

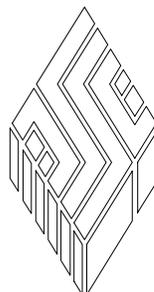


## **AUTO ~~300~~** **Table-mounted** **Electronic Platform Scale**

- *300-pound / 136 kg capacity*
- *Accurate to  $\pm 1.0\%$*
- *Mounts to Tables, Lift Tables, Bases and Carts*
- *Quick and easy to use*

New Model Numbers: 12451-01-GZAHDH

Former Model Numbers: 209934-1-PT



# **SSCI**

Wheeling, IL 800 323 7366

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# Chapter 1 - General Information



## Introduction

Accuracy is what you need in a scale! So much depends on knowing the correct weight of your patients: anesthesia, medications, inoculations, feeding amounts. With an accuracy of  $\pm 1.0\%$ , SSCI makes sure that you can depend on your new Auto 300 Electronic Platform Scale. The motionless, stainless steel platform is supported by four load cells, one in each corner, to ensure reliability.

State-of-the-art electronics take readings from all load cells to give you the most accurate weight - even if the animal is placed off-center. A Lock Button on the console locks in the electronically-averaged weight, so you get accurate figures even with restless or active animals. The scale also features a Tare function to compensate for the extra weight when an animal is weighed in a carrier, or held by its owner.

The easy-to-read, easy-to-use display console measures in pounds or kilograms and is touch-activated with automatic shut-off. A reinforced, 1-piece, welded, stainless steel covered frame gives you the strongest, most rigid platform scale available.

## About this Manual

Every attempt has been made to insure that the information in this manual is correct and complete. SSCI, however, always welcomes our customer's suggestions for improvements to our products and associated publications.

## Conventions Used in this Manual

Throughout this manual you will find text under the headings **Note:** and **CAUTION:**.

**Notes:** Under the **Note:** heading, you will be given additional information pertinent to the subject discussed in that paragraph or procedural step.

**Example:**

After removing the top carton and the plastic wrap, make sure the parts listed in Table 2 are present. **Note:** Not all parts will be used in your particular installation.

**CAUTIONS** Under the **CAUTION:** heading, you will be alerted to potentially hazardous conditions which, if ignored or mishandled, could result in injury to yourself, or damage to the equipment.

**Example:**

**CAUTION:** Do not place the scale in an area subject to drafts from air conditioners, heating vents or exterior doors. Exposing the scale to wide variations in temperature can cause the micro-processor to read weights erroneously.

## Models

The model numbers of the Auto 300 Table-mounted Electronic Platform Scale are:

- New Model Numbers: 12451-01-GZAHDH
- Former Model Numbers: 209934-1-PT

## Accessories

The following accessory can be ordered from SSCI to increase the operating convenience of your Auto 300 scale. Refer to your current SSCI product catalog for more information. Order this item from your local dealer or refer to *Page 34 for Parts Ordering Procedure*.

- Voltage adapter - Call SSCI for information

## Mounts for Table Model Scales

Table 1 gives a list of SSCI products on which the Auto 300 table model scale can be mounted.

SSCI Product			Part Number
Classic Lift Table	Floor-standing	Lateral	12661-00-GZLWEF
		Longitudinal	12665-00-DPLWHX
	Wall-mount	Lateral	12663-00-GZLWEF
		Longitudinal	12667-00-DPLWHX
Premier Lift Table	Floor-standing	Lateral	12671-00-GZLWEF
		Longitudinal	12675-00-DLPWHX
	Wall-mount	Lateral	12673-00-GZLWEF
		Longitudinal	12677-00-DPLWHX
Transport / Prep Cart	Without lower shelf		12526-00-GZFSDH
	With lower shelf		12527-00-GZFSDH
Pedestal Exam / Treatment Table			12592-00-GZFDPH
Laminated Exam / Treatment Table			Refer to Catalog

**Table 1. SSCI Products on Which Auto 300 Table-mounted Electronic Scales Can Be Mounted**

## Care and Cleaning of Stainless Steel

### Introduction

Stainless steel is steel alloyed with chromium to make it highly resistant to stain, rust and corrosion. **Note:** This does NOT mean that stainless steel will *never* rust or corrode. Science has not yet developed a steel which is completely stainless or corrosion PROOF.

The type of stainless steel and finish selected by SSCI for the Auto 300 Electronic Platform Scale is the best available for the intended use.

### Cleaning and Cleansers

The basic rule of thumb is to use the mildest cleaning procedure that will do the job effectively. Always rinse thoroughly with clear water and dry completely. Frequent cleaning will prolong the service life of stainless steel equipment and will help maintain a bright, pleasing appearance. **Note:** NEVER power-wash the scale.

Ordinary deposits of waste and fluids can usually be removed with soap and water. More stubborn deposits or tightly adhering debris may require harder scrubbing and possibly the use of commercial cleaning products acceptable for use on metal surfaces. When using any cleaning agent, rub in the direction of the polish lines or “grain” of the metal. For high luster finishes, clean soft cloths or pads should be used. If especially rough cleaning is necessary, use “stainless steel” wool, nylon or plastic scrubbers. Test these scrubbers in an inconspicuous area first to be sure they do not mar or scratch the stainless steel finish.

Minor scale build-up and some hard water spotting may be removed by washing with vinegar, followed by a neutralizing rinse with clear water and a thorough drying with a soft cloth. For heavy deposits of scale, 5% oxalic acid (use warm), 5-15% sulfamic acid, or 5-10% phosphoric acid may be used. Always follow with a neutralizing rinse of clean water and a thorough drying.

## **Deodorizing Agents, Disinfectants and Sanitizers**

The large selection of brands and combinations of chemicals available for deodorizing, disinfecting and sanitizing is staggering. Select one or more agents for use in your facility only after weighing all the benefits claimed by each product. Often this choice is made without adequate consideration of the effects these agents may produce on equipment or furnishings.

**CAUTION: Before selecting a chemical to employ in your facility, review label statements regarding use with metals (stainless steel). Always consult the chemical supplier if there are any doubts.**

Avoid prolonged use of chlorides (such as chlorine bleach), bromides, iodides and thiocyanates on stainless steel surfaces as these chemicals will cause pitting, corrosion and metal discoloration. Allowing salty solutions to evaporate and dry on stainless steel may also contribute to corrosive conditions.

In summary, select chemical deodorizers, disinfectants and/or sanitizers only after weighing all possible benefits and known adverse effects.

## **Effect on Warranty**

**CAUTION: The warranty for this product is void if the care and cleaning instructions provided in this manual are not followed.**

## **Safety**

### **Load Weight Limitations**

**CAUTION: The scale is designed to carry weights up to 300-pounds (136 kg). Placing weights greater than 300-pounds on the scale can damage the weighing mechanism.**

**CAUTION: Do not allow heavy weights to be suddenly applied to the scale (for example: a child jumping on the scale). Such "shock loads" can damage the load cells under the scale, and will VOID YOUR WARRANTY!**

### **Moving a Transport Cart**

If the Auto 300 Scale is mounted on a transport/prep cart, remember to un-plug the AC Adapter/Charger either from the wall outlet, or the bottom of the display console before moving the cart.

## Cleaning Requirements

Clean the scale exactly in accordance with the cleaning instructions provided in *Chapter 3* of this manual. Failure to follow these instructions can void your warranty.

## SSCI Contact Information

SSCI Customer Service can be contacted via mail, telephone or fax. The department is available from 8:30am to 5:00pm, Central Time, Monday through Friday. Closed holidays.

**Address:** Suburban Surgical Co., Inc.  
275 Twelfth Street  
Wheeling, Illinois 60090

**Telephone:** Illinois - (847) 537-9320, ext. 3518  
Toll Free - 1-800-323-7366

**Fax:** (847) 537-9061

**Web:** [www.suburbansurgical.com](http://www.suburbansurgical.com)

## Warranty

Suburban Surgical Company, Inc. warrants the original purchaser that our products are of the highest standards in material and workmanship. Our stainless steel components are guaranteed to last a lifetime assuming they are used as intended, properly maintained and cared for. Mechanical, electrical, electronic, hydraulic, and any product's devices carry a one year warranty.

Items purchased by Suburban Surgical Company, Inc. from other manufacturers and incorporated into our equipment are covered by the respective manufacturer's warranties.

Warranties will not apply if it is determined by Suburban Surgical Company, Inc. that the equipment became defective due to an accident, misuse, abuse, improper maintenance or alteration. Warranty freight charges are covered for the first year only.

## Chapter 2 - Setup

### Introduction

This chapter guides you in setting up table-mounted models of the Auto 300 Electronic Platform Scale (P/N 12451-01-GZAHDH).

### Unpacking and Inspection

**CAUTION: Unpacking and setting up the electronic scale is not difficult. However, the scale is heavy and we recommend that these procedures be done by at least two people.**

If the shipping container appears damaged in any way, contact the shipping company immediately. Save all damaged packing materials to assist in proving liability for damage.

Carefully inspect your electronic scale as you unpack it. If any damage is noted, or if parts appear to be missing (Refer to *Parts Included, Page 9*), call SSCI Customer Service at 1-800-323-7366.

### Setup Options

Table model scales can be mounted on any of five SSCI products (refer to Table 1 on *Page 3* for part numbers):

- Classic Lift Table (Figure 1) - *Page 11*
- Premier Lift Table (Figure 2) - *Page 11*
- Transport/Prep Cart (Figure 3) - *Page 16*
- Pedestal Exam/Treatment Table (Figure 4) - *Page 19*
- Laminated Exam/Treatment Table (Figure 5) - *Page 21*

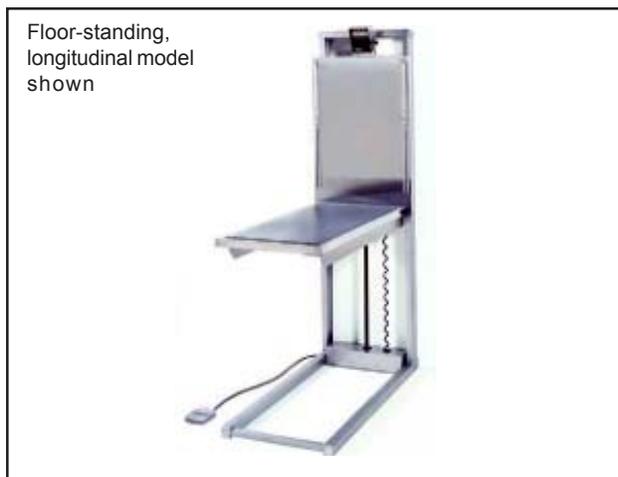


Figure 1. Classic Lift Table



Figure 2. Premier Lift Table



Figure 3. Transport/Prep Cart



Figure 4. Pedestal Exam/Treatment Table



Figure 5. Laminated Exam/Treatment Table

## Location Restrictions

**CAUTION:** Do not use the scale in an area subject to drafts from air conditioners, heating vents or exterior doors. Exposing the scale to wide variations in temperature can degrade the micro-processor's accuracy.

Always use the scale on a surface that is fairly level. An unlevel floor can affect scale accuracy.

## Parts Included

Make sure the parts listed in Table 2 are present in the shipment.

**Note:** Not all parts will be used in your particular installation.

Description	Part Number	Quantity	Refer to	Comments
Scale Platform Assembly	Refer to Page 33 for individual part numbers	1	Fig. 6	Includes frame, stiffening board, scale top, 4 load cells, summing board and display cable
Display Console	212489-PT	1	Fig. 7, A	
AC Adapter/Charger	854117-PT	1	Fig. 7, B	Includes attached wire
Console Bracket	207733	1	Fig. 7, C	
Black Vinyl Mat	750650	1	none	Use is optional
Plastic Knob	853170	2	Fig. 8, A	1-in. dia., black plastic In Parts Package 009022
Machine Screw	850156	1	Fig. 8, B	1/4-20 x 3/8-in. truss head, Phillips In Parts Package 009022
Machine Screw	850172	2	Fig. 8, C	1/4-20 x 3/4-in., truss head, Phillips In Parts Package 009022 Use instead of knobs if preferred
Screw Anchor	853920	2	Fig. 8, D	#10-12 x 1-in., green plastic In Parts Package 009022
Sheet Metal Screw	853921	2	Fig. 8, E	#10 x 1-in., Phillips In Parts Package 009022
Cable Clip	853215	3	Fig. 8, F	Adhesive-mount, locking, black plastic In Parts Package 009022 Use is optional
Machine Screw	850161	4	Fig. 9, A	1/4-20 x 1-in., round head, slotted In Parts Package 009904
Machine Screw	850166	4	Fig. 9, B	1/4-20 x 5/8-in., round head, slotted In Parts Package 009904
Washer	850780	4	Fig. 9, C	1/4-in. ID, flat In Parts Package 009904

**Table 2. Items Supplied with Table Model Auto 300 Scale  
(Refer to Figures 6, 7, 8 and 9)**



Figure 6. Platform Frame Assembly

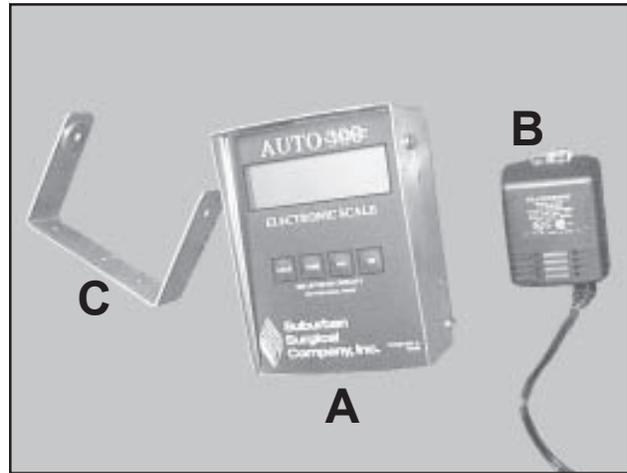


Figure 7. Display Console and Related Parts

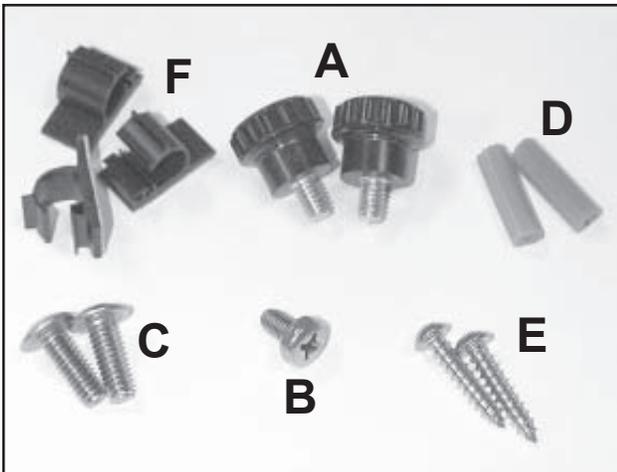


Figure 8. Items in Parts Package 009022

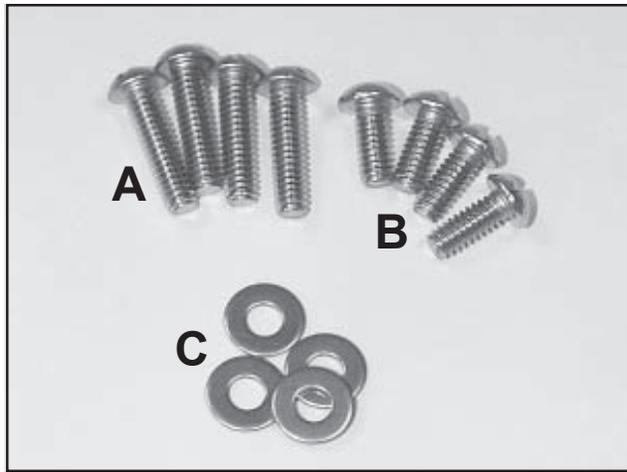


Figure 9. Items in Parts Package 009904

## Mounting the Scale on an SSCI Classic or Premier Lift Table

This section guides you in replacing an existing exam top on an SSCI Classic or Premier Lift Table with a new Auto 300 Electronic Scale. These instructions apply to both floor-standing and wall-mount tables, and both lateral and longitudinal tables.

### Tools Required

- 1/2-in. wrench
- 3/8-in. open-end wrench
- Phillips screwdriver

### Part Required

You will need one Bracket and Hardware Kit, P/N 212366, for mounting the Auto 300 display console (Figure 10 and Table 3).

