



QuickSilver IS

5001 Series



NOTE: Instruments manufactured after **03/01/2018** are not approved for Division 1 applications.

Amendment Record

QuickSilver IS 5001 Series 50770

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

Issue 1	10/2004	New Product
Issue 2	08/2005	Revised commercial application specs
Issue 3	12/2006	Updated Minimum Grad Specifications List
Revision 4	08/2007	Updated images
Revision 5	04/2012	Added NTEP Approved Divisions, Control Drawings, and updated Battery Charger information.
Revision 6	01/2018	Updated Appendix I: FM Control Drawings

Table of Contents

Section 1: Introduction	6
Section 2: Description	7
A. Serial Tag Model Legends:	7
B. Specifications	7
Section 3: Unpacking & Assembly	10
A. Mounting:.....	10
B. Assembly:.....	10
Section 4: Security.....	11
A. Security Levels	11
Section 5: Operation	11
A. Keys	11
B. Indicators:.....	12
C. Weighing	12
1. Instrument Weighing Functions	12
Section 6: Battery Pack	17
A. Description	17
B. Specifications	17
C. States of Operation.....	18
1: NO BATTERY	18
2: UNDER VOLTAGE BATTERY	18
3: CHARGING.....	18
4: TRICKLE CHARGE.....	18
5: OVER VOLTAGE	18
Appendix I: FM CONTROL DRAWINGS.....	19
Appendix II: Certificate of Compliance	22

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.

Section 1: Introduction

The 5001 Series of bench scales and indicators have stainless steel construction. They are designed for use in a hazardous area and/or wash-down environment. They either have a direct power supply or can also use a battery. The scales feature the capacity to store up to four (4) Over/Under Checkweighing Sequences in memory, each of which can be recalled at the push of a button. Programming of these Over/Under Checkweighing can be made through the front panel. The battery pack is stored in the battery holster located on the back of the indicator which can be easily removed for recharging.



Section 2: Description

A. Serial Tag Model Legends:

P=Platform
P=Pillar (2nd "P")
I=Indicator or IND = Indicator Only
W=Wall Bracket
H =Hazardous Environment

Example: PWI = Platform + Wall bracket + Indicator

Example: PPI = Platform + Pillar + Indicator

Note: C = CSA approved (Canadian certification)

B. Specifications

1. Minimum Grad Size for Commercial Applications: NTEP Approval = 5000 Divisions

NTEP Appv'd	LB	KG	OZ	G
	2.0000 X .0001	0.90715 X .00005	32.000 X .002	907.15 X .05
	2.0000 X .0002	0.9072 X .0001	32.000 X .005	907.2 X .1
YES	2.0000 X .0005	0.9072 X .0002	32.00 X .01	907.2 X .2
	6.0000 X .0001	2.72155 X .00005	96.000 X .005	2721.55 X .05
	6.0000 X .0002	2.7215 X .0001	96.000 X .005	2721.5 X .1
	6.0000 X .05	2.7216 X .0002	96.00 X .01	2721.6 X .2
	6.000 X .001	2.7215 X .0005	96.00 X .02	2721.5 X .5
YES	6.000 X .002	2.722 X .001	96.00 X .05	2722 X 1
YES	6.000 X .005	2.722 X .002	96.0 X .1	2722 X 2
	10.000 X .001	4.5360 X .0005	160.00 X .01	4536.0 X .5
YES	10.000 X .002	4.536 X .001	160.00 X .05	4536 X 1
YES	10.000 X .005	4.536 X .002	X .1	4536 X 2
	12.000 X .001	5.4430 X .0005	192.00 X .02	5443.0 X .5
	12.000 X .002	5.443 X .001	192.00 X .05	5443 X 1
YES	12.000 X .005	5.444 X .002	192.0 X .1	5444 X 2
	24.000 X .001	10.8865 X .0005	384.00 X .02	10886.0 X .5
	24.000 X .002	10.886 X .001	384.00 X .05	10886 X 1
YES	24.000 X .005	10.886 X .002	384.0 X .1	10886 X 2
YES	24.00 X .01	10.885 X .005	384.0 X .2	10885 X 5
YES	24.00 X .02	10.89 X .01	384.0 X .5	10890 X 10
YES	24.00 X .05	10.88 X .02	384 X 1	10880 X 10
	25.000 X .001	11.3400 X .0005	400.00 X .02	113400 X 5
	25.000 X .002	11.340 X .001	400.00 X .05	11340 X 1
YES	25.000 X .005	11.340 X .002	400.0 X .1	11340 X 2
	30.000 X .001	13.6070 X .0005	480.00 X .02	136075 X 5
	30.000 X .002	13.608 X .001	480.00 X .05	13608 X 1
	30.000 X .005	13.608 X .002	480.0 X .1	13608 X 2

