SAFETY

INSTALLATION

OPERATION

MAINTENANCE

M A N U A L

MASTERWEIGH INFINITY

No. 556240

9575 N. 109th Ave.
Omaha, Nebraska 68142
(402) 330-1500
www.intersystems.net

Intersystems MasterWeigh Infinity Configuration and Setup Guide

556240

Control Box Components

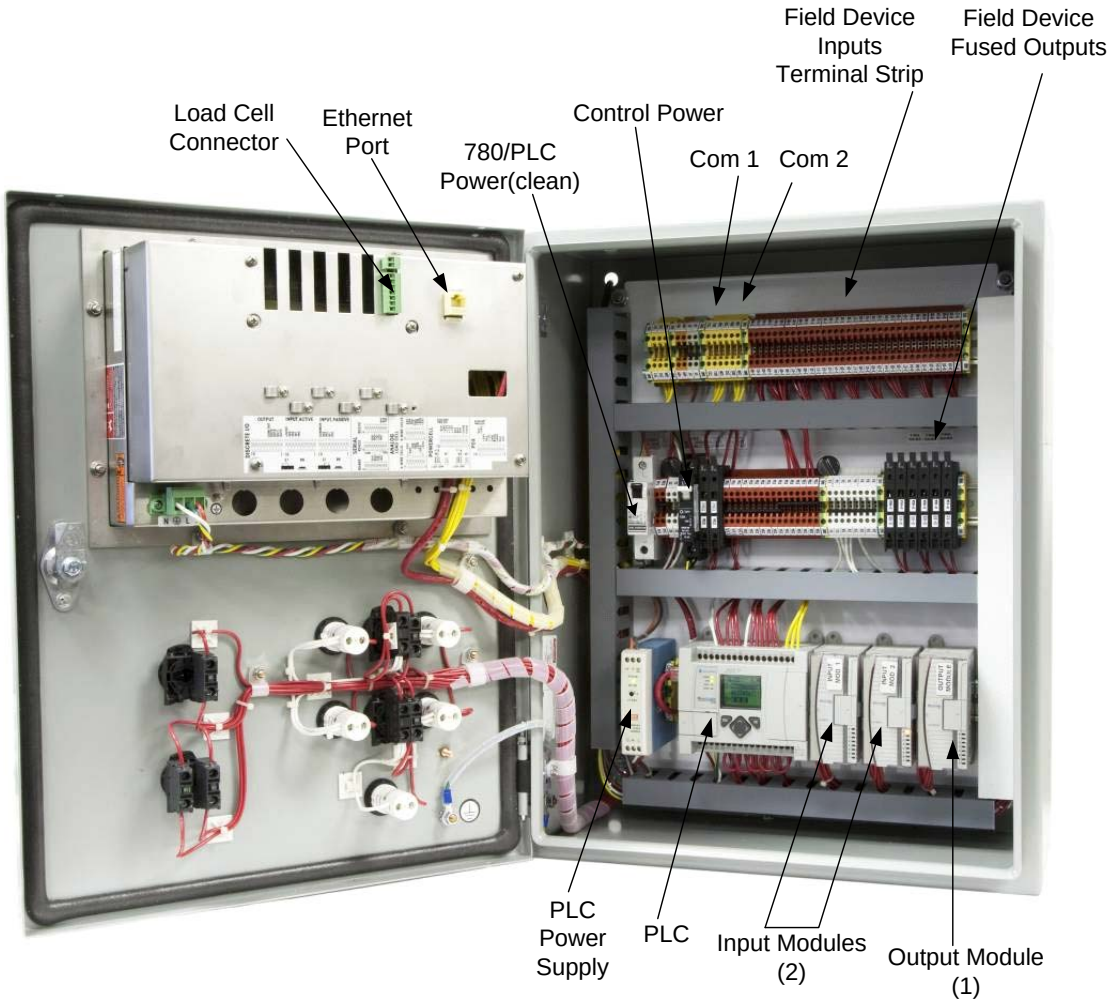
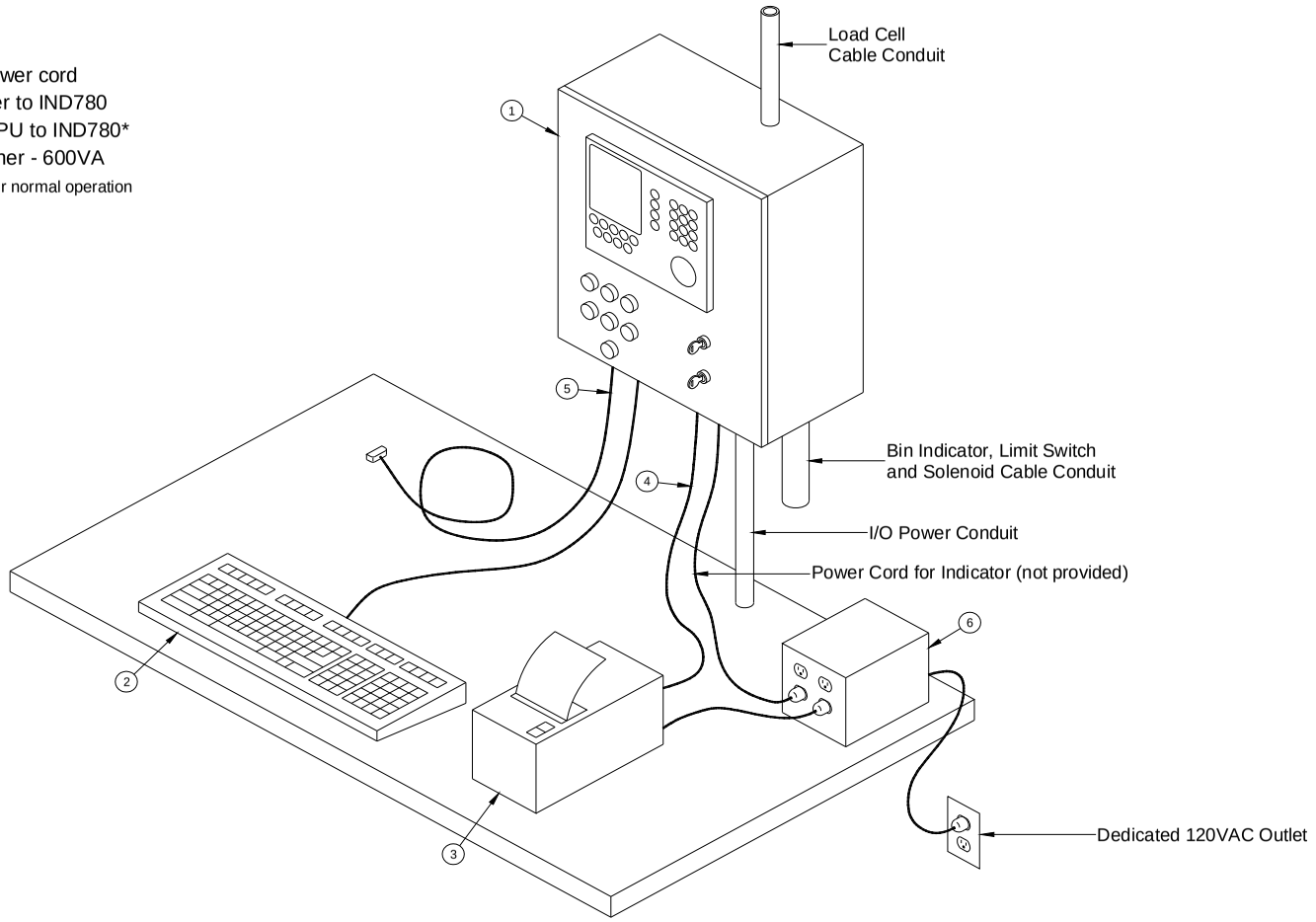


Diagram 1 - Masterweigh Infinity Control Room Layout

1	Infinity Enclosure
2	Keyboard
3	Printer - 40 col. w/power cord
4	Cable - 40 col. Printer to IND780
5	Cable - Download CPU to IND780*
6	Power Line Conditioner - 600VA

*Download cable is not req. for normal operation



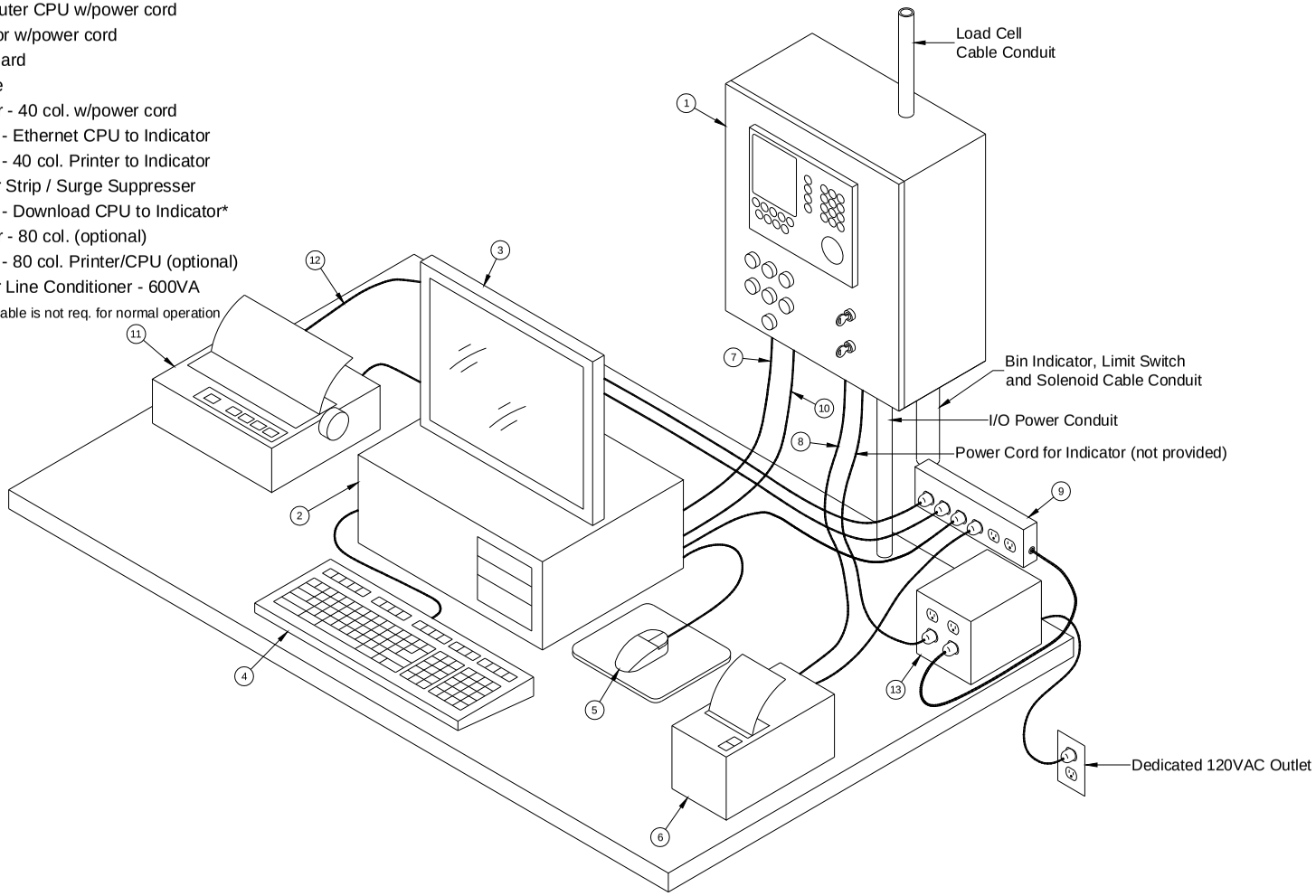
DO NOT LOCATE CONTROL OR PRINTER NEAR RADIO EQUIPMENT

BULK/MANUAL-MW/MWI MANUAL DWG/CTRLROOM-MWI PLUS.DWG

Diagram 2 - Masterweigh Infinity Plus Control Room Layout

1	Infinity/IND780 Enclosure
2	Computer CPU w/power cord
3	Monitor w/power cord
4	Keyboard
5	Mouse
6	Printer - 40 col. w/power cord
7	Cable - Ethernet CPU to Indicator
8	Cable - 40 col. Printer to Indicator
9	Power Strip / Surge Suppresser
10	Cable - Download CPU to Indicator*
11	Printer - 80 col. (optional)
12	Cable - 80 col. Printer/CPU (optional)
13	Power Line Conditioner - 600VA

*Download cable is not req. for normal operation



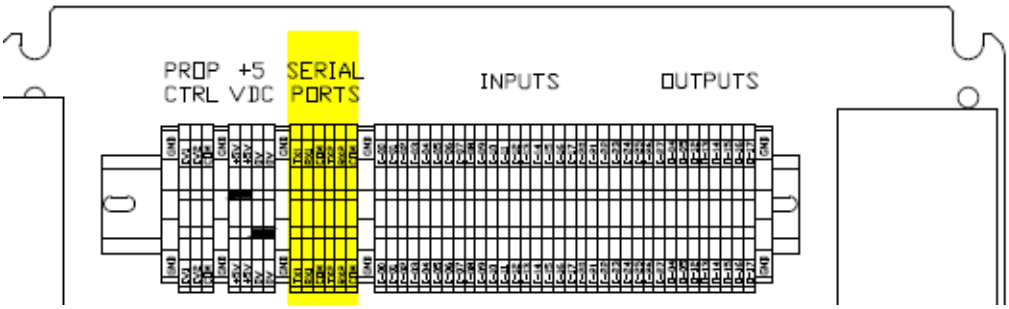
DO NOT LOCATE COMPUTER OR PRINTERS NEAR RADIO EQUIPMENT

Printer

Star SP 712 Serial Printer

Note: System will work with discontinued Star SP312 Serial Printer

- **Printer attaches to Com 1 in the Control Box**



- **Printer uses standard bulkWeigh printer cable from Harland Technologies**
  - **Tx1 on Terminal Strip to Pin 3 on DB 25 male connector**
  - **Rx1 on Terminal Strip to Pin 2 on DB 25 male connector**
  - **Com on Terminal Strip to Pin 7 on DB 25 male connector**

- **Default baud rate on printer is 9600-N-8-1 no adjustment needed**
- **Default baud rate on IND 780 com port is 9600-N-8-1 no adjustment needed**
- **For installs that require a 2nd printer wire 2nd printer to Com2 and set program for # of printers to 2**

Understanding the Navigational Interface

Navigate in the applications and configure the IND780 using

- Navigation keys
- Softkeys
- Application Keys
- Scale function keys
- Alpha keys (that appear on-screen when a field requiring alphanumeric data entry is selected)
- Numeric keys
- Optional external keyboard

The locations of these keys and the display screen area are shown in Figure 2-2.

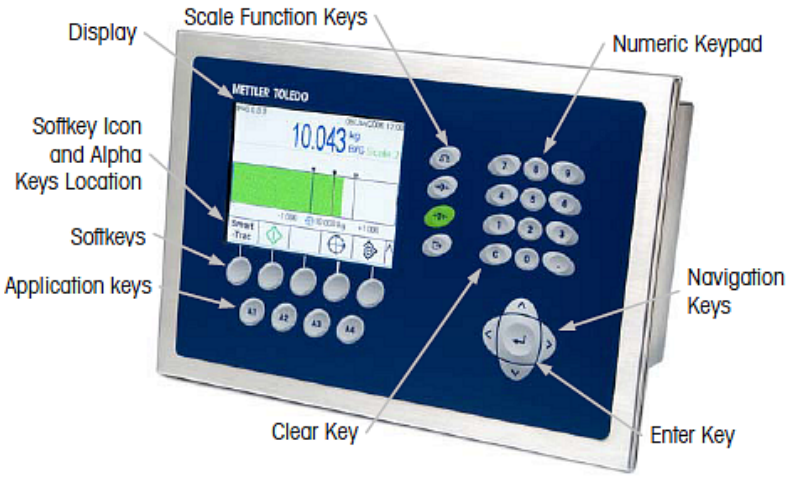


Figure 2-2: Front Panel Components and Key Locations

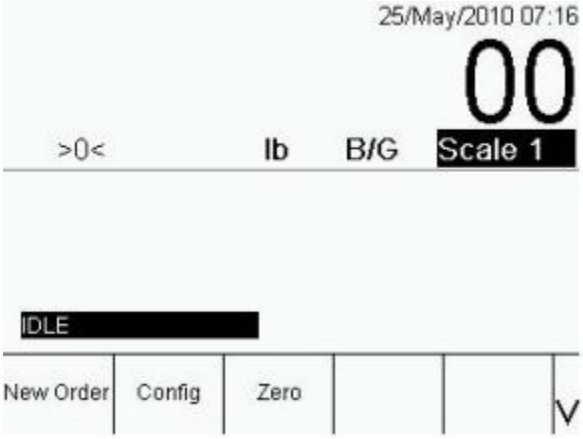
Frequently Used Soft Keys

SETUP		EDIT	
OK		CANCEL	
NEW		DELETE	
EXIT		ESCAPE	
DOWN		UP	
START		TIME/DATE	

Setting Jog Tables

Important During jog setup, it is imperative that the Upper Garner never empties, or the jog values will be incorrect.

- Navigate to Main Menu – Idle
- Press the Config Soft Key



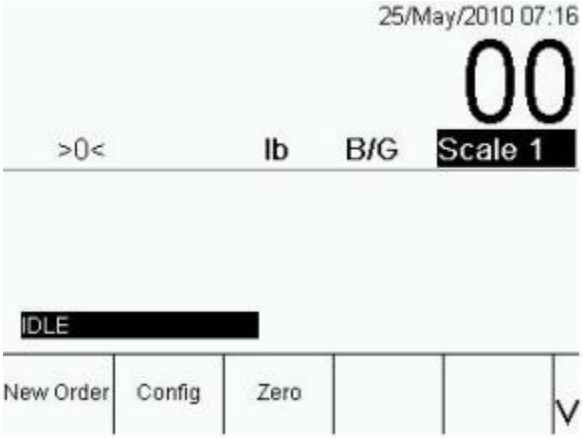
- Arrow to Jog Table

- Press Edit Soft Key

Front Panel Configuration:

Note: All setup and configuration should be performed from the Pc bulkWeigh program. Front panel configuration is available if bulkWeigh unit will not be attached to a bulkWeigh Pc.

- Navigate to Main Menu - Idle



- Press the Config Soft Key

- Arrow to appropriate Menu and press Edit Soft Key
- Make changes in necessary menus
- Press the Exit Soft Key to exit each menu
- Press the Print Soft Key to print setup (optional)
- Press the Exit Soft Key to exit setup menu
- Indicator will re-boot

Calibration instructions for Intersystems installation tech use only. Official calibration must be performed by certified scale technician. Page 1 is overview of entire process. Subsequent pages provide more detail to set Capacity/Increment, details of Cal menu, Calibration steps.

Metrology Switch

If the metrology switch (S1) is placed in the approved position (On), changes to the Scale branch of setup and other metrologically significant areas are not permitted. Access to the metrology switch may be sealed in conformity with local regulations in "legal-for-trade" applications. Figure 2-1 shows the location of the metrology switch, immediately adjacent to the Compact Flash card and PLC module location.

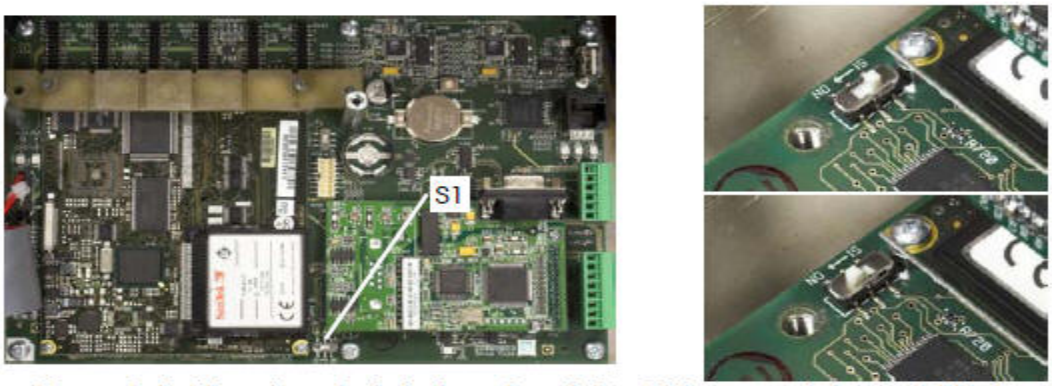


Figure 2-1: Metrology Switch, Location (left), OFF (upper right) and ON (lower right)

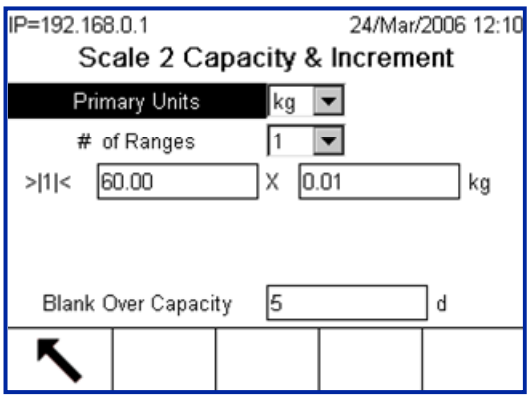
- Ships from Factory in default Off position
- All setup and configuration should be done with switch in Off position
- Switch must be in On position after calibration is complete and unit is ready for use

Thru setup navigate to Scale 1 and with scale empty, capture zero.
Press Capture Span and system will prompt to set weights on
System will ask for weight value, enter value
System will calculate and calibrate

Calibration Icons		
Icon#	**Function#**	**Explanation**
→0←	Capture Zero	Resets the zero condition of the scale
→▼←	Capture Span	Resets the span value with known test weights

Basic Calibration-Setting Capacity/Increment

- Capacity & Increment Size
  - Sets Primary Units to (lb)
  - Number of Ranges to (1)
  - Capacity & Increment
  - Over Capacity Blanking (5)
- Navigate to [Scale 1 / Capacity & Increment]
  - Set lb as primary units
  - 1 range
  - (example) 40000 lb x 20 lb
- Exit to Scale 1 menu



Internal usage only

Definition of calibration setup menu items:

Only use Traditional for calibration

Never use Step Calibration

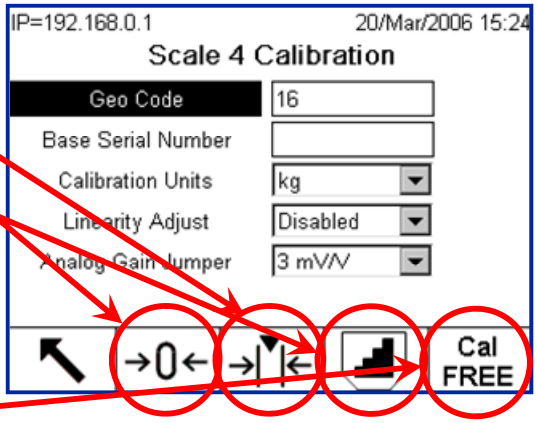
Never use CalFREE

Linearity correction is rarely needed, if ever.

Analog Gain Jumper is typically 3mV/V – this is the standard load cell rating in the industry. To confirm ask scale company if load cells are 2mV/V or 3mV/V, cells are labeled with this information. 3 is standard, 2 is old and rare but you might run into them.

