

# **ASSEMBLY MANUAL**

# YDX-MORO 07 YDX-MORO 05

PE65M7L PE65M7M PE65M7S PE65M5L PE65M5M PE65M5S

#### **FOREWORD**

This Assembly Manual contains the information required for the correct assembly of this Yamaha bicycle prior to delivery to the customer. Since some external parts of the bicycle have been removed at the Yamaha factory for the convenience of packing, assembly by the Yamaha dealer is required. No adjustment of the power unit mechanism, which plays the most important part in riding, is necessary because it has been adjusted at the factory before shipping. It should be noted that the assembled bicycle should be thoroughly cleaned, checked, and adjusted prior to delivery to the customer.

#### **IMPORTANT**

The service specifications given in this assembly manual are based on the model as manufactured. Yamaha Motor Company, Ltd. is continually striving to improve all of its models. Modifications and significant changes in specifications or procedures will be forwarded to all authorized Yamaha dealers and will appear in future editions of this manual where applicable.

The procedures below are described in the order that the procedures are carried out correctly and completely. Failure to do so can result in poor performance and possible harm to the bicycle and/or rider.

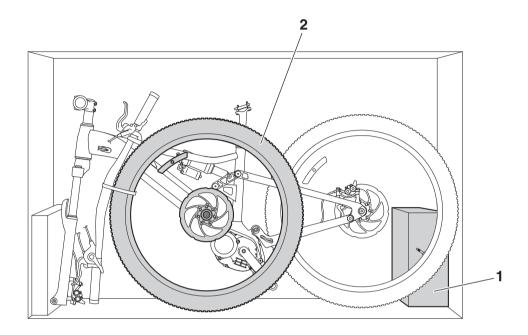
<b>CONCERNING CF</b>	RATE DAMAGE:
Follow the instruction	s in the Dealer Warranty Handbook, Procedure Section.
Particularly importan	t information is distinguished in this manual by the following notations.
$\triangle$	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
<b>WARNING</b>	A WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
NOTICE	A NOTICE indicates special precautions that must be taken to avoid damage to the bicycle or other property.
TIP	A TIP provides key information to make procedures easier or clearer.

PE65M7L/PE65M7M/PE65M7S
PE65M5L/PE65M5M/PE65M5S
ASSEMBLY MANUAL
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# **PARTS LOCATION**

### **NOTICE**

- Do not use a cutter, scissors, or other sharp object to open the part boxes; otherwise, the included parts could be damaged.
- Wear suitable protective gear such as gloves when handling and opening the part boxes.



- 1. Part box 1
- 2. Front wheel

# **INCLUDED PARTS**

The parts listed as follows are included\*. Check the parts and their quantities before starting assembly.

No.	Part names	Q'ty	Remarks
1	Front wheel	1	
2	Part box 1	1	
3	Part box 2	1	② in part box 1
4	Part box 3	1	② in part box 1