NTEP Appv'd	LB	KG	OZ	G
YES	30.00 X .01	13.610 X .005	480.0 X .2	13610 X 5
YES	30.00 X .02	13.61 X .01	480.0 X .5	13610 X 10
YES	30.00 X .05	13.60 X .02	480 X 1	13600 X 10
	40.000 X .001	18.1440 X .0005	640.00 X .02	181440 X 5
	40.000 X .002	18.144 X .001	640.00 X .05	18144 X 1
	40.000 X .005	18.144 X .002	640.0 X .1	18144 X 2
YES	40.00 X .01	18.145 X .005	640.0 X .2	18145 X 5
YES	40.00 X .02	18.14 X .01	640.0 X .5	18140 X 10
YES	40.00 X .05	18.14 X .02	640 X 1	18140 X 20
	50.000 X .001	22.6785 X .0005	800.00 X .02	226800 X 5
	50.000 X .002	22.680 X .001	800.00 X .05	NOT AVAILABLE
	50.000 X .005	22.680 X .002	800.0 X .1	NOT AVAILABLE
YES	50.00 X .01	22.680 X .005	800.0 X .2	22680 X 5
YES	50.00 X .02	22.68 X .01	800.0 X .5	NOT AVAILABLE
YES	50.00 X .05	22.68 X .02	800 X 1	NOT AVAILABLE
	60.000 X .001	27.2155 X .0005	960.00 X .02	272160 X 5
	60.000 X .002	27.215 X .001	960.00 X .05	NOT AVAILABLE
	60.000 X .005	27.214 X .002	960.0 X .1	NOT AVAILABLE
	60.00 X .01	27.215 X .005	960.0 X .2	27215 X 5
YES	60.00 X .02	27.22 X .01	960.0 X .5	NOT AVAILABLE
YES	60.00 X .05	27.22 X .02	960 X 1	NOT AVAILABLE
	100.00 X .01	45.360 X .005	1600.0 X .2	45360 X 5
YES	100.00 X .02	45.36 X .01	1600.0 X .5	NOT AVAILABLE
YES	100.00 X .05	45.36 X .02	1600 X 1	NOT AVAILABLE
	150.00 X .01	68.040 X .005	2400.0 X .2	68040 X 5
	150.00 X .02	68.04 X .01	2400.0 X .5	NOT AVAILABLE
YES	150.00 X .05	68.04 X .02	2400 X 1	NOT AVAILABLE
	200.00 X .01	90.720 X .005	3200.0 X .2	90720 X 5
	200.00 X .02	90.72 X .01	3200.0 X .5	NOT AVAILABLE
YES	200.00 X .05	90.72 X .02	3200 X 1	NOT AVAILABLE
	250.00 x .01	113.400 X .005	4000.0 X .2	113400 x 5
	250.00 X .02	113.40 X .01	4000.0 x .5	NOT AVAILABLE
YES	250.00 X .05	113.40 X .02	4000 X 1	NOT AVAILABLE
	300.00 X .01	136.07 X .005	4800.0 X .2	136075 X 5
YES	300.00 X .02	136.08 X .01	4800.0 X .5	NOT AVAILABLE
	300.00 X .05	136.08 X .02	4800 X 1	NOT AVAILABLE
YES	300.0 X .1	136.10 X .05	4800 X 2	136100 X 50
YES	300.0 X .2	136.1 X .1	4800 X 5	NOT AVAILABLE
YES	300.0 X .5	136.0 X .2	4800 X 10	NOT AVAILABLE
	500.00 X .01	226.795 X .005	8000 X .2	226800 X 5
	500.00 X .02	226.80 X .01	8000.0 X .5	NOT AVAILABLE
	500.00 X .05	226.80 X .02	8000 X 1	NOT AVAILABLE
YES	500.0 X .1	226.80 X .05	8000 X 2	226800 X 50
YES	500.0 X .2	226.8 X .1	8000 X 5	NOT AVAILABLE
YES	500.0 X .5	226.8 X .2	8000 X 10	NOT AVAILABLE
	1000.0 X .1	453.60 X .05	16000 X 2	453600 X 50
YES	1000.0 X .2	453.6 X .1	16000 X 5	NOT AVAILABLE
YES	1000.0 X .5	453.6 X .2	16000 X 10	NOT AVAILABLE

2. **Rounding:** Nearest division (0.5 division rounded upwards)
3. **Overload Protection:** 500% of scale capacity. On 18" x 24" and 24" x 24" models - 300%.
4. **Construction:** All stainless steel
5. **Humidity:** 0-100%, suitable for water washdown; NEMA 4X rated enclosure
6. **Operating Temperature:** 14F to 104F (-10C to 40C)
7. **Power:** 7 volt rechargeable Nicad battery pack, removable or direct power supply
8. **Battery Life:** 65 hours continuous operation, 250 hours in battery saver mode
9. **Display:** 0.75" 6-digit, liquid crystal
10. Front panel selectable
11. **Zero:** Programmable 2% or 100% of capacity
12. **Center-of-Zero:** Active when scale is within 0.25 divisions of zero
13. **Checkweighing:** 4 programmable target and limit weights
14. **Front Panel Programming:** 3 levels of security
15. **Power Failure Protection:** Calibration data, checkweighing target weights and limit weights protected
16. **Approvals:** COC: 92-050A1

QuickSilver IS Accessories :

<u>Model</u>	<u>Description</u>
14618	Intrinsically safe 65 - 250 hr battery pack, purchased WITH instrument
14692	Safe area recharger, used with 14618.
14177	Power supply (NOT for groups A & B)
14178	Power supply, Canadian Version (NOT for groups A & B)
14434	10' cable for 14177 & 14178
14432	25' cable for 14177 & 14178
14433	50' cable for 14177 & 14178

Section 3: Unpacking & Assembly

A. Mounting:

Mounting the QuickSilver IS Instrument with wall mounting bracket.

1. Choose a location within the length of the cable between the indicator and the platform.
2. Mount the bracket at eye level of the operator, using SS screws.
3. Attach the indicator to the wall bracket using hardware provided.
4. Route the cable where it is protected.
5. Set platform on a solid, level surface for operation.

B. Assembly:

The QuickSilver IS bench scale is shipped partly disassembled.

To assemble the scale:

1. Carefully remove the packing materials from the box.
2. The scale is shipped in three parts, the platform, the indicator and the pillar. The platform and indicator are connected with the load cell cable. Remove the three components and place them on a work surface.
3. The top of the pillar has two (2) mounting flanges in the shape of a "Y."
Be sure the pillar is in the correct orientation before proceeding.
4. Remove the nuts and lock washers from the weld studs on the bottom of the Indicator. Place the Indicator on top of the pillar with the two weld studs through the holes in the top of the pillar. Reinstall the nuts and washers on the weld studs and tighten them using a 3/8" open-end wrench.
5. Remove the two bolts from the shelf on the back of the platform.
6. Place the pillar upright on the shelf and install the two bolts through the shelf and the pillar. Tighten the nuts using a 7/16" wrench.
7. Push the excess load cell cable into the QSI Instrument. Tighten the gland nut.
8. Connect the battery cable to the port in the bottom of the indicator.
9. Assembly is now complete and the scale is ready to operate.

Section 4: Security

A. Security Levels

The QuickSilver IS is shipped with the least protected security level, 00, programmed into the indicator. This level allows all parameters to be programmed from the front panel. To change the security level to a more restricted condition, change program step "SL" (security level) "10 00" to "10 01" or "10 02". Once a higher level is programmed, it CANNOT be reduced to a lower level from the front panel. To reduce the security level, call a qualified service representative.

The security levels are:

- 0** - No programmable parameters are protected and all of them can be changed from the front panel. This security level can only be used in NON-COMMERCIAL applications.
- 1** - Limited parameters are protected and P3 through P9 can be changed from the front panel. This security level can be used in commercial applications.
- 2** - All programmable parameters are protected and NO changes can be made from the front panel. This security level may be used in commercial applications.
- 3** - Same as 00.

If the scale is to be used in a commercial application, it must be placed-in-service by a certified technician or an official from the weights and measures department. To be used as a commercial scale, the security level must be set to 01 or 02.

Section 5: Operation



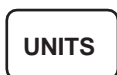
A. Keys



ON - When pressed, turns the indicator ON. The display will go through a warm-up sequence and then go into the weigh mode.



OFF - When pressed, turns the indicator OFF.



UNITS - Switches the scale between the available units, pounds, kilograms, ounces, and grams.



UP - DOWN - These are used to scroll through the various values in each of the program options and are used to change the over/under values in the checkweigh mode.



1, 2, 3, 4 - These are used to program and select the stored checkweigh values.



AUTO - Enters the value of the weight on the platform into memory as a tare weight.



GROSS - Toggles the display between GROSS weight and NET weight.



