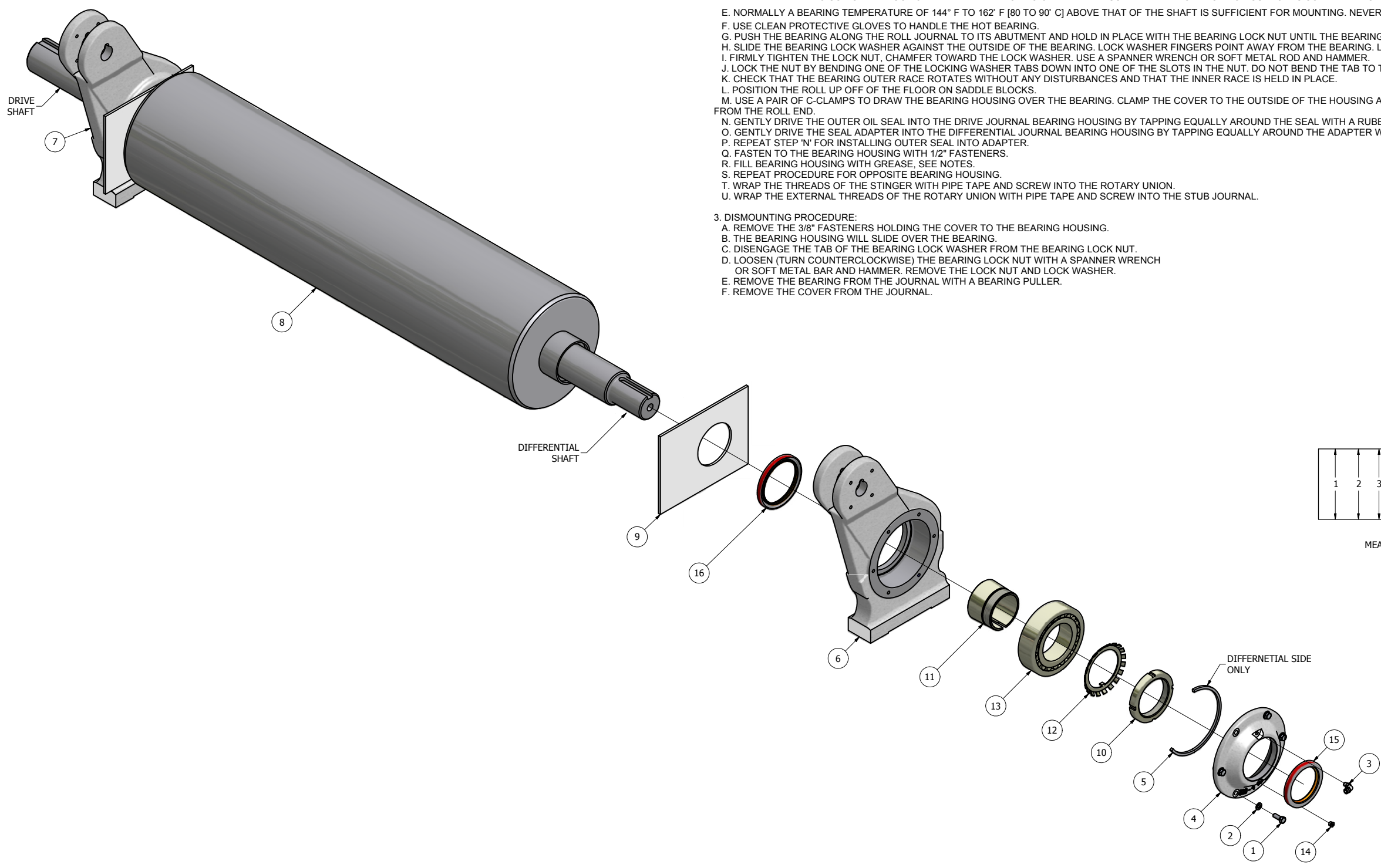


REVISION HISTORY				
REV	ECN	DESCRIPTION	DATE	APPROVED
A	K010031	RELEASE PRINT	3/15/2001	dmjohnson
B	K020060	70012050 WAS 70012003, 62584422 & 66444400 WAS 10X	8/5/2002	dmjohnson
C	K060145	ADD K200-00145	10/18/2006	dmjohnson
D	K090003	REDRAWN INVENTOR, WAS B SIZE	1/8/2009	dmjohnson



BEARING MOUNTING & DISMOUNTING INSTRUCTIONS:

