



CARDINAL®



Satellite Series

Unattended Weighing Kiosk

Technical and Operation Manual

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Disclaimer


While every precaution has been taken in the preparation of this manual, the Seller assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein. All instructions and diagrams have been checked for accuracy and ease of application; however, success and safety in working with tools depend largely upon the individual accuracy, skill, and caution. For this reason, the Seller is not able to guarantee the result of any procedure contained herein. Nor can they assume responsibility for any damage to property or injury to persons occasioned from the procedures. Persons engaging in the procedures do so entirely at their own risk.

FCC Compliance Statement

This equipment generates uses, can radiate radio frequency, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been designed within the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference in which case the user will be responsible to take whatever measures necessary to correct the interference.

You may find the booklet "How to Identify and Resolve Radio-TV Interference Problems" prepared by the Federal Communications Commission helpful. It is available from the U.S. Government Printing Office, Washington, D.C. 20402. Request stock No. 001-000-00315-4.

| |
|--|
| Serial Number _____ |
| Date of Purchase _____ |
| Purchased Form _____ |
| _____ |
| _____ |
| RETAIN THIS INFORMATION FOR FUTURE USE |

| | |
|--|--|
| PRECAUTIONS | |
| Before using this product, read this manual and pay special attention to all "NOTIFICATION" symbols: | |
|  | DANGER! WARNING! CAUTION! |

INTRODUCTION

Cardinal Scale's Satellite series unattended weighing kiosks provide the ultimate experience in unmanned truck scale efficiency and streamlined data integration. The lockable, weather-proof enclosure features a modern design aesthetic with an optional rain hood/sun deflector. Select a Satellite model with the features you need, including a high-speed thermal cut bar tape printer, proximity badge reader (AWID and HID), LED or LCD graphics display, and with or without a rain hood.

The Satellite offers independent remote control over your weighing operations and connects the truck scale to SB500 remote displays with integrated traffic signals, existing computer networks, other digital weight indicators, and WinVRS vehicle recording software.



SPECIFICATIONS

| | |
|---|--|
| Power: | 100 - 240 VAC / 5A max. |
| Weight Indicator / Remote Terminal: | Model 225 or 825 Digital Weight Indicator |
| Optional Proximity Badge Reader: | AWID or HID |
| Dimensions (SAT225PH / SAT225PHB1 / SAT825PH / SAT825PHB1): | 21.7 in W x 18.1 in D x 28 in H / 55 cm W x 46 cm D x 71 cm H (dimensions not including articulating arm and mounting bracket) |
| Dimensions (SAT225P / SAT225PB1 / SAT825P / SAT825PB1): | 21.3 in W x 8.3 in D x 28 in H / 54 cm W x 21 cm D x 71 cm H (dimensions not including articulating arm and mounting bracket) |
| Dimensions (SATP - Satellite Printer Only): | 21.3 in W x 8.3 in D x 14 in H / 54 cm W x 21 cm D x 36 cm H |
| Dimensions (SATH - Satellite Rain Hood Only): | 21.7 in W x 18.1 in D x 13.8 in H / 55 cm W x 46 cm D x 35 cm H |
| Printer: | High-speed thermal cut bar tape printer |
| Ticket Paper: | 6-inch diameter x 3.15-inch wide direct thermal paper roll (part no. 6600-1080) |
| Mounting: | Wall or pole mounted |
| Articulating Arm Extension: | 11 in / 27 cm (protracts and retracts) |
| Displays: | 240 x 64 pixel blue backlit LCD (225 models) or 640 x 480 pixel backlit color touch screen LCD (825 models) |
| Keypad: | Weatherproof QWERTY keyboard standard |

MODEL NUMBER DESCRIPTION

| MODEL | DESCRIPTION | FEATURES |
|------------|---|---|
| SAT225PH | Unattended Weighing Kiosk with 225 Indicator / Printer / Rain Hood | <ul style="list-style-type: none"> • 225 Weight Indicator/Terminal • Thermal Cut bar Tape Printer • Wall or Pole Mounted, Weatherproof Enclosure with Articulating Arm • Internal Heater with Thermostat • With Rain Hood and LED Lamp |
| SAT225P | Unattended Weighing Kiosk with 225 Indicator / Printer | <ul style="list-style-type: none"> • 225 Weight Indicator/Terminal • Thermal Cut bar Tape Printer • Wall or Pole Mounted, Weatherproof Enclosure with Articulating Arm • Internal Heater with Thermostat |
| SAT225PHB1 | Unattended Weighing Kiosk with 225 Indicator / Printer / Proximity Badge Reader / Rain Hood | <ul style="list-style-type: none"> • 225 Weight Indicator/Terminal • Proximity Badge Reader • Thermal Cut bar Tape Printer • Wall or Pole Mounted, Weatherproof Enclosure with Articulating Arm • Internal Heater with Thermostat • With Rain Hood and LED Lamp |
| SAT225PB1 | Unattended Weighing Kiosk with 225 Indicator / Printer / Proximity Badge Reader | <ul style="list-style-type: none"> • 225 Weight Indicator/Terminal • Proximity Badge Reader • Thermal Cut bar Tape Printer • Wall or Pole Mounted, Weatherproof Enclosure with Articulating Arm • Internal Heater with Thermostat |
| SAT825PH | Unattended Weighing Kiosk with 825 Indicator / Printer / Rain Hood | <ul style="list-style-type: none"> • 825 Weight Indicator/Terminal • Thermal Cut bar Tape Printer • Wall or Pole Mounted, Weatherproof Enclosure with Articulating Arm • Internal Heater with Thermostat • With Rain Hood and LED Lamp |
| SAT825P | Unattended Weighing Kiosk with 825 Indicator / Printer | <ul style="list-style-type: none"> • 825 Weight Indicator/Terminal • Thermal Cut bar Tape Printer • Wall or Pole Mounted, Weatherproof Enclosure with Articulating Arm • Internal Heater with Thermostat |

MODEL NUMBER DESCRIPTION, CONT.

| MODEL | DESCRIPTION | FEATURES |
|------------|---|---|
| SAT825PHB1 | Unattended Weighing Kiosk with 825 Indicator / Printer / Proximity Badge Reader / Rain Hood | <ul style="list-style-type: none"> • 825 Weight Indicator/Terminal • Proximity Badge Reader • Thermal Cut bar Tape Printer • Wall or Pole Mounted, Weatherproof Enclosure with Articulating Arm • Internal Heater with Thermostat • With Rain Hood and LED Lamp |
| SAT825PB1 | Unattended Weighing Kiosk with 825 Indicator / Printer / Proximity Badge Reader | <ul style="list-style-type: none"> • 825 Weight Indicator/Terminal • Proximity Badge Reader • Thermal Cut bar Tape Printer • Wall or Pole Mounted, Weatherproof Enclosure with Articulating Arm • Internal Heater with Thermostat |
| SATP | Satellite Outdoor Printer | Aftermarket Add-on Option |
| SATH | Satellite Rain Hood | Aftermarket Add-on Option |

PRECAUTIONS

Static Electricity



CAUTION! This device contains static-sensitive circuit cards and components. Improper handling of these devices or printed circuit cards can result in damage to or destruction of the component or card. Such actual and/or consequential damage IS NOT covered under warranty and is the responsibility of the device owner. Electronic components must be handled only by qualified electronic technicians who follow the guidelines listed below:



ALWAYS handle printed circuit card assemblies by the outermost edges. NEVER touch the components, component leads, or connectors.

ALWAYS observe warning labels on static protective bags and packaging and NEVER remove the card or component from the packaging until ready for use.

ALWAYS store and transport electronic printed circuit cards and components in anti-static protective bags or packaging.



ATTENTION! ALWAYS use a properly grounded wrist strap when handling, removing, or installing electronic circuit cards or components. Make certain that the wrist strap ground lead is securely attached to an adequate ground. If you are uncertain of the quality of the ground, you should consult a licensed electrician.

SITE PREPARATION

Electrical Power

The 225 and 825 weight indicators have been designed to operate from 100 to 240 VAC at 50/60 Hz. Note that a special order is not required for operation at 230/240 VAC.



CAUTION! To avoid electrical hazards and possible damage to the indicator, DO NOT, under any circumstance, cut, remove, alter, or in any way bypass the power cord grounding prong.

- The socket-outlet supplying power to the indicator should be on a separate circuit from the distribution panel and dedicated to the exclusive use of the indicator.
- The socket outlet shall be installed near the equipment and shall be easily accessible. Note that the power cord on the 225 and 825 serves as the power disconnect.
- The wiring should conform to national and local electrical codes and ordinances and should be approved by the local inspector to assure compliance.
- For outdoor operations, the socket-outlet must provide GFCI (ground fault circuit interrupter) protection.
- On installations requiring 230/240 VAC power, **it is the responsibility of the customer** to have a qualified electrician install the proper power cord plug that conforms to national electrical codes and local codes and ordinances.

Electrical Noise Interference

To prevent electrical noise interference, make certain all other wall outlets for use with air conditioning and heating equipment, lighting, or other equipment with heavily inductive loads, such as welders, motors, and solenoids are on circuits separate from the indicator. Many of these disturbances originate within the building itself and can seriously affect the operation of the instrument. These sources of disturbances must be identified, and steps must be taken to prevent possible adverse effects on the instrument. Examples of available alternatives include isolation transformers, power regulators, uninterruptible power supplies, or simple line filters.

Transient Suppression

The following recommendations will help to reduce transients:

- Always use shielded cables to connect signal wires to the weight indicator.
- Connect the cable shield (indicator end only) to a ground point inside the indicator. Keep wires that extend beyond the shield as short as possible.
- Do not run load cell or signal cables from the weight indicator alongside or parallel to wiring carrying AC power. If unavoidable, position the load cell and signal cables a minimum of 24" away from all AC wiring.
- Always use arc suppressors across all AC power relay contacts (see recommendations at http://www.paktron.com/pdf/Quencharch_QRL.pdf).
- Use zero voltage switching relays, optically isolated if possible.

UNPACKING

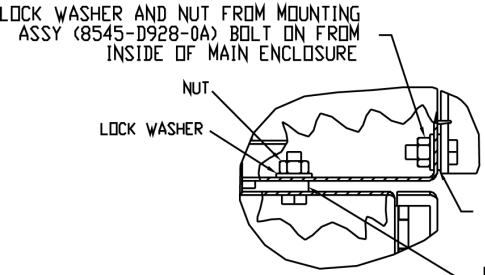
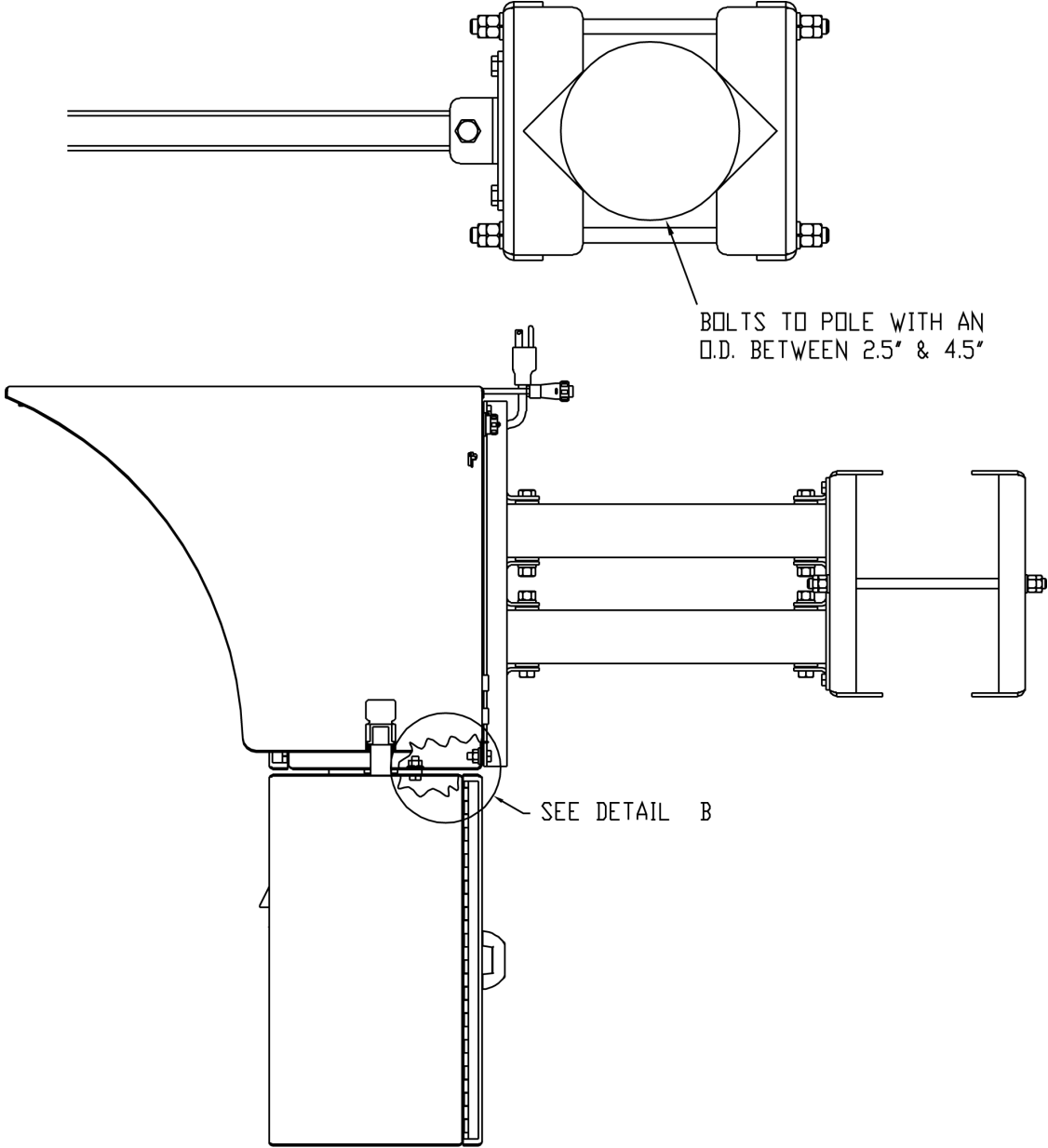
Before beginning the installation of your Satellite Unattended Weighing Kiosk, make certain that it has been received in good condition.

All shipping cartons should be opened and unpacked carefully to prevent damage to the contents. The following steps are used to unpack equipment in preparation for installation:

1. Open the shipping carton and carefully remove the unit and all packing material.
2. Retain the shipping carton and all packing materials. They may be used again for reshipment of the equipment if needed.
3. Inspect the contents for a shortage. If items are missing items, contact the customer service department at 800-441-4237.
4. Visually inspect the unit for any evidence of damage (such as exterior dents or scratches) that may have taken place during shipment. If damage is discovered, perform the following:
 - If shipping caused damage to the unit, a claim must be filed with the commercial carrier.
 - If any other defect is apparent, call 800-441-4237 for a return authorization.

INSTALLATION

Pole Mounting



DETAIL B

LOCK WASHER AND NUT FROM MOUNTING ASSY (8545-D928-0A) BOLT ON FROM INSIDE OF MAIN ENCLOSURE

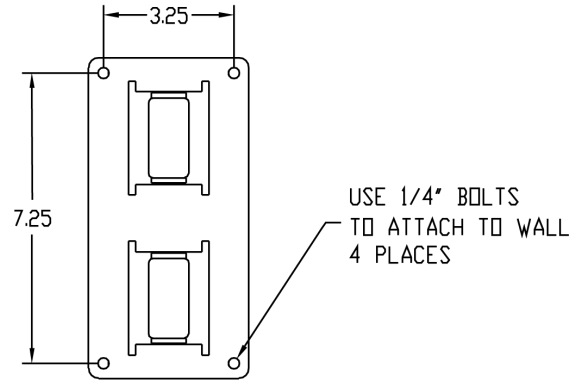
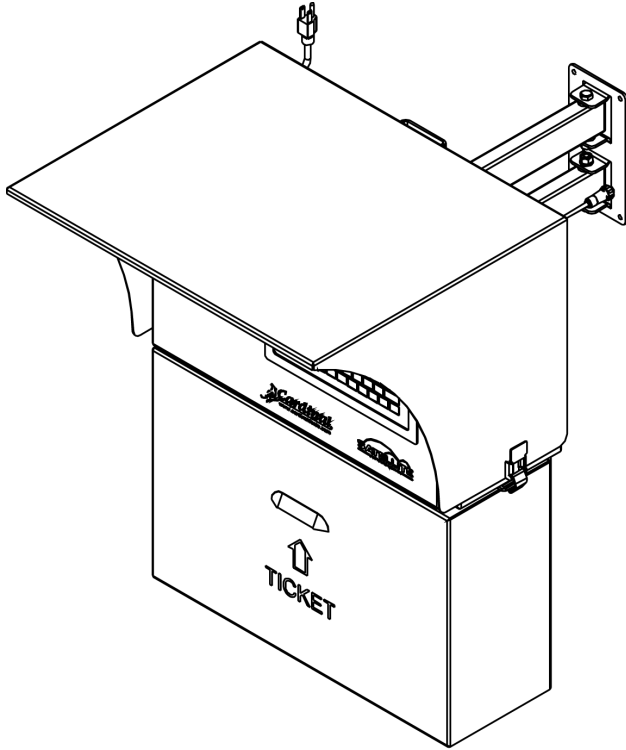
NUT
LOCK WASHER

NEOPRENE WASHER FROM MOUNTING ASSY (8545-D928-0A) SANDWICHED BETWEEN THE MAIN ENCLOSURE AND HINGE PLATE

FIT GASKET OVER THE FOUR SATP STUDS AND INSTALL MAIN ENCLOSURE OVER STUDS AS SHOWN IN DETAIL B.

