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Scale Systems

Calibration and Troubleshooting Procedures

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Calibration

Digi-Star

Weigh-Tronix

640/640XL

1040/1040XL/ 2040/2040XL

Additional Information

Digi-Star EZ Indicator Calibration Numbers
for Knight and Botec Mixers

Digi-Star Brand

	Pounds			Kilograms (60Hz.)	
Load Cell/Weighbar	Setup	Cal.		Setup	Cal.
1.88" weighbar	145015	14105		544006	6397
2.125" weighbar	146040	32640		545018	14805
2 7/8"Bars 4 point system	136060	37777		536027	16703
30K load cell	136040	16059		535018	7284

Weigh-Tronix Brand

	Pounds			Kilograms (60Hz.)	
Load Cell/Weighbar	Setup	Cal.		Setup	Cal.
1.88" weighbar	145015	14648		544006	6644
2.125" weighbar	146040	14648		545018	6644
2 7/8"Bars 4 point system	136060	37777		536027	16703
CC-30-3(Gray) load cell	146040	16059		545018	7284
CC-20/CC-30(Biege) load cell	146040	22535		545018	10222

Japan, Europe & Australia are 50Hz. This requires a change in their Setup No.
For units using C.T.'s change the 5th digit from the right to a seven.
For units using 1.88" and 2.125" weighbars change the 5th digit to an eight.

	Pounds			Kilograms (60Hz.)	
Vertical Mixers/Delivery Boxes	Setup	Cal.		Setup	Cal.
Vertical Mixer - 2 7/8"Bars 4 point system	136060	37777		536027	16703
Vertical Mixer - 3 point systems	136040	27074		535018	12281
Verti-Maxx 5060	136040	29230		535018	13259
VT/VTC 180, 1120	136060	36836		536027	16709
VXL 1140, 1165, 1180	136060	80000		536027	36287
BTC 155, 163, 172, 190, ProFeed 70110	136060	16059		535018	7284

	Pounds			Kilograms (60Hz.)	
Spreaders	Setup	Cal.		Setup	Cal.
PXL 185, 1100	136060	55254		545028	25063
PXL 1120	136060	73672		545028	33417
PSC161/PSC 161 Truck	136040	36836		545018	16709
PSC 171/PSC 171 Truck	136060	55254		545028	25063
PSC 181/PSC 181 Truck	136060	55254		545028	25063
PS 150,160,242,270	136060	45977		545028	20855
SLC 126 8 Bolt Hub	136040	45977		535018	20855
SLC 126 10 Bolt Hub	136040	80000		535018	36287
SLC 132	136040	80000		535018	36287
SLC 132 Truck	136040	27675		535018	12553
SLC 141	136060	80000		545028	36287
SLC 141 Truck	136060	27675		545028	12553
SLC 150	136060	80000		545028	36287
2044 Pro-Push	136040	45977		535018	20855
2054 Pro-Push	136040	80000		535018	36287

Digi-Star EZ SERIES
SET-UP & CALIBRATION

1 Turn on indicator, wait until "Hello" leaves the screen before starting Step 2.

2 To access short form Cal./Set-up press and **hold** ZERO, then press ON until the indicator displays CAL in small letters and the word SET-UP, which will be followed automatically by the SET-UP number.

3 To change the Setup number, increment the flashing digit to the desired number by pressing the NET/GROSS key, then move the flashing status to the left by pressing the TARE key to adjust any of the other digits.

4 After you have input the correct number press ON. It will now display CAL followed by the calibration number. Change that number by following the same procedure as you did to change the set-up number.

5 With Cal No. displayed press ON to complete and exit the calibration and set-up mode.

ALTERNATE Setup and Cal Number Input Method for indicators with numeric keypads.

EZ I, II and III Series (Examples-EZ210, EZ3200, EZ3400)
Setup DAN Number 871 Cal DAN Number 872
EZ IV Series (Examples-EZ2810, 3410)
Setup DAN Number 8711 Cal DAN Number 8722

1 Enter Direct Access Number for Setup Number or Cal Number using the numeric keypad and press the Select key. Enter the value required and press ON to exit.

Digi-Star EZ Indicator Setup Number

Setup Number Example: 1 4 6 0 4 0

0 4 0

These three digits represent the maximum capacity before the indicator will display a "0-Cap" (over-capacity). This is user adjustable. It is not going to damage the indicator if it is exceeded, however it is generally set to a number that is equal or less than the rated capacity of the weigh bars or load cells. If the weigh bars or load cells have a high capacity, (4ea. of the 30K load cells have a system capacity of 120K) the number should be selected as to prevent damage to the wagon or cart (spindle capacity).

6

This number represents the increment at which the display counts. It is user adjustable. Keep in mind, the lower the count increment, the more unstable the indicator will appear.

Display Count (3-9)

Setting on Indicator	Count Size
3	1
4	2
5	5
6	10
7	20
8	50
9	100

4

This number sets the maximum signal input voltage limit of the indicator. If that signal voltage coming from the junction box exceeds this limit, the indicator will display a "+/- Range". This setting is set as low as possible to a enable the greatest resolution. On larger (heavier) wagons or wagons carrying a great deal of weight, this number may need to be lowered a count, possibly two counts if the indicator reads a "+/- Range" when the wagon is fully loaded.

1

This number sets the weigh method and the units which the indicator is counting in. (pounds or kilograms).

Weigh Method			
Lb	1	2	3
Kg	5	6	7
	General	Slow	Fast

Digi-Star Field Calibration

To match your Digi-Star EZ indicators weight to another scales weight or a known weight you must determine the "calibration multiplier".

To do this, take the weight displayed by the platform scale and divide it by the weight displayed on the Digi-Star indicator. This number will be your "calibration multiplier".

Example

Platform/Truck scales weight	a	1200 lbs.
Mixer displayed weight	b	1100 lbs.
Calibration Multiplier	C	1.09

a / b = c

Next, follow the steps outlined in the Kuhn "Digi-Star Setup and Calibration" instructions access the current calibration number. Mulitply the "Calibration Multiplier" by the current calibration to create a new "adjusted" calibration number. Enter the new calibration number and the press on. The weight will change in real time, and should now match the platform scales displayed weight.

The “CAL” number is not a weight. It is a reference value the indicator uses to determine the weight. This number directly affects the accuracy of the scale system.

Formula for Determining Digi-Star Calibration Number

of Weighbar X Weighbar Capacity X .4

÷

Millivolts @ Rated Load

Example: Digi-Star 30K CT (70173034)

4 Loadcells X 30,000 X .4

÷

3 Millivolts

= Calibration Number

4 X 30,000 X .4 = 48,000

÷

3

Calibration number = 16000

Configuring the Weigh-Tronix 640/640XL Indicator

1. From the Gross Mode, press and hold the **HOLD/MENU** key for beeps three beeps(3 seconds), then release. [SET.PAS] is displayed.
2. Key in 640 using the **RM**, **M+** and **Hold/Menu** keys. Then press **Print/Select** to accept it…

- **RM** Press this key to enter a value on the screen and increment the value being entered.
- **M+** Press this key to decrement the numeric value being entered.
- **Hold/Menu** Press this key to move the numeric entry cursor one position to the right.)

3. Press **PRINT/SELECT**….[Config] is displayed.
4. Press **PRINT/SELECT**….The current configuration number will now be displayed [XXXXX].
5. Key in the new configuration code (see chart) then press **PRINT/SELECT,** [CONFIG] is shown.
6. Press the **G/N** key twice to exit.

Configuration Chart for Weigh-Tronix weighbars/loadcells (4 bar/cell systems)

Load Cell/Weighbar	Weigh-Tronix Part Numbers	Pounds	Kilograms
1.88" W.Bars	49050-0121	5330	5234
2.125" W.Bars	49050-0097, 21594-0529	5330	5234
2.25" Dual Bars	52044-0124	7330	7234
CC-20/CC-30 Load Cells	53230-0035	12330	12234
CC-30-3 Load Cells	53759-0036	14330	14234

Configuration Chart for Digi-Star weighbars/loadcells (4 bar/cell systems)

Load Cell/Weighbar	Digi-Star Part Numbers	Pounds	Kilograms
1.88" W.Bars	143978	22330	22134
2.125" W.Bars	143989	23330	23234
30K CT (Load Cell)	153101, 403275	14330	14234

Custom Configuration Weigh-Tronix 640/640XL Indicator

The configuration code is a four or five digit number that configures the indicator for the following operational parameters:

Parameter:
Axle Size
Capacity x Increment Size
Warning Alarm Factor
Units of Measure/Auto Hold ON or OFF

1. From the Gross Mode, press and hold the **HOLD/MENU** key for beeps three beeps(3 seconds), then release. [SET.PAS] is displayed.
2. Key in 640 using the **RM**, **M+** and **Hold/Menu** keys. Then press **Print/Select** to accept it…

- **RM** Press this key to enter a value on the screen and increment the value being entered.
- **M+** Press this key to decrement the numeric value being entered.
- **Hold/Menu** Press this key to move the numeric entry cursor one position to the right.)

3. Press **PRINT/SELECT**….[Config] is displayed.
4. Press **PRINT/SELECT**….The current configuration number will now be displayed as [XXXXX].
5. Key in the new configuration code **98330 for Pounds** or **98234 for Kilograms** then press **PRINT/SELECT,** [CONFIG] is shown.
6. Press **HOLD/MENU** once, [CUSTOM] is shown.
7. Press **PRINT/SELECT** to display the current CUSTOM number. Change it to **XXXXX (see chart below)** using the procedure described in step two and then press **PRINT/SELECT**, [CUSTOM] is shown.
8. Press the **G/N** key twice to exit.

