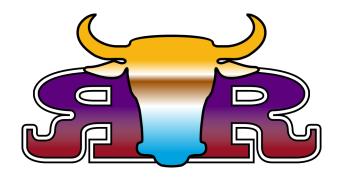
# R & R Machine Works Inc.



We really appreciate you making this purchase from us and we hope the equipment meets your expectations. We strive to sell equipment that will make your business as well as ours, prosper. When you have future equipment or service needs please think of us <u>first!</u>

If we can be of further services to you or your company, please call us at (806) 244-5686.

Sincerely,

Owners and Management

Dalhart R&R Machine Works, Inc.

Revised: 08/01/16 1 Kan-Roll Manual

# Table of Contents

Introduction	3
General Safety Practices	
Installation	5
Tips on Operating Your Mill	6
Adjustments	7
To Set Roll Clearance	8
Starting Your Mill	9
Eccentric Assembly	10
Kan-Roll Bearing Assembly	11
A130 Gearbox Assembly	12
A116 Gearbox Assembly (Bottom)	13
A116 Gearbox Assembly (Top)	14
Kan-Roll Cabinet Assembly	15
1710 Mill Drive Line Assembly	16
1810 Mill Drive Line Assembly	17
8020 Sprocket Chain Assembly	18
10020 Sprocket Chain Assembly	19
Kan-Roll Single Mill Chain Diagram	20
Kan-Roll Two-Seven Mill Chain Diagram	21
Incline Conveyor Drive Drum Assembly	22
Bottom Conveyor Drive Drum Assembly	23
Conveyor Idler Drum Assembly	
Sprocket Assembly	25
Limited Warranty	

# **INTRODUCTION**

Your new Kan-Roll is a quality cracking mill that will give you many years of low cost operation if given the proper amount of care and maintenance.

Your mill has been engineered and designed with simplicity of operation in mind, but first and foremost to give the best quality product at maximum operating capacity.

Your Kan-Roll manufacturer stands ready to serve you at any time with service, whether it is in the form of maintenance and operating instructions, or on location with help performed by a qualified factory representative.

Your Kan-Roll manufacturer has on hand at all times any replacement part for your mill that you will need, and also a supply of rolls corrugated and journaled to fit your mill and your operation.

Revised: 08/01/16 3 Kan-Roll Manual







#### **GENERAL SAFETY PRACTICES**

ALWAYS OBSERVE SAFE OPERATING PRACTICES AROUND MACHINERY. MOST ACCIDENTS ARE THE RESULT OF CARELESSNESS OR NEGLIGENCE. ALL ROTATING MACHINERY IS POTENTIALLY DANGEROUS.

#### **OPERATION**

READ OWNERS MANUAL BEFORE OPERATING.

# **MAINTENANCE**

SHUT OFF AND LOCK OUT MAIN POWER SOURCE. DO NOT DO MAINTENANCE UNTIL ALL MOVING PARTS HAVE STOPPED.

DO NOT USE FLAKER MILL WITHOUT GUARDS IN PLACE.

ON A DUAL DRIVE MACHINE, TIGHTEN HTD BELTS ONLY WHEN ROLLS ARE CLOSED.

FAILURE TO COMPLY WITH SAFETY INSTRUCTIONS CAN RESULT IN INJURY OR DEATH

# **INSTALLATION**

The installation of your cracker mill should be carefully planned and well-engineered.

The following points should be followed to get the most out of your mill, both in capacity and quality:

- 1. There should be sufficient space around the machine for adjustments AND repairs.
- 2. The mill should be parked on a level surface, jack stands are to be lowered to provide stability.
- 3. Install drive lines as recommended by the factory. Chain links are to be properly lubricated and installed on cog and securely link together. Links are to be all in properly working shape thus providing long life of the link.
- 4. Provisions should be made to adequately feed the Mill.
- 5. Rolls must be kept in TRAM at all times. It is especially important when rolls are changed.

Revised: 08/01/16 5 Kan-Roll Manual

# **TIPS ON OPERATING YOUR MILL**

R&R Machine Works Mills are designed to produce efficiently a high quality of commercial grade product.

The capacity of your mill will be dependent on any of the combination of the following.

- 1. Size of product
- 2. Toughness or Friableness of product Friable-easily crumbled or pulverized
- 3. Moisture content
- 4. Amount of conditioning
- 5. Size of desired product
- 6. Foreign material present
- 7. Corrugation on rolls

The capacity can be increased somewhat if the quality of the final product is not critical.

The rolls are usually set further apart when grinding larger size particles. It may be necessary to adjust the spring tension to obtain your desired final product. This adjustment is explained in this manual.

As the corrugation begins to wear off, you will not notice the decrease in capacity at first, but as the corrugation becomes duller, the capacity will be greatly reduced from the original corrugation. Also, it will be hard to meet grind specs. When this occurs, the rolls should be re-corrugated.

NOTE: You should be careful when making adjustments, so as not to allow the rolls to run together. This will cause the corrugation to become dull very rapidly and void factory warranty.

# **ADJUSTMENTS**

Your R&R Machine Works Mill is usually shipped assembled and adjusted, but to meet your requirements, certain re-adjustments may be made as necessary to control rate of production and quality of product.

The following section will aid you with these adjustments to meet your requirements.

#### TO SET FEED RATE

CAUTION: CARE SHOULD BE TAKEN TO KEEP FINGERS AWAY FROM MOVING PARTS.

To increase feed rate:

Open feed gate to desired feed rate?

\*\* Caution if opened to much the Mill can over fill and jam rolls and possibly damage them. Monitor rate of feed to speed roll speed can produce.