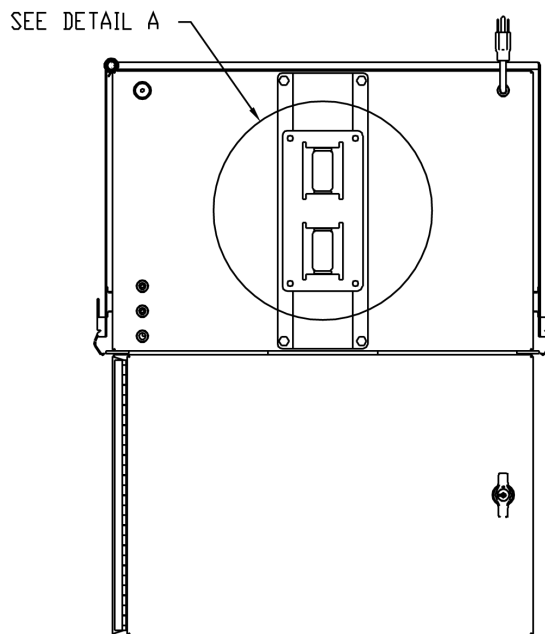
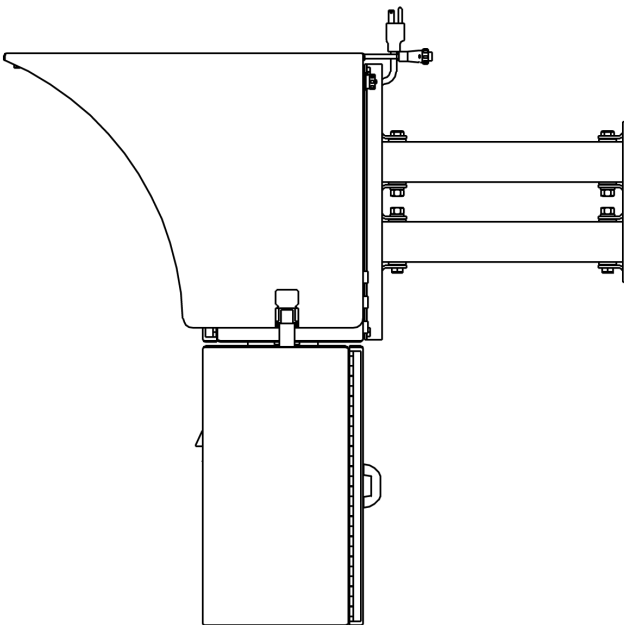
INSTALLATION

Wall Mounting

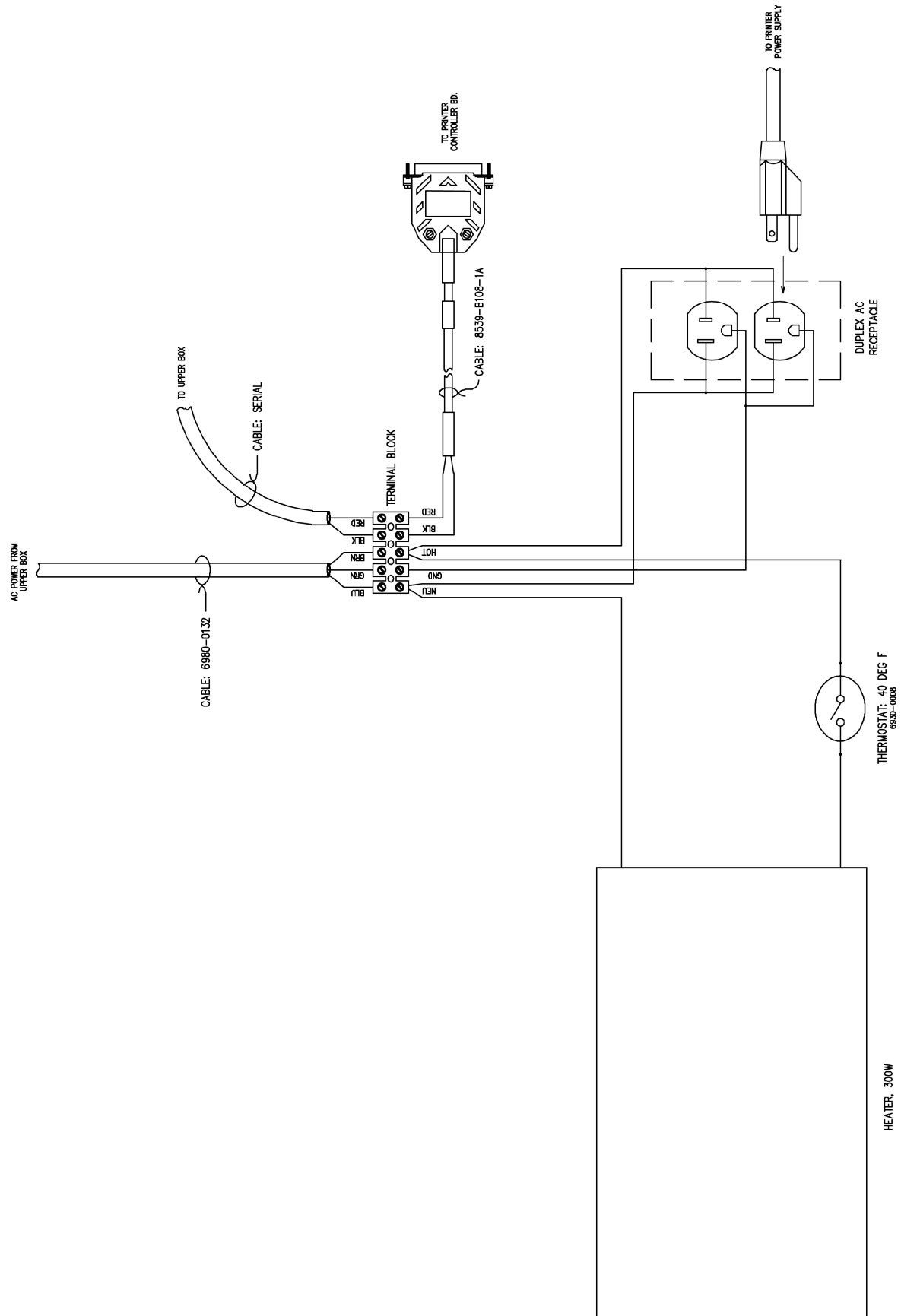


DETAIL A

WALL MOUNTING FOOT PRINT
CENTERED ON TOP BOX



WIRING INTERCONNECT SAT PRINTER

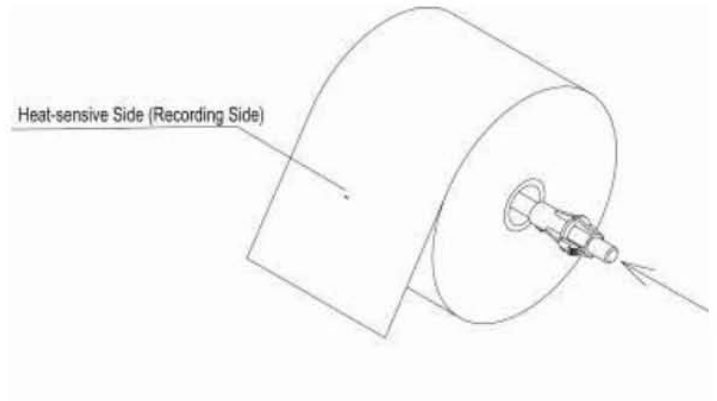
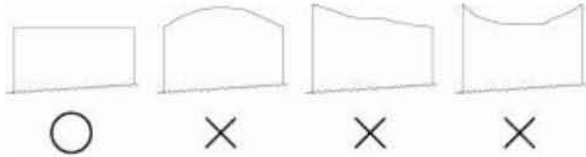


LOADING PRINTER PAPER

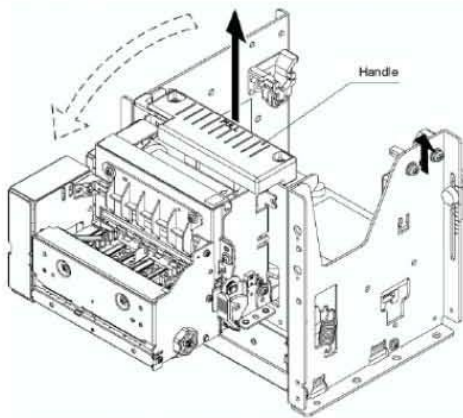
Assembly – Paper Roll Setup

Once the paper roll holder is properly configured for the roll to be used, simply insert the roll holder into the paper core as show.

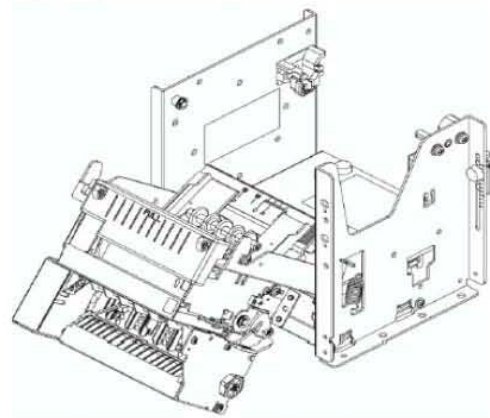
Be sure that the cut end of the paper roll is properly cut to ensure proper paper loading.



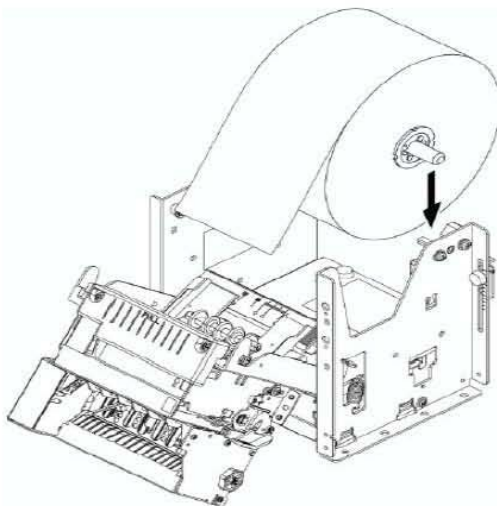
To aid in the installation of the paper roll, the TUP500's mechanism is hinged to the base of the printer allowing the unit to fold open for easier access to the paper inlet path (see below)



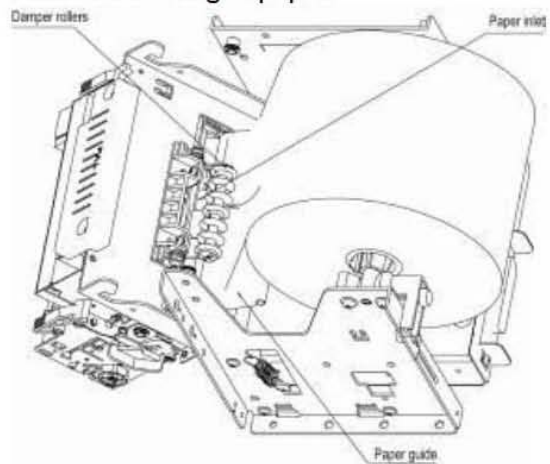
Lift handle and pull unit forward.



In this position, it will be much easier to access the paper inlet for loading of paper.



Position the paper roll as shown.



Slide the cut end of the paper roll into the paper inlet being careful to feed the paper underneath the damper rollers.

225 ID STORAGE OPERATION

The 225 ID Storage feature has been designed to control three different types of transactions and weighing operations. The first type of transaction assigns a permanent ID string, has a stored tare weight, and accumulates net weight totals for the ID. The second type assigns a permanent ID string and accumulates net weight totals for the ID but does not have a permanent stored weight. The third type temporarily assigns an ID string (while weighing in) and does not accumulate any net weight totals for the ID.

PERMANENT

Single Pass Transaction (One-Step Operation)

The first type of permanent transaction is a "single-pass" transaction and is used to weigh loaded containers with a permanent ID string and a previously stored tare weight. The stored tare weight requires weighing the empty container in advance or if the weight of the empty container is known, by entering that value as a manual tare weight. The single-pass transaction completes a ticket and accumulates the net weight for the ID associated with the container with a "one-step" weighing operation.

Two-Pass Transaction (Two-Step Operation)

The second type of permanent transaction is a "two-pass" transaction and is used to weigh the loaded container once when it is empty and once when it is loaded. A permanent ID string and a previously stored zero (0) tare weight is required. In the two-pass transaction, the zero tare weight is replaced by the new tare weight after the first pass and returned to zero after the second pass when the transaction has been completed. The two-pass transaction requires a "two-step" weighing operation. On the first step, the incoming weight will be stored, and an interim ticket will be printed. On the second step, during the outgoing transaction, a complete ticket will be printed and the net weight for the ID associated with the container will be added to the accumulator.

TEMPORARY

Two-Pass Transaction (Two-Step Operation)

The third type is a temporary "two-pass" transaction that also requires a "two-step" operation. However, the ID string is only in memory while the container is weighed in and out and the net weight will not be accumulated. In this type of transaction, on the first pass, the container will be placed on the scale and an ID will be selected either by the operator entering an ID string or by the indicator automatically assigning the ID string. The weight will be stored, and an interim ticket will be printed. On the second pass, the ID string is entered, and the stored weight is recalled for printing the complete ticket. After the ticket has been printed, the ID number and the stored weight will be removed from memory.

225 ID STORAGE OPERATION, CONT.

Gross Weight Alarm

If **WT ALARM = YES** was selected in the ID Storage Menu setup, the indicator will display and activate a **PRESET** soft key. By using the **PRESET** key, a gross weight can be programmed to turn on the PWC1 control output for a programmed time (1-99 seconds) when the gross weight exceeds the programmed weight.

ALARM WT (PWC 1) =XXXXXX

To program the alarm gross weight and alarm on time, press the **PRESET** key. The display will show **ALARM WT (PWC 1) =XXXXXX**. Using the numeric keys, enter the desired alarm gross weight and press the **ENTER** key. The preset weight will be stored, and the display will change to show the alarm **TIME ON=X** parameter.



IMPORTANT! The gross weight must fall below 1/2 the preset weight before the alarm is re-armed.

TIME ON=X

Using the numeric keys, enter the desired alarm **TIME ON=X** value (1-99 seconds) and press the **ENTER** key. The on time will be stored and the display will return to normal mode. Note that setting **TIME ON=0** disables the alarm.

225 ID STORAGE OPERATION, CONT.

The following describes the ID Storage operation for the 225 with the ID Count set for one prompt. Therefore, only one prompt name is referenced. Substitute the prompt name entered during ID Storage Setup for the prompt name shown. Note that with the ID Count set for more than one prompt, additional steps will be displayed.

Permanent Identification (ID) Strings

To Add a Permanent ID String

1. With the indicator in normal operations mode, press the **MEM** key. The display will change to show **Id=**.
2. Enter up to a 12-digit alphanumeric ID string and press the **ENTER** key.
3. The display will show **Ref =**.
4. Using the alphanumeric keys enter up to 12 characters for the name and then press the **ENTER** key.
5. The display will change to show a zero tare weight value stored.
6. If a zero tare weight is correct, press the **ENTER** key and proceed to the next step. Otherwise, using the numeric keys, enter the tare weight and then press the **ENTER** key or to use the current scale weight for the tare, press the **GROSS** key and then the **ENTER** key.
7. The display will change to show a zero value for the accumulator associated with the ID string.
8. If a zero value is correct, press the **ENTER** key to save it. Otherwise, using the numeric keys, enter the accumulator value and then press the **ENTER** key to save it.
9. The indicator will return to normal operation.

To Edit or View a Permanent ID String

1. With the indicator in normal operations mode, press the **MEM** key. The display will change to show **Id=**.
2. Enter the ID string and press the **ENTER** key.
3. The display will show **Ref =XXXXXXXXXXXX**. Note that **XXXXXXXXXXXX** is the name associated with the ID.
4. If the name displayed is acceptable, press the **ENTER** key to save it. Otherwise, using the alphanumeric keys enter up to 12 characters for the name and then press the **ENTER** key.
5. The display will change to show the current tare weight stored.
6. If the displayed tare weight is correct, press the **ENTER** key and proceed to the next step. Otherwise, using the numeric keys, enter the correct tare weight and then press the **ENTER** key or to use the current scale weight for the tare, press the **GROSS** key and then the **ENTER** key.
7. The display will change to show the accumulator value of the ID entered. **NOTE:** If the accumulator value is greater than (>) 999,999,999, **OVERFLOW** will be displayed.
8. If the displayed value is correct, press the **ENTER** key to save it. Otherwise, using the numeric keys, enter the correct value and then press the **ENTER** key to save it.
9. The indicator will return to normal operation.