Spreader	Custom No.	Kilo-Grams
PSC161	36824	16703
PSC 161 Truck	36824	16703
PSC 171	55236	25054
PSC 171 Truck	55236	25054
PSC 181	55236	25054
PSC 181 Truck	55236	25054
PS 150	45977	20854
PS 160	45977	20854
PS 270	45977	20854
PS 242	45977	20854
SLC 126	45977	20854
SLC 132	80000	36287
SLC 132 Truck	27686	12558
SLC 141	80000	36287
SLC 141 Truck	27686	12558
SLC 150	80000	36287

Mixer	Custom No.	Kilo-Grams
3 Point Vertical	27640	12537

NOTE: For machines not listed, use same Config number (step 5) and use the Cal number for the particular machine listed in the Digi-Star Setup and Calibration chart for the Custom number (step 7).

Configuring the Weigh-Tronix 1040/2040/XL Indicator

The configuration code is a four or five digit number that configures the indicator for the following operational parameters:

Parameter:
Axle Size
Capacity x Increment Size
Warning Alarm Factor
Units of Measure/Auto Hold ON or OFF

1. From the Gross Mode, press and hold the **MENU** key for beeps three beeps(3 seconds), then release. [SET.PAS] is displayed.
2. Key in 1040 if you have a 1040 or 2040 if you have a 2040 indicator. **** is displayed.
3. Press **SELECT**….[Config]isdisplayed.
4. Press **SELECT**….Theacurrentaconfigurationanumberawillanowabedisplayeda[XXXXX].
5. Key in the new configuration code (see chart). Press **SELECT**, then press **GROSS** to exit.

Configuration Chart for Weigh-Tronix Weighbars (4 Bar/Cell Systems)

Load Cell/Weighbar	Weigh-Tronix Part Numbers	Pounds	Kilograms
1.88" W.Bars	49050-0121	5320	5204
2.125" W.Bars	49050-0097, 21594-0529	5320	5204
2.25" Dual Bars	52044-0124	7320	7204
CC-20 Load Cells	53230-0035	12320	12204
CC-30-3 Load Cells	53759-0036	14300	14204

Configuration Chart for Digi-Star Weighbars (4 Bar/Cell Systems)

Load Cell/Weighbar	Digi-Star Part Numbers	Pounds	Kilograms
1.88" W.Bars	143978	22300	22104
2.125" W.Bars	143989	23300	23204
30K CT (Load Cell)	153101, 403275	14300	14204

Configuring the Weigh-Tronix 1040/XL/ 2040/XL Indicator for the Verti-Maxx (Pounds or Kilograms) (3 Point Scale System)

The configuration code is a four or five digit number that configures the indicator for the following operational parameters:

Parameter:
Axle Size
Capacity x Increment Size
Warning Alarm Factor (either weight or percent based)
Units of Measure/Auto Hold ON or OFF/Auto Mix ON or OFF

1. From the Gross Mode, press and hold the **MENU** key for three beeps(3 seconds), then release.[SET.PAS] is displayed.
2. Key in 1040 for a 1040 and 2040 for a 2040 indicator. **** is displayed.
3. Press **SELECT**….[CONFIG]aisadisplayed.
4. Press **SELECT**….Theacurrentaconfigurationanumberawillanowabeadisplayeda[XXXXX].
5. Key in 98330 for pounds or 98234 for kilograms and press **SELECT**….a[CONFIG]ashouldanowa be redisplayed.
6. Press **MENU** and [CUSTOM] is displayed.
7. Press **SELECT**…Theacurrentacustomaweightata4amv/vawillabeadisplayeda(Defaulta=a10000alb)
8. Key in 27640 for pounds or 12537 for kilograms and press **SELECT**….a[CUSTOM]aisadisplayed.
9. Press **MENU**….[O-CAP] is displayed.
10. Press **SELECT**….Aanumberawillabeadisplayeda[X].aThisanumberashownawillabea200000aifa weighing in pounds or 20000 if weighing in kilograms. If it is needs to be a different value, use the numeric keypad enter the correct number and press **SELECT.** [O-CAP] should now be displayed.
11. Press **GROSS** to exit the configuration mode.

Chassis Power Connector Pin-Out

Digi-Star

Wire Color	Pin Location
Red	1
Black	2
Orange	3
Yellow	4

Weigh-Tronix

Wire Color	Pin Location
Black	1
White	2

Chassis Load Cell (J-Box) Connector Pin-Out

Digi-Star

Wire Color	Pin Location
Red	1
Green	2
White	3
Black	4

Weigh-Tronix

Wire Color	Pin Location
Green & Yellow	1
Red	2
White	3
Black & Blue	4

Kuhn Junction Box Wiring Chart

LOAD CELL TERMINALS**	**1**	**2**	**3**	**4**	**5**
FUNCTION	(+) EX	(-) SIG	(+) SIG	(-) EX	SHEILD
WSI	GREEN	WHITE	RED	BLACK	SHEILD
EATON	RED	WHITE	GREEN	BLACK	SHEILD
WEIGH-TRONIX	GREEN	RED	WHITE	BLACK	SHEILD
DIGI-STAR	RED	GREEN	WHITE	BLACK	SHEILD

Important Notes

*****This chart is intended for the KuhnKnight manufactured junction box only, other brand boxes may be wired differently, including the J-Star/Digi-Star boxes used by Knight Mfg in the past.

******This chart is intended for the weigh bar / load cell cables. The junction box cord is **always** wired using the Digi-Star color code (regardless of which brand load cells are being used).

Recommended Scale Repair/Troubleshooting Tools and Parts

	KKI Part Number
Indicator-Any Digi-Star or WT (with Amp connectors) will work fine for troubleshooting.	
Loadcell Simulator	172386
Splice kit	171960
Chassis power and load cell connectors	173217 & 173219
Cord Connectors-Power and J-Box cord	173213 & 173215
Plastic connector locking rings	174923
Male and female contact pins	173211 & 173212
Pin Extraction tool	173216
Multimeter	
Calibration Instructions	
Wire Strippers/Cutters	
Phillips Screw Driver	
Small Flat Blade Screw Driver	

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RETURNED SCALE COMPONENT REPORT

A._____(This may be any number you select for your records) B._____/_____/_____
Dealer PO Number Month Day Year

C. _____/_____/_____/_____/_____/_____/_____/_____
Dealer account number to which repair should be billed

Dealer/Warehouse Name
Name_____
Address_____
City, State, Zip_____

Shipping Name and Address (if different)
Name_____
Address_____
City, State, Zip_____

D. ACTION REQUESTED:
1. □ Returning for credit/Provide Invoice number and invoice date number
_____
2. □ Repair/Replace

E. IS THE MACHINE STILL UNDER WARRANTY?
1. □ NO
2. □ YES If yes, you must supply the machine model/serial

Model_____Serial Number_____

F. I WOULD LIKE THE ITEMS RETURNED VIA:
1. □ Spee-Dee
2. □ UPS Ground
3. □ UPS 2nd Day Air
4. □ UPS Overnight
5. □ Other_____

G. ITEM TO BE REPAIRED:

□ Weigh-Tronix □ Digi-Star

□ Load Cell/Weigh Bar □ Indicator/Remote Display □ Other_____

Serial Number (if present)_____

EXPLAIN NATURE OF PROBLEM - BE SPECIFIC -
_____
_____
_____
_____
_____
_____
_____

EZII/3 - Direct Access Numbers

For the Setup / Calibration Settings

This method allows direct access to individual Setup & Calibration Settings. Enter the Direct Access Number of the setting you would like to change on the numeric keypad and then press the SELECT key. The display will show the setting name and then allow the value to be changed. Pressing the ON or ENTER key will return the scale to weighing.

LONG FORM - SETUP/CALIBRATION SETTINGS

Please note: Settings will only be displayed if their feature is found in the indicator model.

MENU 1 - BASIC FEATURES IN MOST SCALES

LANGUAGE {LANGAG}	101	Select Language to be displayed.
DISPLAY RATE {D RATE}	102	Update Display 1, 2, 3, or 4 Times per Second.
MOTION {MOTION}	103	If ON - motion arrow flashes for unstable weight.
ZERO TRACK {ZTRACK}	104	If ON - zero track adjust balance for buildup of snow & mud.
WEIGH METHOD {W MTHD}	105	Select weigh method 1-General 2-Slow 3-Fast 4-Lock On
LOCK ON {LOCKON}	106	Lower number if lock-on does not repeat-Raise to lock-on faster
TR HOLD {TR HLD}	107	Display gross weight if TR key is held for 3 seconds.
SCALE ID SETUP {SCALID}	108	Identity of scale location (Truck ID or Mixer Number).
LOCK-N-HOLD {LKNHLD}	109	If ON - lock weight is held until next animal is weighed.
AUTO OFF {AUTOFF}	111	Indicator turns off after selected minutes of stable weight.
LOCK ON STORE {L STORE}	112	Select lock on storage method.
LSTORE SEND MODE {LSSEND}	113	ON=sends data with animal on scale. OFF=when animal leaves
EID STORE {E STORE}	114	If ON - records are stored to internal memory.
1 PRESS ZERO {1 ZERO}	115	If ON - Press and hold the Zero key to Zero/Balance scale.
POWER LOSS MESS {PWRLOS}	116	If ON - Display time & date of power loss if preset/recipe active.
EID AUTO RECORD{EIDAUT}	117	If ON - Immediately records eid tag.
SCROLL DELAY {SCROLL}	118	Slow scroll rate for cold temperatures, 0=normal to 9=slowest.
TR KEY FUNCTION {TRKEYF}	121	Select function of TR key (TARE, START/STOP, PRINT, LOAD, HOLD, etc…).
FORCE PREMIS ENTRY{GINPIN}	123	If ON - Operator MUST enter Group & Premis to use scale.
SW4600 DEVIATION{SW DEV}	124	If ON – Enables standard deviation screens on SW4600 EID.
MOTION WEIGHT{MOT WT}	125	Enter weight used to detect Motion. 0=Standard Motion detection.
LOCK-ON TIME ADJ{LOCKTM}	126	Adjust the time required to lock onto a weight. Lower to lock on faster.
CLEAR LOCK-ON AT ZERO{LKZERO}	127	If OFF – Indicator can lock onto a new weight without returning to zero.
MOTION LOCK SETUP{MOT LK}	128	If ON - will not allow PRINT or ENTER key if motion is detected.
NO LOW BATTERY SENSING{NOLBAT}	129	If ON – Indicator will never display low battery status.
SAVE TARE{SAVTAR}	131	If ON – Indicator will save tare weight to non-volatile memory.
NUMBER OF BINS{BINNUM}	132	Number of bins 0-10, 0 = bin feature off.
NUMBER OF ROWS{ROWNUM}	133	Number of rows 0-100 used in CALC function, 0 = manual entry.
ROW MAX CAPACITY{ROWMAX}	134	Maximum capacity to limit preset in CALC function, 0 = no limit.
PROGRAM ID{PRG ID}	198	Displays the software version.

