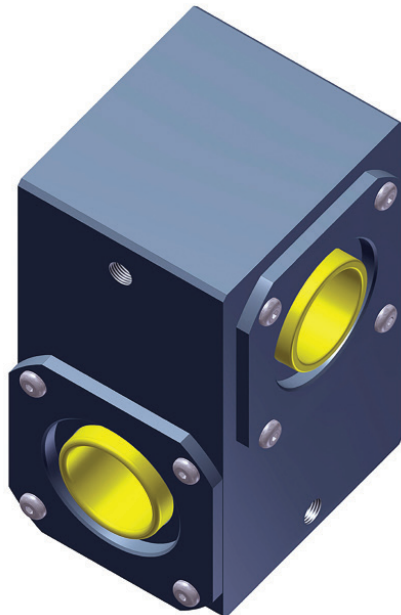


Maintenance Guide

Insert-A-Shaft® 25 1:1 Right Angle Gearbox

Standard & Base Mount Models

A/B Bores: 1.25, 1.00, .750, .625



Standard Model Shown

Prod. #	Model	Prod. #	Model
4304-0066	IAS251:1RHA1.25B1.25	4304-0337	IAS25BM1:1LHA1.25B1.25
4304-0067	IAS251:1LHA1.25B1.25	4304-0338	IAS25BM1:1RHA1.25B1.00
4304-0260	IAS251:1RHA.750B.750	4304-0339	IAS25BM1:1LHA1.25B1.00
4304-0261	IAS251:1LHA.750B.750	4304-0340	IAS25BM1:1RHA1.25B.750
4304-0262	IAS251:1RHA.625B.625	4304-0341	IAS25BM1:1LHA1.25B.750
4304-0263	IAS251:1LHA.625B.625	4304-0342	IAS25BM1:1RHA1.25B.625
4304-0264	IAS251:1RHA.625B.750	4304-0343	IAS25BM1:1LHA1.25B.625
4304-0265	IAS251:1LHA.625B.750	4304-0344	IAS25BM1:1RHA1.00B1.00
4304-0266	IAS251:1RHA1.00B.750	4304-0345	IAS25BM1:1LHA1.00B1.00
4304-0267	IAS251:1LHA1.00B.750	4304-0346	IAS25BM1:1RHA1.00B.750
4304-0268	IAS251:1RHA1.00B1.00	4304-0347	IAS25BM1:1LHA1.00B.750
4304-0269	IAS251:1LHA1.00B1.00	4304-0348	IAS25BM1:1RHA1.00B.625
4304-0318	IAS251:1RHA1.25B.625	4304-0349	IAS25BM1:1LHA1.00B.625
4304-0319	IAS251:1LHA1.25B.625	4304-0350	IAS25BM1:1RHA.750B.750
4304-0320	IAS251:1RHA1.25B.750	4304-0351	IAS25BM1:1LHA.750B.750
4304-0321	IAS251:1LHA1.25B.750	4304-0352	IAS25BM1:1RHA.750B.625
4304-0322	IAS251:1RHA1.25B1.00	4304-0353	IAS25BM1:1LHA.750B.625
4304-0323	IAS251:1LHA1.25B1.00	4304-0354	IAS25BM1:1RHA.625B.625
4304-0336	IAS25BM1:1RHA1.25B1.25	4304-0355	IAS25BM1:1LHA.625B.625

Shaft Requirements

- Diameter tolerance should be $+.000/-0.002$ in. For traversing applications it is recommended to be $.001/.002$ in. under nominal.
- Runout should be within $.002$ in.
- Straightness should be within $.002$ in. TIR. Per foot.
- Material should be suitable for the particular application. Carbon, alloy or stainless steel shafting may be used.
- Shaft finish should be 64 RMS or better for stationary applications and 32 RMS or better for traversing applications.
- Keyway should be made $0.001/0.002$ in. over nominal
Edges should be de-burred.

Shaft Support

Shafting should be supported on all sides of gearbox with external bearing blocks. The internal gearbox bearings are designed to handle the internal loads and are not suitable to support additional, external radial or thrust loads. Failure to support external loads will reduce the gearbox efficiency and service life.

Lubrication

CAUTION: DO NOT FILL GEARBOX WITH GREASE!

Insert-A-Shaft gearboxes are pre-lubricated and ready for service. For light and moderate duty applications they may be considered lubed for life and no further service is required.

For continuous and severe duty use, periodic maintenance may be required. It is recommended to purge grease and re-lubricate every 1,500 hrs of service.

For standard IAS models, lubricate with Magnalube-G® NLGI Grade 2 grease. For Food Grade application, use ACCROLUBE®-FG grease.

For CRL models, lubricate with Lubriplate® 1500 Grade 00 grease. For Food Grade applications use Lubriplate®, FGL-00 grease.

When lubricating remove the lower most port plug and inject new grease into zerk fitting in upper most port purging old grease out lower port. Re-install port plug.

