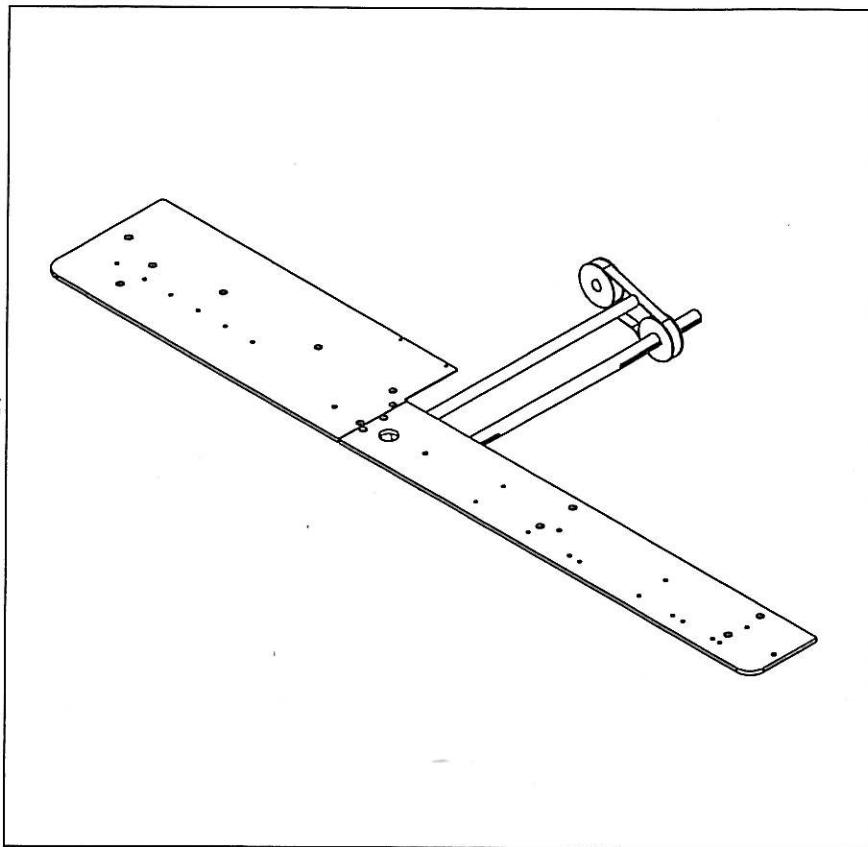


# *Kirk-Rudy, Inc.*

## Parts Manual

### SA492 KR215 DUAL HTD TIMING BELT UPGRADE



Manufactured by Kirk-Rudy, Inc.

Before using this machine, all operators must study this manual to understand and follow the safety warnings and instructions. Keep these instructions with the machine for future reference. If you have any questions, contact your local Kirk-Rudy, Inc. Distributor.

10000-SA492 REV. 1 01/12/2007

Parts Manual

## TABLE OF CONTENTS

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<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
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2	SPECIFICATIONS	4
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4	NOTES	6
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**NOTE: FIGURES AND DIAGRAMS ARE NOT INCLUDED IN PAGE NUMBERS.**

# **1    Important Safety Instructions**

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Intended Use Statement: The SA492 project is an upgrade timing drive system that will be used on all KR215 dual motor machine built after January 2007. This upgrade can also be retrofitted to earlier KR215 machines. Usage for other purposes may lead to an unsafe condition.

**SAVE THESE INSTRUCTIONS. Read all instructions before using this product.**

	<b>WARNING</b>
<p>* NEVER OPERATE THE MACHINE WITHOUT ALL GUARDS OR SAFETY DEVICES IN PLACE.</p> <p>* ALWAYS TURN POWER OFF WHEN MAKING ADJUSTMENTS.</p> <p>* ALWAYS DISCONNECT THE POWER SUPPLY BEFORE ANY MAINTENANCE OR SERVICE WORK.</p> <p>* NEVER START THE MACHINE WITHOUT FIRST CHECKING ALL PERSONNEL ARE CLEAR OF MOVING PARTS.</p> <p>* KEEP FINGERS CLEAR OF ALL MOVING PARTS.</p> <p>* NEVER REMOVE THE PRODUCT FROM THE MACHINE WHILE MACHINE IS RUNNING.</p> <p>* SHOULD MISFED PRODUCT JAM THE MACHINE AND STOP IT FROM RUNNING, ALWAYS PRESS THE STOP BUTTON BEFORE CLEARING PRODUCT. IF THE STOP BUTTON IS NOT PRESSED AND THE JAM IS CLEARED, THE MACHINE WILL BEGIN RUNNING.</p> <p>* IT IS NOT RECOMMENDED THAT LOOSE CLOTHING, JEWELRY AND LONG HAIR BE WORN WHILE OPERATING THIS MACHINERY.</p> <p>* ALWAYS USE AN EXPERIENCED ELECTRICIAN WHEN TROUBLE-SHOOTING ELECTRICAL PROBLEMS.</p> <p>* CHANGES OR MODIFICATIONS TO THIS UNIT NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.</p>	

## **2 SPECIFICATIONS**

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**Notes:**

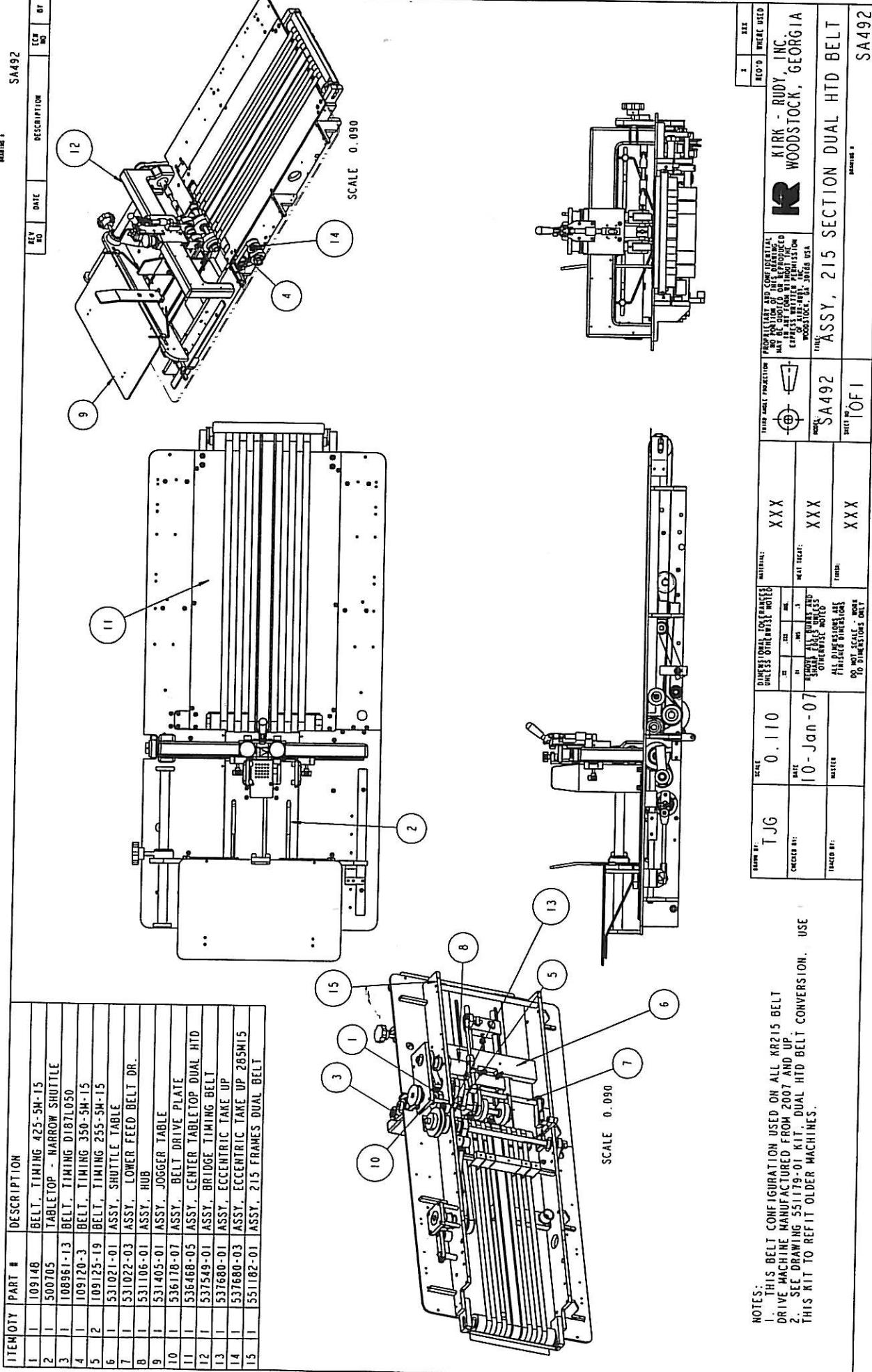
1. Specifications for each KR215 machine have not changed. See KR215 individual manuals for machine specs.
2. See Technical Bulletins 551179-00 & 542832-00.
3. Use Kit# 551179-01 for retrofitting KR215 machines.
4. Right side split tabletops optional.