MENU 2 - CLOCK, PRINTER, COMMUNICATIONS & ESTIMATED WEIGHT FEATURES

TIME FORMAT {TIME F}	201	Select time format - AM/PM or 24 hour
TIME {TIME}	202	Select key changes time, Function key choses hh:mm:ss.
DATE FORMAT {DATE F}	203	Select date format 1-mm-dd 2-mm/dd/yy 3-mm/dd/yyyy 4-dd-mm 5-dd/mm/yy 6-dd/mm/yyyy 7-ddmoyy 8-ddmoyyyy.
DATE {DATE}	204	Select key changes date - Function key choses mm/dd/yy
DATE CHECK {DT CHK}	205	If ON - Indicator verifies the real time clock has a valid date at power up
TARE AUTO PRINT {TAREAP}	211	If ON - tare will auto-print displayed weight.
ONE LINE PRINT {1L PRT}	212	If ON - scale data will be printed on one line.
SCOREBOARD MODE{SCOREM}	213	Select scoreboard output.
AUTO PRINT {APRINT}	214	If ON - pressing keys will auto-print weight values.
COMPUTER IN MODE {COM IM}	215	DOWNLD = Data Down Loader, EZ CMD = Original EZ Commands & EZ2CMD = EZII Escape Commands.
PRINT FORMAT{PRTFMT}	216	Select alternate & comma (CSV) formats.
MEDIA TYPE{MEDIA}	217	Select DDL, Datakey or Serial PC for data storage.
REMOTE{REMOTE}	218	If ON - Communicate with Cab Control Display, MTLINE = 3 Line Display Cab Control
ZERO OUTPUT {ZEROUT}	219	Perform the Zero/Balance for the SCOREM #11 weight output and the Analog Output Option (4-20mA).
COM 1 DELAY {C1 DLY}	221	Select seconds to delay before advancing to next line.
COM 2 DELAY {C2 DLY}	222	Select seconds to delay before advancing to next line.
PRINT ACCUMULATION{PRTACC}	223	Shows a running total of the weights printed.
RMT CC START STOP ENABLE{RMC EN}	224	If ON – Enables Cab Control start/stop control.
RECORD SIZE{RECSIZ}	225	Select how many print lines make a record.
RADIO RESET{RADRES}	228	Select between hardware reset or software for internal radio.
EXTERNAL RADIO{EXTRAD}	229	If ON – Enables external radio to be attached to the J905 port.

(continued)

(continued)

SCALE NUMBER{SCL NO}	231	Select Scale Number for Cab Control communications.
REMOTE DISPLAY{RMDISP}	234	Select type of Remote Display.
PRINT KEY OPERATION{TARPRT}	235	Reverse operation of Print/Tare key on the CC400 or EZ400.
BAR GRAPH MODE{BARGRP}	236	Select output for bar graph display.
BAR GRAPH WEIGHT{BAR WT}	237	Enter the Full Scale Gross weight for the bar graph display.
PRINT BUFFER{BUFFER}	238	If ON - printed records are stored in internal memory.
PB SCROLL BY LINES{PBLINE}	239	Scroll through print buffer record memory PBLINE lines at a time. Select 1-3.
ANALOG LOW WEIGHT{LOW WT}	241	Enter Analog weight value to equal 4mA or 0 Volts.
ANALOG HIGH WEIGHT{HIGHWT}	242	Enter Analog weight value to equal 20mA or 5 Volts.
ANALOG SELECT {ANAOUT}	243	Select 0-5V, 4-20ma or 0-20ma output.
NEGATIVE ANALOG OUTPUT {-ANALG}	244	Allow 4-20mA to output weight values less than Analog Low Weight.
FRONT PANEL ZEROUT{ZEROFP}	249	Use Zero key to zero out the serial gross weight.
REMOTE TERMINAL {RMTERM}	251	If ON – Display data is sent to a Remote Terminal.
ISOBUS WEIGHT {ISO WT}	252	Select rate to broadcast ISOBUS weight data.
OPERATING STATUS {OPSTAT}	253	Select operating data to be sent to a Remote Terminal.
REMOTE TERMINAL PORT {RMPORT}	254	Select scale port used to send data to a Remote Terminal.
DISABLE RMPORT RESPONSE {RMNOPR}	255	If ON – Disable sending 'print' type response to cmds received.
ISOBUS BASE ADDRESS{ISOADR}	256	Assign starting base the ISOBUS gateway should 'address claim.'
DISABLE ISOBUS VT MESSAGE{ISO VT}	257	If ON – Enable ISOBUS gateway to send VT messages.
USE ISOBUS DDI VALUES{ISODDI}	258	If ON – Send ISO WT using ISOBUS DDI's 229 & 232. OFF – use D/S legacy DDIs.
PRINT ON PIN 2 {PRNT-2}	261	If ON – Print data is sent out pin 2 of the Printer connector.
COM 1-1 PARITY {C1-1PR}	271	Sets COM1-1 parity to 7E1, 8N1, or auto.
COM 1-2 PARITY {C1-2PR}	272	Sets COM1-2 parity to 7E1, 8N1, or auto.
COM 1-3 PARITY {C1-3PR}	273	Sets COM1-3 parity to 7E1, 8N1, or auto.
COM 2 PARITY {C2 PR}	274	Sets COM2 parity to 7E1, 8N1, or auto.
COM 1-1 BAUD RATE {C1-1BD}	275	Sets COM1-1 baud rate to 1200, 2400, 4800, 9600, or auto.
COM 1-2 BAUD RATE {C1-2BD}	276	Sets COM1-2 baud rate to 1200, 2400, 4800, 9600, or auto.
COM 1-3 BAUD RATE {C1-3BD}	277	Sets COM1-3 baud rate to 1200, 2400, 4800, 9600, or auto.
COM 2 BAUD RATE {C2 BD}	278	Sets COM2 baud rate to 1200, 2400, 4800, 9600, or auto.
ESTIMATE WEIGHT {EST WT}	299	Adjust Gross weight of scale by changing the zero/balance.

MENU 3 - SCALE CALIBRATION SETTINGS

DISPLAY COUNT {COUNT}	301	Select display count size of weigh values.
AUTO RANGE {ARANGE}	302	If ON - Auto increases the display count value by 1 count size at 300 lbs/kgs and 1 more count size at 600 lbs/kgs.
DISPLAY UNIT {LB-KG}	303	Display pounds - lb or kilograms - kg
CAPACITY {CAP}	304	Enter MAXIMUM weight measurable on scale.
WM1 ADJUST 1 {WMA1-1}	305	Increase this number to smoothen weighing (2 to 100)
WM1 ADJUST 2 {WMA1-2}	306	0=OFF. Use value less than WMA1-1 for quick weight response.
WM1 ADJUST 3 {WMA1-3}	307	Enter the weight to activate quick weight response.
WM2 ADJUST 1 {WMA2-1}	311	Increase this number to smoothen weighing
WM2 ADJUST 2 {WMA2-2}	312	0=OFF. Use value less than WMA2-1 for quick weight response.
WM2 ADJUST 3 {WMA2-3}	313	Enter the weight to activate quick weight response.
MIMIC TYREL {TC1300}	321	If ON - Records preset weights like a Tyrel TCX-1300 Indicator.
APPLICATION 10KMH {10K TR}	322	If ON - Transmits application rate (Tons / Acre) for a speed of 10 KMH.
APPLICATION UNITS {A UNIT}	323	Enter application units in English or Metric.
APPLICATION RATE {RATE}	324	Enter the desired rate in Tons per Acre (or Tonnes / Hectare).
APPLICATION WIDTH {WIDTH}	325	Enter the spread width in feet (or meters).
GPS STORAGE INTERVAL {GPSSTR}	326	Time interval used to store GPS data.
TOTAL ACRES {ACRES}	327	Shows a running total of acres spread on the selected field.
APP RATE ESTIMATE {ARATE1}	331	The number of weight samples used for the application rate estimate. Increase value to smoothen (2 to10).
APP RATE AVERAGE {ARATE2}	332	The number of rate samples averaged. Increase value to smoothen (1 to 5).
APP RATE WINDOW {ARATE3}	333	Determines range for minimum or maximum samples. Uses minimum samples when outside of window. 0 = 'OFF', 1 = RATE +/- RATE, 9 = RATE +/- $^{1}/_{9}$ RATE.
APP MINIMUM SAMPLES {ARATE4}	334	Minimum samples used in APP RATE WINDOW. Decrease for faster response.
APP RATE EQUAL WEIGHTS {AWEQUL}	335	Increase value for low application rates.
APP RATE SPEED ADJUST {ARATES}	336	Select FAST for faster response when beginning to unload.
APP RATE LOAD / UNLOAD { A L/UL }	337	Select Load, Unload, or Auto detect for displaying T/A while loading or unloading.
A,B,C Display Format { ABCDSP }	341	Select Single (A,B,C), Total (A+B+C), or Combined (1 scale, 3 inputs) for ABC scales.

