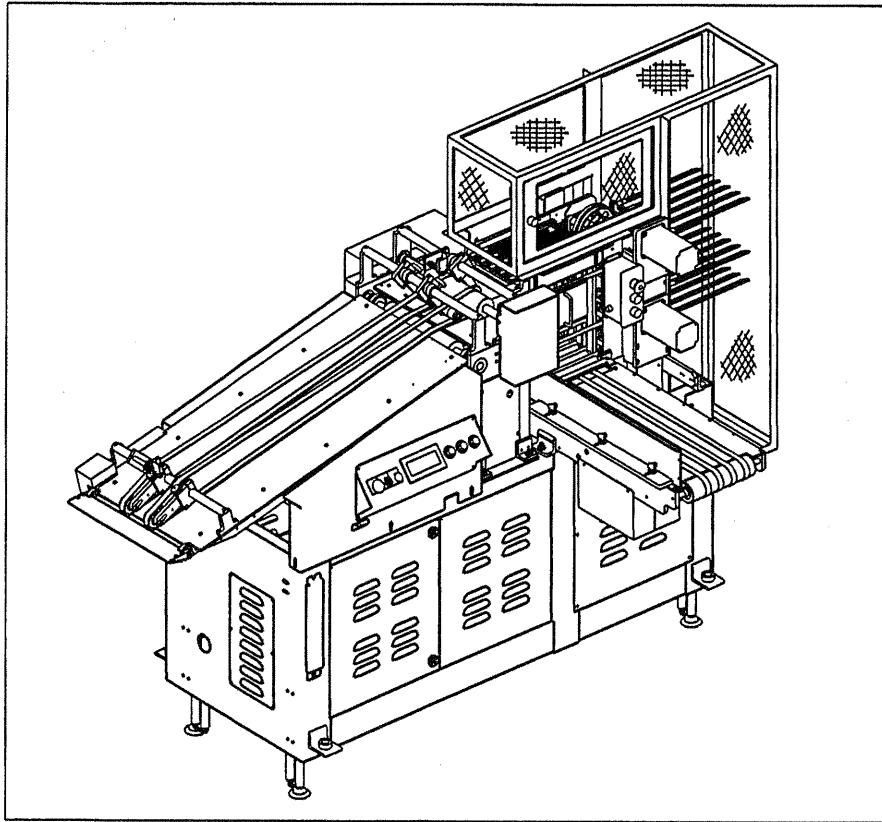


Kirk-Rudy Inc.

Instruction and Parts Manual

KR630 Ramp Stacker



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-KR630 REV. 4 12-28-01

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1 Important Safety Instructions

Intended Use Statement: The KR630 Staking System is a non-compensating stacker designed for use in the mailing industry. It is a one piece, self-contained stacking system that can be added in line with other mail processing systems. The system is designed for use with a zip code sorting processor or to be programmed to do self-initiated batch counts. Any use of the KR 630 Stacking System for other purposes other than as stated above 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 MISFEED 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 A LICENSED 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 GENERAL SPECIFICATIONS

Physical

Length	8'
Height	5'
Width	56"
Infeed height	34"adjustable
Stack height	6"max
Exit conveyor height	32.5"
Conveyor exit direction	left or right

Electrical Requirements

Voltage	120VAC
Current	20 amps
Phase	single
Hertz	60

Compressed Air Requirements

Minimum pressure	60 psi
Usage	½ CFM

Production Rate

Belt speed	400 ft/min
Stacks/minute	50/min

Material Handling

Min stock size	3" X 5"
Max stock size	12" X 15"
Minimum stock thickness	single sheet
Maximum stock thickness	.625"

Options

- Hydraulic lift kit
- Reduced/extended outfeed conveyor
- Left or right outfeed conveyor
- Stack mark reader

3 UNCRATING



WARNING

Read and follow all Safety Instructions in Section 1, Page 3 before proceeding.

WARNING: To reduce the possibility of injury, all packing material should be properly disposed of or stored at the time of removal.

5.1 Uncrating and Unpacking

1. Position crate in a suitable open area.

NOTE: The machine is on casters and can be rolled in place if the installation site is on the same level.

2. Remove crate top and sides.
3. Remove metal strapping and securing blocks.
4. Locate accessories box and use checklist to verify all items were shipped.

NOTE: Some boxes may be located inside the base cabinet.

5. Use a forklift to lift machine off skid. Be sure to position the forks in a centrally located position.
6. Roll or forklift the machine to the installation site.

4 OVERVIEW

The KR630 Stacking System is a non-compensating stacker designed for the mailing industry. It is a one piece, self-contained stacking system that can be added in line with other mail processing systems. The system is designed for use with a zip code sorting processor or to be programmed to do self-initiated batch counts. Product is carried up the belt ramp and delivered into the stacker area using top and bottom belts. The size of the stacking area is adjusted to the products by the use of the center, side and backstop guides. In the stacking area, stacks of products are assembled on a stacker arm assembly. A stepper motor indexes the arm assembly down as the products stack up on it.

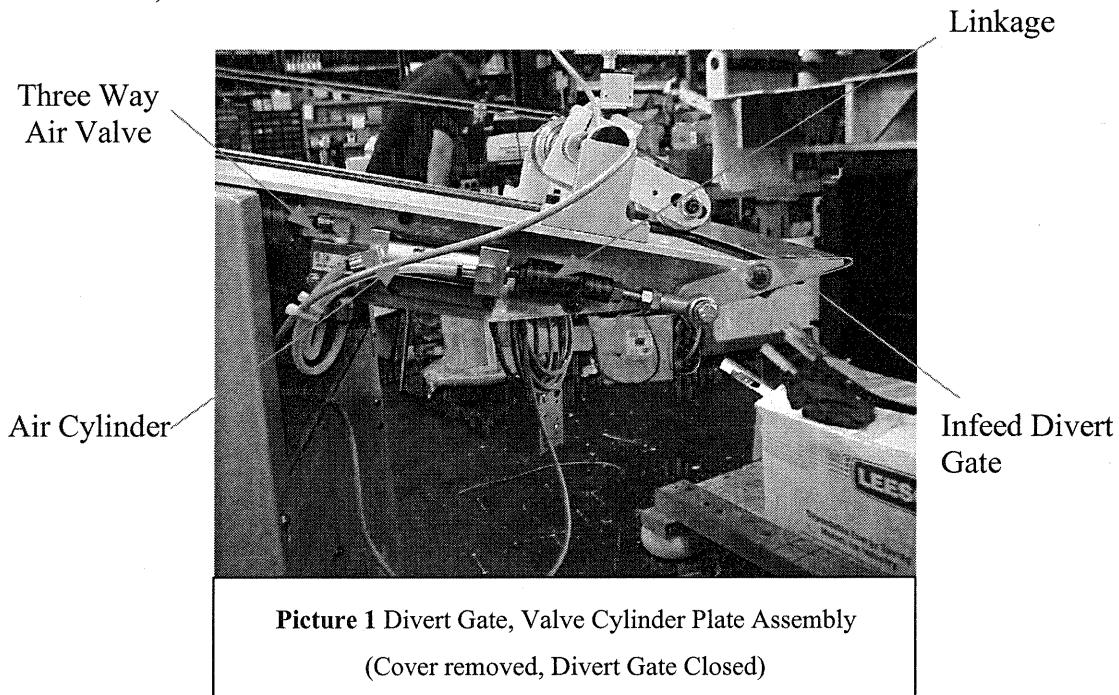
Either a zip sort signal followed by detection of the product to be acted on by the #2 beam switch or a batch count signal from the #1 beam switch is used to cycle the stacker. When the stacker cycles, a set of stepper motors are activated to drop the stacker arm assembly containing the stack of products and bring the next stacker arm assembly in place to start the next stack. During the drop, the fingers of the stacker arm assembly pass through a set of knurled rollers and deposit the stack of products on the rollers. The knurled rollers are activated along with a kicker plate to move the stack of product out of the stacker onto a set of conveyer belts.

A divert gate is mounted on the infeed end of the stacker system. The divert gate is controlled by an air cylinder that can be electrically activated to divert products as necessary before they enter the stacker system.

5 MACHINE DESCRIPTION

5.1 MECHANICAL COMPOENT DESCRIPTON

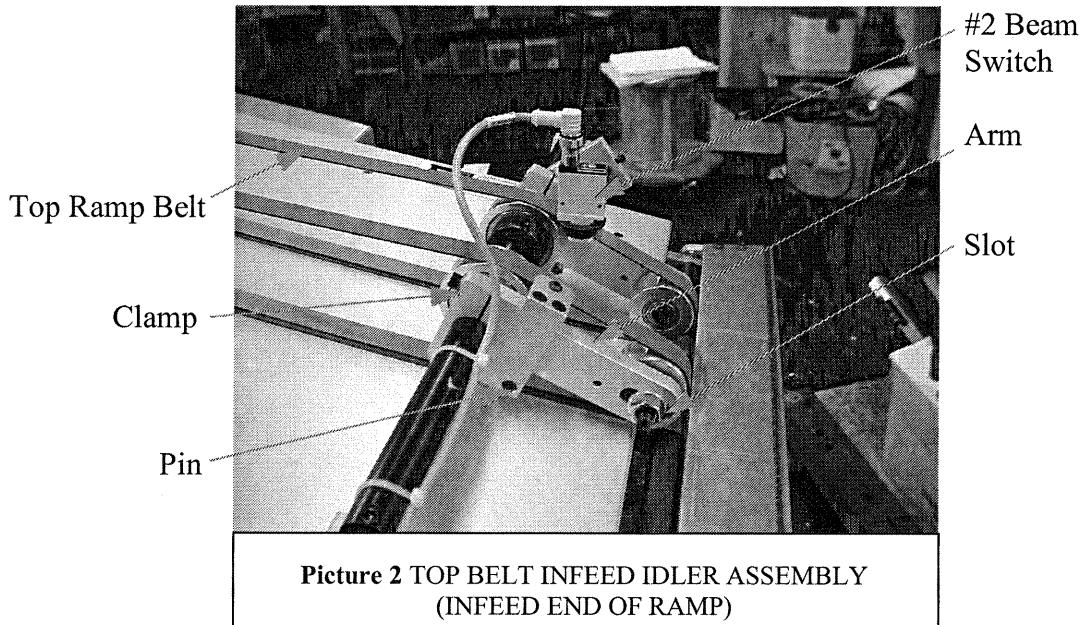
1. **Infeed Divert Gate Assembly:** an infeed divert gate assembly is mounted on the infeed end of the stacker system. Opening the divert gate will divert products downward, preventing the products from entering the stacker system. Products not entering the stacking system can be diverted to a separate conveyor or a holding box. The divert gate is controlled by an electrically activated three way valve controlling an air cylinder. The presence of 120vac and approximately 60 psi of air pressure at the automatic valve will activate the air cylinder and open the gate. (see Drawings 541225-01, item 5; 541187-01, items 1,2,3,9,13,14; 534814-05; and 541186-01)(see Picture 1)



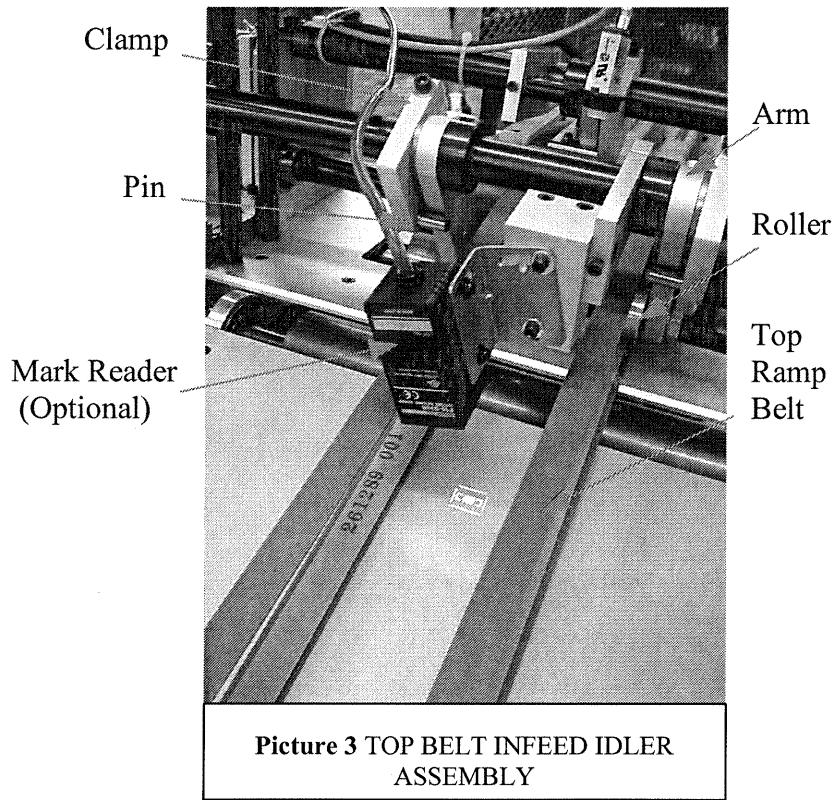
2. **Ramp and Infeed Tabletop Assembly:** the ramp consists of an aluminum tabletop screwed to the infeed tabletop assembly. The ramp is hinged at the top and an infeed tabletop support assembly is mounted underneath the ramp to support and control the adjustment of the incline. A set of upper and lower roller driven belts are used with the ramp to convey products from the outfeed height of an inline mail processing base to the infeed height of the stacker. (see Drawings SP90800, item 2; 541225-01; 541187-01; and 538686-01)
3. **Infeed Tabletop Support Assembly:** the infeed tabletop support assembly supports the infeed end of the ramp. Slots in the infeed tabletop support assembly allow the height of the infeed end of the ramp to be raised approximately three inches. The infeed height of the ramp can be adjusted loosening the shoulder bolts, setting the desired

height of the infeed end of the ramp and re-tightening the bolts. Slots on either side of the machine allow access to the shoulder bolts without removing the covers. (see Drawings 541225-01, item 7 and 541239-01)

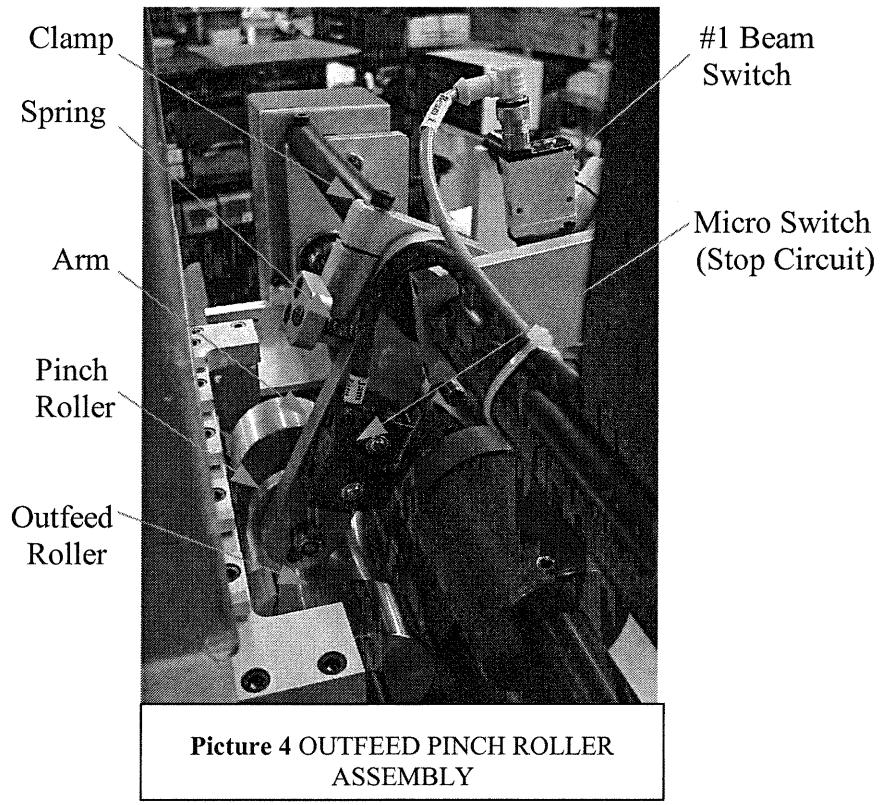
4. Take-up Belt Assembly: located underneath the infeed end of the ramp are two take-up belt assemblies. The assemblies consist of a roller mounted on an arm, which is clamped to a shaft. The assemblies are used to adjust the belt tension of the lower ramp belts. (see Drawings 541187-01, item 7 and 530610-01)
5. Top Belt Infeed Idler Assembly: mounted at the infeed end of the ramp, a pair of top belt idler roller assemblies provide an idler roller mounted on the shaft and an end roller mounted on a spring loaded arm to guide the top belts. Slots in the arms of the assemblies allow movement of the rollers to adjust the tension of the top belts. The arms of the assemblies are adjustable for product thickness. A spring on the arms provides jam relief as well as some compensation for variation in product thickness. (see Drawings 541187-01, items 5,6,11,15; 536629-01 and 535949-01) (see Picture 2)



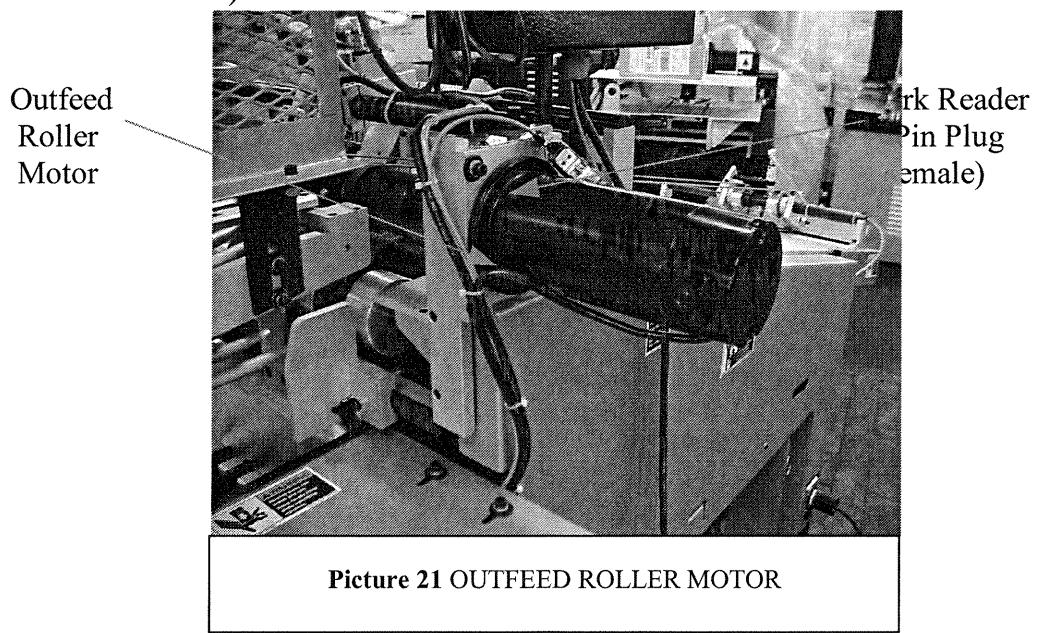
6. Top Belt Infeed Idler Assembly: mounted at the top of the ramp, an additional pair of top belt idler assemblies are used to set the height of the lower section of the top ramp belts for product thickness. The assembly consists of rollers on the end of spring loaded arms. The spring provides jam relief as well as some compensation for variation in product thickness. (see Drawings 541224-01, item 39; 538078-01 and 535949-03) (see Picture 3)

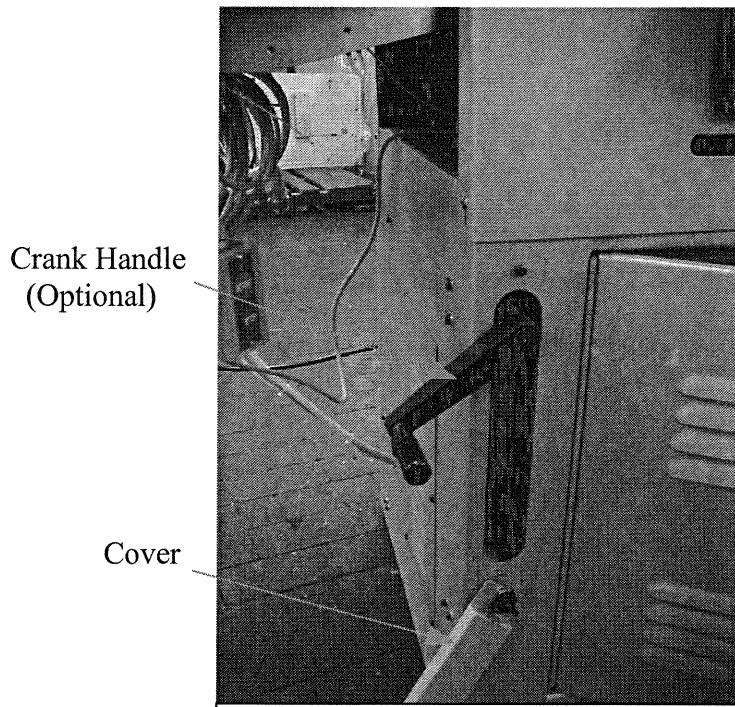


7. Outfeed Pinch Roller Assembly: mounted on the tabletop at the stacker end, a spring-loaded arm is used to suspend a roller above the concave section of the outfeed roller. The pinch roller assembly is adjustable for product thickness and the spring provides some compensation for variation in product thickness. A micro-switch mounted on the arm is wired into the stop circuit of the stacker in order to stop the flow of product in event of a jam at the pinch roller assembly. (see Drawings 541224-01, 2 of 2, item 38 and 536641-03) (see Picture 4)



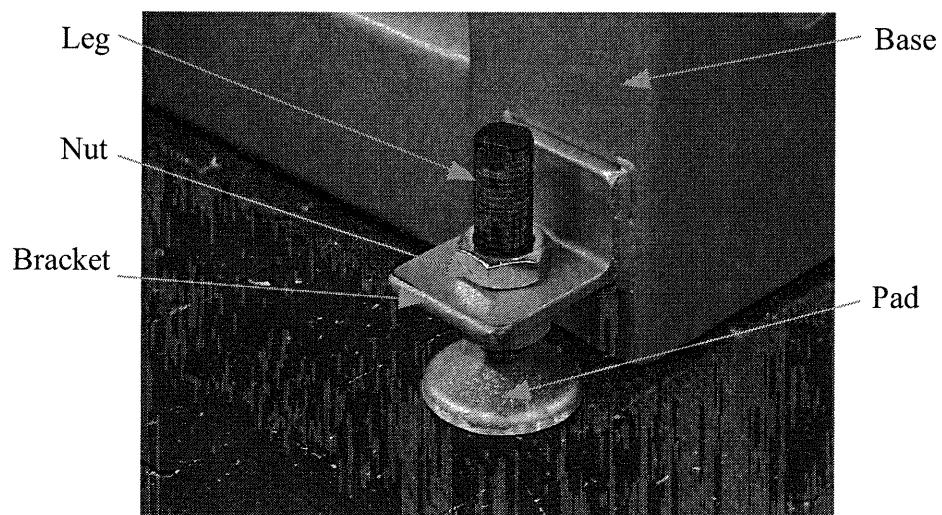
8. **Outfeed Roller:** (available option) the outfeed roller is located at the entry of the stacker section. Driven by a dedicated motor, the speed of the roller is set slightly greater than the speed of the belts. The center portion of the outfeed roller is concave to accept the bottom portion of the pinch roller. Lowering the pinch roller into the concave section gives the products a slight bow to help create some rigidity in the products. The increase in speed and rigidity helps to ensure the products travel all the way into the back of the stacker. (see Drawing 541224-01, 2 of 2, item 14) (see Picture 4 and 21)





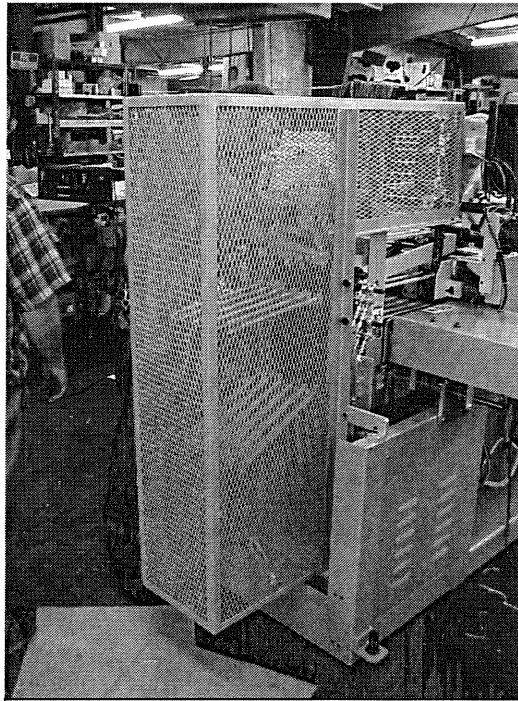
**Picture 10 HYDRAULIC CRANK HANDLE
(COVER REMOVED, HANDLE OUT)**

19. Leveling Legs: threaded angle brackets are welded on the base to accommodate steel leveling legs. The legs serve the purpose of stabilizing, leveling and slightly raising and/or lowering the base of the stacker system. The legs are used when a hydralift kit is not installed. Each leg comes with a locking nut and a forged aluminum pad. The point of the leveling leg fits in to a dimple on the pad. This arrangement compensates for variables in the levelness of the floor and increases the footprint of the legs. (see Picture 11 and 23)



Picture 11 LEVELING LEG

20. Stacker Assembly Cage – a wire cage is used to guard the gears, sprockets, chains and stacker arms assemblies that make up the stacker. (see Drawing SP90800, item 3) (see Picture 23)



**Picture 23 STACKER ARM ASSEMBLY,
CAGE**

5.2 ELECTRICAL COMPONENT DESCRIPTION

5.2.1 Control Panel (Left to Right)

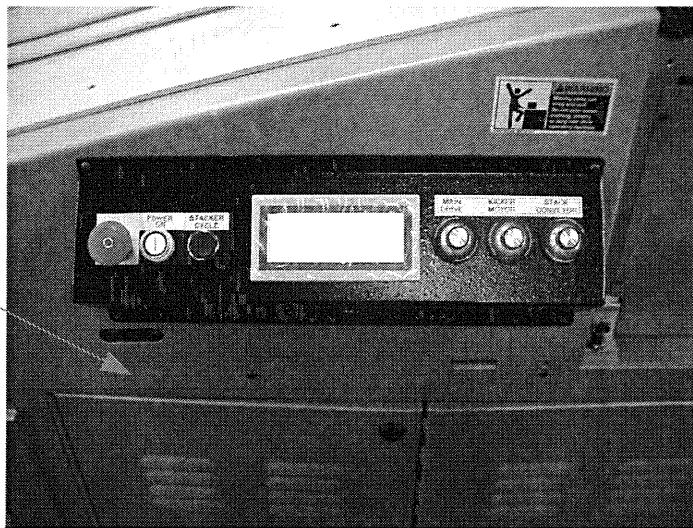
(see Drawings 541088-01 and 541089-01) (see Picture 12)

1. Emergency Stop Button: pressing the emergency stop button turns off all power to the machine. The green power on button light will turn off when the power is off. The button must be unlatched to turn the power back on.
2. Power On Button: to turn the power on to the machine, press the power on button. When the green button is lit, power is being supplied to the machine. Both the emergency stop buttons on the control panel and the side of the stacker must be unlatched for the power on button to function. Three and one half seconds after the power is turned on the arms of the stacker will cycle.
3. Stacker Cycle Button: pressing the stacker cycle button cycles the arms of the stacker. If the ramp belts are running at the time you push the stacker cycle button, the cycling of the stacker arm will activate the transfer roller/kicker motor and the conveyor motors to run through their time cycle.
4. Touch Screen: used to control functions of the stacker through the use of menus.
5. Main Drive Control Knob: a dual pot control used to control both the speed of the motor driving the ramp belts and the motor driving the outfeed roller.

NOTE: The motor board for the motor driving the outfeed roller is set to always drive the outfeed roller slightly faster than the ramp belts regardless of the position of the control knob.

6. Kicker Motor Control Knob: used to control the speed of the motor driving the kicker and the knurled rollers.
7. Stacker Conveyor Control Knob: used to control the speed of the motor driving the stacker conveyor belts.

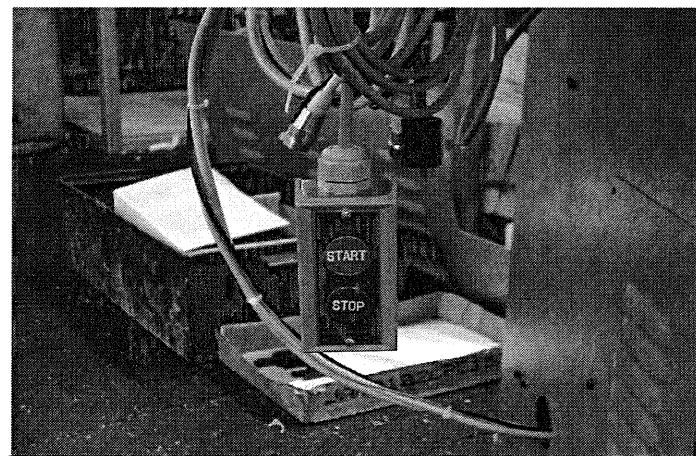
Slot to Adjust
Infeed Table
Top Support
Assembly



Picture 12 CONTROL PANEL

5.2.2 Start/Stop Remote (see Picture 13)

1. Start Button: pressing the green start button will start the motors driving the ramp belts and the outfeed roller if the green power on button is lit up.
2. Stop Button: pressing the red stop button will stop the motors driving the ramp belts and the outfeed roller.



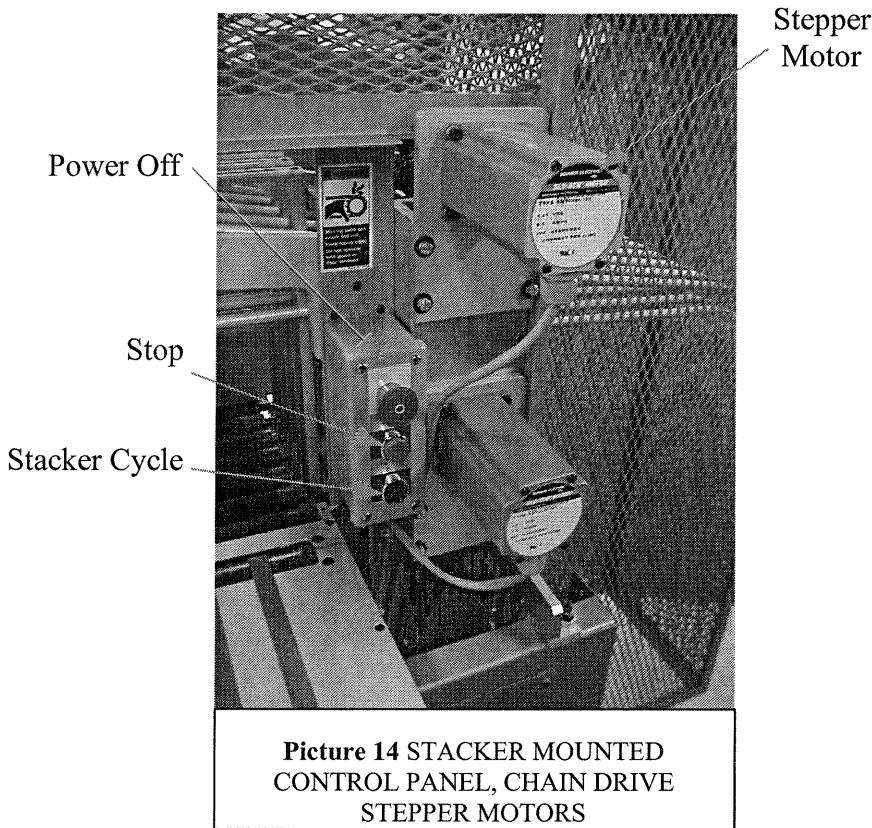
Picture 13 START/STOP REMOTE

5.2.3 Stacker Mounted Control Panel (see Picture 14)

1. Stacker Cycle Button: pressing the stacker cycle button cycles the arms of the stacker. If the ramp belts are running at the time you push the stacker cycle button, the cycling

of the stacker arm will activate the transfer roller/kicker motor and the conveyor motors to run through their time cycle.

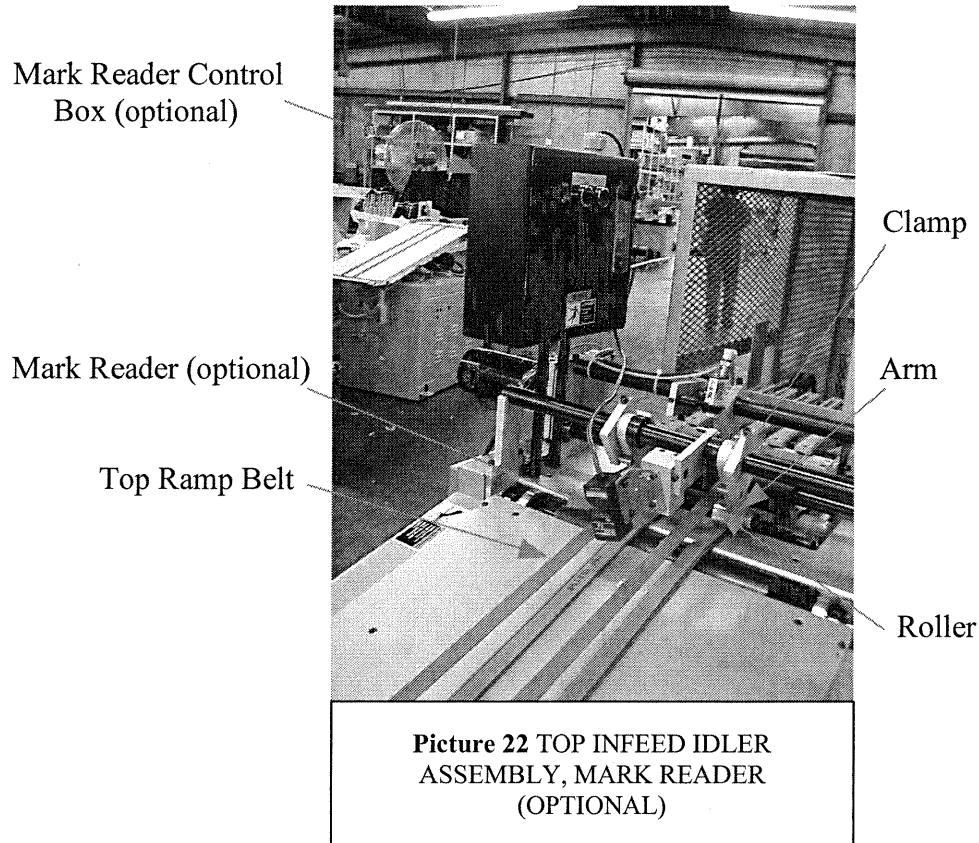
2. Emergency Stop Button: pressing the emergency stop button turns off power all power to the machine. The green light on the power button on the control panel will turn off when the power to the machine is turned off. The button must be unlatched to turn the power back on.
3. Stop Button: pressing the stop button will stop the motors driving the ramp belts and the outfeed roller.



5.2.4 Sensors

1. #1 Beam Switch: the # 1 beam switch is mounted between the top of the ramp and the stacker. A red light on top of the sensor should light up when the beam is reflected by the reflector mounted in the ramp tabletop and go dark when a product interrupts the beam. The sensor provides the product count for incremental lowering of the stacker arm assembly. In the Counter sort mode, the sensor provides the product count and signals when to start the process of cycling the stacker arms for batch counts. The sensor also provides the input for jam detection. (see Drawing 541224-01, 2 of 2, item 21) (see Picture 4)
2. #2 Beam Switch: the #2 beam switch is mounted as the infeed end of the ramp. A red light on top of the sensor should light up when the beam is reflected by the reflector mounted in the ramp tabletop and go dark when a product interrupts the beam. After a signal is sent by a sort system, the sensor provides the signal to start the process of cycling the stacker arms when it detects the product to be acted on. When a ramp-top divert system is installed and a signal is sent by a sort system to divert, the sensor provides the signal to activate the ramp-top divert gate when it detects the product to

5. Stack Signal Cable and Plug: a cable with a male three-pin Molex type plug is provided on the infeed end of the base to convey the stack signal from a KR Townsort or an inkjet system to the stacker system. A closed relay contact between pins one and two activates the stack process. Pin three is not used. When the signal is received by the stacker, detection of the next product by the #2 beam switch starts the stack process. The stacker arms will cycle as soon as the ramp belt travel is equal to the value set in the Townsort Dwell menu on the touch screen. (see Picture 19)
6. Infeed Divert Gate Plug: a cable with a male-three pin twist plug is provided on the infeed end of the base to provide an electrical connection to the electrical/pneumatic valve that controls the air cylinder for the infeed divert gate. The coil for the valve is rated at 120vac. (see Picture 19)
7. Optical Mark Reader Plug: a six pin, female plug is located at the top of the ramp on the side opposite the control panel. The plug is provided to convey the stack signal from an optical mark reader (optional). A closed relay contact between pins three and four activates the stack process. The other pins are not used. The stacker arms will cycle as soon as the ramp belt travel is equal to the value set in the Mark Reader Dwell menu on the touch screen. (see Pictures 3, 21 and 22)

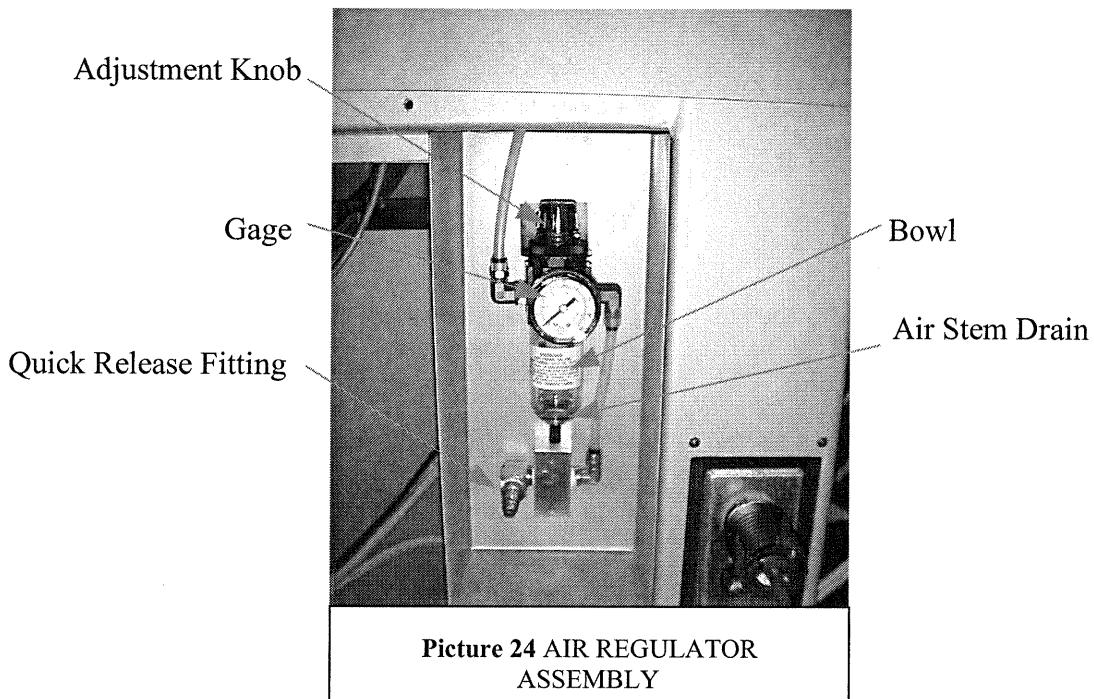


5.3 PNEUMATIC COMPONENT DESCRIPTION

1. Air Regulator Assembly: an air regulator assembly is mounted in a protective box of the back of the stacker assembly. The assembly contains a quick disconnect point for the supply of compressed air and serves as a means to control air pressure to the air cylinder operating the infeed divert gate. Adjustment to the air pressure can be made by lifting and turning the knob on the top of the regulator. (Minimum pressure to

ensure proper operation of the infeed divert gate is 60 psi.) Pushing the knob back down after adjustment disengages the knob and prevents accidental changes in the air pressure. Water in the compressed air will accumulate in the bottom of the regulator bowl. Periodically drain the water by pressing up on the air stem on the bottom of the bowl. (see Picture 24)

2. **Valve Cylinder Plate Assembly:** consists of a three-way air valve, an air cylinder and the linkage used to control the infeed divert gate. (see Drawing 434814-05 and Picture 1)



Picture 24 AIR REGULATOR ASSEMBLY

6 SETUP AND OPERATING INSTRUCTIONS

6.0 ALIGNMENT OF THE MACHINE

1. Carefully align the stacker system inline with the mail processing equipment. Normally, the machine is set in a position that will center the flow of product on the stacker ramp. However, there are some situations where the flow of product into the stacker will need to be offset. If necessary, the offset can be accomplished by offsetting the alignment of the stacker base with the upstream mail processing equipment. The limit to the amount of offset that can be used is the ability to utilize both sets of ramp belts to control the product flow.
2. If an optional Hydralift kit is installed in the base, use the crank handle to raise the infeed divert gate to just below the product flow from the upstream equipment. (see Picture 13)
3. If an optional Hydralift kit is not installed in the base, loosen the shoulder bolts on the infeed tabletop support assembly and set the infeed end of the ramp to about $\frac{1}{2}$ inch below the product flow. Then, tighten the bolts. Position the aluminum pads below the leveling legs, loosen the nuts and hand screw the leveling legs down just to where the point of the leveling legs makes contact with the dimple in the pads. After contact is made with all the pads, turn each leveling leg approximately three half turns with a

wrench. This procedure will keep the weight distribution even and bring the machine just off the wheels. If necessary, loosen the bolts on the infeed tabletop support assembly again and fine-tune the adjustment height of the infeed divert gate.