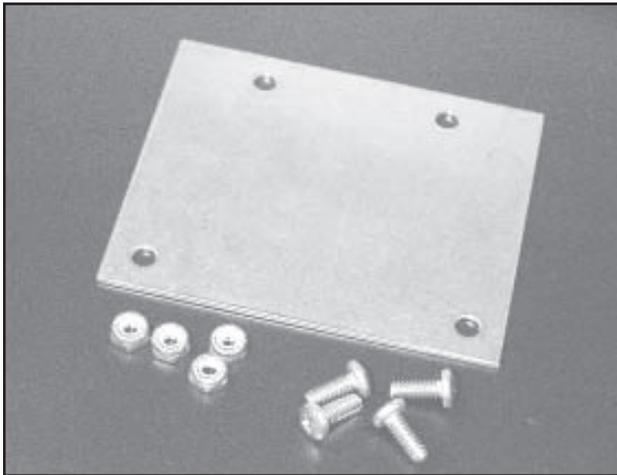


Figure 10. Bracket and Hardware Kit P/N 212366

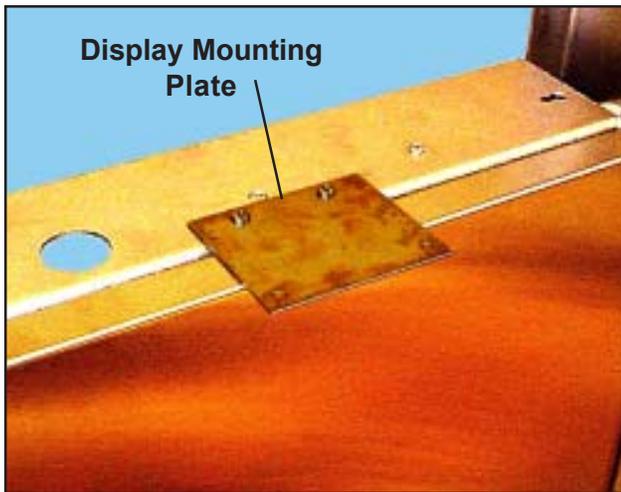
The following parts are included with the Bracket and Hardware Kit:

Description	Qty.	Part Number
Display Mounting Plate	1	618863
Cap Screw #10-24 x 1/2-in	4	850120
Hex Locknut #10-24	4	850401

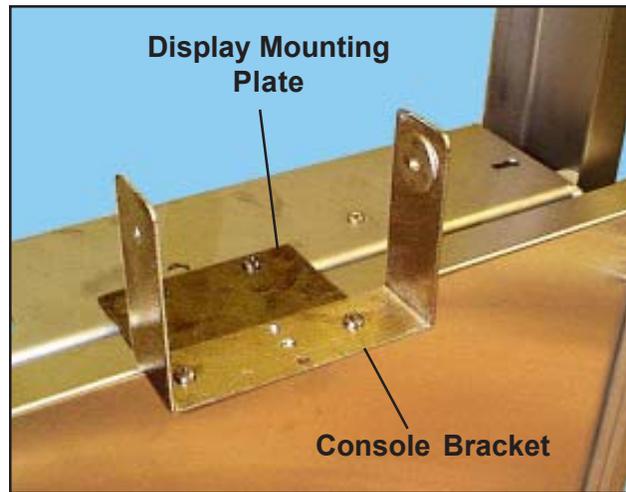
Table 3. Parts Included in P/N 212366

### Procedure Mounting the Display Console

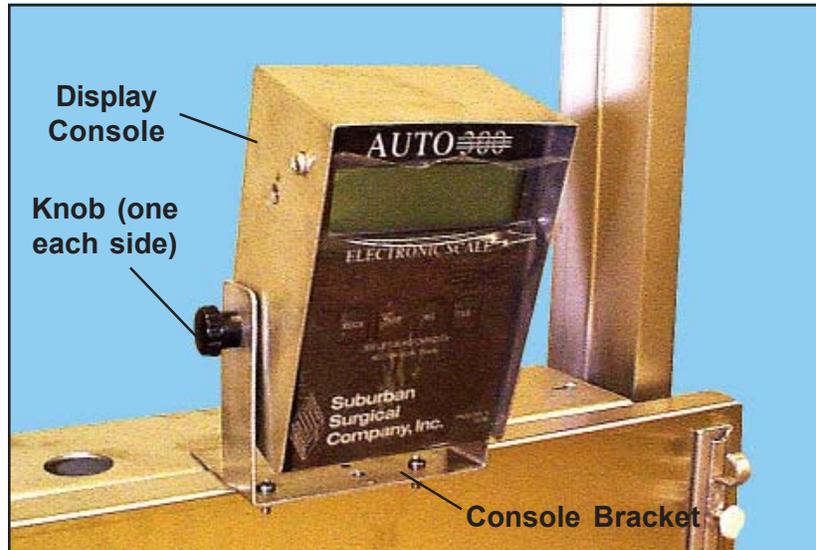
1. With a Phillips screwdriver and a 3/8-in. wrench, mount the display mounting plate to the top cross member of the sliding carriage with two 10-24 x 1/2-in. cap screws and locknuts supplied (Figure 11).
2. With a Phillips screwdriver and a 3/8-in. wrench, mount the console bracket to the display mounting plate with two 10-24 x 1/2-in. cap screws and locknuts supplied (Figure 12).
3. Mount the display console to the console bracket with the two black knobs supplied (Figure 13). **Note:** If preferred, the display console can be mounted with two 1/4-20 x 3/4-in. Phillips head screws supplied.
4. Peel the protective covering from the face of the display console.



**Figure 11. Display Mounting Plate on Sliding Carriage Cross Member**



**Figure 12. Mounting the Console Bracket on the Display Mounting Plate**



**Figure 13. Mounting the Display to the Bracket**

### **Mounting the Scale Platform**

1. Raise the table to provide access to the exam top mounting bolts underneath.
2. With an 1/2-in. wrench, remove the four nuts and washers under the table that secure the exam top to the lift table and remove the exam top.
3. Unwrap the display cable from the hooks under the scale platform frame (Figure 14).

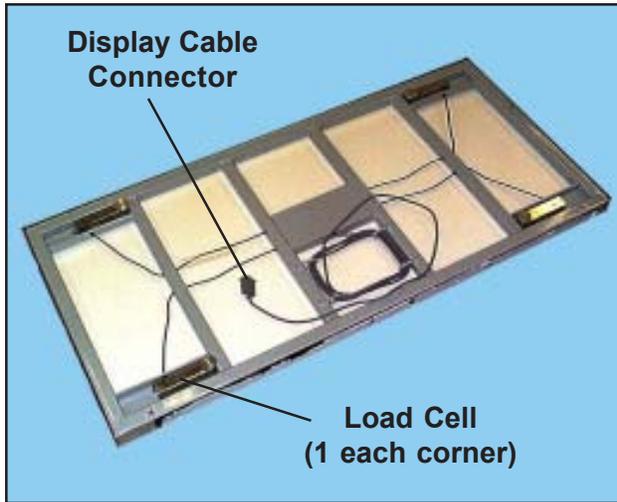


Figure 14. Underside of Scale Platform

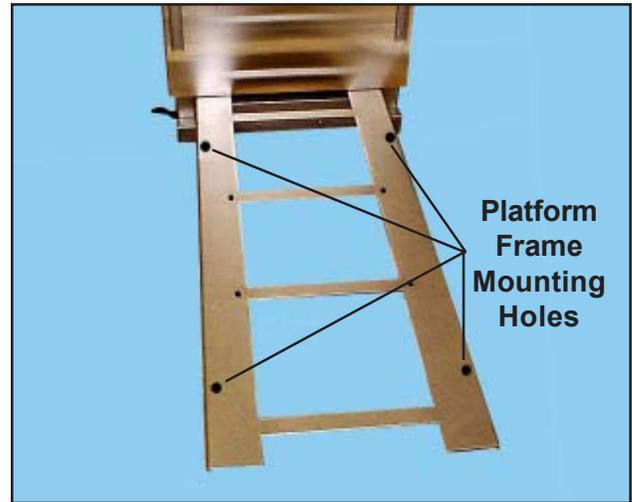


Figure 15. Longitudinal Table - Scale Platform Mounting Holes

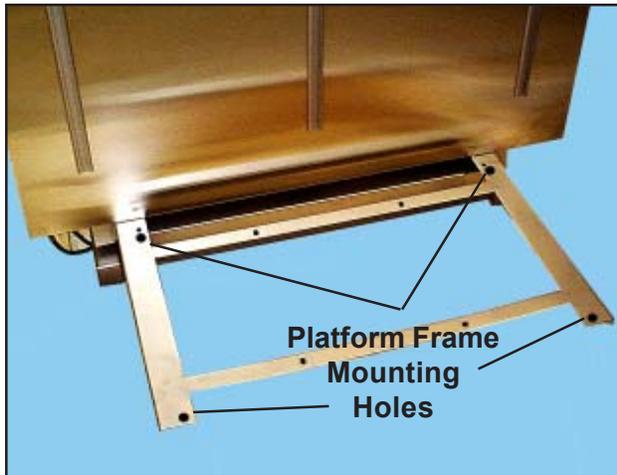


Figure 16. Lateral Table - Scale Platform Mounting Holes

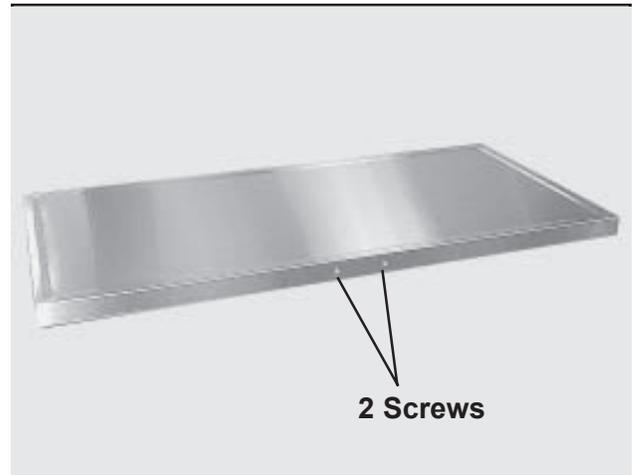
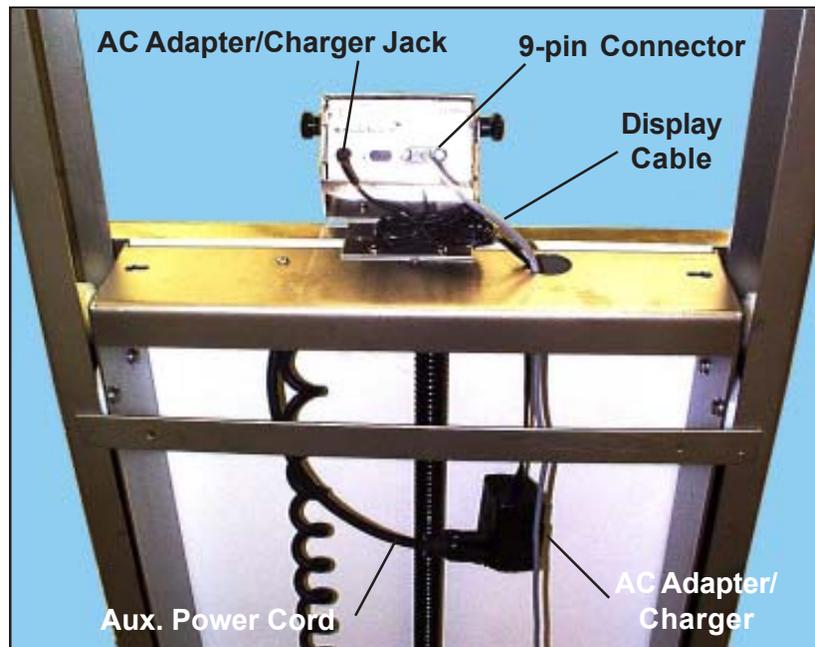


Figure 17. Scale Top in Place

4. Place the scale platform on the lift table arms so that the load cells under the frame line up with the mounting holes in the arms (Figure 15 or 16). The front of the platform is the side with the two machine screws (Figure 17). Make sure that all four load cells rest on the table arms and that the scale is stable and does not rock.  
**Note:** The display cable should exit to the rear to facilitate routing to the display console.
5. Secure the scale platform to the table arms with four 1/4-20 x 5/8 in. screws and flat washers. **Note:** Fasten the screws down no more than finger-tight.

6. If this is a wall-mount table, remove the table from the wall to provide access to the rear of the table.
7. Thread the display cable up through the large holes in the cross members of the sliding carriage (Figure 18).
8. Loosen the knobs and tilt the display console forward to access the terminals on the bottom.
9. Plug the display cable 9-pin male connector into the female terminal on the display console (Figure 18), and secure the connector with the two locking screws.



**Figure 18. AC Adapter/Charger and Display Cable Connections**

10. Plug the AC adapter/charger into the auxiliary power cord hanging in the rear of the lift table.
11. Route the AC adapter/charger wire through the large hole in the upper cross member of the sliding carriage.
12. Plug the AC adapter/charger jack into the matching port on the display console.
13. Coil up and bind any loose AC adapter/charger wire into a neat bundle.

14. Loosen the knobs, return the display console to a comfortable viewing angle, and re-tighten the knobs.
15. If desired, mount one or more of the self-adhesive plastic cable clamps to the rear of the table back panel to secure the display cable.
16. If this is a wall-mount table, refasten the table to the wall.
17. Re-wrap any excess length of display cable back around the hooks on the scale platform.
18. Peel the protective covering from the top.
19. **Optional** - Place the black vinyl mat on the scale top.
20. Proceed to *Preparation for Use* on *Page 23*.

## Mounting the Scale on an SSCI Transport/Prep Cart

This section guides you in replacing an existing top on an SSCI Transport/Prep Cart with a new Auto 300 Electronic Scale. These instructions cover carts either with or without lower shelves.

### Tool Required

- Phillips screwdriver
- Flat-blade screwdriver

### Procedure

#### Mounting the Display Console

**Note:** You can mount the display console to either of two positions on the cart (Figure 19) depending on whether you prefer the display on the right or left

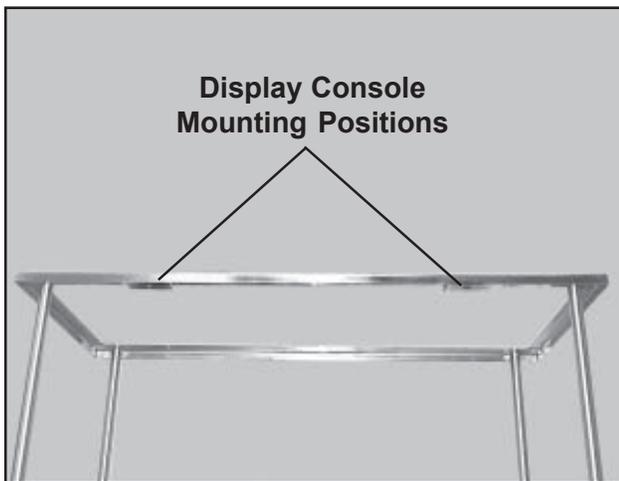


Figure 19. Display Console Mounting Positions on Cart

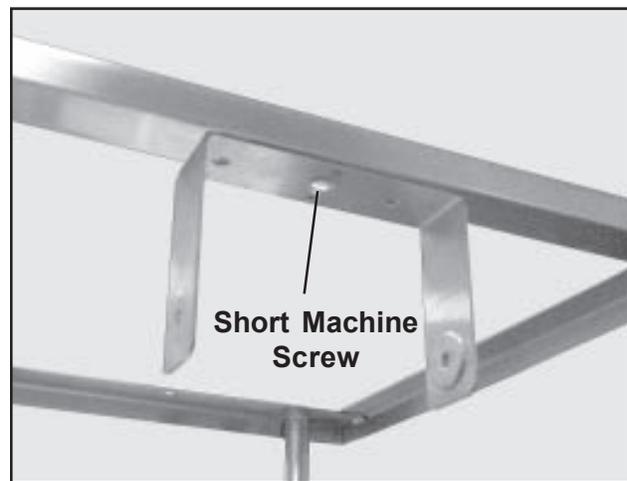


Figure 20. Console Bracket in Place

1. Remove the existing top from the cart by removing the four mounting screws that hold the top to the cart.
2. With the single, short machine screw supplied, mount the console bracket to the location of your choice (Figure 20).
3. Mount the display console to the console bracket with the two black knobs supplied (Figure 21).  
**Note:** If preferred, the bracket can be mounted with two 1/4-20 x 3/4-in. Phillips head screws supplied.
4. Plug the display cable into the terminal under the console (Figure 22) and tighten the two retaining screws.
5. Peel the protective covering from the face of the display console.

