

Checker Unload Checkstand Installation Instructions

Attention Store Manager:

Please find enclosed in this packet important information about your Killion checkstands. This information is provided to help you with the manufacturer's recommended installation and maintenance procedures for your checkstands. Please read through carefully before installing.

- IMPORTANT ELECTRICAL SAFETY INFORMATION
- Checkstand Installation Instructions
- Electrical Installation Instructions
- Accessory Installation Instructions
- Operating Instructions
- User Maintenance Instructions
- Troubleshooting Guide
- Belt Drive Replacement & Adjustment Instructions

Customer service and parts ordering is also available to assist you online at www.killionservice.com or by phone at 1-800-421-5352.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

IMPORTANT ELECTRICAL SAFETY INFORMATION

READ BEFORE PROCEEDING

GROUNDING INSTRUCTIONS

DANGER: For checkstands equipped with plugs: Do not modify the plug provided with the appliance.—If it will not fit the outlet, have a proper outlet installed by a qualified electrician. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with green insulation with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal. Consult a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the checkstand is properly grounded.

WARNING: This appliance must be grounded. In the event of malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. Should there be any concern as to the proper connection and grounding of the main power supply or checkstand, please consult a qualified electrician.

If your checkstand is set up to be hard wired into the main power supply, it must be connected to an equipment-grounding conductor that is run with the circuit conductors and connected to the equipment-grounding lead on the checkstand. Connect the green and/or green with yellow stripes conductors to the grounding leads from the incoming power supply using the provided wire nuts.

If your checkstand comes factory equipped with electrical cords and plugs to connect to the main power supply it must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. Checkstands are rated at or greater than 15 A, a nominal rating of 120V, and factory equipped with a specific cord and plug. No adapter should be used. If the checkstand must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel; and after the reconnection, the checkstand should comply with all local codes and ordinances.

SPECIAL NOTES TO THE INSTALLER

All local building codes must be followed for proper installation of this product. It is the installer's responsibility to ensure that this product is installed to meet local code authority requirements.

If this checkstand is power cord connected:

- If the local code authority having jurisdiction requires this product to be permanently hard-wired to store power, then the power supply cord, including plug and strain-relief will need to be removed and replaced with field wiring connections suitable for the intended purpose and meeting the requirements of the local code authority having jurisdiction.

- Store power circuits should be grouped so that the checkstand power supply cord(s) provide the means to disconnect the entire checkstand from the AC mains at each checkstand.
- **CAUTION:** The power supply cords serve as the main disconnect at each checkstand. All receptacles receiving power from the checkstand's power supply cord(s) must be labeled in order to comply with the National Electrical Code, NFPA 70, Article 422.20

If this checkstand is permanently wired into the store main power (via floor stub-up(s) or ceiling power pole(s)):

- Store power circuits should be set up such that individual checkstands have their own circuit breaker to act as the main power cut off for each checkstand.

Please reference the sample cord-connected and permanently connected checkstand electrical diagrams on the following pages. A customer-specific electrical drawing is typically located at the end of this checkstand installation instructions packet.

OPERATOR SAFETY INSTRUCTIONS

This checkstand is designed to run at 120V, 15+ A electrical current. All electrical switches and conductors have been enclosed for your protection.

DANGER: Do not attempt to open any of the electrical panels or covers while the unit is powered on or in operation as risk of serious electrical shock or injury may result! Opening of such panels or covers is unnecessary in the operation of this unit. Should any adverse behavior arise during the use of this unit, power down the unit at once by moving all switches to the OFF position and contacting a qualified electrician to troubleshoot and repair the unit.

CHECKSTAND INSTALLATION INSTRUCTIONS

LIST OF HARDWARE AND TOOLS REQUIRED FOR INSTALLATION:

- Installation hardware box (provided)
- Phillips head screwdriver
- Slotted screwdriver
- Drill motor with 1/8" bit
- 7/16" wrench
- 3/4" wrench
- Nail gun (Ramset)

STEPS: READ ALL OF THESE STEPS BEFORE BEGINNING INSTALLATION:

- 1) KCh model series checkstands typically come with up to two modules: main module and bagger module. You may skip steps referencing modules that are not contained with your checkstand. Be sure to note which sections your checkstand was shipped with prior to installation. Reference Diagram 'A-KCh'.
- 2) Remove the shipping skids attached to the bottom of the toekick on all modules.
- 3) Placing the first checkstand: See store layout drawing for checkstand placement, aisle width dimensions, and stub-up or power pole locations. **(NOTE: Killion supplied stub-up drawings are for general reference only. Actual on-center dimensions for checkstands may vary from store to store. It is the responsibility of the installer to verify proper checkstand spacing against store plans in order to provide proper aisle clearances for shopping carts, handicap access, poles, etc).** Place main module into the desired position.
- 4) Once the main module is aligned to the intended permanent location, scribe a visible line on the floor around the entire base of the checkstand's toekick.
- 5) Temporarily remove main module and position the supplied wood cleats inside the outline of the toekick, making sure to place them so that they clear the thickness of the toekick itself. Fasten cleats to floor using the Ramset.
- 6) A chalk line can now be snapped across the front end of store for alignment of remaining checkstands, then measuring "on-centers" for installation of the remaining cleats. Fasten remaining cleats to floor for the remaining checkstands.
- 7) Position all checkstand main modules over the cleats and check for level. Shim where necessary to level the top surface of checkstand.
- 8) Using the drill motor with 1/8" bit, drill two (2) pilot holes through the toekick base into each cleat. Fasten the checkstand to the cleats using the supplied #8 X 2½" flat head wood screws.