6.2 ELECTRICAL CONNECTIONS

1. Connect the main power cord to the terminal on the base of the machine. Then, plug the cord into a 120vac, 20 amp receptacle.
2. Connect the conveyor power and stop circuit cords to the applicable receptacle as necessary.

NOTE: In order for the ramp belts to run, either a conveyor or a jumper plug must be connected to the female connector of the conveyor stop cord located towards the bottom of the machine, under the stacker arm assemblies.

3. If the stacker is to be used for mail sorts, connect the processor to be used for sorting to the Molex type plug.
4. If the infeed divert gate is to be used, connect the processor to be used to control the divert gate to the three-pin twist plug.
5. If an optical mark reader is to be used, connect the mark reader to the six pin plug at the top of the ramp and power up the reader by plugging it into the 120vac receptacle on back of the base. (see Picture 14)

6.3 PNEUMATIC CONNECTIONS

6. If the infeed divert gate is to be used; it is necessary to supply the automatic valve with a minimum of 60 psi of compressed air. Use a compatible quick disconnect to plug the air line into the air regulator assembly.
7. Check and set the air on the regulator to 60 psi.

6.4 PRODUCT SETUP

WARNING: the following procedures in the Product Setup section must be accomplished with the power off to the stacker system. With the power off, the stacker arms can be pushed around by hand and the belt rollers can be rotated to move product along the belts as necessary to set and check adjustments and alignments.

NOTE: Adjustments to some of the items listed can be accomplished easier with the cage that guards the stacker arms removed. To remove or install fingers to the stacker arm assemblies, the cage must be removed.

1. Adjust the Ramp Belts – Adjust the top ramp belts by adjusting each of the four top belt infeed idler assemblies for the thickness of the product. Place the product to be stacked between the top and bottom belts and underneath the roller on an assembly. Loosen and rotate the clamp on the assembly till the top belt rests on the product. Then, tighten the clamp screw. The pin on the clamp will limit the lower movement of the spring loaded arm as set, yet allow upward arm movement if necessary. Repeat for all four assemblies

2. Adjust the Pinch Roller – The pinch roller assembly has a spring loaded arm and a clamp and pin similar to the top belt infeed idler assemblies. Adjust the pinch roller assembly by placing one of the products to be stacked under the pinch roller assembly. Loosen and rotate the clamp on the pinch roller assembly to set a slight pressure on the product to bow the product into the concave of the outfeed roller. Then, tighten the clamp screw.
3. Adjust Stacker Arm Width – If the product to be stacked is approximately nine inches or wider, use all six fingers on the stacker arms. If the product to be stacked is approximately seven to eight inches wide, remove a finger on the outfeed conveyor side of each of the six stacker arm assemblies. If the product to be stacked is approximately five to six inches wide, remove a finger from each side of the stacker arm assemblies.

NOTE: A single set screws holds each finger of the stacker arms in place. When re-installing a finger on a stacker arm, make sure the hole in the finger lines up with the set screw before tightening the set screw.

4. Adjust the Center Guide - The center guide is normally set close to the outfeed roller. If not, loosen the knobs on the center guide and set as the center guide as close as it will go to the outfeed roller.
5. Adjust the Side Guides - Center the product to be stacked to the fingers of the stacker arms assemblies; then, set the side guides for the width of the product. Depending on the width of the product and the selection of fingers to be used on the stacker arms, the flow of product into the stacker will sometimes need to be offset. If necessary, the alignment of the stacker system with the up stream machines can be re-adjusted to offset the flow of products to match the offset of the stacker arms and side guides.

CAUTION: Do not move the side guides closer than the width of the fingers on the stacker arms or else fingers of the stacker arms will hit the side guides and jam the stacker when the stacker arms are cycled.

6. Adjust the Knock Down Assembly - If the product to be stacked is over 10 inches long, the vertical bars of the stacker guide assembly is used as a backstop for the flow of product into the stacker. Install and adjust the knock down assembly to where the steel spring bands meet the leading edge of the product just as the trailing edge of the product is clearing the pinch roller assembly.

NOTE: The backstop guide bars have their own set of knockdown bands. If the product is less than 10 inches long, remove and store the knock down assembly and use the knock down bands on the backstop guide bars.

7. Adjust the Backstop Guide Bars - If the product to be stacked is under 10 inches long, install the two backstop guide bars on the upper leg supports that will make the bars align with and be slightly inside the edges of the product flow into the stacker. Adjust the bars as necessary to allow room for the product between the backstop bars and the center guide. Install and adjust the knockdown bands on the backstop bars to meet the leading edge of the product just as the trailing edge of the product is clearing the pinch roller assembly.

8. Adjust the Kicker Plate - During assembly, the center of the kicker plate is set above the center of the first knurled roller. In this position, the fingers on the stacker arms will clear the kicker plate. This position is for use when the product being stacked is approximately the width of the stacker arm assembly. This position will also work well for removing a finger on the outfeed conveyor side of the stacker arms and offsetting the product flow of a seven to eight inch wide product towards the kicker plate. For wider or narrower products, adjust the kicker plate for the size of the product by aligning the kicker plate to be even with the inside edge of the previously set side guide mounted above it. To adjust the kicker plate, remove the cover and loosen the two bolts that clamp the kicker plate assembly to the shafts it slides back and forth on. Loosen the bolt that secures the idler sprocket for the chain that drives the kicker. Slide the kicker in place and tighten the clamp bolts. Stick an allen wrench in the hole in the idler sprocket shaft and use the eccentric to take the slack out of the chain; then, tighten the bolt.

CAUTION: When adjusting the chain tension on the kicker plate, leave some play in the chain. Do not make the chain tight or the clutch will bind and not allow the kicker plate to retract.

CAUTION: Do not move the kicker plate closer than the width of the fingers on the stacker arms or else they will hit and jam the stacker when the stacker arms are cycled.

9. Adjust the Product Guide Assembly - Adjust the product guide assembly to be even with the center guide mounted above it and square with the outfeed conveyor.
10. Adjust the Outfeed Conveyor Belts - Using the belt guides mounted on the underside of the outfeed conveyor belts, adjust the tracking of the belts as necessary to convey the stack of products out of the stacker.
11. If removed, reinstall the cage used to guard the stacker arm assemblies. Check to see that all covers and/or guards are in place. Re-install any other covers and/or guards that might have been removed.

WARNING: Do not attempt to power up or operate the stacker system without all covers and/or guards in place. It is especially critical that the cage for the stacker arm assembly and the cover for the sensor mounting assembly are in place. Without warning, the stacker arms will automatically cycle 3.5 seconds after power is supplied to the stacker system. To prevent injury, the stacker arms, chains and gears must be guarded at all times during operation of the stacker system

6.5 OPERATION AND PROGRAMMING OF THE TOUCH SCREEN CONTROLLER

NOTE: This section provides the information for programming the PLC (programmable logic controller) in the stacker system. The touch screen can only be accessed by powering up the stacker system. The stacker arms will cycle 3.5 seconds after the machine is powered up.

WARNING: Do not attempt to power up or operate the stacker system without all covers and/or guards in place. It is especially critical that the cage for the stacker arm assembly and the cover for the sensor mounting assembly are in place. Without warning, the stacker arms will automatically cycle 3.5 seconds after power is supplied to the stacker system. To prevent injury, the stacker arms, chains and gears must be guarded at all times during operation of the stacker system.

CAUTION: If the stacker arms hit the kicker plate, or the side guides or any other object in the stacker during a cycle of the stack arms, the stacker arms will jam. If the stacker system jams during a cycle of the stack arms, turn off the power to the stacking system and clear the jam. As long as the power is on, the stacker arms will try to continue to cycle for approximately 16 seconds.

1. TOUCH SCREEN

The touch screen on the KR630 Stacker is automatically powered up when the power button is activated on the control panel. For the first 3.5 seconds the Power Up screen will appear. After power is turned on to the machine, if the touch-screen remains untouched for 10 minutes, the screen will revert to a screen saver mode.

2. KR LOGO SCREEN

After the initial 3.5 seconds from power up has expired, the KR logo screen will appear. During use of the touch screen, if the touch screen is not touched for 60 seconds, the KR logo screen will automatically reappear.

3. MENU

If a Menu box appears on a menu, pressing the MENU box will bring up the Main menu.

4. NEXT

If a NEXT box appears on a menu, pressing the box will bring up the next menu for that topic.

5. KEY PAD

Current values assigned to menus are shown as numbers appearing in a blue box on the menu. Pressing the blue box on the menu will be super-imposed a Key Pad on the right side of the menu screen. The existing value of the menu will be at the top of the Key Pad screen in the appropriate decimal value for the menu. Pressing any number will place that number at the right side of the value at the top of the Key Pad and the existing numbers of the value will move to the left. The last number on the left will drop off to keep the value consistent with the menu. Pressing either of the up or down arrows will bring back the existing value of the menu to the top of the screen. Pressing CLR will delete the Key Pad and bring back the menu with the original value. Pressing ENT will delete the Key Pad and replace the existing value of the menu with the value displayed at the top of the Key Pad.

6. MAIN MENU

Press the MENU box on the KR logo screen and bring up the Main Menu. The Main Menu has eight topics for menus: DOC LENGTH, SORT MODE, DWELL LENGTH,

STACK DROP, STACK OFFSET, MOTOR RUN TIMES, DIVERT MODE, and ACCESS CODE. The menus for the topics listed can be accessed by pressing the box for the appropriate topic.

NOTE: Beside the number in the follow items, the topic from the Main Menu will be listed on the left of the hyphen and the specific menu, as applicable, will be listed on the right. The actual process to get to the specific menu on the touch screen is to press the box with the desired topic in the Main Menu; then, press the NEXT box as necessary on the menus until the desired menu is displayed. The menu diagram pages can also be referred to as necessary to follow the process of bringing up a desired menu.

NOTE: Each menu is provided with a default value that can be used to set up and run the stacker until a different value is known.

7. DOC LENGTH – Document Length Menu

The length of the documents to be sorted and stacked is programmed to the nearest inch by use of the Key Pad. Entering the length of the document sets the jam detection parameters for beam switch #1 and #2 located on the ramp tabletop. The ramp belts and outfeed motors will stop anytime either beam switch is covered for more than the amount of belt travel that it would take a product approximately twice the length programmed in the menu to travel under the beam switch. The default value for the Document Length is 6 inches.

8. SORT MODE – Sort Mode Menu

The Sort Mode menu displays either of two modes, Townsort or Counter in a box on the menu. Pressing the box on the menu with either one of these modes listed will select and display the other mode. The Townsort mode allows use of a KR Townsort system, an inkjet system, or an optical mark reader to control the stacker. The Counter mode on the Sort Mode menu enables, the #1 beam switch to use a product count number from the Documents Per Stack menu to control the stacker and produce batch counts. The Counter mode does not prevent use of the other systems listed above. As a result, the Counter mode gives the operator the option of using the #1 beam switch count by itself or in combination with the other systems listed above to control the stacker. The default value for the Sort Mode is Counter.

9. SORT MODE – Documents Per Stack Menu

The Documents Per Stack value is only used in the Counter mode. When the #1 beam switch detects the number of products equal to the value in the Documents Per Stack menu; a signal is sent to stacker to start the process of cycling the stacker arms. If the Count mode is used in conjunction with a KR Townsort, an inkjet system, or optical mark reader, a signal from either of these systems will reset the count of the #1 beam switch back to zero. The default value for Documents Per Stack is 10.

10. DWELL LENGTH

The dwell length is a value used to compensate for the distance between the applicable detection device and the stacker or the ramp-top divert gate. A dwell value set in a dwell

menu is used to control the timing of the detection of the product to be acted on and the activation of the stacker arms or the ramp-top divert gate to capture the product

NOTE: A ramp-top divert gate is an option that can be built into the stacking system during assembly. It is not normally included on most stackers. The ramp-top divert gate should not be confused with the in-feed mounted divert gate.

Depending on the system in use and the mode used to activate the stacker, there is a possible use of three different detection devices: the #1 beam switch, the #2 beam switch or an Optical Mark Reader. If a ramp-top divert gate is installed, there is a possible activation of two devices; the stacker or the ramp-top divert gate. For approximately every two inches of belt travel on the ramp, a pulse is produced from the belt travel sensor. The dwell (the number of pulses needed to delay the action after the detection of the product to be acted on) is determined by the value set in the appropriate dwell menu.

Each system used for stacking will automatically use the appropriate detection device and the appropriate menu to arrive at a dwell value in order to activate the stacker or mid-ramp divert gate as necessary. There are four dwell menus – Townsort, Mark Reader, Count, and Divert.

11. DWELL LENGTH – Townsort Dwell Menu

The value in the Townsort Dwell Menu is used to compensate for the distance between the #2 beam switch and the stacker. The dwell value in the Townsort Dwell menu is automatically used when the KR Townsort system or an inkjet system sends a signal to the stacker to cycle the arms. Adjustments to the value can be made to fine-tune the timing of the stacker arms to capture the last product in the sort in the correct stack. The default value for Townsort Dwell is 30 pulses.

12. DWELL LENGTH – Mark Reader Dwell Menu

The value in the Mark Reader Dwell menu is used to compensate for the distance between the Optical Mark Reader and the stacker. The dwell value in the Mark Reader Dwell menu is automatically used when the Mark Reader sends a signal to the stacker to cycle the arms. Adjustments to the value can be made to fine-tune the timing of the stacker arm to capture the last product in the sort in the correct stack. The default value for Mark Reader Dwell is 10 pulses.

13. DWELL LENGTH - Count Dwell Menu

The value in the Count Dwell menu is used to compensate for the distance between the #1 Beam-switch and the stacker. The dwell value in the Count Dwell menu is automatically used when Counter is selected in the Sort Mode menu. When the number of products detected by the #1 beam switch is equal to the value in the Documents Per Stack menu, a signal is sent to the stacker to cycle the arms. Adjustments to the value can be made to fine-tune the timing of the stacker arm to capture the last product in the sort in the correct stack. The default value for Count Dwell is 5 pulses.

14. DWELL LENGTH – Divert Dwell Menu

The value in the Divert Dwell menu is used to compensate for the distance between the #2 beam switch and the mid-ramp divert gate. The dwell value in the Divert Dwell menu

is automatically used when the KR Townsort system or an inkjet system sends a signal to open the mid-ramp divert gate. Adjustments to the value can be made to fine-tune the timing of the mid-ramp divert gate to capture first product of stack of products to be diverted. The default value for Divert Dwell is 20 pulses.

NOTE: The ramp-top divert system is an option that is built into the tabletop at the time of assembly and is not found on most stackers. If a ramp-top divert is not installed, the Divert Dwell is not used. Do not confuse the operation of the ramp-top divert gate with the operation of the in-feed divert gate.

15. STACK DROP – Documents Per Stack Drop Menu

When the number of products the #1 beam switch detects equals the value set in the Documents Per Stack Drop menu, the appropriate stepper motor will activate and drop the fingers on the stacker arm a set amount of steps as determined by the value set in the Stack Drop menu. The incremental drops are used to lower the stack of products in the stacker to accommodate the flow of more products in the stacker. The downward indexing of the stackers will continue as the flow of products continues to increase the height of the stack until the signal is sent to cycle the arms of the stacker. As the last product in the stack passes the #1 beam switch, the count is reset to zero and the process is repeated. The default value for Documents Per Stack Drop is 10.

16. STACK DROP – Stack Drop Distance Menu

The value in the Stack Drop Distance menu is used to control the distance of the incremental drops implemented by the Documents Per Stack Drop menu. Each increase of 50 in the value increases the drop distance by $\frac{1}{4}$ inch. The default value for Stack Drop Distance is 100.

17. STACK OFFSET – Bottom Offset Menu

A proximity sensor is used to control the bottom stop position of the stacker arms when the arms are cycled. The bottom position is set at two inches below the top of the ramp. Any increase from zero that is set in the value in the Bottom Offset menu will lower the bottom position of the arms and increase the distance the arms stop below the top of the ramp. The default value for Bottom Offset is 0.0.

18. MOTOR RUN TIMES – Kicker Run Time Menu

With the exception of the automatic cycling that occurs after power up, cycling the arms of the stacker will start the motor that drives the knurled rollers at the bottom of the stacker. The value in the Run Time menu controls how long the motor runs. The knurled rollers only need to run long enough for the trailing edge of the stack of product to clear the last of the knurled rollers and pass onto the stacker conveyor. The default value for Kicker Run Time is 3.0 seconds.

19. MOTOR RUN TIMES – Stacker Conveyor Run Time Menu

With the exception of automatic cycling that occurs after power up, cycling the arms of the stacker will start the motor that drives the conveyor belts coming out of the stacker. The value in the Stacker Conveyor Run Time Menu controls how long a time period the motor runs when activated. The default value for Stacker Conveyor Run Time is 03.0 seconds

20. MOTOR RUN TIMES – Divert Conveyor Run Time

Opening the ramp-top divert gate will start the motor that drives the conveyor belts on the divert system. The value in the Divert Conveyor Run Time menu controls how long a period of time the motor that drives the divert conveyor belts runs after the divert gate is activated. The default value for Divert Conveyor Run Time is 03.0 seconds.

NOTE: The ramp-top divert system is an option that is built into the tabletop at the time of assembly and is not found on most stackers. If the ramp-top divert system is not included, the Divert Conveyor Run Time menu is not used. Do not confuse the operation of the ramp-top divert gate with the operation of the in-feed divert gate.

21. DIVERT MODE – Divert Mode Menu

The Divert Mode menu will display either TOGGLE or FOLLOW in a box on the menu. The two choices in the Divert Mode menu allows the operator to select between two types of signals that can be used to activate the divert gate on the ramp-top divert system. In the toggle mode, the divert gate relies on a separate pulse to open and close the divert gate. In the follow mode, the divert gate opens when the signal is sent and stays open as long as the signal is present. Pressing the box on the menu with either one of these modes listed will select and display the other mode. The default value for Divert Mode is Follow.

NOTE: The ramp-top divert is an option that is built into the tabletop at the time of assembly and is not found on most stackers. If the ramp-top divert system is not included; the Divert Mode menu is not used. Do not confuse the operation of the ramp-top divert gate with the operation of the in-feed ramp divert gate.

22. ACCESS CODE – Security/Set Defaults Menu

Pressing the Security box on the Security/Set Defaults menu will super-impose the Key Pad to the right of the screen. Enter the four-digit access code and press the ENT key on the Key Pad. The screen will return to the Security/Set Defaults menu and Set Defaults box will be enabled. Pressing the Set Defaults box will bring up the Set Defaults menu.

23. ACCESS CODE – Set Defaults Menu

Pressing the Set Defaults box will reset all the values contained in the blue boxes on all the menus with their default values as listed in this instruction booklet. Pressing the Return To Main box will cancel the set defaults feature and bring up the Main Menu.

NOTE: By using the default values, a product can be set up and test ran using self-initiated batch counts made by the stacker system. If no other signals are imputed, the stacker will self initiate the stack cycle process every time the #1 beam switch detects ten products.

24. ACCESS CODE – Stepper Speed (Start up) Menu

The value in the Stepper Speed (Start Up) menu determines the start up speed for the stepper motors controlling the arms in the stacker. The default value for Stepper Speed (Start Up) is 400 half steps/sec.

25. ACCESS CODE – Stepper Speed (Run) Menu

The value in the Stepper Speed (Run) menu determines the run speed for the stepper motors controlling the arms in the stacker. The default value for Stepper Speed (Run) is 600 half steps/sec.

26. ACCESS CODE – Accel and Decel Time Menu

The value in the Accel and Decel Time menu determines the acceleration and deceleration time for the stepper motors controlling the arms in the stacker. The default value for Accell and Decell Time is 50 milliseconds.

6.6 OPERATION OF THE STACKER SYSTEM

NOTE: The items in this section must be accomplished with power on to the machine.

WARNING: Do not attempt to power up or operate the stacker system without all covers and/or guards in place. It is especially critical that the cage for the stacker arm assembly and the cover for the sensor mounting assembly are in place.

Without warning, the stacker arms will cycle automatically 3.5 seconds after power is supplied to the stacker system. To prevent injury, the stacker arms, chains and gears must be guarded at all times during operation of the stacker system.

CAUTION: If the stacker arms hit the kicker plate, or the side guides or any other object in the stacker during a cycle of the stack arms, the stacker arms will jam. If the stacker system jams during a cycle of the stack arms, turn off the power to the stacking system and clear the jam. As long as the power is on, the stacker arms will try to continue to cycle for approximately 16 seconds.

NOTE: To avoid a large jam, Steps 1 through 4 of this section should be accomplished by sending a small groups of products (five to ten), checking the results and making adjustments as necessary. After a smooth flow of product has been established from the upstream machine, going up the ramp, into the stacker and out to the outfeed conveyor the remaining steps can be checked and fine tuned.

1. Set the Belt Ramp Speed – press the run button on the start/stop remote to start up the ramp belts. Using the main speed knob on the control panel set the speed of the ramp belts equal to or slightly faster than the speed of the upstream machine.

NOTE: The speed of the outfeed roller is also controlled by the main speed knob and is automatically set to run slightly faster than the ramp belts.

NOTE: If the ramp belts do not start up when the run button is depressed, check the touch screen. If the touch screen shows “Stop Circuit Active” either a conveyor or a jumper plug needs to be connected to the two pin yellow plug on the stacker system or a jam is under the pinch roller depressing the micro-switch on the pinch roller arm. If the touch screen shows “Jam Beam 1 or 2” a product is blocking the reflector on the #1 or #2 beam switch.

2. Check the Height of the Infeed Divert Gate – the height of the divert gate should allow flow of products up the ramp when the gate is close and divert the product down to cut off flow up the ramp when the gate is open. The height of the divert gate should be set during initial alignment of the machine. However, the height of the divert gate may have to fine turned during initial operation. Refer to the Alignment of the Machine section to use the Hydralift kit, if equipped, or the infeed tabletop support assembly to make adjustments as necessary.

3. Check the Alignment of the Product Flow – the alignment of the product flow should allow the products to travel up the ramp using both sets of ramp belts and drop between the side guides in the stacker. Fine tuning the alignment of the product flow, the alignment of the machines, the alignment of the side guides or a combination of these items may be necessary to ensure smooth flow of product into the stacking area.

NOTE: If bumping noises are heard while the products flow up the ramp, check the adjustment of the top belt infeed idler assemblies and the outfeed pinch roller assembly.

4. Check the Cycling of the Stacker Arms – Pushing either of the two stacker cycle buttons will cycle the stacker arms. If the ramp belts are running, the motors driving the kicker plate, the transfer rollers and the outfeed conveyor will activate and operate for the length of the time periods set in their menus.

CAUTION: Never push either of the stacker buttons with product flowing into the stacker. Pushing the button will result in an immediate stack cycle of the stacker arms with no regard to the timing of the products into the stacker and probably cause a jam.

CAUTION: If the stacker arms hit the kicker plate, or the side guides or any other object in the stacker during a cycle of the stack arms, the stacker arms will jam. If the stacker system jams during a cycle of the stack arms, turn off the power to the stacking system and clear the jam. As long as the power is on, the stacker arms will try to continue to cycle for approximately 16 seconds.

NOTE: The top and bottom stop position for the stacker arms and the kick plate travel have been set and tested for proper operation during the assembly of the stacker system. These features of the stacking system should continue to operate correctly without any further adjustment. Any adjustments made to the stop positions of the stacker arms should be made by a qualified technician.

5. Check for Proper Stacking – the cycling of the stacker arms should concur with the inputs from the system being used to control the stacker system. If a zip sort system is being used, the stacker should be making stacks according to the zip code breaks. If a self-initiated batch count is being used, the stacker should be making stacks according to the count. If a mark reader is being used, the stacker should be stacking when the mark occurs. If a combination of the above is used, then the stacks should agree to the logic of the type of sorting desired.

NOTE: When using a zip sort system, the signal to the stacker system should be adjusted to occur just before the product to be acted on reaches the #2 beam switch. The preceding product must be completely past the beam switch at the time of the signal.

6. Check for Proper Stacking Timing - Adjust the value in the appropriate dwell menu as necessary to control the timing of the stacker arm assemblies to ensure the product the stacker acted on enters the right stack.

NOTE: If using a KR Townsort system, the Townsort will beep when a signal to stack is sent to the stacker system. The next product detected by the #2 beam switch will start the stack cycle process. This product can be visually followed up the ramp and into the stacker as a check of the stacker timing.

7. Check for Proper Stack Indexing – during the stacking process, the fingers on the stacker arm should index to keep the top of the stack at approximately the same height as the flow of products continue to enter the stacker. During the stacking process, the steel bands should maintain contact with the top of the stack of product and the next product should slide between the bands and the top product. If the stack does not index fast enough, the next product entering the stacker will hit the trailing edge of the top product and eventually cause a jam in the stacker. If the stack is indexing too fast, the steel bands will lose contact with the top product in the stack and the next product entering the stacker will have a tendency to roll up eventually causing a jam in the stacker. The rate of indexing can be adjusted by changing the value in the Document Per Stack Drop menu and/or the value in the Stack Drop Distance menu. Each change of 50 in the Stack Drop Distance menu will change the drop distance by $\frac{1}{4}$ inch.

8. Adjust the Kicker Plate and Transfer Rollers – use the kicker motor control knob to adjust the speed of the kicker plate and transfer rollers. Adjust the value in the Kicker Motor Run Time menu to control the length of time the rollers run. The speed and time should be adjusted so that the stack or products clear the stacker before the next stack of products drop and transfer to the outfeed conveyor while keeping vertical.

9. Adjust the Outfeed Conveyor – use the stacker conveyor control knob to set the speed of the outfeed. Adjust the value in the Stack Conveyor Run Time menu to control the length of time the outfeed conveyor runs. The speed and time should be adjusted so to smoothly transfer the stack of products from the stacker to the next processing of the products.

6.7 TROUBLE SHOOTING

PROBLEM	SOLUTION
Machine will not power up	Check emergency stop buttons unlatched (control panel and stacker control panel) Check power cord connections Check fuses
Ramp belts will not run	Check touch screen for reason If "Jam Beam 1 or 2" – remove product(s) under beam switches If "Stop Circuit Active" – check stop connections or start upstream machines Check fuses
Stacker arms jammed	Clear products out of stacking area Check knock down bars for interference Check kicker assembly clearance Check kicker plate operation for binding
Stacker does not cycle	Test operation of stacker with stacker cycle button If cycles – check connections for control device If no cycle – check fuses
Kicker does not kick	Check speed of kicker motor control knob not on zero Check chain drive tension not too tight and causing binding Check value in Kicker Run Time menu Check fuses
Stacker Outfeed conveyor does not run	Check speed of stacker conveyor control knob not on zero Check value in Stacker Conveyor Run Time menu Check fuses

7 ELECTRICAL SCHEMATICS AND PARTS

7.1 WIRING DIAGRAMS LIST

7.2 PARTS LIST

8 MAINTENANCE

1. Periodically blow out excessive dirt and paper dust.
2. Check ramp belts and outfeed conveyor belts for wear and tension. Adjust tension as necessary to remove excessive slack out of belts.
3. Check and lubricate the chains on the chain drive assemblies as necessary with chain lube.
4. Check and lubricate the gears on the chain drive assembly and sensor mounting assembly with grease.
5. Check and drain the water out of the air pressure regulator bowl.

9 MECHANICAL PARTS AND DIAGRAMS

9.1 PARTS LIST

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

NO.	DRAWING #	DESCRIPTION
1	.SP90800	ASSY, MINI RAMP
2	. 541279-01	ASSY, RAMP AND TOP
3	. 541291-01	ASSY, INFEED TABLETOP
4	. 536629-02	ASSY, TOP BELT INFEED IDLER
5	. 535949-02	ASSY, PINCH ROLLER ARM
6	. 530610-01	ASSY, TAKEUP 1 IN BELT
7	. 510611A	ASSY, ROLLER
8	. 534814-05	ASSY, VALVE CYLINDER PLATE
9	. 541292-01	ASSY, RAMP INCLINE FRAMES
10	. 541777-01	ASSY, INFEED DIVERT
11	. 541239-01	ASSY, INFEED TABLETOP SUPPORT
12	. 541280-01	ASSY, FRAME AND TABLETOP
13	. 538078-01	ASSY, TOP BELT INFEED IDLER
14	. 535949-03	ASSY, PINCH ROLLER ARM
15	. 541285-01	ASSY, UPPER BELT DRIVE
16	. 510556A	ASSY, ROLLER BELT DRIVE
17	. 536627-01	ASSY, TAKEUP ECCENTRIC
18	. 536641-03	ASSY, OUTFD PINCH ROLLER
19	. 190101A	ASSY, SWITCH WITH COVER
20	. 500339A	ASSY, ROLLER
21	. 541238-01	ASSY, 1/2 HP MOTOR AND SR REDUCER
22	. 509000-14A	ASSY, REDUCER SR 1/2 HP
23	. 541785-01	ASSY, RH OUTFEED SIDEGUIDE
24	. 541786-01	ASSY, LH SIDEGUIDE OUTFEED
25	. 541240-01	ASSY, STACKER
26	. 541031-01	ASSY, TRANSFER ROLLER
27	. 538606-01	ASSY, IDLER ROLLER

28	.	507267-1A	ASSY, ROLLER
29	.	538607-01	ASSY, TAKE UP ROLLER
30	.	541032-01	ASSY, TRANSFER ROLLER
31	.	541241-01	ASSY, ELEVATOR
32	.	541079-01	ASSY, STACKER ARM OUTSIDE
33	.	541081-01	ASSY, STACKER ARM INSIDE
34	.	538098-01	ASSY, CHAIN DRIVE
35	.	538099-01	ASSY, CHAIN TAKE UP
36	.	538100-01	ASSY, GEAR DRIVE
37	.	541248-01	ASSY, SENSOR MTG
38	.	541243-01	ASSY, CHAIN LUG
39	.	541220-01	ASSY, MOTOR MOUNT
40	.	541789-01	ASSY, 3 BUTTON BOX
41	.	541242-01	ASSY, STACKER FRAME
42	.	541244-01	ASSY, STACKER GUIDE
43	.	541761-01	ASSY, BACK STOP
44	.	541770-01	ASSY, STACKER FINGER COVER
45	.	541245-01	ASSY, KICKER
46	.	509000-1AR	ASSY, MOTOR/REDUCER DR 1/4 HP R
47	.	541056-01	ASSY, TIMING BELT IDLER
48	.	541062-02	ASSY, FLAT BELT IDLER
49	.	541246-01	ASSY, KICKER PLATE
50	.	541036-01	ASSY, OUTFEED TABLETOP
51	.	507274	ASSY, ROLLER BELT DRIVE
52	.	507275	ASSY, ROLLER - BELT IDLER
53	.	509000-1A	ASSY, MOTOR/REDUCER DR 1/4 HP
54	.	541065-01	ASSY, TIMING BELT IDLER
55	.	541066-01	ASSY, FLAT BELT IDLER
56	.	541197-01	ASSY, TAKEUP ROLLER
57	.	541069-02	ASSY, PRODUCT GUIDE
58	.	541088-01	ASSY, CONTROL PANEL AND COVER
59	.	541089-01	ASSY, CONTROL PANEL
60	.	541113-01	ASSY, CABINET
61	.	541787-01	KIT, 1000 LB HYDRALIFT
62	.	541179-01	ASSY, RH HYDRALIFT LEG 1000LB
63	.	541180-01	ASSY, LH HYDRALIFT LEG

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	541113-01	ASSY, CABINET					
2	1	541240-01	ASSY, STACKER					
3	1	541279-01	ASSY, RAMP AND TOP					

1	SP90800
REO'D	WHERE USED

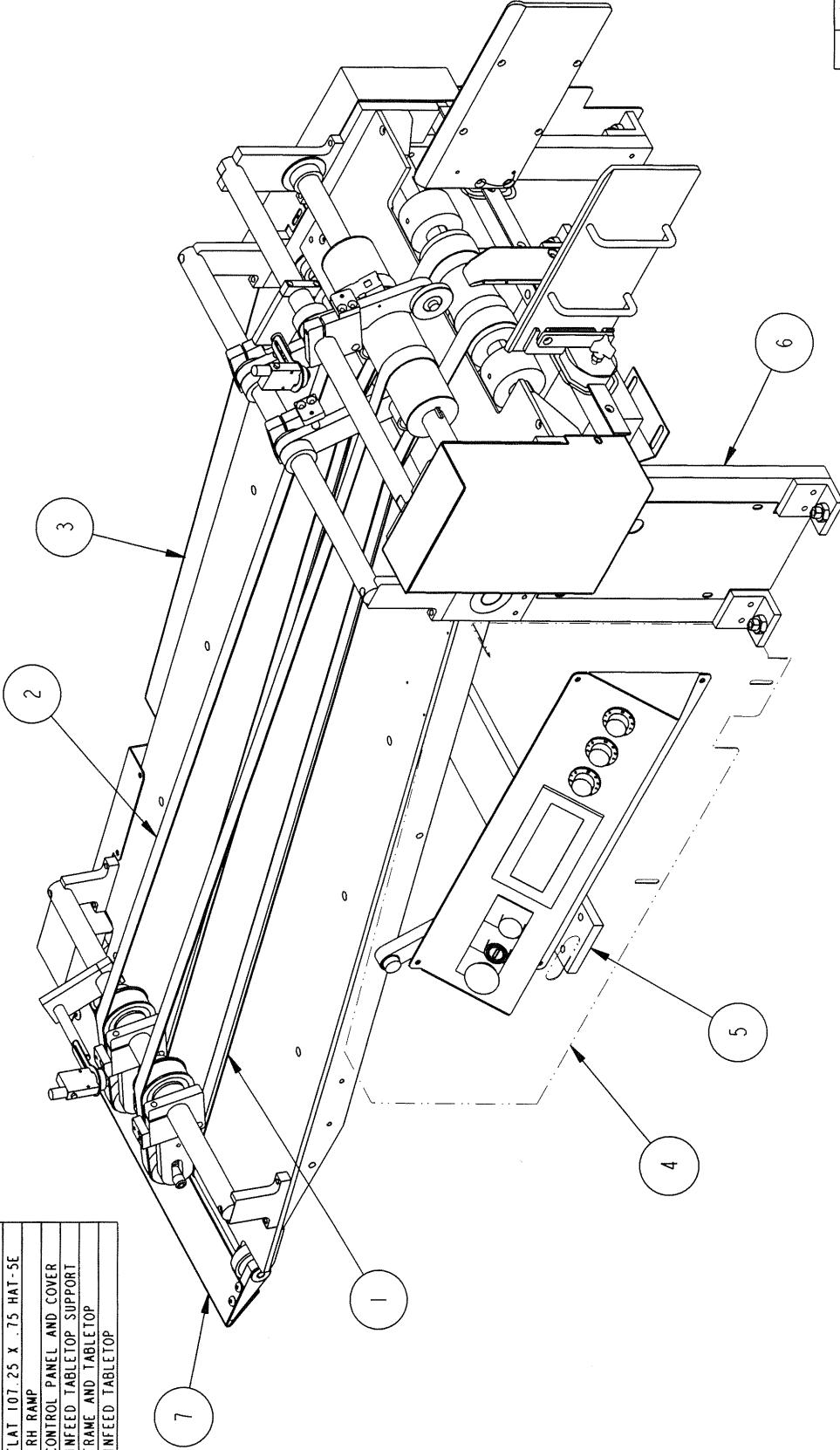
The technical drawing shows a cabinet assembly with various components. Callout 1 points to a side panel or door. Callout 2 points to a top panel or ramp assembly. Callout 3 points to a front panel or stacker assembly.