#### Part box 1 details

(5)	Saddle	1	

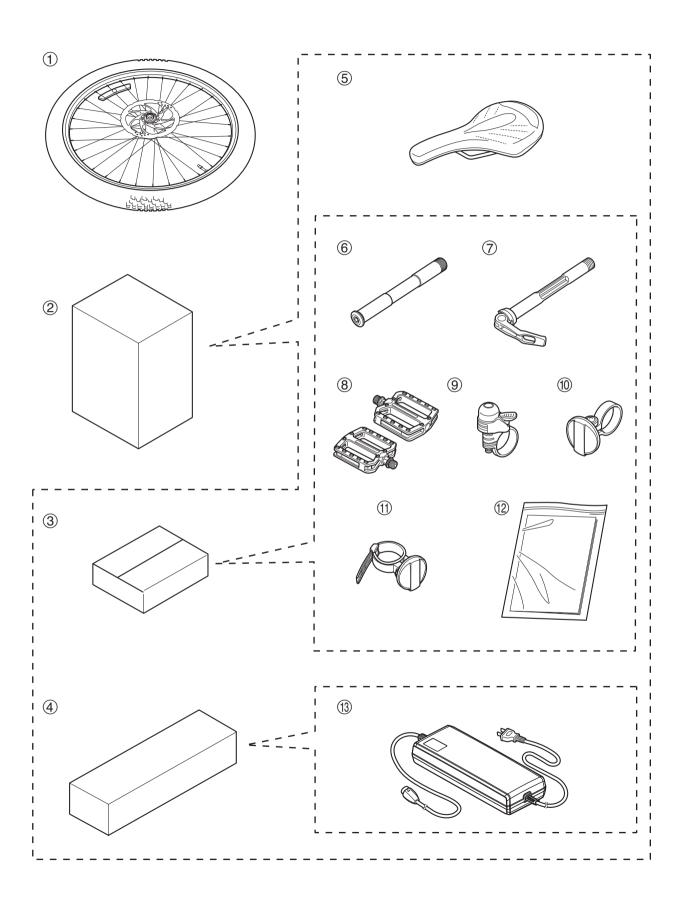
#### Part box 2 details

6	Front axle	1	YDX-MORO 07 only
7	Front axle	1	YDX-MORO 05 only
8	Pedals	2	1 each for left and right
9	Bell	1	
10	Front reflector	1	
11)	Rear reflector	1	
12	Owner's manual	1	

#### Part box 3 details

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	13	Battery charger	1	

<sup>\*</sup> The form of the package is subject to change without notice.





Tighten the bolts and nuts to the specified torques. Failure to tighten the bolts and nuts to the specified torques could prevent proper operation of the bicycle and make it unsafe to operate.

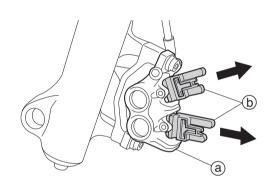
#### TIP\_

- Charge the battery pack following the instructions in the owner's manual before starting installation.
- The letters inside the parts list boxes in the assembly procedures indicate the following:
  - A: Part in part box 1
  - B: Part in part box 2



Remove the spacers **(b)** from the front disc caliper **(a)**.

Give the removed spacers (b) to the customer, explaining how it is used.



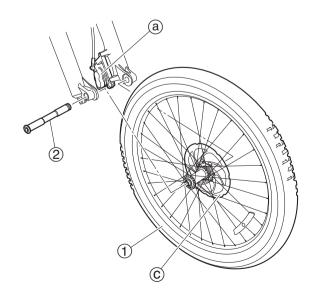
#### (For YDX-MORO 07)

Align the holes in the front wheel ① with the holes in the fork end and install the front wheel ①.

Install it in such a way that the disc rotor © does not touch the disc pad.

Install the front axle ② to the fork end holes from the right side of the bicycle.

1	Front wheel	1	
2	Front axle	1	В

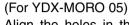


Tightening torque 11 N·m (1.1 kgf·m, 8.1 lb·ft)

Tighten the front axle (2) to the specified torque.



Tighten the front axle ② to the specified torque and install it securely. Otherwise, the front wheel could come off.

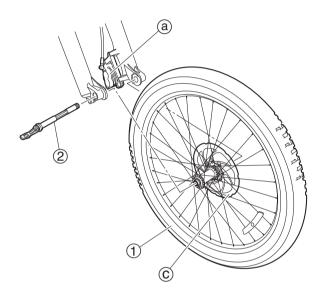


Align the holes in the front wheel 1 with the holes in the fork end and install the front wheel 1.

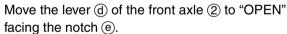
Install it in such a way that the disc rotor © does not touch the disc pad.

Install the front axle ② to the fork end holes from the right side of the bicycle.

1	Front wheel	1	
2	Front axle	1	В

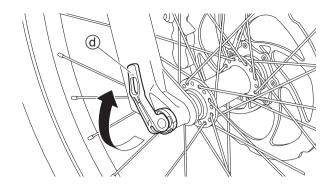






With the lever @ caught in the notch @, turn and tighten until there is a little resistance in the lever.





Free the lever @.

Determine the position to secure the lever @ and fasten it at "CLOSE".

# **↑** WARNING

- Position the lever when it cannot touch obstacles while the bicycle is moving. If not, the lever could be unlocked unexpectedly, causing the front wheel to come off, resulting in an accident with severe injury or death.
- Fasten the lever (d) at position where the tip does not touch other parts when the lever (d) is lowered.
- Fasten the lever (d) facing backward from the direction of travel in such a way that it cannot easily touch obstacles that might be encountered while riding.

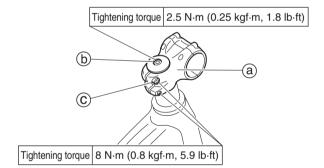
TIP\_

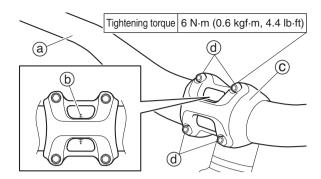
If the lever (a) of the front axle (2) is too hard and cannot be lowered, or if it is too loose and cannot be lowered for it to be locked, turn the lever (a) again to loosen or tighten it, adjusting so that it can be fastened securely.