To decrease feed rate:

Close feed gate to desired rate

P.O. Box 1330 · 1006 Liberal St. · Dalhart, TX 79022 **Ph**: (806) 244-5686 **Fax**: (806) 244-6096

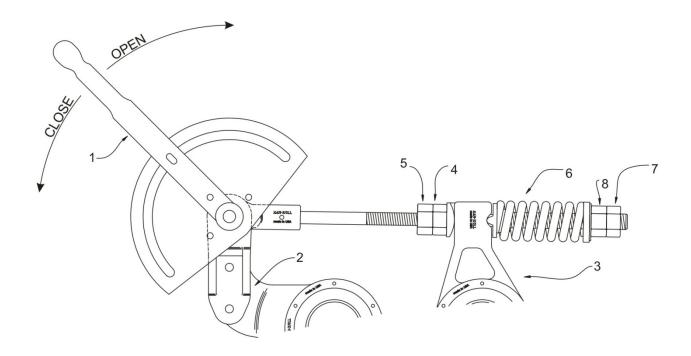
# **TO SET ROLL CLEARANCE**

#### Refer to the diagram below:

- 1. Assure drive power is shut off at the mill.
- 2. Pull adjustment handle #1 down until rolls come together. This clearance has been preset upon leaving factory at .016".
- 3. Place feeler gauge of desired clearance between rolls. Loosen jam nuts #5 and #7. Adjust nut #4 according to gauge-turn toward swivel housing #3 to increase roll clearance; turn away from housing #3 to decrease roll clearance.
- 4. Adjust nut #8 equal to nut #4 to retain spring tension. Normally the spring preload (difference in spring free length and compressed length) should never be greater than one inch. If more spring tension is needed to maintain product consistency, tighten nut #8 towards housing #3 until desired product is achieved. Tighten jam nut #7 up against nut #8.

Note: Be sure to adjust nuts equal amounts on each side of machine.

5. When desired setting is obtained; tighten jam nuts, #5 and #7 to lock roll setting. Desired settings for each type of grain will be determined by experimentation depending on conditions.



**R&R 12" CRACKER ECCENTRIC** 

Revised: 08/01/16 8 Kan-Roll Manual

# HOW TO START & STOP YOUR MILL

#### BEFORE STARTING:

- 1. Check feed control gate it should be closed.
- 2. Move roll adjustment to open position (this moves rolls apart).

#### TO START MILL:

- 1. Start PTO drive.
- 2. When mill comes up to speed, adjust feed rate to desired amount.
- 3. Move roll adjustment to closed position (this moves rolls closer together).

#### TO STOP MILL:

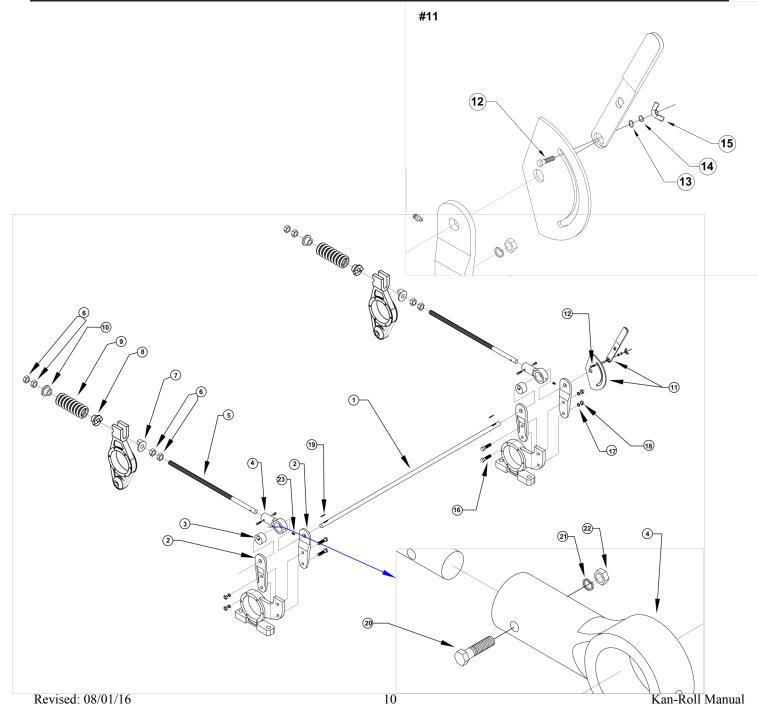
- 1. Close feed gate.
- 2. Let all grain run out of mill and conveyor
- 3. Open rolls move roll adjustment to open position.
- 4. Stop PTO drive.

Note: When starting mill no large amounts of grain should be on the rolls until rolls are running at desired speed.

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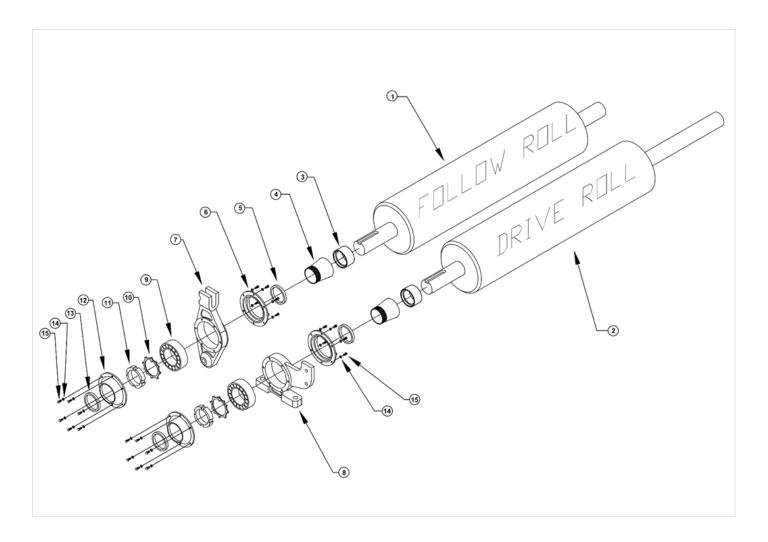
#### **ECCENTRIC ASSEMBLY**