- 9) Locate bagger modules and position them in place at the rear of the checkstand. After removing the false back in each bag area (if applicable) drill four (4) 1/8" pilot holes through the bag module back into the rear module. Fasten the bag module in place by screwing it to the rear module with supplied wood screws. Replace false backs (if applicable).
- 10) Repeat steps #8 and #9 for remaining checkstands.
- 11) Proceed to electrical installation instructions for each stand.



Manufactured by:

1380 Poinsettia Ave.
Vista, CA 92081

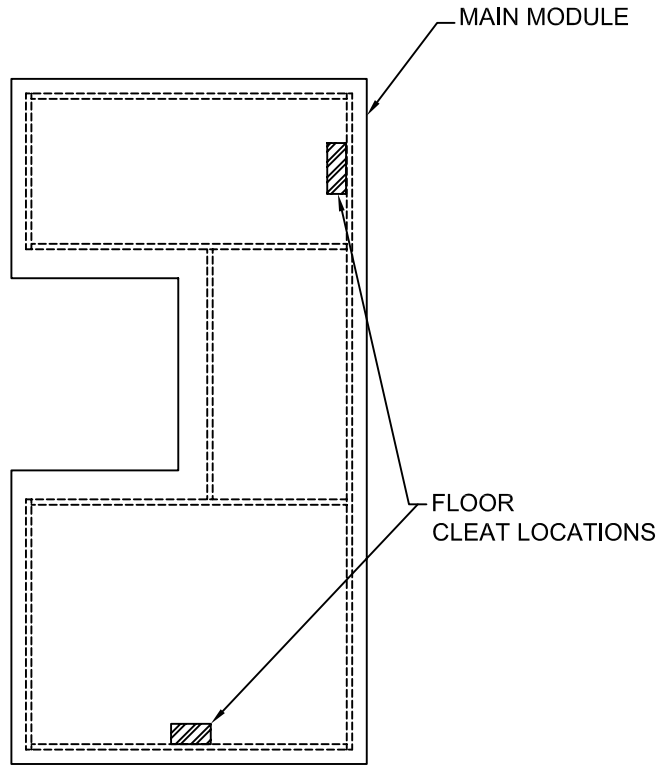
Voice: 800-421-5352
Fax: 760-727-5108
email: sales@killionindustries.com

DESCRIPTION:

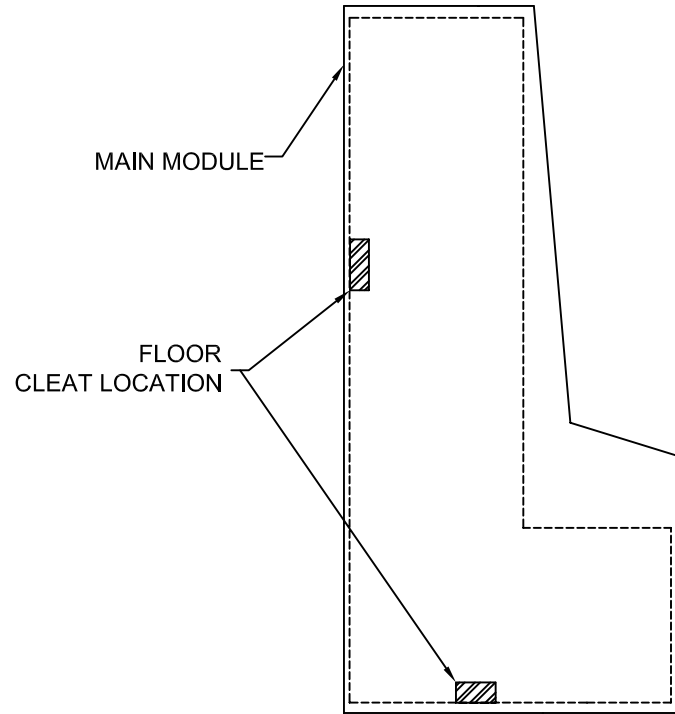
Diagram 'A-KCh' -- Typical Layouts

CUSTOMER:

KCh "Checker Unload" Model Checkstands



Models KCh 1000 RHTA checkstands



Models KCh 2000 & KCh 3000 LHTA checkstands

NOTE: Killion supplied stub-up drawings are for general reference only. Actual on-center dimensions for checkstands may vary from store to store. It is the responsibility of the installer to verify proper checkstand spacing against store plans in order to provide proper aisle clearances for shopping carts, handicap access, poles, etc

NOTICE
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY MATERIAL WHICH IS THE PROPERTY OF KILLION INDUSTRIES, INC. AND MAY NOT BE COPIED OR REPRODUCED. THIS DOCUMENT IS LOANED AND SUBJECT TO RETURN UPON DEMAND.

DO NOT SCALE

DATE: 08/29/06

BY: KF

SAVED AS: DIAGRAM A-KCH.DWG

NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE. ALL DIMENSIONS ARE NOMINAL.

ELECTRICAL INSTALLATION INSTRUCTIONS:

WARNING: Please review and understand all warnings and safety guidelines outlined in the Electrical Safety Information section located at the front of this packet before proceeding with electrical connections.