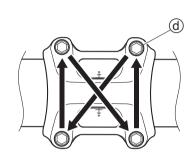
#### 2. Installing the handlebar stem

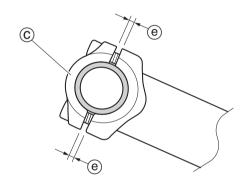
Position the handlebar stem (a) in a straight line with the front wheel.

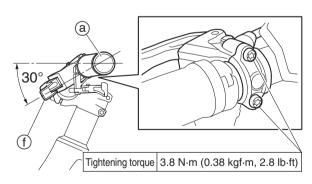
Tighten the bolts (b) and (C), in that order, to the specified torques.

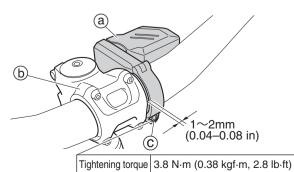












#### 3. Installing the handlebar

Install the handlebar (a) so that the 3rd horizontal line from the top of the alignment mark (b) shown is positioned at the lower end of the hole in the upper handlebar holder (C), and then tighten the 4 bolts (d) of the handlebar holder (C) to the specified torque.

#### **NOTICE**

The handlebar (a) should not touch the frame when it is turned fully to the left or right.

#### TIP

- Tighten bolts @ evenly in stages, in the order shown in the illustration.
- Tighten in such a way that the gaps (e) above and below the handlebar holder (c) are equal.

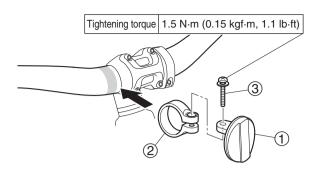
Install the handlebar a so that the brake lever f is at a 30° angle to the handlebar, as shown in the illustration.

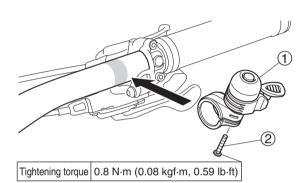
#### 4. Adjusting the display unit position

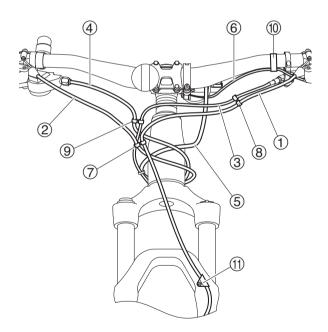
Maintain a clearance of 1 to 2 mm between the bracket of the display unit (a) and the handlebar stem (b) as shown, install the set, and then tighten the bolt (c) to the specified torque.

#### TIP

Adjust the display unit screen so that it is parallel to the handlebar stem (b).







#### 5. Installing the front reflector

Install the front reflector ①, stay ②, and screw ③ as shown, and then tighten them together to the specified torque.

1	Front reflector	1	В
2	Stay	1	В
3	Screw	1	В

#### TIP\_

Install the front reflector ① while adjusting it so that it faces to the front and making sure that the wires, etc. do not contact the front reflector.

#### 6. Installing the bell

Install the bell ① in the shown, then tighten it with the screw ②.

1	Bell	1	В
2	Screw	1	В

#### 7. Routing the wires



Be sure to route the wires as shown in the illustration. If not, they could interfere with handle-bar operation which could cause loss of control.

Confirm that hoses and wires are routed in order starting from front to back

Front brake hose (1)

Rear brake hose (2)

Dropper seat wire (3)

Shift wire (4)

Display unit lead (5)

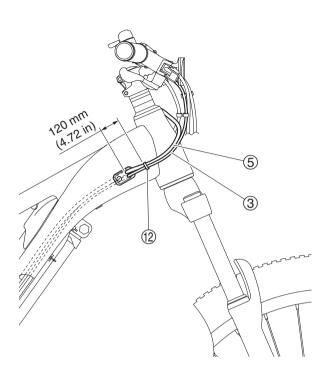
Switch unit lead (6)

Clamp the front brake hose ① and rear brake hose ② with the wire clip ⑦ at the position shown in the illustration.

Clamp the front brake hose ① and dropper seat wire ③ with the wire clip ⑧ at the position shown in the illustration.

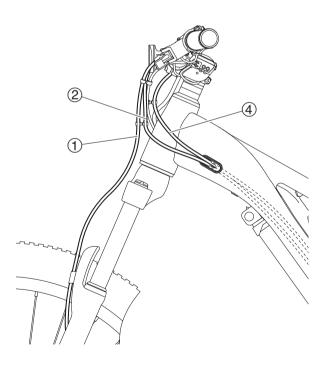
Clamp the dropper seat wire ③ and shift wire ④ with the wire clip ⑨ at the position shown in the illustration.

