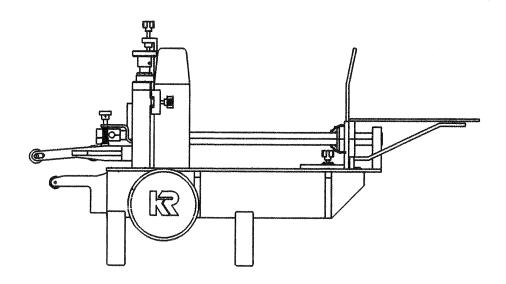


## KIRK - RUDY, INCORPORATED

## MODEL # 324-1 SHUTTLE FEEDER PARTS MANUAL ISSUE #1



KIRK-RUDY, INC. 2700 DUE WEST DRIVE KENNESAW, GEORGIA USA 30144-3588

PHONE: 770-427-4203
PARTS ORDER FAX: 770-427-4036



Kirk - Rudy, Inc.
DESIGNING ENGINEERS AND MANUFACTURERS

SPECIALISTS IN

PAPER HANDLING EQUIPMENT

PHONE (404) 427-4203

2700 DUE WEST DRIVE • KENNESAW, GEORGIA 30144 • FACSIMILE (404) 427-4036

## ACCIDENT PREVENTION GUIDE

- 1. Never operate the machine without all guards in place.
- 2. Never start the machine without first checking all personnel are clear of moving parts.
- 3. Keep fingers clear of all moving parts.
- 4. Never remove the product from the machine while the machine is running.
- 5. 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.
- 6. It is not recommended for loose clothing, jewelry, and long hair be worn while operating this machinery.
- 7. Always use an experienced electrician when trouble-shooting electrical problems.

11/05/92

ITEM	QTY	PART ID NUMBER	DESCRIPTION
1	00001	508700	PLATE-RH FEEDER
2	00001	508604	PLATE-LH FEEDER
3	00001	5Ø8766	BAR-CROSS
4	00003	500721	BRACKET-SUPPORT
5	00002	500714	BRIDGE-REAR GUIDE
6	00001	500824	SHAFT-BELT GUIDE
7	00001	500785	BLOCK-SPRING
8	00001	500786	LEVER-SPRING
9	00001	50071 0-1	BRACKET-FEEDER SUP.
1 Ø	00001	500735	ROD-PUSH
1 1	00001	500769	SHAFT-REAR GUIDE
12	00001	500770	HUB-REAR GUIDE SHFT
13	00001	500750	CRANK-FEEDER
1 4	00002	500768	BRACKET-REAR GUIDE
15	00002	500737	WASHER-BUMPER
16	00002	500771	CLIP-REAR GUIDE
1 7	00001	500751	YOKE-FEEDER CRANK
18	00002	500755	CLAMP-SI DEGUI DE
19	00002	500746	ROLLER-BOTTOM FEED
20	00001	500734	LEVER-CAM
21	00001	500749	ROD-FEEDER SLIDE
22	00001	500718	HUB-SHAFT BEARING
23	00001	500729	CRADLE-FEEDER
24	00001	500797	SHAFT-P.C. HOLDER
25	00001	102200	COLLAR
26	00001	500744-2	SHAFT-TOP ROLLER
27	00001	500744-3	SHAFT-TOP ROLLER
28	00001	500744-4	SHAFT-TOP ROLLER
29	00002	1 Ø52 Ø4	ROLL PIN
3Ø	00001	500796	BRACKET-PHOTO CELL
31	00001	500715	PLATE-REAR GUIDE
32	00001	500810	SHAFT-SCREW ADJ.
33	00001	500806	PLATE-GATE END
34	00002	500807	NUT-LOCK
35	00024	1 Ø 31 Ø 6	FLAT BRG-R6
36	00001	500808-1	PLATE-TOP BRIDGE
37	00001	500795-1	PLATE-BRI DGE
38	00002	500788	PLATE-SI DEGUI DE
39	00001	500733	HUB-ROLLER DRIVE
40	00001	500728	BRACKET-FEEDER
41	00001	500747	CAM-FEED ROLLER
42	00002	500847	BRACE-FORM REST

