

Motor bearing replacement operation process

1, Check to determine

Motor bearings need to be replaced for reasons: 1) bearing overheating, 2) motor vibration is too large, 3) bearing abnormal sound.

2, the preparation of materials and tools

1, Preparation Materials: has been installed conversion switch, screw fuses, contactors, thermal relays, buttons, terminal blocks, and has been connected to the main circuit control board, wire rv~1.5mm, 2.5mm Four-core Rubber Line of a number of meters, mat wood 1, gasoline, lubricating grease, cotton yarn, wool mat wood, gasoline, grease, Cotton yarn, Brush 1, Oil Pan 1.

2. Preparation tools: Electrician pliers, electrician knife, A word screwdriver, phillips screwdriver, hammer, Wood hammer, flat shovel each 1, three claw puller one, three claw puller one, insulation resistance meter, steel (iron) tube (?100mm) 1, marker 1, 2, Preparation tools: electrician pliers, electrician knife, A word screwdriver, Phillips screwdriver, Hammer , wood hammer, flat shovel each 1, three claw puller one, three claw puller one, insulation resistance meter, steel (iron) tube (?100mm) 1, Marker Pen 1.

3, Motor Disassembly

1, remove the pulley or coupling, first in the bearing end (or the end of the Joint) to do a size mark, loosen the belt pulley or coupling on the positioning screw or pin, and then use special tools to slowly pull the pulley or coupling.

2. Remove the fan cover and Fan. Loosen the clamping bolts and gently tap to remove them.

3. Remove the bearing outer cover and end cover of the motor end. Mark the frame with the end cap seams first (so that the installation is aligned at the time of restoration). Remove the bearing cover, loosen and unscrew the fastening screw of the lower cover, and gently tap the end cover for four weeks (mat WOOD) so that it is detached from the base to Remove.

4, the other end of the end cover and the frame to mark, remove the fastening bolts on the lower cover, knock the end cover, so that it and the base separation (mat on the mat wood), the end cover and the rotor from the stator to draw out, the rotor should be careful, do not scrape the stator windings.

5. Remove the bearing cap fastening bolts connected to the rotor and remove the bearing cover and end cover one by one from the shaft.

4. Bearing replacement, Motor Assembly

1, Replace the bearing, with special tools to remove, for the bearing in the end cover of the situation, the end cover can be lifted upward, smooth on two iron plate, cushion on a section of diameter less than the bearing of the metal pipe beating, so that the bearing outer ring force, the bearing will be knocked out;

2, to the fixed, the rotor to sweep, with the skin tiger or compressed air blowing clean dust, with brush Clean.

3, Bearing Clean sliding flexible; The new grease is usually 1/3-1/2 to the bearing chamber Volume.

4. When the motor is assembled, the steps and methods are correct, and the assembling steps are opposite to the disassembly steps.

5, Insulation test

1, the selection of tools and nuclear inspection, the use of 500V insulation resistance meter, before using the insulation resistance table for inspection, the method is in the "L" and "E" end open-ended case, shaking the handle, so that the speed of 120r/min, the pointer should point to "∞". In the "L" short-circuit (and "E" short-circuit (collision) case, the light rocker handle, The pointer refers to "0", indicating that the insulation resistance meter Intact.

2, measuring Winding insulation, 1) Determination of the sub-winding, e-terminal button casing, l termination winding end, the three-phase winding respectively Measured. 2) measuring the insulation resistance between the three-phase windings, the "L" and "E" ends are respectively connected to the measured two-phase windings.

The insulation resistance of the above two measurements should be no less than 0.5m?.

6, no-load test Machine

7, the test machine current is generally rated current of 50%, no vibration, no noise as qualified