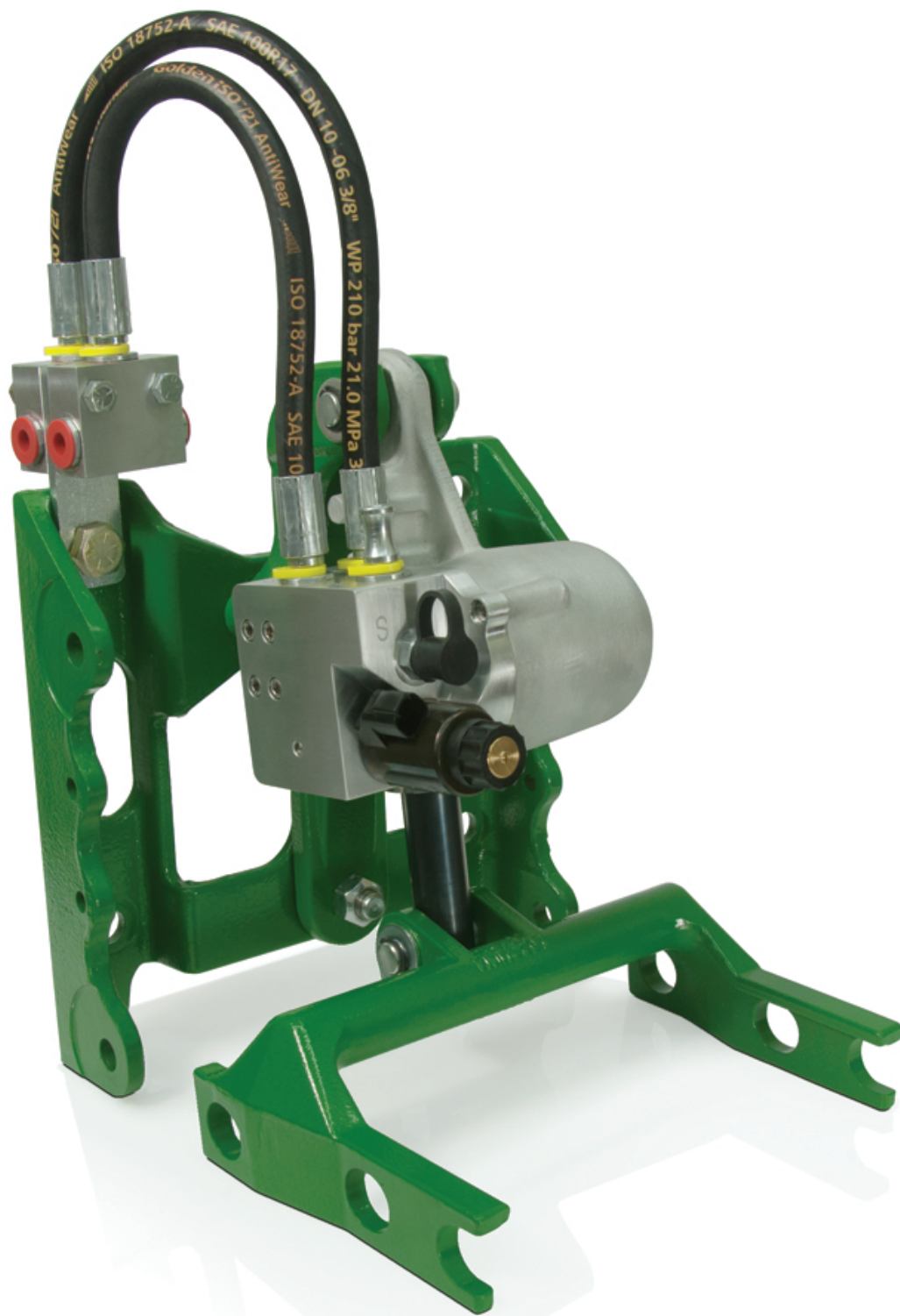


Dawn Model 5027 Installation Manual



DAWN®

Introduction

PLEASE CAREFULLY READ THIS MANUAL

It is strongly recommended that you become familiar with all operation and maintenance procedures concerning your Dawn agricultural equipment.

Failure to follow safety recommendations while this implement is in operation, and/or failure to properly store this implement, and/or failure to adequately prepare this implement for transport, could result in equipment damage, personal injury or death. Please make yourself aware of all federal and local laws that may apply to the transport, use and sale of this implement.

USING THIS MANUAL

All Dawn manuals are named and numbered and should be considered a principal element of the device they accompany. Please ensure this manual is kept in a location not subject to extreme conditions (i.e. excess humidity, hydraulic fluid, exposed to natural elements, etc.). Please ensure that this manual remains with the implement if traded, leased, or sold.

WARRANTY INFORMATION

All new Dawn Equipment company products carry a limited warranty. Warranty assurances vary by device, and can be found in the appendices of this or any other Dawn Equipment Company users manual. Warranty information is also available upon request by contacting Dawn toll-free at 800.554.0007, or you can request a copy in writing. Request warranty information by e-mail at

info@dawnequipment.com, or by US post at

Dawn Equipment
Company PO Box 497
Sycamore, IL 60178

Dawn Equipment Company prides itself on the manufacture of quality American made row crop tools. Warranties will be honored by Dawn to dealers authorized to sell Dawn Equipment products who, in turn, honor such warranties to the original retail purchaser. Should this equipment be improperly cared for, or should it be modified to change performance beyond OEM specifications, applicable Dawn warranties will become void, and Dawn sponsored implement improvements will not be granted.

DISCLAIMER

Dawn Equipment Company makes no claim to the safety or reliability of non-Dawn OEM parts or whole goods used in conjunction with Dawn OEM equipment, and shall not be held responsible for any personal injury or property damage, or for any complications with operational performance caused by non-Dawn OEM parts or whole goods used in conjunction with Dawn OEM equipment. Please familiarize yourself with the users manuals and safety recommendations of all non-Dawn OEM equipment.

WEIGHTS AND MEASURES

All Dawn Equipment Company part and whole good designs adhere to the United states Customary Unit System (Inch-Pound). All measurements in this manual are labeled using only the aforementioned units, unless otherwise explicitly specified.

ADDITIONAL INFORMATION

Additional information on this, and any other Dawn tool can be found on the web at www.dawnequipment.com. You may also contact Dawn for information by phone at **800.554.0007**, or by fax at **815.899.3663**, or by email at info@dawnequipment.com



GENERAL SAFETY

GENERAL SAFETY

It is essential that you be able to recognize safety signal words and their associated symbols. Please be alert to any signs posted on your Dawn Equipment Company products, and/or in your users manual. Make sure you have read all safety messages and that you clearly understand the recommended precautions. If you have any questions about any Dawn safety sign, or have further questions about the safety recommendations on this or any other Dawn product, please contact Dawn Equipment Company at 800.554.0007.

SAFETY TRIGGERS

Several safety symbols appear with their associated safety words throughout your Dawn Equipment user manual. It is important to recognize and understand these safety sig-nals in order to take appropriate action as necessary.

▲ DANGER - Indicates an imminently hazardous situation that, if not avoided, will result in serious injury or death, and/or property damage

▲ WARNING - Indicates a potentially hazardous situation that, if not avoided, will result in serious injury or death, and/or property damage.

▲ CAUTION - Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury, and/or property damage.

REPORTING AN EMERGENCY

Ensure that you have access to a radio or a mobile phone when operating or repairing farm machinery. Working with a partner whenever possible significantly increases the chances of receiving timely emergency care should one party become severely injured, and/or incapacitated.

MAINTENANCE AND UPKEEP

For safety reasons, it is important to keep your implements in proper working order. Unauthorized modifications to Dawn Equipment Company products may compromise the efficiency and/or safe operation of the product and will void any and all warranties through Dawn Equipment Company. Please read your manual before attempting any repair work to your Dawn tool. If you need to work on your Dawn tool, make sure to support it before partially or fully removing it from the attachment points. Do not adjust your Dawn tools while they are moving. Before making adjustments to your Dawn fx tool, make sure to disengage the hydraulic circuit and disconnect the power source.