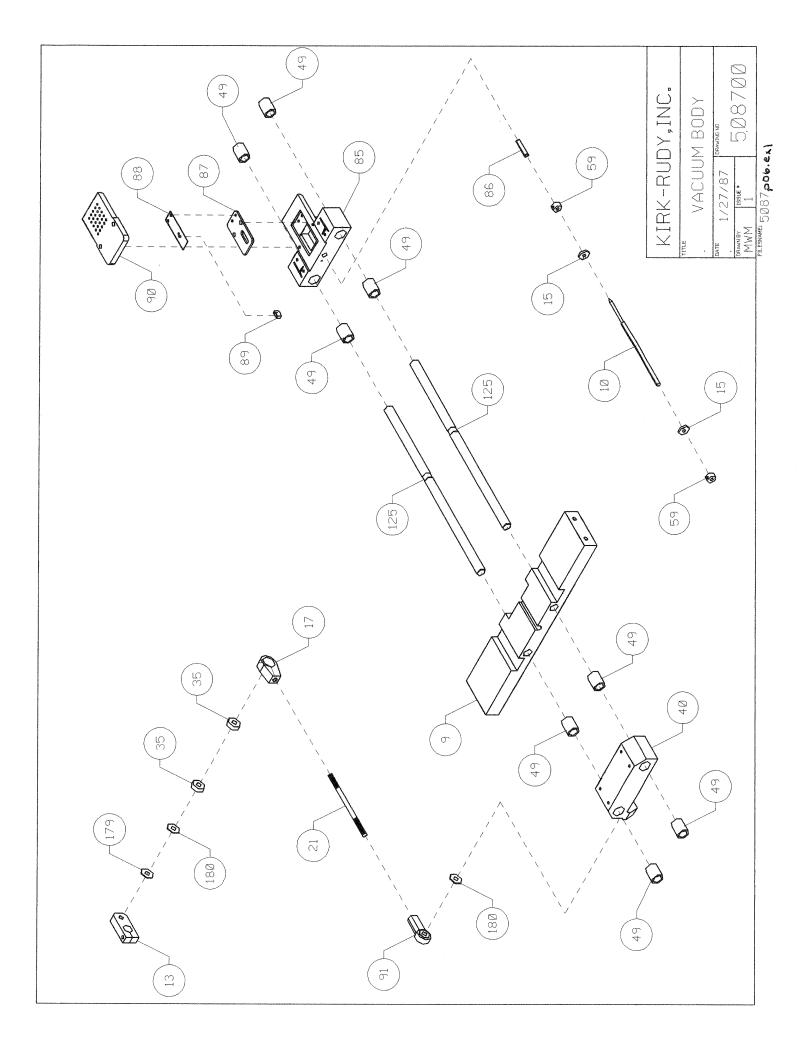
ITEM	QTY	PART ID NUMBER	DESCRIPTION 2
43	00001	500860	LEG-JOGGER TABLE
44	00001	500827	SHAFT-SPRING LEVER
45	00002	500814	RAI L-SI DEGUI DE
46	00002	500812	KNOB-ROLLER
47	00001	500845	TABLE-JOGGER
48	00001	1 001 09	BUSHI NG-P1 Ø2-12
49	00008	1 001 45	BUSHING-P 63-8
50	00001	1 Ø56Ø1	SHAFT-THREADED
51	00002	1 05600	SHAFT-THREADED
52	00004	1 Ø 2 1 1 9	KNOB
53	00001	1 Ø 21 1 2	KNOB
54	00005	1 Ø38Ø4	ASS 202-010N
55	00003	1 Ø381 7	ER-10
56	00009	1 Ø2657	SPACER
57	00002	1 02320	SPACER
58	00001	1 Ø2671	SPACER
59	00003	1 Ø2225	SPACER
6Ø	00001	500880	BRACKET-JOG TBL SUP
61	00001	500878	SUPPORT-JOGGER TABLE
62	00001	508865	SHAFT-FEED ROLLER
63	00005	1 Ø 3 1 1 Ø	FLAT BRG-A10
64	00001	508645	PAWL
65	00004	508937	BLOCK-BEARING
66	00002	508751	PLATE-SWING
67	00002	508752	GUI DE-BELT
68	00002	508839	SPACER-NEEDLE BLOCK
69	00004	508854	ARM-NEEDLE BLOCK
7Ø	00001	508703	PLATE-FEEDER
71	00004	508741	LEG-FEEDER
72	00002	508759	SCREW
73	00002	508750	BAR-SPRI NG
74	00004	508761 - 2	ROLLER-TAKE UP
75	00001	508763	ROLLER-I DLER
76	00002	508753	ROLLER-BELT
77	00001	508721	PLATE-BEARING
78	00001	508721 - 1	PLATE-BEARING
79	00001	50861 4	PLATE-SI DE
8Ø	00002	508728	BLOCK-NEEDLE SUPPORT
81	00002	508628	BLOCK-NEEDLE
82	00002	1 Ø26Ø1	SPRING
83	00008	1 Ø541 9	PIN-DOWEL
84	00012	1 90656	NEEDLE

