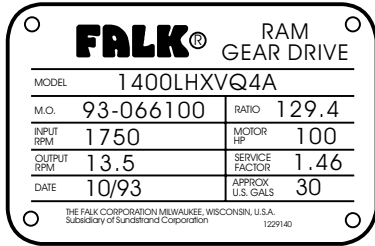


Introduction

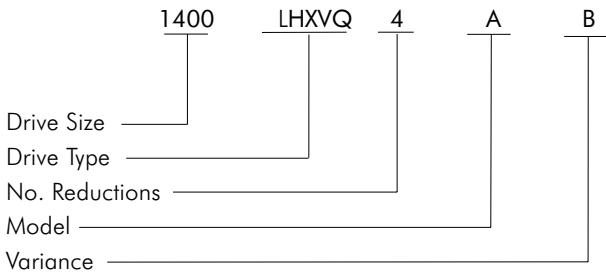
This parts guide is designed to assist in ordering replacements parts for standard Type "LHXVQ" quadruple reduction gear drives with a vertical high speed shaft and a vertical hollow low speed shaft. Consult Falk for special or modified drives.

1. IDENTIFY DRIVE — Record Drive Model, Ratio, and M.O. Number from nameplate.

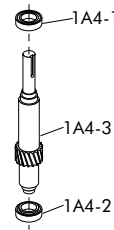
Sample Nameplate



Gear Drive Identification



2. IDENTIFY INDIVIDUAL PARTS — Use exploded view on Page 2 to determine Ref. No. of required parts.



1A4 ASSEMBLY

Ref. No.	Part Description
1A4-1	Bearing
1A4-2	Bearing
1A4-3	Pinion & Shaft

NOTE: Replace seals, shims, and gaskets whenever reassembling a reducer. Shim-gaskets are available only in kits; see reference number 100.

3. HOW TO USE THIS GUIDE — Use the Part Ref. No. (Step 2) and the drive Model No. (Step 1) to determine the part description and use this information to order the required parts.
4. ORDER REPLACEMENT — Place your order with your local Falk Representative or Distributor. If you need assistance call the number below.

Bearing & Seal Identification

Refer to the exploded views on Page 2 to identify the bearings and oil seals by the parts list Reference Number. Then refer to tables 2 thru 5, Pages 3 and 4, to determine the Manufacturer and Manufacturer's part number.

Corrosion Protection & Storage

- CAUTION: Follow guidelines below to avoid damage to parts.*
1. For domestic or indoor storage, Falk provides standard 24 month protection as boxed or optional 24 month protection for individual parts.
 2. For export or outdoor storage, Falk provides optional 18 month protection.

CAUTION: This protection does not cover exposure to elements such as standing water, etc.

