

SeedSense®

Smart Connect Install Guide

Precision Planting®

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System Overview

Parts List		
Part Number	Part Description	Quantity
725842	20/20 Display Kit	
725843	20/20 Display	1
725804	Mount Bracket	1
725825	Smart Connect Kit	
725714	Smart Connector	1
725271	Row Unit Module Kit	3
725499	Universal Tractor Harness	1

Note: Finish Kit Parts list can be viewed under its respective install section of this manual.

Cab Install

Step 1:

Mount the monitor in an accessible location to the operator using the provided basic mounting bracket. There are also several RAM mounting options available for separate purchase. Refer to the [Cab Diagram](#) for an overview.

Step 2:

Plug the 3 Pin AMP connection labeled '12V Power' into an available power strip connection. If a 12V convenience outlet is not available, several adapters are available to change the connection type

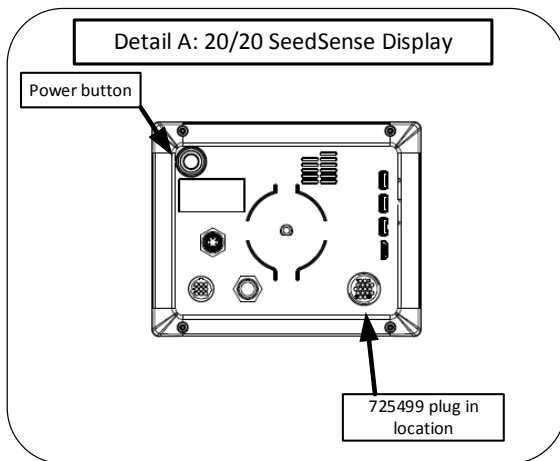
Step 3:

Connect into GPS. GPS is required for the 20/20 SeedSense to map and record data. Whatever source that you use to provide GPS to the SeedSense monitor will need to conform to the following requirements. Some GPS sources will require the configuration of the receiver or of a 3rd party display in order to output the correct signal. Information on configuring these 3rd party receivers and displays may be acquired from their manufacturer. Information on configuring many of these displays is also available from your Precision Planting dealer or from cloud.precisionplanting.com

- a: **Frequency:** The SeedSense will accept signals at 1, 5, or 10 Hz. The number reflects the number of times per second that the GPS sends a signal to the monitor. A signal of 5 Hz is recommended. (1 Hz signal will degrade performance)
- b: **Baud Rate:** The SeedSense will accept baud rates of 4800, 9600, 19,200, 38,400 or 115,200. This number reflects the number of symbols communicated per second. To avoid communication issues, select 4800 or 9600 baud if you choose 1 Hz frequency. Select 38,400 baud if you select 5 or 10 Hz frequency.
- c: **NMEA Messages:** Information from the GPS receiver is communicated in packets identified by 3-letter codes called NMEA Messages. The SeedSense uses information from three of these packets: GGA, RMC, VTG, and ZDA. GGA is necessary for the system to function. The presence of VTG and RMC will ensure that they system functions smoothly. If you do not have the RMC or ZDA message, your display will not automatically have the current date.

Step 4:

Plug Channel A/B into the Smart Connector. The Smart Connector(s) must plug into the Channel A/B connections. Channel A is used primarily for rows 1-32, and Channel B is primarily used for rows 33-54. There are exceptions to this, please refer to the finishing kit installation instructions for further details. The 725499 Universal Tractor harness can only reach to the hitch of the tractor with Channel A, so any extension harnesses will be included in the finishing kit or planting harness kit (with applicable systems).



20/20 SeedSense Monitor			
Item	Part NO	Description	QTY
1	725843	20/20 SeedSense Display (iPad ready)	1
2	725499	Universal Tractor Harness	1
3	725411	RS485 extension (channel A/B)	1
The monitor mounting location will vary from tractor to tractor			
Note A: There are several mounting options available for the monitor, the option shown below is a RAM mount			
Note B: Adapters may be needed for GPS and 12V power depending upon make/model of tractor and brand of GPS			
Note C: When needed, the RS485 extension for Channel B is included in the finishing kit, and is only necessary for systems with two Smart Connectors			

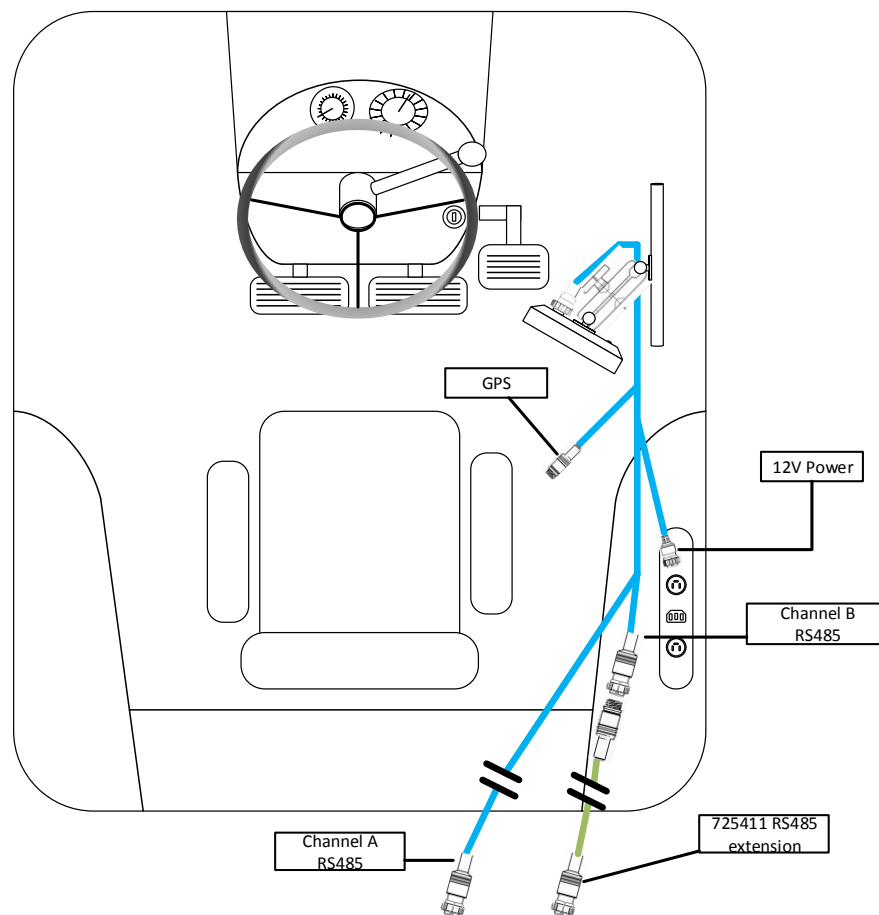


Figure 1.
Cab install Overview

Finishing Kit Install

CompuTrack Finishing kit Install

Includes finishing kits: 725513, 725515, 725516, 725739

Locate the planter harness connector at or near the planter hitch. There should be a 37 pin AMP round connection the same number of pins as rows, plus either pins 27, 28 or 27, 28, 29, 30 occupied. (example: 12 row planter would have pins 1-12 and 27,28 occupied)

Note: JD 7000 planters: If you do not have a 37 pin connection at the hitch, a new planter harness, seed tube sensors and seed tubes are required.

Step 1:

Plug the 37 pin planter harness connection into the Smart Connector.

Step 2:

Plug the Channel A 4 pin AMP connection coming from the Universal Tractor harness into the Smart Connector.

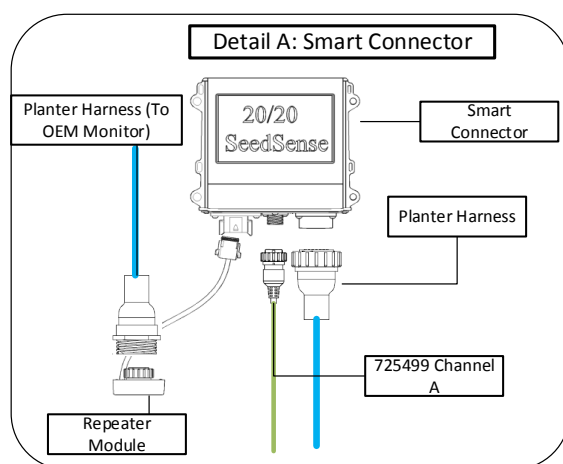
Step 3:

Secure the Smart Connector using either zip ties or bolt it onto desired mounting location. Make sure that the mounting location is protected from moving parts.

If repeating data to a third party monitor is desired, plug the provided repeater module into the 8 pin Deutsch connection on the Smart Connector, and plug the 37 pin AMP module into the receiving connection for the 3rd party monitor.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page



CompuTrack Monitor <32 Rows			
Item	Part NO	Description	QTY
1	725499	Universal Tractor Harness	1
2	725714	Repeater Module	1
3	725712	Smart Connector	1
4	OEM	OEM Planter Harness	1

The Smart Connector mounting location may vary slightly from planter to planter

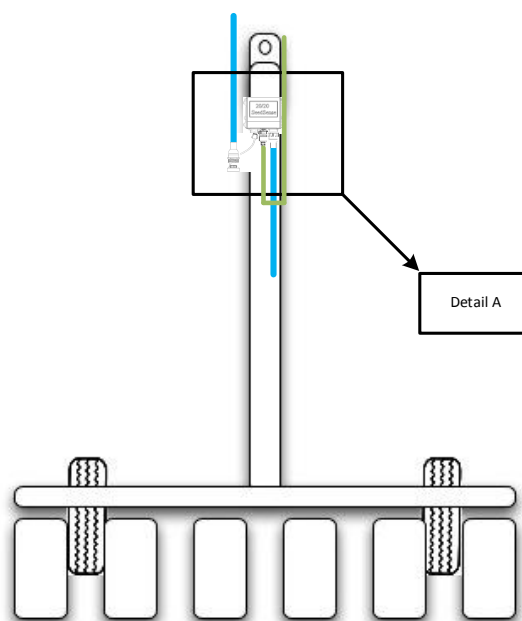


Figure 2.
CompuTrack Monitor <32 Rows Overview

Dickey-John Finishing kit Install

Includes finishing kits: 725514, 725517, 7255524, 725839, 725533, 725573

Locate the planter harness connector at or near the planter hitch. There should be a 37 pin AMP round connection the same number of pins as rows, plus either pins 24, 26 or 24, 25, 26, 27 occupied. (example: 12 row planter would likely have pins 1-12 and 24, 26 occupied).

Step 1:

Connect the Dickey-John adapter to the Smart Connector. The gray connection (labeled 'Smart Connector') **must** plug into the Smart Connector for the system to function.

Step 2:

Plug the 37 pin planter harness connection into the black side of the Dickey-John adapter.

Step 3:

Plug the Channel A 4 pin AMP connection coming from the Universal Tractor harness into the Smart Connector.

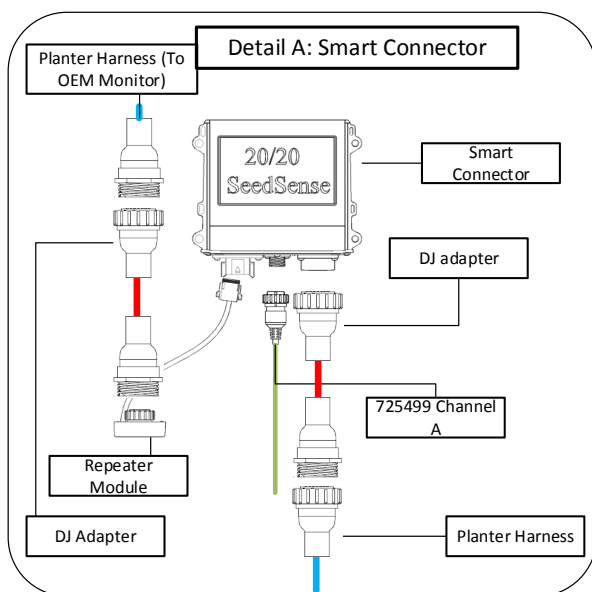
Step 4:

Secure the Smart Connector using either zip ties or bolt it onto desired mounting location. Make sure that the mounting location is protected from moving parts.

If repeating seed data to a third party monitor is desired, please plug the provided repeater module into the 8 pin Deutsch connection on the Smart Connector, and plug the 37 pin module into the gray connection of the second Dickey-John adapter, which plugs into the receiving connection for the 3rd party monitor.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



Dickey-John Monitor <32 Rows			
Item	Part NO	Description	QTY
1	725499	Universal Tractor Harness	1
2	725714	Repeater Module	1
3	725712	Smart Connector	1
4	725234	Dickey-John Adapters	1
5	OEM	OEM Planter Harness	1

The Smart Connector mounting location may vary slightly from planter to planter

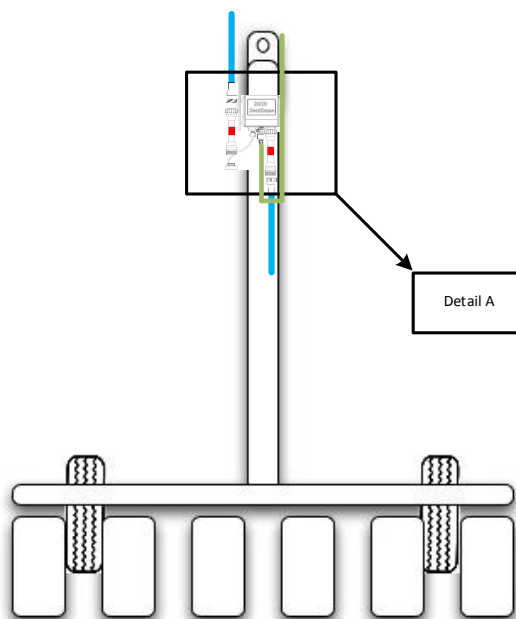


Figure 3.
Dickey John Monitor <32 Rows Overview

John Deere SeedStar —2002 Finishing Kit Install

Includes finishing kits: 725596, 725518

Locate the John Deere Wedge Box. The Wedge Box will have one connection on each end and will either be black or gray, generally near the center of the planter frame.