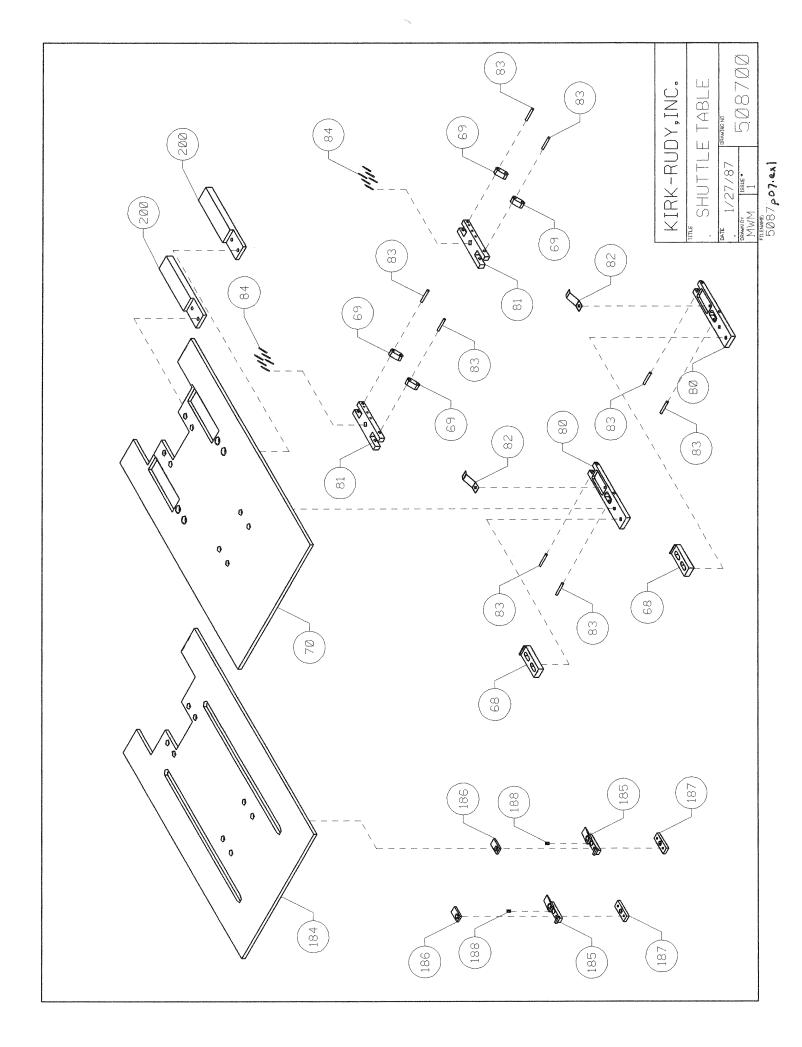
I TEM 85 86	QTY 00001 00001	PART ID NUMBER 500708 100131	DESCRIPTION BODY-VACUUM VALVE BUSHING-P26 10
87	00001	500740	PLATE-VACUUM
88	00001	500738	SPRING-VALVE
89	00001	500739	BLOCK-PUSHER
9Ø	00001	500709	PLATE-VACUUM
91	00001	1 03500	BEARING-ROD END
92	00001	508719	PLATE-SOLENOID
93	00002	1 0031 0	BUSHI NG-FL26-3
94	00001	508718	YOKE-THROW OUT
95	00001	SP1 21 99	PIN-YOKE PIVOT
96	00002	1 Ø 41 Ø 7	RING-EXT. RETAINING
97	00001	508704 LH	TOP-FEEDER TABLE
98	00001	508704 RH	TOP-FEEDER TABLE
99	00001	1 0 2 6 7 2	SPACER
100	00003	1 0 2 6 7 0	SPACER
1 Ø1	00002	1 03408	FOLLOWER-CAM
102	00001	1 03405	CAM FOLLOWER
103	00001	501 638	SHAFT-FEEDER ROLL
104	00001	508637	SHAFT-CRANK
1 Ø5	00001	508648	SHAFT-HANDWHEEL
106	00001	1 Ø21 Ø8	HANDWHEEL
107	00002	501 040	WASHER
108	00001	500955	LINK-THROW OUT
109	00001	202200	SOLENOID-813 103
110	00001	508720	CLUTCH-SHUTTLE DRIVE
1 1 1	00002	1 0 4 1 0 4	RING-EXT. RETAINING
112	00001	508624	HUB-CLUTCH
113	00001	1 001 46	BUSHING-P66 8
114	00002	1 Ø1 91 8	GEAR-1648
115	00001	1 Ø1 988	GEAR-1654
116	00001	1 Ø1 946	GEAR-1626
117	00002	1 Ø1 91 6	GEAR-1628
118	00001	1 02401	GEAR-1616
119	00001	1 Ø1 962	GEAR-162Ø
120	00001	508747	GEAR-1633
1 21	00001	508755	BLOCK-BEARING
122	00006	1 Ø31 Ø8	FLAT BRG-R8
123	00001	1 Ø56Ø8	SHAFT-THREADED
124	00002	508746	ROLLER-UPPER FEED
1 25	00002	500741	SHAFT-FEEDER
1 26	00002	500809	SLEEVE-TOP ROLLER

