



U HARVEST^{PRO} **Grain Handling**

Data Management System
Grain Cart Installation Guide &
Parts Manual
for Carts equipped with Scales

Part No. 276851

Foreword



This symbol identifies important safety messages. When you see it, read the message that follows and be alert to the possibility of personal injury.

Remember, safety instructions stated in this manual are for your protection. Read them carefully and follow them closely when working around or using this machine.

Read and study this manual completely before attempting to operate this implement. Take this manual to the field for handy reference when operating, adjusting, or servicing your machine.

When referenced, “Right-Hand” (RH) and “Left-Hand” (LH) side of the machine are determined by standing behind the machine and facing in the direction of travel.

Product Information

When ordering parts or when requesting further information or assistance, always give the following information:

- Machine name
- Model number
- Serial number

Registration

Be sure to register your UHarvest system to be eligible for warranty and receive software update notifications. Locate the grain cart GCM (Grain Cart Module) serial number and then visit uharvest.net to register.

All products manufactured by Unverferth Mfg. Co., Inc. are warranted to be free from material and workmanship defects for one full year from time of consumer delivery. Your local dealer will gladly assist you with any warranty questions.

Please fill out and retain this portion for your records. The serial number plate is located as shown below.

Purchase Date _____ Model _____ Serial No. _____

Dealer _____ City _____

Dealer Contact _____ Phone _____



IMPORTANT

- *The information, specifications, and illustrations in the manual are based on information available at the time it was written. Due to continuing improvements in the design and manufacture of Unverferth products, all specifications and information contained herein are subject to change without notice.*

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*Refer to page 5 for a list of carts that your cart may fall under.

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Section II Set Up

*For other brands of grain carts with this design, set up procedures may vary from the instructions provided.

The list below indicates what category each grain cart model refers to:

Single-Auger Front-Fold	
Unverferth:	
	1019, 1119, 1319, 1519

Single-Auger Rear-Fold	
Brent:	
	V700, V800, V1000, V1100, V1300, V1500
Killbros:	
	735, 835, 1035, 1135
Parker:	
	742, 842, 1042, 1142
Unverferth:	
	760, 860, 1060, 1160

Double-Auger	
Brent:	
	1196, 1396, 1596, 2096, 2596
Killbros:	
	1111, 1311, 1611, 1113, 1313, 1613
Parker:	
	1648, 1152, 1352, 1154, 1354, 1654
Unverferth:	
	1110, 1310, 1610, 1120, 1320, 1620, 2020

In-Line Auger	
Parker:	
	1348

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Section I

Safety

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General Hazard Information

No accident-prevention program can be successful without the wholehearted cooperation of the person who is directly responsible for the operation of the equipment.

A large number of accidents can be prevented only by the operator anticipating the result before the accident is caused and doing something about it. No power-driven equipment, whether it be transportation or processing, whether it be on the highway, in the field, or in the industrial plant, can be safer than the person who is at the controls. If accidents are to be prevented--and they can be prevented--it will be done by the operators who accept the full measure of their responsibility.

It is true that the designer, the manufacturer, and the safety engineer can help; and they will help, but their combined efforts can be wiped out by a single careless act of the operator.

It is said that, "the best kind of a safety device is a careful operator." We, at Unverferth Mfg. Co., Inc. ask that you be that kind of operator.



REMEMBER:
THINK SAFETY
A CAREFUL OPERATOR IS THE
BEST INSURANCE AGAINST AN
ACCIDENT!

SIGNAL WORDS



INDICATES AN EXTREMELY HAZARDOUS SITUATION OR ACTION THAT WILL RESULT IN SERIOUS INJURY OR DEATH.



INDICATES A HAZARDOUS SITUATION OR ACTION THAT COULD RESULT IN SERIOUS INJURY OR DEATH.



INDICATES AN UNSAFE SITUATION OR ACTION THAT MAY RESULT IN PERSONAL INJURY.



Is used for instruction on operating, adjusting, or servicing a machine.

Following Safety Instructions

- Read and understand this operator's manual before operating.
- All machinery should be operated only by trained and authorized personnel.
- To prevent machine damage, use only attachments and service parts approved by the manufacturer.
- Always shut tractor engine off and remove key before servicing.
- Avoid personal attire such as loose fitting clothing, shoestrings, drawstrings, pants cuffs, long hair, etc., that may become entangled in moving parts.



Before Servicing

- Do not stand between towing vehicle and implement during hitching.
- Avoid working under an implement; however, if it becomes absolutely unavoidable, make sure the implement is safely blocked.
- Ensure that all applicable safety decals are installed and legible.



Before Operating

- Do not stand between towing vehicle and implement during hitching.
- Always make certain everyone and everything is clear of the machine before beginning operation.
- Verify that all safety shields are in place and properly secured.
- Ensure that all applicable safety decals are installed and legible.
- Secure drawbar pin with safety lock and lock tractor drawbar in fixed position.

Driveline Safety

- Do not allow children near equipment that is running or engaged.
- Do not exceed 1000 rpm PTO speed.
- Disengage the PTO, stop the tractor engine, and remove key from ignition before making inspections, or performing maintenance and repairs.



Pressurized Oil

- Relieve pressure before disconnecting hydraulic lines from tractor, loosening any hydraulic fittings or servicing hydraulic system. See hydraulic power unit manual for procedure to relieve pressure.
- High-pressure fluids can penetrate the skin and cause serious injury or death. Use cardboard or wood to detect leaks in the hydraulic system. Seek medical treatment immediately if injured by high-pressure fluids.
- Hydraulic system must be purged of air before operating to prevent serious injury or death.
- Do not bend or strike high-pressure lines. Do not install bent or damaged tubes or hoses.
- Repair all oil leaks. Leaks can cause fires, personal injury, and environmental damage.
- Route hoses and lines carefully to prevent premature failure due to kinking and rubbing against other parts. Make sure that all clamps, guards and shields are installed correctly.
- Check hydraulic hoses and tubes carefully. Replace components as necessary if any of the following conditions are found:
 - End fittings damaged, displaced, or leaking.
 - Outer covering chafed/cut or wire reinforcing exposed.
 - Outer covering ballooning locally.
 - Evidence of kinking or crushing of the flexible part of a hose.



Preparing for Emergencies

- Keep a first aid kit and properly rated fire extinguisher nearby.



- Keep emergency numbers for fire, rescue, and poison control personnel near the phone.



Wearing Protective Equipment

- Wear clothing and personal protective equipment appropriate for the job.



- Wear steel-toed shoes when operating.



- Wear hearing protection when exposed to loud noises.



- Do not wear additional hearing impairing devices such as radio headphones, etc.



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*Refer to page 5 for a list of carts that your cart may fall under.

General Set Up Instructions

WARNING

- **TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE MACHINE IS SECURELY BLOCKED.**

- **FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT WORK UNDER THE MACHINE AT ANY TIME WHILE BEING HOISTED. BE SURE ALL LIFTING DEVICES AND SUPPORTS ARE RATED FOR THE LOADS BEING HOISTED. THESE ASSEMBLY INSTRUCTIONS WILL REQUIRE A SAFE LIFTING DEVICE PER MODEL AS LISTED IN THE FOLLOWING CHARTS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.**

- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.**

- **KEEP HANDS CLEAR OF PINCH POINT AREAS.**

This manual is for installation of the UHarvest Pro data system components on the implement. For installation of related cabling on the tractor, please refer to your UHarvest Pro Operation Guide.

Scale Kit Installation — Grain Carts with 3-Point Scales

Hitch Assembly

Park the empty grain cart on a firm, level surface. Block the tires/tracks on the machine to keep it from moving. Completely disconnect cart from tractor.

1. Remove the capscrew, lock washer, and nut to remove the standard hitch. Remove the original bushing.
2. Replace with load cell, making sure to feed the scale wire through the conduit to the Junction Box.

BRENT Models:	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9004913)
V700, V800, V1000, V1100	
KILLBROS Models:	
735, 835, 1035, 1135	
PARKER Models:	
742, 842, 1042, 1142	
UNVERFERTH Models:	
760, 860, 1060, 1160, 1019, 1119	

NOTE: The bending direction decal on the end of the load cell should point up. Also, the load cell should be installed with the serial number decal facing up.

3. Reusing the capscrew, lock washer and hex nut, assemble the load cell to the tongue. Use the provided longer bushing.
4. Reattach the hitch casting to the load cell using hitch pin and retaining rings.

NOTE: Refer to previous page and PARTS section for reference.

Scale Kit Installation — Grain Carts with 3-Point Scales

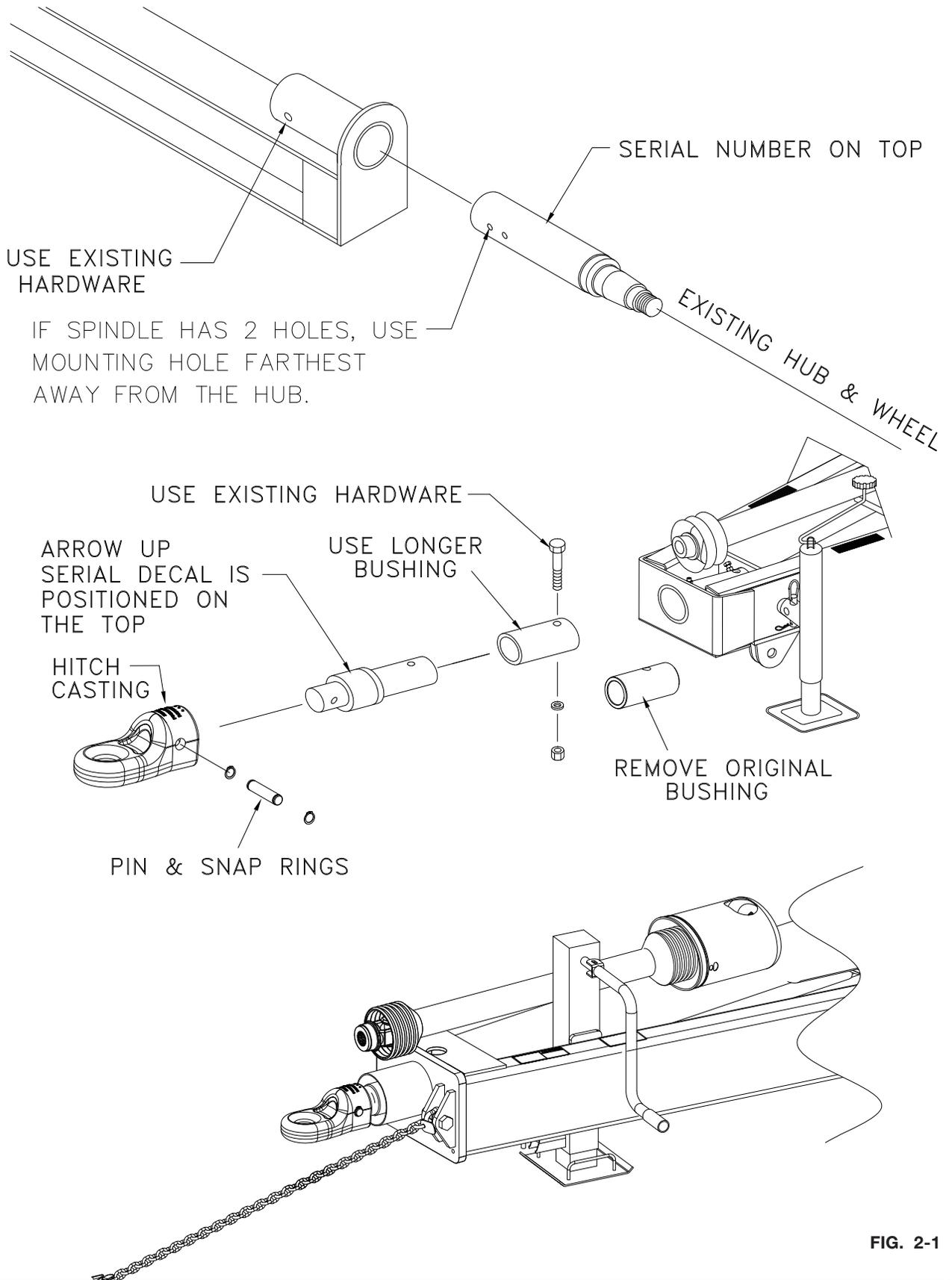


FIG. 2-1

**Scale Kit Installation
Grain Carts with 3-Point Scales**

Axle Load Cell Installation

⚠ WARNING

- BEFORE PROCEEDING, REFER TO INDEX PAGE 2-2 FOR PROPER WARNINGS.

SAFE LIFTING DEVICE WEIGHT	
BRENT Models:	
V700	12,000 Lbs.
V800, V1000	14,000 Lbs.
V1100	16,000 Lbs.
KILLBROS Models:	
735	9,000 Lbs.
835	10,000 Lbs.
1035, 1135	14,000 Lbs.

SAFE LIFTING DEVICE WEIGHT	
PARKER Models:	
742	9,000 Lbs.
842	10,000 Lbs.
1042, 1142	14,000 Lbs.
UNVERFERTH Models:	
760	9,000 Lbs.
860	10,000 Lbs.
1060, 1160	14,000 Lbs.
1019	18,000 Lbs.
1119	24,000 Lbs.

1. With the cart empty, use a safe lifting device with a minimum weight rating per chart to support the weight of your grain cart. Place the safe lifting device under the axle, near the tire.

IMPORTANT

- *Replace only 1 spindle at a time.*
2. Using a 500 lbs. rated lifting device, remove wheel and tire. Refer to MAINTENANCE section for wheel removal and replacement procedures.
 3. Starting on the left-side of the cart, remove the bolt and lock nut that retains the spindle and hub assembly to the axle. Using a lifting device rated for 150 lbs, replace the spindle. Coat axle contact length of spindle shaft with anti-seize lubricant prior to installation. Install with 'top' decal facing upwards. Reuse bolt and lock nut to retain spindle to axle. For walking tandem units, use the hole closest to the hub to retain the spindle. Tighten as outlined in MAINTENANCE section.
 4. Using a 150 lbs. rated lifting device, re-install hub assembly, removed in Step 2, onto spindle. Install outer bearing, spindle washer and castle nut.
 5. Attach the wheel(s) and tire(s) to the hub using the same rated lifting device for removal. Tighten wheel nuts to appropriate requirements and recheck as outlined in the "Wheel and Tire" section of this manual. Raise cart, remove safe lifting device and lower tire to the ground.
 6. Repeat steps 2 through 5 on right-side of the cart.