MENU 4 - PRESET, BATCHING & ROTATION COUNTER FEATURES

PRE ALARM {P MTHD} & {P-ALM}	401	Select weight or percentage method, then enter a value to activate an early warning that scale is reaching the preset.
REMOTE INPUT {RM INP}	402	Set function of remote input line on the power cord.
ALARM OUTPUT {AL OUT}	403	Select Preset OR TR to control Relay, Horn & Lamp. Switch to control Lamp.

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BUZZER {BUZZER}	404	ALARM BUZZER–Alarm Horn can be shortened or turned OFF.
PRELOAD TARE {PRETAR}	405	If ON - tare weights can be entered using the numeric keypad
RELAY {RELAY}	406	Select behavior for +12VDC Alarm Output.
UNLOAD ALARM{U ALRM}	407	UNLOAD ALARM BUZZER- Alarm duration can be shortened or turned OFF.
REMOTE SWITCH MESSAGE {RI MSG}	411	Message that is displayed for remote input switch condition.
REMOTE SWITCH STATE {RISTAT}	412	Set remote input line state that displays message and/or illuminates alarm lamp. Open or Closed.
REMOTE SWITCH MSG {RITIME}	413	Set how often the remote switch message is displayed. Once every 1-9 seconds.
TIMER/COUNTER {TMRCTR}	421	Select time or mixer revolutions to decrement mix timer/counter.
DRIVE RATIO {DRATIO}	422	Enter the number of input pulses that equal 1 mixer revolution.
SET POINT {SETPNT}	423	Enter set point at which 12V Alarm output changes.
CHANGE WEIGHT {SETCHG}	424	Enter the weight below the set point for output to change.
CHANGE DELAY {SETDEL}	425	Time 12V Alarm output remains constant before it changes.
SET OVER UNDER {SETOUT}	426	Select ON for +12VDC ALARM when Over or UNDER set point.
SET POINT COUNTER {SETCTR}	427	Counts how many times set point is activated.
RECIPE KEYS {RECKEY}	438	If ON - disables certain keys when Loading / Unloading Recipe.
PROGRAM RECIPE {PROGRM}	439	Selects program method, PC or at SCALE.
ENTRY METHOD {E MTHD}	441	Select batching 1-amount/animal 2-percent/load 3-amount/load.
TOLERANCE {TOLER}	442	Select weight or percentage method, then enter a value to accept ingredient or turn off relay output on Seed Tender models.
INGR.ADVANCE DELAY{DELAY}	443	Select seconds to delay before advancing to next ingredient.
INGREDIENT NAMES {INGRNM}	444	If ON - displays ingredient names while batching.
ACCUMULATION {ACCUM}	445	If ON - ingredient weights are accumulated while batching.
FORCE USER ID {USERID}	446	If ON - operator MUST enter User ID to use scale.
MEDIA STORAGE{MSTORE}	447	Select MANUAL, AUTO or Quick START methods for transferring recipe information with the DDL or Datakey.
RESIZE 3500 RECIPE{RESIZE}	448	If ON - operator can change EZ3500 recipe size.
INGREDIENT RE-SIZING {INGSIZ}	449	Selects Automatic Ingredient Re-Sizing mode.
RECIPE TOTAL {RECTOT}	451	Selects Total amount to be displayed when starting recipe.
DISPLAY SCOOP % {SCOOP%}	452	If ON - displays scoop percentage to load.
TOLER OVER LOCK {OVERLK}	453	If ON - prevents auto-advancing if preset exceeds tolerance
FEED ZONE {FDZONE}	454	Select feed zone for recipe deliveries.
UNDONE RECIPES {UNDN I}	455	If ON - displays all incomplete recipes.
DISPLAY RECIPE PENS {RECPEN}	456	If ON - pens are displayed when selecting recipes.
RANGE TEST {R-TEST}	457	If ON -Feedlines sent from DataLink are marked "done".
AUTO START PENS {AUTPEN}	458	If ON -Starts Pens List after Recipe is loaded.
ERASE DONE FEEDLINE{ERASFD}	459	If ON -Erases done feedlines after data transfer.
MANUAL PEN ADVANCE{MANPEN}	461	If ON -Overrides Automatic advance for Pens.
PEN TOL {T MTHD} & {PENTOL}	462	Select weight or percentage method, then enter pen tolerance.
PEN WEIGHT {PEN WT}	463	Select method for displaying pen weight - Net, Load, or Gross.
BATCH NUMBER {BATNUM}	464	Select either PC or EZ to control the batch number.
DOUBLE KEY {DBLKEY}	465	Ignore extra INGR ADVANCE keys while feeding.
RECIPE REMAIN ACTIVE{RE-USE}	466	Allows recipes to be RE-USED for another load.
RECIPE STARTED WEIGHT{RSTART}	467	This weight threshold determines if the recipe has been started.
RECIPE ENTRY METHOD{ RENTRY}	468	Select recipe start method - recipe name or batch number.
PARTIAL FEEDING {PARTFD}	469	If ON –Partial feedings will be recorded.
PEN STARTED WEIGHT {PSTART}	471	This weight threshold determines if the feeding has been started.
SPLIT LOAD {SPLOAD}	472	If ON –Pen presets are re-calculated after each ingredient/pen.
NUMBER OF INGREDIENTS {NUMING}	473	Number of ingredients in the Ingredient Name Table- D.A.N. 444
STARTING PRESET WEIGHT {STPRST}	474	If ON –Return the starting preset in the timer/bunk read field of feedline
PRESET ACTIVE SIG. TIMEOUT{PAST}	475	Time to continue preset active signal after preset is reached.
UNLOAD WEIGHT DISPLAY {UNWEDI}	476	NET = From zero, GROSS = Display total weight, LOAD = Unload from preset
AUTO LOAD PRESET {ALP}	477	If ON – Load the stored preset when unloading begins.
VARIABLE THROTTLE {STTHRO}	478	If ON – Enables seed tender variable throttle control
PRESET DELAY{PRTDLY}	479	If ON – Uses ingredient advance delay to clear a normal preset

MENU 5 – CONTROL SETTINGS

DOOR SETUP{UGDOOR}	501	If ON – Grain cart door control features enabled.
UV GRAIN SOLONOID{UG3SOL}	502	If ON – Scale uses 3 solenoids. If OFF – Scale uses 2 solenoids.
PARTIAL LOAD {TRUCK}	503	If ON – Scale uses truck preset and remainder when loading.
SPLIT HOPPER ALARM{S ALRM}	504	Select length of time alarm sounds off when switching hoppers .
SPLIT HOPPER PREALARM{SPALRM}	505	Select weight difference to begin displaying message to switch hoppers .
DOOR OPEN WEIGHT{DOOROW}	506	Select unload weight before door begins to open.
DOOR DEBUG MODE{DDEBUG}	507	Sends door debug information out COM1 serial port.
DIAGNOSTIC ENABLE{DIAG }	508	ON enables diagnostic information - Press Select to display “DIAG”, then press Function to display RPM.
DOOR OPEN TIME{DOOROT}	509	Select the time required to fully open the grain door when closed.
DOOR OPEN PERCENTAGE{DOOROP}	511	Set the percentage the door will open.

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DOOR CLOSE TIME{DOORCT}	512	Select the time required to fully close the grain door when open.
DOOR CLOSE WINDOW{DOORWT}	513	Set the window for minimum weight change before door will close.
DOOR INSIDE WINDOW TIME{DOORIT}	514	Set the maximum time a weight can stay in the weight window before door closes.
DOOR PREALARM OFFSET{DOORPO}	515	Set the weight to switch from higher weight to lower weight.
DOOR PREALARM SCALER{DOORPS}	516	Decrease if unloaded results are consistently lower than expected. Set higher if unloaded results are consistently higher than expected.
ADAPTIVE AUGER WEIGHT MAX{AUGRMX}	517	Set the maximum adaptive weight change.
LEFTOVER AUGER WEIGHT{AUGRWT}	518	Set to modify Door Adaptive Weight.
AUGER WEIGHT SCALAR GAIN{DRAWGN}	519	Increase value for faster adaptation, decrease for slower adaptation.
DOOR WEIGHT CLOSING{DOORWC}	521	Set the weight for when the grain door should start closing.
RPM START/STOP CONTROL{RSSCTL}	531	ON enables AUTOLOG feature(RPM automatic start/stop control feature)
RPM STOP SPEED{RSSMIN}	532	Set to 20-50% of PTO operating RPMS. Stop is activated using this value.
RPM START TOL SPEED{RSSTOL}	533	Set to 10% of PTO operating RPMS. Start is activated using this value + D.A.N. 532
RPM START DELAY{RSSTDY}	534	Start activated when RPMS above D.A.N 532 + D.A.N. 533 for this time is seconds
RPM STOP DELAY{RSSPDY}	535	Stop activated when RPMS below D.A.N 532 for this time is seconds
RPM CONTROL {RPMCTL}	536	ON enables RPM control feature. Use with D.A.N 537 and D.A.N 538
RPM CONTROL MIN {RPMMIN}	537	Set to minimum operating RPM value. Must be larger than RSSCTL (D.A.N 531)
RPM CONTROL SPEED {RPMTOL}	538	Set to between 5% and 20% of PRMMIN (D.A.N. 537)
RPM CONTROL DELAY {RPMDLY}	539	Time in seconds to delay door closing
DEMO MODE {UGDEMO}	541	Demo Mode

CALIB - CALIBRATION

TEMP CALIBRATION {T CALB}	801	If ON - scale adjust for temperature changes.
DEAD WEIGHT CAL {CAL}	802	Calibration method using weights.

SHORT FORM - CALIBRATION SETTINGS

SETUP NUMBER {SETUP}	871	Quick entry value to select weigh method (1-4 lb) (5-8 kg), gain (1-9), display counts (0-9), and capacity (*1000)
CALIBRATION NUMBER {CAL}	872	Weight displayed at 0.4mV/V for these loadcells.