DRAWN BY: A KEY	SCALE 0 . 065	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED				MATERIAL: N / A	THIRD ANGLE PROJECTION	
DATE 27 - Dec - 01		.xx	.xxx	ANG. .5		HEAT TREAT: N / A		
REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED					ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY			
CHECKED BY:						FINISH: N / A	MODEL: 630	TITLE: ASSY, MINI RAMP
TRACED BY:	MASTER					SHEET NO: 10F2	DRAWING #	SP90800

DRAWING 1

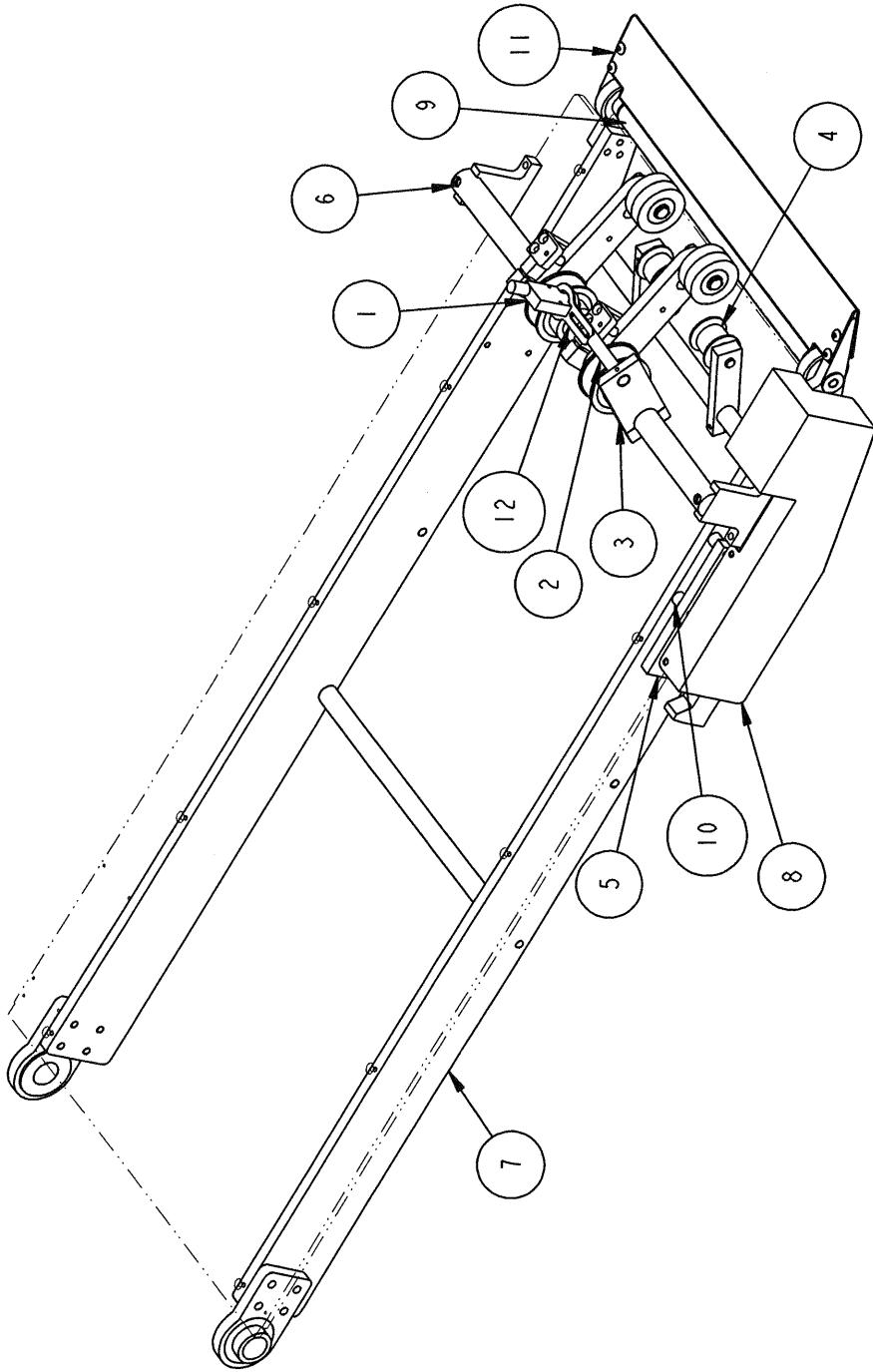
541279-01

ITEM NO	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	ER
1	2	106566 BELT, FLAT 110.50 X 1.000 HAT-SE					
2	2	106304-1 BELT, FLAT 107.25 X .75 HAT-SE					
3	1	541004-02 COVER, RH RAMP					
4	1	541008-01 ASSY, CONTROL PANEL AND COVER					
5	1	541239-01 ASSY, INFEED TABLETOP SUPPORT					
6	1	541230-01 ASSY, FRAME AND TABLETOP					
7	1	541291-01 ASSY, INFEED TABLETOP					



DRAWING 1		SP63000		RECD WHERE USED					
KIRK - RUDY, INC.									
KENNESAW, GEORGIA									
PRINTED ON COPIER									
NO COPIES OR REPRODUCTION OF THIS DRAWING									
MAY BE MADE UNLESS SPECIFICALLY APPROVED BY THE									
ENGINEER OR SUPERVISOR									
KIRK - RUDY, INC.									
KENNESAW, GA 30046 USA									
SP63000									
541279-01									
ASSY, RAMP AND TOP		DRAWING 1		541279-01					
DIMENSIONAL TOLERANCES									
UNLESS OTHERWISE NOTED									
IN	MM	IN	MM	IN	MM				
1	2	3	4	5	6				
SCALE:	0 .220	INCHES	MM	INCHES	MM				
CREATED BY:	DATE	26-08-01	REMOVED ALL GAPS AND SHRINKAGE MARKS	REMOVED ALL GAPS AND SHRINKAGE MARKS	REMOVED ALL GAPS AND SHRINKAGE MARKS				
TRACED BY:	MASTER	N/A	N/A	N/A	N/A				
ALL DIMENSIONS ARE IN INCHES UNLESS NOTED DO NOT SCALE, DRAW TO EXISTING ONE									

REV NO	DATE	DESCRIPTION	ECN NO	BT
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ITEM #	PART #	DESCRIPTION
1	1	BEAMSWITCH, RETROREFLECTIVE
2	1	SHAFT BEAMSWITCH MOUNT
3	1	CLAMP, SUPPORT
4	5340610-01	ASSY, TAKEUP I IN BELT
5	534814-05	ASSY, VALVE CYLINDER PLATE
6	5336229-02	ASSY, TOP BELT INFED DOLER
7	541292-01	RAMP, INCLINE FRAMES
8	541296-02	COVER, REJECT AIR CYLINDER
9	541300-01	SHAFT, INFED ROLLER
10	4	SPACER, AIR CYLINDER MOUNT
11	1	ASSY, INFED DIVERT
12	SP38237	BRACKET, PHOTOCELL

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	2	508049-4	BRACKET, UPPER BELT SUPPORT					
2	2	535949-02	ASSY, PINCH ROLLER ARM					
3	1	SP18329-1	SHAFT, UPPER BELT IDLER					

REF ID: 538080-01 WHERE USED

DRAWN BY: A Y B SCALE: 0 . 375 DIMENSIONAL TOLERANCES: UNLESS OTHERWISE NOTED

.xx	.xxx	ANG.	.01	.005	.5
-----	------	------	-----	------	----

CHECKED BY: DATE: 30 - May - 00 MATERIAL: N / A HEAT TREAT: N / A

TRACED BY: MASTER FINISH: N / A

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

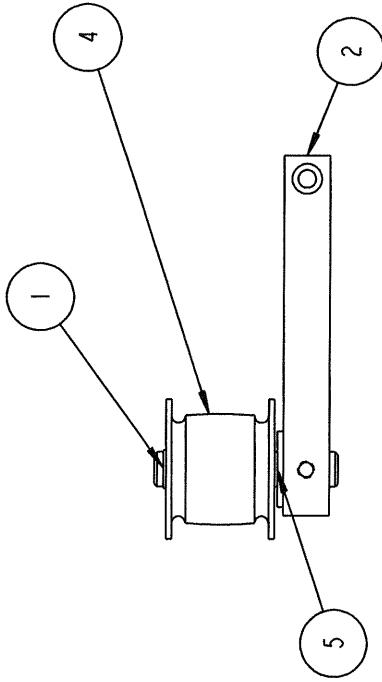
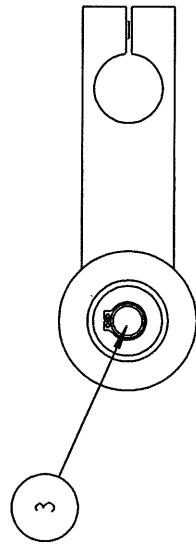
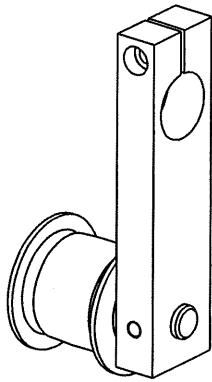
MODEL: SP63000 TITLE: ASSY, TOP BELT INFED IDLER

SHEET NO: 1 OF 1 DRAWING #: 536629-02

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	100116	BUSHING, SLI. 0001D1 .2500D .500LG					
2	2	100410	WASHER, BRASS TW100					
3	1	102217	COLLAR 1.000					
4	1	102704	SPRING, COIL					
5	2	103108	BEARING, FLAT .500					
6	2	103116	BEARING, FLAT 1.000					
7	1	104106	SNAPRING, .500					
8	1	506292	CLAMP, ROLLER					
9	1	506293	BRACKET, CLAMP SPRING					
10	1	515266	STUD, IDLER					
11	1	515288	ROLLER, BELT CROWN IN EXTENSION					
12	1	535950-01	ASSY, IDLER ROLLER					
13	1	535951-01	ASSY, IDLER ROLLER					
14	1	SP20812	ROLLER, BELT GUIDE					
15	1	SP30833	BRACKET, ROLLER, RAMP					

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. KENNESAW, GA 30144 USA
A Y B	0 . 500	.XX .XXX .005 .5 ANG.	N / A		
CHECKED BY:	DATE	HEAT TREAT:	N / A	MODEL: 703R	KIRK - RUDY, INC. KENNESAW, GEORGIA
TRACED BY:	MASTER	FINISH:	N / A	SHEET NO: 1 OF 1	TITLE: ASSY, PINCH ROLLER ARM
		REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED	ALL DIMENSIONS ARE IN INCHES DO NOT SCALE - WORK TO DIMENSIONS ONLY	DRAWING #:	535949-02

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	104100	SNAPRING, .375					
2	1	504949	ARM BELT TIGHTENER					
3	1	504988-1	SHAFT, BELT TIGHTENER					
4	1	510611A	ASSY-ROLLER					
5	1	WA013	WASHER, FLAT 3/8					



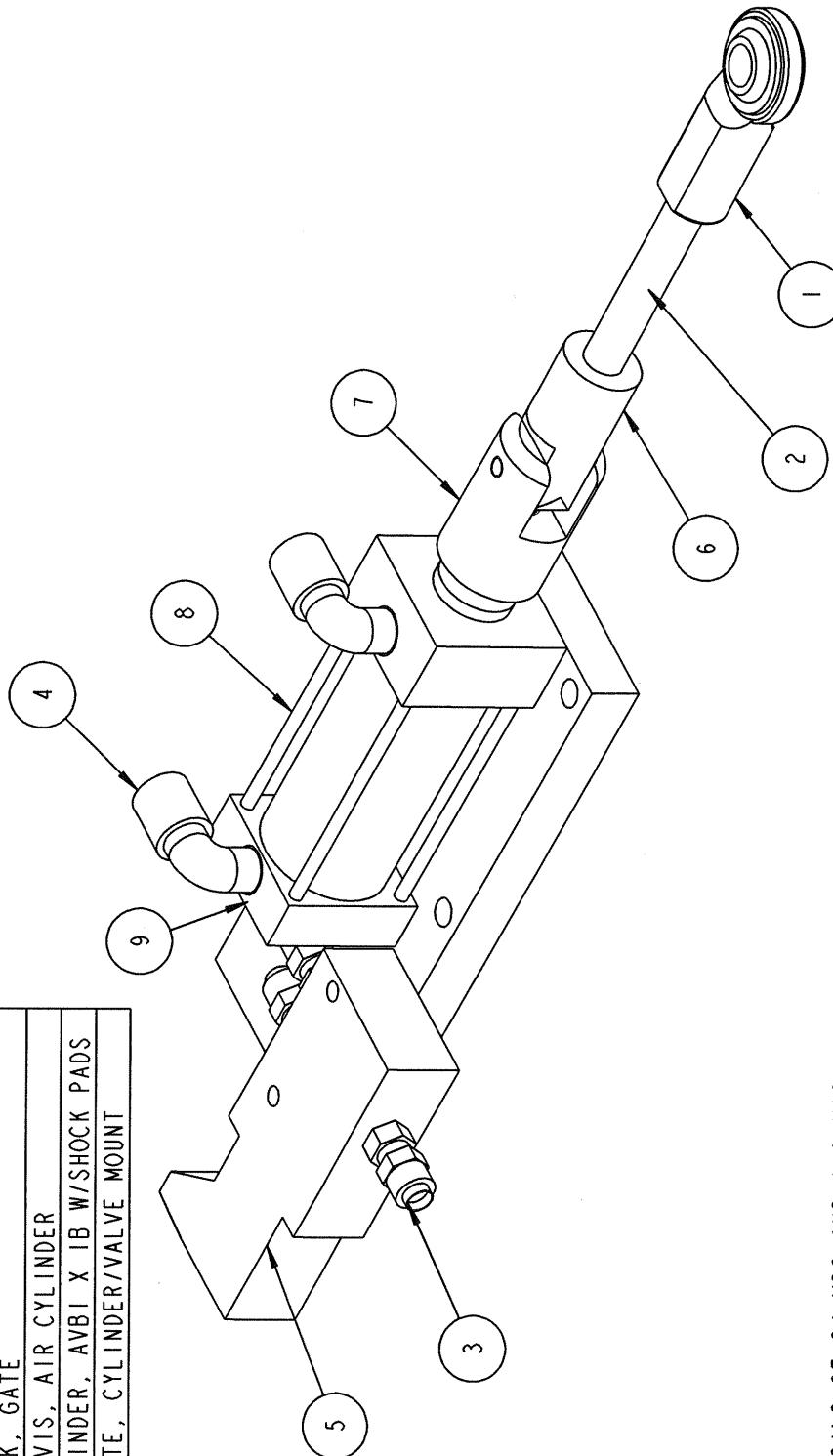
DRAWN BY:		SCALE	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	MATERIAL:	THIRD ANGLE PROJECTION	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNESAW, GA 30144, USA	GEN	
RECD'D	WHERE USED		.XX	.XXX	ANG.			
		TVK	0 . 500	X X X	+ -	KIRK - RUDY, INC. KENNESAW, GEORGIA		
CHECKED BY:		DATE	26 - May - 98	HEAT TREAT:	NONE			
TRACED BY:		MASTER		FINISH:	ALL DIMENSIONS ARE FURNISHED IN INCHES. DO NOT SCALE - WORK TO DIMENSIONS ONLY			
					N / A	SHEET NO.: 1 OF 1	DRAWING #: ASSY, TAKEUP IN BELT	530610-01

510611A

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	2	103106	BEARING, FLAT .375					
2	1	510611	ROLLER, IDLER					

DRAWN BY: T JG	SCALE 2 . 000	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED			MATERIAL: XXX	THIRD ANGLE PROJECTION [Diagram: A circle with a plus sign inside, followed by a horizontal line with a vertical dashed line extending from its right end.]	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	
CHECKED BY:	DATE 10 - Sep - 98	.xx	.xxx	.ANG.	.01	.005	.5	HEAT TREAT: N / A
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED			MODEL: XXX FINISH: N / A			
		ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY			SHEET NO. 10F 1	DRAWING # ASSY - ROLLER	510611A	
					X	xxx	REO'D WHERE USED	

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	103500	BEARING - ROD END					
2	1	105633	SHAFT, THREADED 3/8-24 X 2.375					
3	3	109529	CONNECTOR, PIPE					
4	2	109533	ELBOW					
5	1	202708	VALVE, THREE WAY AIR					
6	1	508055	LINK, GATE					
7	1	508175	CLEVIS, AIR CYLINDER					
8	1	190803-1	CYLINDER, AVBI X 1B W/SHOCK PADS					
9	1	532571-01	PLATE, CYLINDER/VALVE MOUNT					



NOTE:

1) AVAILABLE IN COILS OF 24 VDC AND 110 VAC
 24 VDC (512 DIVERT, 215 DIVERT OPTIONAL)
 110 VAC (SP630-703 RAMP, 215 DIVERT OPT.)
 202708-1
 202708-2

1	703
---	-----

RECD	WHERE USED

DRAWN BY: A KEY	SCALE: 0 .625	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. KENNESAW, GA 30144, USA	
					.01 .005 .5	HEAT TREAT: N / A
CHECKED BY:	DATE: 3 - JUN - 01	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED	FINISH: N / A	MODEL: 703R	TITLE: ASSY , VALVE CYLINDER PLATE	
TRACED BY:	MASTER	ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	SHEET NO.: 1 OF 1	DRAWING #: 534814-05		

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	2	109530 ELBOW, MALE 1/4 NPT					
2	1	190850 NUT, REGULATOR					
3	1	190851 AIR REGULATOR W/BOWL					
4	1	190852 GUAGE, AIR PRESSURE					
5	1	531485-01 BRACKET, AIR REGULATOR					

1 215SP20
REQ'D WHERE USED

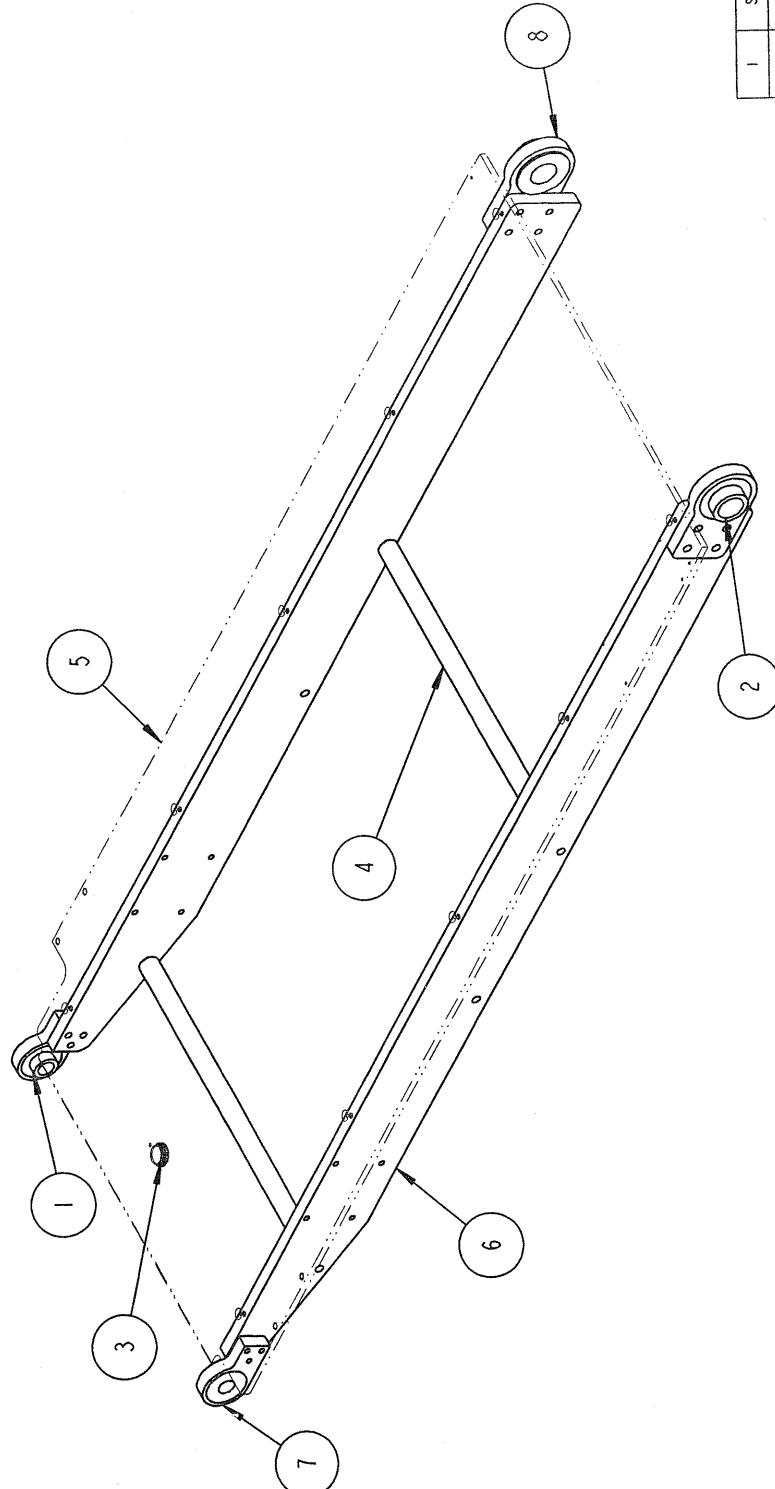
PROPRIETARY AND CONFIDENTIAL
NO PORTION OF THIS DRAWING
MAY BE QUOTED OR REPRODUCED
IN ANY FORM WITHOUT THE
EXPRESS WRITTEN PERMISSION
OF KIRK-RUDY, INC.
KR WOODSTOCK, GEORGIA
WOODSTOCK, GA 30188 USA

THIRD ANGLE PROJECTION

SCALE: A KEY	SCALE: .000	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED			MATERIAL: N/A	MODEL: 215SP20	TITLE: ASSY, AIR PRESSURE REGULATOR
		.xx	.xxx	ANG.			DRAWING #
		.01	.005	.5	HEAT TREAT: N/A	SHEET NO. 1 OF 1	
REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED					FINISH: ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY		
DRAWN BY: A KEY	DATE: 26-Jan-01						
CHECKED BY:							
TRACED BY: MASTER							

539942-02

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	2	103804	BEARING, HUB .625					
2	2	103808	BEARING, HUB 1.000					
3	1	202246	REFLECTOR					
4	2	500824-1	SHAFT, FRAME SPACER					
5	1	532221-01	TABLETOP, INFEED					
6	2	541293-01	PLATE, FRAME EXTENSION					
7	2	541299-01	PLATE, HUB BEARING					
8	2	SP46322	PLATE, RAMP BEARING					



DRAWN BY: A KEY	SCALE 0 . 156	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. WOODSTOCK, GA 30188 USA	
CHECKED BY:	DATE 18-05-01	.XX	.XXX	ANG. .01 .005 .5	HEAT TREAT: N / A	MODE: SP63000		TITLE: ASSY, RAMP INCLINE FRAMES DRAWING #
TRACED BY:	MASTER <i>M</i>	FINISH: N / A				SHEET NO.: 10F1	541292-01	
		REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY						

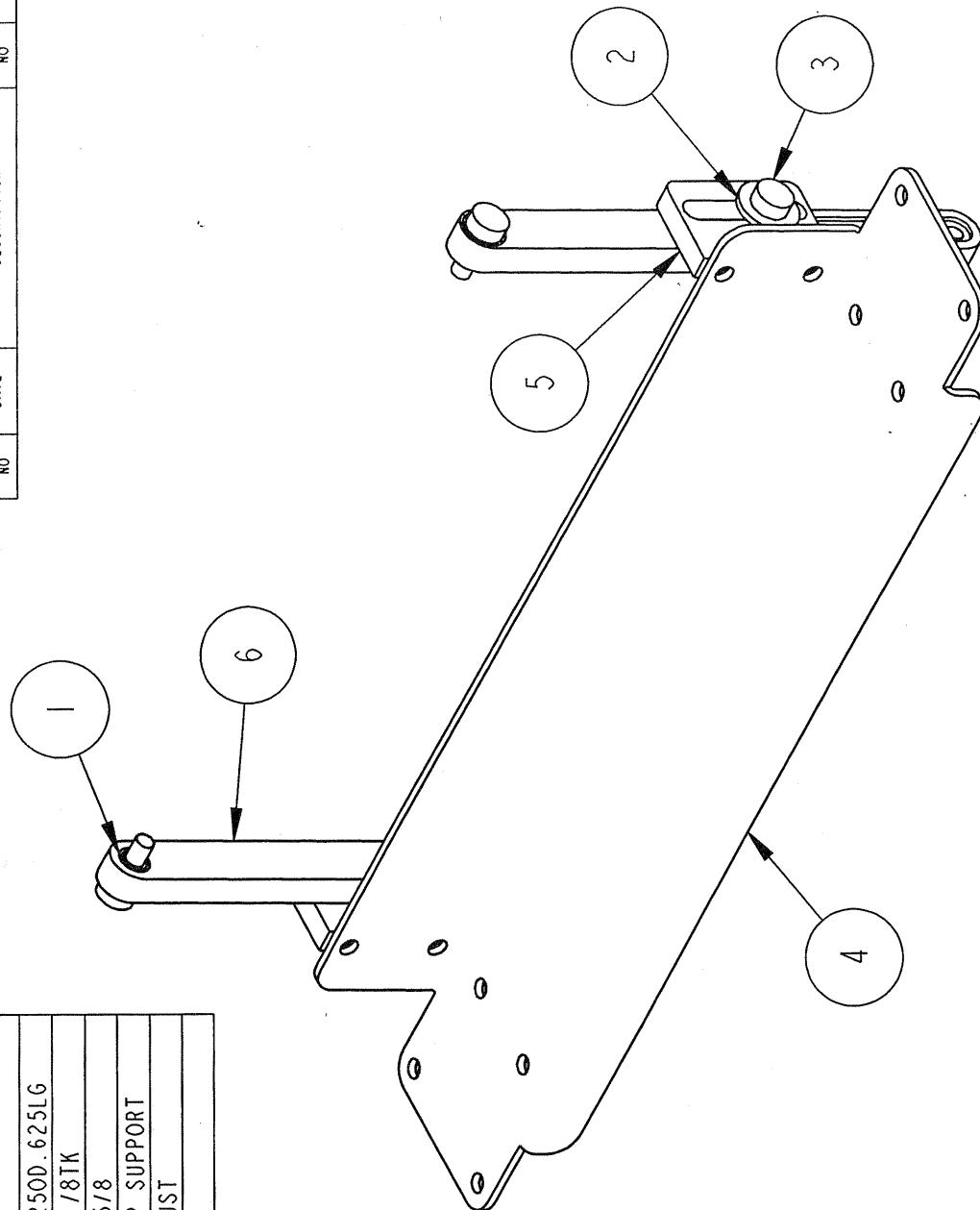
ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	4	103106	BEARING, FLAT .375					
2	1	532226-02	ARM, REJECT CYLINDER					
3	1	541295-01	GUIDE, INFED DIVERT					
4	1	541779-01	ARM, REJECT CYLINDER					
5	4	CSFF64	SCREW, BUTTON HEAD 1/4X.375					

1	SP90800
REQ'D	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	KR	KIRK - RUDY, INC. KENNESAW, GEORGIA
TITLE:		ASSY, INFED DIVERT
DRAWING #:		541777-01

DRAWN BY: A KEY	SCALE 0 . 438	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. KENNESAW, GA 30144 USA	
CHECKED BY:	DATE 27 - Dec - 01	.xx	.xxx	HEAT TREAT: N / A			
TRACED BY:	MASTER	.01	.005	FINISH: N / A			
		REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED		ALL DIMENSIONS ARE IN INCHES DO NOT SCALE - WORK TO DIMENSIONS ONLY			

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	100162	BUSHING, SL. 500ID. 625OD. 625LG					
2	100618	WASHER, FLAT 1/2ID 1/8TK					
3	107286	BOLT, SHOULDER 1/2X5/8					
4	541831-01	BRACKET, INFEED RAMP SUPPORT					
5	SPI8316	BRACKET, INFEED ADJUST					
6	SPI8315-3	ARM, INFEED SUPPORT					



1	630
REQ'D	WHERE USED
 KIRK - RUDY, INC. KENNESAW, GEORGIA	
<small>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</small>	
<small>THIRD ANGLE PROJECTION</small>	
<small>MATERIAL: N/A</small>	
<small>DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED</small>	
<small>.XX .XXX ANG. .01 .005 .5 HEAT TREAT:</small>	
<small>REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED</small>	
<small>ALL DIMENSIONS ARE FINISHED DIMENSIONS</small>	
<small>DO NOT SCALE - WORK TO DIMENSIONS ONLY</small>	
DRAWN BY: A KEY	SCALE: 0 : 3 3
CHECKED BY:	DATE: 28 - Jan - 03
TRACED BY:	MASTER <i>M</i>
<small>FINISH:</small>	
<small>SHEET NO. 1 OF 1</small>	
<small>TITLE: ASSY, INFEEDED TABLETOP SUPPORT</small>	
<small>DRAWING #: 541239-01</small>	

ITEM NO.	PART #	DESCRIPTION	REV. NO.	DATE	DESCRIPTION	REV. NO.	DATE
1	2	102205 COLLAR .500					
2	4	103808 BEARING, HUB 1.000					
3	1	105056 V-PULLEY, MAVR. 21200					
4	1	105032 V-PULLEY, AN30					
5	1	106035 BELT, V AX46					
6	1	108866 PULLEY, TIMING 21075 1.000B .250K					
7	1	108933 BELT, TIMING D2251075					
8	1	202246 REFLECTOR					
9	1	500790 ASSY, KNOB					
10	2	502295 SHAFT, PAPER GUIDE					
11	1	510532 SHAFT, ROLLER					
12	1	202261-5 BEAMSWITCH, RETROREFLECTIVE					
13	2	500814-1A ASSY, SIDE GUIDE RAIL					
14	1	508995-5 SHAFT, PLATE MOUNT					
15	1	510536-1A ASSY, ROLLER BELT DRIVE					
16	2	510535-1 BRACKET, TABLETOP SUPPORT					
17	2	510565-2 GUSSET, TABLE TOP SUPPORT					
18	1	510519-1 SUPPORT					
19	1	510613-12 GUIDE, PAPER					
20	1	515300-31 CLAMP, SUPPORT					
21	1	536641-03 ASSY, OUTFEED PINCH ROLLER					
22	1	538018-01 ASSY, TOP BELT INFEED IDLER					
23	1	54120-01 BRACKET, PROX MOUNT					
24	1	541238-01 ASSY, 1/2 HP MOTOR AND SR REDUCER					
25	1	541281-01 PLATE, FRAME LH					
26	1	541282-01 PLATE, FRAME RH					
27	1	541283-01 SHAFT, ROLLER DRIVE					
28	1	541284-01 TABLETOP, UPPER					
29	1	541285-01 ASSY, UPPER BELT DRIVE					
30	1	541287-01 WLMT, BELT COVER					
31	1	541290-01 COVER, LH SIDE					
32	1	541297-01 ROLLER, OUTFEED					
33	2	541298-01 ROLLER, OUTFEED					
34	1	541765-01 ASSY, RH OUTFEED SIDEGUIDE					
35	1	541766-01 ASSY, LH SIDEGUIDE OUTFEED					
36	1	541768-01 BLOCK, REAR GUIDE MOUNT					
37	2	541829-01 LEG, RAMP OUTFEED SUPPORT					
38	2	541830-01 ANGLE, OUTFEED LEG SUPPORT MOUNT					
39	1	543431-01 COVER, RH RAMP					
40	1	SP37360 GEAR, SENSING					
41	1	SP38237 BRACKET, PHOTOCELL					

DRAWING #:		SCALE	DIMENSIONS, TOLERANCES UNLESS OTHERWISE NOTED		MATERIAL	DRAWABLE PROJECTION NO. OF DRAWINGS		PROPRIETARY AND CONFIDENTIAL NO. OF DRAWINGS NAME OF DRAWING NAME OF COMPANY NAME OF DRAWN BY NAME OF APPROVED BY NAME OF CHECKED BY NAME OF DRAWN BY NAME OF APPROVED BY		SPARES RECD. WHERE USED
CHECKED BY:		DATE	IN IN. MM		WEAT TREAT:	N/A		N/A		
TRACED BY:		DATE	IN IN. MM		WEAT TREAT:	N/A		N/A		
MASTER BY:		DATE	IN IN. MM		WEAT TREAT:	N/A		N/A		
TYPED BY:		DATE	IN IN. MM		WEAT TREAT:	N/A		N/A		

SP90800	10F2
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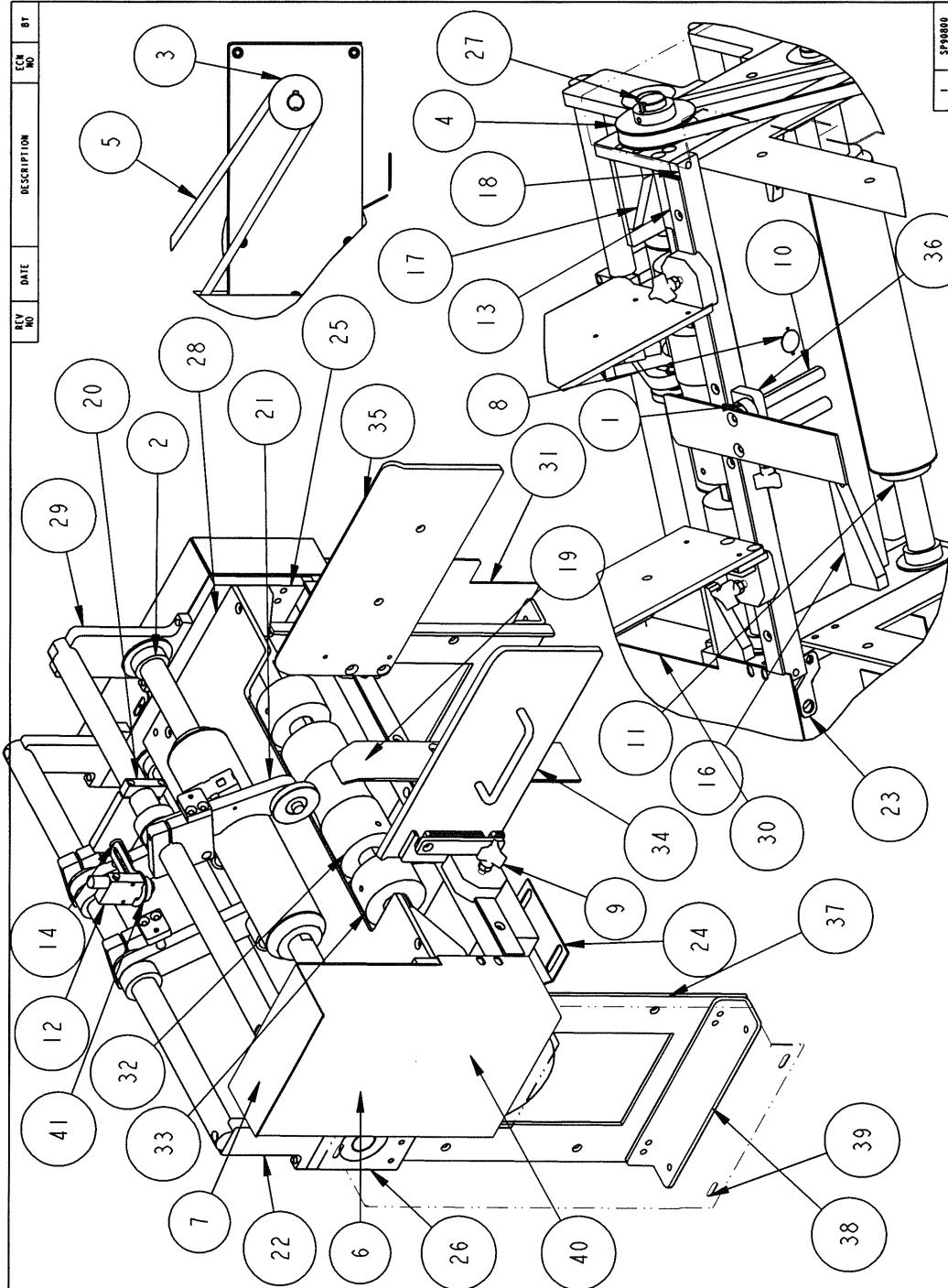
KRK - RUDY, INC.
WOODSTOCK, GEORGIA

1

ASSY, FRAME AND TABLETOP

DRAWING #

541280-01



ITEM QTY	PART #	DESCRIPTION	REV. NO.	DATE	ECN	B1
1	2	COLLAR .500				
2	4	BEARING, HUB 1.000				
3	1	105026 V-PULLEY, MAVR. 2200				
4	1	105032 V-PULLEY, AK30				
5	1	106035 BELT, V AX46				
6	1	108866 PULLEY, TIMING 21L015 1.000B .250K				
7	1	108933 BELT, TIMING D225L075				
8	1	202246 REFLECTOR				
9	1	500790 ASSY, KNOB				
10	2	502295 SHAFT, PAPER GUIDE				
11	1	510562 SHAFT, ROLLER				
12	1	202261-5 BEAMS/ SWITCH, RETROREFLECTIVE				
13	2	50084-1A ASSY, SIDE GUIDE RAIL				
14	1	508935-5 SHAFT, PLATE MOUNT				
15	1	510565-1A ASSY, ROLLER BELT DRIVE				
16	2	510565-1 BRACKET-TABLETOP SUPPORT				
17	2	510565-2 GUSSET, TABLE TOP SUPPORT				
18	1	510579-1 SUPPORT				
19	1	510613-12 GUIDE, PAPER				
20	1	51530-31 CLAMP, SUPPORT				
21	1	536641-03 ASSY, OUTFEED PINCH ROLLER				
22	1	538018-01 ASSY, TOP BELT INFED IDLER				
23	1	54120-01 BRACKET, PROX MOUNT				
24	1	541238-01 ASSY, 1/2 HP MOTOR AND SR REDUCER				
25	1	541281-01 PLATE, FRAME LH				
26	1	541282-01 PLATE, FRAME RH				
27	1	541283-01 SHAFT, ROLLER DRIVE				
28	1	541284-01 TABLETOP, UPPER				
29	1	541285-01 ASSY, UPPER BELT DRIVE				
30	1	541287-01 WLMT, BELT COVER				
31	1	541290-01 COVER, LH SIDE				
32	1	541291-01 ROLLER, OUTFEED				
33	2	541298-01 ROLLER, OUTFEED				
34	1	541765-01 ASSY, RH OUTFEED SIDEGUIDE				
35	1	541766-01 ASSY, LH SIDEGUIDE OUTFEED				
36	1	541768-01 BLOCK, REAR GUIDE MOUNT				
37	2	541829-01 LEG, RAMP OUTFEED SUPPORT				
38	2	541830-01 ANGLE, OUTFEED LEG SUPPORT MOUNT				
39	1	543431-01 COVER, RH RAMP				
40	1	SP37360 GEAR, SENSING				
41	1	SP38337 BRACKET, PHOTOCELL				

I	SP48080	REC'D WHERE USED
KIRK - RUDY INC. WOODSTOCK, GEORGIA		
PRINTED ON COMPUTER BY KIRK-RUDY INC., WOODSTOCK, GA 30188 U.S.A.		
ASSY, FRAME AND TABLETOP	SP90800	PRINTING #
20F2	541280-01	541280-01

DRAWING NO.	A KEY	SCALE	DIMENSIONAL TOLERANCES			MATERIAL:
			IN	MM	IN	
CHECKED BY:						ALL SURFACES AND SHARP EDGES UNLESS OTHERWISE NOTED
MASTER #:						FINISH: ALL SURFACES TO 100% SCALE. INCHES DO NOT INDICATE. ONLY
TRACED BY:						

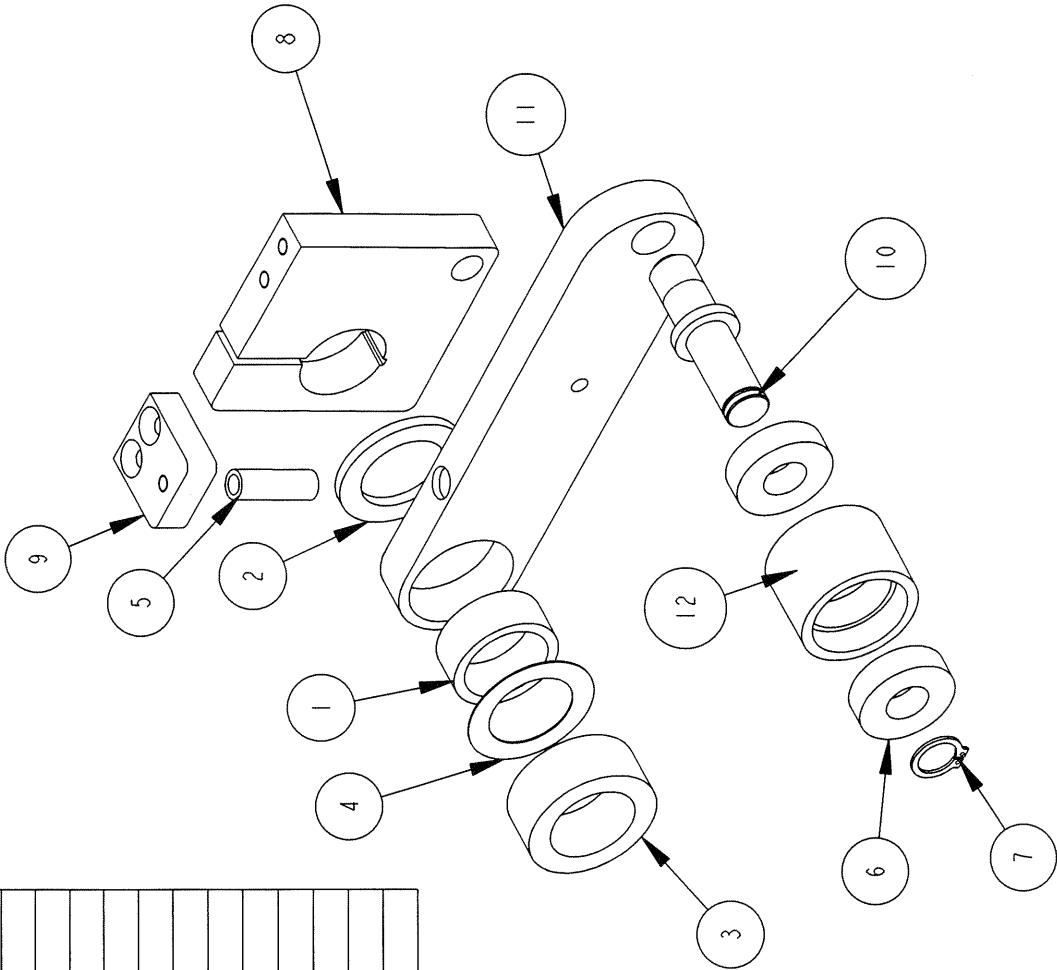
ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	2	508049-1	BRACKET, UPPER BELT SUPPORT					
2	1	510638-1	SHAFT, UPPER BELT SUPPORT					
3	2	535949-03	ASSY, PINCH ROLLER ARM					

1	536619-01
REQ'D	WHERE USED

The drawing shows a mechanical assembly consisting of three main components. Component 1 is a bracket located at the top, which appears to be a U-shaped or L-shaped part. Component 2 is a horizontal shaft that connects two vertical arms. One end of the shaft is attached to the bracket, and the other end is attached to a roller arm assembly. Component 3 is the roller arm assembly, which includes a vertical frame with a roller at the bottom and a handle or lever extending from the side.

