

# 6 DEALER MANUAL FOR M420 (MM G332.250/350.C/CCB)

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# 6.1 INTRODUCTION

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- **Product Model**

MM G332.250.C

MM G332.350.C

MM G332.250.CCB

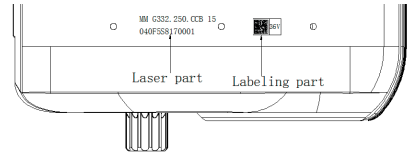
MM G332.350.CCB

- **Scope**

**i** Applies only to electrically powered pedelecs developed or licensed by Bafang. It is suitable for city and trekking bikes, which have been developed for road use. The engine is not suitable for sport competitions.

- **Identification**

The following graphic, is the identification numbers of the product, which are shown on the housing:



**Note:** Content in the label is important information about this product. Please do not remove the information from the motor.

## 6.2 SPECIFICATIONS

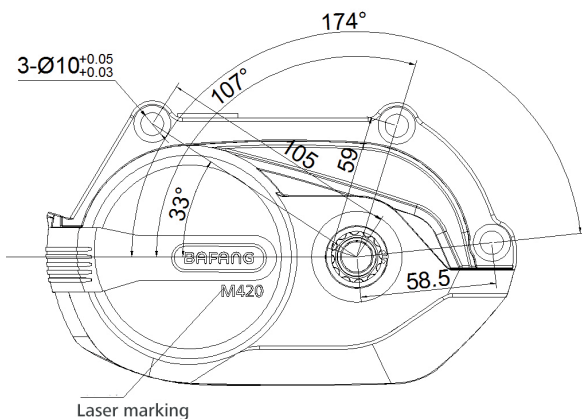
① Motor model: MM G332.250.C / MM G332.250.CCB

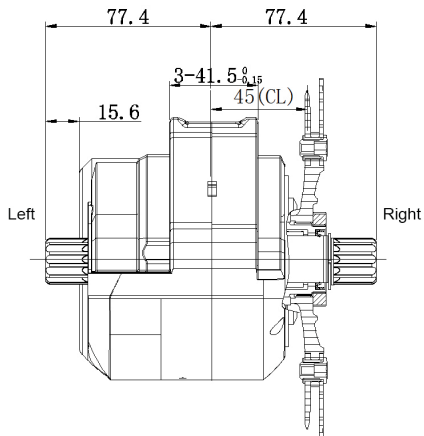
Rated power (W)	250
Rated voltage (V)	36 / 43 / 48
Waterproof	IP65
Certification	CE / ROHS / EN14766
Outdoor Temperatures	-20 C~45 C

② Motor model: MM G332.350.C / MM G332.350.CCB

Rated power (W)	350
Rated voltage (V)	36 / 43 / 48
Waterproof	IP65
Certification	CE / ROHS / EN14766
Outdoor Temperatures	-20 C~45 C

### 6.2.1 Outline and geometric size





Chain line(CL): 45/48/49mm

Shaft standard: BAFANG

## 6.2.2 Surface


Shockproof black coating





## 6.2.3 Storage Information

The pedelec should be stored in a ventilated dry room. Avoid storing the pedelec near strong magnetic objects.

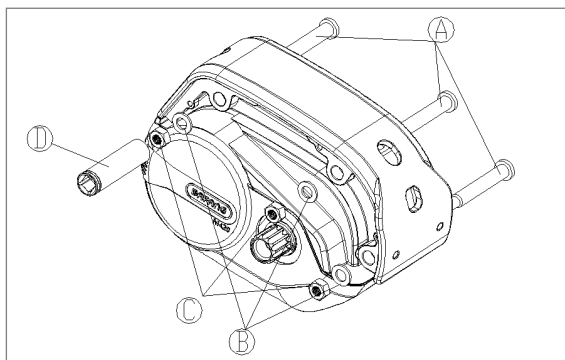
## 6.3 DRIVE UNIT INSTALLATION





### 6.3.1 List of Tools to be used

 Do not use impact wrenches.

