HydraFeeder™

INSTALLATION MANUAL

HydraBed®

The Original Flatbed Bale Handler

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As with any device designed to transfer feed, some cautions are in order. Keep this manual available at all times and refer to it regularly.

NEVER allow yourself or anyone else inside the ***HydraFeeder***™ or near the discharge tube outlet while it is in operation or with the vehicle running.

NEVER operate the hydraulic pump power source at flows in excess of 15 GPM or serious hydraulic motor damage may result that will not be covered by warranty.

NEVER allow children or other unauthorized personnel access to the controls for your ***HydraFeeder***™.

NEVER load/unload ***HydraFeeder***™ while filled with feed unless proper precautions have been taken. Consult factory for proper instructions.

ALWAYS use sound judgment and common sense when operating your ***HydraFeeder***™.

HYDRAFEEDER™ Installation Instructions on all HYDRA BED® Models

1 Using the arm pins provided with the ***HydraFeeder***™, lift the unit onto the ***HydraBed***®. Slide the ***HydraFeeder***™ forward against the headache rack and center it.

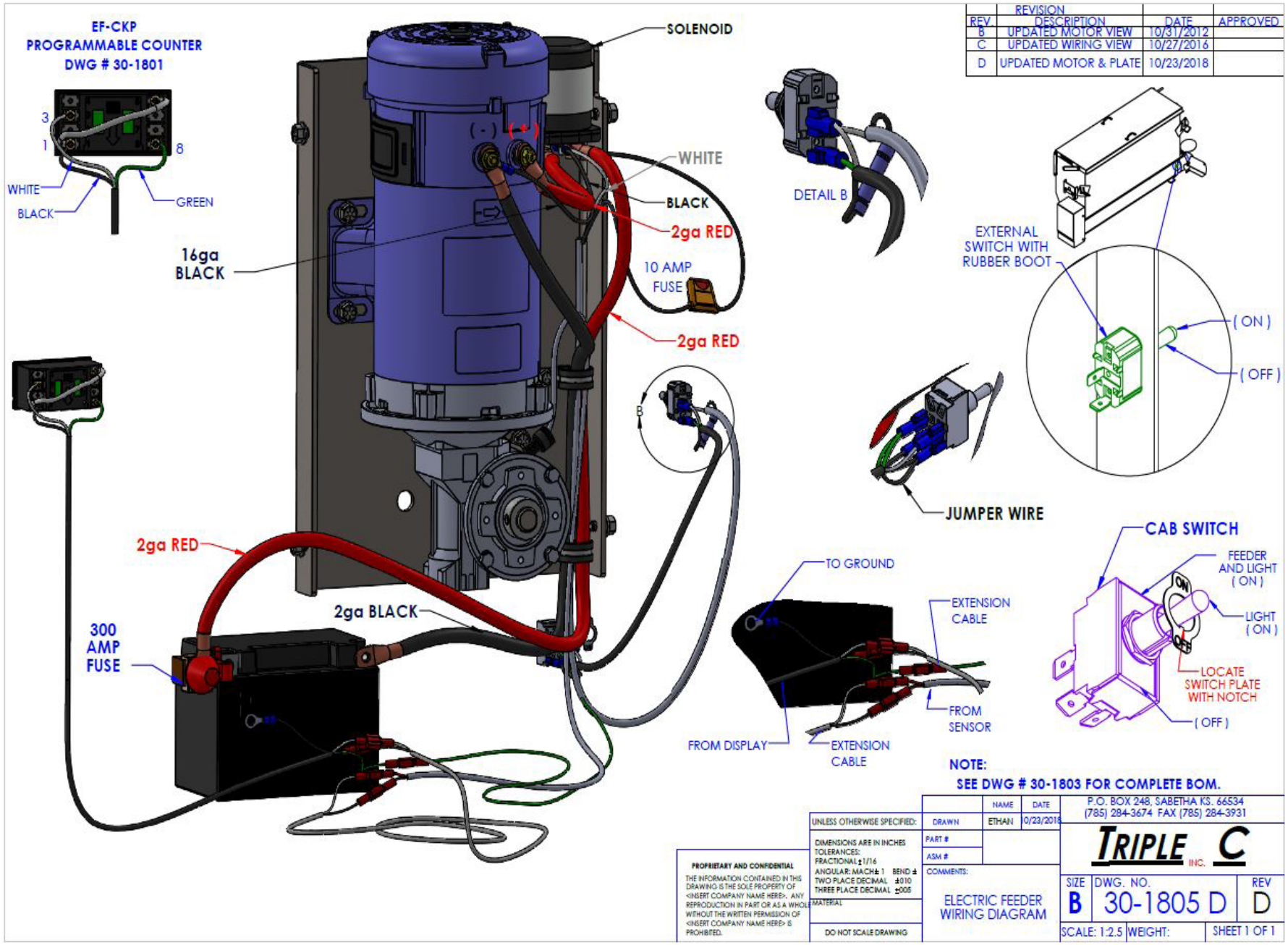
2 [**OPTIONAL**] Mark and drill two 7/16" holes into the bed floor through the slots located in the ***HydraFeeder***™ feet.