#	PART #	DESCRIPTION	#	PART #	DESCRIPTION
1	KRECCS	KR CONNECTING SHAFT	13	WF12	½" FLAT WASHER
2	KRECCA1	ECCENTRIC CAM ARMS	14	WL12IT	1/2" INTERNAL LOCK WASHER
3	KRECC	KR ECCENTRIC	15	ECC0012BSL	½" CLAMPING LEVER (WING NUT)
4	KRECCH1	KR ECCENTRIC HOUSING	16	BOL58X3	5/8" X 3" BOLT
5	KRECCT	KR TENSION SHAFT	17	WL58	5/8" LOCKWASHER
6	N1CT	1" CT NUTS	18	N58CT	5/8" CT NUT
7	KRECCPW	KR PIVOT WASHER	19	KY25X1	1/4" X 1" KEYSTOCK
8	KRECCDW	KR DOG EAR SPRING WASHER	20	BOL516X212	5/16" X 2 ½" BOLT
9	ECC08SP7	7" CRACKER SPRING	21	WL516	5/16" LOCKWASHER
10	KRECCSW	KR SPRING WASHER	22	N516CT	5/16" CT NUT
11	KRECCLA	KR ECCENTRIC LEVER ASSY.	23	GRSZK	1/8" GREASE ZERK
12	BOL12X112CS	½" X 1 ½" CARRIAGE BOLT			



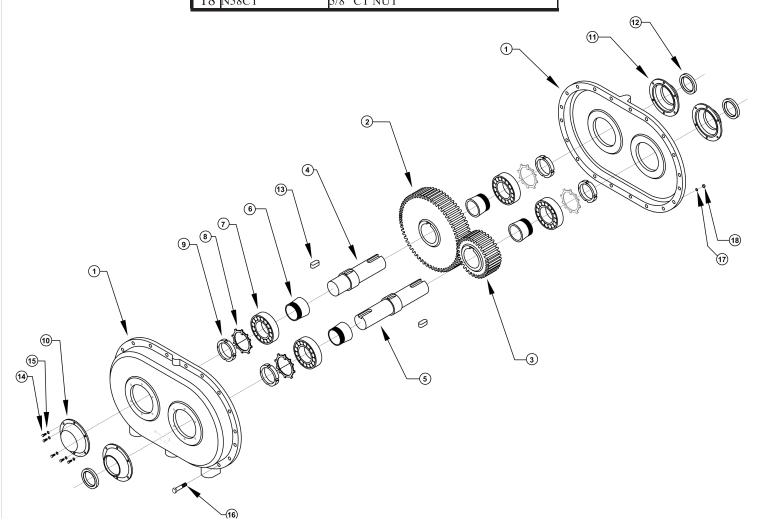
#### **KAN-ROLL BEARING ASSEMBLY**

#	PART #	DESCRIPTION
1	R1252	12" X 52" KR FOLLOW ROLL
2	R1252D	12" X 52" KR DRIVE ROLL
3	JRSR12K	12" X 52" KR SEAL RING
4	ADS18	SNW 18 X 3 3/16 ADAPTER
5	SL415035	415035 SEAL
6	KRHSB1	KR HOUSING BACKPLATE
7	KRHSS1	KR SWIVEL HOUSING
8	KRHSD1	KR STATIONARY HOUSING
9	BRG2218K	22218K BEARING
10	W18	W18 LOCKWASHER
11	NAN18	AN18 ADAPTER NUT
12	KRHSC1	KR HOUSING CAP
13	SL456105	456105 SEAL
14	WL516	5/16" LOCKWASHER
15	BOL516X34	5/16" X 3/4" BOLT



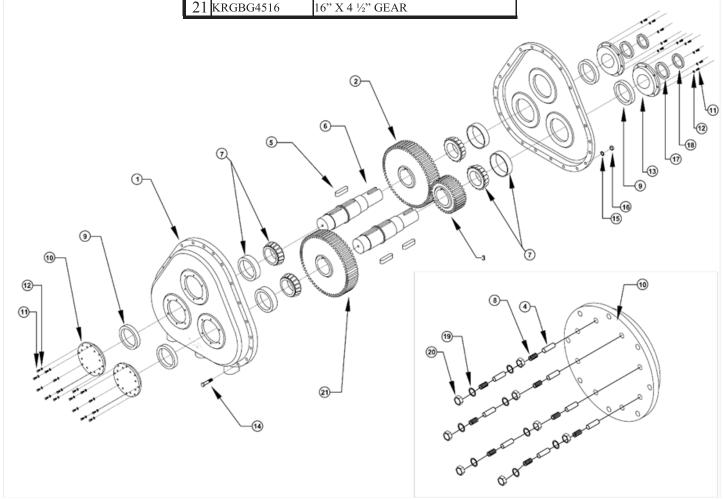
#### **A130 GEARBOX ASSEMBLY**

#	PART #	DESCRIPTION	
1	KRGBA130M	A130 OVAL GEAR BOX HALF	
2	KRGBG3514	14 3/8" DIA. GEAR	
3	KRGBG3510	10 5/8" DIA GEAR	
4	KRGBA130SS	A130 GB SHORT SHAFT 13.2"	
5	KRGBA130S	A130 GB LONG SHAFT 17.63"	
6	ADS18	SNW 18" X 3 3/16" ADAPTER SLEEVE	
7	BRG2218K	22218K BEARING	
8	W18	W18 LOCKWASHER	
9	NAN18	AN 18 ADAPTER NUT	
10	KRHSC1	KR SOLID GB CAP	
11	KRHSC1	KR HOUSING CAP	
12	SL456105	456105 SEAL	
13	KY78	7/8" KEYSTOCK	
14	BOL516X34	5/16" X ¾" BOLT	
15	WL516	5/16" LOCKWASHER	
16	BOL58X3	5/8" X 3 BOLT	
17	WL58	5/8" LOCKWASHER	
18	N58CT	5/8" CT NUT	



