



8500/8500KGEU and 8550/8550KGEU Portable Stretcher Scale Service Manual

FCC COMPLIANCE STATEMENT

This equipment generates uses and 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 tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed 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. Stock No. 001-000-00315-4.

PROPER DISPOSAL

When this device reaches the end of its useful life, it must be properly disposed of. It must not be disposed of as unsorted municipal waste. Within the European Union, this device should be returned to the distributor from where it was purchased for proper disposal. This is in accordance with EU Directive 2002/96/EC. Within North America, the device should be disposed of in accordance with the local laws regarding the disposal of waste electrical and electronic equipment.

It is everyone's responsibility to help maintain the environment and to reduce the effects of hazardous substances contained in electrical and electronic equipment on human health. Please do your part by making certain that this device is properly disposed of. The symbol shown to the right indicates that this device must not be disposed of in unsorted municipal waste programs.



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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 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 to a great extent 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 the procedures do so entirely at their own risk.

CARE AND CLEANING

Indicator

The indicator contains no user-serviceable parts and maintenance should be limited to an occasional cleaning and battery replacement as required.

General Cleaning Instructions

- Do not submerge the scale or indicator in water or pour or spray water directly on them to clean. The scale and indicator are not waterproof and covering them with water will damage them and void the warranty.
- Always remove power before cleaning.
- When cleaning, use only damp soft cloths or plastic scouring pads for cleaning cloth and a mild non-abrasive detergent.
- **DO NOT** use acetone, thinner or other volatile solvents for cleaning.
- **DO NOT** use things which will scratch the surface, such as steel pads, wire brushes and scrapers.

Powder Painted Steel Care and Cleaning

While powder painted steel is attractive and so durable that it will last many years longer than ordinary painted steel, it is desirable to clean it thoroughly on a routine basis. There are three basic things that should be remembered when cleaning powder painted steel.

- 1. Do not use wire brushes, abrasives, or cleaning tools such as steel pads and scrapers, which will scratch the painted surface. Instead, use soft cloths or plastic scouring pads for cleaning. Clean food equipment frequently to avoid build-up.
- 2. When possible, use treated water. Hard water can leave behind deposits. Soft water is much gentler on the painted steel's surface.
- **3.** Avoid the use of acetone, thinner or other volatile solvents and abrasive type cleaners for cleaning. If required, a mild solvent such as mineral spirits can be used to remove oil, grease, tars, wax, and similar substances. Use a cloth dampened with mineral spirits and apply only to areas that are contaminated. Follow up the use of this mild solvent with detergent cleaning and rinsing.

8500/8550, 8500KGEU/8550KGEU PORTABLE STRETCHER SCALE TEST PROCEDURE

A. EQUIPMENT REQUIRED

B. SETUP

C. SCALE TRIM ADJUSTMENT

D. CALIBRATION

E. FINAL TEST



A. Equipment Required

Scale under test Standard Hand tools Test Weights: Appropriate certified weights to accomplish the linearity tests

B. Setup - HI RES MODE (MV2 ONLY, OTHERWISE GO TO STEP C.)

- 1. Assemble scale.
- 2. Plug unit into power.
- 3. For **KGEU** models, first go to the setup table and Calibrate the scale. Next, return here to the initiate the HI RES mode for the scale trim adjustment. Then recheck the capacity weight and recalibrate if necessary.
- 4. Enter Setup Review:
 With the MV2 on press and hold the CLEAR (←) key
 When the screen says SETUP
 Release the CLEAR (←) key
 Press ENTER until you see the HIGH-RESOLUTION prompt
 Change HIGH RESOLUTION to YES and press ENTER
 Exit setup review mode

C. Scale Trim Adjustment

- 1. Gain access to the junction box and remove the cover.
- 2. Place a test weight of at least 25 percent of scale capacity on each corner, one at a time, and record each displayed weight.
- 3. Place test weight on the corner with the highest displayed weight and adjust appropriate trim potentiometer counterclockwise until corner reading agrees with the lowest weight reading.
- 4. Repeat Step No. 3 until all corners are within tolerance. (For KGEU models, the tolerance is +/-0.03).
- 5. If any trim pot reaches the end of adjustment in the CCW direction then turn all potentiometers clockwise 25 turns or until a click is heard. Now turn all potentiometers counterclockwise 1 (one) turn and repeat steps 2 4.
- 6. Turn the power off.