Step 1:

Unplug the Planter Cable from the Wedgebox.

Step 2:

Plug the male end of the Metrapack adapter into the Wedge Box, and the female receptacle into the harness that was previously plugged into the Wedge Box.

Step 3:

Plug the male 37 pin AMP connection on the Metrapack adapter into the Smart Connector.

Step 4:

Route the provided 4 pin extension (725477) down either the tongue or draft tube, securing it with zip ties. Plug the Channel A 4 pin AMP extension coming from the Universal Tractor harness into the Smart Connector. (3 Pt hitch planters will likely not need an extension for Channel A, and the Universal Tractor harness will extend to the Smart Connector).

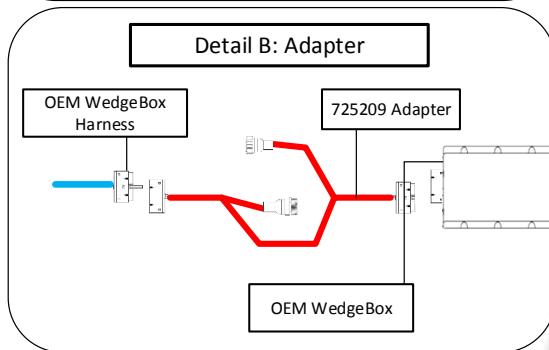
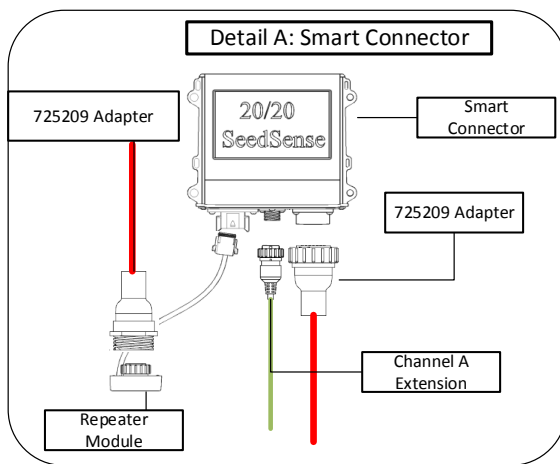
Step 5:

Secure the Smart Connector using either zip ties or bolt it onto desired mounting location. Make sure that the mounting location is protected from moving parts.

If repeating data to a third party monitor is desired, please plug the provided repeater module into the 8 pin Deutsch connection on the Smart Connector, and plug the 37 pin module into the female receptacle on the Metrapack adapter. This will send seed data to the 3rd party monitor.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



SeedStar 2002 and Earlier Pull <32 Rows			
Item	Part NO	Description	QTY
1	725411-477	RS485 extension (channel A/B)	1
2	725714	Repeater Module	1
3	725712	Smart Connector	1
4	725209	Metra-Pack Adapter -2002	1
5	OEM	OEM Planter Harness	1

The WedgeBox and Smart Connector mounting location may vary slightly from planter to planter

The 725209 adapter has a 2 pin WP connection on it. This connection is only used on SeedSense harnesses manufacture before 2009

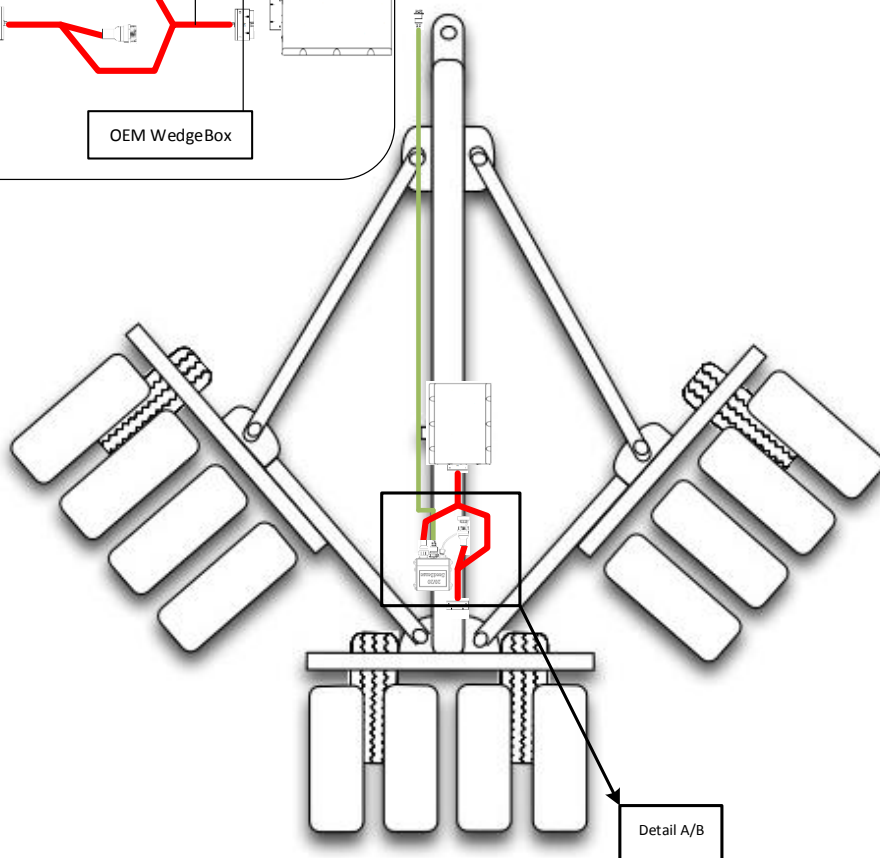


Figure 4.
SeedStar 2002 and Earlier <32 Rows Overview

John Deere SeedStar <15 Rows 2003+ Finishing Kit Install

Includes finishing kits: 725597, 725740, 725583, 725496, 725741

Locate the John Deere Wedge Box. The Wedge Box will have two connections on one end with an ISOBUS connection on the other side. It will either be black, grey or green, generally near the center of the planter frame.

Step 1:

Unplug the planter harness (Connection 'A') from the Wedgebox.

Step 2:

Plug the male end of the WedgeBox adapter into the Wedge Box, and the female receptacle into the harness that was previously plugged into the Wedge Box.

Step 3:

Plug the male 37 pin AMP connection on the WedgeBox adapter into the Smart Connector.

Step 4:

Route the provided 4 pin extension down either the tongue or draft tube, securing it with zip ties. Plug the Channel A 4 pin AMP extension coming from the Universal Tractor harness into the Smart Connector. (3 Pt hitch planters will likely not need an extension for Channel A, and the Universal Tractor harness will extend to the Smart Connector).

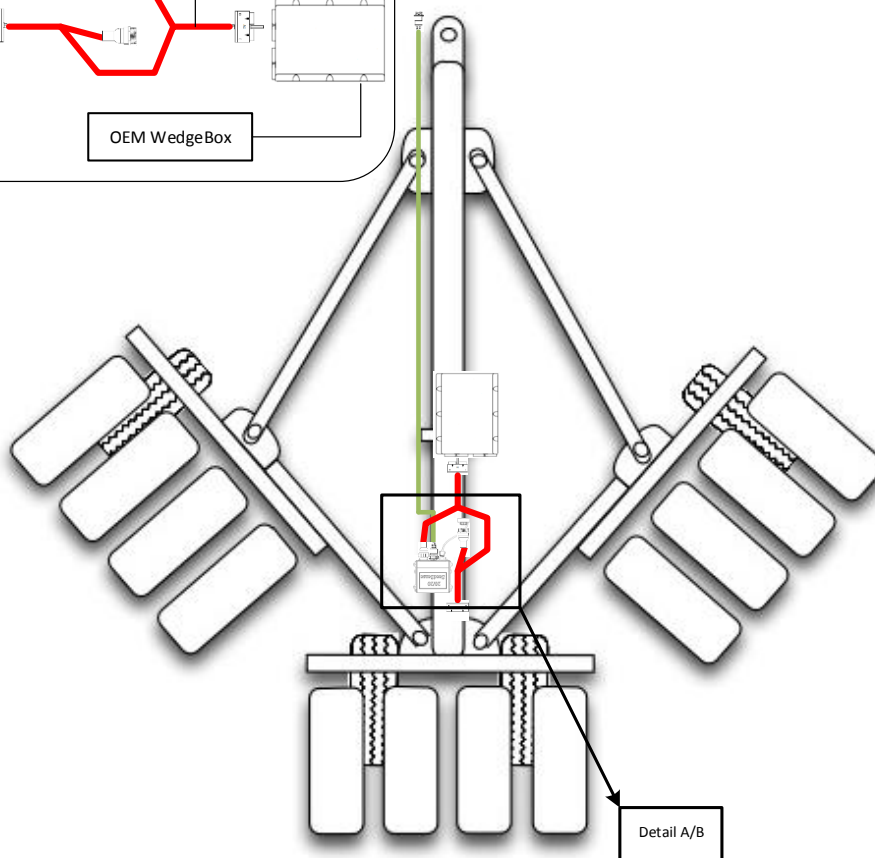
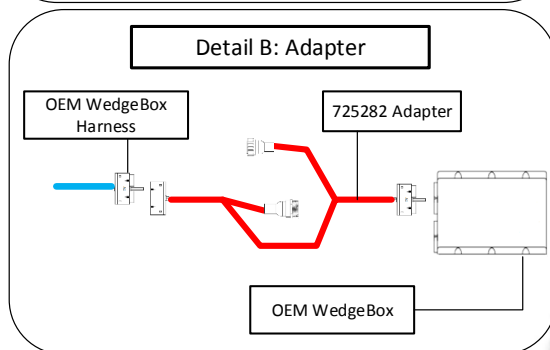
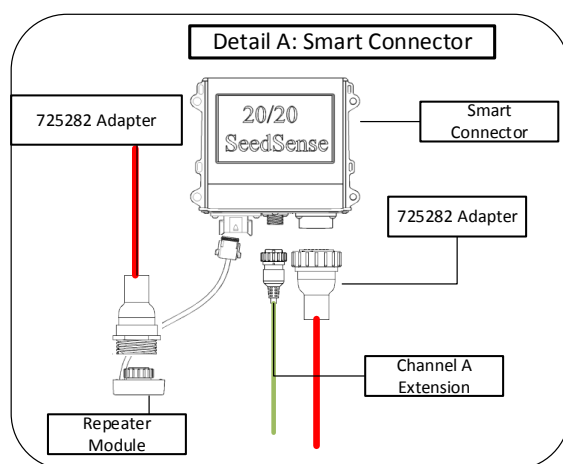
Step 5:

Secure the Smart Connector using either zip ties or bolt it onto desired mounting location. Make sure that the mounting location is protected from moving parts.

If repeating data to a third party monitor is desired, please plug the provided repeater module into the 8 pin Deutsch connection on the Smart Connector, and plug the 37 pin module into the female receptacle on the WedgeBox adapter. This will send seed data to the 3rd party monitor.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



SeedStar 2003-2010 <15 Rows & 2011+ <16 Rows Pull			
Item	Part NO	Description	QTY
1	725411-477	RS485 extension (channel A/B)	1
2	725714	Repeater Module	1
3	725712	Smart Connector	1
4	725282	WedgeBox Adapter 2003+ 4-15 Rows	1
5	OEM	OEM Planter Harness	1

The WedgeBox and Smart Connector mounting location may vary slightly from planter to planter

The 725282 adapter has a 2 pin WP connection on it. This connection is only used on SeedSense harnesses manufacture before 2009

Figure 5.
John Deere SeedStar <15 Rows 2003+ Overview

John Deere SeedStar 17–24 Rows 2011+ Finishing Kit Install

Includes finishing kits: 725597, 725740, 725583, 725496, 725741

Locate the John Deere Wedge Box. The Wedge Box will have two connections on one end with an ISOBUS connection on the other side. It will likely be black, generally near the center of the planter frame and will normally be on the left or right side of center frame directly beneath the CCS tank on CCS planters.

Step 1:

Unplug the planter harness (Connection 'A', 'B') from the Wedgebox.

Step 2:

Plug the male ends of the WedgeBox adapter into the Wedge Box, and the female receptacle into the harness that was previously plugged into the Wedge Box. The WedgeBox adapter provided in the Finishing Kit will have corresponding labels to show what connection they plug into. (A/B)

Step 3:

Plug the male 37 pin AMP connection on the WedgeBox adapter into the Smart Connector.

Step 4:

Route the provided 4 pin extension down either the tongue or draft tube, securing it with zip ties. Plug the Channel A 4 pin AMP extension coming from the Universal Tractor harness into the Smart Connector. (3 Pt hitch planters will likely not need an extension for Channel A, and the Universal Tractor harness will extend to the Smart Connector).

Step 5:

Secure the Smart Connector using either zip ties or bolt it onto desired mounting location. Make sure that the mounting location is protected from moving parts.

If repeating data to a third party monitor is desired, please plug the provided repeater module into the 8 pin Deutsch connection on the Smart Connector, and plug the 37 pin module into the female receptacle on the WedgeBox adapter. This will send seed data to the 3rd party monitor.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.