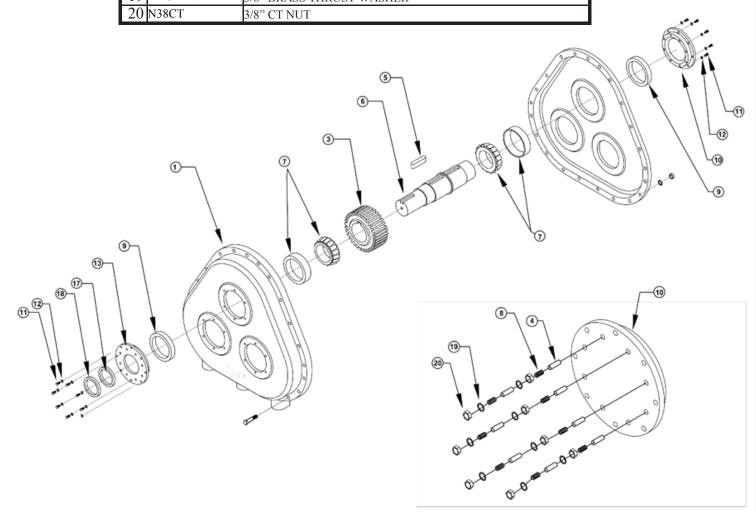
# $\frac{\textbf{A116 GEARBOX ASSEMBLY} --}{\textbf{BOTTOM}}$

#	PART #	DESCRIPTION	
1	KRGBHM	A116 TRIANGLE GEARBOX	
2	KRGBG4514	14" X 4 ½" GEAR	
3	KRGBG4510	10" X 4 ½" GEAR	
4	KRGBD34	3/8" X 5/8" DOW PIN	
5	KY1	1" KEYSTOCK	
6	KRGBL1	A116 KR GEARBOX SHAFT	
7	KRBRG32220	32220 BEARING ASSY.	
8	BOL38X114CS	3/8" X 1 ¼" SOCKET SET SCREW	
9	KRGBL2	A116 BEARING SPACER RING	
10	KRGBCS	A116 GB SOLID CAP	
11	BOL38X1	3/8" X 1" CT BOLT	
12	WL38	3/8 LOCKWASHER	
13	KRGBCO	A116 GB OPEN CAP	
14	BOL58X312	5/8" X 3 ½" BOLT	
15	WL58	5/8" LOCKWASHER	
16	N58CT	5/8" CT NUT	
17	KRSL34860	34860 SEAL	
18	KRSL34861	34861 SEAL	
19	KRGBTW	3/8" BRASS THRUST WASHER	
20	N38CT	3/8" CT NUT	
21	KRGBG4516	16" X 4 ½" GEAR	



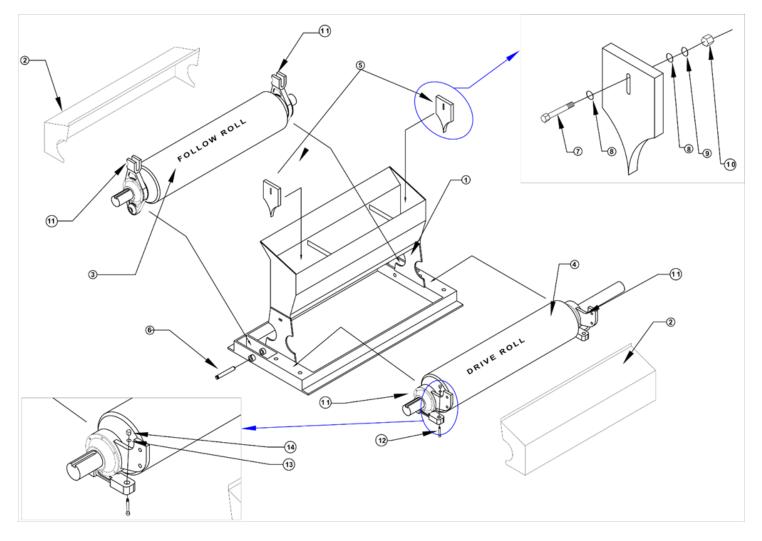
# A116 GEARBOX ASSEMBLY— <u>TOP</u>

#	PART #	DESCRIPTION
1	KRGBHM	A116 TRIANGLE GEARBOX HALF
3	KRGBG458	8.625" X 4 ½" GEAR
4	KRGBD34	3/8 X 5/8" DOW PIN
5	KY1	1" KEYSTOCK
6	KRGBL1	A116 KR GEARBOX SHAFT
7	KRBRG32220	32220 BEARING ASSY.
8	BOL38X114CS	3/8" X 1-1/4 SOCKET SET SCREW
9	KRGBL2	A116 BEARING SPACER RING
10	KRGBCS	A116 GB SOLID CAP
11	BOL38X1	3/8" X 1" BOLT
12	WL38	3/8" LOCKWASHER
13	KRGBCO	A116 KR OPEN CAP
14	BOL58X312	5/8" X 3 ½" CT BOLT
15	WL58	5/8" LOCKWASHER
16	N58CT	5/8" NUT
17	KRSL34860	34860 SEAL
18	KRSL34861	34861 SEAL
19	KRGBTW	3/8" BRASS THRUST WASHER
20	N38CT	3/8" CT NUT