### **3 PARTS LISTS AND DIAGRAMS**

---

This section contains the entire mechanical bill of materials and assembly drawings.

ITEM NO	PART #	DESCRIPTION	
1	109148	BELT, TIMING 425-SH-15	
2	500105	TABLETOP - NARROW SHUTTLE	
3	108961-13	BELT, TIMING D1871050	
4	109120-3	BELT, TIMING 350-SH-15	
5	2	109125-19	BELT, TIMING 255-SH-15
6	1	531021-01	ASSY, SHUTTLE TABLE
7	1	531022-03	ASSY, LOWER FEED BELT DR.
8	1	531106-01	ASSY, HUB
9	1	5311405-01	ASSY, JOGGER TABLE
10	1	536783-07	ASSY, BELT DRIVE PLATE
11	1	536468-05	ASSY, CENTER TABLETOP DUAL HTD
12	1	537549-01	ASSY, BRIDGE TIMING BELT
13	1	531680-01	ASSY, ECCENTRIC TAKE UP
14	1	531680-03	ASSY, ECCENTRIC TAKE UP 205W15
15	1	551182-01	ASSY, 215 FRAMES DUAL BELT



NOTES:  
 1. THIS IS BELT CONFIGURATION USED ON ALL KR215 BELT  
 DRIVE MACHINE MANUFACTURED FROM 2007 AND UP.  
 2. SEE DRAWING 551176-01 KIT, DUAL HTD BELT CONVERSION.  
 THIS KIT TO REFIT OLDER MACHINES.

DRAWING BY:		SCALE:		DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED		TOTAL SCALE FACTOR:		PROPRIETARY AND CONFIDENTIAL NO COPIES OR DERIVED WORKS MAY BE MADE OR DISSEMINATED EXCEPT AS AUTHORIZED BY KIRK-RUDY, INC.	
CHECKED BY:		DATE:		IN	MM	IN	MM	IN	MM
		10- Jan -07							
ISSUED BY:		RELEASER:							

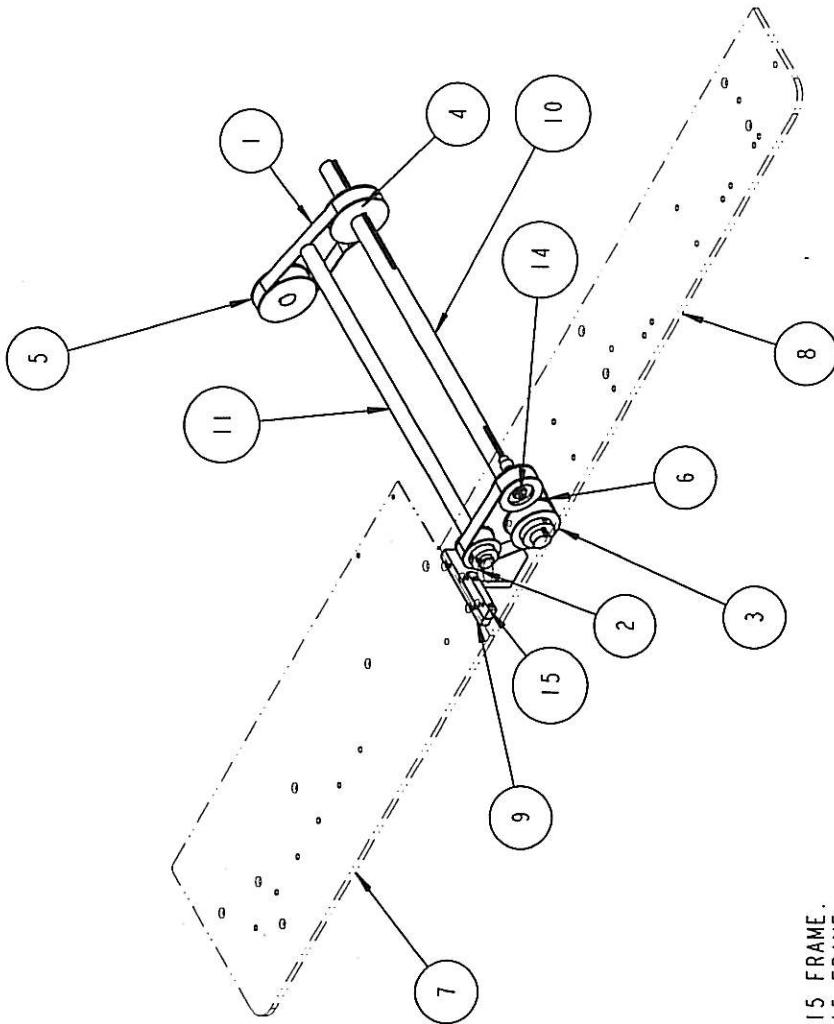
KIRK - RUDY, INC.  
 WOODSTOCK, GEORGIA

ASSY, 215 SECTION DUAL HTD BELT

SA492

1 OF 1

ITEM	QTY	PART #	DESCRIPTION
1	1	109148	BELT, TIMING 425-5M-15
2	1	109738	PULLEY, TIMING 245M15 .625B .188K
3	1	109741	PULLEY, TIMING 325M15 .750B .188K
4	1	109742	PULLEY, TIMING 385M15 .750B .188K
5	1	109743	PULLEY, TIMING 385M15 .625B .188K
6	1	109120-3	BELT, TIMING 350-5M-15
7	1	500702-11R	TABLETOP, RH SIDE SPLIT BELT ACCESS
8	1	500702-14R	TABLETOP, RH SIDE SPLIT BELT ACCESS
9	1	500721-26	GUSSET, TABLETOP CUTOUT SPLICE
10	1	500825-1	SHAFT, 215 MAIN DRIVE
11	1	534181-02	SHAFT, FRONT ROLLER
12	1	536178-07	ASSY, BELT DRIVE PLATE
13	1	536468-05	ASSY, CENTER TABLETOP DUAL HTD
14	1	537680-03	ASSY, ECCENTRIC TAKE UP 285M15
15	1	551150-01	BAR, TABLETOP SPLICE
16	1	551182-01	ASSY, 215 FRAMES DUAL BELT



## NOTES:

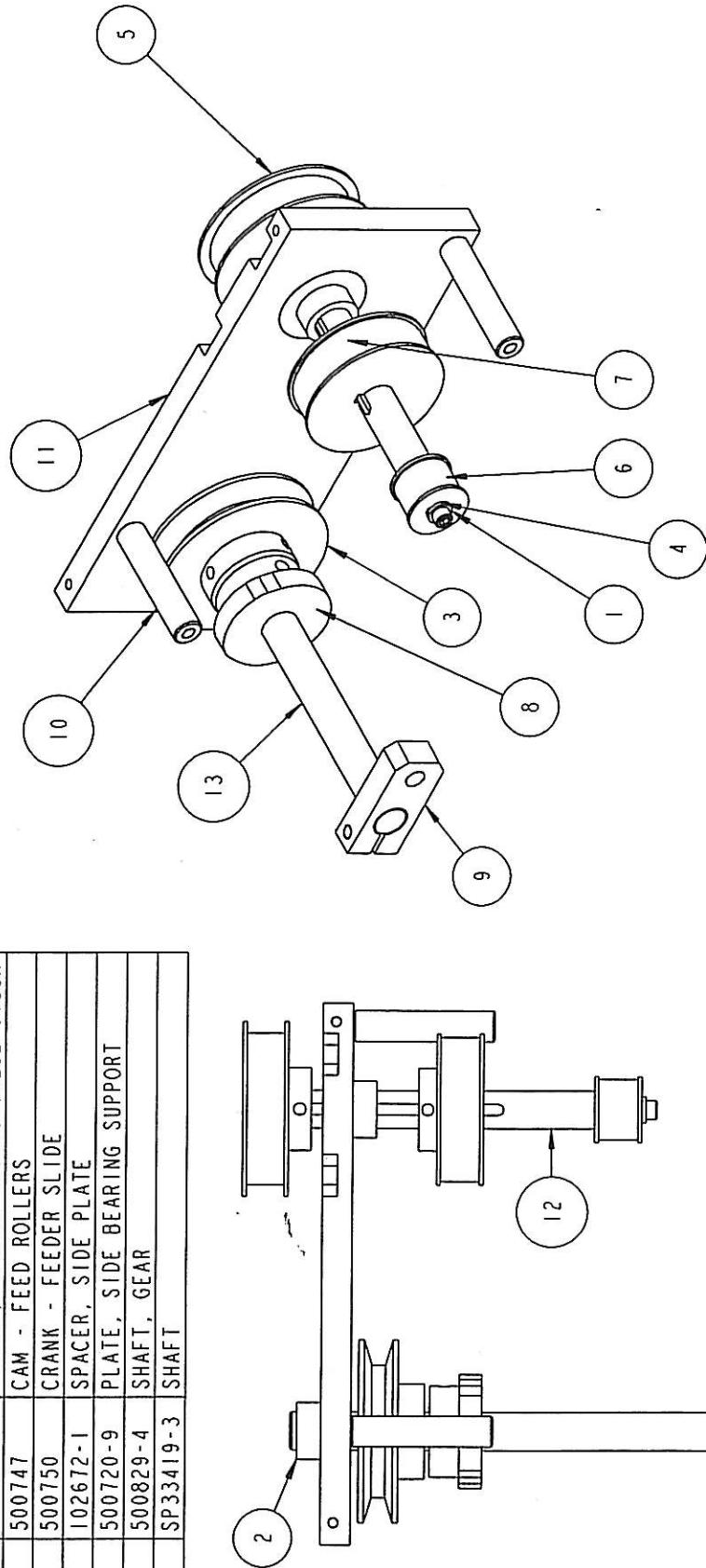
1. KIT KR#551179-01
2. TABLETOPS OPTIONAL.
3. SEE SA492 MANUAL FOR COMPLETE ASSEMBLY.
4. USE JIG #551149-01 TO INSTALL HOLE IN RH KR215 FRAME.
5. USE JIG #551149-02 TO INSTALL HOLE IN LH KR215 FRAME.