**Scale Kit Installation - Walking Tandems & Steerable Tandems
with 5-Point Scales**

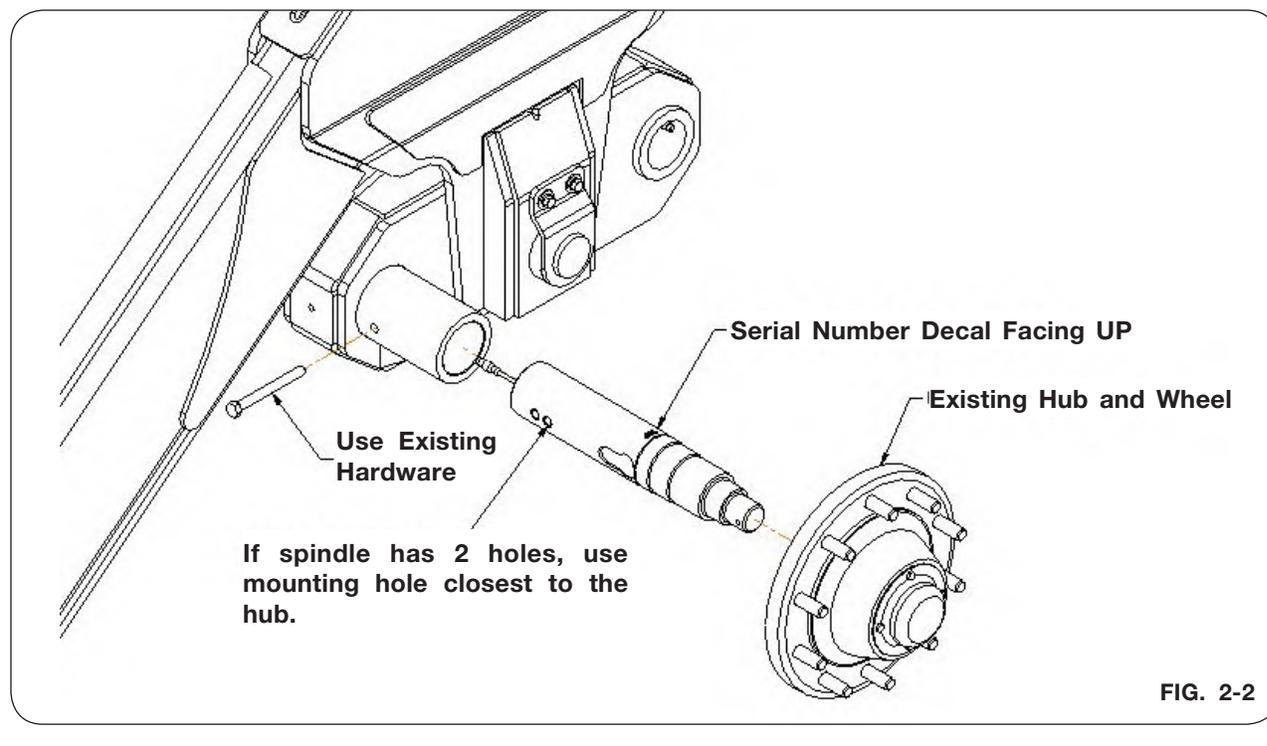


FIG. 2-2

**Scale Kit Installation - Walking Tandems & Steerable Tandems
with 5-Point Scales**

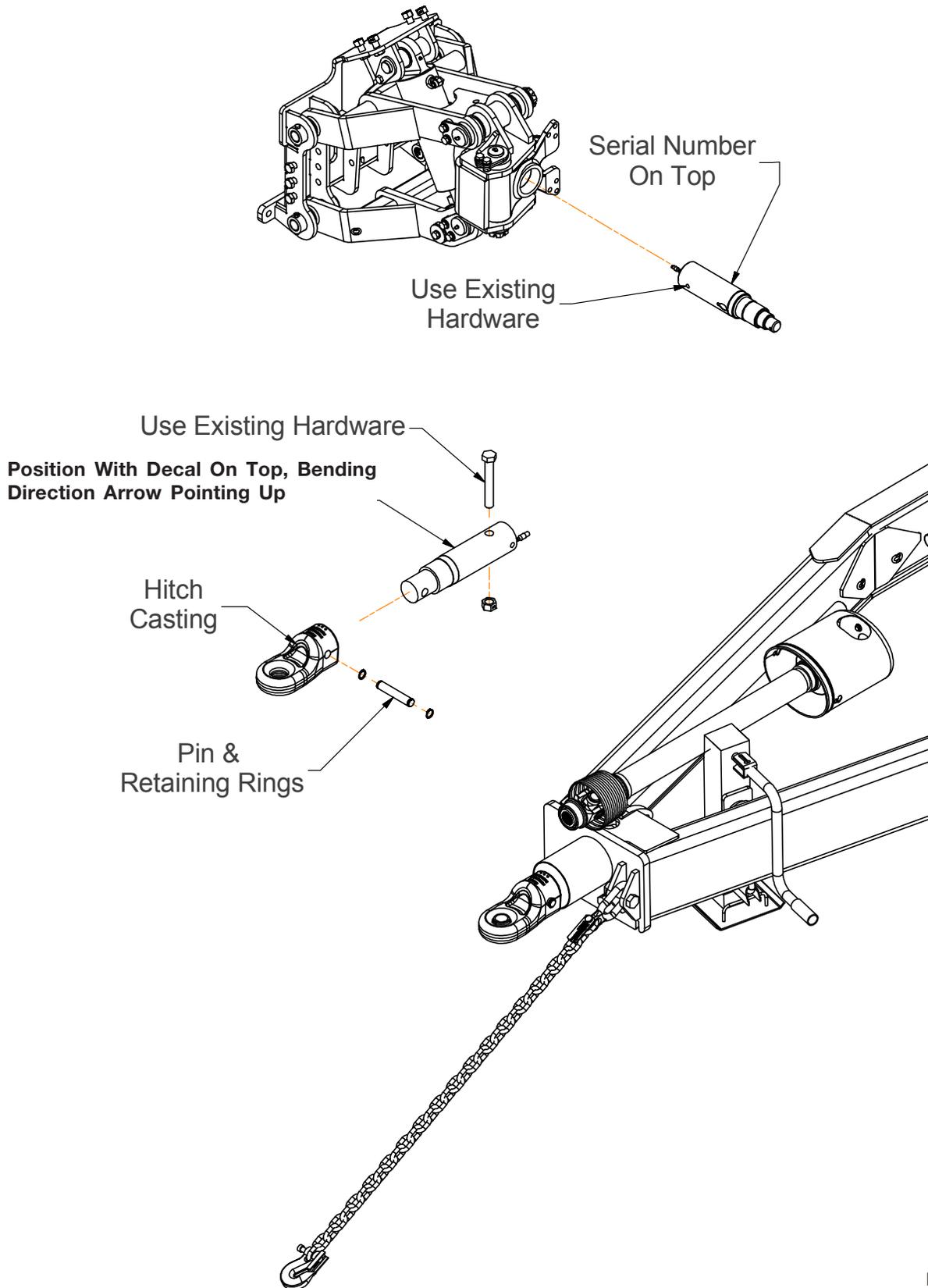


FIG. 2-3

Scale Kit Installation - Walking Tandems & Steerable Tandems with 5-Point Scales

Hitch Assembly

Park the empty grain cart on a firm, level surface. Block the tires/tracks on the machine to keep it from moving. Completely disconnect cart from tractor.

1. Remove the retaining rings and pin. Then remove hitch casting and hitch pin.
2. Remove hex nut, lock washer and capscrew.
3. Remove standard hitch and replace with load cell, making sure to feed the scale wire through the conduit to the Junction Box.

BRENT Models:	
1196, 1396, 1596	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9004910)
2096	Replace Standard Hitch with Scale Hitch Weigh Bar 3 3/4" Dia. (9008135)
KILLBROS Models:	
1111, 1311, 1311, 1313, 1613	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9004910)
PARKER Models:	
1348, 1152, 1352, 1154, 1354, 1654	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9004910)
UNVERFERTH Models:	
1110, 1310, 1120, 1320, 1620	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9004910)

NOTE: The bending direction decal on the end of the load cell should point up. Also, the load cell should be installed with the serial number decal facing up.

4. Reusing the capscrew, lock washer and hex nut, assemble the load cell to the tongue.
5. Reattach the hitch casting to the load cell using hitch pin and retaining rings.

Scale Kit Installation - Walking Tandems & Steerable Tandems with 5-Point Scales

Axle Load Cell Installation

⚠ WARNING

- BEFORE PROCEEDING, REFER TO INDEX PAGE 2-2 FOR PROPER WARNINGS.

SAFE LIFTING DEVICE WEIGHT	
BRENT Models:	
1196, 1396	24,000 Lbs.
1596	28,000 Lbs.
2096	36,000 Lbs.
KILLBROS Models:	
1111, 1311, 1311, 1313	22,000 Lbs.
1613	28,000 Lbs.

SAFE LIFTING DEVICE WEIGHT	
PARKER Models:	
1348, 1152, 1352, 1154, 1354	22,000 Lbs.
1654	28,000 Lbs.
UNVERFERTH Models:	
1110, 1310, 1120, 1320	22,000 Lbs.
1620	28,000 Lbs.

1. With the cart empty, use safe lifting device with a minimum weight rating per chart to support the weight of your grain cart. Place the safe lifting device on undercarriage rear of the axle.

IMPORTANT

- Replace only 1 load cell at a time. Follow Steps 2-5 before loosening hardware on any of the other load cells.

2. Starting on the left side of the cart in front of the axle, remove capscrews, flat washers, lock washers and hex nuts connecting the axle mount weldment.

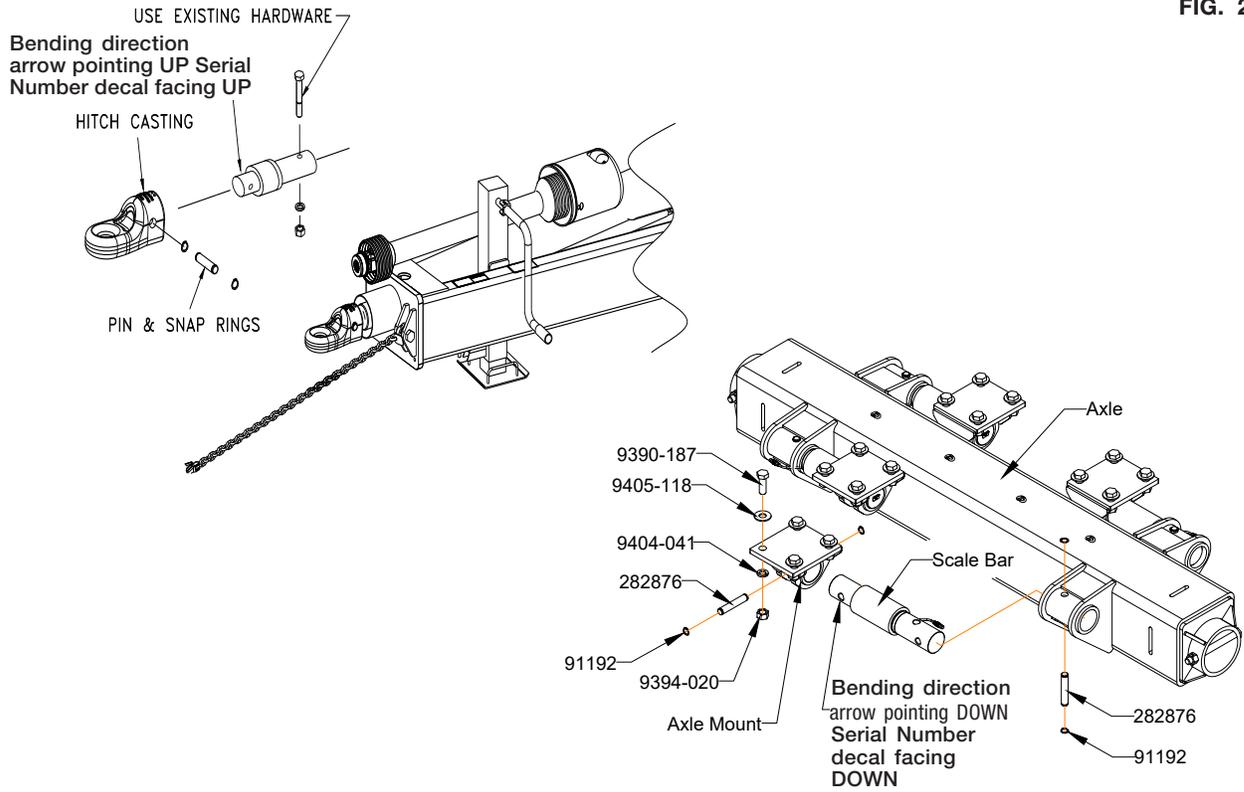
NOTE: The bending direction decal on the end of the load cell should point up. Also, the load cell should be installed with the serial number decal facing up.

4. Remove retaining rings and pins retaining both ends of the non-scale bars.
5. Replace non-scale bars with load cells using retaining rings and pins removed in step 3 to connect load cells to axle and axle mount weldments.
6. Reattach capscrews, flat washers, lock washers and hex nuts removed in step 2 to connect the axle mount weldments to the cart frame.
7. Route scale wires along axle and cart frame to location of Junction Box installation.

Scale Kit Installation - Tracks with 5-Point Scales

Layout for Models with Tracks

FIG. 2-4



Scale Kit Installation - Tracks with 5-Point Scales

Hitch Assembly

Park the empty grain cart on a firm, level surface. Block the tires/tracks on the machine to keep it from moving. Completely disconnect cart from tractor.

1. Remove the retaining rings and pin. Then remove hitch casting and hitch pin.
2. Remove hex nut, lock washer and capscrew.
3. Standard hitch can be removed and replace with load cell, making sure to feed the scale wire through the conduit to the Junction Box.

BRENT Models:	
V800, V1000, V1100, V1300, V1500, 1196, 1396, 1596	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9004910)
2096	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9008119)
KILLBROS Models:	
835, 1035, 1135, 1111, 1311, 1611, 1113, 1313, 1613	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9004910)
PARKER Models:	
842, 1042, 1142, 1348, 1152, 1352, 1648, 1154, 1354, 1654	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9004910)
UNVERFERTH Models:	
860, 1060, 1160, 1019, 1119, 1319, 1519, 1110, 1310, 1610, 1120, 1320, 1620	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9004910)
2020	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9008119)

NOTE: The bending direction decal on the end of the load cell should point up. Also, the load cell should be installed with the serial number decal facing up.

4. Reusing the capscrew, lock washer and hex nut, assemble the load cell to the tongue.
5. Reattach the hitch casting to the load cell using hitch pin and retaining rings.

Scale Kit Installation - Tracks with 5-Point Scales

Axle Load Cell Installation

WARNING

- BEFORE PROCEEDING, REFER TO INDEX PAGE 2-2 FOR PROPER WARNINGS.

SAFE LIFTING DEVICE WEIGHT	
BRENT Models:	
V800	20,000 Lbs.
V1000, V1100, 1196	24,000 Lbs.
1396	26,000 Lbs.
1596, V1300, V1500	30,000 Lbs.
2096	36,000 Lbs.
KILLBROS Models:	
835	20,000 Lbs.
1035, 1135, 1111, 1113	24,000 Lbs.
1311, 1313	26,000 Lbs.
1611, 1613	30,000 Lbs.

SAFE LIFTING DEVICE WEIGHT	
PARKER Models:	
842	20,000 Lbs.
1042, 1142, 1152, 1154	24,000 Lbs.
1348, 1352, 1354	26,000 Lbs.
1648, 1654	30,000 Lbs.
UNVERFERTH Models:	
860, 1019	20,000 Lbs.
1060, 1110, 1119, 1160, 1120	22,000 Lbs.
1310, 1319, 1320	26,000 Lbs.
1519, 1610, 1620	30,000 Lbs.
2020	36,000 Lbs.

1. With the cart empty, use safe lifting device with a minimum weight rating per chart to support the weight of your grain cart. Place the safe lifting device under the axle, near the tire.

IMPORTANT

- Replace only 1 load cell at a time. Follow Steps 2-5 before loosening hardware on any of the other load cells.

2. Starting on the left side of the cart in front of the axle, remove capscrews, flat washers, lock washers and hex nuts connecting the axle mount weldment. See figure 2-17.

NOTE: For carts with tracks, the rear axle load cells should be installed with the bending direction arrow pointing down. The serial number decal should also be facing down.

3. Remove retaining rings and pins retaining both ends of the non-scale bars. See figure 2-17.
4. Replace non-scale bars with load cells using retaining rings and pins removed in step 3 to connect load cell to axle and axle mount weldments.

NOTE: Make sure serial number decal on load cell is facing down when installed.

5. Reattach capscrews, flat washers, lock washers and hex nuts removed in step 2 to connect the axle mount weldments to the cart frame.
6. Route scale wires along axle and cart frame to location of Junction Box installation.

**Scale Kit Installation - Single Wheels/Straddle Duals
with 5-Point Scales**

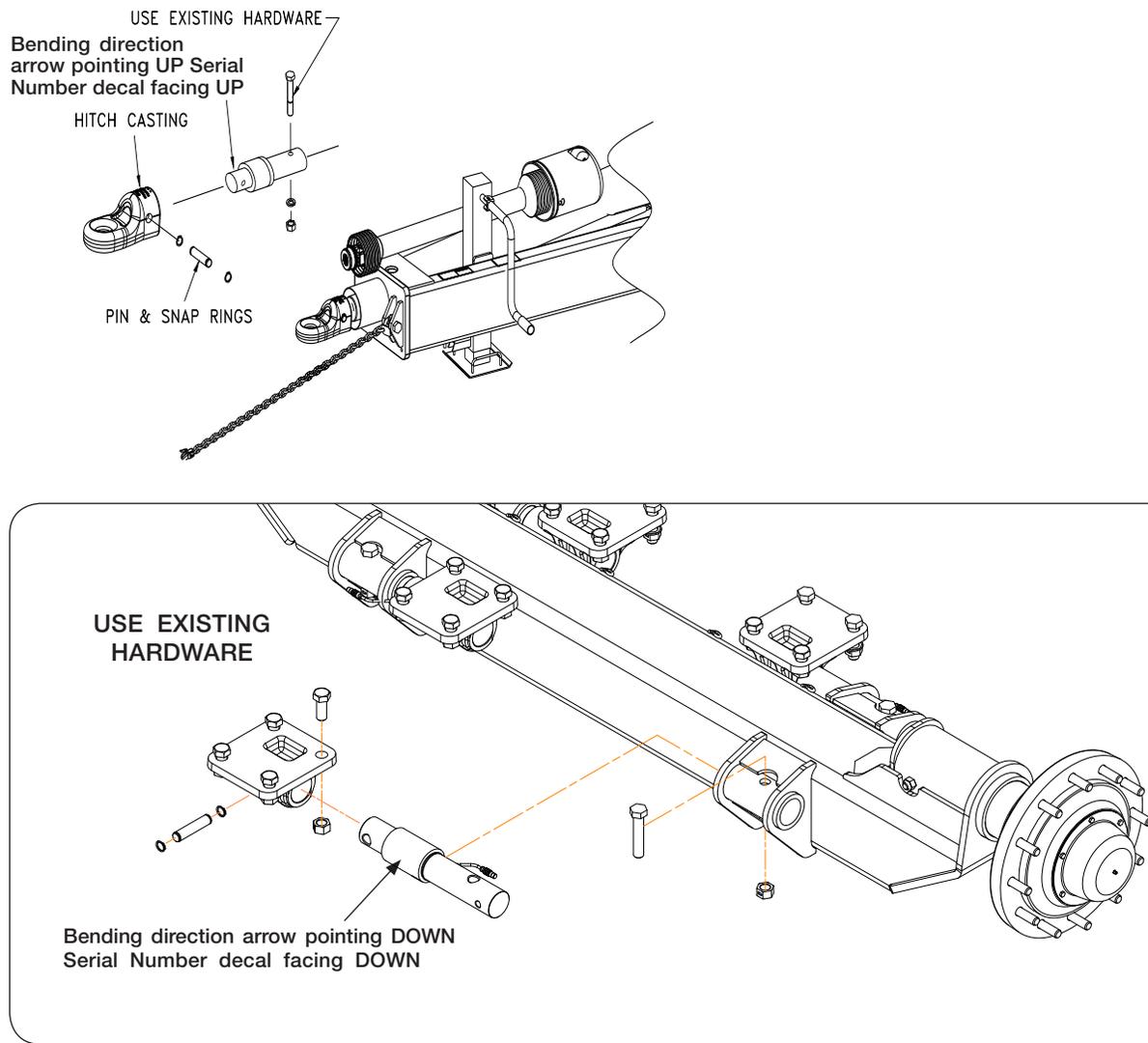


FIG. 2-5

Scale Kit Installation - Single Wheels/Straddle Duals with 5-Point Scales

Hitch Assembly

Park the empty grain cart on a firm, level surface. Block the tires/tracks on the machine to keep it from moving. Completely disconnect cart from tractor.

