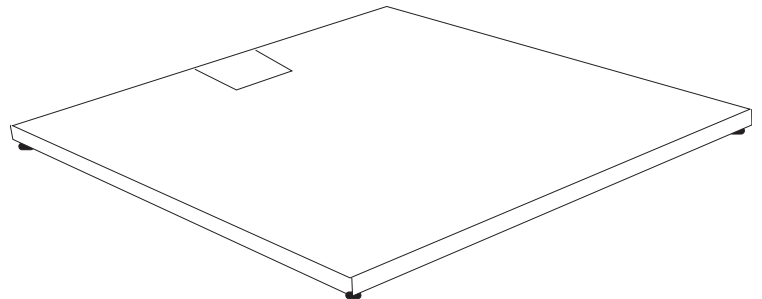
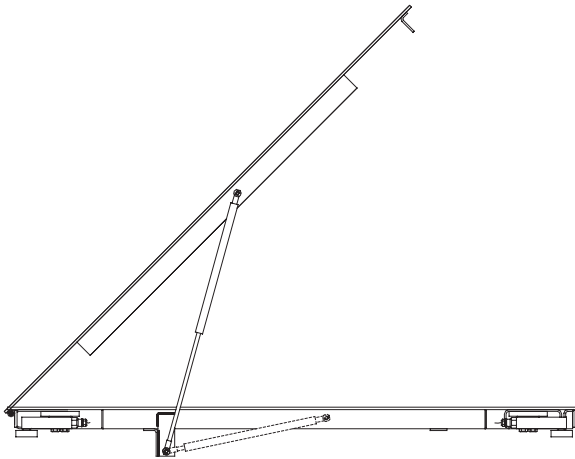




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# Aegis Profile 3400 Series Floor Scale



# Amendment Record

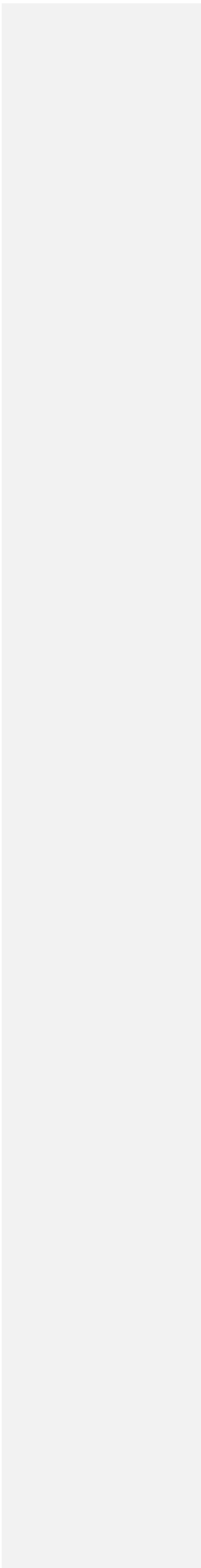
Aegis Profile  
3400 Series Floor Scale  
50604 / SJ4779

Manufactured by Fairbanks Scales Inc.  
821 Locust  
Kansas City, Missouri 64106

Created	12/97	
Issue 1	12/97	
Issue 2	11/02	Added pit frame installation drawings and lift deck information
Issue 3	05/03	Updated parts list

## Disclaimer

Every effort has been made to provide complete and accurate information in this manual. However, although this manual may include a specifically identified warranty notice for the product, Fairbanks Scales makes no representations or warranties with respect to the contents of this manual, and reserves the right to make changes to this manual without notice when and as improvements are made.



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# Section 1: General Information

## A. Introduction:

The Aegis Profile series floor scale features a rugged structural rib design and a nominal height of three inches - among the lowest in the industry. With a full range of accessories, these scales can be configured to fit most floor scale applications.

## B. Description:

The Aegis Profile series floor scale platform is fully assembled and pre-wired. Aegis Profile series floor scale sizes range from 30" x 30" to 6' x 8', and capacities from 1000 to 10,000 lbs. The scales are available in mild or stainless steel construction.

The Aegis Profile Lift Deck Floor Scale is another addition to the Fairbanks Aegis line of floor scales. It is designed to offer a safe and convenient way to lift the deck of the scale to facilitate cleaning. The Aegis Lift Deck Floor Scale is for pit installation only.

The Aegis Profile floor scales are available with an analog or Intalogix™ interface. The analog series uses a standard junction box for interfacing to most analog indicators, and the Intalogix™ series uses a quad multiplexer box (QMB) for interfacing to an Intalogix™ Technology indicator. Both types are equipped with a 25' interface cable. All junction boxes are constructed of stainless steel and all models have threaded holes in the decks for attaching eyebolts to facilitate installation and cleaning.

## C. Specifications:

Models and sizes are included in a chart in Appendix II.

Description	Mild Steel	Stainless Steel
Platform Deck plate	0.25"	0.25"
Platform Height	3.0"	3.0"
Operating Temperature	15° to 104° F -10° to 40° C	15° to 104° F -10° to 40° C
Humidity	0-95% Non-condensing	100% Suitable for water washdown
Overload Capacity	150% rated capacity	150% rated capacity
Endloading Capacity	100% rated capacity	100% rated capacity
Construction	A36 carbon steel	Type 304 stainless steel
Paint	Epoxy enamel	-----
Grade Level	Within 3° of level	Within 3° of level

## Section 2: Installation

### A. General Service Policy:

Prior to installation, it must be verified that the equipment will satisfy the customer's requirements as supplied, and as described in this manual. If the equipment cannot satisfy the application and the application cannot be modified to meet the design parameters of the equipment, the installation should not be attempted.

It is the customer / operators responsibility to ensure the equipment provided by Fairbanks is operated within the parameters of the equipment's specifications and protected from accidental or malicious damage. Other than the procedures authorized in the Operating manual, no service, repair, or adjustments may be performed by unauthorized / untrained service personnel. Any unauthorized repairs will void any verbal, implied, or written warranties.

### B. Overview:

1. These instructions apply to the floor scale and its specific installation procedures. The instructions include a pre-installation checkout, which must be performed, either at the service center before the technician goes to the site, or at the site before he places the equipment in service.
2. All electronic and mechanical calibrations and or adjustments required to make this equipment perform to accuracy and operational specifications are considered to be part of the installation, and are included in the installation charge. Only those charges which are incurred as a result of the equipment's inability to be adjusted or calibrated to performance specifications may be charged to warranty.
3. Absolutely no physical or electrical modifications other than selection of standard options and accessories are to be made to this equipment. Electrical connections other than those specified may not be performed, and physical alterations ( holes, etc.) are not allowed.

4. Before the installation is considered complete, the equipment is to be installed to satisfy any applicable weights and measures requirements. The installing technician is responsible to make certain that personnel are fully trained and familiar with the capabilities and limitations of the equipment. Be prepared to recommend the arrangement of components which will provide the most efficient layout, utilizing the equipment to the best possible advantage. The warranty policy must be explained and reviewed with the customer.

The complete installation consists of:

1. Verifying the application
2. Unpacking
3. Floor scale checkout
4. Customer and site readiness:
  - a. Is the Location ready?
  - b. Is the customer aware there may be work disruptions?
  - c. Are the operators available for training?
5. Floor scale connections
6. Adjustments
7. Customer training



**NOTE:**

*It is the owner's responsibility to document, notify, and follow-up regarding shipping damage with the carrier.*



**NOTE:**

*Above ground installations require the scale platform be protected from mobile machinery that may be present in the area. Fairbanks Scales is not responsible for damages to unprotected platforms in above ground installations.*

**C. Pre-Installation Checklist:**

The following points should be checked and discussed with the Area Sales Manager and/or customer, if necessary, before the technician goes to the site to install the equipment.

1. Has the customer's application been checked to make certain that it is within the capabilities and design parameters of the equipment?
2. If the installation will disrupt the customer's normal operations, is he aware and has he made arrangements?
3. Is properly grounded power available at the installation location?
4. Will the equipment operator(s) be available for training?
5. Has the service technician thoroughly reviewed the installation procedures?
6. Has the service technician reviewed the recommended setup with the Area Sales Manager or Area Service Manager, and identified all necessary variations to satisfy the customer's particular application?

#### **D. Unpacking:**

1. Check that all components are on hand, and agree with the customer's order.
2. Remove all components from their packing material, checking to make certain that all parts are accounted for and no parts are damaged. Advise the shipper immediately, if damage has occurred. Order any parts necessary to replace those which have been damaged. Keep the shipping container and packing material for future use. Check the packing list.
3. Collect all necessary installation manuals for the floor scale.
4. Examine the floor scale and perform an inspection, making certain that all hardware, electrical connections and PC Assemblies are secure.



#### **E. Safety:**

As is the case with any equipment, certain safety precautions should be observed during operation:

1. Ensure that any structure which supports the floor scale is capable of withstanding the weight of the scale and its rated capacity.



2. Beware of pinch points on the lift deck models. Severe personal injury could occur if safety precautions are not observed.
3. Use proper lifting technics when raising the lift deck platforms.



**NOTE:**

*Above ground installations require the scale platform be protected from mobile machinery that may be present in the area. Fairbanks Scales is not responsible for damages to unprotected platforms in above ground installations.*

**F. Setup:**

The setup of the floor scale consists of installing the scale on a level surface and wiring the scale to the indicator. Consult the appropriate indicator manual for further information regarding the indicator and its setup.

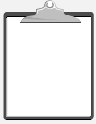
1. Select a location that is level and will fully support the weight of the platform plus a full capacity load.
2. Remove the top of the crate and all packing/banding material
3. Screw two (2) eyebolts into the threaded adapters in the platform top and use a forklift or other lifting means along with chains, cables, or nylon straps to remove the scale from the crate.



**CAUTION:**

*Do NOT use grab or slip hooks to lift the scale. Failure to use the proper lifting tools may result in personal injury.*

4. Set the scale so that the interface cable exits in a direction where it can be protected. If possible, use a cable protector to reduce 'trip' hazards and to protect the interface cable from being damaged.
5. Level the scale by turning the foot pads.
6. Wire the scale cable to the proper type indicator as follows:



**NOTE:**

*All models of Aegis Profile floor scales use the same color code for the load cells.*



**NOTE:**

*The analog junction box and the QMB interface box on the Lift Deck models are mounted remotely on a wall location. The boxes need to be located above the splash line and in a secure area away from material handling traffic.*

**A. Using an Analog Interface (Junction Box 67171) mild & stainless:**

L/C Wire Color	Function	Analog Instrument
Black	(-) Excitation	(-) Excitation
Green	(+) Excitation	(+) Excitation
Yellow	Shield	Shield
White	(+) Signal	(+) Signal
Red	(-) Signal	(-) Signal

**B. Using an Intalogix™ Technology interface (QMB 15291) mild & stainless:**

QMB Terminal	Wire Color	Function	Intalogix™ Technology Inst
1	Green	(-) Excitation	1
2	Red	(+) Excitation	2
3	Black	Ground	3
4	White	D out	4
5	Brown	D In	5
6	Blue	EOC	6
7	Orange	SCLK	7
8	Yellow	CS	8
9	Violet	Temperature	9
10	Gray/Shield	Chassis	10

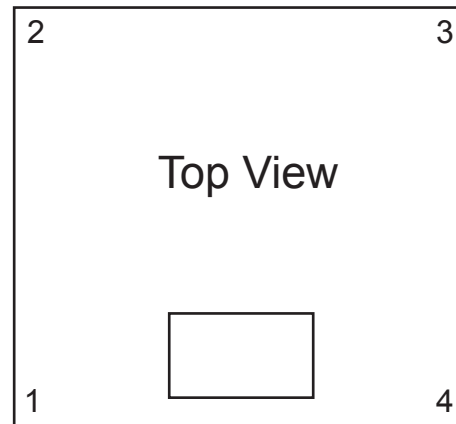


**NOTE:**

- 1. If the Gray/Shield wire is equipped with a screw lug, it can be attached using one of the PCB screws.*
- 2. Calibrate the Intalogix™ platform/ indicator. Follow the calibration procedure in the appropriate indicator service manual.*

7. Adjust the analog indicator to the platform. First, ensure all corners are within 1 division of each other at 25% of the rated capacity specification. Follow the calibration procedure in the appropriate indicator service manual to ensure a good calibration.