D. Calibration

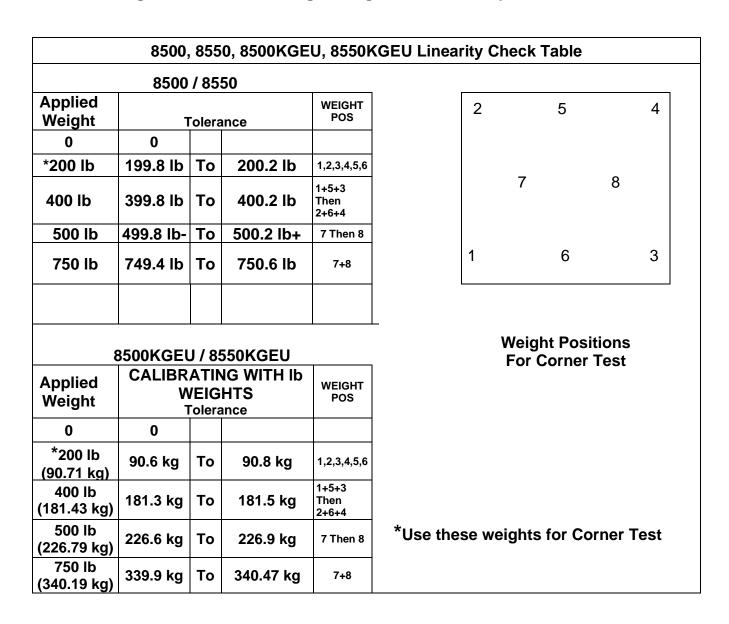
- 1. To begin Calibration and Setup, make sure the MV1 indicator is turned on.
- 2. Next, looking at the front of the MV1, remove the two screws from the left end cap and remove the end cap.
- 3. Locate the calibration switch access hole near the bottom of the side panel, and insert a small hex wrench or tool through the access hole.
- 4. Press and hold the calibration switch until the display changes to show SETUP in large letters at the top of the display, and SCALE in smaller letters at the bottom.
- 5. Release the calibration switch. You are now ready to perform calibration.
- 6. During setup and calibration, pressing the **PRINT/ENTER** key will cause the data displayed, to be retained and the indicator to advance to the next prompt. Change the value by entering the new data using the numeric keypad, and then pressing the **PRINT/ENTER** key.
- 7. Follow the prompts listed in the MV1 SETUP TABLE.

MV1 SETUP TABLE			
CAPACITY =	1000		
OIML =	NO		
UNITS =	2		
INTERVAL =	2		
dECIMAL =	1		
MOTION RANGE =	2		
SAMPLE RATE =	2		
ZERO LIMIT =	no		
POWER UP ZERO =	no		
ZERO TRACKING =	3		
FILTER MOdE =	2		
FILTER LEVEL =	0		
CALIbRATE =	YES		
NUM CAL POINTS =	1		
LOAdEd CAL WT =	APPLY FULL CAPACITY WEIGHT		
UNLOAd	REMOVE TEST WEIGHTS		
GRAVITY ENAbLE =	no		
HOLd MOdE =	2		
BANd =	99		
LANGUAGE =	0		
bACKLIGHT =	150		
KEYPAd bEEP =	YES		
SLEEP MOdE =	4		
AUTO SHUT OFF =	2		
KEY dISAbLE =	0		
ENAbLE Id =	no		
bARCOdE =	no		
USE HEIGHT =	no		
bOdY MASS IdX =	YES		
HI RESOLUTION =	no		
RS232 MOdE =	3		
bAUd RATE =	3		
PRINTER TYPE =	0		
END OF PRINT =	0		
USb MOdE =	1		
YEAR [YYYY] =	Enter current year		
MONTH [1-12] =	Enter current month		
dAY [1-31] =.	Enter current day of the month		
HOUR [0-23] =	Enter current hour in 24-hour format		
MINUTE [0-59] =	Enter current minute		
SECONd [0-59] =	Enter current second		
24 HOUR TIME =	no		

MV2 SETUP TABLE			
CAPACITY =	IF USING LB WEIGHTS, SET @ 400 (AFTER CAL RESET TO 300)		
OIML =	YES		
INTERVAL =	1		
dECIMAL =	1		
MOTION RANGE =	2		
SAMPLE RATE =	4		
ZERO LIMIT =	YES		
POWER UP ZERO =	YES		
ZERO TRACKING =	1		
FILTER MOdE =	2		
FILTER LEVEL =	0		
CALIbRATE =	YES		
NUM CAL POINTS =	1		
LOAdEd CAL WT =	APPLY FULL CAPACITY WEIGHT		
UNLOAd	REMOVE TEST WEIGHTS		
GRAVITY ENAbLE =	no		
HOLd MOdE =	0		
LANGUAGE =	0		
bACKLIGHT =	150		
KEYPAd bEEP =	YES		
SLEEP MOdE =	4		
AUTO SHUT OFF =	2		
KEY dISAbLE =	0		
ENAbLE Id =	no		
bARCOdE =	no		
USE HEIGHT =	no		
bOdY MASS IdX =	YES		
HI RESOLUTION =	YES		
RS232 MOdE =	3		
bAUd RATE =	3		
PRINTER TYPE =	0		
END OF PRINT =	0		
USb MOdE =	1		
YEAR [YYYY] =	Enter current year		
MONTH [1-12] =	Enter current month		
dAY [1-31] =.	Enter current day of the month		
HOUR [0-23] =	Enter current hour in 24-hour format		
MINUTE [0-59] =	Enter current minute		
SECONd [0-59] =	Enter current second		
24 HOUR TIME =	no		