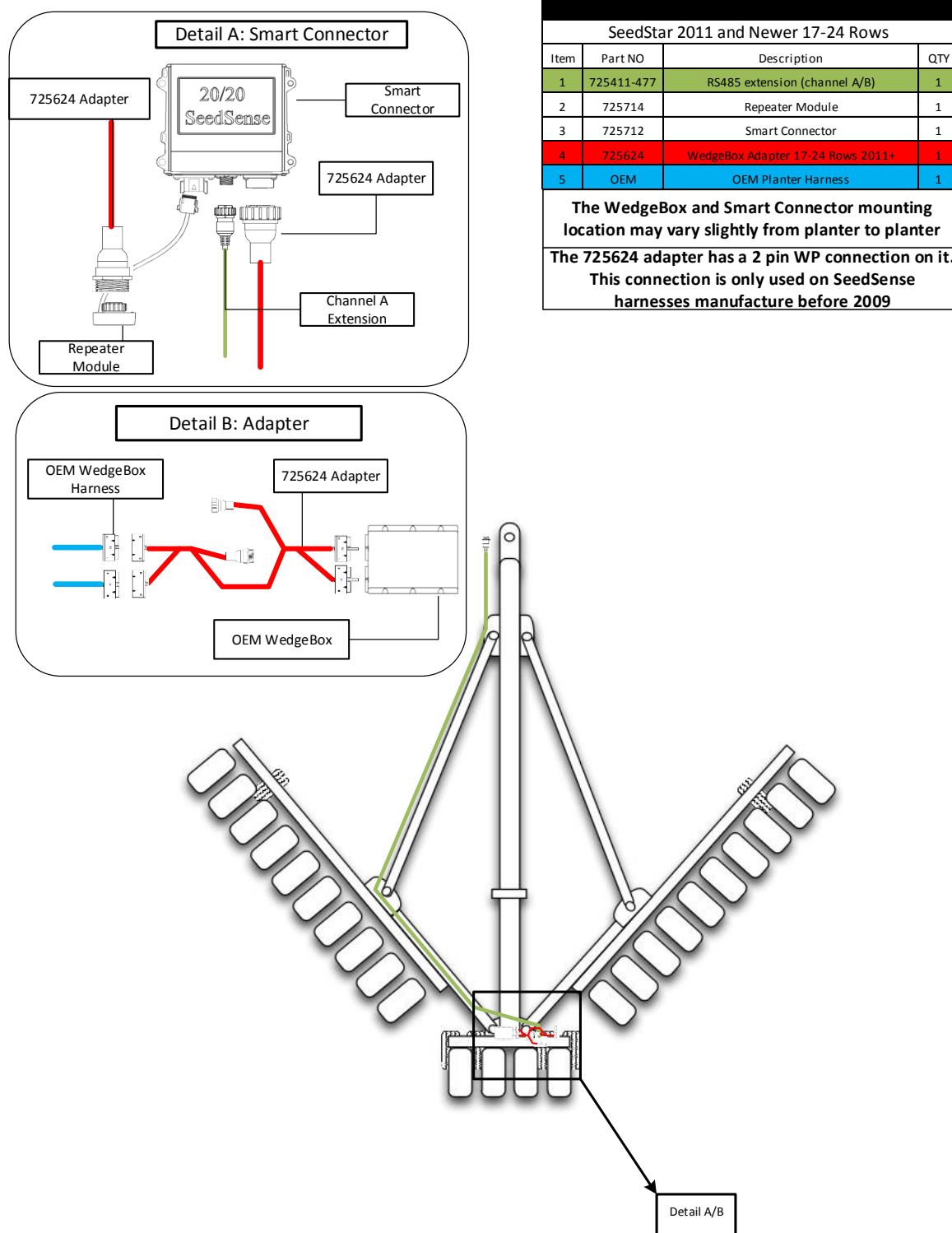


Figure 6.
John Deere SeedStar 17–24 Rows 2011+ Overview

John Deere SeedStar 25–32 Rows 2011+ Finishing Kit Install

Includes finishing kits: 725743, 725748

Locate the John Deere Wedge Boxes. Each Wedge Box will have two connections on one end with an ISOBUS connection on the other side. It will likely be black, generally near the center of the planter frame and will normally be on the left or right side of center frame directly beneath the CCS tank on CCS planters.

Step 1:

Unplug the planter harness (Connection 'A', 'B', 'A2') from the Wedgeboxes.

Step 2:

Plug the male ends of the WedgeBox adapter into the Wedge Box, and the female receptacle into the harness that was previously plugged into the Wedge Box. The WedgeBox adapter provided in the Finishing Kit will have corresponding labels to show what connection they plug into. (A/B/A2)

Step 3:

Plug the male 37 pin AMP connection on the WedgeBox adapter into the Smart Connector.

Step 4:

Route the provided 4 pin extension down either the tongue or draft tube, securing it with zip ties. Plug the Channel A 4 pin AMP extension coming from the Universal Tractor harness into the Smart Connector.

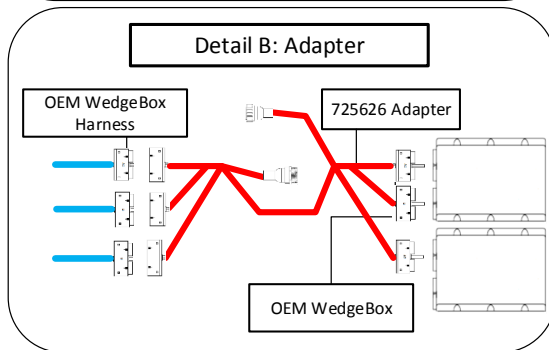
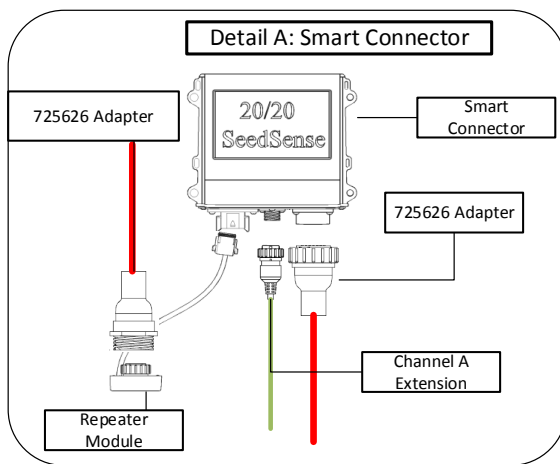
Step 5:

Secure the Smart Connector using either zip ties or bolt it onto desired mounting location. Make sure that the mounting location is protected from moving parts.

If repeating data to a third party monitor is desired, please plug the provided repeater module into the 8 pin Deutsch connection on the Smart Connector, and plug the 37 pin module into the female receptacle on the WedgeBox adapter. This will send seed data to the 3rd party monitor.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



SeedStar 2011 and Newer 25-32 Rows			
Item	Part NO	Description	QTY
1	725411-477	RS485 extension (channel A/B)	1
2	725714	Repeater Module	1
3	725712	Smart Connector	1
4	725626	WedgeBox Adapter 25-32 Rows 2011+	1
5	OEM	OEM Planter Harness	1

The WedgeBox and Smart Connector mounting location may vary slightly from planter to planter

The 725626 adapter has a 2 pin WP connection on it. This connection is only used on SeedSense harnesses manufacture before 2009

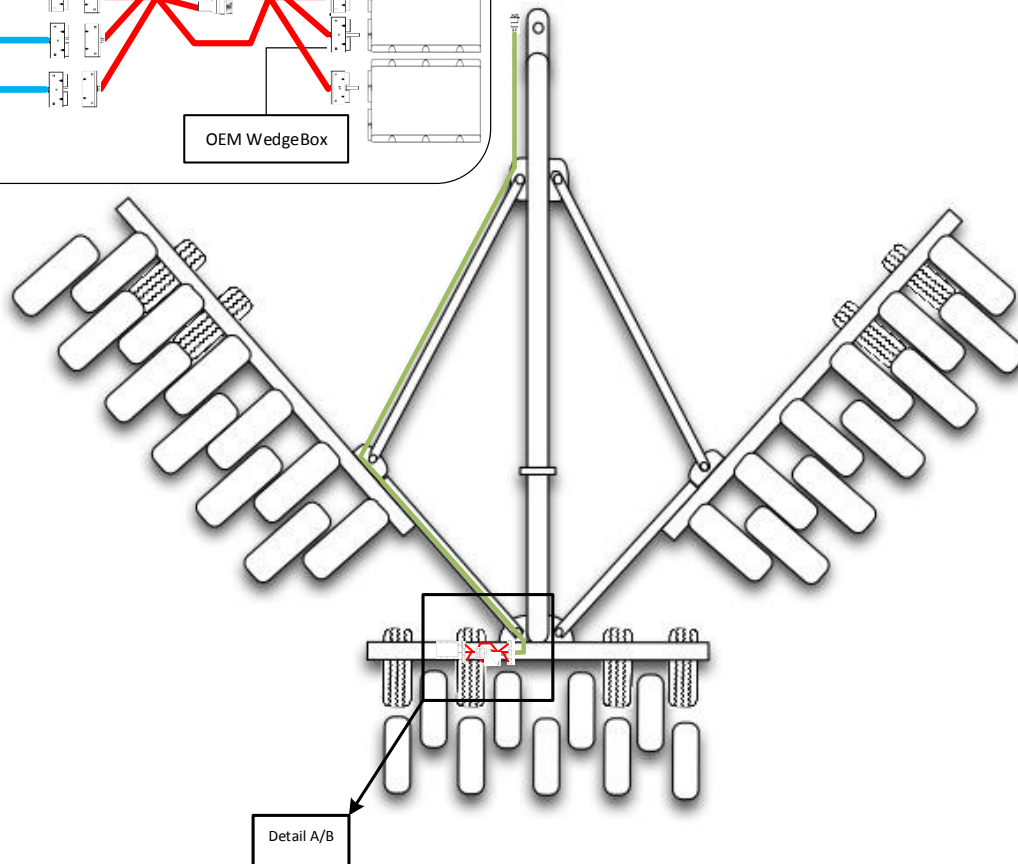


Figure 7.
John Deere SeedStar 25–32 Rows 2011+ Overview

Deere Bauer SeedStar —2011 24–32 Row Finishing Kit Install

Includes finishing kits: 725527

Locate the 37 pin AMP junction on the center frame of the planter. This connection can be found by following the harness coming from the WedgeBox and following it to the planter harness. This connection should have the same number of pins as the rows, plus pins 24-27 occupied. (example: 24 row planter would have pins 1-24 and 24-27 occupied).

Step 1:

Connect the Dickey-John adapter to the Smart Connector. The gray connection (labeled ‘Smart Connector’) **must** plug into the Smart Connector for the system to function.

Step 2:

Plug each 37 pin planter harness connections into the black connection on the Dickey-John adapter.

Step 3:

Route the provided 4 pin extension from the Channel A connection at the hitch to the Smart Connector. Connect the Smart Connector to Channel A.

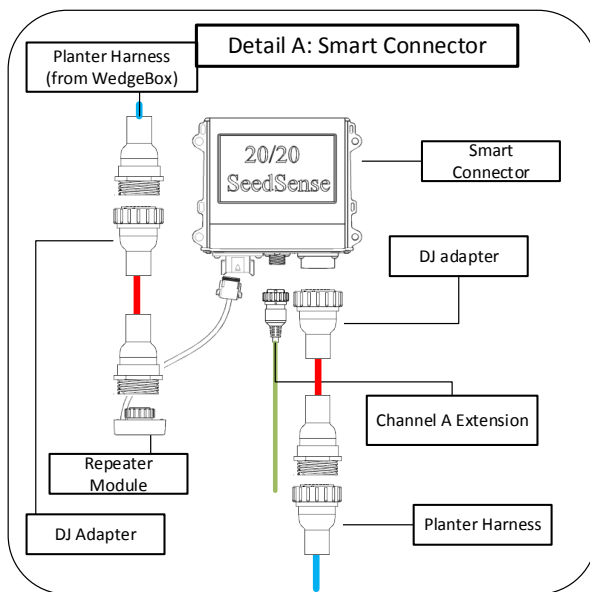
Step 4:

Secure the Smart Connectors using either zip ties or bolt it onto desired mounting location. Make sure that the mounting location is protected from moving parts.