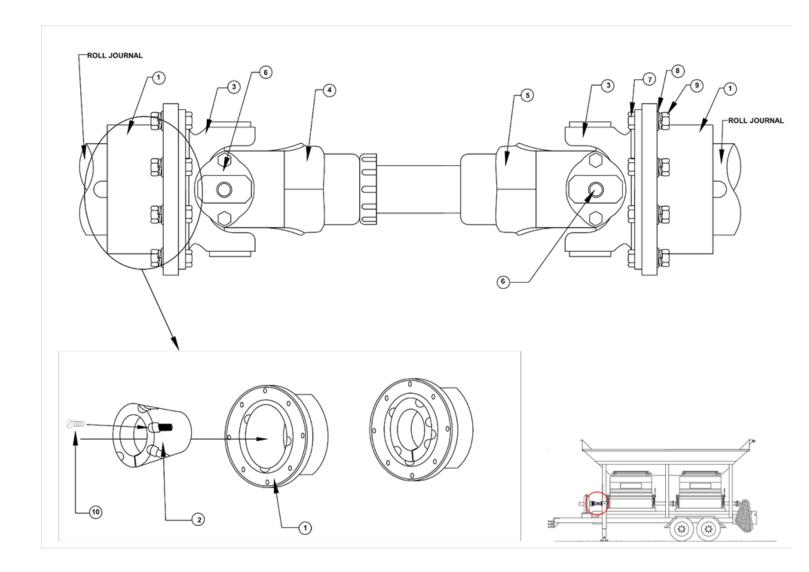
#### **KAN-ROLL ROLL CABINET ASSEMBLY**

#	PART #	DESCRIPTION	
1	KRF12	12" X 52" KAN-ROLL FRAME W/ BAR GRATE HOPPER	
2	KRFR12C	12" X 52" KAN-ROLL COVER	
3	R1252	12" X 52" KAN-ROLL FOLLOW ROLL	
4	R1252D	12" X 52" KAN-ROLL DRIVE ROLL	
5	KRSAD12	12" UHMW KAN-ROLL SADDLE	
6	HSP1KR	1" X 6" KAN-ROLL SWIVEL PIN	
7	BOL38X212	3/8" X 2 ½" BOLT	
8	WF38	3/8" FLATWASHER	
9	WL38	3/8" LOCKWASHER	
10	N38CT	3/8" CT NUT	
11	KRHSA	KAN-ROLL HOUSING ASSY. (1 SET)	
12	BOL1X312	1" X 3 ½" BOLT	
13	WL1	1" LOCKWASHER	
14	N1CT	1" CT NUT	



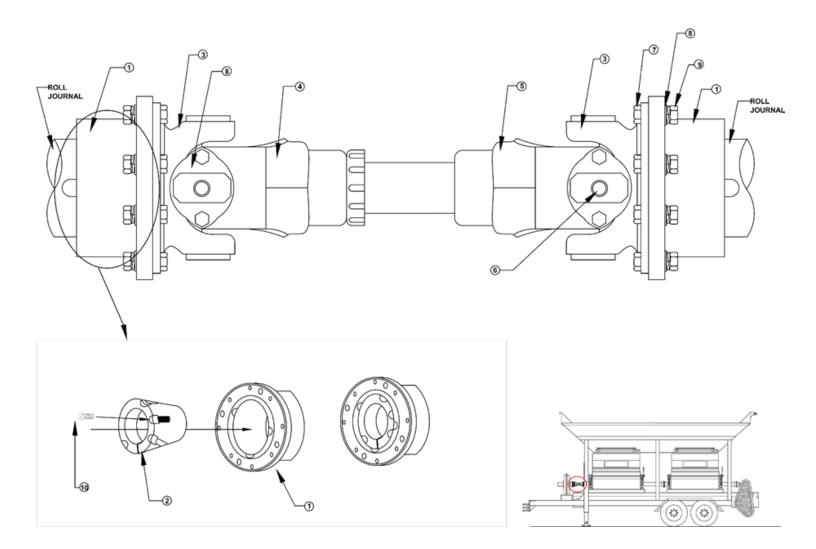
# 1710 MILL DRIVE LINE ASSEMBLY

#	PART #	DESCRIPTION	
1	KR1710CF	1710 – 3535 COMPANION FLANGE	
2	HB3535	3535 X 3 3/16 TAPER LOCK HUB	
3	KRDRIVEFY	1710 FLANGE YOKE	
4	KRDRIVESY	1710 SLIP YOKE	
5	KRDRIVEYS	1710 YOKE SHAFT	
6	KRDRIVEUJ	1710 U-JOINT	
7	BOL38X112	3/8" X 1 ½" CT BOLT	
8	WL38	3/8" LOCKWASHER	
9	N38CT	3/8" CT NUT	
10	BOL12X112SH	½" X 1 ½" SHC SCREW	