10/60/SL2 Series
Direct Access Numbers

For Setup / Calibration Settings

This method allows direct access to individual Setup & Calibration Settings. Enter the Direct Access Number of the setting you would like to change on the numeric keypad and then press the SELECT key. The display will show the setting name and then allow the value to be changed. Pressing the ON or ENTER key will return the scale to weighing. Jump Lists will start at the beginning of the menu and step through all options by press the ON or ENTER key. To access Jump Lists, enter the corresponding menu number and then press and hold FUNCTION key.

LONG FORM - SETUP/CALIBRATION SETTINGS

Please note: Settings will only be displayed if the feature is found in the indicator model.

MENU 1 – GENERAL SETTINGS (Jump List – 1)

MENU 1.0 – GENERAL SETTINGS 1

LANGUAGE {LANGAG}	1001	Select Language to be displayed.
DISPLAY RATE {D RATE}	1002	Update Display 1, 2, 3, or 4 Times per Second.
SCALE ID SETUP {SCALID}	1003	Identity of scale location (Truck ID or Mixer Number).
ZERO TRACK {ZTRACK}	1004	If ON - zero track adjust balance for buildup of snow & mud.
WEIGH METHOD {W MTHD}	1005	Select weigh method 1-General, 2-Slow, 3-Fast, or 4-Lock - On (Stockweigh only)
1 PRESS ZERO {1 ZERO}	1006	If ON - Press and hold the Zero key to Zero/Balance scale.
AUTO OFF {AUTOFF}	1007	Indicator turns off after selected minutes of stable weight.
DISPLAY UNIT {LB-KG}	1008	Display pounds - lb or kilograms - kg

MENU 1-1 – GENERAL SETTINGS 2 (JL 11)

SCROLL DELAY {SCROLL}	1101	Slow scroll rate for cold temperatures, 0=normal to 9=slowest.
SAVE TARE {SAVTAR}	1102	If ON – Indicator will save tare weight to non-volatile memory.
PRELOAD TARE {PRETAR}	1103	If ON - tare weights can be entered using the numeric keypad

MENU 1-2 – TIME & DATE (JL 12)

TIME FORMAT {TIME F}	1201	Select time format - AM/PM or 24 hour
TIME {TIME}	1202	Select key changes time, Function key choses hh:mm:ss.
DATE FORMAT {DATE F}	1203	Select date format 1-mm-dd 2-mm/dd/yy 3-mm/dd/yyyy 4-dd-mm 5-dd/mm/yy 6-dd/mm/yyyy 7-ddmoyy 8-ddmoyyyy.
DATE {DATE}	1204	Select key changes date - Function key choses mm/dd/yy
DATE CHECK {DT CHK}	1205	If ON - Indicator verifies the real time clock has a valid date at power up

MENU 1-4 – REMOTE INPUTS (JL 14)

REMOTE INPUT 1 {RMINP1}	1401	Set function of remote input line on the power cord.
REMOTE SWITCH MESSAGE {R1MSG}	1402	Message that is displayed for remote input switch condition.
REMOTE SWITCH STATE {R1STAT}	1403	Set remote input line state that displays message and/or illuminates alarm lamp. Open or Closed.
REMOTE SWITCH TIME {R1TIME}	1404	Set how often the remote switch message is displayed. Once every 1-9 seconds.
REMOTE INPUT 2 {RMINP2}	1411	Set function of remote input line of remote port or TR key.
REMOTE SWITCH MESSAGE {R2MSG}	1412	Message that is displayed for remote input switch condition.
REMOTE SWITCH STATE {R2STAT}	1413	Set remote input line state that displays message and/or illuminates alarm lamp. Open or Closed.
REMOTE SWITCH TIME {R2TIME}	1414	Set how often the remote switch message is displayed. Once every 1-9 seconds.

MENU 1-9 – DIAGNOSTIC 1 (JL 19)

PROGRAM ID {PRG ID}	1998	Displays the software version.
ESTIMATE WEIGHT {EST WT}	1999	Adjust Gross weight of scale by changing the zero/balance.

MENU 2 – COMMUNICATIONS, REMOTE, AND ISOBUS (Jump List – 2)

MENU 2.0 – COMMUNICATIONS

REMOTE {REMOTE}	2001	If ON - Communicate with Cab Control Display, MTLINE = 3 Line Display Cab Control
SCALE NUMBER {SCL NO}	2002	Select Scale Number for Cab Control communications.
EXTERNAL RADIO {EXTRAD}	2003	If ON – Enables external radio to be attached to the J905 port.
DDL ATTACHED {DDL}	2004	If ON – Enables the DDL to be attached to the J905 port.
EZ2 AUDIBLE COMMANDS {EZ2AUD}	2005	If ON – Enables an audible notification when an EZ2 command is sent.

MENU 2.1 – SCOREBOARD & OPERATIONAL STATUS MESSAGES (JUMP LIST 21)

SCOREBOARD MODE {SCOREM}	2101	Select scoreboard output.
ZERO OUTPUT {ZEROUT}	2102	Perform the Zero/Balance for the SCOREM #11 weight output.
FRONT PANEL ZEROUT {ZEROFP}	2103	Use Zero key to zero out the serial gross weight.

OPERATING STATUS {OPSTAT} .....2111 Select operating data to be sent to a Remote Terminal.
DYNAMIC VARIABLE ADJUST {-dvadj} .....2199 If ON – Causes negative sign to be left justified and numeric values right justified.

MENU 2.2 – PORT SETTINGS (JL 22)
COM 1 BAUD RATE {C1 BD} .....2201 Sets COM1 baud rate to 1200 – 115200
COM 1 PARITY {C1 PAR} .....2202 Sets COM1 parity to EVEN, ODD, or NONE.
COM 1 DATA BITS {C1DATA} .....2203 Sets COM1 data to 7 or 8.
COM 1 DELAY {C1 DLY} .....2204 Select seconds to delay before advancing to next line.
COM 2 BAUD RATE {C2 BD} .....2211 Sets COM2 baud rate to 1200 – 115200
COM 2 PARITY {C2 PAR} .....2212 Sets COM2 parity to EVEN, ODD, or NONE.
COM 2 DATA BITS {C2DATA} .....2213 Sets COM2 data to 7 or 8.
COM 2 DELAY {C2 DLY} .....2214 Select seconds to delay before advancing to next line

MENU 2.3 – PRINT (JL 23)
TARE AUTO PRINT {TAREAP} .....2301 If ON - tare will auto-print displayed weight.
ONE LINE PRINT {1L PRT} .....2302 If ON - scale data will be printed on one line.
AUTO PRINT {APRINT} .....2303 If ON - pressing keys will auto-print weight values.
PRINT FORMAT {PRTFMT} .....2304 Select alternate & comma (CSV) formats.
PRINT ACCUMULATION {PRTACC} .....2305 Shows a running total of the weights printed.
PRINT BUFFER {buffer} .....2306 If ON – printed records are stored in internal memory.

MENU 2.4 – REMOTE DISPLAY (JL 24)
REMOTE DISPLAY {RMDISP} .....2401 Select type of Remote Display.
REMOTE TERMINAL {RMTERM} .....2402 If ON – Display data is sent to a Remote Terminal.
BAR GRAPH MODE {BARGRP} .....2411 Select output for bar graph display.
BAR GRAPH ENABLE {wtgrph} .....2412 Enables bar graph for gross weighing mode.
BAR GRAPH WEIGHT {BAR WT} .....2413 Enter the Full Scale Gross weight for the bar graph display.
PRESET GRAPH ENABLE {PRGRPH} .....2414 Enables bar graph for preset weights.
TIMER GRAPH ENABLE {TMGRPH} .....2415 Enables bar graph for timer/rotation counts.
INGREDIENT GRAPH ENABLE {INGRPH} ...2416 Enables bar graph for ingredient preset weights.
NON DIGI-STAR DISPLAY {NONDSR} .....2417 Enables non-digi-star display mode.

MENU 2.7 – ISOBUS (JL 27)
ISOBUS WEIGHT {ISO WT} .....2701 Select rate to broadcast ISOBUS weight data.
ISOBUS BASE ADDRESS {ISOADR} .....2702 Assign starting base the ISOBUS gateway should 'address claim.
USE ISOBUS DDI VALUES {ISODDI} .....2704 If ON – Send ISO WT using ISOBUS DDI's 229 & 232. OFF – use D/S legacy DDIs.
ISOBUS VT INSTANCE NUMBER {ISOINT} .2705 Preferred virtual terminal instance to display mask on.
CAN MESSAGE TYPE {CANMSG} .....2711 Allows for entry of a proprietary can message type.
CAN MESSAGE INTERVAL {CANINT} .....2712 Allows editing of the interval time for the CANMSG output.

MENU 3 – MOTION & WEIGHT
(Jump List – 3)

MENU 3.0 – WEIGHT
DISPLAY COUNT {COUNT} .....3001 Select display count size of weigh values.
CAPACITY {CAP} .....3002 Enter MAXIMUM weight measurable on scale.
WM1 ADJUST 1 {WMA1-1} .....3003 Increase this number to smoothen weighing (2 to 100)
WM1 ADJUST 2 {WMA1-2} .....3004 0=OFF. Use value less than WMA1-1 for quick weight response.
WM1 ADJUST 3 {WMA1-3} .....3005 Enter the weight to activate quick weight response.
WM2 ADJUST 1 {WMA2-1} .....3006 Increase this number to smoothen weighing
WM2 ADJUST 2 {WMA2-2} .....3007 0=OFF. Use value less than WMA2-1 for quick weight response.
WM2 ADJUST 3 {WMA2-3} .....3008 Enter the weight to activate quick weight response.
A, B, C, D DISPLAY FORMAT {ABCDSP} .....3091 Select Single (A, B, C, D), Total (A+B+C+D), or Combined (1 scale, 2-4 inputs) for ABCD scales.