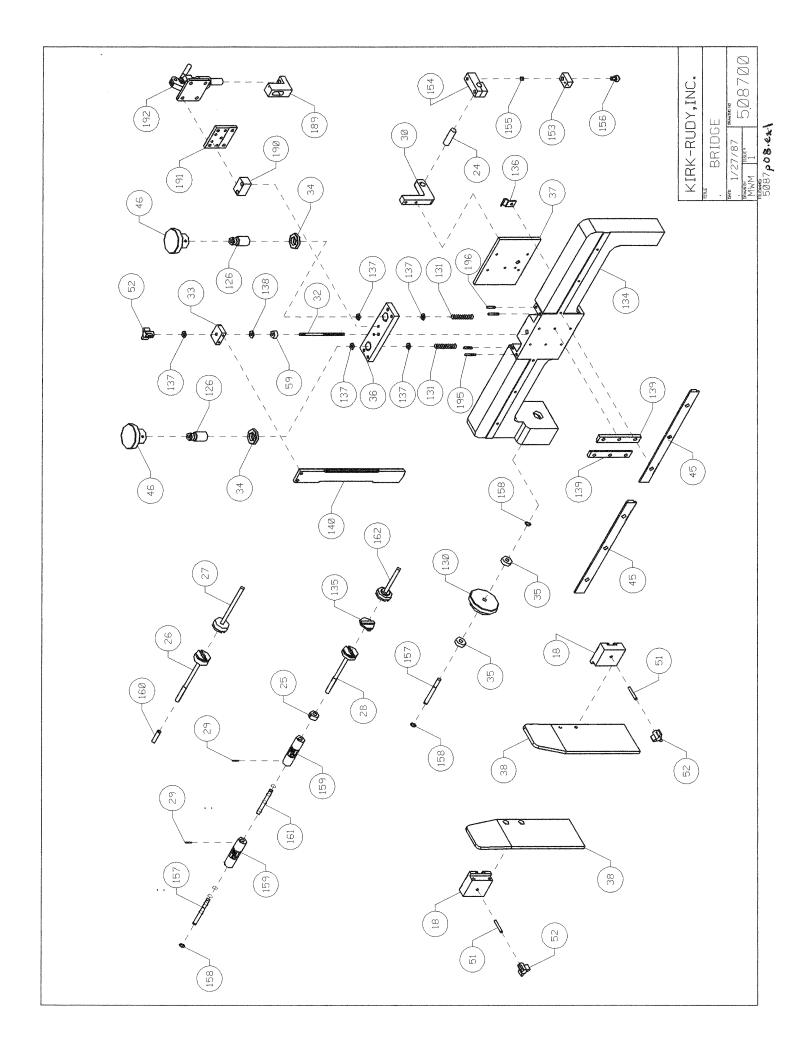
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127	00001	508682	STUD-IDLER
128	00005	1 Ø 41 Ø 6	RING-EXT. RETAINING
129	00001	1 Ø1 7Ø8	GEAR-2072
130	00001	1 Ø1 7Ø7	GEAR-2048
1 31	00003	1 02701	SPRI NG
132	00002	1 Ø2723	SPRI NG
133	00001	1 Ø2722	SPRI NG
134	00001	500704	BRI DGE-FEEDER
135	00001	1 90600	SPI DER-DRI VE
136	00005	1 9Ø61 2	CLIP-WIRE
137	00001	1 00409	WASHER
138	00001	1 00 4 0 1	WASHER
139	00002	500805	PLATE-HOLD DOWN
140	00001	500730	PLATE-GATE FEEDER
1 41	00002	508989	BRACKET-ARM
142	00001	5Ø8875	HOLDER-LI GHT
143	00002	508748	MOUNT-ROLLER
144	00002	1 Ø1 1 ØØ	BEARING-ONE WAY
1 45	00002	SP63Ø7-1	PLATE-INSIDE SWING
1 46	00002	5Ø8754	GUSSET
1 47	00002	500811-2	FORK-TOP ROLLER
148	00002	5Ø8722	PLATE-INSIDE SWING
149	00002	508723	PLATE-BELT SUPPORT
150	00001	5Ø8763-2	ROLLER-I DLER
1 51	00001	5Ø8765	SHAFT-ROLLER
152	00001	51 2303	SHAFT-ROLLER
153	00001	500799	CLAMP-PHOTO CELL
154	00001	500798	HOLDER-PHOTO CELL
1 55	00001	1 90229	CELL-PHOTO EYE
156	00001	1 90246	LENS
157	00001	500830	SHAFT-DRI VE
158	00006	1 0 4 1 0 0	RI NG-EXTERNAL
159	00002	1 00800-1	JOINT-UNI VERSAL
160	00001	500803-1	SHAFT-UNI VERSAL
161	00001	500803	SHAFT-UNI VERSAL
162	00001	500744-1	SHAFT-TOP ROLLER
163	00001	1 0 2 4 9 4	GEAR-1656
164	00001	508756-1	SHAFT-BELT DRIVE
165	00001	508756-2	SHAFT-LOWER BELT
166	00001	500748-1	SHAFT-FEED ROLLER
167	00004	508762	STUD-TAKE UP
168	00001	508637-1	SHAFT-FEEDER