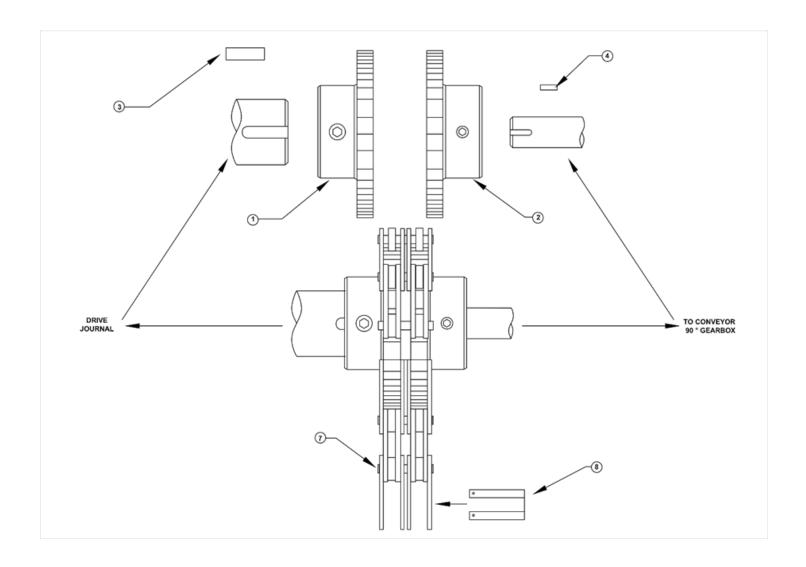
# 1810 MILL DRIVE LINE ASSEMBLY

#	PART #	DESCRIPTION
1	KR1810CF	1810 – 3535 COMPANION FLANGE
2	HB3535	3535 X 3 3/16 TAPER LOCK HUB
3	KRDRIVEFY18	1810 FLANGE YOKE
4	KRDRIVESY18	1810 SLIP YOKE
5	KRDRIVEYS18	1810 YOKE SHAFT
6	KRDRIVEUJ18	1810 U-JOINT
7	BO716X112	7/16" X 1 ½" CT BOLT
8	WL716	7/16''' LOCKWASHER
9	N716CT	7/16" CT NUT
10	BOL12X112SH	½" X 1 ½" SHC SCREW



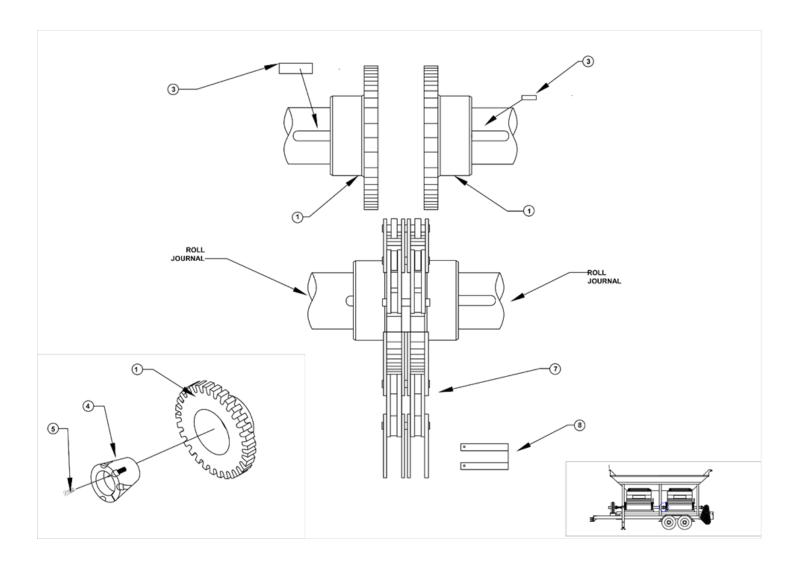
# 8020 SPROCKET CHAIN ASSEMBLY

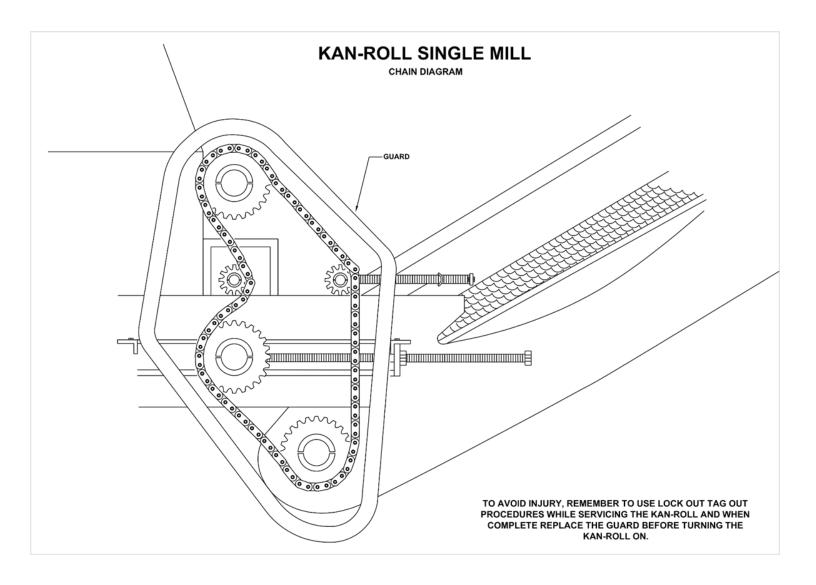
#	PART #	DESCRIPTION
1	KR80203316	8020 X 3-3/16" BORE CHAIN COUPLING
2	KR8020112	8020 X 1-1/2" BORE CHAIN COUPLING
3	KY75X6	3/4" KEYSTOCK
4	KY38X2	3/8" X 3/8" X 2" KEYSTOCK
7	KR8020	8020 DOUBLE CHAIN ASSEMBLY
8	KRC802FL	80-2 LINK