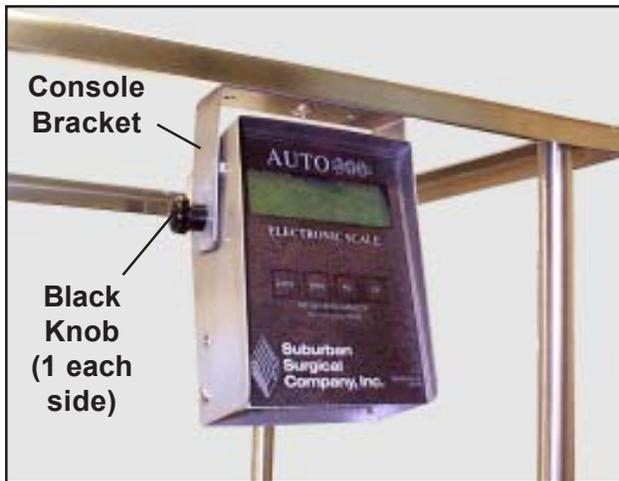


Figure 21. Display Console in Console Bracket

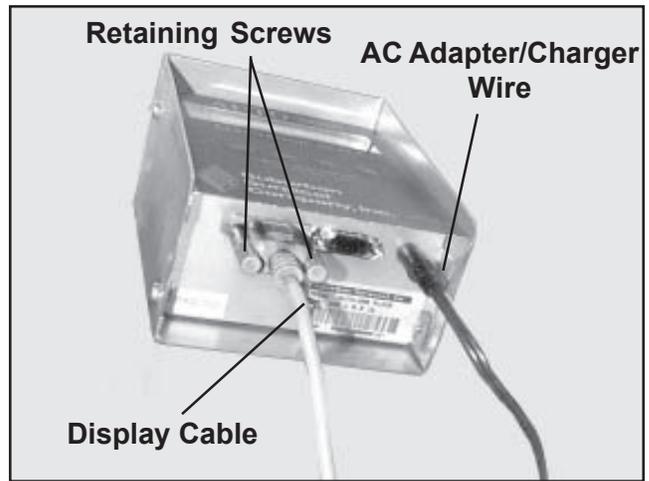


Figure 22. Cable Connections Under Display Console

### Mounting the Scale Platform

**Note:** The front side of the scale platform is the side with the two machine screws (Figure 17). This side should be on the same side of the cart as the display console.

1. Place the scale platform on the cart so that the load cells under the frame line up with the mounting holes on the cart frame (Figures 23 and 24). Make sure that the scale is stable and does not rock.
2. Secure the scale to the frame with four 1/4-20 x 5/8-in. screws and flat washers provided. **Note:** Fasten the screws down no more than finger-tight.

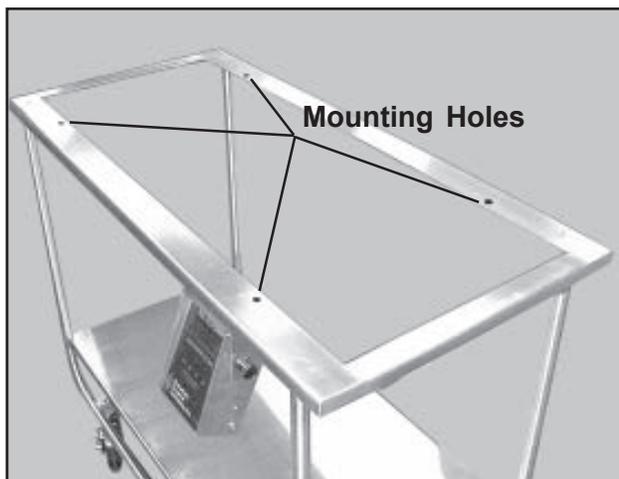


Figure 23. Scale Platform Mounting Holes in the Cart Frame



Figure 24. Scale Platform Mounted on Cart

3. Re-wrap any excess length of display cable back around the hooks on the platform frame.
4. Peel the protective covering from the scale top.
5. **Optional** - Place the black vinyl mat on the scale top.
6. Proceed to *Preparation for Use* on Page 23.

## Mounting the Scale on an SSCI Pedestal Exam/Treatment Table

This section guides you in replacing an existing top on an SSCI Pedestal Exam/Treatment Table with a new Auto 300 Electronic Scale.

### Tools Required

- Flat-blade screwdriver
- Phillips screwdriver

### Procedure Mounting the Scale Platform

1. Remove the existing top from the table by removing the four mounting screws that hold the top to the table base arms.

**Note:** The front side of the scale platform frame is the side with the two machine screws (Figure 17).

2. Place the scale platform on the table so that the load cells under the frame line up with the mounting holes in the table base arms (Figures 25 and 26). Make sure that the scale is stable and does not rock.
3. Secure the scale platform to the base arms with four 1/4-20 x 5/8-in. screws and flat washers provided  
**Note:** Fasten the screws down no more than finger-tight.
4. Peel the protective covering from the scale top.
5. **Optional** - Place the black vinyl mat on the scale top.

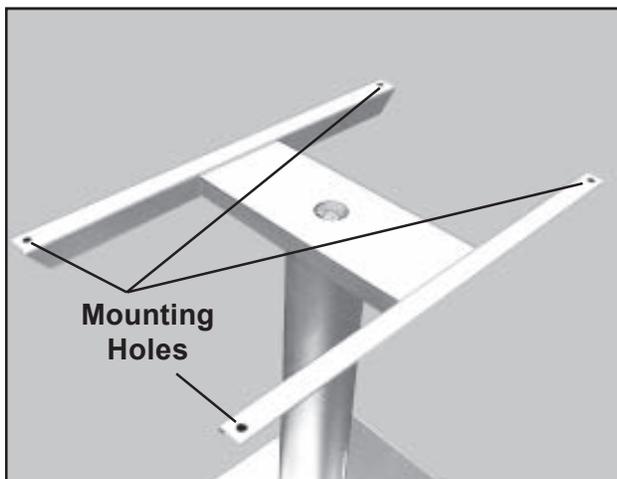


Figure 25. Scale Platform Mounting Holes in the Table Base Arms

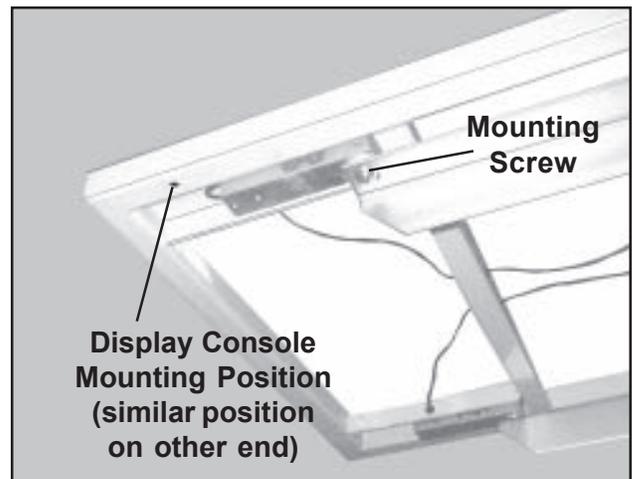


Figure 26. Display Console Mounting Positions Under Scale Platform

## Mounting the Display Console

**Note:** You can mount the display console to either of two positions under the scale platform. (Figure 26) depending on whether you prefer the display on the right or left.

1. With the single, short machine screw supplied, mount the console bracket to the location of your choice (Figure 27).
2. Mount the display console to the console bracket with the two black knobs supplied (Figure 28).  
**Note:** If preferred, the bracket can be mounted with two 1/4-20 x 3/4-in. Phillips head screws supplied.
3. Plug the display cable into the terminal under the console (Figure 22) and tighten the two retaining screws.
4. Peel the protective covering from the face of the display console.

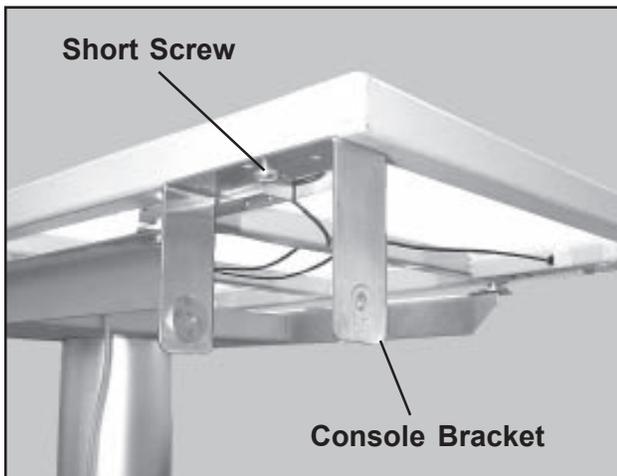


Figure 27. Console Bracket in Place

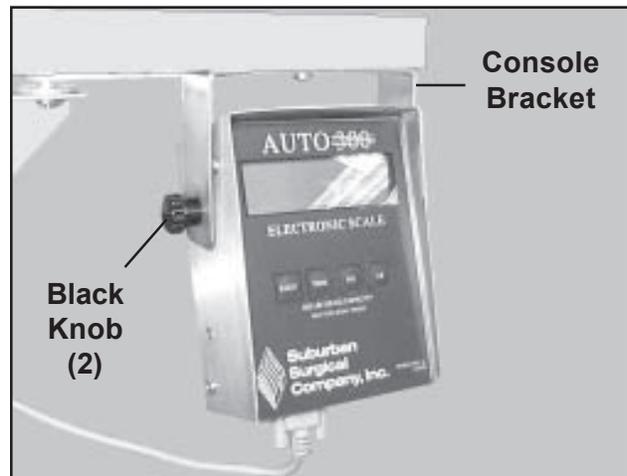


Figure 28. Display Console in Console Bracket

5. Re-wrap any excess length of display cable back around the hooks on the platform frame.
6. Proceed to *Preparation for Use* on Page 23.

## Mounting the Scale on an SSCI Laminated Exam/ Treatment Table

This section guides you in replacing an existing top on an SSCI Laminated Exam/Treatment Table with a new Auto 300 Electronic Scale.

### Tools Required

- Flat-blade screwdriver
- Phillips screwdriver

### Procedure

#### Mounting the Scale Platform

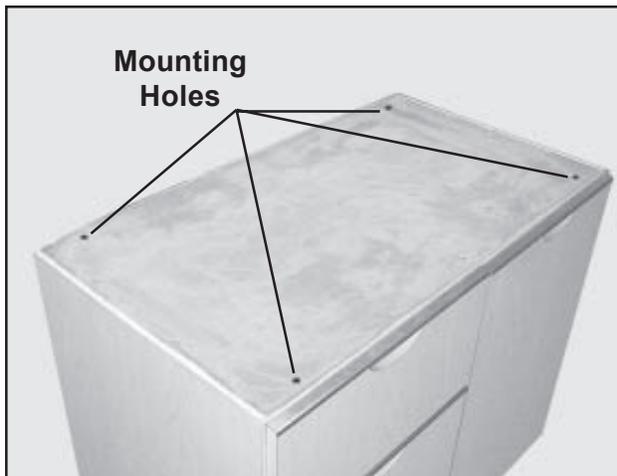
1. Remove the existing top from the table by removing the four mounting screws that hold the top to the table.

**Note:** The front side of the scale platform is the side with the two machine screws (Figure 17).

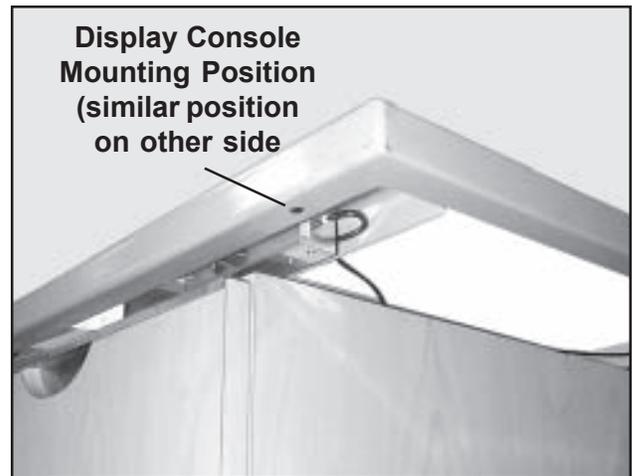
2. Place the scale platform on the table so that the load cells under the frame line up with the mounting holes in the table (Figure 29). Make sure that the scale is stable and does not rock.

3. Secure the scale platform to the table with four 1/4-20 x 1-in. screws and flat washers provided.

**Note:** Fasten the screws down no more than finger-tight.



**Figure 29. Platform Frame Mounting Holes in the Table**



**Figure 30. Display Console Mounting Positions Under Platform Frame**

4. Peel the protective covering from the scale top.
5. **Optional** - Place the black vinyl mat on the scale top.

## Mounting the Display Console

**Note:** You can mount the display console to either of two positions under the scale platform (Figure 30) depending on whether you prefer the display on the right or left.

1. With the single, short machine screw supplied, mount the console bracket to the location of your choice (Figure 31).
2. Mount the display console to the console bracket with the two black knobs supplied (Figure 32).  
**Note:** If preferred, the bracket can be mounted with two 1/4-20 x 3/4-in. Phillips head screws supplied.
3. Route the display cable under the scale platform and plug it into the terminal under the console (Figure 22) and tighten the two retaining screws.
4. Re-wrap any excess length of display cable back around the hooks on the platform frame.
5. Peel the protective covering from the face of the display console.
6. Proceed to *Preparation for Use* on Page 23.

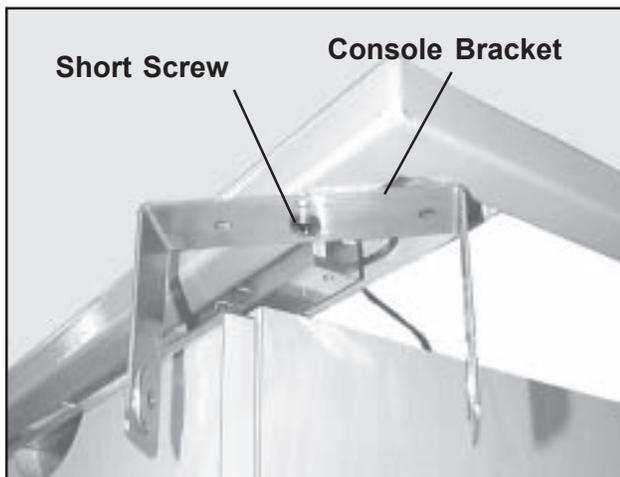


Figure 31. Console Bracket in Place

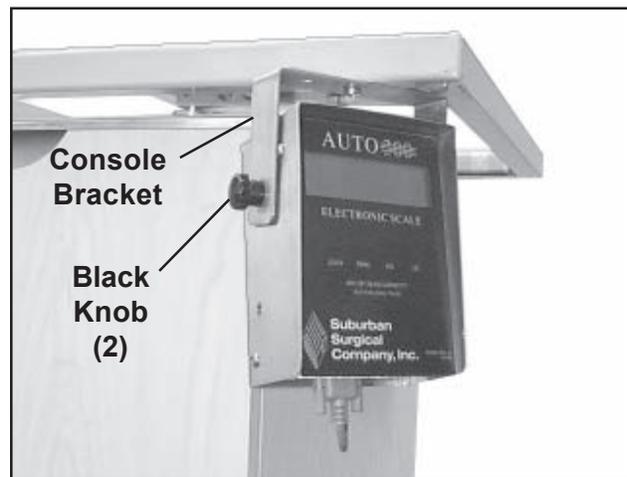


Figure 32. Display Console in Console Bracket

## Preparation for Use

1. Plug the AC adapter/charger wire into the terminal under the display console (Figure 22).
2. Plug the AC adapter/charger into a standard 120 VAC outlet.
3. Turn the scale on by pushing the switch under the console to **ON** (Figure 33). The display will illuminate and count down to 0.0 LB (or KG).
4. Select your desired unit of measure, pounds (LB) or kilograms (KG) by pressing the appropriate button on the console face (Figure 36).
5. Turn the scale off by pushing the On/Off switch to **OFF**.
6. Allow the scale to sit and re-charge for several hours. Refer to *Charging the Battery* on Page 25 for details.
7. Read and understand *Chapter 3, Operation and Care*.

## Disposition of the Shipping Carton

The shipping carton can be cut up and thrown away. It is large and bulky and takes up considerable space. If adequate space is available, however, it might be handy to retain the carton in case reshipment of the scale to the manufacturer becomes necessary for repairs.



# Chapter 3 - Operation & Care

## Introduction

Operating the Auto 300 Electronic Scale is simple. The following instructions cover:

- Turning the Scale On and Off - *Page 25*
- Charging the Battery - *Page 25*
- Selecting the Unit of Measure - *Page 26*
- Weighing Restless Animals - *Page 26*
- Weighing Animals in a Container - *Page 27*
- Using the "Sleep" Mode - *Page 28*
- Testing the Scale Accuracy - *Page 28*
- Operating Tips - *Page 30*

## Operating the Auto 300 Scale

### Turning the Scale On and Off

The scale is turned on and off using the switch under the display console (Figure 33). To turn the scale On, push the switch to the left. To turn the scale Off, push the switch to the right.

**Note:** A few seconds delay between turning the unit On and the display appearing on the screen is normal. This especially true if there is a weight on the scale platform.