3 [**OPTIONAL**] Attach ***HydraFeeder***™ feet to bed floor using 3/8 bolts, washers and nuts.

4 With the two 5/16" U-bolts provided, fasten the ***HydraFeeder***™ tabs to the headache rack.

5a Hydraulic: Attach the hydraulic hoses to the hydraulic motor fittings on the ***HydraFeeder***™. Route and secure the hoses over the filler plate in the headache rack and under the bed to the auxiliary rear quick couplers.

5b Electric: Route the battery and digital counter cabling through the ***HydraBed***® knockout (optional) along the vehicle frame. The counter cabling will route into the cab and the battery cabling will maintain it's route along the frame to the vehicle battery. Make the counter wiring connections per drawing 30-1807 (pg 6). Connect the 300 amp fuse to the positive post of the battery and connect the red battery cable to the fuse. Connect the black battery cable to a suitable ground. Refer to drawing 30-1805 (pg 3) for the secondary switch installation.



REV	DESCRIPTION	DATE	APPROVED
B	UPDATED MOTOR VIEW	10/31/2012	
C	UPDATED WIRING VIEW	10/27/2016	
D	UPDATED MOTOR & PLATE	10/23/2018	

NOTE:
SEE DWG # 30-1803 FOR COMPLETE BOM.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±1/16
ANGULAR: MACH ± 1 BEND ± 1
TWO PLACE DECIMAL ±010
THREE PLACE DECIMAL ±005
MATERIAL
DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	ETHAN	10/23/2018
PART #		
ASM #		
COMMENTS:		

ELECTRIC FEEDER WIRING DIAGRAM

P.O. BOX 248, SABETHA KS. 66534
(785) 284-3674 FAX (785) 284-3931

TRIPLE C INC.

SIZE	DWG. NO.	REV
B	30-1805 D	D

SCALE: 1:2.5 WEIGHT: SHEET 1 OF 1

HYDRAFEEDER™ Digital Counter Installation Instructions

HYDRAULIC MOTOR MOUNTED SENSOR AND PROGRAMMABLE DISPLAY

1 Using the 3-foot piece of 18/3-jacketed wire, attach the black lead to no. 1 terminal, the white lead to no. 2 terminal and the green lead to no. 8 terminal on back of display.

2 Locate your preferred location in the cab for the digital counter (typically on the dash to the left of the steering column) and route the wire to a location under the dash near the ***HydraBed***® dash bracket.

3 Connect the 20' Sensor Harness (HF12-46) to the sensor on the ***HydraFeeder***™ motor, routing it along the truck chassis and into the cab in a protected and secure manner to a location under the dash near the ***HydraBed***® dash bracket.

4 Make all other wire connections per drawing 30-1800 (pg 5). Make certain to attach power lead to the switched side of the hydraulic pump switch using the quick splice provided. This connection method will only supply power to display and sensor when hydraulic pump is on.