**A.** Perform a coarse platform calibration approximate to the actual weight.



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**B.** Identify the platform corner numbers.

**C.** Place a load which is 25% of platform capacity upon the scale at the corner 1 location. Note the indication. Proceed to each successive corner with the weight and note each indication.

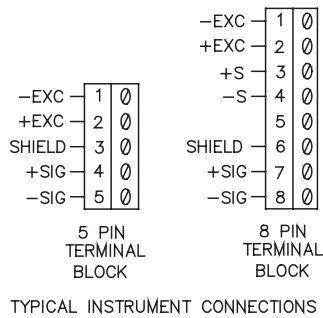


**NOTE:**

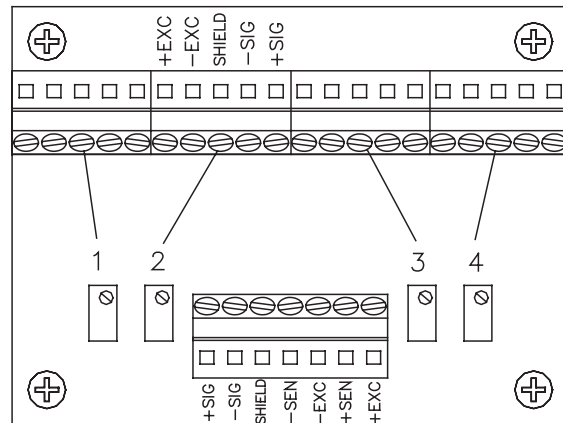
*The platform junction box is preset at the factory by centering the adjusting pots. Minimal corner adjustment should be required.*

**D.** If corners require adjustment, place the load on the corner displaying the lowest weight and use the appropriate potentiometer to change the displayed weight to read the same as the highest reading by turning the potentiometer clockwise (CW). Repeat the process, rechecking all corners until there is no error. Perform a zero reference check with an unloaded platform, then repeat the corner test to ensure

all readings are the same before proceeding. Upon completing corner adjustments, check the zero reference of



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JUNCTION BOX CONNECTIONS

the scale and adjust if necessary.

**NOTE:**

*Junction box assembly 67171 has four extended range, multi-turn potentiometers, one for each load cell. If you have difficulty adjusting the corners on the platform, turn all potentiometers to the fully counter clockwise (CCW) position until a audible clicking sound is heard when turned. With the weight on the lowest reading corner, adjust the corresponding potentiometer clockwise (CW) to indicate the same as the highest reading corner. Continue this process until each corner is correct.*



- E.** When the corners are the same in reference to each other, final calibration may be accomplished by the following:
- 1) Remove all weights.
  - 2) Zero the indicator.
  - 3) Perform the calibration with test weights.
  - 4) Follow the appropriate indicator service manual to ensure proper calibration.

## Section 3: Accessories Installation

Accessories: Bolt-down plates, Ramps, Bumper-Guards, and Pit-frames are installed as follows:

### A. Bolt-Down Plates:

Bolt down plates are used to keep the scale from sliding or moving when loads are applied. The plates are bolted via anchors at each of the scale's feet.

#### Installation:

1. Place the platform in position
2. Place the bolt-down plate under the foot, plate edge extending out from under the scale.
3. Drill the two holes using a hammer drill. Insert anchors with the nut and washer already ON. Tap the anchor into the hole then tighten the nuts securely. Repeat this process for each plate used.



#### NOTE:

*If ramps are NOT installed and bolt-down plates are necessary, a set of four bolt-down plates is required. See Appendix II B.*

### B. Ramps:

Each ramp accessory comes with two integral bolt-down plates and four anchors.

#### Installation:

1. Place the ramp in position, then lift and set the platform feet into the bolt-down plate holes.
2. Drill the two holes using a hammer drill. Insert anchors with the nut and washer already ON. Tap the anchor into the hole then tighten the nuts securely.

- If two ramps are installed, NO bolt-down plates are required.
- If one ramp is installed, a set of two bolt-down plates is required.
  
- Only two ramps total may be installed on opposite sides of a scale platform.

### **C. Bumper Guards:**

Bumper Guards are designed to help protect the platform from forklift traffic. The guards are slightly higher than the scale and will help deflect the forks.

1. Place the bumper guard so it will protect the platform from non-scale traffic, but it cannot contact or interfere with the platforms movement.

2. Drill holes using a hammer drill or its equivalent. Clean the hole thoroughly. Insert the anchor(s) with the nut and washer in place. Tap the anchor(s) into the hole(s) and tighten the nuts securely.

### **D. Pit Frames:**

The pit frame accessory is a one-piece welded unit with no additional welding required. There are different type frames (2 for the standard duty scale and 1 for the heavy capacity unit) with many sizes for each type. Refer to bulletin 50644. This accessory is designed for in-floor applications. In general, a hole is cut in the concrete, the pit-frame accessory is installed in the hole, then concrete is poured around and under the frame. Once cured, the scale platform is set into the frame and installation can be completed.

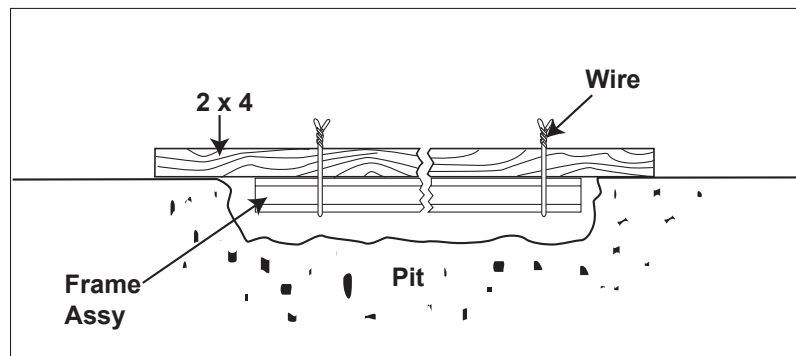
Standard duty frames are available in mild steel or stainless steel for all Aegis Profile floor scale sizes. The concrete work and frame setting is usually done by a contractor, with a scale technician completing the project by setting and installing the scale.



### **NOTE:**

*The Aegis Lift Deck Floor Scale is for pit installation only. For above ground installations contact Fairbanks Inquiry.*

1. Place the pit frame in the approximate position it will occupy on the floor.
2. Mark out the position of the hole to be made. The hole MUST be a minimum of 12" larger than the pit frame on all sides. Should pit drainage be required, slope the pit floor to an installed drain while maintaining a level area at each corner. Use the drawing in Appendix III for measurements.
3. The hole will have to be deep enough to accommodate the pit coping, plus the thickness of the pit floor. Use the drawing in Appendix III for measurements.
4. Once the properly sized and prepared hole has been cut in the concrete floor, use these steps to help set the frame properly.
  - Set the frame in the hole supported at about the correct height.
  - Set two 2 x 4's on edge (longer than the width of the hole) across the opening
  - Use soft wire and make 2 loops by twisting wire around each



2 x 4 and the frame

- With the frame supported by the wire and 2 x 4's, use a level to set the frame flush with the surrounding floor, level, and at the correct height by twisting or untwisting the wire
- Use the drawing in Appendix III for measurements, concrete

specifications and amounts

- Make sure the conduit for the scale cable is in place and secured into the frame opening
- Pour the concrete around and under the frame ensuring a smooth and level finish
- If a drain is required, form the pit (Refer to the drawings in the Appendix) to place a slope in the pit floor to the drain.
- Cure to a minimum of 2000 psi before cutting wire.
- Pull the cable through the conduit before placing the scale platform in the frame
- Level the platform before installing the instrumentation



## Section 4: Maintenance and Service

### A. Load Cell Replacement:

1. Remove power to the indicator.
2. Remove the platform access cover then the junction box cover and disconnect the failed load cell cable at the junction box. Loosen the gland bushing and tie a string or wire to the end of the cable to act as a pull wire. (Check that all cells have wire markers on the cable ends. If not, identify cells with wire markers or other means).
3. Lift the platform end and secure using wood blocks for safety.
4. Remove the load cell mounting bolts (use a  $\frac{3}{4}$ " socket), then the cell, pulling the load cell cable through the scale while leaving the pull string/wire in the scale.
5. Remove the foot assembly from the old cell and install on the new cell, using anti-seize on the threads.
6. Disconnect the pull string/wire from the old cell's cable and attach to the new cell's cable end. Pull the cable of the new cell through to the junction box, then mount the cell using anti-seize on the mounting bolts, torque to 90 ft/lbs.
7. Lower the scale to the surface removing the safety blocks.
8. Ensure that the weight is shared equally by all four (4) feet. Connect the load cell wires into the junction box, tighten the box gland bushing(s) then test and calibrate the scale. Replace the box cover and torque all screws to 18-20 in/lbs. Replace the platform access cover .
9. Recalibrate as necessary.

## 10. Load Cell Specifications:

<u>Specifications</u>	<u>Mild Steel</u>	<u>Stainless Steel</u>
Material:	Tooled Steel	Stainless Steel 17-4ph
Resistance:	350 Ohm	1000 Ohm
Rated Output:	3mV/V	2 mV/V
Safe Overload:	150%	150%
Compensated Temp range:	-10°C to 40°C	-20°C to 65°C
Safe Operating Temp range:	-10°C to 40°C	-20°C to 65°C

### **B. Junction Box/QMB PCB Replacement:**

1. Remove power to the indicator
2. Open the platform access cover, then the box cover
3. Loosen all gland bushing nuts
4. Check that all load cells have wire markers on the cable ends. If not, identify cells with wire markers or other means, then disconnect the load cells' wires from the terminal blocks. Disconnect the home-run wires.
5. Remove the PCB, clean the box, then install the new PCB.
6. Reconnect all load cell and home-run wires to the new PCB
7. Tighten all gland bushing nuts



#### **NOTE:**

*For analog systems, Leave the box cover removed until all corner adjustments are completed.*

8. Replace the box cover and torque all screws to 18-20 in/lbs. Replace the platform access cover .
9. Recalibrate as necessary.