CONNECTING ELECTRICAL BETWEEN MODULES

If your checkstand is shipped in multiple modules with motorized components (i.e.; rear belt, turntable, elevator, etc.) and/ or additional electrical outlets for CPU or EFT units, follow these steps:

- 1) Remove the electrical access panels by lifting up, then out, then down. These panels are typically located on the customer side of the front and rear modules. Pedestal style models will have access panels located on the under-side of the pedestal module.
- 2) Locate the flex tail(s) in the rear module. Route the flex tail(s) from the rear module into the front or scanner module, through the cable passage ways, into the front module electrical junction box. Exception: If your checkstand is a KCu 4000 turntable type, then the junction box will be located in the rear module and the flex tails will be routed from the front module to the rear module. (Note that pedestal style models may require that the flex tails from the front and the rear modules are routed to the scanner module.)
- 3) Remove the cover from the electrical junction box. Bring the wires from the flex tail through the open flex connector on the side of the junction box and attach the flex tail to the flex connector.
- 4) Connect matching colored leads together using supplied wire nuts; black to black, white to white, etc. If there are more than two like-color wires, all of the same-color wires connect together.
- 5) Re-install the electrical junction box cover.

CONNECTING MAIN POWER

CAUTION: Make sure that main power to the power pole or stub-up connections is **OFF** before proceeding with electrical installation.

- A) If your checkstand connects via power supply cords with plugs to be plugged into power pole electrical receptacles, follow these steps:
- 1) Install the power pole to checkstand pre-routed hole typically found in the terminal, main, or front modules. Reference power pole manufacturer's installation instructions. Install

the power pole so that the receptacles face the interior of the checkstand and can be accessed through the checkstand's removable access panels.

- 2) Plug the checkstand power cords into the appropriate power pole electrical outlets and replace any open electrical access panels.
 - 3) Computer equipment may now be installed at this time. Clean power outlets (orange outlets) are for computer equipment. Dirty power outlets (black outlets) are for soda coolers, aisle lights, etc. **NOTE:** A dedicated circuit should be provided for refrigerated soda merchandisers and connected to a separate circuit breaker from that of the checkstand.
- B) If your checkstand is set-up to be permanently connected to the main power source via a drop-down power pole, follow these steps:
- 1) Install the power pole to checkstand pre-routed hole typically found in the terminal, main, or front modules. Reference power pole manufacturer's installation instructions. Install the power pole so that the store wiring is accessible from the interior of the checkstand and can be accessed through the checkstand's removable access panels.
 - 2) Remove the cover from the clean power electrical junction box. If one is not provided, it must be installed by a qualified electrician. Bring the wires from the flex tail(s) through the open flex connector(s) on the sides of the junction box and attach the flex tail(s) to the flex connector(s).
 - 3) Attach matching colored leads together using supplied wire nuts. (Black to black, white to white, etc.) If there are more than two like-color wires, all of the same-color wires connect together. The solid green wires are for dirty ground and the striped green wires are for isolated ground.
 - 4) Reinstall the electrical junction box cover. Replace any open electrical access panels.
 - 5) Computer equipment may now be installed at this time. Clean power outlets (orange outlets) are for computer equipment. Dirty power outlets (black outlets) are for soda coolers, aisle lights, etc. **NOTE:** A dedicated circuit should be provided for refrigerated soda merchandisers and connected to a separate circuit breaker from that of the checkstand.
- C) If your checkstand is set up to be permanently connected to the main power source via electrical connections from floor stub-ups, follow these steps:
- 1) Remove electrical stub-up cover from the inside floor of the checkstand.
 - 2) Remove the cover from the clean power electrical junction box. If one is not provided, it must be installed onto the clean power supply by a qualified electrician. Bring the wires

from the flex tail through the open flex connector on the side of the junction box and attach the flex tail to the flex connector.

- 3) Attach matching colored leads together using supplied wire nuts. (Black to black, white to white, etc.) If there are more than two like-color wires, all of the same-color wires connect together.
- 4) Reinstall the electrical junction box cover.
- 5) Repeat steps 2 through 4 for dirty power connection(s).
- 6) Replace all open electrical access panels.
- 7) Computer equipment may now be installed at this time. Clean power outlets (orange outlets) are for computer equipment. Dirty power outlets (black outlets) are for soda coolers, aisle lights, etc. **NOTE:** A dedicated circuit should be provided for refrigerated soda merchandisers and connected to a separate circuit breaker from that of the checkstand.

CUSTOMER:
DESCRIPTION:



manufactured by:

1380 Poinsettia Ave.
Vista, CA 92081

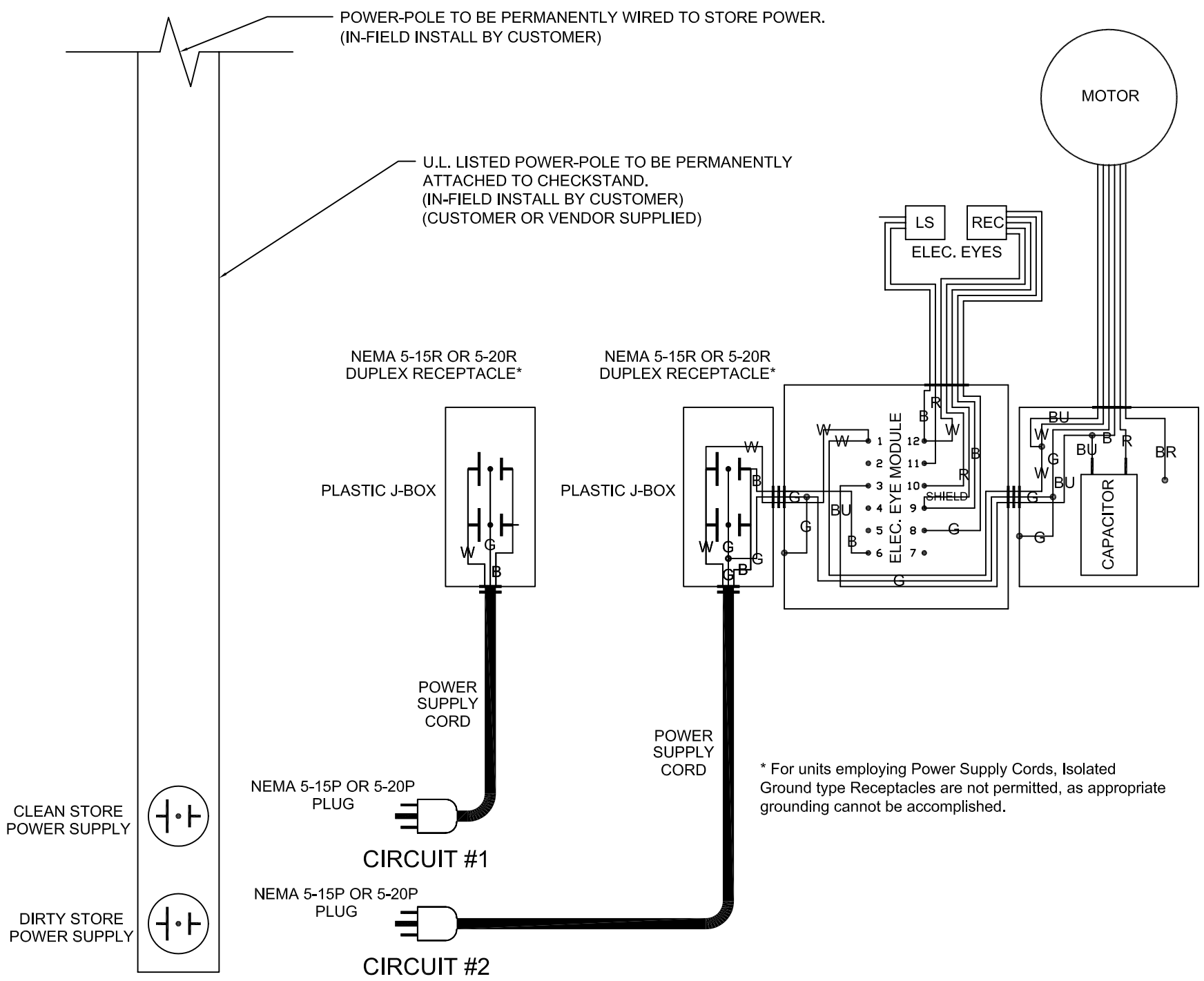
voice: 800-421-5352
fax: 760-727-5108
email: sales@killionindustries.com

KILLION SL

NOTICE
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY MATERIAL WHICH IS THE PROPERTY OF KILLION INDUSTRIES, INC. AND MAY NOT BE COPIED OR REPRODUCED. THIS DOCUMENT IS LOANED AND SUBJECT TO RETURN UPON DEMAND.

DO NOT SCALE
DATE: 08/16/06
BY: ETT/rev.KF

SAVED AS: UL sample electrical harness 1.dwg



CUSTOMER:
DESCRIPTION:

Sample Electrical Harness for Permanently Wired Checkstands w/ Power Pole

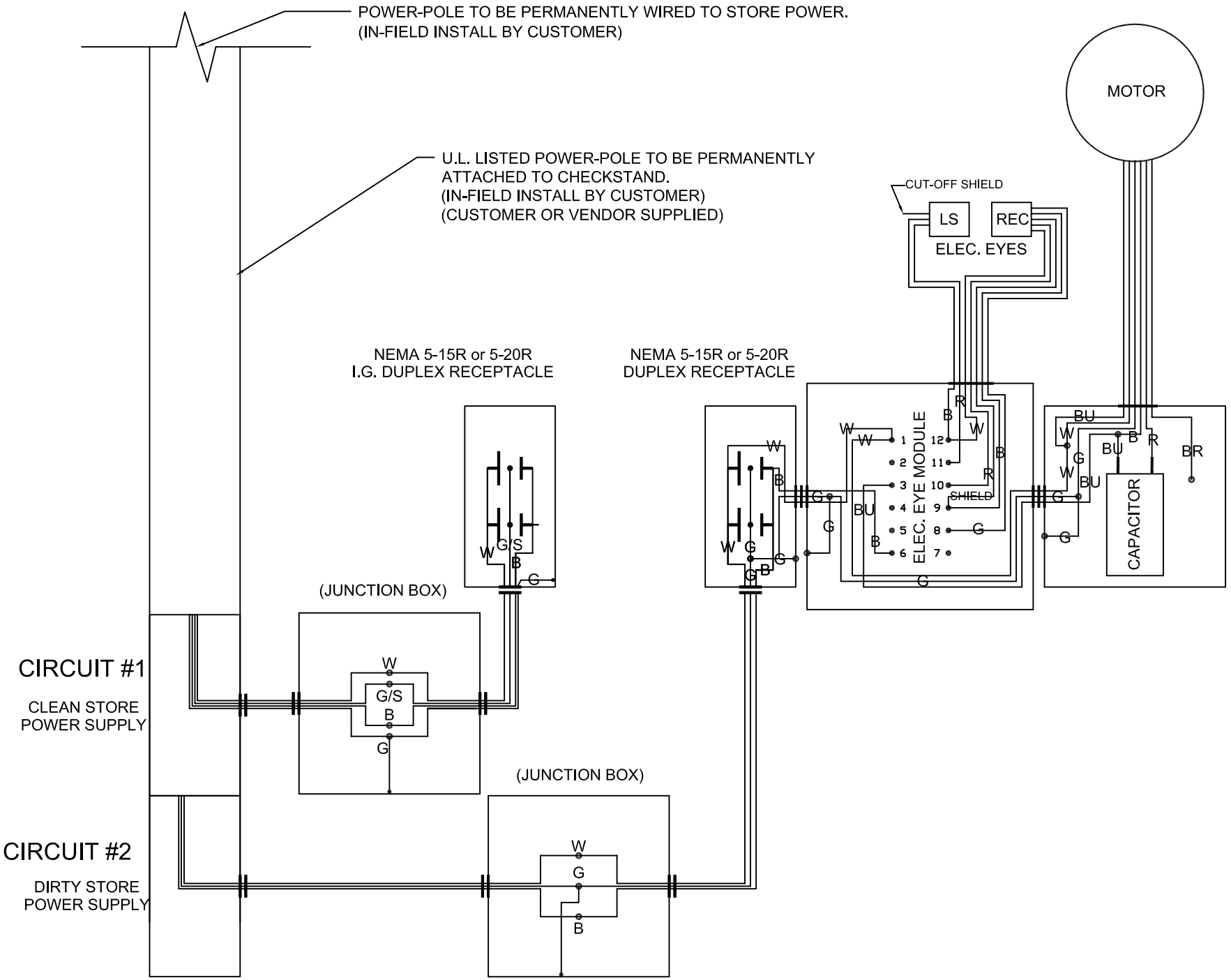
DO NOT SCALE
DATE: 08/16/06
BY: ETT/rev.KF



