spacer | a. Flat side   |
| 2. Upper Battery Cables | 7. Mounting Bolt  | b. Curved side |
| 3. Lower Battery Cables | 8. Water Bottle   |                |
| 4. 3M™ Tape             |                   |                |
| 5. Washer, M5           |                   |                |

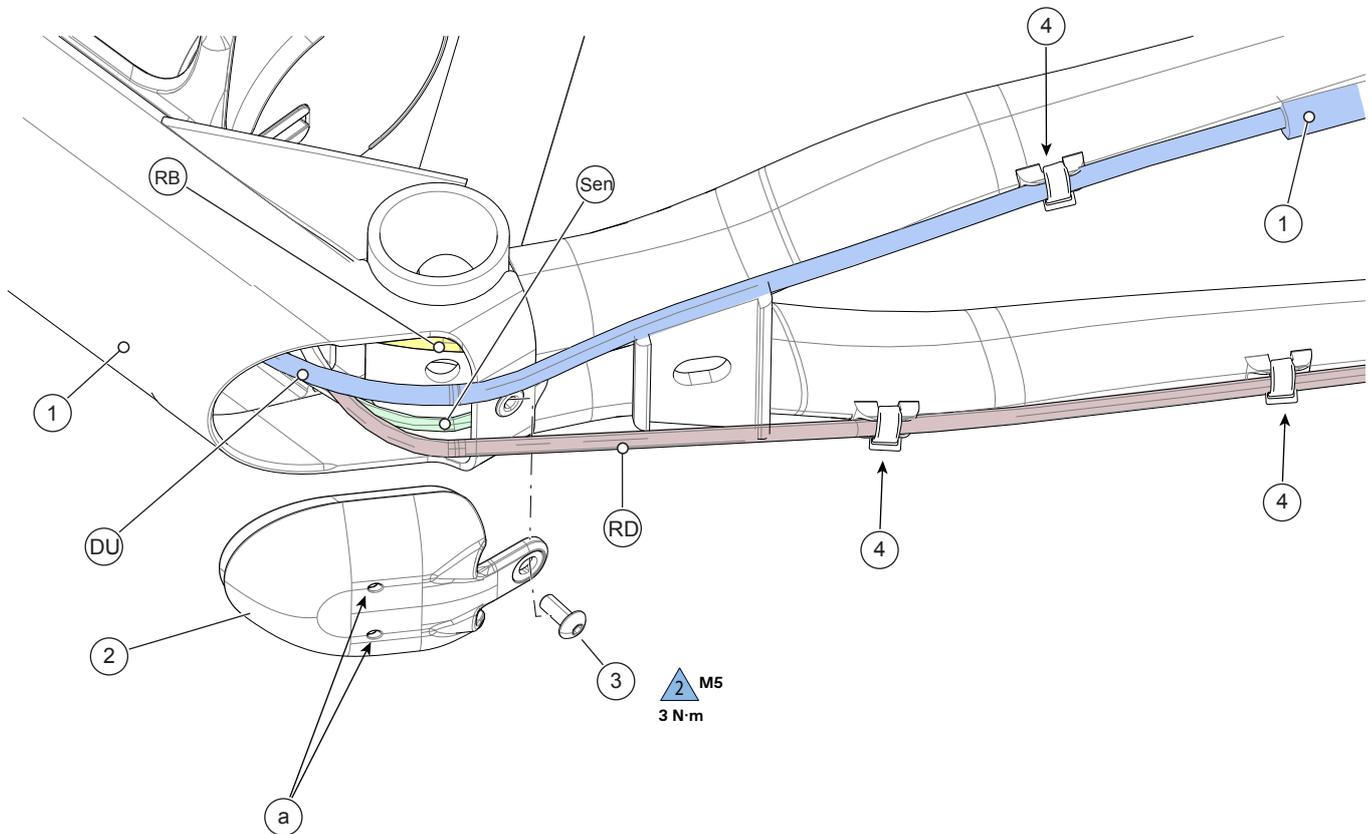
**NOTICE**  
 Do not use mounting bolts longer than the maximum specified. Longer bolts will protrude into the down tube and damage the internal battery.