E. Final Test

- 1. Perform Corner Test using 1/4 capacity weights (positions 1-6). Use tolerances listed in the Calibration Table below.
- 2. Perform Linearity test. Check both ascending and descending. See table below.
- 3. Install indicator cover (MV1).
- 4. For kg units calibrated using lb weights, reset the Cap = 300 after calibration.



APPLICATION OF ADHESIVE/ADHESIVE BACKED ITEMS

- 1. Use a clean cloth or paper towel to clean the surface with alcohol where the adhesive or adhesive backed item is to be applied.
- 2. After the alcohol has dried, use another clean dry cloth or paper towel to wipe the surface clean of all residue before the adhesive backed item is applied.
- **3.** Apply the adhesive backed item immediately after the surface has dried. Be careful not to touch either the application surface or the adhesive with the bare hand.
- **4.** Using a clean dry cloth or paper towel, rub out all air bubbles on flat items, such as keypads, labels, serial tags etc., by rubbing back and forth on the surface of the adhesive backed item while pressing firmly.

NOTE: Be sure to press firmly on each corner to insure a good bond.

5. For items that have foam tape, such as standoffs, apply the items square to the surface and hold in place with firm pressure for 5-10 seconds.

NOTE: Most adhesive backed items will not attain full strength until after 24 hours. It is critical that the above procedure be followed to obtain the maximum bonding strength of any adhesive.

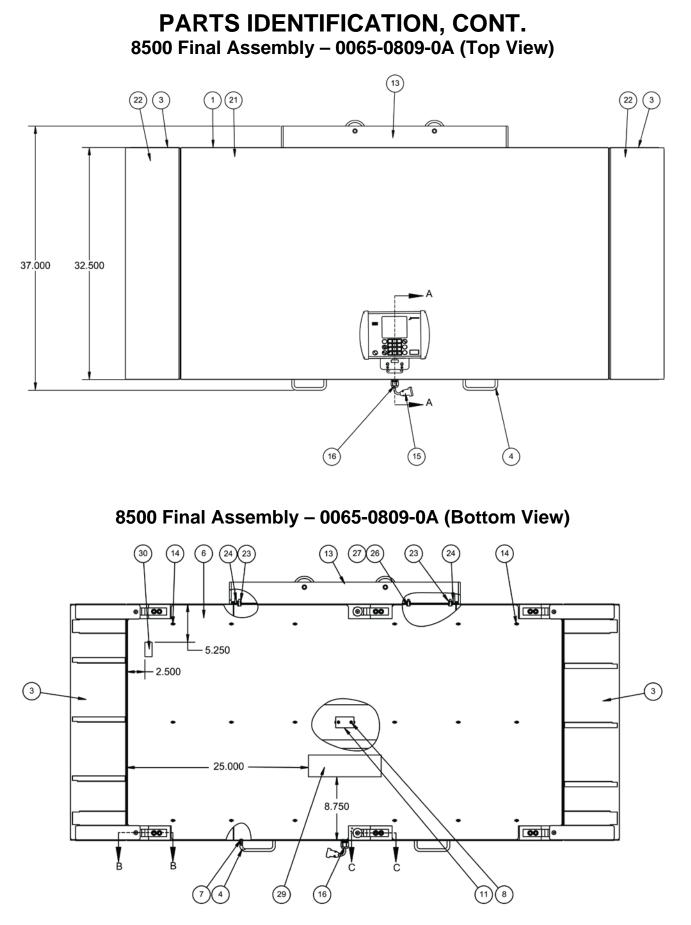
PARTS IDENTIFICATION 8500 Final Assembly – 0065-0809-0A