If repeating seed data to a third party monitor is desired, please plug the provided repeater modules into the 8 pin Deutsch connections on the Smart Connectors, and plug the 37 pin module into the gray connection of the second Dickey-John adapters, which plugs into the receiving connections for the 3rd party monitor.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



DB SeedStar 2011 and Before 24-32 Row			
Item	Part NO	Description	QTY
1	725468	RS485 Channel A/B extension	1
2	725714	Repeater Module	1
3	725712	Smart Connector	1
4	725234	Dickey-John Adapters	1
5	OEM	OEM Planter Harness	1

The Smart Connector mounting location may vary slightly from planter to planter

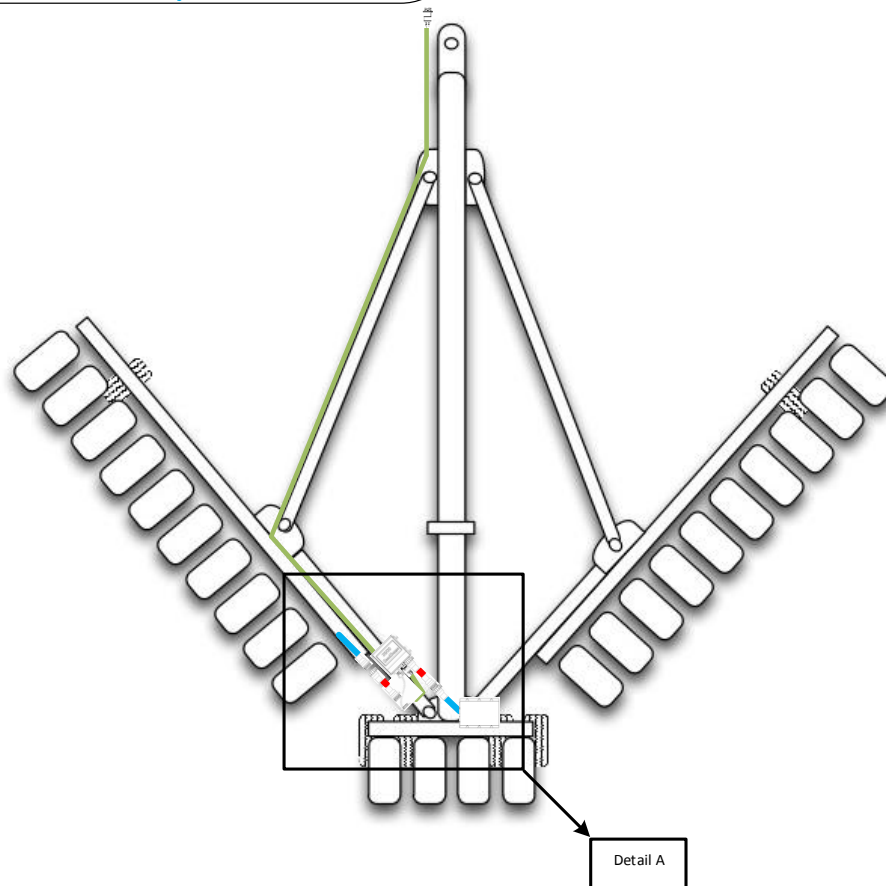


Figure 8.
Deere Bauer SeedStar —2011 24–32 Row Overview

Deere Bauer SeedStar —2011 >33 Row Finishing Kit Install

Includes finishing kits: 725519

Locate the 37 pin AMP junctions on the center frame of the planter. These connections can be found by following the harnesses coming from the WedgeBox and following it along the planter harness to the seed tubes. These connections should have the same number of pins as half the rows, plus pins 24-27 occupied. (example: 36 row planter would have pins 1-18 and 24-27 occupied)

Step 1:

Connect the Dickey-John adapters to the Smart Connectors. The gray connection (labeled ‘Smart Connector’) **must** plug into the Smart Connector for the system to function.

Step 2:

Plug each 37 pin planter harness connections into the black connection on the Dickey-John adapter.

Step 3:

Route the provided 4 pin extension from the Channel A connection at the hitch to the Smart Connector. Connect the Smart Connector to Channel A.

Step 4:

Plug the 4 pin extension (725411) into the Channel B connection on the Universal Tractor harness, and route it to the hitch of the tractor.

Step 5:

Route one of the 725648 extensions down the right draft tube, starting at the 725411 extension at the hitch to the Smart Connector plugged into the right rows.

Step 6:

Route the other 725648 extension down the left draft tube from the Channel A connection on the Universal Tractor Harness to the Smart Connector plugged into the left rows.

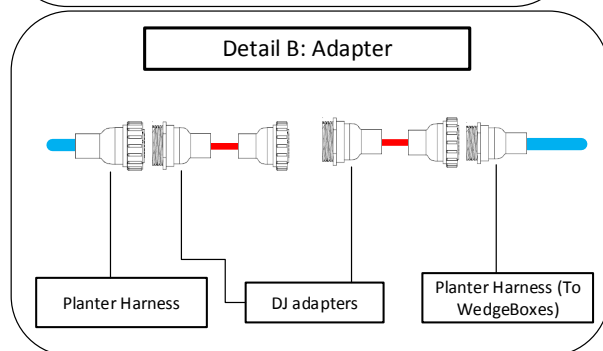
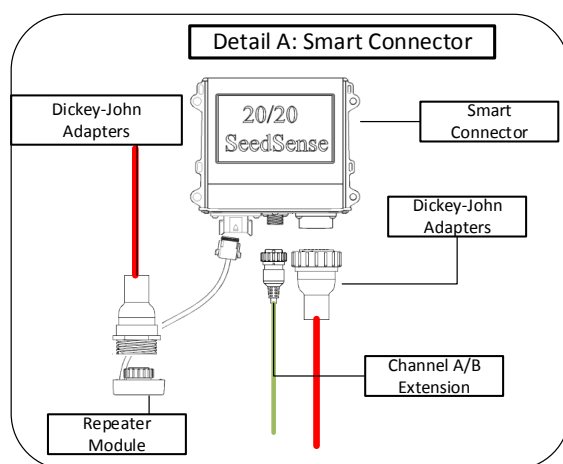
Step 7:

Secure the Smart Connectors using either zip ties or bolt it onto desired mounting location. Make sure that the mounting location is protected from moving parts.

If repeating seed data to a third party monitor is desired, please plug the provided repeater modules into the 8 pin Deutsch connections on the Smart Connectors, and plug the 37 pin module into the gray connection of the second Dickey-John adapters, which plugs into the receiving connections for the 3rd party monitor.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



DB SeedStar 2011 and Before >32 Row			
Item	Part NO	Description	QTY
1	725411-477	RS485 Channel A/B extension	3
2	725714	Repeater Module	2
3	725712	Smart Connector	2
4	725234	Dickey-John Adapters	2
5	OEM	OEM Planter Harness	1

The Smart Connector mounting location may vary slightly from planter to planter

Note A: The provided 725411 harness extends the 725499 Channel B connection to the hitch

Note B: Channel A Smart Connector will be plugged into the Left rows, Channel B Smart Connector will be plugged into the Right rows.

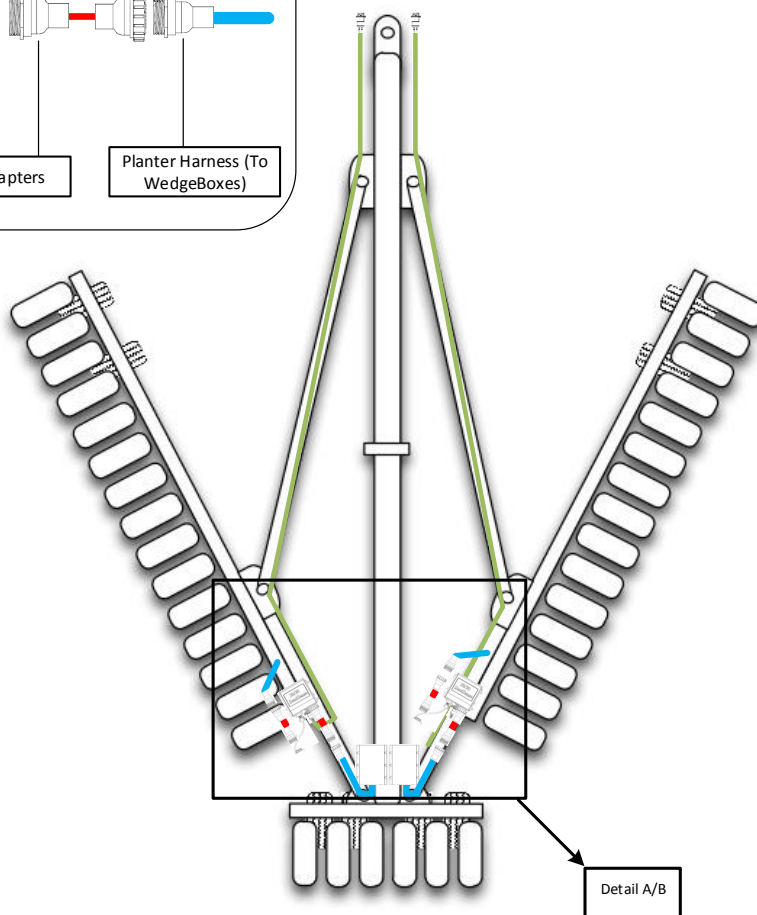


Figure 9.
Deere Bauer SeedStar —2011 >33 Row Overview

Deere Bauer SeedStar —2011 48/54 Row Finishing Kit Install

Includes finishing kits: 725528, 725519

Locate the three WedgeBoxes in the center of the planter. They will be directly beneath the CCS tank. Each WedgeBox will have a harness coming out of it with a 37 pin AMP junction. These connections can be found by following the harnesses coming from the WedgeBox and following it along the planter harness to the seed tubes. There will be a total of three junctions the system will be plugging into, the left wing junction will have pins 1-22 or 1-18 & 24-27 occupied. The center frame junction will have pins 1-20 and 24-27 occupied. The right wing junction will also have 1-22 or 1-18 & 24-27 occupied.

Step 1:

Connect the Dickey-John adapter to one of the Smart Connectors. This Smart Connector will be plugged into the Channel A extension. The gray connection (labeled 'Smart Connector') **must** plug into the Smart Connector for the system to function.

Step 2:

Plug the 37 pin planter harness connections from the left wing into the black connection on the Dickey-John adapter on Smart Connector A.

Step 3:

Connect the 725454/725555 adapter harness to the remaining Smart Connector. This Smart Connector will be plugged into the Channel B extension. (for use of the 725455/725556 harness, please refer to the section below on sending seed data to 3rd party monitors).

Step 4:

Connect the 725454/725555 adapter to the center and right wing 37 pin connections coming from the seed tube sensors.

Step 5:

Plug the 4 pin extension (725411) into the Channel B connection on the Universal Tractor harness, and route it to the hitch of the tractor.

Step 6:

Route one of the 725468 extensions down the right draft tube, starting at the 725411 extension at the hitch to the Smart Connector plugged into the right rows.

Step 7:

Route the other 725468 extension down the left draft tube from the Channel A connection on the Universal Tractor Harness to the Smart Connector plugged into the left rows.

Step 8:

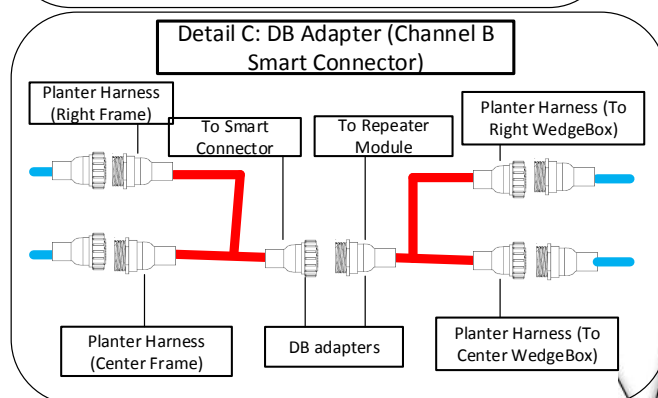
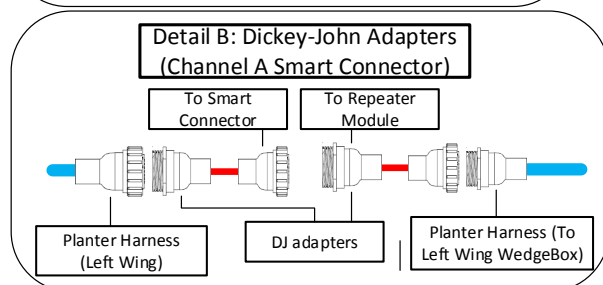
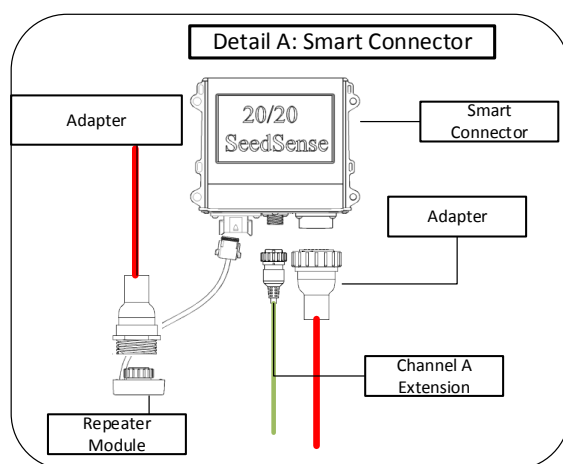
Secure the Smart Connectors using either zip ties or bolt it onto desired mounting location. Make sure that the mounting location is protected from moving parts.

If repeating seed data to a third party monitor is desired, please plug the provided repeater modules into the 8 pin Deutsch connections on the Smart Connectors, and plug the 37 pin module into the gray connection of the remaining Dickey-John adapter on the Channel A Smart Connector, which plugs into the receiving connections for the 3rd party monitor on the left wing

going to the WedgeBox. Plug the 725455/725556 adapter into the Channel B Smart Connector's repeater module, and plug the corresponding connections into the harness coming from the center and right wing WedgeBoxes.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



DB SeedStar 2011 and Before 48/54 Row			
Item	Part NO	Description	QTY
1	725411-477	RS485 Channel A/B extension	3
2	725714	Repeater Module	2
3	725712	Smart Connector	2
4	725234	Dickey-John Adapters	1
5	725554-556	DB Send/Receive Adapter	2
6	OEM	OEM Planter Harness	1

The Smart Connector mounting location may vary slightly from planter to planter

Note A: The provided 725411 harness extends the 725499 Channel B connection to the hitch

Note B: Channel A Smart Connector will be plugged into the Left frame, Channel B Smart Connector will be plugged into the Right and Center frame.

