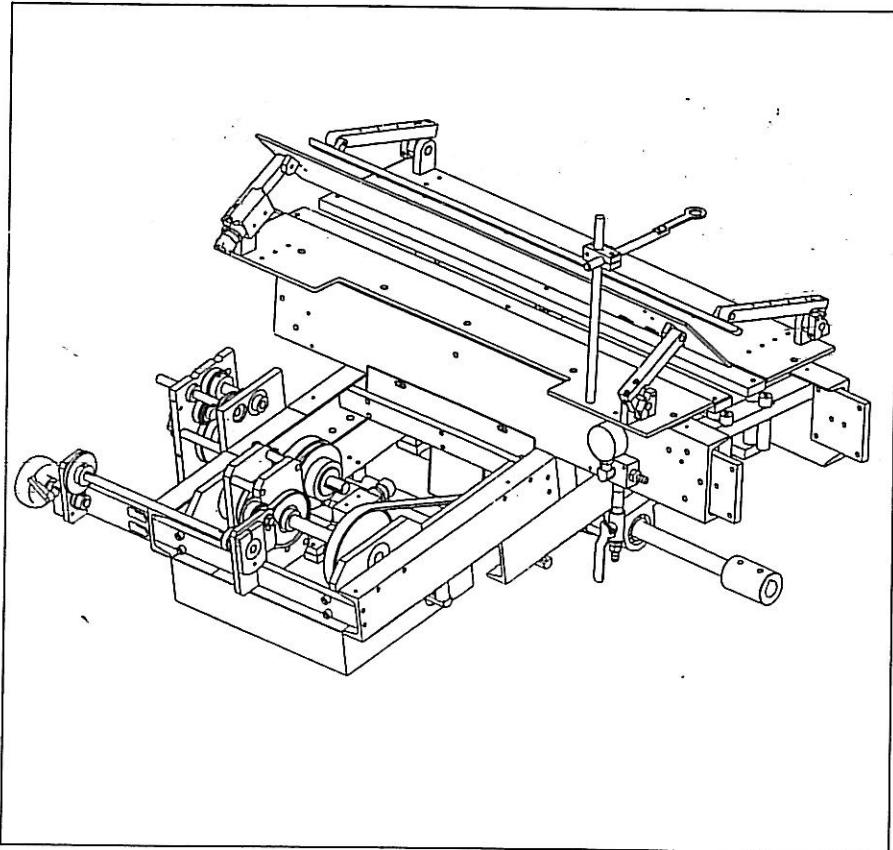


Kirk-Rudy, Inc.

Parts Manual

KR 512/600 Differential Kit for the 324-1 Feeder



anufactured 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.

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NOTE: FIGURES AND DIAGRAMS ARE NOT INCLUDED IN PAGE NUMBERS.

1 Important Safety Instructions

Intended Use Statement: The SP88900 – Differential Kit for the 324-1 Feeder System is designed to be a bolt on to the KR512 Newspaper Inserter. The differential allows the operator to adjust the timing of the feeder to the KR512 lug space while the machine is running. To adjust the timing, push the adjustment knob in and turn to advance or retard the timing. Once the adjustment knob is released the shaft will automatically lock into position. Usage for other purposes may lead to an unsafe condition.

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



WARNING

- * NEVER OPERATE THE MACHINE WITHOUT ALL GUARDS OR SAFETY DEVICES IN PLACE.
- * ALWAYS TURN POWER OFF WHEN MAKING ADJUSTMENTS.
- * ALWAYS DISCONNECT THE POWER SUPPLY BEFORE ANY MAINTENANCE OR SERVICE WORK.
- * NEVER START THE MACHINE WITHOUT FIRST CHECKING ALL PERSONNEL ARE CLEAR OF MOVING PARTS.
- * KEEP FINGERS CLEAR OF ALL MOVING PARTS.
- * NEVER REMOVE THE PRODUCT FROM THE MACHINE WHILE MACHINE IS RUNNING.
- * 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.
- * IT IS NOT RECOMMENDED THAT LOOSE CLOTHING, JEWELRY AND LONG HAIR BE WORN WHILE OPERATING THIS MACHINERY.
- * ALWAYS USE AN EXPERIENCED ELECTRICIAN WHEN TROUBLE-SHOOTING ELECTRICAL PROBLEMS.
- * 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.

2 SPECIFICATIONS

	<u>ENGLISH</u>	<u>METRIC</u>
<u>PHYSICAL SIZE</u>		
Length:	23"	58.4 cm
Width:	28"	71.1 cm
Height:	16"	40.6 cm