ZERO - When pressed, sets the indicator to zero.

B. Indicators:

NET When ON, indicates the scale is in the NET mode. When OFF, indicates the scale is in the GROSS mode.

lb Indicates the scale is using pounds as the unit of weight.

kg Indicates the scale is using kilograms as the unit of weight.

oz Indicates the scale is using ounces as the unit of weight.

g Indicates the scale is using grams as the unit of weight.

Center-of-Zero Indicates the scale is at the zero point and is ready to weigh.

C. Weighing

Remove any weight from the platform. If the instrument is OFF, press and hold the ON key until the display comes on (not blank) and the indicator begins its initiation sequence (the PROM # and Revision will be displayed briefly i.e., 11754.3). The scale will begin operations in the Gross Weighing Mode.

The Zero function, Auto Tare function, and AZT require the displayed weight to be stable before these functions will operate. The weight reading is stable if the variation in weight is less than the programmed motion range. If the rate of change in weight is less than 2.5 times the motion range every second, then the weight is stable.

1. Instrument Weighing Functions

The industry uses three terms which describe the apportionment of an object's weight. These terms are GROSS WEIGHT, TARE WEIGHT, and NET WEIGHT.

- Gross weight is the total weight of an object. This would include any incidental materials as well as the primary materials which comprise the object.
- Tare weight is the weight of the incidental materials.
- Net weight is the weight of the primary materials. Tare weight and Net weight together equal the Gross weight.

Example: A can of house paint is an object to be weighed. The can is incidental material used to hold the primary material, paint, and the label is incidental material used to identify the paint. All of the incidental materials taken together make up the tare weight. All of the primary materials' weights together make up the Net weight; in this case pigment, vehicle, and solvent. The object is made up of incidental materials, can and label, and primary materials, paint. Taken together, this is the gross weight.

The three weights can be expressed in terms as follows:

$$\begin{aligned} \text{GROSS} &= \text{NET} + \text{TARE} \\ \text{TARE} &= \text{GROSS} - \text{NET} \\ \text{NET} &= \text{GROSS} - \text{TARE} \end{aligned}$$

The equation, **NET = GROSS -TARE**, is particularly important because it is the equation that a scale uses to figure net weights in NET WEIGHING MODE. The gross weight is a function of the weight on the platform and the zero reference. Tare weight is always an operator defined value.

a. Basic Weighing

- 1). Turn ON the indicator and the display will go through the warm-up sequence.
- 2). When the warm-up sequence is complete, the display should show zero and the Center-of-Zero indicator should be ON. If it is not, press the ZERO key.
- 3). For GROSS weighing, the NET indicator should be OFF. If it is not, press the GROSS/NET key until the NET indicator is OFF.
- 4). Place the object to be weighed on the platform. As soon as the system is stable, the weight value will appear in the display.

b. Tare Weighing

- 1). Turn ON the indicator and the display will go through the warm-up sequence.
- 2). When the warm-up sequence is complete, the display should show zero and the Center-of-Zero indicator should be ON. If it is not, press the ZERO key. Any tare weight in memory when the scale was turned off will be lost. A new tare weight must be entered into tare memory.
- 3). Place the empty container that is going to be used on the platform and press the AUTO/TARE key. The weight of the empty container will be entered into memory as a tare weight.
- 4). Remove the container from the platform. The display will show a NEGATIVE tare weight value.
- 5). Place the same or similar container filled with product on the platform. The display will show the weight of the material in the container.

c. To change the TARE weight value:

- 1). With no weight on the platform, press the ZERO key. The display will show zeros and the Center-of-Zero indicator will be ON.
- 2). Place the new container on the platform and press the AUTO/TARE key. The old tare weight will be deleted from memory and the new tare weight entered.

d. Weighing Units

To select the desired weighing units, press the UNITS key. The Units indicator will move in response to the key.

The selected weighing units will be saved in memory each time the OFF key is pressed. This feature allows the instrument to return to the weighing units in use when power is restored.

The selected weighing units will not change unless:

1. The UNITS key is pressed.
2. Power to the instrument is lost prior to pressing the OFF key.
3. The Programming mode of the instrument is accessed.

e. Checkweighing

CHECKWEIGHING is a process in which a TARGET weight is entered into the scales memory. The display shows the operator where the weight on the platform is, over or under, relative to the target weight.

The **TARGET VALUE** is the weight that has been selected as the weight to be achieved in the checkweighing process. The target value refers to the absolute value of the Gross weight only. This is a programmable feature.

The **LIMIT WEIGHT** value is the amount over or under the target weight that is to be shown in the display. This is a programmable feature.

Three different ranges can be shown in the display; the accept range, the over range and the under range. The size of the ranges is set by the **LIMIT WEIGHT** value.

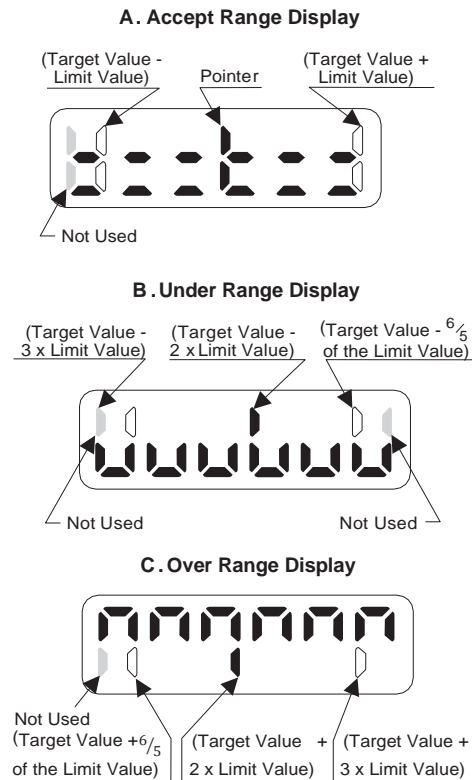
When the weight on the platform is within the **ACCEPT** range, the display will show a series of "- - -". A pointer will show the operator where the weight value is, within the ACCEPT range.

If the weight on the platform is over or under the values set by the limits, the display will show a series of "u"s for under, or up-side-down "u"s for over. A pointer will tell the operator where in the over or under range the weight value is located.

To exit the Checkweighing Mode, press the **GROSS/NET** key.

Note: *In the Checkweighing Mode the ZERO, AUTO/TARE, and UNITS keys are disabled.*

Note: Target and limit weight values - while values of 0, 1, 2, 3, or 4 divisions may be entered as target or limit values during the programming, the system will ALWAYS default to 5 divisions.