REV NO	DATE	DESCRIPTION	ECN NO	BY

X	XX	REO'D WHERE USED
KIRK - RUDY, INC	WOODSTOCK, GEORGIA	
SA492	DRAWING #	HTD BELT ASSY, 215 SECTION DUAL HTD BELT
OF 2		551179-01

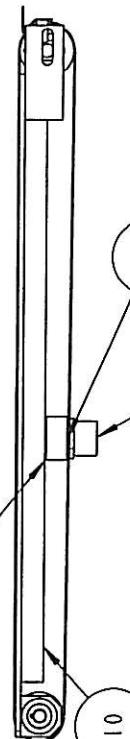
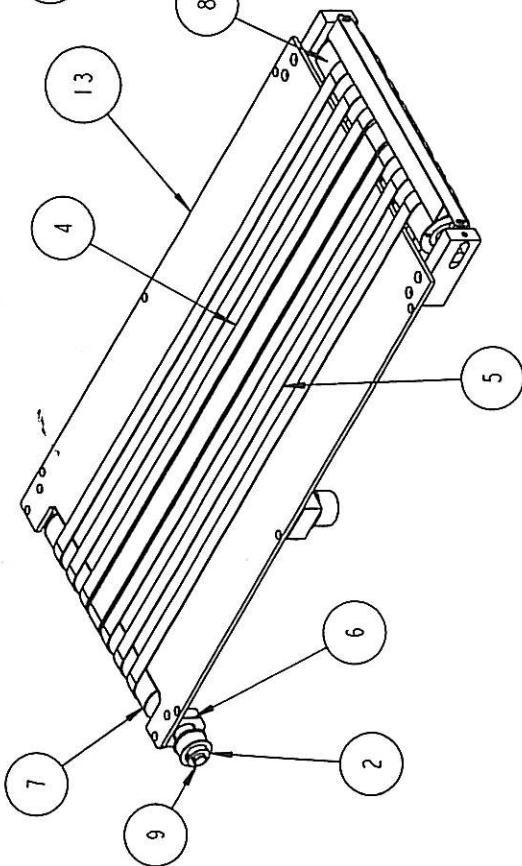
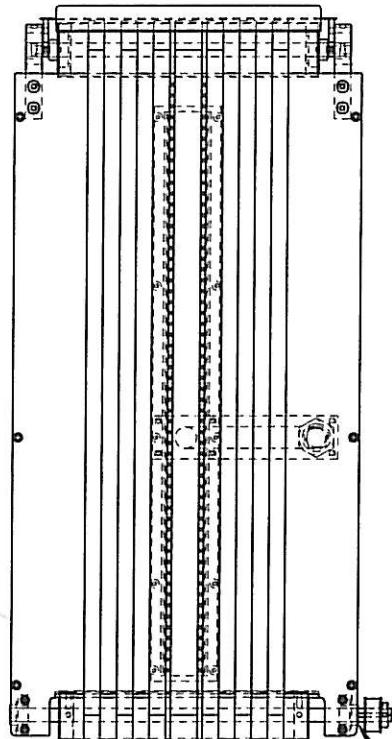
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T JG	0.145	.01 .005 .5 .005 .005 .5 ANG.	XXX	XXX
CHECKED BY:	DATE:	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED	XXX	HEAT TREAT.
TRACED BY:	MASTER:	ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE. WORK TO DIMENSIONS ONLY	XXX	MODEL: SHEET #:

ITEM QTY	PART #	DESCRIPTION
1	100619	WASHER, FLAT 10-32
2	2 103804	BEARING, HUB .625
3	1 105021	V-PULLEY, AK30
4	1 107409	SCREW, SHCS 10-32X.500
5	1 108441	PULLEY, TIMING 21L050 .625B .188K
6	1 109719	PULLEY, TIMING 16M15 .375B .125K
7	1 109743	PULLEY, TIMING 385M15 .625B .188K
8	1 500747	CAM - FEED ROLLERS
9	1 500750	CRANK - FEEDER SLIDE
10	2 102672-1	SPACER, SIDE PLATE
11	1 500720-9	PLATE, SIDE BEARING SUPPORT
12	1 500829-4	SHAFT, GEAR
13	1 SP33419-3	SHAFT



DRAWN BY:	SCALE	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	MATERIAL:	THIRD ANGLE PROJECTION	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC.	RECD' D WHERE USED
TRACED BY:	DATE	.XX .XXX .005 .005 .005	ANG. N/A	-	KIRK - RUDY, INC. WOODSTOCK, GEORGIA	
MASTER:	11 - Jan - 07	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED	N/A	-		
		ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	N/A	-		
					ASSY, BELT DRIVE PLATE	
						DRAWING #
						536178-07