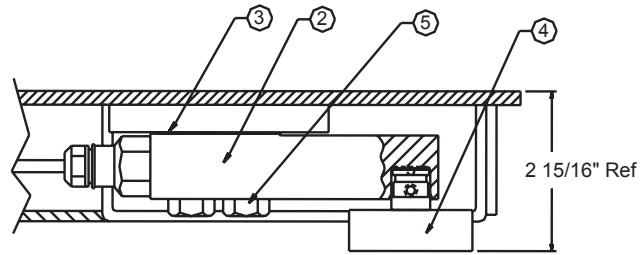
### **C. Foot Assembly Replacement:**

- 1.** Lift the platform end and secure using wood blocks for safety.
- 2.** Remove the bolt which goes through the load cell and post of the foot.
- 3.** Pull the foot assembly out of the load cell.
- 4.** Lubricate the “O” ring on the new foot assembly and re-insert the post of the new assembly into the load cell.
- 5.** Align the bolt hole in the part with the bolt hole in the load cell.
- 6.** Install the bolt and tighten.
- 7.** Removing the safety blocks, lower the scale to the surface.
- 8.** Ensure that the weight is shared equally by all four (4) feet.

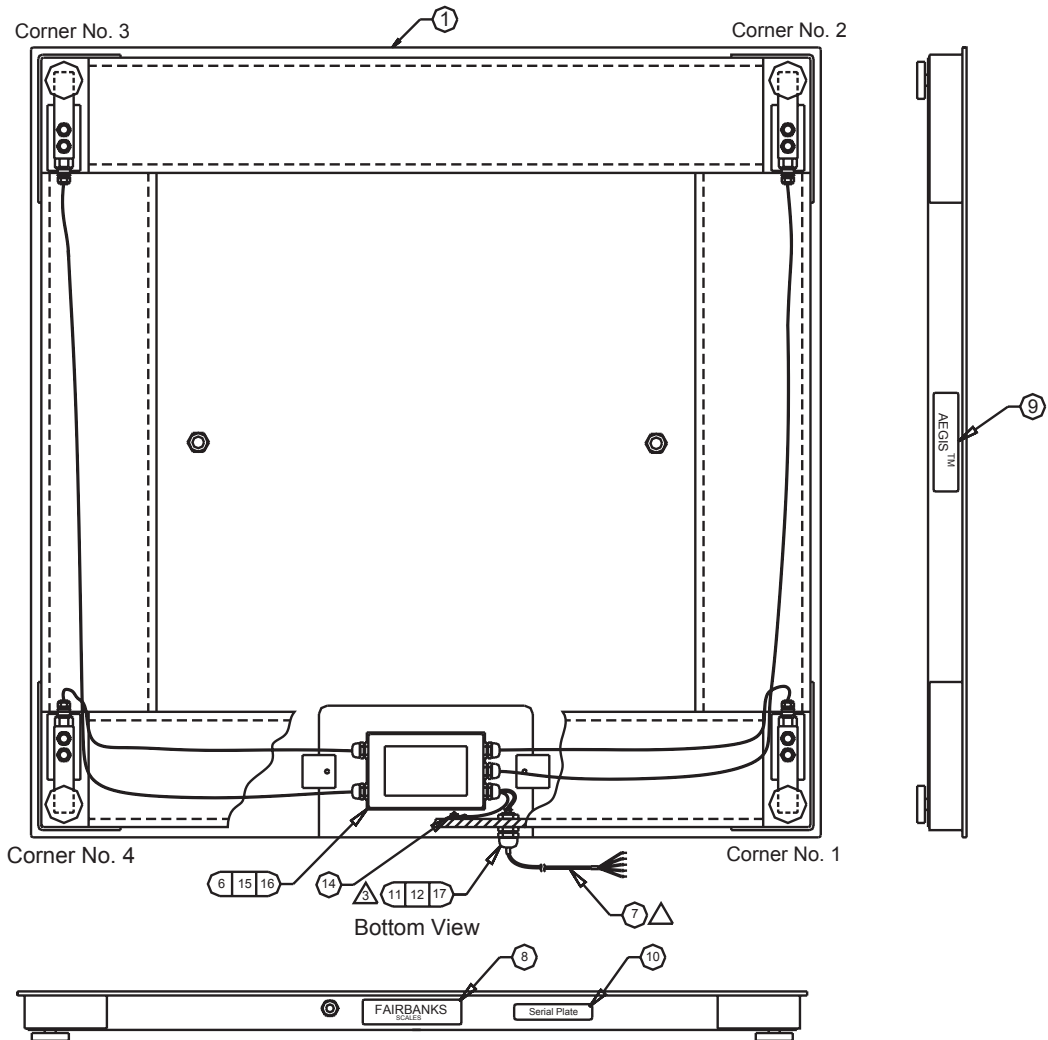
## Section 5: Parts

### A. Mild Steel Platforms, Intalogix and Analog Types:

<u>Item</u>	<u>Part#</u>	<u>Description</u>	<u>Models</u>
1	See Appendix I	Platform Weldment	See Appendix I
2	63889	Load Cell	1K, 2.5K
2	63890	Load Cell	5K
2	63891	Load Cell	10K
3	66754	Load Cell Shim	ALL
4	63899	Foot Assembly	ALL
5	54502	Load Cell Mtg Bolt ½'-20 x 1 ¾"	ALL
6	67171	Analog Junction Box	ANALOG
	96141	PCB for Analog box	ANALOG
6	15291	QMB Junction Box	INTALOGIX™
	15635	PCB for QMB Box	INTALOGIX™
7	12838	Cable Assembly	ANALOG
8	11224	'Fairbanks Scales' Decal	ALL
9	63592	'Aegis' Decal	ALL
10		Serial Tag	Individual
11	17546	Liquid Tight Connector	ALL
12	63586	Hole Plug, 5/8"	ALL
14	54203	SS Hex Nut 10-24 (for ground)	ALL
15	14721	5" Velcro Loop (use with hook)	ALL
16	14722	5" Velcro Hook (use with loop)	ALL
17	11175	Rubber Bushing (for #11 conn)	ALL



Section of Load Cell

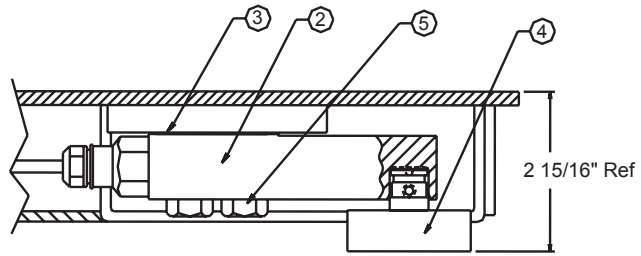


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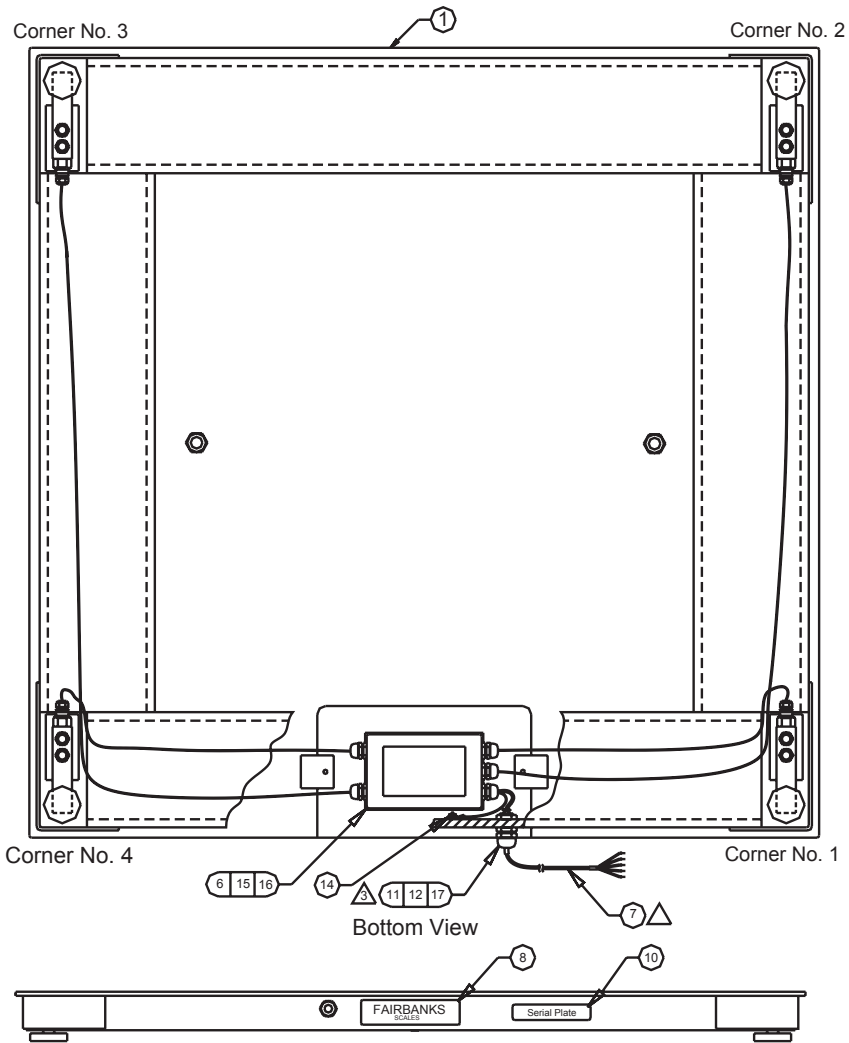
## Parts Diagram - Mild Steel Models

### B. Stainless Steel Platforms, Intalogix™ and Analog Types:

<u>Item</u>	<u>Part#</u>	<u>Description</u>	<u>Models</u>
1	See Appendix I	Platform Weldment	See Appendix I
2	63895	Load Cell, 1K LCF HR 4060-2	1K, 2.5K
2	63896	Load Cell, 2.5K LCF HR 4060-3	5K
2	63897	Load Cell, 5K LCF HR 4060-4	10K
3	66754	Load Cell Shim	ALL
4	63899	Foot Assembly	ALL
5	54503	Load Cell Mtg Bolt ½'-20 x 1 ¾"	ALL
6	67171	Analog Junction Box	ANALOG
	96141	PCB for Analog box	ANALOG
6	15291	QMB Junction Box	INTALOGIX™
	15635	PCB for QMB Box	INTALOGIX™
7	12838	Cable Assembly	ANALOG
8	11224	'Fairbanks Scales' Decal	ALL
9	63592	'Aegis' Decal	ALL
10		Serial Tag	Individual
11	17546	Liquid Tight Connector	ALL
12	14278	Lock Nut (for #11 connector)	ALL
14	54203	SS Hex Nut 10-24 (for ground)	ALL
15	14721	5" Velcro Loop (use with hook)	ALL
16	14722	5" Velcro Hook (use with loop)	ALL
17	11175	Rubber Bushing (for #11 conn)	ALL