Basic Calibration-Only Use Traditional

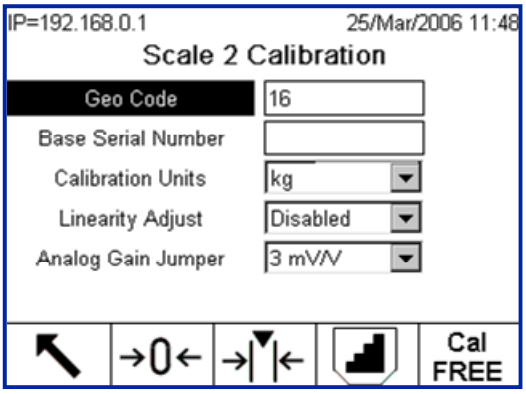
- Traditional
  - Most accurate
  - Utilizes known test masses
  - Required for approved installations
- Step Calibration
  - Commonly used technique for large tanks & vessels
  - This procedure helps to make the sequence easier to manage
- CalFREE™
  - Calibration without test weights
  - Utilizes span values of load cells to compute the calibration of the scale
  - Does not accommodate mechanical interactions
  - Not for Approved applications



Internal usage only

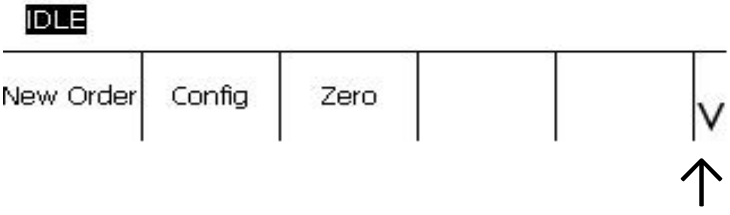
Basic Calibration – Steps for Traditional

- Navigate to Calibration
  - [Scale 1 / Calibration]
- Defaults should be as displayed here except lb not kg-no changes needed, in most cases use defaults
- Press Zero softkey
  - Ensure Scale is Empty
  - Press Start
- Press Span softkey
  - Enter test weight value
  - Add Test Weight
  - Press Start
- Exit to Home Screen



Internal usage only

Front Panel Configuration (Detailed):

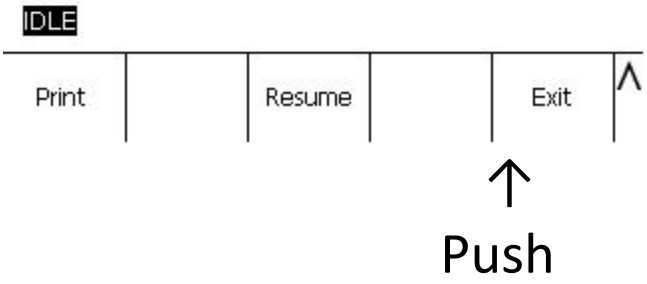


Push

- To go into Calibration press the Down Arrow Soft Key

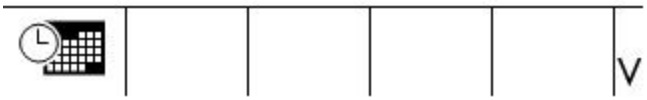
Push down arrow

- Press the Down Arrow Soft Key



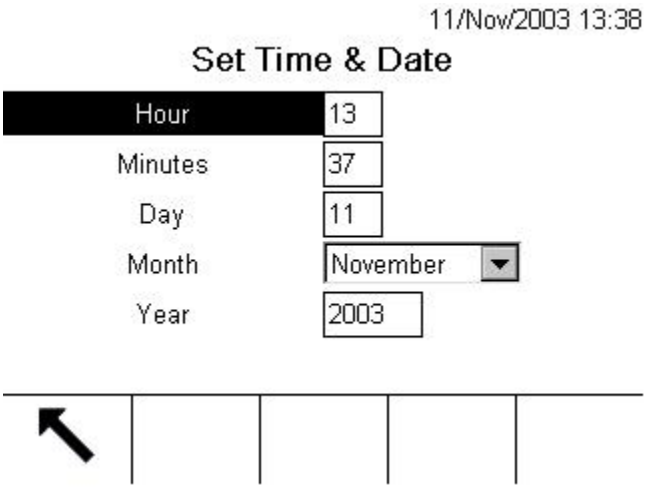
Push

Push Exit soft Key



Push

- Press Keyboard Soft Key to change Time & Date.
- Press the Down Arrow to go to Calibration.



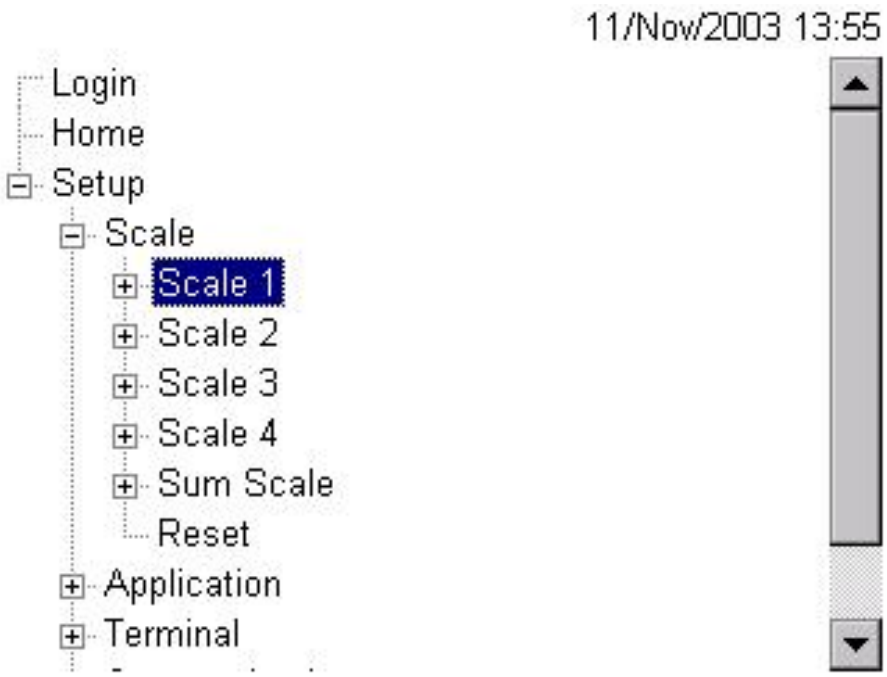
- Configure Date and Time
- When complete press angle arrow

↑
Push

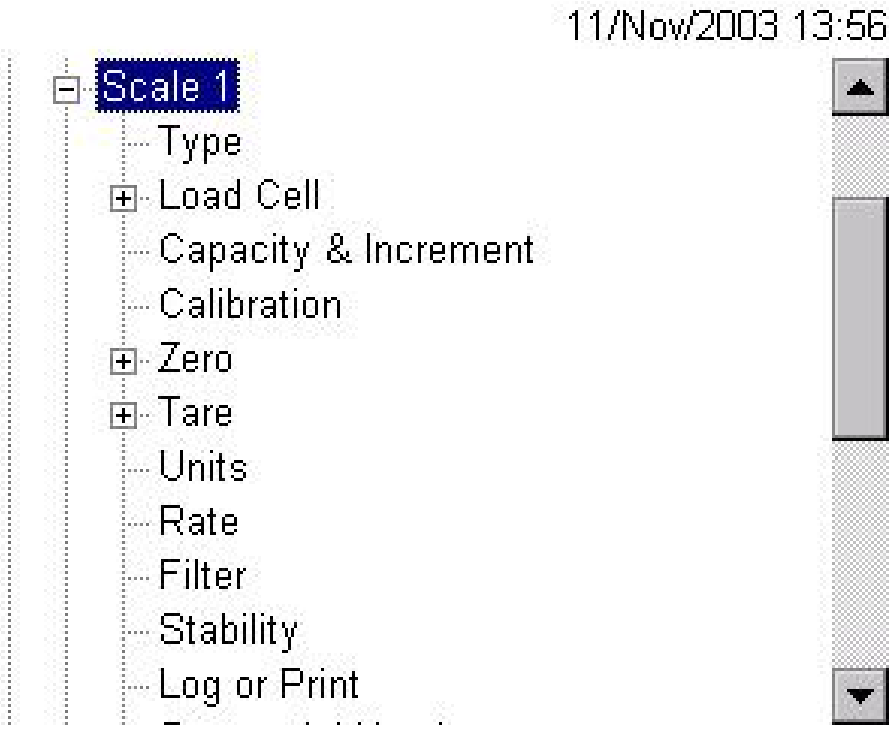
- Press <!> Key to Enter Setup

Push<!> Key

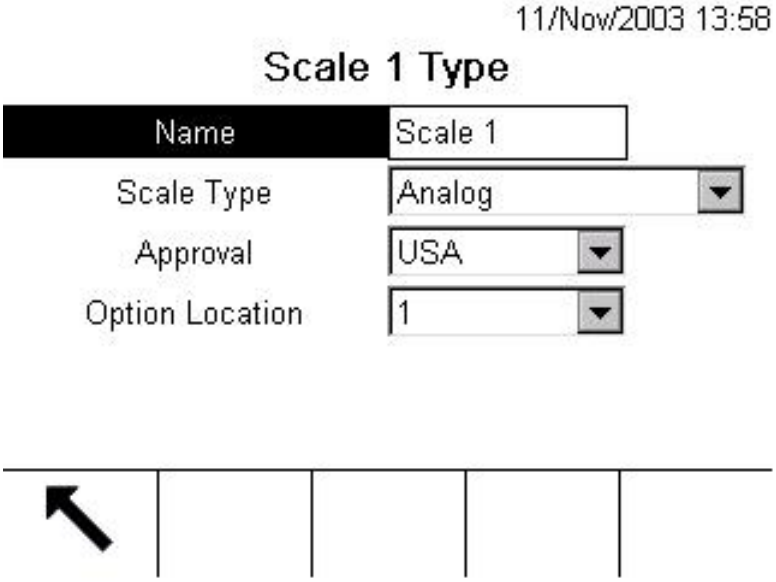
Toggle down to scale and press right arrow



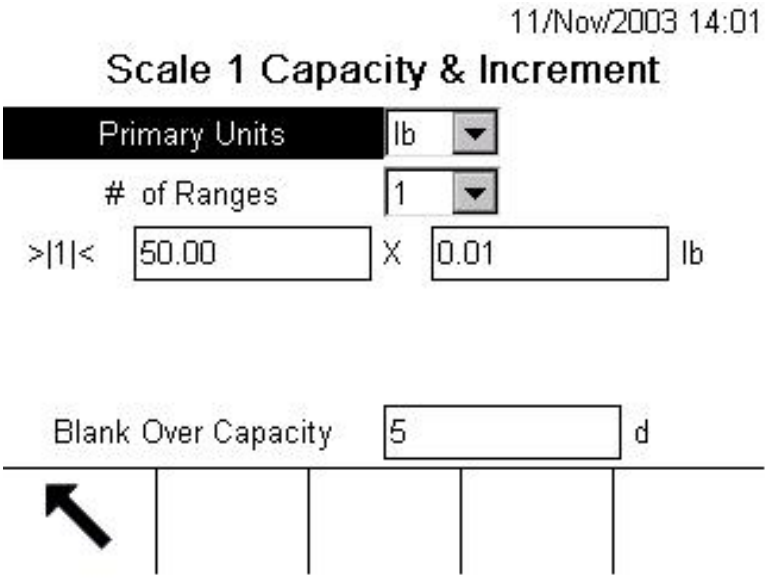
- Toggle Down to Scale 1



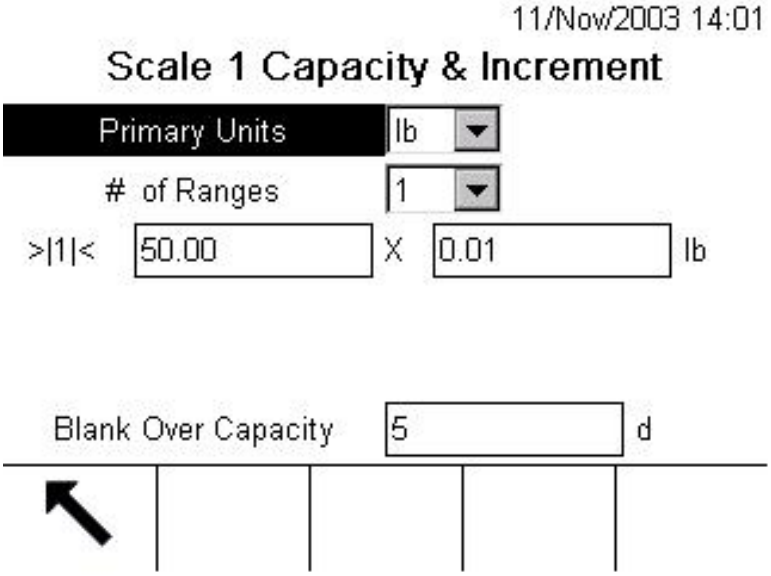
- Toggle Down to Scale 1 Type
- Press Enter



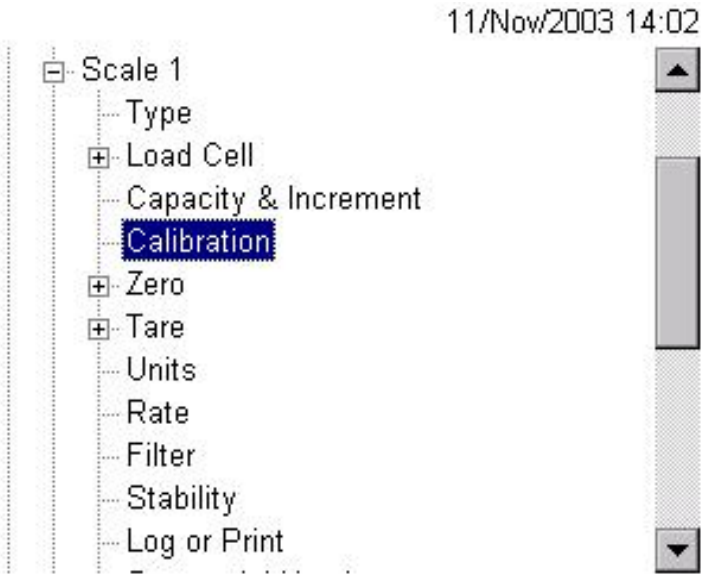
- Scale Type Change to Analog
- Approval Change to USA
- Option Location Change to 1
- When done press angle arrow



- Toggle Down to Load Cell Capacity & Increment



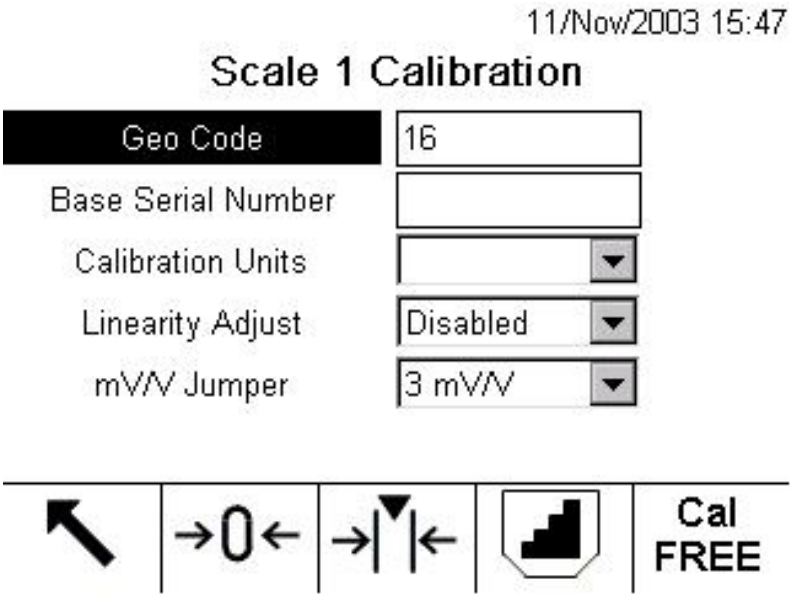
- Primary Units Choose lb or kg
- Select # of Ranges is always 1
- Enter Scale Capacity _____x _____lb
- Most you can have is 5000 div. per NTEP
- Change Blank Over Capacity to (5 div)



Toggle to Load Cell Calibration

Thru setup navigate to Scale 1 and with scale empty, capture zero.
Press Capture Span and system will prompt to set weights on
System will ask for weight value, enter value
System will calculate and calibrate

Calibration Icons		
Icon#	**Function#**	**Explanation**
→0←	Capture Zero	Resets the zero condition of the scale
→▼| ←	Capture Span	Resets the span value with known test weights

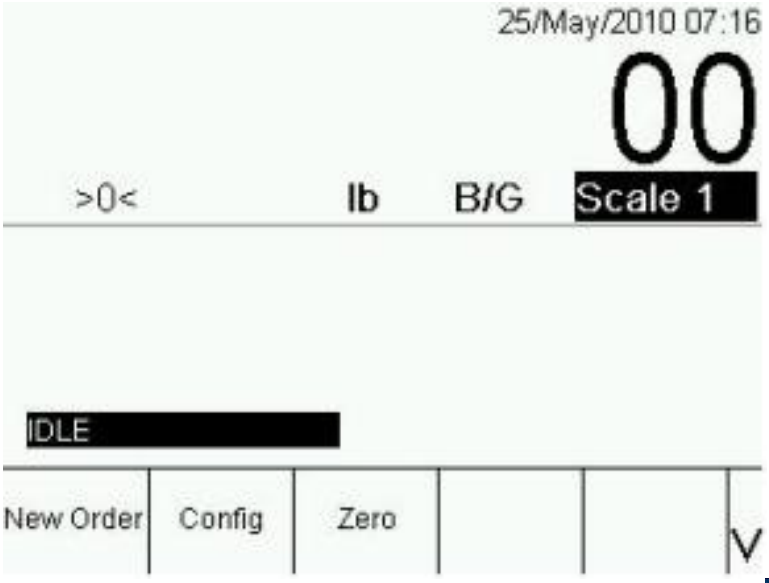


- Leave the Base Serial Number field blank
- Cal units are whatever your test weights are in
- Linearity disabled
- mV/V whatever load cells are set for

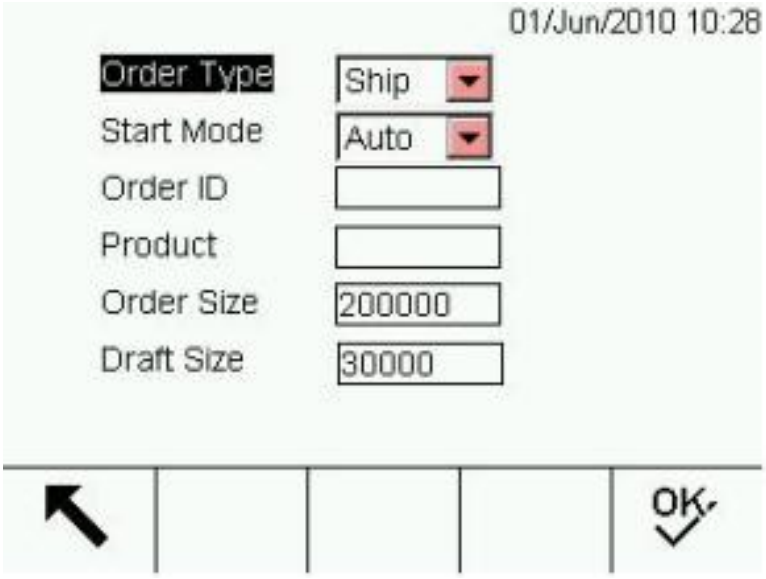
Entering order From Front Panel

Note: PC Bulkweigher software program must not be active in order for front panel operation to work.

- Press the New Order Soft Key

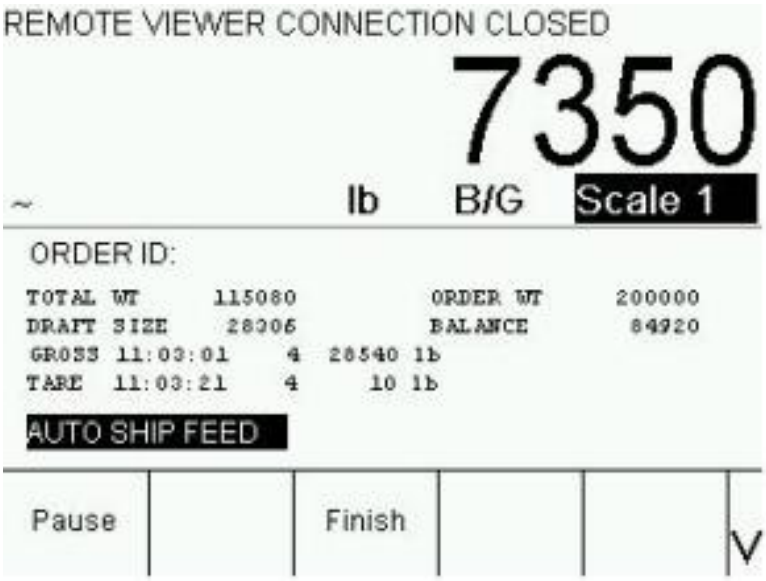


- Enter to move between fields & input data
    - Press New Order
    - Order Type – Ship
    - Start Mode – Auto
    - Enter Order Size in Ship Mode
    - Order ID and Product fields are optional



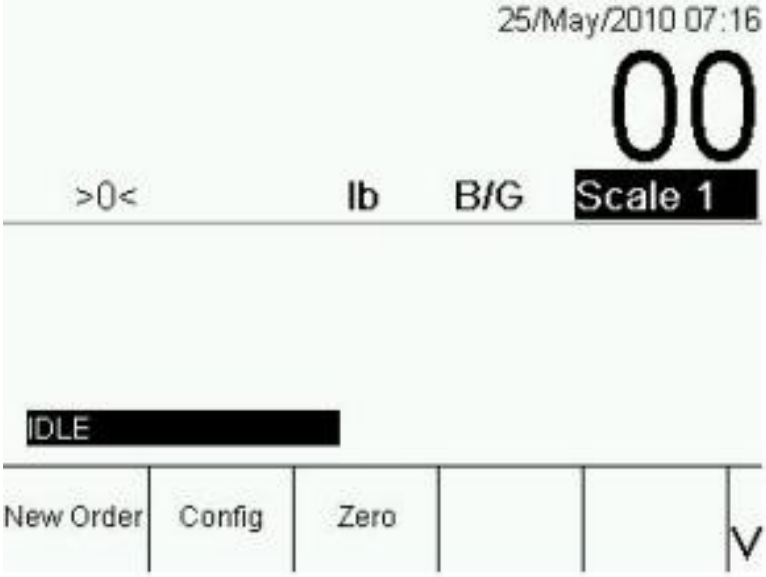
- Press the OK Soft Key when ready to start order OK

- Order will process
  - Press Pause to pause order in progress
  - Press Finish to Finish order before target weight is met



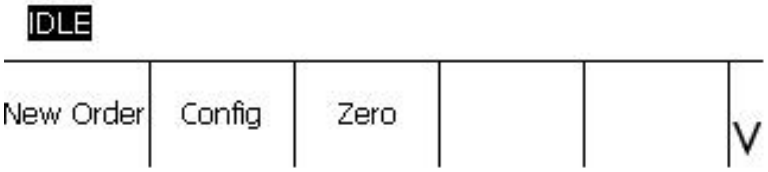
- When order weight is reached system will go to Pause Ship
- Press the Finish Soft Key to finish order

- System will return to Main Menu – Idle ready for next order



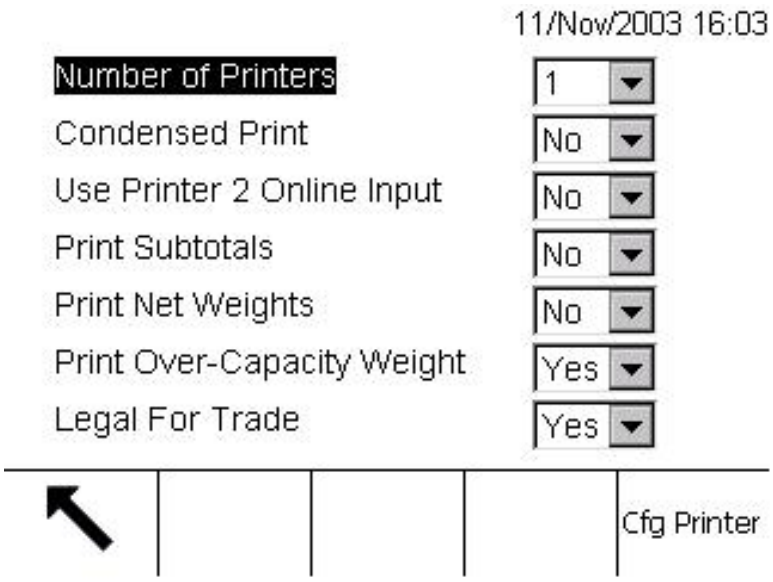
- **Order Type (ship, rec, or trans)**
- **Start Mode (Auto)**
- **Order ID (Rail Car, Barge, Truck, etc.) whatever you are loading**
- **Product (what product you are loading)**