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			TITLE:	ASSY, TOP BELT INFED IDLER	
					THIRD ANGLE PROJECTION
DRAWN BY:	A Y B	SCALE	0 . 375	MATERIAL:	N/A
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED				HEAT TREAT:	N/A
DIM.	.xx	.xxx	.ANG.		
DATE	.01		.005	.5	
30-May-00					
REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED				FINISH:	
ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY				N/A	
CHECKED BY:				SHEET NO.	1 OF 1
MASTER				DRAWING #	538078-01

ITEM	QTY	PART #	DESCRIPTION
1	1	100116	BUSHING, SLI. 0001DI. 2500D. 500LG
2	1	100410	WASHER, BRASS TW100
3	1	102217	COLLAR 1.000
4	1	102659	SHIM, 1.000X1.500X.015
5	1	102704	SPRING, COIL
6	2	103108	BEARING, FLAT .500
7	1	104106	SNAPRING, .500
8	1	506292	CLAMP, ROLLER
9	1	506293	BRACKET, CLAMP SPRING
10	1	515266	STUD, IDLER
11	1	515287	BRACKET, ROLLER RAMP
12	1	516045-1	ROLLER, BELT TAKEUP
13	1	535949-03	ASSY, PINCH ROLLER ARM



REV NO	DATE	DESCRIPTION	ECN NO	BY
2				538078-01
REQ'D WHERE USED				
2	538078-01			

DRAWN BY: A Y B		SCALE 0 .500	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	MATERIAL: N / A
			.XX .XXX ANG.	.01 .005 .5 HEAT TREAT:
CHECKED BY:		DATE 2 - JUN - 00	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED	
TRACED BY:		MASTER	ALL DIMENSIONS ARE IN INCHES DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	
			SHEET NO 1 OF 1	FIRMS: N / A
			TITLE: ASSY, PINCH ROLLER ARM	
			DRAWING # 535949-03	

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	102321	SPACER, 1.000X1.375X.188					
2	2	103808	BEARING, HUB 1.000					
3	1	108866	PULLEY, TIMING 21L075 1.000B .250K					
4	1	508051	BRACKET-UPPER BELT DR. SUPP.					
5	1	510639	SHAFT, BELT ADJ.					
6	1	510556A	ASSY, ROLLER BELT DRIVE					
7	1	510563-3	SHAFT, OUTFEED DRIVE					
8	1	536627-01	ASSY, TAKEUP ECCENTRIC					
9	1	541286-01	BRACKET-UPPER BELT DR SUPP.					

1	SP90800
REQ'D	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 3044 USA	KR	KIRK - RUDY INC. KENNESAW, GEORGIA
THIRD ANGLE PROJECTION		
MATERIAL:	N/A	
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		
.xx .xxx ANG.	.01 .005 .5	HEAT TREAT:
REMOVE ALL BURS AND SHARP EDGES UNLESS OTHERWISE NOTED		
ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY		

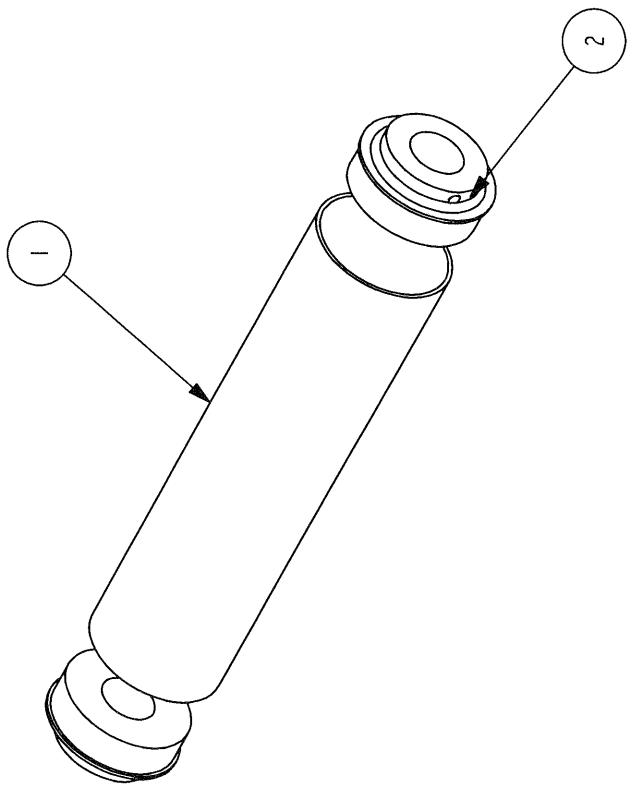
DRAWN BY: A KEY	SCALE: 0 .375	DATE: 11-JUL-01	MODEL: SP90800	TITLE: ASSY, UPPER BELT DRIVE
CHECKED BY:				
TRACED BY: MASTER			SHEET NO.: 1 OF 1	DRAWING #:

541285-01

DRAWING 1

510556A

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	510556			ROLLER, BELT DRIVE		
2	2	500330-3			HUB, ROLLER		

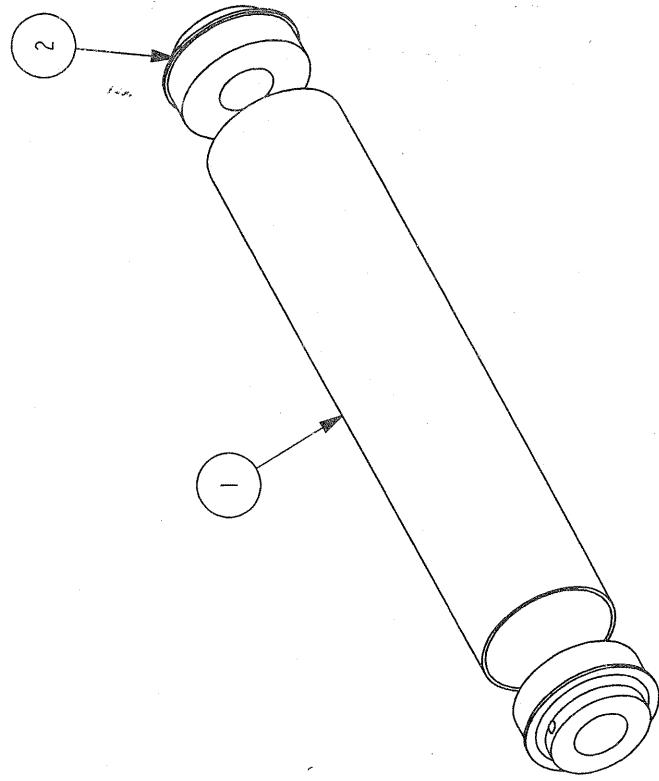


DRAWN BY:	SCALE	0 . 330	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED			THIRD ANGLE PROJECTION		PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE ODED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNESAW, GA 30144 USA	
MASTER	DATE	xx . xxx	ANG.	xx	.01	.005	.005	HEAT TREAT:	KIRK - RUDY, INC. KENNESAW, GEORGIA
TRACED BY:	30 - May - 00	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED			FINISH:			MODEL:	TITLE: ASSY, ROLLER BELT DRIVE
	MASTER	ALL DIMENSIONS ARE FINISHED DIMENSIONS			DO NOT SCALE - WORK TO DIMENSIONS ONLY			SHEET NO.: 0F 1	DRAWING #: 510556A

ITEM QTY	PART #	DESCRIPTION
1	1	500835 ROLLER, BELT IDLER
2	2	500330-3 HUB, ROLLER

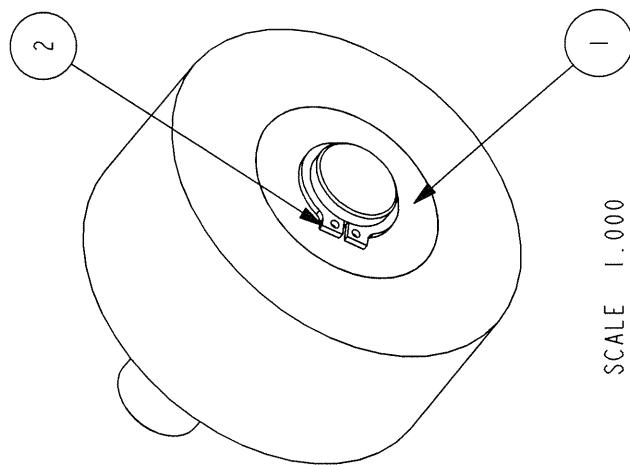
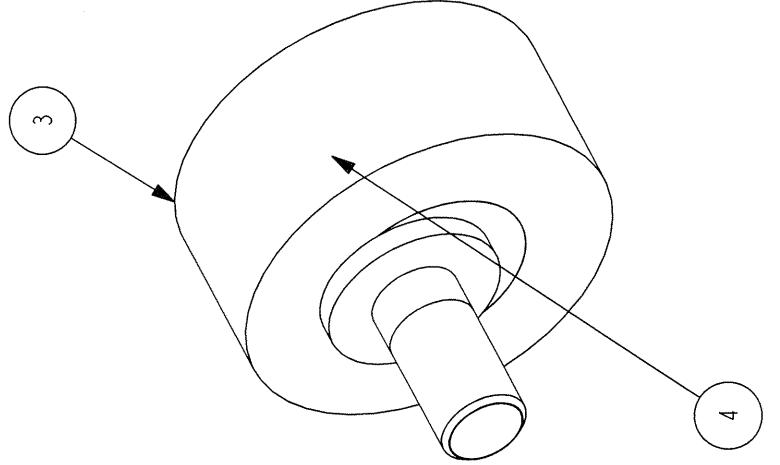
ITEM	REV NO	DATE	DESCRIPTION	ECN NO	BY

1	541280-01
REQ'D	WHERE USED



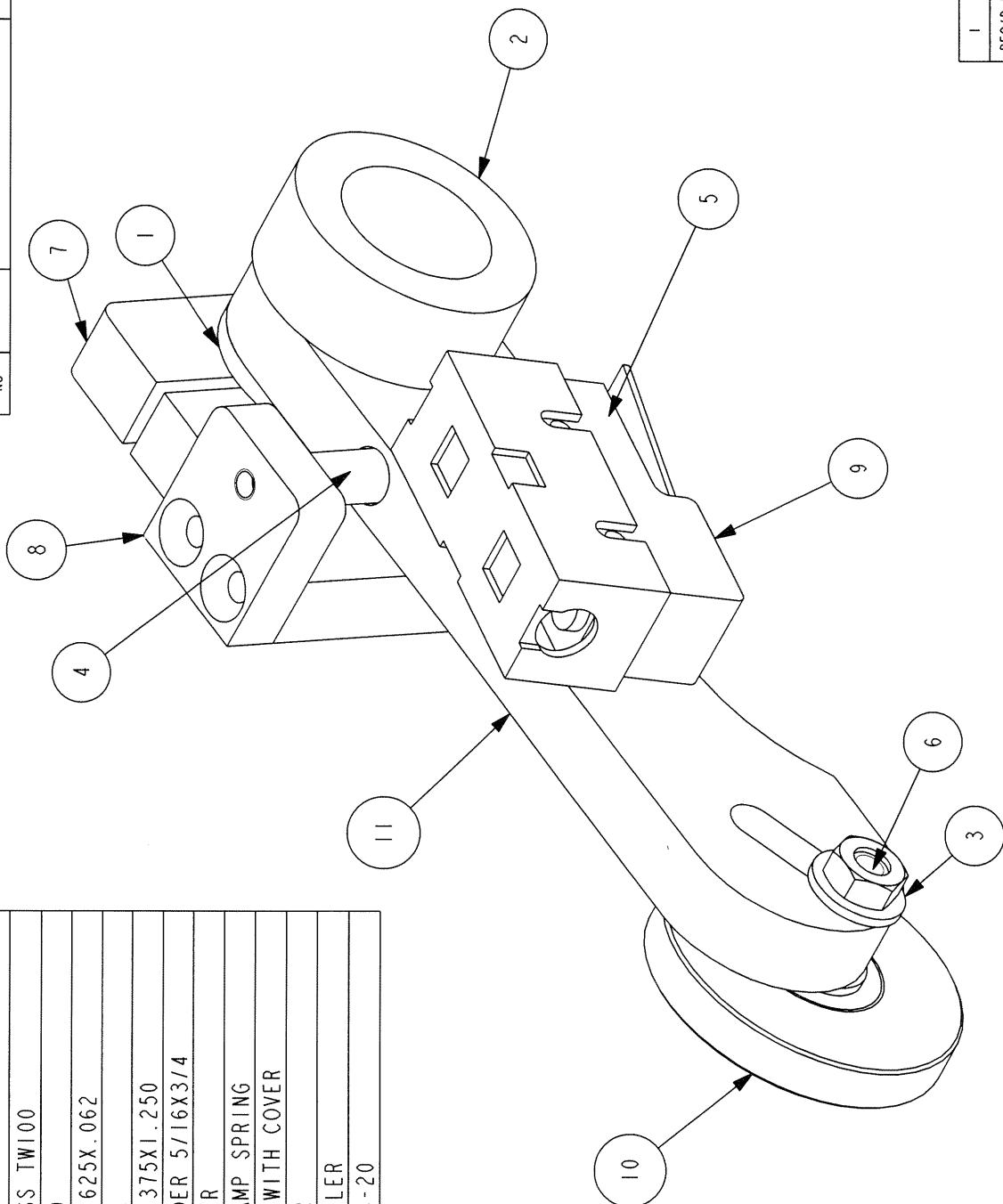
DRAWN BY: CMC	SCALE: 0 . 330	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	MATERIAL: N/A	THIRD ANGLE PROJECTION 	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNESAW, GA 30144 USA
CHECKED BY:	DATE: 16 - Nov - 04	.01 .005 .5 xx xxx ang.	HEAT TREAT: N/A	MODEL: 630	TITLE: ASSY, ROLLER BELT DRIVE
TRACED BY:	MASTER 	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE FINISH FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	N/A	SHEET 10 OF 1	DRAWING ■ 510556-1A

ITEM QTY	PART #	DESCRIPTION
1 2	103108	BEARING, FLAT .500
2 1	104106	SNAPRING, .500
3 1	108862-1	PULLEY, TIMING 18L075 1.125B NK
4 1	500983-3	STUD, IDLER SPROCKET

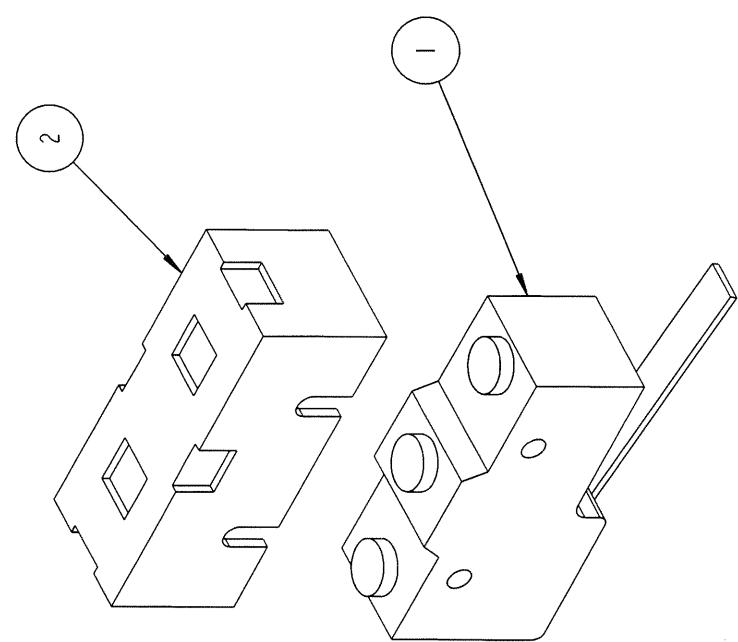


DRAWN BY: A Y B	SCALE 1.000	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	
CHECKED BY: 30 - May - 00	DATE 30 - May - 00	.00	.005
TRACED BY: MASTER	ANG. .01	ANG. .005	HEAT TREAT:
REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED			
ALL DIMENSIONS ARE IN INCHES DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY			
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-ROD, INC. KENNESAW, GA 30144 USA	
MODEL: 703R		TITLE: ASSY, TAKE UP ECCENTRIC	
SHEET NO. 1 OF 1		DRAWING # 536627-01	
RECD: 0 WHERE USED		I 536626-01	

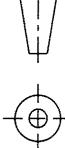
ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	100410	WASHER, BRASS TW100					
2	1	102212	COLLAR 1.000					
3	2	102308	SHIM, .375X.625X.062					
4	1	102704	SPRING, COIL					
5	1	105444	DOWEL, PIN .375X1.250					
6	1	107104	BOLT, SHOULDER 5/16X3/4					
7	1	506292	CLAMP, ROLLER					
8	1	506293	BRACKET, CLAMP SPRING					
9	1	190101A	ASSY-SWITCH WITH COVER					
10	1	500339A	ASSY, ROLLER					
11	1	506297-4	BRACKET, ROLLER					
12	1	HMSN12	NUT, HEX 1/4-20					



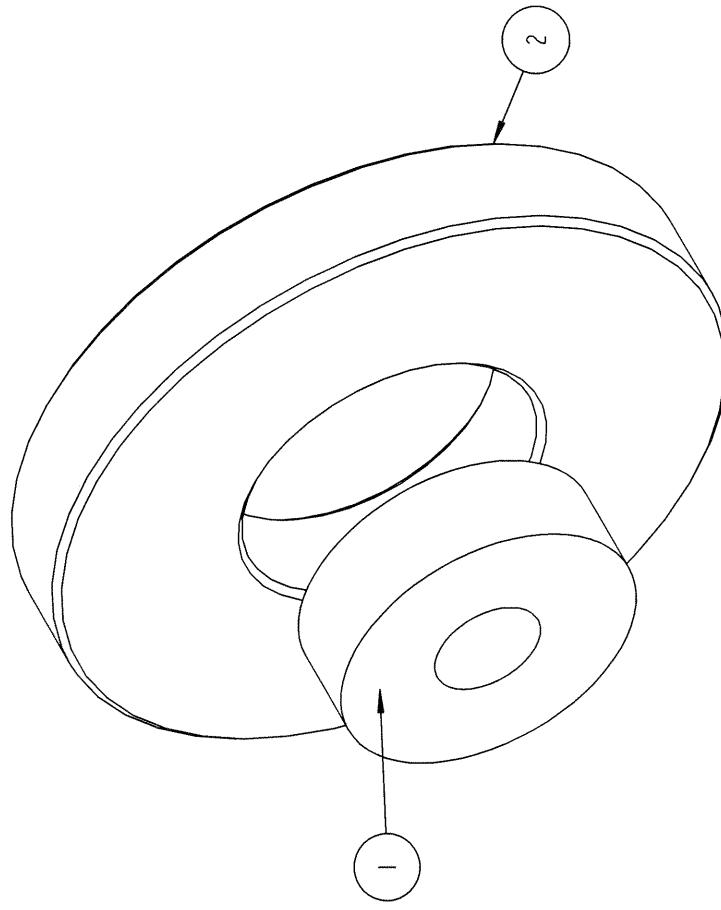
DRAWN BY:		SCALE		MATERIAL:	N / A	THIRD ANGLE PROJECTION	KIRK - RUDY, INC.
A K E Y		. 0 0 0		DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	. XX . XXX ANG.		
CHECKED BY:		DATE		HEAT TREAT:	N / A	MODEL:	KENNESAW, GEORGIA
		02 - J U - 0		REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED		SP 6 3000	KENNESAW, GA 30144 USA
TRACED BY:		MASTER		ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	FINISH:	N / A	TITLE:
							ASSY , OUTFD PINCH ROLLER
							DRAWING #
							10F
							SHEET NO.
							536641-03
							SP63000
							REO'D WHERE USED



ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	190101 MICROSWITCH, LEVER					
2	1	190203 COVER, MICROSWITCH					

X	XXX
REQ'D	WHERE USED
 KIRK - RUDY, INC. KENNESAW, GEORGIA	
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	
THIRD ANGLE PROJECTION	
	
MATERIAL:	XXX
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	
xx .xxx .005 .5	.01 .005 .5
ANG.	HEAT TREAT:
REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED	
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED	
DO NOT SCALE - WORK TO DIMENSIONS ONLY	
CHECKED BY:	08 - Mar - 01
DATE	MASTER
TRACED BY:	10F1
SHEET NO.	DRAWING #
215 ASSY - SWITCH WITH COVER	
190101A	

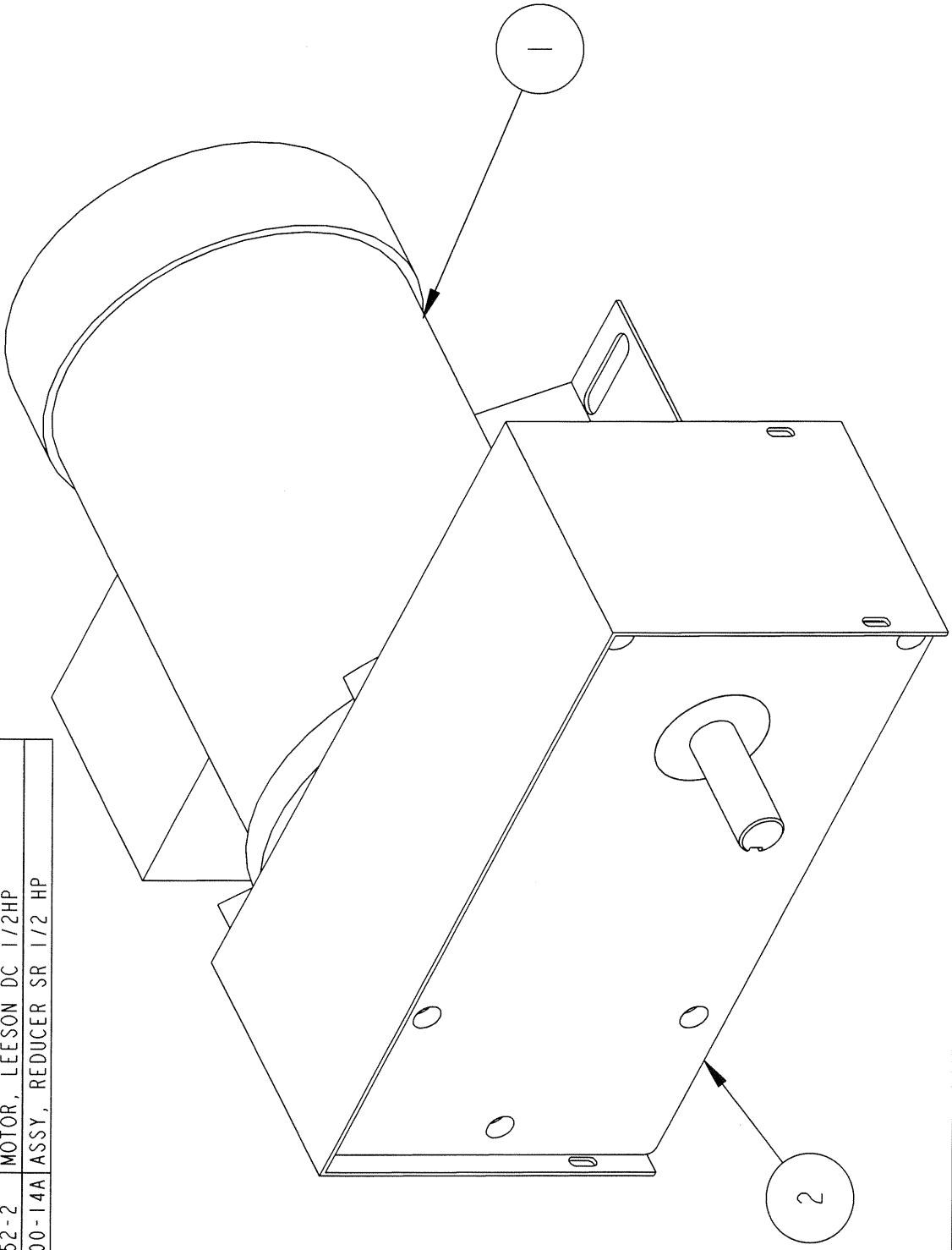
ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	103107	BEARING, FLAT .312					
2	1	500339	ROLLER, ARM					



DRAWN BY: T J G	SCALE: 2 . 000	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED			MATERIAL: NOTED	THIRD ANGLE PROJECTION DRAWING	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	
CHECKED BY:	DATE: 16 - Apr - 98	.xx	.xxx	ANG. .01 .005 .5	HEAT TREAT: NONE	MODEL: 527	TITLE: ASSY, ROLLER	
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED			FINISH: ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	SHEET NO.: 1 OF 1	DRAWING #: 500339-A	

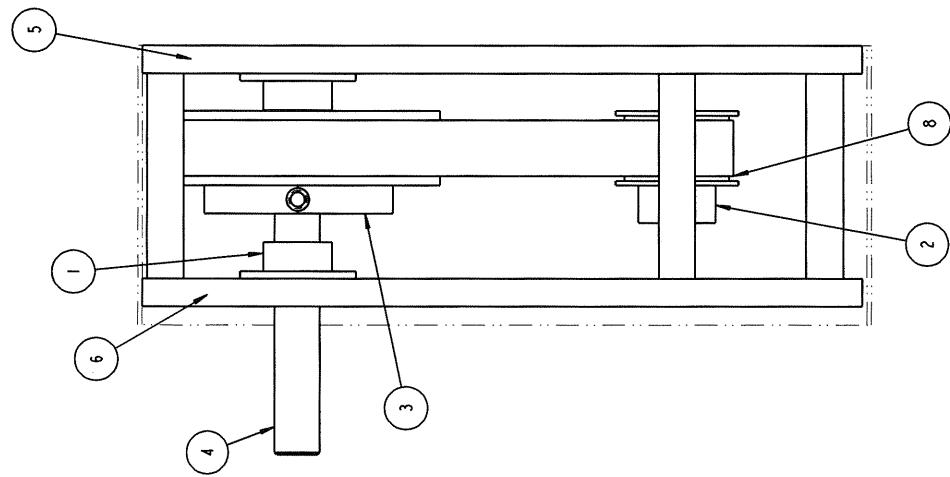
ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	200152-2	MOTOR, LEESON DC 1/2HP					
2	1	509000-14A	ASSY, REDUCER SR 1/2 HP					

1	SP63000
REO D	WHERE USED



DRAWN BY: A KEY	SCALE 0 . 500	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. KENNESAW, GA 30144 USA	
CHECKED BY:	DATE 03-JUL-01	X	.XXX	ANG.	.01	.005	.5	HEAT TREAT: N/A
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED			ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY			FINISH: N/A
								SHEET NO: 1 OF 1
								TITLE: ASSY, 1/2 HP MOTOR AND SR REDUCER
								DRAWING #: 541238-01

ITEM	QTY	PART #	DESCRIPTION	REV NO.	DATE	DESCRIPTION	ECN NO.	BY
1	2	103804	BEARING, HUB .625					
2	1	108809	PULLEY, TIMING 12L075 .625B .88K					
3	1	109320	PULLEY, TIMING 32L075 .625B .88K					
4	1	500829	SHAFT-GEAR					
5	1	509006	PLATE-REAR SIDE					
6	1	509007	PLATE-GEARBOX 1/2 HP SINGLE RED					
7	1	509037	COVER, REDUCER					
8	1	108805-4	BELT, TIMING 187L075					
9	5	SP16208	SPACER, REDUCER					

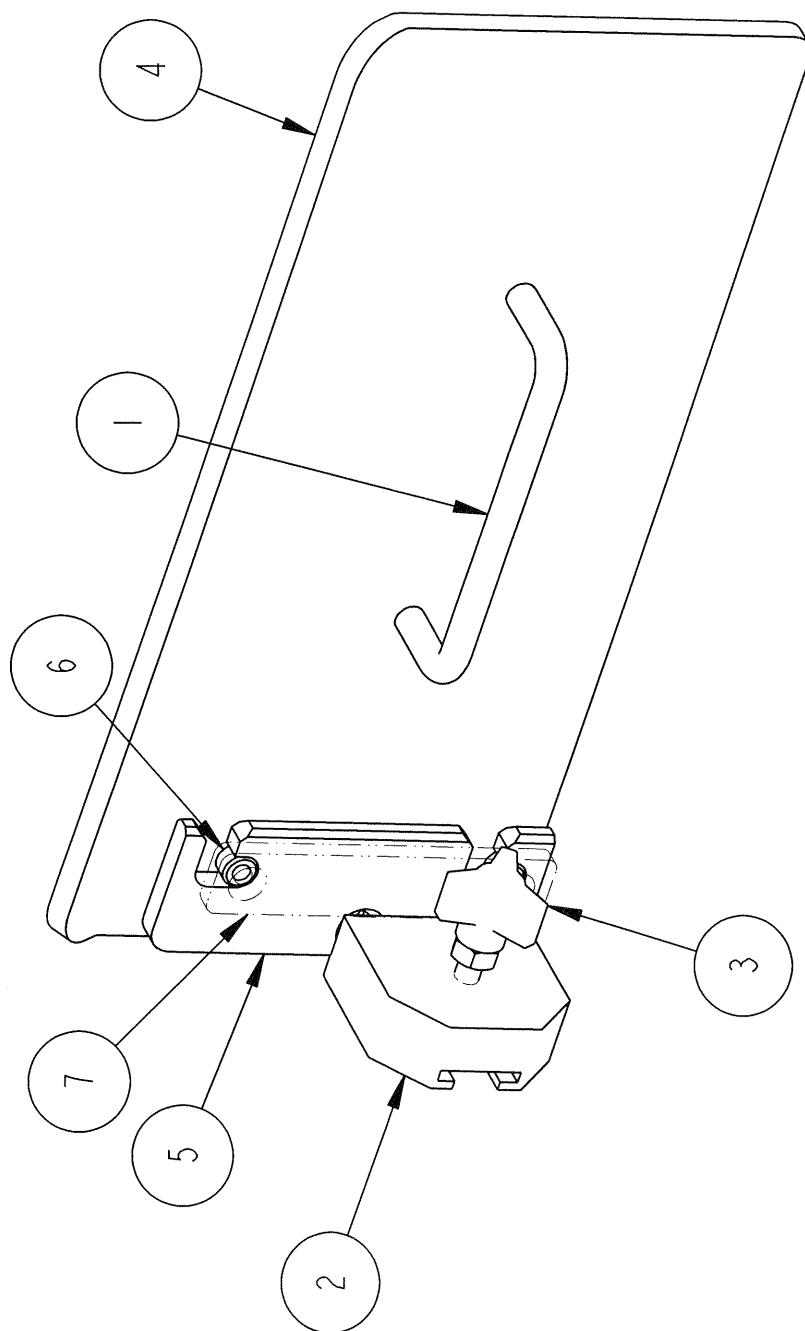


ITEM	QTY	PART #	SCALE	DESCRIPTION
			0 .625	DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED

DRAWING 1
509000-14A

1	11X	RECD WHERE USED
KIRK-RUDY, INC.		
KR WOODSTOCK, GEORGIA		
ITEM:	ASSY., REDUCER SR 1/2 HP	PRINTED: 509000-14A
GENERAL:	N/A	SET NO. 1 OF 1
NOTES:	THIS IS A MACHINING DRAWING. NO CONSTRUCTION OR ASSEMBLY INFORMATION IS CONTAINED HEREIN. THIS DRAWING IS THE PROPERTY OF KIRK-RUDY, INC. AND IS TO BE KEPT CONFIDENTIAL. NO COPIES OR REPRODUCTIONS ARE TO BE MADE EXCEPT WITHIN KIRK-RUDY, INC. FACILITIES. NO COPIES ARE TO BE MADE OUTSIDE THE U.S.A.	
NAME & DATE:	MASTER	TRACED BY:
NAME & DATE:	3 - Nov - 98	TRACED BY:

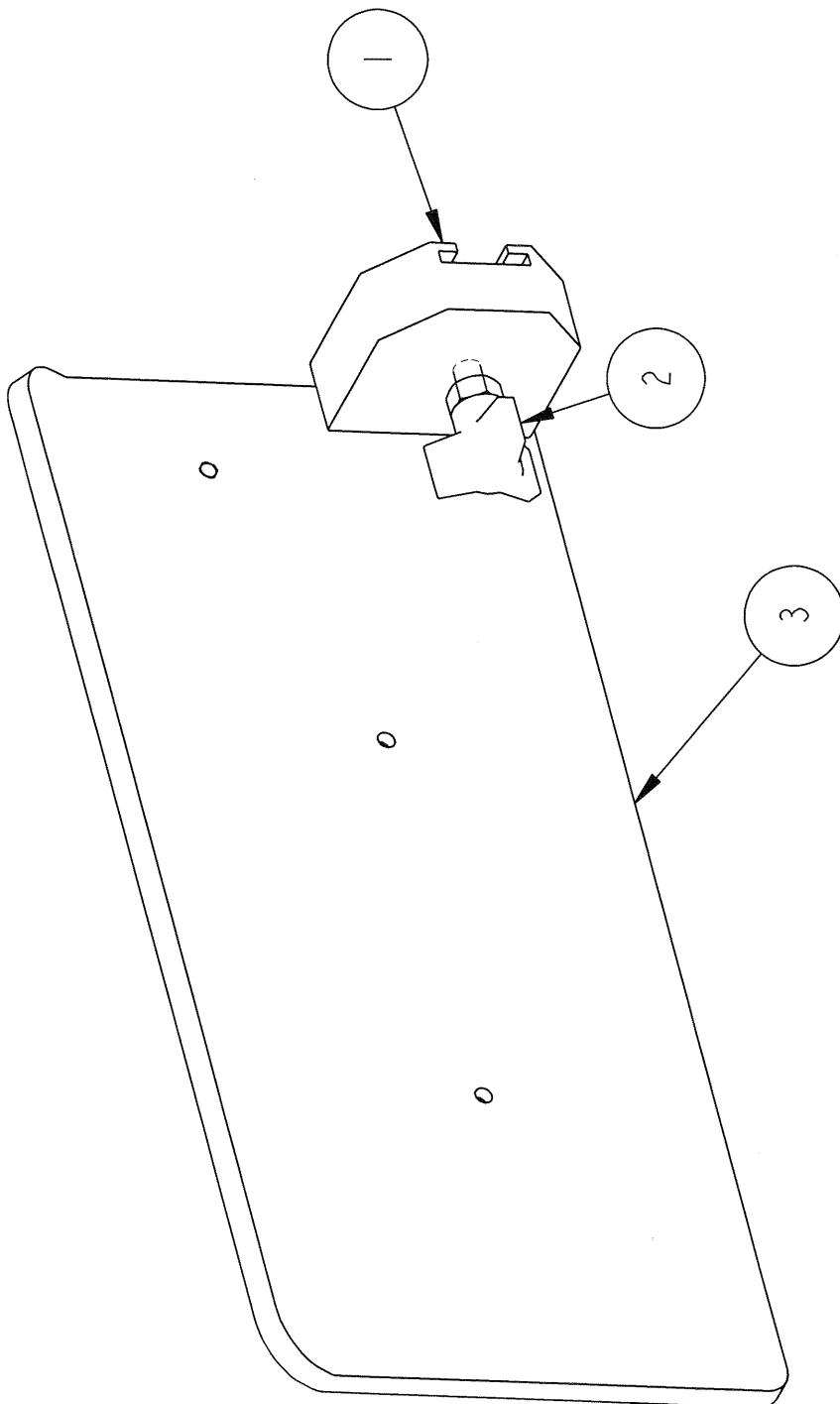
ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	190955	HANDLE					
2	500755	CLAMP - SIDE GUIDE					
3	500790	ASSY, KNOB					
4	541780-01	SIDEGUIDE, RH OUTFEED					
5	541782-01	PLATE, SIDEGUIDE MOUNT					
6	541783-01	SPACER, SIDEGUIDE MOUNT					
7	541784-01	PLATE, SIDEGUIDE MOUNT					