ELECTRIC MOTOR MOUNTED SENSOR AND PROGRAMMABLE DISPLAY

1 Using the 3-foot piece of 18/3-jacketed wire, attach the black lead to no. 1 terminal, the white lead to no. 3 terminal and the green lead to no. 8 terminal on back of display.

2 Locate your preferred location in the cab for the digital counter (typically on the dash to the left of the steering column) and route the wire to a location under the dash near the ***HydraBed***® dash bracket.

3 Connect the 17' Sensor Harness to the sensor on the ***HydraFeeder***™ motor, routing it along the truck chassis and into the cab in a protected and secure manner to a location under the dash near the ***HydraBed***® dash bracket.

4 Make all other wire connections per drawing 30-1807 (pg 6). The green power wire with the spade terminal from the counter connects to the green power lead with the spade terminal of the switch. This connection method supplies power to the backlight of the display when the main switch is turned on.

NOTES:

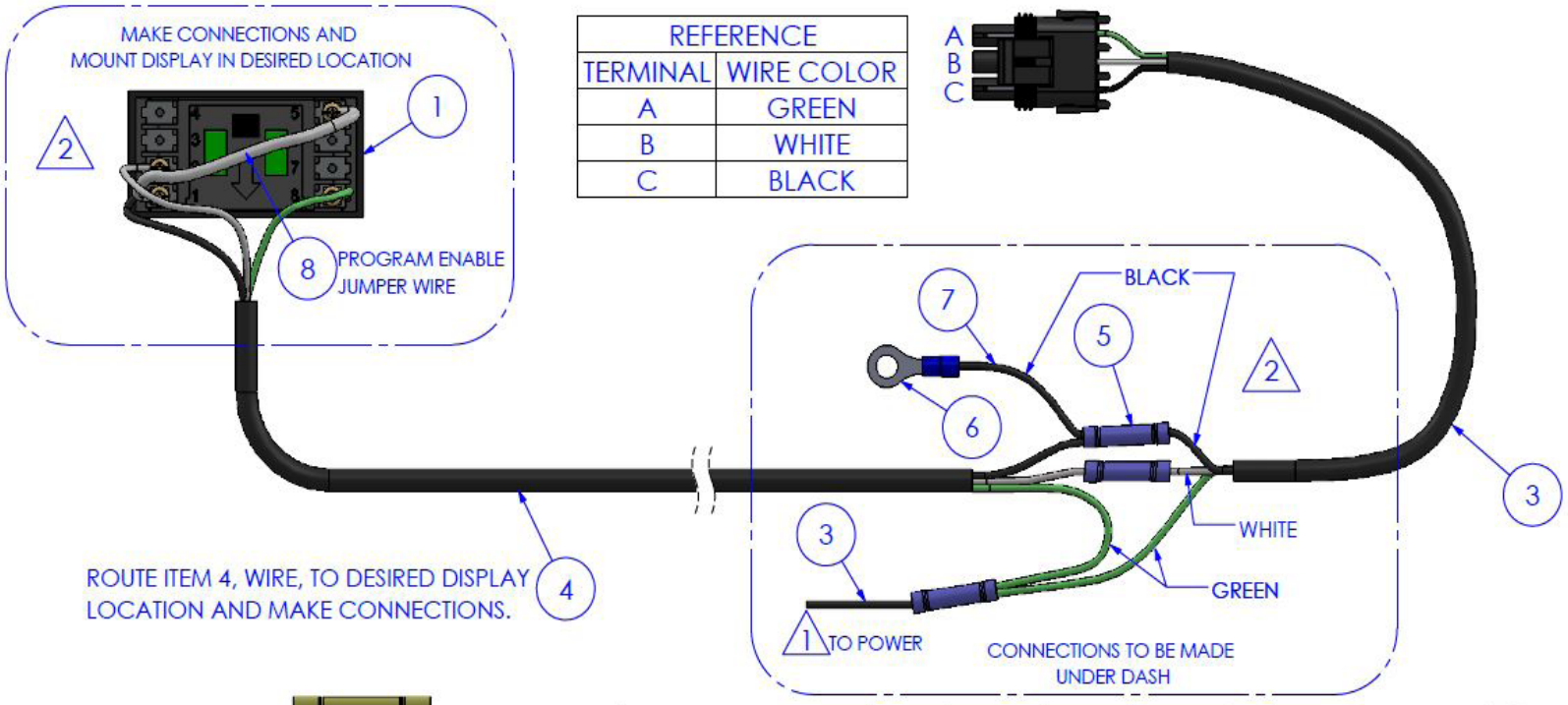
1. USE ITEM 8, QUICK SPLICE, TO CONNECT TO HYDRAULIC PUMP POWER WIRE ON A HYDRA BED SYSTEM.