1. Remove the retaining rings and pin. Then remove hitch casting and hitch pin.
2. Remove locknut and capscrew.
3. Standard hitch can be removed and replace with load cell, making sure to feed the scale wire through the conduit to the Junction Box.

BRENT Models:	Replace Standard Hitch with Load Cell 3 3/4" Dia. (9004910)
V1000, V1100, V1300, 1196, 1396	
KILLBROS Models:	
1035, 1135, 1111, 1311, 1113, 1313	
PARKER Models:	
1042, 1142, 1348, 1152, 1352, 1154, 1354	
UNVERFERTH Models:	
1060, 1160, 1019, 1119, 1319, 1110, 1310, 1120, 1320	

NOTE: The bending direction decal on the end of the load cell should point up. Also, the load cell should be installed with the serial number decal facing up.

4. Reusing the capscrew and locknut, assemble the load cell to the tongue.
5. Reattach the hitch casting to the load cell using hitch pin and retaining rings.

Scale Kit Installation - Single Tires with 5-Point Scales

Axle Load Cell Installation

WARNING

- BEFORE PROCEEDING, REFER TO INDEX PAGE 2-2 FOR PROPER WARNINGS.

SAFE LIFTING DEVICE WEIGHT	
BRENT Models:	
V1000	14,000 Lbs.
V1100	16,000 Lbs.
1196, V1300	20,000 Lbs.
1396	22,000 Lbs.
UNVERFERTH Models:	
1060	14,000 Lbs.
1019, 1119, 1160	16,000 Lbs.
1110, 1319, 1120	20,000 Lbs.
1310, 1320	22,000 Lbs.

SAFE LIFTING DEVICE WEIGHT	
KILLBROS Models:	
1035	14,000 Lbs.
1135	16,000 Lbs.
1111, 1113	20,000 Lbs.
1311, 1313	22,000 Lbs.
PARKER Models:	
1042	14,000 Lbs.
1142	16,000 Lbs.
1348, 1152, 1154	20,000 Lbs.
1352, 1354	22,000 Lbs.

1. With the cart empty, use safe lifting device with a minimum weight rating per chart to support the weight of your grain cart. Place the safe lifting device under the axle, near the tire.

IMPORTANT

- *Replace only 1 load cell at a time. Follow Steps 2-5 before loosening hardware on any of the other load cells.*
2. Starting on the left side of the cart in front of the axle, remove capscrews and lock nuts connecting the axle mount weldments.
 3. Remove retaining rings and pins retaining both ends of the non-scale bars.
 4. Replace non-scale bars with load cells using retaining rings and pins removed in step 3 to connect load cell to axle and axle mount weldments.

NOTE: The bending direction decal on the end of the load cell should point down. Also, the load cell should be installed with the serial number decal facing down.

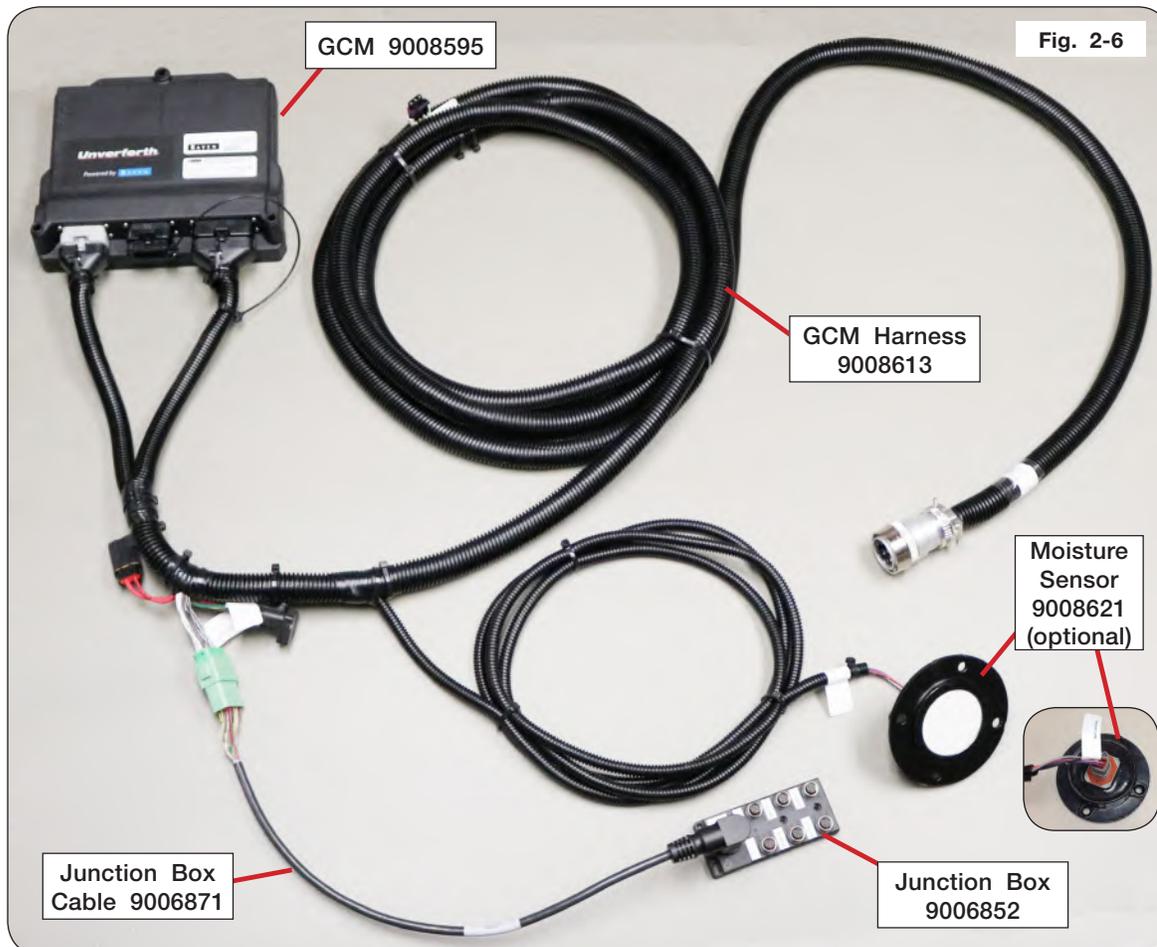
5. Reattach capscrews and locknuts removed in step 2 to connect the axle mount weldments to the cart frame.
6. Repeat steps 2 through 6 on the rear axle bar.
7. Route and secure scale wires along axle and cart frame to location of Junction Box installation.

NOTE: Because of movement in the grain cart's suspension, failure to route scale wire properly could damage the load cell.

8. Lower the cart.
9. Repeat steps 2 through 7 for opposite side of the cart.

Single-Auger - UHarvest Pro System Components

NOTE: For complete parts listing, see the Parts section of this manual.



GCM (Grain Cart Module)

⚠ WARNING

- EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.

1. Mount the GCM on the inside face of the Left-Hand standard using the three 3/8"-16 UNC x 1 1/4" bolts (9390-056) and three 3/8"-16 UNC elastic hex jam nuts.
2. Connect the two 30-pin rectangular connectors on the grain cart ISO cable to the bottom of the GCM. Do not force the connection as the connectors are keyed for proper alignment. Use a 1/4-inch nut driver to hand tighten the bolted connection (Fig. 2-7).



Accu-Save — Single-Auger Grain Carts

1. Park the empty unit on a firm, level surface. Block the tires on the machine to keep it from moving. Set the tractor's parking brake, shut off the engine, remove the ignition key and disconnect the PTO shaft and hydraulics from the tractor and cart.
2. Remove the driveshaft cover to access the backside of the front driveshaft 4-bolt bearing. Remove the bolts and nuts from the bottom two bearing attaching bolts (Fig. 2-8).
3. Replace the two bolts with the same diameter, but longer 1/2"-13 x 1 1/2" bolts (9388-104) provided in hardware kit.
4. Reusing the hex nuts and lock washers removed in step 1, attach the brackets (252198B and 252199B) (Fig. 2-9).

NOTE: Install sensor mounting brackets (252198B and 252199B) with notches towards bearing to avoid interference with bearing.

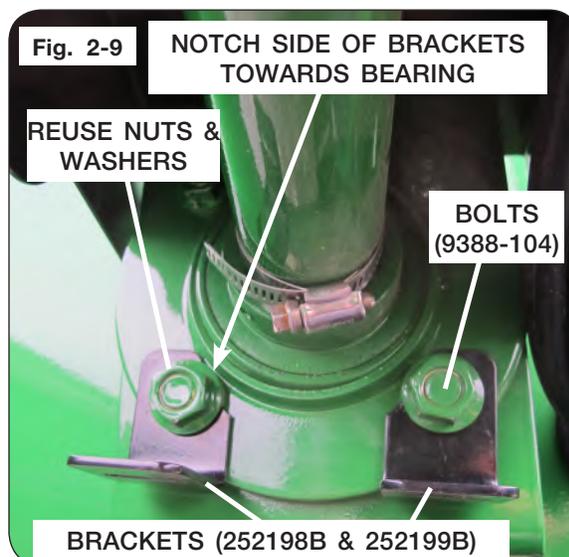
NOTE: It may be necessary to shim brackets (252198B and 252199B) to avoid interference with bearing. If so, use provided washers to shim.

5. The bolt found on hose clamp (900571) is what the sensor reads.
6. Install flat bracket (252065) using 1/4"-20 x 3/4" flange screws (97420) and hex nuts (97189).
7. Attach Accu-Save sensor (9006076) to flat bracket, allowing sufficient clearance (1/8" to 1/4") for the rotating shaft target, keeping sensor centered with drive shaft. Tighten jam nuts, all attaching hardware, and hose clamp.

NOTE: Use two washers provided in the hardware kit or two quarters to set the gap between the end of the sensor and target.

NOTE: Very little hose clamp should extend beyond the adjustment screw. If more than 1/2" extends beyond, bend down towards shaft or cut off.

8. Attach the Accu-Save proximity sensor cable to the GCM harness labeled "Accu-Save".
9. Reinstall any guards or shields that were removed during installation.



DANGER

- ENTANGLEMENT WITH THE DRIVELINE WILL CAUSE SERIOUS INJURY OR DEATH. KEEP ALL GUARDS AND SHIELDS IN GOOD CONDITION AND PROPERLY INSTALLED AT ALL TIMES. AVOID PERSONAL ATTIRE SUCH AS LOOSE FITTING CLOTHING, SHOE STRINGS, DRAWSTRINGS, PANTS CUFFS, LONG HAIR, ETC. THAT CAN BECOME ENTANGLED IN A ROTATING DRIVELINE.

Accu-Load — Single-Auger Grain Carts

WARNING

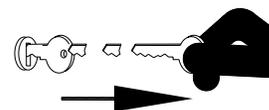
- EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.
- RELIEVE THE HYDRAULIC SYSTEM OF ALL PRESSURE BEFORE ADJUSTING OR SERVICING. SEE THE HYDRAULIC POWER UNIT OPERATOR'S MANUAL FOR PROPER PROCEDURES.
- HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.
- HYDRAULIC SYSTEM MUST BE PURGED OF AIR BEFORE OPERATING TO PREVENT SERIOUS INJURY OR DEATH.

1. Verify the cartridge part numbers are installed in the correct ports of the manifold. Look at the wrench flats of the Accu-Load manifold to find the part numbers. (Fig. 2-10, 2-11, & 2-12)

S1 - WK10K-01
S2 - WK10X-01
S3 - WS10YR-01

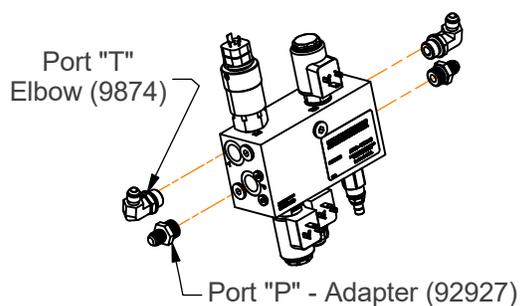
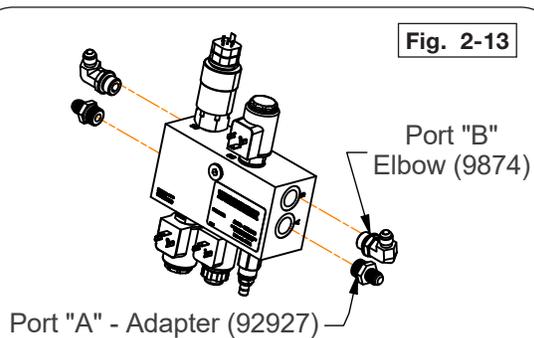
NOTE: If the numbers do not match the ports as indicated above, contact your dealer.

2. Attach the tractor drawbar to the grain cart hitch. Connect the hydraulic lines for the grain cart flow door to the tractor.
3. Run the flow door open and closed. Note which line is pressurized to open the flow door and which is pressurized to close the flow door. Flow door open should be set up with the lever having a detent position. If the tractor lever is in detent in the door closed position, remove the flow door hoses from the tractor and reverse them.
4. Remove the hydraulic pressure from all hydraulic circuits. See the tractor manual for the proper procedure.
5. Park the empty cart on a firm, level surface. Block the tires to keep it from moving. Set the tractor's parking brake, shut off the engine, remove the ignition key, and disconnect the PTO shaft and hydraulics from the tractor and cart.

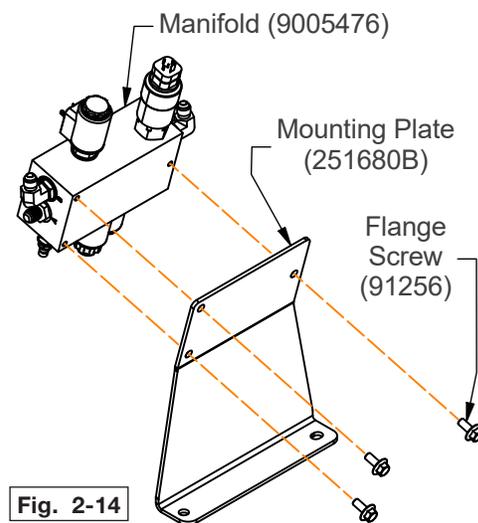


Accu-Load — Single-Auger Grain Carts (continued)

6. Install the 9/16"-18 JIC male x 3/4"-16 male o-ring boss elbow (9874) into the T and B ports on the manifold (9005476). Install the 9/16"-18 JIC male x 3/4"-16 o-ring male boss straight adapter (92927) into the P and A ports. Install the 9/16"-18 JIC male/female elbow (9876) to the straight adapters. (Fig. 2-13)



7. Mount the manifold (9005476) to the mounting plate (251680B) using the three 5/16"-18UNC x 3/4" flange screws (91256). (Fig. 2-14)



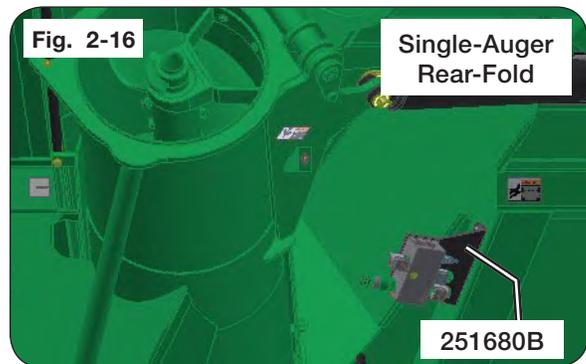
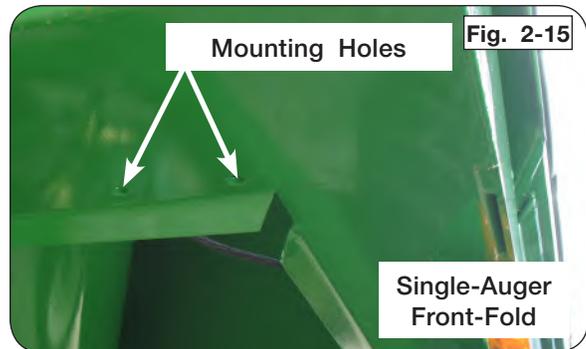
Accu-Load — Single-Auger Grain Carts (continued)

WARNING

- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.**

8. In the front, left-hand corner of the grain cart, bolt the mounting plate (251680B) to the front perimeter just below the auger tube. (Fig. 2-15 & 2-16) It may be necessary to drill holes to mount the manifold. Holes need to be 9/16" in diameter with a spacing of 4".