225 ID STORAGE OPERATION, CONT.

Permanent Identification (ID) Strings, Cont.

To Delete a Permanent ID String

1. With the indicator in normal operations mode, press the **MEM** key. The display will change to show `Id#`.
2. Enter the ID string to be deleted and then press the **DELETE** key.
3. The display will show `Id deleted` momentarily.
4. The ID string entered along with its associated accumulator will be deleted.
5. The indicator will return to normal operation.

To Print a Permanent ID String

1. With the indicator in normal operations mode, press the **MEM** key. The display will change to show `Id#`.
2. Enter the ID string and then press the **PRINT** key.
3. A ticket containing the stored weight, the accumulated weight along with the ID string will be printed and the indicator will return to normal operation.
4. If the ID string entered does not exist, the display will show `ID NOT FOUND` and then the indicator will return to normal operation.

To Delete All Permanent ID Strings

1. With the indicator in normal operations mode, press the **MEM** key. The display will change to show `Id#`.
2. Press the **DELETE** key. The display will show `Del All?NO`, which asks if all ID strings are to be deleted.
3. To delete all ID strings, press the **YES** key (display will change to `Del All?YES`), and then press the **ENTER** key.
4. All ID strings and the associated accumulators will be deleted.
5. The indicator will return to normal operation.

To Print All ID Strings:

1. With the indicator in normal operations mode, press the **MEM** key. The display will change to show `Id#`.
2. Press the **PRINT** key. The display will show `Printing` while all currently stored ID strings are printed.
3. The indicator will return to normal operation.

225 ID STORAGE OPERATION, CONT.

PERMANENT ID

Single Pass Transaction (One-Step Operation)

The single-pass transaction (one-step operation) is used to weigh LOADED containers with a permanent ID string and a *previously stored tare weight* associated with that ID string. This requires weighing the empty container in advance or if the empty weight is known, by entering that value as a manual tare weight when adding the permanent ID.

Single ID (Loaded Container with One ID Prompt)

1. With the indicator in normal operations mode, place the loaded container on the scale.
2. Press the **ID** key. The display will change to show **ID1=** (the Prompt 1 name entered in ID Storage Setup).
3. Enter up to a 12-digit alphanumeric ID string and press the **ENTER** key.
4. The display will momentarily show **Ref =** (and the name associated with the ID), then change to **Print Pass 2** before returning to the Gross weight display.
5. The Net weight will be added to the accumulator of the entered ID string and the ticket printed will show the TIME, DATE, ID, TIME/DATE of Stored Tare weight, the Gross, Tare, and Net weights.

Multiple IDs (Loaded Container with Two ID Prompts)

1. With the indicator in normal operations mode, place the loaded container on the scale.
2. Press the **ID** key. The display will change to show **ID1=** (the Prompt 1 name entered in ID Storage Setup).
3. Enter up to a 12-digit alphanumeric ID string and press the **ENTER** key.
4. The display will momentarily show **Ref =** (and the name associated with the ID), then change to **ID2=** (the Prompt 2 name entered in ID Storage Setup).
 - If only one ID prompt is needed, press the **PRINT** key to store the weight and print the ticket. Proceed to Step 7.
5. If two ID prompts are required, enter up to a 12-digit alphanumeric string for the second ID prompt.
6. Press the **PRINT** or **ENTER** key to store the tare weight and print the ticket.
7. The indicator will print a ticket; display **Print Pass 2** before returning to the Gross weight display.
8. The Net weight will be added to the accumulator of the entered ID string and the ticket printed will show the TIME, DATE, ID, TIME/DATE of Stored Tare weight, the Gross, Tare, and Net weights.

225 ID STORAGE OPERATION, CONT.

PERMANENT ID

Single Pass Transaction (One-Step Operation)

Multiple IDs (Loaded Container with Three ID Prompts)

1. With the indicator in normal operations mode, place the loaded container on the scale.
2. Press the **ID** key. The display will change to show **ID1=** (the Prompt 1 name entered in ID Storage Setup).
3. Enter up to a 12-digit alphanumeric ID string and press the **ENTER** key.
4. The display will momentarily show **Ref=** (and the name associated with the ID) then change to **ID2=** (the Prompt 2 name entered in ID Storage Setup).
 - If only one ID prompt is needed, press the **PRINT** key to store the weight and print the ticket. Proceed to Step 9.
5. If two ID prompts are required, enter up to a 12-digit alphanumeric string for the second ID prompt.
 - If only two ID prompts are needed, press the **PRINT** key to store the weight and print the ticket. Proceed to Step 9.
 - If three ID prompts are required press the **ENTER** key to proceed to the third prompt.
6. The display will show **ID3=** (the Prompt 3 name entered in ID Storage Setup).
7. Enter up to a 12-digit alphanumeric string for the third ID prompt.
8. Press the **PRINT** or **ENTER** key to store the tare weight and print the ticket.
9. The indicator will print a ticket; display **Print Pass 2** before returning to the Gross weight display.
10. The Net weight will be added to the accumulator of the entered ID string and the ticket printed will show the TIME, DATE, ID, TIME/DATE of Stored Tare weight, the Gross, Tare, and Net weights.

225 ID STORAGE OPERATION, CONT.

PERMANENT ID

Two-Pass Transaction (Two-Step Operation)

The two-pass transaction is a two-step operation used to weigh the container once when it is empty and once when it is loaded. A permanent ID string and a *previously stored zero tare* weight associated with that ID string are required.

In the two-pass transaction, the zero tare weight will be replaced by the new tare weight after the first pass, and the stored weight will return to zero after the second pass.

On the first step, the incoming weight will be stored, and an interim ticket will be printed. On the second step, during the outgoing transaction, a complete ticket will be generated, and the net weight will be added to the permanent ID string accumulator.

Single ID (Empty or Loaded Container with One ID Prompt)

Step 1

1. With the indicator in normal operations mode, place the loaded container on the scale.
2. Press the **ID** key. The display will change to show `ID1=` (the Prompt 1 name entered in ID Storage Setup).
3. Enter up to a 12-digit alphanumeric ID string and press the **ENTER** key.
 - If a ticket is desired, press the **PRINT** key to store the weight and print the ticket. The display will show `Print Pass 1`. Proceed to Step 4.
 - If a ticket is NOT desired, press the **ENTER** key to store the weight. Proceed to Step 4.
4. The display will momentarily show `Ref =` (and the name associated with the ID), then return to the Gross weight display.

Step 2

1. With the indicator in normal operations mode, place the loaded container on the scale.
2. Press the **ID** key. The display will change to show `ID1=` (the Prompt 1 name entered in ID Storage Setup).
3. Enter up to a 12-digit alphanumeric ID string and press the **PRINT** key.
4. The indicator will print a ticket; display `Print Pass 2` before returning to the Gross weight display.
5. The Net weight will be added to the accumulator of the entered ID string and the ticket printed will show the TIME, DATE, ID, TIME/DATE of Stored Tare weight, the Gross, Tare, and Net weights.

225 ID STORAGE OPERATION, CONT.

PERMANENT ID

Two-Pass Transaction (Two-Step Operation), Cont.

MULTIPLE IDs (Empty or Loaded Container with Two ID Prompts)

Step 1

1. With the indicator in normal operations mode, place the loaded container on the scale.
2. Press the **ID** key. The display will change to show `ID1=` (the Prompt 1 name entered in ID Storage Setup).
3. Enter up to a 12-digit alphanumeric ID string and press the **ENTER** key.
4. The display will momentarily show `Ref=` (and the name associated with the ID), then change to `ID2=` (the Prompt 2 name entered in ID Storage Setup).
 - If only one ID prompt is needed AND a ticket is desired, press the **PRINT** key to store the weight and print the ticket. The display will show `Print Pass 1`. Proceed to Step 6.
5. If two ID prompts are required, enter up to a 12-digit alphanumeric string for the second ID prompt.
 - If only two ID prompts are needed AND a ticket is desired, press the **PRINT** key to store the weight and print the ticket. The display will show `Print Pass 1`. Proceed to Step 6.
 - If a ticket is NOT desired, press the **ENTER** key to store the weight. Proceed to Step 6.
6. The indicator will return to the Gross weight display.

Step 2

1. With the indicator in normal operations mode, place the loaded container on the scale.
2. Press the **ID** key. The display will change to show `ID1=` (the Prompt 1 name entered in ID Storage Setup).
3. Enter up to a 12-digit alphanumeric ID string and press the **PRINT** key.
4. The indicator will print a ticket; display `Print Pass 2` before returning to the Gross weight display.
5. The Net weight will be added to the accumulator of the entered ID string and the ticket printed will show the TIME, DATE, ID, TIME/DATE of Stored Tare weight, the Gross, Tare, and Net weights.

225 ID STORAGE OPERATION, CONT.

PERMANENT ID

Two-Pass Transaction (Two-Step Operation), Cont.

MULTIPLE IDs (Empty or Loaded Container with Three ID Prompts)

Step 1

1. With the indicator in normal operations mode, place the loaded container on the scale.
2. Press the **ID** key. The display will change to show `ID1=` (the Prompt 1 name entered in ID Storage Setup).
3. Enter up to a 12-digit alphanumeric ID string and press the **ENTER** key.
4. The display will momentarily show `Ref =` (and the name associated with the ID), then change to `ID2=` (the Prompt 2 name entered in ID Storage Setup).
 - If only one ID prompt is needed AND a ticket is desired, press the **PRINT** key to store the weight and print the ticket. The display will show `Print Pass 1`. Proceed to Step 8.
5. If two ID prompts are required, enter up to a 12-digit alphanumeric string for the second ID prompt.
 - If only two ID prompts are needed AND a ticket is desired, press the **PRINT** key to store the weight and print the ticket. The display will show `Print Pass 1`. Proceed to Step 8.
 - If three ID prompts are required, press the **ENTER** key to proceed to the third prompt.
6. The display will show `ID3=` (the Prompt 3 name entered in ID Storage Setup).
7. Enter up to a 12-digit alphanumeric string for the third ID prompt.
 - If a ticket is desired, press the **PRINT** key to store the weight and print the ticket. The display will show `Print Pass 1`. Proceed to Step 8.
 - If a ticket is NOT desired, press the **ENTER** key to store the weight. Proceed to Step 8.
8. The indicator will return to the Gross weight display.

Step 2 - Empty or Loaded Container

1. With the indicator in normal operations mode, place the loaded container on the scale.
2. Press the **ID** key. The display will change to show `ID1=` (the Prompt 1 name entered in ID Storage Setup).
3. Enter up to a 12-digit alphanumeric ID string and press the **PRINT** key.
4. The indicator will print a ticket; display `Print Pass 2` before returning to the Gross weight display.
5. The Net weight will be added to the accumulator of the entered ID string and the ticket printed will show the TIME, DATE, ID, TIME/DATE of Stored Tare weight, the Gross, Tare, and Net weights.

225 ID STORAGE OPERATION, CONT.

TEMPORARY ID

Two-Pass Transaction (Two-Step Operation)



NOTE: If the ID string entered already exists, the display will show `ID IN USE` momentarily and the indicator will return to normal operation.

Single ID (Store a Temporary ID String and Print a Ticket with One ID Prompt)

First Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show `ID1=`.
3. Enter up to a 12-digit alphanumeric ID string and press the **PRINT** key. *If a ticket is NOT desired, press the **ENTER** key instead.*
4. The indicator will store the current scale weight under this ID string, print a ticket, and display `Print Pass 1`.

Second Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show `ID1=`.
3. Enter up to a 12-digit alphanumeric ID string and press the **PRINT** key.
4. The indicator will print a ticket, display `Print Pass 2`, and delete the ID string.

Multiple IDs (Store a Temporary ID String and Print a Ticket with Two ID Prompts)

First Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show `ID1=`.
3. Enter up to a 12-digit alphanumeric ID string and press the **ENTER** key.
4. The display will change to show `ID2=`.
5. Enter up to a 12-digit alphanumeric ID string and press the **PRINT** key. *If a ticket is NOT desired, press the **ENTER** key instead.*
6. The indicator will store the current scale weight under this ID string, print a ticket, and display `Print Pass 1`.

Second Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show `ID1=`.
3. Enter up to a 12-digit alphanumeric ID string and press the **PRINT** key.
4. The indicator will print a ticket, display `Print Pass 2`, and delete the ID string.

225 ID STORAGE OPERATION, CONT.

TEMPORARY ID

Multiple IDs (Store a Temporary ID String and Print a Ticket with Three ID Prompts)

First Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show ID1=.
3. Enter up to a 12-digit alphanumeric ID string and press the **ENTER** key.
4. The display will change to show ID2=.
5. Enter up to a 12-digit alphanumeric ID string and press the **ENTER** key.
6. The display will change to show ID3=.
7. Enter up to a 12-digit alphanumeric ID string and press the **PRINT** key. *If a ticket is NOT desired, press the **ENTER** key instead.*
8. The indicator will store the current scale weight under this ID string, print a ticket, and display `Print Pass 1`.

Second Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show ID1=.
3. Enter up to a 12-digit alphanumeric ID string and press the **PRINT** key.
4. The indicator will print a ticket, display `Print Pass 2`, and delete the ID string.

225 ID STORAGE OPERATION, CONT.

TEMPORARY ID

Automatically Assign a Temporary ID String (One ID Prompt)

First Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show `ID1=`.
3. Press the **PRINT** key. *If a ticket is NOT desired, press the **ENTER** key instead.*
4. A temporary ID string will be assigned, and the weight stored.
5. A temporary ticket showing the ID string and weight will be printed and the display will show `Print Pass 1`.

Second Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show `ID1=`.
3. Enter the ID string printed on the ticket and then press the **PRINT** key.
4. The indicator will print a ticket, display `Print Pass 2`, and delete the ID string.

Multiple IDs (Temporary ID String with Two ID Prompts)

First ID Automatically Assigned, Second ID Manually Entered

First Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show `ID1=`.
3. Press the **ENTER** key.
4. The display will change to show `ID2=`.
5. Enter up to a 12-digit alphanumeric ID string and press the **PRINT** key. *If a ticket is NOT desired, press the **ENTER** key instead.*
6. The automatically assigned temporary ID string, the manually entered ID, and the weight will be stored.
7. A temporary ticket showing the ID strings and weight will be printed and the display will show `Print Pass 1`.

Second Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show `ID1=`.
3. Enter the ID string printed on the ticket and then press the **PRINT** key.
4. The indicator will print a ticket, display `Print Pass 2`, and delete the ID string.

225 ID STORAGE OPERATION, CONT.

TEMPORARY ID

Multiple IDs (Temporary ID String with Three ID Prompts)

First ID Automatically Assigned, Second and Third IDs Manually Entered

First Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show `ID1=`.
3. Press the **ENTER** key.
4. The display will change to show `ID2=`.
5. Enter up to a 12-digit alphanumeric ID string and press the **ENTER** key.
6. The display will change to show `ID3=`.
7. Enter up to a 12-digit alphanumeric ID string and press the **PRINT** key. *If a ticket is NOT desired, press the **ENTER** key instead.*
8. Temporary ID strings will be assigned, and the weight stored.
9. A temporary ticket showing the ID strings and weight will be printed and the display will show `Print Pass 1`.

Second Pass

1. With the indicator in normal operations mode, press the **ID** key.
2. The display will change to show `ID1=`.
3. Enter the ID string printed on the ticket and then press the **PRINT** key.
4. The indicator will print a ticket, display `Print Pass 2`, and delete the ID string.

825 ID/TRUCK STORAGE

INTRODUCTION

The Cardinal 825 features an ID/Truck Storage application with full database capabilities, nearly unlimited ID/Truck storage capabilities, report printings, and much more.

