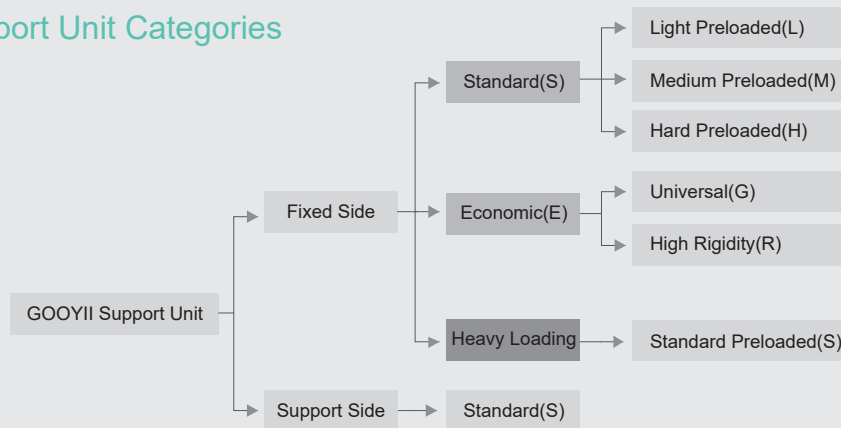


Support Bearing Categories

Support Unit Categories



Differential Points Between GOOYII Standard & Economic Category

Standard type

- Fixed side : Applied angular contact bearings to perform pre-loaded for three different usages - light preloaded, medium preloaded, heavy preloaded.
- Support side : Applied deep-groove bearings.

Economic type : Applied deep-groove bearings to rigid assembly and universal assembly types.

Heavy loading : Applied TAC series angular 60 degree contact bearing to perform heavy pre-loaded.
Options of DF or DFD combination per application.

Preload Selection and Applications

Preload	Machine Requirements	Application Examples
Light (L)	Equipments with small vibration and small thrust, load in one fixed direction. High accuracy is not required. Reduction of frictional force.	Laser welder, small CNCmill machine, cutter, welder, automatic tool changer, packing machine, material supply equipment.
Medium (M)	Equipments with load on a post. Equipments with a torque acting on it. Equipments working in one direction. Equipments with low load. Equipments with high accuracy.	Automated feeder, linear feeder, automated painting machine, precision slide table, Z-axis control on machines, PC board punch machine. Industrial robot, EDM machine, NC lathe.
Hard (H)	High rigidity, high vibration, high thrust equipments. High load, high torque equipments.	Machining center spindle, NC lathe, Z-axis spindle of the machinery, milling machine, grinding wheel feeding of grinding machine.

Pre-Loaded Description

Pre-Loaded Description

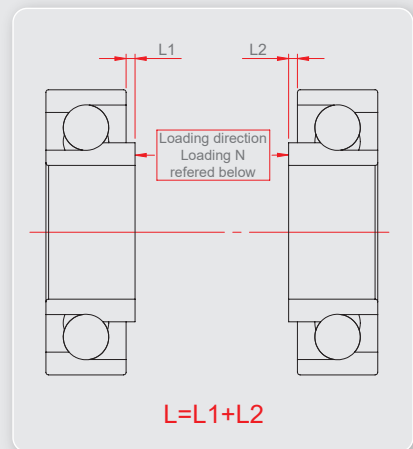
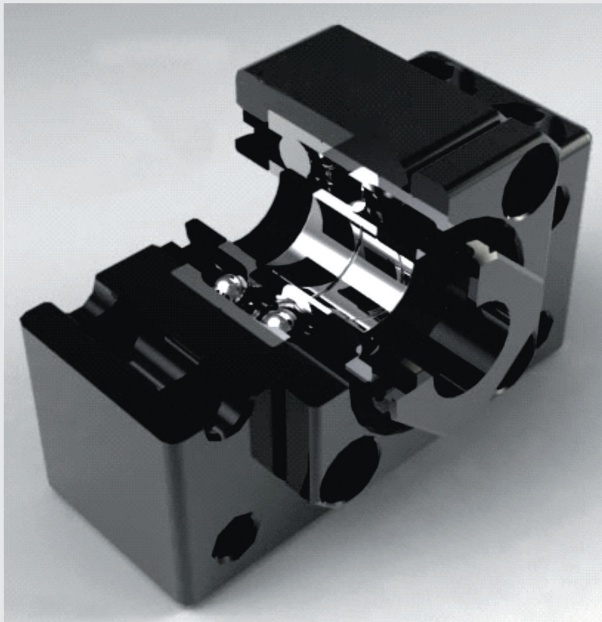
Purpose of Preloaded :

1. Increase the rotational accuracy of axle.
2. Increase the rigidity of axle.
3. Reduce unwanted clearance.
4. Reduce vibration and noise while bearing stops.