   CONNECT TO SWITCHED AND FUSED POWER LEAD FOR OTHER APPLICATIONS.

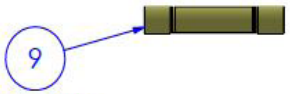
2. STRIP JACKET FROM WIRES AND MAKE CONNECTIONS AS SHOWN.

3. PROVIDED WIRES MAY BE CUT TO LENGTH TO MAKE CONNECTIONS.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	A103-001	DIGITAL DISPLAY	1
2	VELCRO	VELCRO FASTENER	1-1/2 IN
3	HF12-46	SENSOR HARNESS, 20 FT	1
4	W18/3 SVO	18/3 JACKETED WIRE	3 FT
5	BC422005	BLUE BUTT CONNECTOR	3
6	RT152565	RING TERMINAL, 5/16	1
7	W37140	14 GA WIRE, BLACK	2 FT
8	EL-QS905595	BLUE QUICK SPLICE	1
9	BC423005	YELLOW BUTT CONNECTOR	1
10	HF12-64	BRACKET, DISPLAY	1



REFERENCE	
TERMINAL	WIRE COLOR
A	GREEN
B	WHITE
C	BLACK



MAY NEED TO BE USED TO TAP INTO EXISTING POWER WIRE.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ± 1/16
ANGULAR: MACH ± 1 BEND ± 1
TWO PLACE DECIMAL ± 010
THREE PLACE DECIMAL ± 005

