

General Safety Information

WARNING

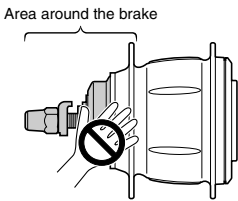
– To avoid serious injuries:

- It is important to completely understand the operation of your bicycle's brake system. Improper use of your bicycle's brake system may result in a loss of control or an accident, which could lead to severe injury. Because each bicycle may handle differently, be sure to learn the proper braking technique (including bicycle control characteristics) and operation of your bicycle. This can be done by consulting your professional bicycle dealer and the bicycle owner's manual, and by practicing your riding and braking technique.
- When securing the brake arm to the frame, be sure to use a brake arm clip that matches the size of the chainstay, and securely tighten them with the clip screw and clip nut to the specified tightening torque. Use a lock nut with a nylon insert (self-locking nut) for the clip nut. It is recommended that standard Shimano parts be used for the clip screw, clip nut and brake arm clip. In addition, use a brake arm clip that matches the size of the chainstay. If the clip nut comes off the brake arm, or if the clip screw or brake arm clip becomes damaged, the brake arm may rotate on the chainstay and cause the handlebars to jerk suddenly, or the bicycle wheel may lock and the bicycle may fall over, causing serious injury.
- When installing the hub to the frame, be sure to install the correct non-turn washers to the left and right sides, and securely tighten the hub nuts to the specified torques. If the non-turn washers are installed to one side only, or if the hub nuts are not tightened sufficiently, the non-turn washer may fall out, which could cause the hub axle to rotate and the motor unit to turn. This may then cause the cables to break.
- If using a reversed dropout, use a chain tensioner to prevent the chain from becoming slack.
- Obtain and read the service instructions carefully prior to installing the parts.** Loose, worn, or damaged parts may cause serious injury to the rider. We strongly recommend only using genuine Shimano replacement parts.
- Check that the wheels are fastened securely before riding the bicycle. If the wheels are loose in any way, they may come off the bicycle and serious injury may result.
- Read these Technical Service Instructions carefully, and keep them in a safe place for later reference.

CAUTION

– To avoid serious injuries:

- Avoid continuous application of the brakes when riding down long slopes, as this will cause the internal brake parts to become very hot, and this may weaken braking performance. It may also cause a reduction in the amount of brake grease inside the brake, and this can lead to problems such as abnormally sudden braking.
- Spin the wheel and confirm that the braking force of the coaster brake is correct.
- If the brake is used frequently, the area around the brake may become hot. Do not touch the area around the brake for at least 30 minutes after you finish riding the bicycle.



NOTE:

- Use a wheel with 3x or 4x spoke lacing. Wheels with radial lacing cannot be used because the spokes and the wheel can be damaged when applying the brakes and brake noise can be generated.
- You can shift gears while pedaling, but on rare occasions the pawls and ratchet inside the hub may produce some noise afterwards as part of normal gear shifting operation.
- The 8-speed hub has a built-in mechanism to support shifting. When this support mechanism operates during shifting, noise or vibration may occur. The shifting feel may also change depending on the gear position at the time of shifting. Noise may also be generated if the bicycle is pushed backward when the gear position is 5, 6, 7 or 8. These occurrences are a normal result of the structure of the internal gear shifting mechanism, and are not a sign of a malfunction.
- It is recommended that you set the chainrings so that the gear ratios are approximately 2.1. Example: F36T – R16T, F38T – R18T, F46T – R22T
- In order to maintain proper performance, it is recommended that you ask the place where you purchased the bicycle or your nearest Pro shop to carry out maintenance such as greasing the internal hub about once every two years starting from the first time of use (or once about every 5,000 km if the bicycle is used very frequently). Furthermore, it is recommended that you use the Shimano internal hub grease or lubrication kit when carrying out maintenance. If the special grease or lubrication kit is not used, problems may occur such as the gear shifting not working correctly. Use only the special grease with the brake shoes. If using the lubrication kit, remove the brake shoes so that none of the oil gets onto them.
- The internal hub is not completely waterproof. Avoid using the hub in places where water might get inside it and do not use high-pressure water to clean the hub, otherwise the internal mechanism may rust.
- If the wheel becomes stiff and difficult to turn, you should replace the brake shoes. For any questions, please contact the place of purchase.
- You should periodically wash the sprockets in a neutral detergent and then lubricate them again. In addition, cleaning the chain with neutral detergent and lubricating it can be a effective way of extending the useful life of the sprockets and the chain.
- If the chain keeps coming off the sprockets during use, replace the sprockets and the chain.
- Parts are not guaranteed against natural wear or deterioration resulting from normal use.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.
- For any questions regarding methods of handling or adjustment, please contact the place of purchase.
- Do not disassemble the hub. If you think disassembly might be necessary, contact the place of purchase.