**Remove**

1. Disconnect the rear hub and battery connector on the left chainstay
2. Disassemble the headset cap so that the fork may be lowered slightly within the headtube. This is required to enable adequate cable slack.
3. Remove the retaining bolt for the iWoc® ONE on the top tube and lift up the device. Disconnect it from the battery cable.
4. Disconnect any attached optional lighting from the battery connector.
5. Remove the bottom bracket cover.
6. Remove the screws and lift up the charge port. Disconnect the device from the battery cable.
7. At the bottom bracket:  
  
Disconnect the wheel sensor, drive unit battery connectors.
8. Remove the three bolts and washers on the underside of the downtube to release the internal battery.
9. Slide the internal battery down and out of the bottom bracket opening.
10. Remove the three battery spacers from the battery.
11. There are no servicable parts of the battery. The removed battery must be handled as electronic waste, subject to regulations regarding handling or used batteries in your area.

**Install**

1. Attach the three battery spacers onto the replacement internal battery at the mounting points on the lower surface of the battery.  
  
Affix the flat side of the spacers to the battery over the mounting holes.
2. Insert the upper parts of the battery into the downtube.  
  
Make sure other cables and housing inside the downtube are positioned on the top of the battery inside the downtube.  
  
Align the holes in the battery with the holes in the frame and install the washers and bolts.  
  
Apply Loctite 242 (blue) to the bolt threads and tighten to the specified torque.
3. Reconnect the battery to the iWoc® ONE and charge port and re-install both devices into the frame. Tighten to the specified torque.
4. At the bottom bracket:  
  
Reconnect the rear hub and battery cable on the left chainstay.  
  
Reconnect the sensor to the battery.
5. Reinstall the bottom bracket cover and tighten the cover bolt to the specified torque.
6. Charge the battery.
7. Test the operation of the drive system.



### Identification

1. Downtube
2. Bottom Bracket Cover
3. Bolt
4. Cable Tie

- RB - Rear Brake Line  
 RD - Rear Derailleur Housing  
 DU - Drive Unit Cable  
 FD - Front Derailleur Housing  
 Sen - PAS Sensor Cable

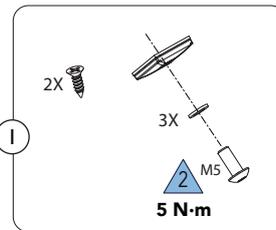
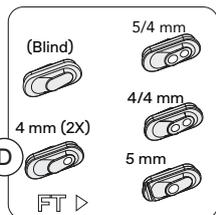
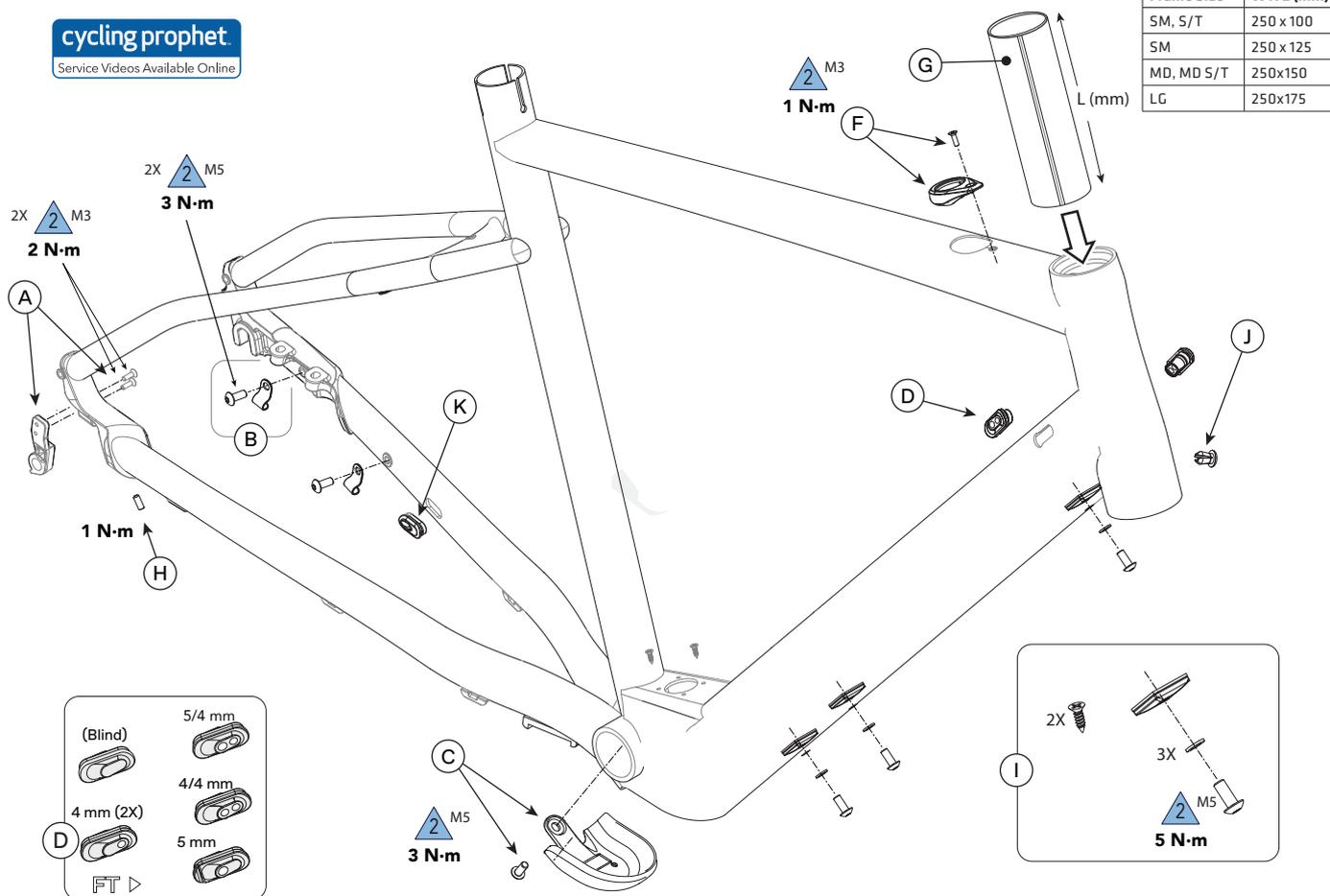
a Drain Holes