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0065-0810-0A	8500 WEIGHBRIDGE WELDMENT
2	6	LFB-250P	LOAD CELL, SHEAR BEAM, 125 KG, NICKEL PLATED ALLOY
3	2	0065-0821-0A	32-1/2" RAMP WELDMENT
4	2	0044-B178-08	HANDLE
5	6	6540-1624	LOADCELL FOOT
6	1	0065-0820-08	WEIGHBRIDGE BASE COVER
7	4	6021-1045	SCW HEX-HD, MACHINE SCW, 10-32X.5
8	2	6021-0661	SCW PAN-HEAD. MACHINE-SCW 06-32X.250
9	6	6021-1401	SCW SOCKET-HD .25-20X.5
10	12	6021-2063	SCW SOCKET-HD CAP-SCREW .375-24
11	1	0065-0822-0A	TRIM BOARD
12	2	0065-0811-08	ALUM. WASHER STYLE FOOT
13	1	0065-0827-0A	8500 WHEEL ASSEMBLY
14	18	6021-1257	SCW TRUSS-HEAD THREAD CUTTING #8-32
15	1	0067-B044-0A	MOD. 6 CONDUCTOR CABLE ASSY, 15FT.
16	1	6610-1150	CONNECTOR GLAND
17	1	MV1	INDICATOR
18	2	6021-0687	SCW PAN-HEAD. SHEET METAL #6X.50
19	4	6680-0180	RIVET POP, BH SS 1/8 DIA x 250-312 GR
20	1	0065-B506-08	COVER PLATE
21	1	0065-0826-08	8500/8550 WEIGHBRIDGE SKID MAT
22	2	0065-0828-08	8500/8550 RAMP SKID MAT
23	4	6013-2008	1/4-20 CAGE NUT Z/P
24	2	0065-0829-08	CAGE NUT ALIGNING BRACKET
25	1	8555-B516-0A	DESKTOP PLATE ASSY
26	4	6021-1454	1/4-20 x .750, ZP
27	4	6024-0004	1/4" FLAT WASHER, SS (302)
28	2	8555-B159-08	SPACER, 758C MOUNT: 758C
29	1	5930-B104-08	LABEL: DETECTO LOGO W/WEB SITE (3" x 10")
30	1	593GR986	SERIAL TAG ASSY

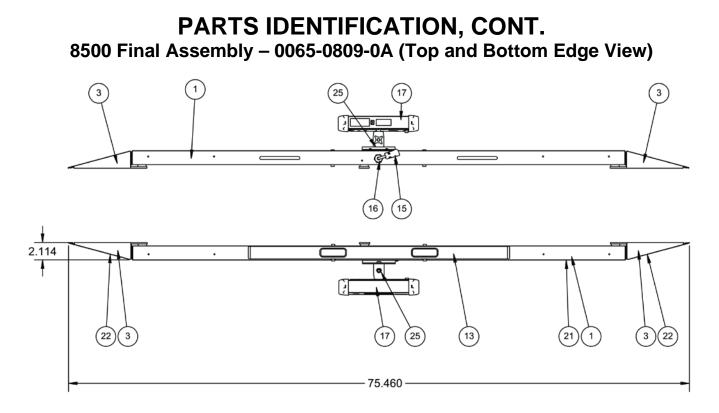
PARTS IDENTIFICATION, CONT. 8500 Final Assembly – 0065-0809-0A

NOTES:

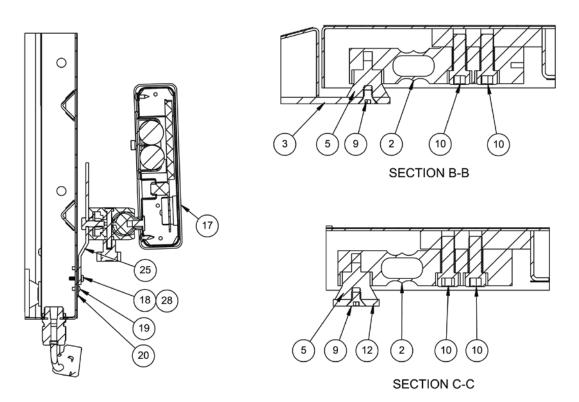
- 1. Wire indicator and load cell cables as shown in schematic. Check to make sure that none of the indicator cables, or load cell cable wires are crossed, or touching where they connect to the trim board to avoid a short circuit. Route cables through available holes.
- 2. Ensure correct wiring occurs before addition of cover plate.
- 3. Calibrate and set up indicator per **Test Procedure** section.
- 4. Prepare surface per **APPLICATION OF ADHESIVE/ADHESIVE BACKED ITEMS** section before applying item 29, and 30.
- 5. Remove ramps and package separately for shipping.
- 6. Center label as closely as possible and offset from edge of deck using given dimensions.
- 7. Ensure Loctite packet (6560-1046), screws qty. 4 (6021-1812), and hex key (M220-0080-00) are added to package before shipping.
- 8. Cutout items 21 and 22 per dimensions of weighbridge and ramps.