2645b

f. Over/Under Setup

1. Press the ZERO key and the display will show "0" with the center-of-zero indicator ON.
2. Press the appropriate OVER/UNDER key, 1, 2, 3, or 4. The display will flash the last target value entered into memory and then display the OVER/UNDER graphic.
3. To change the TARGET WEIGHT, press the UP key. The display will show the current target weight in memory as a four digit number.
4. Press the UP key to increase the target weight or the DOWN key to decrease the target weight. In some cases, it will be faster to enter a new target weight or limit weight by starting from 0. Press the ZERO key. The display will be reset to all zeros. Use the arrow keys and the UNITS key to enter a new target weight or limit weight.

Note: When the arrow keys are pressed, Fine adjustment changes the last two digits, Coarse adjustment changes the first two digits. The operator can toggle between fine and coarse adjustments by pressing the [UNITS] key.

5. With the appropriate TARGET weight displayed, press the same OVER/UNDER key, 1, 2, 3, or 4 as was pressed in Step 2.
6. To change the LIMIT WEIGHT, press the DOWN key. The display will show the current limit weight in memory as a four digit number.
7. Press the UP key to increase the limit weight or the DOWN key to decrease the limit weight.
8. With the appropriate LIMIT weight displayed, press the same

Note: *When the arrow keys are pressed, Fine adjustment changes the last two digits, Coarse adjustment changes the first two digits. The operator can toggle between fine and coarse adjustments by pressing the [UNITS] key.*

OVER/UNDER key, 1, 2, 3, or 4 as was pressed in Step 2.

9. Repeat this process for each of the four OVER/UNDER programs.

g. Over/Under Weighing

1. Press the OVER/UNDER key, 1, 2, 3, or 4, that is to be used in the weighing operation. The display will show the appropriate OVER/UNDER graphic.
2. Place the item to be weighed on the platform. The indicator in the display will move to show the weight as being UNDER, OVER, or on TARGET.
3. Add or remove material from the platform until the indicator shows on target.
4. Remove the material from the platform and repeat the process.

h. Exit Over/Under Weighing

To exit the Over/Under Weighing Mode, press the GROSS/NET key. The indicator will return to the Weigh Mode.

Section 6: Battery Pack

A. Description

Accessory 530 Battery Recharger is a **Safe Area Smart Charger**, intended for non-hazardous, safe areas only. It is only used for recharging **Battery Accessory 352**.

- This Accessory will fully charge a completely discharged 532 Battery **within sixteen (16) hours**.
- A charged battery can be left on the charger without any resulting damage to either the charger or the battery pack.
- When a discharged Accessory 532 Battery is first connected to a charger, the status LED on the charger will be a constant **yellow**.
- Once the battery is fully charged, the LED will remain a constant **green**.



IMPORTANT NOTE: Use the Accessory 530 Battery Recharger in a **SAFE AREA** only.

B. Specifications

INPUT VOLTAGES	120 VAC, 60 Hz
BATTERY OUTPUT VOLTAGES	7.0 VDC +/- 0.2 VDC at the end of charge cycle with battery connected.
LEADS	<ul style="list-style-type: none">• Output leads 18 AWG, approximately three feet (3').• Extended power cord up to six feet (6').
STATUS LED	Brightness sufficient to discern the charge status under general office environment lighting.
CHARGING TIME	<ul style="list-style-type: none">• Sixteen (16) hours maximum for undamaged chargeable battery (electrolyte not depleted).• Initial unloaded output voltage of 5.0 VDC.• Do not recharge a battery with a voltage below 4.0 VDC.
OPERATING	0°C to +38°C (+32°F to +100°F).

*** * WARNING! * ***

Battery packs are to be charged in non-hazardous areas only!

C. States of Operation

1: NO BATTERY

- **RED LED** is constantly on.
- No battery is attached to the charger, and no current is flowing from the charger.

2: UNDER VOLTAGE BATTERY

- **RED LED** flashes at a set interval.
- A battery is attached to the charger, but is **below the 3.6V threshold**.
 - The charger will attempt a trickle charge for up to sixteen **(16) hours** to restore the battery to normal state.
 - If at the end of sixteen (16) hours the battery has not reached 3.6V, the charger shuts down.
 - **RED LED** flashes with a steady **YELLOW LED**.
 - No battery charge exists while in this state.
- The small trickle charge in this state is about **10% duty cycle**, or about **60mA***.

3: CHARGING

- **YELLOW LED** is on constantly.
- Indicates the battery is between **3.6V and 7.0V**.
- Charger will continue charging for up to sixteen (16) hours
 - If charger has not reach next state in the sixteen (16) hours, it will determine voltage
- If charger is between **6.4V and 7.2V**, the unit switches to **State 4: Trickle Charge**.
- If charger is not to 6.4V, charger shuts down and shows **YELLOW LED** on steady with
 - **RED LED** flashing (used to indicate possible fault with battery).
- **Full charge** is produced in this state is **200mA***.