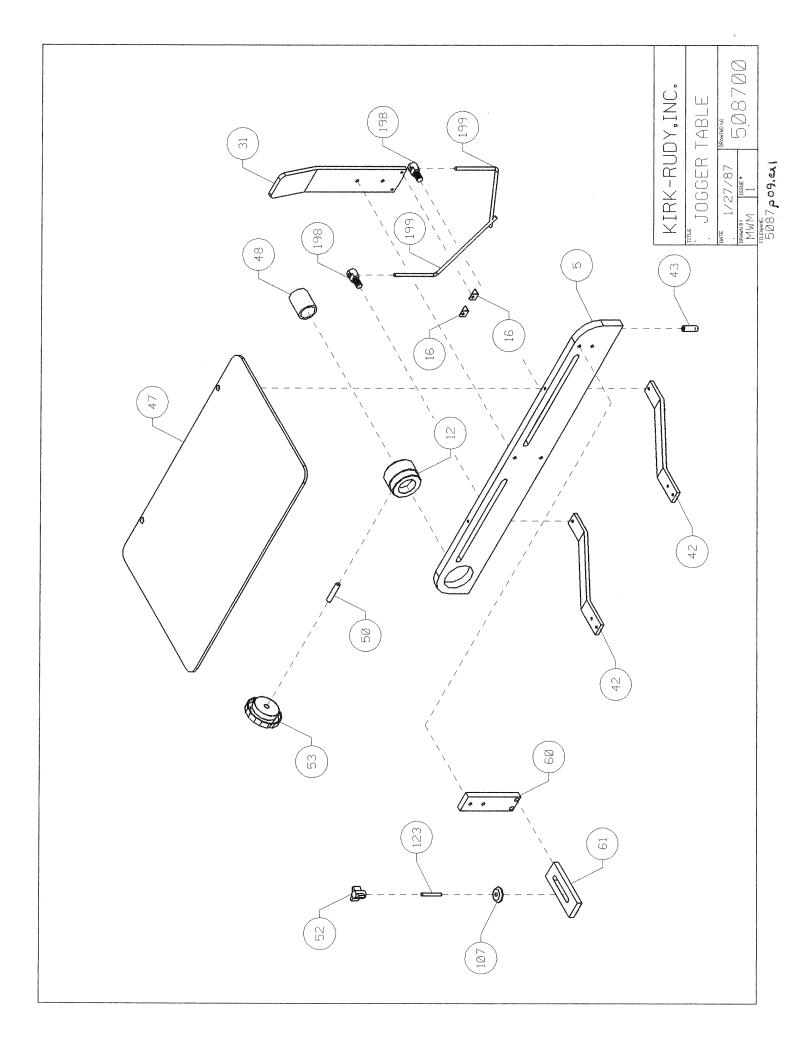
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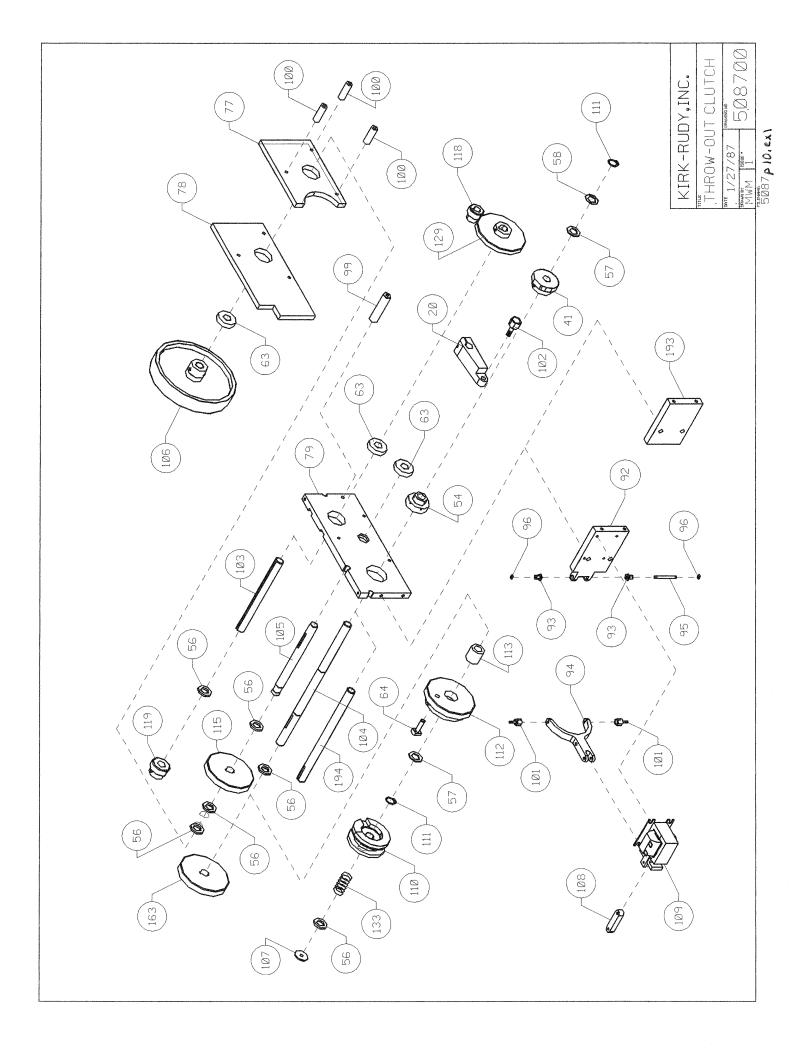
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ITEM	QTY	PART ID NUMBER	DESCRIPTION
169	00002	5Ø876Ø	SHAFT-SPRING
170	00002	508757	HOLDER-SPRING SHAFT
171	00002	1 ØØ1 35	BUSHI NG-P5Ø 4
172	00002	1 ØØ1 62	BUSHI NG-P5Ø 5
173	00002	1 02204	COLLAR
174	00002	SP63Ø6-1	PLATE-BELT SUPPORT
1 75	00002	1 Ø591 3	BELT-FBG2Ø
176	00002	1 Ø5974	BELT-FBG2Ø
177	00002	1 05954	BELT-FBG2Ø
178	00002	1 05 91 4	BELT-FBG2Ø
179	00005	102308	SPACER
18Ø	00005	102345	SPACER
181	00004	101302	SPACER
182	00008	101301	SPACER
183	00002	100601	WASHER-FLAT
184	00001	508703-1	PLATE-FEEDER
185	00002	500760	LIFTER-FEEDER PUSHER
186	00002	500775	PLATE-FEEDER PUSHER
187	00002	500762	PLATE-FEEDER PUSHER
188	00002	102700	SPRING-COIL
189	00001	500799-2	BLOCK-CONNECTOR
190	00001	500799-5	BLOCK-CLAMP SUPPORT
191	00001	500799-3	PLATE-CLAMPING
192	00001	19Ø685	QUICK RELEASE
193	00001	508861	PLATE-SPACER
194	00001	508637-1	SHAFT-SHUTTLE FEEDER
1 95	00002	500799-6	STUD
1 96	00002	500799-7	STUD
197	00001	508925-1	COVER-GEAR (WIDE)
	00001	5Ø8925-2	COVER-GEAR (NARROW)
1 98	00002	500766	SCREW-MACH REAR GUIDE
199	00002	500764	LIFTER-REAR BRIDGE
200	00002	SP1 21 82	BLOCK-PLUG REPL NDL BCK

