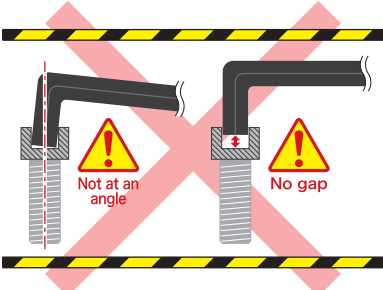
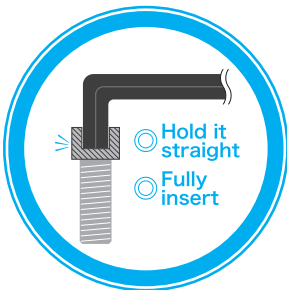


# Tightening Torque Specification Chart

**! You must read this before you proceed.**

### Precautions for secure bolting

- ①The bolt must be free of irregularities and go straight into the matching hole.
  - ②Check whether the selected tool matches the type and shape of the bolt.
  - ③Make sure you are holding the tool straight, not at an angle to the bolt and setting it all the way down.
  - ④Only begin bolting process after the above precautions are carefully taken.
- \*Incorrectly tightened bolts can lead to component breakdowns and resulting in accident.  
 \*Tightening too quickly can lead to inaccurate tightening (e.g., insufficient tightening).



### Precautions for use of torque wrench

Torque wrench is a precision tool. Incorrect use can compromise accuracy and damage it.  
 Torque wrench is used to check an already tightened bolt only for achieving final torque values.  
 Be sure to apply force slowly perpendicular to the wrench handle.