What is bearing preload?

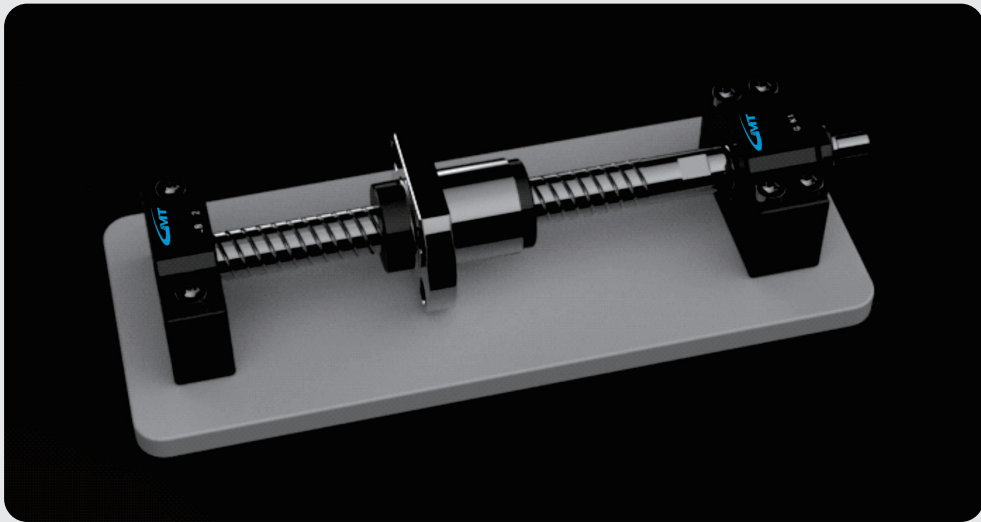
The preload describes the process wherein a permanent thrust load is applied to the bearing, so that the bearing is secure in the groove and has no axial clearance.

Apply normal force (N). Measure value of L of a pair of bearings. $L=L_1+L_2$. Press these pair of bearings on the covers to apply preload and bring these bearings together.



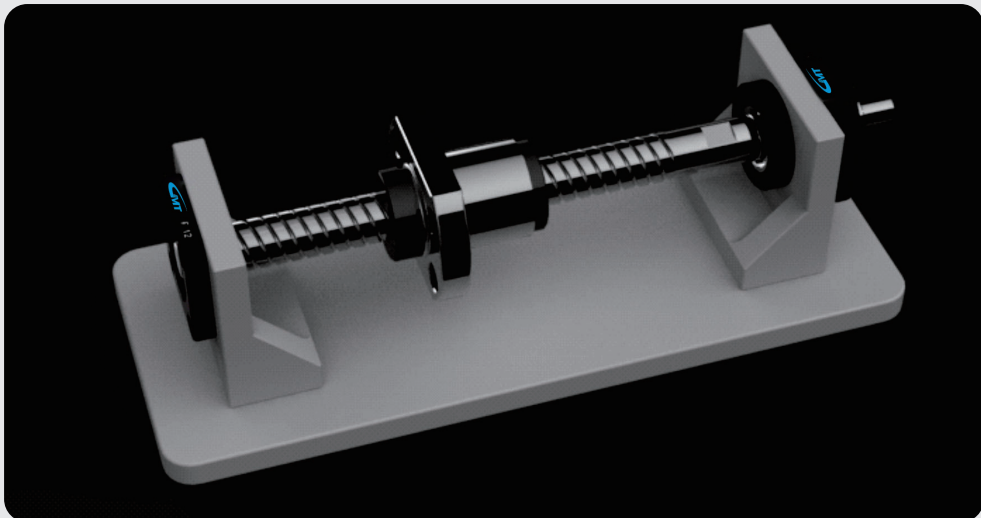
Assembly Models

Rectangle Design



- ◆ Assembly features : The rectangle design is fitted to plane structure which is available for lower assembly required high rigidity applications.