SG-8C56  
MU-8S40

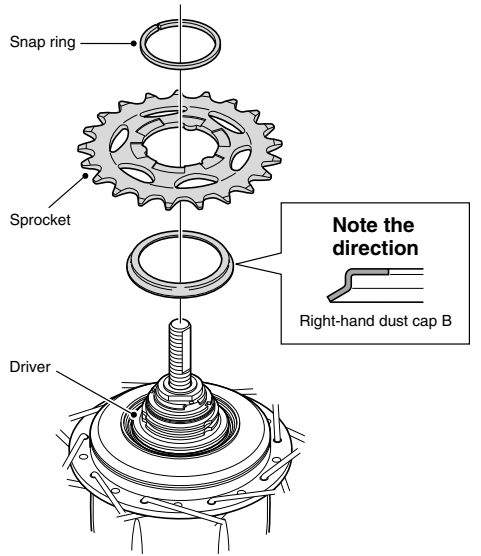
Inter-8 Hub  
with Coaster Brake  
Motor unit

Technical Service Instructions

Be sure to read these service instructions in conjunction with the service instructions for the Al-8S40 before use.

Installation of the sprocket to the hub

Place right-hand dust cap B onto the driver on the right side of the hub body. Next, install the sprocket and secure it in place with the snap ring.

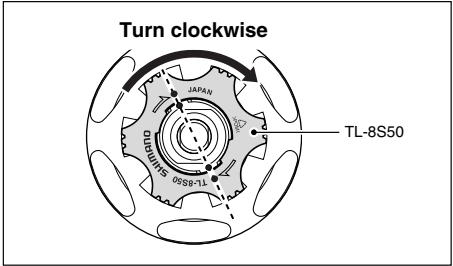
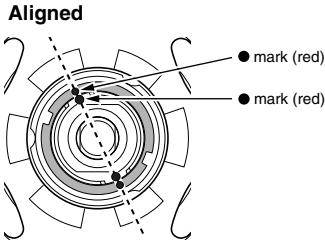


**Note:**

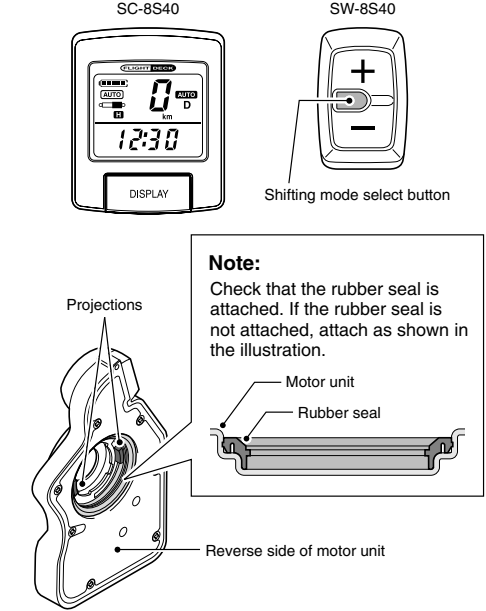
- This product should only be used with inward assembling sprockets from 16T to 23T.
- If the sprocket is 16T and has thick teeth, remove right-hand dust cap B before use.

Installation of the motor unit to the hub

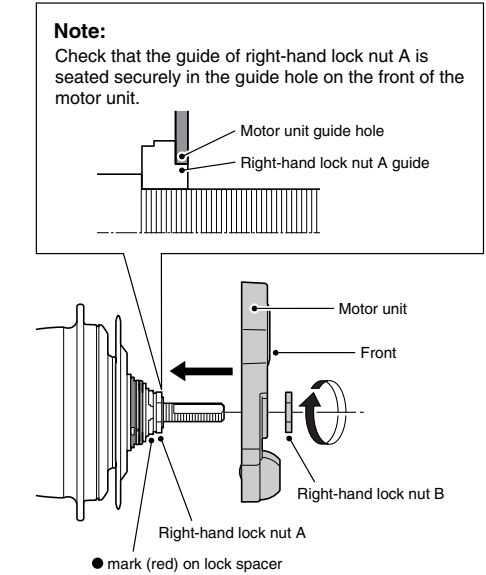
- Check that the two ● marks (red) on the right side of the hub body are aligned. If the two ● marks (red) are not aligned, use the TL-8S50 to align the two ● marks (red).



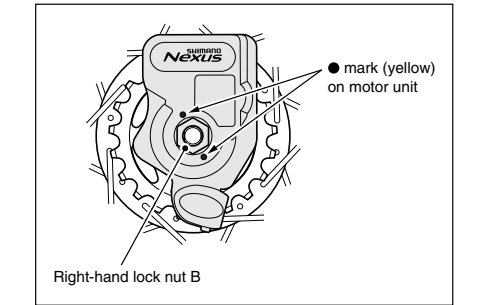
- Check that the two projections on the reverse side of the motor unit are positioned as shown in the illustration. If they are not in this position, connect the motor unit connector and then turn the front wheel to turn on the display for the Flight Deck (SC-8S40). Next, operate the shifting mode select button on the shifting switch (SW-8S40) at the right side of the handle to set the shifting mode to manual (MANU). After this, press the [-] button to move the projections to the position shown in the illustration. Once this happens, disconnect the motor unit connector.