4: TRICKLE CHARGE

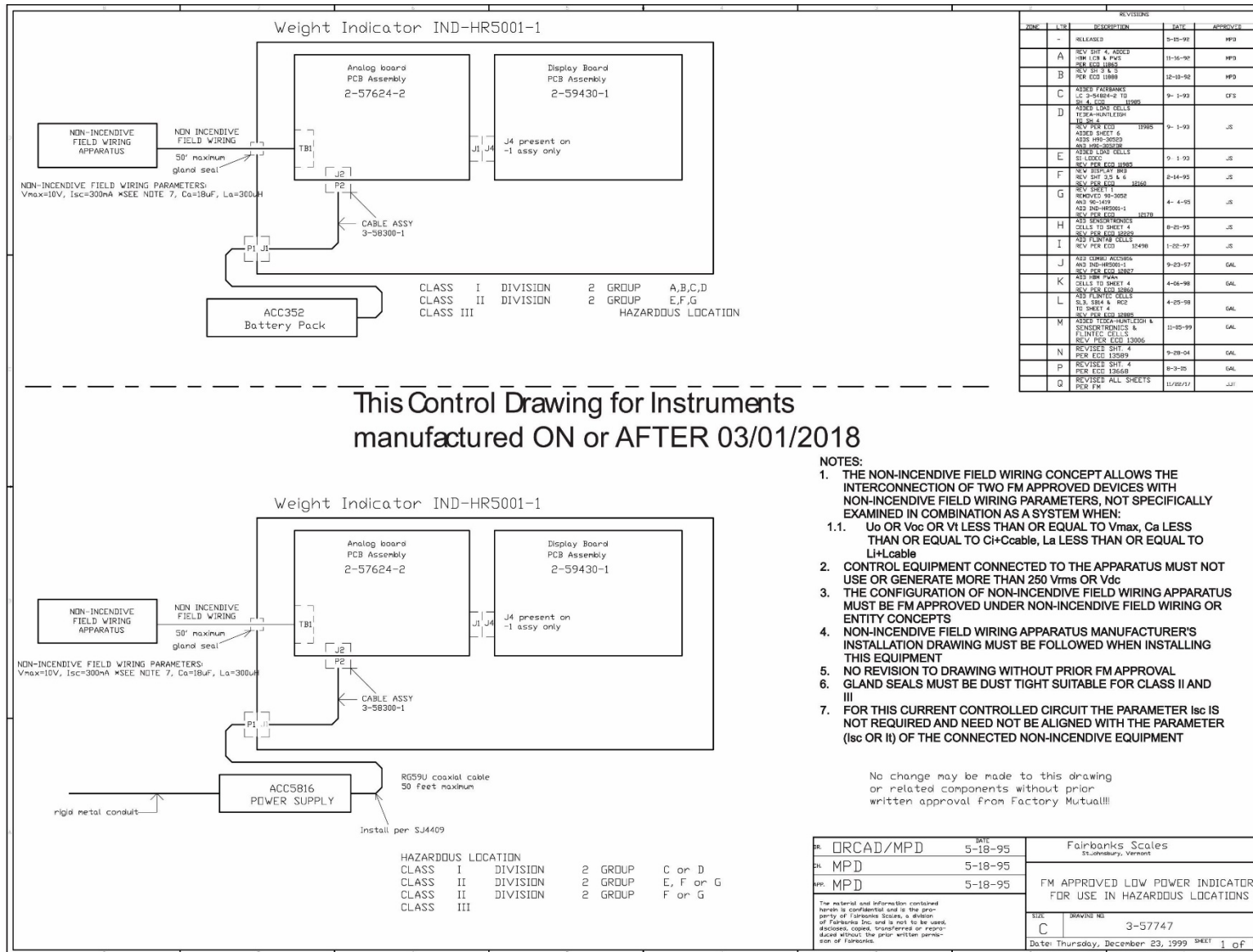
- **GREEN LED** will be on steady, battery pack is considered fully charged
- Indicates the battery has reached 7.0V, and is now between **6.6V and 7.2V**.
 - Hysteresis is built in to allow battery's chemicals to settle.
- Charger will stay in this state indefinitely as long as battery voltage remains between **6.6V and 7.2V**.
 - If voltage drops **below 6.6V**, the charger returns to **State 3: Charging**.
 - If voltage rises above **7.2V**, the charger switches to **State 5: Over Voltage**.
- Trickle charge is produced at about 35% duty cycle or **about 60mA***.

5: OVER VOLTAGE

- **GREEN LED** will be on steady with the **RED LED** flashing.
- This indicates the battery has been over charged above **7.2V**.
 - Current from the charger is stopped and charger waits for voltage level to drop back **below 7.2. V**
- No current is produced

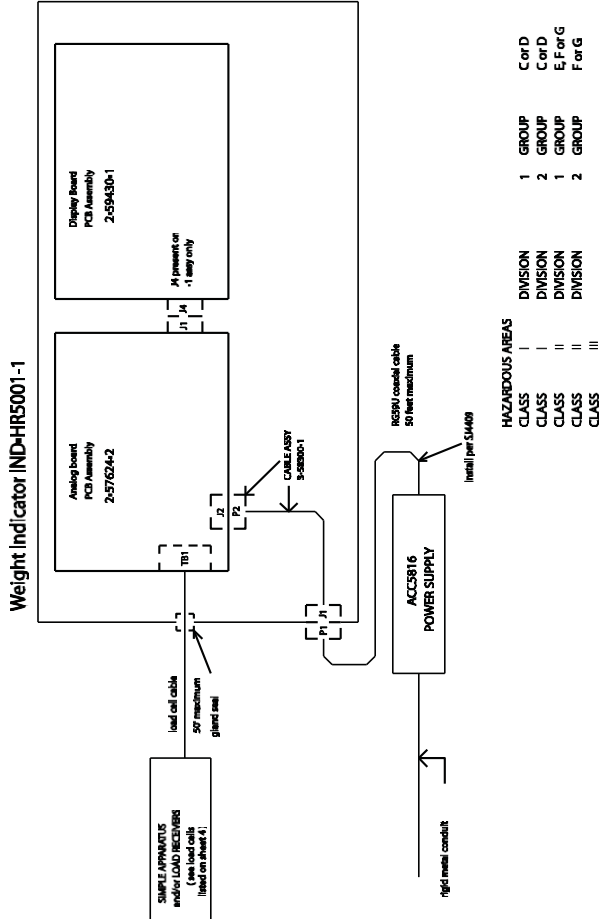
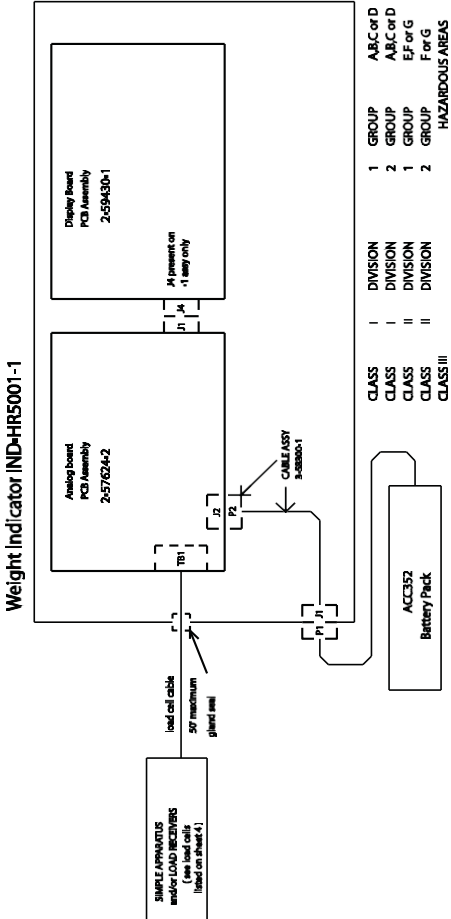
* Current levels will vary between batteries and is only given as a reference.