NOTE: If drilling mounting holes, be sure to verify location with hoses to assure connection.



Accu-Load — Single-Auger Grain Carts (continued)

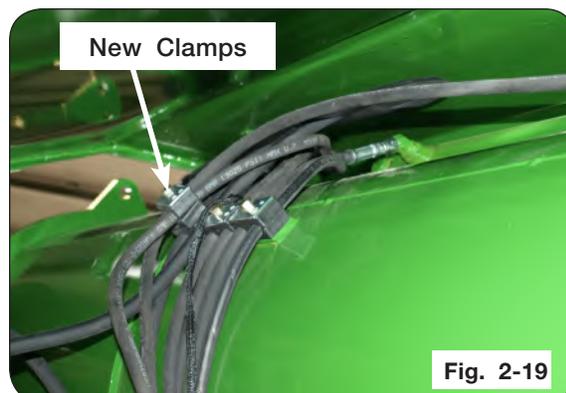
- On the grain cart flow door cylinder, disconnect the hose attached to the elbow on the rod end and attach to the fitting in manifold port P. Disconnect the hose attached to the elbow on the butt end of the flow door cylinder and attach to manifold port T.
- Attach the longest 1/4" hose with 9/16"-18 JIC female ends provided to the fitting on the manifold port B and the opposite end to the elbow in the rod end of the flow door cylinder. Attach shortest 1/4" hose with 9/16"-18 JIC female ends provided to the fitting on manifold port A and the opposite end to the butt end of the flow door cylinder.

"A" Port - should close the flow door (cylinder extended).

"B" Port - should open the flow door (cylinder retracted).



- Secure the new hoses with the clamps and hardware. Tighten all connections. (Fig. 2-19)
- Reattach the hoses to the tractor and purge the lines, see the grain cart operator's manual for the proper procedure. Make sure the door open lever direction has detent.
- Once the lines are purged, use the tractor lever to open and close the flow door. Verify the lever direction is in the same direction as step 4. The tractor lever for open needs to have detent capability.



Accu-Load — Single-Auger Grain Carts (continued)

14. Connect Accu-Load harness 9008615 to the middle connector on the GCM (grain cart module). (FIG. 2-20). Route the branch with the four square DIN connectors labeled S1, S2, S3 & PSW1 to Accu-Load Manifold (9005476) mounted in steps 7 & 8. Attach the square DIN connectors to the three solenoids of the Accu-Load Manifold. Match up the labeled connector with the corresponding solenoids. The DIN connector labeled PSW1 is for the pressure switch installed in port PS of the manifold. Make sure to snug the retaining screw of all DIN connectors. **DO NOT OVERTIGHTEN.** (Fig. 2-20 & 2-21)

NOTE: The solenoid on the cartridge can be rotated or flipped by removing the retaining cap screwed onto the cartridge of the manifolds, sliding out the solenoid and flipping, then reinstalling retaining cap. This may improve the routing of the harness.



Fig. 2-20



Fig. 2-21A

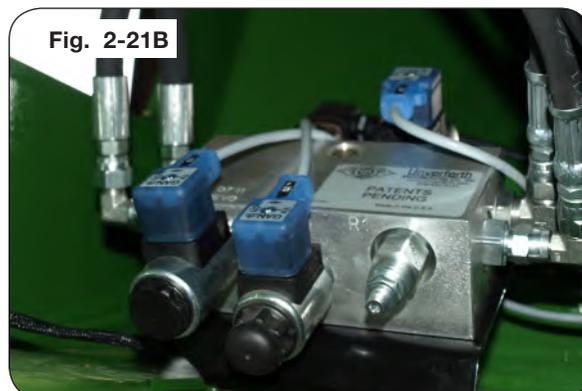


Fig. 2-21B

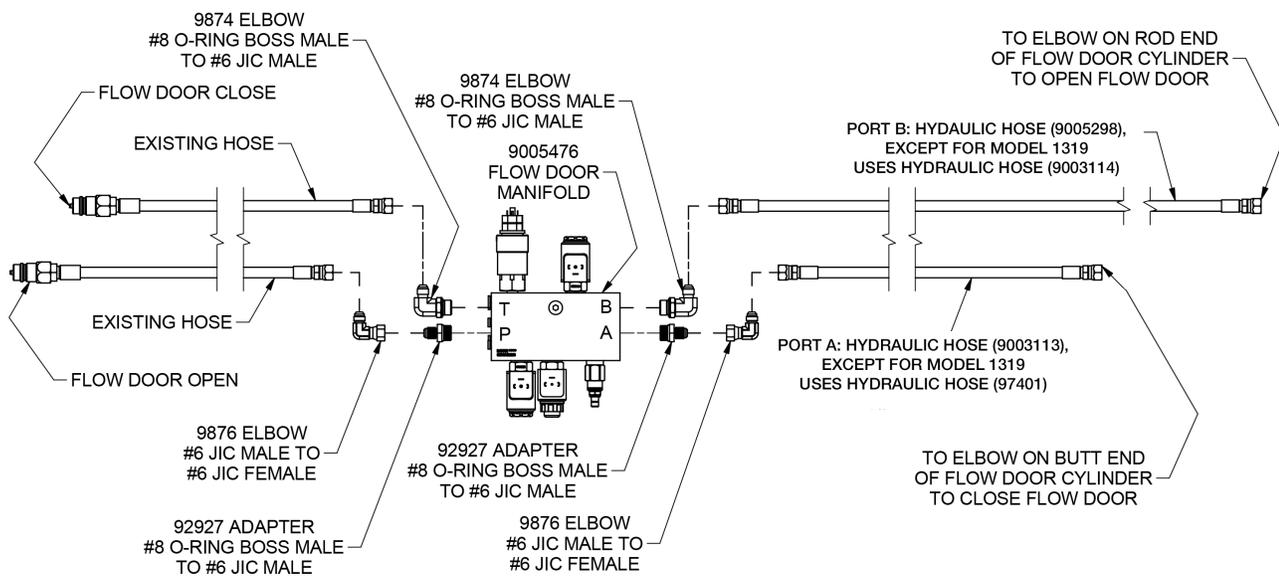
Accu-Load — Single-Auger Grain Carts (continued)

15. All connection points should be made. Retain the harness and cables with zip ties making sure slack is given in appropriate areas. Example: hitch point. (Fig. 2-22)
16. Start the tractor and test the flow door function by manual operation. Refer to the UHarvest operation manual for the remaining steps involved for the controller.



Fig. 2-22

Accu-Load Hydraulic Plumbing Schematic



MODELS: 1015, 1017, 1019, 1115, 1117, 1119, 1315, 1317, 1319

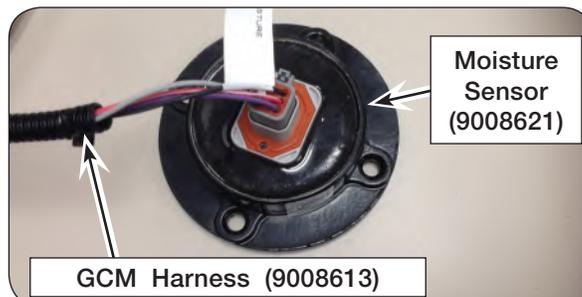
Fig. 2-23

Moisture Sensor (Optional) — Single-Auger Grain Carts

Wheel Operated Cleanout Door

NOTE: The sensing face of the moisture sensor should be close to flush with the inside of the cleanout door.

1. Park the empty cart on a firm, level surface. Block the tires on the machine to keep it from moving. Set the tractor's parking brake, shut off the engine, remove the ignition key and disconnect the PTO shaft and hydraulics from the tractor and cart.
2. Remove the existing cleanout door from the auger assembly by first removing the 3/8"-16 x 1" capscrew (9390-055) and 3/8"-16 locknut (9928). Secure the rack and then slide the cleanout door up and out of the channel. Retain the hardware for installing the new cleanout door.
3. Install the moisture sensor (9008621) and guard (281835B) to the outside of the new cleanout door using the four 1/4"-20 x 1" countersunk screws (902703-021) and four 1/4"-20 flange nuts (97189). The moisture sensor should be oriented with the connector toward the top of the cleanout door.
4. Slide the new cleanout door into the channel on the auger assembly and attach it to the rack using the same hardware that was removed in step 1.
5. Route the GCM harness (9008613) to the moisture sensor (9008621) and connect.
6. Zip tie the GCM harness (9008613) to the chain link on the cleanout door. Also, ensure that there is adequate slack in the harness for the cleanout door to completely open and close.



Moisture Sensor (Optional) — Single-Auger Grain Carts (continued)

Lever Operated Cleanout Door

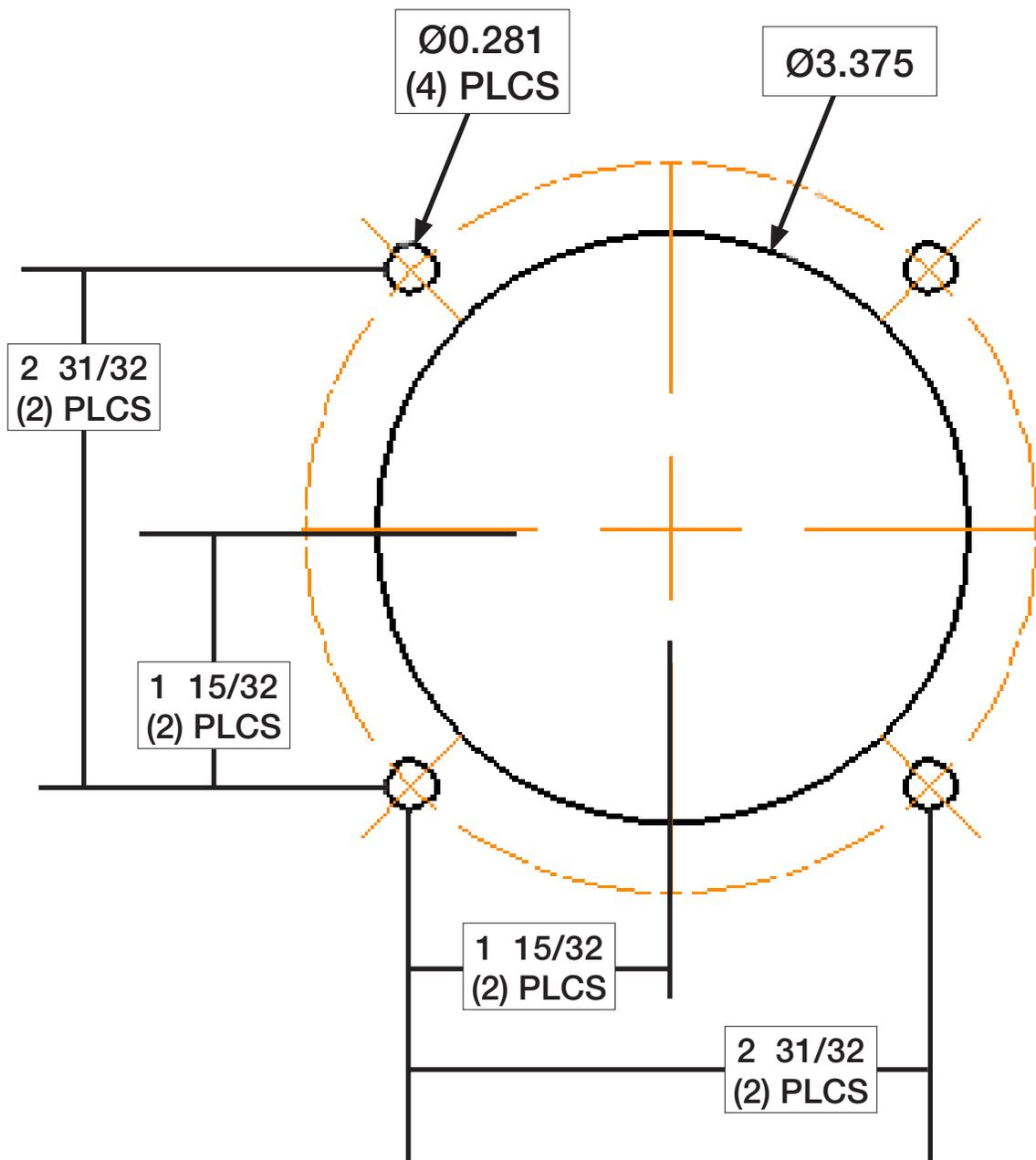
NOTE: The sensing face of the moisture sensor should be close to flush with the inside of the cleanout door.

1. Park the empty cart on a firm, level surface. Block the tires on the machine to keep it from moving. Set the tractor's parking brake, shut off the engine, remove the ignition key and disconnect the PTO shaft and hydraulics from the tractor and cart.
2. Remove the existing cleanout door from the auger assembly by first removing the 1/2"-13 locknut (94981) that attaches the linkage to the cleanout door. Secure the linkage and then slide the cleanout door up and out of the channel. Retain the locknut for installing the new cleanout door.
3. Install the moisture sensor (9008621) and guard (281835B) to the outside of the new cleanout door (233689B) using the four 1/4"-20 x 1" countersunk screws (902703-021) and four 1/4"-20 flange nuts (97189). The moisture sensor should be oriented with the connector toward the right of the cleanout door when looking at the door from the outside.
4. Slide the new cleanout door into the channel on the auger assembly and attach it to the linkage using the same locknut that was removed in step 1.
5. Zip tie the moisture sensor cable to the chain link on the auger assembly and attach the 4 pin shroud Weatherpack connector to the breakout labeled "Moisture" on the ISO harness (9006855). The 2-pin tower Weatherpack connector on the moisture sensor is not used and should remain plugged. Also, ensure that there is adequate slack in the cable and harness for the cleanout door to completely open and close.

Moisture Sensor (Optional) — Single-Auger Grain Carts (continued)

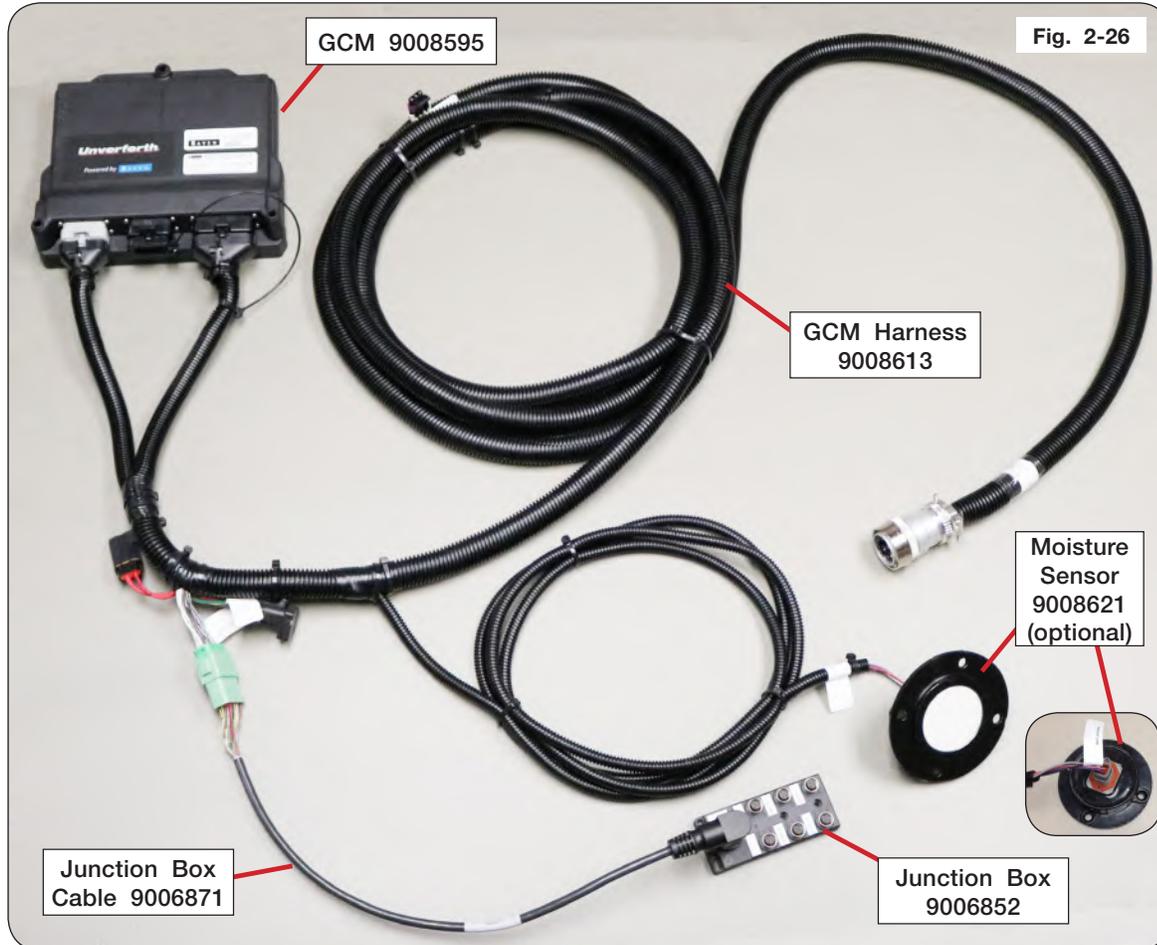
NOTE: Some applications will require modification to the grain cart's original cleanout door. Use the following template as a guide.

NOTE: If preferred, contact your UHarvest dealer about availability of a new replacement cleanout door with moisture sensor mounting.