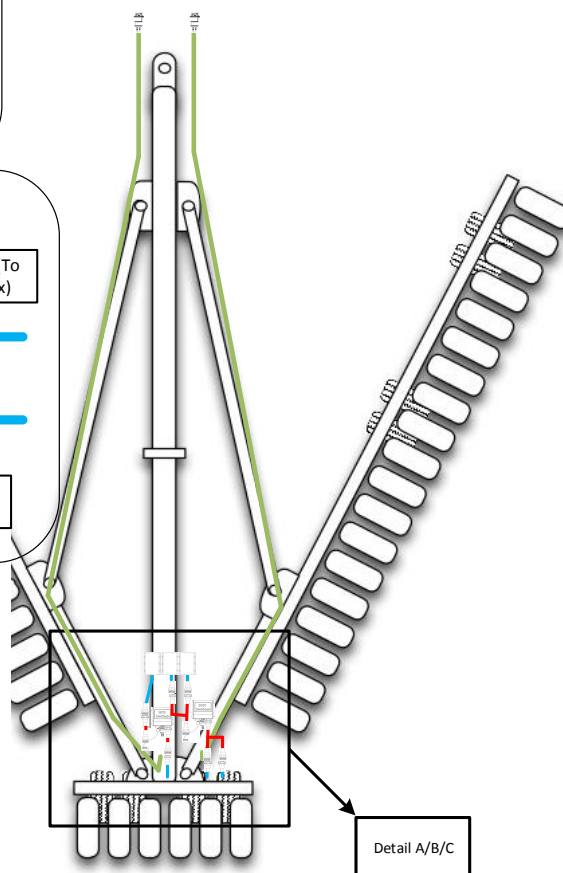


Figure 10.
Deere Bauer SeedStar —2011 48/54 Row Overview

Deere Bauer 2012+ Finishing Kit Install

Includes finishing kits: 725703, 725704, 725744, 725745

Locate the planter electronics box on the front side of the left wing of the planter. There will be two 128 pin Deutsch bulk head connections on the side of the box; the bottom connection is where our adapter harness will be tying into for seed data.

Step 1:

Remove the bottom original bulk head connection from the planter electronics box.

Step 2:

Plug the 725701 adapter harness into the bulk head connection.

Note: This connection is keyed, do NOT force the connection in, doing so could cause damage

Step 3:

The 725701 harness has two sets on 37 pin AMP connections. Plug the connection labeled 'Rows 1-32' into the Smart Connector.

Step 4:

Route the provided 725468 4 pin extension from Channel A at the hitch along the draft tube to the Smart Connector and connect it.

Step 5:

If the planter is above 32 rows, plug the secondary Smart Connector into the connection labeled 'Rows 33-54'.

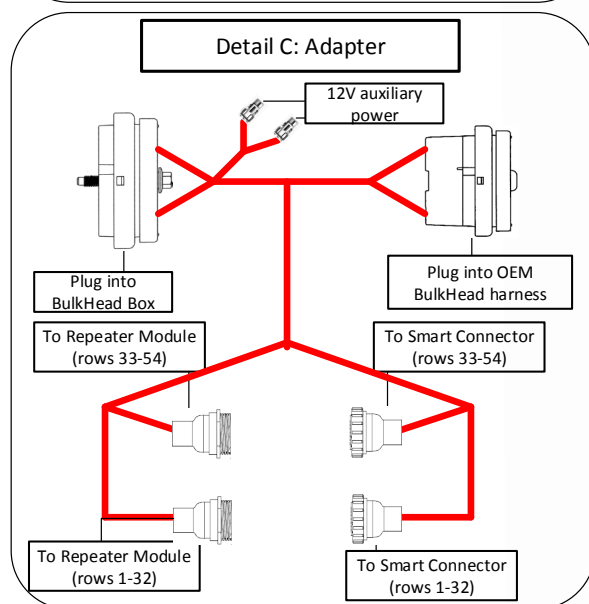
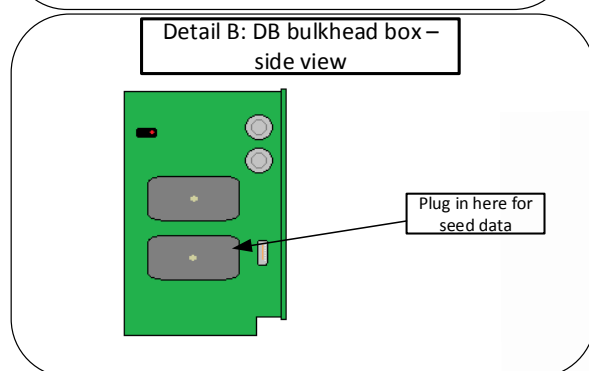
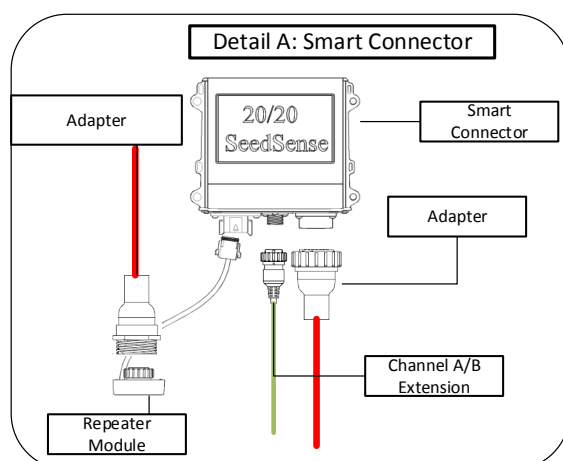
Step 6:

Route the provided 725411 4 pin extension from the Channel B connection on the Universal Tractor harness to the hitch of the planter and route the remaining 725468 extension along the draft tube and connect the secondary Smart Connector to it.

If repeating seed data to a third party monitor is desired, please plug the provided repeater module into the 8 pin Deutsch connections on the Smart Connector, and plug the 37 pin module into the connection labeled 'Rows 1-32'. If a secondary Smart Connector was also used, install the remaining repeater module and plug it into the connection labeled 'Rows 33-54'.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



DB 2012 and Newer			
Item	Part NO	Description	QTY
1	725411-477	RS485 Channel A/B extension	3
2	725714	Repeater Module	2
3	725712	Smart Connector	2
4	725701	DB BulkHead Seed Harness	1
5	OEM	OEM Planter Harness	1

The Smart Connector mounting location may vary slightly from planter to planter

Note A: The provided 725411 harness extends the 725499 Channel B connection to the hitch

Note B: Channel A Smart Connector will be plugged into rows 1-32, Channel B Smart Connector will be plugged into rows 33-54.

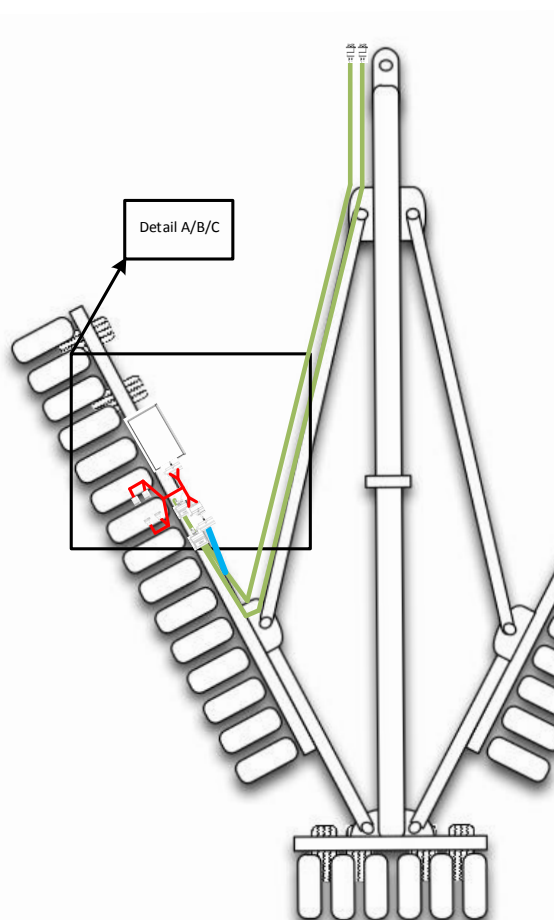


Figure 11.
Deere Bauer 2012+ Overview

Deere Bauer CT450 Finishing Kit Install

Includes finishing kits: 725520

Locate the 57 pin AMP connection on the hitch of the planter. Follow the harness coming from the 57 pin connection to the planter until you find two 37 pin AMP connections. These connections should have the same number of pins as half of the rows, plus pins 24-27 occupied. (example: 36 row planter would have two connections, each with pins 1-18 and 24-27 occupied).

Step 1:

Connect the Dickey-John adapters to the Smart Connectors. The gray connection (labeled 'Smart Connector') **must** plug into the Smart Connector for the system to function.

Step 2:

Plug each 37 pin planter harness connections into the black connection on the Dickey-John adapter.

Step 3:

Plug the 4 pin extension (725411) into the Channel B connection on the Universal Tractor harness, and route it to the hitch of the tractor.

Step 4:

Plug the Channel A 4 pin AMP connection coming from the Universal Tractor harness into the Smart Connector plugged into the left rows, and plug the Channel B extension into the Smart Connector plugged into the right half.

Step 5:

Secure the Smart Connectors using either zip ties or bolt it onto desired mounting location. Make sure that the mounting location is protected from moving parts.

If repeating seed data to a third party monitor is desired, please plug the provided repeater modules into the 8 pin Deutsch connections on the Smart Connectors, and plug the 37 pin module into the gray connection of the second Dickey-John adapters, which plugs into the receiving connections for the 3rd party monitor.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.

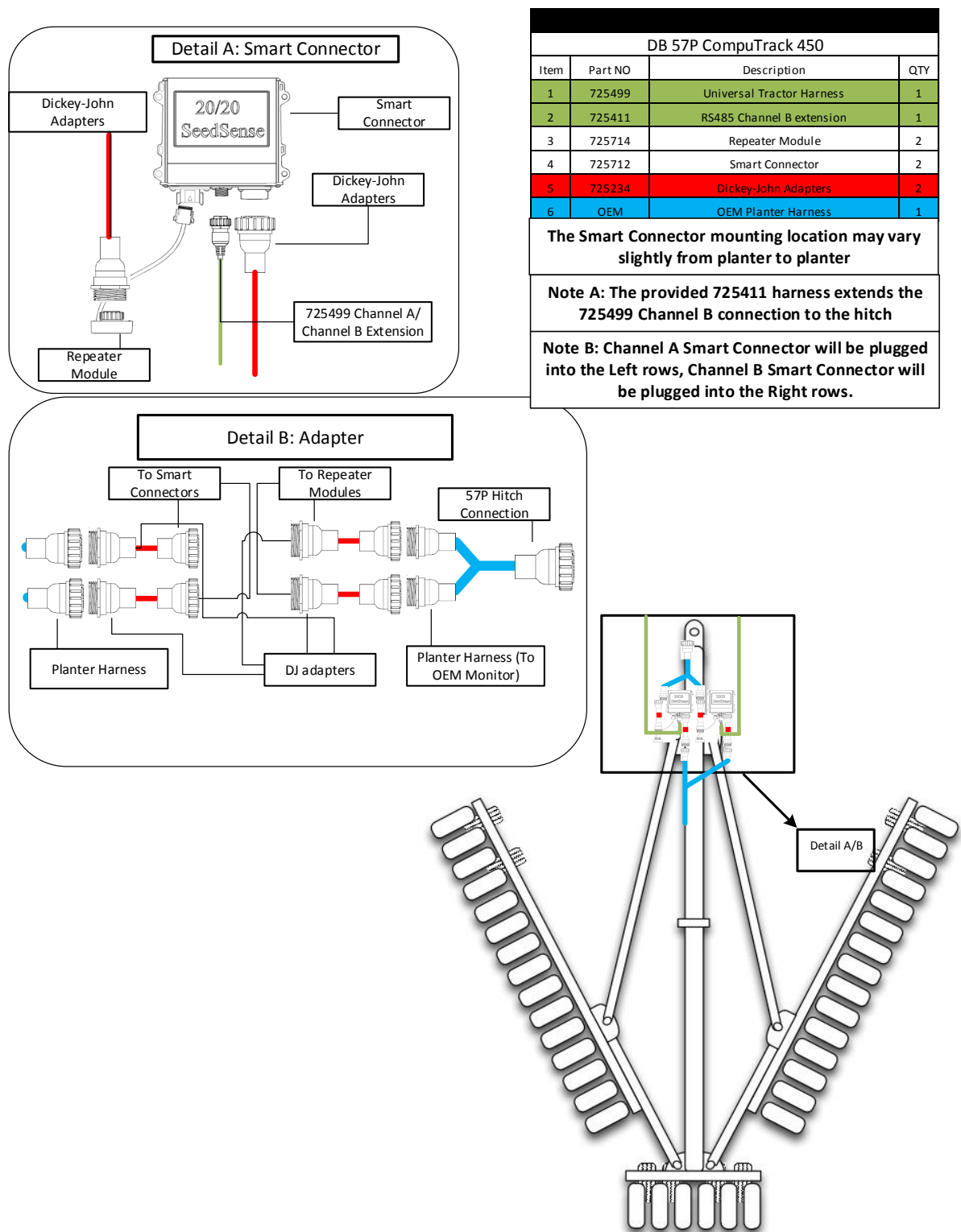


Figure 12.
Deere Bauer CT450 Overview

John Deere ExactEMerge Finishing Kit Install

Includes finishing kits: 725748

This configuration requires the addition of a planter harness. Please refer to the below planter diagram which show how to lay the harness on the planter.