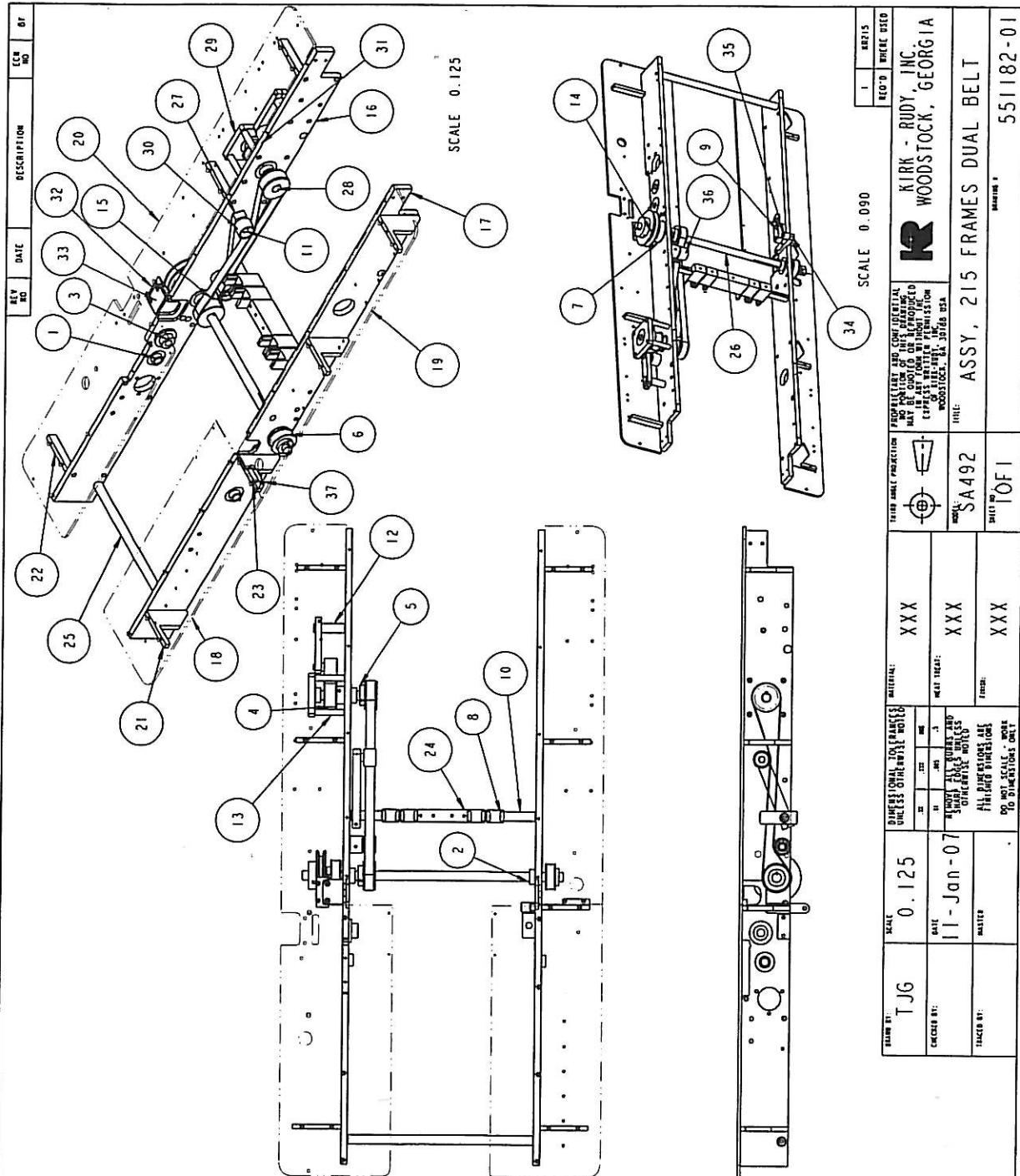
ITEM QTY	PART #	DESCRIPTION
1 2	103804	BEARING, HUB .625
2 1	109738	PULLEY, TIMING 245M15 .625B .188K
3 1	190715	PVC COUPLING
4 6	105901-30	BELT, FLAT CONVEYOR 3/4" X 68.75"
5 1	106202-20	BELT, FLAT CONVEYOR 1.25" X 68.75"
6 2	500819-2	BLOCK, BEARING
7 1	530676-01	ASSY, ROLLER FRONT DRIVE
8 1	533876-02	ASSY, IDLER ROLLER
9 1	534181-02	SHAFT, FRONT ROLLER
10 1	SP30202	BLOCK, VACUUM
11 1	SP28217-1	BLOCK, LOWER VACUUM
12 1	SP28218-1	BLOCK, UPPER VACUUM
13 1	SP30201-1	TABLETOP 30.5 IN EXT. CANTER VA



SCALE 0:125

DRAWN BY:	T JG	SCALE	0 . 125	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	MATERIAL:	N / A	THIRD ANGLE PROJECTION	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. WOODSTOCK, GA 30188 USA	REC'D WHERE USED
CHECKED BY:		DATE	11 - Jan - 07	X1      X15      ANG.	.01      .005      4	FINISH:	N / A	NOTE:	RELEASER
TRACED BY:		MASTER		REMOVE ALL BURRS, AND SHARP EDGES UNLESS OTHERWISE NOTED	ALL DIMENSIONS ARE FINISHED DIMENSIONS	FINISH:	N / A	NOTE:	DO NOT SCALE - WORK TO DIMENSIONS ONLY
									DRAWING # 536468-05

DRAWING # 551182-01



ITEM NO	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	REV NO	DATE
1	2	103804 BEARING, HUB .625					
2	4	103805 BEARING, HUB .750					
3	1	103812 BEARING, HUB .625					
4	1	108820 PULLEY, TIMING 16L075 .750B .88K					
5	2	108892 PULLEY, TIMING 19L075 .750B .88K					
6	1	109141 PULLEY, TIMING 35SM15 .750B .88K					
7	1	109142 PULLEY, TIMING 36SM15 .750B .88K					
8	4	500125 GUIDE - BELT					
9	1	500185 BLOCK, SPRING					
10	1	500824 SHAFT-BELT GUIDE					
11	1	508340 STUD					
12	1	525408 STUD, TAKEUP ARM					
13	4	102672-1 SPACER, SIDE PLATE					
14	1	105000-1 V-PULLEY					
15	1	108946-16 BELT, TIMING 36L075					
16	1	500701-L PLATE, FRAME KR215 LH					
17	1	50070-R PLATE, FRAME KR215 RH					
18	1	500702-14R TABLETOP, RH SIDE SPLIT BELT ACCESS					
19	1	500702-14R TABLETOP, RH SIDE SPLIT BELT ACCESS					
20	1	500702-9L TABLETOP, LH SIDE					
21	3	500712-18 GUSSET, TABLETOP SUPPORT CUTOUT					
22	3	500712-24 GUSSET, TABLETOP SUPPORT					
23	1	500712-26 GUSSET, TABLETOP CUTOUT SPLICE					
24	1	500712-7 GUIDE, BELT					
25	1	500824-1 SHAFT, FRAME SPACER					
26	1	500825-1 SHAFT, 215 MAIN DRIVE					
27	1	508684-1 ARM, TAKE UP					
28	1	508870-5 SHAFT, JACK					
29	1	510628-7 BLOCK, BEARING SPACER OFFSET					
30	1	516045A ASSY, IDLER 1.376 DIA. X 1.00					
31	1	536471-01 ASSY, TAKE UP TIMING BELT					
32	1	531658-01 BAR, PLATE SPLICE					
33	1	531659-01 PLATE, TABLETOP INSERT					
34	1	531691-01 BAR, ENCODER STUD MNT.					
35	1	538341-01 STUD, ENCODER MOUNT					
36	1	538996-01 ASSY, ECCENTRIC BELT IDLER					
37	1	551150-01 BAR, TABLETOP SPLICE					

DRAWING # T JG		SCALE	0.125	SUPERSEDED TOTAL PARTS MATERIAL:	X X X	THIS DRAWING IS PROPERLY AND CONSIDERABLY REPLACED BY THE DRAWING NUMBER AND DATE SHOWN ON THIS SHEET. THIS SHEET IS NO LONGER A PART OF THE ASSEMBLY. THIS DRAWING IS FOR INFORMATION ONLY. IT IS THE PROPERTY OF KIRK-RUDY INC. IT IS THE PROPERTY OF KIRK-RUDY INC. IT IS THE PROPERTY OF KIRK-RUDY INC. IT IS THE PROPERTY OF KIRK-RUDY INC.	1	ARTS
CHCKD BY:		DATE		RELEASER:	X X X	RELEASER:		
TECHN. BY:		STUD, ENCODER MOUNT		MASTER	X X X	MASTER		

551182-01

551182-01

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECH NO	BY
1	1	105213	PIN, ROLL .250X1 .000					
2	1	500701-R	PLATE, FRAME KR215 RH					
3	1	551149-01	JIG, IDLER HOLE RH SA492					

**RH KR215 FRAME**

**DRILL PILOT HOLE FOR ECCENTRIC IDLER LOCATION. .500" HOLE REQUIRED**

**LH KR215 FRAME**

**NOTES:**

1. PLACE CORRECT (LH OR RH) JIG OVER 3/4" MAIN DRIVE SHAFT.
2. MOVE JIG UP UNTIL ROLL PIN TOUCHES BOTTOM OF FRAME.
3. DRILL PILOT HOLE IN FRAME.
4. DRILL 1/2" HOLE IN FRAME.

ITEM	QTY	PART #	DESCRIPTION
1	1	105213	PIN, ROLL .250X1 .000
2	1	500701-L	PLATE, FRAME KR215 LH
3	1	551149-02	JIG, IDLER HOLE LH SA492

**1 KR215**

**2 KR215**

**3 KR215**

**DRAWN BY: T JG SCALE: 0.125 DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED MATERIAL: XXX**

CHECKED BY: 11 - Jan - 07	DATE: 01	ANG.: .5	HEAT TREAT: XXX
REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED			
TRACED BY: M	MASTER	FINISH: XXX	ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY

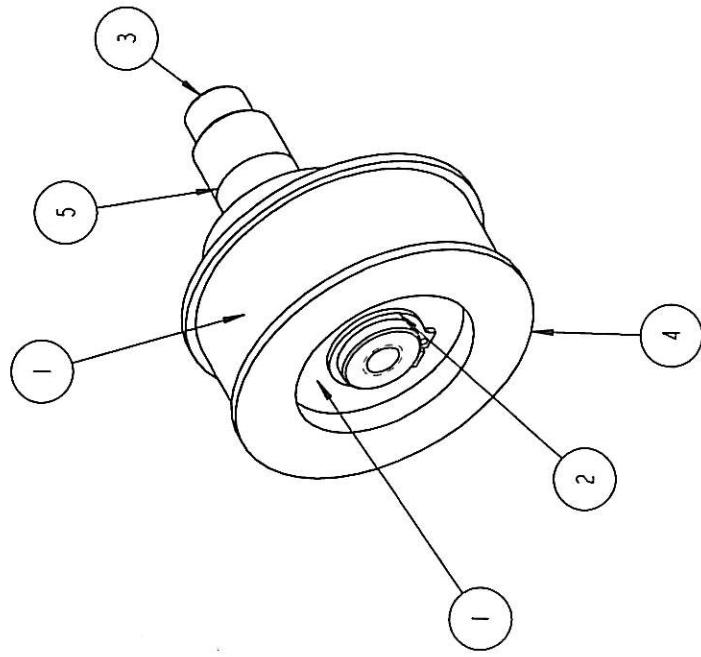
**PROPRIETARY AND CONFIDENTIAL  
NO PORTION OF THIS DRAWING  
MAY BE QUOTED OR REPRODUCED  
IN ANY FORM WITHOUT THE  
EXPRESS WRITTEN PERMISSION  
OF KIRK-RUDY, INC.  
WOODSTOCK, GA 30188 USA**