Section of Load Cell



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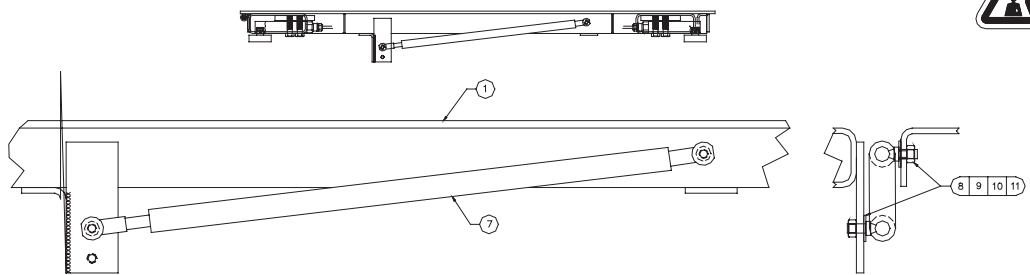
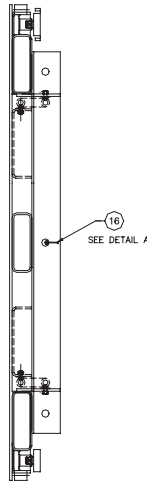
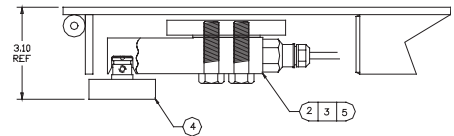
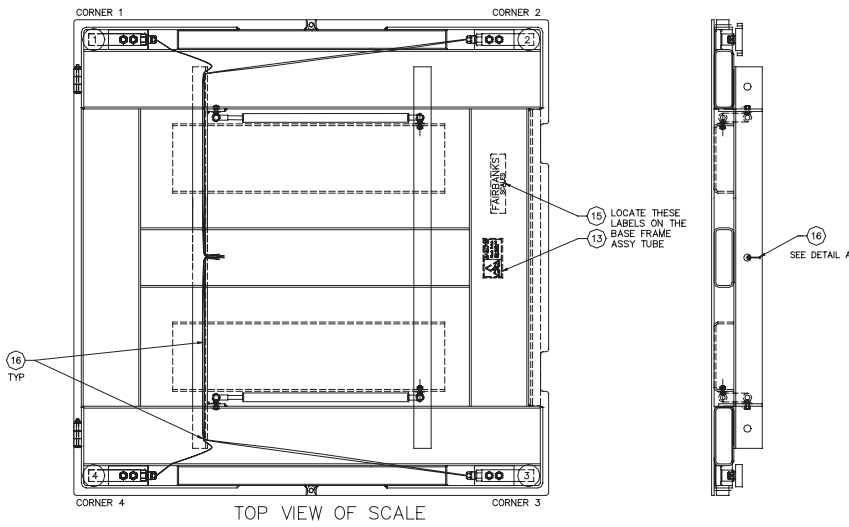
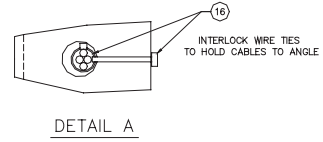
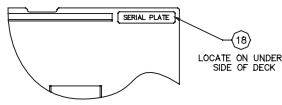
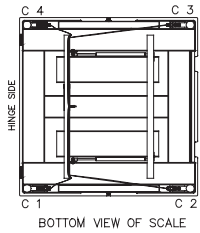
**C. Stainless Steel Lift Deck Platforms, Intalogix™ and Analog Types:**

<b><u>Item</u></b>	<b><u>Part#</u></b>	<b><u>Description</u></b>	<b><u>Models</u></b>
1	See Appendix I	Platform Weldment	See Appendix I
2	23426	Load Cell, 1K	1K, 2.5K
2	23427	Load Cell, 2.5K	5K
2	23428	Load Cell, 5K	10K
3	66754	Load Cell Shim	ALL
4	63899	Foot Assembly	ALL
5	54503	Load Cell Mtg Bolt ½'-20 x 1 ¾"	ALL
*	67171	Analog Junction Box	ANALOG
*	96141	PCB for Analog box	ANALOG
*	23902	J-Box, Remote Cradle Bracket	ANALOG
*	15291	QMB Junction Box	INTALOGIX™
*	15635	PCB for QMB Box	INTALOGIX™
*	24176	J-Box, Remote Cradle Bracket	INTALOGIX™
7	23429	Gas Spring, 250 lb	ALL
8	23436	Ball Stud	ALL
9	23437	Safety Clip	ALL
10	11121	Flat Washer .31	ALL
11	11105	Hex Nut .31-18	ALL
12			
13	23834	Label, Pinch Point	ALL
14	23836	Label, Lifting Hazard	ALL
15	11224	Label, Fairbanks	ALL
16	17613	Wire Tie	ALL
17			
18		Serial Tag	Individual

\* Not shown on parts diagram.



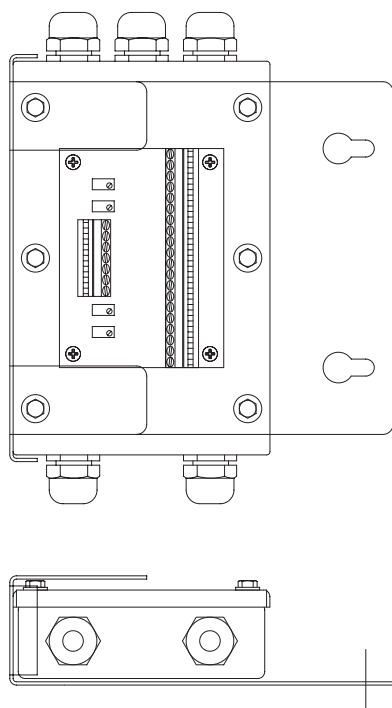
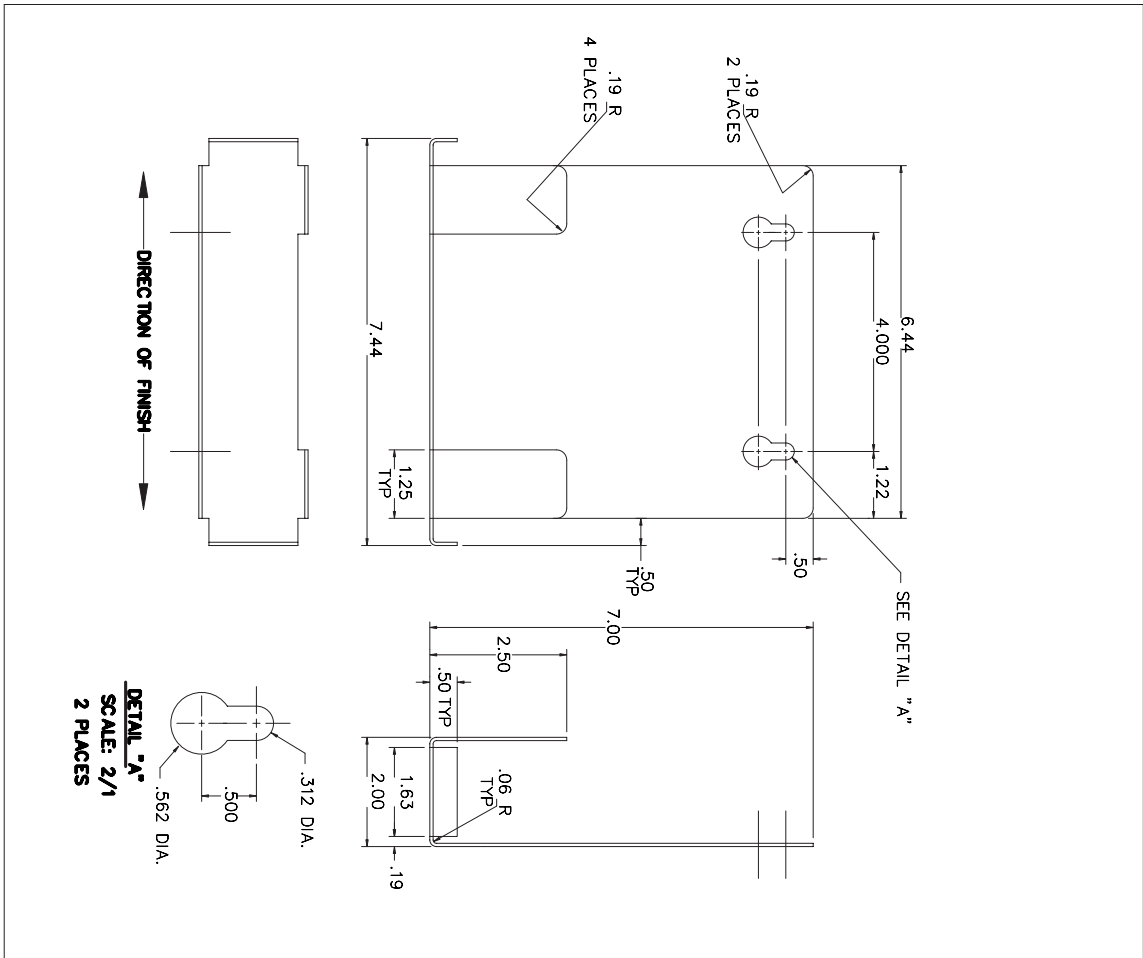
# Parts Diagram - Stainless Steel Lift Deck 3' x 3' and 4' x 4' Models