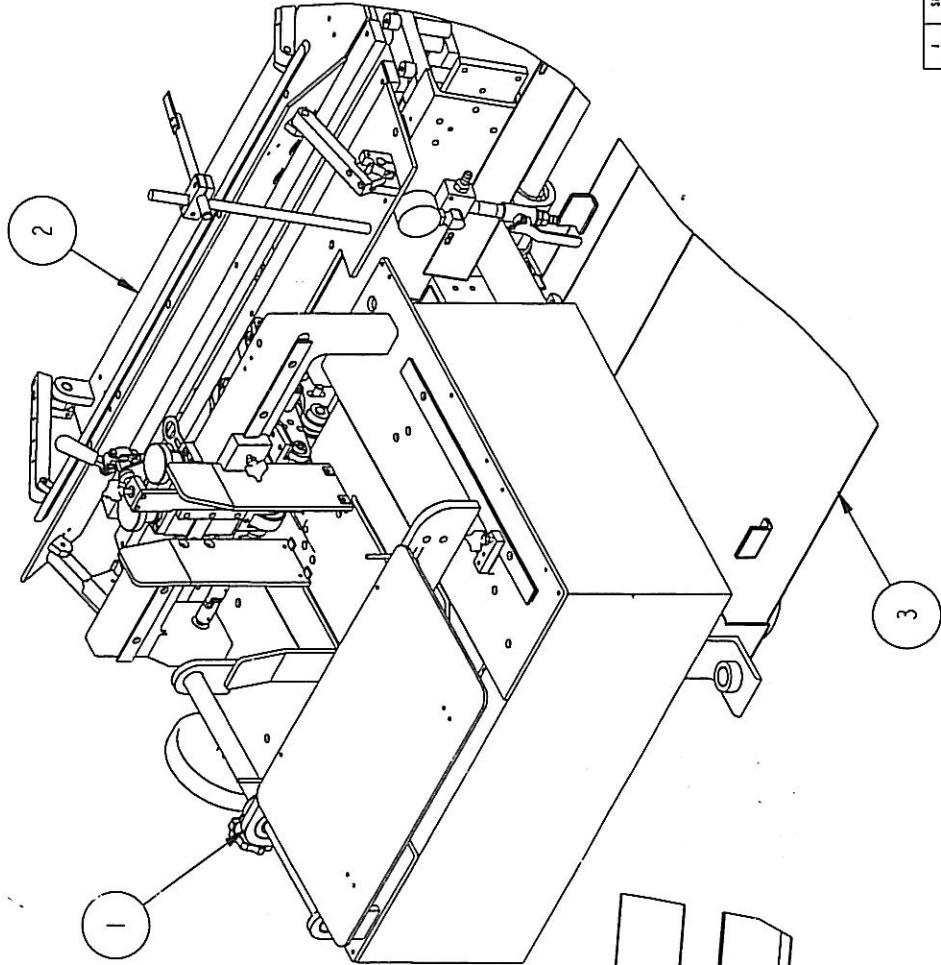
3 PARTS LISTS AND DIAGRAMS

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

Drawing #

SP88900

ITEM NO.	PART NO.	DESCRIPTION	EGM NO.	BY
1	53474-01	ASSY. 324-1 FEEDER		
2	53988-01	ASSY. MODULAR STATION		
3	SP34401-2	WDLMT. 99 IN INSERTER SECTION		



ITEM NO.	PART NO.	DESCRIPTION	EGM NO.	BY
1	SP88900			
2	SP88900			
3	SP88900			

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

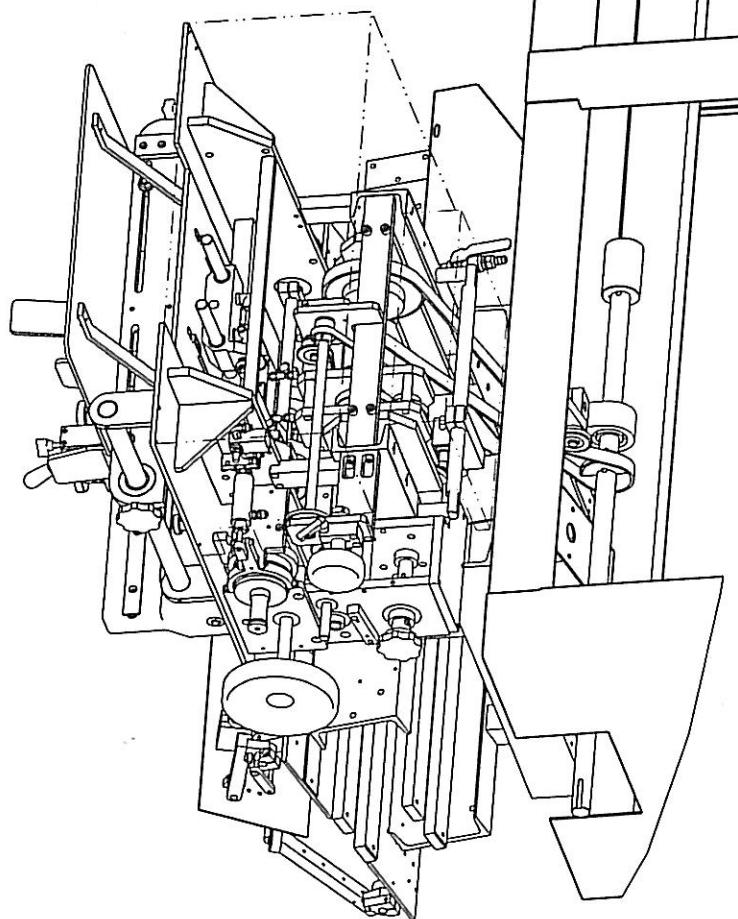
PRINT NAME PROTECTION
PROPRIETARY AND CONFIDENTIAL
ALL RIGHTS RESERVED
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BY KIRK-RUDY INC.
IN ANY FORM, WHOLLY OR PARTIALLY,
EXCEPT AS EXPRESSLY APPROVED
IN WRITING BY KIRK-RUDY INC.
KIRK-RUDY INC.
KIRK-RUDY INC.
KIRK-RUDY INC.

DATE: SP88900
TIME: 10:00 AM
JAN 1974 USA

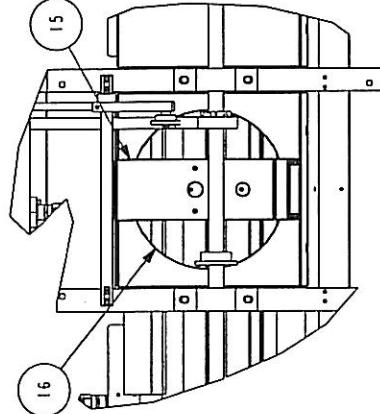
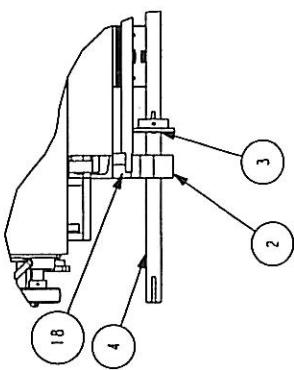
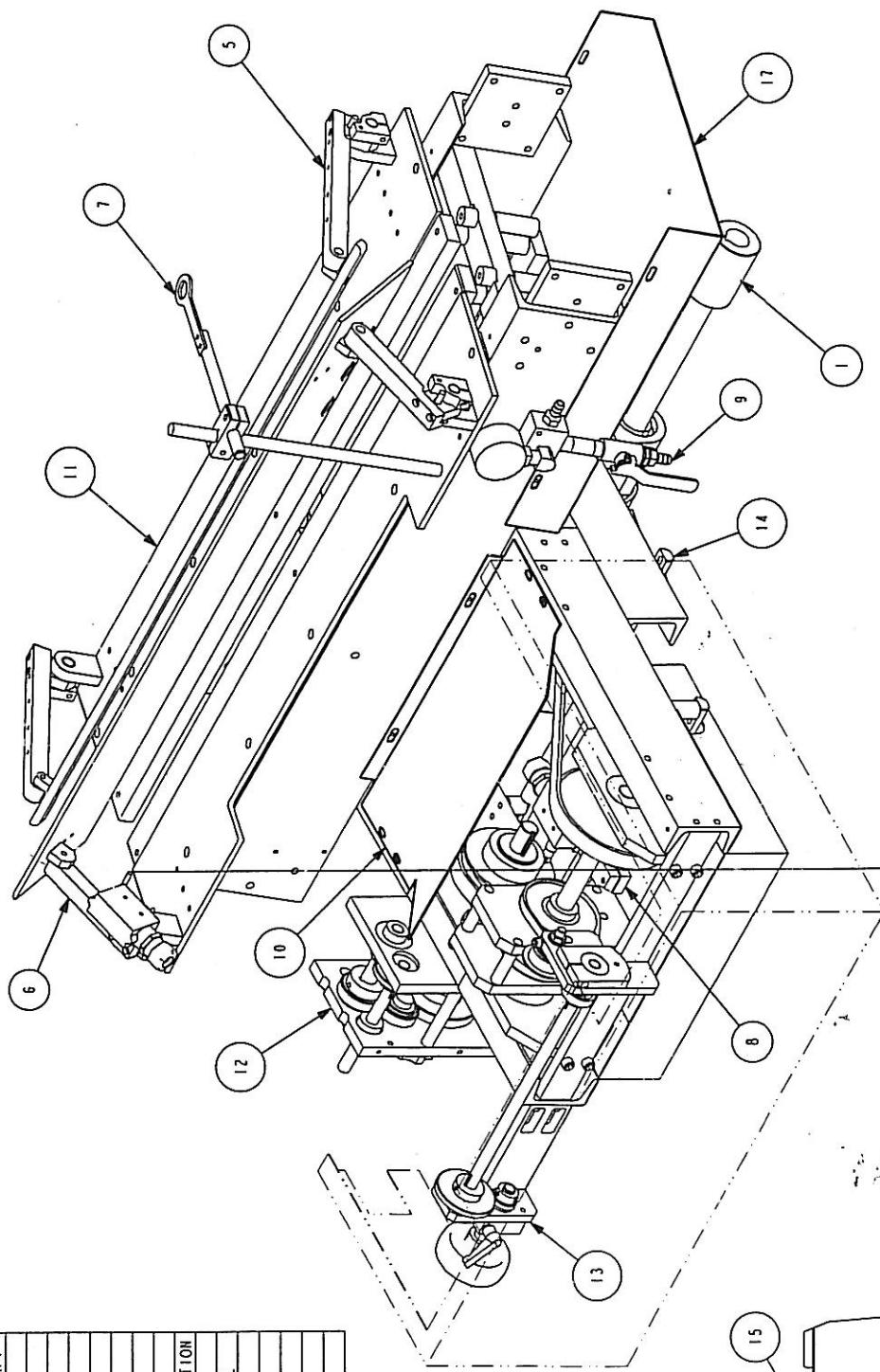
ASSY. FEEDER SECTION

