BEARING INSTALLATION INSTRUCTIONS

Bearings should be installed in a no dust and water vapor and corrosive gases environment to ensure the bearing cleanness and installation accuracy, and to prevent foreign matter to enter into the inside of the bearing causing damage and corrosion. Installation of the use of mechanical parts should be checked according to the drawings to make sure the size of the corresponding bearing are accurate in accordance with the requirements. The surface of the bearing must be blown, cleaned with particular attention, there can not be any metal debris, blind holes, and other issues. For the interference with the bearings, it is recommended to preheat the bearing so the bearing diameter expand before the assembly of the bearing to reduce damage to the bearing. According to the user experience, the internal clearance of interference with the bearing is reduced by 55% to 75% of the amount of the interference with the bearing, the difference is mainly due to the different materials, high density material bearing clearance shrinkage significantly, and vice versa. When the bearing is mounted on the shaft or inside the housing hole, it is advised to avoid strong pressure from the outside on that the balls and ferrule rolling surfaces in the bearing, as it will damaged the bearing.

ABNORMAL OPERATION OF BEARING AND CORRESPONDING SOLUTION

Status	Speculated reason	Corresponding Solution
Abnormal increase in temperature	Too much or too little grease	Verify that the appropriate amount of lubricant is injected
	Increased load	Adjust the load, modify the bearing clearance or gap
	Poor installation	Improve the bearing processing, installation accuracy, and the pressure of preload
	Corresponding side moved or external friction	Adjust the fit or replace the bearing
Big shock	Poor installation	Correct the alignment accuracy of the shaft or housing, preload adjustment
	Foreign material intrusion	Improve the cleanness of the shaft and surface shell, improve the installation method
	Bearing wear out or deformation	Replace the bearing
Grease leaking or change color	Too much grease or seal is not strong, outside oil and water intrusion, etc.	Adjust the amount of grease or replace the seal form, improve the bearing working environment
Loud noise	Bearing damage, stripping, clearance is too large	Replace the bearing
	Foreign material intrusion	Cleaning parts, replacing the sealing device, using clean grease
Loud noise	Poor installation, abnormal load	Improve installation accuracy, improve the installation, modify the bearing clearance, adjust the pre-paid and etc

Above action is only for some common anomalies, for each specific bearing, always check the actual bearing product to find the reasons and then develop feasible solutions.

COMMON DAMAGE OF BEARING AND CORRESPONDING SOLUTION

Types	Damage phenomenon	The reason	Corresponding solution
Peeled off	Roller surface and rolling surface layer has fish scale looking damage	The bearing internal clearance is too small, improper or insufficient grease, axial load change, rust, poor installation	Select the appropriate bearing internal clearance, Re-select the lubrication method and grease, re-select bearing with the axial clearance, Give the bearing a comprehensive anti-rust treatment, develop reasonable accuracy
Outer, inner rupture		Large amount of interference, impact load is too large, peel or burn mating shaft expends, housing fillet is too large	Choose the right match, Set the stable load, Make sure the fillet on the mating surface is smaller than the chamfer of the bearing
Electric erosion	Rolling surface has the melting point due to the spark, the surface has a small pit	The humidity in the environment is large, water or rusty substances enter into the inside of the bearing	Improve the sealing device, Improve the bearing storage environment
Creep	Movement occurs when the collar relative to the shaft or shell axial moves	The sleeve is not tight enough, Lack of interference	Strengthen the fastening, Increase the amount of interference
Retainer broken	There is deformation, wear, fracture	Impact, torque is too large Improper lubrication Poor installation	Resets the load size, Choose the appropriate lubrication method, Reduce installation errors and improve installation methods

The above is only a few common problems in the using process, there are specific circumstances which need specific analysis for the appropriate solution.