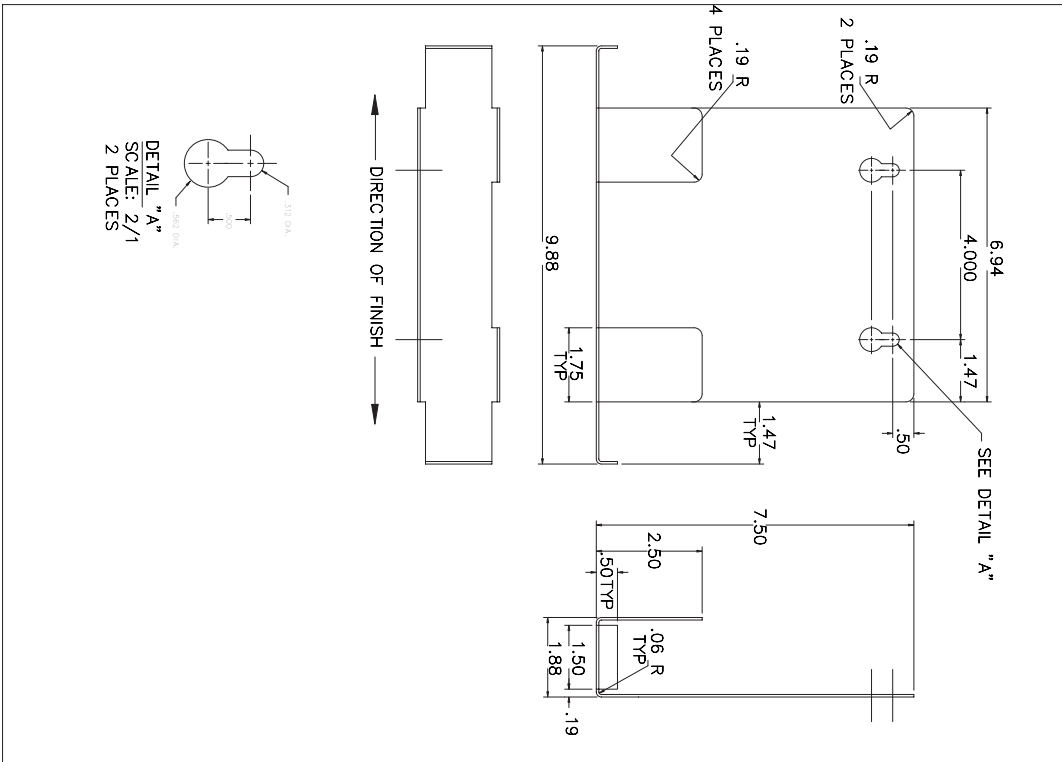
- NOTES:
1. APPLY ANTI-SEIZE SEALING COMPOUND TO BOLT THE LOAD CELLS TO THE LOAD CELL MOUNTING BLOCKS, TORQUE TO 90 FT-LB.
  2. PULL LOADCELL CABLES SLIGHTLY TAUGHT AND USE WIRE TIES, ITEM 16, TO ATTACH THEM TOGETHER AND TO KEEP CABLES CLOSE TO THE BASE FRAME ANGLE.
  3. SHIP ITEMS 14 AND 20 LOOSE WITH SCALE. LIFTING LABEL TO BE APPLIED TO THE TOP OF THE PIT COPING FRAME BETWEEN THE HANDLES.

50604-7

REVISIONS	
NO.	DESCRIPTION
1	REVISED FOR B-0-3
2	REVISED FOR B-0-3
3	REVISED FOR B-0-3
4	REVISED FOR B-0-3
5	REVISED FOR B-0-3
6	REVISED FOR B-0-3
7	REVISED FOR B-0-3
8	REVISED FOR B-0-3
9	REVISED FOR B-0-3
10	REVISED FOR B-0-3



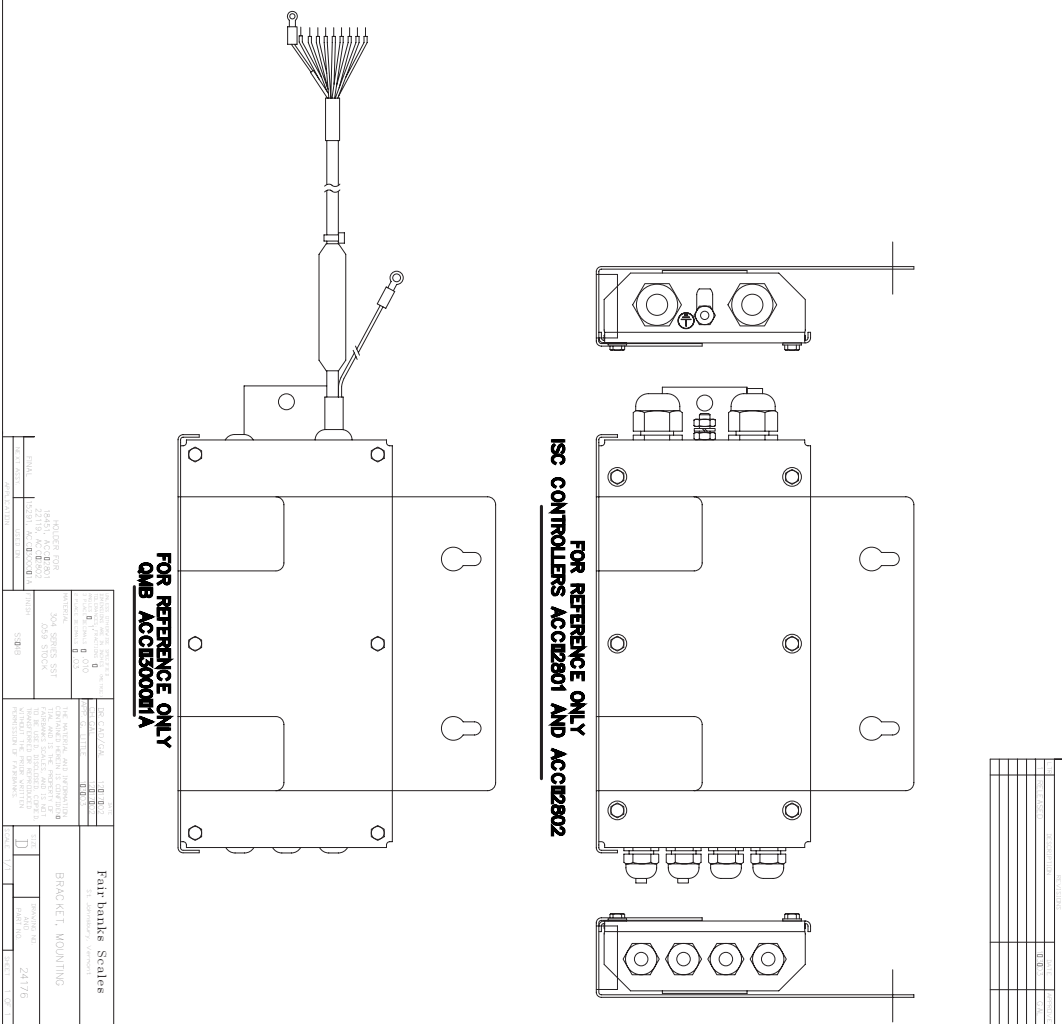
23816 THRU 23831	HOLDER FOR 67171 BOX	APPROXIMATE USER SIZE	MATERIAL: 304 SERIES SST .050 STOCK FINISH: SB-0-B	DR. CAD/GAL: SB-0-B DR. 3D: SB-0-B DR. 2D: SB-0-B DR. 1D: SB-0-B DR. 0D: SB-0-B DR. -0: SB-0-B	THE MATERIAL, AND DIMENSIONS LISTED HEREIN IS CAPABLE OF WITHSTANDING THE STRESS AND LOADS ASSOCIATED WITH THE OPERATION OF THE INSTRUMENT AND IS NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN PERMISSION OF INTRACORP	TITLE: BRACKET, MOUNTING DRAWING NO: 23802 PART NO:	SHEET: 1 OF 1
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DETAIL "A"  
SCALE: 2/1  
2 PLACES

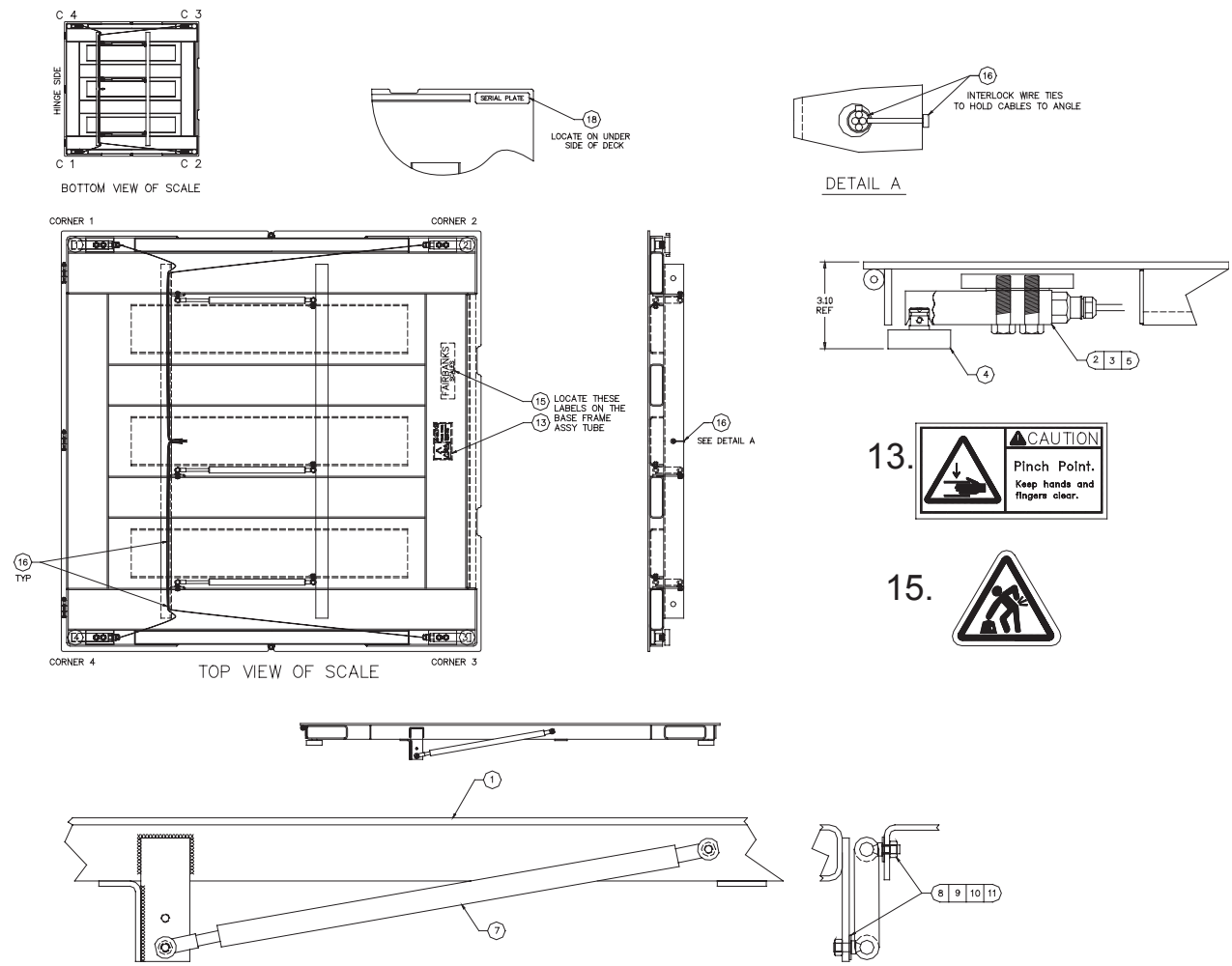
FOR REFERENCE ONLY  
QMS ACCR2801A

FOR REFERENCE ONLY  
ISC CONTROLLERS ACCR2801 AND ACCR2802



FAIRBANKS SECURITY SYSTEMS 2545 N. ACQUA DENVER, CO 80202 (303) 733-8000		FAIRBANKS SECURITY SYSTEMS 2545 N. ACQUA DENVER, CO 80202 (303) 733-8000	
ORDER NUMBER: 24176 QUANTITY: 1		ORDER NUMBER: 24176 QUANTITY: 1	
BRACKET, MOUNTING PART NUMBER: 24176		BRACKET, MOUNTING PART NUMBER: 24176	

# Parts Diagram - Stainless Steel Lift Deck 5' x 5' Models



50604-8

- NOTES:
1. APPLY ANTI-SEIZE SEALING COMPOUND TO BOLT THE LOAD CELLS TO THE LOAD CELL MOUNTING BLOCKS, TORQUE TO 90 FT-LB.
  2. PULL LOADCELL CABLES SLIGHTLY TAUGHT AND USE WIRE TIES, ITEM 16, TO ATTACH THEM TOGETHER AND TO KEEP CABLES CLOSE TO THE BASE FRAME ANGLE.
  3. SHIP ITEMS 14 AND 20 LOOSE WITH SCALE. LIFTING LABEL TO BE APPLIED TO THE TOP OF THE PIT COPING FRAME BETWEEN THE HANDLES.