Drawing # SP88900

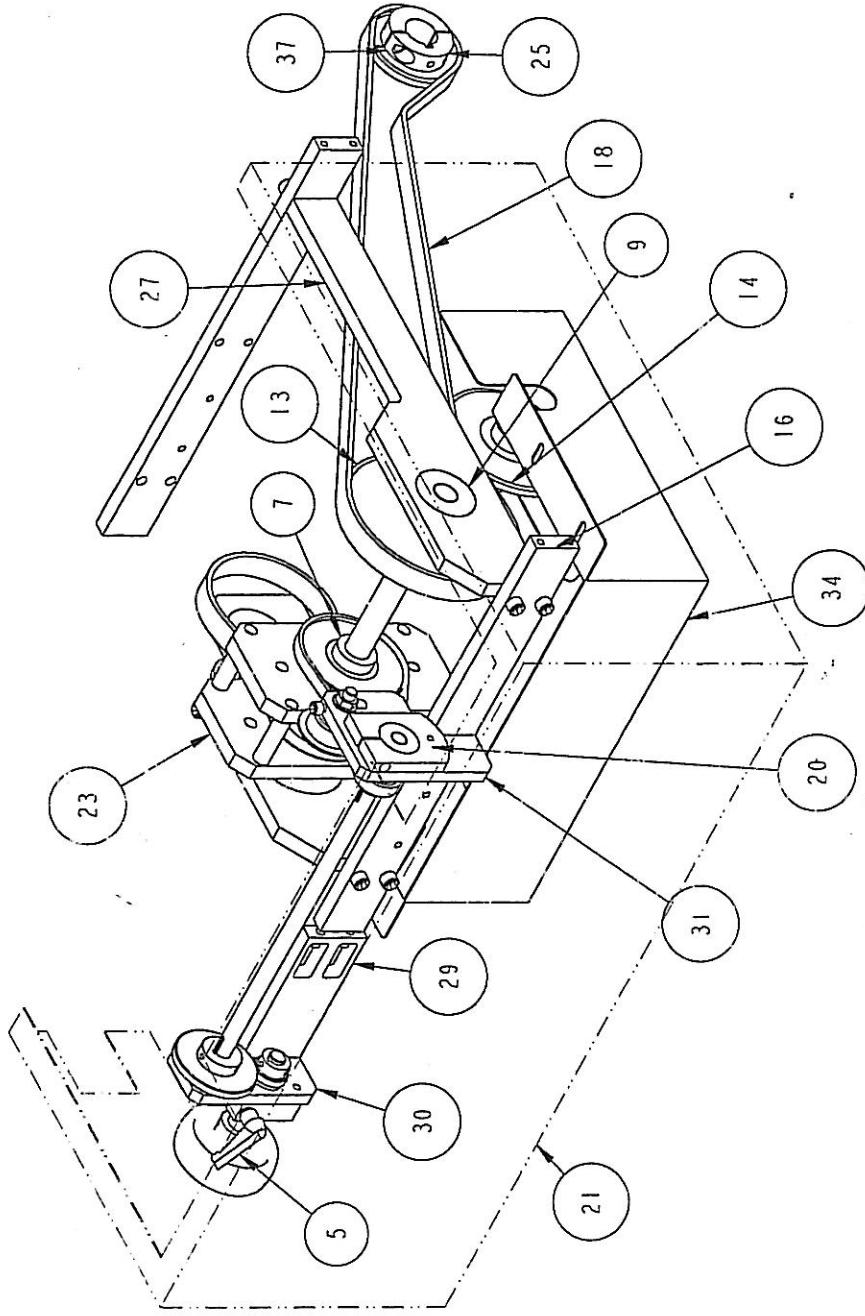
ITEM NO.	PART NO.	DESCRIPTION
1	53474-01	ASSY. 324-1 FEEDER
2	53988-01	ASSY. MODULAR STATION
3	SP34401-2	WDLMT. 99 IN INSERTER SECTION



ITEM NO	DATE	DESCRIPTION	QTY	RD
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1
1
1

