

Installation and Maintenance Instructions Freewheel Type RSBF

To avoid premature failure of the freewheel or possible machine malfunction, installation of the freewheel should be carried out by suitably qualified personnel and according to the following instructions.

STIEBER will not accept liability in cases of non-compliance with these instructions!

Prior to Installation:

The freewheels should be unpacked and installed in a clean, dry working environment.

Freewheeling direction should be checked prior to installation. If the direction of freewheeling is to be reversed:

Remove the inner race from the outer race whilst slightly rotating the inner in the freewheeling direction. Remove circlip from outer race, withdraw the cage and turn it through 180 degrees.

Care should be taken, that the sprags and/or springs do not drop out.

Reinstall the sprag cage, and secure with circlip.

The hub of the outer race should be fitted to a shaft of h6 tolerance.

The mounting register for the flange of the inner race should be to h6/j6 tolerance.

Ensure that concentricity between the inner and outer is better than 0.25mm for units up to RSBF 70 and better than 0.5mm for sizes RSBF 80 and 90.

Parallel alignment should be within 0.045mm up to RSBF 70 and 0.1mm for larger diameter units.

Installation:

- Remove the inner race from the outer race whilst slightly rotating the inner in the freewheeling direction.
- Torque tighten the flange of the inner race to its mounting. Bolts of 8.8 quality or better should be used, tighten them according to size and quality.
- Use a key to DIN 6885 sheet 1. The key should be the length of the outer race hub.
- Fit the outer race to the shaft, slightly rotating the outer and shaft in the freewheeling direction.
- Ensure the axial clearance between the inner race and the hub of the outer race is approximately 2mm for sizes up to RSBF 70 and 3mm for sizes above RSBF 70.
- Ensure that concentricity and parallel alignment between the inner and outer are within the limits stated above.
- Secure outer race to the shaft using a locking screw.
- When unit is installed on a non horizontal shaft a retaining collar should be used.
- Where used, the dust proof cover can now be pressed onto the flange of the inner race.

After Installation:

After installation, ensure the backstop permits rotation in the required direction.

The backstop should be lightly oiled with corrosion inhibiting oil prior to use.

Machine oils with corrosion protecting agents and anti-ageing additives can be used.

Maintenance:

Protect backstop against corrosion and wear by periodically lightly lubricating the sprag contact surfaces.