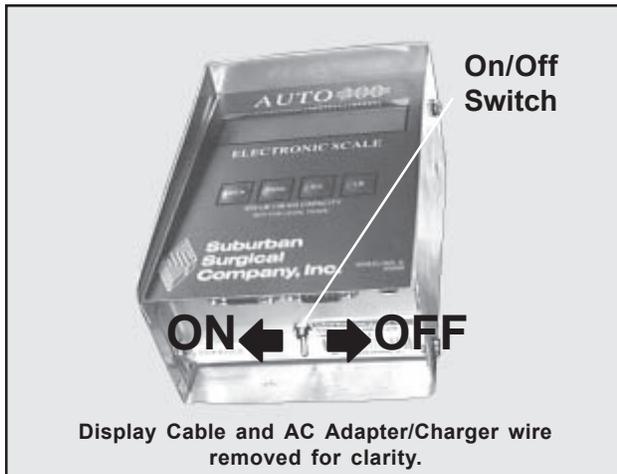


Figure 33. On/Off Switch

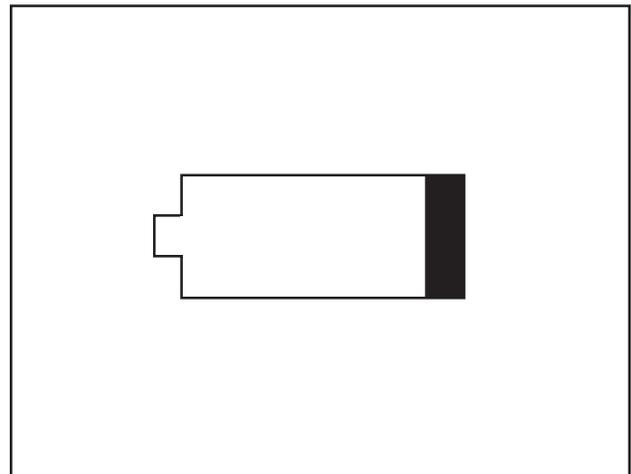


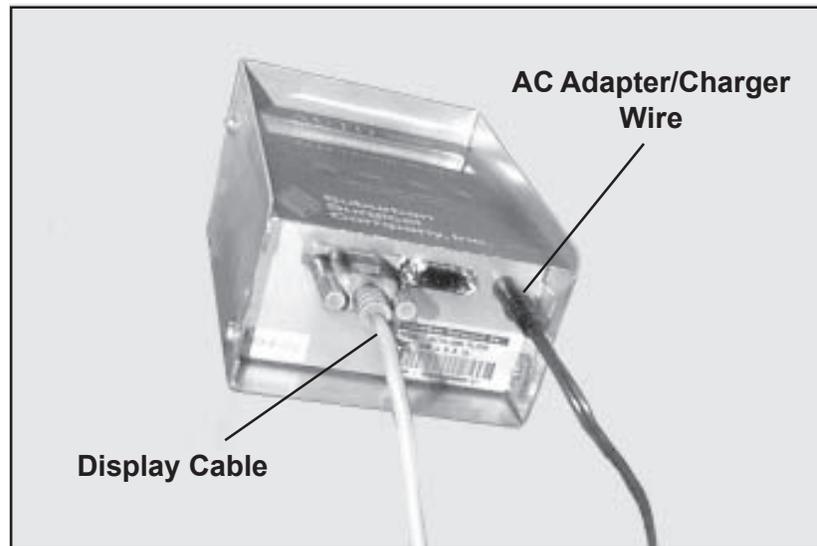
Figure 34. "Battery Low" Icon

### Charging the Battery

If the charger is not in use and the scale is left on continuously, the battery will operate for about 15 hours. When the "Battery Low" icon (Figure 34) appears in the upper left corner of the display readout, it is time to re-charge the battery. You may not get accurate readings when the "Battery Low" icon is illuminated.

To re-charge the battery, plug the AC adapter/charger into a standard 120 VAC wall socket and insert the other end of the wire into the terminal under the display console (Figure 35). **Note:** It is OK to leave the charger plugged in continuously - you cannot overcharge the battery and it will not damage the scale in any way.

We recommend that you leave the AC adapter/charger plugged in continuously, or plug it in only when the Low Battery icon is displayed. Avoid constantly plugging and un-plugging the AC adapter/charger while the Battery Low icon is not displayed. This is very harmful to the battery and may result in early failure.



**Figure 35. AC Adapter/Charger Wire In Display Console Terminal**

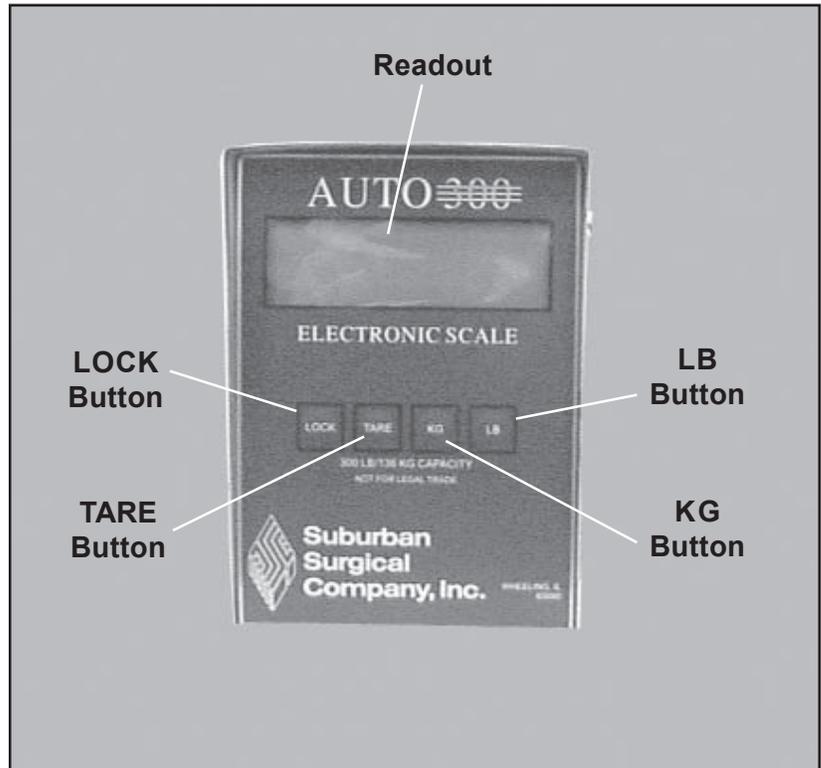
### Selecting the Unit of Measure

You can select whether the Auto 300 Scale will display readings in pounds or kilograms. To display weight in pounds, press the **LB Button** on the display console face (Figure 36). To display weight in kilograms, press the **KG Button**. When pounds are selected, the symbol **lb** appears to the right of the weight in the readout. When kilograms are selected, the symbol **kg** appears. If these symbols are blinking, it indicates that the “Lock” feature is not engaged (refer to *Weighing Restless Animals* below).

### Weighing Restless Animals

The Auto 300 Scale is equipped with a “Lock” feature that locks-in to an average weight to weigh restless or active animals. To activate the Lock feature, press the **Lock Button** on the display console (Figure 36). When Lock is activated, the **lb** or **kg** symbol (whichever is selected) will stop blinking. To de-activate the Lock feature, press the **Lock Button** again.

To use, press the **Lock Button** either before or after placing the animal on the scale. After about three-seconds, an average weight will be computed and displayed in the readout. If desired, you can change between pounds and kilograms while the weight is displayed. Press the **Lock Button** again when you are finished with the Lock feature. After you remove the animal from the scale, the readout will return to **0.0**.



**Figure 36. Display Console Face**

### **Weighing Animals in a Container**

Occasionally, it may be necessary to weigh an animal in a basket, box, or other container. The Auto 300 Scale provides a “Tare” feature that involves weighing the empty container, then weighing the animal in the container. The scale computes the animal’s weight and displays it in the readout. To use the Tare feature:

1. Place the empty container on the scale. The scale will display the container weight.
2. Press the **TARE Button** (Figure 36). The letter **T** will appear in the display.
3. Place the animal in the container (still on the scale). The scale will display the weight of the animal only.

4. If the animal is active or restless, press the **Lock Button** (refer to *Weighing Restless Animals* on Page 27).
5. Remove the animal and container from the scale.
6. If the **Lock Button** was pressed above, press it again to de-activate the Lock feature.
7. Press the **TARE Button** to return the display to **0.0**.

### Using the “Sleep” Mode

The Auto 300 Scale has a “Sleep” feature which can be used to prolong battery life. The Sleep Mode can be turned on or off. When the feature is turned on, the scale will enter the Sleep Mode after about three minutes of inactivity, and the readout will display the word **SLEEP**. To activate the scale when it is in the Sleep Mode, press any button. The scale comes from the factory with the Sleep Mode enabled. To enable or disable the Sleep Mode:

1. Push the **On/Off Switch** (Figure 33) to the right to turn the scale Off.
2. While pressing and holding the **KG Button** (Figure 36), push the **On/Off Switch** to the left to turn the scale On.
3. After the readout displays “\_\_\_\_\_”, release the **KG Button**. The readout will display **1** or **0**.
  - 1** = Sleep Mode On
  - 0** = Sleep Mode Off
4. Use the **LOCK Button** (Figure 36) to select **1** or **0**.
5. Press the **TARE Button** to save the setting.

### Testing the Scale Accuracy

It is good practice to check the scale’s accuracy about once a month. The scale should be accurate to  $\pm 1.0\%$ . To check scale accuracy, place an object of exactly known weight on the scale. If an object of exactly known weight (such as a body-building lifting weight) is not available, you can use bags of pet-food or similar containers. Try to use a weight of at least fifty-pounds. Be aware, however, that the weights of pet-food containers are not exact and can vary by several pounds between bags.

The scale should display a weight within 1.0% of the weight of the object. Examples are:

- A 50 lb. weight should indicate 49.50 to 50.50 lbs.
- A 100 lb. weight should indicate 99 to 101 lbs.
- A 150 lb. weight should indicate 148.50 to 151.50 lbs.
- A 200 lb. weight should indicate 198 to 202 lbs.

If the indicated weight is not within 1.0% of the object weight, refer to *Calibrating the Scale* on Page 52.

## List of Icons

Several icons are displayed on the readout. These icons and their meanings are shown in Table 4.

Icon	Meaning
	Battery is low
	There is nothing on the scale
<b>lb</b>	Weight will be displayed in pounds
<b>kg</b>	Weight will be displayed in kilograms
<b>P</b>	not used
<b>T</b>	Tare weight is being measured
<b>G</b>	not used
<b>N</b>	not used
	The reading is stable
<b>pcs</b>	not used
<b>oz</b>	not used
<b>%</b>	not used
	negative amount

**Table 4. Icons Used in the Auto 300 Display Readout**

## Operating Tips

- Do not place the scale in an area subject to drafts from air conditioners, heating vents or exterior doors. Exposing the scale to wide variations in temperature can degrade the micro-processor's accuracy.
- Always place the scale on a surface that is fairly level. An unlevel floor will affect scale accuracy.
- When the scale is turned on in the morning, allow it to warm up for about 20 minutes before using. If, after the 20-minute warm up period, the scale does not display **0.0**, turn it off, and then on again. This can help stabilize the micro-processor.

## Safety Notes

**CAUTION:** The Auto 300 Scale is designed to carry weights up to 300-pounds (136 kg). Placing weights greater than 300-pounds on the scale can damage the weighing mechanism.

**CAUTION:** Do not allow heavy weights to be suddenly applied to the scale (for example: a child jumping on the scale). Such "shock loads" can damage the load cells under the scale, and will VOID YOUR WARRANTY!

**CAUTION:** If the Auto 300 Scale is mounted on a transport/prep cart, remember to un-plug the AC adapter/charger, either from the wall outlet or the bottom of the display console, before moving the cart.

## Cleaning the Electronic Scale

### Introduction

You will no doubt want to clean your electronic scale whenever it becomes dirty or saturated with waste fluids. Maintaining high standards of sanitation will be an important priority for your facility. Always turn the scale off before cleaning.

### Cleaning the Display Console

When necessary, wipe the display console with a slightly damp cloth, then dry off with a clean dry cloth. Do not soak the console; excessive amounts of water can damage the electronics.

### Cleaning the Scale Platform

Whenever necessary, rinse the platform with clear water and dry thoroughly with clean, soft cloths. **Note:** NEVER power-wash the scale.

Ordinary deposits of waste and fluids can usually be removed with soap and water. Stubborn deposits may require scrubbing with "stainless steel" wool, nylon or plastic scrubbers and/or the use of commercial cleaning products. Always scrub in the direction of the "grain" of the metal. Rinse with clear water and dry thoroughly with clean, soft cloths. Minor scale build-up and some hard water spotting may be removed by washing with vinegar, followed by a neutralizing rinse of clear water and a thorough drying with clean, soft cloths.

For heavy deposits of scale, 5% oxalic acid (use warm), 5-15% sulfamic acid, or 5-10% phosphoric acid may be used. As always, rinse with clear water and dry thoroughly with clean soft cloths.,

Avoid prolonged use of chlorides (such as chlorine bleach), bromides, iodides and thiocyanates. Never allow salty solutions to dry on the stainless steel.



## Chapter 4 - Repairs & Replacements

### Replacement Parts

The following replacement parts are available for the Auto 300 Scale. For parts not listed below, contact SSCI Customer Service. Refer to *Contact Information* on Page 6 and *Parts Ordering Procedure* on Page 34.

Description	SSCI Part Number	Replacement Instructions
Display Console	212489-PT	Page 35
Scale Top	615157	Page 36
Stiffening Board	753200	Page 37
AC Adapter/Charger	854117-PT	Page 38
Console Bracket	207733	Page 39
Display Console Battery	854685	Page 40
Display Cable	854067	Page 44
Fuse	854695	Page 47
Load Cell	209687	Page 48
Display Mounting Plate (Classic and Premier Lift Tables only)	212366	Page 51
Display Console Knob	853170	Page 52

**Table 5. Replacement Parts for Auto 300 Scale**

### General

- Many threaded fasteners used on the scale are secured with thread adhesive to insure structural integrity. Removing any screw or bolt may be difficult at first.
- If during dis-assembly, you remove any tape, cable ties, etc., remember to replace them when the installation is complete.
- During dis-assembly, retain all hardware items such as screws, nuts, lockwashers, etc. for re-assembly.
- If you have problems with any procedure, please feel free to call SSCI Customer Service at 1-800-323-7366.

## Parts Ordering Procedure

Order new equipment, accessories and/or replacement parts from your local dealer, or directly through SSCI Customer Service. Refer to *SSCI Contact Information* on *Page 6* for address, telephone and fax numbers.

For more information on SSCI's fine line of products, refer to your SSCI product catalog or talk to your SSCI sales representative. Find replacement part descriptions and numbers on *Page 33*.

When ordering, please provide the following:

- Your name
- Company name
- Company account number
- Your telephone number
- Shipping address
- Billing address (if different from shipping address)
- Names, part numbers and quantities of items being ordered
- Credit card number and expiration date, or other payment information
- Preferred method of shipment
- Information on whether the items are required on a normal or urgent basis

## Use of Figures in This Chapter

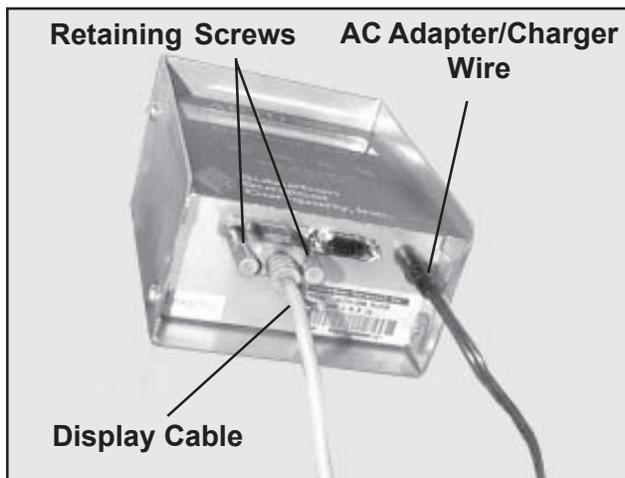
The Auto 300 Scale can be mounted to a variety of SSCI products. The figures in this chapter will show only one particular application, however, they are applicable to all. It would be impractical and unwieldy to show all applications in each case.