Double- and In-Line Auger - UHarvest Pro System Components

NOTE: For complete parts listing, see the Parts section of this manual.



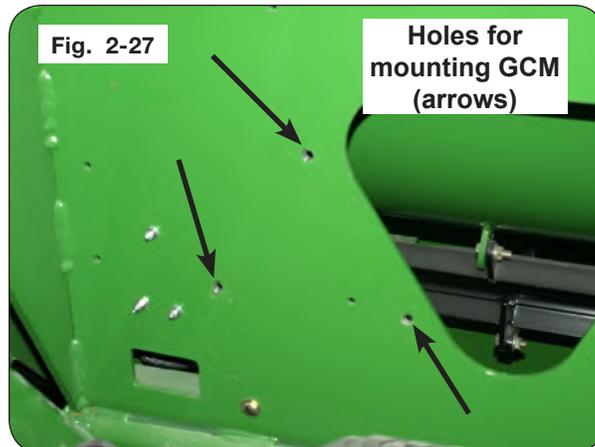
Double- and In-Line Auger - UHarvest Pro System Components (continued)

GCM (Grain Cart Module)

WARNING

- EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.

1. Mount the GCM on the outside face of the left-hand standard using the three 9390-056 3/8"-16 UNC x 1 1/4" bolts and three 3/8"-16UNC elastic hex jam nuts.
2. Connect the two 30-pin rectangular connectors on the grain cart ISO cable to the bottom of the GCM. The connectors are keyed to make correct connections. Do not force the connectors into the GCM. Use a 1/4-inch nut drive to hand tighten the bolted connection (Fig. 2-28).



Accu-Save — Double- and In-Line Auger Grain Carts

1. Park the empty unit on a firm, level surface. Block the tires on the machine to keep it from moving. Set the tractor's parking brake, shut off the engine, remove the ignition key and disconnect the PTO shaft and hydraulics from the tractor and cart.
2. Remove driveline from end of gearbox input shaft. (Refer to MAINTENANCE section of your grain cart manual for instructions.) Remove belt cover from front of junction box. Remove the hex nuts and lock washers attached to the bottom two bolts mounting the input shaft flange bearing to the junction box. Replace the bottom two bolts with the longer bolts (9390-495) included in the hardware kit. Attach the sensor mounting brackets (252198B & 252199B). Secure bolts reusing the existing lock washers and hex nuts removed.

NOTE: Install sensor mounting brackets (281894B) with notches towards bearing to avoid interference with bearing.

NOTE: It may be necessary to shim brackets (252198B and 252199B) to avoid interference with bearing.

3. The bolt found on hose clamp (900571) is what the sensor will be sensing.
4. Install bracket (281894B) using flange screws (97420) and hex nuts (97189) (Fig. 65).
5. Attach Accu-Save sensor (9006076) to flat bracket, allowing sufficient clearance (1/8" to 1/4") for the rotating shaft target, keeping sensor centered with gearbox shaft. Tighten jam nuts, all attaching hardware, and hose clamp.



NOTE: Use two washers provided in the hardware box or two quarters to set the gap between the end of the sensor and target.

NOTE: Very little hose clamp should extend beyond the adjustment screw. If more than 1/2" extends beyond, bend down towards shaft or cut off.

6. Connect the Accu-Save sensor cable to the ISO cable harness connector labeled "Accu-Save".
7. Reinstall belt cover and driveline removed in Step 1. (Refer to MAINTENANCE section of your grain cart manual for instructions.)

⚠ DANGER

- **ENTANGLEMENT WITH THE DRIVELINE WILL CAUSE SERIOUS INJURY OR DEATH. KEEP ALL GUARDS AND SHIELDS IN GOOD CONDITION AND PROPERLY INSTALLED AT ALL TIMES. AVOID PERSONAL ATTIRE SUCH AS LOOSE FITTING CLOTHING, SHOE STRINGS, DRAWSTRINGS, PANTS CUFFS, LONG HAIR, ETC. THAT CAN BECOME ENTANGLED IN A ROTATING DRIVELINE.**

Accu-Load — Double- and In-Line Auger Grain Carts

WARNING

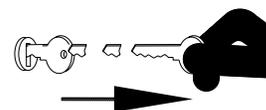
- EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.
- RELIEVE THE HYDRAULIC SYSTEM OF ALL PRESSURE BEFORE ADJUSTING OR SERVICING. SEE THE HYDRAULIC POWER UNIT OPERATOR'S MANUAL FOR PROPER PROCEDURES.
- HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.
- HYDRAULIC SYSTEM MUST BE PURGED OF AIR BEFORE OPERATING TO PREVENT SERIOUS INJURY OR DEATH.

1. Verify the cartridge part numbers are installed in the correct ports of the manifold. Look at the wrench flats of the Accu-Load manifold to find the part numbers. (Fig. 2-30, 2-31 & 2-32)

S1 - WK10K-01
S2 - WK10X-01
S3 - WS10YR-01

NOTE: If the numbers do not match the ports as indicated above, contact your dealer.

2. Attach the tractor drawbar to the grain cart hitch. Connect the hydraulic lines for the grain cart flow door to the tractor.
3. Run the flow door open and closed. Note which line is pressurized to open the flow door and which is pressurized to close the flow door. Flow door open should be set up with the lever having a detent position. If the tractor lever is in detent in the door closed position, remove the flow door hoses from the tractor and reverse them.
4. Remove the hydraulic pressure from all hydraulic circuits. See the tractor manual for the proper procedure.
5. Park the empty cart on a firm, level surface. Block the tires to keep it from moving. Set the tractor's parking brake, shut off the engine, remove the ignition key, and disconnect the PTO shaft and hydraulics from the tractor and cart.



Accu-Load — Double- and In-Line Auger Grain Carts (continued)

7. Install the 9/16"-18 JIC Male x 3/4"-16 Male O-ring Boss adapters (92927) into all ports of the manifold (9005476). (Fig. 2-33)
8. Mount the Accu-Load manifold (9005476) to the mounting plate (252046B) using the three 5/16-inch flange screws (91256). (Fig. 2-34)

Fig. 2-33

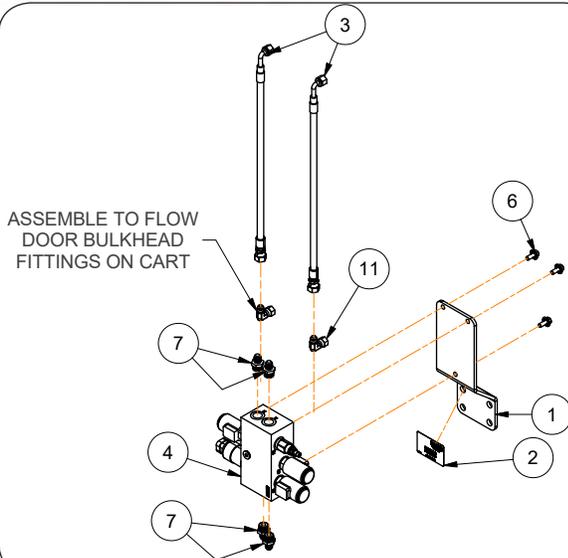
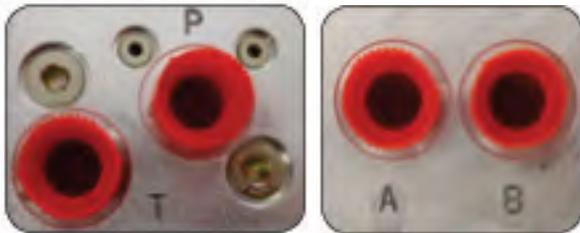


Fig. 2-34



Accu-Load — Double- and In-Line Auger Grain Carts (continued)

9. On the front of the grain cart, unbolt the four bolts located between the bulkheads which retain the front flow door to the hopper front panel. Install plate (252046B) to the front panel with the manifold above the bolts. (Fig. 2-35)

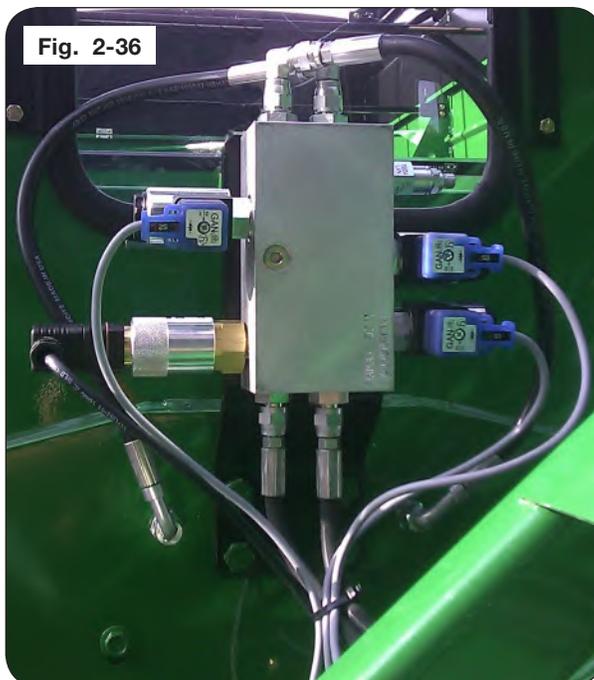


10. Find the flow door open hose from the bulkhead and connect to the 'P' port of the Accu-Load manifold. Disconnect the flow door close hose from the bulkhead and connect to the 'T' port of the Accu-Load manifold. (Fig. 2-36)

11. Units with 5-Function Electric-Over-Hydraulic (EOH) flow door control: Attach run tee to the bulkheads on the front panel. (Fig. 2-36)

Units with 3-Function EOH and Non EOH flow door: Attach elbows (9876) to Ports 'A' and 'B' on the manifold. (Fig. 2-36)

12. Attach hoses (9004113) to connect the fittings on the bulkheads to ports 'A' and 'B' of the manifold. Port 'A' should go to close the flow door (cylinder extend). Port 'B' should go to open the flow door (cylinder retract). If the unit has flow door EOH controls, attach the hoses disconnected from the bulkhead in step 10 to the corresponding tee attached in step 11.



NOTE: Plumbing will allow for manual or Accu-Load control.

13. Tighten all connections.

Accu-Load — Double- and In-Line Auger Grain Carts (continued)

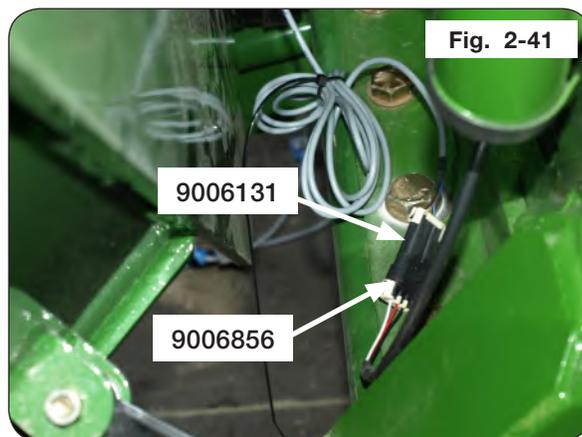
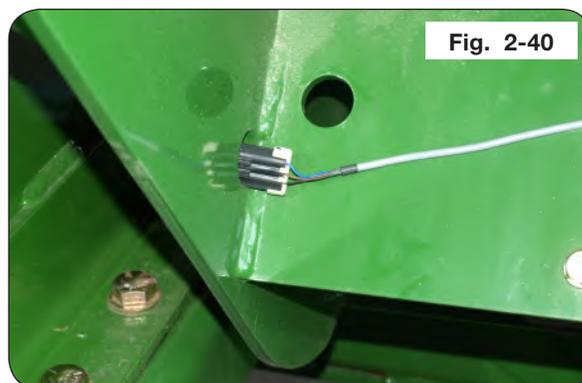
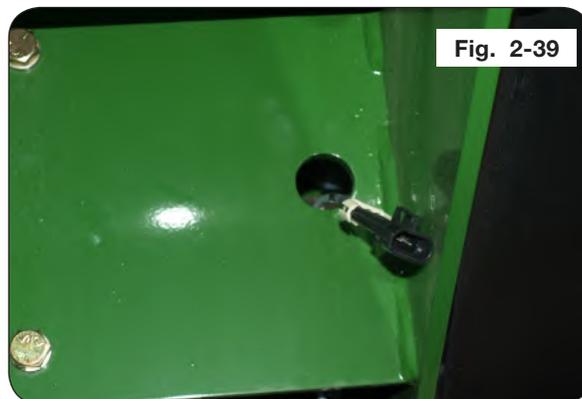
14. Reattach the hoses to the tractor and purge the lines. See the grain cart operator's manual for the proper procedure. Make sure the door open lever direction has detent.
15. Once the lines are purged, open and close the door using the same lever direction and procedure as step 4.
16. Connect Accu-Load harness (9008615) to the middle connector on the GCM (grain cart module). (FIG. 2-20). Route the branch with the four square DIN connectors labeled S1, S2, S3 & PSW1 to Accu-Load Manifold (9005476) mounted in steps 7 & 8. Attach the square DIN connectors to the three solenoids of the Accu-Load Manifold. Match up the labeled connector with the corresponding solenoids. The DIN connector labeled PSW1 is for the pressure switch installed in port PS of the manifold. Make sure to snug the retaining screw of all DIN connectors. **DO NOT OVERTIGHTEN.** (Fig. 2-37 & 2-38)

NOTE: The solenoid on the cartridge can be flipped by removing the retaining cap screwed on the cartridge of the manifolds and sliding out the solenoid and flipping, then installing and reinstalling retaining cap. This may make the routing of the harness easier.



Accu-Load — Double- and In-Line Auger Grain Carts (continued)

17. Route the Accu-Save Sensor cable (9006131) as shown and connect to the Accu-Save Sensor connector on the ISO Cable (9006856) labeled "Accu-Save".



Accu-Load — Double- and In-Line Auger Grain Carts (continued)

18. All connection points should be made. Retain the harness lines with zipties making sure slack is given in appropriate areas. Example: auger pivot, hitch point. (Fig. 2-42)
19. Follow the Indicator manual for the remaining set-up and operating instructions.
20. Start the tractor and test the flow door function by manual operation. Refer to the UHarvest operation manual for remaining steps involved for the controller.

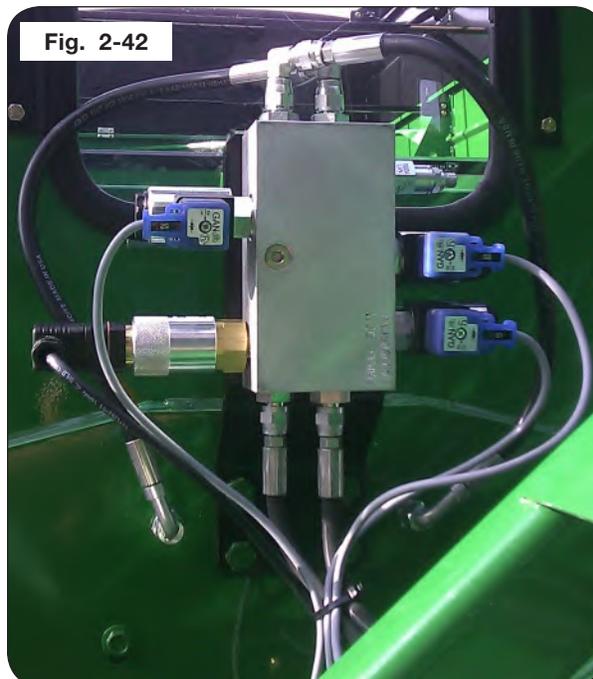
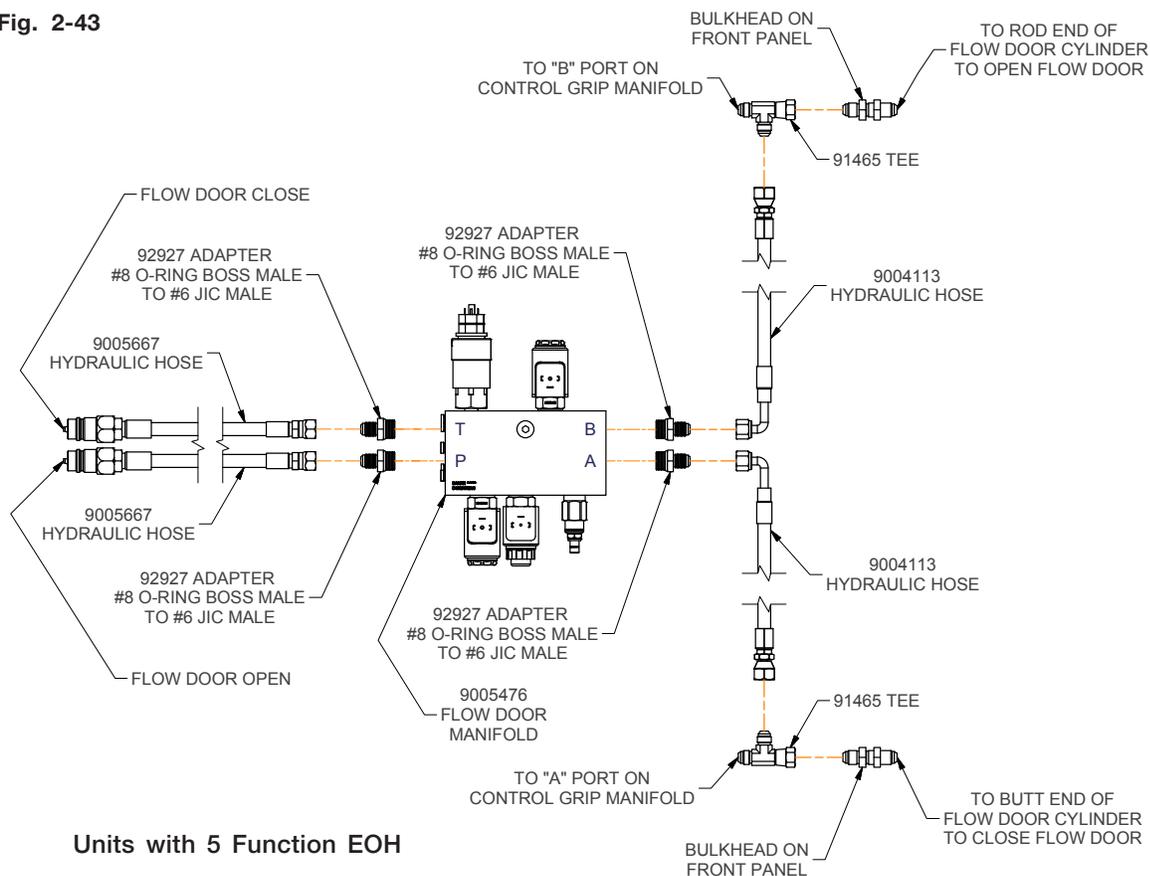