I	SP90800
REO D	WHERE USED

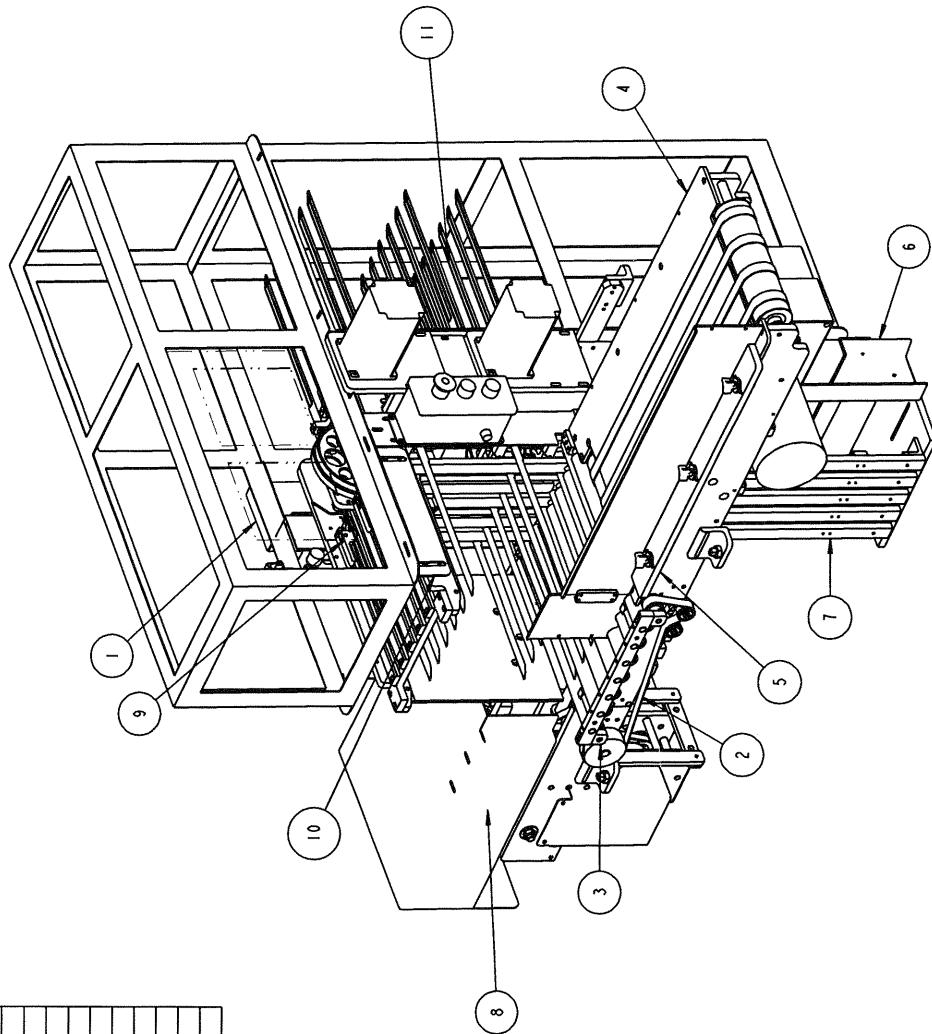
DRAWN BY: A KEY		SCALE: 0 . 563	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		MATERIAL: N/A		THIRD ANGLE PROJECTION	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY INC. KENNESAW, GA 30144 USA	
			.xx	.xxx	ANG.			KIRK - RUDY, INC. KENNESAW, GEORGIA	
CHECKED BY:		DATE: 27-DeC-01	.01	.005	.5	HEAT TREAT: N/A	MODEL: 630	TITLE: ASSY, RH OUTFEED SIDE GUIDE	
TRACED BY:		MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED			FINISH: N/A	SHEET NO.: OF 1	DRAWING #: 541785-01	
ALL DIMENSIONS ARE FLUSHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY									

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	500755 CLAMP - SIDE GUIDE					
2	1	500790 ASSY, KNOB					
3	1	541781-01 SIDE GUIDE, LH OUTFEED					



DRAWN BY: A KEY	SCALE 0 . 625	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED .005 .005 .01 .5	MATERIAL: N / A	HEAT TREAT: N / A	THIRD ANGLE PROJECTION DRAWING NO. 630	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, GEORGIA KIRK - RUDY, INC. KENNESAW, GEORGIA
CHECKED BY: 27 - Dec - 01	DATE	.01 .005 .01 .5	FINISH: N / A			
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY			SHEET NO.: 0F1	TITLE: ASSY, LH SIDE GUIDE OUTFEED DRAWING # 541786-01

ITEM #	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BT
1	510702	COVER, PROX SWITC					
2	105932-4	BELT, FLAT .625 x 39.500					
3	541031-01	ASSY, TRANSFER ROLLER					
4	541036-01	ASSY, OUTFEED TABLETOP					
5	541069-05	ASSY, PRODUCT GUIDE					
6	541241-01	ASSY, ELEVATOR					
7	541244-01	ASSY, STACKER GUIDE					
8	541245-01	ASSY, KICKER					
9	541761-01	ASSY, BACK STOP					
10	541772-01	BRACKET, GAGE SUPPORT					
11	543316-01	WLDNT, STACKER FINGER COVER					



RECD BY:	A KEY	SCALE:	0. 125	DIMENSIONS OR DRAWINGS UNITS:	N/A	TRIM SHEET PROJECTION PROJECTION AND CONFIDENTIAL DATA MAY BE QUOTED OR REPRODUCED BY OTHERS ONLY WITH THE WRITTEN CONSENT OF THE ORIGINAL DRAWER EXCEPT AS PROVIDED IN THE CONTRACT OR AGREEMENT.	KIRK - RUDY INC WOODSTOCK, GEORGIA	RECD BY:
CHECKED BY:		DATE:	30-Apr-02	REV.:	N/A	DATE:		RECD BY:
TRACED BY:		MASTER		ALL DIMENSIONS ARE IN INCHES. ALL ANGLES ARE RIGHT UNLESS STATED OTHERWISE. ALL DIMENSIONS ARE INCHES. ALL ANGLES ARE RIGHT UNLESS STATED OTHERWISE.	N/A	SET NO.:	10F	RECD BY:
						ASSY, STACKER		541240-01

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	8	538606-01	ASSY, IDLER ROLLER					
2	1	538607-01	ASSY, TAKE UP ROLLER					
3	7	541032-01	ASSY, TRANSFER ROLLER					
4	1	541034-01	PLATE, TRANSFER ROLLER					
5	1	541040-01	PLATE, TRANSFER ROLLER					
6	2	541041-01	SPACER, TRANSFER ROLLER MOUNT					
7	2	541042-01	PLATE, ROLLER TAKE UP					

1	SP90800
REQ'D	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	

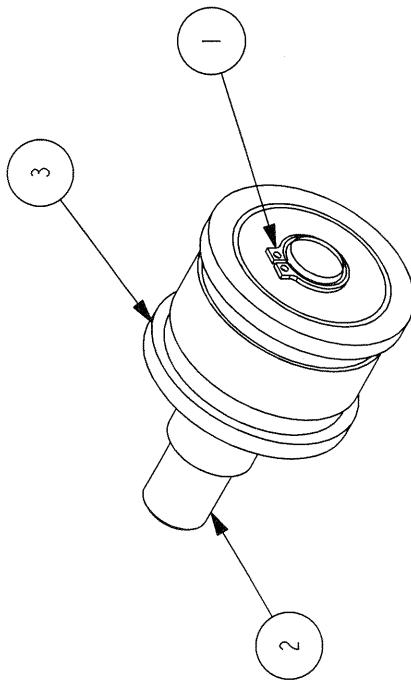
KR KIRK - RUDY, INC.
KENNESAW, GEORGIA

SCALE:	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		
A KEY	0 . 375	.005	.5
	xx	xxx	ANG.
	.01		
DRAWN BY:	HEAT TREAT:		
A KEY	N/A		
CHECKED BY:	MATERIAL:		
	N/A		
TRACED BY:	FINISH:		
MASTER	N/A		

DATE:	REMOVED ALL BURRS, AND SHARP EDGES UNLESS OTHERWISE NOTED		
06-Apr-01	ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY		
SHEET NO:	TITLE:		
1 OF 1	ASSY, TRANSFER ROLLER		
	DRAWING #		

541031-01

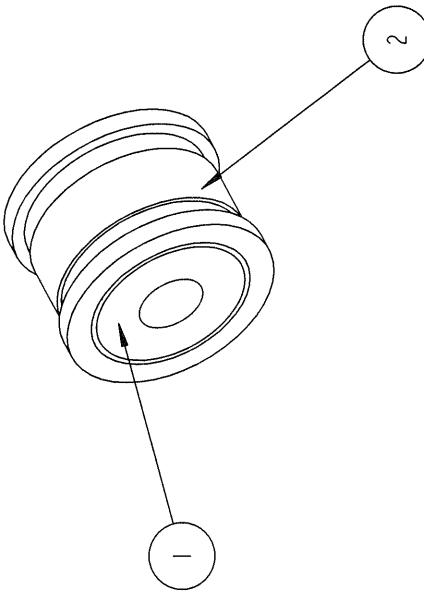
ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	104100	SNAPRING, .375					
2	507268	SHAFT - IDLER ROLLER					
3	507267-1A	ASSY-ROLLER					



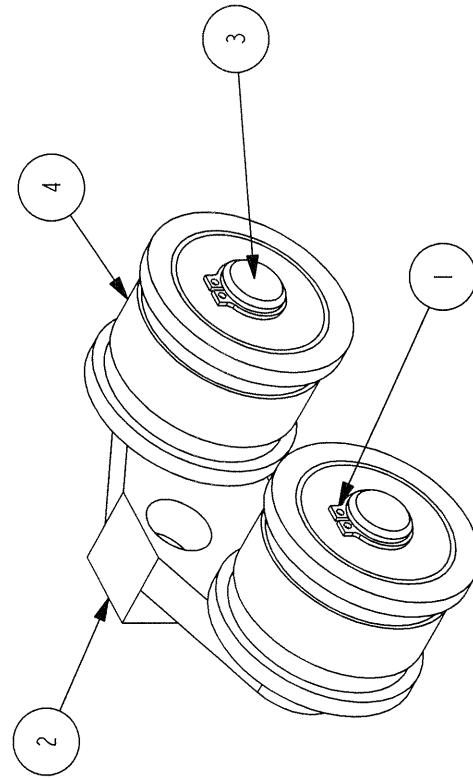
DRAWN BY:		SCALE	MATERIAL:	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN WHOLE OR IN PART, WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNESAW, GA 30144, USA	
CHECKED BY:		DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	N / A	THIRD ANGLE PROJECTION	
DATE		xx - .005 ANG.	N / A		
10 - AUG - 00		01 .005 .5	HEAT TREAT:		
MASTER		REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED		MODEL:	703S
TRACED BY:		ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY		FINISH:	N / A
REQ'D		ASSY, IDLER ROLLER		SHEET NO.	1 OF 1
WHERE USED				DRAWING #	538606-01

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	2	103106	BEARING, FLAT .375					
2	1	507267-1	ROLLER, IDLER					

								X	XXX
								REF'D	WHERE USED

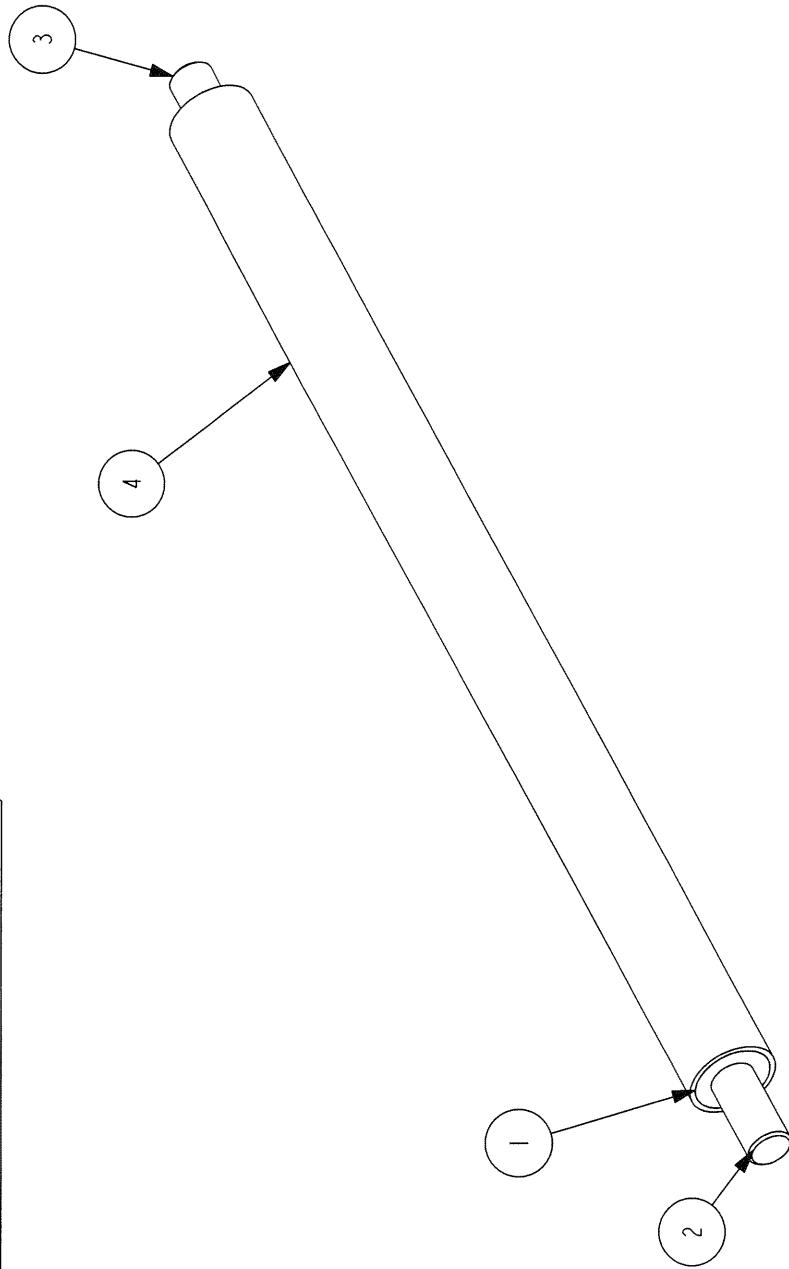
		KIRK - RUDY, INC. KENNESEAW, GEORGIA	
			
PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNESAW, GA 30144 USA		THIRD ANGLE PROJECTION 	
MATERIAL: N / A		MODEL: 703S	
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		TITLE: ASSY, ROLLER	
.xx .xxx .005 .5		HEAT TREAT: N / A	
DATE: 4-0C1-97		FINISH: N / A	
CHECKED BY: MASTER		SHEET NO: 10F1	
TRACED BY: 		DRAWING #: 507267-1A	
SCALE: .000		ALL DIMENSIONS ARE IN INCHES. WORK TO DIMENSIONS ONLY	
REMOVED ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED		DO NOT SCALE	

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	2	104100	SNAPRING, .375					
2	1	501097	BRACKET - BELT TIGHTENER PULLEY					
3	2	501329-1	SHAFT - BELT TIGHTENER PULLEY					
4	2	507267-1A	ASSY-ROLLER					



I	538605-01
REF'D	WHERE USED
 KIRK - RUDY, INC. KENNESAW, GEORGIA	
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	
THIRD ANGLE PROJECTION	
MATERIAL:	N/A
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	
xx	.005
ANG.	.5
HEAT TREAT:	N/A
SCALE:	.000
DRAWN BY:	A Y B
CHECKED BY:	10-AUG-00
TRACED BY:	MASTER
DATE:	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED
FINISH:	ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY
MODEL:	703S
SHEET NO:	10F1
TITLE: ASSY, TAKE UP ROLLER	
DRAWING I	
538607-01	

ITEM QTY	PART #	DESCRIPTION
1 2	103106	BEARING, FLAT .375
2 1	507277	SHAFT
3 1	507278	STUD - OUTSIDE ROLLER
4 1	541033-01	ROLLER, TRANSFER



REV NO	DATE	DESCRIPTION	ECN NO	BY

7	SP90800
REQ'D	WHERE USED

KRK KIRK-RUDY, INC.
KENNESAW, GEORGIA

SCALE	0 . 500	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. KENNESAW, GA 30144 USA
DRAWN BY:	A KEY	DIMENSIONAL TOLERANCES DIMENSIONS OTHERWISE NOTED	.xx .xxx .005 .5	ANG.	
CHECKED BY:	DATE			HEAT TREAT:	N / A
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY		FINISH:	N / A

MODEL:	SP90800	TITLE:	ASSY, TRANSFER ROLLER
SHEET NO.	10F	DRAWING #	

541032-01

ITEM NO.	PART #	DESCRIPTION	REV. NO.	DATE	DESCRIPTION	ECN NO.
1	1 108915-9	BELT, TIMING 124L050				
2	1 108915-10	BELT, TIMING 124L050				
3	1 538098-01	ASSY, CHAIN DRIVE				
4	1 538099-01	ASSY, CHAIN TAKE UP				
5	1 538100-01	ASSY, GEAR DRIVE				
6	2 539181-01	BRACKET, SENSOR MOUNT				
7	2 539182-02	BRACKET, PROX SWITCH				
8	3 541079-01	ASSY, STACKER ARM OUTSIDE				
9	3 541081-01	ASSY, STACKER ARM INSIDE				
10	2 541211-01	COVER, SWITCH MOUNT				
11	1 541220-01	ASSY, MOTOR MOUNT				
12	1 541242-01	ASSY, STACKER FRAME				
13	4 541243-01	ASSY, CHAIN LUG				
14	2 541248-01	ASSY, SENSOR WIG				
15	1 541189-01	ASSY, 3 BUTTON BOX				

PARTS HAVE BEEN PHANTONED FOR CLARITY
SCALE 0.250

DRAWING 1: ASSY, ELEVATOR

REVISION: 541241-01

SP90800 WHERE USED

REO 0

KIRK - RUDY, INC.
KENNESAW, GEORGIA

PROPRIETARY AND CONFIDENTIAL
NO COPIES OR DERIVATIVES
MAY BE MADE
IN ANY FORM WITHOUT THE
EXPRESS WRITTEN PERMISSION
OF KIRK-RUDY, INC.
KENNESAW, GA 30042 USA

PRINTED: 10/10/2014

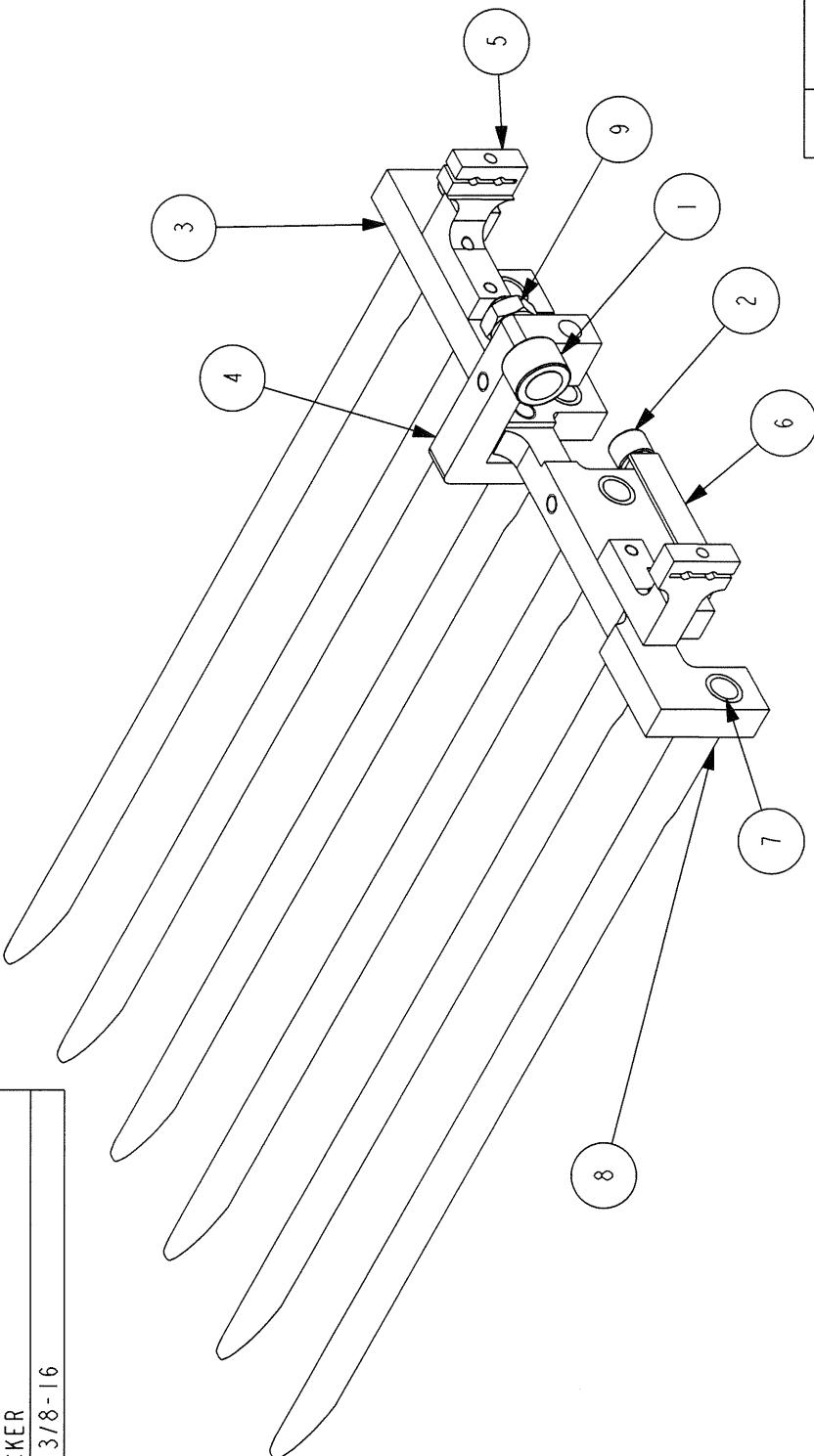
DRAWING 2:

KEY	SCALE	DIMENSIONAL TOLERANCES	MATERIAL	N/A
A	0 .150	UNLESS OTHERWISE NOTED		
CHECKED BY:	DATE	.000 .000 .000 .000	+.000 -.000	
TRACED BY:	MASTER	26-Dec-01	REMOVE ALL BURRS AND SHARP EDGES UNLESS CLEARLY INDICATED	N/A

ALL DIMENSIONS ARE
IN INCHES. ONE
INCH = 25.4MM
100 INCHES = 2.54M
1000 INCHES = 25.4M
10000 INCHES = 254M
100000 INCHES = 2540M

PRINTED: 10/10/2014

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	103405	CAM FOLLOWER					
2	1	103408	CAM FOLLOWER					
3	1	510512	PLATE, ARM SUPPORT					
4	1	510632	BLOCK, CAM FOLLOWER ADJUSTING					
5	2	510598-1	BRACKET, CHAIN ATTACH					
6	1	510633-1	BRACKET, CAM FOLLOWER MTG					
7	6	510636-3	STUD, ARM					
8	6	541082-01	ARM, STACKER					
9	1	HMSN14	NUT, HEX 3/8-16					



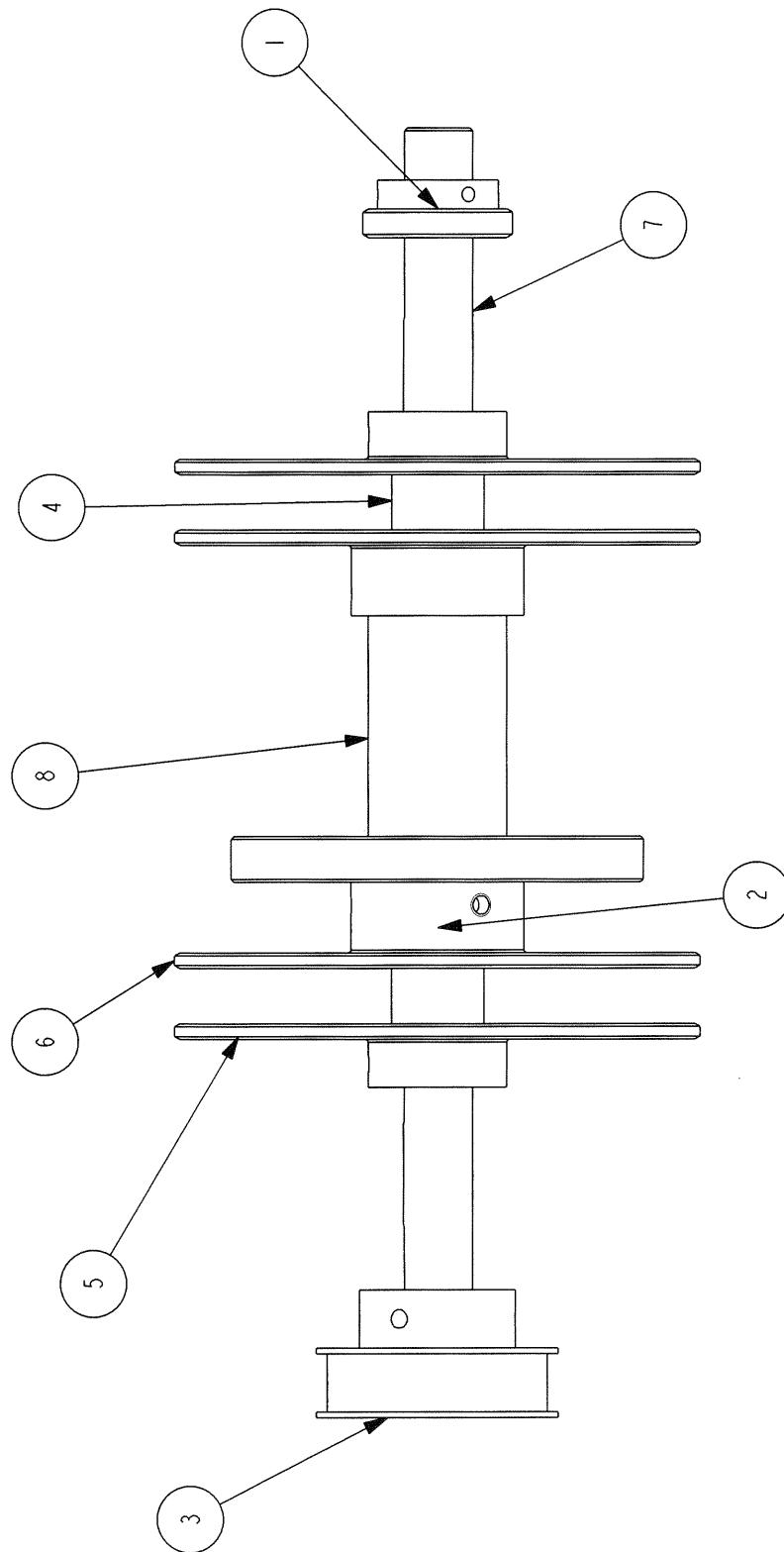
DRAWN BY: A K E Y	SCALE 0 . 438	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		MATERIAL: N / A	THIRD ANGLE PROJECTION		PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNSEAW, GA 30144 USA
CHECKED BY:	DATE 05 - JU - 0	.xx	.xxx	ANG. .01 .005 .5	HEAT TREAT:	N / A	
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED		ALL DIMENSIONS ARE IN INCHES DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY		N / A	
RECD BY:		DRAWING #	SP63000	SHEET NO.	1 OF 1		541079-01
		WHERE USED					

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	103405	CAM FOLLOWER					
2	1	103408	CAM FOLLOWER					
3	1	510512	PLATE, ARM SUPPORT					
4	1	510632	BLOCK, CAM FOLLOWER ADJUSTING					
5	2	510598-1	BRACKET, CHAIN ATTACH					
6	1	510633-1	BRACKET, CAM FOLLOWER MTG					
7	6	510636-3	STUD, ARM					
8	6	541082-01	ARM, STACKER					
9	1	HMSN14	NUT, HEX 3/8-16					

3	SP90800
REF ID	WHERE USED

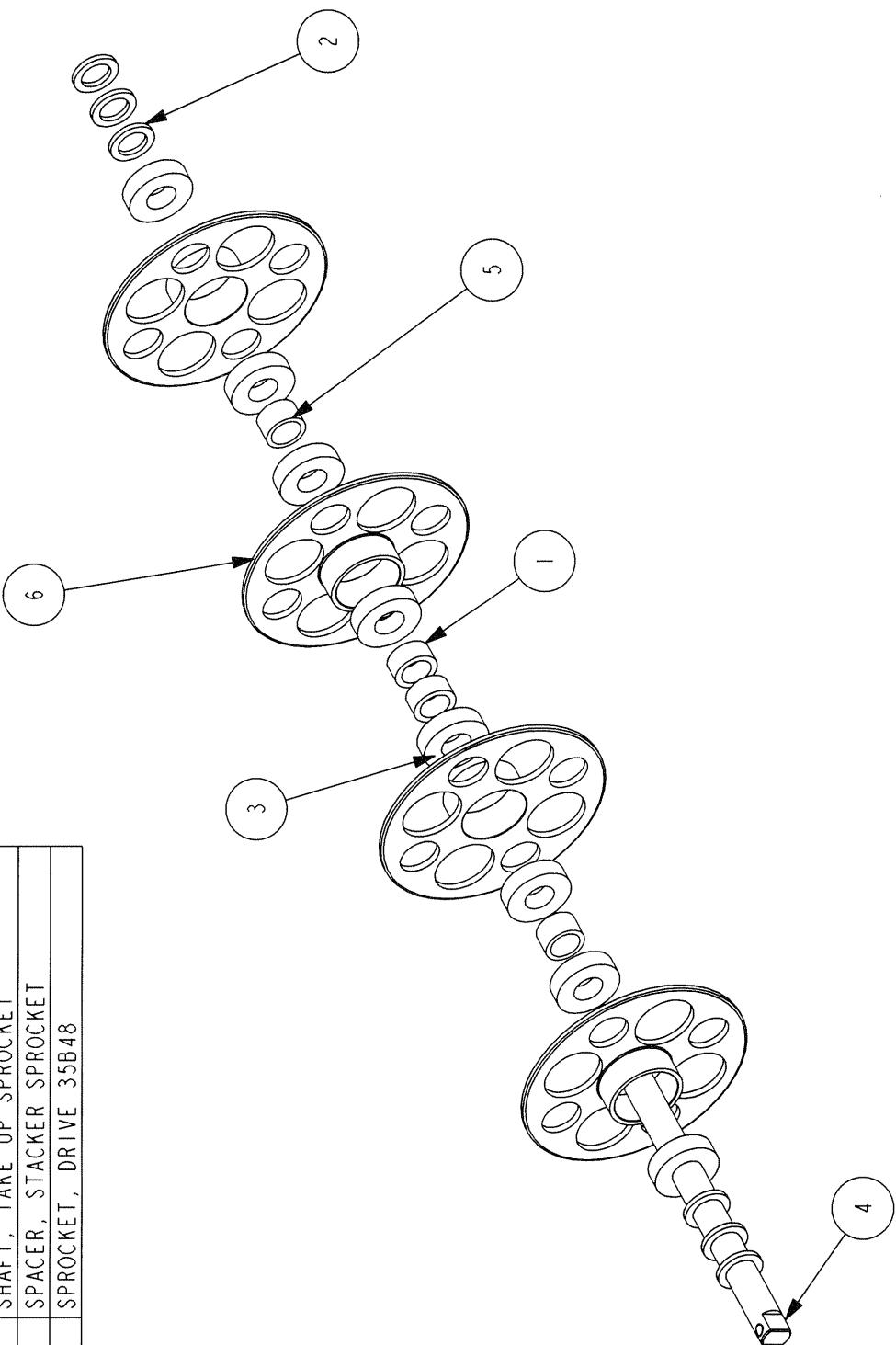
DRAWN BY: A KEY	SCALE 0 . 438	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		MATERIAL: N/A	THIRD ANGLE PROJECTION	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY INC. KENNESAW, GA 30144 USA	
CHECKED BY:	DATE 05-JUL-01	.xx	.xxx	ANG. .01 -.005 .5	HEAT TREAT:	KIRK - RUDY - INC. KENNESAW, GEORGIA	
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED		FINISH: N/A	MODEL: SP 63000	TITLE: ASSY, STACKER ARM INSIDE	
		ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY		SHEET NO. 1 OF 1	DRAWING #	541081-01	

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	102439	GEAR, 1624 .750B .188K					
2	2	103112	BEARING, FLAT .750					
3	1	108833	PULLEY, TIMING 201050 .750B .188K					
4	2	510597	SPACER, STACKER SPROCKET					
5	2	510616	SPROCKET, DRIVE 35B48					
6	2	510617	SPROCKET, DRIVE 35B48					
7	1	510635-1	SHAFT					
8	1	538754-01	WLDMNT, HUB/GEAR 1672					



1	538614-01
REF'D	WHERE USED
<p align="center">KR KIRK - RUDY, INC. KENNEDYSAW, GEORGIA</p>	
<p align="center">ASSY, CHAIN DRIVE</p>	
<p align="center">DRAWING # 538098-01</p>	
<p align="center">PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN WHOLE OR IN PART, WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC., USA</p>	
<p align="center">THIRD ANGLE PROJECTION</p>	
MATERIAL:	N/A
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	
SCALE:	0 .500
DATE:	0 - AUG - 00
CHECKED BY:	
TRACED BY:	
MASTER	
SHEET NO.	10F1
FINISH:	N/A
HEAT TREAT:	N/A
ANG.	.005
XX	.01
XXX	.005
REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED	
ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	
MODEL:	703S
TITLE:	

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BR
1	2	102207	COLLAR .750					
2	6	102398	SHIM, .750X1.125X.125					
3	8	103112	BEARING, FLAT .750					
4	1	507335	SHAFT, TAKE UP SPROCKET					
5	2	510597	SPACER, STACKER SPROCKET					
6	4	510618	SPROCKET, DRIVE 35B48					



1	538614-01
REQ'D	WHERE USED
KRK KIRK - RUDY INC.	
KENNESAW, GEORGIA	
PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN WHOLE OR IN PART, WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK RUDY INC., KENNESAW, GA 30144 USA	THIRD ANGLE PROJECTION
MATERIAL: N/A	DATE: 10-Aug-00
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED .01 .005 .5 .XXX ANG.	MODEL: 703S
CHECKED BY:	FINISH: N/A
MASTER	SHEET NO. 1 OF 1
TRACED BY:	TITLE: ASSY, CHAIN TAKE UP
	DRAWING # 538099-01

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	102438	GEAR, 1616 .500B NK					
2	1	108834	PULLEY, TIMING 16L050 .625B .188K					
3	1	101943-OLD	GEAR, 1648					
4	1	507331-1	SHAFT, INSIDE CHAIN DRIVE					

SCALE 0.250

I	538100-01
REC'D	WHERE USED

PROPRIETARY AND CONFIDENTIAL	
NO PORTION OF THIS DRAWING	
MAY BE QUOTED OR REPRODUCED	
IN WHOLE OR IN PART, WITHOUT	
EXPRESS WRITTEN PERMISSION	
OF KIRK-RUDY, INC., KENNESAW, GA 30144 USA	

KR KIRK-RUDY, INC.
KENNESAW, GEORGIA

ASSY, GEAR DRIVE

DRAWING # 538100-01

DRAWN BY:	A Y B	SCALE:	0 .500	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		
CHECKED BY:		DATE:	10 - Aug - 00	.01	.005	.005
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED			HEAT TREAT:	
					N/A	
					FINISH:	
					N/A	

MODEL: 703S SHEET NO: 1 OF 1

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	102525 GEAR, 1618 .500B NK					
2	2	103108 BEARING, FLAT .500					
3	2	104106 SNAPRING, .500					
4	1	508755 BLOCK, BEARING					
5	1	510614 SHAFT, SWITCH					
6	2	514445 COLLAR, UNDER PROM SWITCH					

TOP VIEW
SCALE 0.750

DRAWN BY: A KEY	SCALE .500	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
CHECKED BY:	DATE 26-Jun-01	xx	xxx	ANG. .01 .005 .5	HEAT TREAT:		KIRK - RUDY, INC. KENNESAW, GEORGIA
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY			FINISH: N/A	SHEET NO. 1 OF 1	TITLE: ASSY, SENSOR MTG DRAWING # 541248-01

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1 3	110016	LINK, #35-2 E2					
2 1	110092-1	CHAIN, #35-13.5 IN SPACING 3 PI					

4	SP90800
REQ'D	WHERE USED

DRAWN BY: A KEE	SCALE: 0 . 375	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.
CHECKED BY:	DATE: 05 - JUL - 01	.XX	.XXX	ANG. .01 .005 .5	HEAT TREAT:		KIRK RUDY - RUDY, INC. KENNESAW, GEORGIA
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED			FINISH: ALL DIMENSIONS ARE FINAL DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	MODEL: SP63000	TITLE: ASSY, CHAIN LUG
					SHEET NO 1 OF 1	DRAWING #	541243-01