# Appendix I: Model Matrix

## Parts Diagram - Stainless Steel Models

### A. Analog Mild Steel Series

<u>Product #</u>	<u>Model</u>	<u>Size</u>	<u>Capacity</u>	<u>Platform</u>
				<u>Weldment</u>
63653	PLF-R3400-A1	30" x 30"	1000 lbs	22483
63654	PLF-R3400-B1	3' x 3'	1000 lbs	63489
63655	PLF-R3400-C1	3' x 3'	2500 lbs	63489
63656	PLF-R3400-D1	4' x 4'	2500 lbs	63491
63657	PLF-R3400-F1	4' x 4'	5000 lbs	63491
63658	PLF-R3400-I 1	4' x 4'	10000 lbs	63491
63659	PLF-R3400-O1	4' x 5'	5000 lbs	63523
63660	PLF-R3400-P1	4' x 5'	10000 lbs	63523
63661	PLF-R3400-Q1	4' x 6'	5000 lbs	63525
63662	PLF-R3400-R1	4' x 6'	10000 lbs	63525
63663	PLF-R3400-G1	5' x 5'	5000 lbs	63493
63664	PLF-R3400-J1	5' x 5'	10000 lbs	63493
63665	PLF-R3400-H1	5' x 7'	5000 lbs	63495
63666	PLF-R3400-K1	5' x 7'	10000 lbs	63495
63667	PLF-R3400-S1	6' x 8'	10000 lbs	22484

### B. Analog Stainless Steel Series

<u>Product #</u>	<u>Model</u>	<u>Size</u>	<u>Capacity</u>	<u>Platform</u>
				<u>Weldment</u>
63715	PLF-HR3400-A1	30" x 30"	1000 lbs	63545
63716	PLF-HR3400-B1	3' x 3'	1000 lbs	63546
63717	PLF-HR3400-C1	3' x 3'	2500 lbs	63546
63718	PLF-HR3400-D1	4' x 4'	2500 lbs	63547
63719	PLF-HR3400-F1	4' x 4'	5000 lbs	63547
63720	PLF-HR3400-I1	4' x 4'	10000 lbs	63547
63721	PLF-HR3400-O1	4' x 5'	5000 lbs	63548
63722	PLF-HR3400-P1	4' x 5'	10000 lbs	63548
63723	PLF-HR3400-Q1	4' x 6'	5000 lbs	63549
63724	PLF-HR3400-R1	4' x 6'	10000 lbs	63549
63725	PLF-HR3400-G1	5' x 5'	5000 lbs	63550
63726	PLF-HR3400-J1	5' x 5'	10000 lbs	63550
63727	PLF-HR3400-H1	5' x 7'	5000 lbs	63551
63728	PLF-HR3400-K1	5' x 7'	10000 lbs	63551
63729	PLF-HR3400-S1	6' x 8'	10000 lbs	63552

### C. Intalogix™ Mild Steel Series

<u>Product #</u>	<u>Model</u>	<u>Size</u>	<u>Capacity</u>	<u>Platform Weldment</u>
63683	PLF-R3400-A1Q	30" x 30"	1000 lbs	22483
63684	PLF-R3400-B1Q	3' x 3'	1000 lbs	63489
63685	PLF-R3400-C1Q	3' x 3'	2500 lbs	63489
63686	PLF-R3400-D1Q	4' x 4'	2500 lbs	63491
63687	PLF-R3400-F1Q	4' x 4'	5000 lbs	63491
63688	PLF-R3400-I 1Q	4' x 4'	10000 lbs	63491
63689	PLF-R3400-O1Q	4' x 5'	5000 lbs	63523
63690	PLF-R3400-P1Q	4' x 5'	10000 lbs	63523
63691	PLF-R3400-Q1Q	4' x 6'	5000 lbs	63525
63692	PLF-R3400-R1Q	4' x 6'	10000 lbs	63525
63693	PLF-R3400-G1Q	5' x 5'	5000 lbs	63493
63694	PLF-R3400-J1Q	5' x 5'	10000 lbs	63493
63695	PLF-R3400-H1Q	5' x 7'	5000 lbs	63495
63696	PLF-R3400-K1Q	5' x 7'	10000 lbs	63495
63697	PLF-R3400-S1Q	6' x 8'	10000 lbs	22484

### D. Intalogix™ Stainless Steel Series

<u>Product #</u>	<u>Model</u>	<u>Size</u>	<u>Capacity</u>	<u>Platform Weldment</u>
63730	PLF-HR3400-A1Q	30" x 30"	1000 lbs	63545
63731	PLF-HR3400-B1Q	3' x 3'	1000 lbs	63546
63732	PLF-HR3400-C1Q	3' x 3'	2500 lbs	63546
63733	PLF-HR3400-D1Q	4' x 4'	2500 lbs	63547
63734	PLF-HR3400-F1Q	4' x 4'	5000 lbs	63547
63735	PLF-HR3400-I1Q	4' x 4'	10000 lbs	63547
63736	PLF-HR3400-O1Q	4' x 5'	5000 lbs	63548
63737	PLF-HR3400-P1Q	4' x 5'	10000 lbs	63548
63738	PLF-HR3400-Q1Q	4' x 6'	5000 lbs	63549
63739	PLF-HR3400-R1Q	4' x 6'	10000 lbs	63549
63740	PLF-HR3400-G1Q	5' x 5'	5000 lbs	63550
63741	PLF-HR3400-J1Q	5' x 5'	10000 lbs	63550
63742	PLF-HR3400-H1Q	5' x 7'	5000 lbs	63551
63743	PLF-HR3400-K1Q	5' x 7'	10000 lbs	63551
63744	PLF-HR3400-S1Q	6' x 8'	10000 lbs	63552

**E. Analog Lift Deck Stainless Steel Series Smooth Deck**

<u>Product #</u>	<u>Model</u>	<u>Size</u>	<u>Capacity</u>	<u>Platform</u>	
				<u>Weldment</u>	
23816	PLF-HR3410-B1	3' x 3'	1000 lbs	23813	
23817	PLF-HR3410-C1	3' x 3'	2500 lbs	23814	
23818	PLF-HR3410-D1	4' x 4'	2500 lbs	23463	
23819	PLF-HR3410-E1	4' x 4'	5000 lbs	23464	
23820	PLF-HR3410-F1	4' x 4'	10000 lbs	23465	
23821	PLF-HR3410-G1	5' x 5'	2500 lbs	23453	
23822	PLF-HR3410-H1	5' x 5'	5000 lbs	23454	
23823	PLF-HR3410-J1	5' x 5'	10000 lbs	23455	

**F. Analog Lift Deck Stainless Steel Series Diamond Deck**

<u>Product #</u>	<u>Model</u>	<u>Size</u>	<u>Capacity</u>	<u>Platform</u>	
				<u>Weldment</u>	
23824	PLF-HR3420-B1	3' x 3'	1000 lbs	23811	
23825	PLF-HR3420-C1	3' x 3'	2500 lbs	23812	
23826	PLF-HR3420-D1	4' x 4'	2500 lbs	23460	
23827	PLF-HR3420-E1	4' x 4'	5000 lbs	23461	
23828	PLF-HR3420-F1	4' x 4'	10000 lbs	23462	
23829	PLF-HR3420-G1	5' x 5'	2500 lbs	23190	
23830	PLF-HR3420-H1	5' x 5'	5000 lbs	23191	
23831	PLF-HR3420-J1	5' x 5'	10000 lbs	23192	

**G. Intalogix Lift Deck Stainless Steel Series Smooth Deck**

<u>Product #</u>	<u>Model</u>	<u>Size</u>	<u>Capacity</u>	<u>Platform</u>	
				<u>Weldment</u>	
23908	PLF-HR3410-B1Q	3' x 3'	1000 lbs	23813	
23909	PLF-HR3410-C1Q	3' x 3'	2500 lbs	23814	
23910	PLF-HR3410-D1Q	4' x 4'	2500 lbs	23463	
23911	PLF-HR3410-E1Q	4' x 4'	5000 lbs	23464	
23912	PLF-HR3410-F1Q	4' x 4'	10000 lbs	23465	
23913	PLF-HR3410-G1Q	5' x 5'	2500 lbs	23453	
23914	PLF-HR3410-H1Q	5' x 5'	5000 lbs	23454	
23915	PLF-HR3410-J1Q	5' x 5'	10000 lbs	23455	

**H. Intalogix Lift Deck Stainless Steel Series Diamond Deck**

<u>Product #</u>	<u>Model</u>	<u>Size</u>	<u>Capacity</u>	<u>Platform</u>	
				<u>Weldment</u>	
23916	PLF-HR3420-B1Q	3' x 3'	1000 lbs	23811	
23917	PLF-HR3420-C1Q	3' x 3'	2500 lbs	23812	
23918	PLF-HR3420-D1Q	4' x 4'	2500 lbs	23460	
23919	PLF-HR3420-E1Q	4' x 4'	5000 lbs	23461	
23920	PLF-HR3420-F1Q	4' x 4'	10000 lbs	23462	
23921	PLF-HR3420-G1Q	5' x 5'	2500 lbs	23190	
23922	PLF-HR3420-H1Q	5' x 5'	5000 lbs	23191	
23923	PLF-HR3420-J1Q	5' x 5'	10000 lbs	23192	



## Appendix II: Accessories

### A. Mild Steel Ramps, Bumper Guards and Pit Frames:

<u>Size</u>	<u>Cap</u>	<u>Ramp</u>	<u>Bumper Guard</u>	<u>Pit Frame</u>
30"	1K	64058 (30")	-	-
3' x 3'	1K	63751 (3')	72198 (3')	63757
3' x 3'	2.5K	63751 (3')	72198 (3')	63757
4' x 4'	2.5K	63753 (4')	72194 (4')	63759
4' x 4'	5K	63753 (4')	72194 (4')	63759
4' x 4'	10K	63753 (4')	72194 (4')	63759
4' x 5'	5K	63753 (4')	72190 (5')	63761
4' x 5'	10K	63753 (4')	72190 (5')	63761
4' x 6'	5K	63753 (4')	72196 (6')	63763
4' x 6'	10K	63753 (4')	72196 (6')	63763
5' x 5'	5K	63755 (5')	72190 (5')	63765
5' x 5'	10K	63755 (5')	72190 (5')	63765
5' x 7'	5K	63755 (5')	72192 (7')	63767
5' x 7'	10K	63755 (5')	72192 (7')	63767
6' x 8'	10K	64060 (6')	72200 (8')	64062