Fig. 2-42

Accu-Load Hydraulic Plumbing Schematic

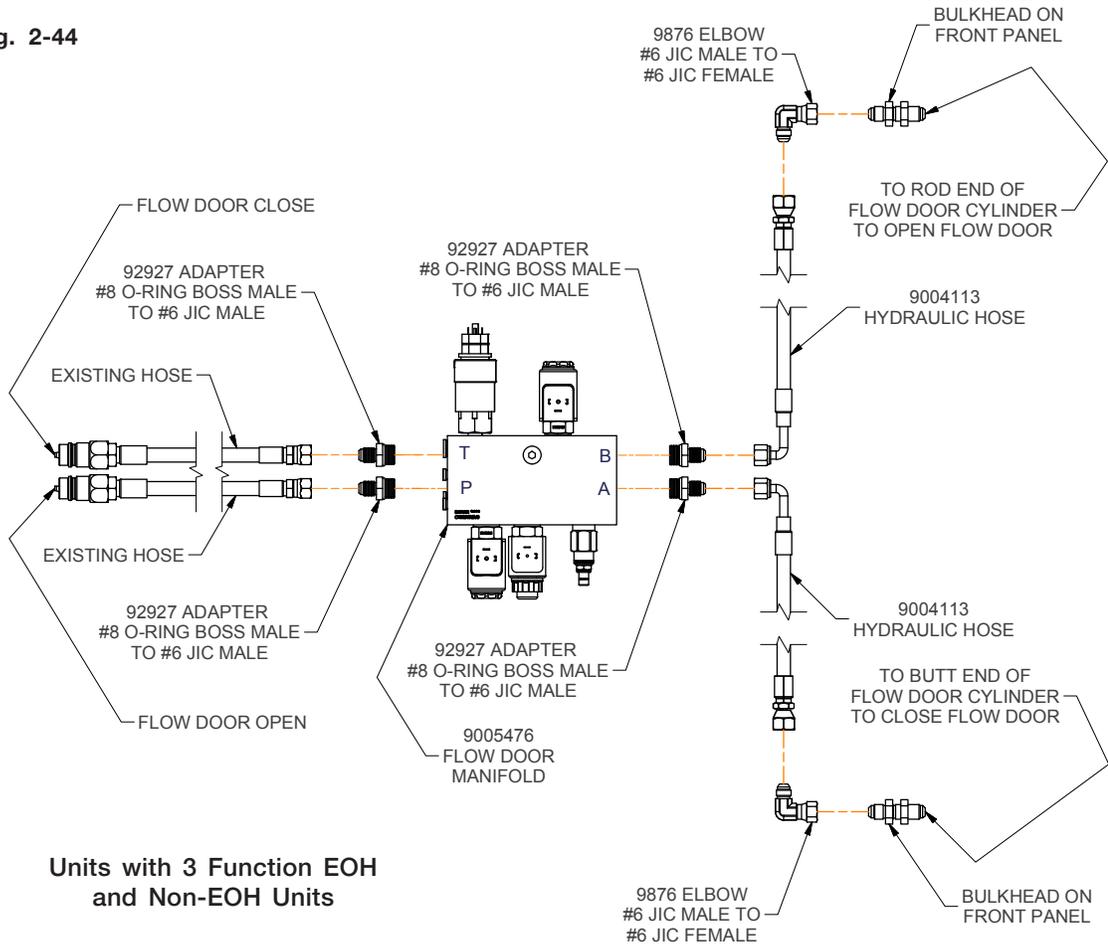
Fig. 2-43



Accu-Load — Double- and In-Line Auger Grain Carts (continued)

Accu-Load Hydraulic Plumbing Schematic

Fig. 2-44

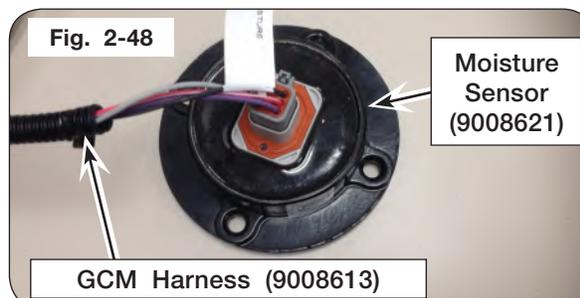
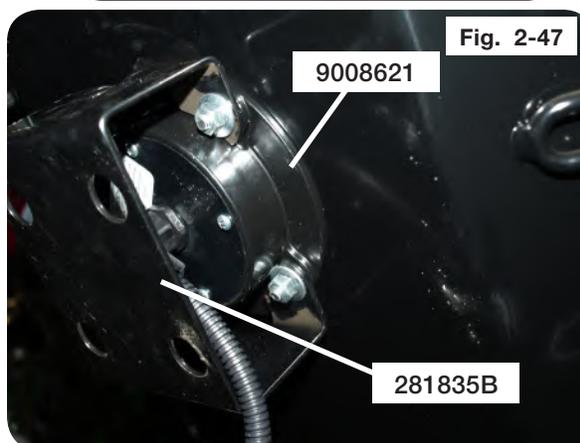
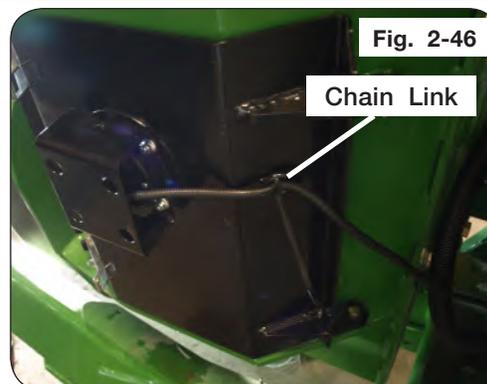
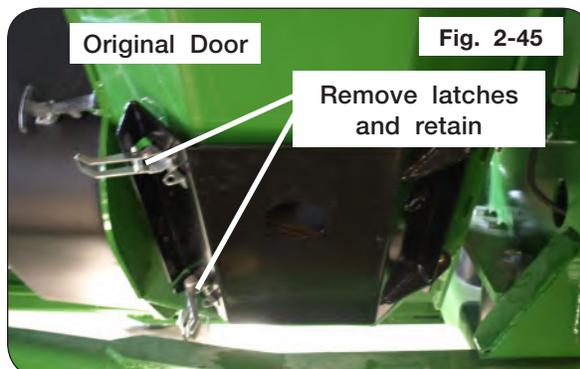


Moisture Sensor (Optional) — Double- and In-Line Auger

NOTE: The sensing face of the moisture sensor should be close to flush with the inside of the cleanout door.

NOTE: Some units may have a door with the hinge towards the front of the cart (opposite shown). Prior to opening the door, the moisture sensor connector must be disconnected.

1. Park the empty cart on a firm, level surface. Block the tires on the machine to keep it from moving. Set the tractor's parking brake, shut off the engine, remove the ignition key and disconnect the PTO shaft and hydraulics from the tractor and cart.
2. Remove the existing cleanout door from the auger assembly by first removing the two 3/8"-16UNC x 1 1/4" capscrews (9390-056) and two 3/8"-16UNC locknuts (9928). Retain the hardware for installing the new cleanout door.
3. Remove the two draw latches (9006497) from the existing cleanout door by first removing the six 10"-24 x 1/2" machine screws (9400-026) and six 10"-24 flange nuts (902331). Reinstall the latches to the new cleanout door (272636B, 273917B for 2096).
4. Install the moisture sensor (9008621) and guard (281835B) to the outside of the new cleanout door using the four 1/4"-20 x 1" carriage bolts (9388-003) and four 1/4"-20 flange nuts (97189). The moisture sensor should be oriented with the connector toward the hinge side of the cleanout door.
5. Zip tie the GCM harness (9008613) to the chain link on the cleanout door. Attach harness to moisture sensor (9008621). Also, ensure that there is adequate slack in the harness for the cleanout door to completely open and close.



Calibration

Brand	Model	Capacity	Steerable Tandem	Tracks	Walking Tandem	Single Tires (5pt)	Single Tires (3pt)	Straddle Duals	
-	-	-	Cal Number/#Load Cells						
Brent	2096	112000	78000/5	40000/5	-	-	-	-	
	1596	84000	40000/5	40000/5	-	-	-	-	
	1396	72800	-	40000/5	40000/5	40000/5	-	-	
	1196	61600	-	40000/5	40000/5	40000/5	-	-	
	1386	74480	-	40000/5	-	40000/5	-	-	
	1186	63000	-	40000/5	-	40000/5	-	-	
	1282	67200	-	40000/5	40000/5	40000/5	-	-	
	1182	61600	-	40000/5	-	40000/5	-	-	
	1082	56000	-	40000/5	-	-	24000/3	24000/3	
	882	47040	-	-	-	-	24000/3	24000/3	
	782	42000	-	-	-	-	24000/3	24000/3	
	V1500	84000	-	40000/5	-	-	-	-	
	V1300	72800	-	40000/5	-	40000/5	-	-	
	V1100	61600	-	40000/5	-	40000/5	46500/3	-	
	V1000	56000	-	40000/5	-	40000/5	46500/3	40000/5	
	V800	44800	-	40000/5	-	-	46500/3	46500/3	
V700	39200	-	-	-	-	46500/3	46500/3		
Unverferth	2020	112000	40000/5	40000/5	-	-	-	-	
	1620	84000	40000/5	40000/5	40000/5	-	-	-	
	1320	72800	-	40000/5	40000/5	40000/5	-	-	
	1120	61600	-	40000/5	40000/5	40000/5	-	-	
	1610	89600	-	40000/5	-	-	-	-	
	1310	72800	-	40000/5	40000/5	40000/5	-	-	
	1110	61600	-	40000/5	40000/5	40000/5	-	-	
	1519	84000	-	40000/5	-	-	-	-	
	1319	72800	-	40000/5	-	40000/5	-	-	
	1119	61600	-	40000/5	-	40000/5	46500/3	-	
	1019	56000	-	40000/5	-	40000/5	46500/3	40000/5	
	1317	72800	-	40000/5	40000/5	40000/5	-	-	
	1117	61600	-	40000/5	40000/5	40000/5	-	-	
	1017	56000	-	40000/5	-	40000/5	46500/3	-	
	1315	72800	-	40000/5	40000/5	40000/5	-	-	
	1115	61600	-	40000/5	40000/5	40000/5	-	-	
	1015	56000	-	40000/5	-	40000/5	46500/3	-	
	1160	61600	-	40000/5	-	40000/5	46500/3	-	
	1060	56000	-	40000/5	-	40000/5	46500/3	40000/5	
	860	44800	-	40000/5	-	-	46500/3	46500/3	
	760	39200	-	-	-	-	46500/3	46500/3	
	1050	58800	-	40000/5	-	40000/5	-	-	
	9250	56000	-	-	-	-	-	(900) 24000/3	-
		56000	-	-	-	-	-	(1050) 46500/3	-
8250	44800	-	-	-	-	24000/3	46500/3		
7250	39200	-	-	-	-	24000/3	46500/3		

For all other brand grain carts use the following formula
 Cal Number = Axle Weigh Bar Capacity/(5 x mV Output) x # load cells x 2

Calibration (continued)

Brand	Model	Capacity	Steerable Tandem	Tracks	Walking Tandem	Single Tires (5pt)	Single Tires (3pt)	Straddle Duals	
-	-	-	Cal Number/#Load Cells						
Parker	1654	84000	40000/5	40000/5	40000/5	-	-	-	
	1354	72800	-	40000/5	40000/5	40000/5	-	-	
	1154	61600	-	40000/5	40000/5	40000/5	-	-	
	1352	72800	-	40000/5	40000/5	40000/5	-	-	
	1152	61600	-	40000/5	40000/5	40000/5	-	-	
	1648	89600	-	46000/5	-	-	-	-	
	1348	72800	-	46000/5	46000/5	46000/5	-	-	
	1048	56000	-	46000/5	-	-	27500/3	-	
	1142	61600	-	40000/5	-	40000/5	46500/3	-	
	1042	56000	-	40000/5	-	40000/5	46500/3	-	
	842	44800	-	40000/5	-	-	46500/3	46500/3	
	742	39200	-	-	-	-	46500/3	46500/3	
	1139	61600	-	46000/5	-	46000/5	27500/3	-	
	1039	56000	-	-	-	-	(900) 27500/3	-	
		56000	-	-	-	-	(1050) 27500/3	-	
839	44800	-	-	-	-	27500/3	27500/3		
739	39200	-	-	-	-	27500/3	27500/3		
Killbros	1613	84000	40000/5	40000/5	40000/5	-	-	-	
	1313	72800	-	40000/5	40000/5	40000/5	-	-	
	1113	61600	-	40000/5	40000/5	40000/5	-	-	
	1611	89600	-	46000/5	-	-	-	-	
	1311	72800	-	46000/5	46000/5	46000/5	-	-	
	1111	61600	-	46000/5	46000/5	46000/5	-	-	
	1950	56000	-	46000/5	-	-	27500/3	-	
	1135	61600	-	40000/5	-	40000/5	46500/3	-	
	1035	56000	-	40000/5	-	40000/5	46500/3	-	
	835	44800	-	40000/5	-	-	46500/3	46500/3	
	735	39200	-	-	-	-	46500/3	46500/3	
	1195	56000	-	-	-	-	(900) 27500/3	-	
		56000	-	-	-	-	(1050) 27500/3	-	
	1185	44800	-	-	-	-	27500/3	27500/3	
1175	39200	-	-	-	-	27500/3	27500/3		

Brand	Model	Steerable Tandem	Tracks	Walking Tandem	Single Tires (5pt)	Single Tires (3pt)	Straddle Duals
Parker w/ Weightronix Load Cells	1648	-	40000	-	-	-	-
	1348	-	40000	40000	40000	-	-
	1048	-	40000	-	-	24000	-
	1139	-	40000	-	40000	24000	-
	1039	-	-	-	-	24000	-
	839	-	-	-	-	24000	24000
	739	-	-	-	-	24000	24000
Killbros w/ Weightronix Load Cells	1611	-	40000	-	-	-	-
	1311	-	40000	40000	40000	-	-
	1111	-	40000	40000	40000	-	-
	1950	-	40000	-	-	24000	-
	1135	-	40000	-	40000	24000	-
	1195	-	-	-	-	24000	-
	1185	-	-	-	-	24000	24000
1175	-	-	-	-	24000	24000	

For all other brand grain carts use the following formula
 Cal Number = Axle Weigh Bar Capacity/(5 x mV Output) x # load cells x 2

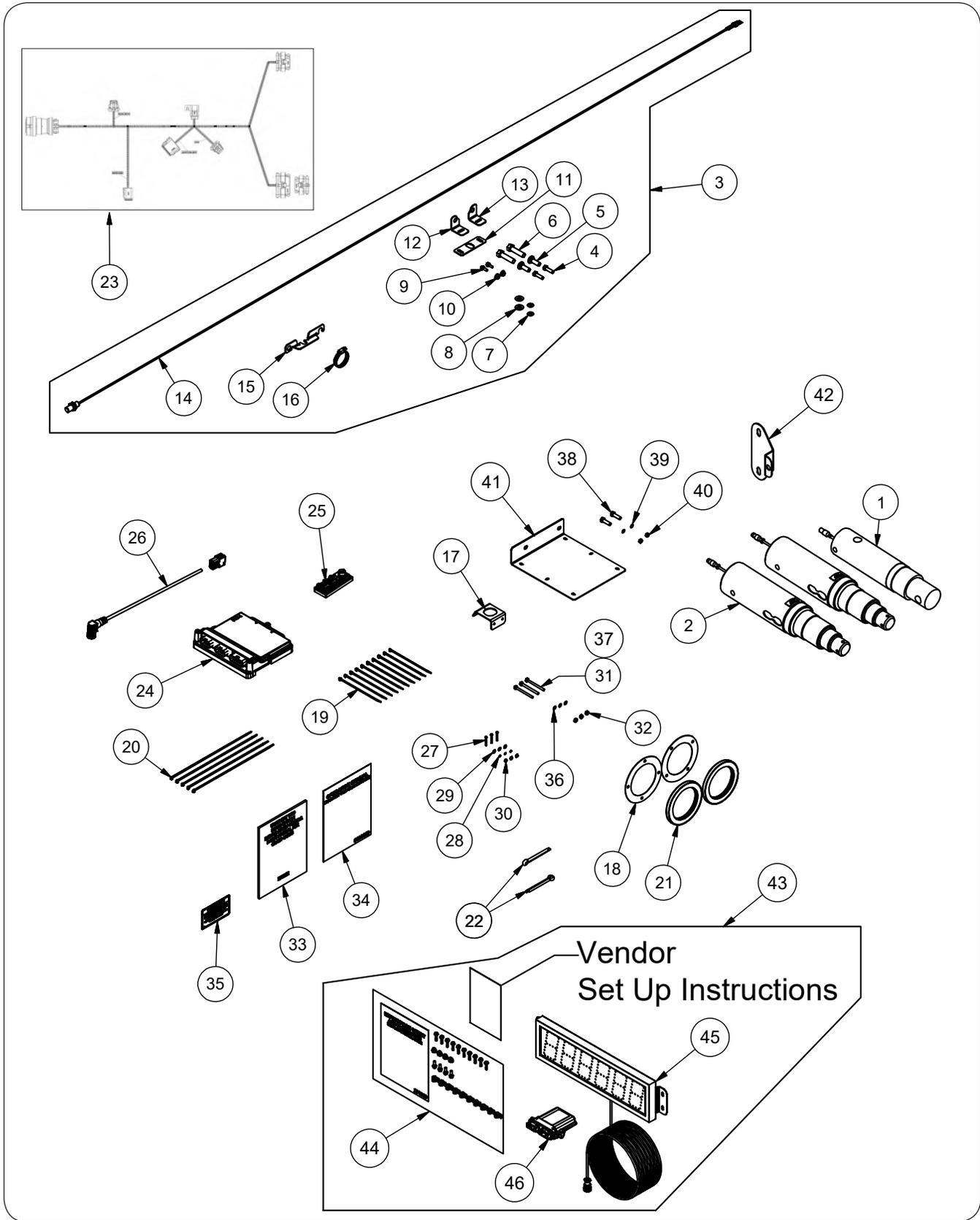
Section III Parts

Please visit www.unverferth.com/parts/ for the most current parts listing.