PROPER WASTE DISPOSAL

Please familiarize yourself with all waste disposal laws applicable to your area before dumping.



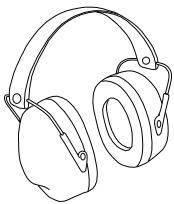
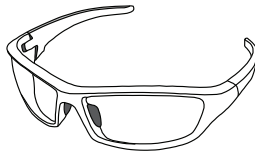
SAFETY GEAR

PROTECTIVE CLOTHING

Wearing proper attire when working on agricultural equipment is a critical safety precaution. Loose clothing or accessories may become entangled in moving parts causing serious injury or death. Please ensure that loose cuffs, shirts, belts, jewelry, etc. are secured such that they cannot be drawn into moving machinery. Stay aware of your surroundings when in the proximity of machinery that is either moving or has the potential for spontaneous movement. Equip yourself with all recommended safety accessories, and develop a strategy for ensuring their use when needed.

SAFETY GLASSES/ GOGGLES

If you will be using hazardous chemicals, or are striking, cutting or grinding metal make sure you are wearing eye protection.

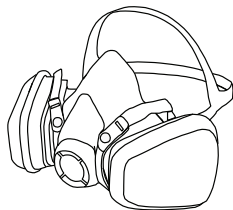


EARPLUGS / SOUND

MUFFLERS When working around equipment that generates high amplitude sound (ie dryers, vacuums, etc.) ear protection is strongly recommended.

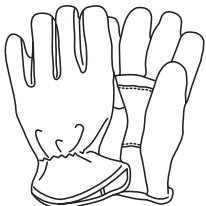
RESPIRATOR MASK

Carefully read all safety information associated with any chemicals you will be handling. Use a respirator mask when using hazardous chemicals, (ie Insecticides, NH₃, etc.)



WORK GLOVES

If working around machinery with sharp edges, or rough metal surfaces, work gloves may prevent a few stitches. Work gloves are inexpensive, and are really worth the investment.



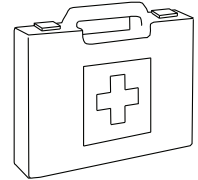
STEEL-TOED BOOTS

A good pair of steel-toed boots can save your toes.

Avoid an unfortunate accident, and protect your feet.

FIRST AID KIT

In order to minimize the risk of infection, every shop and tractor should have a complete first aid kit.



FIRST AID KIT CONTENTS

According to the National Agricultural Safety Database (NASD) and Canadian Agricultural Safety Association (CASA), each first aid kit should include the following;

- Poison First Aid Kit with syrup of Ipecac and charcoal
- Sterile first aid dressings in sealed envelope (2"x 2" for small wounds, 4"x 4" for larger wounds and a compress to stop bleeding)
- Tongue blades
- Stainless steel bandage scissors (strong enough to cut denim)
- Tweezers
- Eye wash solution
- Thermometer
- Safety pins
- Ace bandage
- "Band-aids"
- Roller bandage 1"x 5 yds. (for fingers)
- Roller bandage 2"x 5 yds. to hold dressings in place
- Adhesive tape
- Triangular bandages for a sling or as a covering over a larger dressing
- Cotton balls for cleaning wounds or applying medication
- Splints 1/4" thick, 1/2" wide, 12-15" long for splinting broken arms and legs
- 70% isopropyl alcohol and tincture green soap in a covered container for cleaning
- Ice packs (chemical ice bags) to use to reduce swelling
- Several pairs of disposable latex or nitrile gloves
- Waterless hand wash
- Emergency tourniquet (or elastic wrap/tubing)
- Amputation preservation kit consisting of plastic bags: one large garbage bag, four kitchen-sized and two bread bags



SAFETY INFORMATION

Rfx SAFETY CONSIDERATIONS

- ▲ **WARNING!:** It is imperative that you familiarize yourself with this device and its operation before attempting any service or operation.

HYDRAULIC CONSIDERATIONS

- ▲ **WARNING!:** The Rfx is a high pressure hydraulic device. Always fully discharge any system pressure prior to attempting any service of the hydraulic system. Always make sure hydraulic fittings are tight before operation. Consult your tractor owner manual if necessary to determine proper way of discharging system pressure. Always place SCV valve into float position prior to disconnecting from tractor. **WARNING!:**
- ▲ The Rfx unit is a high precision hydraulic device. Always try to work on assembly in a shop environment that is as clean as possible. When performing installation avoid exposing the hydraulic circuit to the open air until it is absolutely necessary to complete an assembly step. Minimizing the contamination of the hydraulic components with dirt and debris will have a direct effect on the longevity of the seals and other components.

PROTECTIVE CASTING

The protective casting makes up a large portion of the Rfx unit volume. This protective casting encases a hydraulic accumulator which stores a large amount of energy. Never remove the protective cover from the unit without first discharging hydraulic pressure from the circuit. The accumulator should be serviced only after pressure is removed from the unit. No service or modification should be done to the accumulator.

TAMPER PROOF COVER

The tamper proof cover is located on the relief valve which comes installed on the pressure control manifold. Do not remove, damage or destroy this protective cover. Do not change relief valve settings. All service to this manifold should be done by an authorized Dawn distributor or by Dawn Equipment Company.

PINCH POINTS

The Rfx is a dynamic device which connects many points of articulation where hands or loose clothing can become caught. For your safety, please be aware of how the unit operates and stay clear of pinch points.

- ▲ **WARNING!:** Operating or servicing the Rfx or planter row unit with Rfx hydraulic circuit charged may result in loss of limb or death. Only service unit with hydraulic line pressure discharged.
- ▲ **WARNING!:** Never remove unit retaining pins without first discharging the circuit pressure and supporting the planter row unit with a jack or by resting on ground.



TABLE OF CONTENTS

Safety Information	3-5
SECTION 1 Install Rfx+ Actuator	7-8
1.1 Remove Pneumatic Components	7
1.2 Install New Mounts & Actuator	7
SECTION 2 Hydraulic System – Tractor & Trunk Lines	9-12
2.1 Bulkhead to Tractor.....	8
2.2 Trunk Hose Routing	10
2.3 Filter Kit Installation	10
2.4 Rear Bulkhead to Center of Planter.....	12
SECTION 3 Hydraulic System – Row Units to Trunk Lines.....	13-16
3.1 WEO Tee Mount Plates	13
3.2 WEO Tee Stacks	13
3.3 Row to Row Hoses	15
3.4 Trunk Line Connection & End Rows	16
3.5 Actuator Plumbing.....	16
SECTION 4 Electrical Installation for ISO Ccontroller	17-22
4.1 Tractor to Front Bulkhead.....	17
4.2 Front Bulkhead to Toolbar	17
4.3 Row to Row Cables & Tees	18
4.4 Row Unit Mounted Components	22



1.1 REMOVE PNEUMATIC COMPONENTS

1.1A – AIRLINES: DISCONNECT & REMOVE AIRLINES FROM COMPRESSOR AND AIRBAGS

1.1B – AIRBAG & MOUNTS: REMOVE UPPER MOUNT

TOOLS NEEDED:

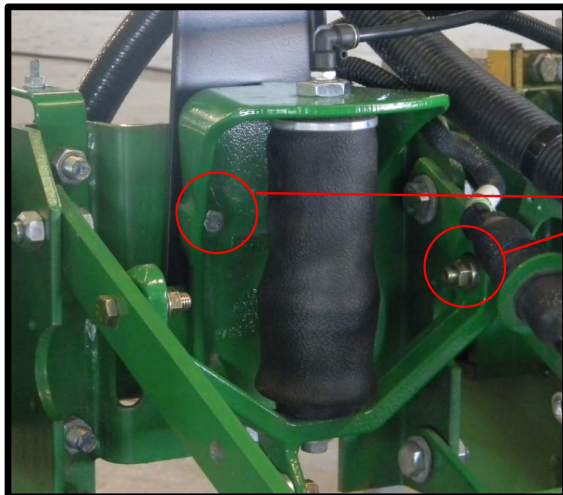
15/16" WRENCH

5/8" WRENCH

1.1C – AIRBAG & MOUNTS: REMOVE LOWER MOUNT

TOOLS NEEDED:

3/4" WRENCH



*RETAIN ORIGINAL
HARDWARE FOR RFX
CLEVIS MOUNTS*

1.2 INSTALL NEW MOUNTS AND ACTUATOR

1.2A – UPPER CLEVIS MOUNT

PARTS NEEDED:

REUSE ORIGINAL HARDWARE

TOOLS NEEDED:

15/16" WRENCH

5/8" WRENCH



1.2B – LOWER CLEVIS MOUNT

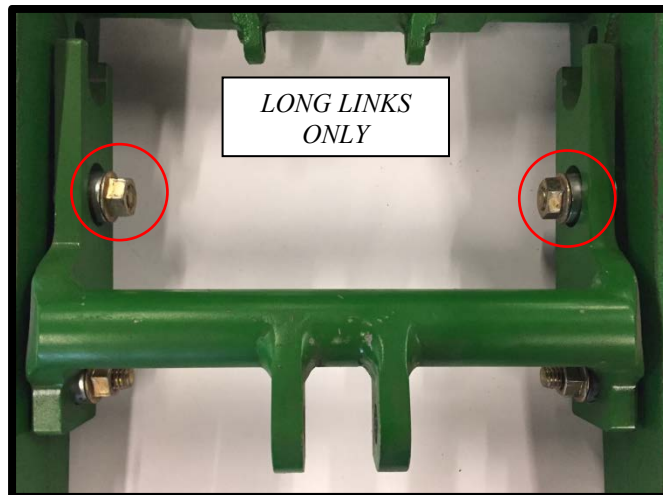
PARTS NEEDED PER ROW:

HHCS 1/2-13 X 2-1/4 GR5 ZN	# 9077 (4)
BUSHING, CRADLE CLEVIS MNT	# 102845 (4)
NUT 1/2-13 FLG LOCK GR5 ZN	# 9007-R1 (4)

TOOLS NEEDED:

3/4" WRENCH (2x)

* NOTE REAR BOLT/BUSHING POSITION CHANGE FOR LONG LINKS



1.2C – INSTALL RFX + ACTUATOR

PARTS NEEDED PER ROW:

CLEVIS PIN	# 90971 (2)
WASHER	# 90955 (2)
RETAINING RING	# 90953 (2)

STEP 1: SECURE ACTUATOR ROD IN LOWER CLEVIS MOUNT USING CLEVIS PIN, WASHER & RETAINING RING. ENSURE RING IS IN PIN GROOVE.

STEP 2: ALIGN ACTUATOR CLEVIS WITH UPPER CLEVIS MOUNT & INSTALL CLEVIS PIN FROM MANIFOLD SIDE OF ACTUATOR, TO ALLOW ACCESSIBILITY TO RETAINING RING AFTER HYDRAULIC HOSES ARE IN PLACE.



2.1 BULKHEAD TO TRACTOR

2.1A – ASSEMBLE HOSES

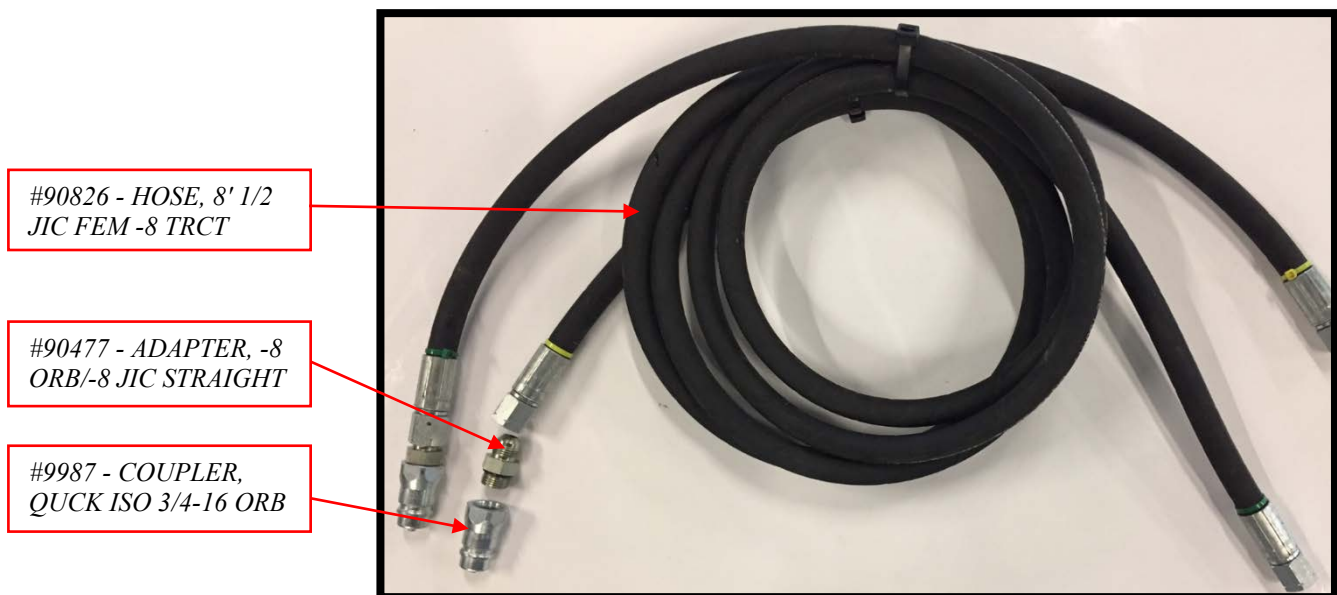
PARTS NEEDED:

HOSE, 8' 1/2 JIC FEM -8 TRCT	# 90826 (2)
ADAPTER, -8 ORB/-8 JIC STRAIGHT	# 90477 (2)
COUPLER, QUICK ISO 3/4-16 ORB	# 9987 (2)

TOOLS NEEDED:

7/8" WRENCH (2)
1-1/16" WRENCH (OR ONE 7/8" & ONE ADJUSTABLE WRENCH)

IT IS HIGHLY RECOMENDED TO DESIGNATE ALL HOSES AS PRESSURE OR RETURN THROUGHOUT THE INSTALLATION TO AVOID CROSS CONNECTION AND TO ASSIST IN FUTURE MAINTENANCE.



2.1A HOSES DESIGNATED PRESSURE (YELLOW) & RETURN (GREEN) USING COLORED ZIP TIES

2.1B – SECURE BULKHEAD ADAPTER TO BULKHEAD

PARTS NEEDED:

ADAPTER, -8 JIC 45 DEG BLKHD	# 90825 (2)
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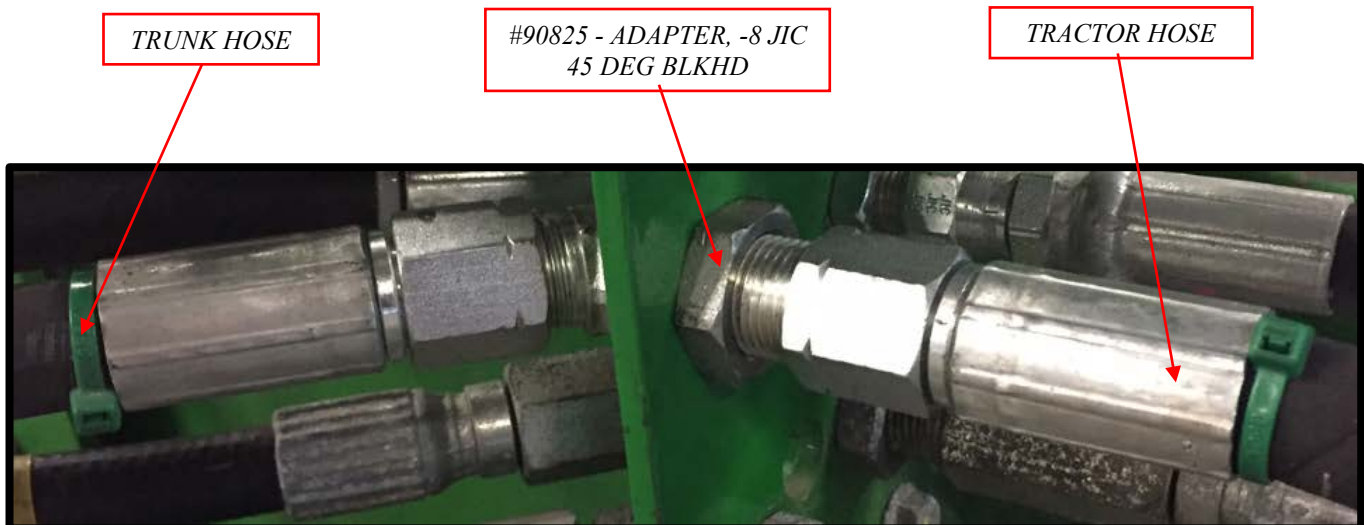
TOOLS NEEDED:

3/4" WRENCH
1" WRENCH

2.1C – SECURE TRACTOR HOSES TO BULKHEAD

TOOLS NEEDED:

7/8" WRENCH
3/4" WRENCH



2.2 TRUNK HOSE ROUTING – FRONT BULKHEAD TO REAR BULKHEAD

- * TRUNK HOSES MAY BE ROUTED THROUGH OR ALONG EITHER ARM. FACTORS TO CONSIDER ARE: EASE OF INSTALLATION, -8 BULKHEAD PORT AVAILABILITY (FRONT AND REAR), FILTER LOCATION, ETC.
- * TRUNK HOSE LENGTHS MAY BE CUSTOMIZED TO BETTER FIT PLANTERS

PARTS NEEDED:

HOSE, 25' 1/2 JIC FEM -8 TRUNK # 90912 (2)

TOOLS NEEDED:

FISH TAPE (IF UNABLE TO ROUTE BY HAND)

2.3 HYDRAULIC FILTER KIT INSTALLATION

- * FILTER CAN BE INSTALLED ANYWHERE ALONG THE PRESSURE TRUNK LINE
- * CONSIDER FOLDED PLANTER POSSESSION WHEN SELECTING FILTER LOCATION
- * ADDITIONAL FITTINGS MAY BE NEEDED DEPENDENT UPON LOCATION

2.3A – ASSEMBLE KIT

PARTS NEEDED:

FILTER, HYDRAULIC, RFX+ # 90509 (1)

PLATE, FILTER MOUNT, RFX+ # 102661 (1)

HHCS 3/8-16 X 5/8 GR8 ZN # 90044 (4)

FW 3/8 ZINC # 90045 (4)

TOOLS NEEDED:

9/16" WRENCH

ASSEMBLE KIT AS SHOWN





* NOTE FLOW DIRECTION BEFORE MOUNTING FILTER ON MOUNTING PLATE. FLOW DIRECTION INDICATOR NOT VISIBLE ONCE BOLTED TO MOUNT PLATE.



2.3B – INSTALL FILTER KIT ALONG PRESSURE TRUNK LINE

PARTS NEEDED:

- | | |
|--------------------------------|-------------|
| U-BOLT 5/8 X 7.06 X 8.63 | # 9188 (1) |
| NUT 5/8-11 GR5ZN ALLMETL LOCK | # 9142 (2) |
| HOSE, 2' 1/2 JIC FEM -8 FILTER | # 90914 (1) |

TOOLS NEEDED:

15/16" WRENCH

- * SELECT LOCATION FOR FILTER KIT.
- * 2' HOSE TO BE USED BETWEEN BULKHEAD AND FILTER.
- * ENSURE ORB/JIC FITTINGS IN FILTER ARE TIGHTENED.
- * INSTALL KIT USING U-BOLT AND CRIMP LOCK NUTS. DO NOT OVER TIGHTEN – MOUNTING PLATE WILL BEND OUT OF SHAPE.



2.4 REAR BULKHEAD TO CENTER OF PLANTER

2.4A – SECURE BULKHEAD ADAPTER

PARTS NEEDED:

ADAPTER, -8 JIC 45 DEG BLKHD

90825 (2)

TOOLS NEEDED:

3/4" WRENCH

1" WRENCH

2.4B – ASSEMBLE BULKHEAD TO CENTER HOSES

* HOSE LENGTHS MAY BE CUSTOMIZED TO BETTER FIT PLANTERS.

PARTS NEEDED:

HOSE, 18' 1/2 JIC FEM -8 BLKHD

90913 (2)

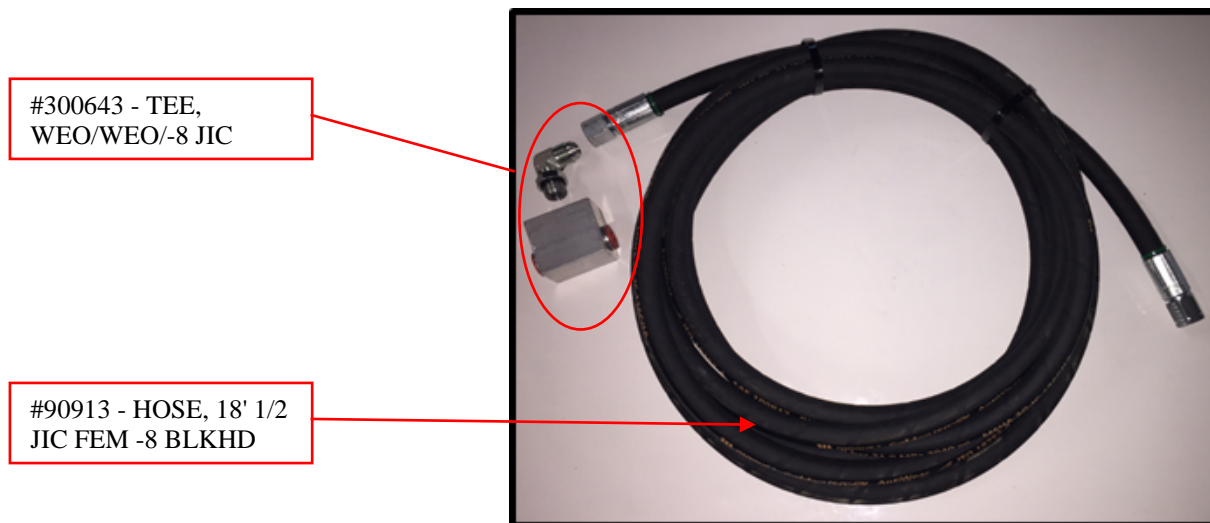
TEE, WEO/WEO/-8 JIC

300643 (2)

TOOLS NEEDED:

3/4" WRENCH

1" WRENCH



2.4A – ROUTE HOSES FROM BULKHEAD TO CENTER OF PLANTER

TOOLS NEEDED:

7/8" WRENCH

3/4" WRENCH

STEP 1: SECURE HOSE TO BULKHEAD ADAPTER (OR FILTER).

STEP 2: ROUTE HOSE TO CENTER OF PLANTER THROUGH SLEEVES

* SECURE HOSE AWAY FROM PINCH POINTS WHEN PLANTER FOLDS, USING ZIP TIES

STEP 3: LOCATE WEO/WEO/JIC TEE IN CENTER OF PLANTER WITHIN 3-1/2 FEET OF CENTER ROW UNITS.



SECTION 3 HYDRAULIC SYSTEM – ROW UNITS TO TRUNK LINES

3.1 WEO TEE MOUNT PLATES

3.1A – INSTALL WEO TEE MOUNT PLATES ON ROW UNITS

PARTS NEEDED:

PLATE, WEO TEE MOUNT	# 102953B
PLATE, WEO TEE MOUNT OFFSET	# 102991

TOOLS NEEDED:

15/16" WRENCH (IMPACT WITH DEEP SET 15/16" SOCKET)

* SOME ATTACHMENTS MAY NEED TO BE RELOCATED, SUCH AS HOSE/CABLE CLAMPS, SEED TUBE GUIDES.