**Model: SA492 Date: ASSY , 215 FRAMES DUAL BELT**

**Sheet No. 20F2 Drawing # 551182-01**

**RECD'D WHERE USED**

ITEM	QTY	PART #	DESCRIPTION
1	2	103108	BEARING, FLAT .500
2	1	104106	SNA SPRING, .500
3	1	107403	SCREW, SHCS 1/4-20X.375
4	1	109710	PULLEY, TIMING 285M15 1.1248 DIA
5	1	500983-7	STUD, IDLER SPROCKET



The diagram illustrates a three-stage integrated circuit structure. It consists of three rectangular blocks stacked vertically. The top block is a smaller rectangle with a central U-shaped cutout, containing a smaller rectangle with four diagonal lines. The middle block is a larger rectangle with a central U-shaped cutout, containing a smaller rectangle with four diagonal lines. The bottom block is a large rectangle with a central U-shaped cutout, containing a smaller rectangle with four diagonal lines. Dashed lines indicate the internal structure of each stage.

SCALE 1 . 000

ITEM NO.	PART #	DESCRIPTION	REVISION		ECCN NO.	BY
			REV NO	DATE		
1	2	103108 BEARING, FLAT .500				
2	1	104106 SNAPRING, .500				
3	1	107403 SCREW, SHCS 1/4-20X .375				
4	1	109710 PULLEY, TIMING 285M15 1.1248 DIA				
5	1	500983-7 STUD, IDLER SPROCKET				

DRAWN BY: T JG	SCALE 1 . 000	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		MATERIAL: XXX	THIRD ANGLE PROJECTION NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. WOODSTOCK, GA 30188 USA	RECD WHERE USED 1 215
CHECKED BY:	DATE 10 - Jan - 07	.11	.01	.005	.5	HEAT TREAT:
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED				MODEL: SA492
		ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE • WORK TO DIMENSIONS ONLY				NAME: ASSY, ECCENTRIC TAKE UP 285M15
		TRANS:				SHEET NO. 10F
						DRAWING # 537680-03

SCALE 1 . 000

Woodstock, GA 30188 U.S.A.

NO: 551186-00	REV: 1	PAGE: 1 of	DATE ISSUED: 1-12-2007
WRITTEN BY: TJG	DATE: 1-12-2007	APPROVED BY:	DATE:
SUBJECT: KR215 DUAL MOTOR BELT DRIVE UPGRADE			

## KR215 INFORMATION:

The KR215 currently (pre 2007) uses a single HTD belt to drive the upper/lower feed rollers and the conveyor belts. The belt can break during a feeder jam. The drive upgrade will use two HTD belts. The drive belt on the operator side (located behind the electrical panel insert box) will drive the conveyor belts. The drive belt on the non-operator side (located in same place as the old HTD drive belt) will drive the upper and lower feed rollers. In order to deliver more torque the new system will use larger pulleys and not back bend the HTD belt. The conveyor drive motor will also use a plastic screw torque limiter. See attached Technical Bulletin 542832-00. KR215 machines built from 2007 and up will have this upgrade. KR215 machines build before 2007 can be upgraded with KR kit# 551179-01.

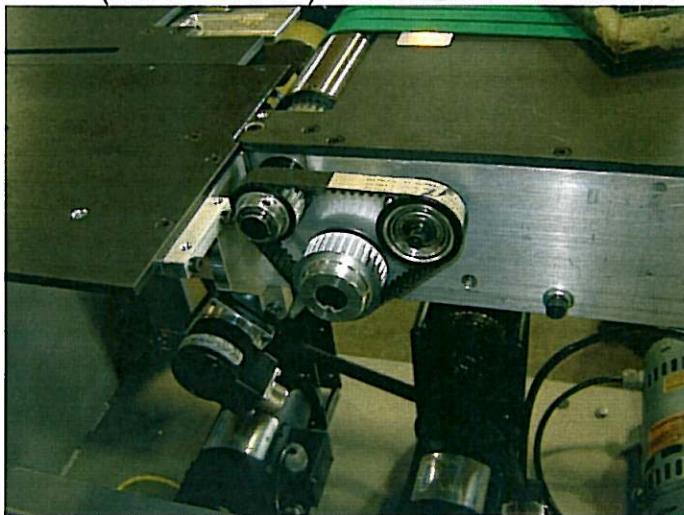
## KIT 551179-01

### INSTALLATION INSTRUCTIONS

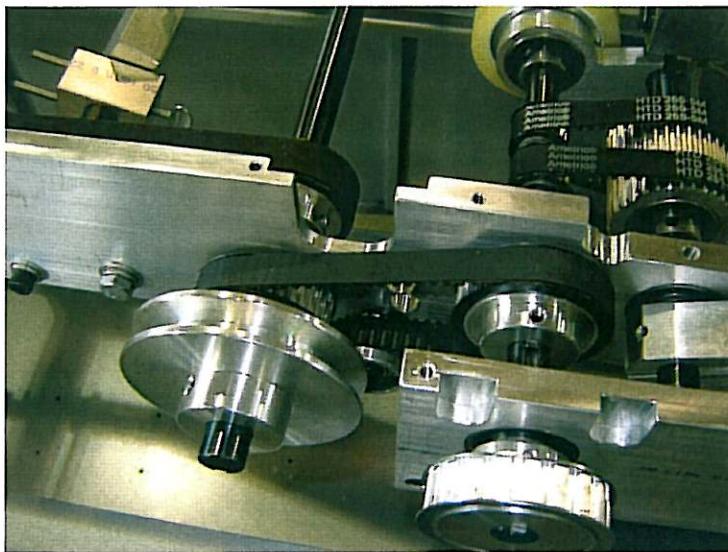
(Reference prints SA492, 551182-01, 536468-05, 536178-07, 551182-01, 551179-01)

Note: See SA492 manual for all reference prints.

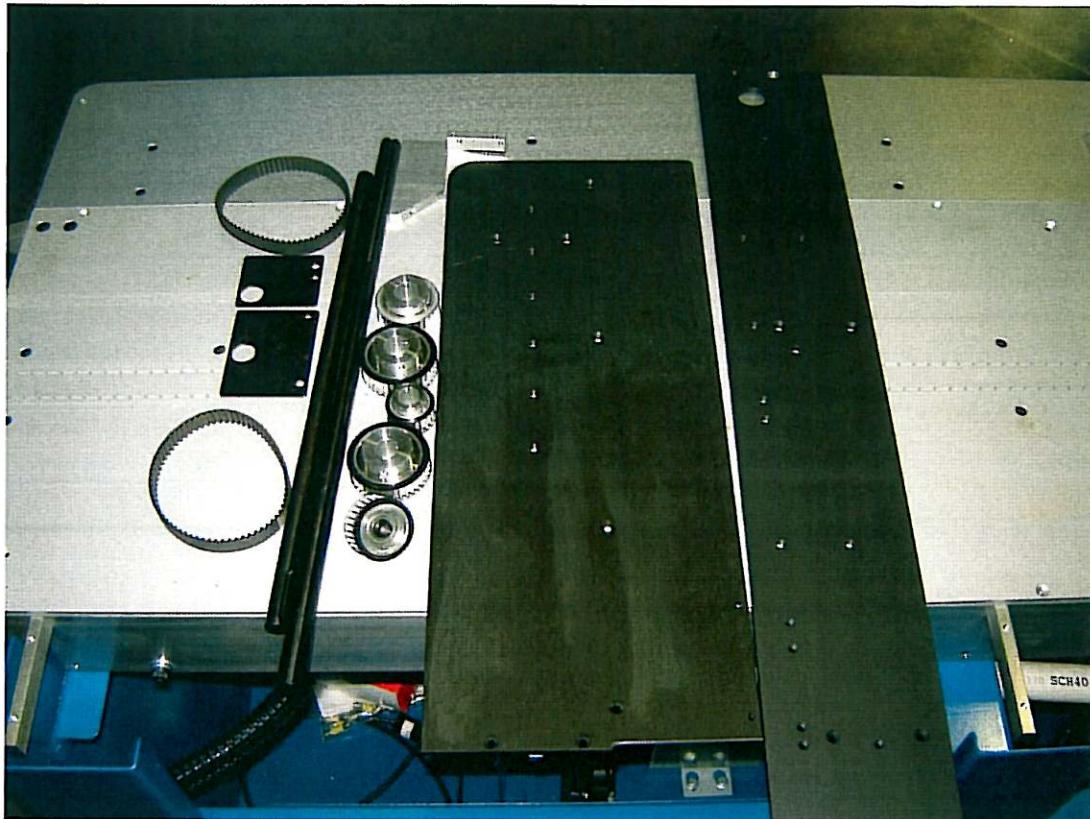
1. Remove V-belt, V-pulley and HTD timing belt for conveyor drive.
2. Remove operator side tabletop.
3. Drop control panel and electrical insert to get access to right hand frame.
4. Remove main  $\frac{3}{4}$ " diameter drive shaft 500825. Replace with shaft 500825-1.
5. Drill holes in main frames for eccentric idler. Use jig 551149-01 & 02. See print 551182-01 page 2 for instructions.
6. Remove center tabletop assembly. Replace roller shaft with 534181-02. Install HTD 24 tooth timing pulley (109738) on opposite side (see 536468-05). Install center tabletop assembly.
7. Install eccentric idler assembly 537680-03 to right 215 frame.
8. Install gusset 500721-26 and bar splice 551150-01.
9. Install 32 tooth HTD pulley 109741 (see 551182-01) and 350-5M-15 timing belt (see 551179-01). Tension belt with eccentric idler. See picture below.