TY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
	109955	PULLEY, TIMING 10L050 .500B NK					
1	108821-1	PULLEY, TIMING 12L050 .625B NK					
2	200159-3	MOTOR, STEPPING KMT093					
3	510606-2	PLATE, MTR MT					
4	510606-3	PLATE, MTR MT					
5	510607-L	BRACKET, STEP MOTOR					
6	532686-01	COVER, STEPPER MTR DR					
7	532686-01	COVER, STEPPER MTR DR					

I	SP90800
REO D	WHERE USED
ASSY, MOTOR MOUNT	
541220-01	

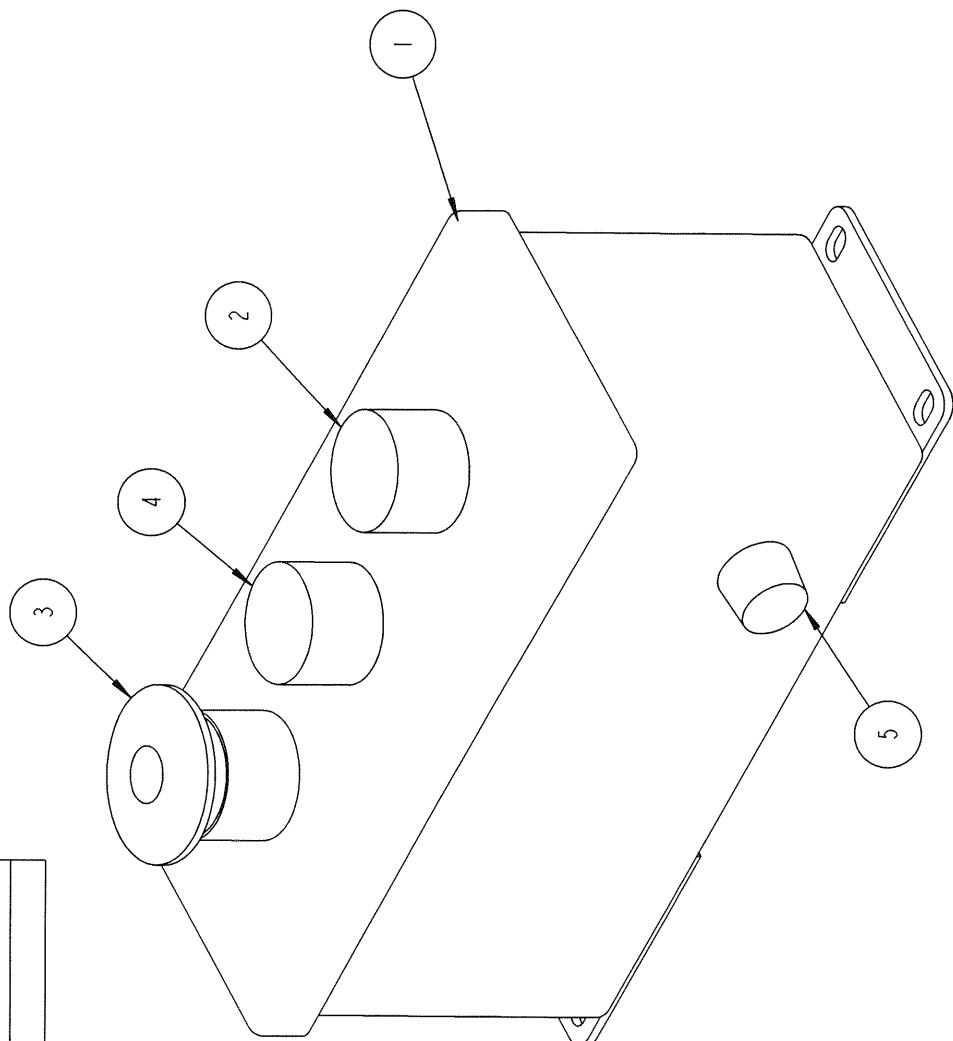
PROPRIETARY AND CONFIDENTIAL	
NO PORTION OF THIS DRAWING	
MAY BE QUOTED OR REPRODUCED	
IN ANY FORM WITHOUT THE	
EXPRESS WRITTEN PERMISSION	
OF KIRK-RUDY INC.	
KENNESAW, GA 30144 USA	
TITLE:	
SP90800	
SHEET NO:	1 OF 1
DRAWING #	

KRK KIRK - RUDY, INC.
KENNESAW, GEORGIA

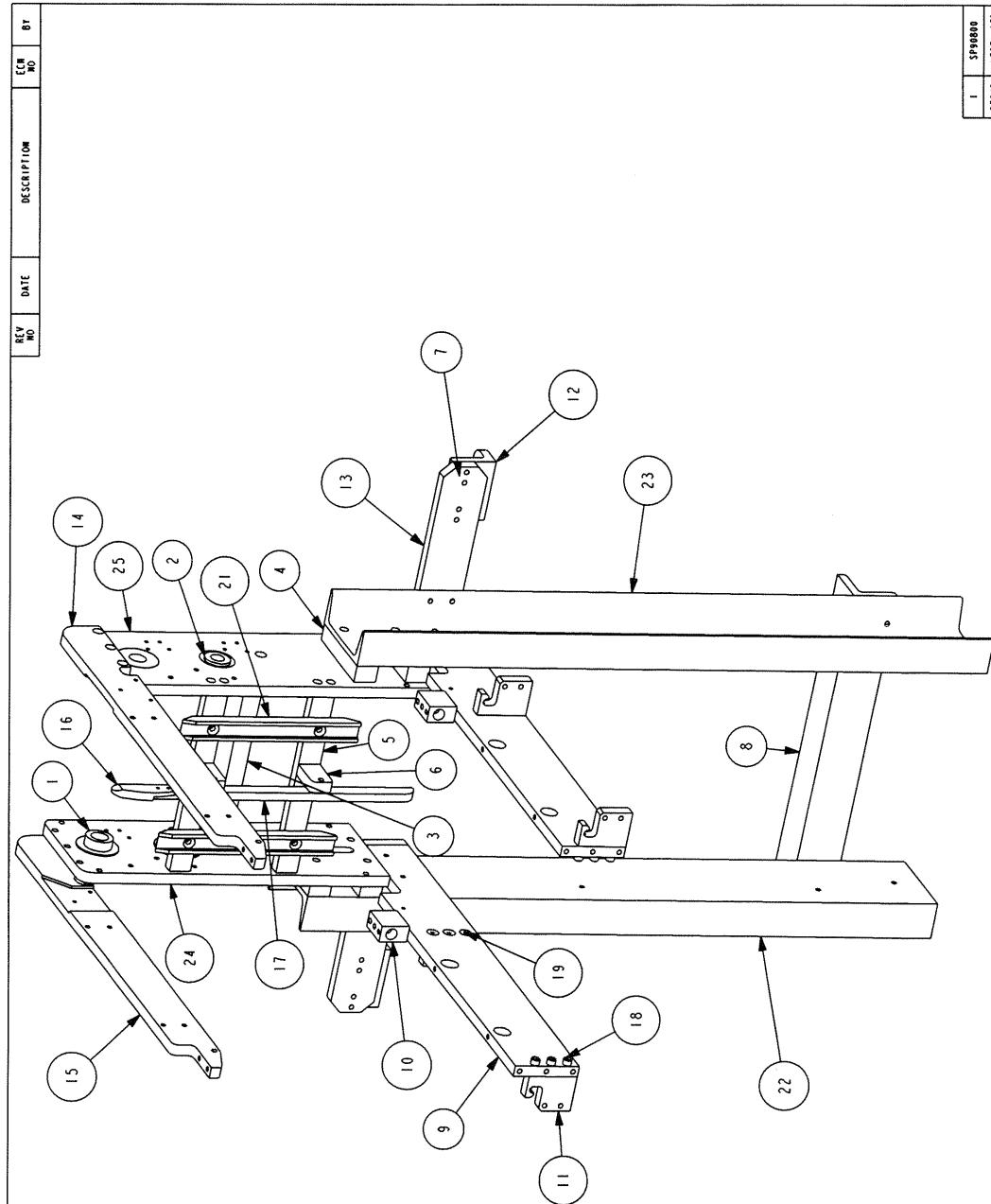
DRAWN BY: A KEY	SCALE: 0 .250	MATERIAL: N/A	THIRD ANGLE PROJECTION ICON
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED			
xx	.005	ANG.	
.01	.005	.5	HEAT TREAT:
REMOVE ALL BURS AND SHARP EDGES UNLESS OTHERWISE NOTED			
ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY			

CHECKED BY: 20-Jun-01	DATE
MASTER	FINISH:

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	200267-1	ELECTRICAL SWITCH BOX, 2 HOLE					
2	1	201124-2	BUTTON, START					
3	1	201125-4	BUTTON, MUSHROOM STOP					
4	1	201126-1	BUTTON, JOG					
5	1	209204-3	LENS, RED LIGHT					



1	630		
REQ'D	WHERE USED		
 KIRK - RUDY, INC. KENNESAW, GEORGIA			
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			
THIRD ANGLE PROJECTION			
			
MATERIAL:	N/A		
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED			
xx	.xxx	ANG.	
.01	.005	.5	HEAT TREAT:
REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED			
ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY			
DRAWN BY: A KEY	SCALE: 0 . 625		
CHECKED BY: 26-Dec-01	DATE:		
TRACED BY: MASTER	FINISH:		
	SHEET NO.: 1 OF 1		
	TITLE: ASSY, 3 BUTTON BOX		
	DRAWING #: 541789-01		



ITEM QTY	PART #	DESCRIPTION
1	2	103805 BEARING, HUB .750
2	2	103817 HUBBEARING 5/8 ID
3	1	507249 SPACER, SIDE PLATE
4	4	507436 SPACER
5	2	510620 BAR, CHAIN GUIDE SUPPORT
6	2	510630 BLOCK, CAM FOLLOWER SUPPORT
7	2	510660 SCREW ADJUSTING
8	1	510171 ANGLE - COVER SUPPORT
9	2	541038-01 PLATE, KICKER SUPPORT
10	2	541039-01 BRACKET, TRANSFER ROLLER
11	4	541049-01 PLATE, CONNECTING
12	2	541073-01 BRACKET, LEVELING LEG
13	2	541074-01 PLATE, STACKER MOUNT
14	1	541219-01 PLATE, BAR SUPPORT RH
15	1	541219-02 PLATE, BAR SUPPORT LH
16	1	541660-01 GUIDE, STACKER FORK
17	1	541661-01 RAIL, CAM FOLLOWER
18	6	CSD0296 SCREW, SHCS 1/4-20X1.000
19	6	CSE0283 SCREW, FLATHEAD 1/4-20X 750
20	2	HJN014 NUT, JAN 1/2-13
21	2	SP46934 GUIDE, CHAIN
22	1	SP46936-L CHANNEL, STACKER LH
23	1	SP46936-R CHANNEL, STACKER RH
24	1	SP41031-L PLATE - R & L SIDE
25	1	SP41031-R PLATE - R & L SIDE

ITEM	KEY	SCALE	DIMENSION, INCHES	NOTES:	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE COPIED, REPRODUCED, EXHIBITED, OR DISCLOSED WHEN THIS DRAWING IS SHIPPED, WHETHER IN PART OR IN WHOLE, TO THE KIRK-RUDY INC. KENNESAW, GEORGIA PRINTED IN U.S.A.	REDO WHERE USED
1					SP40800	
2					SP90800	
3					ASSY, STACKER FRAME	

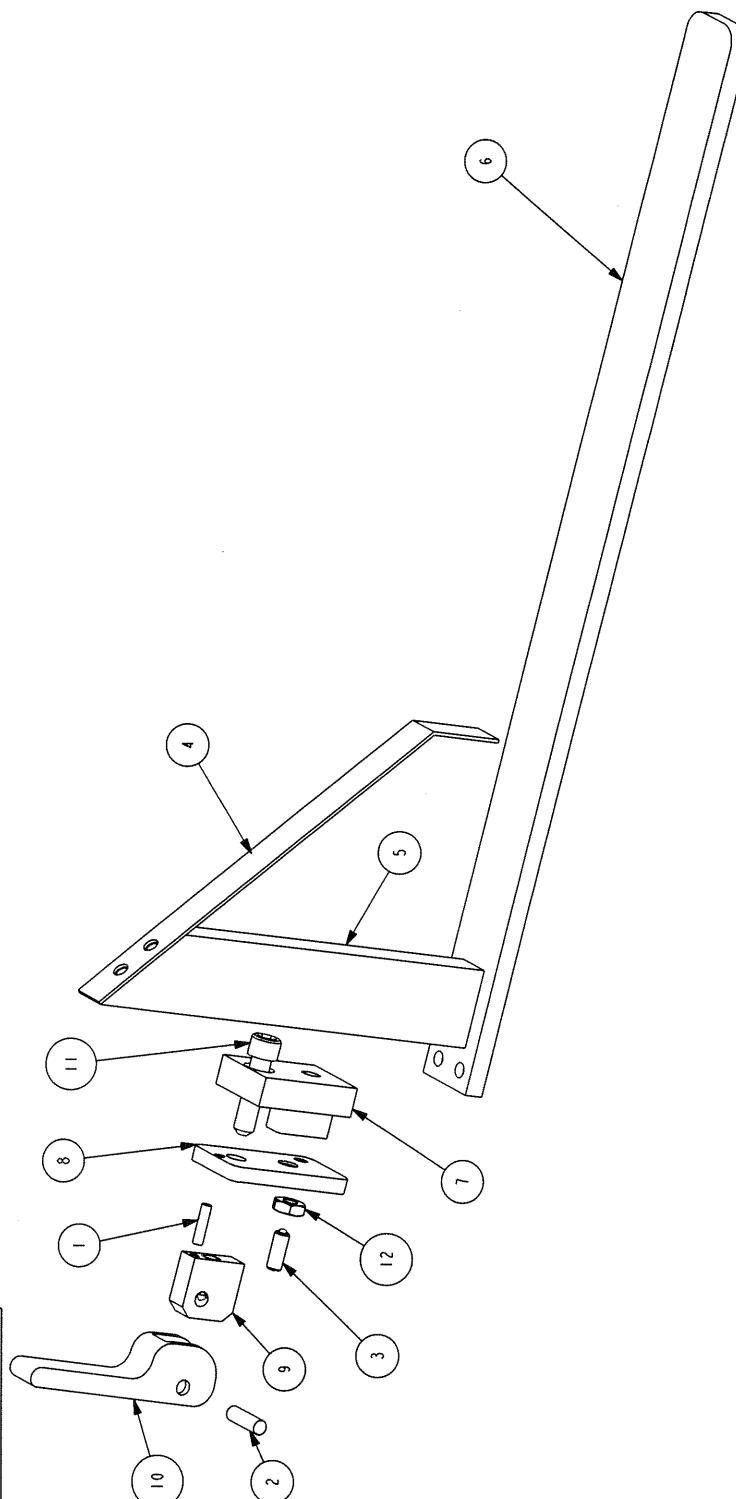
ITEM	KEY	SCALE	DIMENSION, INCHES	NOTES:	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE COPIED, REPRODUCED, EXHIBITED, OR DISCLOSED WHEN THIS DRAWING IS SHIPPED, WHETHER IN PART OR IN WHOLE, TO THE KIRK-RUDY INC. KENNESAW, GEORGIA PRINTED IN U.S.A.	REDO WHERE USED
1					SP40800	
2					SP90800	
3					ASSY, STACKER FRAME	

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	5	507263	SUPPORT, HORIZ ROLLER					
2	1	510574	ANGLE, ROLLER LEG SUPPORT					
3	1	510576	SUPPORT, LEG LOWER					
4	1	510663	SUPPORT					
5	2	510577-5	SUPPORT, UPPER LEG					
6	3	510577-7	SUPPORT, UPPER LEG					
7	1	541075-01	PLATE, STACKER MOUNT					
8	5	SP46951	LEG, TRANSFER ROLLER					

1 630
 REV'D WHERE USED

DRAWN BY: A KEY	SCALE 0 . 125	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
CHECKED BY:	DATE 23 - Jan - 03	.xx	.005	.5	ANG.	HEAT TREAT: N/A	MODEL: 630	TITLE: ASSY, STACKER GUIDE
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED				FINISH: N/A	SHEET NO: 10F1	DRAWING #: 541244-01

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO
1	1	105202 PIN, ROLL .125X.500				
2	1	105228 PIN, ROLL .188X.625				
3	1	107304 BALL PLUNGER .10-.32				
4	1	510775-4 SPRING, KNOCK DOWN				
5	1	510775-5 BLOCK, KNOCK DOWN				
6	1	541762-01 BAR, BACK STOP				
7	1	541768-01 PLATE, BACK STOP MOUNT				
8	1	541773-01 PLATE, BACK STOP TOP				
9	1	541774-01 BLOCK, CAM LOCK				
10	1	541775-01 LOCK, CAM				
11	1	CS00296 SCREW, SHCS 1/4-20X1.000				
12	1	HMSN10 NUT, HEX #10-32				

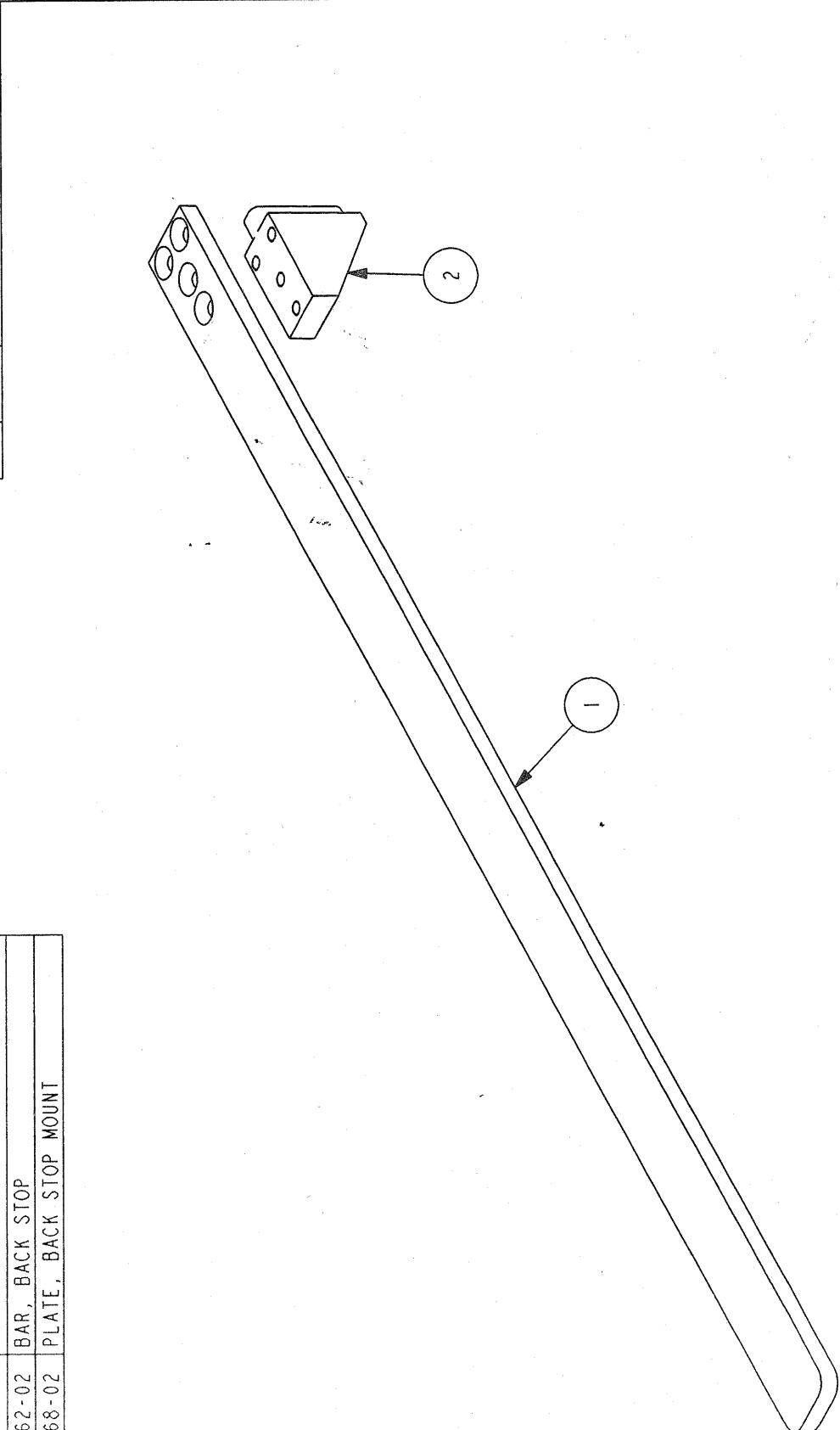


2	\$30
RECD WHERE USED	
 KIRK-RUDY, INC.	
KENNESAW, GEORGIA	
ASSY, BACK STOP	
Drawing # 541761-01	

DRAWING #: A KEY		SCALE: 0.688	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		N/A	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE COPIED OR REPRODUCED EXCEPT WRITTEN PERMISSION RECEIVED IN WRITING FROM KIRK-RUDY, INC., KENNESAW, GA 30046 USA	
CHECKED BY:		DATE: 26-Dec-01	IN:	.05	INCHES AND SHALL OVER+.005 UNLESS OTHERWISE NOTED	MANUFACTURER:	N/A
TRACED BY:		MATERIAL: MASTERS	IN:	.05	ALL DIMENSIONS ARE FLAT SURFACE DIMENSIONS. DO NOT SCALE. WORK TO DIMENSIONS ONLY	TIME: 6:30	SET: 10F1

ITEM	QTY	PART #	DESCRIPTION
1	1	541762-02	BAR, BACK STOP
2	1	541768-02	PLATE, BACK STOP MOUNT

REV NO	DATE	DESCRIPTION	ECN NO	BY
			2	SA144
			2	SA226

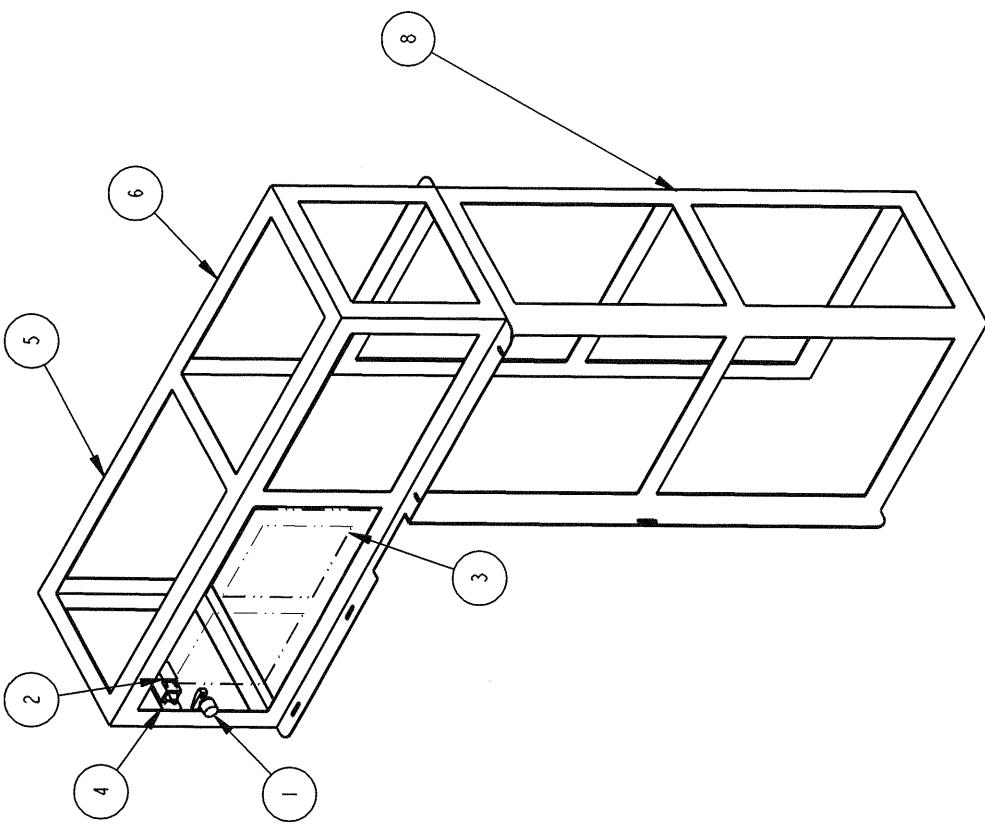


DRAWN BY: A KEY	SCALE 0 .530	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		MATERIAL: N/A	THIRD ANGLE PROJECTION	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY INC. KIRK-KENNE SAW, GEORGIA	
CHECKED BY:	DATE 13-Dec-02	.xx	.xxx	ANG. .01 .005 .5	HEAT TREAT: N/A	MODEL: 630	TITLE: ASSY, BACK STOP
TRACED BY:	MASTER JW	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED		FINISH: N/A	SHEET NO.: 10F1	DRAWING # 541761-03	
ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY							

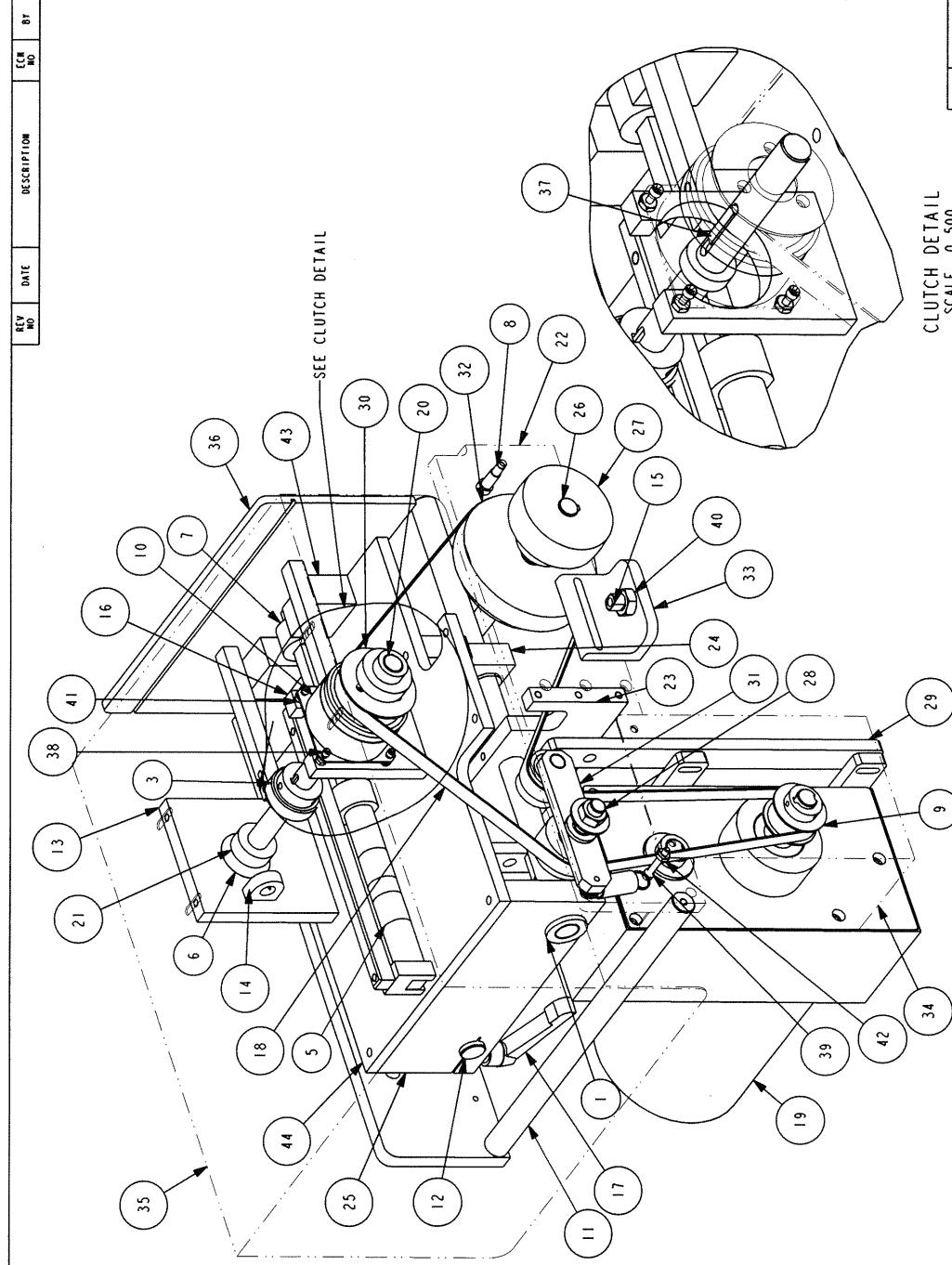
REQ'D	WHERE USED
2	SA144
2	SA226

Drawing No. 543316-01

ITEM NO.	PART #	DESCRIPTION	REV. NO.	DATE	DESCRIPTION	CON NO.	BY
1	102143	KNOB, CABINET LATCH					
2	201162	SWITCH, ROLLER					
3	541771-01	DOOR, STACKER FINGER COVER					
4	541776-01	BRACKET, SAFETY SWITCH MOUNT					
5	543314-01	WLDMNT, STACKER FINGER COVER					
6	543315-01	GUARD, STACKER					
7	543316-01	WLDMNT, STACKER FINGER COVER					
8	543317-01	GUARD, STACKER					



1	630	RECD WHERE USED
PROPRIETARY AND CONFIDENTIAL NO PART OF THIS DRAWING MAY BE COPIED OR REPRODUCED EXCEPT WITH WRITTEN PERMISSION OF KIRK-RUDY, INC. WOODSTOCK, GEORGIA WOODSTOCK, GA 30092 U.S.A.		
ITEM NO.:	543316-01	DATE:
A KEY	SCALE: 0 . 125	DIMENSION TOLERANCES: UNLESS OTHERWISE NOTED
CHECKED BY:	DATE: 21-Dec-01	IN. MM. IN. MM. IN. MM.
TRACED BY:	MASTER	N/A N/A N/A N/A
		NOTES: ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED
		ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE. WORK TO DIMENSIONS ONLY
		NOTE: 630
		SET 2 OF 2



ITEM #	PART #	DESCRIPTION	REV A0	DATE	DESCRIPTION	ECN AD
1	3	100320 BUSHING, FL. 7501D .000001 .0001G				
2	1	100611 WASHER, FLAT 1/2D 1/16TK				
3	1	101957 GEAR 1624 .625B .188K				
4	1	102216 COLLAR .625				
5	3	102155 SPRING, COIL 2.5 X .875				
6	4	103804 BEARING, HUB .625				
7	2	103952 NYLACIDE BUSHING				
8	2	107103 BOLT, SHOULDER 5/16X5/8				
9	1	108888 PULLEY, TIMING 12L050 .625B .188K				
10	1	202117 ELECTROD CLUTCH 201-467-8100				
11	1	510569 SHAFT - BELT GUIDE				
12	2	510583 SHAFT - KICKER ADJUSTING				
13	2	510591 BLOCK - BEARING				
14	1	510608 BRACKET - PROX. MITG				
15	1	510660 SCREW-ADJUSTING				
16	1	510703 SUPPORT - KICKER CLUTCH				
17	1	102134-1 HANDLE - RELEASE				
18	1	108877-4 BELT, TIMING 510L050				
19	1	509000-1AR ASSY MOTOR/REDUCER DR 1/4 HP R				
20	1	510592-1 SHAFT, KICKER DRIVE				
21	1	510650-1 COLLAR, UNDER PROX SWITCH				
22	2	541044-01 PLATE, KICKER SUPPORT				
23	1	541045-01 PLATE - KICKER SUPPORT				
24	1	541046-01 PLATE - SLIDING				
25	1	541047-01 PLATE, SLIDING CLAMP				
26	1	541050-01 SHAFT, KICKER DRIVE				
27	1	541051-01 ROLLER, BELT DRIVE				
28	1	541056-01 ASSY, TIMING BELT IDLER				
29	2	541059-01 PLATE, MOTOR MOUNT				
30	1	541061-01 PULLEY, TIMING 18L050 CLUTCH				
31	1	541062-02 ASSY, FLAT BELT IDLER				
32	1	541063-01 PULLEY, TIMING 3L050 .625B .188K				
33	1	541073-01 BRACKET, LEVELING LEG				
34	1	541111-01 COVER, KICKER MOTOR				
35	1	541209-01 COVER, KICKER				
36	1	541246-01 ASSY, KICKER PLATE				
37	1	541954-01 KEY, ELECTROD CLUTCH				
38	4	CSD0213 SCREW, SHCS 6-.32X .875				
39	1	CSD0270 SCREW, SHCS 10-32X1.250				
40	2	HJN014 NUT, JAM 1/2-13				
41	4	HMSN08 NUT, HEX #6-32				
42	1	HMSN10 NUT, HEX #10-32				
43	2	SP 0544 BLOCK - STOP				
44	1	SP 0550-1 TOP, KICKER MOUNT				

SCALE BY:	A KEY	SCALE	0 .313	DIMENSIONAL TOLERANCES: UNLESS OTHERWISE NOTED	N/A	PROPRIETARY AND CONFIDENTIAL
CHECKED BY:		DATE	29-Jan-02	NO. OF INCHES	.5	NO. OF MILLIMETERS
MADE BY:		MASTER		REMOVED ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED	N/A	EXCEPT AS SPECIFIED ON THIS DRAWING
REVIEWED BY:		WORKSHEET NO.		ALL SURFACES ARE FINISHED TO THE SIZE AND TOLERANCE AS SHOWN	N/A	PRINTED IN U.S.A.
APPROVED BY:		WORKSHEET NO.		NO. OF INCHES .001 NO. OF MILLIMETERS .025	630	PRINTED IN U.S.A.
RECORDED BY:		RECD. NO.		TOP	10F1	
		SPREADER			1	
		WHERE USED				

ASSY, KICKER

541245-01

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
4	103804	BEARING, HUB .625					
2	108809	PULLEY, TIMING 12L075 .625B .188K					
3	108821	PULLEY, TIMING 12L050 .500B NK					
4	109320	PULLEY, TIMING 32L075 .625B .188K					
5	509005	PLATE - FRONT SIDE					
6	509015	HUB-BEARING					
7	509032	SHAFT, OUTPUT					
8	509035	SHAFT-IDLER					
9	509037	COVER, REDUCER					
10	108911-1	BELT, TIMING 150L075					
11	108912-1	BELT, TIMING 187L050					
12	109319-1	PULLEY, TIMING 32L050 .625B .188K					
13	200165-4	MOTOR, LEESON DC					
14	509006-1	PLATE, REAR SIDE					
15	530138-01	BAR, MOUNTING					
16	5 SP16208	SPACER, REDUCER					

X XXX
REQ'D WHERE USED

DRAWN BY: MY **SCALE:** 0 . 250 **DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED**

xx	xxx	.01	.005	.5
				ANG.

CHECKED BY: DATE: 03 - Jan - 01 **MATERIAL:** N/A **HEAT TREAT:** N/A

TRACED BY: MASTER **FINISH:** REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED **ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY**

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

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

MODEL: 703S **TITLE:** ASSY, MOTOR / REDUCER DR 1/4 HP R

SHEET NO: 1 OF 1 **DRAWING #:** 5090000 - IAR

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1 2	103108	BEARING, FLAT .500					
2 1	104104	SNAPRING, .625					
3 1	104106	SNAPRING, .500					
4 1	109386	PULLEY, TIMING 15L050 1.125B NK					
5 1	541057-01	STUD, CHAIN DIVERT					

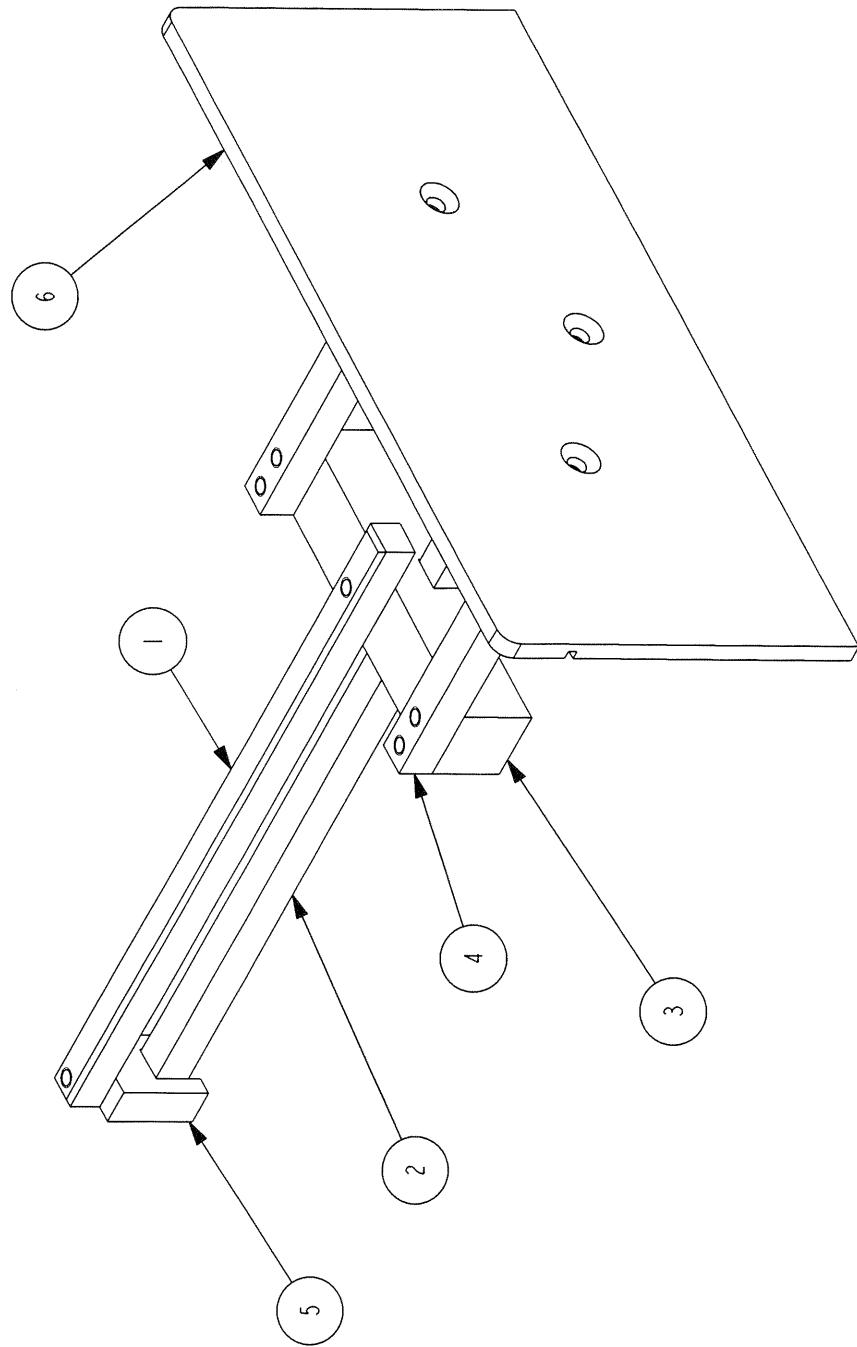
A KEY	SCALE .500	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED			MATERIAL: N/A	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE COPIED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY INC. KENNESAW, GA 30144 USA	
DRAWN BY:	DATE	.xx	.xxx	ANG.	HEAT TREAT:		
CHECKED BY:	DATE	.01	.005	.5	N/A	MODEL: SP90800	TITLE: ASSY, TIMING BELT IDLER
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY			FINISH: N/A	SHEET NO 10F1	DRAWING #

The technical drawing illustrates a mechanical assembly. A central vertical shaft (2) supports a bearing (1) at its upper end. A timing pulley (4) is keyed onto the shaft. A chain divert stud (5) is also attached to the shaft. A snap ring (3) is used to hold the bearing in place. The drawing uses callouts to identify each component.

