



## General Safety Information



### WARNING

– To avoid serious injuries:

- When securing the brake arm to the frame, be sure to securely tighten the clip screw and clip nut to the specified tightening torque. Use lock nuts with nylon inserts (self-locking nuts) for the clip nut. It is recommended that standard Shimano parts be used for the clip screw, clip nut and brake arm clip. 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 (30 – 45 N·m). If the non-turn washers are installed to one side only, or if the hub nuts are not tightened sufficiently, the hub axle could rotate and cause the cone to be tightened and lock the wheel. There is a danger of falling over when losing the balance because of a locked wheel.
- Before riding, turn pedals backward to confirm proper slack in the chain. Do not ride if the chain is too slack because the chain may come off while riding and cause the bicycle to fall over. Rather, before attempting to ride, have the chain checked and adjusted by the bicycle vendor.
- 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.

### NOTE:

- The structure of the IF-C530 hub is such that during rotation adjustment, the hub unit and freewheel are both adjusted at the same time. If the torque of the freewheel is too great, when the pedals are turned backward, the chain may become too slack. In this case, readjustment must be carried out.
- 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.
- If the wheel becomes stiff and difficult to turn, you should lubricate it with grease.
- Do not apply any grease to the inside of the hub, otherwise the grease will come out again.
- 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.

SI-35H0C

**IF-C530**

Inter-3 Freehub

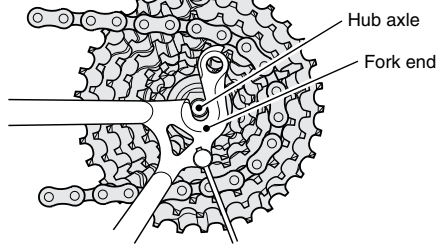
Be sure to read these service instructions in conjunction with the service instructions for the Inter-M Brake and the ST-C530 shifting lever before use.

## Technical Service Instructions

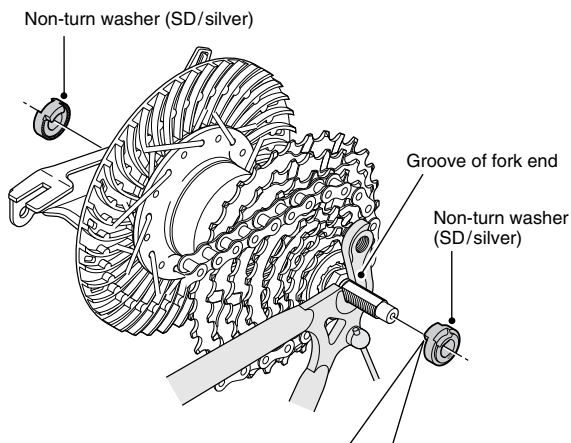
**SHIMANO**  
**NEXAVE**  
**C530**

## Installation of the hub to the frame

1. Mount the chain on the sprocket, and then set the hub axle into the fork ends.

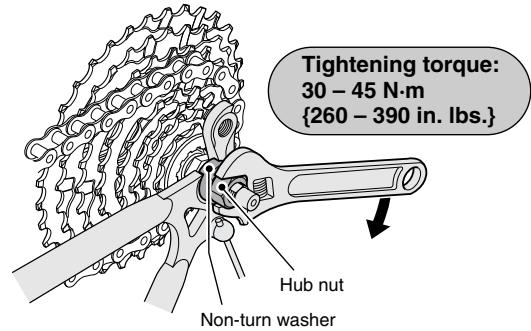


2. Place the non-turn washers onto the right side and left side of the hub axle. At this time, turn the hub axle to install so that the projecting parts of the non-turn washers fit into the grooves of the fork ends.



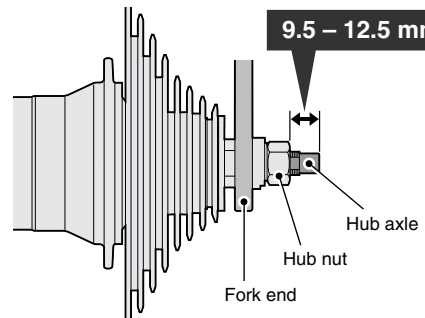
- The projecting parts should be on the fork end side.
- Install the non-turn washers so that the projecting parts are securely in the fork end grooves on either side of the hub axle.

4. Take up the slack in the chain and secure the wheel to the frame with the hub nuts.



### Note:

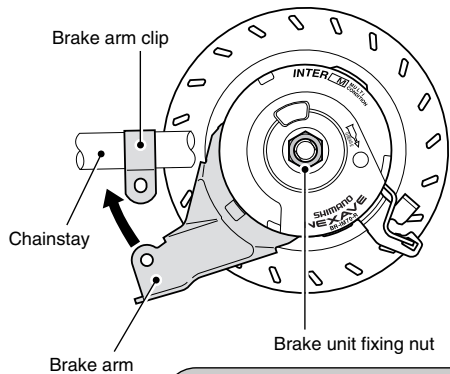
Check that the distance from the edge of the hub nut to the right end of the hub axle is between 9.5 and 12.5 mm.



3. Install the brake arm of the Inter-M brake to the chainstay with the brake arm clip, provisionally tighten the clip screw and clip nut, and then tighten the brake unit fixing nut.

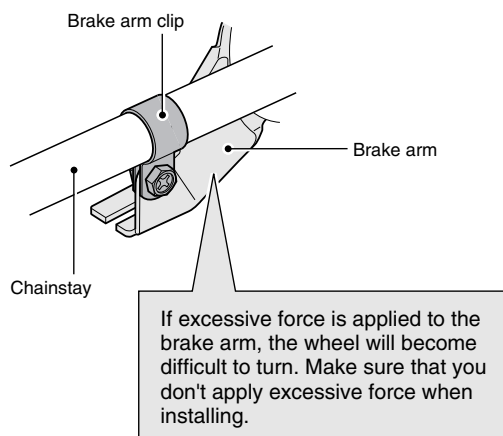
### Note:

If the brake arm is in the incorrect position as shown in the illustration so that it cannot be provisionally installed to the chainstay, loosen the brake unit fixing nut and turn the brake arm. Then, after provisionally securing the brake arm to the chainstay, tighten the brake unit fixing nut.



Tightening torque:  
20 – 25 N·m {174 – 217 in. lbs.}

5. Fix the brake arm of the Inter-M brake securely to the chainstay with the brake arm clip.

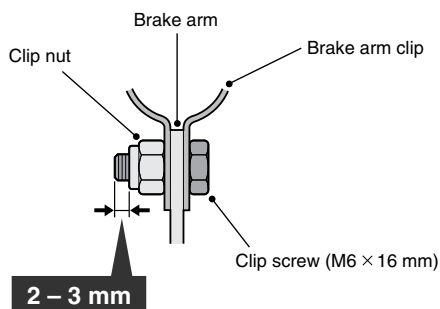


**Note:**

- When installing the brake arm clip, securely tighten the clip screw while holding the clip nut with a 10 mm spanner.

**Tightening torque:**  
**2 – 3 N·m {17 – 26 in. lbs.}**

- After installing the brake arm clip, check that the clip screw protrudes about 2 – 3 mm from the surface of the clip nut.



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.

These service instructions are printed on recycled paper.

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

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