- **Order Size (how much you are put in order)**
- **Draft Size (what draft to run) 80/85% of scale capacity**

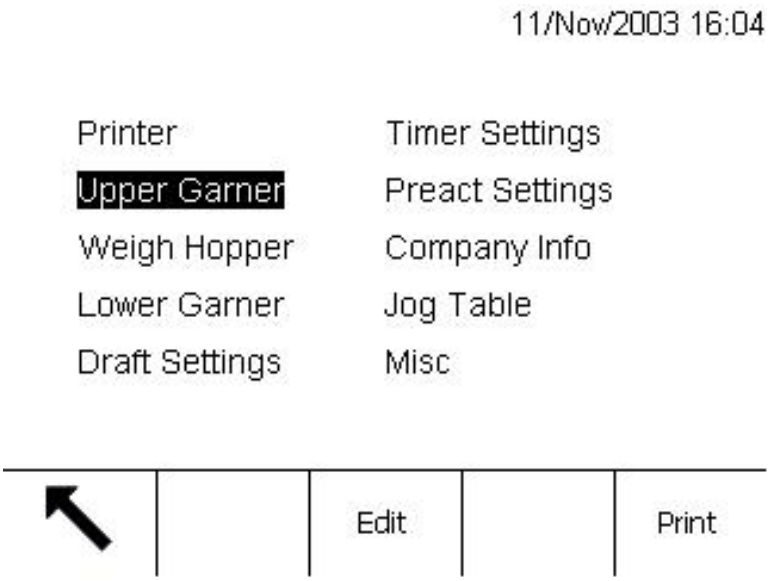


- Press **Config**

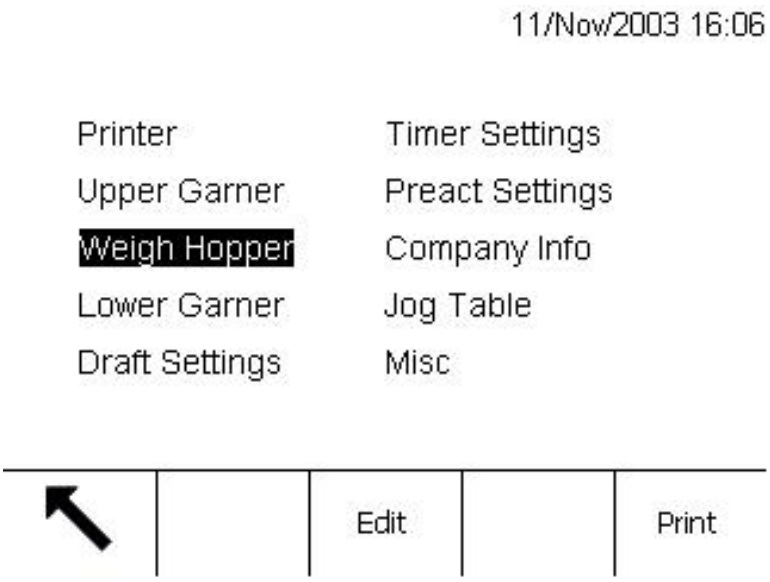
Press Edit



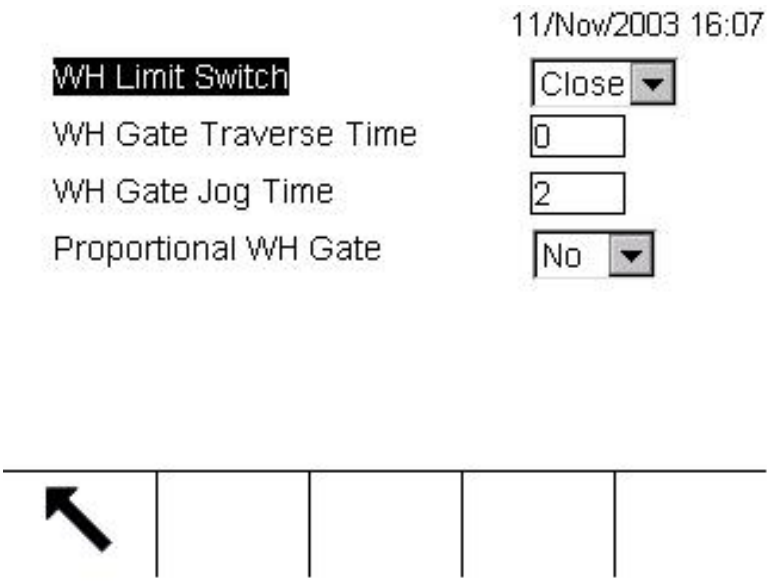
- Go to Printers and Enter # of Printers -1
- Change Use Printer 2 Online Input to (No)
- Change Print Subtotals to Print Subtotals on Each Draft
- Change Net Weights to Print Net weight on Each Draft
- Change Print Over-Capacity Weight to (Yes)
- Legal For Trade –**Yes**- Look for Print Complete Sign from Printer Before Going to Next Step. **No** means it will still send print info but not look for print complete signal
- When complete press angle arrow



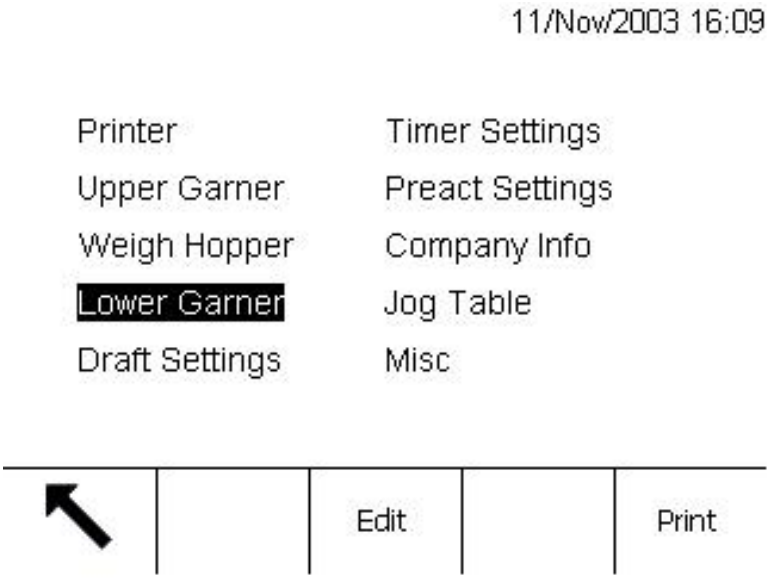
- Press **Edit**
- Upper Garner
- Change UG Limit Switch to (Close)
- Change UG Gate Traverse Time to (5) Travel of Gate to Make Limit
- Change UG Gate Jog Time to (10) Pulse of Gate from Testing
- Use UG Min Level Input – Signal from Mid-Level for Feed Gate to Open
- When complete angle arrow



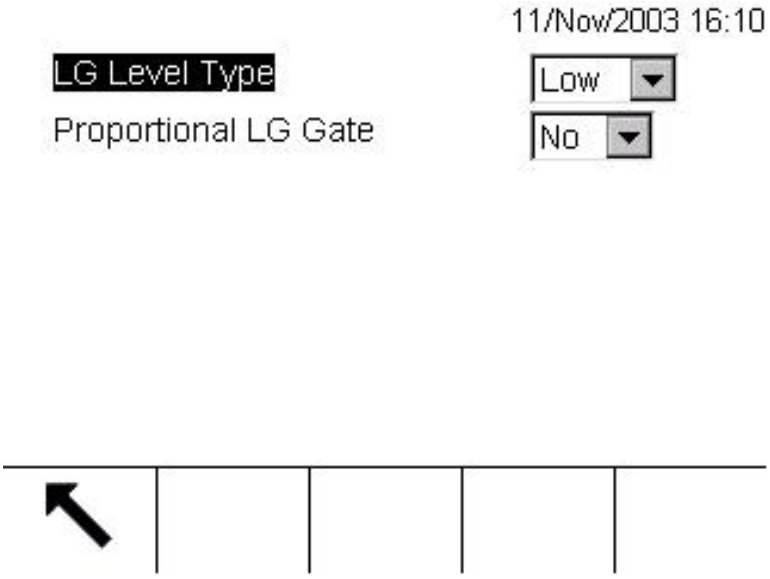
- Press **Edit**



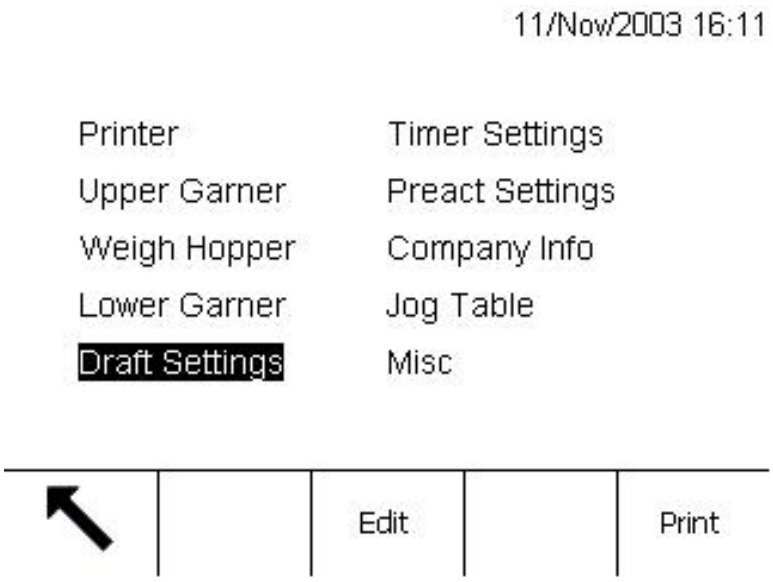
- Change Weigh Hopper Limit to (Closed)
- Change WH Gate Traverse Time to (5) Traverse of Gate to Make Limit
- Change WH Jog Time to (10) Pulse of Gate for testing
- Proportional WH Gate (Do Not Use)
- When complete angle arrow



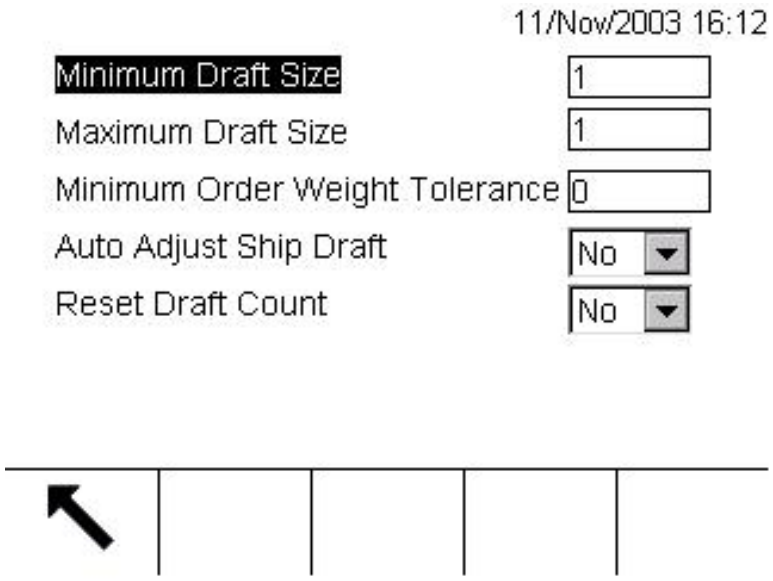
- Press **Edit**



- Change LG Level Type to (Low)
- Proportional LG Gate (Do Not Use)
- Press angle arrow when complete

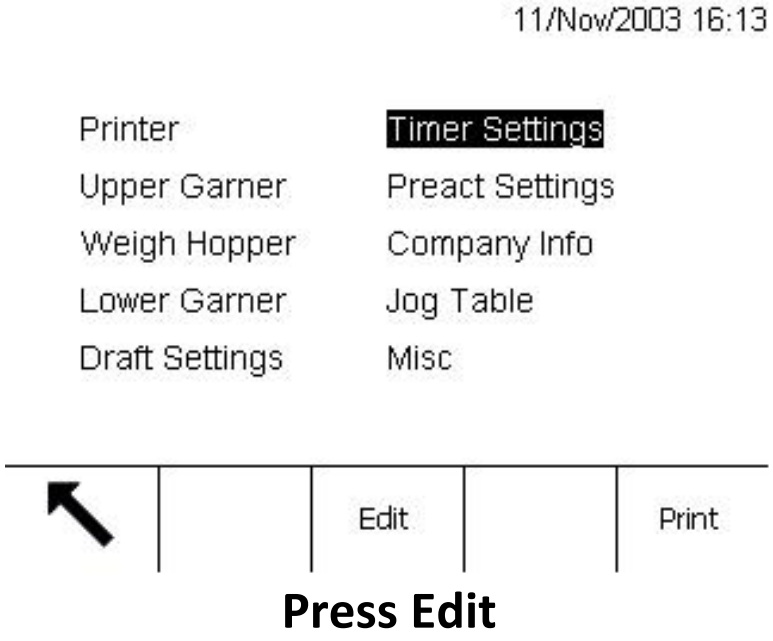


- Press **Edit**

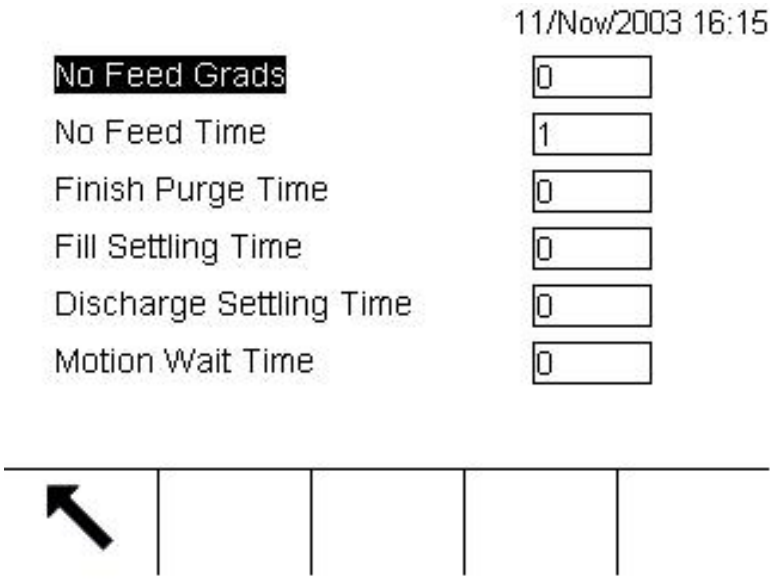


- Change Minimum Draft Size to 25% of Scale Capacity
- Change Maximum Draft Size to 95% of Scale Capacity
- Minimum Order Weight Tolerance – How Close to Order Weight Before it Completes Order

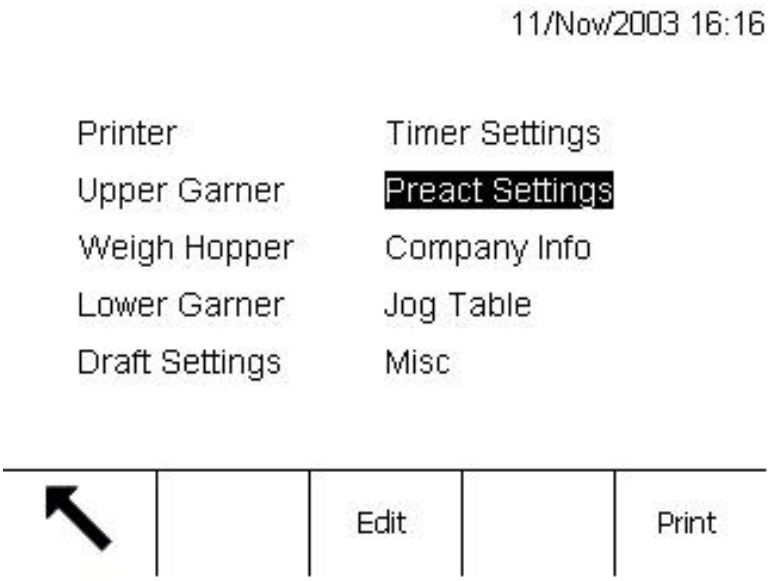
- Change Auto Adjust Draft to (Yes) Adjust Draft Size and press Complete Order.
- Change Reset Draft Count to (Yes or No) Reset Count on New Order
- When complete angle arrow



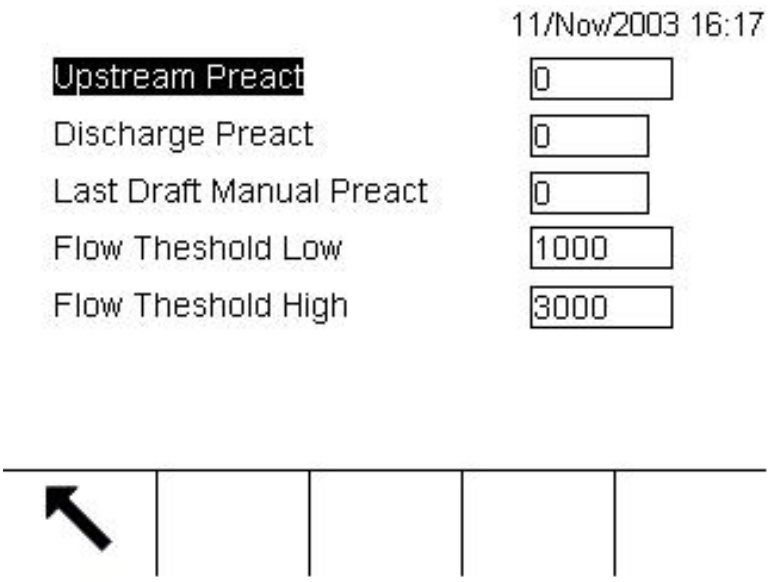
Press Edit



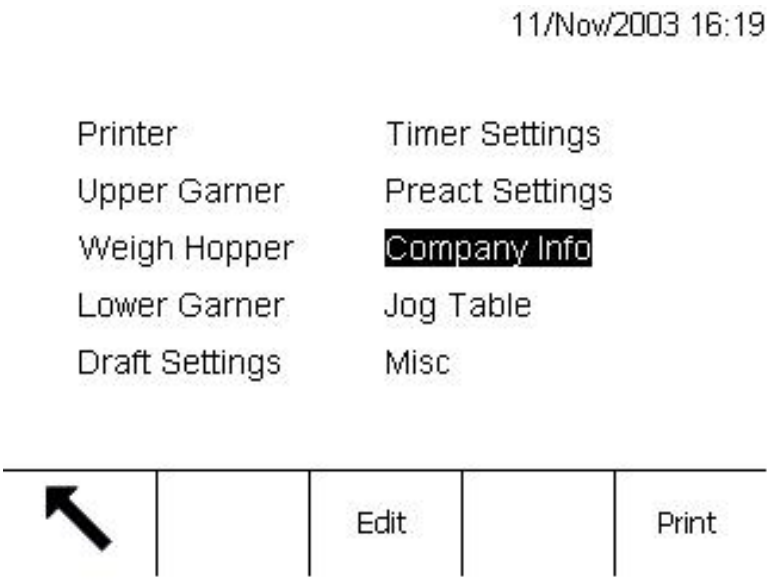
- Change No Feed Grads to (10) Grads of Change in the Amount of Time Below or It Gives a Minor Alarm
- Change No Feed Time to (90)
- Finish Purge Time - Signal in Controller to Tell to Shut Off Equipment
- Change Fill Settle Time to (2) Time it Waits Before It Looks For A stable Weight
- Change Discharge Settling Time to (2) When Scale Discharges How Long It Waits Before It Reads Scale Indication
- Change Motion Wait Time to (2) Time The Unit Has to Be Stable Before It Records Weight



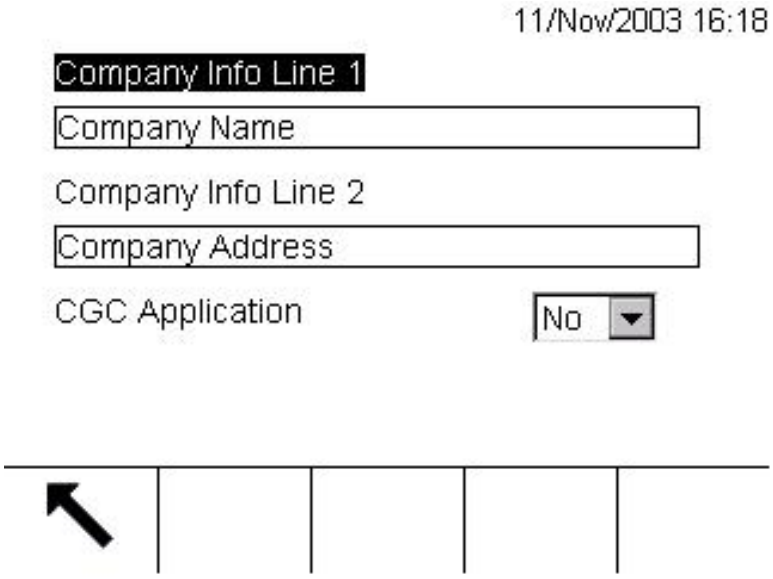
- Press **Edit**



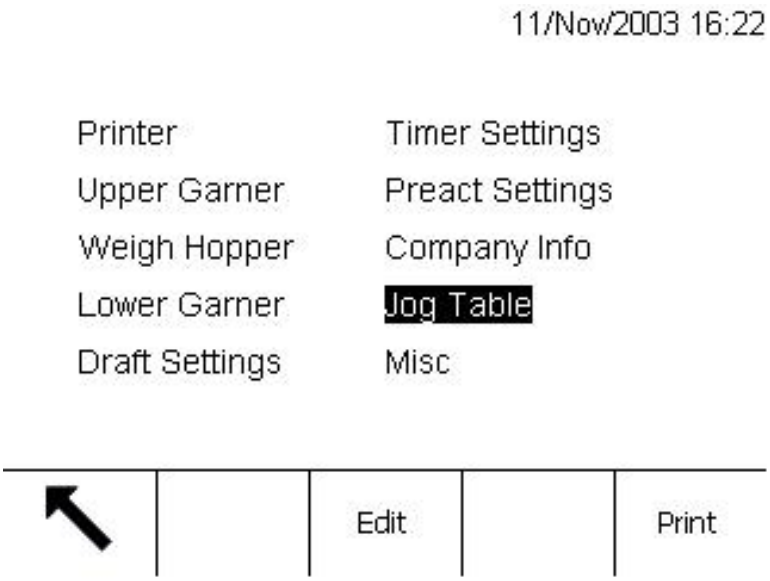
- Upstream Pre-act – A setting that will tell plant controls that an order is met. This value is subtracted from the total order.
- Discharge Pre-act – This number will tell the discharge gate when to close prior to hopper empting completely.
- Last Draft Manual Pre-act – This number is minus the total unit and will close the gate and jog reset of the order.
- Flow Threshold Low – Grad per second or slow feed into scale.
- Flow Threshold High – grads per second on fast feed into scale.
- When complete angle arrow



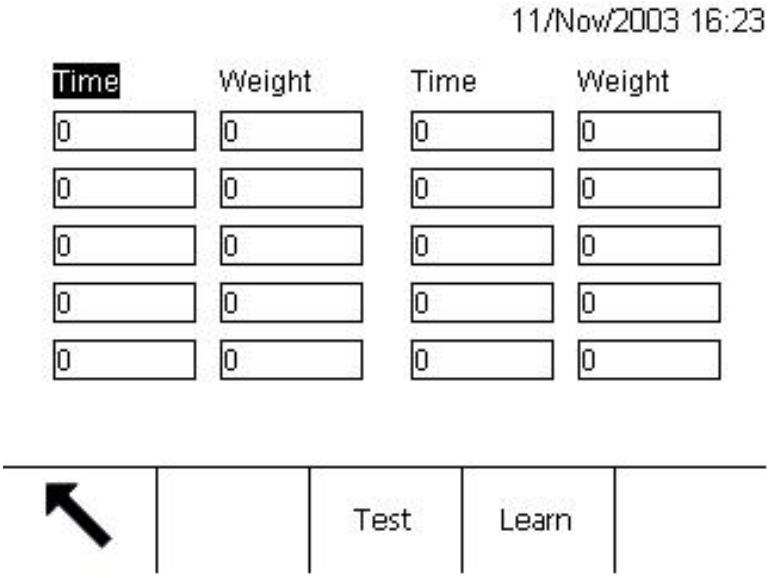
Press Edit



- Company Info Line 1 Enter Company Name
- Company Info Line 2 Enter City and State
- Change CGC Application to No