Use of the Tools	Tools
To tighten/loosen the screw onto the frame adapter and the drive unit.	 Internal hex wrench
To tighten/loosen screws on the crank.	
To tighten/loosen screws on the motor cover.	 Cross screwdriver
To tighten/loosen the locking nut on the chain ring.	 Special tools
To tighten/loosen nuts on the frame adapter and the drive unit.	 Socket spanner

### 6.3.2 Motor Installation



-  M8 Special bolts
-  M8 Flat washer-A
-  M8 Locknuts
-  Standard tool

1) Align the three mounting holes in the drive unit, with the mounting holes in the bike frame. From the right side of the bike frame, insert three special M8 bolts through the frame and motor to keep the motor in place.

2) Now from the left side of the Bike, place the washer over the bolts, and using three M8 Locking nuts (13\*13) tighten the bolts to secure the motor to the frame.

The size of the standard tool for our company: outer diameter 17.7 and length 63. Tightening torque requirement: 35 N.m.



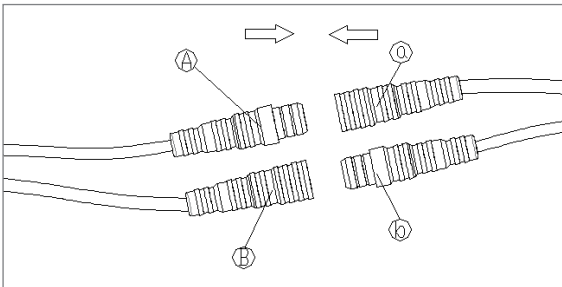
Please pay attention to the direction of the cables coming out of the frame and from the motor. Please note that the cables should not be squashed when the motor is attached to the frame.

## 6.3.3 Cabling



Please note: all cables can only be connected to its corresponding counterpart. Each connector is different so there is no possibility to get the cables mixed up, all cables can only fit into one connector.

### 6.3.3.1 Connection of the battery cables to the motor

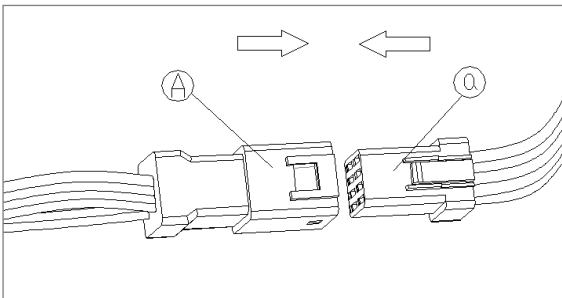


- A The female connector (negative) from the motor
- B The male connector (positive) from the motor
- a The male connector (negative) from the battery
- b The female connector (positive) from the battery

Please connect the negative connectors from the motor and battery together.

Please connect the positive connectors from the motor and battery together.

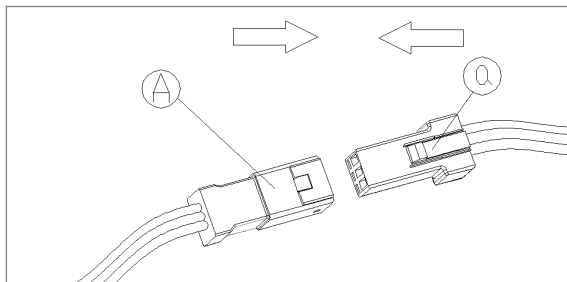
### 6.3.3.2 Connection of the EB-BUS to the motor



- A The male connector from the motor
- a The female connector from the EB-BUS cable

Please connect the connectors from the motor and EB-BUS cable together.

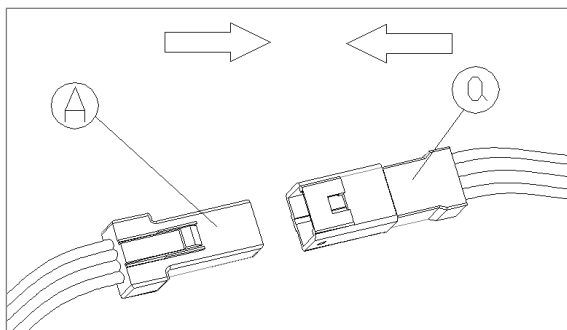
### 6.3.3.3 Connection of the gear sensor to the motor



- Ⓐ The male connector from the motor
- ⓐ The female connector from the gear sensor

Please connect the connectors from the motor and the gear sensor together.