Appendix I: FM CONTROL DRAWINGS



REV	DATE	DESCRIPTION	BY	CHKD	APP'D
1	11-14-95	REVISED	MPD		
2	11-14-95	REVISED	MPD		
3	11-14-95	REVISED	MPD		
4	11-14-95	REVISED	MPD		
5	11-14-95	REVISED	MPD		
6	11-14-95	REVISED	MPD		
7	11-14-95	REVISED	MPD		
8	11-14-95	REVISED	MPD		
9	11-14-95	REVISED	MPD		
10	11-14-95	REVISED	MPD		
11	11-14-95	REVISED	MPD		
12	11-14-95	REVISED	MPD		
13	11-14-95	REVISED	MPD		
14	11-14-95	REVISED	MPD		
15	11-14-95	REVISED	MPD		
16	11-14-95	REVISED	MPD		
17	11-14-95	REVISED	MPD		
18	11-14-95	REVISED	MPD		
19	11-14-95	REVISED	MPD		
20	11-14-95	REVISED	MPD		
21	11-14-95	REVISED	MPD		
22	11-14-95	REVISED	MPD		
23	11-14-95	REVISED	MPD		
24	11-14-95	REVISED	MPD		
25	11-14-95	REVISED	MPD		
26	11-14-95	REVISED	MPD		
27	11-14-95	REVISED	MPD		
28	11-14-95	REVISED	MPD		
29	11-14-95	REVISED	MPD		
30	11-14-95	REVISED	MPD		
31	11-14-95	REVISED	MPD		
32	11-14-95	REVISED	MPD		
33	11-14-95	REVISED	MPD		
34	11-14-95	REVISED	MPD		
35	11-14-95	REVISED	MPD		
36	11-14-95	REVISED	MPD		
37	11-14-95	REVISED	MPD		
38	11-14-95	REVISED	MPD		
39	11-14-95	REVISED	MPD		
40	11-14-95	REVISED	MPD		
41	11-14-95	REVISED	MPD		
42	11-14-95	REVISED	MPD		
43	11-14-95	REVISED	MPD		
44	11-14-95	REVISED	MPD		
45	11-14-95	REVISED	MPD		
46	11-14-95	REVISED	MPD		
47	11-14-95	REVISED	MPD		
48	11-14-95	REVISED	MPD		
49	11-14-95	REVISED	MPD		
50	11-14-95	REVISED	MPD		
51	11-14-95	REVISED	MPD		
52	11-14-95	REVISED	MPD		
53	11-14-95	REVISED	MPD		
54	11-14-95	REVISED	MPD		
55	11-14-95	REVISED	MPD		
56	11-14-95	REVISED	MPD		
57	11-14-95	REVISED	MPD		
58	11-14-95	REVISED	MPD		
59	11-14-95	REVISED	MPD		
60	11-14-95	REVISED	MPD		
61	11-14-95	REVISED	MPD		
62	11-14-95	REVISED	MPD		
63	11-14-95	REVISED	MPD		
64	11-14-95	REVISED	MPD		
65	11-14-95	REVISED	MPD		
66	11-14-95	REVISED	MPD		
67	11-14-95	REVISED	MPD		
68	11-14-95	REVISED	MPD		
69	11-14-95	REVISED	MPD		
70	11-14-95	REVISED	MPD		
71	11-14-95	REVISED	MPD		
72	11-14-95	REVISED	MPD		
73	11-14-95	REVISED	MPD		
74	11-14-95	REVISED	MPD		
75	11-14-95	REVISED	MPD		
76	11-14-95	REVISED	MPD		
77	11-14-95	REVISED	MPD		
78	11-14-95	REVISED	MPD		
79	11-14-95	REVISED	MPD		
80	11-14-95	REVISED	MPD		
81	11-14-95	REVISED	MPD		
82	11-14-95	REVISED	MPD		
83	11-14-95	REVISED	MPD		
84	11-14-95	REVISED	MPD		
85	11-14-95	REVISED	MPD		
86	11-14-95	REVISED	MPD		
87	11-14-95	REVISED	MPD		
88	11-14-95	REVISED	MPD		
89	11-14-95	REVISED	MPD		
90	11-14-95	REVISED	MPD		
91	11-14-95	REVISED	MPD		
92	11-14-95	REVISED	MPD		
93	11-14-95	REVISED	MPD		
94	11-14-95	REVISED	MPD		
95	11-14-95	REVISED	MPD		
96	11-14-95	REVISED	MPD		
97	11-14-95	REVISED	MPD		
98	11-14-95	REVISED	MPD		
99	11-14-95	REVISED	MPD		
100	11-14-95	REVISED	MPD		

This Control Drawing is for
Instruments manufactured
BEFORE 03/01/2018



No change may be made to this drawing or related components without prior written approval from Factory Mutual!!!

ORCAD/MPD		DATE	5-18-95
MPD		DATE	5-18-95
MPD		DATE	5-18-95
This drawing is the property of Fairbanks Scales. It is to be used only for the purpose intended and is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Fairbanks Scales.			
Fairbanks Scales Instrument Division		DATE	3-57747
FM APPROVED LOW POWER INDICATORS FOR USE IN HAZARDOUS LOCATIONS		DATE	Thursday, December 23, 1999
SEE COMMENTS		SHEET 1 of 6	

This Control Drawing is for
 Instruments manufactured
BEFORE 03/01/2018

LOAD CELL MANUFACTURER	MANUFACTURER PART NUMBER	FWD PLATFORM	LOAD CELL MANUFACTURER	MANUFACTURER PART NUMBER	FWD PLATFORM
SENSORTRONICS	60001 FAMILY 60001-500	1106 & 1170	FAIRBANKS	3-53776-1	H23-2511 & 23-2511
	60001-750	1107		3-54723-1	70-4070
	60001-1.5K	1108		3-54824-1	70-4170
	60001-2K	60-5400		3-55122-1	
	60001-3K	1109			21-2102
	60001-5K	1111		3-55176-1	21-2101
	60008 FAMILY	1112		3-55176-1	H70-4814
	60010 FAMILY			3-55177-1	H70-4820
	60030 FAMILY			3-55383-1	
	60036 FAMILY				
	60045 FAMILY				
	60048 FAMILY				
	60051 FAMILY				
	60058 FAMILY				
	60060 FAMILY				
	65016 FAMILY				
	65016-5K	80-9114			
	65016-15K	80-9118			
	65016-25K	80-9118			
	65016-50K	80-9108			
	65016-0104	80-9110			
	65016-0104	80-9119			
	65023 FAMILY	80-9109			
	65023-2.5K	23-2554AFM			
	65023A-	H70-4100AFM			
	65023A-2.5K	H23-2502FM			
	65023A-2.5K	H23-2502AFM			
	65023A-2.5K	23-2502AFM			
	65023A-2.5K	23-2500AFM			
	65023A-2.5K	23-2520A			
	65023A-1K	H70-4100BFM			
	65023A-1K	H23-2512FM			
	65023A-3K-0140	H23-2503AFM			
	65023A-3K-0140	23-2557			
	65023A-10K-0140	23-2558			
	65024 FAMILY				
	65029 FAMILY				
	65032 FAMILY				
	65040 FAMILY				
	65041 FAMILY				
	65058 FAMILY				
	65059 FAMILY				
	65059-75	80-9016			
	65059-100	80-9111			
	65059-250	80-9117			
	65059-500	80-9112			
	65059-1K	80-9113			
	65061 FAMILY				
	65083 FAMILY				
	65094 FAMILY				
	60048-50K-1124				