Flange Design

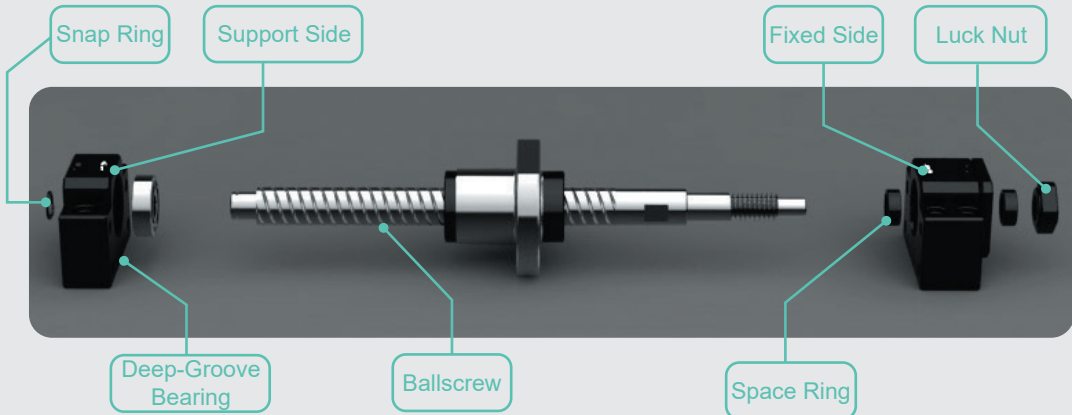


- ◆ Assembly features : The round design is fitted to suspension and spindle structure which is able to be assembled freely according to the equipment height.

Assembly Process

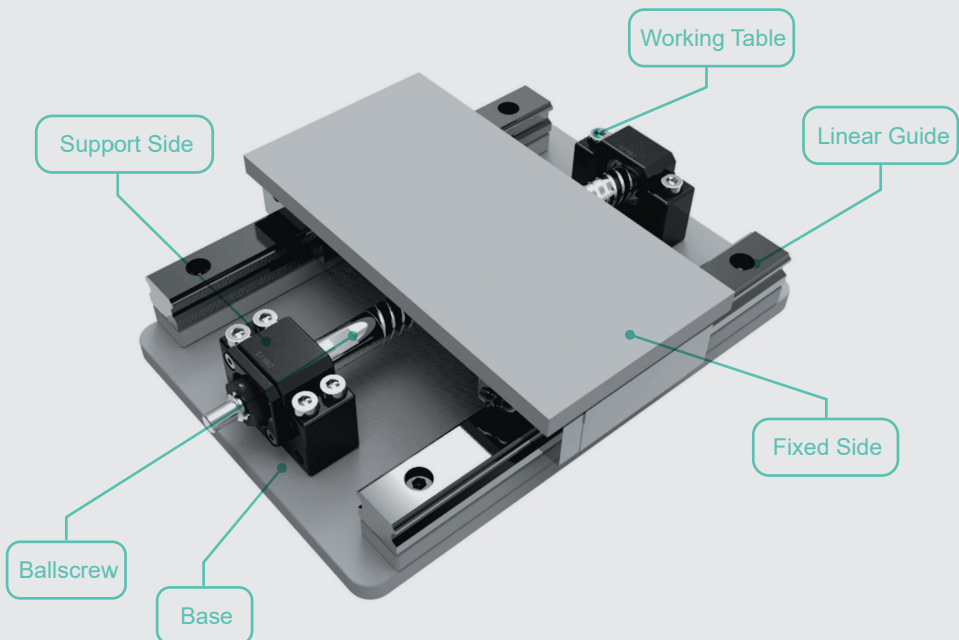
Assemble The Support Unit to Ballscrew

- (1) No disassembly to the support unit fixed side.
- (2) Install ballscrew to the fixed side with care not to scratch the external lip of the seal.
- (3) Assembly sequence : Install the first space ring to the ballscrew → Install ballscrew to the Fixed Side → Install the second space ring to the ballscrew → Install the Luck nut (tighten after installation) → Install the support side and deep-groove-bearings to the ballscrew → Buckle the snap ring.