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8500 Final Assembly – 0065-0809-0A Section A-A, Section B-B, and Section C-C Views



SECTION A-A

PARTS IDENTIFICATION, CONT. 8550 Final Assembly – 0065-0812-0A

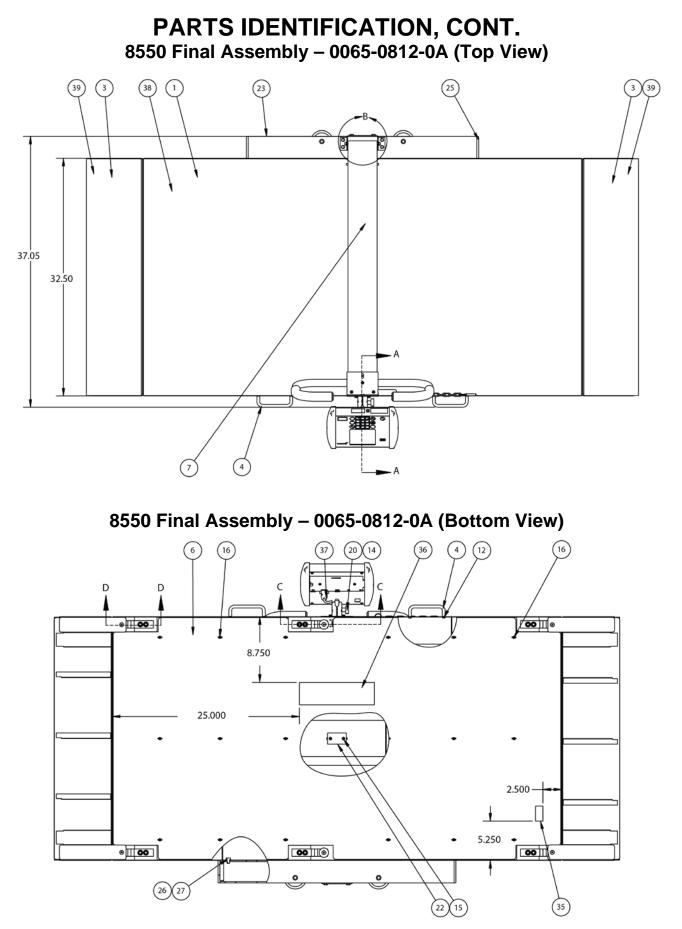
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0065-0813-0A	8500 WEIGHBRIDGE WELDMENT
2	6	LFB-250P	LOAD CELL, SHEAR BEAM, 125 KG, NICKEL PLATED ALLOY
3	2	0065-0821-0A	32-1/2" RAMP WELDMENT
4	2	0044-B178-08	HANDLE
5	6	6540-1624	LOADCELL FOOT
6	1	0065-0820-08	WEIGHBRIDGE BASE COVER
7	1	0065-0814-0A	8550 COLUMN ASSEMBLY
8	1	0065-B359-08	LATCH COVER PLATE
9	4	6680-0180	RIVET POP, BH SS 1/8 DIA x 250-312 GR
10	12	6021-2063	SCW SOCKET-HD CAP-SCREW .375-24
11	6	6021-1401	SCW SOCKET-HD .25-20X.5
12	4	6021-1045	SCW HEX-HD, MACHINE SCW, 10-32X.5
13	2	6021-1032	THUMB SCREW
14	1	6021-0950	SCW HEX-HEAD 10-32 X 1.5
15	2	6021-0661	SCW PAN-HEAD. MACHINE-SCW 06-32X.250
16	18	6021-1257	SCW TRUSS-HEAD THREAD CUTTING #8-32
17	2	0065-0811-08	ALUM. WASHER STYLE FOOT
18	1	8555-B517-08	INDICATOR TO COLUMN MOUNTING
19	2	8555-C508-08	MOUNT CLAMP
20	1	6540-1053	ENCLOSURE KNOB 1.25 DIA, 10-32 INSERT
21	1	MV1	INDICATOR
22	1	0065-0822-0A	TRIM BOARD
23	1	0065-0713-08	HR BTTM BASE SINGLE COL.
24	2	574R473	WHEEL
25	2	6540-1627	END CAP
26	4	6024-0004	1/4" FLAT WASHER, SS (302)
27	4	6021-1454	SCW HEX-HEAD. MACHINE-SCW, .25-20 x .750
28	7	6021-1454	SCW HEX-HEAD. MACHINE-SCW, .25-20 x .750
29	4	399R40	PUSH NUT, 1/4"
30	2	0065-0709-08	1/4" WHEEL SHAFT