MATERIAL

DO NOT SCALE DRAWING

DRAWN: ETHAN 10/26/2016
PART #: Part #
ASM #: Asm #
COMMENTS:
HYDRA-FEEDER SENSOR COUNTER

TRIPLE C INC
P.O. BOX 248, SABETHA, KS 66534
(785) 284-3674 FAX (785) 284-3931

SIZE A | DWG. NO. 30-1800 B | REV A
SCALE: 1:8 | WEIGHT: | SHEET 1 OF 1

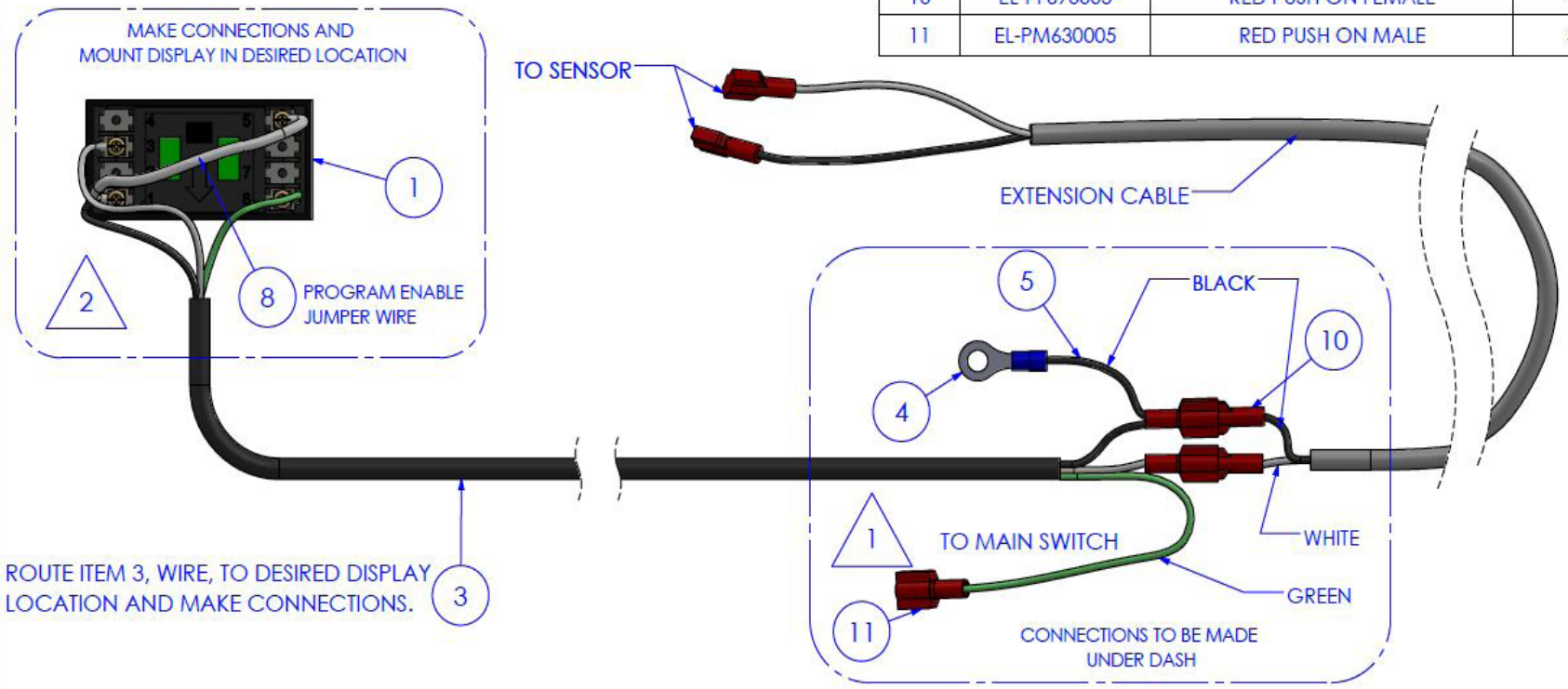
NOTES:

1. CONNECT TO MAIN SWITCH GREEN WIRE

2. STRIP JACKET FROM WIRES AND MAKE CONNECTIONS AS SHOWN.

3. PROVIDED WIRES MAY BE CUT TO LENGTH TO MAKE CONNECTIONS.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	A103-001	DIGITAL DISPLAY	1
2	VELCRO	VELCRO FASTENER	1-1/2 IN
3	W18/3 SVO	18/3 JACKETED WIRE	3 FT
4	RT152565	RING TERMINAL, 5/16	1
5	W37140	14 GA WIRE, BLACK	2 FT
6	BC423005	YELLOW BUTT CONNECTOR	1
7	EL-QS905595	BLUE QUICK SPLICE	1
8	W29165	16 GA WIRE, WHITE	2-3/4 IN
9	HF12-64	BRACKET, DISPLAY	1
10	EL-PF690005	RED PUSH ON FEMALE	4
11	EL-PM630005	RED PUSH ON MALE	3



UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ± 1/16
ANGULAR: MACH ± 1 BEND ±
TWO PLACE DECIMAL ± 010
THREE PLACE DECIMAL ± 005
MATERIAL
DO NOT SCALE DRAWING

DRAWN ETHAN 9/26/2018
PART # Part #
ASM # Asm #
COMMENTS:
ELECTRIC-FEEDER SENSOR COUNTER

TRIPLE C INC
P.O. BOX 248, SABETHA, KS 66534
(785) 284-3674 FAX (785) 284-3931

SIZE A | DWG. NO. 30-1807 A | REV A
SCALE: 1:8 | WEIGHT: | SHEET 1 OF 1

PROGRAMMABLE DISPLAY - HYDRAULIC ONLY

The digital counter is factory configured to count one digit per auger revolution. The factory preset for menu 1 is 00.0667. If you desire your counter to display "pounds of feed", follow these instructions to calculate your programming factor.

