SERVICING.

It is preferable that Type 4 / 48 bearings are serviced by the factory or a JP3 agent. The main reason for this is there may be parts needed, other than the seal kit, that are not always obvious from an external inspection and these need to be made at the factory.

However to service the Type 4 / 48 bearings it is a relatively simple process. Prior to disassembly and servicing contact the JP3 factory for the appropriate service kit got your bearing. To do this you will need to the bearing part number, i.e. 48.22.30.

DISASSEMBLY.

1. Remove the seal carrier from each side of the bearing by loosening and removing retaining Hex Head screws.

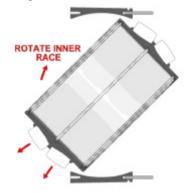
The seal carriers may be tight on the main outer race as a result of age. The carriers are fitted with threads plastic plugs to allow for jacking screws to be fitted to help separate the parts.



2. Before you continue, count the number of rollers visible in the outer row and note this down.

While the two roller bearings have an equal number of rollers in each row, the three roller bearings do not and there are more rollers in the middle row. Counting the number of rollers in the outer will record this for reassembly.

3. Place the bearing on it's side and rotate inner race so the rollers fall out.



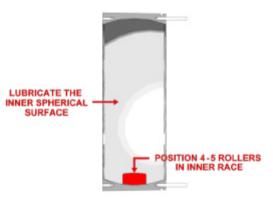
4. The inner race can now be removed.

CLEANING AND INSPECTION

- Thoroughly inspection and clean all the parts with a solvent cleaner such as 'Wax & Grease Remover'.
- If there any signs of corrosion, contact the factory for advice.
- When cleaning take special care not to damage the surface. DO NOT USE any sharp scrapers such as chisels.

RE-ASSEMBLY.

- 1. Prior to reassembly, lubricate the inner spherical surface of the outer race with the silicon oil supplied in the service kit.
- 2. Position 4 -5 rollers in the inner race aligned with the rolling direction.



3. Fit the inner race inside the outer race so that it is sitting on the row of 4-5 rollers.

If you are servicing is a three roller bearing position the inner race so the 4-5 rollers are in the middle roller track.



4. Rotate the inner race and 4-5 rollers so the opposite side of the roller track that has the first 4-5 rollers in it just exposed at the upper edge and a roller can be placed in the track.

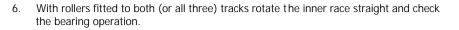
Fit the rollers in the track and slide these down until the track is filled.

Remember if you are re-assembling a three roller bearing the middle track will have more rollers than the outer tracks. Refer to the number of rollers you counted prior to disassembly.



5. Rotate the inner race and the first track of roller in opposite direction so the other roller track is just exposed at the upper edge and a roller can be placed in the track.

NOTE: Rotating the inner race like this will allow the rollers in the first track to fall out. You must hold these rollers in the track. This can be done with a cupped hand.

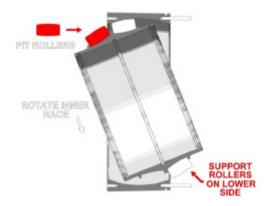


The bearing should run freely and align easily.



7. Before the seal and seal carriers are fitted there are number of surfaces that need to be lightly greased to assist with the sealing on the V-ring seals and seal carrier.

Lightly Grease the inside surfaces of the seal carriers where the V Seals rium.



If the bearing is a three roller bearing repeat this step filling the third track.

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8. Fit each V-seal and seal carrier.

SEAL ORIENTATION.

The lips of BOTH seals should be away from the water so the water pressure pushes in the seal lip.

The process is a little like fitting a bicycle tire to a wheel. Before fitting a v seal the unstretched seal has a smaller internal diameter than the matching surface.

The seal and seal carrier are fitted together. Fit the seal in the seal carrier and stretch the seal over the inner race.

Make sure the lip of the seal is inside the groove in the seal carrier. If not the seal will leak and will be damaged. This can be done with a visual check. It is possible to lift the seal carrier enough to see if the seal is correctly located.

9. Refit and tighten the fasteners using a Zinc Chromate anti corrosion paste such as Duralac or equivalent.

Refit fit the external and internal o-rings.

The bearing should be reassembled ready for installation.