1 PRECAUTIONS:

- A. MOUNT THE BEARINGS IN A CLEAN ENVIRONMENT. HOUSINGS, SHAFTS AND OTHER COMPONENTS OF THE BEARING ARRANGEMENT SHOULD BE CHECKED FOR CLEANLINESS.
- B. THE BEARINGS SHOULD BE LEFT IN THEIR ORIGINAL PACKAGES UNTIL IMMEDIATELY BEFORE MOUNTING, SO THAT THEY DO NOT BECOME DIRTY.
- C. THE DIMENSIONAL AND FORM ACCURACY ALL COMPONENTS WHICH WILL BE IN CONTACT WITH THE BEARING SHOULD BE CHECKED.
- D. CHECK THE DIAMETER OF THE ROLL JOURNAL BEARING MOUNT SURFACE USING A MICROMETER AT FOUR POSITIONS IN THREE PLANES. 3.500 +.000 / -.003 [88.9 +.00 / -.07].
- E. CHECK THE DIAMETER OF THE BEARING HOUSING BEARING MOUNT SURFACE USING AN INTERNAL GAUGE AT FOUR POSITIONS IN THREE PLANES. 7.087 +.001 / -.000 [180.009 +.003 / -.000].
- F. USE LIFTING EQUIPMENT TO FACILITATE THE HANDLING OF THE BEARING. SPRING SUSPENSION CAN SIMPLIFY BEARING POSITIONS.

2. MOUNTING PROCEDURE:

- A. GENTLY DRIVE THE INNER OIL SEAL INTO BOTH BEARING HOUSING COVERS BY TAPPING EQUALLY AROUND THE SEAL WITH A RUBBER Mallet UNTIL FLUSH WITH THE HOUSING.
- B. SLIDE THE BEARING HOUSING COVERS OVER EACH JOURNAL, UP TO THE ROLL END.
- C. WIPE THE PRESERVATIVE FROM THE BORE AND OUTSIDE DIAMETER OF THE BEARING.
- D. HEAT THE BEARING USING AN INDUCTION HEATER. AN ELECTRIC OVEN MAY BE USED IF BEARING PLACED ON SUPPORTS SO THAT AIR CAN MOVE FREELY AROUND BEARING.
- E. NORMALLY A BEARING TEMPERATURE OF 144° F TO 162° F [80 TO 90° C] ABOVE THAT OF THE SHAFT IS SUFFICIENT FOR MOUNTING. NEVER HEAT A BEARING GREATER THAN 257° F [125° C], OR USING AN OPEN FLAME.
- F. USE CLEAN PROTECTIVE GLOVES TO HANDLE THE HOT BEARING.
- G. PUSH THE BEARING ALONG THE ROLL JOURNAL TO ITS ABUTMENT AND HOLD IN PLACE WITH THE BEARING LOCK NUT UNTIL THE BEARING COOLS AND GRIPS THE JOURNAL. REMOVE THE LOCK NUT.
- H. SLIDE THE BEARING LOCK WASHER AGAINST THE OUTSIDE OF THE BEARING. LOCK WASHER FINGERS POINT AWAY FROM THE BEARING. LOCK WASHER INNER TONGUE FITS INTO JOURNAL KEYWAY.
- I. FIRMLY TIGHTEN THE LOCK NUT, CHAMFER TOWARD THE LOCK WASHER. USE A SPANNER WRENCH OR SOFT METAL ROD AND HAMMER.
- J. LOCK THE NUT BY BENDING ONE OF THE LOCKING WASHER TABS DOWN INTO ONE OF THE SLOTS IN THE NUT. DO NOT BEND THE TAB TO THE BOTTOM OF THE SLOT.
- K. CHECK THAT THE BEARING OUTER RACE ROTATES WITHOUT ANY DISTURBANCES AND THAT THE INNER RACE IS HELD IN PLACE.
- L. POSITION THE ROLL UP OFF OF THE FLOOR ON SADDLE BLOCKS.
- M. USE A PAIR OF C-CLAMPS TO DRAW THE BEARING HOUSING OVER THE BEARING. CLAMP THE COVER TO THE OUTSIDE OF THE HOUSING AND DRAW IN EQUALLY. LOCATE THE HOUSING MOUNTING HOLES 6.50 [165.10] FROM THE ROLL END.
- N. GENTLY DRIVE THE OUTER OIL SEAL INTO THE DRIVE JOURNAL BEARING HOUSING BY TAPPING EQUALLY AROUND THE SEAL WITH A RUBBER Mallet UNTIL FLUSH WITH THE HOUSING.
- O. GENTLY DRIVE THE SEAL ADAPTER INTO THE DIFFERENTIAL JOURNAL BEARING HOUSING BY TAPPING EQUALLY AROUND THE ADAPTER WITH A RUBBER Mallet UNTIL FLUSH WITH THE HOUSING.
- P. REPEAT STEP 'N' FOR INSTALLING OUTER SEAL INTO ADAPTER.
- Q. FASTEN TO THE BEARING HOUSING WITH 1/2" FASTENERS.
- R. FILL BEARING HOUSING WITH GREASE, SEE NOTES.
- S. REPEAT PROCEDURE FOR OPPOSITE BEARING HOUSING.
- T. WRAP THE THREADS OF THE STINGER WITH PIPE TAPE AND SCREW INTO THE ROTARY UNION.
- U. WRAP THE EXTERNAL THREADS OF THE ROTARY UNION WITH PIPE TAPE AND SCREW INTO THE STUB JOURNAL.