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	100337	BUSHING, FL. 625ID. 750OD. 625LG					
2	100619	WASHER, FLAT 10-32					
3	102775	SPRING, EXT EO 500-041-1750M					
4	2 103108	BEARING, FLAT .500					
5	1 104106	SNAPRING, .500					
6	1 541745-01	ROLLER, BELT TAKEUP					
7	1 541746-01	STUD, CHAIN DIVERT					
8	1 541747-01	ARM, TAKE UP ROLLER					
9	1 CSDD265	SCREW, SHCS 10-32X .500					
10	1 HMSN10	NUT, HEX #10-32					

DRAWN BY: A KEY	SCALE 1 .000	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		MATERIAL: N/A	THIRD ANGLE PROJECTION DRAWING	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESSED WRITTEN PERMISSION OF KIRK-RUDY KENNESAW, GA 30444 USA	
CHECKED BY:	DATE 05 - Dec - 01	.xx	.xxx	ANG. .01 .005 .5	HEAT TREAT: N/A	MODEL: SP90800	KIRK - RUDY INC. KENNESAW, GEORGIA
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED		FINISH: N/A	SHEET NO: 1 OF 1	TITLE: ASSY, FLAT BELT IDLER DRAWING # 541062-02	
		ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY					

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	510590	RACK, KICKER					
2	1	SP10545	BAR, SLIDING					
3	1	SP10546	BAR, SUPPORT					
4	2	SP10547	BAR, KICKER					
5	1	SP10548	BLOCK					
6	1	SP47035	BAR, KICKER					



DRAWN BY:	A KEY	SCALE	0 . 437	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	N/A	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. KENNESAW, GA 30144 USA
CHECKED BY:		DATE	26 - Jun - 01	.xx .xxx .01 .005 .5 ANG.		HEAT TREAT:	N/A	MODEL:	KIRK-RUDY INC. KENNESAW, GA 30144 USA
TRACED BY:		MASTER		REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED		FINISH:	N/A	SHEET NO:	ASSY, KICKER PLATE
				ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY				DRAWING #:	541246-01

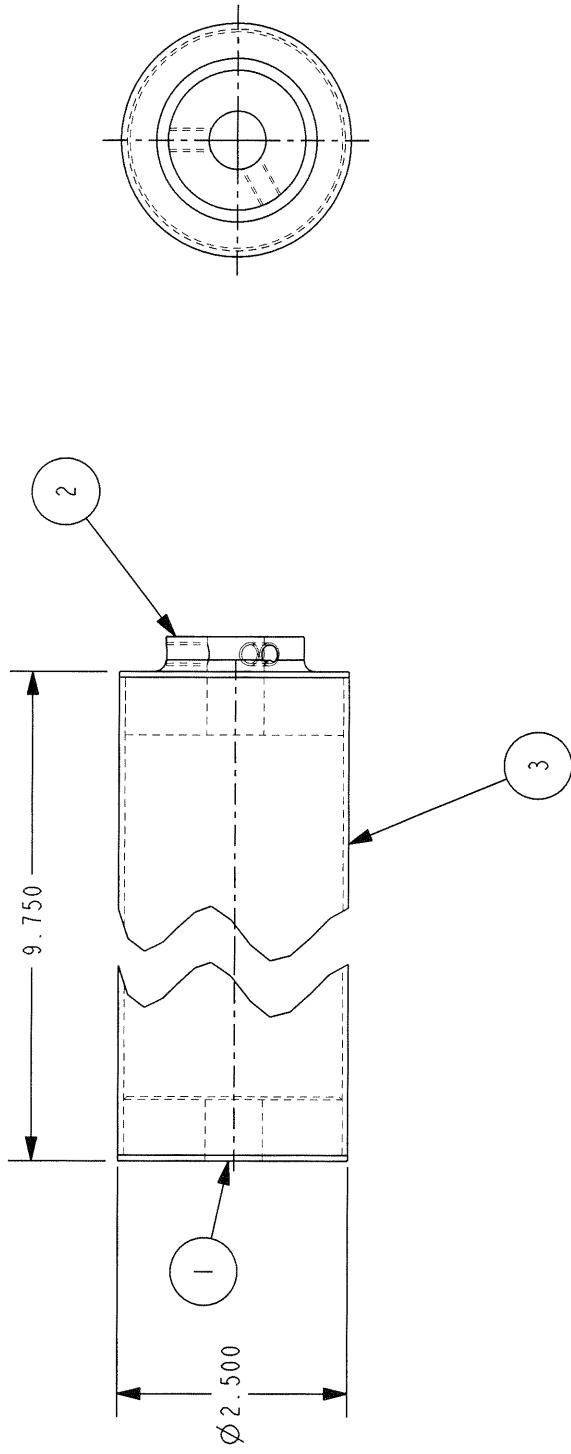
1	SP63000
REF'D	WHERE USED

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	ECN NO	BY
1	2	103110 BEARING, FLAT .625				
2	2	107103 BOLT, SHOULDER 5/16X5/8				
3	1	109481 PULLEY, TIMING 151075 .625B .188K				
4	4	500725 GUIDE - BELT				
5	1	507274 ASSY, ROLLER BELT DRIVE				
6	1	507215 ASSY, ROLLER - BELT IDLER				
7	2	510569 SHAFT - BELT GUIDE				
8	1	510510 BLOCK - BEARING				
9	1	510511 SHAFT, CONVEYOR DRIVE				
10	1	510660 SCREW ADJUSTING				
11	4	105936 .6 BELT, FLAT .75 X 60 GREEN				
12	1	108904 .6 BELT, TIMING 380L075				
13	1	509000 -1A ASSY, MOTOR/REDUCER DR 1/4 HP				
14	2	541055 .01 PLATE, OUTFEED CONVEYOR				
15	2	541060 .01 PLATE, MOTOR MOUNT				
16	1	541064 .01 PULLEY, TIMING 12L075 .625B .188K				
17	1	541065 .01 ASSY, TIMING BELT IDLER				
18	1	541066 .01 ASSY, FLAT BELT IDLER				
19	1	541012 .01 TOP CONVEYOR				
20	1	541013 .01 BRACKET, LEVELING LEG				
21	1	541110 .01 COVER, REDUCER				
22	1	541196 .01 SHAFT, OUTFEED ROLLER				
23	1	541197 .01 ASSY, TAKEUP ROLLER				
24	1	H.N014 NUT, JAM 1/2-13				

1	SP9490 RED D WHERE USED
PRINTED DRAWING PROPRIETARY AND CONFIDENTIAL NO COPIES OR REPRODUCED EXCEPT AS WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNESAW, GEORGIA SP94900 11/11 SET 10F 1	
ASSY, OUTFEED TABLETOP	
SCALE 0.250	
SCALE 0.250	

ITEM	QTY	PART #	DESCRIPTION
1	1	500331	HUB, ROLLER
2	1	500330-1	HUB, ROLLER
3	1	507274-1	ROLLER

	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	14-JUL-88	CHG FROM 10.000 TO 9.750	4367	GA
2	2	15-JAN-99	REPLACE PRT 500333-1 W/ 500330 & REDRAW IN PRO/E	6422	AYB

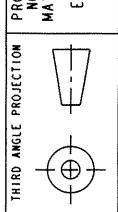


2	507100
1	510500

REF ID WHERE USED

KR KIRK - RUDY, INC.
KENNESSAW, GEORGIA

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.
KENNESSAW, GA 30144 USA



MODEL: XXX

TITLE: ASSY, ROLLER BELT DRIVE

DRAWING #: 507274

SHEET #: 1 OF 1

DRAFTING:

DRAWN BY: WEF

SCALE: 0.500

DIMENSIONAL TOLERANCES

UNLESS OTHERWISE NOTED

.005 .005 .5

.01 .005 .5

HEAT TREAT: XXX

FINISH: BL OXIDE

ALL DIMENSIONS ARE

FINISHED DIMENSIONS

DO NOT SCALE - WORK

TO DIMENSIONS ONLY

REMOVED ALL BURRS AND

SHARP EDGES UNLESS

OTHERWISE NOTED

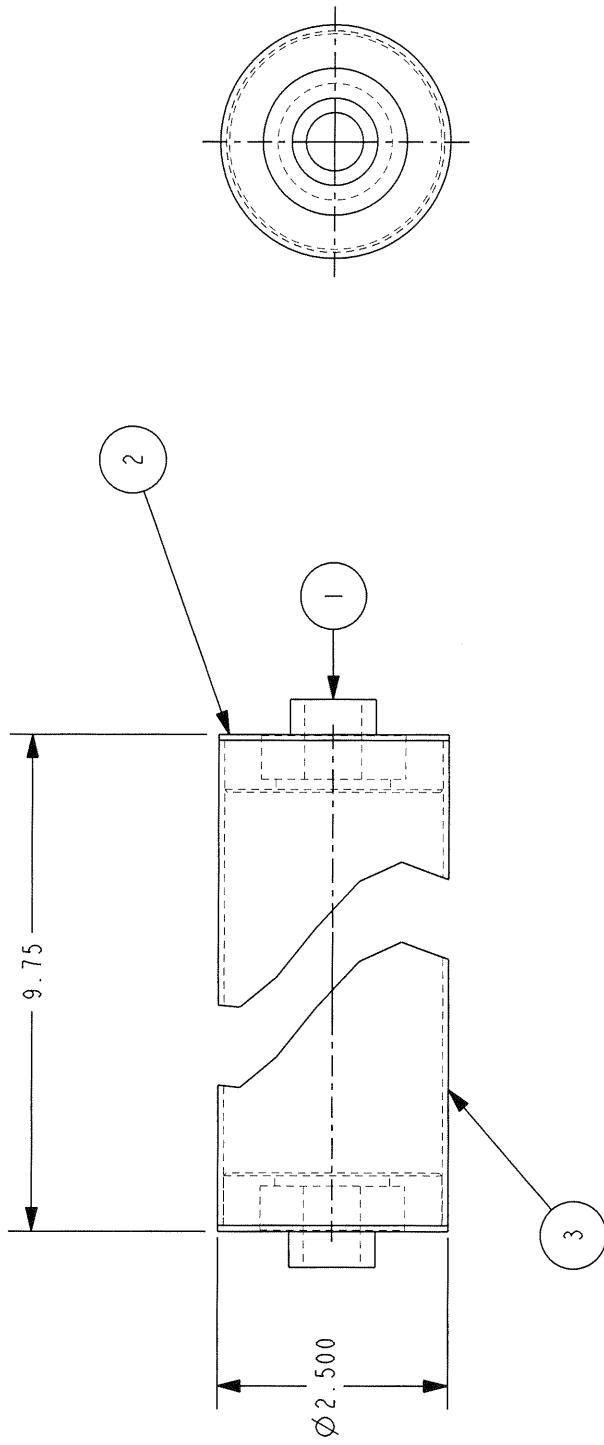
MASTER

4-FEB-75

CHECKED BY:

TRACED BY:

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	2	103804	BEARING, HUB .625	1	14-JUL-88	CHG FROM 10.000 TO 9.750	4366	GA
2	2	500836	HUB	2	15-JAN-99	REPLACE PRT 500836 W/ 500836-5 & REDRAWN IN PROJE	6423	AWB
3	1	507274-1	ROLLER	3	20-DEC-00	REPLACE PRT 500836-5 W/ 500836 FOR HUB BRG	6644	TJG



REF'D	WHERE USED
1	510500
2	507100

DRAWN BY: W E F	SCALE: 0 . 500	MATERIAL: XXX	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 3044 USA
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	.xx	.xxx	ANG.	.005	HEAT TREAT:
CHECKED BY: 14-FEB-75	.01	.005	.5		MODEL: 703
TRACED BY: MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED				SHEET NO.: 1 OF 1
	ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY				DRAWING #: 507275

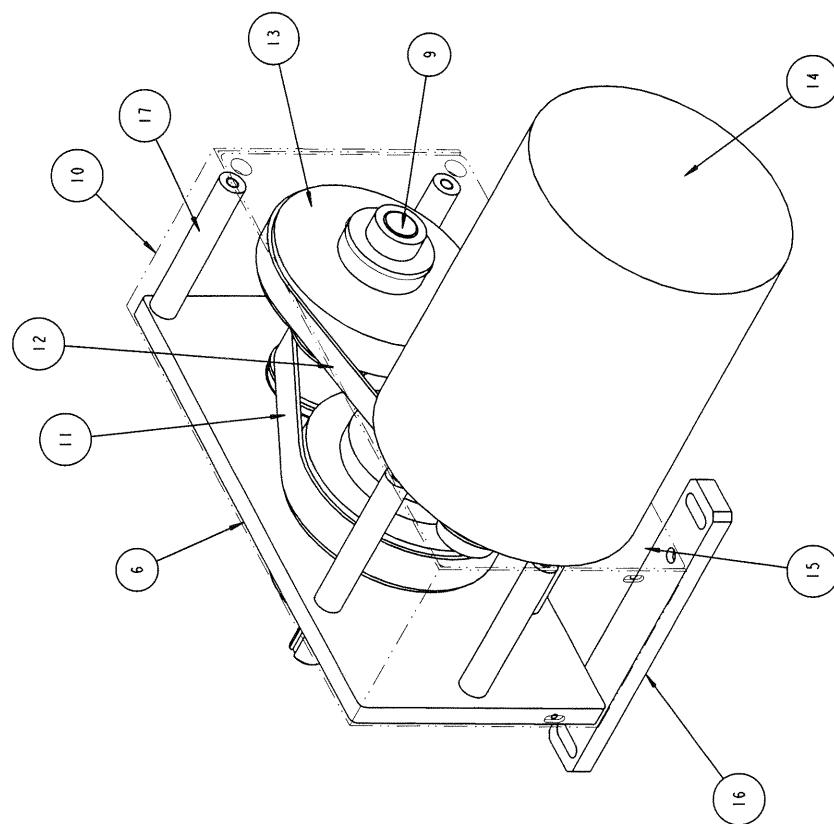
KRK KIRK - RUDY, INC.
KENNESAW, GEORGIA

ASSY, ROLLER - BELT IDLER

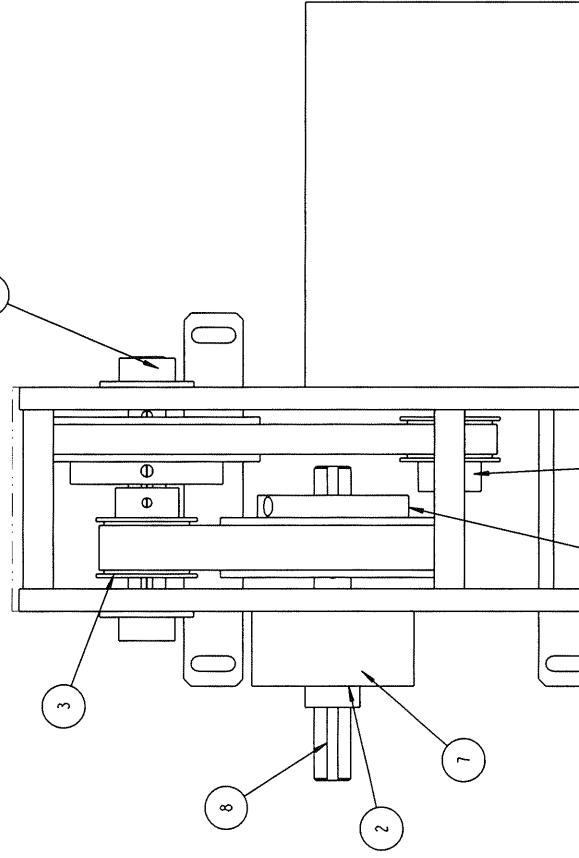
Drawing No. 1

509000 - 1A

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	ECN NO	BT
1	4	103604	BEARING, HUB .625				
2	1	104104	SPRING, TIMING .625				
3	1	108009	PULLEY, TIMING 12L075 .625B .188K				
4	1	108211	PULLEY, TIMING 12L050 .500B NK				
5	1	109220	PULLEY, TIMING 32L075 .625B .188K				
6	1	509005	PLATE, FRONT SIDE				
7	1	509015	HUB-BEARING				
8	1	509032	SHAFT, OUTPUT				
9	1	509035	SHAFT-IDLER				
10	1	509037	COVER, REDUCER				
11	1	10811-1	BELT, TIMING 150L075				
12	1	10812-1	BELT, TIMING 187L050				
13	1	109319-1	PULLEY, TIMING 32L050 .625B .188K				
14	1	200165-4	MOTOR, LEESON DC				
15	1	509006-1	PLATE, REAR SIDE				
16	2	530138-01	BAR, MOUNTING				
17	5	SP16208	SPACER, REDUCER				



ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	ECN NO	BT
1	4	103604	BEARING, HUB .625				
2	1	104104	SPRING, TIMING .625				
3	1	108009	PULLEY, TIMING 12L075 .625B .188K				
4	1	108211	PULLEY, TIMING 12L050 .500B NK				
5	1	109220	PULLEY, TIMING 32L075 .625B .188K				
6	1	509005	PLATE, FRONT SIDE				
7	1	509015	HUB-BEARING				
8	1	509032	SHAFT, OUTPUT				
9	1	509035	SHAFT-IDLER				
10	1	509037	COVER, REDUCER				
11	1	10811-1	BELT, TIMING 150L075				
12	1	10812-1	BELT, TIMING 187L050				
13	1	109319-1	PULLEY, TIMING 32L050 .625B .188K				
14	1	200165-4	MOTOR, LEESON DC				
15	1	509006-1	PLATE, REAR SIDE				
16	2	530138-01	BAR, MOUNTING				
17	5	SP16208	SPACER, REDUCER				



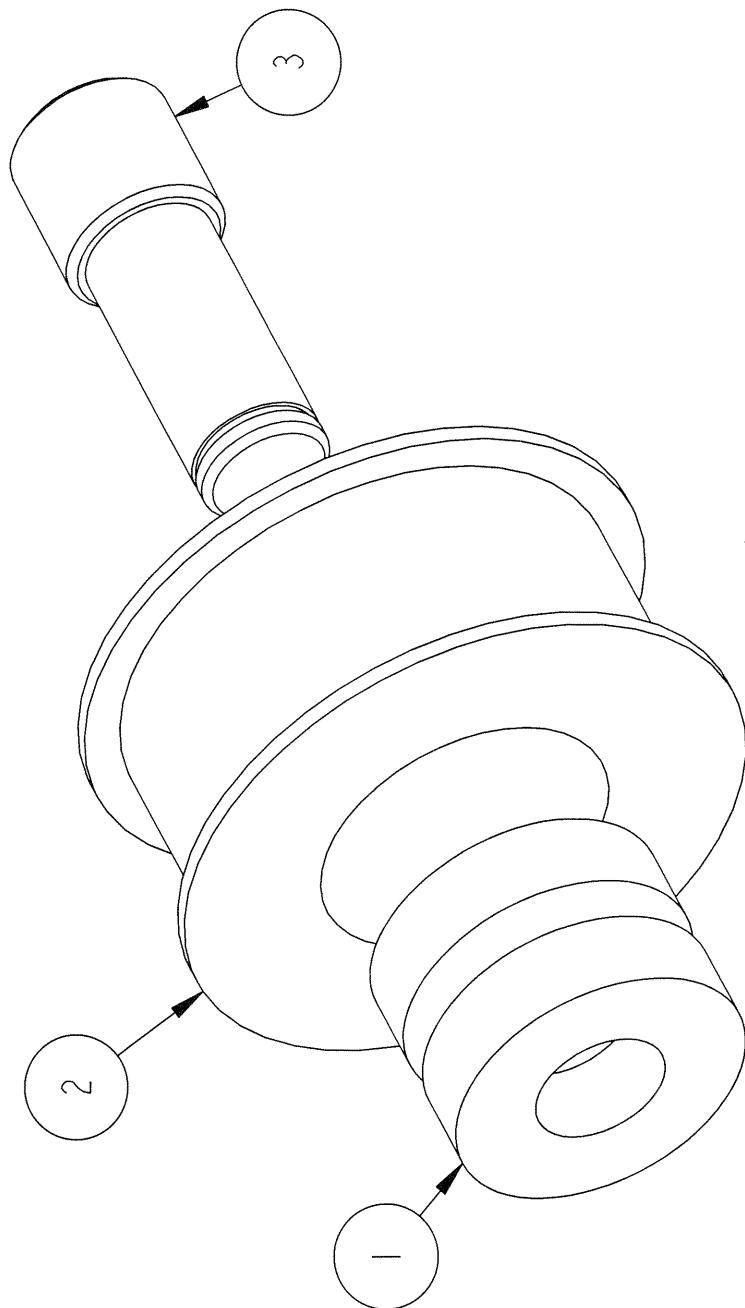
ITEM	MY	SCALE	0 .500	DIMENSIONS ON THIS PRINT ARE IN INCHES.	N/A	LEAD-IN LINE POSITION	PROJECTION OF THE LEAD-IN LINE FOR THIS DRAWING MAY BE QUOTED OR REFERENCED ON REPRODUCED EDITIONS. EXPRESSED IN INCHES.
CHECKED BY:		DATE	18-May-98	REPRINTS ALL FIGURES AND DIMENSIONS UNLESS OTHERWISE NOTED.	NONE	NOTE:	KIRK-RUDY INC. KENNESAW, GEORGIA
TRACED BY:		DATE		ALL DIMENSIONS ARE FINISHED DIMENSIONS. DO NOT SCALE. WORK TO DIMENSIONS ONLY.	N/A	SET:	53158-01 RECD 5/18/98

ITEM	1	53158-01	RECD 5/18/98
NOTE:			

ITEM	1	53158-01	RECD 5/18/98
NOTE:			

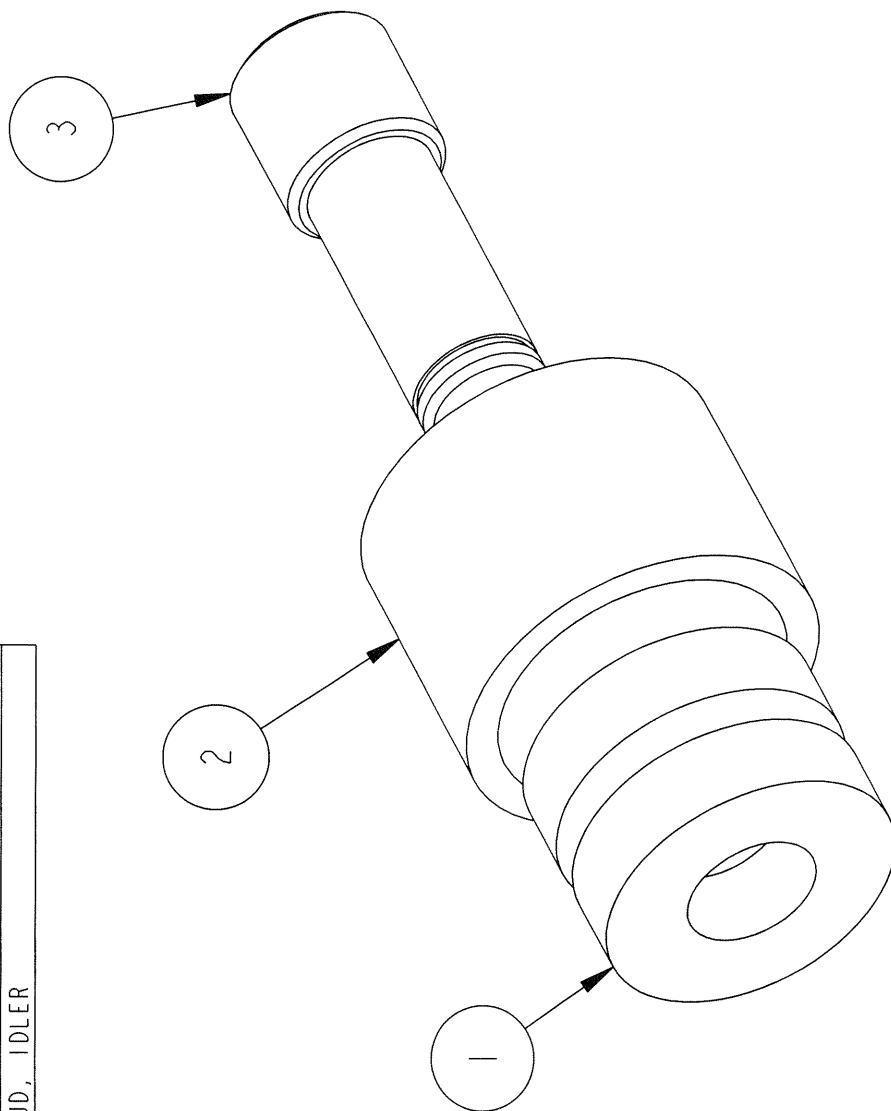
5090000 - 1A

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	2	103108	BEARING, FLAT .500					
2	1	108877	PULLEY, TIMING 16L075 I. 125B NK					
3	1	541067-01	STUD, IDLER					



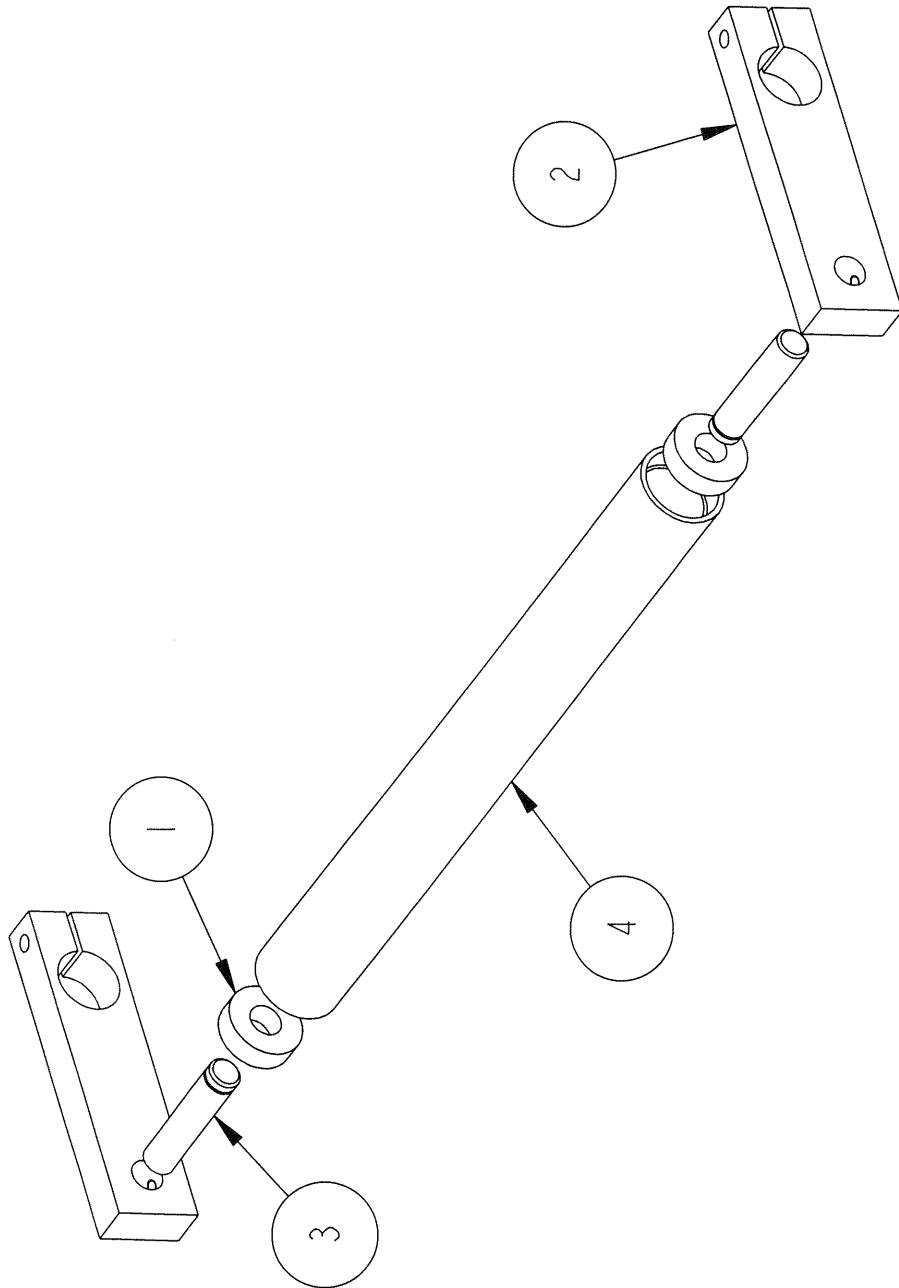
1	SP90800		
RECD	WHERE USED		
<p align="center">KR KIRK-RUDY, INC. KENNESAW, GEORGIA</p>			
<p align="center">PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNESAW, GA 30144 USA</p>			
THIRD ANGLE PROJECTION			
MATERIAL:	N/A		
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED			
.XX	.XXX	ANG.	
.01	.005	.5	HEAT TREAT:
<p align="center">REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED</p>			
<p align="center">ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY</p>			
DRAWN BY: A KEY	SCALE: 1 . 500	DATE: 06-Apr-01	MODEL: SP90800
CHECKED BY:			TITLE: ASSY, TIMING BELT IDLER
TRACED BY: MASTER			SHEET NO.: 1 OF 1
DRAWING #: 541065-01			

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	2	103108	BEARING, FLAT .500					
2	1	516045	ROLLER, BELT TAKEUP					
3	1	541067-01	STUD, IDLER					



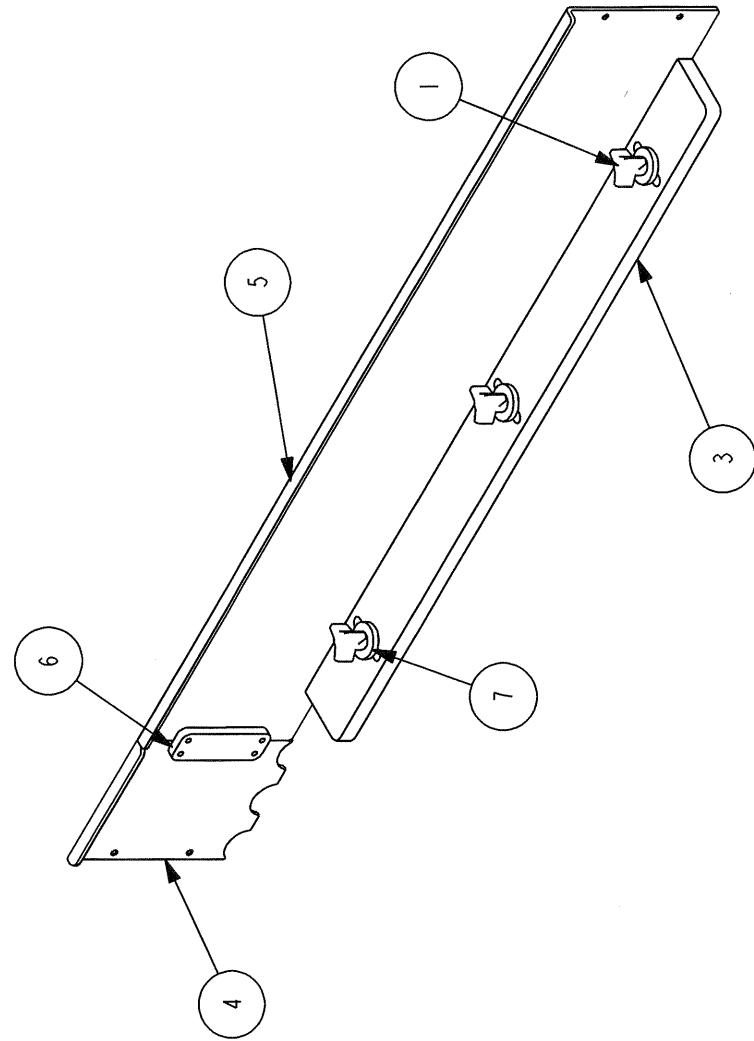
1	SP90800	
REQ'D	WHERE USED	
 KIRK - RUDY, INC. KENNESAW, GEORGIA		
<small>PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY INC. KENNESAW, GA 30144 USA</small>		
THIRD ANGLE PROJECTION		
MATERIAL:	N/A	
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED		
XX	.005	ANG.
.01		
HEAT TREAT:		
MODEL:	SP90800	TITLE: ASSY, FLAT BELT IDLER
SHEET NO.:	1 OF 1	DRAWING #
DRAWN BY: A KEY	SCALE: 1 .500	
CHECKED BY:	DATE: 06-Apr-01	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED
TRACED BY:	MASTER	ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY

ITEM	QTY	PART #	DESCRIPTION	REV	DATE	DESCRIPTION	ECN
				NO			NO
1	2	103106	BEARING, FLAT .375				
2	2	504949	ARM BELT TIGHTENER				
3	2	504988	SHAFT, BELT GUIDE ROLLER				
4	1	510735	ROLLER				



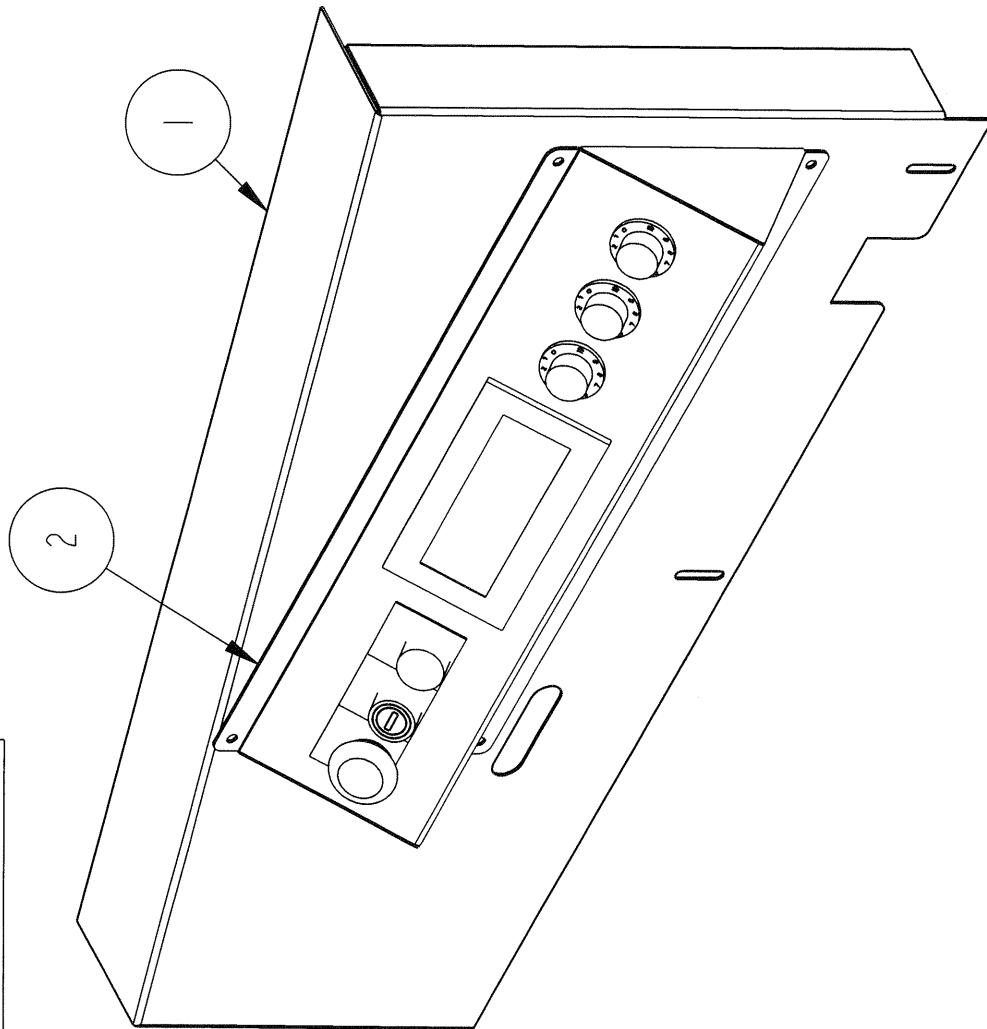
DRAWN BY: A KEY		SCALE 0 . 500	MATERIAL: N / A	THIRD ANGLE PROJECTION 	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESS WRITTEN PERMISSION OF KIRK-RUDY, INC. KENNESAW, GA 30144 USA	RECD WHERE USED XXX
CHECKED BY: DATE 04 - Jun - 01		DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED xx .xxx ANG. .01 .005 .5	HEAT TREAT: N / A	MODEL: SP 90800	TITLE: ASSY , TAKEUP ROLLER	
TRACED BY: MASTER		REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	FINISH: N / A	SHEET NO. 10F	DRAWING # 541197-01	

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1 3	102119	KNOB					
2 3	105622	ROD, THREADED	1/4-20 X 1.75 IN				
3 1	510790	BAR, SIDE GUIDE SUPPORT					
4 1	541068-06	GUIDE, RH					
5 1	541070-05	GUIDE, STACKER OUTFEED SIDE					
6 1	541071-01	PLATE, SIDE GUIDE CONNECTING					
7 3	SP6383-1	SPACER, GEAR COVER					



DRAWN BY: A KEY		SCALE 0 . 200	MATERIAL: N/A	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	
CHECKED BY:		DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED DATE 22 - Jan - 03	THIRD ANGLE PROJECTION 	MODEL: 630	KIRK - RUDY INC. KENNESAW, GEORGIA 
TRACED BY:		.XX .XXX .005 .5 .01	HEAT TREAT: N/A	TITLE: ASSY, PRODUCT GUIDE	
		REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED	FINISH: N/A	SHEET NO.: OF 1	DRAWING #: 541069-05
		ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY			