Technical Supplement  
**MY20 Quick Neo SL**

**Specifications & Replacement Parts**  
 Standard & Remixte Frames

Item	Specification
Drive System	E-Bike Motion X35 M1-C
Battery	E-Bike Motion X35 B1-C
Drive-Assist Owner's Manual	<a href="https://www.ebikemotion.com/web/">https://www.ebikemotion.com/web/</a>
Head Tube	UPR: 1-1/8in, LWR: 1-1/4in
Headset	Integrated, 1-1/8in - 1-1/4in
Bottom Bracket: Type/Width	BSA/73mm
Front Derailleur	N/A
Seat Post: Dia./Binder	31.6mm/34.9mm
▲ Min. Seat Post Insert	65mm

Item	Specification
▲ Tire Size x Max. Tire Width	700c x 42mm
Brakes: Mount Type / Min./Max. Rotor Dia.	RR: Flat Mount/160mm/160mm, FT: Flat Mount/140mm/160mm
Axles: Type/Length	RR: EBM X35 FR: Maxle TA/ 100x12 125mm length
▲ Intended Use	ASTM CONDITION 2: General Purpose Riding
▲ Max. Weight Limit: Total (Rider+All Equipment)	305lbs/138kg



ID	Part Number	Description
A	K33050	Derailleur Hanger BT ST SS 077
B	K32240	NDS EBM Cable Clips Qty 2
C	K34030	Alloy Frame Battery Door
D	K32000	Shift/Brake Keyhole Grommets
G	K34020	HT Plastic Cable Sheet
H	K33080	Dropout Bolts M4x10mm Qty 2
I	K76040	X35 Battery/Charge Mounting Hardware

ID	Part Number	Description
J	K34090	DT Light Cable Grommet
K	KP312/	Open Oval Grommet x10 (QTY 10)
--	K14040	Herrmans H-Trace E-Bike Rear Light
--	K83038	Ratchet Lever Maxle 100x12 125mm