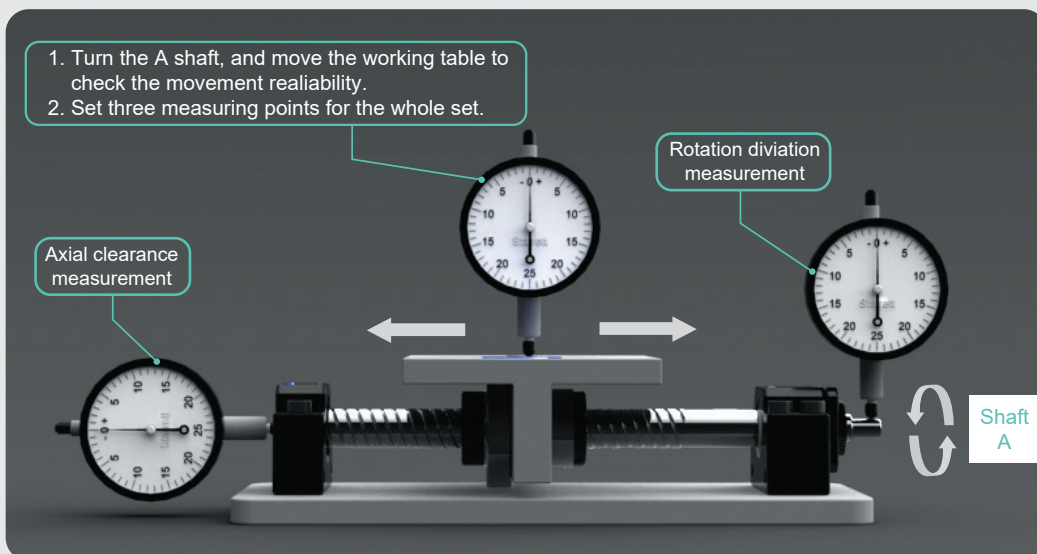
Assemble The Working Table and Base

- Combine ballscrew with the working table → Combine the fixed side with the base → Combine ballscrew with the fixed side → Combine support side and ballscrew → Combine the support side and the base.