manufactured by:
KILLION INDUSTRIES, INC.
1380 Poinsettia Ave.
Vista, CA 92081

voice: 800-421-5352
fax: 760-727-5108
email: sales@killionindustries.com

NOTICE
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY MATERIAL WHICH IS THE PROPERTY OF KILLION INDUSTRIES, INC. AND MAY NOT BE COPIED OR REPRODUCED. THIS DOCUMENT IS LOANED AND SUBJECT TO RETURN UPON DEMAND.



SAVED AS: UL sample electrical harness 2.dwg



manufactured by:

1380 Poinsetta Ave.
Vista, CA 92081

voice: 800-421-5352
fax: 760-727-5108
email: sales@killionindustries.com

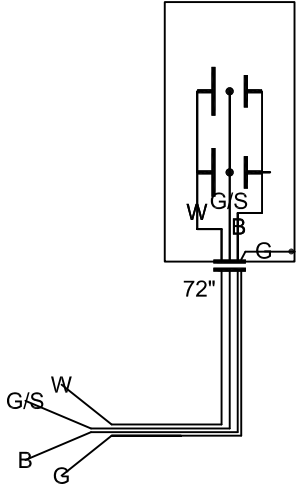
NOTICE
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY MATERIAL WHICH IS THE PROPERTY OF KILLION INDUSTRIES, INC. AND MAY NOT BE COPIED OR REPRODUCED. THIS DOCUMENT IS LOANED AND SUBJECT TO RETURN UPON DEMAND.

DESCRIPTION: Sample Electrical Harness for Permanantly Wired Checkstands w/ Floor Stub Ups

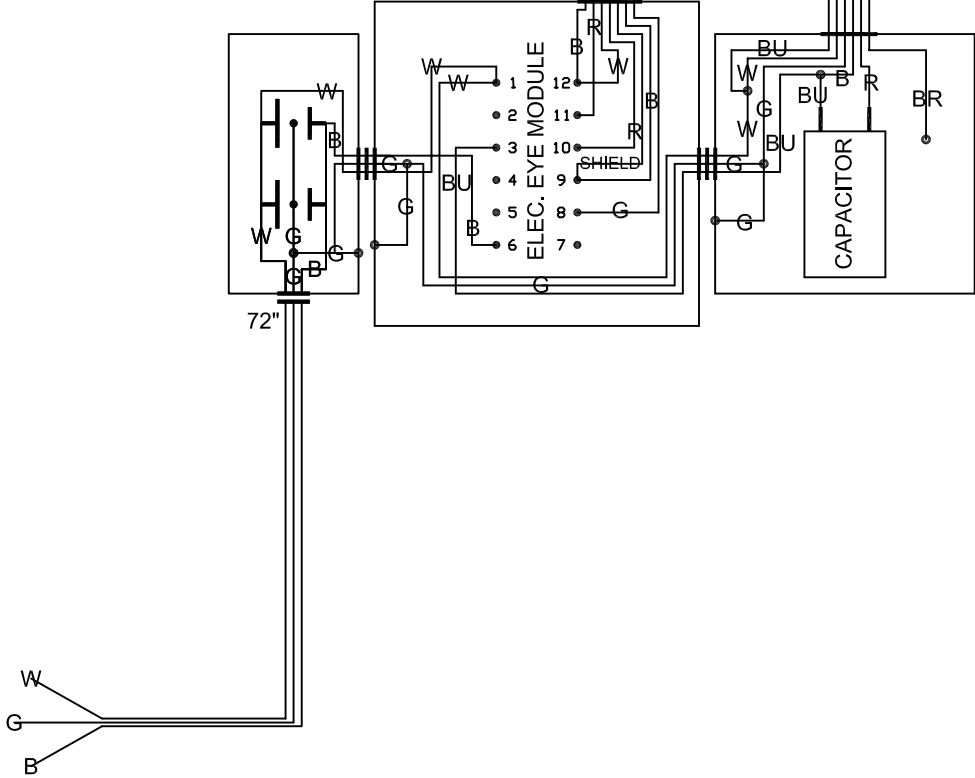
CUSTOMER:

KILLION SL

NEMA 5-15R or 5-20R
I.G. DUPLEX RECEPTACLE



NEMA 5-15R or 5-20R
DUPLEX RECEPTACLE



DO NOT SCALE

DATE: 08/16/06

BY: ETT/rev.KF

SAVED AS:

UL sample electrical harness 3.dwg

ACCESSORY INSTALLATION INSTRUCTIONS

AISLE CLOSURE COILS:

1. Locate aisle closure coils and eye straps supplied in the hardware installation box.
2. Mount an eye strap, using supplied #6 x 3/4" flat head wood screws, to each opposing railing system or checkstand. The coils should span from railing to railing, or checkstand to checkstand, as appropriate for store layout.
3. Secure one end of the coil to an eye strap using the 1" split-ring attached at the end of the coil.