To determine the programming factor:

1 Obtain a container to run feed into. Weigh that container empty.
Example: Empty container weighs 4 pounds.

2 With the readout displaying zeros, run some feed into the container. The larger the sample size, the greater your accuracy.

3 Record the number on the digital display.
Example: Number on display is 7

4 Weigh the full container and subtract the weight of the container.
Example: 67 – 4 = 63 pounds of feed

5 Divide the number of pounds by the number on the display. This will be the number of pounds per revolution.
Example: 63 / 7 = 9

6 Divide the number of pounds per revolution by 15. This will be the factor you will program into the digital display.
Example: 9 / 15 = .6000

7 This is the programming factor for that particular feed. Replace the number calculated in step 6 (Example 0.6000) in the first counter parameter. See page 9 for instructions to enter the factor into the counter. Record this factor and feed type for future reference.

For accurate feeding, this must be done for each different type of feed.

PROGRAMMABLE DISPLAY - ELECTRIC ONLY

The digital counter is factory configured to count one digit per auger revolution. The factory preset for menu 1 is 01.0000. If you desire your counter to display "pounds of feed", follow these instructions to calculate your programming factor.

To determine the programming factor:

1 Obtain a container to run feed into. Weigh that container empty.
Example: Empty container weighs 4 pounds.

2 With the readout displaying zeros, run some feed into the container. The larger the sample size, the greater your accuracy.

3 Record the number on the digital display.
Example: Number on display is 7

4 Weigh the full container and subtract the weight of the container.
Example: 67 – 4 = 63 pounds of feed

5 Divide the number of pounds by the number on the display. This will be the number of pounds per revolution.
Example: 63 / 7 = 9

6 This is the programming factor for that particular feed. Replace the number calculated in step 5 (Example: 9) in the first counter parameter. See page 10 for instructions to enter the factor into the counter. Record this factor and feed type for future reference.

For accurate feeding, this must be done for each different type of feed.

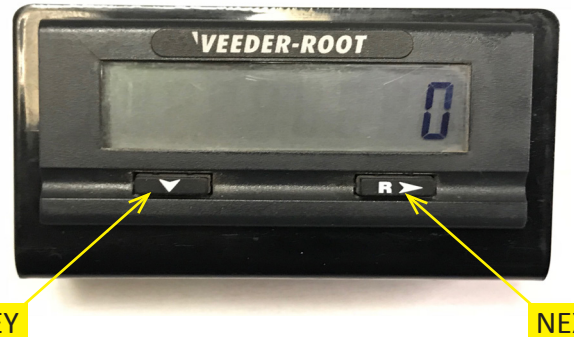
HYDRAULIC COUNTER CONFIGURATION

Entering the factor into the digital display:

Refer to the Technical Manual shipped with the digital display.

There are four (4) parameters that make up the programmable display. The leftmost digit designates each parameter. Once in the programming mode, you must scroll through each parameter to return to normal operation.

The display is configured from the factory to enter the programming mode simply by pressing the Down (left) Key.



Programming parameters can be accessed by pressing the Down Key. To edit a parameter use the Down key to scroll until the desired parameter appears on the screen. Pressing the Next key will cause the leftmost digit of that value to begin to flash. Use the Next and Down keys in combination to choose individual digits and change their value.

1 The first menu is the count-input calibrator. Using the next/reset key, input your factor number that you calculated in step 6 on page 7. Press the next/reset once more after you have entered the last digit of your factor, then press the down key to advance to next parameter. **Factory preset is 00.0667**.

2 The second menu is the “Display Decimal Point”. This should be set to “off’. Press the down key to advance to next parameter.

3 The third menu is the “Count Offset”. This should be set to “000000”. All zeros. Press the down key to advance to next parameter.

4 The fourth menu is the “Front Panel Reset Enable”. This should be set to “on”. Press the down key once more.

5 Your digital display is now configured to display the number of pounds for that particular feed.

ELECTRIC COUNTER CONFIGURATION

Entering the factor into the digital display:

Refer to the Technical Manual shipped with the digital display.

There are four (4) parameters that make up the programmable display. The leftmost digit designates each parameter. Once in the programming mode, you must scroll through each parameter to return to normal operation.