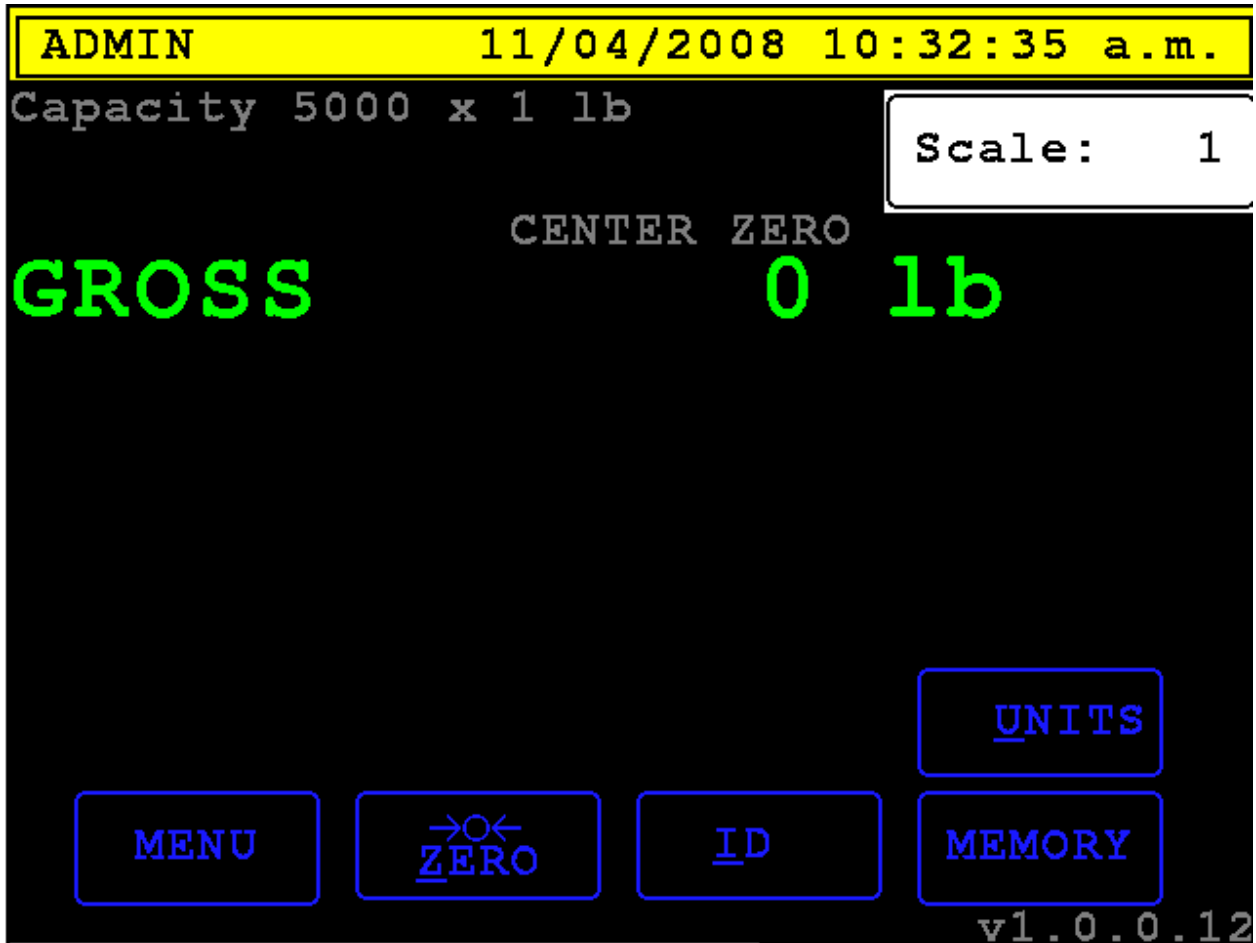


Figure 1: Cardinal 825 ID/Truck Storage

- Full database capabilities from SQLite.
- Nearly unlimited truck storage capabilities (~1,500,000 on standard storage).
- Fully configurable report listings and printing capabilities. Reports can be filtered and sorted by various fields.
- Three configurable prompts and up to three linked IDs/Trucks.
- Temporary and permanent IDs/Trucks.

825 ID/TRUCK STORAGE, CONT.

SETUP

1. Configuring Prompts

1. Touch the **MENU** button or press “M” to access the ID/Truck Storage menu.
2. Touch the **3. Setup** button or press “3” to access the setup menu (Figure 2).

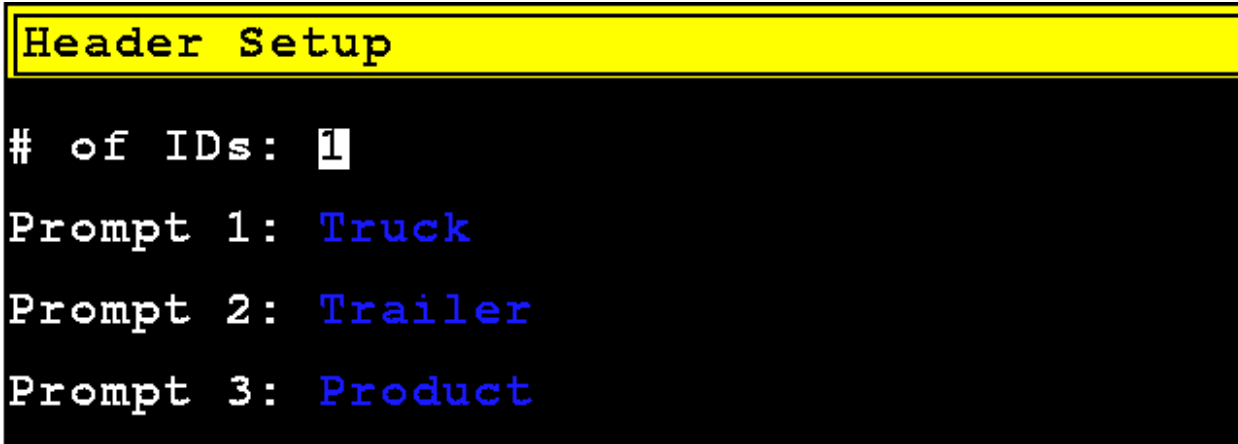


Figure 2: ID/Truck Storage Header Setup menu

3. Use the navigation keys to move between fields and the keypad to enter values.
 1. # of IDs – Enter a value (1-3) for the number of linked IDs/Trucks.
 2. Prompt 1 – Enter a prompt for ID 1.
 3. Prompt 2 – Enter a prompt for ID 2.
 4. Prompt 3 – Enter a prompt for ID 3.
4. Press the **ENTER** key to save or the **ESC** key to cancel changes.

2. Configuring Printers

1. Touch the **MENU** button or press “M” to access the ID/Truck Storage menu.
2. Touch the **4. Printing** button or press “4” to access the printing menu (Figure 3).
3. Press the **SPACE** key to toggle options for report printouts.
4. Press the **ENTER** key to save or the **ESC** key to cancel changes.

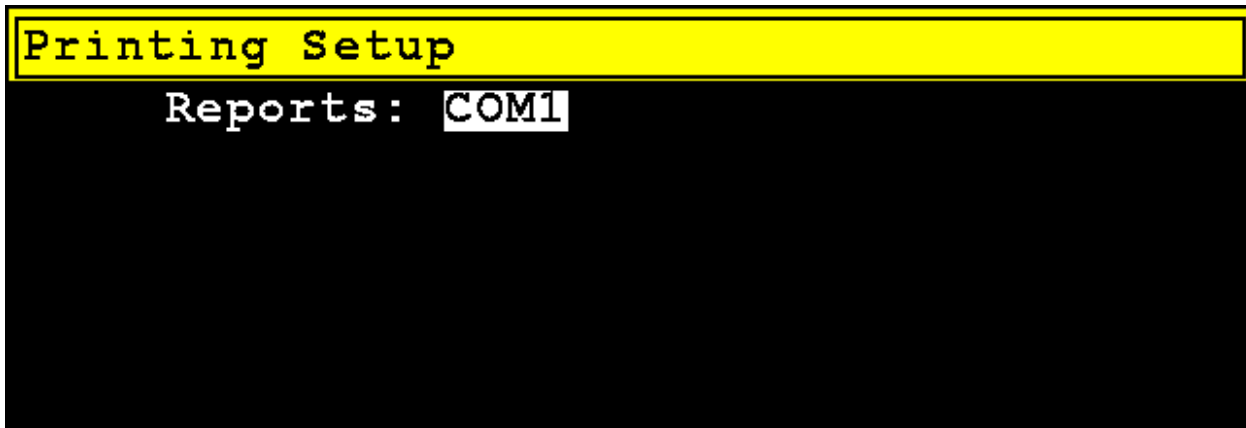


Figure 3: ID/Truck Storage Printing Setup menu

825 ID/TRUCK STORAGE, CONT.

MANAGING PERMANENT ID/TRUCK ENTRIES.

1. Creating an ID/Truck

1. On the main screen, press the **MEMORY** button or press “Y” to access the ID/Truck Storage ID/Truck entry screen (Figure 4).

The screenshot shows a terminal-style interface with a black background and yellow and green text. At the top, a yellow header bar contains the text "ID Entry". Below this, the text "ID: CSMC1" is displayed in white. A green prompt reads "Enter an ID or select from list (1-14)". Below the prompt, the text "Previous Entries" and "Page: 1 of 1" is shown in green. The main area contains a grid of eight rectangular buttons with blue borders and blue text. The top-left button contains "CSMC1", while the other seven buttons contain "EMPTY". At the bottom of the screen, there are three buttons labeled "PRINT", "DELETE", and "ENTER" in blue text on a black background.

Figure 4: ID/Truck Storage ID Entry screen

2. Enter an ID/Truck and touch the **ENTER** button or press the **ENTER** key.
3. Use navigation keys to move between fields and the keypad to enter values (Figure 5).

825 ID/TRUCK STORAGE, CONT.



Figure 5: ID/Truck Storage create/edit ID screen

1. ID – Enter a text value to be associated with the ID/Truck.
 2. Weight – Enter a stored weight for the ID/Truck or press the **Use Scale Weight button** to use the current scale weight. Entering 0.0 will flag the truck as having a zero stored weight.
 3. Accumulator – Enter an accumulator value for the ID/Truck or 0.0 to have a zero accumulator.
 4. Press the **ENTER** button or key to save changes or the **ESC** button to cancel changes.
- 2. Editing an ID/Truck**
1. Touch the **MENU** button or press “M” to access the ID/Truck Storage menu.
 2. Touch the truck you wish to edit or enter the truck ID and press the **ENTER** key.
 3. Repeat steps 2.1.3 through steps 2.1.4 changing the values you wish to edit.
- 3. Deleting an ID/Truck**
1. Touch the **MENU** button or press “M” to access the ID/Truck Storage menu.
 2. Touch the truck you wish to delete or enter the truck ID.
 3. Press the **DELETE** button and the ID/Truck is deleted (Figure 6).

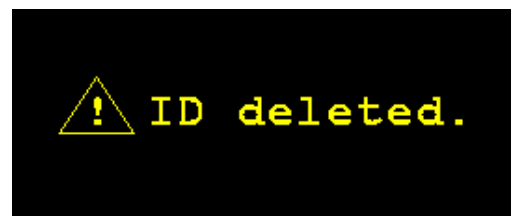


Figure 6: Deleting an ID/Truck.

825 ID/TRUCK STORAGE, CONT.

RUNNING A TRANSACTION

1. Using a Temporary ID/Truck

1. On the main screen, press the **ID** button or press “I” to access the ID/Truck Storage ID/Truck entry screen (Figure 4).
2. Begin a first pass temporary truck transaction by:
 1. Enter a truck ID and press the **ENTER** key or touch the **ENTER** button or
 2. Press an **EMPTY** button or leave the ID entry field blank and press the **ENTER** key to create an automatically assigned ID/Truck.
3. Repeat step 3.1.2.1 for the number of linked ids defined in setup (Figure 2).
4. When the maximum number of IDs/Trucks are entered or the print button is pressed, the 825 will display “Printing First Pass” (Figure 7) and will print a first pass ticket.

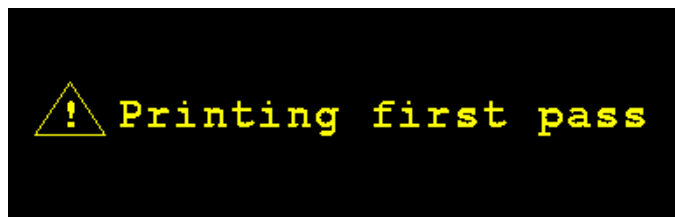


Figure 7: Printing a first pass ticket

5. Repeat step 3.1.1.
6. Enter the ID/Truck from the ID entry list (Figure 4) or press the corresponding ID/Truck button.
7. Touch the **PRINT** button to print a second pass ticket (Figure 8) and delete the temporary ID/Truck

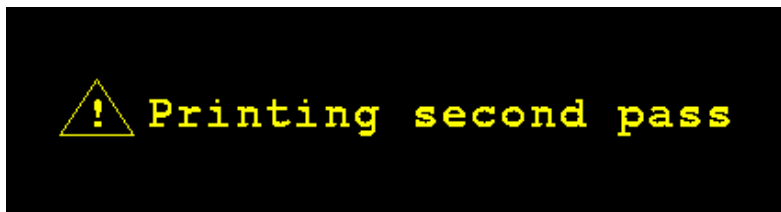


Figure 8: Printing a second pass ticket

2. Using a Permanent ID/Truck with Zero Stored Weight

1. Repeat steps 3.1.1 through 3.1.6.
2. Touch the **PRINT** button to print a second pass ticket (Figure 8).
3. The 825 will accumulate the permanent ID/Truck and reset the stored weight.

3. Using a Permanent ID/Truck with Stored Weight

1. On the main screen, press the **ID** button or press “I” to access the ID/Truck Storage ID/Truck entry screen (Figure 4).
2. Enter the ID/Truck from the ID entry list (Figure 4) or press the corresponding ID/Truck button.
3. Touch the **PRINT** button to print a second pass ticket (Figure 8).
4. The 825 will accumulate the permanent ID/Truck and reset the stored weight.