## Procedures

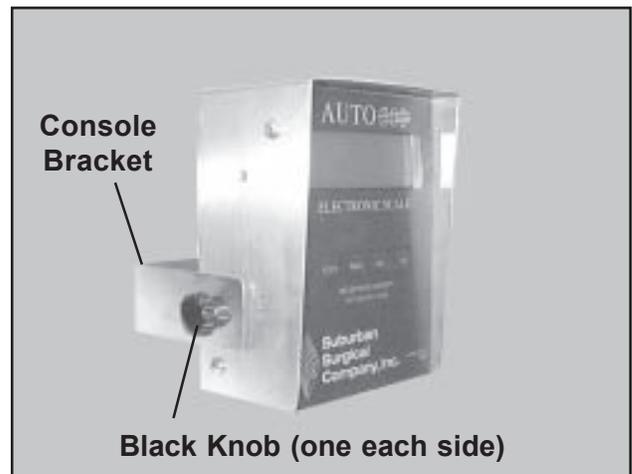
### Display Console P/N 212489-PT

#### Procedure

1. Make sure the scale is turned off.
2. Loosen the two retaining screws and release the display cable from the bottom of the console (Figure 37).
3. If in place, unplug the AC adapter/charger wire from the console.
4. Remove the two black knobs (or the Phillips head screws if used in their place) and remove the display console from the console bracket (Figure 38).



**Figure 37. Removing the Display Cable**



**Figure 38. Removing the Console from the Console Bracket**

5. Mount the new display console into the console bracket and secure with the two black knobs (or Phillips head screws, if preferred).
6. Connect the display cable to the appropriate terminal on the underside of the console (Figure 37) and secure with the two retaining screws.
7. Plug the AC adapter/charger wire into its terminal under the console.
8. Allow the console to remain on the charger for several hours before use.

## Scale Top

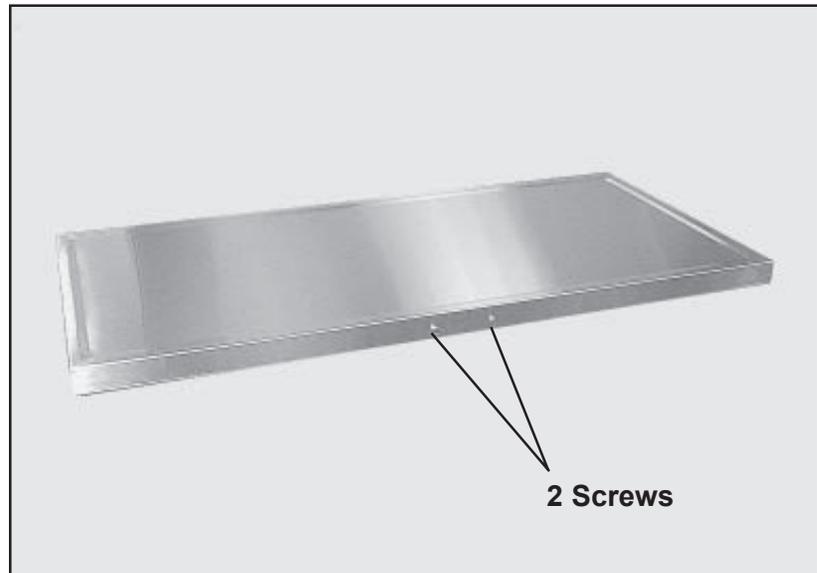
P/N 615157

### Tool Required

- Phillips screwdriver

### Procedure

1. With a Phillips screwdriver, remove the two screws in the side of the platform frame (Figure 39).
2. Lift the scale top from the platform.



**Figure 39. Screws in Scale Top (not column-mounted display)**

3. Place the new scale top on the platform with the two screw holes aligned with the holes in the frame.
4. Secure the top by re-installing the two screws removed in *Step 1*.

## Stiffening Board

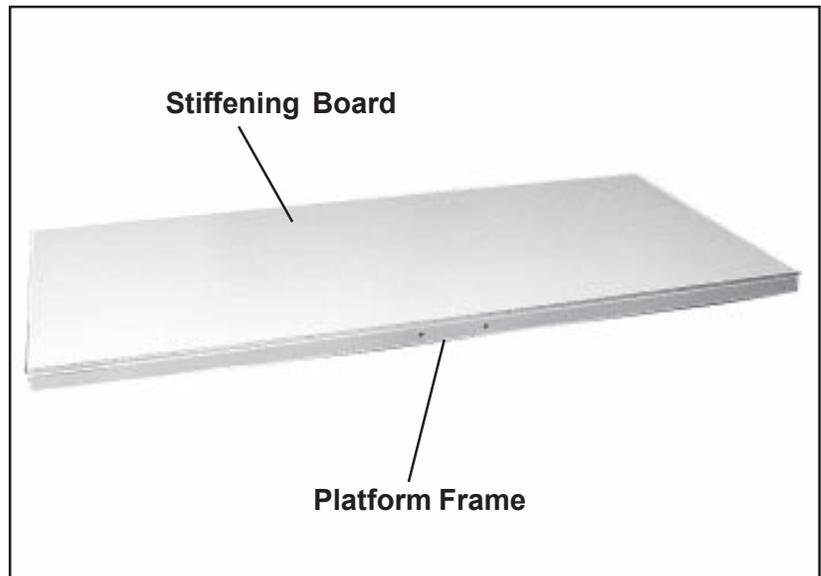
P/N 753200

### Tool Required

- Phillips screwdriver

### Procedure

1. Refer to *Scale Top* on *Page 36* and perform *Steps 1* and *2*.
2. Lift the stiffening board off the platform frame (Figure 40).



**Figure 40. Removing the Stiffening Board**

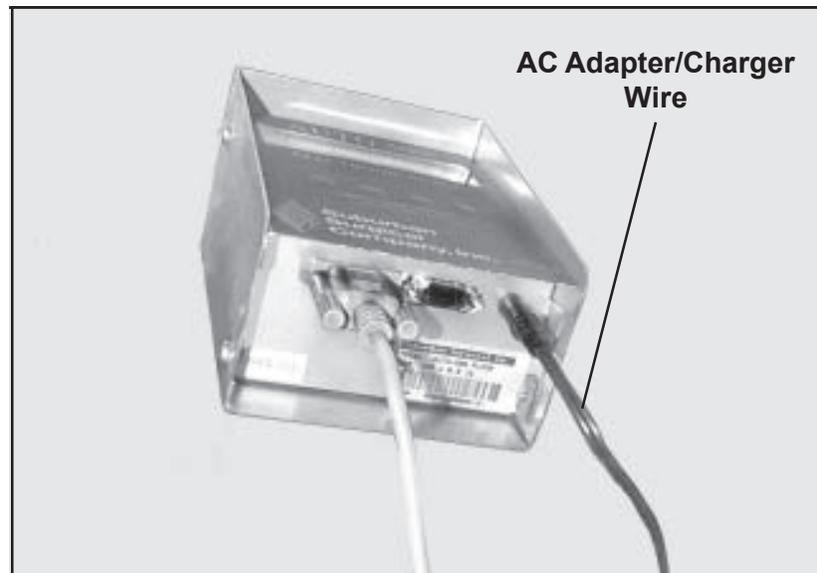
3. Place the new stiffening board on the platform frame.
4. Refer to *Scale Top* on *Page 36* and perform *Steps 3* and *4*.

## AD Adapter/Charger

P/N 854117-PT

### Procedure

1. Make sure the scale is turned off.
2. Unplug the AC adapter/charger wire from the bottom of the console (Figure 41).
3. Unplug the AC adapter/charger from the wall socket and discard the AC adapter/charger.



**Figure 41. Removing the AC Adapter/Charger Wire**

4. Plug the new AC adapter/charger into the wall socket.
5. Plug the AC adapter/charger wire into the terminal on the bottom of the display console.

## Console Bracket

P/N 207733

## Tool Required

- Phillips screwdriver

## Procedure

1. Remove the two black knobs and remove the display console from the console bracket (Figure 42).  
**Note:** It is not necessary to disconnect the display cable or the AC adapter/charger wire from the console.
2. Remove the screw(s) that hold the console bracket to whatever surface it is attached, and remove the bracket.
3. Fasten the new bracket to the original mounting surface with the screw(s) removed in *Step 2* (Figure 43).
4. Re-mount the display console to the console bracket.

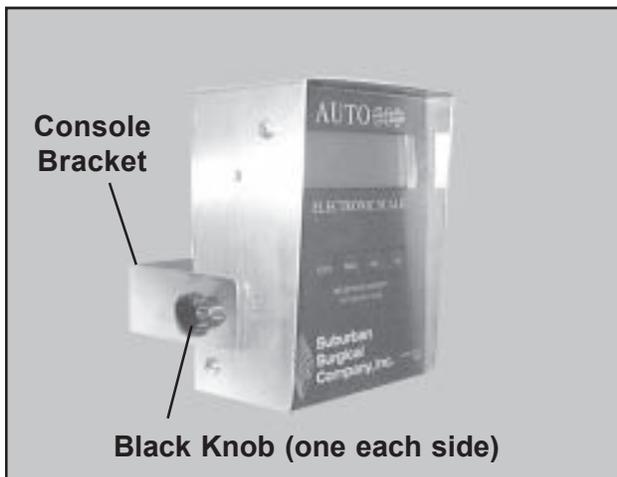


Figure 42. Removing the Console from the Console Bracket

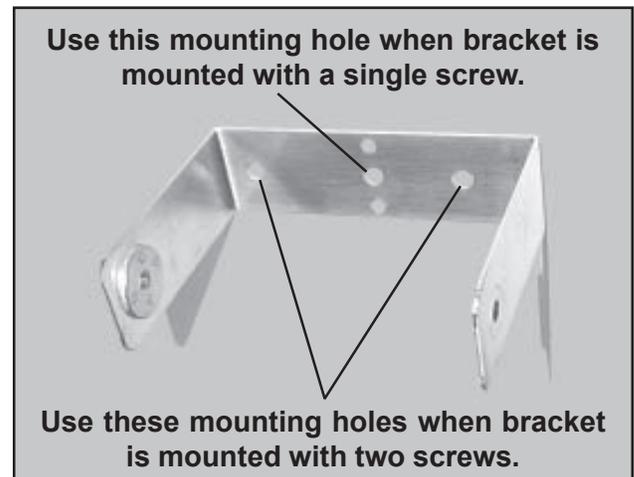


Figure 43. Console Bracket Mounting Holes

**Display Console  
Battery**  
P/N 854685

**Tools Required**

- Phillips screwdriver
- Small Phillips screwdriver
- Small flat-blade screwdriver
- Needle-nose pliers

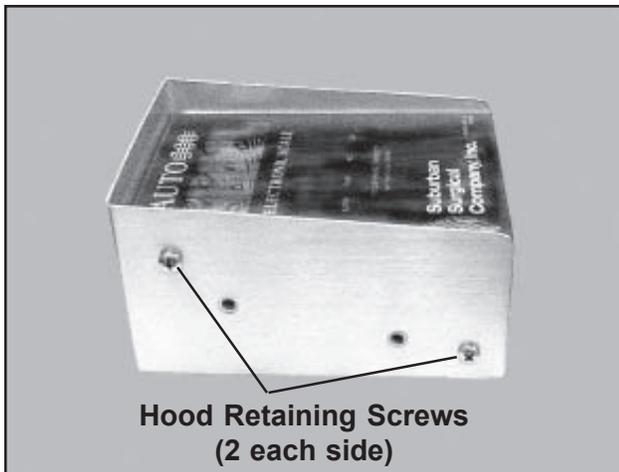
**CAUTION:** Do not short across the battery terminals.

**Removal**

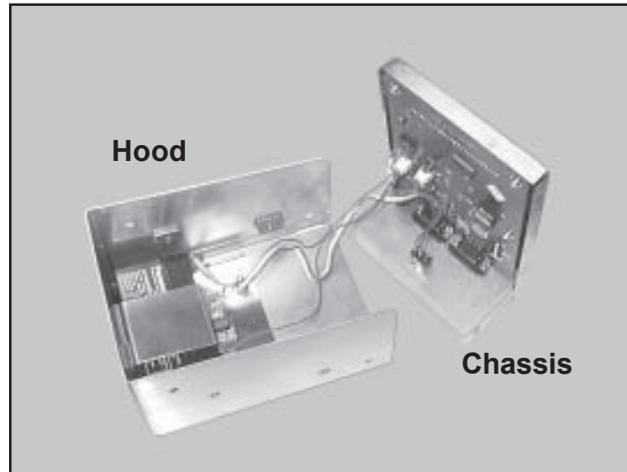
1. Make sure the scale is turned off.
2. Remove the display console from the console bracket. Refer to *Display Console* on *Page 35* and perform *Steps 1* through *4*.
3. With a Phillips screwdriver, remove the four screws that hold the hood onto the display console chassis (Figure 44).

**CAUTION:** In the next step you will remove the hood and expose electrical components in the console. Use caution around the electrical wiring and components to prevent injury to yourself and/or damage to the equipment.

4. Separate the hood and chassis (Figure 45).



**Figure 44. Removing Console Hood Retaining Screws**



**Figure 45. Console Hood Removed from Chassis**

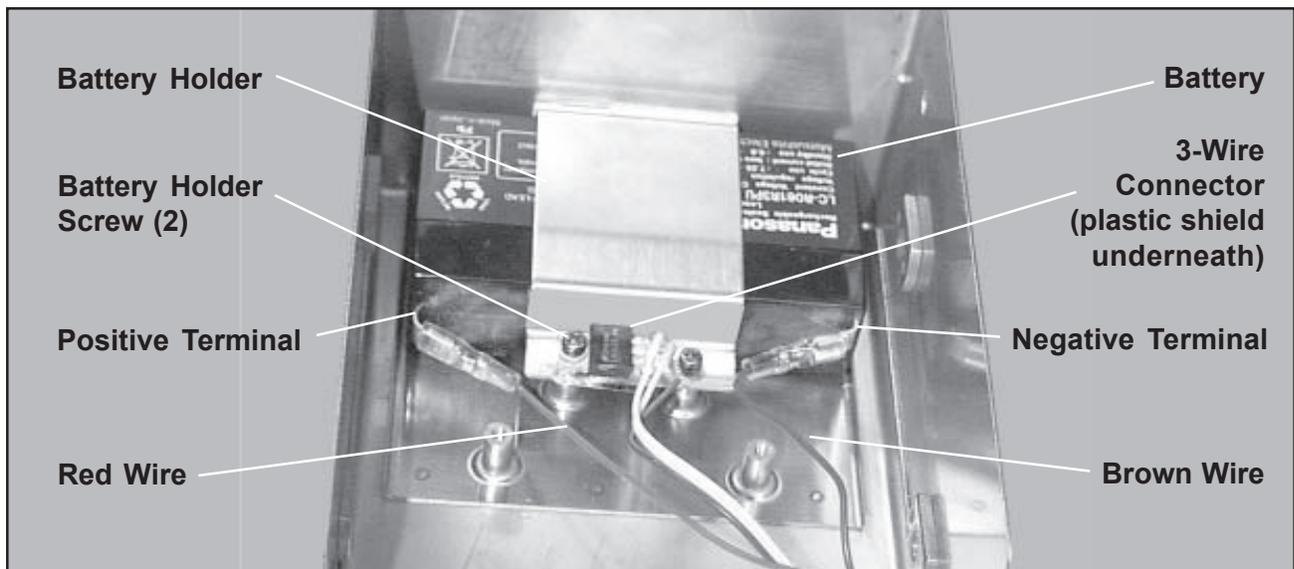


Figure 46. Components Inside the Auto 300 Display Console Hood

4. Inside the hood, take the brown wire off the negative terminal (Figure 46). **Note:** Slide the plastic sleeve down the wire, away from the terminal, until the spade connector is exposed. Use a small flat-blade screwdriver to pry the connector off the terminal. **DO NOT** pull on the wire itself or you may pull the wire off the connector.
5. In the same way, take the red wire off the positive terminal.
6. With a small Phillips screwdriver, remove the two battery holder screws (Figure 46). The screws are held in with thread adhesive and can be difficult to unscrew. Be careful not to strip the Phillips head with the screwdriver. If necessary, grip the screw head tightly with a needle-nose pliers and rotate the screw slightly counter-clockwise. Once you have moved the screw just a little bit, it should come out fairly easily. **Note:** Do not lose the small plastic washer under the screw closest to the positive terminal. The other screw does not have a similar washer.
7. Lift off the 3-wire connector being very careful not to lose the plastic shield underneath.

**CAUTION:** The plastic shield is coated with a white grease. Do not wipe the grease off and do not lose the shield. Without the shield, grease and small plastic washer, a short could occur and the scale will not work.

8. Pull out the battery holder (Figure 47). The holder is held to the upper wall of the hood with an adhesive pad. If necessary, use a small flat-blade screwdriver or similar tool to pry the holder loose.

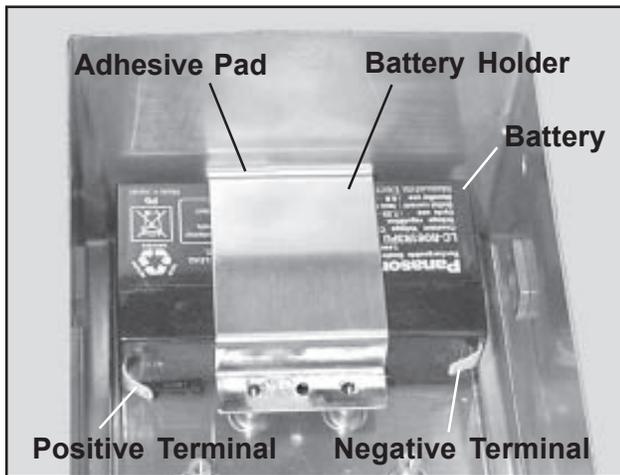


Figure 47. Battery Holder



Figure 48. Battery

**CAUTION:** Thoroughly flush skin or eyes immediately with clear water if contact is made with battery electrolyte (acid).