3. DISMOUNTING PROCEDURE:

- A. REMOVE THE 3/8" FASTENERS HOLDING THE COVER TO THE BEARING HOUSING.
- B. THE BEARING HOUSING WILL SLIDE OVER THE BEARING.
- C. DISENGAGE THE TAB OF THE BEARING LOCK WASHER FROM THE BEARING LOCK NUT.
- D. LOOSEN (TURN COUNTERCLOCKWISE) THE BEARING LOCK NUT WITH A SPANNER WRENCH OR SOFT METAL BAR AND HAMMER. REMOVE THE LOCK NUT AND LOCK WASHER.
- E. REMOVE THE BEARING FROM THE JOURNAL WITH A BEARING PULLER.
- F. REMOVE THE COVER FROM THE JOURNAL.

NOTES:

1. DO NOT SCALE FROM DRAWING.
2. ALTERNATIVE DIMENSIONS [X.XX] IN MILLIMETERS.
3. SIMILAR TO K100-00139: ROLL & BEARING HOUSING ASSY, PIVOT, 12 X 52".
4. FILL BEARING HOUSING WITH NLGI No. 2 GRADE LITHIUM BASED GREASE WITH AT LEAST 1000 SSU @ 100°F (38°C) UNTIL GREASE RELIEFS OPEN. APPROXIMATELY 56 FL OZ/1663 mL (4, 14 OZ/416 mL TUBES), AFTER ASSEMBLING COMPLETE.
5. * PARTS COMBINED IN K902-10802: ADAPTER KIT, BEARING S20 X 3.500".
6. SEE SHEET 1 FOR COMPLETE ASSEMBLY.

16	K914-06401	2	SEAL, OIL 416888
15	K914-06201	2	SEAL, OIL 415991
14	K910-06221	2	FITTING, RELIEF-ALEMITE 317-400 1/8-27 NPT
13	K902-14101	2	BEARING, SPHERICAL ROLLER 22220 CCK/W33
* 12	K902-12601	2	LOCKWASHER, BEARING ADAPTER W 20
* 11	K902-10801	2	ADAPTER, BEARING S20 X 3.500"
* 10	K902-01301	2	NUT, BEARING ADAPTER AN-20
9	K200-05533	2	SEAL, DUST 3.500" JOURNAL 12"
8	K200-01000	1	ROLL ASSY, DRIVE FIN 3.500", 12 X 52"
7	K200-00941	1	HOUSING, BEARING FIXED, 220-1R
6	K200-00940	1	HOUSING, BEARING FIXED, 220-1L
5	K200-00145	1	RING, SPACER, BEARING 220
4	K200-00083	2	COVER, BEARING HOUSING, FIXED, 220-4
3	70012050	2	CPLG, ELBOW 90 1/8-27M NPT X 1/4" TBG
2	66444400	8	WASHER, LOCK HELICAL 3/8"
1	62584422	8	HHCS, 3/8-16 X 1.00"

This drawing is the property of the A.T. Ferrell Company, Inc and must be returned immediately upon request. No part of this drawing may be reproduced, stored in a retrieval system or transmitted in any form or by any means, without prior written consent of the A.T. Ferrell Company, Inc.	CAD NO MANUAL CHANGES	 DIVISION OF A. T. FERRELL COMPANY SINCE 1869 BLUFFTON, INDIANA - USA			
	TOLERANCES EXCEPT AS NOTED DECIMAL: .005 .030 FRACTIONAL: 1/32 ANGULAR: 1/2			FINISH: SCALE: 0.38:1 DRAWN BY: dmjohnson APPROVED BY: DMJ	
TITLE: ROLL & BEARING HOUSING ASSY, FIXED, 12 X 52"		DATE: 1/6/2009	SIZE: D	PART NUMBER: K100-00138	SHEET: 2 of 2