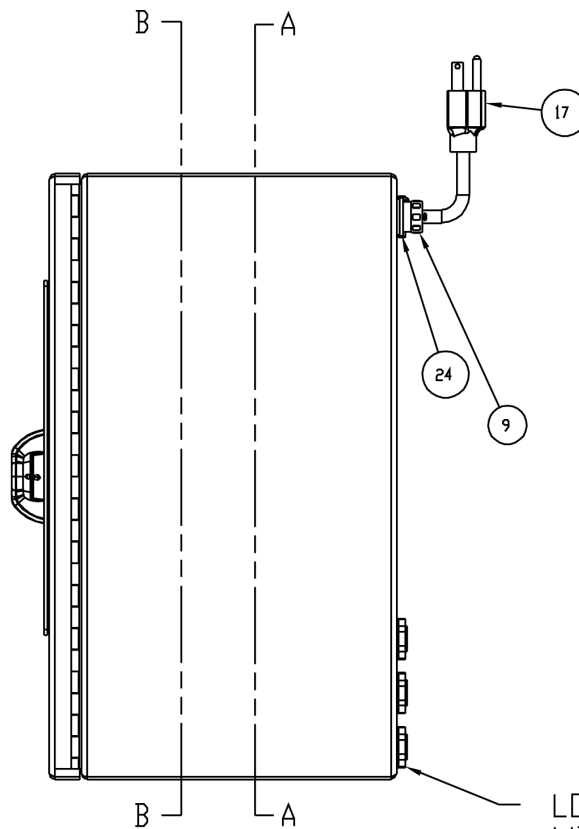
PARTS IDENTIFICATION

Final Assembly SAT225

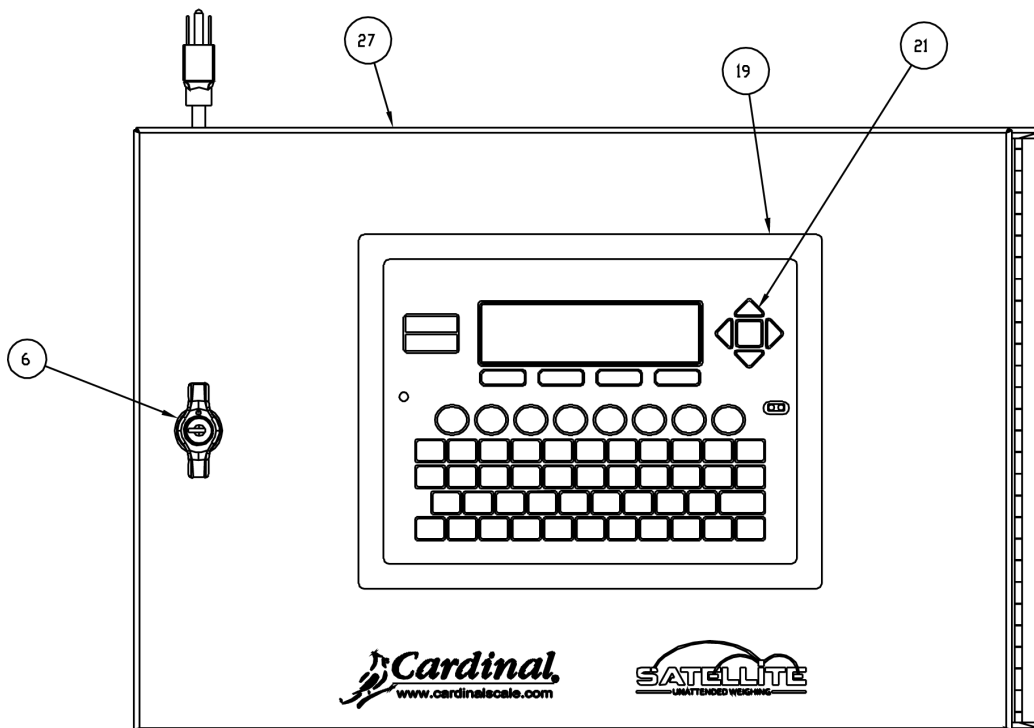
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| 1 | 18 | 6013-0039 | NUT #6-32 HEX Z/P |
| 2 | 2 | 6013-0295 | NUT #10-32 HEX Z/P |
| 3 | 2 | 6024-1027 | WASHER FLAT #10 TYPE A Z-PLATE |
| 4 | 12 | 6024-1078 | WASHER FLAT #6 NEOPRENE BACKING SS |
| 5 | 65in | 6030-0051 | GASKET MAT. 1/4X5/8 CLOSED CELL (GREY) |
| 6 | 1 | 6540-0310 | LOCKING LATCH, VISE ACTION COMPRESSION |
| 7 | 2 | 6540-1104 | HOLE PLUG, 0.343X0.187X1 LG, SILICONE RUBBER |
| 8 | 16in | 6600-1236 | DIN RAIL 35MM WIDE X X7.5MM TALL X 1M LG |
| 9 | 1 | 6610-1304 | CONN CAP FOR CIRC CONNECTORS |
| 10 | 4 | 6610-2248 | CABLE CLAMP, STRAIN RELEIF, BLACK |
| 11 | 11 | 6610-2281 | TERMINAL BLOCK, 24-1 AWG |
| 12 | 2 | 6610-2282 | TERMINAL BLOCK (GROUND) 24-10AWG DINRAIL |
| 13 | 6 | 6680-0004 | WASHER LOCK INT TOOTH #6 TYPE A Z-PL |
| 14 | 6 | 6680-0219 | SPACER # 6 X .813 NYLON |
| 15 | 1 | 6910-2420 | CIRCUIT BRAKER, 20 AMP, DINRAIL |
| 16 | 7 | 6980-0014 | CABLE TIE 4" WHITE |
| 17 | 1 | 6980-1030 | POWER CORD, 6.3' |
| 18 | 1 | 8200-B238-1A | CABLE: SATELLITE POWER SUPPLY OUTPUT |
| 19 | 1 | 8200-C312-0A | WELDMENT: BEZEL FOR 220 |
| 20 | 1 | 8200-D160-0A | PCB CONTROLLER, 225 INDICATOR |
| 21 | 1 | 8200-D360-08 | KEYPAD 225 INDICATOR |
| 22 | 1 | 8545-0938-08 | CALIBRATION COVER, 225 |
| 23 | 1 | 8545-0946-0A | SUB-ASSY, 225 P.S. |
| 24 | 1 | 8545-0947-0A | CABLE ASSY: LED, ENCLOSURE |
| 25 | 1 | 8545-0952-0A | CABLE ASSY: A/C POWER |
| 26 | 1 | 8545-0953-0A | CABLE ASSY: GROUND WIRE |
| 27 | 1 | 8545-D914-0A | ENCLOSURE WELDMENT |

PARTS IDENTIFICATION

Final Assembly SAT225

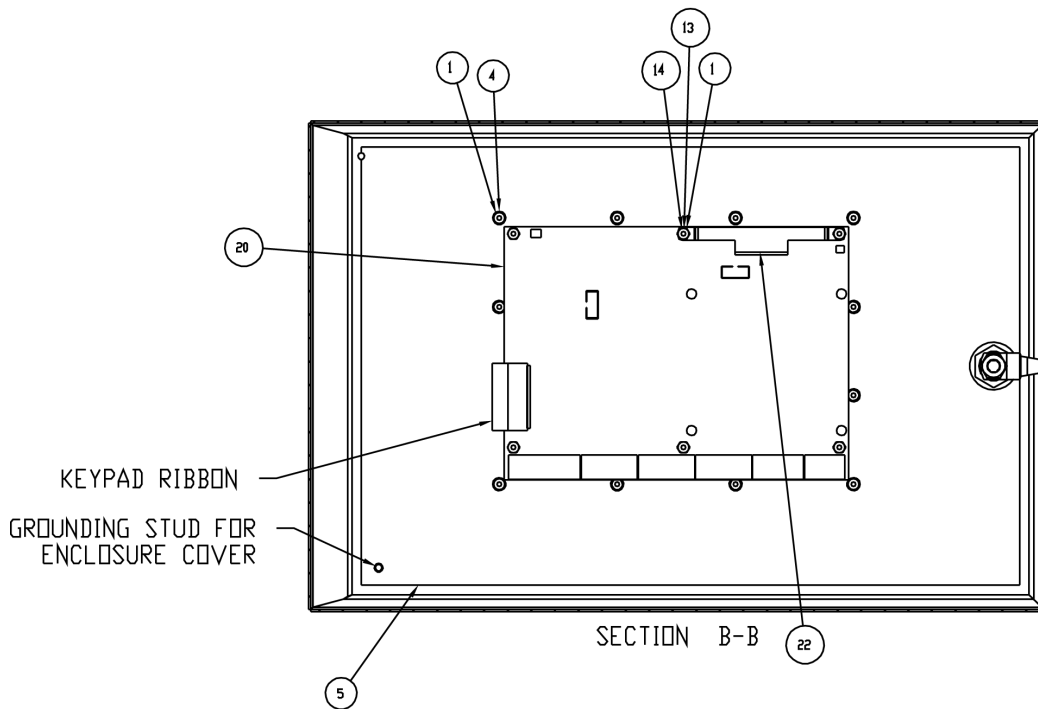
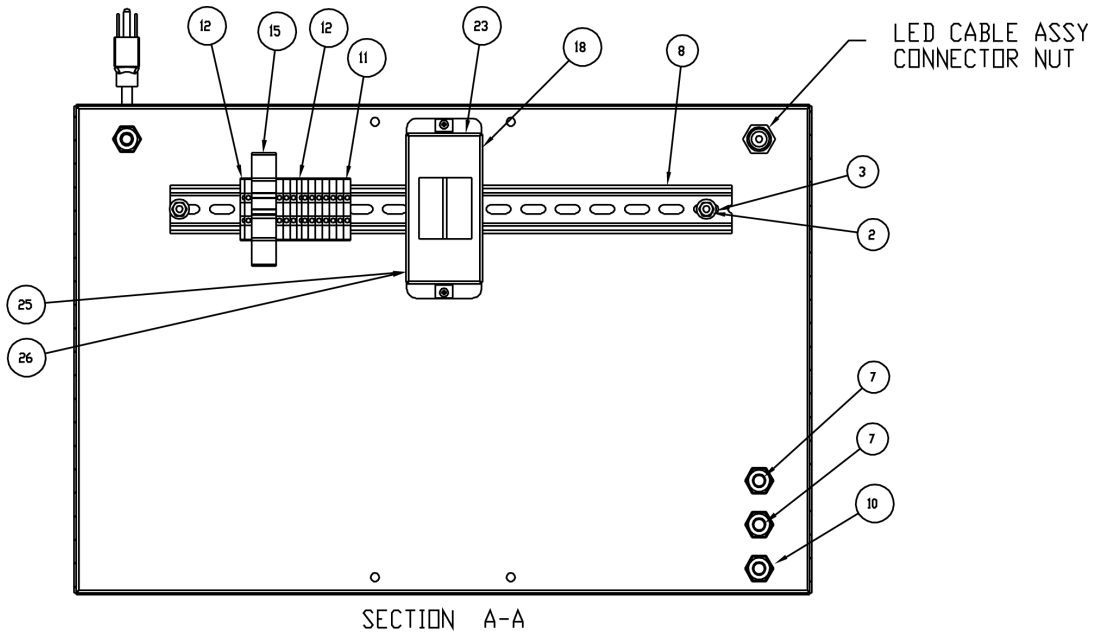


LOAD ALL 4 GLANDS
WITH NUTS FACING OUT



PARTS IDENTIFICATION

Final Assembly SAT225



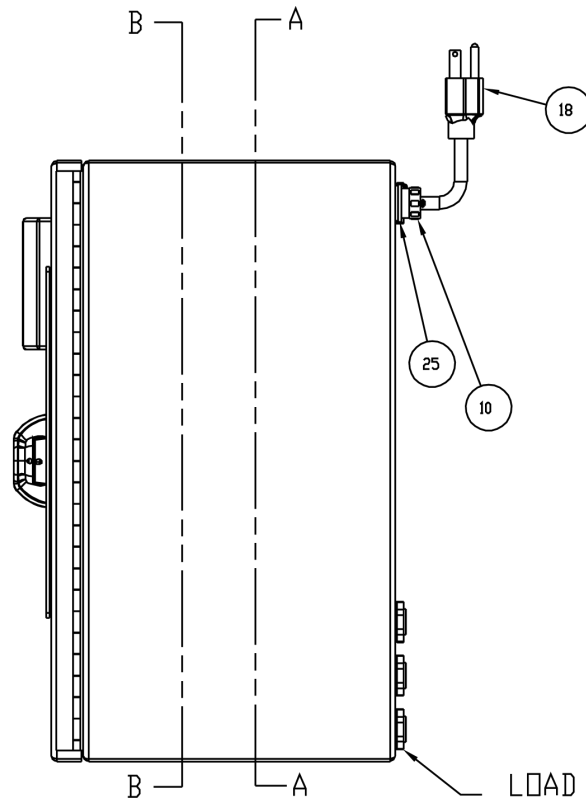
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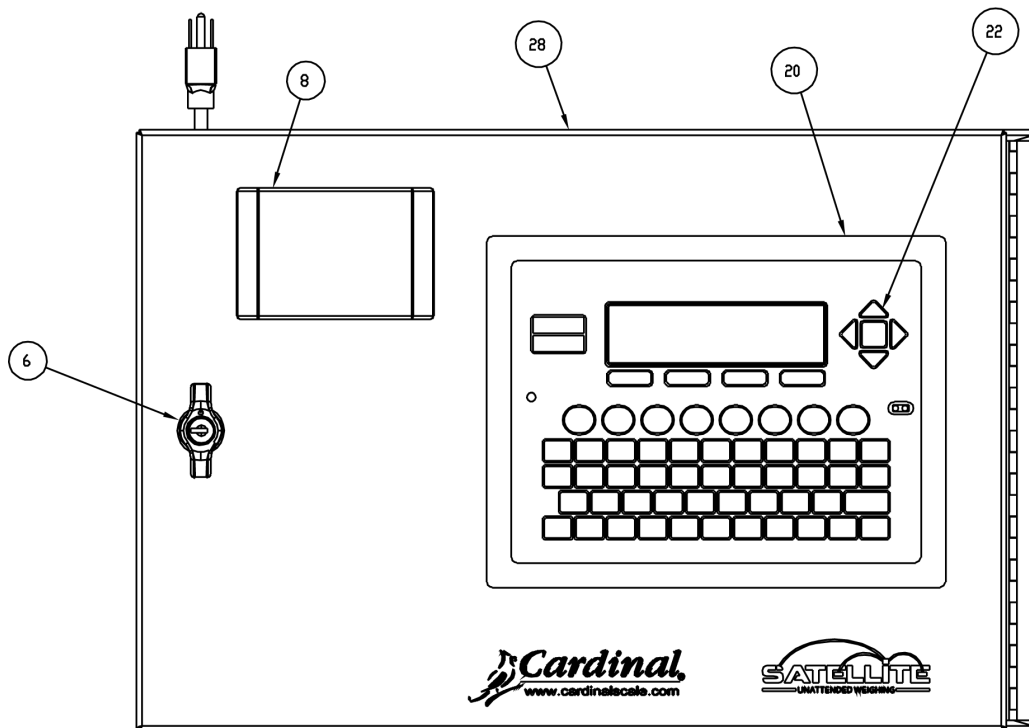
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| 3 | 2 | 6024-1027 | WASHER FLAT #10 TYPE A Z-PLATE |
| 4 | 14 | 6024-1078 | WASHER FLAT #6 NEOPRENE BACKING SS |
| 5 | 65in | 6030-0051 | GASKET MAT. 1/4X5/8 CLOSED CELL (GREY) |
| 6 | 1 | 6540-0310 | LOCKING LATCH, VISE ACTION COMPRESSION |
| 7 | 2 | 6540-1104 | HOLE PLUG, 0.343X0.187X1 LG, SILICONE RUBBER |
| 8 | 1 | 6600-1197 | READER, PROXIMITY, SHORT RANGE, AWID |
| 9 | 16in | 6600-1236 | DIN RAIL 35MM WIDE X X7.5MM TALL X 1M LG |
| 10 | 1 | 6610-1304 | CONN CAP FOR CIRC CONNECTORS |
| 11 | 4 | 6610-2248 | CABLE CLAMP, STRAIN RELEIF, BLACK |
| 12 | 11 | 6610-2281 | TERMINAL BLOCK, 24-1 AWG |
| 13 | 2 | 6610-2282 | TERMINAL BLOCK (GROUND) 24-10AWG DINRAIL |
| 14 | 6 | 6680-0004 | WASHER LOCK INT TOOTH #6 TYPE A Z-PL |
| 15 | 6 | 6680-0219 | SPACER # 6 X .813 NYLON |
| 16 | 1 | 6910-2420 | CIRCUIT BRAKER, 20 AMP, DINRAIL |
| 17 | 7 | 6980-0014 | CABLE TIE 4" WHITE |
| 18 | 1 | 6980-1030 | POWER CORD, 6.3' |
| 19 | 1 | 8200-B238-1A | CABLE: SATELLITE POWER SUPPLY OUTPUT |
| 20 | 1 | 8200-C312-0A | WELDMENT: BEZEL FOR 220 |
| 21 | 1 | 8200-D160-0A | PCB CONTROLLER, 225 INDICATOR |
| 22 | 1 | 8200-D360-08 | KEYPAD 225 INDICATOR |
| 23 | 1 | 8545-0938-08 | CALIBRATION COVER, 225 |
| 24 | 1 | 8545-0946-0A | SUB-ASSY, 225 P.S. |
| 25 | 1 | 8545-0947-0A | CABLE ASSY: LED, ENCLOSURE |
| 26 | 1 | 8545-0952-0A | CABLE ASSY: A/C POWER |
| 27 | 1 | 8545-0953-0A | CABLE ASSY: GROUND WIRE |
| 28 | 1 | 8545-D914-1A | ENCLOSURE WELDMENT |

PARTS IDENTIFICATION

Final Assembly SAT225B1

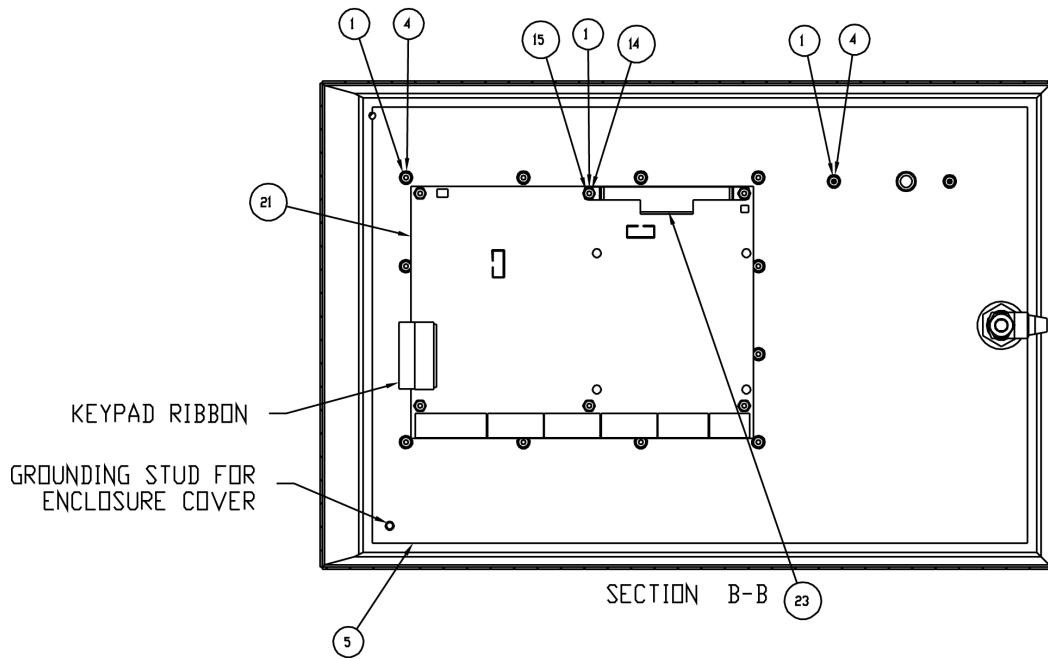
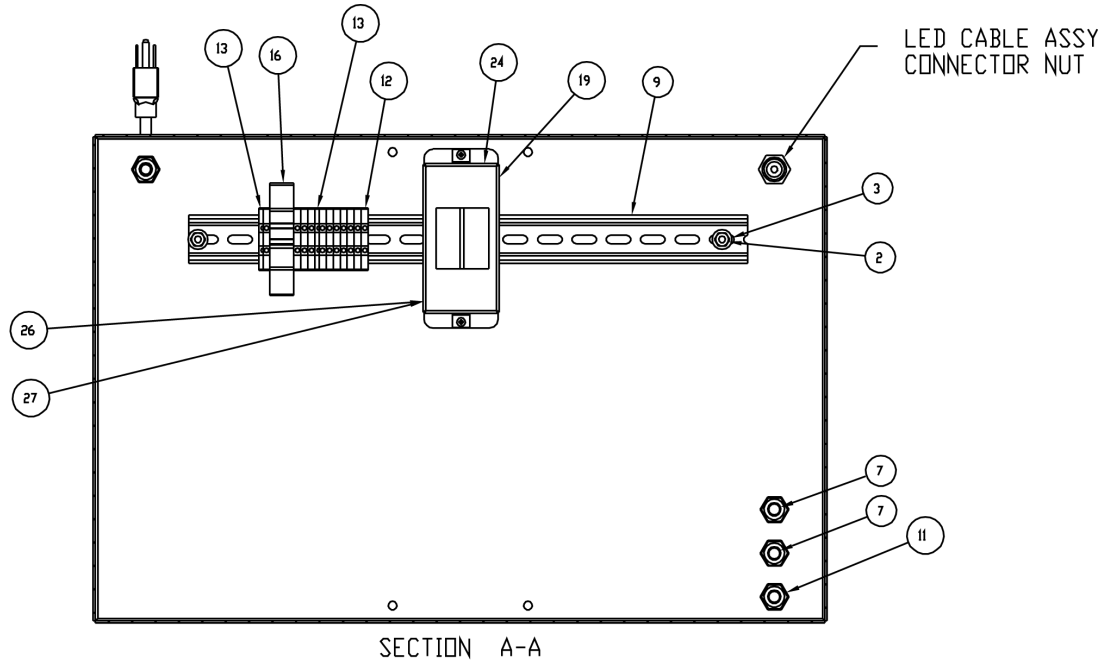