PARTS IDENTIFICATION, CONT. 8550 Final Assembly – 0065-0812-0A

ITEM	QTY	PART NUMBER	DESCRIPTION
31	1	6680-1043	GROMMET 1/4 ID X 5/8 OD FOR 1/8 TK PNL
32	1	391rv204	1/4-20 ELASTIC STOP
33	1	6680-0250	SPACER .26 ID X .5 OD
34	1	6024-1066	WASHER FLAT 1/4 X 1
35	1	593GR986	SERIAL TAG ASSY
36	1	5930-B104-08	LABEL: DETECTO LOGO W/WEB SITE (3" x 10")
37	1	0065-B403-0A	CABLE, INDICATOR
38	1	0065-0826-08	8500/8550 WEIGHBRIDGE SKID MAT
39	2	0065-0828-08	8500/8550 RAMP SKID MAT
40	1	0065-B392-08	SAFETY PIN WARNING LABEL

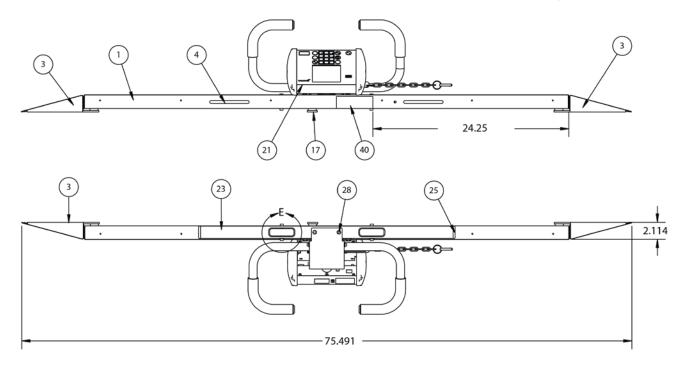
NOTES:

- 1. Wire indicator and load cell cables as shown in schematic. Check to make sure that none of the indicator cables, or load cell cable wires are crossed, or touching where they connect to the trim board to avoid a short circuit. Route cables through available holes.
- 2. Ensure correct wiring occurs before addition of cover plate.
- 3. Calibrate and set up indicator per **Test Procedure** section.
- 4. Prepare surface per **APPLICATION OF ADHESIVE/ADHESIVE BACKED ITEMS** section before applying item 35, 36, and 40.
- 5. Remove ramps and package separately for shipping.
- 6. Center label as closely as possible and offset from edge of deck using given dimensions.
- 7. Ensure Loctite packet (6560-1046), screws qty. 4 (6021-1812), and hex key (M220-0080-00) are added to package before shipping.
- 8. Cutout items 21 and 22 per dimensions of weighbridge and ramps.

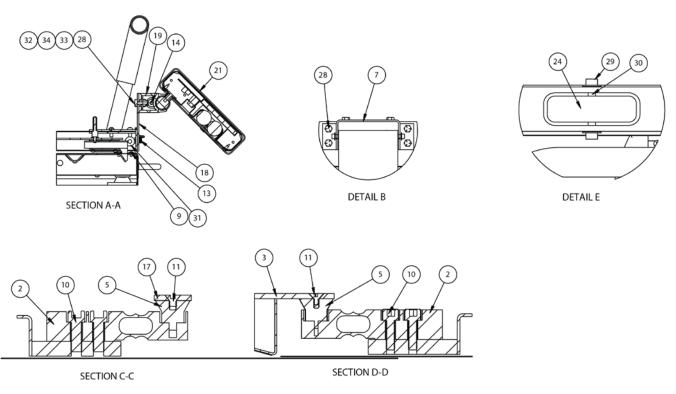


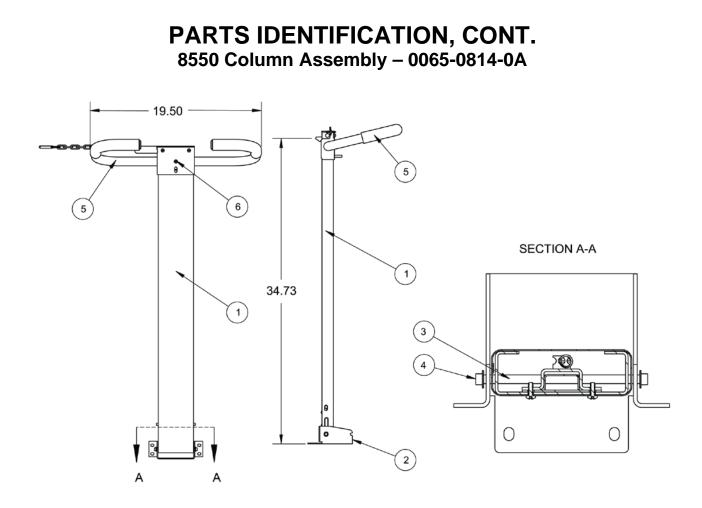
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PARTS IDENTIFICATION, CONT. 8550 Final Assembly – 0065-0812-0A (Top and Bottom Edge View)