- Install the motor unit to the hub so that the ● mark (yellow) on the motor unit is aligned with the ● mark (red) on the hub lock spacer. After this, gently push the motor unit while turning it slowly to set it correctly until it stops turning on the hub axle. Next, secure the motor unit by tightening right-hand lock nut B.

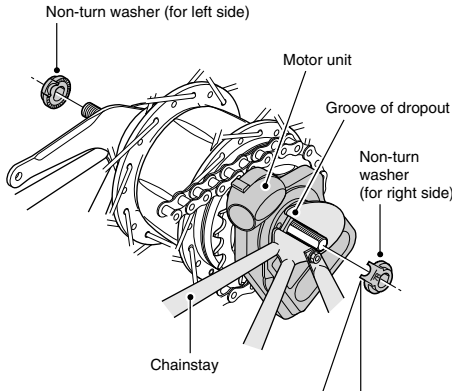


**Tightening torque:**  
6 – 10 N·m {52 – 87 in. lbs.}



Installation of the hub to the frame

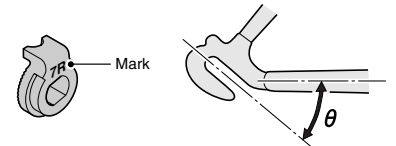
- Mount the chain on the sprocket, and then set the hub axle into the dropouts.
- Place the non-turn washers onto the right side and left side of the hub axle. At this time, turn the motor unit while installing it so that the projecting parts of the non-turn washers fit into the grooves of the dropouts.



**Note:**

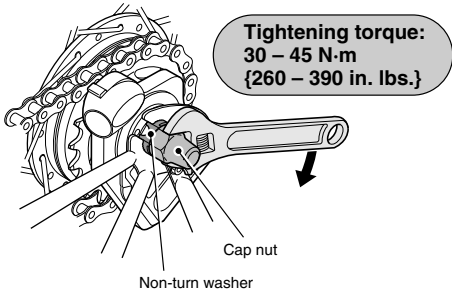
- Use whichever non-turn washers match the shape of the dropouts. Different non-turn washers are used at the left and right sides.

Dropouts	Non-turn washer		Size
	Right	Left	
Standard	5R / Yellow 7R / Black	5L / Brown 7L / Gray	$\theta \leq 20^\circ$ $\theta \leq 38^\circ$
Reversed	6R / Silver	6L / White	$\theta = 0^\circ$
Reversed (full chain case)	5R / Yellow	5L / Brown	$\theta = 0^\circ$



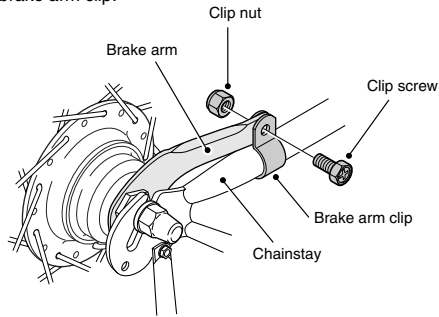
- The projecting parts should be on the dropouts side.
- Install the non-turn washers so that the projecting parts is securely in the dropouts grooves on either side of the hub axle.

- Take up the slack in the chain and secure the wheel to the frame with the cap nuts.



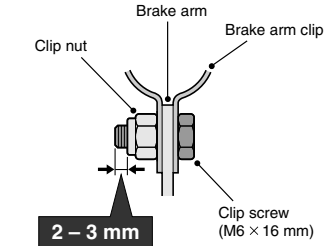
**Tightening torque:**  
30 – 45 N·m  
{260 – 390 in. lbs.}

- Fix the brake arm securely to the chainstay with the brake arm clip.

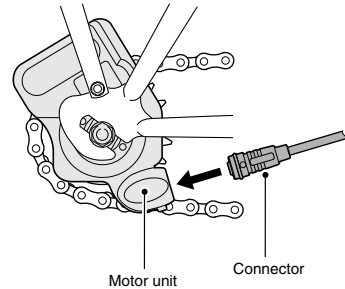


Note:

- When installing the brake arm clip, securely tighten the clip screw while holding the clip nut with a 10 mm spanner.
- After installing the brake arm clip, check that the clip screw protrudes about 2 – 3 mm from the surface of the clip nut.



- Connect the motor unit connector.



- Before using the Coaster Brake, check that the brake works properly and that the wheel turns smoothly.

These service instructions explain how to use and maintain the Shimano bicycle parts which have been used on your new bicycle. For any questions regarding your bicycle or other matters which are not related to Shimano parts, please contact the place of purchase or the bicycle manufacturer.

Please note: Specifications are subject to change for improvement without notice. (English)

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