Lubrication amounts:

25 series = 1 oz (30ml), 20 series = .67 oz (20ml), 15 and 10 series = .50 oz (15ml)

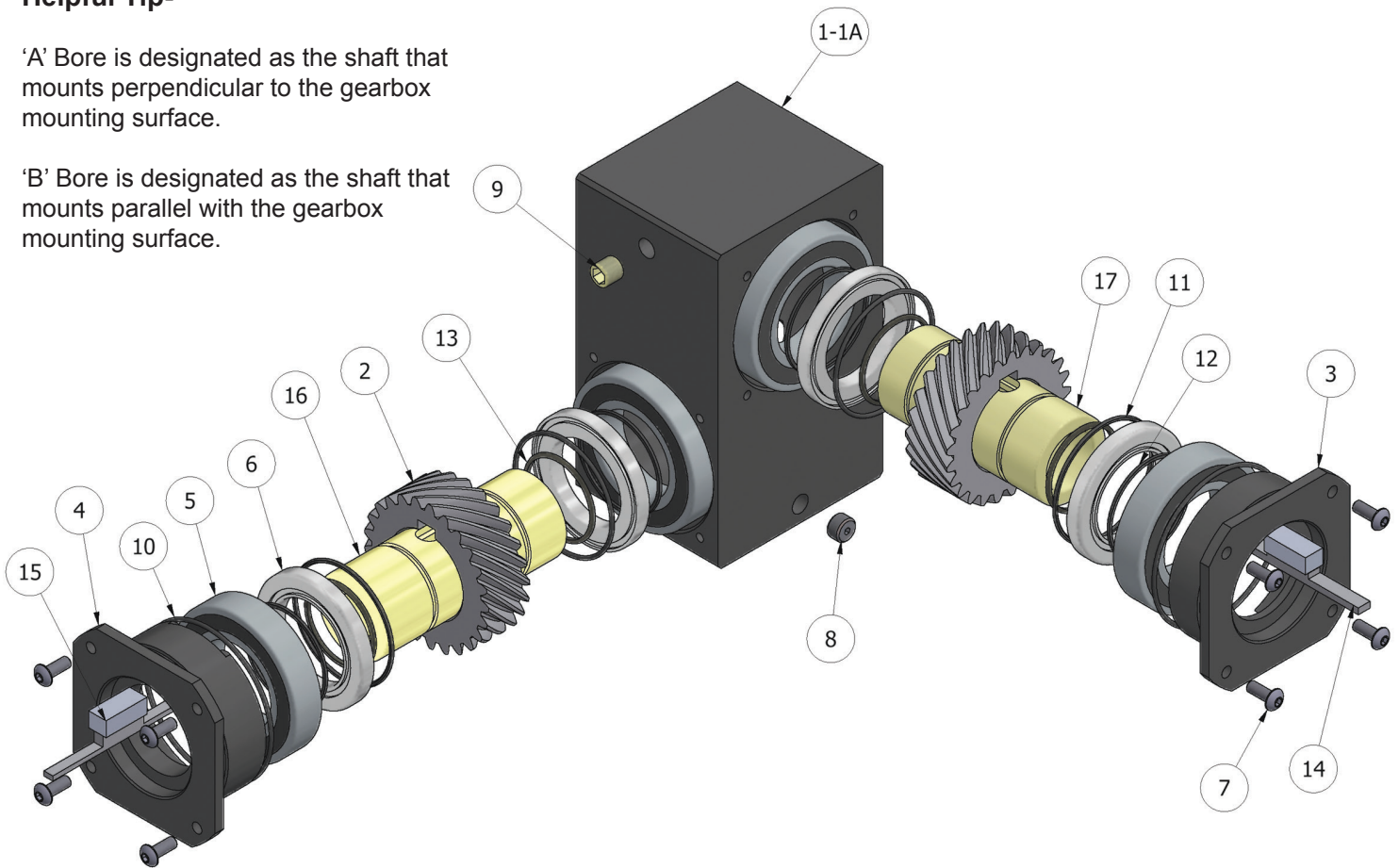
Note: Overfilling may result in leakage, excessive heat and reduced service life.



Helpful Tip-

'A' Bore is designated as the shaft that mounts perpendicular to the gearbox mounting surface.

'B' Bore is designated as the shaft that mounts parallel with the gearbox mounting surface.



ITEM #	DESCRIPTION	QTY	ITEM #	DESCRIPTION	QTY
1	HOUSING, STANDARD	1	9	BREATHER PLUG	1
1A	HOUSING, BASE MOUNT	1	10*	O-RING BEARING CAP	2
2 [!]	GEAR	2	11*	O-RING SPACER/GEAR (L)	4
3	BEARING CAP (A) BORE	1	12*	O-RING SPACER/BEARING (S)	4
4	BEARING CAP (B) BORE	1	13*	O-RING SHAFT	4
5 [!]	BEARING	4	14	SHAFT KEY	2
6*	SPACER	4	15	GEAR KEY	2
7	BH SCREWS	8	16	SHAFT (B) BORE	1
8	HEX PORT PLUG	1	17	SHAFT (A) BORE	1

Available Repair Kits:

- * 4304-9106 Kit: Seals / Spacers
- *! 4304-9104 Kit: Seals / Spacers / RH Gears / Bearings
- *! 4304-9105 Kit: Seals / Spacers / LH Gears / Bearings