Technical Supplement

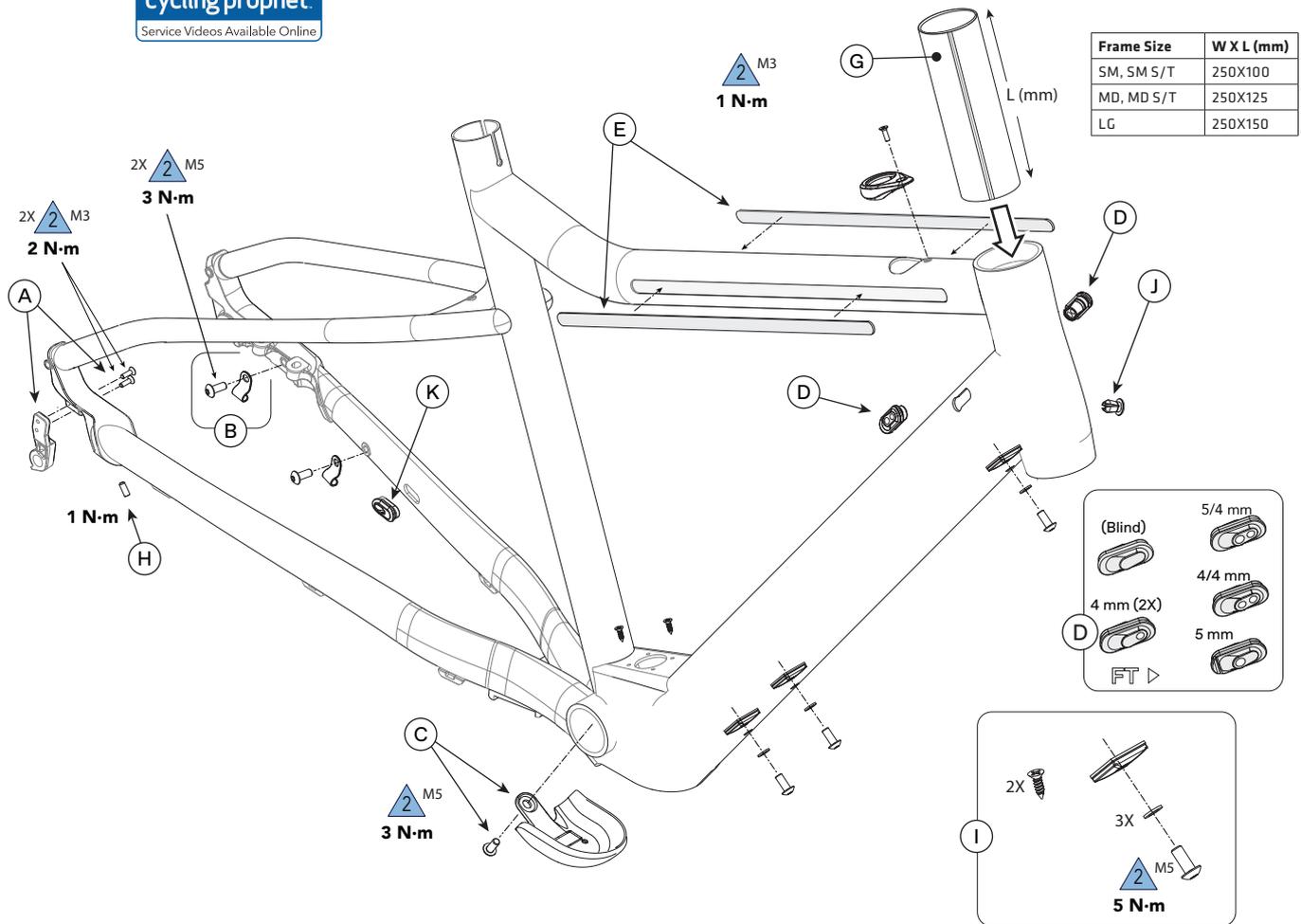
MY20 Treadwell Neo

Specifications & Replacement Parts

Standard & Remixte Frames

Item	Specification
Drive System	E-Bike Motion X35 M1-C
Battery	E-Bike Motion X35 B1-C
Drive-Assist Owner's Manual	<a href="https://www.ebikemotion.com/web/">https://www.ebikemotion.com/web/</a>
Head Tube	UPR: 1-1/8in LWR: 1-1/8in
Headset	Semi-integrated, 1 1/8in -1 1/8in
Bottom Bracket: Type/Width	BSA/73mm
Front Derailleur	N/A
Seat Post: Dia./Binder	31.6mm/34.9mm

Item	Specification
▲ Min. Seat Post Insert	65mm
▲ Tire Size x Max. Tire Width	650b x 48mm
Brakes: Mount Type / Min./Max. Rotor Dia.	RR: Flat Mount/160mm/160mm, FR: Flat Mount/140mm/160mm
Axles: Type/Length	RR: EBM X35 FR: QR /100 x 9mm"
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B	K32240	NDS EBM Cable Clips (QTY 2)
C	K34030	Alloy Frame Battery Door
D	K32000	Shift/Brake Keyhole Grommets
E	K34000	Treadwell Top Tube Scuff Guard
F	K32230	Treadwell Neo Bezel
G	K34020	HT Plastic Cable Sheet
H	K33080	Dropout Bolts M4x10mm (QTY 2)

ID	Part Number	Description
I	K76040	X35 Battery/Charge Mounting Hardware
J	K34090	DT Light Cable Grommet
K	KP312/	Open Oval Grommet x10 (QTY 10)
--	K13000	Treadwell Front Rack w/ Bamboo Tray
--	K14040	Herrmans H-Trace E-Bike Rear Light
--	K21000	Cruise Control Handlebar 740 x 31.8mm
--	K83038	Ratchet Lever Maxle 100x12 125mm