Parts Diagram

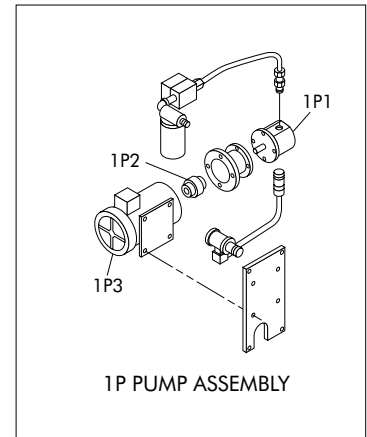
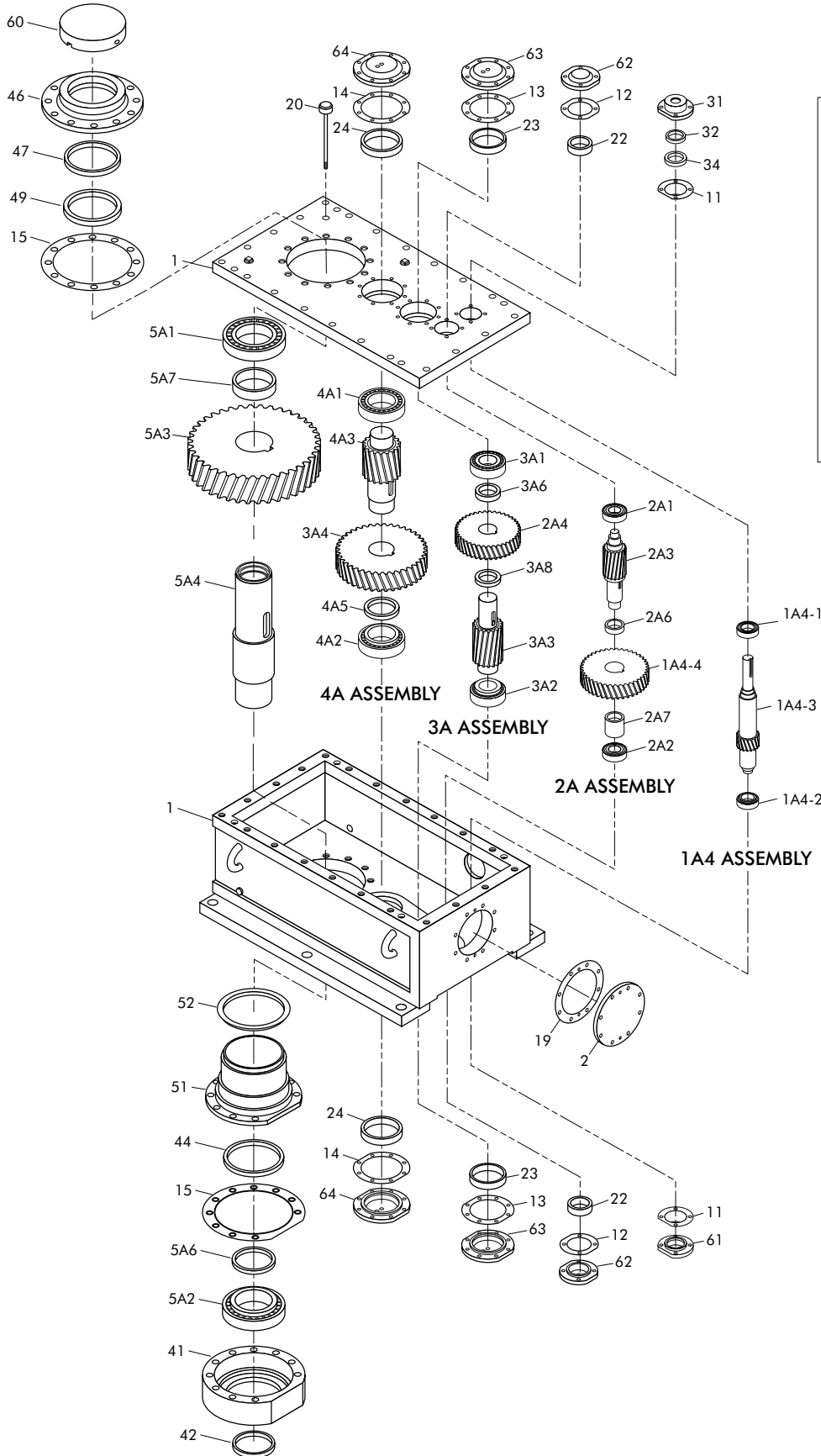


TABLE 1 — Parts List

Ref No	Part Description
1	Housing - Cover & Base
2	End Cover
11	Shim-Gasket
12	Shim-Gasket
13	Shim-Gasket
14	Shim-Gasket
15	Shim-Gasket
19	Shim-Gasket
20	Dipstick
22	Spacer
23	Spacer
24	Spacer
31	Seal Cage
32	Seal
34	Seal
41	Bearing/Seal Cage
42	Seal
44	Seal
46	Seal Cage
47	Seal
49	Seal
51	Oil Dam
52	Seal
60	Shaft Cover
62	Shaft Cover
63	Shaft Cover
64	Shaft Cover
100	Shim-Gasket Kit (Includes Ref Nos 11, 12, 13, 14, 15 & 19)
H.S. SHAFT ASSEMBLY	
1A4	Shaft Assembly (Includes Ref Nos 1A4-1, 1A4-2 & 1A4-3)
1A4-1	Bearing
1A4-2	Bearing
1A4-3	Pinion & Shaft
1A4-4	Gear (Included with Ref No 2A)
EXTERNAL LUBRICATION PUMP	
1P	Pump Assembly
1P1	Pump
1P2	Coupling
1P3	Motor
1st INTERMEDIATE SHAFT ASSEMBLY	
2A	Shaft Assembly (Includes Ref Nos 2A1 thru 2A7 & 1A4-4)
2A1	Bearing
2A2	Bearing
2A3	Pinion & Shaft
2A4	Gear (Included with Ref No 3A)
2A6	Spacer (Sizes 1200, 1300 & 1400)
2A7	Spacer
INTERMEDIATE SHAFT ASSEMBLY	
3A	Shaft Assembly (Includes Ref Nos 3A1 thru 3A8 & 2A4)
3A1	Bearing
3A2	Bearing
3A3	Pinion & Shaft
3A4	Gear (Included with Ref No 4A)
3A6	Spacer
3A8	Spacer (Sizes 1100 & 1200)
L.S. PINION ASSEMBLY	
4A	Shaft Assembly (Includes Ref Nos 4A1 thru 4A5 & 3A4)
4A1	Bearing
4A2	Bearing
4A3	Pinion & Shaft
4A5	Spacer
L.S. SHAFT ASSEMBLY	
5A	Shaft Assembly (Includes Ref Nos 5A1 thru 5A7)
5A1	Bearing
5A2	Bearing
5A3	Gear
5A4	Hollow Shaft
5A6	Spacer (Size 1100 only)
5A7	Spacer