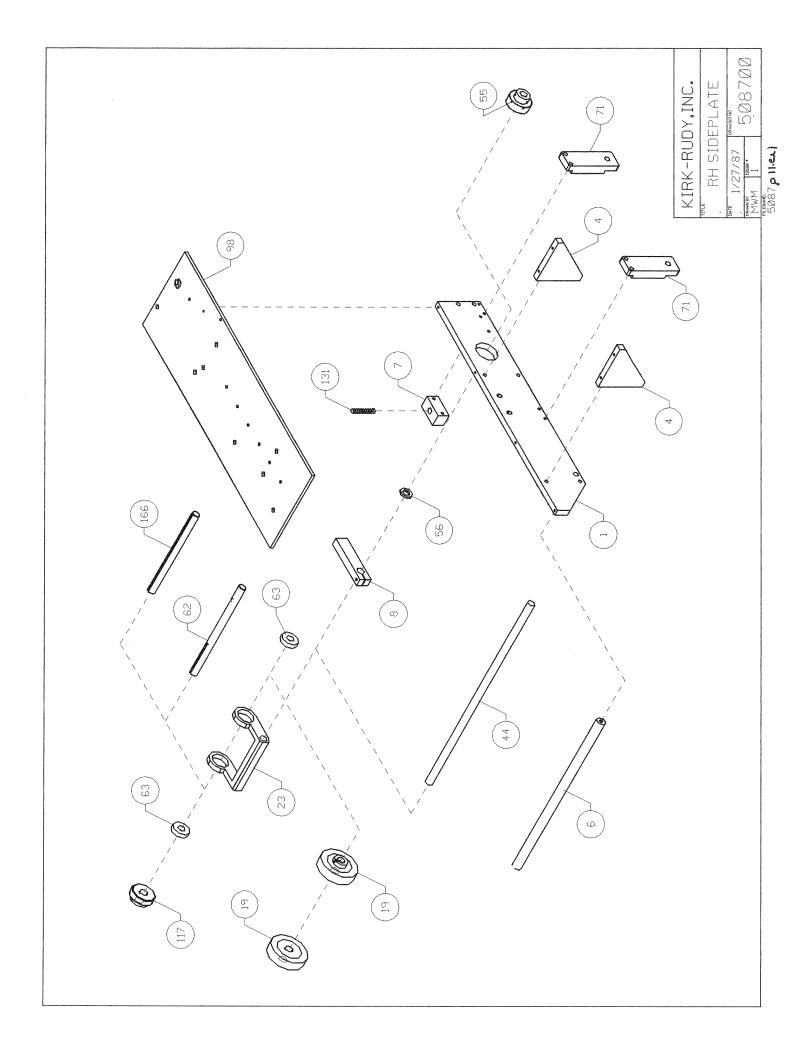


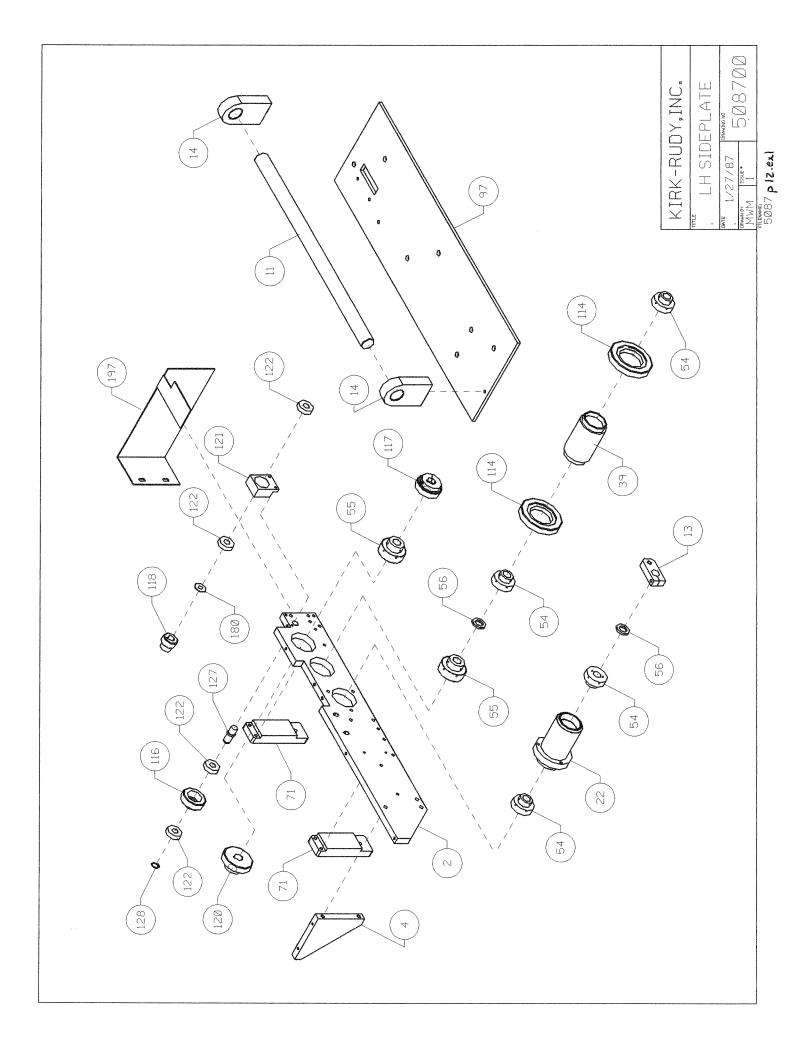


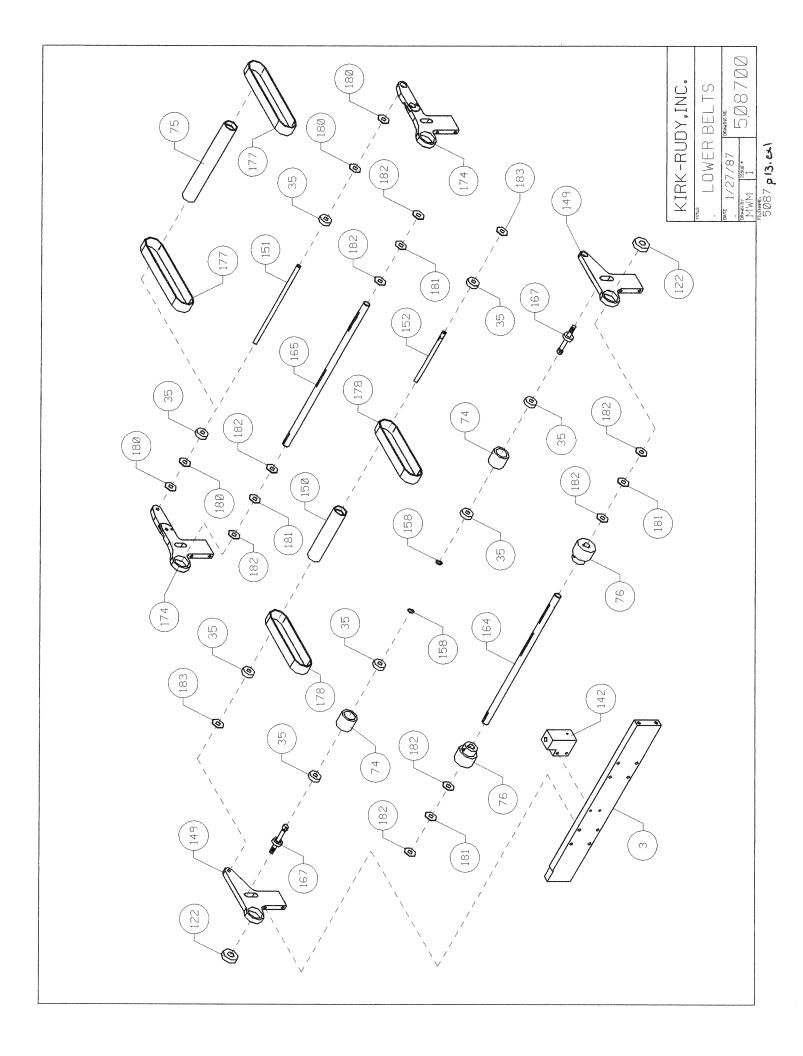


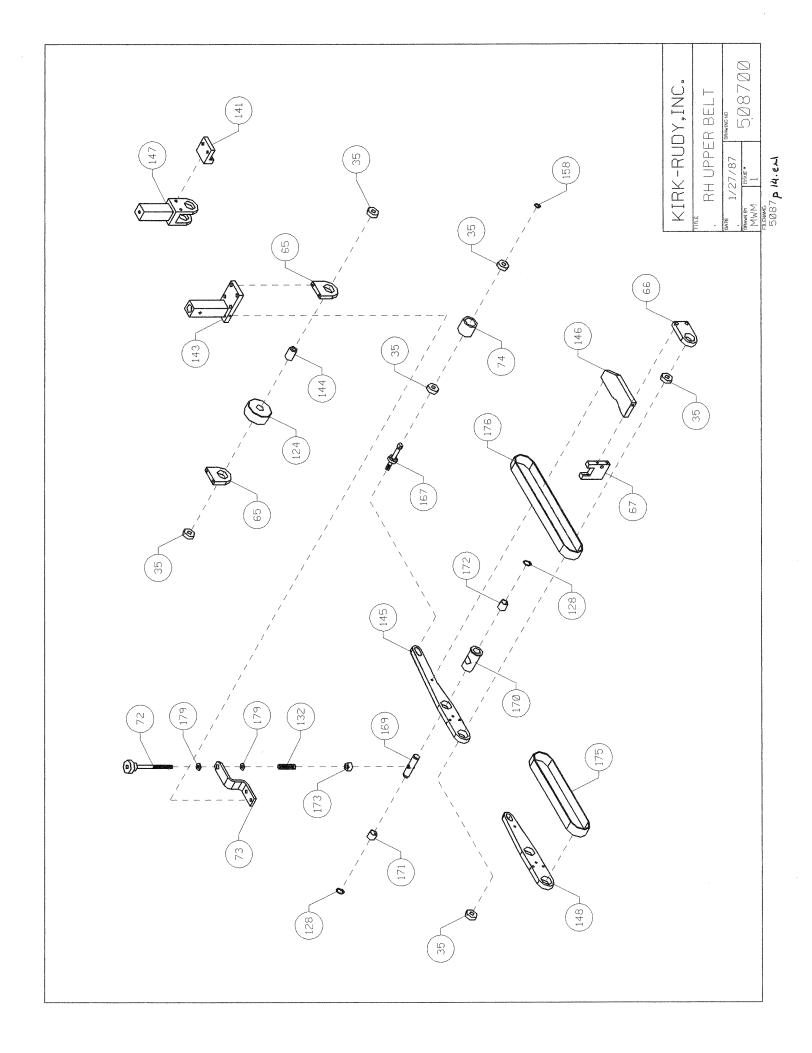


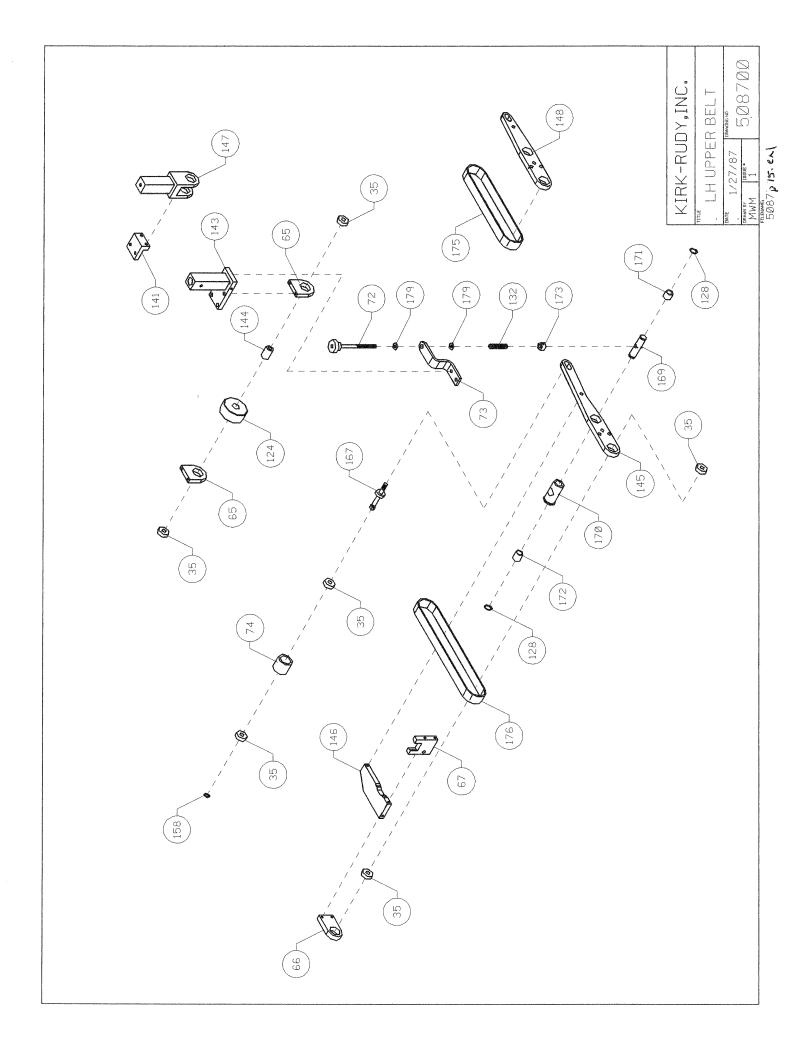












## FEEDER HOPPER SET UP

- A. <u>Vacuum Plates</u> three vacuum plates are furnished with your machine....
  - Deep hollow used for light material: e.g., envelopes cards, etc. - material that will conform to the deep, concave depression when vacuum is applied.
  - 2. Shallow hollow for medium weight material; e.g. self-mailers, light newspapers, folded sheets pamphlets, etc. - material that will conform into the shallow concave depression when vacuum is applied.
  - 3. Flat for heavy material such as catalogs, booklets, magazines, etc.

Select the proper vacuum plate using the aforementioned as a guide - inherant peculiarities in some mailing piece stocks might require interchanging the vacuum feed plates to achieve optimum feed operation. The vacuum plate is mounted to the feed shuttle by two allen cap screws - clean all foreign material from the bottom of the vacuum plate and the shuttle mounting block before mounting. A light coating of grease on the bottom periphery of the vacuum plate is usually helpful to insure a good vacuum seal.

- B. <u>Side Guides</u> loosen thumb screws and move feeder side guides to allow approximately 1/8" clearance between the face of the guides and the mailing piece.