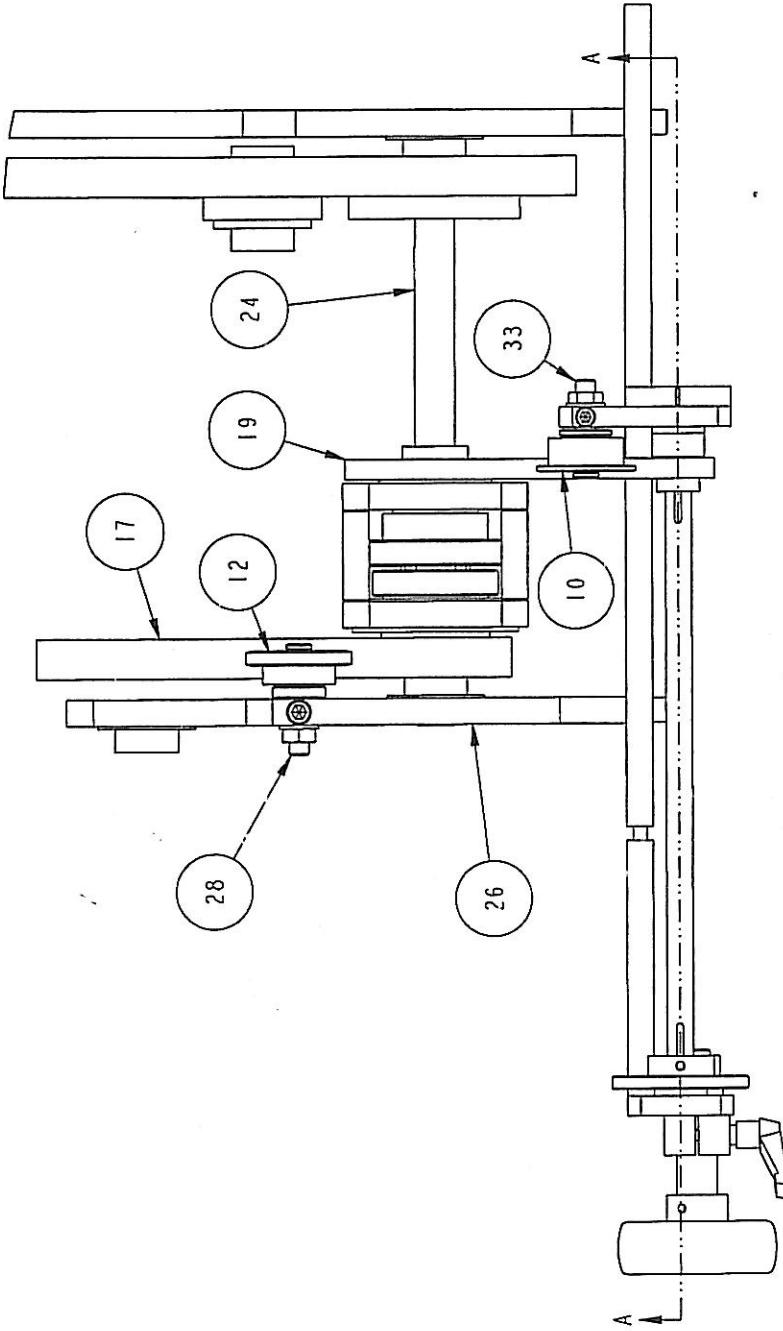


ITEM #	PART #	DESCRIPTION
1	4	BUSHING, FL. 50010D-75000D, 500LG
2	2	WASHER, THRUST T0612
3	1	101600 GEAR, 2424 .500B .125K
4	1	101610 GEAR, 2424 .500B .125K
5	1	102140 HANDLE, RELEASE 1/4-20 x .75
6	1	102205 COLLAR .500
7	1	102226 COLLAR .150
8	4	103105 BEARING, FLAT .500
9	5	103105 BEARING, HUB .750
10	1	110108 SPRAT. 250122 1.125B MK
11	1	110186 SPRAT. 25014 .500B .125K
12	1	1101449 SPRAT. 400111 1.125B MK
13	1	110842 SPRAT. 400132 .750B .183K
14	1	110870 SPRAT. 40024 1.849B MK
15	1	502815 COLLAR-BAKE ONE UP HEAD
16	2	508788 BAR-CROSS
17	1	110019-18 CHAIN .40
18	1	110019-19 CHAIN .40
19	1	110021-35 CHAIN .25
20	1	50995-2 BRAKE, FORM
21	1	526630-2 COVER, STANDARD
22	1	533006-01 THROTHEEL, W/ KR LOGO
23	1	539830-01 ASSY, DIFFERENTIAL
24	1	539832-01 SPRAT, DIFFERENTIAL
25	1	539839-01 SPRAT, ADJUST L.D. BORE SP1 W KEY
26	1	539841-01 PLATE, BEARING
27	1	539842-01 PLATE, BEARING
28	1	539845-01 STUD, CHAIN TAKEUP
29	1	539846-01 PLATE, KNOB SPACER
30	1	539847-01 PLATE, KNOB MOUNT
31	1	539848-01 PLATE, KNOB MOUNT
32	1	539849-01 SHAFT, KNOB MOUNT
33	1	539852-01 STUD, CHAIN TAKEUP
34	1	539853-01 COVER, DRIVE BOTTOM
35	1	539948-01 BLOCK, KNOB LOCK
36	1	539949-01 SHAFT, ADJUSTMENT GEAR
37	2	CSD0207 SCREW, SHCS 6-32X 1.88
38	2	CSD0292 SCREW, SHCS 1/4-20X .500
39	2	CSD0296 SCREW, SHCS 1/4-20X 1.000
40	7	CSD0319 SCREW, SHCS 5/16-18X .625
41	1	HJN012 HOLT, JAW 3/8-16
42	1	HASH14 HOLT, HEX 3/8-16

539837-01

ITEM NO.	PART #	DESCRIPTION	REV	DATE	EXPIRATION	ECN	IN
----------	--------	-------------	-----	------	------------	-----	----

1	400552	BUSHING, FL.50ID.75OD.50OLG					
2	100402	WASHER, THRUST TB612					
3	101600	GEAR, 2460 .500B .125K					
4	101610	GEAR, 2424 .500B .125K					
5	102140	HANDLE, RELEASE 174-20 X .15					
6	102205	COLLAR .500					
7	102226	COLLAR .750					
8	03108	BEARING, FLAT .500					
9	103805	BEARING, HUB .750					
10	110108	SPRKIT, 25B22 1.125B HK					
11	110186	SPRKIT, 25B14 .500B .125K					
12	110449	SPRKIT, 40B11 1.125B HK					
13	110842	SPRKIT, 40B32 .750B .188K					
14	110870	SPRKIT, 40B24 1.849B HK					
15	1502815	COLLAR-BAKE ONE UP HEAD					
16	2508768	BAR-CROSS					
17	110019-18	CHAIN, 40					
18	110019-19	CHAIN, 40					
19	110021-15	CHAIN, 25					
20	1500935-2	BRAKE, FORN					
21	1526630-2	COVER, STANDARD					
22	1533006-01	HANDWHEEL, W/ KR LOGO					
23	1539830-01	ASSY. DIFFERENTIAL					
24	1539838-01	SHAFT, DIFFERENTIAL					
25	1539839-01	SPRKIT, 40B16 1.0 BORE SPIT W/ KEY					
26	1539841-01	PLATE, BEARING					
27	1539842-01	PLATE, BEARING					
28	1539845-01	STUD, CHAIN TAKEUP					
29	1539846-01	PLATE, KNOB SPACER					
30	1539847-01	PLATE, KNOB MOUNT					
31	1539848-01	PLATE, KNOB MOUNT					
32	1539849-01	SHAFT, KNOB MOUNT					
33	1539850-01	STUD, CHAIN TAKEUP					
34	1539851-01	COVER, DRIVE BOTTOM					
35	1539946-01	BLOCK, KNOB LOCK					
36	1539949-01	SHAFT, ADJUSTMENT GEAR					
37	2CS00207	SCREW, SHCS 6-32X .160					
38	1CS00292	SCREW, SHCS 1/4-20X .500					
39	2CS00236	SCREW, SHCS 1/4-20X .000					
40	7CS00319	SCREW, SHCS 5/16-18X .625					
41	1HJ012	NUT, JAW 3/8-16					
42	1HRSH14	NUT, HEX 3/8-16					