Step 1:

Install new planter harness and secure with zip ties.

Note: A 725746 Seed Tube Sensor adapter cable is required for each row to tie into the ExactEMerge tube sensor. Details on how to connect this adapter are located in the RUM installation page.

Step 2:

Plug new planter harness into Smart Connector.

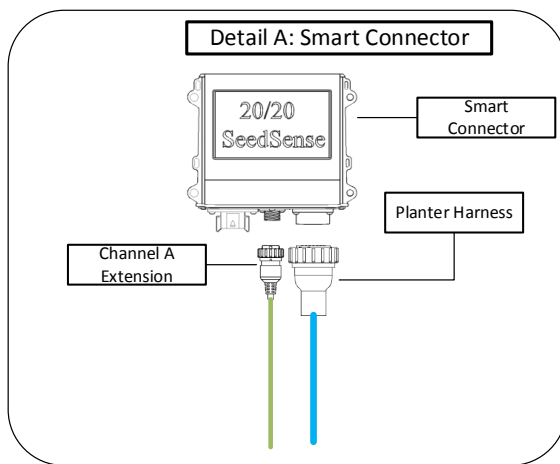
Step 3:

Route the 4 pin Channel A extension supplied with the planter harness kit from the Universal Tractor harness to the Smart Connector.

Repeating seed data to an OEM monitor is not supported on these planters.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



Kinze KPM, Monosem MPM, White SM400SE/GTA/C3000, CaseIH 12X0 series <32 rows			
Item	Part NO	Description	QTY
1	725411-477	RS485 extension (channel A/B)	1
2	725301-345	Planter Harness*	1
3	725712	Smart Connector	1

The planter frame type and Smart Connector mounting location may vary slightly from planter to planter

Note A: This planter does not support sending seed data to the original 3rd party monitor

Note B: SeedTube sensors must be replaced with Dickey-John sensors on the Kinze and CaseIH planters. 2013+ Kinze 3XXX planters can use existing sensors with adapter harness 725720 (1 per row)

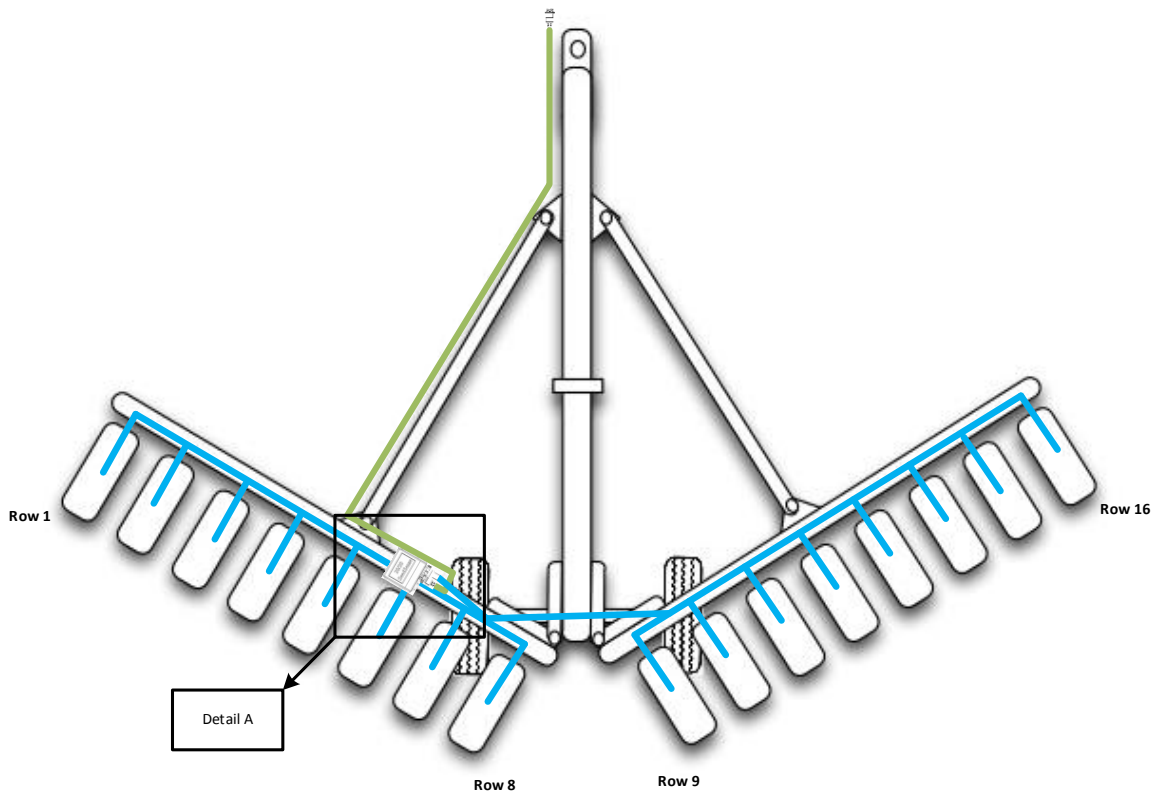


Figure 13.
John Deere ExactEmerge Overview

Kinze Finishing Kit Install

Includes finishing kits: 725521, 725522, 725523

This configuration requires the replacement of the planter harness, seed tubes and seed tube sensors. Please refer to the below planter diagrams which show how to lay the harness on the planter for both front fold and dual front frame types.

Note: 2013+ 3000 series planters do not require replacement of the seed tubes/sensors. The new planter harness can adapt to the existing sensors with adapter part number 725720.

Step 1:

Install new seed tubes and seed tube sensors.

Step 2:

Install new planter harness and secure with zip ties.

Note: Kinze splitter planters have the first half of rows on the back rows and the second half on the front rows. [See Diagram](#) for details

Step 3:

Plug the new planter harness into the Smart Connector.

Step 4:

Route the 4 pin Channel A extension supplied with the planter harness kit from the Universal Tractor harness to the Smart Connector.

Step 5:

If rows are greater than 32, install secondary Smart Connector, route 725411 harness from Channel B connection, and route remaining Channel B extension to the Secondary Smart Connector.

Repeating seed data to an OEM monitor is not supported on these planters'.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page

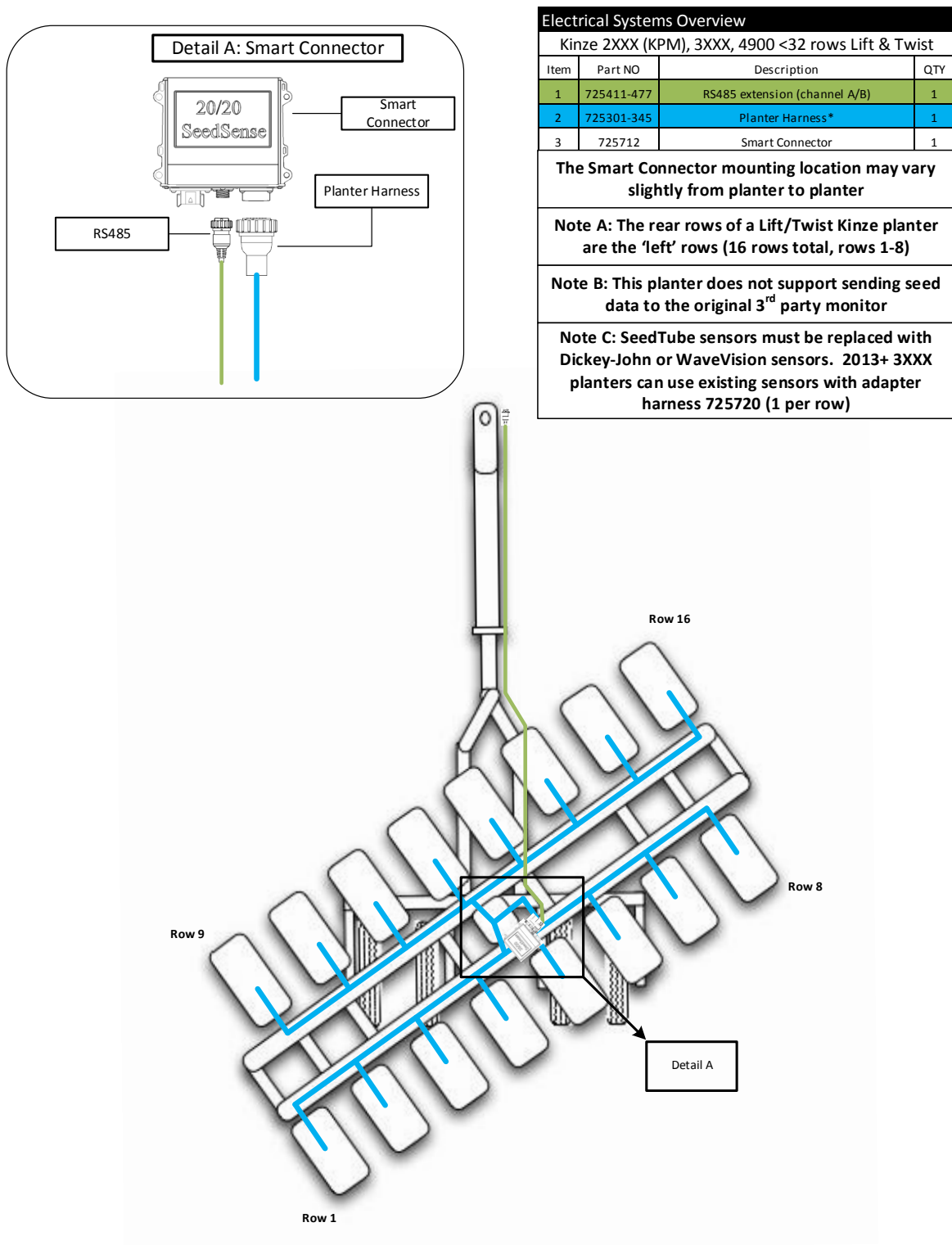


Figure 14.
Kinze Overview

CaseIH 12X0 with Pro600/700 Finishing Kit Install

Includes finishing kits: 725534, 725510

This configuration requires the replacement of the planter harness and seed tube sensors. Please refer to the below planter diagram which show how to lay the harness on the planter.

Step 1:

Remove the CaseIH seed tube sensors and install Dickey-John Sensors.

Step 2:

Install new planter harness and secure with zip ties.

Step 3:

Plug new planter harness into the Smart Connector(s).

Step 4:

Route the 4 pin Channel A extension supplied with the planter harness kit from the Universal Tractor harness to the Smart Connector.

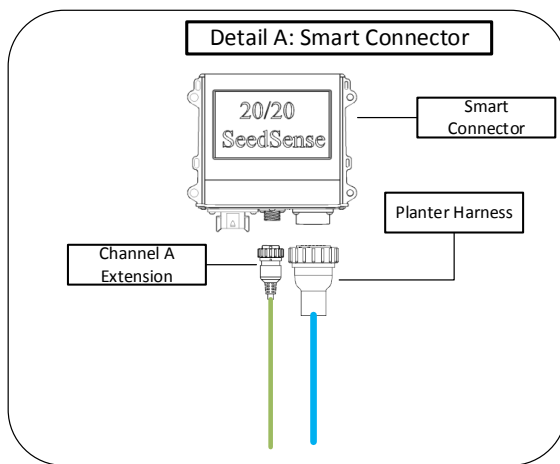
Step 5:

If rows are greater than 32, install secondary Smart Connector, route 725411 harness from Channel B connection on the Universal Tractor harness, and route remaining Channel B extension to the Secondary Smart Connector.