KEYBOARD PEDESTALS:

If your checkstands came provided with keyboard pedestals, locate the keyboard pedestal for checkstand and insert keyboard pedestal tube into keyboard pedestal base. (This is usually located directly behind the scanner.) Adjust keyboard pedestal to desired height and tighten hand adjustment knob.

DISPLAY POSTS:

If your checkstands came provided with display posts for monitors, fasten the display post over the cable hole in the top deck using supplied #12 x 1" hex head lag bolts. (This is usually located on the terminal stand towards the back.)

OPERATING INSTRUCTIONS

ALL KCh MODEL CHECKSTANDS:

The belt drive is equipped with manually operated switches for the checker and the bagger. These switches operate independently of one another so that when either the checker or the bagger operates their switch, the belt can be turned on or off.

MAINTENANCE INSTRUCTIONS

NOTE: No scheduled maintenance is required for electrical or mechanical components in this checkstand.

PLASTIC LAMINATES:

Clean regularly with warm water and a liquid detergent using a soft sponge. Do not use abrasive cleaners!

VINYL TOP DECK SURFACES:

Regularly apply a protective floor polish to prevent excessive scratching and soiling. Liquid water-emulsion wax (either buff-able or self-polishing type) is best since it can be removed with cleaners that will not damage the vinyl surfaces. Solvent-based wax is not recommended.

BELTS:

Wipe debris off belt regularly and periodically clean with rubbing alcohol.

STAINLESS OR BLACK STEEL:

Clean regularly with warm water and a liquid detergent using a soft sponge.

PAINTED SURFACES:

Clean regularly with warm water and a liquid detergent using a soft sponge.

KCh MODEL TROUBLE SHOOTING GUIDE

If the belt will not operate, follow these steps to diagnose the problem:

1. The belt drive Powerroll is equipped with automatic thermal overload protection. Make sure that the belt drive has been allowed to completely cool down. If the belt continues to operate intermittently or not at all, proceed to the next step.
2. Check that the checkstand main power switch is in the on position. Plug an electrical device into the utility receptacle and see if it operates. If the electrical device does not operate, proceed to step #3. If the electrical device operates, proceed to step #4.
3. Check that the store circuit breakers for the inoperative lane are not tripped. (Each lane typically will have (2) breakers.) If the breaker is tripped, reset it by pushing it off and then on. If this does not work, then proceed to step #4.
4. Remove the electrical access panel and locate the capacitor box. (The Powerroll leads connect directly to it.) Replace the capacitor with a capacitor from an operating lane. If this works, proceed to step #6 to order a replacement capacitor. If this does not work, proceed to step #5.
5. Check that both the checker switch and the bagger switch for the rear belt both do not activate the belt. If only one fails to work, then that switch is faulty. Proceed to step #6 to order a replacement. If both switches fail to work, proceed to the next step.
6. Visit www.killionservice.com to order parts or call Killion Industries, Inc, at (800) 421-5352.

CONVEYOR BELT AND POWERROLL MOTOR REPLACEMENT INSTRUCTIONS FOR STANDARD BELT DRIVES

These instructions are for a standard belt drive system. See the following page for slide-back belt drives.

TOOLS:

- Phillips head screwdriver
- 9/16" socket wrench

WARNING – make sure the main power to the checkstand is OFF before accessing electrical components.

STEPS:

1. Disconnect main power from the checkstand.
2. Open the electrical access panel.
3. Disconnect Powerroll lead wires to capacitor box. (See Figure 1.)



Figure 1 - Example front/ main module electrical setup for checkstands.

4. Remove stainless steel front & rear transition plates on both ends of the belt.
5. Unplug and remove electric eyes. Remove product diverter, if present.
6. Remove belt drive unit from checkstand by lifting straight up. Set the belt unit on its side, using wood spacers for support, so that Powerroll lead is on top side. See Diagram 'B-1'.

7. Fully loosen belt tension by turning the two tension bolts located at the front of the belt counter clockwise. Then remove top side tension bolt only.
8. Remove 9/16" hex-nut(s) along lower portion of side rail (top side).
9. Remove pan-head screws from bottom side of conveyor slider deck.
10. Lift side rail straight up to remove.
11. Pull Powerroll straight up & out of bushing.
12. Reverse above procedure to install new Powerroll or belt replacement. Adjust belt tracking and tension. (See instructions.)

CONVEYOR BELT AND POWERROLL MOTOR REPLACEMENT INSTRUCTIONS **FOR SLIDE-BACK BELT DRIVES**

These instructions are for a slide-back belt drive system. See the previous page for standard belt drives.

TOOLS:

- Phillips head screwdriver
- 9/16" socket wrench

WARNING – make sure the main power to the checkstand is OFF before accessing electrical components.

STEPS:

1. Disconnect main power from the checkstand.
2. Open the electrical access panel.
3. Disconnect Powerroll lead wires to capacitor box. (See Figure 1.)
4. Remove the stainless steel front and rear transition plates.
5. Fully extend the slide-back belt drive. On the under side of the belt carriage, remove the 1/4-20 bolts holding the belt to the full extension glides.
6. Remove the belt drive unit by sliding it towards the rear of the checkstand and lifting the belt drive unit straight up. Set the belt drive on its side using wood spacers for support so that the powerroll lead is on top side. See Diagram 'B-2'.