STEP 1: REMOVE TOP NUT FROM U-BOLT ON THE LEFT (MANIFOLD) SIDE OF THE ROW.

STEP 2: PLACE MOUNT PLATES ON U-BOLT AS SHOWN.

* OFFSET MOUNTS TO BE USED ON CENTER ROWS AND WING ROWS WHERE STANDARD MOUNT IS OBSTRUCTED.

STEP 3: TIGHTEN U-BOLT NUT TO SECURE MOUNT PLATE

* PLATES ON NARROW ROW MOUNTS MAY NEED TO BE BACKED BY WASHER TO CORRECTLY ALIGN MOUNT PLATE.

3.2 WEO TEE STACKS

3.2A – INSTALL WEO TEES ON MOUNT PLATES

PARTS NEEDED PER ROW:

TEE, WEO/WEO/WEO	#300590 (2)
HHCS 3/8-16 X 3 GRD8 ZINC	# 90993 (2)
FW 3/8 ZINC	# 90045 (2)
NUT 3/8-16 FLANGE LOCKNUT	# 9100 (2)

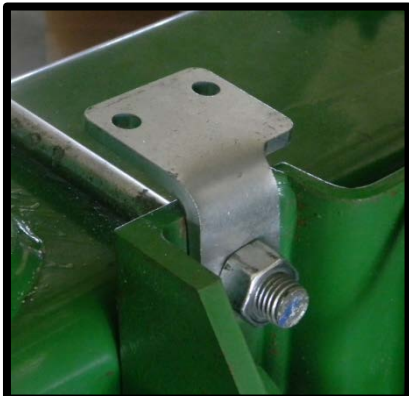
TOOLS NEEDED:

9/16" WRENCH

STEP 1: STACK 2 WEO TEES PER ROW AND ALIGN WITH CENTER PORT FACING THE BACK OF PLANTER.

* ON ROWS WITH OFFSET MOUNTS, MOUNT WEO TEES WITH CENTER PORT FACING UP.

STEP 2: SECURE TEES WITH BOLTS AND FLANGE NUTS.



3.1



3.2

WEO PLUG / CARTRIDGE ASSEMBLY AND REMOVAL

CONNECTION:

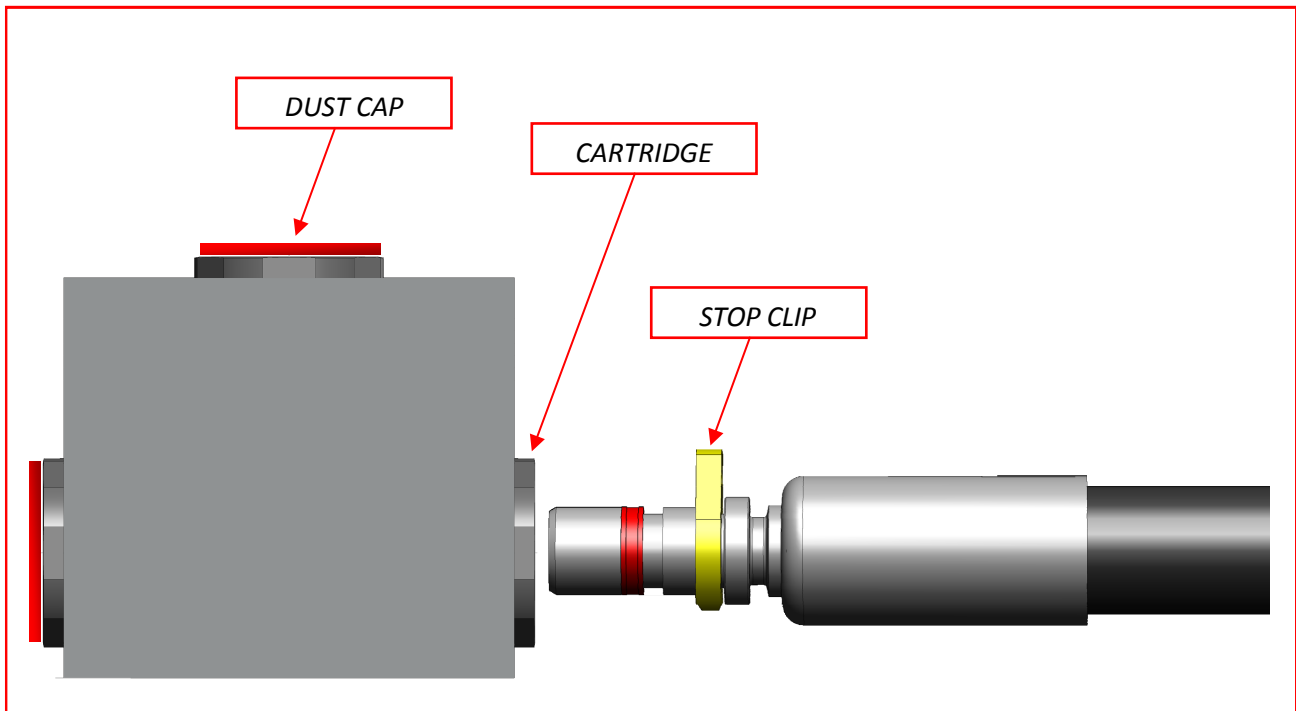
- 1: Remove dust caps from cartridge.
- 2: Leave stop clip in place on plug.
- 3: Insert plug into cartridge until stop ring contacts cartridge.
- 4: Pull hose outward to confirm proper connection.

REMOVAL:

- 1: Remove stop ring from plug end.
- 2: Push plug into cartridge to release internal locking hooks.
- 3: Pull plug straight out of cartridge to remove hose. (If plug does not come free, repeat step two.)
- 4: Replace stop ring on plug.

IMPORTANT NOTES:

- 1: ENSURE PLUG IS INSTALLED & REMOVED PERPENDICULAR TO CARTRIDGE FACE TO PREVENT DAMAGE TO PLUG-IN AND CARTRIDGE COMPONENTS.
- 2: IF PLUG IS INSERTED INTO CARTRIDGE WITHOUT STOP RING IN PLACE, PROPER CONNECTION WILL NOT BE MADE. THE HOSE MUST BE REMOVED, STOP RING REPLACED, AND REINSTALLED.



3.3 ROW TO ROW HOSES

3.3A – INSTALL 30” ROW TO ROW HOSES BETWEEN WING ROWS

PARTS NEEDED PER ROW:

HOSE, WEO -6 MALE/MALE 30" # 90778 (2)

3.3B – INSTALL 35” ROW TO ROW HOSES OVER FLEX POINTS

PARTS NEEDED PER ROW:

HOSE, WEO -6 MALE/MALE 35" # 90970 (2)

3.3C – INSTALL 42” STRT/90 ROW TO ROW HOSES BETWEEN CENTER ROWS

PARTS NEEDED PER ROW:

HOSE, WEO -6 MALE STR/90 42" # 90969 (2)