8550 Final Assembly – 0065-0812-0A Section A-A, Detail B, Detail E, Section C-C, and Section D-D Views





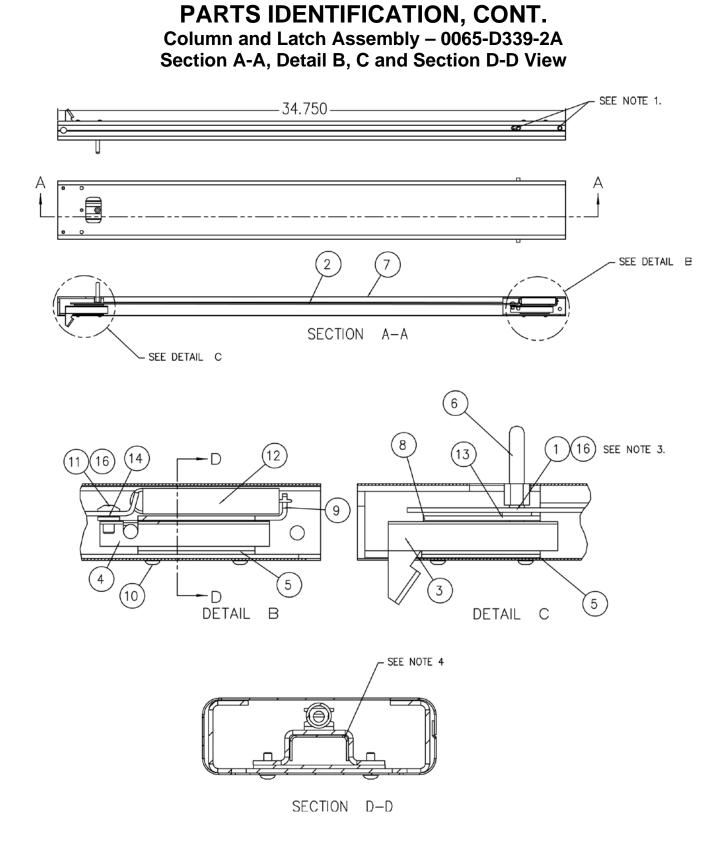
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0065-D339-2A	COLUMN AND LATCH ASSEMBLY
2	1	0065-0815-08	SHORT COLUMN MOUNTING BRACKET
3	1	0065-B342-08	PIN – COLUMN PIVOT
4	2	399R40	PUSH NUT 1/4"
5	1	0065-C391-0A	HANDLE ASSEMBLY
6	3	6021-1006	SCW ROUND-HEAD SELF-TAP 10-32X.500 S.S.

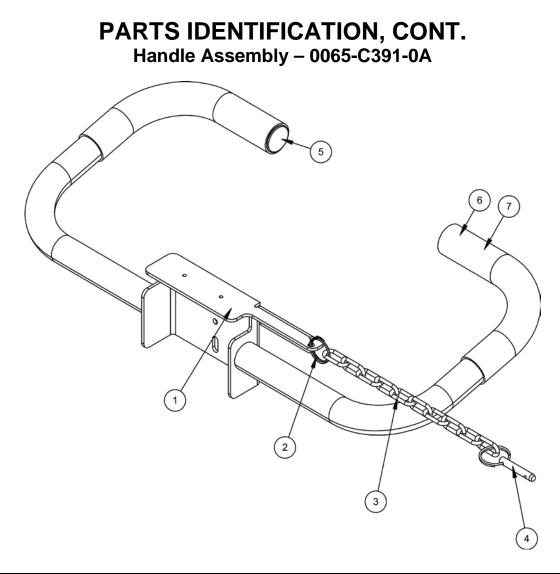
PARTS IDENTIFICATION, CONT. Column and Latch Assembly – 0065-D339-2A

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0031-B014-08	SPACER
2	1	0065-B351-08	LINK BAR
3	1	0065-B352-0A	LATCH WELDMENT
4	1	0065-B373-0A	LOWER LATCH BLOCK
5	2	0065-B374-08	LATCH SPACER
6	1	0065-B442-08	LATCH SHAFT
7	1	0065-C338-0A	COLUMN WELDMENT
8	1	0065-C347-08	GUIDE, LATCH
9	1	0065-C443-08	GUIDE, LATCH LOWER
10	8	6021-0665	#6-32 X 3/8 PAN HD CAP SCW Z/P
11	1	6021-1020	SCW ROUND HEAD #10-32 X 0.375
12	1	6022-0027	SPRING, EXT. 1 7/8 LONG
13	1	6680-0030	WASHER FLAT 1/4 NYLON
14	1	6680-0038	WASHER FLAT #10 NYLON
16	.01	6560-0021	ADHESIVE LOCTITE 222-31 LO-STRENGTH 50ML

NOTES:

- 1. Check part fit prior to assembly. Remove paint buildup, or material from column weldment as required to allow pivot pin installation and to allow latch to slide without binding.
- 2. None.
- 3. Apply Loctite (6560-0021) to bottom threads. Tighten until spacer is held against latch slide. The spacer must pass through the linkage, washer and latch guide.
- 4. Radius of item 4 must face up.