DRAWING NO.		SCALE		DIMENSIONAL TOLERANCES		MATERIAL		TOLERANCE INDICATION		DRAWING AND SPECIFICATION	
EXTRACTED BY:	DATE:	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
07-Feb-01		.40	10.16	.000	0.000	N/A	N/A	N/A	N/A	KIRK - RUDY, INC.	KENNESAW, GEORGIA
M										SP88900	KIT, 324-1 FEEDER DIFFERENTIAL

REVISED
BY
DATE
RELEASER
RELEASING
DATE
RELEASER
RELEASING DATE

539837-01

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECH NO	BY
1	100610	WASHER, FLAT 1/2ID 1/32TK					
2	100611	WASHER, FLAT 1/2ID 1/16TK					
3	102205	COLLAR .500					
4	2 103112	BEARING, FLAT .750					
5	4 502255	SPACER, GEAR COVER					
6	1 539831-01	ASSY, PULLEY AND GEAR					
7	1 539992-01	GEAR, 1648 .750B .188K HARDENED					
8	1 SP30706	SHAFT, IDLER GEAR					
9	1 SP30707	PLATE, ROTARY GEAR					
10	1 SP30708	PLATE, GEAR					
11	1 SP30710	SPROCKET, 25B40					
12	1 SP30719-A	ASSY, GEAR DIFFER. WITH BEARINGS					

SECTION A-A
SCALE 0.750

5 SP88900
RED WHERE USED

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.
KENNESAW, GA 30144 USA.

KIRK - RUDY INC.
KENNESAW, GEORGIA

ASSY, DIFFERENTIAL

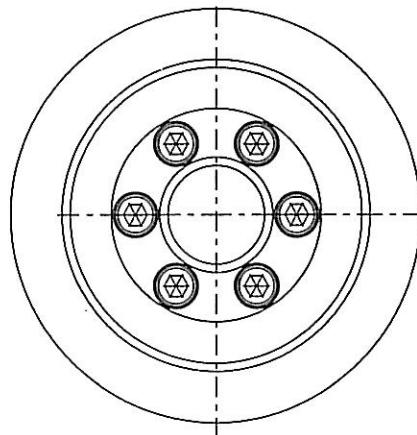
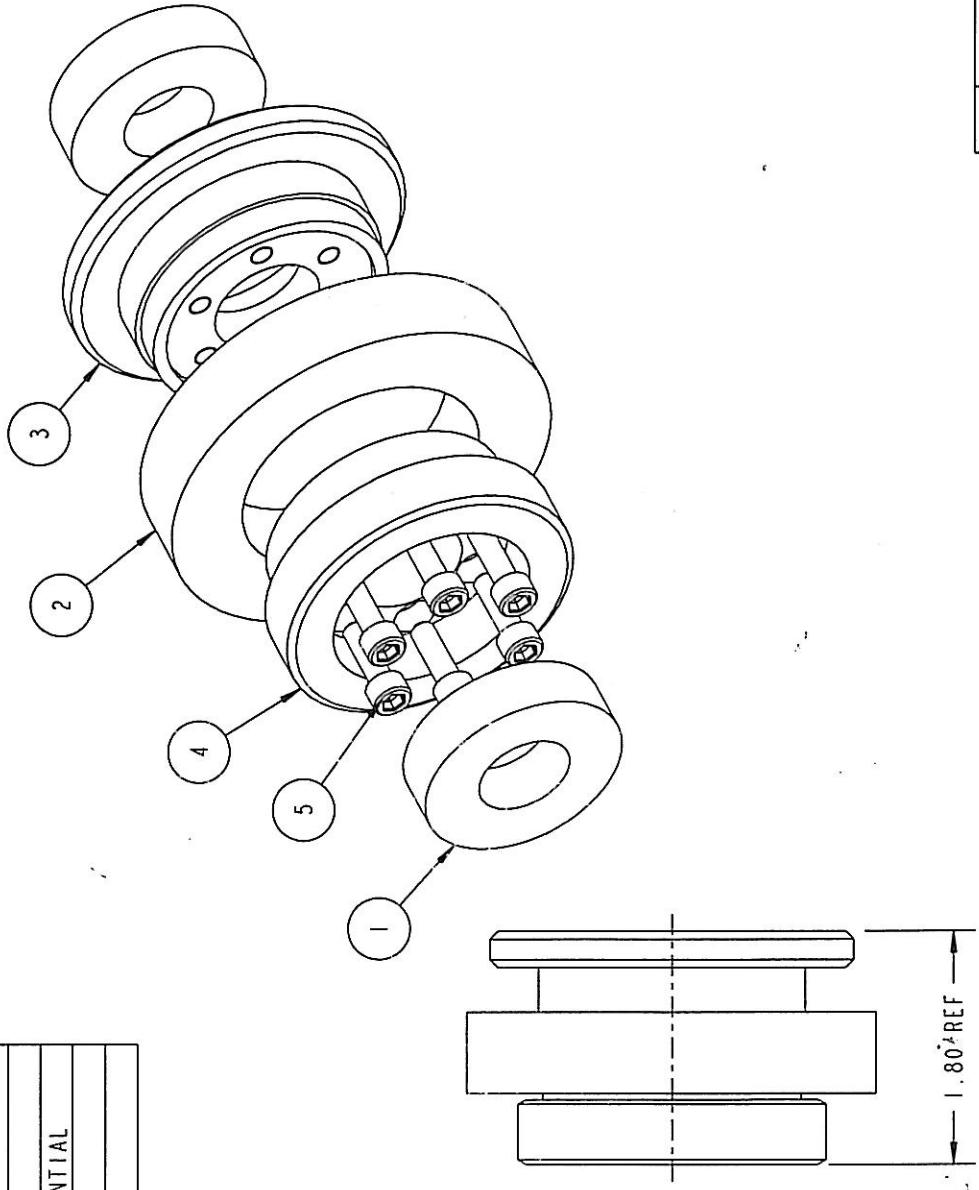
SP88900
DRAWING #
SHEET NO. 0F 1