TABLE 2 — Oil Seals/Falk Part Numbers

DRIVE SIZE	Reference Number						
	32	34	42	44	47	49	52
1100	913010	913011	912816	912767	912816	912833	2912858
1200	913018	912946	912767	912827	2913531	912767	2913534
1300	912948	912949	912578	912580	912672	912578	2912448
1400	912948	912949	912580	912550	912580	912940	2912803
1500	912991	912992	912550	912808	912550	2913168	2913172

TABLE 3 — Seal Manufacturer's Part Numbers

Part No	Chicago Rawhide	Johns-Manville	National
912550	CRWH1-115021	9019LUP	...
912578	HDS5-91135	16554LUP	455476
912580	...	9830LPD	455270
912672	CRP 90006	11552LPD	...
912767	CRWH 77540	...	...
912808	HDS1-1300570	10093LUP	...
912816	CRWH 70016	10063LPD	45517
912827	CRWH 85009	10371LUP	455489
912833	CRWH 70052	11577LPD	455084
912940	...	17846LDS	417020
912946	CRW 17558 (V)	4465LUP H5/L16 (V)	...
912948	CRW 198263 (V)	10755LPD H5/L16 (V)	...
912949	CRWH 20002 (V)	10757LPD H5/L16 (V)	...
912991	CRW 22363 (V)	10289LUP H5/L16 (V)	483323V
912992	CRWH 22449 (V)	6336LUP H5/L16 (V)	...
913010	CRW 14861 (V)	11654LUP H5/L16 (V)	...
913011	CRW 14940 (V)	12184LUP H5/L16 (V)	481507V
913018	CRW 17379 (V)	14849LPD H5/L16 (V)	...
2912448	402750	...	...
2912803	403250	...	...
2912858	402002	...	...
2913168	CRWH 115041	...	...
2913172	403500	...	...
2913531	CRSH 77530	...	...
2913534	402500	...	...

TABLE 4 — Bearings/Falk Part Numbers

DRIVE SIZE	1A4-1/1A4-2	2A1	2A2	3A1	3A2	4A1/4A2	5A1/5A2
1100	921896	★	921629	921809	921809	921899	921331
1200	921892	921878	921878	■	■	921552	921759
1300	921629	†	921301	921678	◆	921443	2912892
1400	921878	‡	921855	921443	*	921541	2912802
1500	921301	●	921895	921541	▲	921470	2913166

- ★ Ratios 118.2 thru 368.2 = 921629; Ratios 396.0 thru 431.1 = 921888.
- † Ratios 113.4 thru 341.6 = 921301; Ratios 401.5 & 429.8 = 921319.
- ‡ Ratios 112.1 thru 322.24 = 921855; Ratios 365.8 thru 428.6 = 921856.
- Ratios 116.0 thru 362.1 = 921895; Ratios 391.7 thru 426.3 = 921734.
- Ratio 229.8 & 340.9 = 921494; All other ratios = 921895.
- ◆ Ratio 113.4 & 123.0 = 921678; Ratios 142.4 thru 429.8 = 921899.
- * Ratio 112.1 & 129.4 = 921443; Ratios 140.1 thru 428.6 = 921551.
- ▲ Ratios 116.0 thru 135.5 = 921541; Ratios 156.8 thru 426.3 = 921459.

TABLE 5 — Bearing Manufacturer's Part Numbers

Falk Part No.	Manufacturer's No. ★
921301	623/612
921319	619/612
921331	HM237545/HM237510
921443	HH221449/HH221410
921459	HH224335/HH224310
921470	HH228349/HH228310
921494	H715336/H715311
921541	HH224346/HH224310
921551	HH221430/HH221410
921552	HH421246C/HH421210
921629	3780/3720
921678	850/832
921734	H715341/H715311
921759	JHM840449/JHM840410
921809	5583/5535
921855	5584/5535
921856	5578/5535
921878	529X/522
921888	3782/3720
921892	3586/3520
921895	H715346/H715311
921896	M802048/M802011
921899	843/832
2912802	EE275100/275155
2912892	EE130902/131400
2913166	EE722115/722185

★ Falk suppliers of tapered roller bearings are Timken, Bower and Tyson.