MENU 3.1 –MOTION (JL 31)
MOTION {MOTION} .....3101 If ON - motion arrow flashes for unstable weight.
MOTION WEIGHT {MOT WT} .....3102 Enter weight used to detect Motion. 0=Standard Motion detection.

MENU 3.2 – ANALOG OUT (JL 32)
ANALOG LOW WEIGHT {LOW WT} .....3201 Enter Analog weight value to equal 4mA or 0 Volts.
ANALOG HIGH WEIGHT {HIGHWT} .....3202 Enter Analog weight value to equal 20mA or 5 Volts.
ANALOG SELECT {ANAOUT} .....3203 Select 0-5V or 0-20ma output.
NEGATIVE ANALOG OUTPUT {-ANALG} .....3204 Allow 4-20mA to output weight values less than Analog Low Weight.
ANALOG OUTPUT TEST {ANTEST} .....3209 Select output for testing. Normal, Min, Max, or Saw.

MENU 4 – PRESET, ALARM, and TIMER
(Jump List – 4)

MENU 4.0 - PRESET, ALARM, AND TIMER
PRE ALARM METHOD {P MTHD} .....4001 Select weight or percentage method, then enter a value to activate an early warning that scale is reaching the preset.
PRE ALARM {P-ALM} .....4002 Enter a value to activate an early warning that scale is reaching the preset.

ALARM OUTPUT {AL OUT} .....4003 Select Preset OR TR to control Relay, Horn & Lamp. Switch to control Lamp.
BUZZER {BUZZER}.....4004 ALARM BUZZER–Alarm Horn can be shortened or turned OFF.
RELAY {RELAY} .....4005 Select behavior for +12VDC Alarm Output.
PRESET ADVANCE DELAY {PRTdIY}.....4006 Select seconds to delay before clearing a normal preset
RELAY OUT {RLYOUT}.....4008 Select the state of the relay when preset is reached. SIG12V or SIG 0V.
PRESET CLEAR ON PRINT {PRCLPT}.....4009 If ON – Clears preset and preset ID when a print occurs.

MENU 4.1 – SETPOINT (JL 41)
SET OVER UNDER {SETOUT}.....4101 Select ON for +12VDC ALARM when Over or UNDER set point.
CHANGE WEIGHT {SETCHG}.....4102 Enter the weight below the set point for output to change.
CHANGE DELAY {SETDEL} .....4103 Time 12V Alarm output remains constant before it changes.
SET POINT {SETPNT} .....4104 Enter set point at which 12V Alarm output changes.
SET POINT COUNTER {SETCTR}.....4105 Counts how many times set point is activated.
SET POINT WEIGHT SOURCE {Stwtsc}....4106 Select weight source to activate the 12V Alarm (normal or serial)

MENU 4.2 – PRESET TOLERANCE (JL 42)
TOLERANCE METHOD {T mthd}.....4201 Select weight or percentage method, then enter a value to accept preset, print, and clear.
TOLERANCE {TOLER}.....4202 Enter a value to accept preset and print and clear.
TOLER OVER LOCK {OVERLK}.....4203 If ON - prevents auto-advancing if preset exceeds tolerance

MENU 4.3 – MIXER REVOLUTIONS (JL 43)
TIMER/COUNTER {TMRCTR}.....4301 Select time or mixer revolutions to decrement mix timer/counter.
DRIVE RATIO {DRATIO} .....4302 Enter the number of input pulses that equal 1 mixer revolution.

MENU 5 – COMMUNICATION PORT MAPPING (Jump List – 5)

MENU 5.0 – PORT OUTPUTS
REMOTE DISPLAY PORT {RMDPRT} .....5001 Sets serial remote display output. OFF, COM1, COM2, or COM 3
RADIO PORT {RADPRT} .....5002 Sets internal radio port. OFF, COM1, COM2, or COM 3
EXTERNAL RADIO PORT {EXRPRT} .....5003 Sets external radio port. OFF, COM1, COM2, or COM 3
PRINTER PORT {PRPORT}.....5005 Sets printer port. OFF, COM1, COM2, or COM 3
SCOREBOARD PORT {SCPORT} .....5006 Sets scoreboard port. OFF, COM1, COM2, or COM 3
OPSTAT PORT {OPSTAT} .....5007 Sets opstat port. OFF, COM1, COM2, or COM 3.
DDL PORT {DDLPRT} .....5009 Sets DDL port. OFF, COM1, COM2, or COM 3
20MA MIRROR PORT {20MAMR}.....5011 Sets port for 20MA signal to mirror. OFF, COM1, COM2, or COM 3
RECIPE PORT {RECPRT} .....5012 Sets recipe output port. OFF, COM1, COM2, or COM 3
GPS PORT {GPSPRT}.....5013 Sets GPS output port. OFF, COM1, COM2, COM 3, or COM 4
CAN PORT {CANPSPRT}.....5111 Used to send a specific message via the CAN bus
DEBUG PORT {dbgprt}.....5999 Sets internal debug port. OFF, COM1, COM2, or COM 3

MENU 6 – APPLICATION SPECFIC (Jump List – 6)

MENU 6.0 – COMMON BATCHING
BATCH PRE-ALARM METHOD {BPMTHD} ....6001 Select weight or percentage method for batch pre-alarm
BATCH PRE-ALARM {BP-ALM} .....6002 Enter value to activate an early warning that scale is reaching preset.
INGRED. TOLERANCE METHOD {ITMTHD} 6003 Select weight or percentage method for ingredient tolerance.
INGREDIENT TOLERANCE {ITOLER} .....6004 Enter value to accept ingredient for auto advance.
PEN TOLERANCE METHOD {ptMTHD}.....6005 Select weight or percentage method for pen tolerance.
PEN TOLERANCE {PTOLER} .....6006 Enter value to accept pen for auto advance.
BATCH TOLERANCE OVERLOCK{BOVRLK}6007 If ON – prevents auto-advancing if preset exceeds tolerance
BATCH ADVANCE DELAY {BDELAY}.....6008 Select seconds to delay before advancing to next feedline.
MANUAL PEN ADVANCE {MANPEN}.....6009 If ON -Overrides Automatic advance for Pens.
INGREDIENT STARTED WEIGHT {ISTART}6011 This weight threshold determines if the ingredient has been started.
PEN WEIGHT {PEN WT}.....6012 Select method for displaying pen weight - Net, Load, or Gross.
RESIZE RECIPE {RESIZE}.....6013 If ON - operator can change recipe size.

MENU 6.0.5 – COMMON BATCHING/SELECTION BASED ON APPLICATION
RECIPE PRINT FORMAT {RECFMT} .....6051 Defines how scale will print when in weighing mode or a batch.
RECIPE TOTAL {RECTOT}.....6052 Selects Total amount to be displayed when starting recipe.
INGREDIENT RE-SIZING {INGSIZ}.....6053 Selects Automatic Ingredient Re-Sizing mode.
PROGRAM RECIPE {PROGRM}.....6054 Selects program method, PC or at SCALE.

MENU 6.1 – 3410 BATCHING (JL 61)
ENTRY METHOD {E MTHD} .....6101 Select batching 1-amount/animal 2-percent/load 3-amount/load.
DISPLAY SCOOP % {SCOOP%} .....6102 If ON - displays scoop percentage to load.
INGREDIENT NAMES {INGRNM} .....6103 If ON - displays ingredient names while batching
ACCUMULATION {ACCUM} .....6104 If ON – load/unload weights are accumulated while batching.

MENU 6.2 – 3610/4610 BATCHING (JL 62)
FORCE USER ID {USERID} .....6201 If ON - operator MUST enter User ID to use scale.
RECIPE KEYS {RECKEY}.....6202 If ON - disables certain keys when Loading / Unloading Recipe.
BATCH NUMBER {BATNUM}.....6203 Select either PC or EZ to control the batch number.
DOUBLE KEY {DBLKEY}.....6204 Ignore extra INGR ADVANCE keys while feeding.

RECIPE REMAIN ACTIVE {RE-USE}	6205	Allows recipes to be RE-USED for another load.
RECIPE ENTRY METHOD {RENTRY}	6206	Select recipe start method - recipe name or batch number.
SPLIT LOAD {SPLOAD}	6207	If ON –Pen presets are re-calculated after each ingredient/pen.
STARTING PRESET WEIGHT {STPRST}	6208	If ON –Return the starting preset in the timer/bunk read field of feedline
SMALL INGREDIENT DISPLAY {SMINGR}	6209	Enter value to display small ingredient message.
UNDONE RECIPES {UNDN I}	6211	If ON - displays all incomplete recipes.
DISPLAY RECIPE PENS {RECPEN}	6212	If ON - pens are displayed when selecting recipes.
ERASE DONE FEEDLINE {ERASFD}	6214	If ON -Erases done feedlines after data transfer.
MEDIA STORAGE {MSTORE}	6215	Select MANUAL, AUTO or Quick START methods for transferring recipe information
RANGE TEST {R-TEST}	6216	If ON -Feedlines sent from DataLink are marked "done".
AUTO START PENS {AUTPEN}	6217	If ON -Starts Pens List after Recipe is loaded.
FEED ZONE {FDZONE}	6218	Select feed zone for recipe deliveries.
PARTIAL FEEDING {PARTFD}	6219	If ON –Partial feedings will be recorded.
MIMIC TYREL {TC1300}	6221	If ON - Records preset weights like a Tyrel TCX-1300 Indicator.
PEN CHECK METHOD {PCMTHD}	6222	Select weight or percentage method for pen check option.
PEN CHECK {PENCHK}	6223	Enter value to verify if pen has been underfed.
PEN STARTED WEIGHT {PSTART}	6224	This weight threshold determines if the pen has been started.