DRAWN BY: A KEY	SCALE: 0 .625	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		MATERIAL: N/A	THIRD ANGLE PROJECTION	NOTE: SP88900
CHECKED BY:	DATE: 20-Feb-01	.01	.005	HEAT TREAT: N/A		TITLE:
TRACED BY:	MASTER			FINISH: N/A		

REMOVE ALL BURRS AND
SHARP EDGES UNLESS
OTHERWISE NOTED
ALL DIMENSIONS ARE
FINISHED DIMENSIONS
DO NOT SCALE - WORK
TO DIMENSIONS ONLY

539830-01

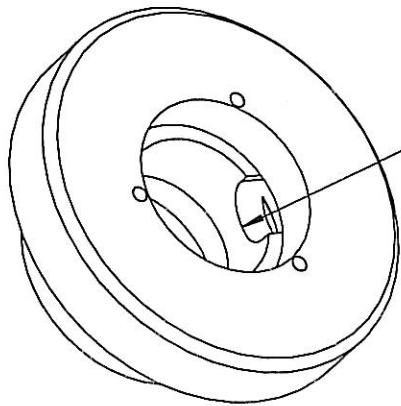
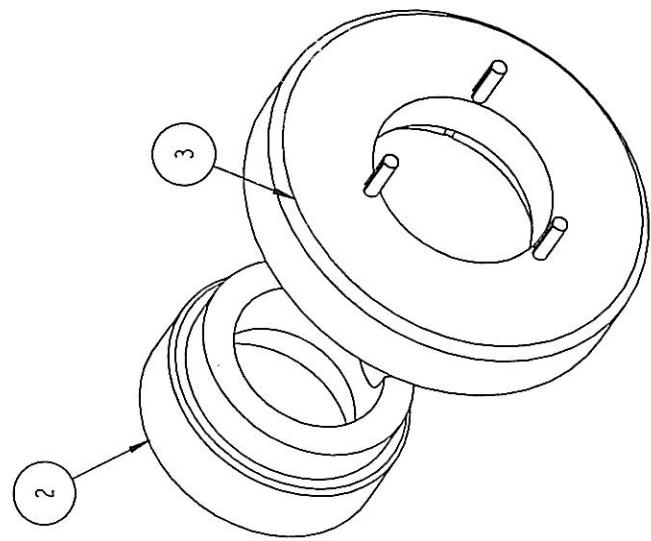
ITEM QTY	PART #	DESCRIPTION
1 2	103112	BEARING, FLAT .750
2 1	103128	BEARING, FLAT 1.968
3 1	5399832-01	SPROCKET, 40B16 DIFFERENTIAL
4 1	539983-01	GEAR, 1636
5 6	CSDD266	



DRAWN BY:	A KEY	SCALE	0 . 750	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	MATERIAL:	N / A	THIRD ANGLE PROJECTION +---+ +---+-----+ +---+-----+	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE COPIED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNESAW, GA 30144 USA	RECD. WHERE USED
CHECKED BY:		DATE	19 - Feb - 01	.01 .015 .065 .5	HEAT TREAT:	N / A	NOTE(S): SP 88900	TITLE: ASSY, PULLEY AND GEAR	
TRACED BY:	MASTER			REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED	FINISH:	N / A	SHEET NO. 10F	DRAWING #	

ITEM QTY	PART #	DESCRIPTION
1	3	105204 PIN, ROLL .094X.625
2	1	SP30732 GEAR, 1624
3	1	SP30719-1 GEAR, 1636

REV NO	DATE	DESCRIPTION	ECN NO	BT
1	28-OCT-98	REDRAWN IN PRO/E	6254	NY



WELD. MAKE SURE CONTACT IS MADE WITH BOTH PARTS. REMOVE EXCESS WELD. LATHE.

NOTE:

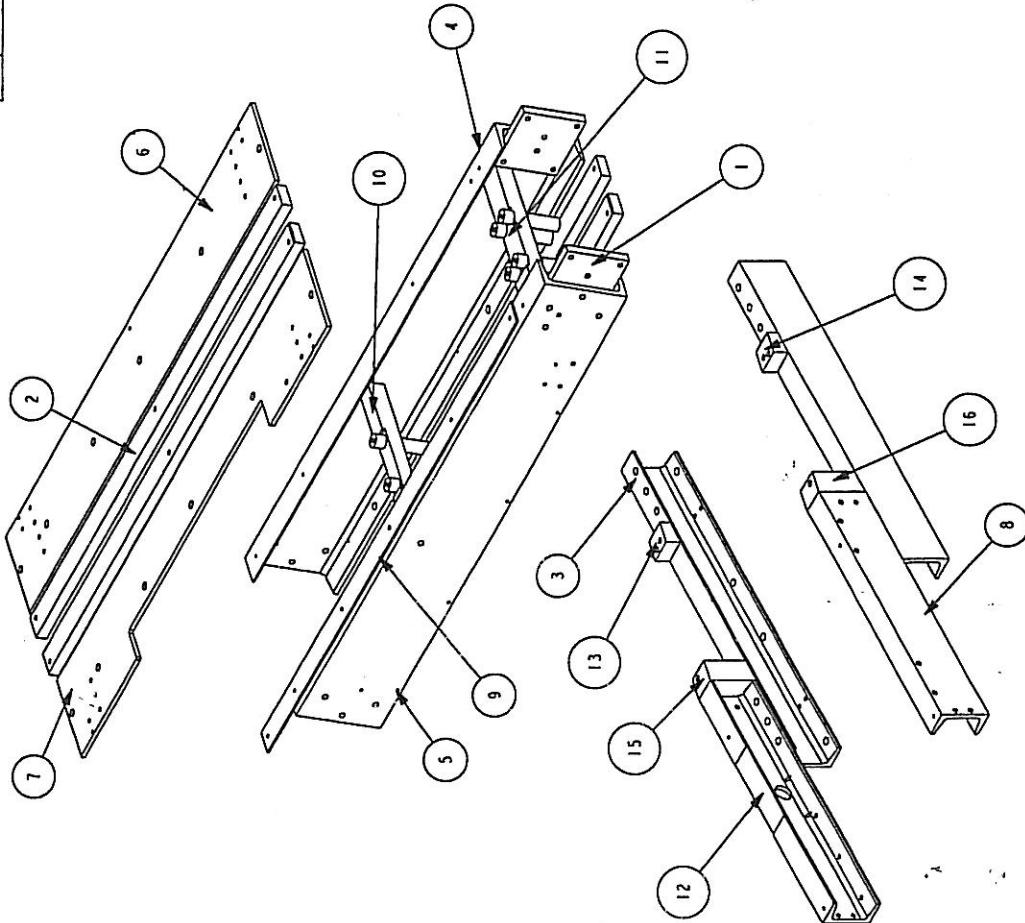
1. PRESS FIT TWO PARTS TOGETHER. NOTE POSITION OF SLOT ON SP30732 TO (3) HOLE LOCATION.
2. DRILL .093 X .625 DP FOR ROLL PIN.
3. WELD ASSY IN MACHINED SLOT. MAKE SURE CONTACT IS MADE BETWEEN TWO PARTS.
4. HEAT TREAT - FLAME HARDEN TEETH 55-60 Rc.
5. BLACK OXIDE