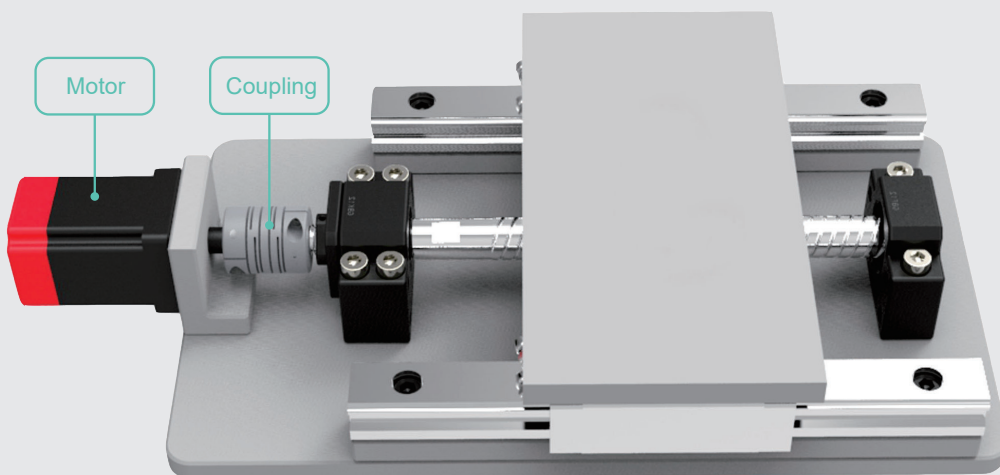
Assembly Process

Calibration and Adjustment



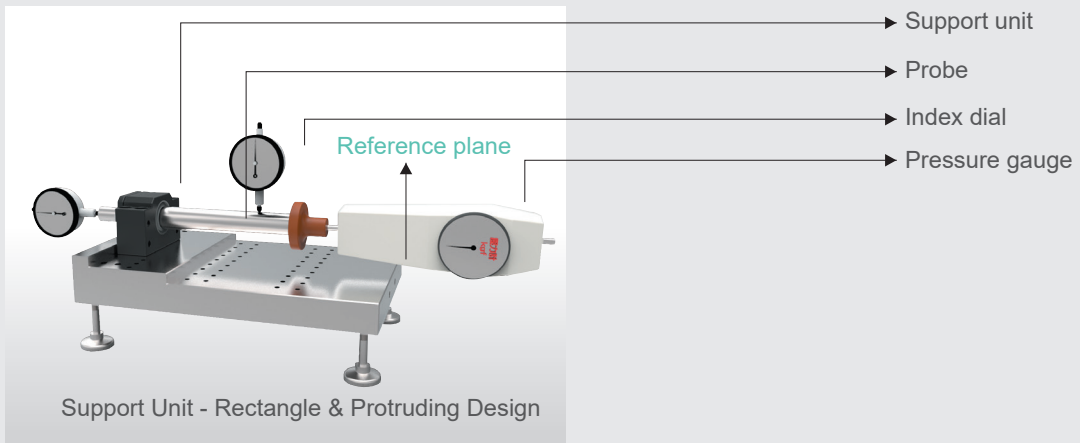
Assembly with motor

1. Combine the base with the motor bracket.
2. Install the coupling to the motor shaft with the bracket, and calibrate the assembly accuracy.
3. Make trial turning of the motor after installation.

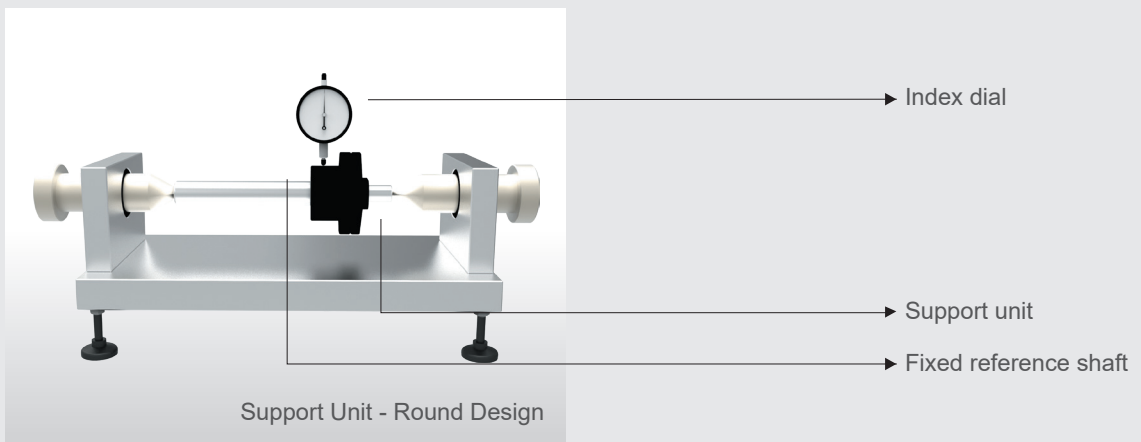
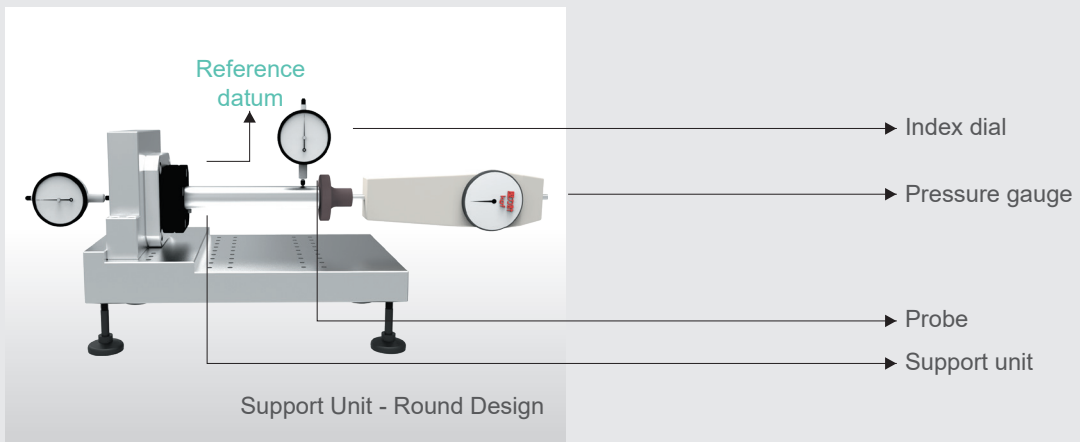