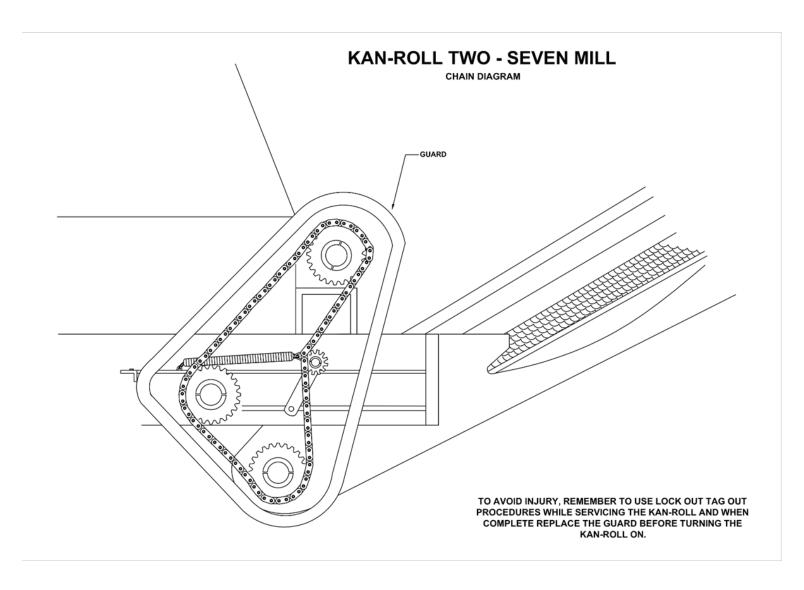


#### 10020 SPROCKET CHAIN ASSEMBLY

#	PART #	DESCRIPTION
1	SH10020	10020 X 3535 CHAIN COUPLING
3	KY75X6	3/4" KEYSTOCK
4	HB3535	3535 X 3 3/16" TAPER LOCK HUB
5	BOL12X112SH	½" X 1 ½" SHC SCREW
7	KR10020	10020 CHAIN ASSEMBLY
8	KRC1002FL	100-2 LINKXXX

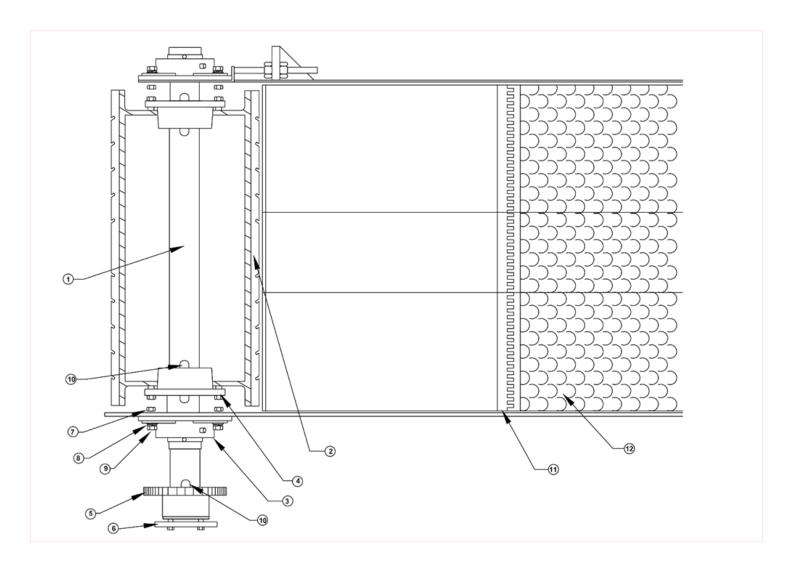






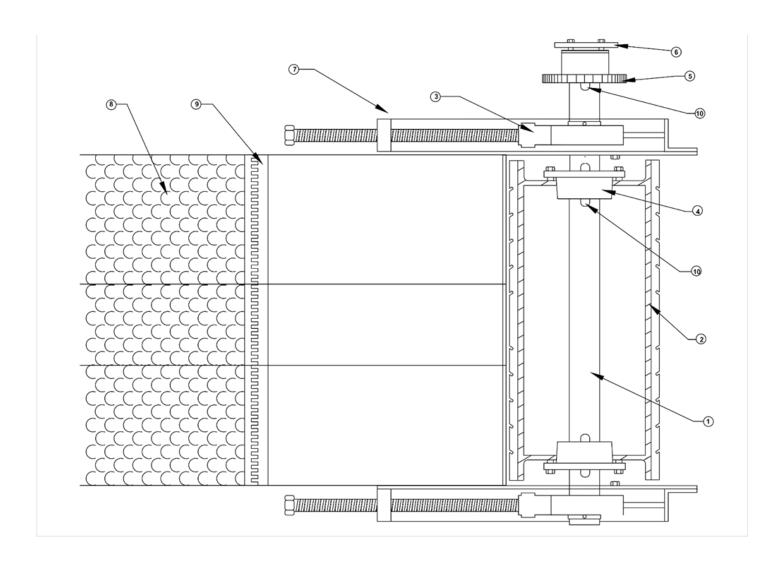
# **INCLINE CONVEYOR DRIVE DRUM ASSEMBLY**

#	PART #	DESCRIPTION	#	PART #	DESCRIPTION
1	KRDRUMS1	DRIVE DRUM SHAFT	7	BOL58X2C	5/8" X 2" CARRIAGE BOLT
2	KRDRUM1	10" X 24" LAGGED DRUM	8	WL58	5/8" LOCKWASHER
3	KRBRG11516F	1 15/16" 4 BOLT FLANGE	9	N58CT	5/8" CT NUT
4	KRDRUMB	HE25 X 1 15/16" HUB (BEARING)	10	KY50X6	½" KEYSTOCK
5	KRD6035	D60Q35 SPROCKET	11	KRLACE	24" R/S STEEL BELT LACE
6	KRHBQ11516	Q1" X 1 15/16" HUB	12	KRBELT	24" CRESENT TOP BELT