1	SP30700
REQ'D	WHERE USED

KRK KIRK - RUDY, INC.
KENNESAW, GEORGIA

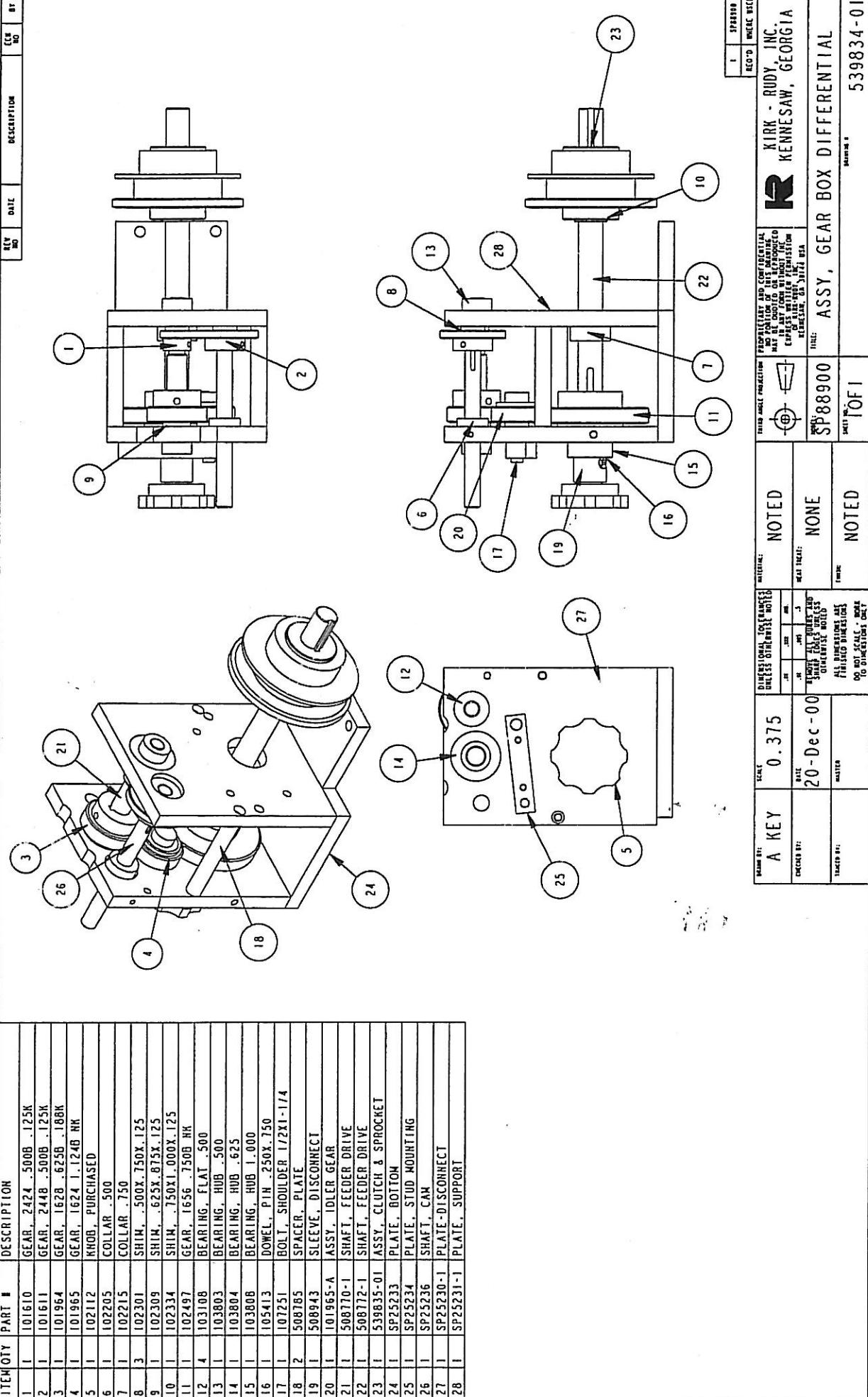
DRAWN BY:	SCALE	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	MATERIAL: NOTED	THIRD ANGLE PROJECTION	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNESAW, GA 30144 USA
MWM	1 . 000	.005 .005 .005	HEAT TREAT: REMOVAL ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED		
CHECKED BY:	DATE		SEE NOTE	MODEL: 215	NAME: WLDMNT, GEAR DIFFERENTIAL
TRACED BY:	MASTER		FINISH: BLACK OXIDE	SHEET NO. 1 OF 1	DRAWING # SP 30719

ITEM QTY	PART #	DESCRIPTION
1	2	PLATE, CONNECTING
2	4	TRACK, FLIGHT 33 LH
3	2	508603-1 CHANNEL
4	1	508701-L CHANNEL, LH
5	1	508701-R CHANNEL, RH
6	1	508711-4L TOP, TABLE LH
7	1	508711-4R TOP, TABLE
8	1	508903-3 CHANNEL, UPPER CROSS
9	1	53010-01 SPACER, TABLETOP
10	1	53546-01 ASSY, FRAME SPACER
11	1	53547-01 ASSY, FRAME SPACER
12	1	SP23201 CHANNEL, UPPER CROSS
13	1	SP6301-L SUPPORT, CHANNEL LH
14	1	SP6301-R SUPPORT, CHANNEL RH
15	1	SP6301-L SUPPORT, CHANNEL LH
16	1	SP6301-R SUPPORT, CHANNEL RH