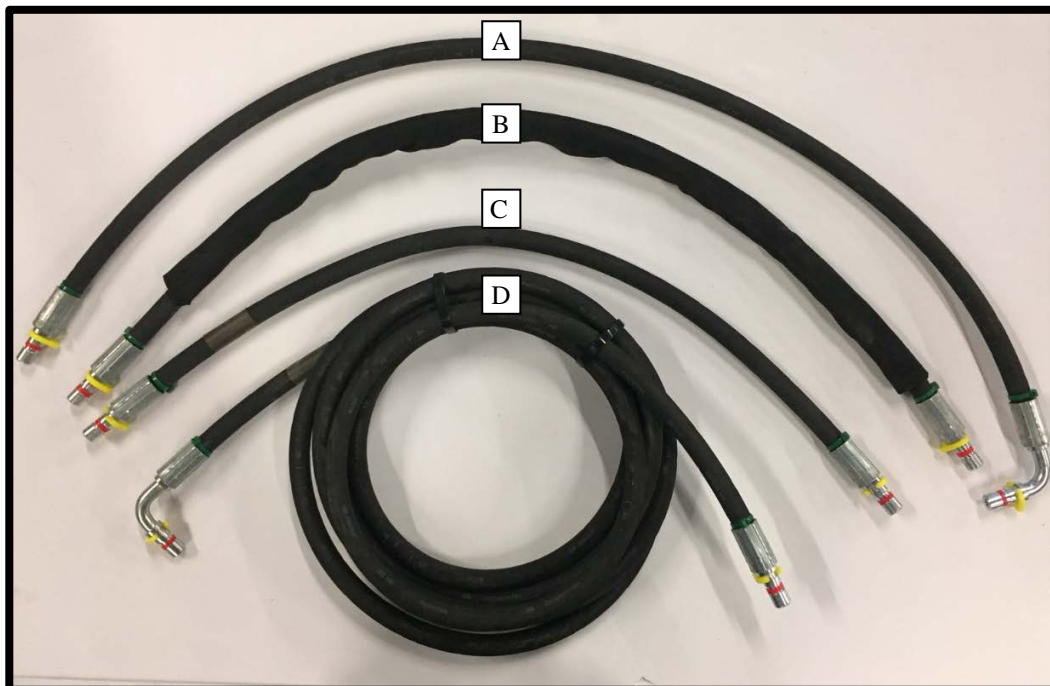
3.3D – INSTALL 160” STRT/90 HOSES BETWEEN WING & CENTER ROWS

PARTS NEEDED PER ROW:

HOSE, WEO -6 MALE STR/90 160" # 90831 (2)

* SECURE WING TO CENTER HOSES AWAY FROM PINCH POINTS WHEN PLANTER FOLDS

* ENSURE WEO HOSES ARE INSTALLED CORRECTLY.



ROW TO ROW HOSES SHOWN IN IMAGE (TOP TO BOTTOM):

A: CENTER ROW/ LIFT WHEEL STRT/90DEG

B: FLEX POINT HOSE WITH PROTECTIVE SLEEVE

C: STANDARD ROW

D: WING TO CENTER STRT/90DEG



3.4 TRUNK LINE CONNECTION & END ROWS

3.4A – RUN THE PRESSURE AND RETURN LINES FROM THE TWO CENTER ROWS UP TO THE CORRESPONDING TRUNK LINE AND CONNECT TO THE TRUNK WEO/WEO/-8JIC TEE

* ENSURE PRESSURE AND RETURN TRUNK HOSES ARE CONNECTED TO CORRECT ROW TO ROW HOSES.

3.4B – INSTALL WEO PLUGS IN FIRST AND LAST ROW UNIT WEO TEES

PARTS NEEDED PER ROW:

PLUG, WEO -6 QUICK CONNECT

300643 (2)



3.5B



3.6

3.5 ACTUATOR PLUMBING

3.5A – PRESSURE: INSTALL 20" HOSE FROM "P" PORT ON THE MANIFOLD TO THE CORRESPONDING WEO TEE ON THE PRESSURE ROW TO ROW LINE

PARTS NEEDED PER ROW:

HOSE, WEO -6 MALE/MALE 20"

90779 (1)

3.5B – RETURN: INSTALL 20" HOSE FROM "R" PORT ON THE MANIFOLD TO THE CORRECT WEO TEE ON THE RETURN ROW TO ROW LINE

PARTS NEEDED PER ROW:

HOSE, WEO -6 MALE/MALE 20"

90779

(1) 3.5C – INSTALL WEO PLUG IN "G" PORT ON MANIFOLD PARTS NEEDED PER ROW:

PLUG, WEO -6 QUICK CONNECT

300643 (1)

SECTION 4 ELECTRICAL INSTALLATION FOR ISO CONTROLLER

4.1 TRACTOR TO FRONT BULKHEAD

- **TO SECURELY ATTACH TRUNK CABLE TO FRONT & REAR BULKHEADS, TWO PLATES WILL NEED TO BE MADE TO SECURE TO BULKHEADS. (SEE IMAGE BELOW)**

PARTS NEEDED:

CABLE, RFX BATT TO FRONT HUB	# 90574	(1)
HARNESS, ISOBUS SPLITTER	# 90581	(1)
HUB, MIFX RELAY/FUSE BOX	# 90575-R1	(1)
CABLE, FRNT HUB TO PWR/CAN TEE	# 90578	(1)
TEE, POWER/CANBUS UNION	# 90579	(1)
CABLE, RFX UNION TO FRNT BLKHD	# 90590	(1)

TOOLS NEEDED:

WRENCH TO LOOSEN BATTERY CABLES
LARGE CRESCENT OR CHANNEL LOCK TO TIGHTEN BULKHEAD FITTING
FISH TAPE

STEP 1: CONNECT POWER CABLE TO TRACTOR BATTERY AND ROUTE CABLE UNDER CAB, SECURING TO A SOLID STRUCTURE TO PREVENT DAMAGE TO POWER CABLE.

Video assistance available at: <https://www.youtube.com/watch?v=YAzBKNLb9cY> (Aprox 23:40)

STEP 2: CONNECT 9-PIN ISOBUS SPLITTER TO TRACTOR ISO TERMINAL

STEP 3: CONNECT 3-PIN BATTERY CABLE TO HUB

STEP 4: CONNECT HUB/CAN CABLE TO HUB

STEP 5: CONNECT TEE TO ISOBUS SPLITTER TO HUB CABLE

STEP 6: CONNECT ISOBUS SPLITTER TO PLANTER

STEP 7: CONNECT BULKHEAD CABLE TO TEE & SECURE TO BULKHEAD PLATE

4.2 FRONT BULKHEAD TO TOOL BAR

4.2A – FRONT BULKHEAD TO REAR BULKHEAD

PARTS NEEDED:

CABLE, RFX DRAFT TUBE 300",25'	# 90584	(1)
CONNECTOR, ELEC, LG FIELD WIRE	# 90674	(1)

TOOLS NEEDED:

WIRE STRIPPERS
FISH TAPE

STEP 1: RUN FISH TAPE THROUGH DRAFT ARM FROM REAR OF PLANTER & PULL DRAFT CABLE THROUGH.

STEP 2: CONNECT FRONT PLUG TO BULKHEAD, PULL CABLE TO ALLOW PROPER EXCESS N THE FRONT OF DRAFT TUBE.

STEP 3: ROUTE CABLE TO REAR BULKHEAD, ALLOWING EXCESS FOR FOLDING, PLUS 6" FOR FIELD WIREABLE CONNECTION.

STEP 4: CUT CABLE TO LENGTH, STRIP ENDS OF FOUR WIRES

STEP 5: WIRE CABLE END AS SHOWN: 1- RED, 2-BLACK, 3-GREEN, 4-YELLOW

*** (DO NOT FOLLOW COLOR CODE ON FIELD WIREABLE PLUG) ***

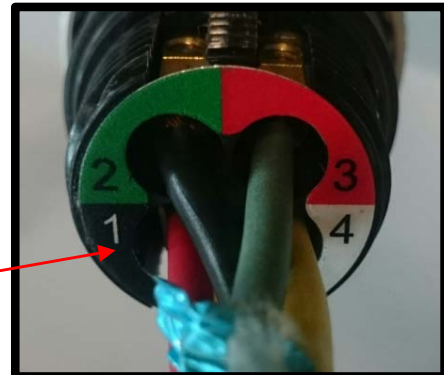




4.1

1-5/8" DIAMETER
HOLE
FOR TRUNK CABLE
BULKHEAD PLATES

FIELD WIRE
SHOWN HERE



4.2

4.2B – REAR BULKHEAD TO CENTER OF TOOLBAR

PARTS NEEDED:

CABLE, RFX BLKHD TO CENT 300"	# 90587
TEE, ELEC REAR HUB FOR MIFX	# 90762
CABLE, ISOBUS REAR HARNESS	# 300626
CONTROLLER, ISOBUS MASTER	# 90872

STEP 1: CONNECT BLKHD/CENT CABLE TO FIELD WIREABLE AT BULKHEAD & ROUTE CABLE TO CENTER OF PLANTER. (COIL ANY EXTRA LENGTH & SECURE OUT OF THE WAY)

STEP 2: LOCATE REAR HUB IN CENTER OF TOOLBAR SO BOTH CENTER ROW TEES ARE WITHIN 30". CONSIDER CABLE CONNECTIONS WHEN SELECTING LOCATION FOR REAR HUB.