MENU 6.3 – PRESET ACTIVE SIGNAL (JL 63)

UNLOAD WEIGHT DISPLAY {UNWEDI}	6301	NET = From zero, GROSS = Display total weight, LOAD = Unload from preset
AUTO LOAD PRESET {alp}	6302	If ON – Load the stored preset when unloading begins.
PRESET ACTIVE SIG. TIMEOUT {PAST}	6303	Time to continue preset active signal after preset is reached.
UNLOAD ALARM {U ALRM}	6304	UNLOAD ALARM BUZZER – Alarm duration can be shortened or turned OFF.
OUTPUT TOLERANCE METHOD{OTMTHD}	6305	Select weigh or percentage method for output tolerance method.
OUTPUT TOLERANCE {OTOLER}	6306	Enter value to accept preset active signal, according to relay setting.

MENU 6.4 – AUTOLOG (JL 64)

RPM START/STOP CONTROL {RSSCTL}	6401	Three settings available, RPM, SWITCH, or MANUAL
RPM STOP SPEED {RSSMIN}	6402	Set to 20-50% of PTO operating RPMs. Stop is activated using this value.
RPM START TOL SPEED {RSStol}	6403	Set to 10% of PTO operating RPMs. Start is activated using this value + D.A.N. 6402
RPM START DELAY {RSSTDY}	6404	Start activated when RPMs above D.A.N 6402 + D.A.N. 6403 for this time in seconds
RPM STOP DELAY {RSSPDY}	6405	Stop activated when RPMs below D.A.N 6402 for this time is seconds
RMT CC START STOP ENABLE {RMC EN}	6406	If ON – Enables Cab Control start/stop control.
GPS TRIGGER TOLERANCE {GPSTOL}	6408	Enter weight change that will trigger GPS recording.
GPS STARTUP ENABLE {GPSHOW}	6409	Enables GPS Satellite screen upon startup.
FEEDBOX STRT/STP POLARITY {FS POL}	6411	Select Open or Close to activate automatic Start/Stop.
SWITCH START DELAY {SWSTDY}	6412	Seconds to delay start after switch is enabled.
SWITCH STOP DELAY {SWSPDY}	6413	Seconds to delay stop after switch is disabled.

MENU 6.8 – MOISTURE (JL 68)

MOISTURE WEIGHT TOLER {mwthrd}	6801	Enter unloaded weight to indicate flow over sensor.
SHOW CURRENT MOISTURE {SHOWMT}	6802	Displays current moisture value.
SHOW MOISTURE TEMP. {SHOTMP}	6803	Display current temperature in Fahrenheit.
SHOW BUSHEL WEIGHT {bushow}	6804	Shows bushel weight on active screen.
CLEAR VOLTAGE MEMORY {CLRDMV}	6894	Clears all moisture voltage data.
MOISTURE VOLT. RECORDS {MVNREC}	6896	Displays the number of voltage records in memory.
SAVE MOISTURE VOLT. REC. {SAVMDV}	6897	Save moisture voltage records to USB.
SAVE ALL MOIST. RECORDS {Mddump}	6898	Saves all moisture data to USB.
MOISTURE DEBUG {mdebug}	6899	If ON – output debug messages through serial port.

MENU 6.9 – BALER (JL 69)

BALER MAX RANGE {*MAXRNG*}	6901	Sample Range to average when finding MAX value.
BALER MAX RANGE OFFSET {*MAXOFF*}	6902	Offset from last peak before drop for end-point of max. range averaging.
BALER MINIMUM RANGE {*MINRNG*}	6903	Sample Range to average when finding MIN value (empty chute weight).
BALER SLOPE AVG. TRIP POINT{*SLOPRG*}	6904	Magnitude of negative slope-average threshold that triggers bale drop detection.
BALE MINIMUM WEIGHT {*MIN WT*}	6905	Default value to be used for minimum weight (empty bale chute).
TARGET BALE WEIGHT {*TRGBWT*}	6906	Default Target Bale Weight used to improve rejection of false bale-drop detections.

Please note: Scale specific settings can be affected by the same global settings above. When changed, they will affect the currently selected scale.

MENU 7.1 – SCALE SPECIFIC SETTINGS (SCALES A&B - JL 71)

SCALE PLATFORM A

SCALE ID SETUP {SCALID}	7101	Identity of scale location (Truck ID or Mixer Number).
WEIGH METHOD {W MTHD}	7103	Select weigh method 1-General, 2-Slow, 3-Fast, or 4-Lock - On (Stockweigh only)
DISPLAY UNIT {LB-KG}	7104	Display pounds - lb or kilograms - kg
CAPACITY {CAP}	7106	Enter MAXIMUM weight measurable on scale.
WM1 ADJUST 1 {WMA1-1}	7107	Increase this number to smoothen weighing (2 to 100)
WM1 ADJUST 2 {WMA1-2}	7108	0=OFF. Use value less than WMA1-1 for quick weight response.
WM1 ADJUST 3 {WMA1-3}	7109	Enter the weight to activate quick weight response.
WM2 ADJUST 1 {WMA2-1}	7111	Increase this number to smoothen weighing
WM2 ADJUST 2 {WMA2-2}	7112	0=OFF. Use value less than WMA2-1 for quick weight response.
WM2 ADJUST 3 {WMA2-3}	7113	Enter the weight to activate quick weight response.
MOTION {MOTION}	7114	If ON - motion arrow flashes for unstable weight.

MOTION WEIGHT {MOT WT}.....7115 Enter weight used to detect Motion. 0=Standard Motion detection.
TARE AUTO PRINT {TAREAP} .....7116 If ON - tare will auto-print displayed weight.
SAVE TARE {SAVTAR} .....7117 If ON – Indicator will save tare weight to non-volatile memory.

SCALE PLATFORM B
SCALE ID SETUP {SCALID} .....7151 Identity of scale location (Truck ID or Mixer Number).
WEIGH METHOD {W MTHD}.....7153 Select weigh method 1-General, 2-Slow, 3-Fast, or 4-Lock - On (Stockweigh only)
DISPLAY UNIT {LB-KG}.....7154 Display pounds - lb or kilograms - kg
CAPACITY {CAP} .....7156 Enter MAXIMUM weight measurable on scale.
WM1 ADJUST 1 {WMA1-1} .....7157 Increase this number to smoothen weighing (2 to 100)
WM1 ADJUST 2 {WMA1-2} .....7158 0=OFF. Use value less than WMA1-1 for quick weight response.
WM1 ADJUST 3 {WMA1-3} .....7159 Enter the weight to activate quick weight response.
WM2 ADJUST 1 {WMA2-1} .....7161 Increase this number to smoothen weighing
WM2 ADJUST 2 {WMA2-2} .....7162 0=OFF. Use value less than WMA2-1 for quick weight response.
WM2 ADJUST 3 {WMA2-3} .....7163 Enter the weight to activate quick weight response.
MOTION {MOTION}.....7164 If ON - motion arrow flashes for unstable weight.
MOTION WEIGHT {MOT WT}.....7165 Enter weight used to detect Motion. 0=Standard Motion detection.
TARE AUTO PRINT {TAREAP} .....7166 If ON - tare will auto-print displayed weight.
SAVE TARE {SAVTAR} .....7167 If ON – Indicator will save tare weight to non-volatile memory.

MENU 7.2– SCALE SPECIFIC SETTINGS (SCALES C&D - JL 72)

SCALE PLATFORM C
SCALE ID SETUP {SCALID} .....7201 Identity of scale location (Truck ID or Mixer Number).
WEIGH METHOD {W MTHD}.....7203 Select weigh method 1-General, 2-Slow, 3-Fast, or 4-Lock - On (Stockweigh only)
DISPLAY UNIT {LB-KG}.....7204 Display pounds - lb or kilograms - kg
CAPACITY {CAP} .....7206 Enter MAXIMUM weight measurable on scale.
WM1 ADJUST 1 {WMA1-1} .....7207 Increase this number to smoothen weighing (2 to 100)
WM1 ADJUST 2 {WMA1-2} .....7208 0=OFF. Use value less than WMA1-1 for quick weight response.
WM1 ADJUST 3 {WMA1-3} .....7209 Enter the weight to activate quick weight response.
WM2 ADJUST 1 {WMA2-1} .....7211 Increase this number to smoothen weighing
WM2 ADJUST 2 {WMA2-2} .....7212 0=OFF. Use value less than WMA2-1 for quick weight response.
WM2 ADJUST 3 {WMA2-3} .....7213 Enter the weight to activate quick weight response.
MOTION {MOTION}.....7214 If ON - motion arrow flashes for unstable weight.
MOTION WEIGHT {MOT WT}.....7215 Enter weight used to detect Motion. 0=Standard Motion detection.
TARE AUTO PRINT {TAREAP} .....7216 If ON - tare will auto-print displayed weight.
SAVE TARE {SAVTAR} .....7217 If ON – Indicator will save tare weight to non-volatile memory.

SCALE PLATFORM D
SCALE ID SETUP {SCALID} .....7251 Identity of scale location (Truck ID or Mixer Number).
WEIGH METHOD {W MTHD}.....7253 Select weigh method 1-General, 2-Slow, 3-Fast, or 4-Lock - On (Stockweigh only)
DISPLAY UNIT {LB-KG}.....7254 Display pounds - lb or kilograms - kg
CAPACITY {CAP} .....7256 Enter MAXIMUM weight measurable on scale.
WM1 ADJUST 1 {WMA1-1} .....7257 Increase this number to smoothen weighing (2 to 100)
WM1 ADJUST 2 {WMA1-2} .....7258 0=OFF. Use value less than WMA1-1 for quick weight response.
WM1 ADJUST 3 {WMA1-3} .....7259 Enter the weight to activate quick weight response.
WM2 ADJUST 1 {WMA2-1} .....7261 Increase this number to smoothen weighing
WM2 ADJUST 2 {WMA2-2} .....7262 0=OFF. Use value less than WMA2-1 for quick weight response.
WM2 ADJUST 3 {WMA2-3} .....7263 Enter the weight to activate quick weight response.
MOTION {MOTION}.....7264 If ON - motion arrow flashes for unstable weight.
MOTION WEIGHT {MOT WT}.....7265 Enter weight used to detect Motion. 0=Standard Motion detection.
TARE AUTO PRINT {TAREAP} .....7266 If ON - tare will auto-print displayed weight.
SAVE TARE {SAVTAR} .....7267 If ON – Indicator will save tare weight to non-volatile memory.