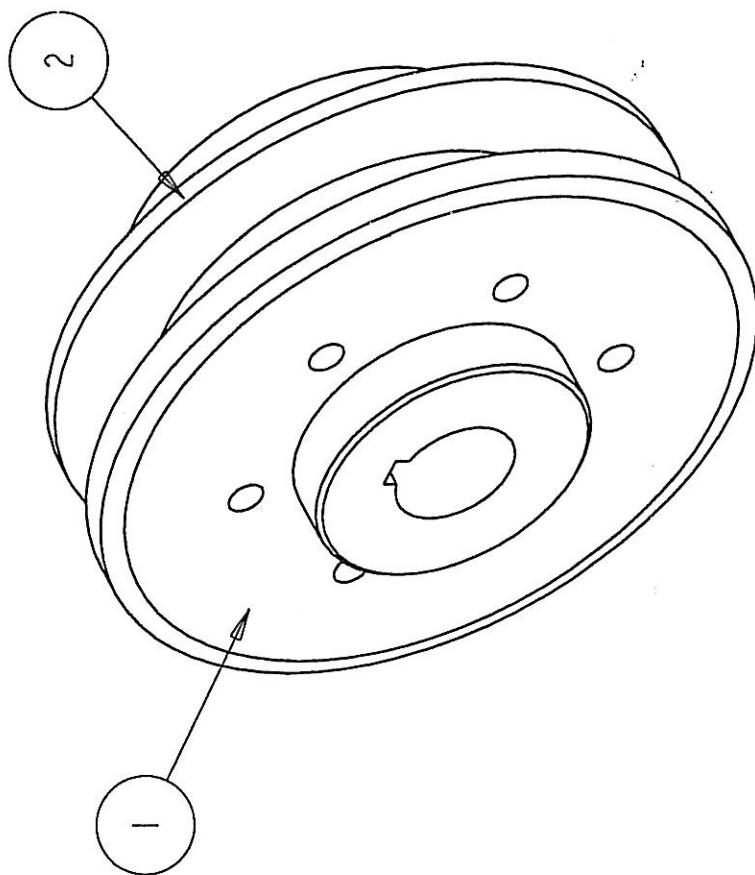


ITEM NO.	REV NO.	DATE	DESCRIPTION	QTY	BY
1			SPRING	1	
2			PLATE, CONNECTING	2	KODAK
3			CHANNEL, FLIGHT 33 LH	2	PRINTED
4			CHANNEL, LH	1	
5			CHANNEL, RH	1	
6			TOP, TABLE LH	1	
7			TOP, TABLE	1	
8			CHANNEL, UPPER CROSS	1	
9			SPACER, TABLETOP	1	
10			ASSY, FRAME SPACER	1	
11			ASSY, FRAME SPACER	1	
12			CHANNEL, UPPER CROSS	1	
13			SUPPORT, CHANNEL LH	1	
14			SUPPORT, CHANNEL RH	1	
15			SUPPORT, CHANNEL LH	1	
16			SUPPORT, CHANNEL RH	1	

DRAWING NUMBER:		DIMENSIONAL ORIGINATES FROM:		MATERIAL:	
ITEM NO.:		.12	.06	N/A	
SCALE:		.12	.06	N/A	
CHANGER #::		20 - Dec - 00		N/A	
TRACER #::				N/A	
PRINTED BY:		SHEET NO.:		TOTAL NO. OF SHEETS:	
KIRK - RUDY, INC.		1		10F 1	
KENNESAW, GEORGIA					
KIRK - RUDY, INC.		SP88900 ASSY, CHNL FRAMES MODULAR STATION			
KENNESAW, GEORGIA					
PRINTED BY:		539829-01			
KIRK - RUDY, INC.					
KENNESAW, GEORGIA					



ITEM QTY	PART #	DESCRIPTION
1	11111	SPRKT, 40A24 1.7328B
2	104039-2	CLUTCH, MAYR SIZE 1

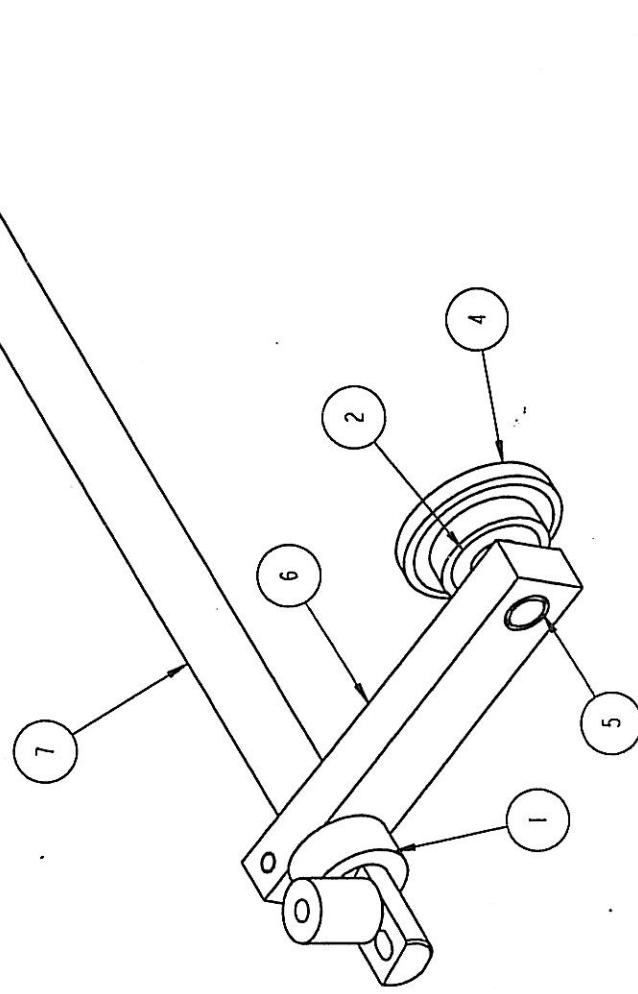


REV NO	DATE	DESCRIPTION	EACH NO	BY

I	SP88900
RECD	WHERE USED

DRAWN BY: A KEY	SCALE 1 .000	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	NOTED	HEAT TREAT:	THIRD ANGLE PROJECTION	KIRK - RUDY, INC.
						KENNESEAW, GEORGIA
CHECKED BY:	DATE 20 - Dec - 00			NONE	MODEL: SP 88900	ASSY, CLUTCH & SPROCKET
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED			PRINT: SHEET NO. 1 OF 1	DRAWING # 539835-01
		ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY				

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECH NO	BY
1	1	102215 COLLAR .750					
2	2	103108 BEARING, FLAT .500					
3	1	104106 SPRING, .500					
4	1	110449 SPRKT, 40B11 1.125B NK					
5	1	508540 STUD					
6	1	508684 ARM, TAKE UP					
7	1	508781 SHAFT, TAKE UP					
8	2	530712-01 SPACER					



DRAWN BY:	SCALE	0 . 500	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	MATERIAL: N / A	THIRD ANGLE PROJECTION	KIRK - RUDY, INC. KENNESAW, GEORGIA
CHECKED BY:	DATE	.11	.01 .005 .005	ANG. .5	HEAT TREAT:	SP 88900
TRACED BY:	MASTER	20 - Dec - 00		N / A	FINISH:	ASSY, TAKE UP
				N / A	STRETCH:	1 OF 1
					REMOVED ALL BURRS AND SHARP EDGES, UNLESS OTHERWISE NOTED	539840-01
					ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE DRAWINGS TO OTHER DIMENSIONS ONLY	

4 NOTES

5 WARRANTY AND SERVICE

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.
2700 Kennesaw Due West Road
Kennesaw, GA 30144