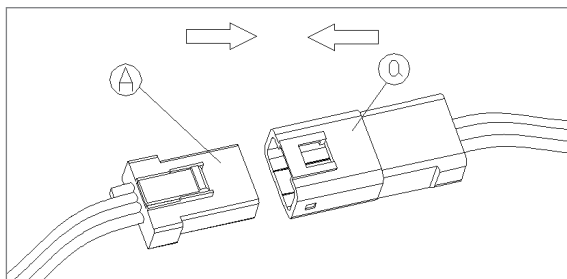
### 6.3.3.4 Connection of the speed sensor to the motor



- Ⓐ The female connector from the motor
- ⓐ The male connector from the speed sensor

Please connect the connectors from the motor and the speed sensor together.

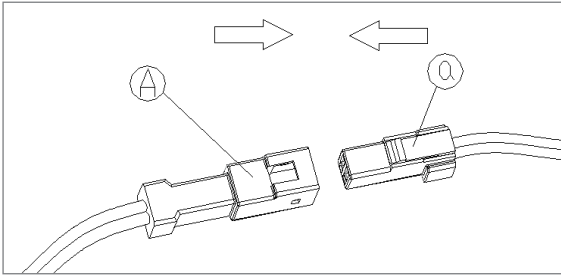
### 6.3.3.5 Connection of the communication to the motor



- Ⓐ The female connector from the battery BMS
- ⓐ The male connector from the motor

Please connect the connectors from the motor and the battery BMS together.

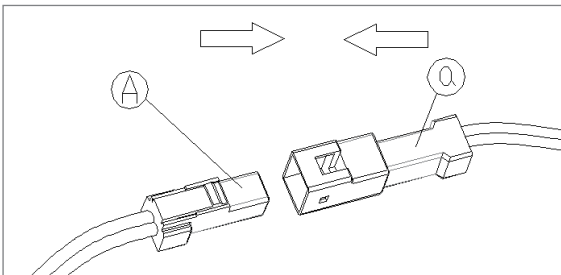
### 6.3.3.6 Connection of the headlight cable to the motor



- A The male connector from the motor
- a The female connector from the headlight cable

Please connect the connectors from the motor and the headlight cable together.

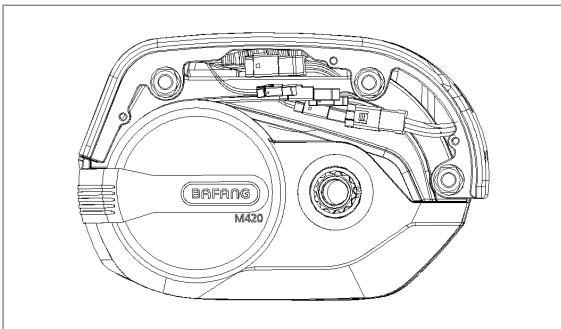
### 6.3.3.7 Connection of the taillight cable to the motor



- A The female connector from the motor
- a The male connector from the taillight cable

Please connect the connectors from the motor and the taillight cable together.

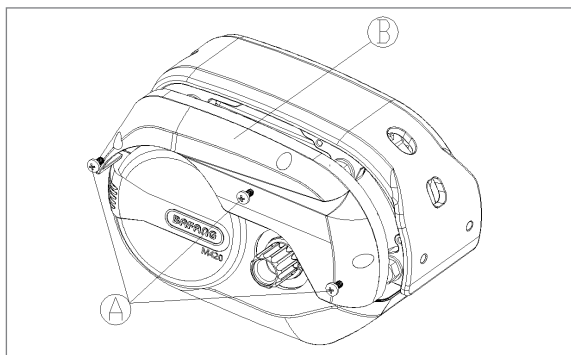
### 6.3.3.8 Cable Route



Please arrange the cable connectors neatly without being squashed, so the motor cover can be secured in place with ease.