REVERE TRANSDUCERS INCORPORATED
 558FAMILY
 558-10-30-51398
 USFAMILY
 CBFAMILY
 UFFAMILY
 LTFAMILY
 TO FAMILY
 LFCFAMILY
 XB FAMILY
 CSFAMILY
 CFFAMILY
 UPFAMILY
 UBFAMILY
 SSSFAMILY
 TSPFAMILY
 HSFAMILY
 USRFAMILY

HBM INC
 582 FAMILY
 585 FAMILY
 586 FAMILY
 587 FAMILY
 588 FAMILY
 589 FAMILY
 590 FAMILY
 591 FAMILY
 592 FAMILY
 593 FAMILY
 594 FAMILY
 595 FAMILY
 596 FAMILY
 597 FAMILY
 598 FAMILY
 599 FAMILY
 600 FAMILY
 601 FAMILY
 602 FAMILY
 603 FAMILY
 604 FAMILY
 605 FAMILY
 606 FAMILY
 607 FAMILY
 608 FAMILY
 609 FAMILY
 610 FAMILY
 611 FAMILY
 612 FAMILY
 613 FAMILY
 614 FAMILY
 615 FAMILY
 616 FAMILY
 617 FAMILY
 618 FAMILY
 619 FAMILY
 620 FAMILY
 621 FAMILY
 622 FAMILY
 623 FAMILY
 624 FAMILY
 625 FAMILY
 626 FAMILY
 627 FAMILY
 628 FAMILY
 629 FAMILY
 630 FAMILY
 631 FAMILY
 632 FAMILY
 633 FAMILY
 634 FAMILY
 635 FAMILY
 636 FAMILY
 637 FAMILY
 638 FAMILY
 639 FAMILY
 640 FAMILY
 641 FAMILY
 642 FAMILY
 643 FAMILY
 644 FAMILY
 645 FAMILY
 646 FAMILY
 647 FAMILY
 648 FAMILY
 649 FAMILY
 650 FAMILY
 651 FAMILY
 652 FAMILY
 653 FAMILY
 654 FAMILY
 655 FAMILY
 656 FAMILY
 657 FAMILY
 658 FAMILY
 659 FAMILY
 660 FAMILY
 661 FAMILY
 662 FAMILY
 663 FAMILY
 664 FAMILY
 665 FAMILY
 666 FAMILY
 667 FAMILY
 668 FAMILY
 669 FAMILY
 670 FAMILY
 671 FAMILY
 672 FAMILY
 673 FAMILY
 674 FAMILY
 675 FAMILY
 676 FAMILY
 677 FAMILY
 678 FAMILY
 679 FAMILY
 680 FAMILY
 681 FAMILY
 682 FAMILY
 683 FAMILY
 684 FAMILY
 685 FAMILY
 686 FAMILY
 687 FAMILY
 688 FAMILY
 689 FAMILY
 690 FAMILY
 691 FAMILY
 692 FAMILY
 693 FAMILY
 694 FAMILY
 695 FAMILY
 696 FAMILY
 697 FAMILY
 698 FAMILY
 699 FAMILY
 700 FAMILY
 701 FAMILY
 702 FAMILY
 703 FAMILY
 704 FAMILY
 705 FAMILY
 706 FAMILY
 707 FAMILY
 708 FAMILY
 709 FAMILY
 710 FAMILY
 711 FAMILY
 712 FAMILY
 713 FAMILY
 714 FAMILY
 715 FAMILY
 716 FAMILY
 717 FAMILY
 718 FAMILY
 719 FAMILY
 720 FAMILY
 721 FAMILY
 722 FAMILY
 723 FAMILY
 724 FAMILY
 725 FAMILY
 726 FAMILY
 727 FAMILY
 728 FAMILY
 729 FAMILY
 730 FAMILY
 731 FAMILY
 732 FAMILY
 733 FAMILY
 734 FAMILY
 735 FAMILY
 736 FAMILY
 737 FAMILY
 738 FAMILY
 739 FAMILY
 740 FAMILY
 741 FAMILY
 742 FAMILY
 743 FAMILY
 744 FAMILY
 745 FAMILY
 746 FAMILY
 747 FAMILY
 748 FAMILY
 749 FAMILY
 750 FAMILY
 751 FAMILY
 752 FAMILY
 753 FAMILY
 754 FAMILY
 755 FAMILY
 756 FAMILY
 757 FAMILY
 758 FAMILY
 759 FAMILY
 760 FAMILY
 761 FAMILY
 762 FAMILY
 763 FAMILY
 764 FAMILY
 765 FAMILY
 766 FAMILY
 767 FAMILY
 768 FAMILY
 769 FAMILY
 770 FAMILY
 771 FAMILY
 772 FAMILY
 773 FAMILY
 774 FAMILY
 775 FAMILY
 776 FAMILY
 777 FAMILY
 778 FAMILY
 779 FAMILY
 780 FAMILY
 781 FAMILY
 782 FAMILY
 783 FAMILY
 784 FAMILY
 785 FAMILY
 786 FAMILY
 787 FAMILY
 788 FAMILY
 789 FAMILY
 790 FAMILY
 791 FAMILY
 792 FAMILY
 793 FAMILY
 794 FAMILY
 795 FAMILY
 796 FAMILY
 797 FAMILY
 798 FAMILY
 799 FAMILY
 800 FAMILY

