

## WARNING

- Obtain, read and carefully service instructions when installing parts. A loose, worn, or damaged parts may cause injury to the rider. We strongly recommend that only genuine Shimano replacement parts be used.

## SERVICE INSTRUCTIONS SI-1TG0G

# BB-7700 BB-7703

## Bottom Bracket

Before use, read these instructions carefully, and follow them for correct use.

### Specifications

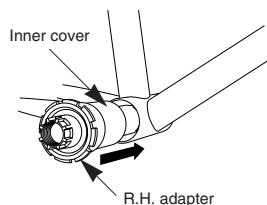
Bottom Bracket	BB-7700	BB-7703
Spindle length	109.5mm	118.5mm
Shell width	68mm (BC1.37), 70mm (M36)	

### Note

- \* Check that the fixing bolt of the bottom bracket cable guide is not so long that it touches the inner cover. If the fixing bolt touches the inner cover, it may damage the inner cover, which will result in a drop in waterproofing performance.
- \* Apply grease to the R.H. adapter and L.H. adapter before installing them to the hanger.
- \* Apply grease to the surface which contacts the crank arm before installing the crank arm.
- \* For maximum performance we highly recommend Shimano lubricants and maintenance products.

## Installation of the Bottom Bracket (BB-7700)

1. Insert the main unit into the hanger. After checking that the inner cover is securely attached to the R.H. adapter, place them onto the hanger.



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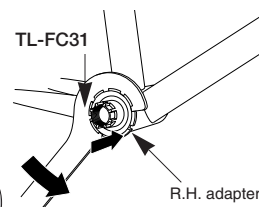
Please note: specifications are subject to change for improvement without notice. (English)

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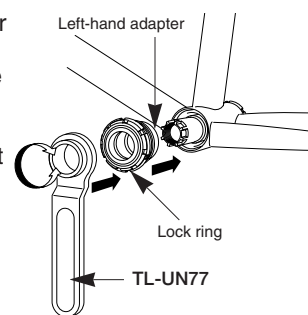
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2. Tighten the right-hand adapter by turning it counterclockwise using the special tool (TL-FC31). (clockwise for 70 mm [M36] bottom brackets)

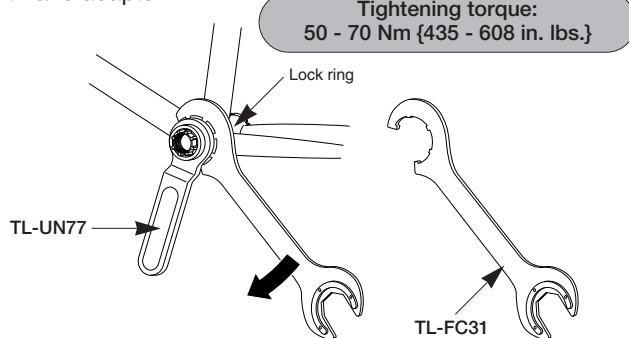


Tightening torque:  
50 - 70 Nm  
{435 - 608 in. lbs.}

3. Use the special tool (TL-UN77 or TL-UN74-S) to tighten the left-hand adapter clockwise until the spindle turning effort increases sharply. After tightening the left-hand adapter, loosen it by about 1/16 to 1/8 of a turn so that the spindle rotates smoothly.

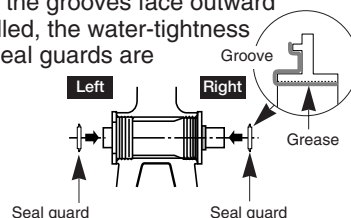


4. Use the special tool (TL-FC31) to tighten the lock ring while using the special tool (TL-UN77 or TL-UN74-S) to push in the left-hand adapter.



Tightening torque:  
50 - 70 Nm {435 - 608 in. lbs.}

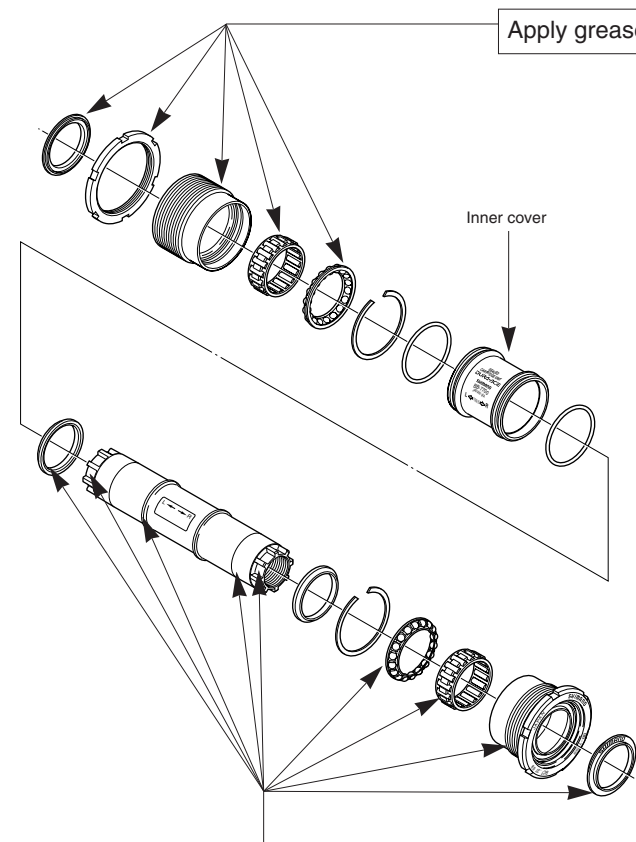
5. Apply grease to the seal guards and then attach the seal guards to the spindle, while making sure that the grooves of the seal rings face inward. If the grooves face outward after the seal rings are installed, the water-tightness will drop significantly. (The seal guards are pushed into the proper positions when the crank arms are installed, so do not force the seal rings on when installing them.)



6. Install the right-hand crank arm, and then check that there is no play in the bearing cone is adjusted correctly. If there is some play in the bearing cone, loosen the lock ring and then tighten the left-hand adapter by as little as possible. Repeat steps 4 and 6 until there is no more play.

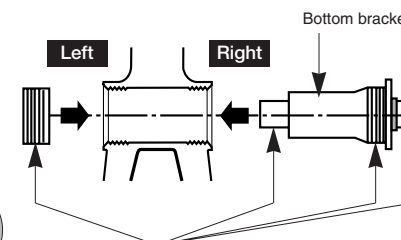
## Maintenance

- Apply grease to each part at periodic intervals. (Refer to the illustration.)
- Water can get inside the bottom bracket. If using a frame which does not have water drainage holes in the hanger, be sure to drain any water which has collected inside the hanger before removing the bottom bracket.



## Installation of the Bottom Bracket (BB-7703)

1. Use the special tool (TL-UN74-S) to install the bottom bracket. First install the main body (clockwise for 70 mm [M36] bottom brackets), then the adapter.



Adapter/bottom bracket  
tightening torque:  
50 - 70 Nm {435 - 608 in. lbs.}

Apply grease to  
the bottom bracket  
before installing it.