UHarvest Pro Components for Grain Carts with 3-Point Scales	3-2
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UHarvest Pro Components — Grain Carts with 3-Point Scales

Please visit www.unverferth.com/parts/ for the most current parts listing.



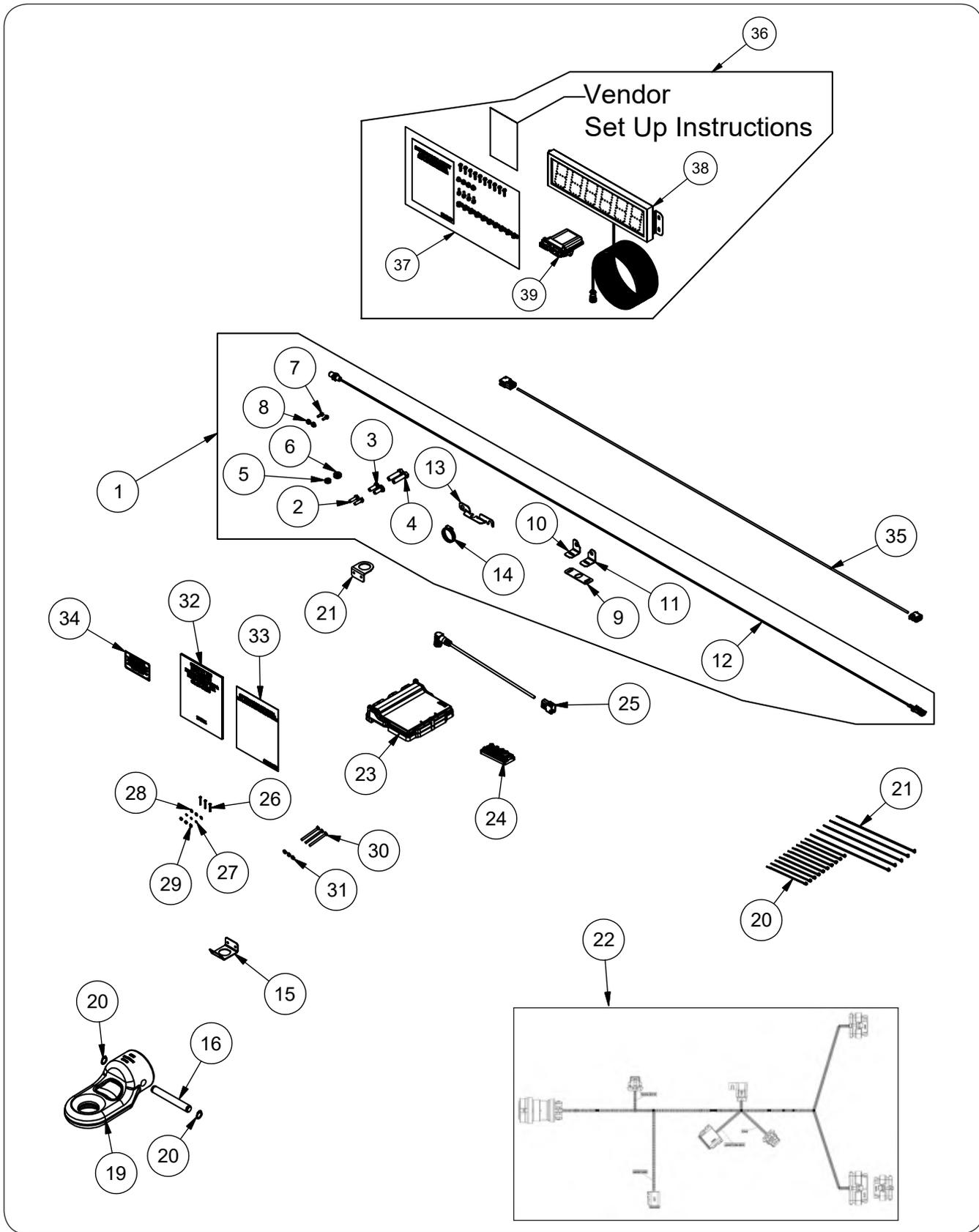
UHarvest Pro Components — Grain Carts with 3-Point Scales

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	Load Cell 3 3/4" Dia. x 16.406"	9004913	1	BRENT Models: V700, V800, V1000, V1100
2	Spindle Load Cell 4 1/2" Dia. x 20.25"	9006348	2	KILLBROS Models: 735, 835, 1035, 1135 PARKER Models: 742, 842, 1042, 1142 UNVERFERTH Models: 760, 860, 1060, 1160, 1019, 1119
3	Accu-Save Kit	271473B	1	Includes Items 4-16
4	Capscrew, 3/8"-16UNC x 1 1/4" G5	9390-056	2	
5	Carriage Bolt, 1/2"-13UNC x 1 1/2" G5	9388-104	2	
6	Capscrew, 9/16"-12UNC x 2 1/4" G5	9390-495	2	
7	Flat Washer, 3/8" SAE	9405-074	2	
8	Flat Washer, 1/2" SAE	9405-086	2	
9	Flange Screw, 1/4"-20UNC x 3/4" G5	97420	2	
10	Large Flange Hex Nut, 1/4"-20UNC G5	97189	2	
11	Accu-Save Sensor Bracket =Black=	252065B	1	
12	Accu-Save Sensor Bracket =Black=	252198B	1	
13	Accu-Save Sensor Bracket =Black=	252199B	1	
14	Proximity Sensor w/Metri-Pack Connector	9006076	1	
15	RPM Formed Sensor Bracket =Black=	281894B	1	
16	Hose Clamp, #28 (SS)	900571	1	
17	Connector Bracket	281836B	1	
18	Hub Cap Gasket	284230	2	
19	Cable Tie 7 1/2"	9000106	10	
20	Cable Tie 14 1/2"	9000107	5	
21	Grease Seal	92455	2	
22	Cotter Pin, 3/8" Dia. x 4"	9391-090	2	
23	Harness - GCM (Grain Cart Module)	9008613	1	
24	GCM (Grain Cart Module)	9008595	1	
25	Uharvest Pro Junction Box	9006852	1	
26	Cable - Junction Box	9006871	1	
27	Pan head #8-32UNC x 1 1/4" Phillips Machine Screw	903172-119	3	
28	Lock Washer, #8	9404-011	3	
29	Flat Washer, #8	9405-046	3	
30	Hex Nut, #8-32UNC G2	9830-015	3	
31	Capscrew, 1/4"-20UNC x 3" G5	9390-013	2 3	BRENT Models: V700, V800, V1000 KILLBROS Models: 1950
32	Lock Nut/Top, 1/4"-20UNC	9936	3	Used on all models
33	Manual - Uharvest Pro Scale System	276851	1	
34	Manual - Operation	9008619	1	
35	Decal, IMPORTANT ISO-Harness	9008814	1	
36	Flat Washer, 1/4" USS	9405-064	3	Items 36 through 41 BRENT Models: V700, V800, V1000 KILLBROS Models: 1950
37	Capscrew, 1/4"-20UNC x 2 1/2" G5	9390-011	1	
38	Capscrew, 3/8"-16UNC x 1" G5	9390-055	2	
39	Flat Washer, 3/8" USS	9405-076	2	
40	Lock Nut/Top 3/8"-16UNC	9928	2	
41	GCM (Grain Cart Module) Mounting Bracket	276907B	1	
42	Proximity Sensor Bracket	2004919B	1	Only KILLBROS Models: 1950
43	Uharvest Pro Remote Display Kit	276944	1	Includes Items 44-46
44	Display Bundle Box	2010408	1	
45	Display Assembly 4" LED	9008351	1	
46	Uharvest Pro Remote Display ECU Kit	9008850	1	

UHarvest Pro Components Less Load Cells
Grain Carts with 5-Point Scales

Please visit www.unverferth.com/parts/ for the most current parts listing.



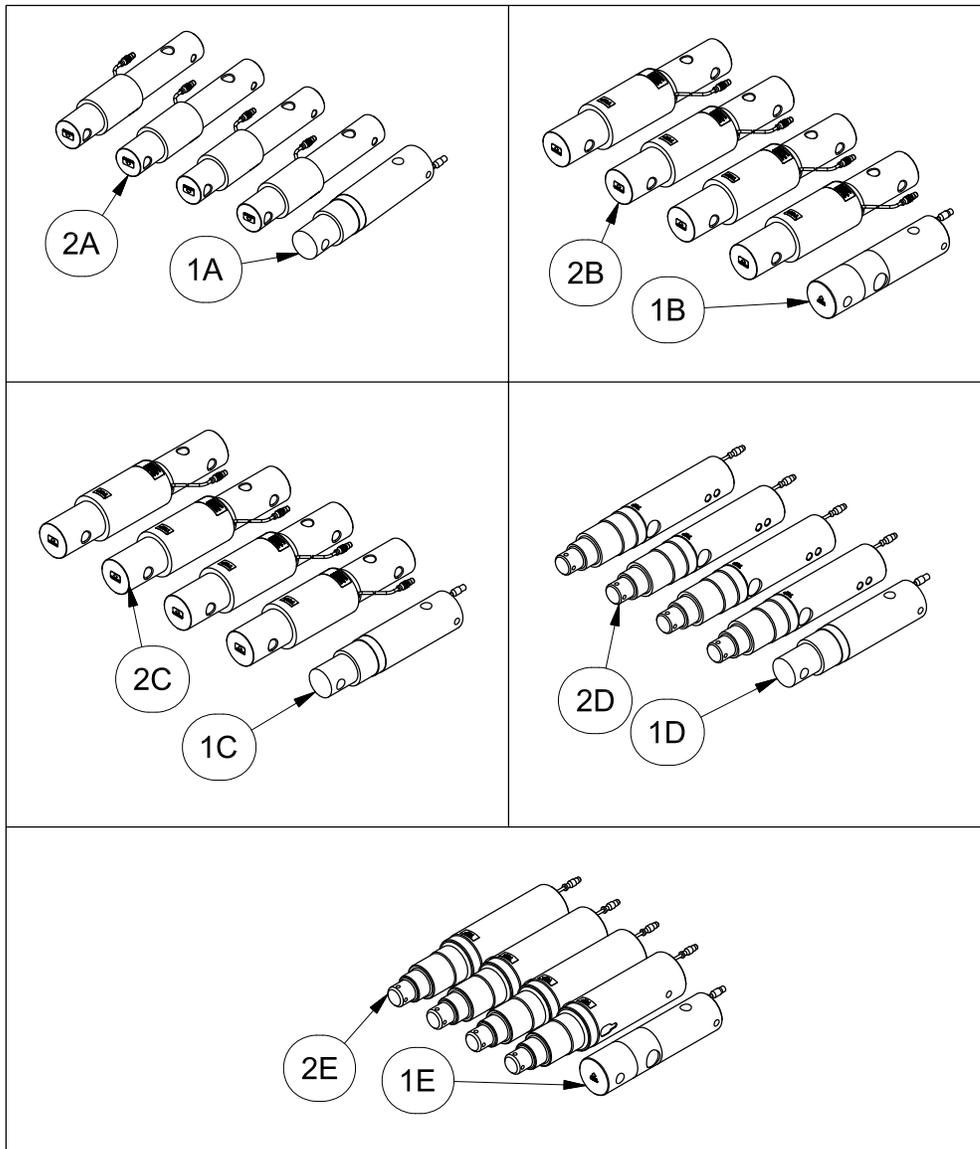
UHarvest Pro Components Less Load Cells Grain Carts with 5-Point Scales

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	Accu-Save Kit	271473B	1	Includes Items 2-14
2	Capscrew, 3/8"-16UNC x 1 1/4" G5	9390-056	2	
3	Carriage Bolt, 1/2"-13UNC x 1 1/2" G5	9388-104	2	
4	Capscrew, 9/16"-12UNC x 2 1/4" G5	9390-495	2	
5	Flat Washer, 3/8" SAE	9405-074	2	
6	Flat Washer, 1/2" SAE	9405-086	2	
7	Flange Screw, 1/4"-20UNC x 3/4" G5	97420	2	
8	Large Flange Hex Nut, 1/4"-20UNC G5	97189	2	
9	Accu-Save Sensor Bracket	252065B	1	
10	Accu-Save Sensor Bracket	252198B	1	
11	Accu-Save Sensor Bracket	252199B	1	
12	Proximity Sensor w/Metri-Pack Connector	9006076	1	
13	RPM Formed Sensor Bracket	281894B	1	
14	Hose Clamp, #28 (SS)	900571	1	
15	Connector Bracket	281836B	1	
16	Pin 1" Dia. x 7 3/8"	281691	1	
17	Cable Tie 7 1/2"	9000106	10	
18	Cable Tie 14 1/2"	9000107	5	
19	Hitch - Cast - CAT 5	282329B	1	
20	Retaining Ring 1"	91192	2	
21	Plate Holder	281837B	1	
22	Harness - GCM	9008613	1	
23	GCM	9008595	1	
24	Uharvest Junction Box	9006852	1	
25	Cable - Junction Box	9006871	1	
26	Pan head #8-32UNC x 1 1/4" Phillips Machine Screw	903172-119	3	
27	Lock Washer, #8	9404-011	3	
28	Flat Washer, #8	9405-046	3	
29	Hex Nut, #8-32UNC G2	9830-015	3	
30	Capscrew, 1/4"-20UNC x 3" G5	9390-013	3	
31	Lock Nut/Top, 1/4"-20UNC	9936	3	
32	Manual-Uharvest Pro Scale Sys.	276851	1	
33	Manual	9008619	1	
34	Decal, IMPORTANT ISO-Harness	9008814	1	
35	Extension Harness - Junction Box	9006936	1	
36	Uharvest Pro Remote Display Kit	276944	1	
37	Display Bundle Box	2010408	1	
38	Display Assembly 4" LED	9008351	1	
39	Uharvest Pro Remote Display ECU Kit	9008850	1	

**UHarvest Pro Load Cells & Spindle Load Cell Component
Grain Carts with 5-Point Scales**

Please visit www.unverferth.com/parts/ for the most current parts listing.