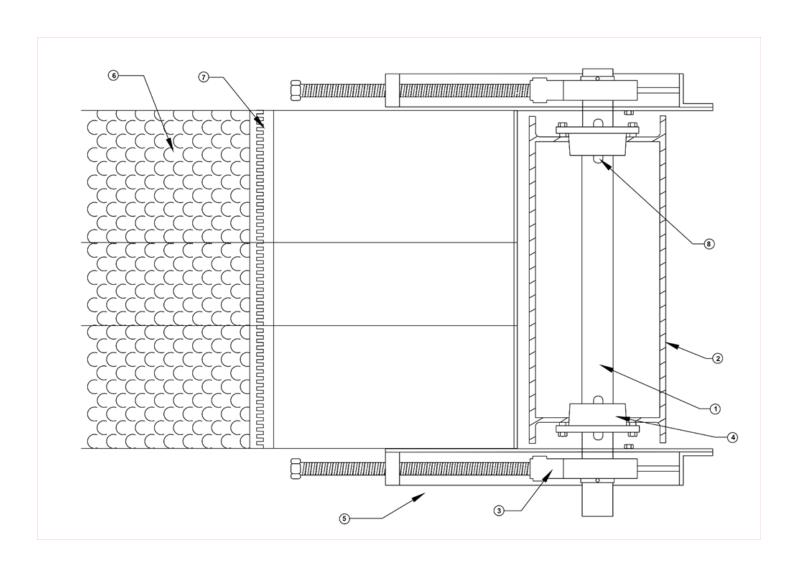
# **BOTTOM CONVEYOR DRIVE DRUM ASSEMBLY**

#	PART #	DESCRIPTION	#	PART #	DESCRIPTION
1	KRDRUMS1	DRIVE DRUM SHAFT	6	KRHBQ11516	Q1" X 1 15/16" HUB
2	KRDRUM1	10" X 24" LAGGED DRUM	7	KRTAKEUP	W/S TAKE UP ASSY.
3	KRBRG11516TU	1 15/16" WIDE SLOT TAKE UP BRGS	8	KRBELT	24" CRESENT TOP BELT
4	KRDRUMB	HE25 X 1 15/16" HUB	9	KRLACE	24" R/S STEEL BELT LACE
5	KRD6035	D60Q35 SPROCKET	10	KY50X6	½" KEYSTOCK



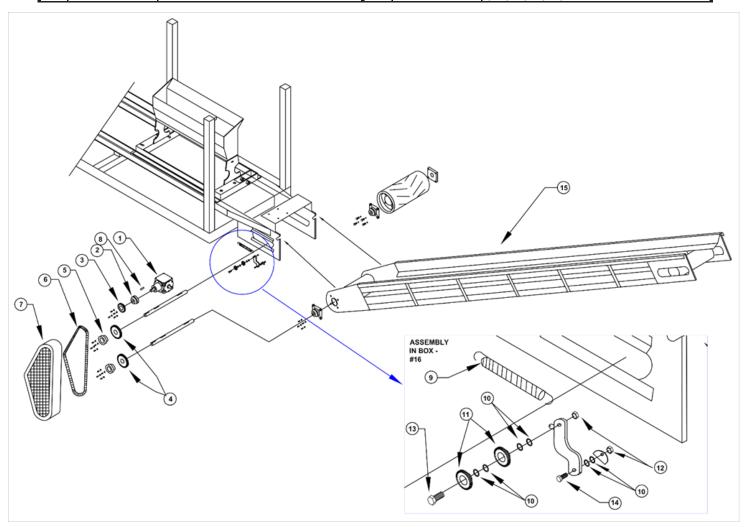
#### **CONVEYOR IDLER DRUM ASSEMBLY**

#	PART #	DESCRIPTION	#	PART #	DESCRIPTION
1	KRDRUMS	IDLER DRUM SHAFT	5	KRTAKEUP	W/S TAKE UP FRAME ASSY.
2	KRDRUM	10" X 24" SMOOTH DRUM	6	KRBELT	24" CRESENT TOP BELT
3	KRBRG11516TU	1 15/16" 4 WIDE SLOT TAKE UP BRG	7	KRLACE	24" R/S STEEL BELT LACE
4	KRDRUMB	HE25 X 1 15/16" HUB (BEARING)	8	KY50X6	½" KEYSTOCK



# **SPROCKET ASSEMBLY**

#	PART #	DESCRIPTION	#	PART #	DESCRIPTION
1	KRGB800H	MODEL 800 HUB CITY GEARBOX	9	KRD60IS	D60 CHAIN IDLER SPRING
2	KRHBQ112	Q1" X 1 ½" HUB	10	WF58	5/8" FLAT WASHER
3	KRD6024	D60Q24 SPROCKET	11	KR60BB13	60BB13H IDLER SPROCKET
4	KRD6035	D60Q35 SPROCKET	12	N58LN	5/8" CT LOCKNUT
5	KRHBQ11516	Q1" X 1 15/16" HUB	13	BOL58X3	5/8" X 3" CT BOLT
6	KRD60CHAIN	J60-2R #60 DOUBLE CHAIN	14	BOL58X2	5/8" X 2" CT BOLT
7	KRGARC	D60 CHAIN GUARD	15	KRUC	25' KR INCLINE CONVEYOR W/ CABLES
8	KY38X2	3/8" X 3/8" X 2" KEYSTOCK	16	KRD60IA	D60 KR CHAIN IDLER ASSY.
				ITEMS #	9, 10, 11, 12, 13, &14.



# **LIMITED WARRANTY**

The manufacturer warrants this equipment to the original user against material or workmanship for a period of 30 days from the date of purchase on repair parts and labor. The manufacturers responsibility under this warranty is limited to the repair or replacement of defective part or parts.

The manufacturer reserves the right to determine whether the part or parts failed because of material, workmanship, or other causes. Failure caused by accident, alteration, or misuse is not covered by this warranty

A DALHART R&R MACHINE WORKS, INC. representative must do all warranty repairs. Any repair to the equipment other than by this authorized facility voids this warranty. The rights under this warranty are limited to the original user and may not be transferred to subsequent owners.

The warranty is in lieu of all other warranties, expressed or implied, including warranties for a particular purpose.