This configuration does not support sending seed data to the original monitor.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



Kinze KPM, Monosem MPM, White SM400SE/GTA/C3000, CaseIH 12X0 series <32 rows			
Item	Part NO	Description	QTY
1	725411-477	RS485 extension (channel A/B)	1
2	725301-345	Planter Harness*	1
3	725712	Smart Connector	1
The planter frame type and Smart Connector mounting location may vary slightly from planter to planter			
Note A: This planter does not support sending seed data to the original 3 rd party monitor			
Note B: SeedTube sensors must be replaced with Dickey-John sensors on the Kinze and CaseIH planters. 2013+ Kinze 3XXX planters can use existing sensors with adapter harness 725720 (1 per row)			

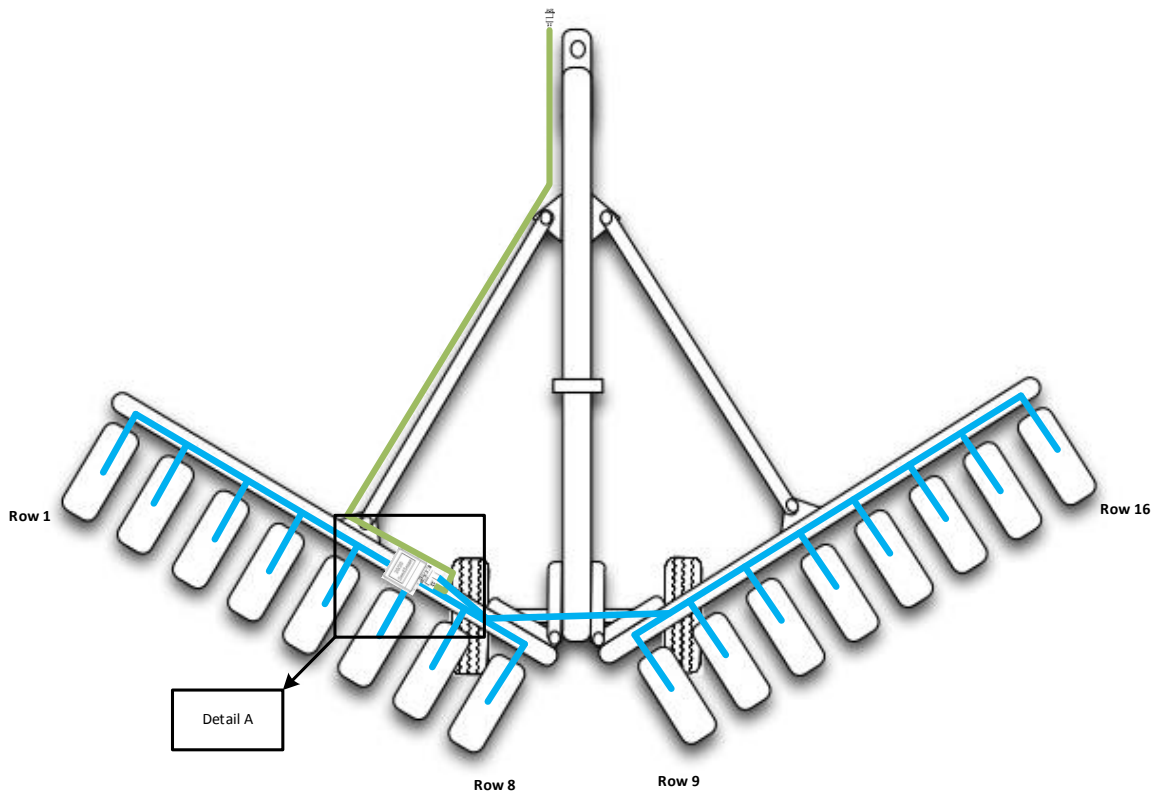


Figure 15.
CaseIH 12X0 with Pro600/700 Overview

CaseIH 12X5 23+ Rows Finishing Kit Install

Includes finishing kits: 725849, 725850

Locate the two Dickey-John modules on the planter. The left side module will be mounting near the left side center frame section and will be labeled 'Seed Sensor Module'. The right side module will be mounted near the right side of the center frame section and will also be labeled 'Seed Sensor Module'. Coming each of these modules there will be a set of two deutsch connections. This will be the plug in location for the adapter harnesses.

Step 1:

Route the provided 725411 4 pin AMP extension from the Channel B connection on the Universal Tractor Harness to the hitch of the planter.

Step 2:

Install one of the provided 725838 adapter harnesses, tying it into the junction coming from the left Dickey John module.

Step 3:

Plug the 37 pin AMP connection on the 725838 harness into one of the Smart Connectors.

Step 4:

Route one of the two remaining 4 pin AMP Channel A extension from the Smart Connector to the Channel A connection on the Universal Tractor harness at the hitch.

Step 5:

Install the second 725838 adapter harness, tying it into the junction coming from the right Dickey John module.

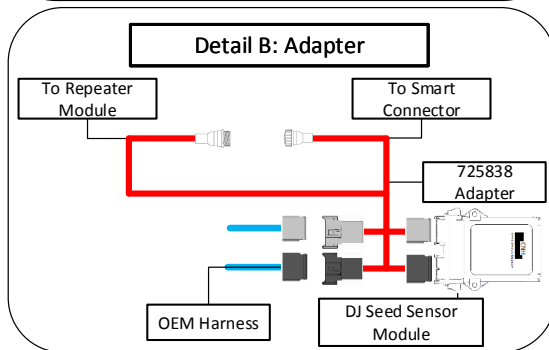
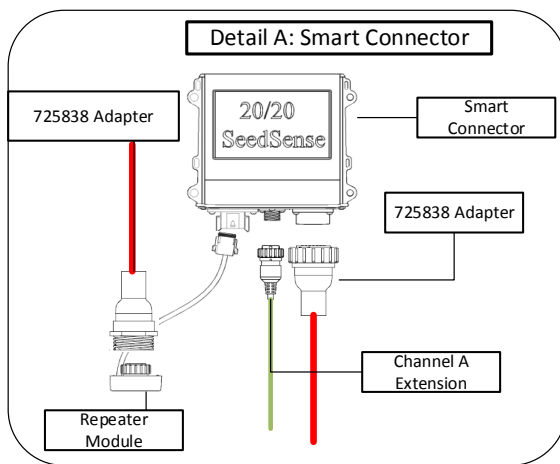
Step 6:

Plug the 37 pin AMP connection into the remaining Smart Connector.

If repeating seed data to a third party monitor is desired, plug a repeater module into the 8 pin Deutsch connections on each Smart Connector, and plug the 37 pin module into the remaining 37 pin AMP connection on the 725838 adapter harnesses.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



CaseIH 12X5 Series 23-36 Row			
Item	Part NO	Description	QTY
1	725411-477	RS485 Channel A/B extension	3
2	725714	Repeater Module	2
3	725712	Smart Connector	2
4	725838	CaseIH Seed Sensor Adapter	2
5	OEM	OEM Planter Harness	1

The Smart Connector mounting location may vary slightly from planter to planter

Note A: The provided 725411 harness extends the 725499 Channel B connection to the hitch

Note B: Channel A Smart Connector will be plugged into the Left rows, Channel B Smart Connector will be plugged into the Right rows.

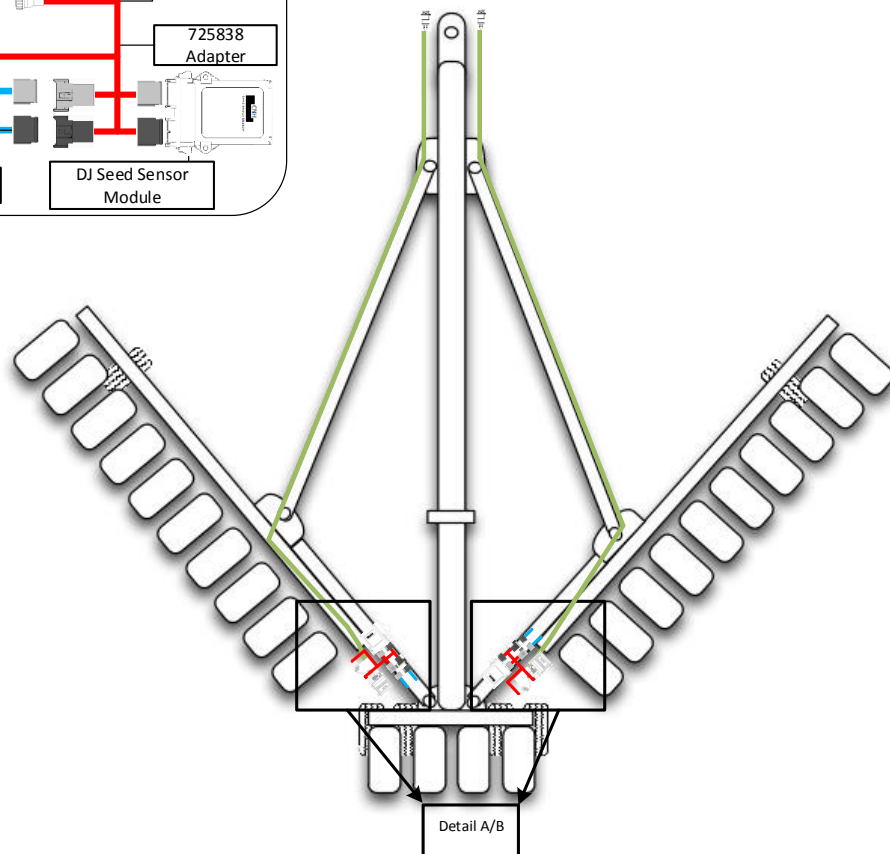


Figure 16.
CaseIH 12X5 23+ Rows Overview

CaseIH 12X5 4–16 Rows Finishing Kit Install

Includes finishing kits: 725847, 725848

Locate the Dickey-John module on the planter. The module will be mounting near the left side center frame section and will be labeled 'Seed Sensor Module'. Coming from the module there will be a set of two deutsch connections. This will be the plug in location for the adapter harness.

Step 1:

Install the provided 725838 adapter harness, tying it into the junction coming from the Dickey John module.

Step 2:

Plug the 37 pin AMP connection on the 725838 harness into the Smart Connector.

Step 3:

Route the provided 4 pin AMP Channel A extension from the Smart Connector to the Channel A connection on the Universal Tractor harness at the hitch.

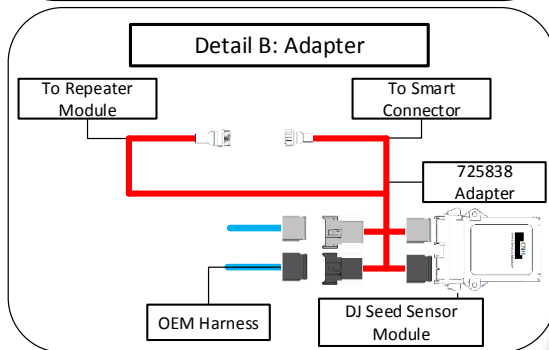
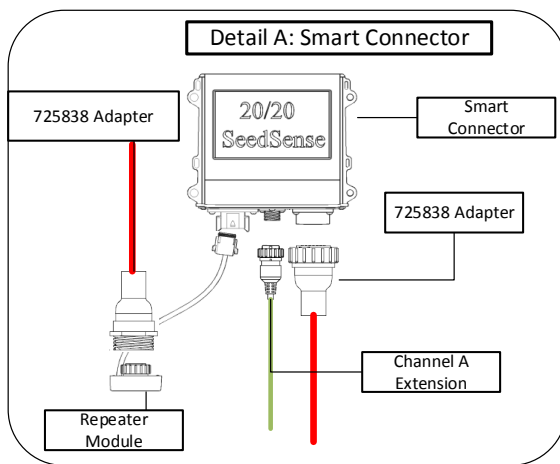
Note:

With 3pt planters, no extension is needed.

If repeating seed data to a third party monitor is desired, plug the provided repeater module into the 8 pin Deutsch connections on the Smart Connector, and plug the 37 pin module into the remaining 37 pin AMP connection on the 725838 adapter harness.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page



CaseIH 12X5 Series 4-16 Rows			
Item	Part NO	Description	QTY
1	725411-477	RS485 extension (channel A/B)	1
2	725714	Repeater Module	1
3	725712	Smart Connector	1
4	725838	CaseIH Seed Sensor Adapter	1
5	OEM	OEM Planter Harness	1

The WedgeBox and Smart Connector mounting location may vary slightly from planter to planter

3pt planters will not include a RS485 extension, as the Seed Sensor Module can be reached with the Universal Tractor Harness

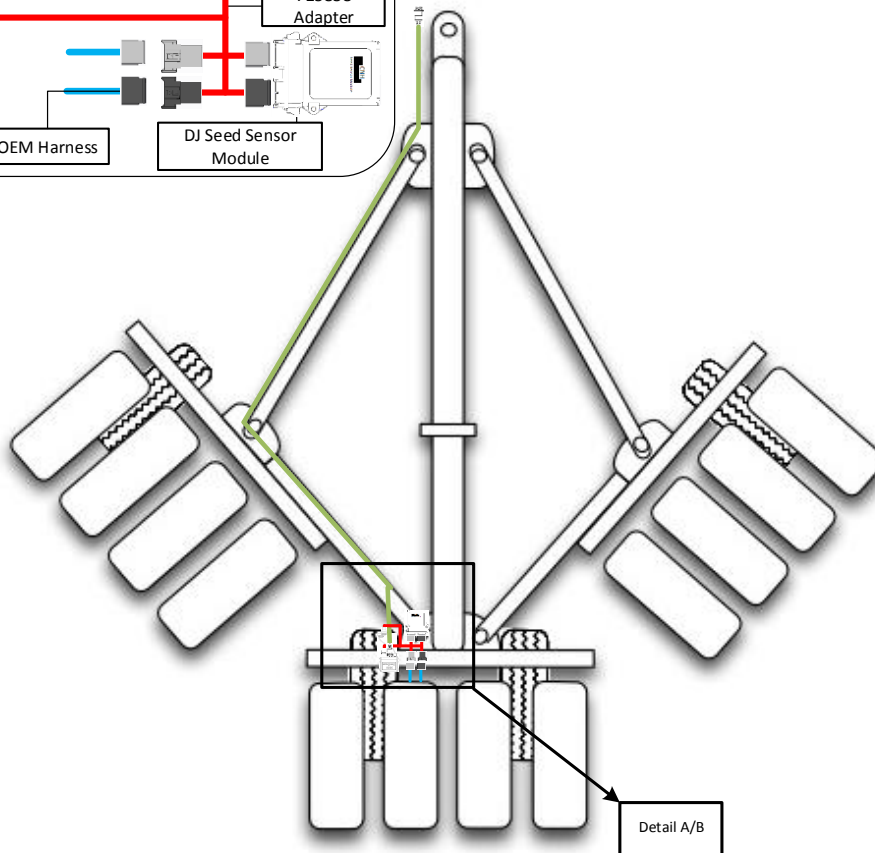


Figure 17.
CaseIH 12X5 4-16 Rows Overview

White Finishing Kit Install

Includes finishing kits: 725529, 725840, 725841

This configuration requires the replacement of the planter harness. Please refer to the below planter diagram which show how to lay the harness on the planter.