### B. Mild Steel Bolt-Down Plates, Eyebolts, and Hole plugs:

<u>Size</u>	<u>Cap</u>	<u>Bolt-Down Plates</u>	<u>Eyebolts</u>	<u>Hole Plugs</u>
ALL	ALL	63776 (Set of 4) 63778 (Set of 2)	70895 (2)	70896 (2)

**C. Stainless Steel Ramps, Bumper Guards and Pit Frames:**

<u>Size</u>	<u>Cap</u>	<u>Ramp</u>	<u>Bumper Guard</u>	<u>Pit Frame</u>	<u>Lift Deck Pit Frame</u>
30"	1K	64059 (30")	-	-	-
3' x 3'	1K	63752 (3')	72199 (3')	63758	63758
3' x 3'	2.5K	63752 (3')	72199 (3')	63758	63758
4' x 4'	2.5K	63754 (4')	72195 (4')	63760	63760
4' x 4'	5K	63754 (4')	72195 (4')	63760	63760
4' x 4'	10K	63754 (4')	72195 (4')	63760	63760
4' x 5'	5K	63754 (4')	72191 (5')	63762	-
4' x 5'	10K	63754 (4')	72191 (5')	63762	-
4' x 6'	5K	63754 (4')	72197 (6')	63764	-
4' x 6'	10K	63754 (4')	72197 (6')	63764	-
5' x 5'	2.5K	-	-	-	63766
5' x 5'	5K	63756 (5')	72191 (5')	63766	63766
5' x 5'	10K	63756 (5')	72191 (5')	63766	63766
5' x 7'	5K	63756 (5')	72193 (7')	63768	-
5' x 7'	10K	63756 (5')	72193 (7')	63768	-
6' x 8'	10K	64061 (6')	72201 (8')	64063	-

**D. Stainless Steel Bolt-Down Plates, Eyebolts, and Hole plugs:**

<u>Size</u>	<u>Cap</u>	<u>Bolt-Down Plates</u>	<u>Eyebolts</u>	<u>Hole Plugs</u>
ALL	ALL	63777 (Set of 4) 63779 (Set of 2)	70895 (2) (Mild Steel)	70896 (2)

**E. Stainless Steel Pedestal for Above Ground Installations:**

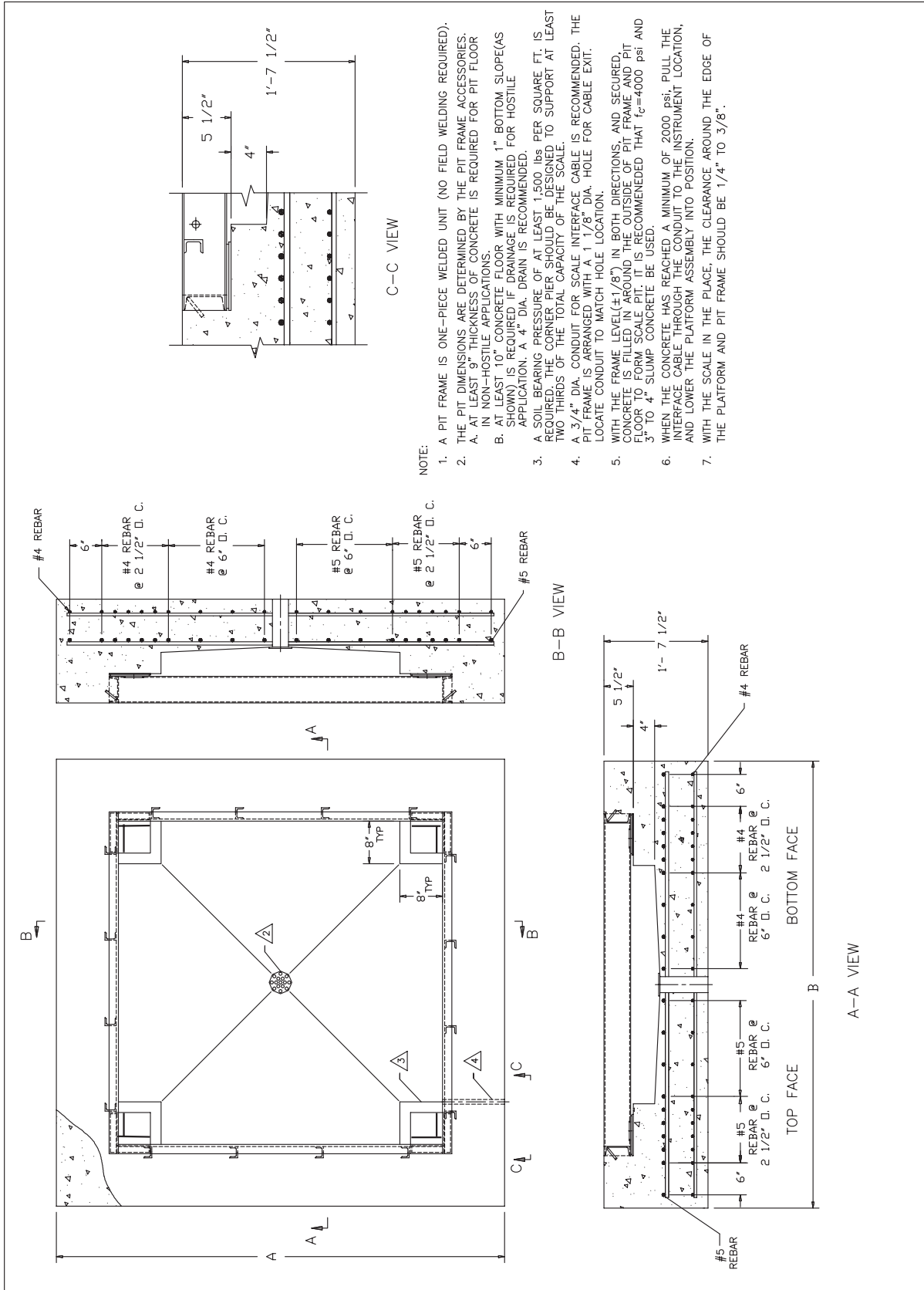
<u>Size</u>	<u>Cap</u>	<u>Item</u>	<u>Description</u>
ALL	ALL	79638	Pedestal Kit (4-79629 & 16-73741)
		79629	Pedestal, SS (one only)
		73741	Wedge Anchor, SS (one only)

**NOTE:**

*Above ground installations require the scale platform be protected from mobile machinery that may be present in the area. Fairbanks Scales is not responsible for damages to unprotected platforms in above ground installations.*