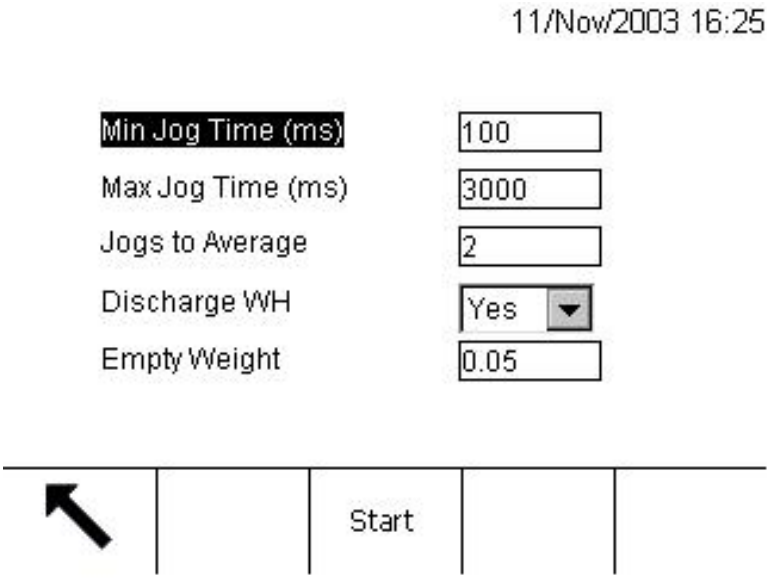


- Press **Edit**

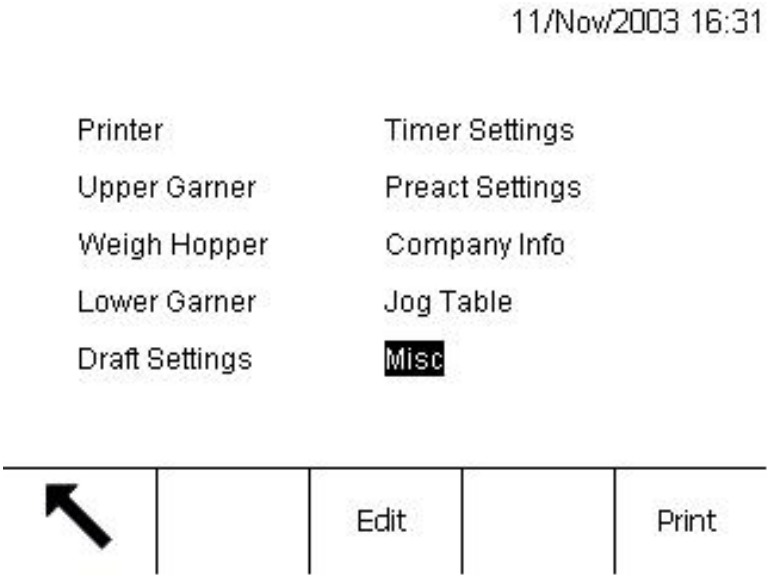


- **Learn** – Time for unit to pulse gate and get weight reading to finish orders. Time is in milliseconds.
- Insert Min and Max weight time to jog feed gate. **Must keep upper garner full during this process**.
- Jog average set to 1

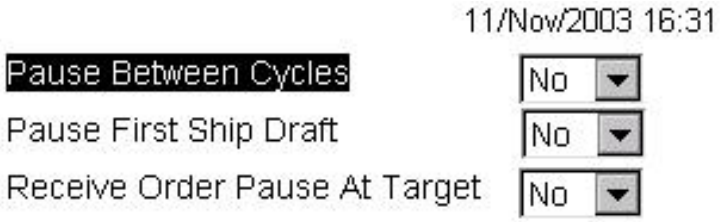
- Discharge WH to No
- Empty weight to 5% scale capacity
- Press start and will run Jog test



- **Test** is for testing of the feed gate in a preset time
- When complete angle arrow



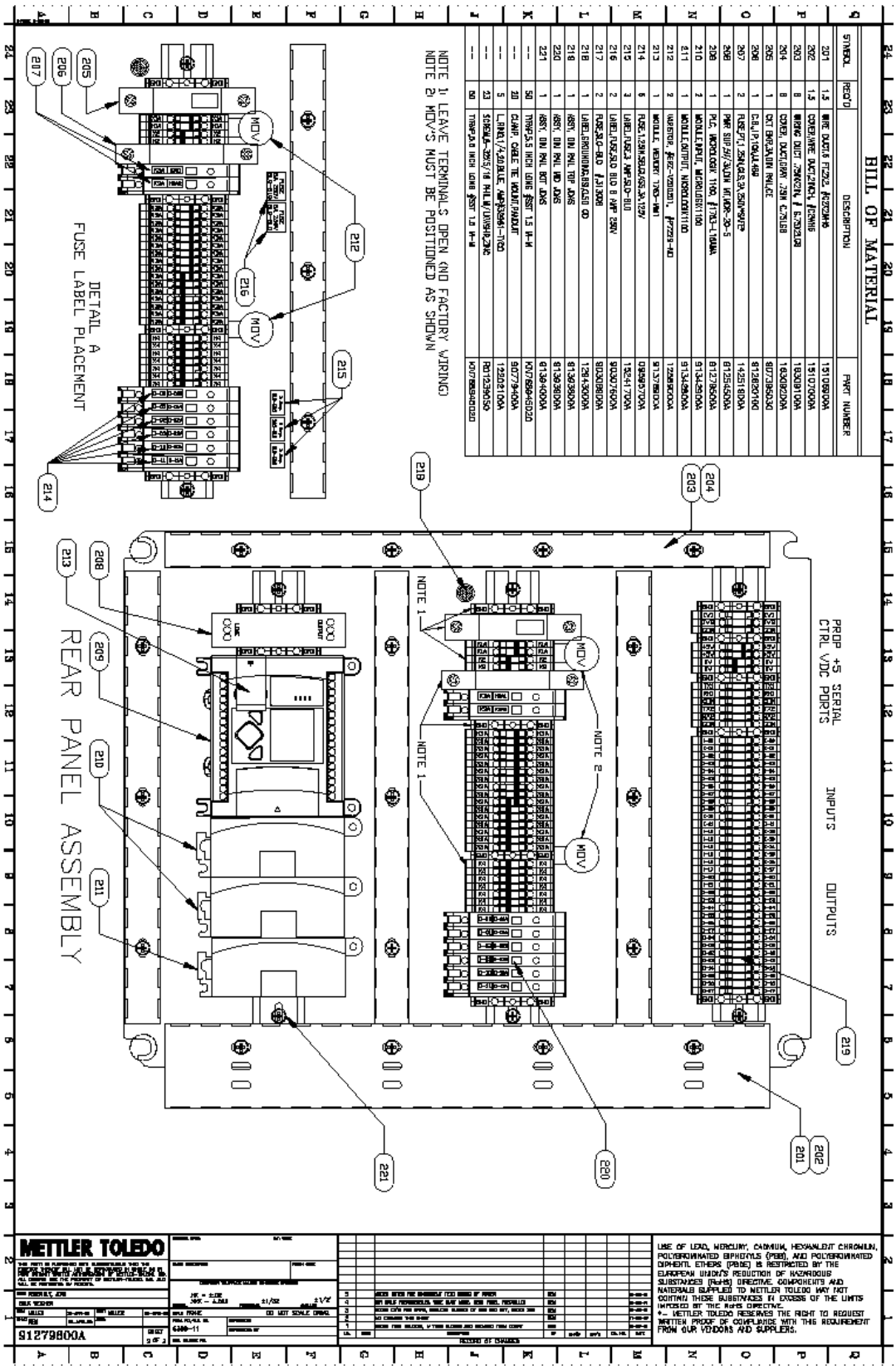
- Press **Edit**

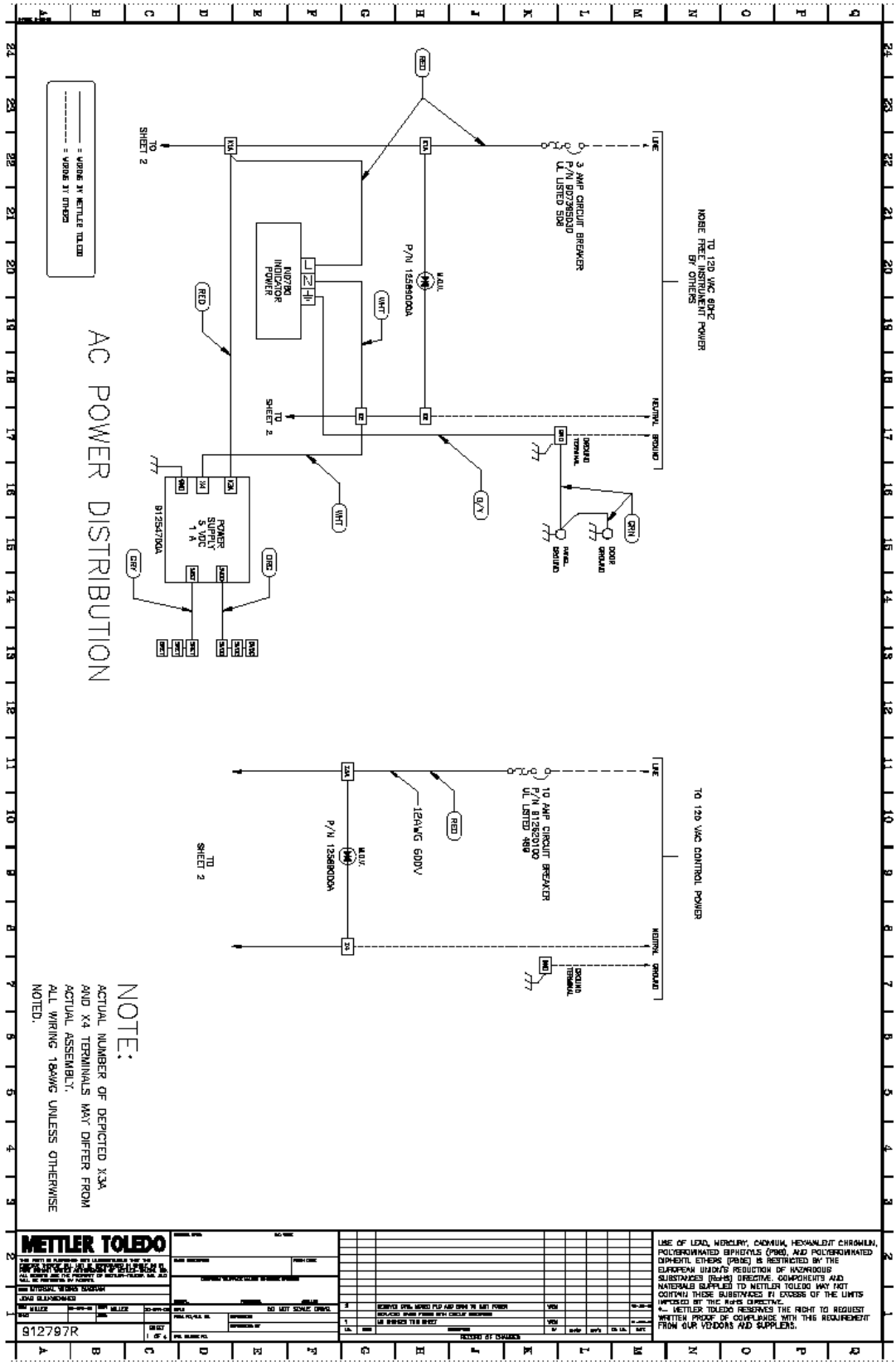


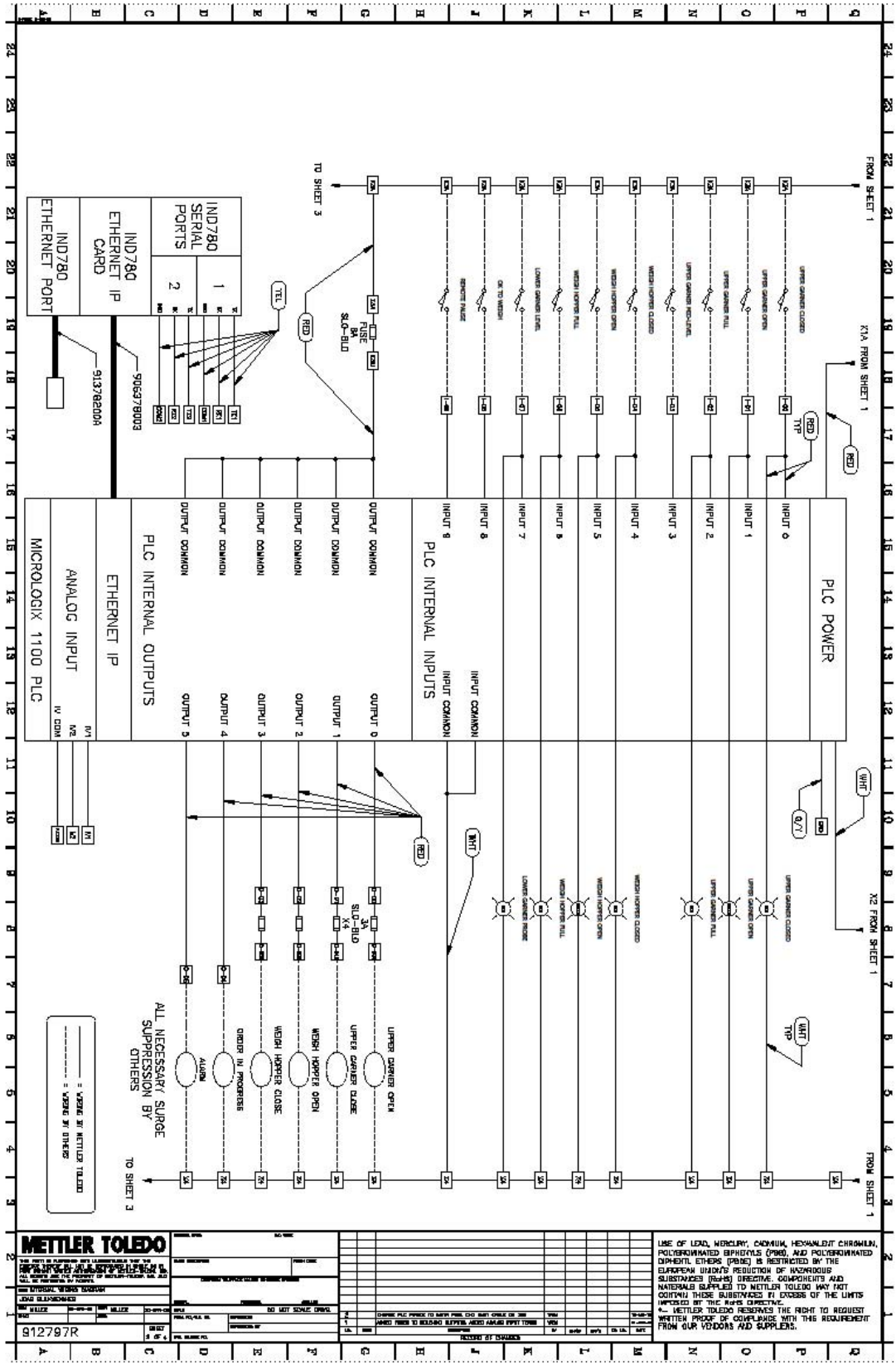
- Change Pause Between Cycles to (No)
- Change Pause First Ship Draft to (No)
- Change Receive Order Pause At Target to (No)
- When complete angle arrow
- **When complete with all programming press the Print soft key and it will print all parameters on small printer**

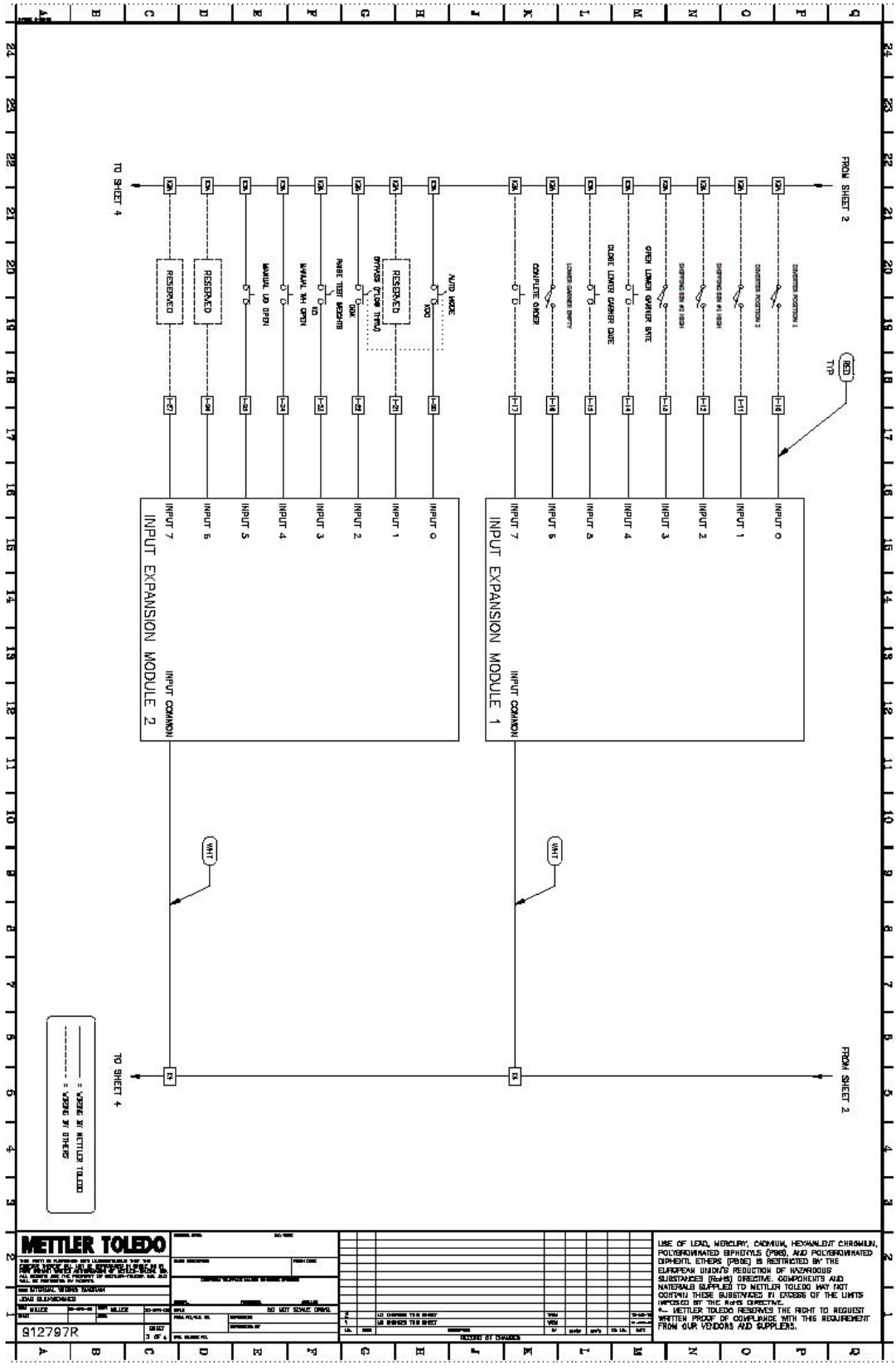
MasterWeigh Infinity PC Program Setup

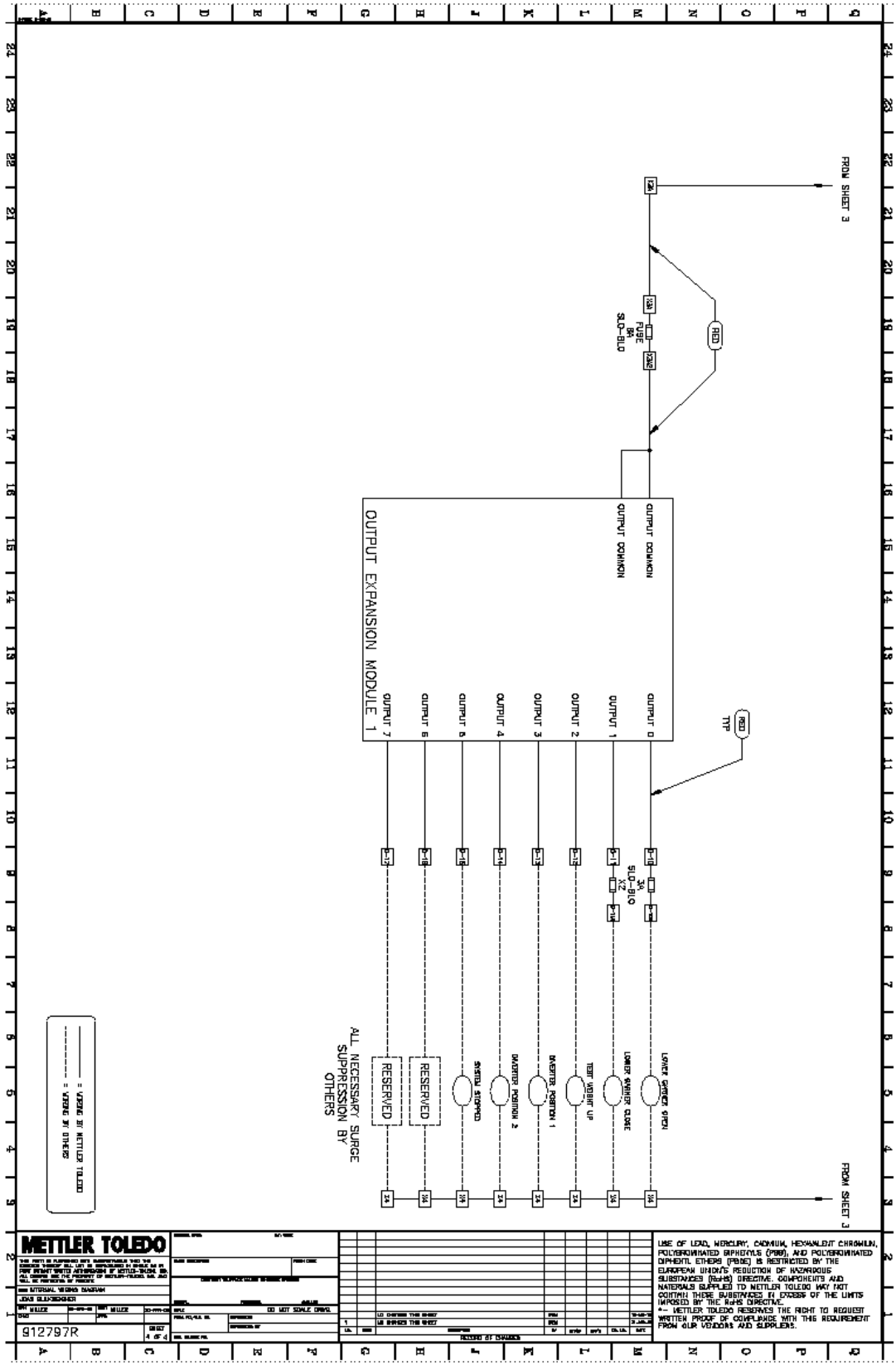
- Install AGRIS and Pervasive and license both on Pc
- In C:\Agris\Packages create a folder called BLK
- On Pc navigate to C:\Agris\Packages\One directory
- Locate the BLK_IND780.Zip file
- Copy BLK_IND780.zip to C:\Agris\Packages\BLK
- Extract contents of file
- Re-name ubulkwghi.exe to bulkwghi.exe
- In oneWeigh setup scale definition for BulkWeigh and choose IND780 for equipment type