### 6.3.4 Motor Cover Installation

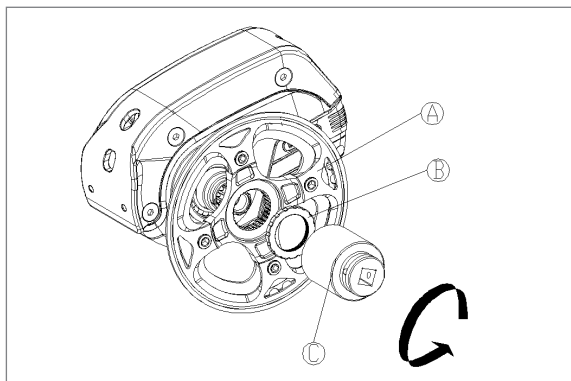


- A** M4\*8 Cross countersunk head screws
- B** Motor cover

As shown in the figure above, three M4\*8 countersunk head screws are used to secure the motor cover on the motor. The covers purpose is to protect and hide the cables and connectors.

Locking torque requirement : 1.5N.m.

### 6.3.5 Chain Wheel Installation



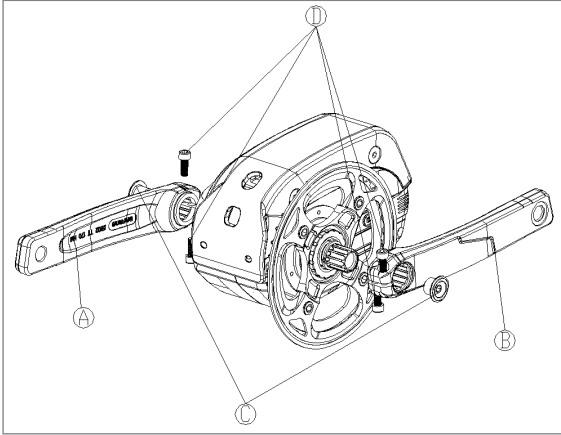
- A** Chain wheel
- B** Lock nut
- C** Special tool

Place the chain wheel onto the axel of the drive unit ensuring the inner teeth on the chainwheel fit correctly onto the bracket on the axel.

Using the special tool provided, tighten the locking nut onto the axel.

Torque requirement: 35 N.m.

### 6.3.6 Crank Installation

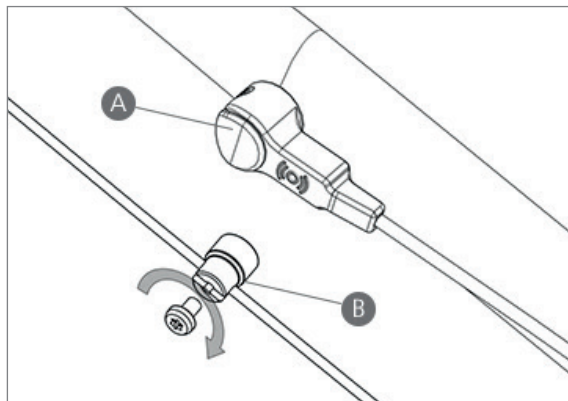


- A Left crank
- B Right crank
- C Crank attachment screws
- D Crank tightening screws  
M6\*20

Mount the right crank on the right side of the axel, using a hex key tighten screw (C) onto the axel (torque requirement is 1.5N.m) , this ensures the crank stays attached.Now using a Hex key tighten two M6 \* 20 (D) screws on the crank itself ensuring the crank is kept in place and cannot rotate around the axel (torque requirement is 15N.m).

Note: Now carry out the same actions on the left side of the pedelec, ensuring the crank stays parallel to the right crank.

## 6.3.7 External Speed Sensor Installation



- A Speed sensor
- B Magnet for the speed sensor

Fasten the mounting screws through the speed sensor and with a cross screwdriver. Tightening the speed sensor onto the frame. Then place the rubber seal on the speed sensor hiding the screw. Torque requirement: 1.5-2 N.m.

(Note: Please make sure the gap between the speed sensor and the magnetic unit is between 10 and 20 mm. When the magnet is not the correct distance, this can cause Error 21)

Now place the magnet on the spoke of the wheel ensuring it is aligned to the middle of the speed sensor. And with a star key tighten the magnet in place. Torque requirement: 1.5-2 N.m.

# 6.4 MAINTENANCE

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- Maintenance must be carried out by authorized personnel with the correct equipment.
- Do not disassemble the motor.
- Do not use thinners or other solvents to clean the components. Such substances can damage the surfaces.
- Avoid water submerging, to keep the components protected.
- Avoid using high-pressure cleaning jets.
- For prolonged storage, turn off the battery and avoid storing near heat sources.