7. Fully loosen the belt tension by turning the two tension nuts on the front of the belt housing counter clockwise.
8. Remove the Phillips flat head screws closest to the belt (near the top side of the belt housing).
9. Remove the Phillips pan head screws holding the bottom deck of the belt drive.
10. Lift the side rail straight up to remove it.
11. Pull the Powerroll straight up and out of the bushing.
12. Reverse above procedure to install new Powerroll or belt replacement. Adjust belt tracking and tension. (See instructions.).

CONVEYOR BELT ADJUSTMENT INSTRUCTIONS

(Reference Diagrams 'C-1' & 'C-2' showing location of belt tension bolts)

TO ADJUST TRACKING OF BELT:

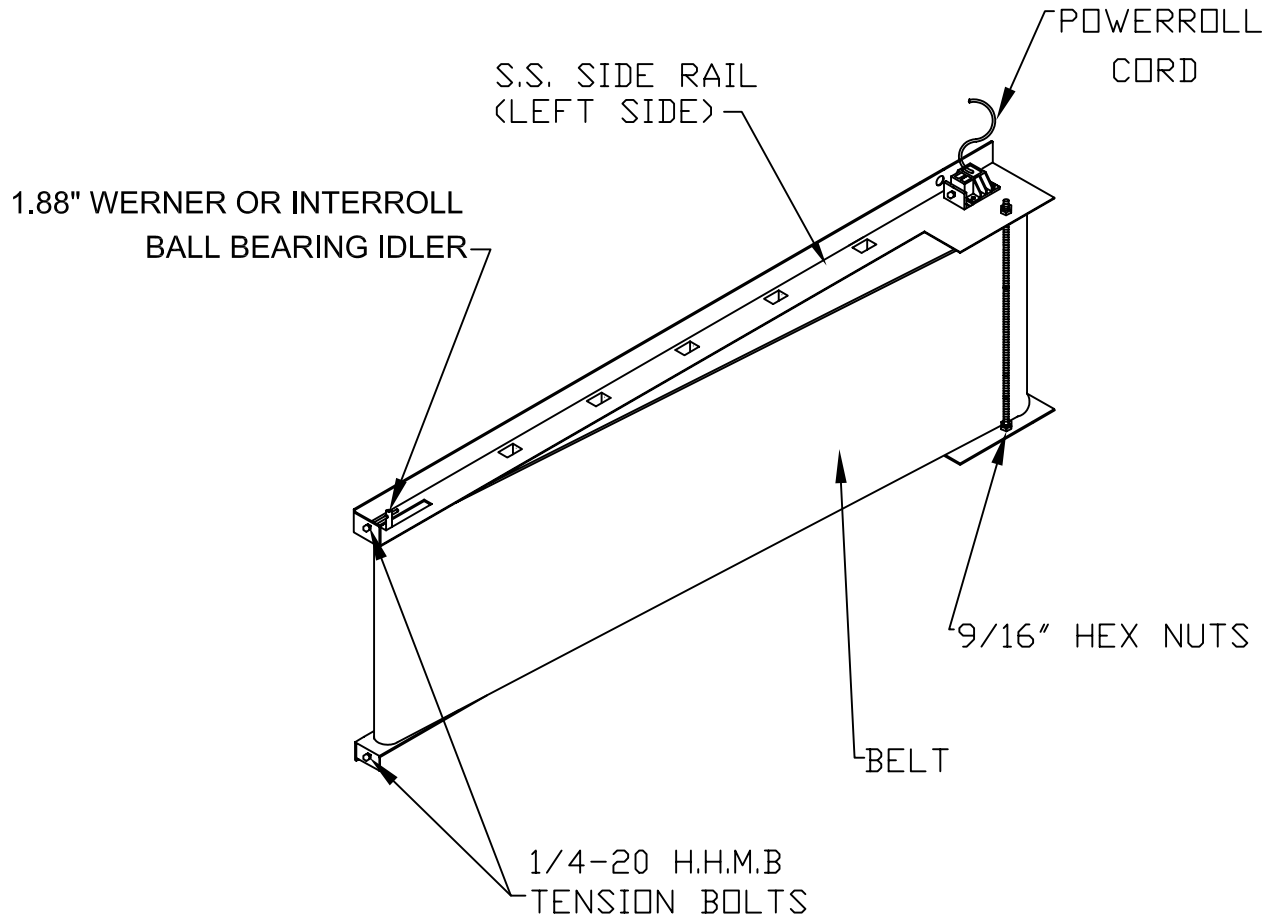
1. Remove the stainless steel front transition plate with a Phillips head screwdriver. If your belt is a reverse drive conveyor belt, then you must remove the rear transition plate for the belt.
2. Start belt running using on-off switch or hip switch, as appropriate.
3. If the belt is running to one side, adjust that side by tightening, (turning clockwise) the adjustment bolt about 1/4 of a turn using a 7/16" wrench.
4. Allow belt to run for at least 5 minutes before making another adjustment. This prevents over-adjustment.
5. Make finer adjustments as necessary.

TO CHECK AND ADJUST THE TENSION OF THE BELT:

1. Place both hands on top of the running belt (near center) and press firmly against the movement of the belt.
2. If the belt slips easily, it is too loose and the tension needs to be adjusted.

3. To adjust the belt's tension, remove the stainless steel front transition plate with a Phillips head screwdriver. If your belt is a reverse drive conveyor belt, then you must remove the rear transition plate for the belt.
4. Tighten (turn clockwise) the two adjustment bolts (turning each bolt equally) until the belt slips only under firm pressure.
5. Check and re-track belt if necessary.