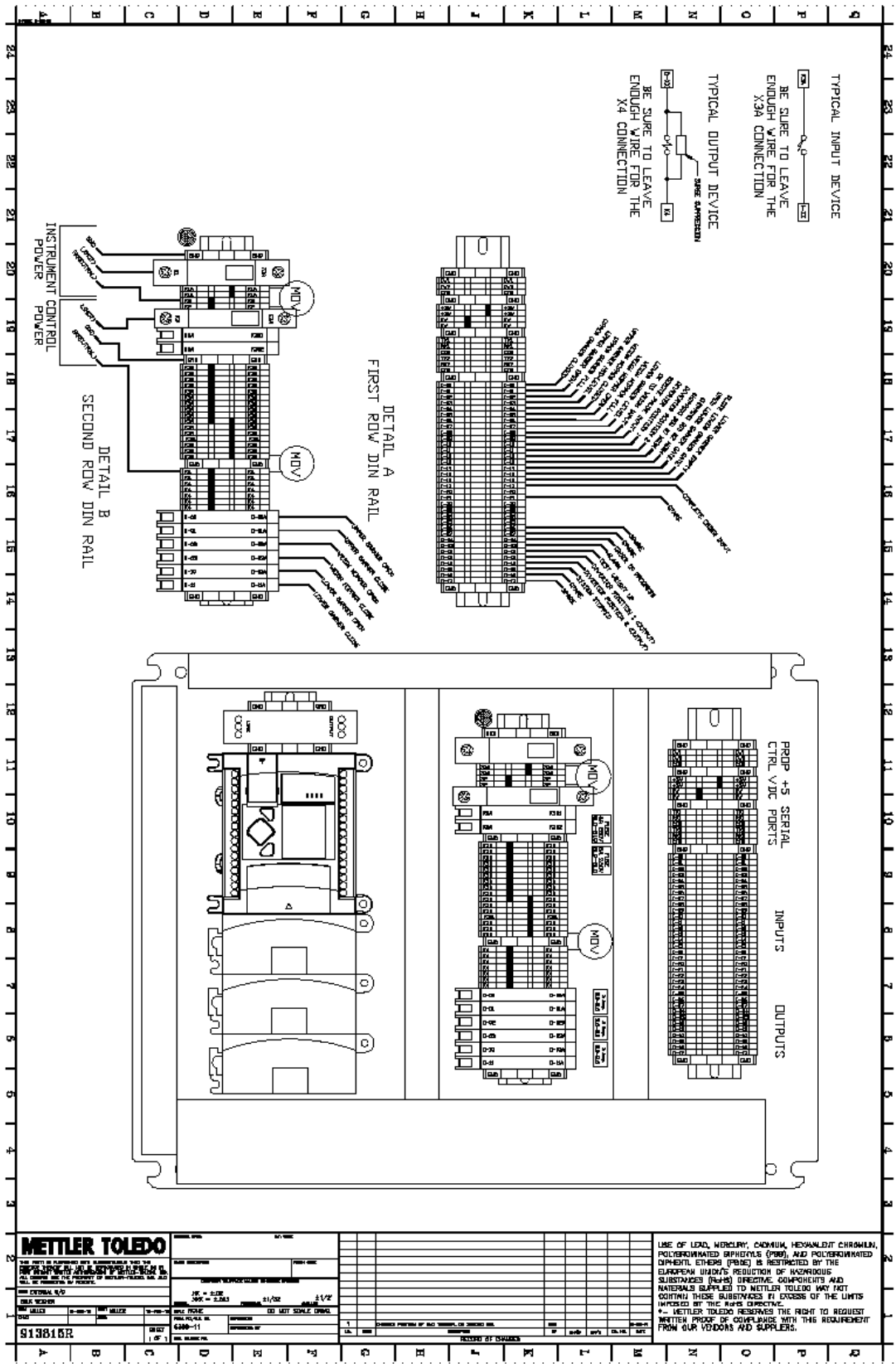

BILL OF MATERIAL
SYMBOL
REQ'D
DESCRIPTION
PART NUMBER
201 1.5 WIRE, DATA FLEX2, #26AWG 191058904
202 1.3 COVER,WIRE DUCT,GRAY, #10MIN 191070004
203 8 WIRING DUCT .75"WIDE,W/ ADH 1830911004
204 8 COVER, DUCT,GRAY .75W 0.75LG 1830922004
205 1 CKT BRD,MAIN PANEL 920773650130
206 1 CAP,1P,10MM,4.5SQ 81238501040
207 2 FUSE,PCI 1.25A,125V,SLO,500MSEC 142511604A
208 1 PWR SUP,5V/3A,12V/1A,W/ADP-30-5 812154504A
209 1 PLG, MICROLOCK 1100, 8 CKT-100MM 812278504A
210 2 MODULE,INPUT, MICROLOCK1100 913425804A
211 1 MODULE,OUTPUT, MICROLOCK1100 913426804A
212 2 INVERTOR, PIEZO-COMBO1, 24V229-MD 122985400A
213 1 MODULE, HEADER 7363-0M1 913378804A
214 6 FUSE,1.25A,SLO,125V 099997004A
215 3 LABEL,FUSE,3 AMP,SLO-BLO 12541700A
216 2 LABEL,FUSE,SLO BLO 8 AMP 250V 920307604A
217 2 FUSE,SLO-BLO 8A 3008 920308804A
218 1 LABEL,GROUNDING,8SQ,ISO 12614300DA
219 1 ASSY, DIN RAIL TOP JOKS 813493804A
220 1 ASSY, DIN RAIL MID JOKS 813493804A
221 1 ASSY, DIN RAIL BOT JOKS 813494004A
--- 50 TYRAP,5.5 INCH LONG 50ST 1.5 W-M K0076894-65020
--- 20 CLAMP, CABLE TIE MOUNT,PADDLE 920779404A
--- 5 L-PAD,1/4-20,BLUE, MAP830864-7060 1292801104A
--- 23 SCREW,6-32X5/16 PHL W/LOKSHAZMC R0102304050
00 TYRAP,5.8 INCH LONG 50ST 1.8 W-M K0076894-80020
NOTE 1: LEAVE TERMINALS OPEN AND FACTORY WIRING
NOTE 2: MOV'S MUST BE POSITIONED AS SHOWN
DETAIL A
FUSE LABEL PLACEMENT
REAR PANEL ASSEMBLY
PROP +5 VDC PORTS
SERIAL
INPUTS
OUTPUTS
MOV
NOTE 1
NOTE 2
METTLER TOLEDO
91279800A
DO NOT SCALE DRAWING
USE OF LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS (PBB), AND POLYBROMINATED DIPHENYL ETHERS (PBDE) IS RESTRICTED BY THE EUROPEAN UNION'S REDUCTION OF HAZARDOUS SUBSTANCES (RoHS) DIRECTIVE. COMPONENTS AND MATERIALS SUPPLIED TO METTLER TOLEDO MAY NOT CONTAIN THESE SUBSTANCES IN EXCESS OF THE LIMITS IMPOSED BY THE RoHS DIRECTIVE.
*- METTLER TOLEDO RESERVES THE RIGHT TO REQUEST WRITTEN PROOF OF COMPLIANCE WITH THIS REQUIREMENT FROM OUR VENDORS AND SUPPLIERS.


AC POWER DISTRIBUTION
NOTE:
ACTUAL NUMBER OF DEPICTED X3A AND X4 TERMINALS MAY DIFFER FROM ACTUAL ASSEMBLY.
ALL WIRING 18AWG UNLESS OTHERWISE NOTED.
TO 120 VAC 60HZ NOISE FREE INSTRUMENT POWER BY OTHERS
3 AMP CIRCUIT BREAKER P/N 9D7365D30 UL LISTED 5D8
P/N 12589000A
INDICATOR POWER
POWER SUPPLY 5 VDC 1 A
912547D0A
TO 120 VAC CONTROL POWER
10 AMP CIRCUIT BREAKER P/N 912620100 UL LISTED 4B9
12AWG 600V
P/N 12589000A
TO SHEET 2
METTLER TOLEDO
912797R
USE OF LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS (PBB), AND POLYBROMINATED DIPHENYL ETHERS (PBDE) IS RESTRICTED BY THE EUROPEAN UNION'S REDUCTION OF HAZARDOUS SUBSTANCES (RoHS) DIRECTIVE. COMPONENTS AND MATERIALS SUPPLIED TO METTLER TOLEDO MAY NOT CONTAIN THESE SUBSTANCES IN EXCESS OF THE LIMITS IMPOSED BY THE RoHS DIRECTIVE.
*- METTLER TOLEDO RESERVES THE RIGHT TO REQUEST WRITTEN PROOF OF COMPLIANCE WITH THIS REQUIREMENT FROM OUR VENDORS AND SUPPLIERS.


IND780 SERIAL PORTS
IND780 ETHERNET IP CARD
IND780 ETHERNET PORT
PLC POWER
PLC INTERNAL INPUTS
PLC INTERNAL OUTPUTS
ETHERNET IP
ANALOG INPUT
MICROLOGIX 1100 PLC
FROM SHEET 1
TO SHEET 3
K1A FROM SHEET 1
X2 FROM SHEET 1
FUSE 6A SLO-BLO
ALL NECESSARY SURGE SUPPRESSION BY OTHERS
ALARM
ORDER IN PROGRESS
WEIGH HOPPER CLOSE
WEIGH HOPPER OPEN
UPPER GARNER CLOSE
UPPER GARNER OPEN
= WIRING BY METTLER TOLEDO
= WIRING BY OTHERS
METTLER TOLEDO
912797R
DO NOT SCALE DRWG.


FROM SHEET 2
TO SHEET 4
INPUT EXPANSION MODULE 1
INPUT EXPANSION MODULE 2
INPUT COMMON
RESERVED
RED TYP
WHT
METTLER TOLEDO
912797R
USE OF LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS (PBB), AND POLYBROMINATED DIPHENYL ETHERS (PBDE) IS RESTRICTED BY THE EUROPEAN UNION'S REDUCTION OF HAZARDOUS SUBSTANCES (RoHS) DIRECTIVE. COMPONENTS AND MATERIALS SUPPLIED TO METTLER TOLEDO MAY NOT CONTAIN THESE SUBSTANCES IN EXCESS OF THE LIMITS IMPOSED BY THE RoHS DIRECTIVE.
*– METTLER TOLEDO RESERVES THE RIGHT TO REQUEST WRITTEN PROOF OF COMPLIANCE WITH THIS REQUIREMENT FROM OUR VENDORS AND SUPPLIERS.


FROM SHEET 3
RED
SLO-BLO
OUTPUT EXPANSION MODULE 1
OUTPUT COMMON
OUTPUT 7
OUTPUT 6
OUTPUT 5
OUTPUT 4
OUTPUT 3
OUTPUT 2
OUTPUT 1
OUTPUT 0
TYP
SLO-BLO
RESERVED
RESERVED
SYSTEM STOPPED
DIVERTER POSITION 2
DIVERTER POSITION 1
TEST WEIGHT UP
LOWER BARRIER CLOSE
LOWER GATHER OPEN
ALL NECESSARY SURGE SUPPRESSION BY OTHERS
= WIRING BY METTLER TOLEDO
= WIRING BY OTHERS
METTLER TOLEDO
INTERNAL WIRING DIAGRAM
912797R
DO NOT SCALE DRAWING
USE OF LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS (PBB), AND POLYBROMINATED DIPHENYL ETHERS (PBDE) IS RESTRICTED BY THE EUROPEAN UNION'S REDUCTION OF HAZARDOUS SUBSTANCES (RoHS) DIRECTIVE. COMPONENTS AND MATERIALS SUPPLIED TO METTLER TOLEDO MAY NOT CONTAIN THESE SUBSTANCES IN EXCESS OF THE LIMITS IMPOSED BY THE RoHS DIRECTIVE.
** METTLER TOLEDO RESERVES THE RIGHT TO REQUEST WRITTEN PROOF OF COMPLIANCE WITH THIS REQUIREMENT FROM OUR VENDORS AND SUPPLIERS.


TYPICAL INPUT DEVICE
BE SURE TO LEAVE ENOUGH WIRE FOR THE X3A CONNECTION
TYPICAL OUTPUT DEVICE
BE SURE TO LEAVE ENOUGH WIRE FOR THE X4 CONNECTION
DETAIL A
FIRST ROW DIN RAIL
DETAIL B
SECOND ROW DIN RAIL
INSTRUMENT CONTROL POWER
PROP +5 SERIAL CTRL VDC PORTS
INPUTS
OUTPUTS
METTLER TOLEDO
913815R
USE OF LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS (PBB), AND POLYBROMINATED DIPHENYL ETHERS (PBDE) IS RESTRICTED BY THE EUROPEAN UNION'S RESTRICTION OF HAZARDOUS SUBSTANCES (RoHS) DIRECTIVE. COMPONENTS AND MATERIALS SUPPLIED TO METTLER TOLEDO MAY NOT CONTAIN THESE SUBSTANCES IN EXCESS OF THE LIMITS IMPOSED BY THE RoHS DIRECTIVE.
*- METTLER TOLEDO RESERVES THE RIGHT TO REQUEST WRITTEN PROOF OF COMPLIANCE WITH THIS REQUIREMENT FROM OUR VENDORS AND SUPPLIERS.

INTERSYSTEMS

Masterweigh Infinity 780

Set up and Operation Manual

Contents

Working with Commodities 3
Adding a commodity (Fig. 1) 3
Changing a commodity (Fig. 1)....3
Deleting a commodity (Fig. 1)....3

Working with Unit Train Information....5
Adding a unit train (Fig. 3)....5
Changing a unit train (Fig. 3)....5
Deleting a unit train (Fig. 3)....6
Adding a new unit train from rail list (Fig. 4)....6
Adding a car to a unit train (Fig. 4)....7
Changing a car in a unit train (Fig. 4)....7
Deleting a car from a unit train (Fig. 4)....7
Sorting rail cars in a unit train (Fig. 5)....8

Working with Rail Certificates....13
Printing individual rail certificates (Fig. 10)....13
Previewing individual rail certificates (Fig. 10)....13
Creating a print file for individual rail certificates (Fig. 10)....13
Printing rail certificates for an entire unit train (Fig. 10)....14
Revising the format of a rail certificate (Fig. 11)....14

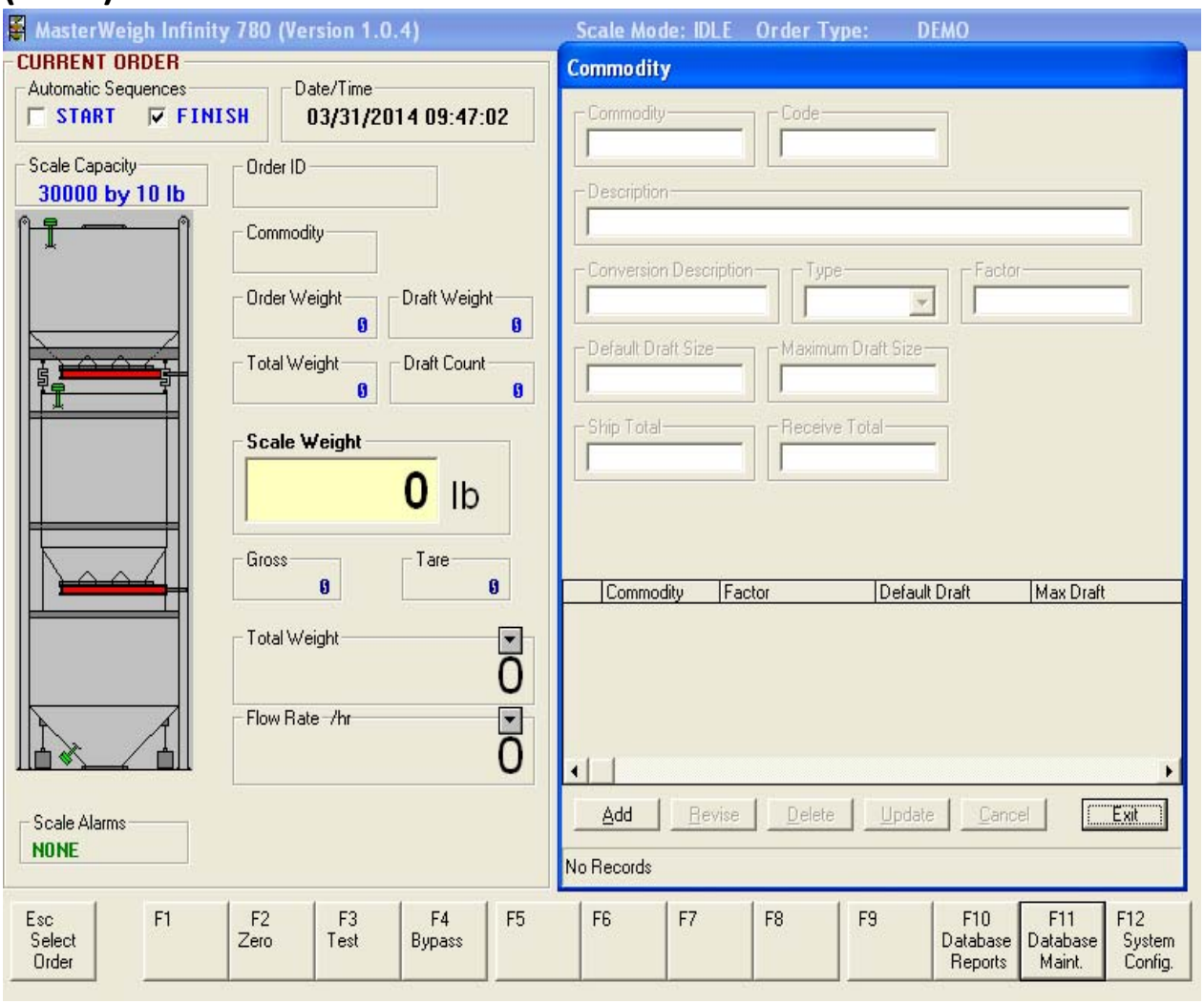
Printing reports....15
Printing a unit train summary (Fig. 12)....15
Printing user defined reports (Fig. 12)....15

Testing the Scale and Gates....16
Zeroing scale (Fig. 13)....16
Manually testing hopper system gates and weights (Fig. 13)....16
Bypassing the scale (Fig. 13)....16

Working with Order....17
Starting a single receiving order (Fig. 14)....17
Staring a single shipping order (Fig. 14)....17
Receiving a unit train (Fig. 14)....17
Shipping a unit train (Fig. 14)....17
Transfer operation (No draft weights printed) (Fig. 14)....17

Operations from Auto, Pause, and Manual Modes.....21
Revising current order weight.....21
From auto mode (Fig. 20).....21
From pause mode (Fig. 20).....21
Restarting a paused order in auto mode (Fig. 20).....21
Printing comments on roll tape printer (Fig. 20).....22
From auto mode.....22
From pause mode.....22
Printing order subtotal weights.....22
From auto mode.....22
From pause mode.....22
From manual mode.....22
Manual Keyboard Operation.....23
From manual mode, fill cycle.....23
Opening UG gate.....23
Jogging UG gate.....23
Closing gates.....23
Printing Manual Gross Weight.....23
From manual mode, discharge cycle.....23
Opening WH gate.....23
Jogging WH gate.....23
Closing gates.....23
Printing Manual Tare Weight.....23
Finishing an order.....23
From auto mode.....23
From pause mode.....23
From manual mode.....23
Pausing, Entering a mode, Exiting a mode.....23
Pausing.....23
Entering manual mode.....23
Exiting manual mode.....23

(FIG.1)



Working with Commodities

Adding a commodity (Fig. 1)

1. From the MasterWeigh Infinity Main Menu, select **Database Maintenance (F11),** and then **Commodity.**
2. Click **Add.**
3. In text boxes on the window, type commodity information.
4. Click **Update.**
5. Click **Exit.**

Changing a commodity

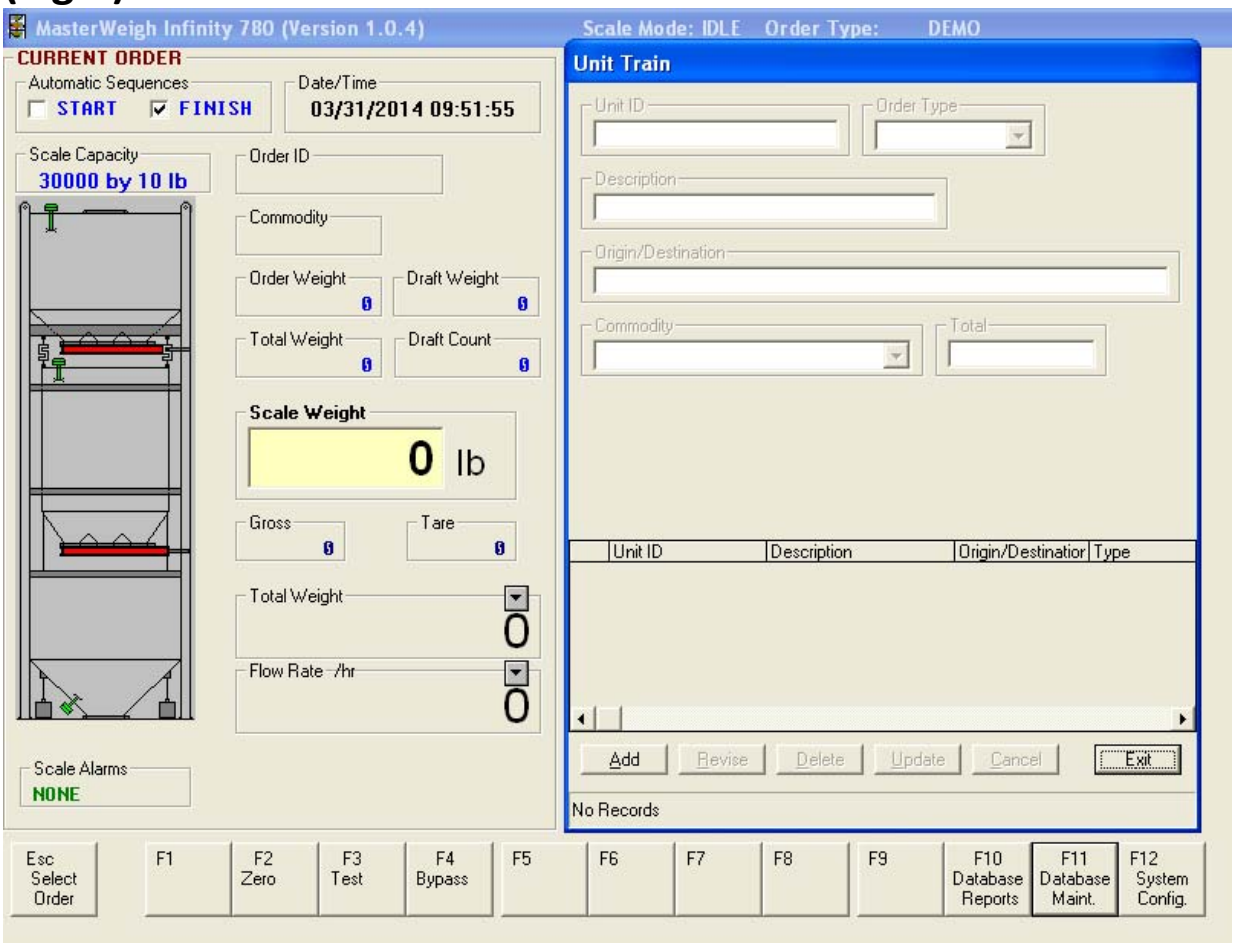
1. From the MasterWeigh Infinity Main Menu, select **Database Maintenance (F11),** and them **Commodity.**
2. From the list box, select a commodity.
3. Click **Revise.**

4. Select and change information in any of the text boxes.
5. Click **Update.**
6. Click **Exit.**

Deleting a commodity (Fig. 1)

1. From the MasterWeigh Infinity Main Menu, select **Database Maintenance (F11),** and then **Commodity.**
2. From the list box select a commodity.
3. Click **Delete.**
4. Click **Exit.**

(Fig.2)