BOTTOM BRACKET					
<div>CBBF</div> <p><b>Main unit (Right cup)</b> Thread : BC1.37 x 24T - L Material : Steel</p> <p><b>Left cup</b> Thread : BC1.37 x 24T Material : Steel</p> <p><b>Tool</b> TL-CBB &amp; 24mm spanner</p> <p><b>Tightening torque</b> 50~70N・m (500~700kgf・cm)</p>	<div>CBBAL</div> <p><b>Main unit (Right cup)</b> Thread : BC1.37 x 24T - L Material : Aluminum alloy</p> <p><b>Left cup</b> Thread : BC1.37 x 24T Material : Aluminum alloy</p> <p><b>Tool</b> TL-CBB &amp; 24mm spanner</p> <p><b>Tightening torque</b> 50~70N・m (500~700kgf・cm)</p>	<div>CBBAL (ITA)</div> <p><b>Main unit (Right cup)</b> <b>Left cup</b> Thread : M36 x 24T Material : Aluminum alloy</p> <p><b>Tool</b> TL-CBB &amp; 24mm spanner</p> <p><b>Tightening torque</b> 50~70N・m (500~700kgf・cm)</p>	<div>CBB-SG75</div> <p><b>Main unit (Right cup)</b> Thread : BC1.37 x 24T - L Material : Aluminum alloy</p> <p><b>Left cup</b> Thread : BC1.37 x 24T Material : Aluminum alloy</p> <p><b>Tool</b> TL-CBB &amp; 24mm spanner</p> <p><b>Tightening torque</b> 50~70N・m (500~700kgf・cm)</p>	<div>BB-SG75</div> <p><b>Main unit (Right cup)</b> Thread : BC1.37 x 24T - L Material : Steel</p> <p><b>Left cup - Lockring</b> Thread : BC1.37 x 24T Material : Steel</p> <p><b>Tool</b> 36mm spanner</p> <p><b>Tightening torque</b> 50~70N・m (500~700kgf・cm)</p> <p><b>Tool</b> Hook spanner for lockring</p> <p><b>Tightening torque</b> 35~50N・m (350~500kgf・cm)</p>	
<div>POWER SLEEVE (BB30A, PF30A)</div> <p><b>Joint section of Left &amp; Right cups (Thread-in structure)</b> Thread : M28 x 1.0 Material : Aluminum alloy</p> <p><b>Tool</b> TL-PWS BB wrench (External BB tool)</p> <p><b>Tightening torque</b> 30~50N・m (300~500kgf・cm)</p>	<div>POWER SLEEVE (Other than BB30A, PF30A)</div> <p><b>Joint section of Left &amp; Right cups (Thread-in structure)</b> Thread : BC1.37 x 1.0 Material : Aluminum alloy</p> <p><b>Tool</b> TL-PWS BB wrench (External BB tool)</p> <p><b>Tightening torque</b> 30~50N・m (300~500kgf・cm)</p>	<div>Sugino T47</div> <p><b>Right cup</b> Thread : M47 x 1.0 - L Material : Aluminum alloy</p> <p><b>Left cup</b> Thread : M47 x 1.0 Material : Aluminum alloy</p> <p><b>Tool</b> TL-PWS BB wrench (External BB tool)</p> <p><b>Tightening torque</b> 30~50N・m (300~500kgf・cm)</p>	<div>MB-608 (BSA)</div> <p><b>Right cup</b> Thread : BC1.37 x 24T - L Material : Aluminum alloy</p> <p><b>Left cup</b> Thread : BC1.37 x 24T Material : Aluminum alloy</p> <p><b>Tool</b> TL-PWS BB wrench (External BB tool)</p> <p><b>Tightening torque</b> 40~50N・m (400~500kgf・cm)</p>	<div>MB-608 (ITA)</div> <p><b>Right cup</b> <b>Left cup</b> Thread : M36 x 24T Material : Aluminum alloy</p> <p><b>Tool</b> TL-PWS BB wrench (External BB tool)</p> <p><b>Tightening torque</b> 40~50N・m (400~500kgf・cm)</p>	
CRANK (CHAINWHEEL)			CHAINRING FIXING BOLT		
<div>IDS24 series (Φ24mm axle crank)</div> <p><b>Clamp bolt</b> Thread : M6 x 1.0 Material : Steel</p> <p><b>Tool</b> 5mm hexagon wrench</p> <p><b>Tightening torque</b> 14~16N・m (140~160kgf・cm)</p>	<div>IDS30 series (Φ30mm axle crank)</div> <p><b>Axle bolt</b> Thread : M15 x 1.0 Material : Aluminum alloy</p> <p><b>Tool</b> 8mm hexagon wrench</p> <p><b>Tightening torque</b> 40~50N・m (400~500kgf・cm)</p>	<div>4-Taper series (Square taper axle crank)</div> <p><b>BB axle bolt</b> Thread : M8 x 1.0 Material : Steel</p> <p><b>Tool</b> Such as 14mm box wrench</p> <p><b>Tightening torque</b> 40N・m (400kgf・cm)</p>	<div>#401 SUS75</div> <p><b>Bolts</b> Thread : M8 x 0.75 Material : SUS</p> <p><b>Tool</b> 5mm hexagon wrench</p> <p><b>Tightening torque</b> 14~16N・m (140~160kgf・cm)</p>	<div>#400 series (Other than #401 SUS75)</div> <p><b>Bolts</b> Thread : M8 x 0.75 Material : Steel</p> <p><b>Tool</b> 5mm hexagon wrench</p> <p><b>Tightening torque</b> 14~16N・m (140~160kgf・cm)</p>	<div>#700 &amp; #800 series</div> <p><b>Bolts</b> Thread : M8 x 0.75 Material : Aluminum alloy</p> <p><b>Tool</b> T30 torx wrench</p> <p><b>Tightening torque</b> 6.9N・m (70kgf・cm)</p>
OTHERS					
<div>FUMIKIRI Lockring</div> <p>Thread : BC1.29 x 24T - L Material : Steel</p> <p><b>Tool</b> TL-PWS BB wrench (External BB tool)</p> <p><b>Tightening torque</b> 40N・m (400kgf・cm)</p>	<div>FIXIE Cluster</div> <p>Thread : BC1.37 x 24T Material : Steel</p> <p><b>Tool</b> TL-PWS BB wrench (External BB tool)</p> <p><b>Tightening torque</b> 40N・m (400kgf・cm)</p>	<div>Seatpost Clamp Bolt</div> <p>Thread : M6 x 1.0 Material : Steel</p> <p><b>Tool</b> 5mm hexagon wrench</p> <p><b>Tightening torque</b> 12~15N・m (120~150kgf・cm)</p>	<div>Adjustable FD MOUNT (MT-OX)</div> <p><b>FD fixing bolt</b> <b>Base plate fixing nut</b> Thread : M5 x 0.8 Material : SUS</p> <p><b>Tool</b> T20 torx wrench</p> <p><b>Tightening torque</b> 5~7N・m (50~70kgf・cm)</p>	<p>*The torque specifications in the chart are determined for fastening components in Sugino products, and don't apply to those in other brands'.</p>	