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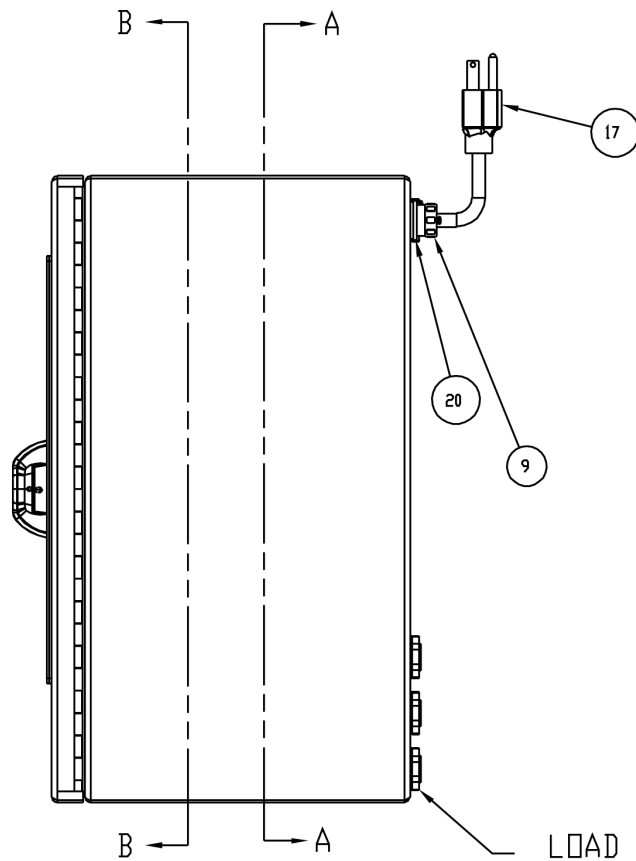
PARTS IDENTIFICATION

Final Assembly SAT825

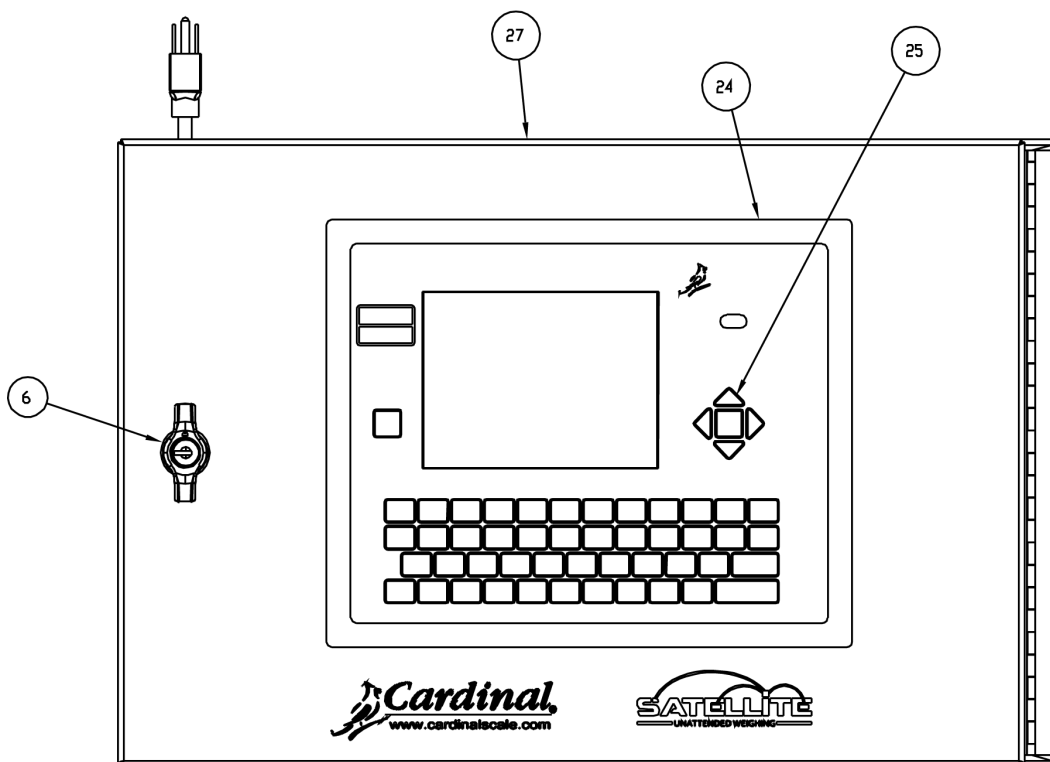
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| 6 | 1 | 6540-0310 | LOCKING LATCH, VISE ACTION COMPRESSION |
| 7 | 2 | 6540-1104 | HOLE PLUG, 0.343X0.187X1 LG, SILICONE RUBBER |
| 8 | 16in | 6600-1236 | DIN RAIL 35MM WIDE X X7.5MM TALL X 1M LG |
| 9 | 1 | 6610-1304 | CONN CAP FOR CIRC CONNECTORS |
| 10 | 4 | 6610-2248 | CABLE CLAMP, STRAIN RELEIF, BLACK |
| 11 | 11 | 6610-2281 | TERMINAL BLOCK, 24-1 AWG |
| 12 | 2 | 6610-2282 | TERMINAL BLOCK (GROUND) 24-10AWG DINRAIL |
| 13 | 6 | 6680-0004 | WASHER LOCK INT TOOTH #6 TYPE A Z-PL |
| 14 | 6 | 6680-0220 | SPACER # 6 X .875 NYLON |
| 15 | 1 | 6910-2420 | CIRCUIT BRAKER, 20 AMP, DINRAIL |
| 16 | 7 | 6980-0014 | CABLE TIE 4" WHITE |
| 17 | 1 | 6980-1030 | POWER CORD, 6.3' |
| 18 | 1 | 8545-0939-08 | CALIBRATION COVER, 825 |
| 19 | 1 | 8545-0945-0A | SUB-ASSY, 825 P.S. |
| 20 | 1 | 8545-0947-0A | CABLE ASSY: LED, ENCLOSURE |
| 21 | 1 | 8545-0952-0A | CABLE ASSY: A/C POWER |
| 22 | 1 | 8545-0953-0A | CABLE ASSY: GROUND WIRE |
| 23 | 1 | 8545-B821-1A | POWER CABLE ASSY |
| 24 | 1 | 8200-C822-0A | BEZEL WELDMENT |
| 25 | 1 | 8200-D810-08 | KEYPAD 825 INDICATOR |
| 26 | | 8545-D835-1A | SUB-CHASSIS ASSEMBLY-LED |
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PARTS IDENTIFICATION

Final Assembly SAT825

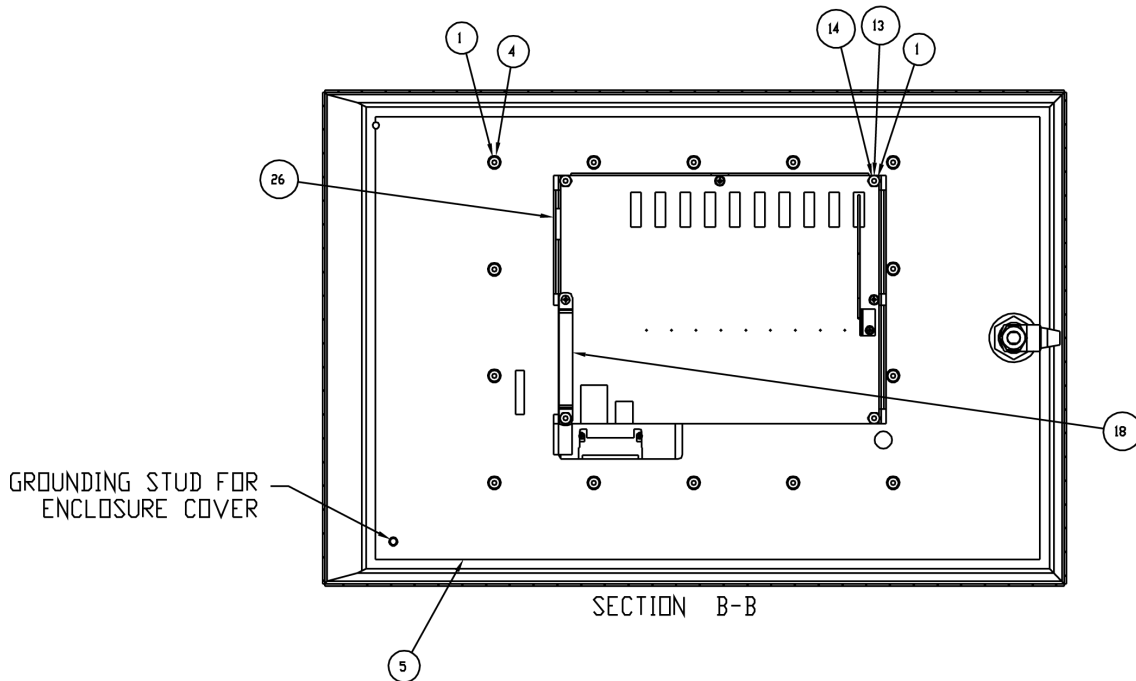
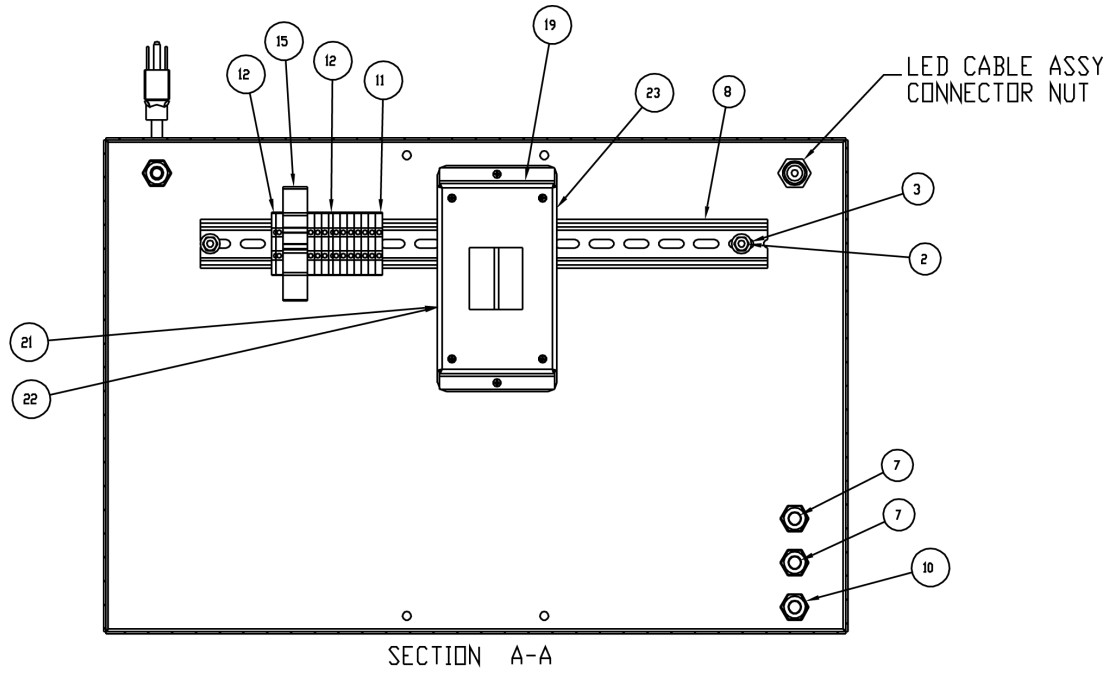