Working with Unit Train Information

Adding a unit train (Fig. 2)

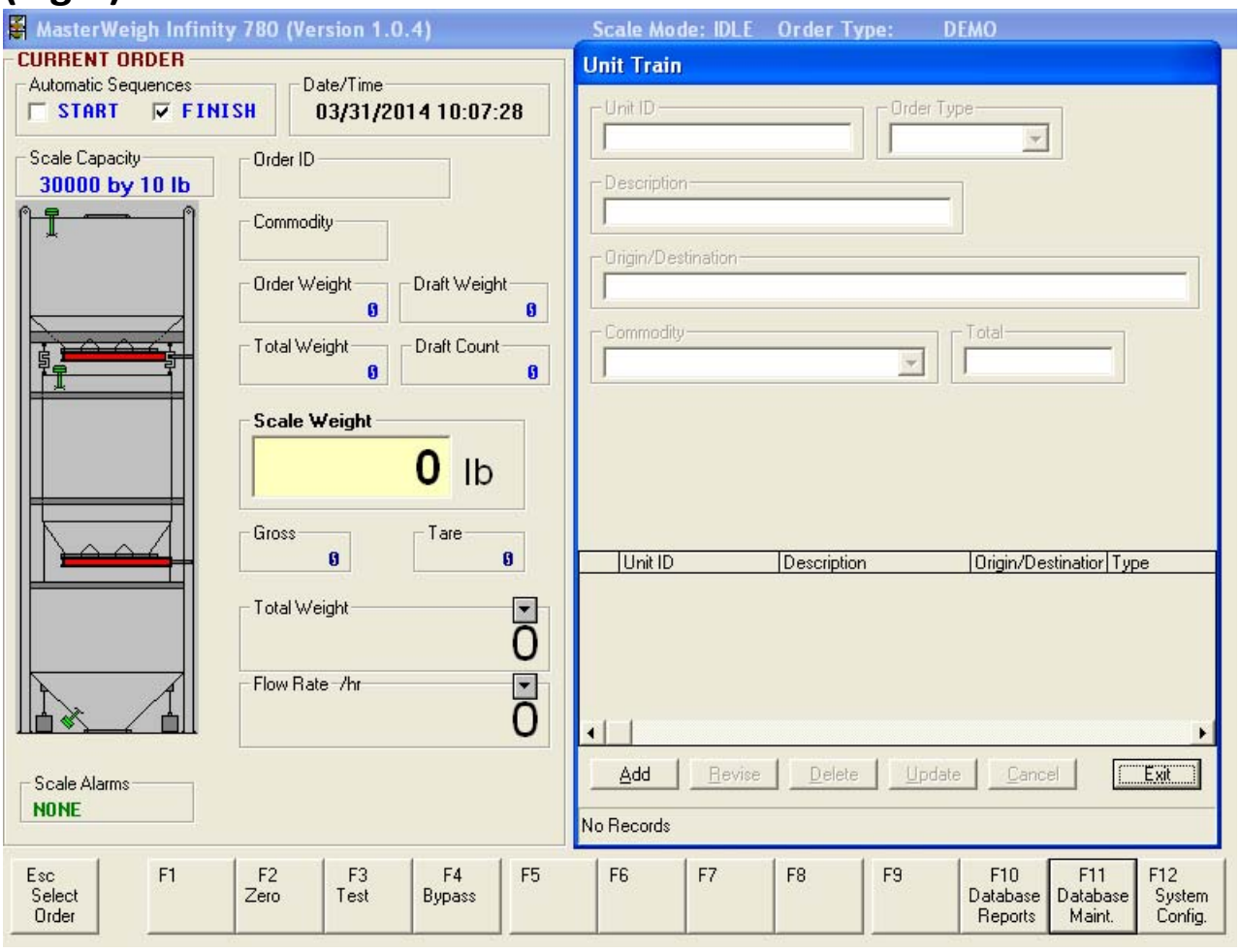
1. From the MasterWeigh Infinity Main Menu, select **Database Maintenance (F11),** and then **Unit Train.**

2. Click **Add.**
3. In text boxes on the window, type **Unit Train information.**
4. Click **Update.**
5. Click **Exit.**

Changing a unit train (Fig.2)

1. From the MasterWeigh Infinity Main Menu, select **Database Maintenance (F11),** and then **Unit Train.**
2. From the list box, select the **Unit Train** to be revised.
3. Click **Revised.**
4. Select and change information in any of the text boxes.
5. Click **Update.**
6. Click **Exit.**

(Fig.3)



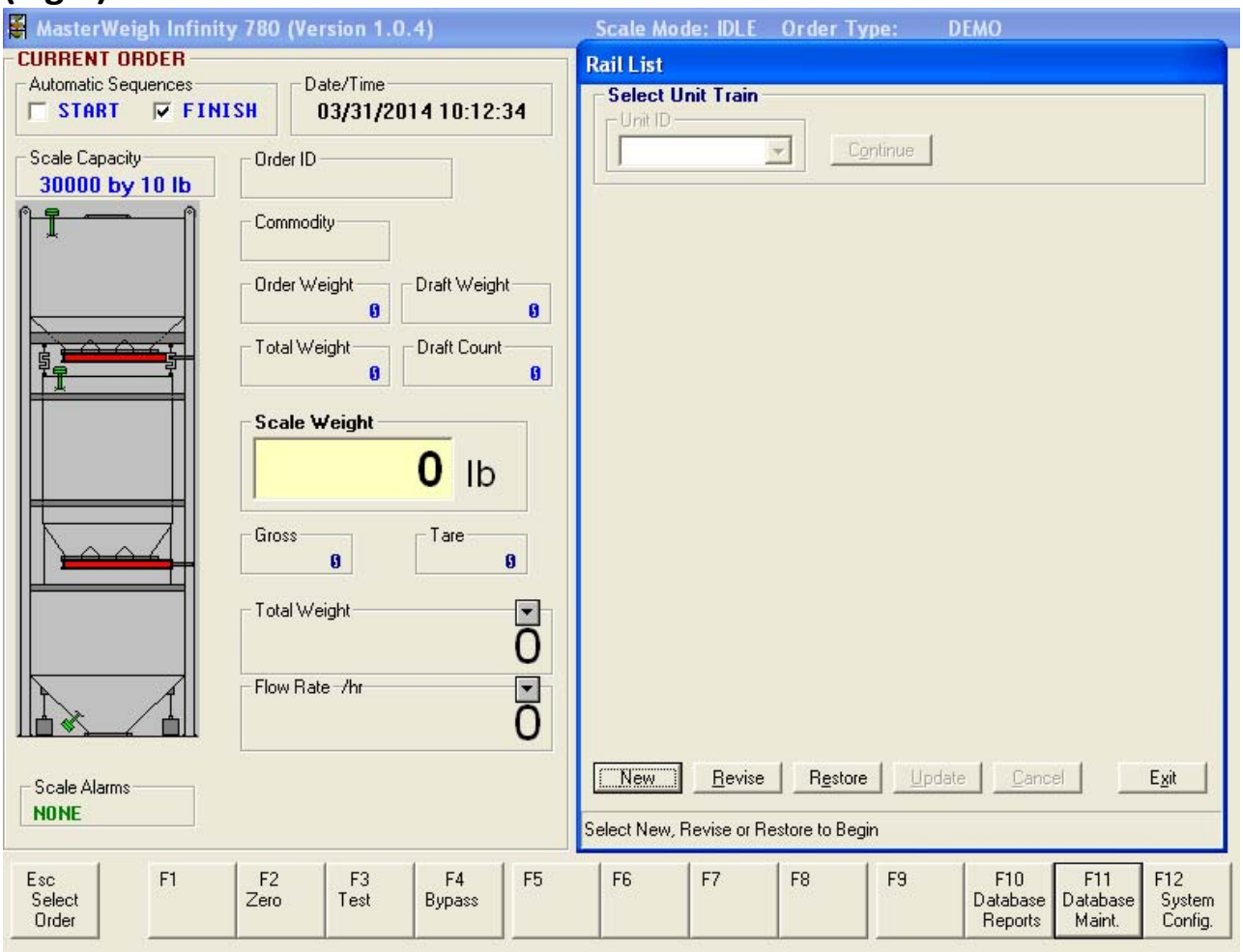
Working with Unit Train Information (continued)

Deleting a unit train (Fig.3)

Note: Deleting a Unit Train will result in the loss of all associated cars, whether they are weighed or not. A unit train cannot be deleted if it is actively being loading or unloaded.

1. From the MasterWeigh Infinity Main Menu, select **Database Maintenance (F11),** and then **Unit Train**
2. From the list box, select the Unit Train to be deleted.
3. Click **Delete.**
4. Click **Exit.**

(Fig.4)



Adding a new unit train from rail list (Fig. 4)

1. From the MasterWeigh Infinity Main Menu, select **Database Maintenance (F11),** and them **Rail List**.
2. Click **New**

3. In text boxes on the window, type Unit Train information.
4. Click **Update.**
5. Click **Add.**
6. In text boxes on the window, type Rail Car information.
7. Click **Update.**
8. Click **Exit.**

Working with Unit Train Information (continue)

Adding a car to a unit train (Fig. 4)

1. From the MasterWeigh Infinity Main Menu, select **Database Maintenance (F11),** and then **Rail List.**
2. Click **Revise.**
3. From the list box, select the **Unit Train** to be revised.
4. Click **Continue.**
5. Click **Add**
6. In text boxes on the window, type Rail Car information.
7. Click **Update.**
8. Click **Exit.**

Changing a car in a unit train (Fig. 4)

1. From the MasterWeigh Infinity Main Menu, select **Database Maintenance (F11),** and them **Rail List.**
2. Click **Revise**.
3. From the list box, select the Unit Train to be revised.
4. Click **Continue**.
5. From the list box, select the Rail Car to be revised.
6. Click **Revised**.
7. Select and change information in any of the text boxes.
8. Click **Update.**
9. Click **Exit**.

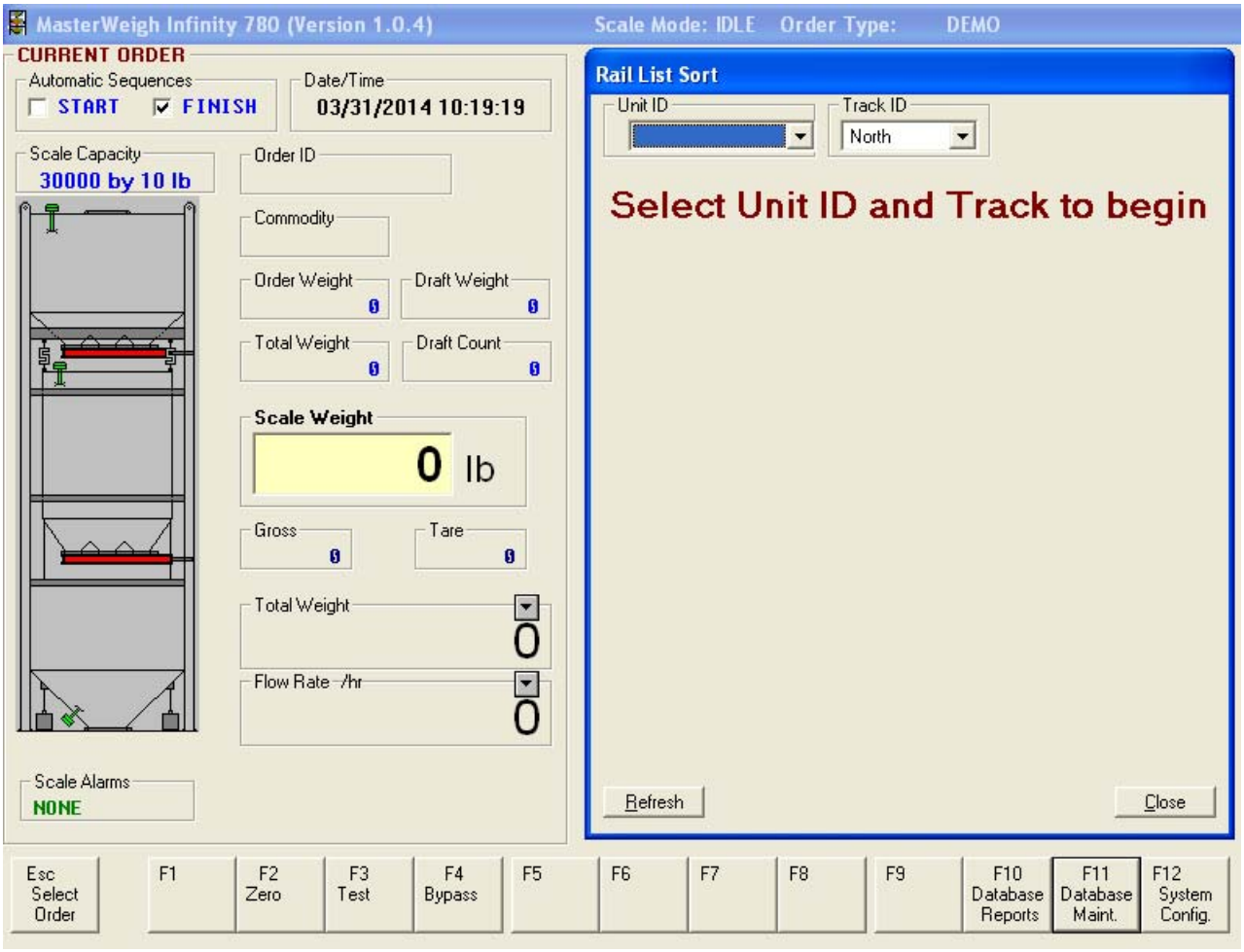
Deleting a car from a unit train (Fig. 4)

1. From the MasterWeigh Infinity Main Menu, select **Database Maintenance (F11),** and them Rail List.
2. Click **Revise**.
3. From the list box, select the Unit Train to be revised.
4. Click **Continue.**

Note: Click More/Hide to display user defined Rail Car Information

5. From the list box, select the Car to be deleted.
6. Click **Exit.**

(Fig.5)

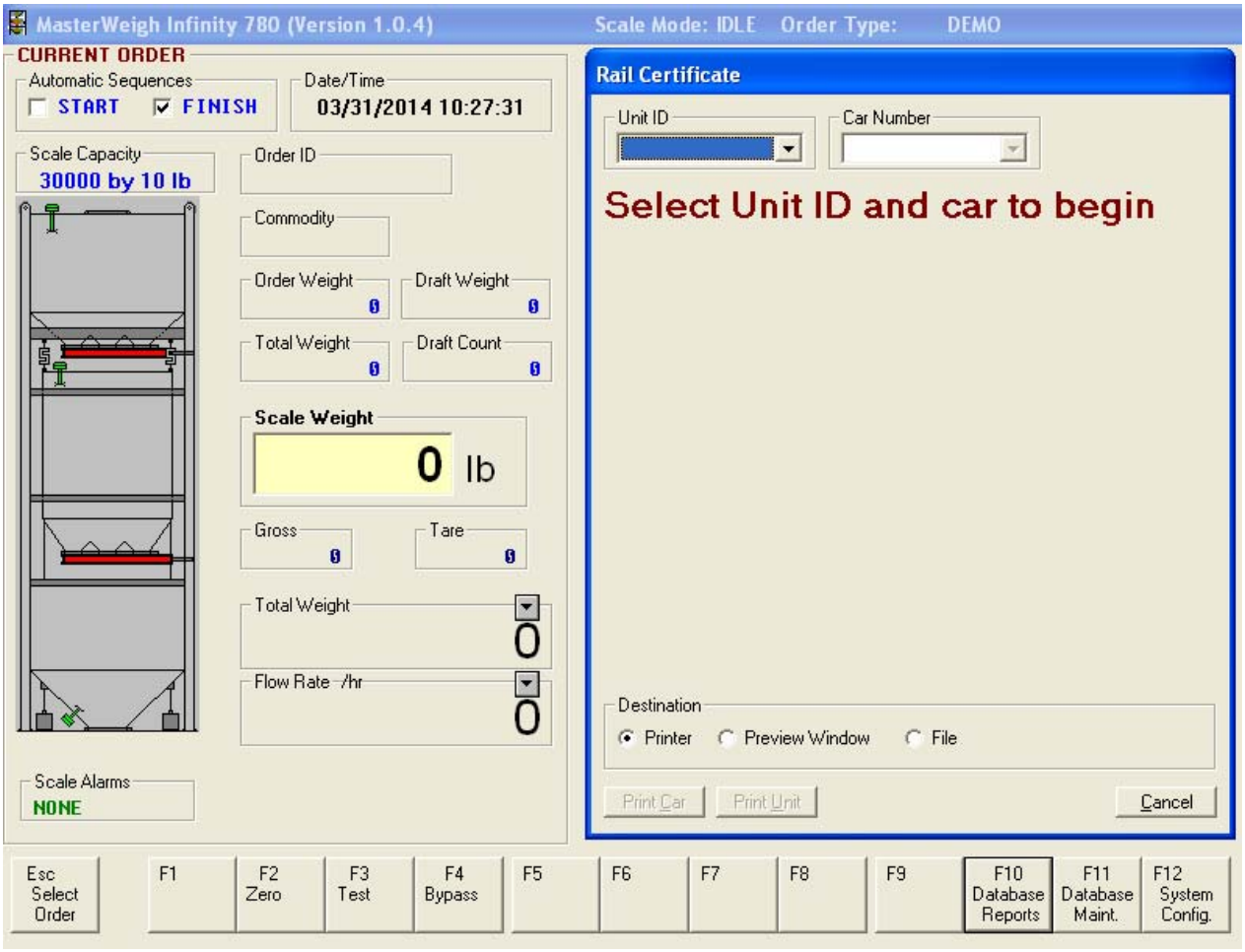


Working with Unit Train Information

Sorting rail cars in a unit train (Fig. 5)

1. From the MasterWeigh Infinity Main Menu, select **Database Maintenance (F11),** and them **Rail List Sorting**.
2. From the list box, select the **Unit Train** to be sorted. (Fig. 5)
3. From the list box, change the **Rail Car Sequence Number** as needed. (Fig. 6)
4. Click **Refresh.**
5. Click **Exit.**

(Fig.6)



Working with Rail Certificates

Printing individual rail certificates (Fig. 6)

1. From the MasterWeigh Infinity Main Menu, select **Database Reports (F10),** and then **Rail Certificate(s**).
2. From the box list, select the **Unit Train and Car Number**.
3. Click **Printer.**
4. Click **Print Car.**

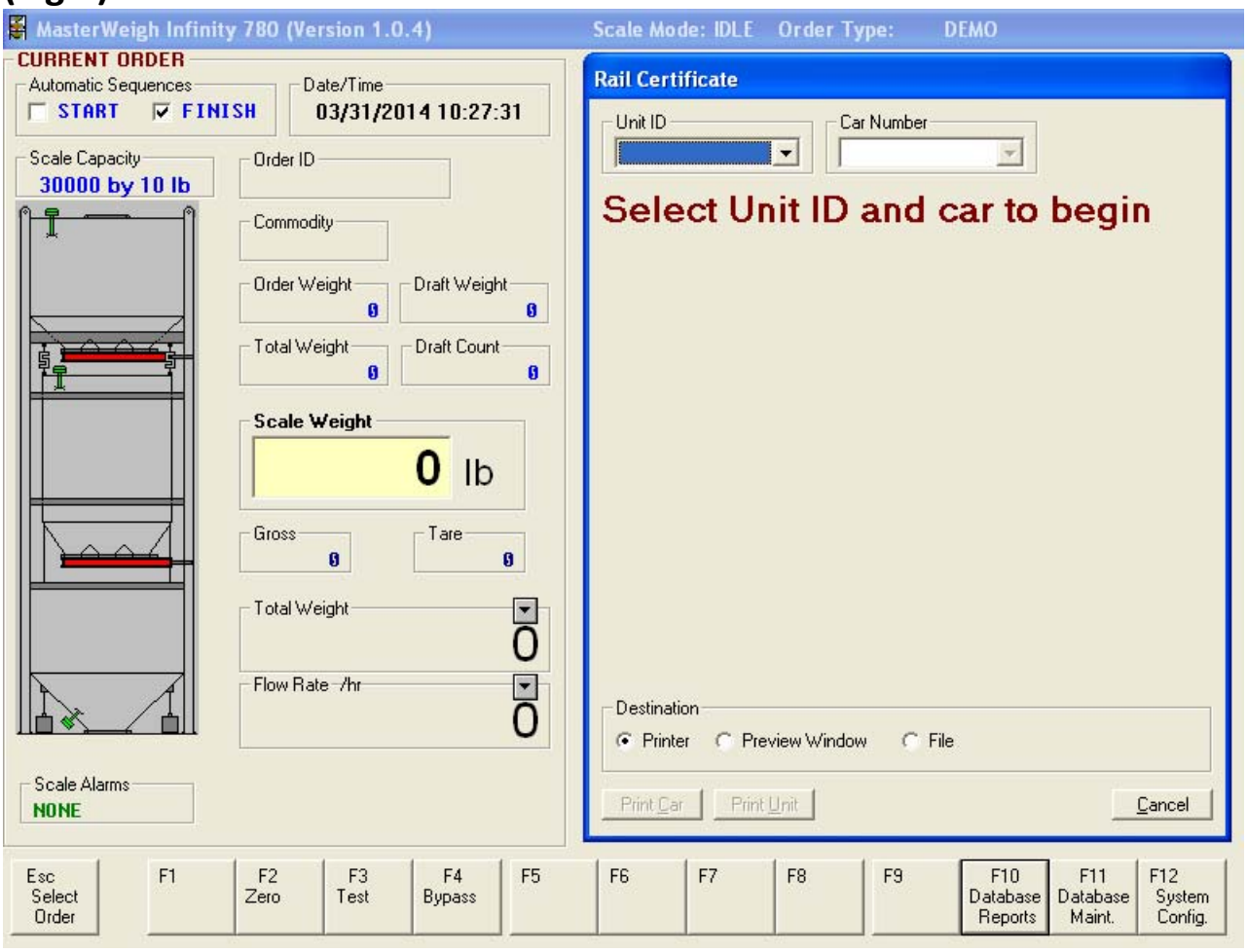
Previewing individual rail certificates (Fig. 10)

1. From the MasterWeigh Infinity Main Menu, select **Database Reports (F10),** and then **Rail Certificate**(s).
2. From the list box, select the **Unit Train and Car Number**.
3. Click **Preview Window**.
4. Click **Print Car**.

Creating a print file for individual rail certificates (Fig. 10)

1. From the MasterWeigh Infinity Main Menu, select Database Reports (F10), and then Rail Certificate(s).
2. From the list box, select the Unit Train and Car Number.
3. Click **File.**
4. Click **Print Car.**
5. Type name of File and select directory that file will be stored in.