Inspection Description


GOOYII Support Unit Inspection - Rectangle & Protruding Design



GOOYII Support Unit Inspection - Round Design






Support Bearing Figuration



GOOAK : Fixed Side <small>Standard P.0031~P.0032 Economic P.0039~P.0040</small>		GOOBK : Fixed Side <small>Standard P.0033~P.0044 Economic P.0041~P.0042</small>	
GOOAK - B Black Dyed	GOOAK - N Ni-Plating	GOOBK - B Black Dyed	GOOBK - N Ni-Plating
			

GOOEK : Fixed Side <small>Standard P.0035~P.0036 Economic P.0043~P.0044</small>		GOOFK : Fixed Side <small>Standard P.0037~P.0038 Economic P.0045~P.0046</small>	
GOOEK - B Black Dyed	GOOEK - N Ni-Plating	GOOFK - B Black Dyed	GOOFK - N Ni-Plating
			

GOOAF : Support Side <small>Standard P.0047~P.0048</small>		GOOBF : Support Side <small>Standard P.0049~P.0050</small>	
GOOAF - B Black Dyed	GOOAF - N Ni-Plating	GOOBF - B Black Dyed	GOOBF - N Ni-Plating
			

GOOEF : Support Side <small>Standard P.0051~P.0052</small>		GOOFF : Support Side <small>Standard P.0053~P.0054</small>	
GOOEF - B Black Dyed	GOOEF - N Ni-Plating	GOOFF - B Black Dyed	GOOFF - N Ni-Plating
			

Support Bearing Figuration

GOOWFF : Fixed Side Heavy Loadingt Standard P.0055~P.0056	
GOOWFF - B - DF Black Dyed	GOOWFF - N - DF Ni-Plating
	

GOOSW : Fixed Side Standard P.0057~P.0058		GOOSWE : Fixed Side Standard P.0059~P.0060	
GOOSW - B Black Dyed	GOOSW - N Ni-Plating	GOOSWE - B Black Dyed	GOOSWE - N Ni-Plating
			

GOORW : Fixed Side Standard P.0061~P.0062		GOORWE : Fixed Side Standard P.0063~P.0064	
GOORW - B Black Dyed	GOORW - N Ni-Plating	GOORWE - B Black Dyed	GOORWE - N Ni-Plating
			

GOOUN : Support Side Standard P.0065~P.0066		GOOTN : Support Side Standard P.0067~P.0068	
GOOUN - B Black Dyed	GOOUN - N Ni-Plating	GOOTN - B Black Dyed	GOOTN - N Ni-Plating
			

Support Bearing Figuration

GOOUR : Support Side <small>Standard P.0069~P.0070</small>		GOOTR : Support Side <small>Standard P.0071~P.0072</small>	
GOOUR - B Black Dyed	GOOUR - N Ni-Plating	GOOTR - B Black Dyed	GOOTR - N Ni-Plating
			

GOORLN : Lock Nut/Light Loading <small>Standard P.0073</small>		GOOCLN : Lock Nut/Heavy Loading <small>Standard P.0074</small>		GOOSR : Space Ring <small>Standard P.0075</small>	
GOORLN - B Black Dyed	GOORLN - N Ni-Plating	GOOCLN - B Black Dyed	GOOCLN - N Ni-Plating	GOOSR - B Black Dyed	GOOSR - N Ni-Plating
					

Selection Notes (Refer to Page 0017, 0018, 0019)

[Model] : Pick up the model according to assembly method.

Assembly : 1.Plane mounting : GAK, GBK, GEK, GAF, GBF, GEF, GSW
GSWE, GUN, GTN.

2.Suspension and spindle mount : GFK, GRW, GRWE, GFF
GUR, GTR.

[Size] : Decide the size according to the ballscrew shaft O. D., and the center height.

[Grade] : Standard and economic types for options.

[Pre-loaded] : Decide pre-loaded of the bearing per needs.

[Surface Finish] : Black dyed - Regular environment use, low humidity.
Nickel plating - Clean room use.

[Bearing category] : Available Japanese series and Taiwanese series.