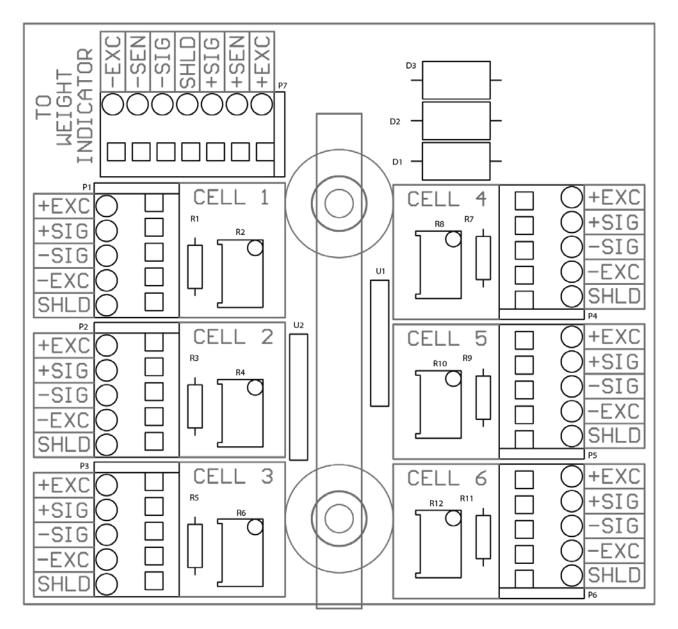


ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0065-C385-0A	HANDLE WLDMT
2	1	6028-0094	SPLIT RING
3	1	6680-1014	CHAIN
4	1	6028-0093	PIN HITCH
5	2	6540-1149	END CAP
6	2	6540-1070	HAND GRIP
7	1	6560-0009	ADHESIVE

PARTS IDENTIFICATION, CONT.

PCB Assembly - 0065-0822-0A

(8500/8550 6 Cell Trim Board)



STATEMENT OF LIMITED WARRANTY

DETECTO warrants its equipment to be free from defects in material and workmanship as follows: DETECTO warrants to the original purchaser only that it will repair or replace any part of equipment which is defective in material or workmanship for a period of **two (2) years from date of shipment**. Detecto shall be the sole judge of what constitutes a defect.

During the **first ninety (90) days** DETECTO may choose to replace the product at no charge to the buyer upon inspection of the returned item.

After the first ninety (90) days, upon inspection of the returned item, DETECTO will repair or replace it with a remanufactured product. The customer is responsible for paying for the freight both ways.

This warranty does not apply to peripheral equipment not manufactured by DETECTO; this equipment will be covered by certain manufacturer's warranty only.

This warranty does not include replacement of expendable or consumable parts. This does not apply to any item which has deteriorated or damaged due to wear, accident, misuse, abuse, improper line voltage, overloading, theft, lightning, fire, water or acts of God, or due to extended storage or exposure while in purchaser's possession. This warranty does not apply to maintenance service. Purchased parts will have a ninety (90) day repair or replacement warranty only.

DETECTO may require the product to be returned to the factory; item(s) must be properly packed and shipping charges prepaid. A return authorization number must be obtained for all returns and marked on the outside of all returned packages. DETECTO accepts no responsibility for items lost or damaged in transit.

Conditions Which Void Limited Warranty

This warranty shall not apply to equipment which:

- A.) Has been tampered with, defaced, mishandled or has had repairs and modifications not authorized by DETECTO.
- B.) Has had serial number altered, defaced, or removed.
- C.) Has not been properly grounded according to Detecto's recommended procedure.

Freight Carrier Damage

Claims for equipment damaged in transit must be referred to the freight carrier in accordance with freight carrier regulations.

This warranty sets forth the extent of our liability for breach of any warranty or deficiency in connection with the sale or use of the product. DETECTO 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. Detecto reserves the right to incorporate improvements in material and design without notice and is not obligated to incorporate improvements in equipment previously manufactured.

The foregoing is in lieu of all other warranties, express 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 DETECTO products installed in the forty-eight (48) contiguous continental United States.



Ph. (800) 641-2008 E-mail: detecto@cardet.com 102 E. Daugherty Webb City, MO 64870

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