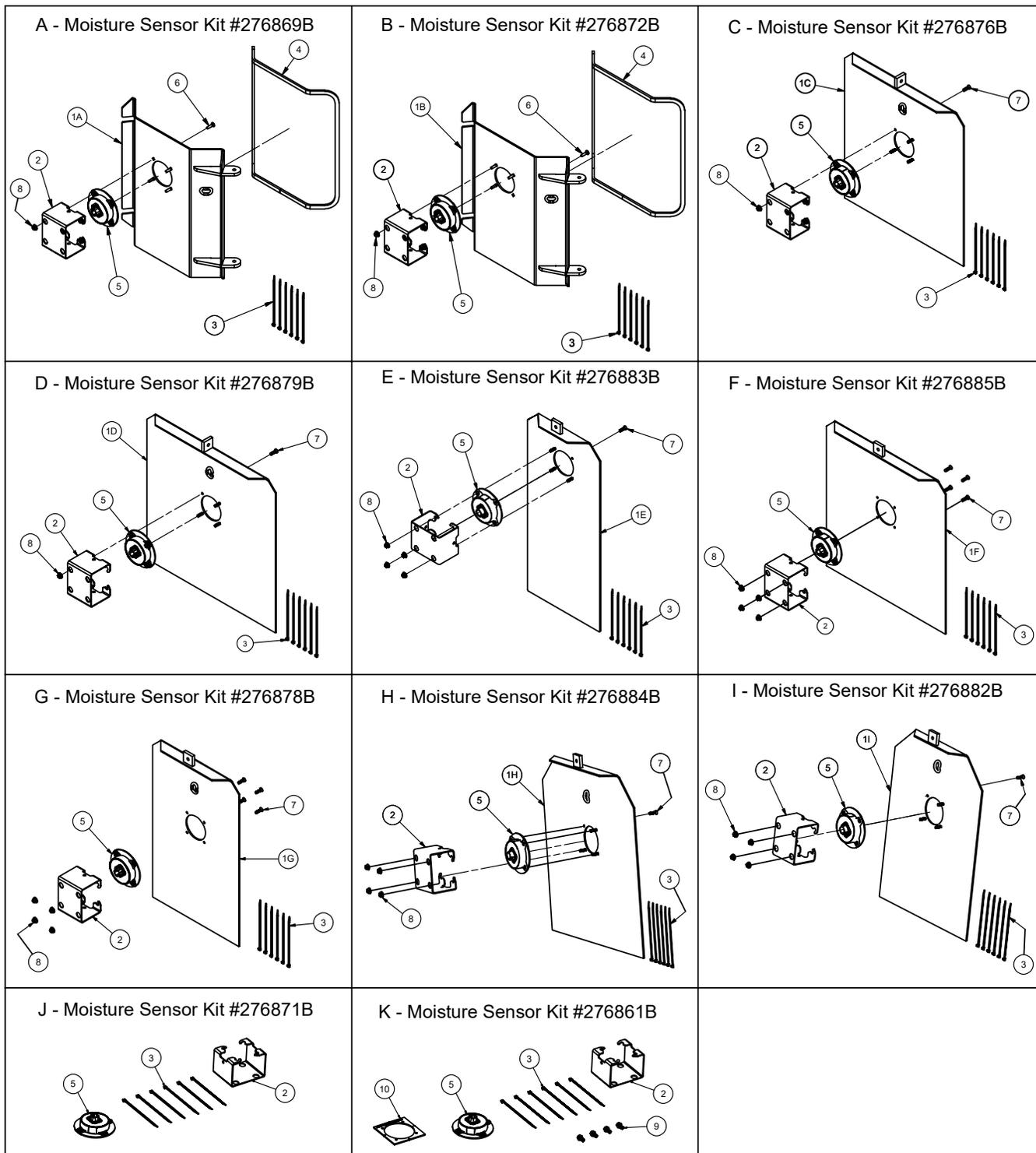
**UHarvest Pro Load Cell & Spindle Load Cell Component
Grain Carts with 5-Point Scales**

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1A	Load Cell 3 3/4" Dia. x 16.406"	90049410	1	BRENT Models: V800 Tracks V1000 Single Wheels w/ Adj. Axle/Straddle Duals/Tracks V1100 Single Wheels w/ Adj. Axle/Tracks V1300, 1196, 1396 Single Wheels/Tracks KILLBROS Models: 835 Tracks 1035 Single Wheels w/ Adj. Axle/Straddle Duals/Tracks 1135 Single Wheels w/ Adj. Axle/Tracks 1111, 1311, 1113, 1313 Single Wheels/Tracks PARKER Models:
2A	Load Cell 2 7/8" Dia. x 18"	9004903	4	842 Tracks 1042 Single Wheels w/ Adj. Axle/Straddle Duals/Tracks 1142, Single Wheels w/ Adj. Axle/Tracks 1348, 1152, 1352, 1154, 1354 Single Wheels/Tracks UNVERFERTH Models: 860 Tracks 1060 Single Wheels w/ Adj. Axle/Straddle Duals/Tracks 1160 Single Wheels w/ Adj. Axle/Tracks 1019 Single Wheels w/ Adj. Axle/Straddle Duals/Tracks 1119 Single Wheels w/ Adj. Axle/Tracks 1110, 1310, 1319, 1120, 1320 Single Wheels/Tracks
1B	Load Cell 3 3/4" Dia. x 14.625"	9008119	1	BRENT Models: 2096 Tracks
2B	Load Cell 3 1/2" Dia. x 20.766"	9005811	4	UNVERFERTH Models: 2020 Tandem Duals/Tracks
1C	Load Cell 3 3/4" Dia. x 16.406"	90049410	1	BRENT Models: V1500, 1596 Tracks KILLBROS Models: 1611 Tracks; 1613 Tandem Duals/Tracks
2C	Load Cell 3 1/2" Dia. x 20.766"	9005811	4	PARKER Models: 1648 Tracks; 1654 Tandem Duals/Tracks UNVERFERTH Models: 1519, 1610 Tracks
1D	Load Cell 3 3/4" Dia. x 16.406"	90049410	1	BRENT Models: 1196, 1396, 1596 Tandem Duals KILLBROS Models: 1111, 1311, 1113, 1313 Tandem Duals
2D	Spindle Load Cell 3 3/4" Dia. x 20.25"	9006347	4	PARKER Models: 1348, 1152, 1352, 1154, 1354 Tandem Duals UNVERFERTH Models: 1110, 1310, 1120, 1320 Tandem Duals
1E	Load Cell 3 3/4" Dia. x 14.625"	9008135	1	BRENT Models: 2096 Tandem Duals
2E	Spindle Load Cell 4 1/2" Dia. x 20.25"	9006348	4	

Moisture Sensor Components

Please visit www.unverferth.com/parts/ for the most current parts listing.



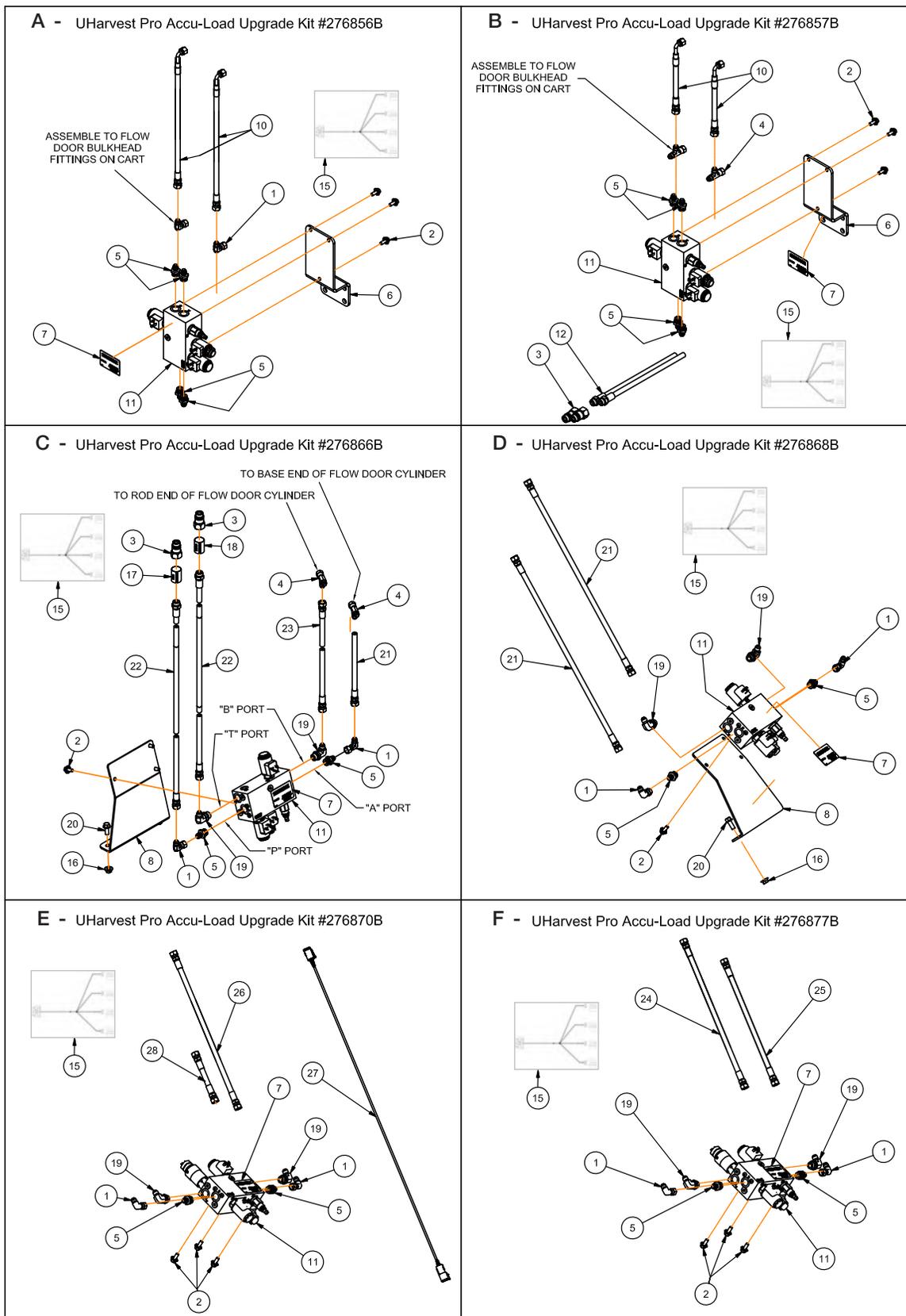
Moisture Sensor Components

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NUMBER	DESCRIPTION	QTY	NOTES	
A	276869B	UHarvest Pro Moisture Sensor Kit (Black) BRENT Models: 1196, 1396, 1596 KILLBROS Models: 1111, 1311, 1611 PARKER Models: 1348, 1152, 1352, 1648 UNVERFERTH Models: 1110, 1310, 1610	1	Includes Items 1A, 2, 3, 4, 5, 6, 8	
B	276872B	UHarvest Pro Moisture Sensor Kit (Black) BRENT Models: 2096 UNVERFERTH Models: 2020		Includes Items 1B, 2, 3, 4, 5, 6, 8	
C	276876B	UHarvest Pro Moisture Sensor Kit (Black) KILLBROS Models: 735, 835 PARKER Models: 742, 842 UNVERFERTH Models: 760, 860		Includes Items 1C, 2, 3, 5, 7, 8	
D	276879B	UHarvest Pro Moisture Sensor Kit (Black) KILLBROS Models: 1035, 1135 PARKER Models: 1042, 1142 UNVERFERTH Models: 1060, 1160		Includes Items 1D, 2, 3, 5, 7, 8	
E	276883B	UHarvest Pro Moisture Sensor Kit (Black) BRENT Models: V1300, V1500		Includes items 1E, 2, 3, 5, 7, 8	
F	276885B	UHarvest Pro Moisture Sensor Kit (Black) BRENT Models: V700		Includes Items, 1F, 2, 3, 5, 7, 8	
G	276878B	UHarvest Pro Moisture Sensor Kit (Black) BRENT Models: V800, V1000		Includes Items 1G, 2, 3, 5, 7, 8	
H	276884B	UHarvest Pro Moisture Sensor Kit (Black) BRENT Models: V1100		Includes Items 1H, 2, 3, 5, 7, 8	
I	276882B	UHarvest Pro Moisture Sensor Kit (Black) UNVERFERTH Models: 1019, 1119, 1319, 1519		Includes Items 1I, 2, 3, 5, 7, 8	
J	276871B	UHarvest Pro Moisture Sensor Kit (Black) BRENT Models: 2596		Includes Items 2, 3, 5	
K	276861B	UHarvest Pro Moisture Sensor Kit (Black) KILLBROS Models: 1950		Includes Items 2, 3, 5, 9, 10	
1A	272636B	Cleanout Door Weldment =Black=	1		
1B	273917B	Cleanout Door Weldment =Black=			
1C	281830B	Cleanout Door Weldment =Black=			
1D	281832B	Cleanout Door Weldment =Black=			
1E	288737B	Cleanout Door Weldment =Black=			
1F	272868B	Cleanout Door Weldment =Black=			
1G	286996B	Cleanout Door Weldment =Black=			
1H	290992B	Cleanout Door Weldment =Black=			
1I	292492B	Cleanout Door Weldment =Black=			
2	281835B	Plate 12GA x 3 31/32 x 11 3/4 =Black=		1	
3	9000106	Cable Tie		6	
4	9003757	Gasket 1/4 x 1/2, Foam Material	AR		
5	9008621	Moisture Sensor	1		
6	9388-003	Carriage Bolt 1/4"-20UNC x 1" G5	4		
7	902703-021	Flat Head 1/4-20UNC x 1 Capscrew	4		
8	97189	Hex Nut/Large Flange 1/4"-20UNC G5	4		
9	9500724	Self Threading Screw 5/16"-18UNC x 3/4"	4		
10	2001515	Moisture Sensor Mount Template	1		

Accu-Load Components

Please visit www.unverferth.com/parts/ for the most current parts listing.



Accu-Load Components

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	NOTES
A	276856B	UHarvest Pro Accu-Load Upgrade Kit (Black) KILLBROS Models: 1111, 1311, 1611 PARKER Models: 1348, 1648, 1152, 1352, 1154 UNVERFERTH Models: 1110, 1310, 1610, 2020, 1120	Includes Items 1, 2, 5, 6, 7, 10, 11, 15
B	276857B	UHarvest Pro Accu-Load Upgrade Kit (Black) BRENT Models: 1196, 1396, 1596, 2096, 2596 KILLBROS Models: 1313, 1613 PARKER Models: 1354, 1654 UNVERFERTH Models: 1320, 1620	Includes Items 2-7, 10-12, 15
C	276866B	UHarvest Pro Accu-Load Upgrade Kit (Black) BRENT Models: V1000, V1100	Includes Items 1-5, 7-8, 11, 15-23
D	276868B	UHarvest Pro Accu-Load Upgrade Kit (Black) BRENT Models: V800 KILLBROS Models: 1035, 1135 PARKER Models: 1042, 1142 UNVERFERTH Models: 1060, 1160, 1019, 1119	Includes Items 1, 2, 5, 7, 8, 11, 15, 16, 19-21
E	276870B	UHarvest Pro Accu-Load Upgrade Kit (Black) BRENT Models: V1300, V1500	Includes Items 1, 2, 5, 7, 11, 15, 19, 26-28
F	276877B	UHarvest Pro Accu-Load Upgrade Kit (Black) UNVERFERTH Models: 1319, 1519	Includes Items 1, 2, 5, 7, 11, 15, 19, 24, 25
1	9876	Elbow 90 Degree 9/16"-18 JIC Male x 9/16"-18 JIC Female	
2	91256	Flange Screw 5/16"-18UNC x 3/4"	
3	91383	Male Tip Coupling 3/4"-16 O-Ring Female Threaded	
4	91465	Tee 9/16"-18 JIC Male x 9/16"-18 JIC Female Swivel x 9/16"-18 JIC Male	
5	92927	Adapter 9/16"-18 JIC Male x 3/4"-16 O-Ring Male Boss	
6	252046B	Plate 1/4 x 4 1/4 x 12 1/8 Valve Block Plate	
7	273898	Decal - Patent Pending	
8	251680B	Valve Mount Plate	
9	9003131	Hose 1/4 x 29 Hyd 3000 PSI 9/16"-18 JIC Swivel Female Both Ends	
10	9004113	Hose 1/4 x 20 Hyd 3000 PSI 9/16"-18 JIC 90 Degree Elbow x 9/16"-18 JIC Female Swivel Both Ends	
11	9005476	Flow Door Manifold	
12	9005667	Hose 1/4 x 152 Hyd 3000 PSI 3/4"-16 O-Ring Male x 9/16"-18 JIC Female Swivel	
13	9006858	Cable - Accu-Load	
14	9390-005	Capscrew, 1/4"-20UNC x 1"	
15	9008615	Harness - Accu-Load	
16	9002717	Lock Nut/Flange 3/8"-16UNC	
17	9003995	Sleeve - Hose Marker	
18	9003996	Sleeve - Hose Marker	
19	9874	Elbow 90 Degree 9/16"-18 JIC Male x 3/4"-16 O-Ring Male	
20	91262	Flange Screw 3/8"-16UNC x 1"	
21	98081	Hose 1/4 x 37 Hyd 3000 PSI 9/16"-18 JIC Swivel Female Both Ends	
22	9004121	Hose 1/4 x 295 Hyd 3000 PSI 3/4"-16 O-Ring Male x 9/16"-18 JIC Female Swivel	
23	93847	Hose 1/4 x 42 Hyd 3000 PSI 9/16"-18 JIC Swivel Female Both Ends	
24	9003114	Hose 1/4 x 54 Hyd 3000 PSI 9/16"-18 JIC Swivel Female Both Ends	
25	97401	Hose 1/4 x 34 Hyd 3000 PSI 9/16"-18 JIC Swivel Female Both Ends	
26	9003113	Hose 1/4 x 31 Hyd 3000 PSI 9/16"-18 JIC Swivel Female Both Ends	
27	9007187	Harness Extension - Accu-Load	
28	94723	Hose 1/4 x 18 Hyd 3000 PSI 9/16"-18 JIC Swivel Female Both Ends	



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