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PARTS IDENTIFICATION

Final Assembly SAT825



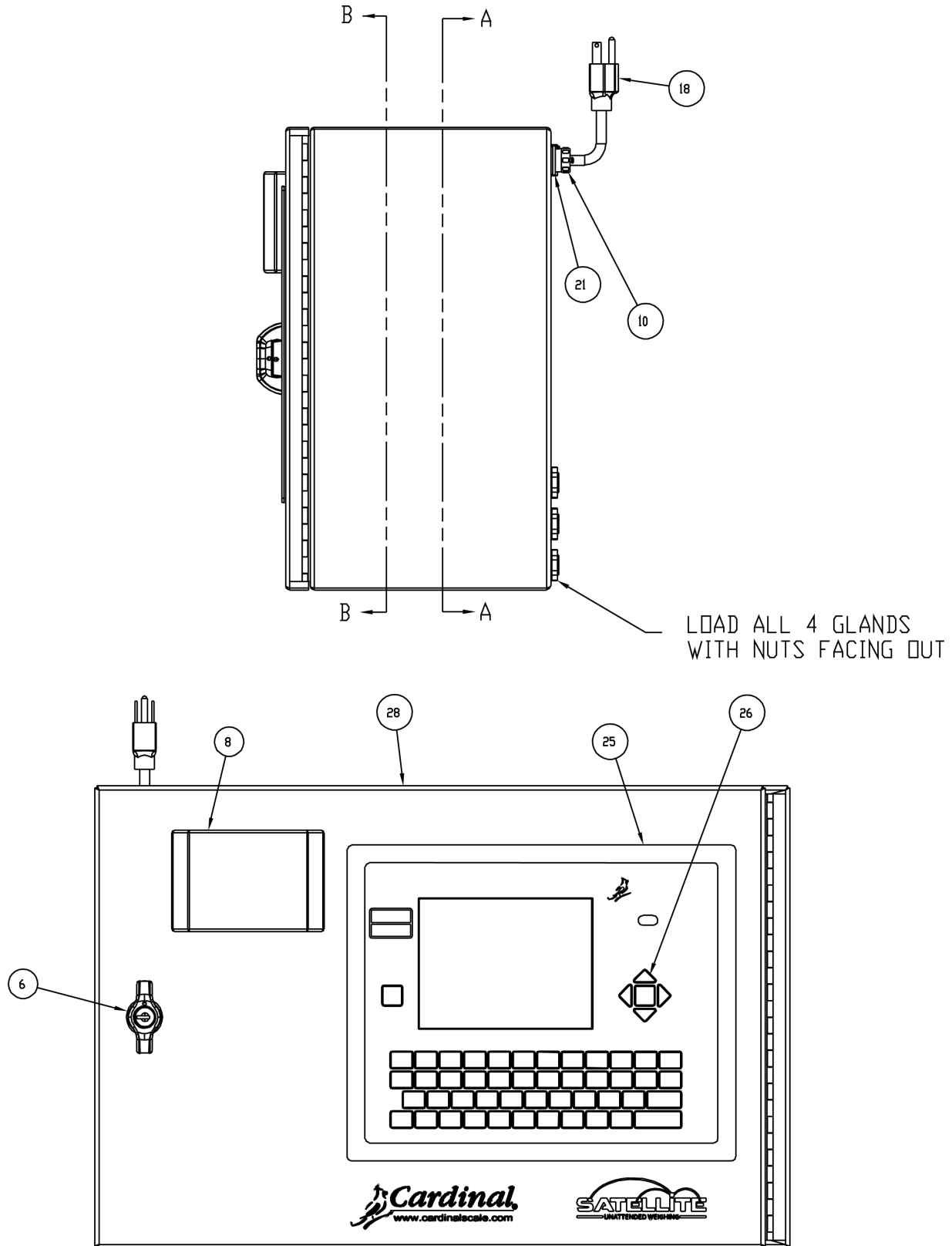
PARTS IDENTIFICATION

Final Assembly SAT825B1

| NO. | QTY. | ITEM | DESCRIPTION |
|-----|------|--------------|--|
| 1 | 18 | 6013-0039 | NUT #6-32 HEX Z/P |
| 2 | 2 | 6013-0295 | NUT #10-32 HEX Z/P |
| 3 | 2 | 6024-1027 | WASHER FLAT #10 TYPE A Z-PLATE |
| 4 | 12 | 6024-1078 | WASHER FLAT #6 NEOPRENE BACKING SS |
| 5 | 65in | 6030-0051 | GASKET MAT. 1/4X5/8 CLOSED CELL (GREY) |
| 6 | 1 | 6540-0310 | LOCKING LATCH, VISE ACTION COMPRESSION |
| 7 | 2 | 6540-1104 | HOLE PLUG, 0.343X0.187X1 LG, SILICONE RUBBER |
| 8 | 16in | 6600-1236 | DIN RAIL 35MM WIDE X X7.5MM TALL X 1M LG |
| 9 | 1 | 6610-1304 | CONN CAP FOR CIRC CONNECTORS |
| 10 | 4 | 6610-2248 | CABLE CLAMP, STRAIN RELEIF, BLACK |
| 11 | 11 | 6610-2281 | TERMINAL BLOCK, 24-1 AWG |
| 12 | 2 | 6610-2282 | TERMINAL BLOCK (GROUND) 24-10AWG DINRAIL |
| 13 | 6 | 6680-0004 | WASHER LOCK INT TOOTH #6 TYPE A Z-PL |
| 14 | 6 | 6680-0220 | SPACER # 6 X .875 NYLON |
| 15 | 1 | 6910-2420 | CIRCUIT BRAKER, 20 AMP, DINRAIL |
| 16 | 7 | 6980-0014 | CABLE TIE 4" WHITE |
| 17 | 1 | 6980-1030 | POWER CORD, 6.3' |
| 18 | 1 | 8545-0939-08 | CALIBRATION COVER, 825 |
| 19 | 1 | 8545-0945-0A | SUB-ASSY, 825 P.S. |
| 20 | 1 | 8545-0947-0A | CABLE ASSY: LED, ENCLOSURE |
| 21 | 1 | 8545-0952-0A | CABLE ASSY: A/C POWER |
| 22 | 1 | 8545-0953-0A | CABLE ASSY: GROUND WIRE |
| 23 | 1 | 8545-B821-1A | POWER CABLE ASSY |
| 24 | 1 | 8200-C822-0A | BEZEL WELDMENT |
| 25 | 1 | 8200-D810-08 | KEYPAD 825 INDICATOR |
| 26 | | 8545-D835-1A | SUB-CHASSIS ASSEMBLY-LED |
| 27 | 1 | 8545-D914-2A | ENCLOSURE WELDMENT |

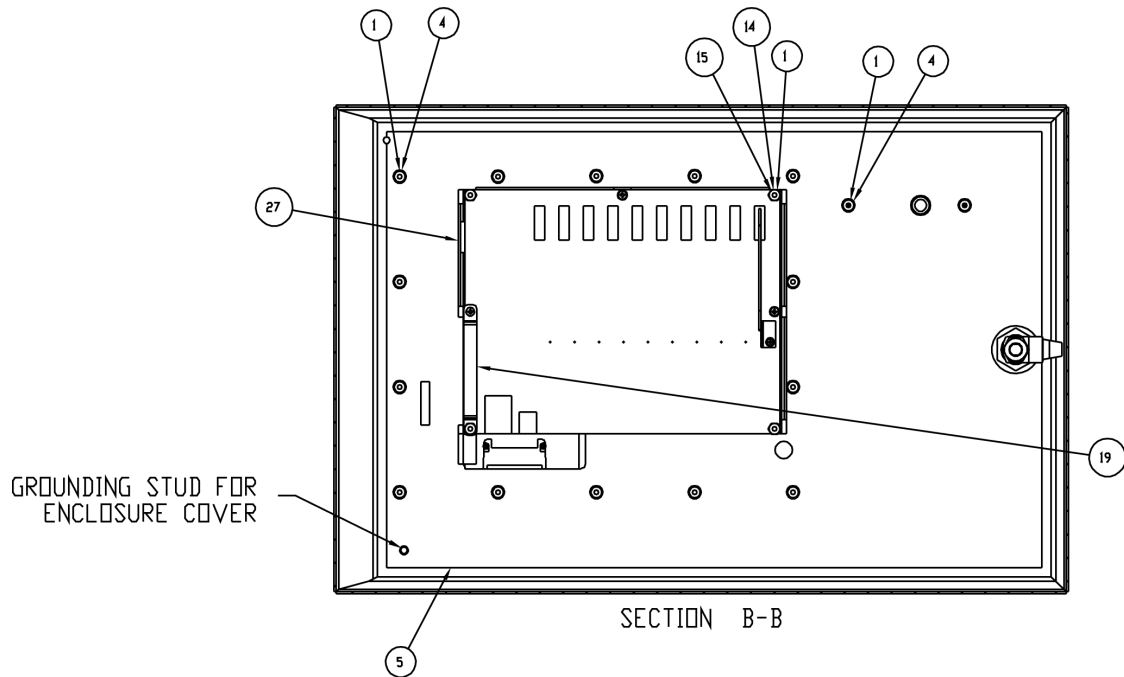
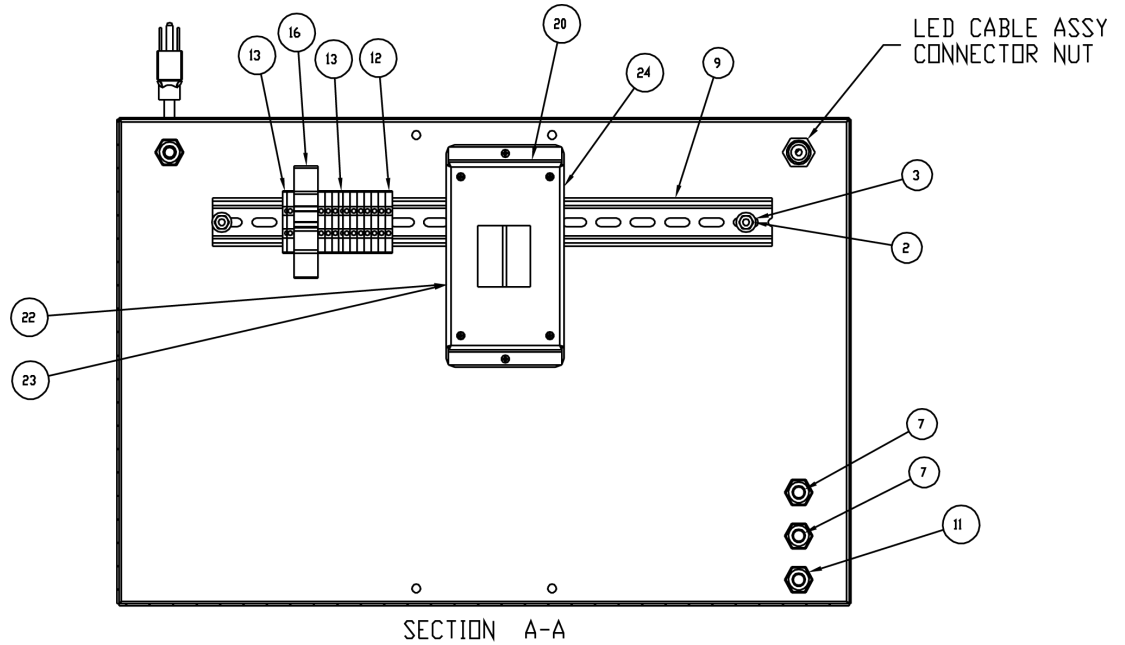
PARTS IDENTIFICATION

Final Assembly SAT825B1



PARTS IDENTIFICATION

Final Assembly SAT825B1



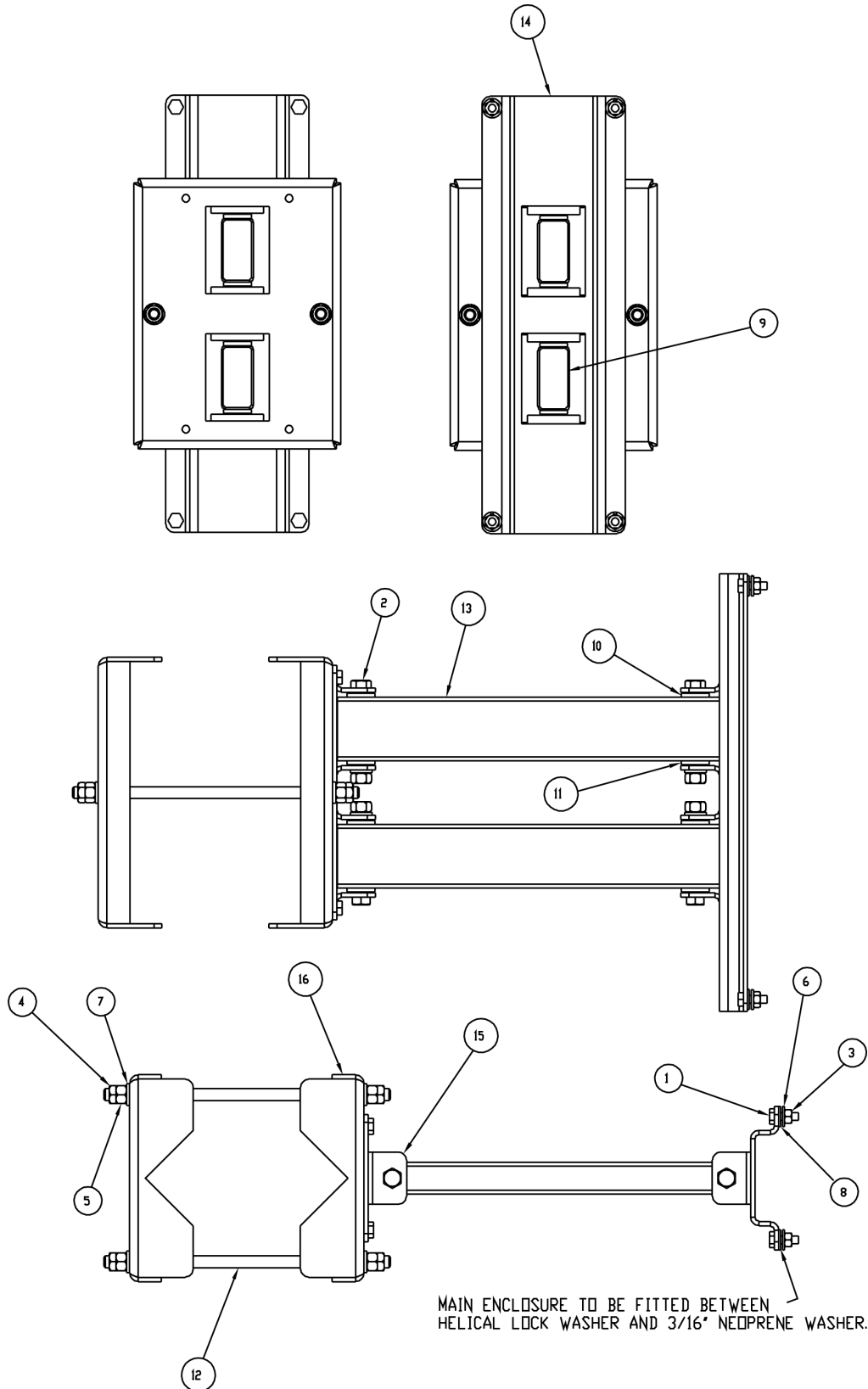
PARTS IDENTIFICATION

Mounting Sub-Assembly

| NO. | QTY. | ITEM | DESCRIPTION |
|-----|------|--------------|--|
| 1 | 8 | 6007-0013 | BLT HEX HD 1/4-20X3/4" SS |
| 2 | 4 | 6007-0053 | BLT HEX HD 3/8-16X3" SS |
| 3 | 8 | 6013-0047 | NUT 1/4-20 HEX SS |
| 4 | 4 | 6013-0075 | NUT 3/8-16 HEX JAM SS |
| 5 | 8 | 6013-0077 | NUT 3/8-16 HEX SS |
| 6 | 8 | 6024-0040 | WASHER LOCK HELICAL SP 1/4" REG SS |
| 7 | 8 | 6024-0046 | WASHER LOCK HELICAL SP 3/8" REG SS |
| 8 | 4 | 6024-0083 | WASHER FLAT 3/16" NEOPRENE, 70 DUROMETER |
| 9 | 4 | 6540-1102 | PLUG, 1"X2" RECTANGULAR TUBING |
| 10 | 4 | 6750-0056 | BUSHING 3/8ID X 5/8OD X 1LG X 1/8THK |
| 11 | 4 | 6750-0057 | BUSHING 3/8ID X 5/8OD X 1-1/4LG X 1/8THK |
| 12 | 2 | 8545-0949-08 | THREADED ARM |
| 13 | 2 | 8545-B918-08 | MOUNTING ARM |
| 14 | 1 | 8545-B919-08 | MOUNTING HINGE, BOX |
| 15 | 1 | 8545-B923-08 | MOUNTING HINGE, POLE |
| 16 | 2 | 8545-B924-08 | MOUNTING BRACKET |

PARTS IDENTIFICATION

Mounting Sub-Assembly



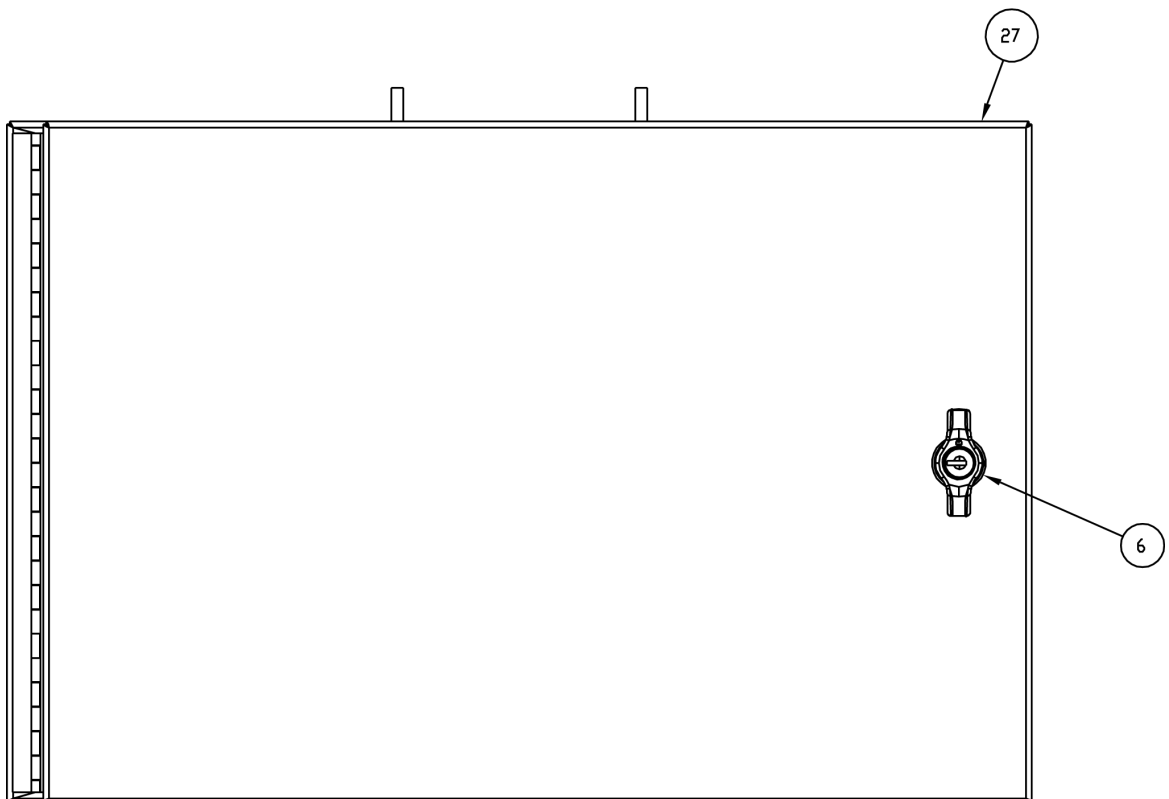
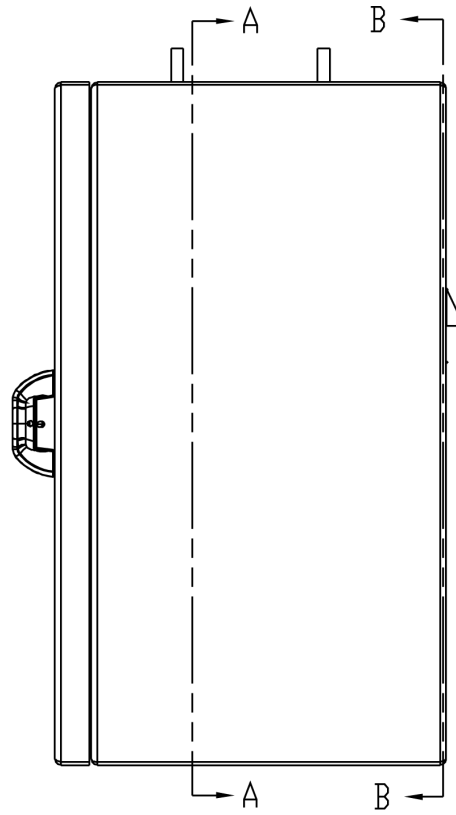
PARTS IDENTIFICATION