STEP 3: SELECT LOCATION FOR MASTER CONTROLLER & CONNECT TO REAR HUB USING REAR HARNESS.

4.3 ROW TO ROW CABLES AND TEES

PARTS NEEDED:

CABLE, RFX+ (12AWG) 30"	# 300581 (BETWEEN STANDARD ROWS)
CABLE, RFX+ (12AWG) 160"	# 300610 (2)
TEE, RFX+ DAISY CHAIN 25A	# 90589 (1 PER ROW)
TERMINATOR, ATP06-4S (120 OHM)	# 90625 (END ROWS)

STEP 1: PLACE TEE ON TOOLBAR AT EACH ROW.

STEP 2: CONNECT WING ROWS TEES USING 30" CABLES.

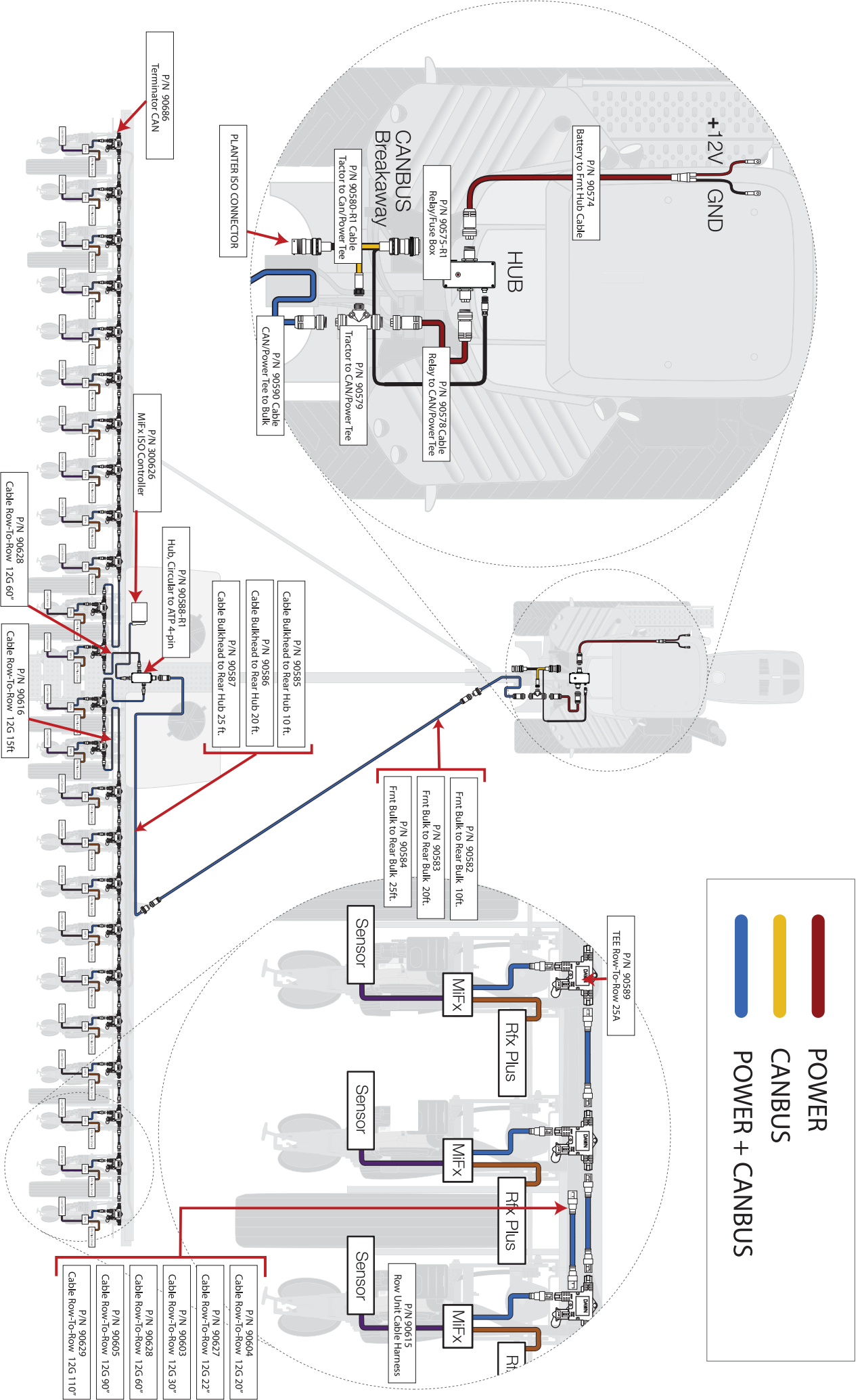
STEP 3: CONNECT WING ROW ADJACENT CENTER ROW WITH 160" CABLE

STEP 4: CONNECT CENTER ROWS WITH 30" CABLES.

STEP 5: CONNECT CENTER ROWS TO REAR HUB.

STEP 6: INSTALL TERMINATORS IN END ROW TEES.

STEP 7: SECURE TEES AND CABLES WITH ZIP TIES TO LOCATE PROPERLY AND PREVENT SNAGS.



— POWER
— CANBUS
— POWER + CANBUS

4.4 ROW UNIT MOUNTED COMPONENTS

4.4A – INSTALL GAUGE WHEEL LOAD SENSOR

PARTS NEEDED (PER ROW):

GAUGE WHEEL LOAD SENSOR (1)

TOOLS NEEDED:

15/16" WRENCH

SNAP RING PLIERS

STEP 1: REMOVE GAUGE WHEEL ARM AND BRUSH METER.

STEP 2: REMOVE SNAP RING ON RETAINING PIN AND REMOVE SEED DEPTH ADJUSTER.

STEP 3: INSTALL GAUGE WHEEL LOAD SENSOR AS SHOWN AND SECURE WITH ORIGINAL RETAINING PIN AND SNAP RING.

STEP 4: ROUTE SENSOR WIRE THROUGH BRUSH METER CAVITY TO THE INNER FRONT CAVITY OF COWLING.

4.4B – INSTALL PROXIMITY SWITCH

*** FOR PROPER ADJUSTMENT OF PROXIMITY SWITCHES, TOOLBAR SHOULD BE RAISED UNTIL ROW UNITS HANG FREE FROM GROUND.**

PARTS NEEDED (PER ROW):

SENSOR, PROXIMITY MIFX/RFX+

90508 (1)

PLATE, PROX SWITCH MNT, EE

102697 (1)

HHCS #6-32 X 3/4 ZN

90612 (2)

FW #6 ZN

90613 (4)

NUT #6-32 GR2 ZN NYLOCK

90614 (2)

TOOLS NEEDED:

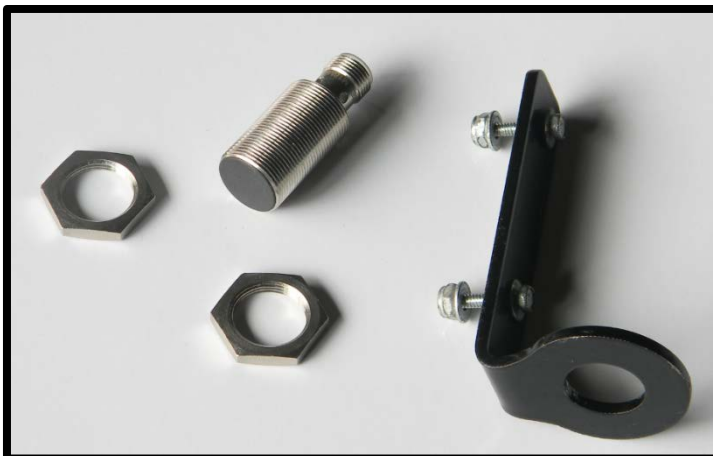
1/4" WRENCH

5/16" WRENCH

STEP 1: ALIGN MOUNTING PLATE WITH HOLES IN FRONT LEFT SIDE OF ROW UNIT COWLING & SECURE WITH PROVIDED HARDWARE.