10. Remove bridge drive timing belt.
11. Remove gear side plate 500720-9. (see assembly print 536178-07). Install 38 tooth HTD timing pulley (109743) and timing belt 425-5M15 (109148) as shown.
12. Install 38 tooth HTD timing pulley 109742. Move eccentric roller idler to hole that was just drilled. Tension belt with eccentric idler. See picture below.



13. Install V-pulley.
14. Install plastic screw torque limiter. See attached Technical Bulletin 542832-00.
15. Install split side tabletops. Note: Split tabletop optional. Existing tabletop can be used.



## 551179-01 KIT, 215 DUAL HTD BELT CONVERSION

No.	Part #	Description	Qty. Per Mach.
1	109120	BELT, TIMING 350-5M-15	1
2	109148	BELT, TIMING 425-5M-15	1
3	109738	PULLEY, TIMING 245M15 .625B .188K	1
4	109741	PULLEY, TIMING 325M15 .750B .188K	1
5	109742	PULLEY, TIMING 385M15 .750B .188K	1
6	109743	PULLEY, TIMING 385M15 .625B .188K	1
7	500701-L	FRAME, 215 LH (MODIFY EXISTING PART)	1
8	500701-R	FRAME, 215 RH (MODIFY EXISTING PART)	1
9	500702-11R	TABLETOP, RH SIDE SPLIT BELT ACCESS (OPTIONAL)	1
10	500702-14R	TABLETOP, RH SIDE SPLIT BELT ACCESS (OPTIONAL)	1
11	500721-26	GUSSET, TABLETOP CUTOUT SPLICE	1
12	500825-1	SHAFT, 215 MAIN DRIVE	1
13	534181-02	SHAFT, FRONT ROLLER	1
14	537680-03 includes (109710)	ASSY, ECCENTRIC TAKE-UP 285M15 includes TIMING 285M15 1.1248 PULLEY,	1
15	551150-01	BAR, TABLETOP SPLICE	1
16	551149-01	JIG, IDLER HOLE RH SA492	1
17	551149-02	JIG, IDLER HOLE LH SA492	1
18	105213	ROLL PIN, .250 X 1.00	2

# Kirk-Rudy, Inc.

Woodstock, GA 30188 U.S.A.

## Technical Bulletin

NO: 542832-00	REV: 1	PAGE: 1 of 1	DATE ISSUED: 12/5/2002
WRITTEN BY: TJG	DATE: 12/5/2002	APPROVED BY: TJG	DATE: 12/5/2002
SUBJECT: V-Pulley torque limiter. Assembly 542566-01 & 542566-02			

Reference: Prints 542566-01, 02 & 542833-01,02

Purpose: The v-pulley torque limiter has been designed to protect the Kirk Rudy, Inc. equipment it drives. During high-speed operation product can jam and cause a torque overload, which may break certain timing belts or damage other machine equipment. This torque limiter assembly will release the torque to protect the machine.

Operation: The v-pulley torque limiter uses nylon #10-32 screws KR#107463 as drive pins. If a torque overload conditions happens the nylon screws will shear, therefore disengaging the v-pulley from the motor/pulley box output shaft. The v-pulley is supported with flat ball bearings; therefore the v-pulley will "freewheel" until the nylon screws are replaced. **Warning: This device does not stop the machine motor if an overload occurs. The operator must stop the motor using the control panel stop button. If the machine belts or shuttle stops and the motor is still turing; stop the machine as soon possible. Do not touch any parts that are suppose to be operating until the machine stop button has been depress and the drive motor is not turning.**

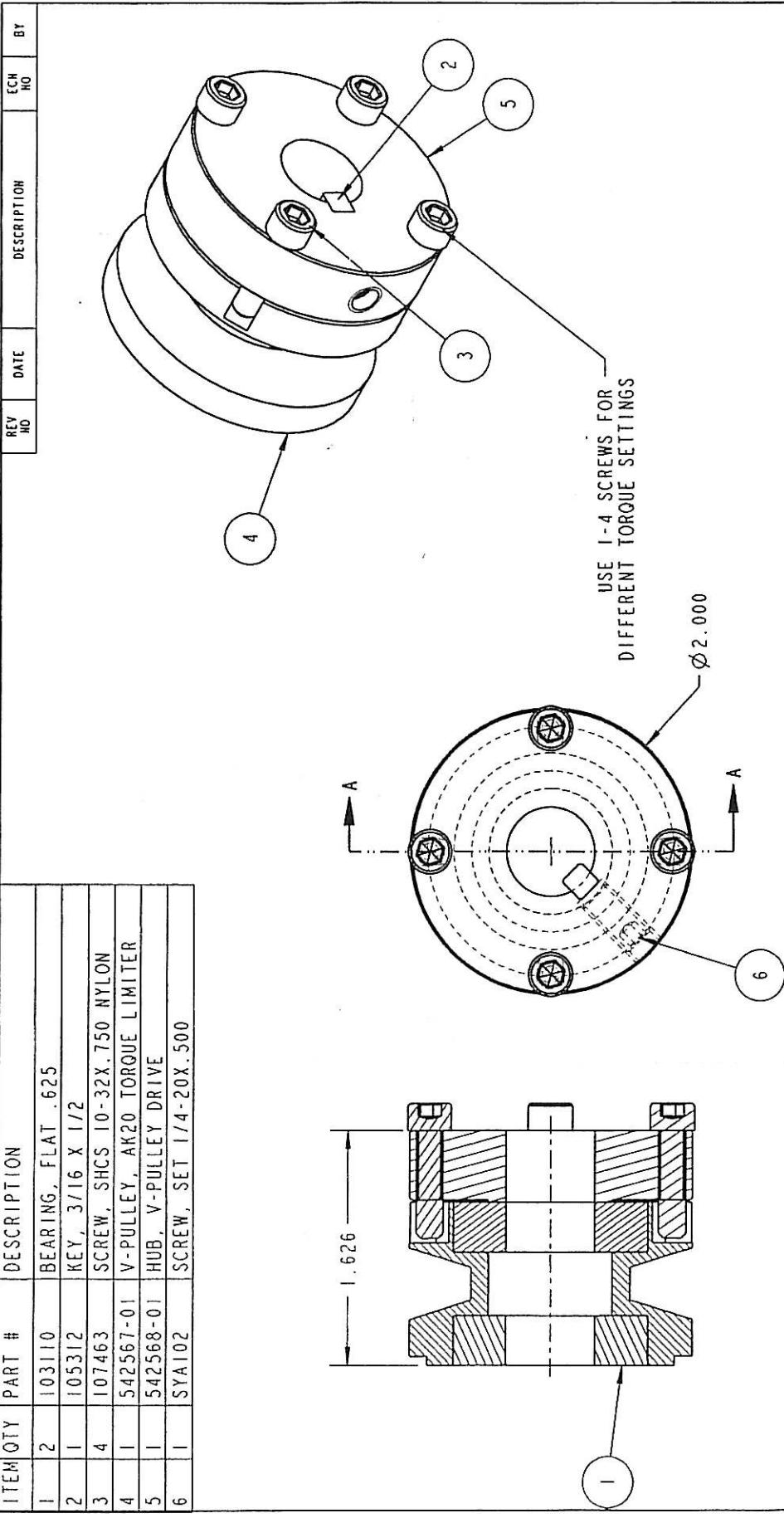
Torque Level Setup: The torque release setting is adjustable by changing the number of nylon screws. The minimum number of screws that can still drive the machine should be used for the best torque overload protection. If speeds are low and product is light only one screw maybe required to drive the machine. A service technician must test the unit to determine the correct number of screws to use.