DIAGRAM 'B-1'



Manufactured by:

1380 Poinsettia Ave.
Vista, CA 92081

Voice: 800-421-5352
fax: 760-727-5108
email: sales@killionindustries.com

NOTICE
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY MATERIAL OF KILLION INDUSTRIES, INC. AND MAY NOT BE COPIED OR REPRODUCED. THIS DOCUMENT IS LOANED AND SUBJECT TO RETURN UPON DEMAND.

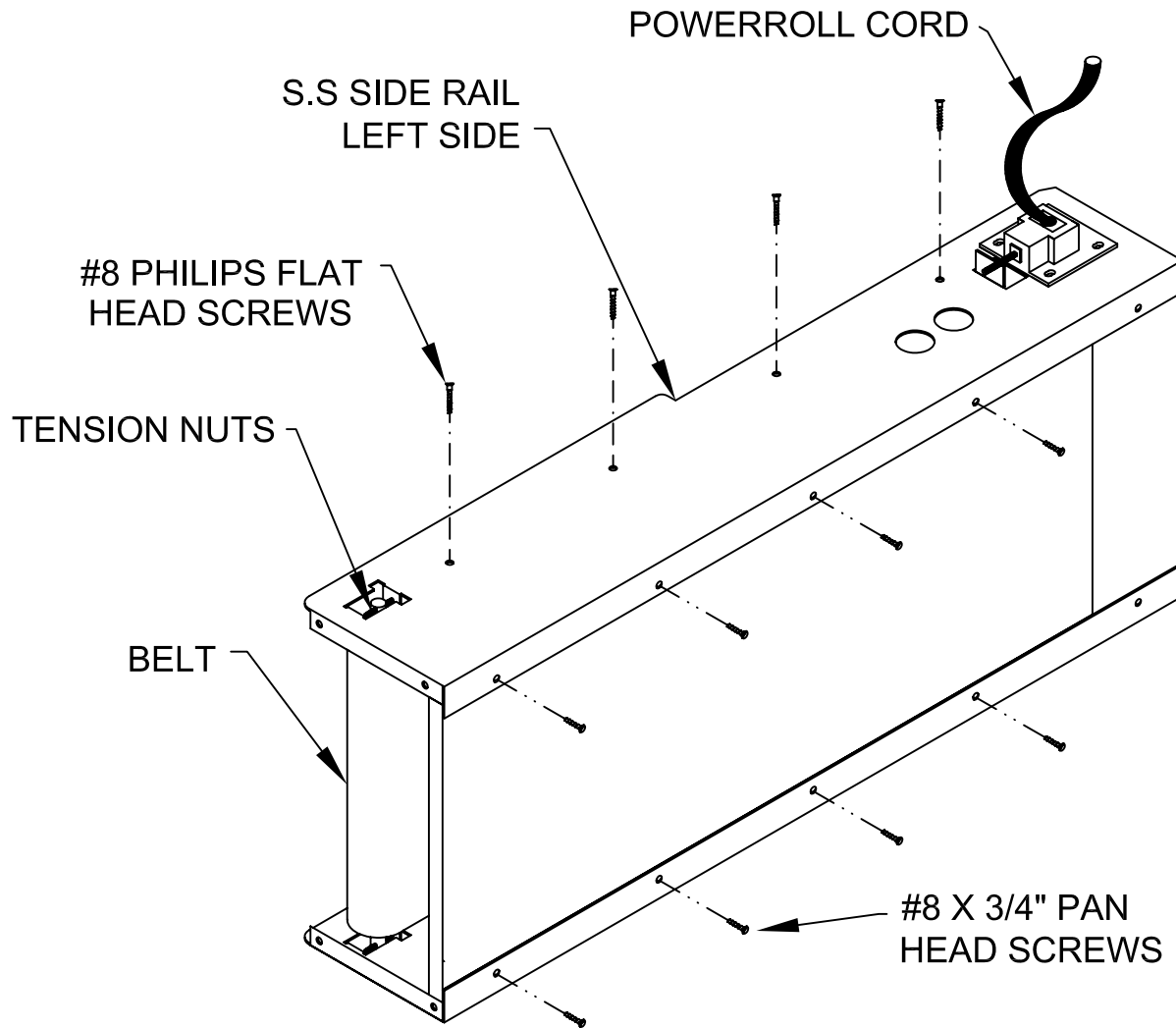
DESCRIPTION: DIAGRAM 'B-1' STANDARD BELT DRIVE
CUSTOMER: KILLION KCU & KCh MODEL CHECKSTANDS

DO NOT SCALE
DATE: 09/05/06
BY: ETT/rev.KF

SAVED AS: diagram B.dwg

NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE. ALL DIMENSIONS ARE NOMINAL.

DIAGRAM 'B-2'



manufactured by:



1380 Poinsettia Ave.
Vista, CA 92081

Voice: 800-421-5352
fax: 760-727-5108
email: sales@killionindustries.com

NOTICE
THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION OF KILLION INDUSTRIES, INC. AND MAY NOT BE COPIED OR REPRODUCED. THIS DOCUMENT IS LOANED AND SUBJECT TO RETURN UPON DEMAND.

DO NOT SCALE
DATE: 09/05/06
BY: ETT/rev.KF

SAVED AS: diagram B.dwg

NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE. ALL DIMENSIONS ARE NOMINAL.

DESCRIPTION:
CUSTOMER:

DIAGRAM 'B-2' - SLIDE-BACK BELT DRIVE
KILLION KCu & KCh MODEL CHECKSTANDS