(Fig.6)

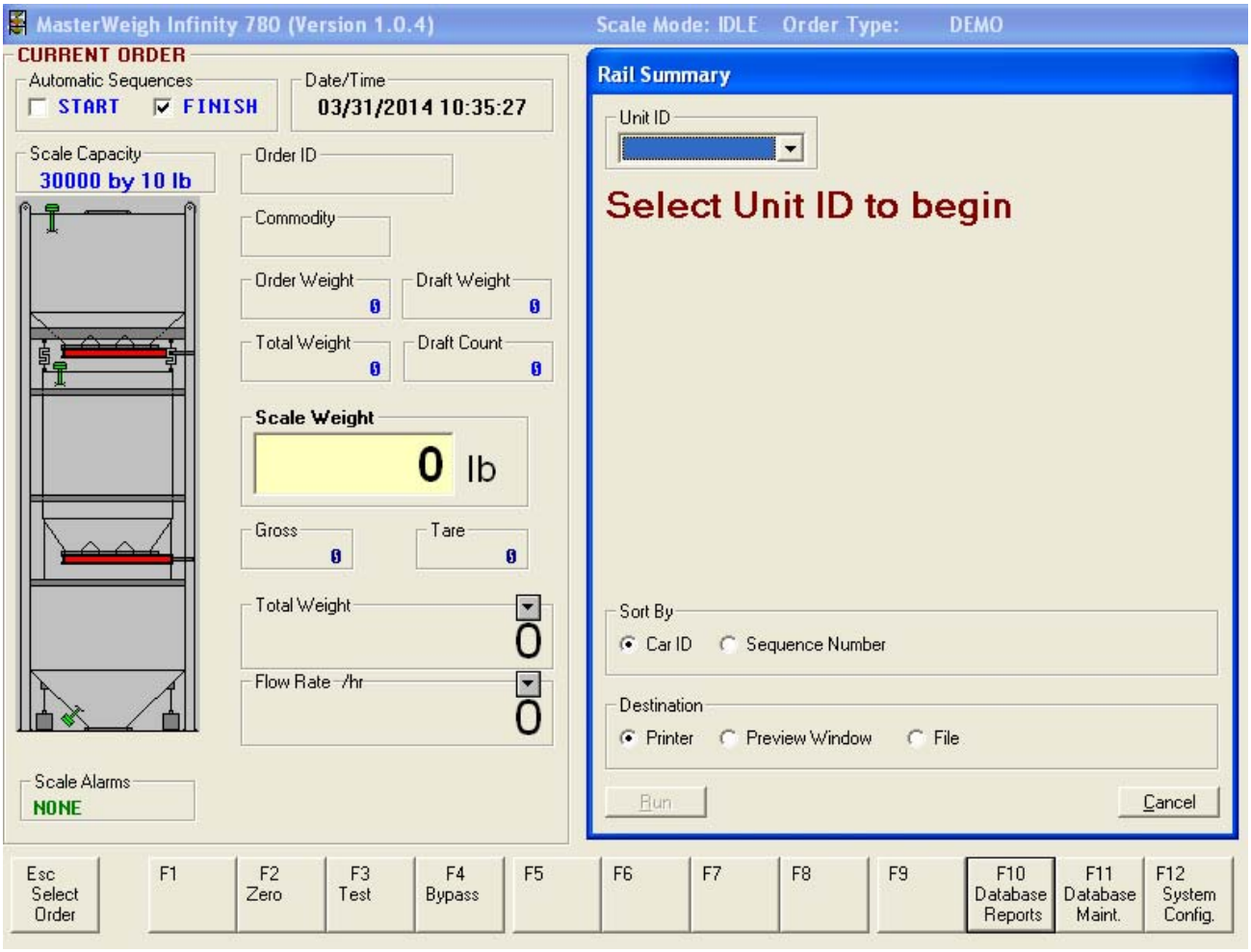


Working with Rail Certificates (continued)

Printing rail certificates for an entire unit train (Fig. 6)

1. From the MasterWeigh Infinity Main Menu, select Database Reports (F10), and then Unit Train Summary.
2. From the list box, select the Unit Train.
3. Click **Printer.**
4. Click **Print Unit**.

(Fig.7)

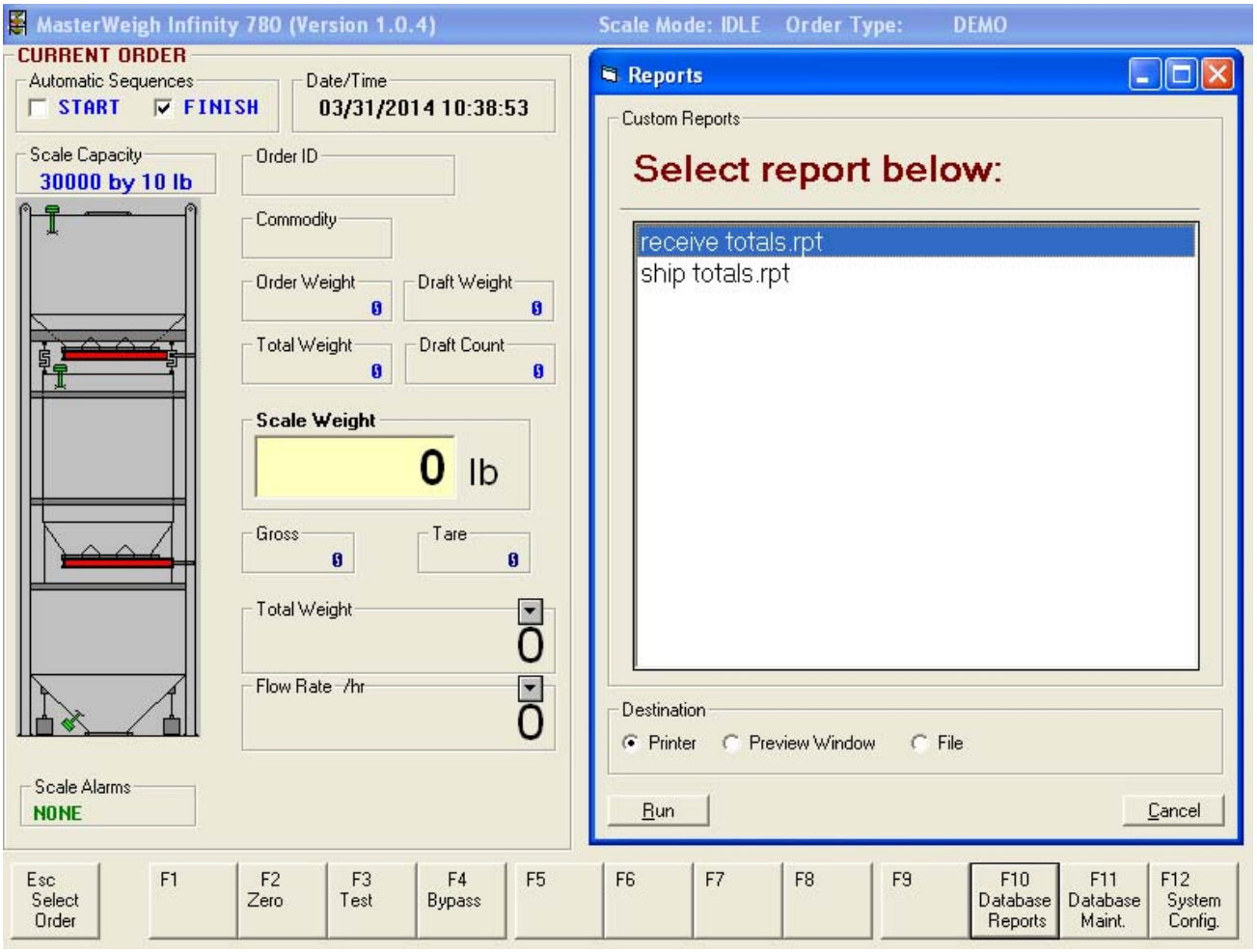


Printing reports

Printing a unit train summary (Fig. 7)

1. From the MasterWeigh Infinity Main Menu, select **Database Reports (F10)**, and then **Unit Train Summary**.
2. From the list box, select the **Unit Train**.
3. Click **Sequence Number**
4. Click **Printer**.
5. Click **Run.**

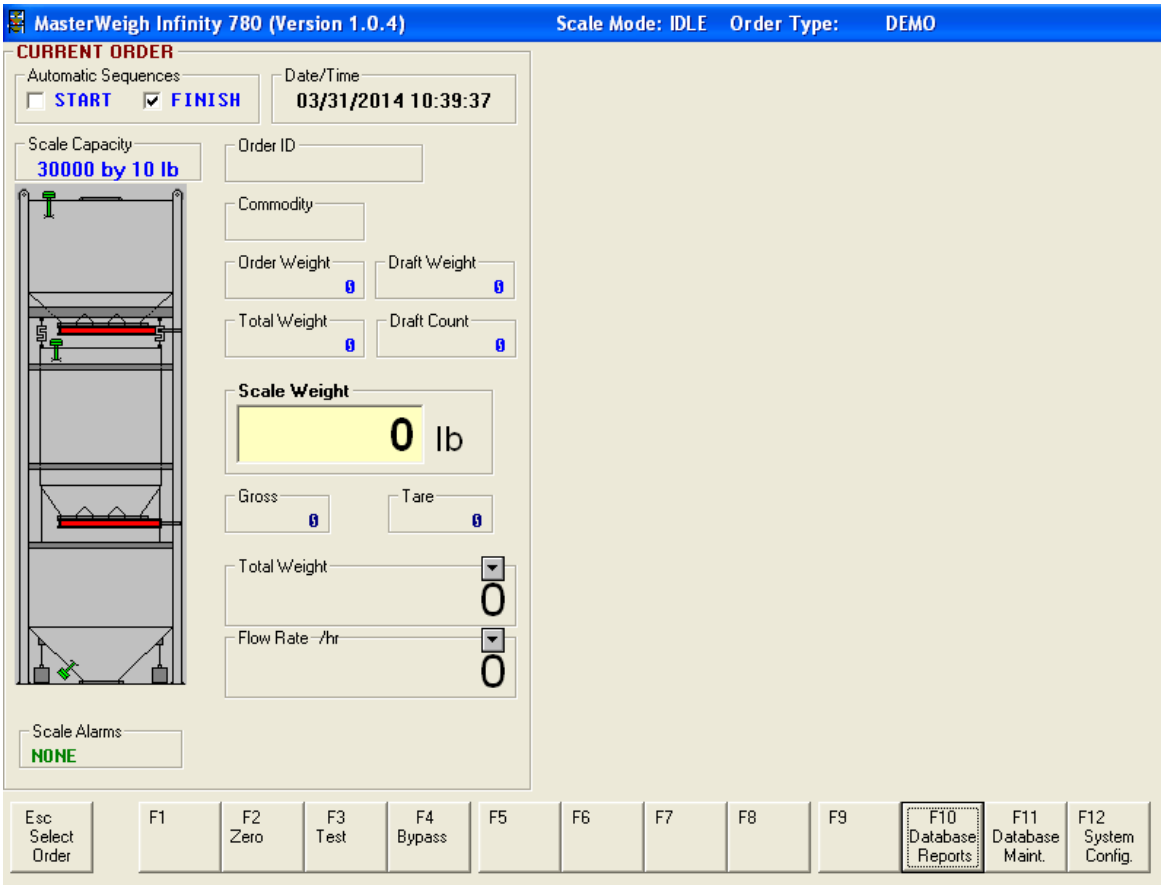
(Fig.8)



Printing user defined reports (Fig. 8)

1. From the MasterWeigh Infinity Main Menu, select **Database Reports (F10),** and then **User Defined Report**.
2. From the list box, select the report.
3. Click **Printer**.
4. Click **Run.**

(Fig.9)



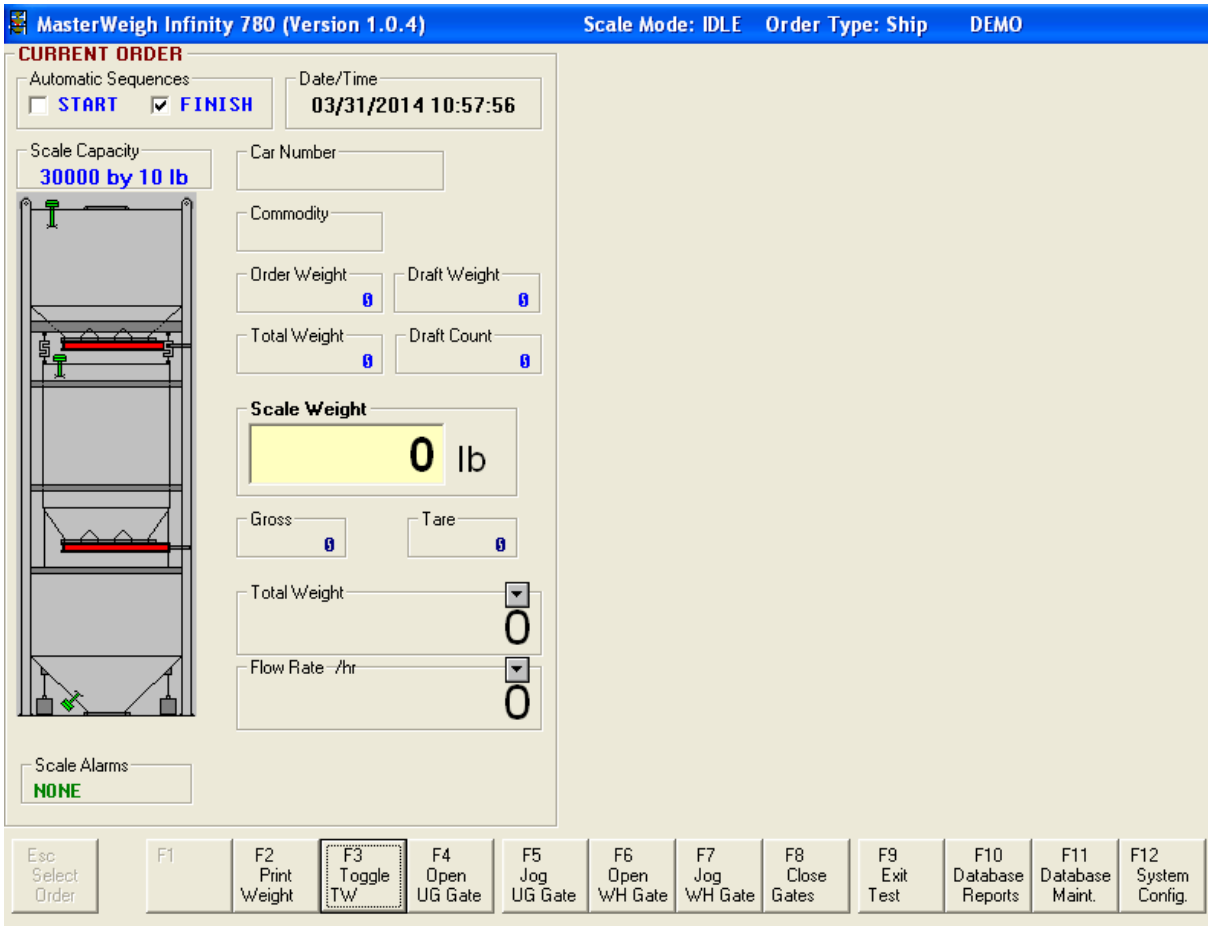
Testing the Scale and Gates

Zeroing scale (Fig. 9)

1. From the MasterWeigh Infinity Main Menu, click **Zero** (F2).

Note: scale will only zero if displayed weight is within 1.9% of capacity.

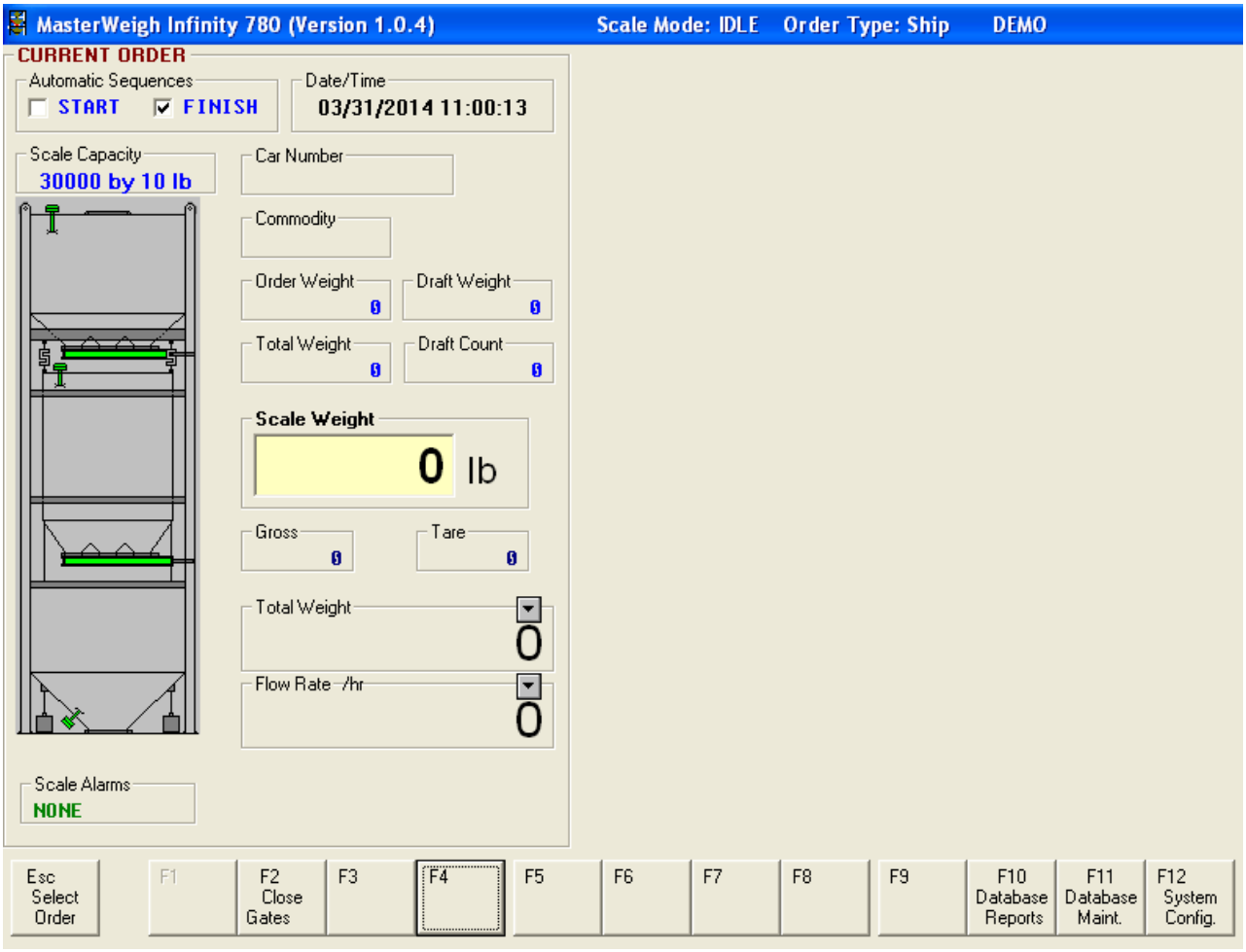
(Fig.10)



Manually testing hopper system gates and weights (Fig. 10)

1. From the MasterWeigh Infinity Main Menu, click **Test** (F3)
2. Select the appropriate Function Key to perform gate operations or to Raise the Lower Test Weight (if equipped).
3. Click **Exit Test** (F9).

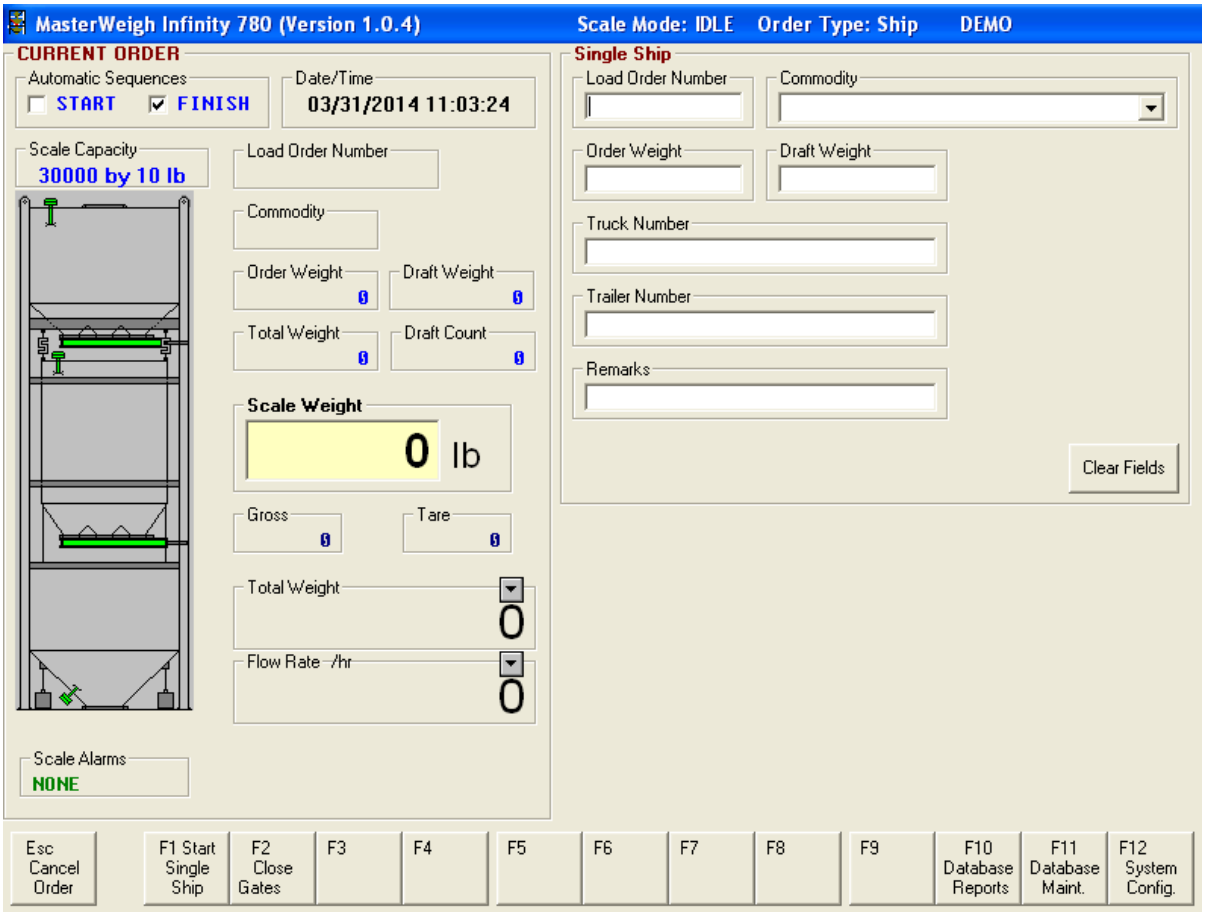
(Fig.11)



Bypassing the scale (Fig. 11)

1. From the MasterWeigh Infinity Main Menu, click **Bypass** (F4).
   Both gates on hopper system will be signaled to open.

(Fig.12)



Working with Orders

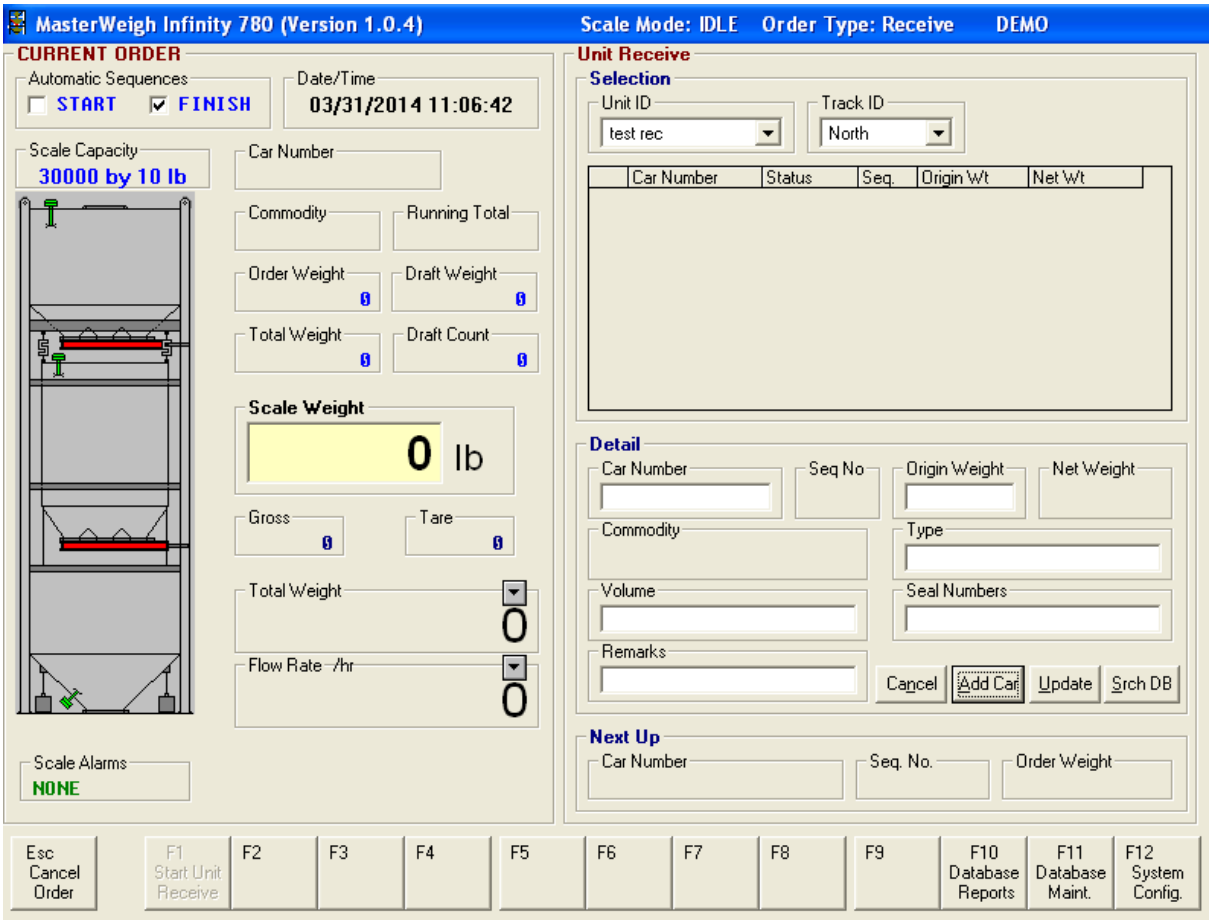
Starting a single receiving order (Fig. 12)

1. From the MasterWeigh Infinity Main Menu, click ***Esc* Cancel Order.**
2. From the Pop-Up menu, select Single Receive.
3. In the text boxes on the window, type the order information (Fig. 12).
4. Click **Start Single Receive** (F1).
5. See section on "Operations from Auto, Pause, and Manual Modes."