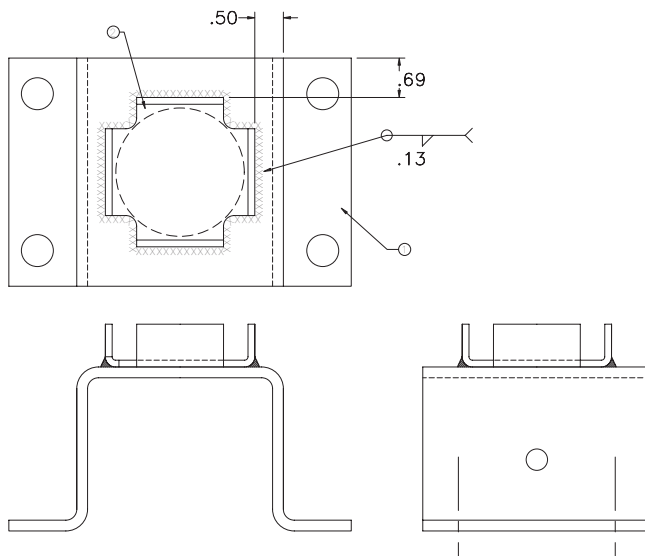


# Appendix III: Standard Pit Frame and Installation Drawing



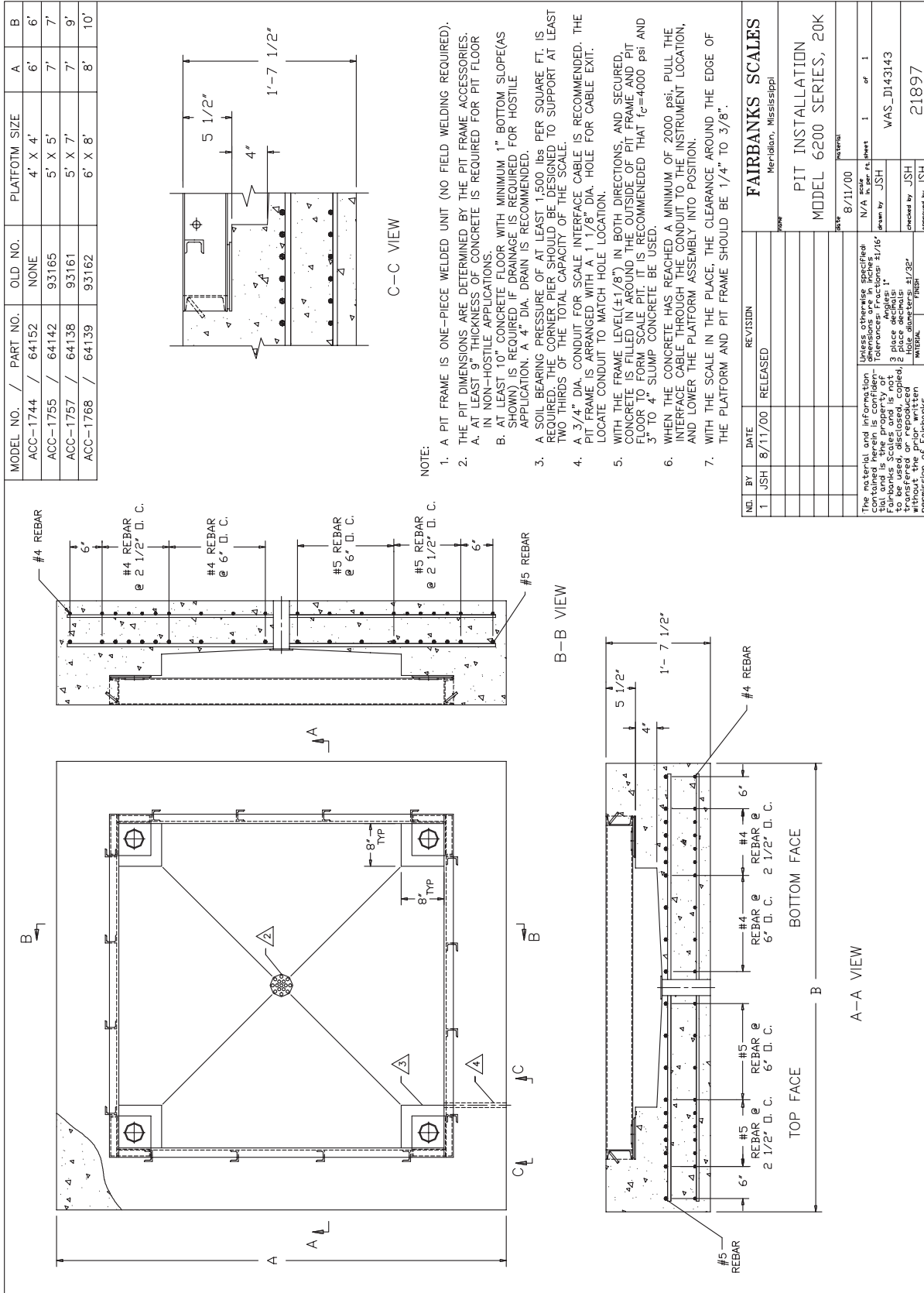
**NOTE:**

1. A PIT FRAME IS ONE-PIECE WELDED UNIT (NO FIELD WELDING REQUIRED).
2. THE PIT DIMENSIONS ARE DETERMINED BY THE PIT FRAME ACCESSORIES.
  - A. AT LEAST 9" THICKNESS OF CONCRETE IS REQUIRED FOR PIT FLOOR IN NON-HOSTILE APPLICATIONS.
  - B. AT LEAST 10" CONCRETE FLOOR WITH MINIMUM 1" BOTTOM SLOPE (AS SHOWN) IS REQUIRED IF DRAINAGE IS REQUIRED FOR HOSTILE APPLICATION. A 4" DIA. DRAIN IS RECOMMENDED.
3. A SOIL BEARING PRESSURE OF AT LEAST 1,500 lbs PER SQUARE FT. IS REQUIRED. THE CORNER PIER SHOULD BE DESIGNED TO SUPPORT AT LEAST TWO THIRDS OF THE TOTAL CAPACITY OF THE SCALE.
4. A 3/4" DIA. CONDUIT FOR SCALE INTERFACE CABLE IS RECOMMENDED. THE PIT FRAME IS ARRANGED WITH A 1 1/8" DIA. HOLE FOR CABLE EXIT. LOCATE CONDUIT TO MATCH HOLE LOCATION.
5. WITH THE FRAME LEVEL (+1/8") IN BOTH DIRECTIONS, AND SECURED, CONCRETE IS FILLED IN AROUND THE OUTSIDE OF PIT FRAME AND PIT FLOOR TO FORM SCALE PIT. IT IS RECOMMENDED THAT  $f_c=4000$  psi AND 3" TO 4" SLUMP CONCRETE BE USED.
6. WHEN THE CONCRETE HAS REACHED A MINIMUM OF 2000 psi, PULL THE INTERFACE CABLE THROUGH THE CONDUIT TO THE INSTRUMENT LOCATION, AND LOWER THE PLATFORM ASSEMBLY INTO POSITION.
7. WITH THE SCALE IN THE PLACE, THE CLEARANCE AROUND THE EDGE OF THE PLATFORM AND PIT FRAME SHOULD BE 1/4" TO 3/8".



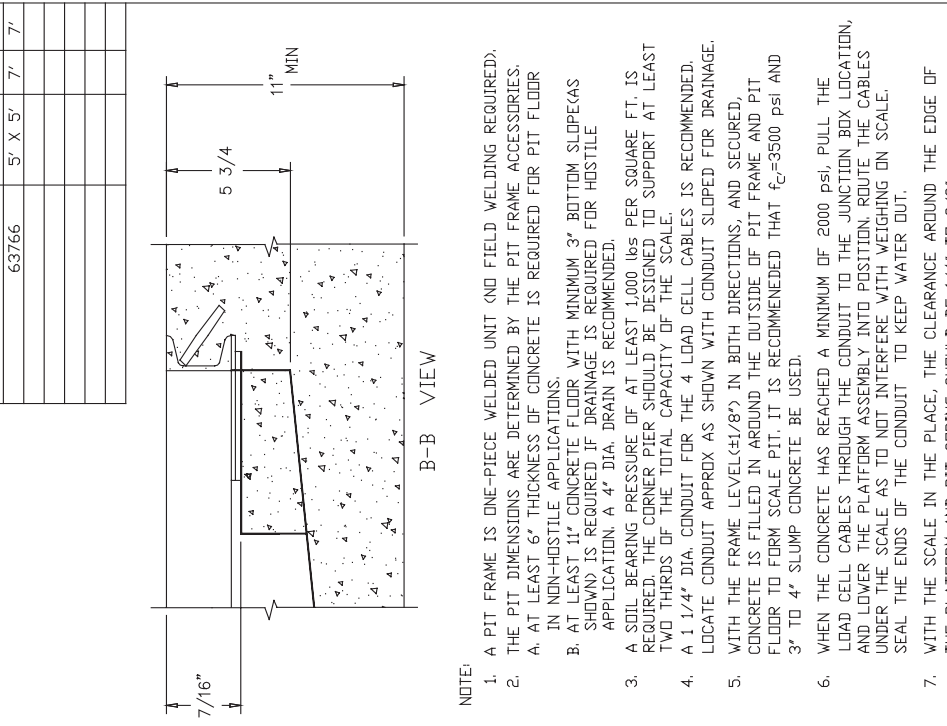
**PEDESTAL ASSY  
PART# 79629**

# Appendix IV: Early Revision Standard Pit Frame Installation Drawing



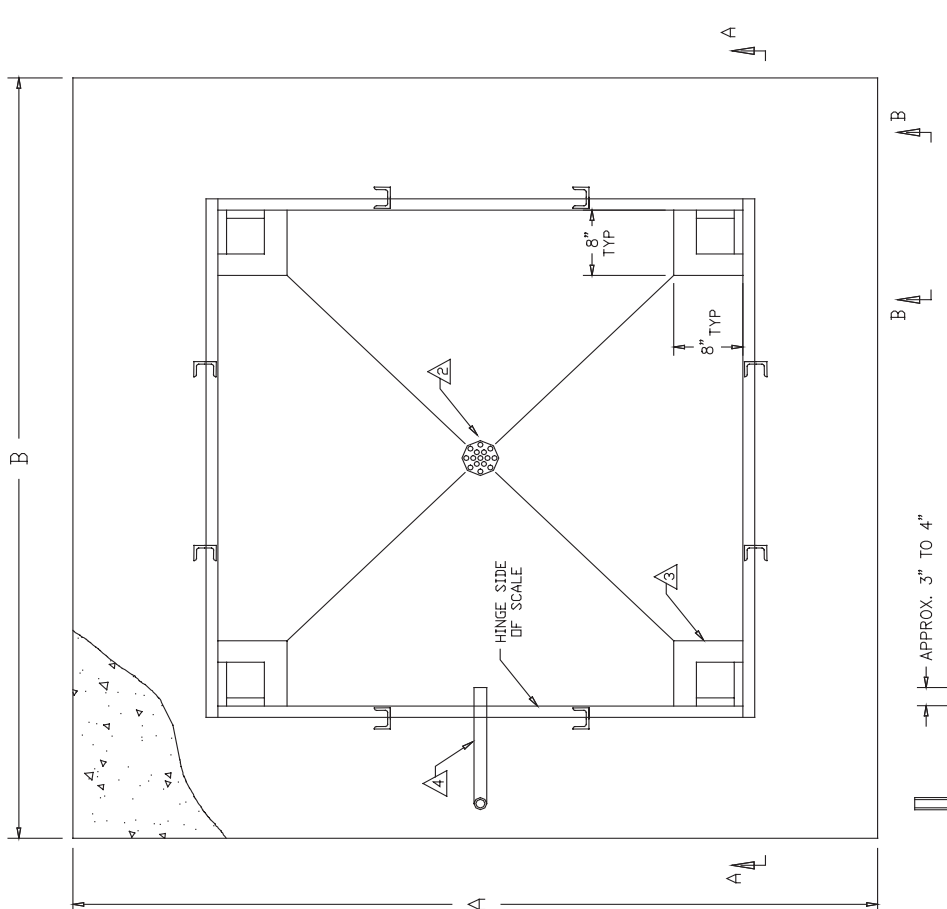
# Appendix V: Lift Deck Pit Frame Installation Drawing

STAINLESS STEEL	PLATFORM SIZE	A	B
SS MODEL / PART NO.	3' X 3'	5'	5'
	4' X 4'	6'	6'
	5' X 5'	7'	7'



**NOTE:**

1. A PIT FRAME IS ONE-PIECE WELDED UNIT (NO FIELD WELDING REQUIRED).
2. THE PIT DIMENSIONS ARE DETERMINED BY THE PIT FRAME ACCESSORIES.
  - A. AT LEAST 6" THICKNESS OF CONCRETE IS REQUIRED FOR PIT FLOOR IN NON-HOSTILE APPLICATIONS.
  - B. AT LEAST 11" CONCRETE FLOOR WITH MINIMUM 3" BOTTOM SLOPE(S) SHOWN. IS REQUIRED IF DRAINAGE IS REQUIRED FOR HOSTILE APPLICATION. A 4" DIA. DRAIN IS RECOMMENDED.
3. A SOIL BEARING PRESSURE OF AT LEAST 1,000 LBS PER SQUARE FT. IS REQUIRED. THE CORNER PIER SHOULD BE DESIGNED TO SUPPORT AT LEAST TWO THIRDS OF THE TOTAL CAPACITY OF THE SCALE.
4. A 1 1/4" DIA. CONDUIT FOR THE 4 LOAD CELL CABLES IS RECOMMENDED. LOCATE CONDUIT APPROX AS SHOWN WITH CONDUIT SLOPED FOR DRAINAGE.
5. WITH THE FRAME LEVEL(±1/8") IN BOTH DIRECTIONS, AND SECURED, CONCRETE IS FILLED IN AROUND THE OUTSIDE OF PIT FRAME AND PIT FLOOR TO FORM SCALE PIT. IT IS RECOMMENDED THAT  $f_c=3500$  psi AND 3" TO 4" SLUMP CONCRETE BE USED.
6. WHEN THE CONCRETE HAS REACHED A MINIMUM OF 2000 psi, PULL THE LOAD CELL CABLES THROUGH THE CONDUIT TO THE JUNCTION BOX LOCATION, AND LOWER THE PLATFORM ASSEMBLY INTO POSITION. ROUTE THE CABLES UNDER THE SCALE AS TO NOT INTERFERE WITH WEIGHING ON SCALE. SEAL THE ENDS OF THE CONDUIT TO KEEP WATER OUT.
7. WITH THE SCALE IN THE PLACE, THE CLEARANCE AROUND THE EDGE OF THE PLATFORM AND PIT COPING SHOULD BE 1/4" TO 3/8".



NO.	BY	DATE	REVISION
1	JSH	4/26/02	RELEASED

FAIRBANKS SCALES	
Meridian, Mississippi	
PIT INSTALLATION	
1 - 10K, SS	
LIFT DECK SCALES	
DATE	4/26/02
DRAWN BY	JSH
CHECKED BY	JSH
APPROVED BY	JSH
SHEET	1 of 1

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---	--

A-A VIEW  
INSTALLATION OF PIT FRAME  
POURED CONCRETE BASED ON THE SIZE  
1K-10K