WC BRANHAM®
SOLUTIONS IN MOTION

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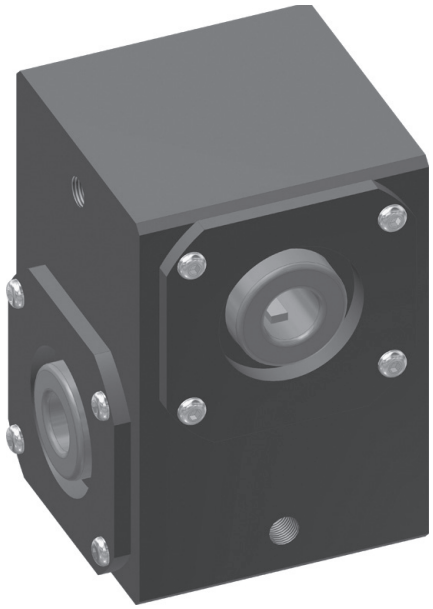
Maintenance Guide

Insert-A-Shaft® 20 1:1 Right Angle Gearbox
Standard Models
A/B Bores:1.00, .750, .625 | Group A



Prod. #	Model	Prod. #	Model
4306-0002	IAS20RH1:1A.625B.625	4306-0011	IAS20LH1:1A.625B1.00
4306-0003	IAS20LH1:1A.625B.625	4306-0012	IAS20RH1:1A.750B1.00
4306-0004	IAS20RH1:1A.750B.750	4306-0013	IAS20LH1:1A.750B1.00
4306-0005	IAS20LH1:1A.750B.750	4306-0014	IAS20RH1:1A.750B.625
4306-0006	IAS20RH1:1A1.00B1.00	4306-0015	IAS20LH1:1A.750B.625
4306-0007	IAS20LH1:1A1.00B1.00	4306-0016	IAS20RH1:1A1.00B.625
4306-0008	IAS20RH1:1A.625B.750	4306-0017	IAS20LH1:1A1.00B.625
4306-0009	IAS20LH1:1A.625B.750	4306-0018	IAS20RH1:1A1.00B.750
4306-0010	IAS20RH1:1A.625B1.00	4306-0019	IAS20LH1:1A1.00B.750

Shaft Requirements

- Diameter tolerance should be +.000/-.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.

An American Company
Family Owned and Operated

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:
22/25 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.

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IAS20 Group A Lubricant (3-oz.):

#4300-9102, Magnalube-G All Standard Non-FG, Non-CRL Models
#4300-9103*, Accrolube-FG Food Grade #2 For Non-CRL Food Grade
*Optional

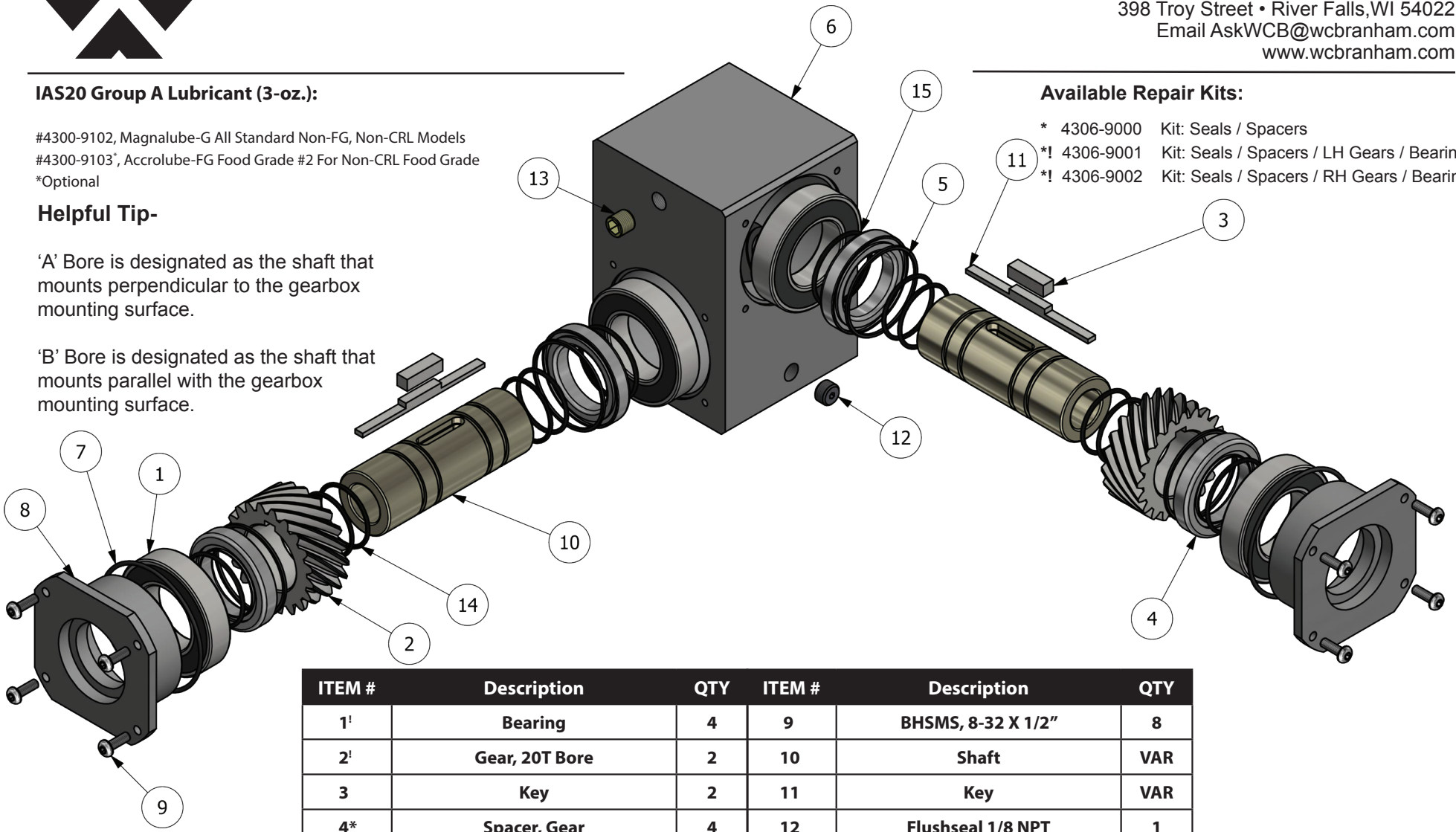
Helpful Tip-

'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.

Available Repair Kits:

* 4306-9000 Kit: Seals / Spacers
*! 4306-9001 Kit: Seals / Spacers / LH Gears / Bearings
*! 4306-9002 Kit: Seals / Spacers / RH Gears / Bearings



ITEM #	Description	QTY	ITEM #	Description	QTY
1!	Bearing	4	9	BHSMS, 8-32 X 1/2"	8
2!	Gear, 20T Bore	2	10	Shaft	VAR
3	Key	2	11	Key	VAR
4*	Spacer, Gear	4	12	Flushseal 1/8 NPT	1
5*	O-Ring, Spacer Large	4	13	Vent Breather 1/8 NPT	1
6	Housing 20T	1	14*	O-Ring, Shaft	8
7*	O-Ring, Cap	2	15*	O-Ring, Spacer Small	4
8	Cap, 20T Series	2			

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