Starting a single shipping order (Fig. 12)

1. From the MasterWeigh Infinity Main Menu, click ***Esc* Cancel Order.**
2. From the Pop-Up menu, select Single Ship.
3. In text boxes on the window, type the order information.
4. Click **Start Single Ship** (F1).
5. See section on "Operations from Auto, Pause, and Manual Modes."

(Fig.13)



Receiving a unit train (Fig. 13)

1. From the MasterWeigh Infinity Main Menu, click ***Esc* Cancel Order.**
2. From the Pop-Up menu, select **Unit Receive.**
3. From the list box, select the **Unit Train**
4. Click **Add Car, fill in car number do not need order weight press update,** repeat for multiple cars

Click **Start Unit Receive** (F1).

Finishing an order

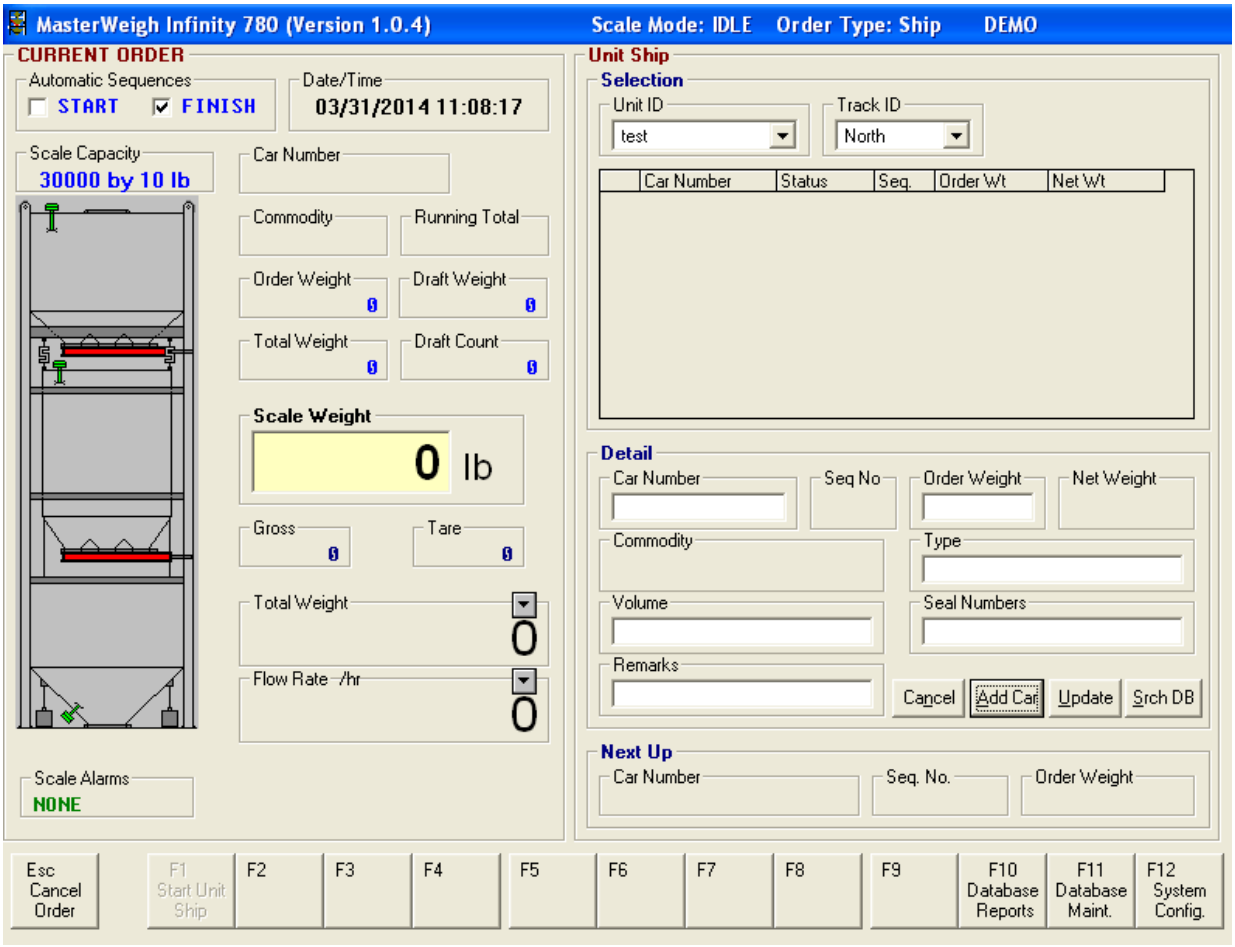
From auto mode

1. From the MasterWeigh Infinity Auto Menu, click **Finish** (F2).
2. Click **Yes** when prompted "Are you sure you want to **finish the order**?"
3. Click **Yes** or **No** when prompted "**Do you want to discharge Weigh Hopper?"**

From pause mode

1. From the MasterWeigh Infinity Auto Menu, click **Finish** (F2).
2. When prompted "Do you want to discharge Weigh Hopper?" Click **Yes** or **No**.

(Fig.14)



Shipping a unit train (Fig. 14)

1. From the MasterWeigh Infinity Main Menu, click ***Esc* Cancel Order.**
2. From the Pop-Up menu, select **Unit Ship.**
3. From the list box, select the **Unit Train**.
4. Click **Add Car, fill in car number and order weight press update** repeat for multiple cars
5. Click **Start Unit Ship** (F1).

Finishing an order

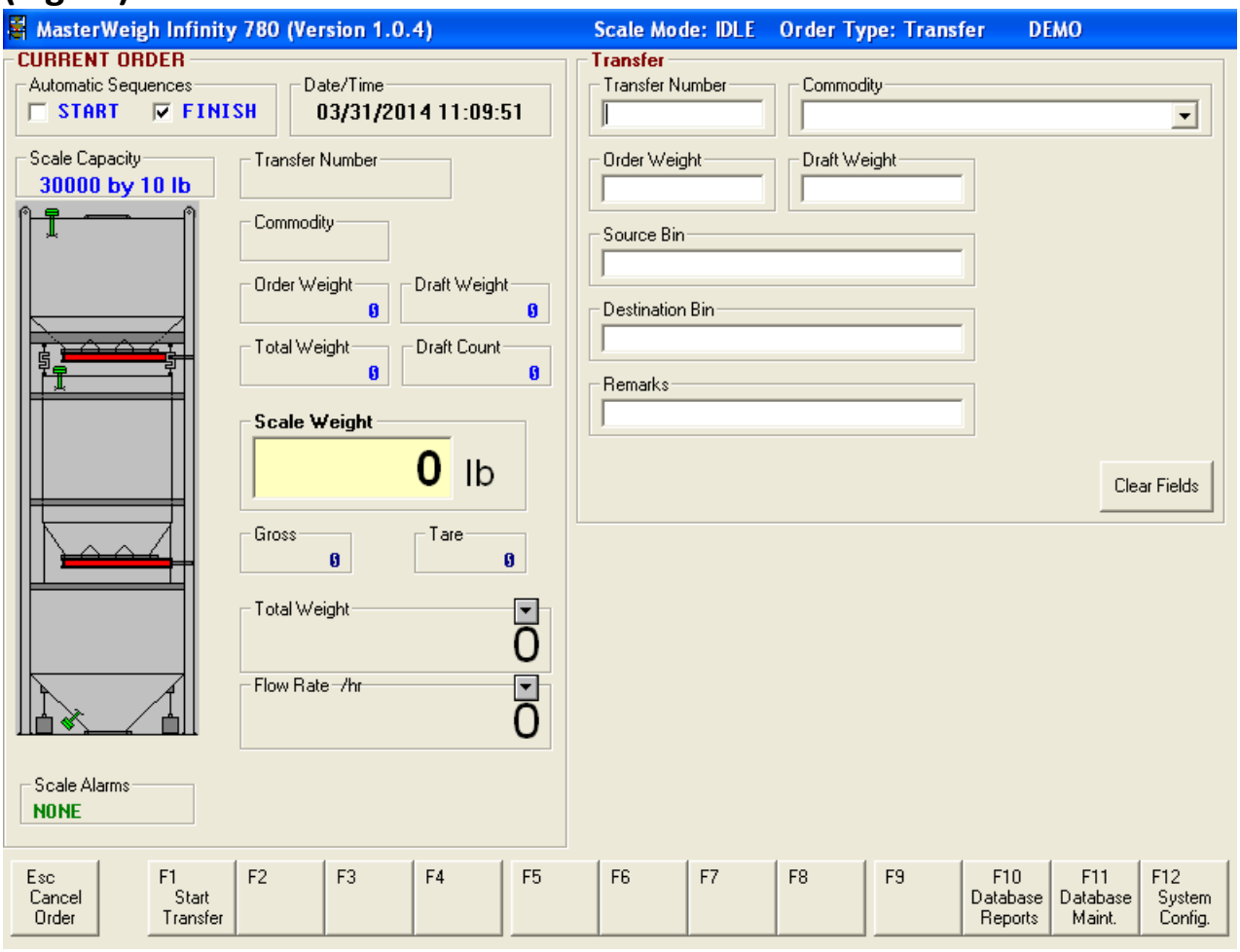
From auto mode

4. From the MasterWeigh Infinity Auto Menu, click **Finish** (F2).
5. Click **Yes** when prompted "Are you sure you want to **finish the order**?"
6. Click **Yes** or **No** when prompted "**Do you want to discharge Weigh Hopper?"**

From pause mode

3. From the MasterWeigh Infinity Auto Menu, click **Finish** (F2).
4. When prompted "Do you want to discharge Weigh Hopper?, click **Yes** or **No**."

(Fig.15)



Transfer operation (No draft weights printed) (Fig. 15)

1. From the MasterWeigh Infinity Main Menu, click ***Esc* Cancel Order.**
2. From the Pop-Up menu, select **Transfer**.
3. In text boxes on the window, type the transfer information.
4. Click **Start Transfer** (F1).
5. See section on "Operations from Auto, Pause, and Manual Modes."

Finishing an order

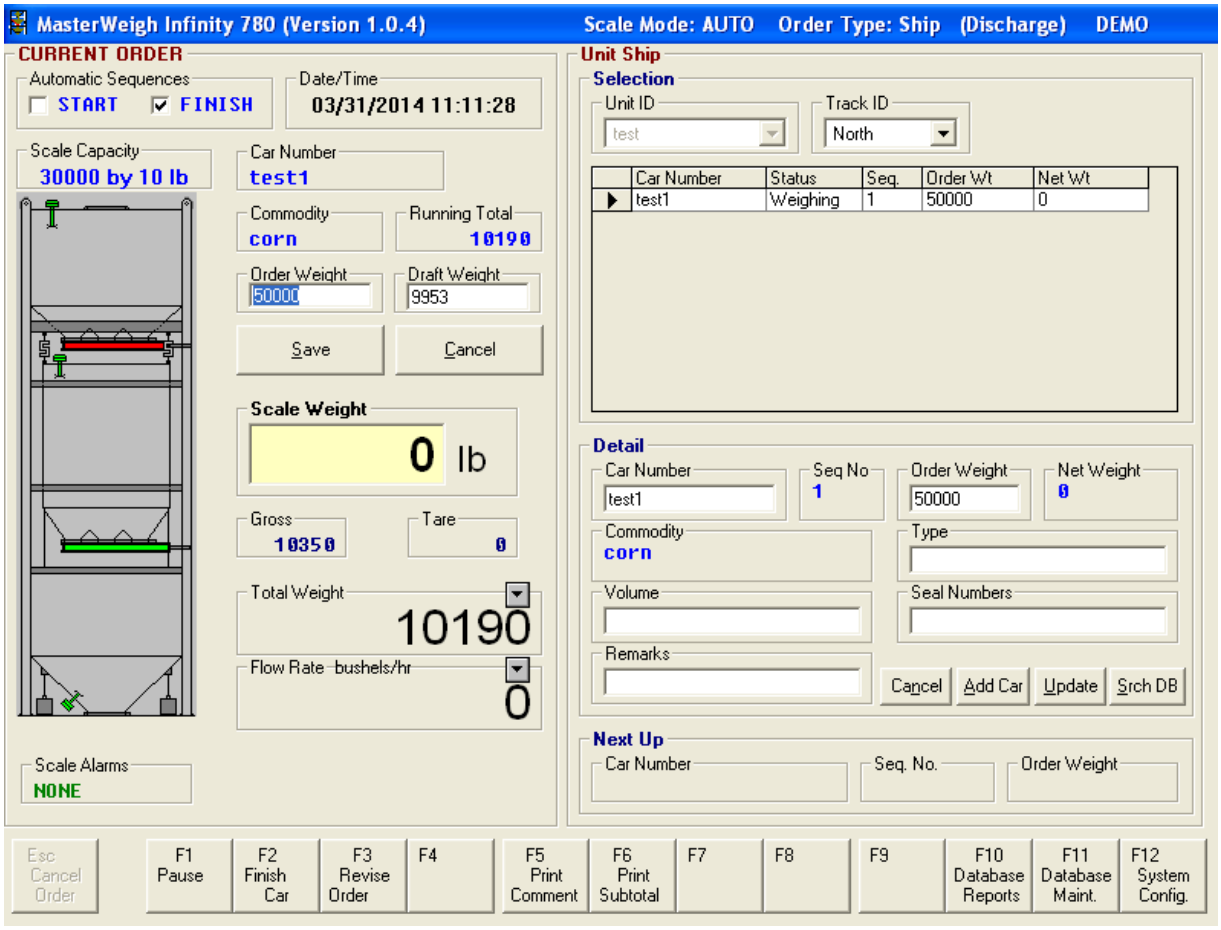
From auto mode

7. From the MasterWeigh Infinity Auto Menu, click **Finish** (F2).
8. Click **Yes** when prompted "Are you sure you want to **finish the order**?"
9. Click **Yes** or **No** when prompted "**Do you want to discharge Weigh Hopper?"**

From pause mode

5. From the MasterWeigh Infinity Auto Menu, click **Finish** (F2).
6. When prompted "Do you want to discharge Weigh Hopper?, click **Yes** or **No**."

(Fig.16)

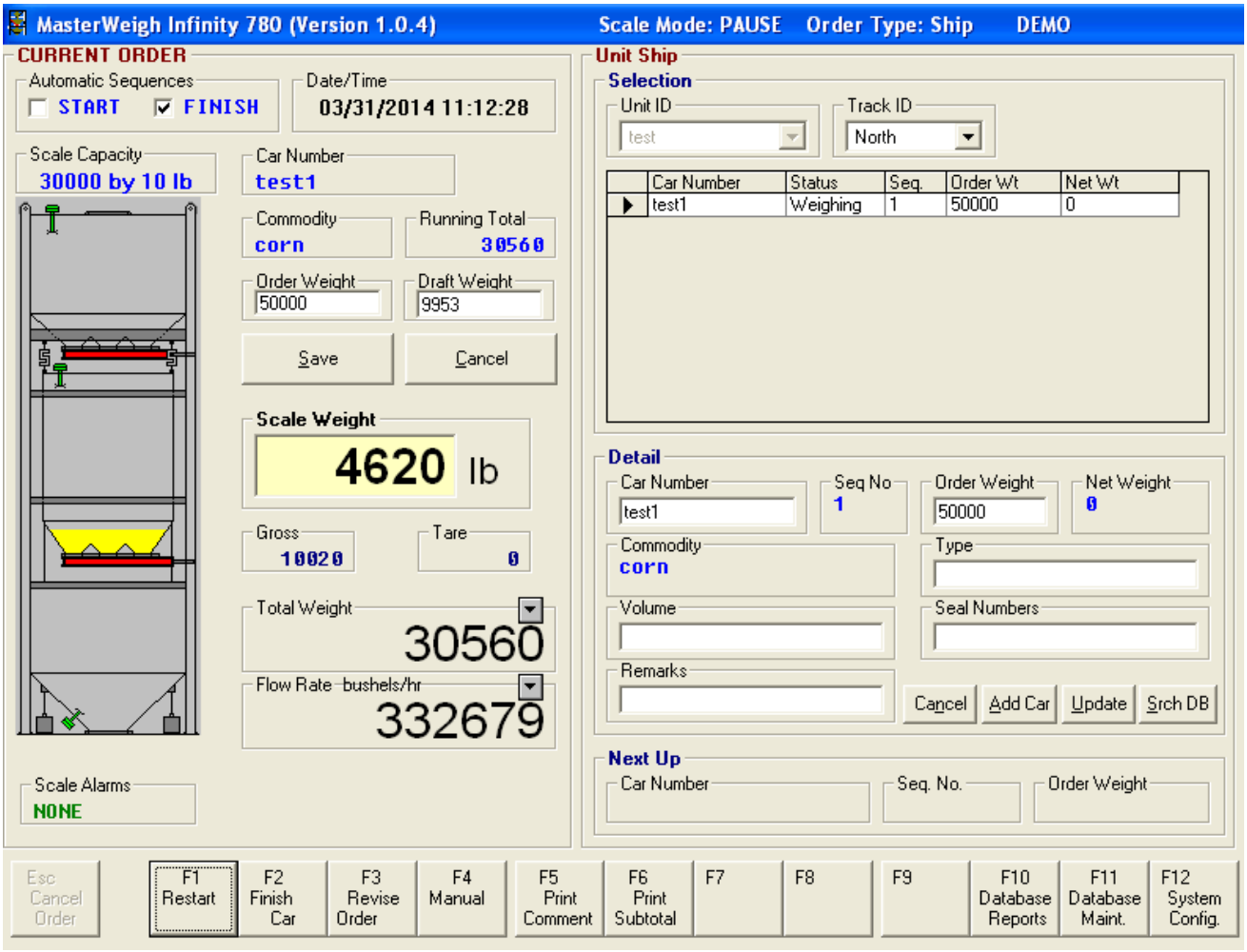


Operation from Auto, Pause, and Manual Modes

From auto mode (Fig. 16)

1. From the MasterWeigh Infinity Auto Menu, Click **Revise Order** (F3).
2. In text boxes on the window, type the **new Order (origin) Weight** or **Draft Weight**.
3. Click **Save**.

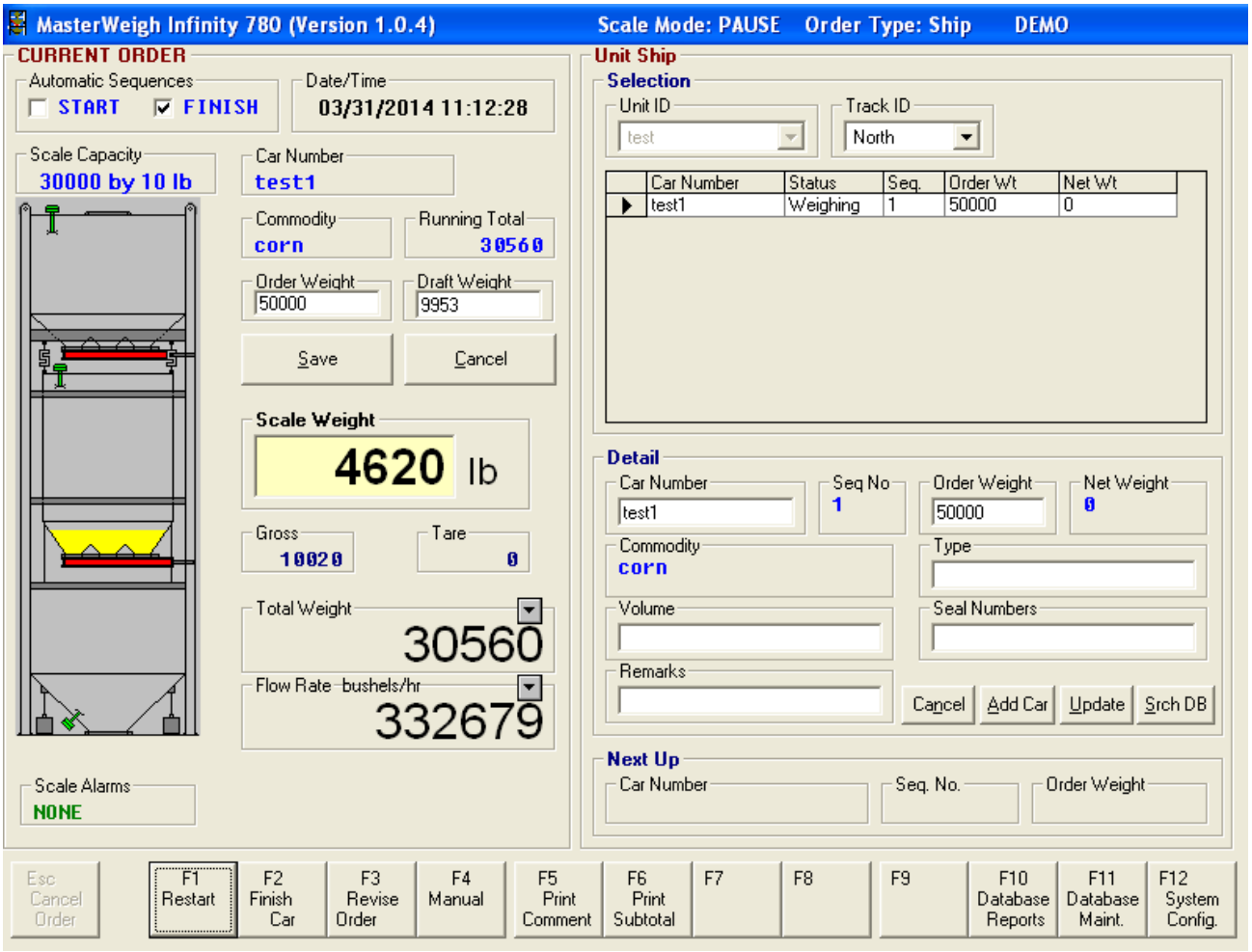
(Fig.17)



From pause mode (Fig. 17)

1. From the MasterWeigh Infinity Pause Menu, Click **Revise Order** (F3).
2. In text boxes on the window, type the new **Order (origin) Weight** or **Draft Weight**.
3. Click **Save**.

(Fig.18)



Restarting a paused order in auto mode (Fig. 18)

1. From the MasterWeigh Infinity Pause Menu, click **Restart (F1)**.

Printing comments on roll tape printer (Fig. 18)

From auto mode

1. From the MasterWeigh Infinity Auto Menu, click **Print Comment** (F5).
2. In text boxes on the window, type comments to be printed on tape.
3. Click **Ok**.

Note: the comments will not print until the current fill or discharge cycle completes.

From pause mode

1. From the MasterWeigh Infinity Pause Menu, click **Print Comment** (F5)
2. In text boxes on the window, type comments to be printed on tape.
3. Click **Ok**.