Final Assembly SATP

| NO. | QTY. | ITEM | DESCRIPTION |
|-----|------|--------------|--|
| 1 | 8 | 6013-0295 | NUT #10-32 HEX Z/P |
| 2 | 3 | 6021-1296 | SCW FLAT-HEAD MACHINE-SCW M3X5 PHIL DR. Z/P |
| 3 | 2 | 6021-1297 | SCW FLAT-HEAD MACHINE-SCW M2.5X10 PHIL DR. Z/P |
| 4 | 8 | 6024-0033 | WASHER LOCK HELICAL SP #10 REG Z-PL |
| 5 | 65IN | 6030-0051 | GASKET MAT. 1/4X5/8 CLOSED CELL (GREY) |
| 6 | 1 | 6540-0310 | LOCKING LATCH, VISE ACTION COMPRESSION |
| 7 | A/R | 6560-0041 | SILICONE SEALER RTV, CLEAR, 2.8 OZ TUBE |
| 8 | 1 | 6600-0413 | ADAPTER 100-240VAC/24VDC/2.5AMP |
| 9 | 1 | 6600-1078* | PRINTER AXLE |
| 10 | 1 | 6600-1078* | PRINTER CONTROLLER |
| 11 | 1 | 6600-1078* | PRINTER HEAD |
| 12 | 2 | 6600-1078* | PRINTER HUB |
| 13 | 1 | 6600-1078* | PRINTER SENSOR |
| 14 | 1 | 6600-1079 | PCB: PRINTER INTERFACE, RS-232, 25 PIN |
| 15 | 1 | 6600-1080 | PAPER ROLL 3.15" W, DIA ROLL, 930 FT LONG |
| 16 | 1 | 6610-1420 | RECEPTACLE, A.C. DUPLEX, 15A |
| 17 | 1 | 6610-1421 | BOX, OUTLET 1-1/2 DP, HANDYBOX |
| 18 | 1 | 6610-1422 | COVER, DUPLEX RECEPTACLE, HANDYBOX |
| 19 | 5POS | 6610-5080 | TERMINAL BLOCK 12POS 22-10GA |
| 20 | 1 | 6660-0126 | HEATER, 300 WATT, 6"X10" |
| 21 | 2 | 6680-0230 | SPACER #6-32 X .500 HEX NYLON |
| 22 | 1 | 6930-0008 | THERMOSTAT 40/55 DEG F |
| 23 | 1 | 8539-B108-1A | DATA CABLE: 2XX TO P400 |
| 24 | 1 | 8545-0959-08 | PAPER GUIDE |
| 25 | 1 | 8545-B934-08 | POWER SUPPLY STRAP |
| 26 | 1 | 8545-C933-0A | PRINTER SUB-PANEL WELDMENT |
| 27 | 1 | 8545-D927-0A | PRINTER ENCLOSURE WELDMENT |
| 28 | 1 | 593GR986 | SERIAL TAG ASSY |

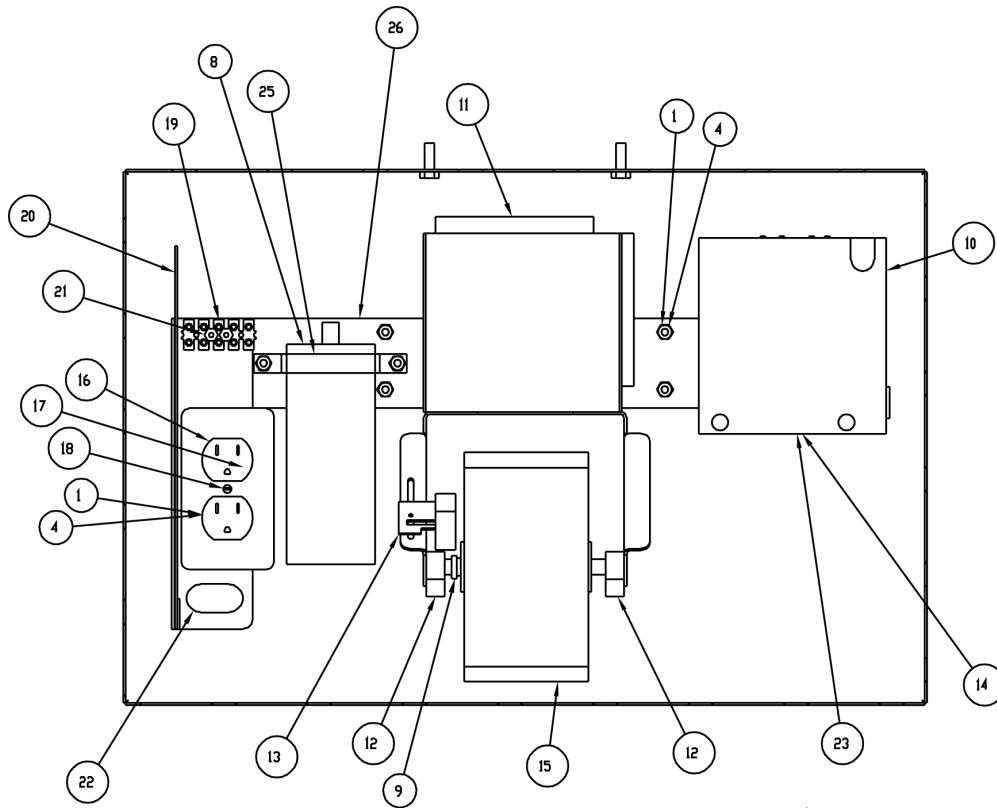
PARTS IDENTIFICATION

Final Assembly SATP

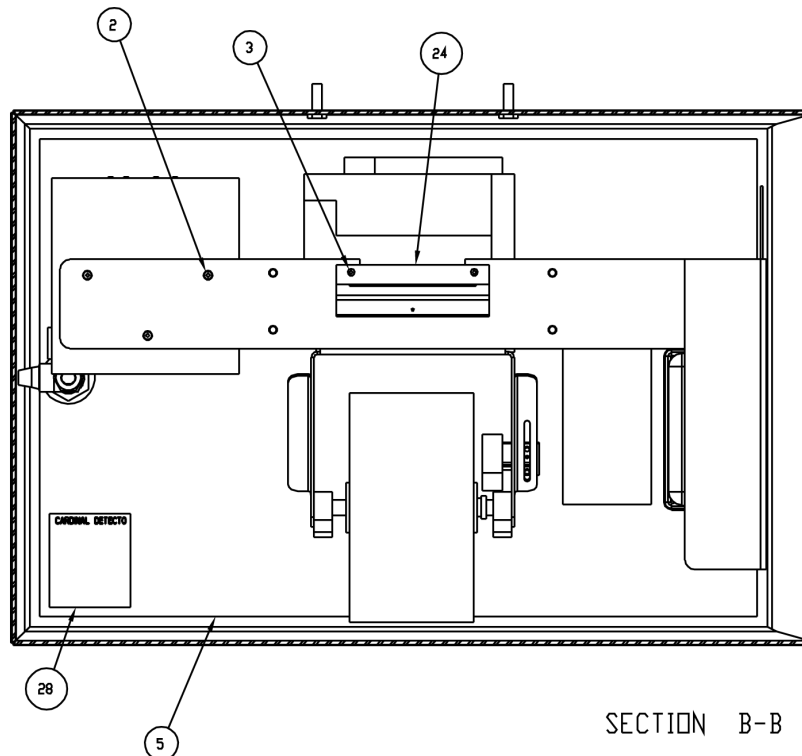


PARTS IDENTIFICATION

Final Assembly SATP



SECTION A-A

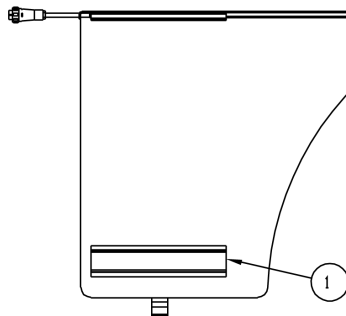
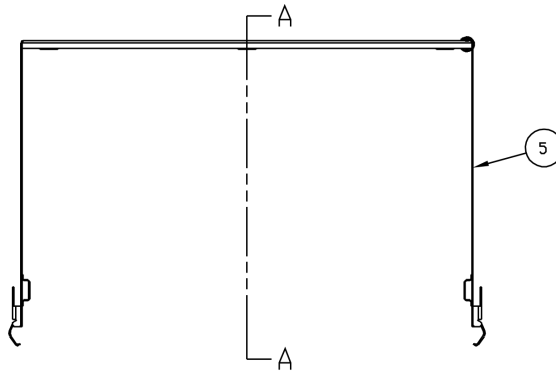


SECTION B-B

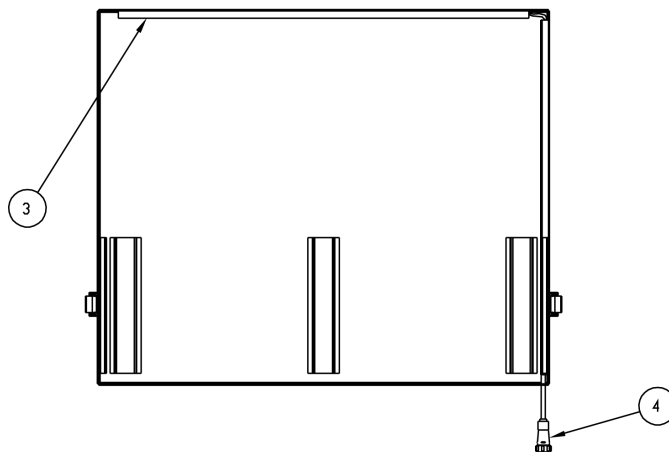
PARTS IDENTIFICATION

Final Assembly SATH

| NO. | QTY. | ITEM | DESCRIPTION |
|-----|--------|--------------|--|
| 1 | .2sqft | 6540-1144 | MAT, SAFETY TRACK RESILIENT-BLK 0.24" TK |
| 2 | A/R | 6560-0041 | SILICONE SEALER RTV, CLEAR, 2.8 OZ TUBE |
| 3 | .5M | 6770-1048 | LED FLEXIBLE LIGHT STRIP |
| 4 | 1 | 8545-0948-0A | CABLE ASSY: LED, HOOD |
| 5 | 1 | 8545-C916-0A | HOOD WELDMENT |



SECTION A-A



STATEMENT OF LIMITED WARRANTY

WARRANTY TERMS

Cardinal Scale Manufacturing Company warrants the equipment we manufacture against defects in material and workmanship. The length and terms and conditions of these warranties vary with the type of product and are summarized below:

| PRODUCT TYPE | TERM | MATERIAL AND WORKMANSHIP | LIGHTNING DAMAGE See note 9 | WATER DAMAGE See note 7 | CORROSION See note 4 | ON-SITE LABOR | LIMITATIONS AND REQUIREMENTS |
|---|---|--------------------------|--------------------------------|----------------------------|-------------------------|---------------|------------------------------------|
| WEIGHT INDICATORS | 90 DAY REPLACEMENT ----- 1 YEAR PARTS | YES | YES | YES | YES | NO | 1, 2, 3, 5, 6 A, B, C, D |
| LOAD CELLS (Excluding Hydraulic) | 1 YEAR | YES | YES | YES | YES | NO | 1, 2, 3, 5, 6 A, B, C, D |
| HYDRAULIC LOAD CELLS (When purchased with Guardian Vehicle Scale) | LIFETIME | YES | YES | YES | YES | 90 DAYS | 1, 5, 6, 8 A, B, C, D |
| HYDRAULIC LOAD CELLS (When purchased separately) | 10 YEARS | YES | YES | YES | YES | NO | 1, 5, 6, 8, 9 A, B, C, D |
| VEHICLE SCALE (Deck and Below Excl. PSC Series) | 5 YEARS | YES | YES | YES | YES | 90 DAYS | 1, 2, 3, 5, 6 A, B, C, D, E |
| LSC SCALE (Deck and Below) | 3 YEARS | YES | YES | YES | YES | 90 DAYS | 1, 2, 3, 5, 6, 11 A, B, C, D |
| GUARDIAN FLOOR SCALES | 10 YEARS | YES | YES | YES | YES | NO | 1, 2, 3, 5, 6, 9, 10 A, B, C, D |
| ALL OTHER CARDINAL PRODUCTS | 1 YEAR | YES | YES | YES | YES | NO | 1, 2, 5, 6 A, B, C, D, E |
| REPLACEMENT PARTS | 90 DAYS | YES | YES | YES | YES | NO | 1, 2, 4, 5, 6 A, B, C, D |
| SWIM AND 760 SERIES VEHICLE SCALES | 1 YEAR | YES | YES | YES | YES | 90 DAYS | 1, 2, 5, 6 A, B, C, D |
| SOFTWARE | 90 DAYS | YES | N/A | N/A | N/A | NO | 1, 6 B, C, D |
| CONVEYOR BELT SCALES (including Belt-Way) | 1 YEAR | YES | YES | YES | YES | NO | 1, 2, 3, 5, 6 A, B, C, D, E, F |



CARDINAL

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E-mail: cardinal@cardet.com
102 E. Daugherty
Webb City, MO 64870

04/24
Printed in USA
315-WARRANTY-CAR-M

APPLICABLE LIMITATIONS AND REQUIREMENTS

1. This warranty applies only to the original purchaser. The warranty does not apply to equipment that has been tampered with, defaced, damaged, or had repairs or modifications not authorized by Cardinal or has had the serial number altered, defaced or removed.
2. This warranty is not applicable to equipment that has not been grounded in accordance with Cardinal's recommendations.
3. This equipment must be installed and continuously maintained by an authorized Cardinal / Belt-Way dealer.
4. Applies only to components constructed from stainless steel.
5. This warranty does not apply to equipment damaged in transit. Claims for such damage must be made with the responsible freight carrier in accordance with freight carrier regulations.
6. Warranty term begins with date of shipment from Cardinal.
7. Only if device is rated NEMA 4 or better or IP equivalent.
8. Lifetime warranty applies to damages resulting from water, lightning, and voltage transients and applies only to the hydraulic load cell structure itself (does not include pressure transducers, rubber seals, o-rings, and associated wiring).
9. 10-Year prorated warranty on hydraulic load cells.
10. 1-Year warranty for scale structure.
11. PSC models' warranty coverage applies only to agricultural installations on farms up to 3,000 acres (LSC models not limited in this manner).
12. Load cell kits MUST be installed in accordance with Cardinal Scale instructions. Failure to follow these instructions will void the warranty.

EXCLUSIONS

- A.) This warranty does not include replacement of consumable or expendable parts. The warranty does not apply to any item that has been damaged due to unusual wear, abuse, improper line voltage, overloading, theft, fire, water, prolonged storage or exposure while in purchaser's possession or acts of God unless otherwise stated herein.
- B.) This warranty does not apply to peripheral equipment not manufactured by Cardinal. This equipment will normally be covered by the equipment manufacturer's warranty.
- C.) This warranty sets forth the extent of our liability for breach of any warranty or deficiency in connection with the sale or use of our product. Cardinal will not be liable for consequential damages of any nature, including but not limited to loss of profit, delays or expenses, whether based on tort or contract. Cardinal reserves the right to incorporate improvements in material and design without notice and is not obligated to incorporate said improvements in equipment previously manufactured.
- D.) This warranty is in lieu of all other warranties expressed or implied including any warranty that extends beyond the description of the product including any warranty of merchantability or fitness for a particular purpose. This warranty covers only those Cardinal products installed in the forty-eight contiguous United States and Canada.
- E.) This warranty does not cover paint coatings due to the variety of environmental conditions.
- F.) Do not cut load cell cables on load cells returned for credit or warranty replacement. Cutting the cable will void the warranty.
- G.) Software is warranted only for performance of the functions listed in the software manual and/or the Cardinal proposal.
- H.) The software warranty does not cover hardware. Warranties on hardware are provided from the hardware vendor only.
- I.) The software warranty does not cover interfacing issues to non-Cardinal supplied hardware.
- J.) The software warranty does not include automatic software upgrades unless purchased separately.



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E-mail: cardinal@cardet.com
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Webb City, MO 64870

04/24
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315-WARRANTY-CAR-M

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