9. The battery is held in place with two strips of Velcro under the battery. Pry the battery out of the hood, being careful not to damage or pierce the battery.

**CAUTION:** Do not attempt to open the battery.

**CAUTION:** The battery must be recycled. In the U.S.A., call 1-800-SAV-LEAD (1-800-728-5323) for information. The battery can be turned in, free of charge, to any facility that accepts old car batteries. **DO NOT BURN THE BATTERY.**

### Installation

1. Place the new battery into the hood (Figure 48), and press it down firmly to set the Velcro. **Note:** Leave enough room between the battery and the top of the hood to make room for the battery holder.
2. Place the battery holder over the battery with the rear flange between the battery and the top of the hood (Figure 47). Press the holder toward the top of the hood to engage the adhesive pad.

3. Place the 3-wire connector, with the shield underneath, over the front battery holder flange (Figure 46). Make sure the holes in the 3-wire connector and the shield align with the screw hole nearest the positive terminal.
4. Secure the connector, shield and battery holder to the hood with the screw with the plastic washer.
5. Insert the second battery holder screw and tighten.
6. Connect the red wire to the positive terminal and slide the plastic sleeve down over the connection.
7. Connect the brown wire to the negative terminal and slide the plastic sleeve down over the connection.
8. Assemble the hood onto the chassis, being very careful not to trap wires between the two units.
9. Secure the hood and chassis together with the four screws removed earlier (Figure 44).
10. Remount the display console chassis to the console bracket. Refer to *Display Console* on *Page 35* and perform *Steps 5* through *8*.

## Display Cable

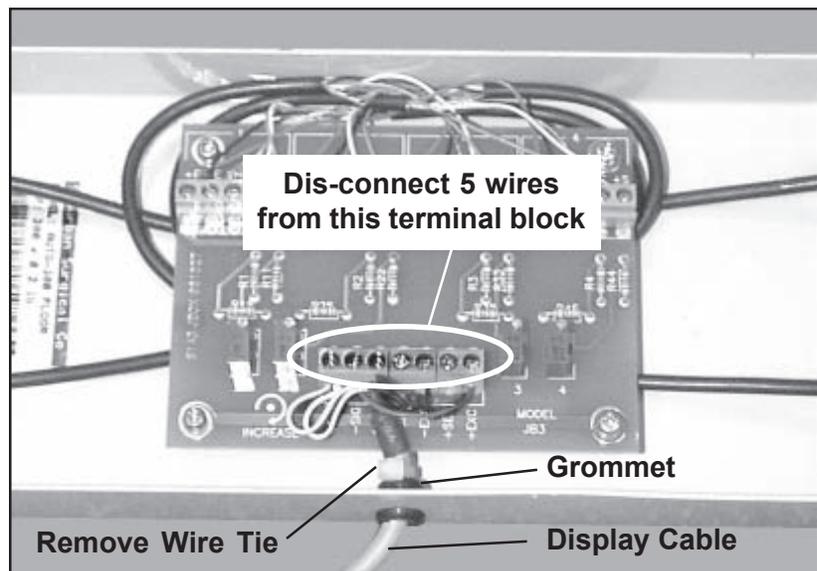
P/N 854067

## Tools and Supplies Required

- Phillips screwdriver
- Small Phillips screwdriver
- Small flat-blade screwdriver
- Small wire cutter
- Small wire tie

## Removal

1. Make sure the scale is turned off.
2. Loosen the two retaining screws and release the display cable from the bottom of the console (Figure 37).
3. Refer to *Scale Top* on *Page 36* and perform *Steps 1* and *2*.
4. Lift the stiffening board off the platform frame (Figure 40).
5. Unwrap the display cable from the hooks in the platform frame.
6. With a small wire cutter, snip off the wire tie on the cable where it nears the summing board (Figure 49).



**Figure 49. Summing Board**

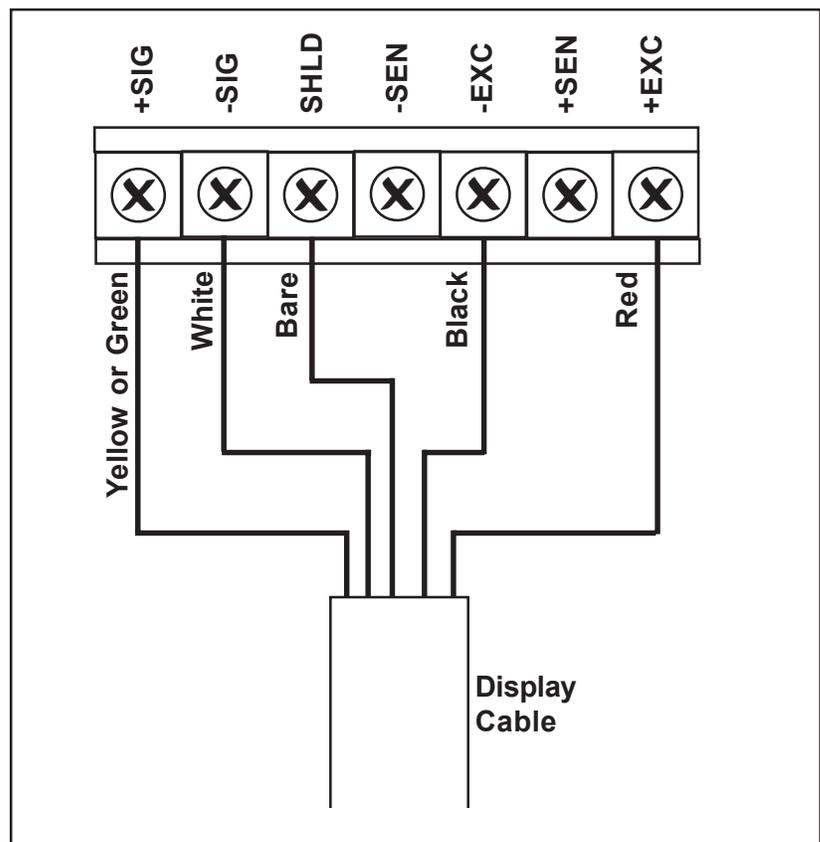
7. With a small Phillips screwdriver, loosen the five screws holding the display cable wires to the terminal block and remove the wires.

8. Pull the old display cable out of the platform frame and discard it.

## Installation

**Note:** The replacement display cable may not look exactly like the old cable. Don't worry about it - the new cable is a direct replacement for the old and will fit and operate just fine.

1. Slip the wires and the end of the cable through the grommet next to the summing board in the platform frame (Figure 49).
2. Connect the five wires from the cable to the terminal block as shown in Figure 50. **Note:** Terminals **-SEN** and **+SEN** are not used.



**Figure 50. Connecting Display Cable Wires to Summing Board Terminal Block**

3. Secure the cable in place with a small wire tie similar to the one removed earlier.
4. Wrap excess cable length around the hooks in the platform frame. Remember, the cable must exit under the frame.

5. Place the stiffening board on the platform frame.
6. Refer to *Scale Top* on *Page 34* and perform *Steps 3* and *4*.
7. Connect the new display cable to the appropriate terminal on the underside of the display console (Figure 37) and, with a small flat-blade screwdriver, secure the retaining screws on the connector.

**Fuse**  
P/N 854695

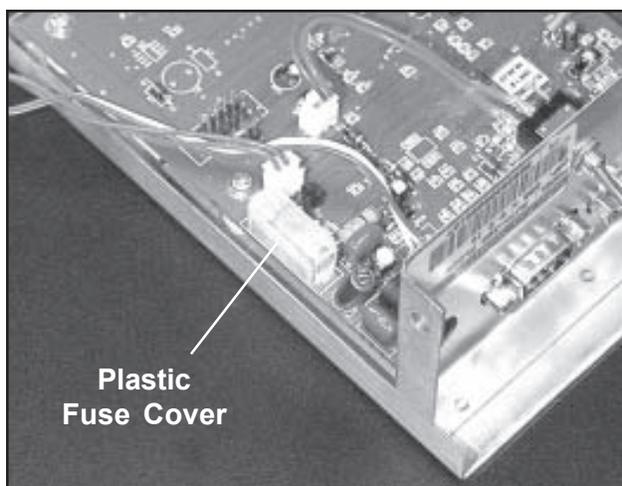
A single 0.8 Amp, 250 V slo-blo (Metric, 5 x 20mm) fuse is located on the printed circuit board inside the chassis. To replace this fuse, it will be cheaper and easier to obtain from your local hardware or electronics supply store. **Note:** Do not use a fast-acting fuse.

**Tools Required**

- Phillips screwdriver
- Small flat-blade screwdriver

**Removal**

1. Separate the display console hood and chassis. Refer to *Display Console Battery, Steps 1 through 4 on Page 40.*

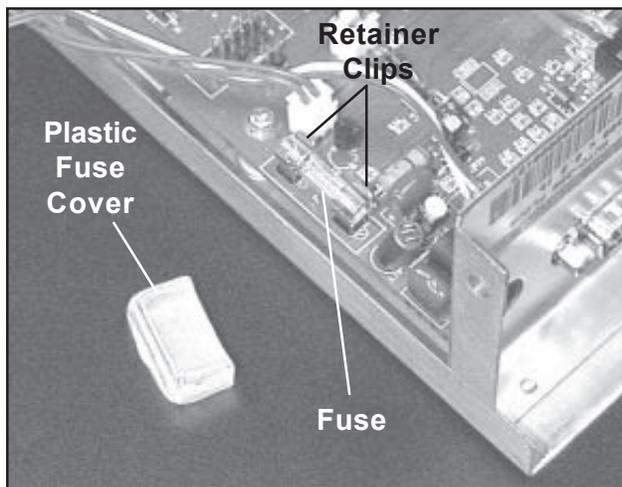


**Figure 51. Display Console Fuse - Plastic Cover in Place**

2. Use a small flat-blade screwdriver to pry off the opaque plastic cover from over the fuse (Figure 51).
3. Pry the fuse out from the two retainer clips that hold the fuse to the board (Figure 52).

**Inspection**

Look carefully at the fuse. Notice the fine wire visible inside the glass section of the fuse. If this wire is intact, the fuse is probably OK. If it is burned or broken, the fuse is bad and must be replaced. The scale will not operate if the fuse is broken or missing.



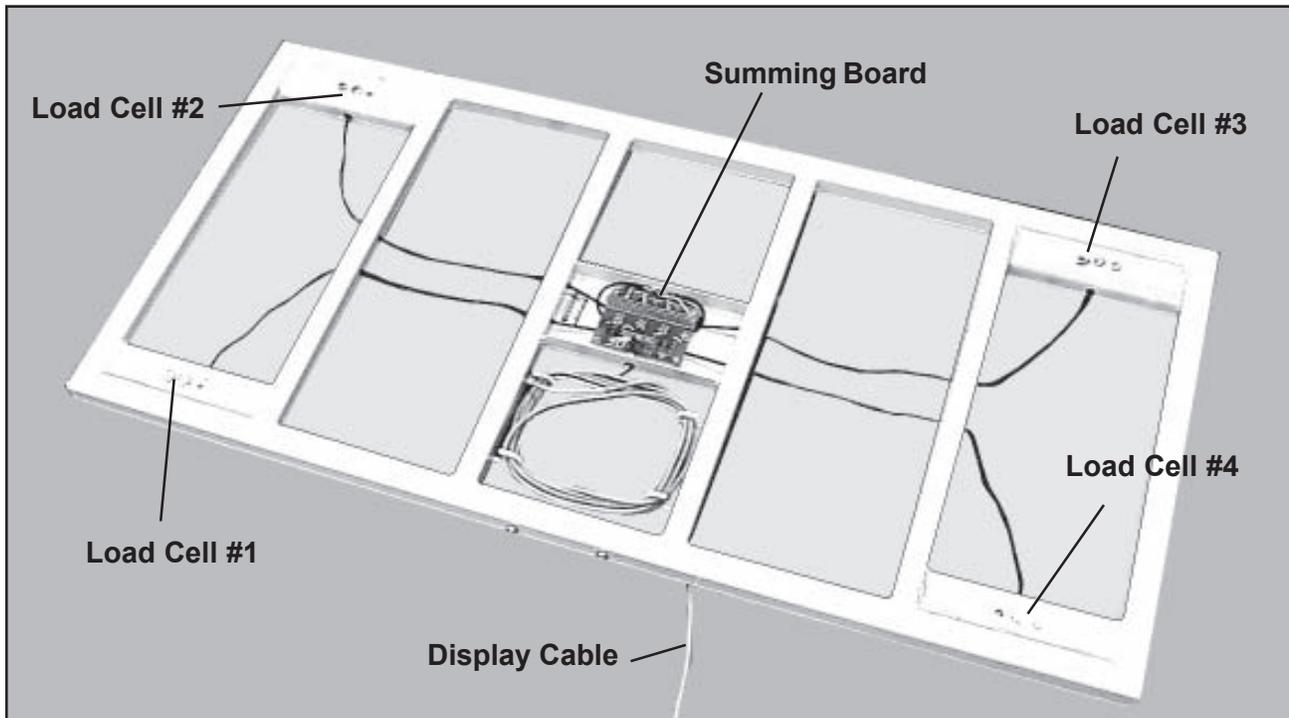
**Figure 52. Display Console Fuse - Plastic Cover Removed**

**Installation**

1. Snap the fuse into position in the two retainer clips. The fuse can go in either way; it makes no difference (Figure 52).
2. Push the plastic cover into place over the fuse and clips (Figure 51). Make sure it seats fully.
3. Assemble the console hood and chassis. Refer to *Display Console Battery, Steps 8 through 10 on Page 43.*

**Load Cell**  
**P/N 209687**

Four identical Load cells are mounted under the corners of the platform frame. In the following procedures, we will discuss the procedures for removing and replacing load cell #1. Procedures for the other three load cells are exactly the same. Refer to Figure 35 to determine the number of the load cell you are replacing.



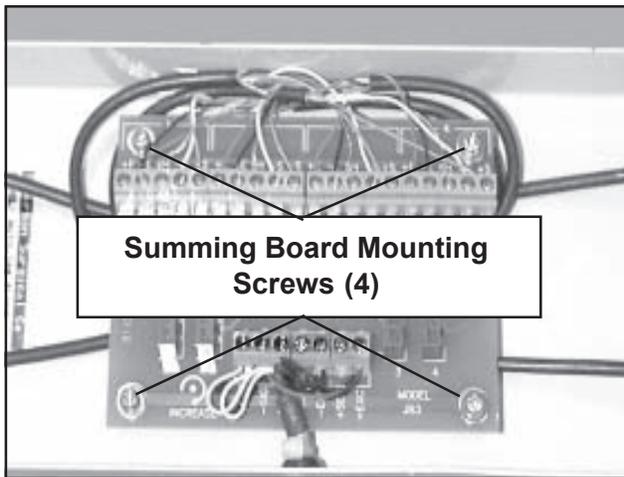
**Figure 53. Overall View of Platform Frame, Load Cells and Summing Board**

**Tools Required**

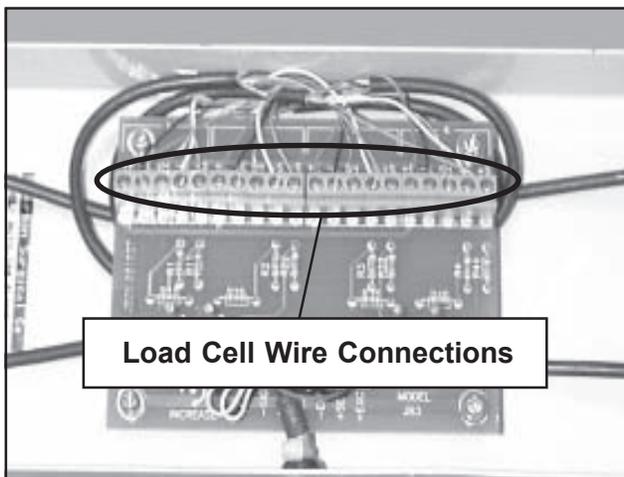
- Phillips screwdriver
- Small Phillips screwdriver
- Small flat-blade screwdriver
- Adjustable wrench

**Removal**

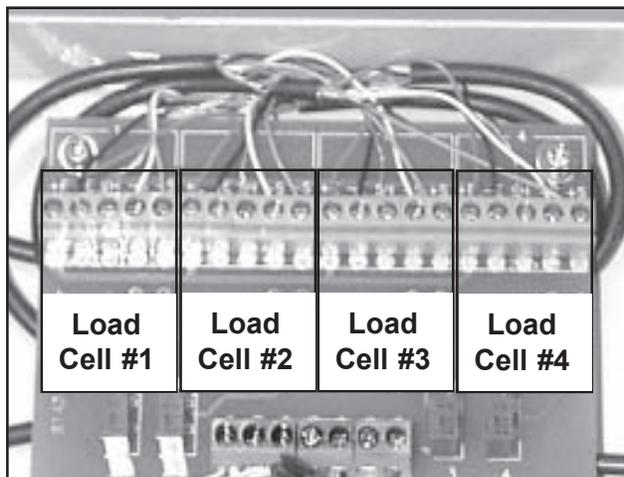
1. Make sure the scale is turned off.
2. Remove the scale top. Refer to *Scale Top* on *Page 36* and perform *Steps 1* and *2*.
3. Lift the stiffening board off the platform frame (Figure 40).