Clamp the switch unit lead (6) at the position shown with the wire clip (10).



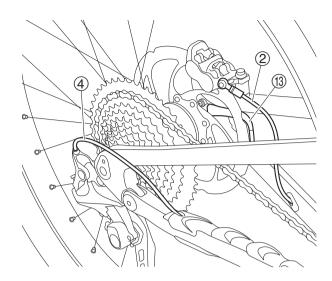
Secure the front brake hose 1 with the wire clamp 1 at the position shown in the illustration.

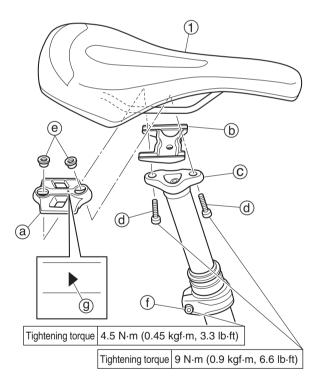
Clamp the dropper seat wire 3 and display unit lead 5 with the plastic locking ties 2 at the position shown in the illustration.



Make sure that the front brake hose 1, rear brake hose 2, and shift wire 4 are routed as shown.

Check that the rear brake hose ②, shift wire ④, and speed sensor lead ③ are routed as shown in the illustration.





#### 8. Installing the saddle

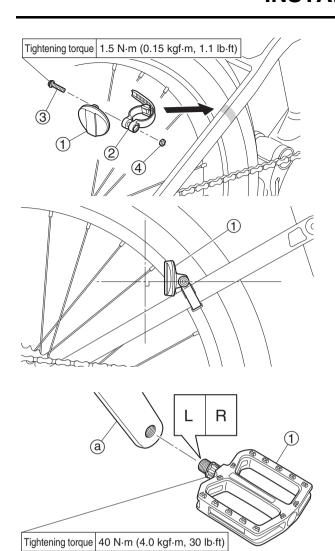
Pinch the rail of the saddle ① with the saddle clamps ② and ⑤, and then tighten the seat post ⑥, bolts ⓓ, and nuts ⓔ to the specified torque.

Adjust the seat post © height, and then tighten the seat pin (f) to the specified torque.

① Saddle 1 A
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#### TIP \_\_\_\_\_

- Face the mark "\( \Lambda \)" (9) of the saddle clamp (a) toward the front, and then install the saddle.
- Be careful that the dropper seat wire is not too tensioned or too slack when installing the seat post © or adjusting its height.
- Do not overtighten the seat pin f. Otherwise, it could cause the dropper seat not to operate smoothly.



#### 9. Installing the rear reflector

Install the rear reflector ①, band ②, screw ③, and nut ④ as shown, and then tighten them together to the specified torque.

Secure them to the frame with the band 2.

1	Rear reflector	1	В
2	Band	1	В
3	Screw	1	В
4	Nut	1	В

#### TIP \_

- Adjust the rear reflector ① so that it is facing straight backward, then tighten it.
- When assembling the rear reflector ① to the frame, adjust the length by cutting the adjustment pad inside the band to fit the frame.

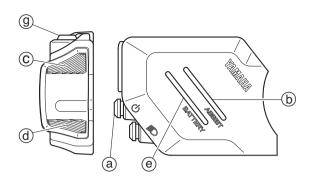
#### 10. Installing the pedals

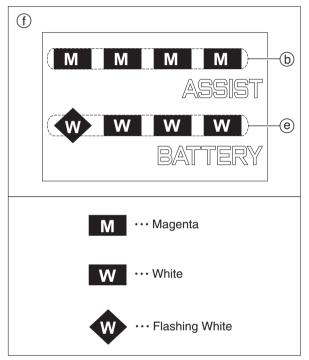
Install the pedals ① to the crank ⓐ, then tighten to the specified torque.

1	Pedals (left and right)	1 each	В
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#### TIP

- Right-hand screw (marked R) for right pedal
- Left-hand screw (marked L) for left pedal





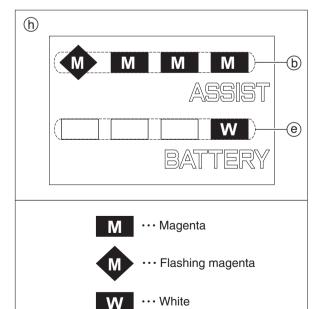


A. Press the power button (a) to turn on the power.

B. After turning on the power, hold the power button a down for approximately 10 seconds within 30 seconds. Make sure that the assist mode indicator b is switched to the magenta display, and then release the power button a.