  - NOTE: the mailing piece should be centered with the gate and upper feed rollers when possible.
- C. <u>Jogger Table</u> insert a few mailing pieces between the side guides (front edge flush with the gate) and move the jogger table until the vertical back plate is approximately 1/8" behind the rear edge of the mailing pieces. The jogger table is easily traversed along its mounting bar by pushing in the area of the jogger table hand screw.
- D. Pusher Blocks two pusher assemblies are provided to assist in feeding heavy material when vacuum alone will not suffice. To adjust---rotate machine by hand until feed table has reached its extreme rear travel loosen front allen holding screws and slide pusher block assemblies until pusher 'lip' is 1/4" from rear of mailing piece and turning the rear pusher block allen screws counterclockwise the front

- edge of the spring-loaded pusher 'lip' can be raised adjust height of lip to approximately one half the thickness of an individual mailing piece.
- E. <u>Lifter Fingers</u> two lifter finger assemblies are provided to assist in feeding wide, limp material (e.g., tabloids, newspaper stock, etc.) more effectively. The lifter fingers give this type material more rigidity at the gate separation area. To adjust, loosen retaining nuts thereby permitting movement of the fingers laterally in their respective slots on the jogger plate and up and down in the hex head bolt assemblies. Position each finger approximately 1/4 to 1/3 in from the edge of the mailing piece and raise to within 1/2 to 1" from feed table.
  - NOTE: Lifter fingers should always be at least 1/8" above feed table.
- F. Gate loosen the 3/8" locknut holding the gate adjusting knob secure to raise the gate turn the knob counterclockwise, clockwise to lower. With mailing pieces in the feed hopper and feeder vacuum pump on, rotate machine by hand until feed table has just started its forward travel-at this point adjust gate to allow one piece to feed while restricting movement of other pieces. Check under operation and adjust gate up or down accordingly.
- G. Upper Feed Rollers with mailing pieces in feed hopper and feeder vacuum pump actuated, rotate machine by hand until the feeder vacuum releases and the lower feed rollers make contact with the mailing piece. At this point sufficient pressure should be exerted from the upper feed roller to propel the mailing piece onto the table top. Loosen the upper feed roller locking collars and turn the feed roller adjusting knobs (clockwise for more pressure, counterclockwise for less feed roller pressure). It is important that both feed rollers exert even pressure on mailing piece 'fish-tailing' from feed hopper indicates uneven feed roller pressure.