**Figure 54. Summing Board - Mounting Screws**



**Figure 55. Summing Board - Load Cell Wire Connections**



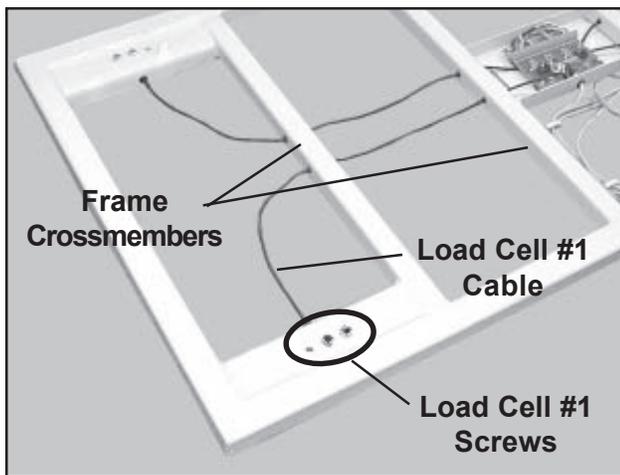
**Figure 56. Load Cell Wiring Groups**

4. With a Phillips screwdriver, remove the four summing board mounting screws (Figure 54).
5. Refer to Figures 55 and 56 and disconnect the five wires that go to the load cell you are replacing. **DO NOT** disconnect wires to the other load cells.
6. Pull the load cell cable out through the two frame crossmembers (Figure 57).
7. With an adjustable wrench, remove the two hex screws that hold the load cell to the platform frame.
8. Turn the platform frame over so that the load cells are up.
9. Lift out the load cell and pull the cable out of the frame.

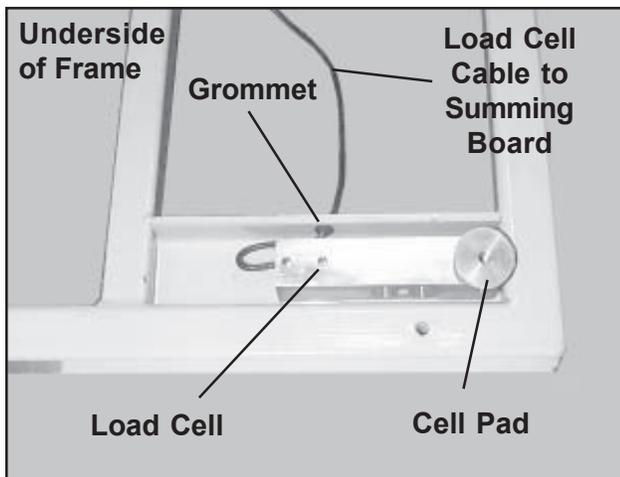
**Note:** You can continue to use your Auto 300 Scale even with one load cell removed. The scale will still give you reasonably accurate readings.

### Installation

1. Slip the wires and cable from the new load cell through the grommet next to the load cell position (Figure 58).
2. Place the load cell in position and secure with the two hex screws removed above.
3. Route the cell cable through both frame crossmembers to the summing board (Figure 57). **Note:** If you have difficulty in passing the cable through the holes in the crossmembers, try this:
  - a. Pry out both grommets from the holes in the crossmember.
  - b. Slip one of the grommets onto the cable.



**Figure 57. Removing Load Cell #1 Cable from the Frame Crossmembers**



**Figure 58. Typical Load Cell and Associated Parts**

- c. Slide the cable through both holes in the crossmember.
  - d. Push the grommet on the cable into the entry hole in the crossmember.
  - e. Slip the second grommet onto the cable.
  - f. Push this grommet into the exit hole in the crossmember.
4. Connect the wires from the cell cable to the appropriate terminals on the summing board (Figures 55 and 56).
  5. Mount the summing board to the frame and secure with the four screws (Figure 54). **Note:** Tuck the wires from the load cell neatly under the summing board making sure that none are pinched or stretched.
  6. Place the stiffening board on the platform frame.
  7. Replace the scale top. Refer to *Scale Top* on Page 36 and perform *Steps 3 and 4*.

## Display Mounting Plate

P/N 212366

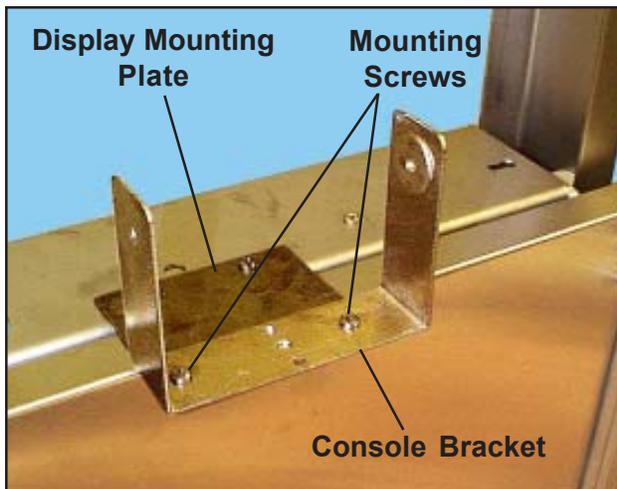
The display mounting plate is found only on Auto 300 scales mounted in SSCI Classic or Premier lift tables.

### Tools Required

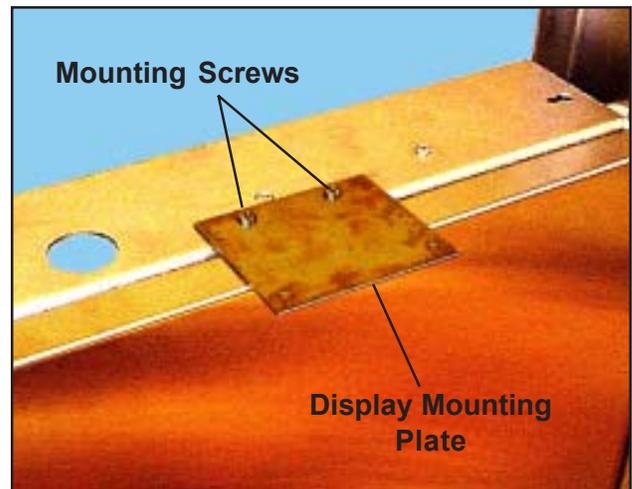
- Phillips screwdriver
- 3/8-in. wrench

### Procedure

1. Remove the two black knobs and remove the display console from the console bracket. **Note:** It is not necessary to disconnect the display cable or the AC adapter/charger wire from the console.
2. With a 3/8-in. wrench and a Phillips screwdriver, remove the two screws that hold the console bracket to the display mounting plate (Figure 59).
3. With the same tools, remove the two screws that hold the display mounting plate to the top crossmember of the sliding carriage (Figure 60).



**Figure 59. Console Bracket on the Display Mounting Plate**



**Figure 60. Display Mounting Plate on the Sliding Carriage Cross Member**

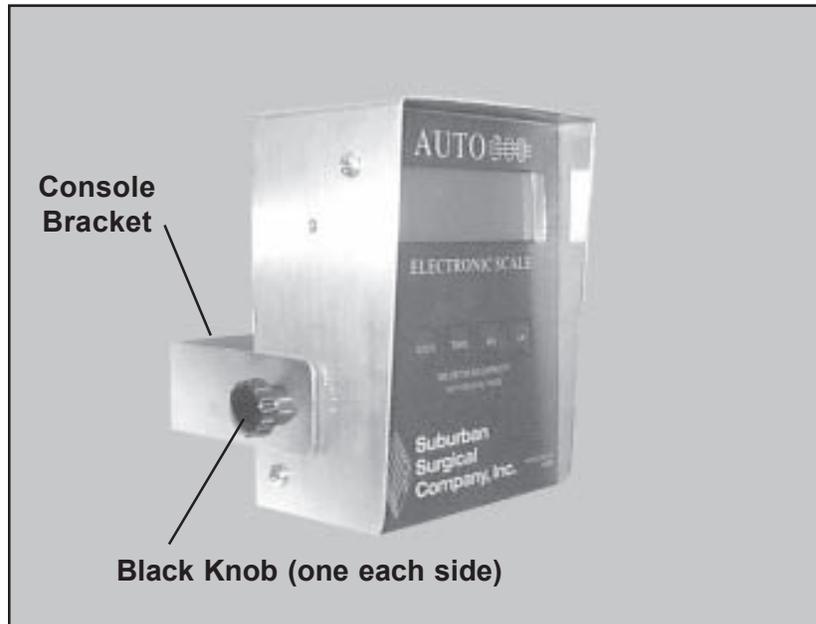
4. Install the new display mounting plate to the top crossmember with the same screws removed in *Step 3*.
5. Mount the console bracket to the display mounting plate with the same screws removed in *Step 2*.
6. Mount the display console to the console bracket with the two black knobs.

**Display Console Knob**  
**P/N 853170**

The display console is usually held to the console bracket with two black, plastic knobs. If preferred, you can mount the console to the bracket with two 1/4-20 x 5/8-in. machine screws provided in Parts Package 009022.

**Procedure**

1. Unscrew and remove the existing knob (Figure 61).
2. Screw in the new knob.



**Figure 61. Removing the Console from the Console Bracket**

## Calibrating the Scale

### Overview

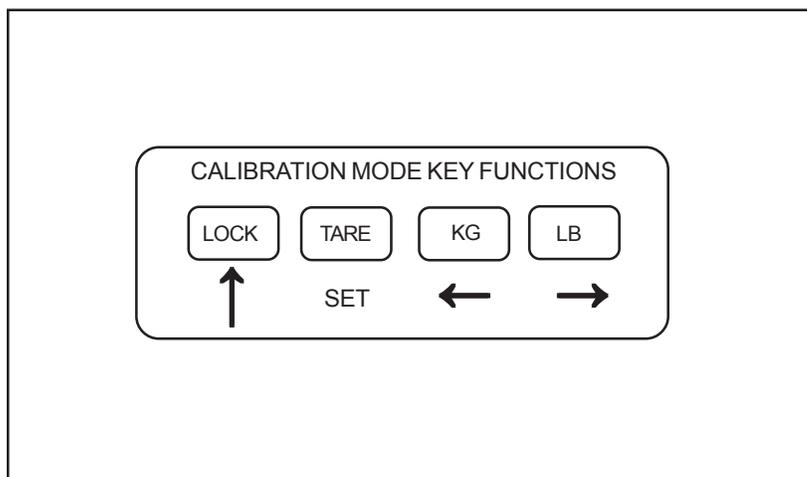
Whenever the scale appears to be displaying incorrect weights, it may need re-calibration. The scale is calibrated in two steps:

1. Zero Calibration (Deadweight)
2. Span Calibration (Test Weight)

Each step saves a value into the scale's non-volatile memory. The minimum test weight that can be used is 1% of full-scale capacity which is 300 lbs (136 kg). A test weight of 2/3 of the scale capacity is recommended.

## Zero Calibration

1. Make sure there is nothing on the scale platform.
2. Enter the calibration mode by pressing and holding the **LOCK Button** (Figure 62) while turning the scale ON. When the display shows "**C 0**", you are in the calibration mode and may release the **LOCK Button**. After the "**C 0**" message is displayed, the indicator displays a value. This value is the internal A/D count and can prove useful when trying to troubleshoot setup problems.
3. Press the **LOCK Button** to zero-out the displayed value.
4. Press the **TARE Button** to save this zero point value. The display will show "**Set**" momentarily, then "**C 1**".
5. Proceed to *Span Calibration* below to complete the scale calibration.



**Figure 62. Calibration Mode Key Assignments**

## Span Calibration

1. After the "**C 1**" message, the scale will display a blinking zero.
2. Place the test weight on the scale platform.
3. Use the three directional keys shown in Figure 62 to adjust the displayed value to the actual test weight value.
  - a. Increase the flashing digit by pressing the **LOCK Button** (Eventually, the **9** will change back to **0**.)
  - b. Pressing the **KG Button** or the **LB Button** will change the position of the flashing light.

4. After setting the exact value, press the **TARE Button** to save the value.
5. If the calibration was successful, the display will show “**SET**” momentarily, then resume normal mode operation.
6. If the calibration was *not* successful, one of the error codes in Table 6 below will appear. Take the indicated action to correct the problem, then perform a new calibration.

Error Code	Mode	Meaning	Remedy
□□□□□□	Normal	Gross Overload a. A weight greater than the rated capacity has been placed on the scale. b. Scale is out of calibration. c. Loose Load Cell connection d. Damaged Load Cell	a. Remove the weight if greater than 300 lbs. b. Recalibrate the scale. c. Check Load Cell connections d. Perform Load Cell A-D Test, Page XX.
<b>Err2</b>	All	a. Insufficient load cell signal to produce internal counts. b. Loose Load Cell Connection c. Damaged Load Cell	Check Load Cell connections. If all OK, perform Load Cell A-D Test, Page XX.
<b>EEE</b>	All	Non-volatile memory read error, One or more setup parameters have been lost. Display Console is bad.	Replace Display Console
<b>bAt</b> (flashing)	Normal	Battery voltage is too low for normal operation	Re-charge battery

**Table 6. Auto 300 Displayed Error Codes**

### Miscellaneous Codes

Table 7 defines certain miscellaneous codes that can appear on your Display Console

Code	Mode	Meaning
Animated Dashes	Lock	Scale is busy averaging readings together to obtain a valid weighing result.
<b>SLEEP</b>	Normal	Scale has entered the battery-saving mode. To exit this mode, press any button.

**Table 7. Auto 300 Displayed Miscellaneous Codes**

# Chapter 5 - Troubleshooting

## General

The following procedures will help you fix most of the problems that you might encounter with the Auto 300 Platform Scale. If necessary, please feel free to call SSCI Customer Service at (847) 537-9320, ext. 3518 (in Illinois) or 1-800-323-7366. Our experienced Technical Support personnel will be glad to help you.

For more information on contacting SSCI, refer to *SSCI Contact Information* on Page 6.

Part numbers for available replacement parts are shown in the table on Page 31. To order replacement parts, refer to *Parts Ordering Procedure* on Page 34.

Possible problems are listed below along with their page references:

- **The scale will not turn on** ----- Page 63
- **The scale turns on but will not display weight** ----- Page 64
- **The scale displays the wrong weight** ----- Page 65

If it is decided that your scale must be returned to SSCI for repairs, refer to *Returning the Scale for Repairs* on Page 56 for directions.

## Returning the Scale for Repairs

### RMA Numbers

If your scale should require return to SSCI for repairs, discuss the problem with one of our Customer Service Representatives. Obtain an RMA number (Return Merchandise Authorization) from them before shipping the unit back. **Note:** Merchandise returned without an RMA number will not be accepted

### Packing and Shipment

If you were able to keep the scale shipping carton, repack the scale into the carton and staple or tape the cover securely in place.

Ship documentation with the scale including:

- Destination
- RMA Number
- Your name, company and address
- Your telephone number
- A description of the reason for returning the scale

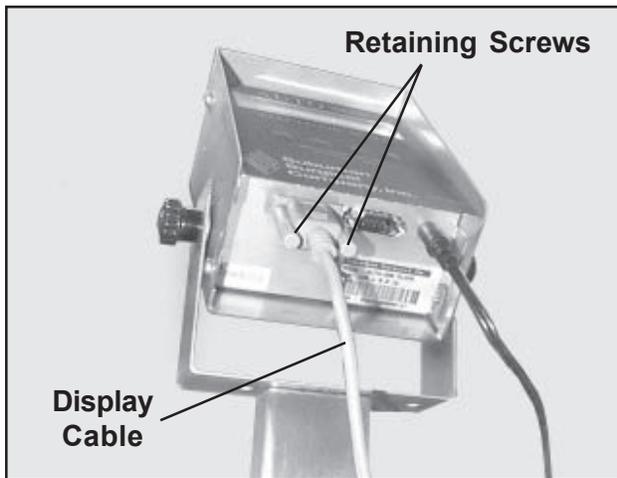
## Troubleshooting Procedure

**Overview** If your Auto 300 Scale malfunctions, follow the procedures below to isolate the problem.

Keep in mind that the most common cause of inaccurate readings is a loose display cable. If you are getting bad readings from the scale, make sure that the display cable is in place, and tightly secured with the two retaining screws on the connector. Refer to Figure 63.