C. Change the white flashing indicator position of the battery capacity indicator @ using the assist mode switch (up) © or assist mode switch (down) @.

When changed to the status (f) shown, push the select button (g) to confirm.



· · · No light

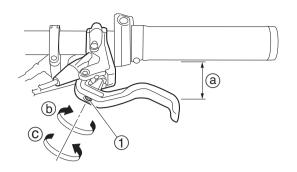
- D. When the mode enters the speed sensor confirmation mode, both the assist mode indicator (b) and the battery capacity indicator (e) will be displayed as shown (h).
- E. When the rear wheel is lifted and it is rotated, the white lighting indicator of the battery capacity indicator (e) will move from the right to the left one time per turn.

Check that both the moving timing of the white lighting indicator and the rotating position of the rear wheel remain constant.

F. After checking the operation, press the power button (a) to quit.

#### TIP\_

- Rotate the rear wheel 3 turns at least, and then make sure that the indicator of the battery capacity indicator @ moves 3 times.



# 12. Adjusting the opening of the front and rear brake levers

Before adjusting the opening of the brake levers, grip the brake levers approximately 10 times to pump them.

Turn the adjusting screw ① to adjust the opening of the tip of the brake lever ⓐ from the tip of the grip.

(b) direction	Opening gets larger.
© direction	Opening gets smaller.

© direction	Opening gets smaller.			
	•			

After adjusting the brake lever opening, check that the rotation of the front and rear wheels is not heavy.

#### TIP\_

**NOTICE** 

Adjust to a position at which it is easy for the customer to operate the front and rear brake levers and within the range of play of the brake levers.

#### PREDELIVERY INSPECTION

# **M** WARNING

After completing the installation, inspect the items as follows and check that there are no problems before delivering the bicycle. Adjust controls and saddle height to the customer's satisfaction according to this manual.

- Handlebar orientation, height, angle, and tightening
   Installing the head cap to the handlebar post: 2.5 N·m (0.25 kgf·m, 1.8 lb·ft)
   Installing the handlebar bracket to the handlebar post: 8 N·m (0.8 kgf·m, 5.9 lb·ft)
   Installing the handlebar to the handlebar holder: 6 N·m (0.6 kgf·m, 4.4 lb·ft)
- Saddle orientation, height, angle, and tightening Installing the saddle: 9 N·m (0.9 kgf·m, 6.6 lb·ft)
   Tightening the seat pin: 4.5 N·m (0.45 kgf·m, 3.3 lb·ft)
- \* Check that the saddle is firmly fastened.Operation of the dropper seat
  - \* Adjust the operation using the wire adjusting screw of the dropper seat lever.
- Various fittings adjusted to the customer's riding posture
  - \* Including brake lever angle, fork suspension air pressure, etc.

Installing the brake lever: 3.8 N m (0.38 kgf m, 2.8 lb ft)

- Inspection of the wheels, hubs, and spokes
  - Tightening the front axle: 11 N·m (1.1 kgf·m, 8.1 lb·ft)
- Tightening of the pedals: 40 N·m (4.0 kgf·m, 30 lb·ft)
- Tightening of the screws of each part

Installing the display unit: 3.8 N·m (0.38 kgf·m, 2.8 lb·ft) Installing the front reflector: 1.5 N·m (0.15 kgf·m, 1.1 lb·ft)

Installing the bell: 0.8 N·m (0.08 kgf·m, 0.59 lb·ft)

Installing the rear reflector: 1.5 N·m (0.15 kgf·m, 1.1 lb·ft)

- Brake performance
- Shift changing operation
- Looseness of the chain
- Bell sound
- Battery pack locking operation
  - \* Check that the battery pack locks securely.
- Check of battery pack and battery charger operation
- Operation of the meter, switches, and drive unit
- Installation state of the reflectors
- Maximum tire air pressure

YDX-MORO 07 (PE65M7)

Front tire: 280 kPa (2.8 kgf/cm<sup>2</sup>, 40.6 psi) Rear tire: 280 kPa (2.8 kgf/cm<sup>2</sup>, 40.6 psi)

YDX-MORO 05 (PE65M5)

Front tire: 280 kPa (2.8 kgf/cm<sup>2</sup>, 40.6 psi) Rear tire: 280 kPa (2.8 kgf/cm<sup>2</sup>, 40.6 psi)