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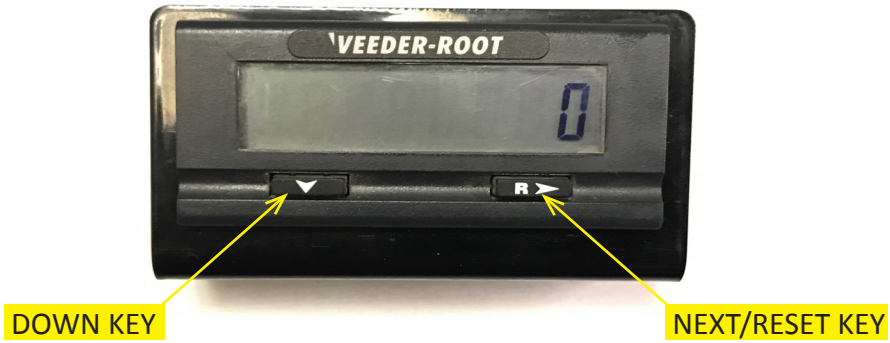

Programming parameters can be accessed by pressing the Down Key. To edit a parameter use the Down key to scroll until the desired parameter appears on the screen. Pressing the Next key will cause the leftmost digit of that value to begin to flash. Use the Next and Down keys in combination to choose individual digits and change their value.

1 The first menu is the count-input calibrator. Using the next/reset key, input your factor number that you calculated in step 6 on page 8. Press the next/reset once more after you have entered the last digit of your factor, then press the down key to advance to next parameter. **Factory preset is 01.0000**.

2 The second menu is the “Display Decimal Point”. This should be set to “off’. Press the down key to advance to next parameter.

3 The third menu is the “Count Offset”. This should be set to “000000”. All zeros. Press the down key to advance to next parameter.

4 The fourth menu is the “Front Panel Reset Enable”. This should be set to “on”. Press the down key once more.

5 Your digital display is now configured to display the number of pounds for that particular feed.

HYDRAFEEDER™ Initial Startup Procedures

Hydraulic

1 Engage pump switch and activate the appropriate hydraulic control.

2 After the air is purged from the hoses and motor, the auger will begin to rotate.

3 Check digital read-out for activity. If no rotations are indicated, turn off vehicle engine and check all wire connections.

4 If all functions are functioning properly, partially fill feeder with feed.

5 Reset read-out to zero by pressing the right button once.

Electric

1 There are two switches that can operate the electric motor, the main switch in the cab and the momentary switch located at the discharge end of the feeder. The main switch has three positions, OFF, ON and MOMENTARY. The ON position illuminates the back light on the digital counter and provides operation to the switch on the feeder. The switch must be in this position to use the momentary switch on the feeder. The MOMENTARY position operates the electric feeder motor.

2 Engage the switch(es) to the MOMENTARY position and the auger will begin to rotate.

3 Check digital read-out for activity. If no rotations are indicated, turn off switch and check all wire connections.

4 If all functions are functioning properly, partially fill feeder with feed.

5 Reset read-out to zero by pressing the right button once.

HYDRAFEEDER™ Operating Procedures

1 Inspect for and remove any foreign objects from feeder interior.

2 Fill feeder to the desired level with any non-corrosive free flowing feed or grain product.

3 Activate hydraulic controls or switch to rotate auger in the discharge direction.

4 To retract feed remaining in discharge tube, reverse hydraulic control for 3 to 5 auger revolutions (***HYDRAULIC ONLY***).

Excessive reversing is unnecessary and may reduce the life of some components.

5 Repeat the above steps as often as necessary for your feeding routine.

6 Do not leave feed in the unit for extended periods of time, as moisture may accumulate in the feed, causing corrosion and/or other damage.

7 Should stalling of the auger occur, momentarily reversing the auger (***HYDRAULIC ONLY***) may assist in freeing the problem.

8 If it is necessary to load/unload ***HydraFeeder***™ onto the ***HydraBed***® while loaded, consult with factory.