MANUFACTURER
 FLINTEC
 584 SERIES
 585 SERIES
 586 SERIES
 587 SERIES
 588 SERIES
 589 SERIES
 590 SERIES
 591 SERIES
 592 SERIES
 593 SERIES
 594 SERIES
 595 SERIES
 596 SERIES
 597 SERIES
 598 SERIES
 599 SERIES
 600 SERIES
 601 SERIES
 602 SERIES
 603 SERIES
 604 SERIES
 605 SERIES
 606 SERIES
 607 SERIES
 608 SERIES
 609 SERIES
 610 SERIES
 611 SERIES
 612 SERIES
 613 SERIES
 614 SERIES
 615 SERIES
 616 SERIES
 617 SERIES
 618 SERIES
 619 SERIES
 620 SERIES
 621 SERIES
 622 SERIES
 623 SERIES
 624 SERIES
 625 SERIES
 626 SERIES
 627 SERIES
 628 SERIES
 629 SERIES
 630 SERIES
 631 SERIES
 632 SERIES
 633 SERIES
 634 SERIES
 635 SERIES
 636 SERIES
 637 SERIES
 638 SERIES
 639 SERIES
 640 SERIES
 641 SERIES
 642 SERIES
 643 SERIES
 644 SERIES
 645 SERIES
 646 SERIES
 647 SERIES
 648 SERIES
 649 SERIES
 650 SERIES
 651 SERIES
 652 SERIES
 653 SERIES
 654 SERIES
 655 SERIES
 656 SERIES
 657 SERIES
 658 SERIES
 659 SERIES
 660 SERIES
 661 SERIES
 662 SERIES
 663 SERIES
 664 SERIES
 665 SERIES
 666 SERIES
 667 SERIES
 668 SERIES
 669 SERIES
 670 SERIES
 671 SERIES
 672 SERIES
 673 SERIES
 674 SERIES
 675 SERIES
 676 SERIES
 677 SERIES
 678 SERIES
 679 SERIES
 680 SERIES
 681 SERIES
 682 SERIES
 683 SERIES
 684 SERIES
 685 SERIES
 686 SERIES
 687 SERIES
 688 SERIES
 689 SERIES
 690 SERIES
 691 SERIES
 692 SERIES
 693 SERIES
 694 SERIES
 695 SERIES
 696 SERIES
 697 SERIES
 698 SERIES
 699 SERIES
 700 SERIES
 701 SERIES
 702 SERIES
 703 SERIES
 704 SERIES
 705 SERIES
 706 SERIES
 707 SERIES
 708 SERIES
 709 SERIES
 710 SERIES
 711 SERIES
 712 SERIES
 713 SERIES
 714 SERIES
 715 SERIES
 716 SERIES
 717 SERIES
 718 SERIES
 719 SERIES
 720 SERIES
 721 SERIES
 722 SERIES
 723 SERIES
 724 SERIES
 725 SERIES
 726 SERIES
 727 SERIES
 728 SERIES
 729 SERIES
 730 SERIES
 731 SERIES
 732 SERIES
 733 SERIES
 734 SERIES
 735 SERIES
 736 SERIES
 737 SERIES
 738 SERIES
 739 SERIES
 740 SERIES
 741 SERIES
 742 SERIES
 743 SERIES
 744 SERIES
 745 SERIES
 746 SERIES
 747 SERIES
 748 SERIES
 749 SERIES
 750 SERIES
 751 SERIES
 752 SERIES
 753 SERIES
 754 SERIES
 755 SERIES
 756 SERIES
 757 SERIES
 758 SERIES
 759 SERIES
 760 SERIES
 761 SERIES
 762 SERIES
 763 SERIES
 764 SERIES
 765 SERIES
 766 SERIES
 767 SERIES
 768 SERIES
 769 SERIES
 770 SERIES
 771 SERIES
 772 SERIES
 773 SERIES
 774 SERIES
 775 SERIES
 776 SERIES
 777 SERIES
 778 SERIES
 779 SERIES
 780 SERIES
 781 SERIES
 782 SERIES
 783 SERIES
 784 SERIES
 785 SERIES
 786 SERIES
 787 SERIES
 788 SERIES
 789 SERIES
 790 SERIES
 791 SERIES
 792 SERIES
 793 SERIES
 794 SERIES
 795 SERIES
 796 SERIES
 797 SERIES
 798 SERIES
 799 SERIES
 800 SERIES

1000 SERIES
 3400 SERIES
 9010 SERIES
 0-440030053 (1250 SERIES)
 0-440030054 (1250 SERIES)
 0-4400370055 (1250 SERIES)

TEDEA-HUNTLEIGH

4515 PLATFORMS
 8701 FAMILY
 8708 FAMILY
 8713 FAMILY
 T101 FAMILY
 T105 FAMILY
 T105 FAMILY
 8707 FAMILY

No change may be made to this drawing or related components without prior written approval from Factory Mutual

DATE	DESCRIPTION	REV	APP'D
	REVISION		
	1. BALANCE	1	
	2. JUNE	2	
	3. 11-8-82	3	
	4. 1-14-83	4	
	5. 1-14-83	5	
	6. 1-14-83	6	
	7. 1-14-83	7	
	8. 1-14-83	8	
	9. 1-14-83	9	
	10. 1-14-83	10	
	11. 1-14-83	11	
	12. 1-14-83	12	
	13. 1-14-83	13	
	14. 1-14-83	14	
	15. 1-14-83	15	
	16. 1-14-83	16	
	17. 1-14-83	17	
	18. 1-14-83	18	
	19. 1-14-83	19	
	20. 1-14-83	20	
	21. 1-14-83	21	
	22. 1-14-83	22	
	23. 1-14-83	23	
	24. 1-14-83	24	
	25. 1-14-83	25	
	26. 1-14-83	26	
	27. 1-14-83	27	
	28. 1-14-83	28	
	29. 1-14-83	29	
	30. 1-14-83	30	
	31. 1-14-83	31	
	32. 1-14-83	32	
	33. 1-14-83	33	
	34. 1-14-83	34	
	35. 1-14-83	35	
	36. 1-14-83	36	
	37. 1-14-83	37	
	38. 1-14-83	38	
	39. 1-14-83	39	
	40. 1-14-83	40	
	41. 1-14-83	41	
	42. 1-14-83	42	
	43. 1-14-83	43	
	44. 1-14-83	44	
	45. 1-14-83	45	
	46. 1-14-83	46	
	47. 1-14-83	47	
	48. 1-14-83	48	
	49. 1-14-83	49	
	50. 1-14-83	50	
	51. 1-14-83	51	
	52. 1-14-83	52	
	53. 1-14-83	53	
	54. 1-14-83	54	
	55. 1-14-83	55	
	56. 1-14-83	56	
	57. 1-14-83	57	
	58. 1-14-83	58	
	59. 1-14-83	59	
	60. 1-14-83	60	
	61. 1-14-83	61	
	62. 1-14-83	62	
	63. 1-14-83	63	
	64. 1-14-83	64	
	65. 1-14-83	65	
	66. 1-14-83	66	
	67. 1-14-83	67	
	68. 1-14-83	68	
	69. 1-14-83	69	
	70. 1-14-83	70	
	71. 1-14-83	71	
	72. 1-14-83	72	
	73. 1-14-83	73	
	74. 1-14-83	74	
	75. 1-14-83	75	
	76. 1-14-83	76	
	77. 1-14-83	77	
	78. 1-14-83	78	
	79. 1-14-83	79	
	80. 1-14-83	80	
	81. 1-14-83	81	
	82. 1-14-83	82	
	83. 1-14-83	83	
	84. 1-14-83	84	
	85. 1-14-83	85	
	86. 1-14-83	86	
	87. 1-14-83	87	
	88. 1-14-83	88	
	89. 1-14-83	89	
	90. 1-14-83	90	
	91. 1-14-83	91	
	92. 1-14-83	92	
	93. 1-14-83	93	
	94. 1-14-83	94	
	95. 1-14-83	95	
	96. 1-14-83	96	
	97. 1-14-83	97	
	98. 1-14-83	98	
	99. 1-14-83	99	
	100. 1-14-83	100	



Manufactured by Fairbanks Scale, Inc.

821 Locust Street
Kansas City, MO 64106

www.fairbanks.com

QuickSilver IS

5001 Series

Document 50770
Operators Manual