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	541084-01			COVER, RH RAMP		
2	1	541089-01			ASSY, CONTROL PANEL		



DRAWN BY: A KEY	SCALE: 0 . 250	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. KENNESAW, GA 30144 USA	
CHECKED BY:	DATE: 23 - Apr - 01	.xx	.xxx	ANG.		MODEL: SP90800	TITLE: ASSY, CONTROL PANEL AND COVER
TRACED BY:	MASTER	.01	.005	.5	HEAT TREAT:	N/A	DRAWING #: 541088-01
REMOVE ALL BURS AND SHARP EDGES UNLESS OTHERWISE NOTED					FINISH: ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	SHEET NO. 1 OF 1	

1	908
REQ'D	WHERE USED

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	201149	PLATE, STEP LABEL					
2	1	201164	PLATE, YELLOW POWER OFF LABEL					
3	1	201169	PLATE, CUSTOM LABEL					
4	3	209016	KNOB, POT					
5	1	201124-4	BUTTON, POWER ON					
6	1	201125-2	BUTTON, MUSHROOM STOP					
7	1	201126-1	BUTTON, JOG					
8	1	202414-1	CONTROLLER, PROGRAMMABLE					
9	1	541086-01	WLDMMT, CONTROL PANEL					

I XXX
REQ'D WHERE USED

THIRD ANGLE PROJECTION

MATERIAL:	N/A		
DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED	.XX	XXX	ANG.
	.01	.005	.5
HEAT TREAT:	N/A		
FINISH:	N/A		

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OF KIRK-RUDY, INC.
KENNESAW, GA 30144 USA

DRAWN BY: A KEY SCALE 0 .375 DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED

DATE: 23 Apr - 01	REMOVAL ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED
MASTER	ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY

CHECKED BY:

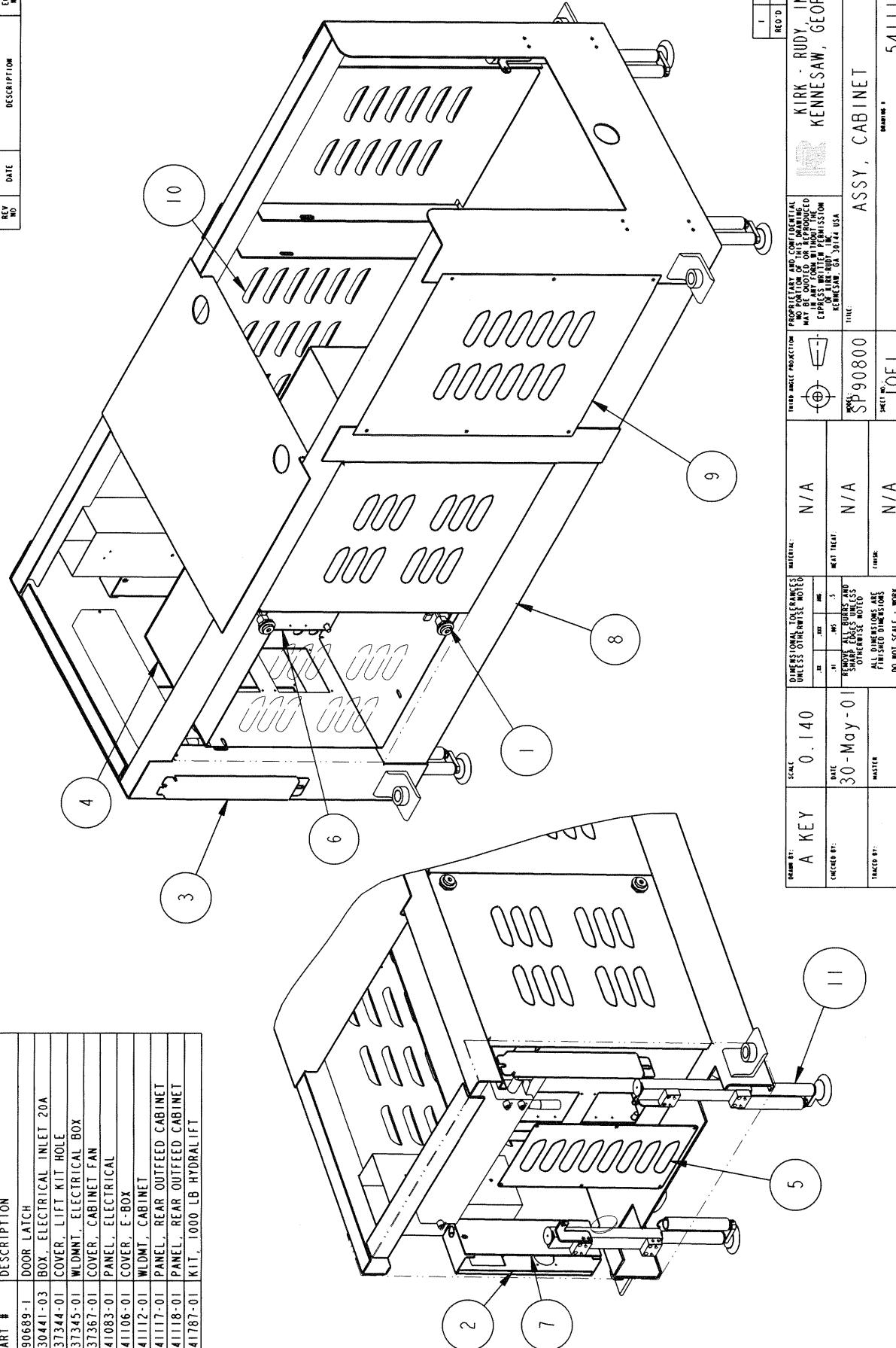
TRACED BY:

KIRK RUDY - INC.
KENNESAW, GEORGIA

ASSY, CONTROL PANEL

541089-01

ITEM #	PART #	DESCRIPTION
1	2	190689-1 DOOR LATCH
2	1	530441-03 BOX, ELECTRICAL INLET 20A
3	1	531344-01 COVER, LIFT KIT HOLE
4	1	531345-01 WLDNNT, ELECTRICAL BOX
5	1	531367-01 COVER, CABINET FAN
6	1	541083-01 PANEL, ELECTRICAL
7	1	541106-01 COVER, E-BOX
8	1	541112-01 WLDNNT, CABINET
9	2	541117-01 PANEL, REAR OUTFEED CABINET
10	1	541118-01 PANEL, REAR OUTFEED CABINET
11	1	541787-01 KIT, 1000 LB HYDRAULIFT



I	SP40800
RECD	WHERE USED
KIRK - RUDY INC.	
KENNESAW, GEORGIA	
PRINTED AND CONFIRMED NO PART OF THIS DRAWING MAY BE COPIED OR REPRODUCED EXCEPT AS AUTHORIZED BY THE RUDY INC. KENNESAW, GA 30144 USA	
SP 90800	SP 90800
Sheet No. 1 of 1	Sheet No. 1 of 1

ASSY, CABINET

Drawing 1

541113-01

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	1	191032-01	PUMP, MOVOTEC PB4615FC					
2	3	537343-01	SPACER, LIFT KIT MOUNT					
3	2	541179-01	ASSY, RH HYDRAULIFT LEG 1000LB					
4	2	541180-01	ASSY, LH HYDRAULIFT LEG					

I	630	RECD WHERE USED
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DRAWN BY: A KEY SCALE 0.125 DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED

xx	.000	.005	.005	HEAT TREAT:
.01				N/A

CHECKED BY: DATE 20-DEC-01 REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED

ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY

TRACED BY: MASTER SHEET NO 10F1 DRAWING #

THIRD ANGLE PROJECTION

MODEL: 630	TITLE: KIT, 1000 LB HYDRAULIFT
SHEET NO 10F1	DRAWING #

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KENNESAW, GA 30144 USA

KR KIRK - RUDY, INC.
KENNESAW, GEORGIA

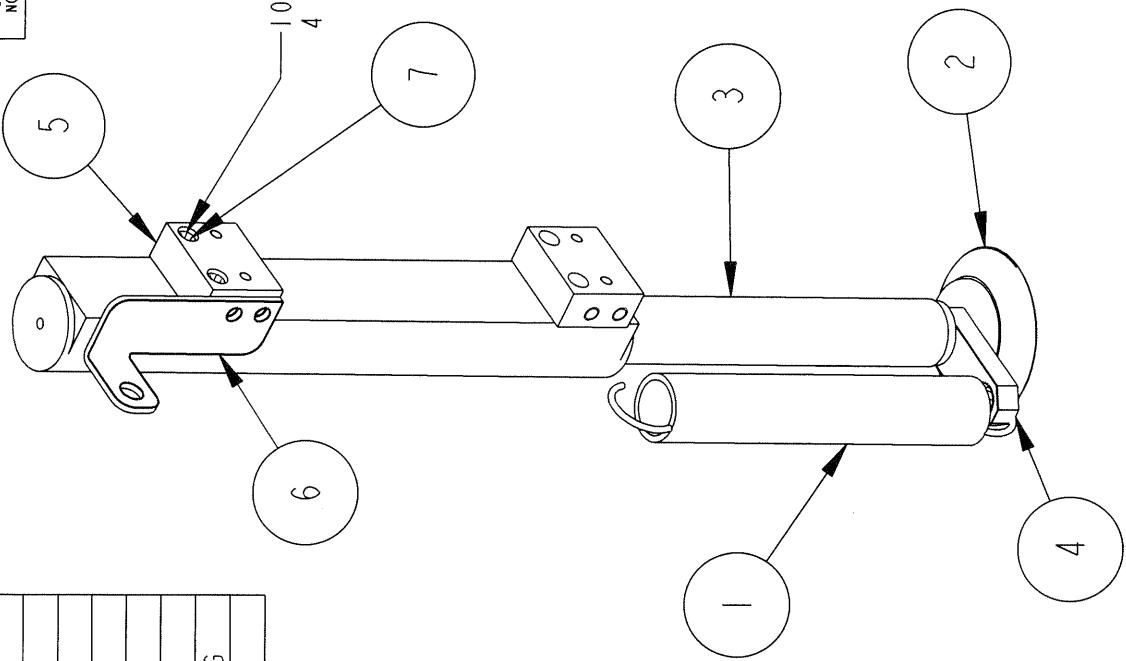
ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	102792	SPRING, EXTENSION					
2	191029-3	GLIDE, SUSPA					
3	191032-02	CYLINDER, LIFT CB615 1000LB					
4	537371-01	BRACKET, SPRING RETURN MOUNT					
5	537596-02	BLOCK, HYDRAULIC LIFT RH					
6	537597-01	BRACKET, HYDRAULIC LIFT SPRING					

10-32 CAP SCREW X .625 LONG
4 PLACES

2	SP90800
REF'D	WHERE USED

DRAWN BY: A KEY	SCALE: 0 .375	MATERIAL: N/A	THIRD ANGLE PROJECTION	PROPRIETARY AND CONFIDENTIAL NO PORTION OF THIS DRAWING MAY BE QUOTED OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF RUDY INC. KENNESAW, GA 30144 USA
CHECKED BY:	DATE: 26-Dec-01	DIMENSIONAL TOLERANCES UNLESS OTHERWISE NOTED xx .xxx ANG. .01 .005 .5	HEAT TREAT:	KIRK - RUDY INC. KENNESAW, GEORGIA
TRACED BY:	MASTER	REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE SWIMMED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY	MODEL: SP90800	TITLE: ASSY, RH HYDRAULIC LIFT LEG 1000LB
		FINISH:	SHEET NO: 10F1	DRAWING #: 541179-01

ITEM QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	BY
1	102792	SPRING, EXTENSION					
2	191029-3	GLIDE, SUSPA					
3	191032-02	CYLINDER, LIFT CB615 1000LB					
4	537371-01	BRACKET, SPRING RETURN MOUNT					
5	537596-01	BLOCK, HYDRAULIC LIFT LH					
6	537597-02	BRACKET, HYDRAULIC LIFT SPRING					
7	2 CSDD266	SCREW, SHCS 10-32X .625					



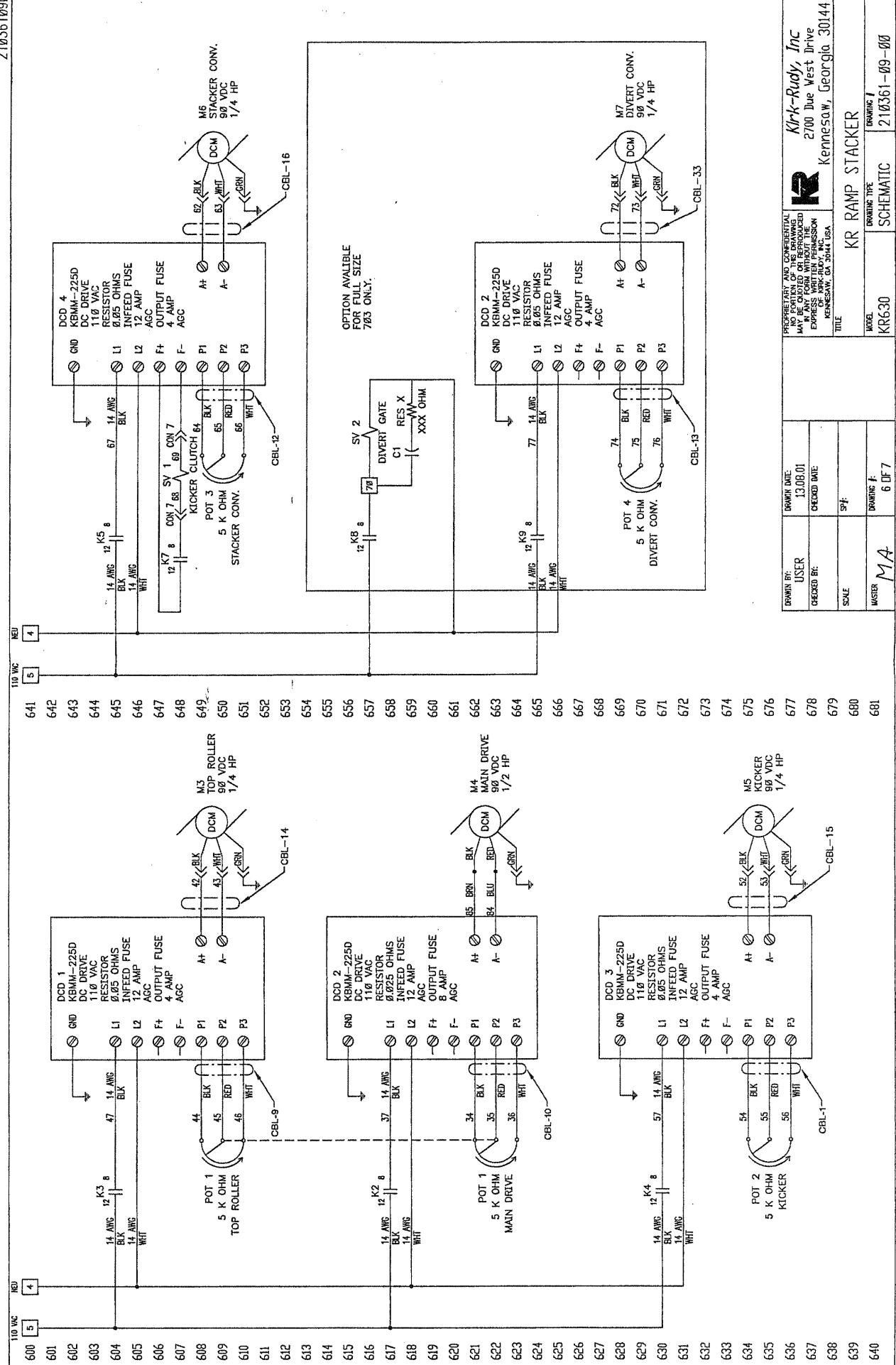
-10-32 CAP SCEW X .625 LONG
4 PLACES

ITEM	QTY	PART #	DESCRIPTION	REV NO	DATE	DESCRIPTION	ECN NO	B/R
1	1	539195-01	BOX, MAIN DISCONNECT					
2	1	539319-01	WLDMNT, MAIN DISCONNECT COVER					
3	2	541235-01	BAR, BREAKER SPACER					
4	1	CIRCUIT BREAKERS @ MRCUIT BREAKER						

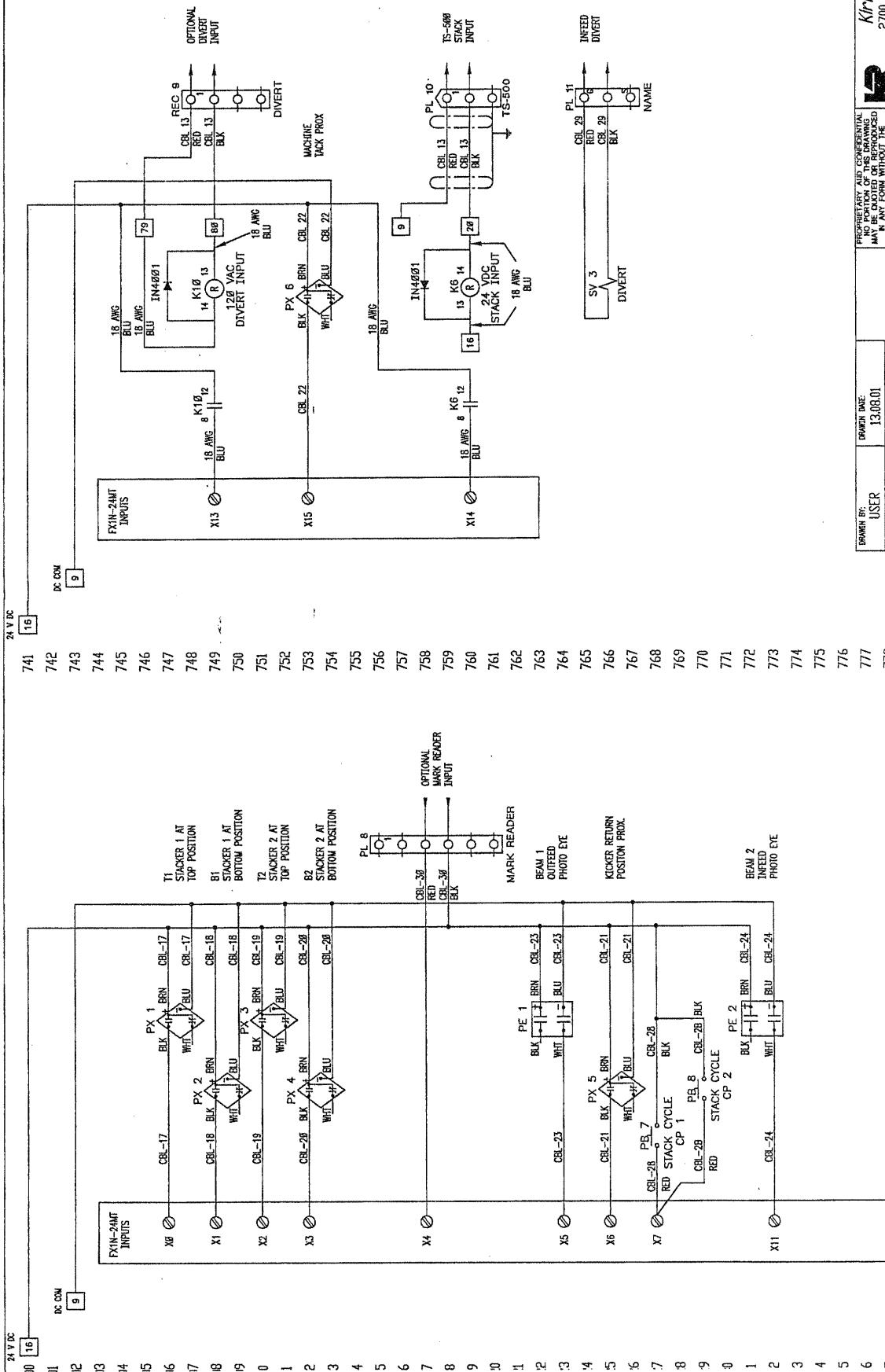
I SP80500
REO'D WHERE USED

ASSY, SWITCH BOX 541236-01

DRAWN BY: A KEY	SCALE 0 .250	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. KENNESAW, GA 30044 USA	
CHECKED BY:	DATE 27-May-00	xx	.XXX	ANG.	HEAT TREAT: N/A		MODEL: SP80500	TITLE:
TRACED BY:	MASTER m	.01	.005	.5	FINISH: N/A	SHEET NO. 10F1	DRAWING # 1	
REMOVE ALL BURRS AND SHARP EDGES UNLESS OTHERWISE NOTED					ALL DIMENSIONS ARE FINISHED DIMENSIONS DO NOT SCALE - WORK TO DIMENSIONS ONLY			



2103610900



 Kirk-Rudy, Inc 2700 Due West Drive Kennesaw, Georgia 30144	KR RAMP STACKER <hr/> <table border="1"> <tr> <td style="width: 15%;">NOTE:</td> <td style="width: 15%;">DRAWING TYPE:</td> <td style="width: 15%;">DRAWING #:</td> </tr> <tr> <td>KR630</td> <td>SCHEMATIC -</td> <td>210361-09-00</td> </tr> </table>			NOTE:	DRAWING TYPE:	DRAWING #:	KR630	SCHEMATIC -	210361-09-00
NOTE:	DRAWING TYPE:	DRAWING #:							
KR630	SCHEMATIC -	210361-09-00							
TITLE									

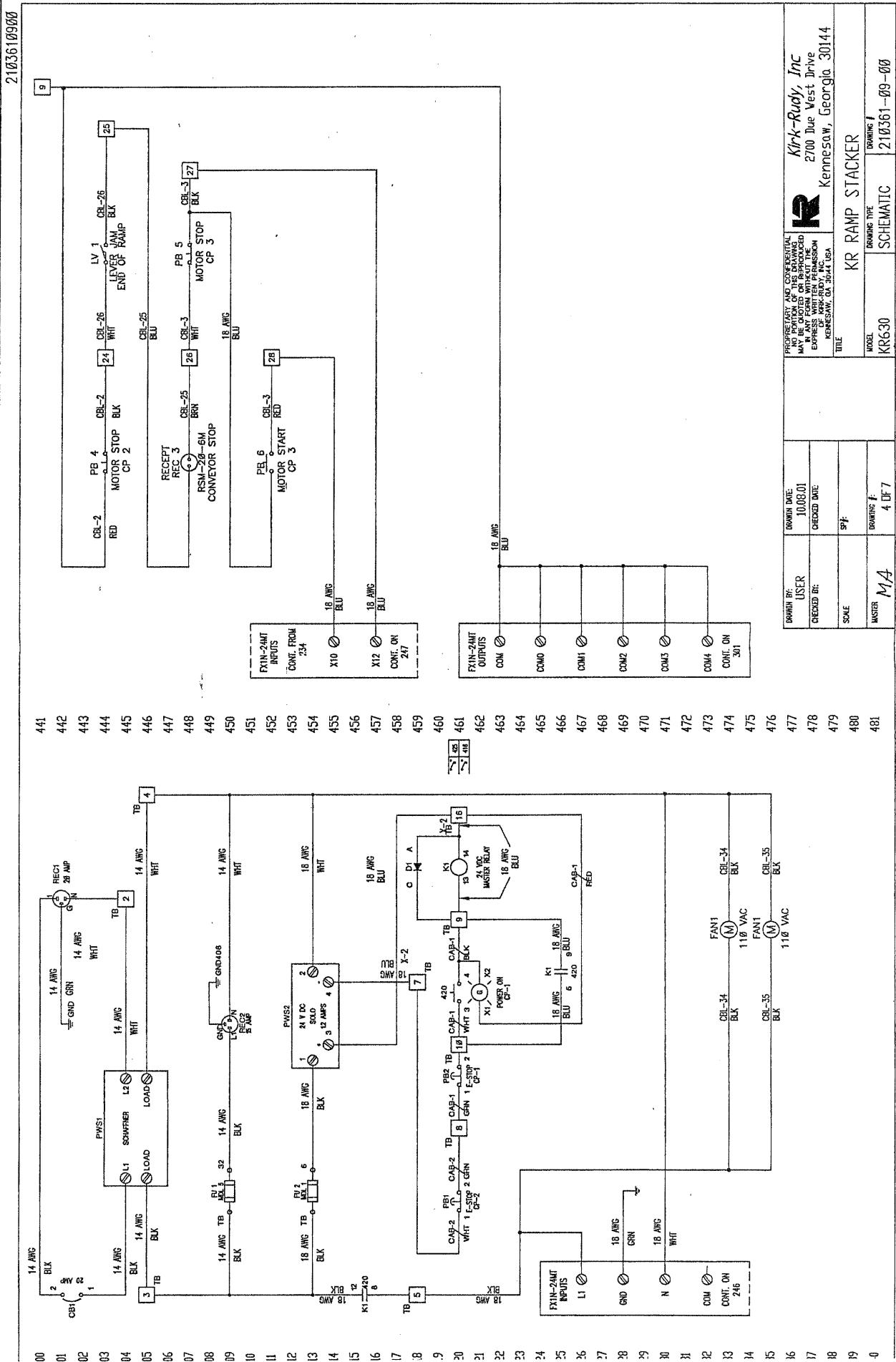
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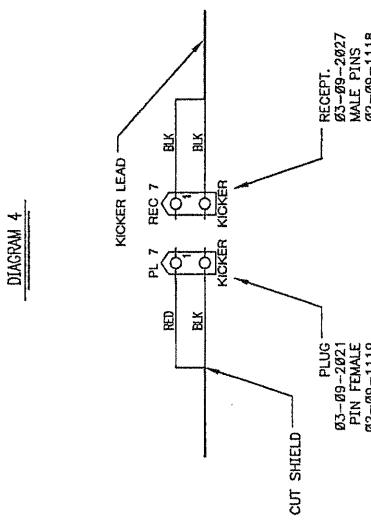
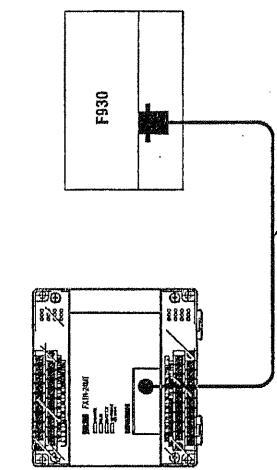
Kirk-Rudys
2700 lung West
Georgetown, Texas

KR RAMP STACKER

MODEL
KR630

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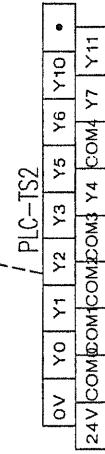
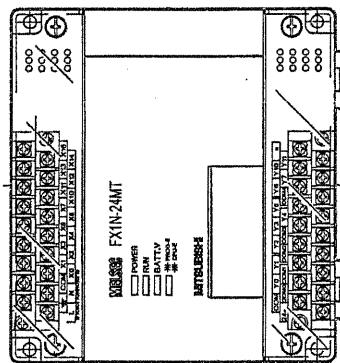
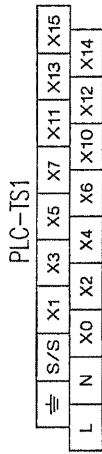
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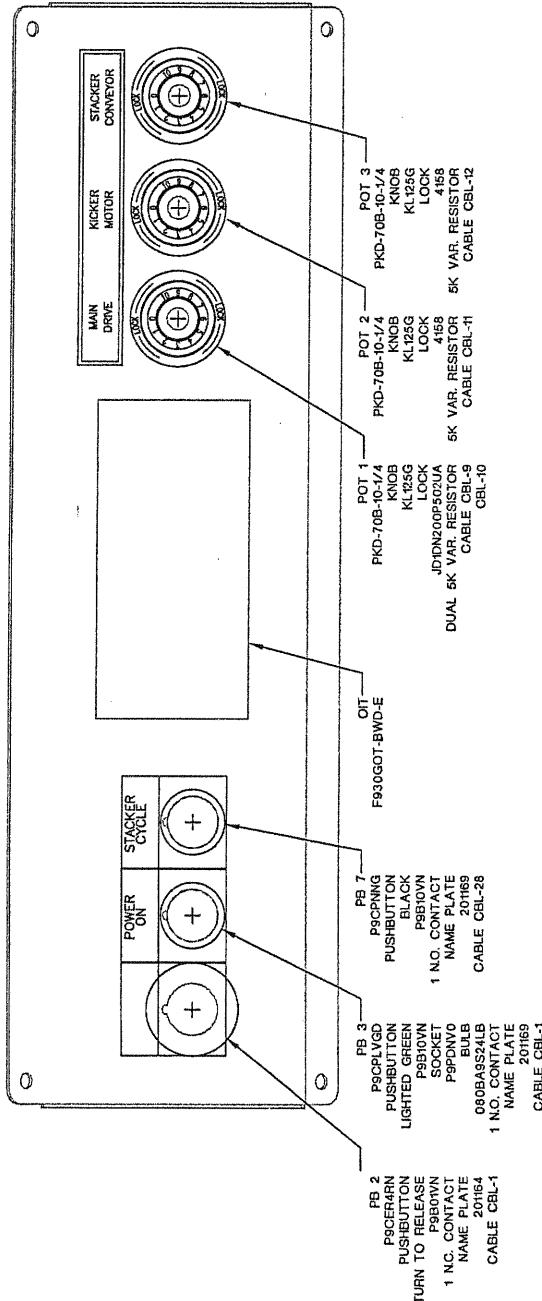
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DRAWN BY: USER		DRAWN DATE: 31/08/01		2700 Due West Drive Kennesaw, Georgia 30144
CHECKED BY:		CHECKED DATE:		KENNESAW, GA 30144 USA
SCALE:	S.F.			TITLE:
MASTER:	M/A	DRAWING NO.:	KR530	DRAWING TYPE:
		3 DF7		SCHEMATIC
				210361-09-00



DRAWN BY:		DRAWN DATE:	
USER		20/09/01	
CHECKED BY:		CHECKED DATE:	
SOLVE		SPF:	
WATER		DRAWING F. 3 OF 3	

KR KRamp Stackermotor

KR KRamp Stackermotor

KR KRamp Stackermotor

KR KRamp Stackermotor

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KR KRamp Stackermotor

KR KRamp Stackermotor

KR KRamp Stackermotor

KR KRamp Stackermotor

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EXCEPT AS PROVIDED IN THE AGREEMENT	EXCEPT AS PROVIDED IN THE AGREEMENT
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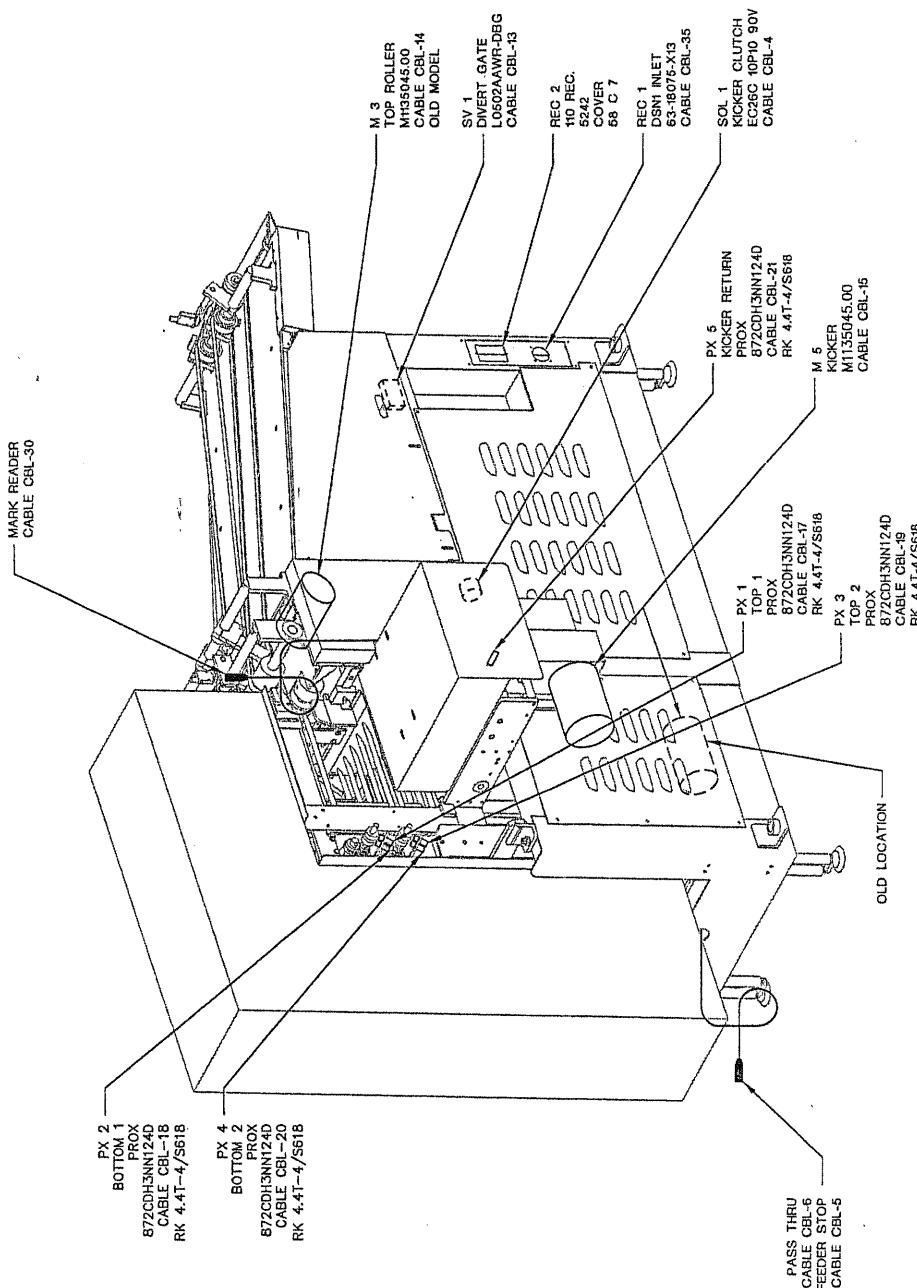
KR KRamp Stackermotor

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KR KRamp Stackermotor

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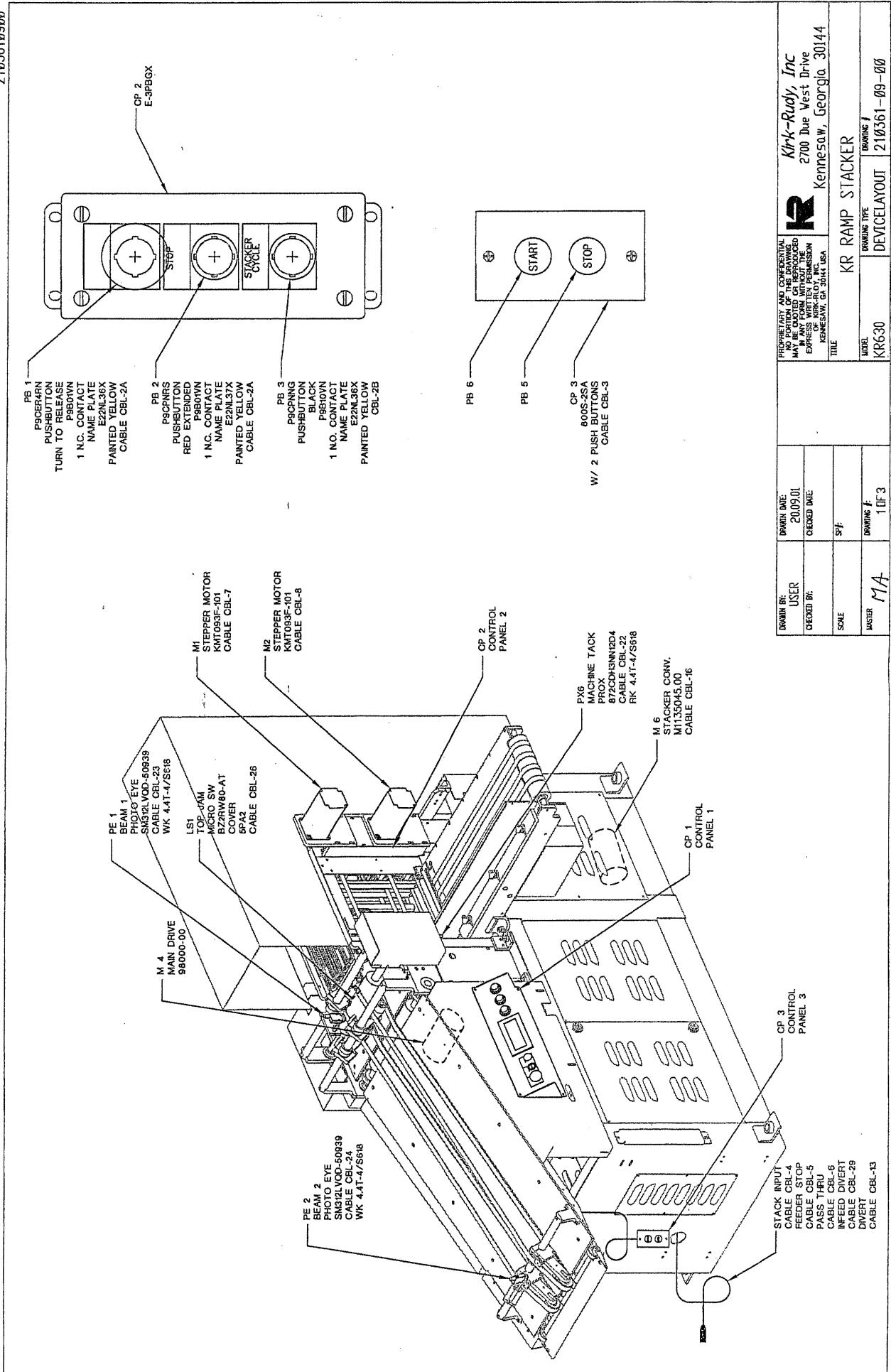
2103610900



DRAWING NO.		PRINT DATE:		Kirk-Rudy, Inc	
USER		200901		2700 Due West Drive	
CHECKED BY:		CHECKED DATE:		Kennesaw, Georgia 30144	
SCALE:		SPF:		EX-1000	
MASTER		DRAWING I 2 OF 3		TITLE	
M A		KR RAMP STACKER		KR630	
DRAWING TYPE		DRAWING I		DEVICE LAYOUT	
NO. OF SHEETS		210361-09-00			

10 NOTES

2103610900



11 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:

In the USA: Kirk-Rudy @PH 770-427-4203, FX 770-427-4036

In Europe: Grafibind @ PH 011-31-5553-41610