STEP 2: INSTALL PROXIMITY SWITCH AND ADJUST TO A DEPTH SO THAT THE BOTTOM OF THE SENSOR IS APPROXIMATELY 1/8" FROM LOWER LINKAGE

STEP 3: CHECK FOR PROPER FUNCTIONING BEFORE FINAL PLACEMENT & TIGHTENING



4.4B - KIT SHOWN FOR EXACT EMERGE ROW UNIT



4.4 NOTE - FOR ROW UNITS OTHER THAN JD EXACT EMERGE, CHECK WITH YOUR DAWN EQUIPMENT REPRESENTATIVE FOR THE APPROPRIATE SENSOR MOUNT PLATES

4.4C CONTROLLER SET UP

STEP 1: ASSIGN A CONTROLLER MODULE TO EACH RFX+ ROW.

STEP 2: PROGRAM CONTROLLER TO CORRESPOND WITH APPROPRIATE PLANTER ROW NUMBER.

STEP 3: APPLY DIELECTRIC GREASE TO PINS BEFORE INSTALLATION.

SET EACH CONTROLLER TO CORRESPONDING PLANTER ROW USING DIP SWITCHES.

FOR EXAMPLE:

ROW 1 SHOULD BE SET AS SHOWN IN PHOTO. THE FIRST SWITCH SET TO ZERO (0) AND THE SECOND SET TO ONE (1).

DIALS FOR ROW 12 WOULD BE SET TO ONE (1) & TWO (2).



4.4D – ROW UNIT HARNESSES

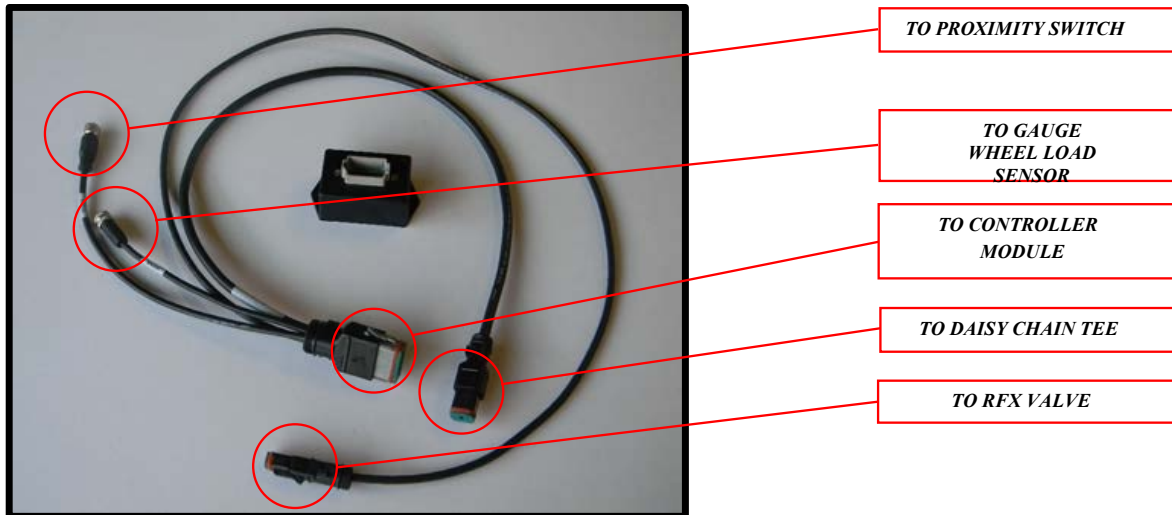
STEP 1: CONNECT 12 PIN PLUG TO CONTROLLER MODULE & LOCATE CONTROLLER IN COWLING SPACE BEHIND PROX SWITCH MOUNT.

STEP 2: CONNECT “SENSOR” HARNESS END TO GAUGE WHEEL LOAD CABLE END.

STEP 3: CONNECT “SWITCH” HARNESS END TO PROXIMITY SWITCH.

STEP 4: ROUTE HARNESS CABLE ALONG UPPER PARALLEL LINKAGE, AROUND UPPER CLEVIS MOUNT & CONNECT TO RFX+ VALVE.

STEP 5: SECURE LOOSE CABLES WITH ZIP TIES TO PREVENT SNAGS.



APPENDIX A - WARRANTY

The following warranties with respect to new Dawn Equipment Company ("Dawn") products, excepting as hereafter provided, is made by Dawn to Dealers ("Dealers") authorized by Dawn to sell the products involved and each selling Dealer, in turn, make such warranties to the original retail purchaser ("Purchaser").

A. Duration and Extent of Warranty

1. Products, except all working, moving and all or any parts subject to wear, except as hereafter provided, which are defective in materials or workmanship as delivered to the Purchaser by Dealer will be repaired by a Dealer or replaced by Dawn, only, as Dawn elects, without charge for materials or labor, if such defect appears in not more than 12 months, or from and after the date of delivery to the Purchase by the Dealer.
2. Dawn warrants that the Trashwheels planter attachment wheels (Dawn part #s 200015, 101550, 102185M-L, 102185M-R) and Curvetine closing wheels (Dawn part # 102540F) will not bend or break during its useful lifetime.
3. Liability of Dawn for defective parts or material is specifically limited to the value of the parts or materials, only.
4. All parts or materials requiring work MUST be returned by delivery to the selling Dealer for repair or for delivery to Dawn within thirty (30) days of occurrence of the defect or failure of the part or material, all freight prepaid by the Dealer upon Dealer warranty form, available by request from Dawn. Upon completion of the warranty work, Dawn will ship parts or material to the Dealer, freight prepaid by Dawn.
5. All decisions by Dawn pertaining to warranty are final.

B. Warranty Exclusions; Dawn will not be responsible for any of the following;

1. Defects of damage resulting from use, repairs or service performed in a manner not approved by Dawn or from repairs or service performed by someone other than an authorized Dawn Dealer service department (after approval from Dawn) or Dawn to repair or replace the product involved.
2. Defects, damage or failure resulting from any alteration or additions done in a manner not approved by Dawn.
3. Defects, damage or failure or depreciation resulting from wear and tear, accidents, misuses, negligence, improper maintenance or improper protection and storage.

4. INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO, LOSS OF PROFITS, LOSS OF TIME, LOSS OF CROPS, INCONVENIENCE, LOSS OF USE OF THE PRODUCT OR OTHER MACHINERY, EQUIPMENT OR VEHICLE USED WITH THE PRODUCTS, COST OF RENTALS OR REPLACEMENT OF THE PRODUCTS OR OTHER COMMERCIAL LOSS.

C. Remedies Exclusive: NO Other Warranties

The obligations of Dawn and the Dealers are limited to the obligations set forth in this Limited Warranty. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OF DAWN, AND THE DEALERS, EXPRESSED OR IMPLIED. WARRANTIES BY DAWN OR THE DEALER OF CONDITION QUALITY, MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED, AS ARE ALL OTHER REPRESENTATIONS BY DAWN AND THE DEALERS TO THE PURCHASE OR USER AND ALL OTHER OBLIGATIONS OR LIABILITIES OF DAWN AND THE DEALERS. NO OTHER PERSON IS AUTHORIZED TO GIVE ANY OTHER WARRANTY OR TO ASSUME ANY OTHER LIABILITY ON BEHALF OF DAWN AND THE DEALERS. THIS LIMITED WARRANTY MAY NOT BE TRANSFERRED BY THE PURCHASER TO ANY SUBSEQUENT OWNER.

D. The instruction manual supplied with the Product contains important maintenance and service information. Read the manual and follow the recommendations contained herein. Please remember that failures due to improper maintenance or service are not covered by the Limited Warranty.

Dawn Equipment Company reserves the right to make changes in design or specifications at any time without obligation to purchasers or equipment and components previously sold. This warranty shall not be altered or changed in any way.