MENU 8 – SETUP, CALIBRATION, AND MAINTENANCE

MENU 8.0 - SIGN-ON & MAINTENANCE MESSAGES
SIGNON SETTING {SIGNON} .....8001 ON/OFF Control for enable/disable display of sign-on message.
SIGNON MESSAGE {SIGMSG} .....8002 Edit sign-on message.

MAINTENANCE MESSAGE {MANTMG}.....8011 Edit maintenance message.
MAINTENANCE MESS. TIME {MANTtm}.....8012 Time for maintenance message to be triggered
MAINTENANCE MESS. CLEAR {MANCLR} ...8013 Allows for clearing of maintenance message time or entry of new time.

MENU 8.1 - CALIBRATION
DEAD WEIGHT CAL {CAL}.....8121 Calibration method using weights.
TEMP CALIBRATION {T CALB}.....8123 If ON - scale adjust for temperature changes.
CALIBRATION MATCH {CALMAT}.....8124 Calibration method used for matching a known weight.

MENU 8.2 – MEMORY MANAGEMENT
CLEAR MEMORY/REUSE .....8201 Clears feedline memory = ON key or Reuse feedlines = CLEAR key.
CLEAR NVRAM .....8202 Reset all internal data storage values stored in non-volatile memory. (TMR)
CLEAR RECORDS {CLEARR}.....8211 Erases all data records stored in memory.
CLEAR NVRAM .....8212 Reset all internal data storage values stored in non-volatile memory. (GT/NT)

MENU 8.7 - SETUP NUMBER AND SETTINGS

SETUP NUMBER {SETUP}	8711	Quick entry value to select weigh method (1-4 lb) (5-8 kg), gain (1-9), display counts (0-9), and capacity (*1000)
CALIBRATION NUMBER {CAL}	8712	Weight displayed at 0.4mV/V for these loadcells.
SAVE CURRENT REST. IMAGE {SAVMEM}	8713	Saves the current and restore settings to XML files on the USB.
LOAD CURRENT REST. IMAGE {LD MEM}	8714	Loads any of the restore images from the USB and saves those settings in memory.
SAVE SET TO REST. IMAGE {ST SET}	8715	Stores current settings into 1 of restore point images. (USER, OEM, FACTORY)
RESTORE SET. TO REST. PT {SW SET}	8716	Restores a restore point to current settings. (USER, OEM, FACTORY)
SYSTEM DATE FORMAT{SYSDTF}	8719	Allows date format to be changed when printing stored records.
CALIBRAION MATCH {CALMAT}	8724	Allows adjustment to the calibration number by inputting two weight values.
LOAD DISPLAY POOL {L POOL}	8732	Load a display pool from the USB device into internal memory
DISPLAY POOL STATUS {D POOL}	8733	Show/Display pool status in internal memory
ISOBUS VT ENABLE {ISO VT}	8745	Enable/Disable uploading mask (pool) data up to a VT

Please note: Scale specific Setup and Calibration settings can be affected by the same global settings above. When changed, they will affect the currently selected scale.

SCALE PLATFORM A

SETUP NUMBER {SETUP}	8771	Quick entry value to select weigh method, gain, display counts, and capacity.
CALIBRATION NUMBER {CAL}	8781	Weight displayed at 0.4mV/V for these loadcells.

SCALE PLATFORM B

SETUP NUMBER {SETUP}	8772	Quick entry value to select weigh method, gain, display counts, and capacity.
CALIBRATION NUMBER {CAL}	8782	Weight displayed at 0.4mV/V for these loadcells.

SCALE PLATFORM C

SETUP NUMBER {SETUP}	8773	Quick entry value to select weigh method, gain, display counts, and capacity.
CALIBRATION NUMBER {CAL}	8783	Weight displayed at 0.4mV/V for these loadcells.

SCALE PLATFORM D

SETUP NUMBER {SETUP}	8774	Quick entry value to select weigh method, gain, display counts, and capacity.
CALIBRATION NUMBER {CAL}	8784	Weight displayed at 0.4mV/V for these loadcells.

MISCELLANEOUS UTILITIES

KEYTEST	8888	Enables front panel key test.
CLOCK	8997	Enables clock – press any key to return to weighing mode.

Formula for Determining Digi-Star Calibration Number

of Weighbar X Weighbar Capacity X .4

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Millivolts @ Rated Load

Example: Digi-Star 30K CT (70173034)

4 Loadcells X 30,000 X .4

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3 Millivolts

= Calibration Number

4 X 30,000 X .4 = 48,000

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3

Calibration number = 16000

Weighbar/Loadcell Cross-Reference Chart

Digi-Star

Kuhn-Knight Part Number	Digi-Star Part Number		Description	Weigh-Tronix Cross	Rated Load	Output(mv/V) @ Rated Load	Output@ 20K	
70172139	143978		1.88" W.Bar		3500	0.4	20,000	2.2857
70172138	143989		2.125" W. Bar	**W.T. Cross AWT27-500229**	10,000	0.5	20,000	1
70173034	153101	or 403275	30K CT Loadcell	**W.T. Cross 53759-0036**	30,000	3	20,000	2
70172311	146110		2.5" W.Bar		18,000	0.9	20,000	1
70174763	403804		2.5" 5 Wire Hitch Bar, 2.25 DUAL CAL	**W.T. Cross 52044-0082**	18,000	0.783	20,000	0.87
70174979	403803		2 7/8" 5 Wire Bar, 2.25 DUAL CAL	**W.T. Cross 52044-0124**	23,000	1.001	20,000	0.870
70174759	403806		3.75" 5 Wire Spindle, 2.25 DUAL CAL	**W.T. Cross 28819-0069**	30,000	1.305	20,000	0.87
70175222	403802		2.7/8"Dia. 5 Wire Spindle, 2.25 DUAL CAL	**W.T. Cross 21960-0095**	20,000	0.87	20,000	0.87
70174758	403805		2 7/8" 5 Wire Spindle, 2.25 DUAL CAL	**W.T. Cross 21960-0079**	20,000	0.87	20,000	0.87
70178474	408589		3" Spindle W.Bar		18,000	0.783	20,000	0.87
70178328	408407		3.75" Spindle W.Bar	**W.T. Cross AWT27-500189**	30,000	0.75	20,000	0.5
76043160	407541		4.5" Spindle W.Bar	**W.T. Cross AWT27-500190**	30,000	0.75	20,000	0.5
76043140	408417		5" Spindle W.Bar	**W.T. Cross AWT27-500191**	30,000	0.75	20,000	0.5

Weigh-Tronix

Kuhn-Knight Part Number	Weigh-Tronix Part Number	Description	Digi-Star Cross	Rated Load	Output(mv/V) @ Rated Load	Output@ 20K	
70172275	21594-0529	2.125" 5 Pin W.Bar, 2.125 CAL		20,000	2.1315	20,000	2.1315
70173230	49050-0097	2.125" 5 wire W.Bar, 2.125 CAL		20,000	2.1315	20,000	2.1315
70173229	49050-0121	1.88" 5 wire W.Bar, 2.125 CAL		20,000	2.1315	20,000	2.1315
N/A	AWT27-500229	2.125" 5 wire W.Bar	**D.S. Cross 143989**	10,000	0.5	20,000	1
70172310	21594-0370	2.5" 5 Pin W. Bar, 2.5 CAL		20,000	1.247	20,000	1.247
70174508	53230-0035	CC-30 Loadcell		30,000	2.13	20,000	1.42
70175256	53759-0036	CC-30-3 Loadcell (3mv/V)	**D.S. Cross 153101/403275**	30,000	3	20,000	2
70174763	52044-0082	2.5" 5 Wire Hitch Bar, 2.25 DUAL CAL	**D.S. Cross 403804**	20,000	0.867	20,000	0.867
70174758	21960-0079	2 7/8" 5 Wire Spindle Bar, 2.25 DUAL CAL	**D.S. Cross 403805**	20,000	0.867	20,000	0.867
70174759	28819-0069	3.75" 5 Wire Spindle Bar, 2.25 DUAL CAL	**D.S. Cross 403806**	20,000	0.867	20,000	0.867
70174979	52044-0124	2.7/8"Dia. 5 Wire Bar, 2.25 DUAL CAL	**D.S. Cross 403803**	20,000	0.867	20,000	0.867
70175222	21960-0095	2 7/8" 5 Wire Spindle Bar, 2.25 DUAL CAL	**D.S. Cross 403802**	20,000	0.867	20,000	0.867
76079210	AWT27-500209	2.872" Hitch W.Bar		20,000	0.867	20,000	0.867
70178328	AWT27-500189	3.75" Spindle W.Bar	**D.S. Cross 408407**	30,000	0.75	20,000	0.5
76093580	AWT27-500218	2.87" Platform W.Bar		25,000	1.084	20,000	0.8672
76043160	AWT27-500190	4.5" Spindle W.Bar	**D.S. Cross 407541**	30,000	0.75	20,000	0.5
76043140	AWT27-500191	5" Spindle W.Bar	**D.S. Cross 408417**	30,000	0.75	20,000	0.5
70178327	AWT27-500188	3.75" Hitch W.Bar		30,000	0.75	20,000	0.5
76101130	AWT27-500224	2.872 Hitch W.Bar		20,000	0.5	20,000	0.5