Resetting Torque Limiter: If an overload has occurred the nylon screws must be replaced.

**Warning: Machine power must be disconnected before screw replacement.** To replace the screws remove the machine covers to get access to the drive v-pulley. Make note of the number of nylon screws in the drive hub (#542568-01). Remove and replace the screws with KR#107463. Do not use any other type of screw such as steel or brass. Replace machine covers and test.

Torque Limiter Installation (ref. Print 542833-01/02): The torque limiter must be installed on the drive shaft of the motor or the pulley gearbox output shaft that is driving the machine. The torque limiter assembly should be installed with drive hub #542568-01 facing outward so the nylon screws can be easily replaced. The first step is to remove the existing v-pulley. Next, slip on the torque limiter assembly, make sure the same outside diameter v-pulley is use. A key (KR# 105312) will need to be install under the drive hub #542568-01. Next, check the v-pulley alignment. The following may have to be done to get the correct alignment: move the motor (holes may have to be drilled and tapped, move the upper pulley on the shaft inside the machine, move the output shaft in or out in the pulley box. Finally, set the belt tension and follow the directions above for "torque level setup".

ITEM	QTY	PART #	DESCRIPTION
1	2	103110	BEARING, FLAT .625
2	1	105312	KEY, 3/16 X 1 1/2
3	4	107463	SCREW, SHCS 10-32X.750 NYLON
4	1	542567-01	V-PULLEY, AK20 TORQUE LIMITER
5	1	542568-01	HUB, V-PULLEY DRIVE
6	1	SYA102	SCREW, SET 1/4-20X.500

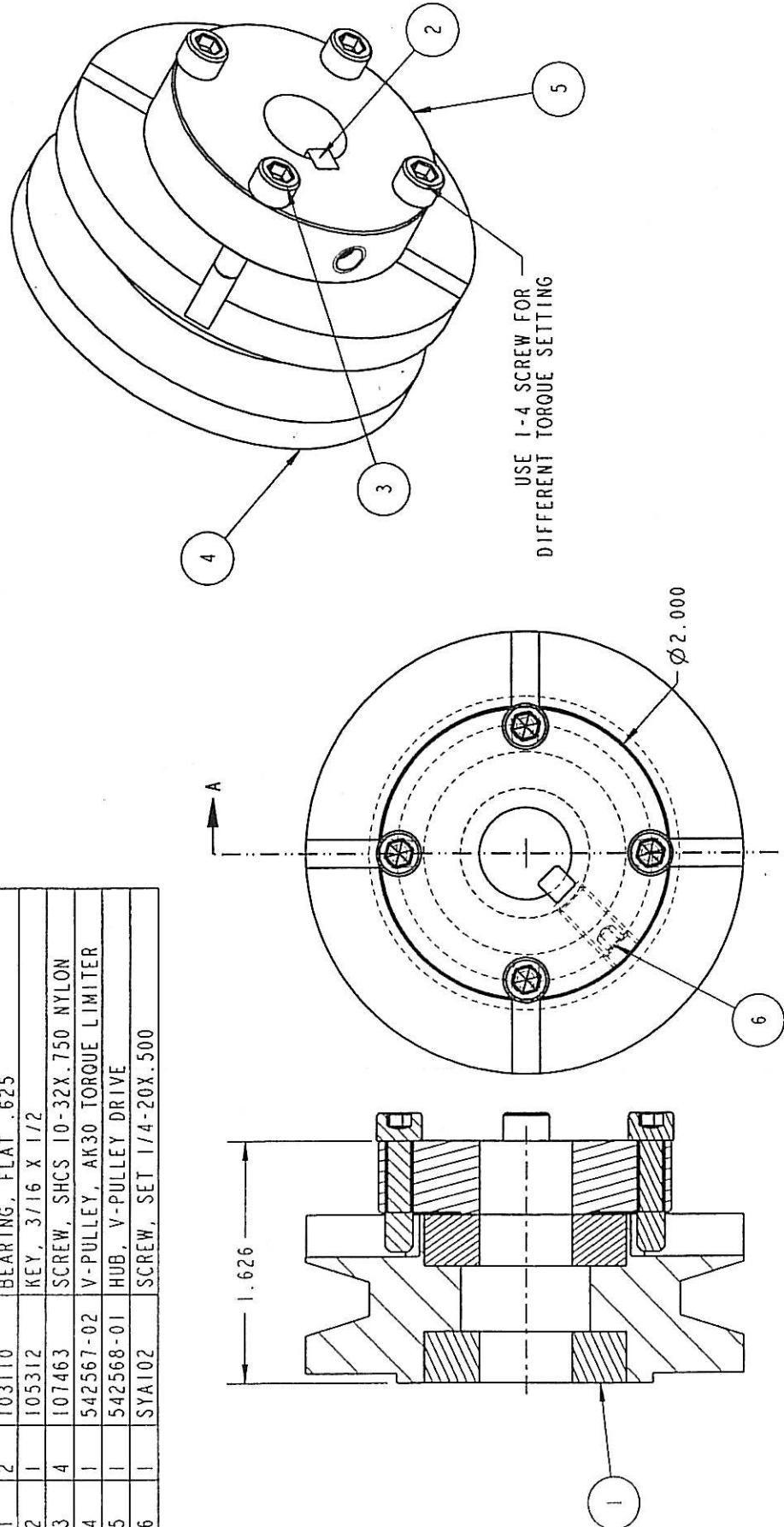


NOTE:  
1. REFERENCE TECHNICAL BULLETIN 542832-00.

X	XXX
REC'D	WHERE USED

DRAWN BY:	T JG	SCALE	1.000	MATERIAL:	XXX	THIRD ANGLE PROJECTION	KIRK - RUDY, INC.
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	.01	.005	.005	HEAT TREAT:	XXX	ASSY, AK20 V-PULLEY TOR. LIMITER	KENNESEE, GEORGIA
REMOVED ALL BURRS AND SHARP EDGES, UNLESS OTHERWISE NOTED	.01	.005	.005	FINISH:	XXX	MASTER	542566-01
ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY							

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECH NO	BY
1 2	103110	BEARING, FLAT .625					
2 1	105312	KEY, 3/16 X 1/2					
3 4	107463	SCREW, SHCS 10-32X.750 NYLON					
4 1	542567-02	V-PULLEY, AK30 TORQUE LIMITER					
5 1	542568-01	HUB, V-PULLEY DRIVE					
6 1	SYA102	SCREW, SET 1/4-20X.500					

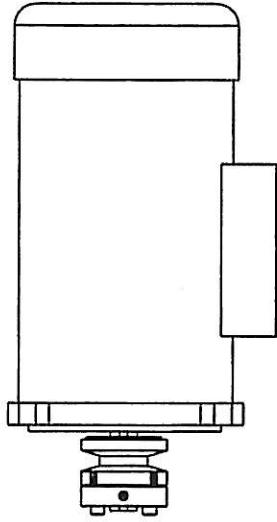
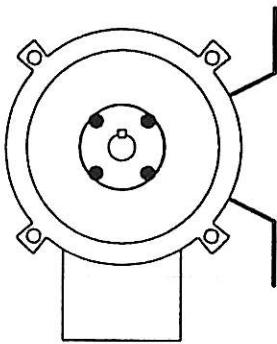
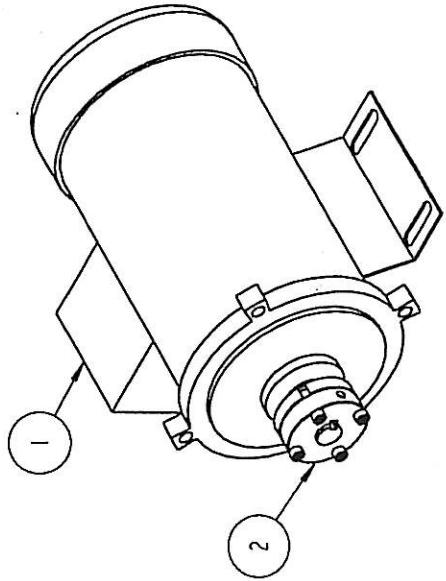


DRAWN BY:	SCALE	MATERIAL:	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	THIRD ANGLE PROJECTION	REF'D WHERE USED
T JG	1 . 000	X X X	.01 .005 .5		KIRK - RUDY INC. KENNESAW, GEORGIA
CHECKED BY:	DATE	HEAT TREAT:			
TRACTED BY:	MASTER	FINISH:	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	SHEET NO. 1 OF 1	DRAWING # 542566-02

ITEM QTY	PART #	DESCRIPTION
1	200152-2	MOTOR, LEESON DC 1/2HP
2	542566-01	ASSY, AK20 V-PULLEY TOR. LIMITER

NOTES:  
 1. REFERENCE TECHNICAL BULLETIN 542832-00.  
 2. CAN BE USE ON ANY MOTOR WITH 5/8" SHAFT.