### Basic System Test

1. Check the display cable connection at the console. Make sure it is fully seated and the retaining screws are tight (Figure 63).



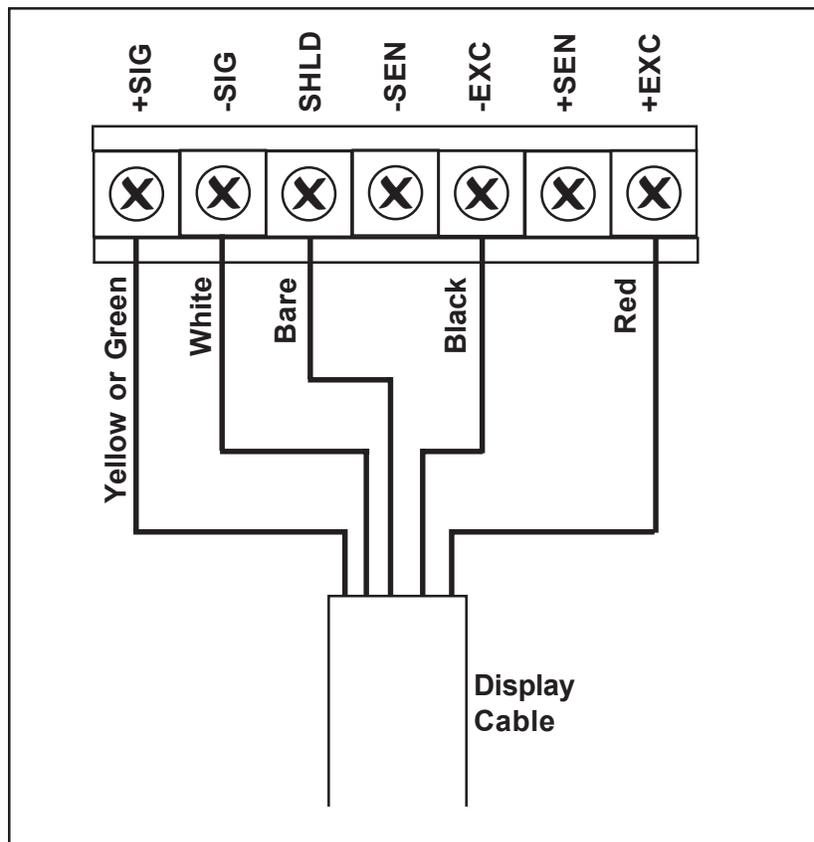
**Figure 63. Display Cable Connected to the Display Console**

2. Check that the five display cable wire connections are correctly terminated on the summing board (Figure 64). All five wires should be securely fastened in place. Give each one a slight tug to be sure they are not loose.
3. If the cable connections are OK, perform the **A-D Test** (Page 58). This test checks the complete scale.

If the scale passes the A-D Test, recalibrate the scale (Page 52). If the read out still sits on **0.0**, replace the display console.

If calibration fails with an **Err2** message, perform the **Load Cell A-D Test** (Page 59).

If, during the A-D Test, the counts are unstable, check the battery and the AC adapter/charger. If the battery and charger appear OK, perform the **Load Cell A-D Test** (Page 59). If all load cells pass the test, replace the display console.



**Figure 64. Display Cable Wire Connections to Summing Board Terminal Block**

### A-D Test

1. Turn the scale Off and remove all loads from the platform.
2. Hold the Lock Button down while you turn the scale On. Continue to hold the Lock Button down until **C 0** is displayed on the readout, then release the Lock Button.
3. A number between 10,000 and 25,000 should be displayed on the readout. The number will quickly change up and down by a few digits but should not change by much. The symbol **▲▲** will appear on the lower left of the readout meaning that the count is stable.
4. Push down on the platform with your hand. You should see the display count increase. When you remove your hand, the displayed counts should go back to the number you saw in *Step 3* (within a few digits).

If the above result is what you see, the scale is probably OK. If not, a load cell is probably bad. Perform a **Load Cell A-D Test** (*Page 59*) to isolate the bad cell.

## Load Cell A-D Test

Perform the following steps to check the operation of the four load cells. The test involves disabling three cells at a time, and checking the scale readings for the remaining cell.

To identify load cell numbers and wiring, refer to Figures 65, 66, 67, and 68. **Note:** Perform the complete test. Do not stop if you find one bad load cell, but continue on to check all four cells.

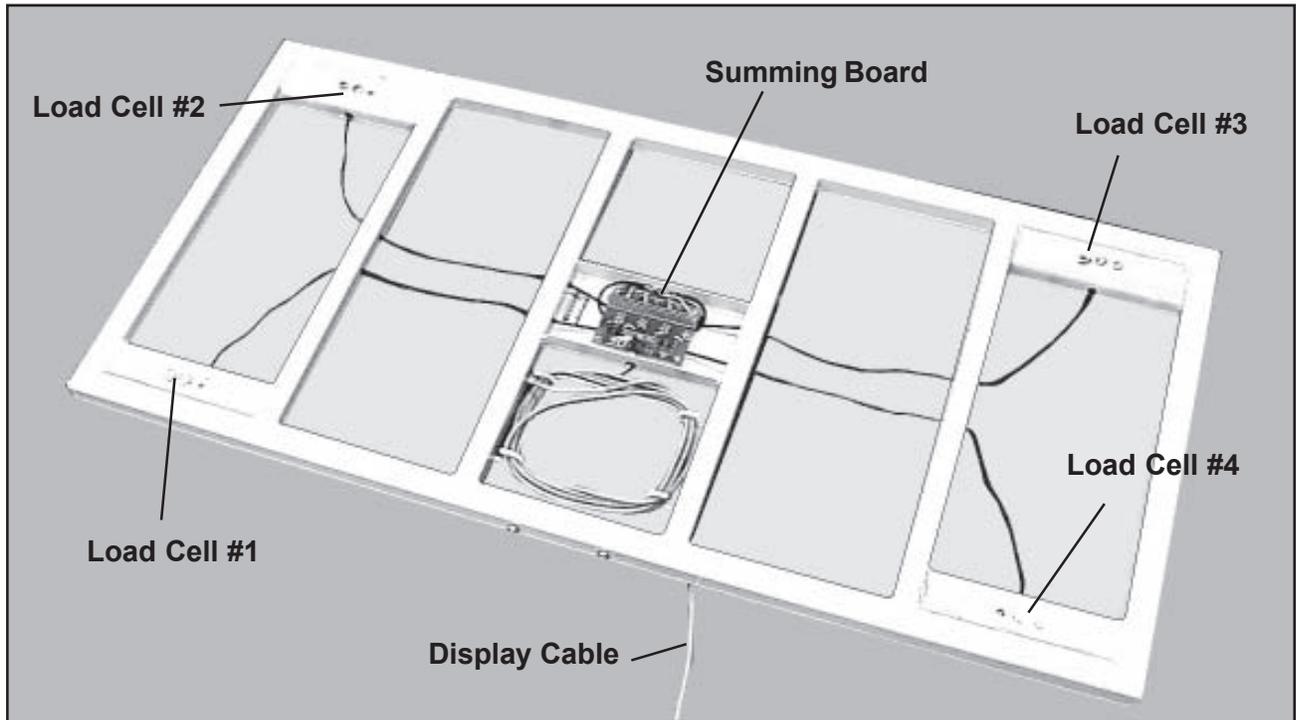


Figure 65. Overall View of Platform Frame, Load Cells, and Summing Board

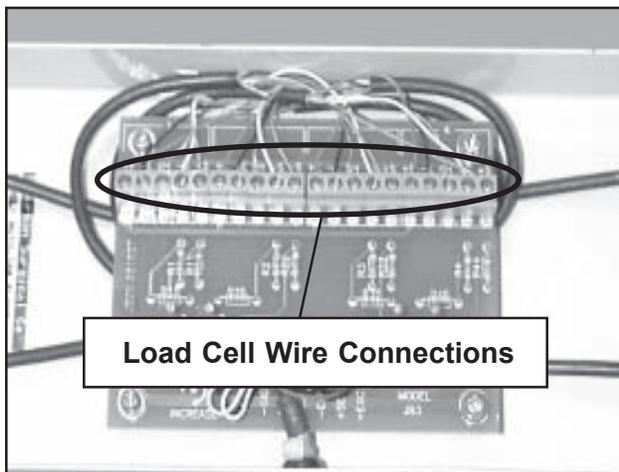


Figure 66. Summing Board - Load Cell Wire Connections

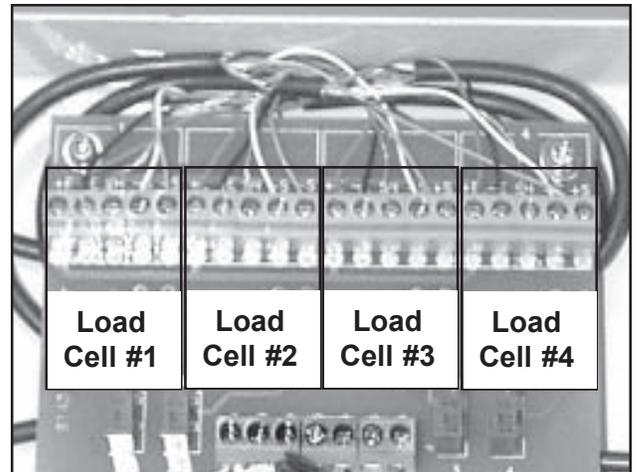
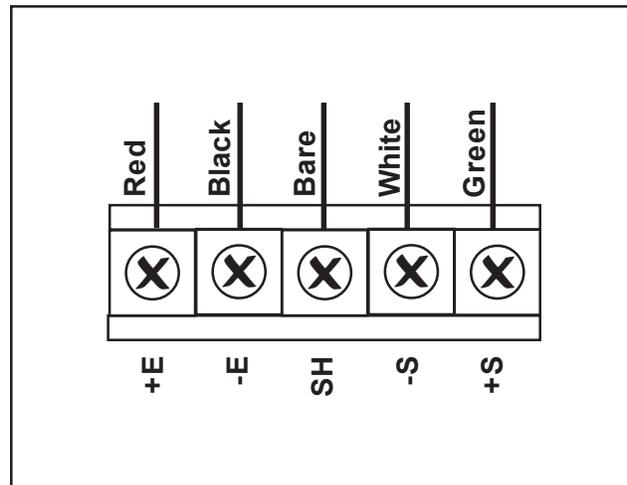


Figure 67. Load Cell Wiring Groups



**Figure 68. Load Cell Wire Connections to Terminal Block (same for all 4 Load Cells)**

### Check Load Cell 1

1. Turn the scale Off and remove all loads from the platform.
2. Remove the scale top and stiffening board to access the summing board.
3. On the summing board, disconnect the green (+S) and white (-S) wires from the Load Cells 2, 3, and 4 connections.
4. Hold the Lock Button down while you turn the scale On. Continue to hold the Lock Button down until **C 0** is displayed on the readout, then release the Lock Button.
5. A number between 10,000 and 25,000 should be displayed on the readout. The number will quickly change up and down by a few digits but should not change by much. The symbol **▲▲** appears on the lower left of the readout meaning that the count is stable.
6. If the readout indicates within the 10,000 to 25,000 range, Load Cell 1 is OK. If the count is not within range, Load Cell 1 is bad.

## Check Load Cell 2

1. Turn the scale Off.
2. Reconnect the green (+S) and white (-S) wires to the load cell 2 connection.
3. Disconnect the green (+S) and white (-S) wires from the Load Cell 1 connection. Load Cells 1, 3, and 4 should now be disconnected, and Load Cell 2 connected.
4. Hold the Lock Button down while you turn the scale On. Continue to hold the Lock Button down until **C 0** is displayed on the readout, then release the Lock Button.
5. A number between 10,000 and 25,000 should be displayed on the readout. The number will quickly change up and down by a few digits but should not change by much. The symbol  appears on the lower left of the readout meaning that the count is stable.
6. If the readout indicates within the 10,000 to 25,000 range, Load Cell 2 is OK. If the count is not within range, Load Cell 2 is bad.

## Check Load Cell 3

1. Turn the scale Off.
2. Reconnect the green (+S) and white (-S) wires to the load cell 3 connection.
3. Disconnect the green (+S) and white (-S) wires from the Load Cell 1 connection. Load Cells 1, 2, and 4 should now be disconnected, and Load Cell 3 connected.
4. Hold the Lock Button down while you turn the scale On. Continue to hold the Lock Button down until **C 0** is displayed on the readout, then release the Lock Button.
5. A number between 10,000 and 25,000 should be displayed on the readout. The number will quickly change up and down by a few digits but should not change by much. The symbol  appears on the lower left of the readout meaning that the count is stable.

6. If the readout indicates within the 10,000 to 25,000 range, Load Cell 3 is OK. If the count is not within range, Load Cell 3 is bad.

#### **Check Load Cell 4**

1. Turn the scale Off.
2. Reconnect the green (+S) and white (-S) wires to the load cell 4 connection.
3. Disconnect the green (+S) and white (-S) wires from the Load Cell 1 connection. Load Cells 1, 2, and 3 should now be disconnected, and Load Cell 4 connected.
4. Hold the Lock Button down while you turn the scale On. Continue to hold the Lock Button down until **C 0** is displayed on the readout, then release the Lock Button.
5. A number between 10,000 and 25,000 should be displayed on the readout. The number will quickly change up and down by a few digits but should not change by much. The symbol  appears on the lower left of the readout meaning that the count is stable.
6. If the readout indicates within the 10,000 to 25,000 range, Load Cell 4 is OK. If the count is not within range, Load Cell 4 is bad.

#### **Completion of Test**

1. Turn the scale Off.
2. Reconnect the green (+S) and white (-S) wires to the load cells 1, 2 and 3 connections. All four load cells should now be reconnected.
3. Replace the scale top and stiffening board.

If all load cells check out OK, the console is defective and must be replaced.

## PROBLEM 1: The scale will not turn on.

### Remedial Action

**First:** Make sure the On/Off switch is switched to On. Refer to *Turning the Scale ON and Off* on Page 25.

**Second:** Make sure the battery is charged. Refer to *Charging the Battery* on Page 25.

**Third:** Make sure the AC adapter/charger is securely plugged into the wall socket and into the terminal under the console. Refer to *Charging the Battery* on Page 25.

**Fourth:** You may have blown a fuse. Refer to Page 40, under *Removal, Steps 1* through 3. Inspect the fuse and, if blown, replace it.

**Fifth:** If the steps above do not get the scale up and running, you may have a defective AC adapter/charger that is not charging the scale battery as it should.

Call SSCI and order a new AC adapter/charger, P/N 854117-PT. Refer to Page 36 for replacement instructions.

**Sixth:** If the scale still will not turn on, you probably have a bad display console.

Call SSCI and order a new display console, P/N 212489-PT. Refer to Page 35 for replacement instructions.

## **PROBLEM 2: The scale turns on but will not display weight.**

### **Remedial Action**

**First:** Make sure the display cable is securely plugged into the bottom of the display console.

**Second:** The display cable may be bad. Inspect it to determine if it has been damaged in any way. If so, replace the cable.

Call SSCI and order a new display cable, P/N 854067. Refer to *Page 44* for replacement instructions.

**Third:** The display wire and load cell wire connections on the summing board may be loose. Access the summing board (refer to *Page 48, Steps 1 through 3*) and make sure that all wire connections on both terminal blocks are tight. Refer to the wiring diagrams in Figures 54, 55, and 56 and re-connect or tighten any loose wire connections you find.

**Fourth:** Refer to *Troubleshooting Procedure on Page 57* and try to isolate the problem.

## PROBLEM 3: The scale displays the wrong weight.

### Remedial Action

**First:** Make sure you are not trying to weigh loads heavier than the scale's maximum weight of 300 lbs. (136 kg). Placing weights greater than 300 pounds on the scale can damage the weighing mechanism.

**Second:** Make sure the battery is charged. *Refer to Charging the Battery on Page 25.*

**Third:** Make sure that the scale is not in an area subject to drafts from air conditioners, heating vents or exterior doors. Exposure to temperature extremes can degrade the micro-processor's accuracy.

**Fourth:** Make sure that the scale is sitting on a level surface, does not rock, and that all four load cells are in firm contact with the floor or other mounting surface.

**Fifth:** Test the scale accuracy. Refer to *Testing the Scale Accuracy on Page 28*. If the scale does not pass the test, recalibrate the scale. Refer to *Calibrating the Scale on Page 52*.

**Sixth:** Refer to *Troubleshooting Procedure on Page 57* and try to isolate the problem.



Inside back cover

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