REV NO	DATE	DESCRIPTION	ECN NO	BY



X	XXX
REF'D	WHERE USED

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 EXPRESS WRITTEN PERMISSION  
 OF KIRK-RUDY INC.  
 KENNESAW, GA 30144 USA

**KR** KIRK - RUDY INC.  
 KENNESAW, GEORGIA

THIRD ANGLE PROJECTION

SCALE	0 .250	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	MATERIAL: XXX
	.11	.005 .01	HEAT TREAT: XXX
CHECKED BY:	05 - De C - 02	REMOVE ALL BURS AND SHARP EDGES UNLESS OTHERWISE NOTED	FINISH: XXX
TRACED BY:	MASTER M	ALL DIMENSIONS ARE FINISHED DIMENSIONS	DO NOT SCALE - WORK TO DIMENSIONS ONLY

TITLE: ASSY, MOTOR / TORQUE LIMITER

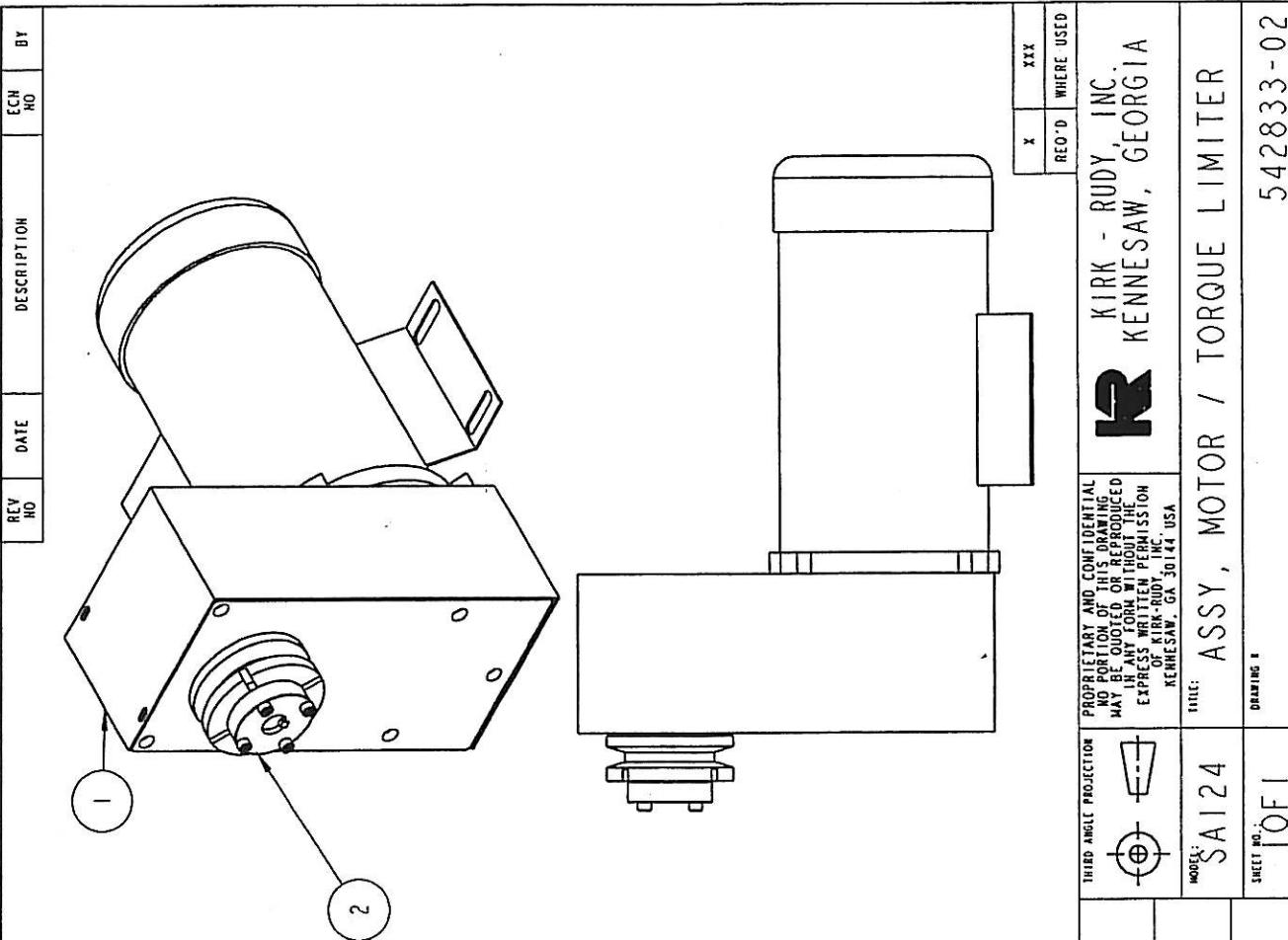
DRAWING # 542833-01

DRAWN BY: T JG	SCALE 0 .250	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	MATERIAL: XXX
DATE 05 - De C - 02	.11 .005 .01	HEAT TREAT: XXX	FINISH: XXX
CHECKED BY:	REMOVE ALL BURS AND SHARP EDGES UNLESS OTHERWISE NOTED	ALL DIMENSIONS ARE FINISHED DIMENSIONS	DO NOT SCALE - WORK TO DIMENSIONS ONLY
TRACED BY:	MASTER M	DO NOT SCALE - WORK TO DIMENSIONS ONLY	

DRAWING # 542833-02

ITEM	QTY	PART #	DESCRIPTION
1	1	509000-84	ASSY, MTR/REDUCER SR 1/2HP VERT
2	1	542566-02	ASSY, AK30 V-PULLEY TOR. LIMITER

- NOTES:
1. REFERENCE TECHNICAL BULLETIN 542832-00.
  2. CAN BE USE ON ANY MOTOR WITH 5/8" SHAFT.



- NOTES:
1. REFERENCE TECHNICAL BULLETIN 542832-00.
  2. CAN BE USE ON ANY MOTOR WITH 5/8" SHAFT.

DRAWN BY: T JG	SCALE 0 .250	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	MATERIAL: XXXX			THREADED ANGLE PROJECTION 	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN WHOLE OR IN PART EXCEPT WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNESAW, GA. 30144 USA
			.01	.005	.5		
CHECKED BY: 05 - Dec - 02	DATE	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED	FINISH: XXXX			MODEL: SA124	TITLE: ASSY, MOTOR / TORQUE LIMITER
			ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE : WORK TO DIMENSIONS ONLY				
TRACED BY: MASTER	SHEET NO.: 1 OF 1	DRAWING #: 542833-02				DRAWING #	542833-02

4 NOTES

## **5 WARRANTY AND SERVICE**

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### **WARRANTY**

**Warranty:** Kirk-Rudy warrants to the original retail purchaser that this product is free from defects in the material and workmanship, and agrees to repair or replace, at Kirk-Rudy's option, any defective product within 90 days from the date of purchase. This warranty is not transferable. It covers damage resulting from defects in material or workmanship, and it does not cover conditions or malfunctions resulting from normal wear, neglect, abuse or accident.  
**THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESSED WARRANTIES OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE.**

**Limitation of Remedies:** If product is proven to be defective within the warranty period stated above, THE EXCLUSIVE REMEDY, AT KIRK\_RUDY'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OF OR TO REPAIR OR REPLACE THE DEFECTIVE PRODUCT, provided that the defective product is, at Kirk-Rudy's choice, returned immediately to Kirk-Rudy or authorized service representative designated by Kirk-Rudy, or made available at user's premises in a location suitable for servicing.

**Limitation of Liability:** Kirk-Rudy shall not otherwise be liable for any losses or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal or equitable theory asserted, including contract, negligence, warranty, or strict liability.

To obtain replacement parts and service, contact an Authorized Kirk-Rudy Dealer. Use Kirk-Rudy part numbers when ordering.

### **USE ONLY GENUINE REPLACEMENT PARTS**

For Service or Replacement Parts Please Call:  
Kirk-Rudy @ 770-427-4203

Kirk-Rudy, Inc.  
125 Lorraine Parkway  
Woodstock, GA 30188