Step 1:

Install new planter harness and secure with zip ties.

Step 2:

Plug new planter harness into Smart Connector.

Step 3:

Route the 4 pin Channel A extension supplied with the planter harness kit from the Universal Tractor harness to the Smart Connector.

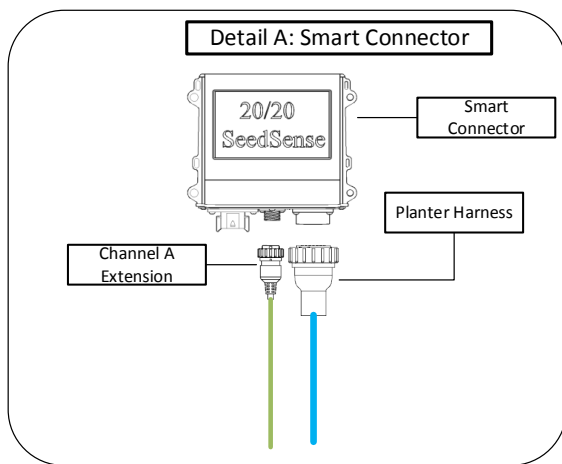
Step 4:

If rows are greater than 32, install secondary Smart Connector, route 725411 harness from Channel B connection, and route remaining Channel B extension to the Secondary Smart Connector.

Repeating seed data to an OEM monitor is not supported on these planters'.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



Kinze KPM, Monosem MPM, White SM400SE/GTA/C3000, CaseIH 12X0 series <32 rows			
Item	Part NO	Description	QTY
1	725411-477	RS485 extension (channel A/B)	1
2	725301-345	Planter Harness*	1
3	725712	Smart Connector	1
The planter frame type and Smart Connector mounting location may vary slightly from planter to planter			
Note A: This planter does not support sending seed data to the original 3 rd party monitor			
Note B: SeedTube sensors must be replaced with Dickey-John sensors on the Kinze and CaseIH planters. 2013+ Kinze 3XXX planters can use existing sensors with adapter harness 725720 (1 per row)			

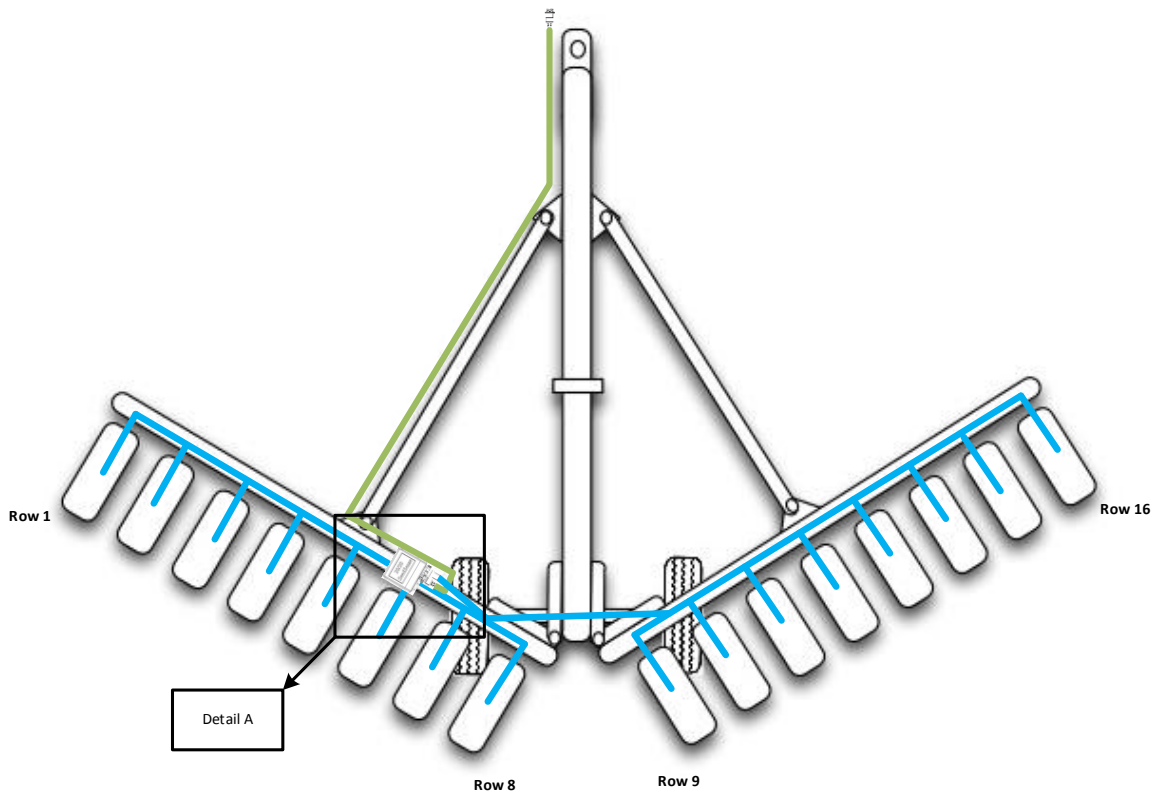


Figure 18.
White Overview

YP1225, 1625 with IntelliAg Finishing Kit Install

Includes finishing kits: 725525

Locate the two Dickey-John modules on the planter. There will be one on the left wing and one on the right wing. Follow the harness coming from the module. Approximately two feet from it, there will be another junction with a set of two 12 pin deutsch connections. This will be the plug in location for the adapter harnesses.

Step 1:

Install the provided 725402 adapter harness, tying it into the junction coming from the left wing Dickey John module.

Step 2:

Install the provided 725402 adapter harness, tying it into the junctions coming from the right wing Dickey John module.

Step 3:

Plug a Smart Connector into the 37 pin AMP connection coming from the left 725402 adapter harness, and plug the secondary Smart Connector into the right 725402 adapter harness.

Step 4:

Route the 4 pin Channel A extension supplied with the planter harness kit from the Universal Tractor harness to the left wing Smart Connector.

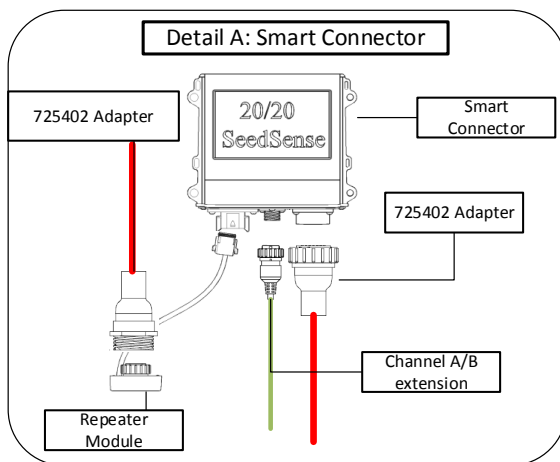
Step 5:

Route 725411 harness from Channel B connection on the Universal Tractor harness, and route remaining Channel B extension to the right wing Smart Connector.

If repeating seed data to a third party monitor is desired, please plug the provided repeater module into the 8 pin Deutsch connections on the Smart Connector, and plug the 37 pin module into the remaining 37 pin AMP connection on the 725402 adapter harness, and plug the second repeater module into the Secondary Smart connector, tying it into the remaining 37 pin AMP connection on the 725402 adapter harness.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page



Great Plains YP 1225, 1625 w/IntelliAg			
Item	Part NO	Description	QTY
1	725411-477	RS485 Channel A/B extension	3
2	725714	Repeater Module	2
3	725712	Smart Connector	2
4	725402	GP Adapter	2
5	OEM	OEM Planter Harness	1

The Smart Connector mounting location may vary slightly from planter to planter

Note A: The provided 725411 harness extends the 725499 Channel B connection to the hitch

Note B: Channel A Smart Connector will be plugged into the Left rows, Channel B Smart Connector will be plugged into the Right rows.

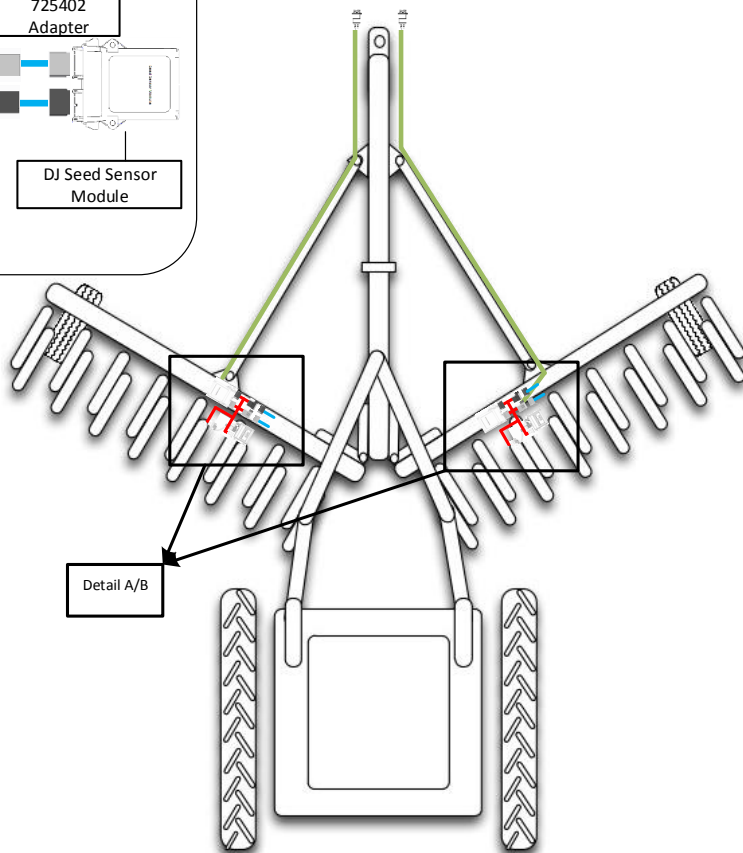
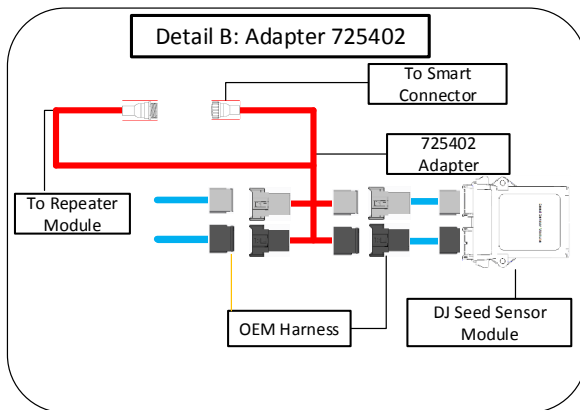


Figure 19.
YP1225, 1625 with IntelliAg Overview

YP1225, 1625 with Seed Manager Finishing Kit Install

Includes finishing kits: 725526

Locate the two Dickey-John modules on the planter. There will be one on the left wing and one on the right wing. Coming from each of these two modules there will be a set of two deutsch connections. This will be the plug in location for the adapter harness.

Step 1:

Install the provided 725400 adapter harness, tying it into the junction coming from the left wing Dickey John module.

Step 2:

Route the 4 pin AMP connection on the left wing 725400 adapter harness to the hitch of the planter. Plug it into the Channel A connection on the Universal Tractor harness.

Step 3:

Install the provided 725400 adapter harness, tying it into the junctions coming from the right wing Dickey John module.

Step 4:

Route the 725411 harness from Channel B connection on the Universal Tractor harness to the hitch of the planter.

Step 5:

Route the 4 pin AMP connection on the left wing 725400 adapter harness to the hitch of the planter. Plug it into the Channel B extension coming from the Universal Tractor harness.

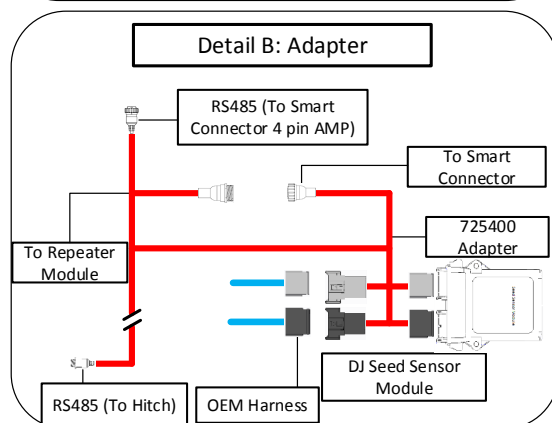
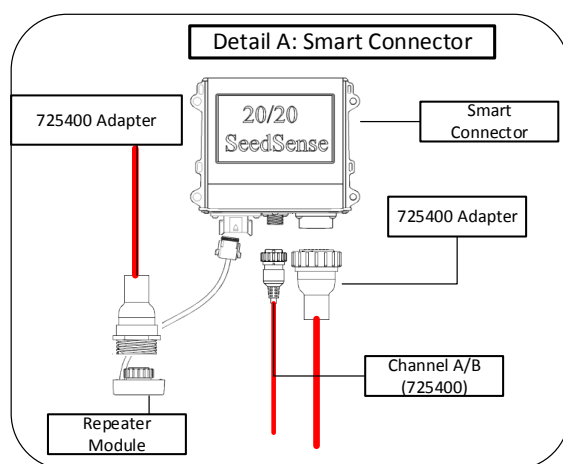
Step 6:

Plug a Smart Connector into the 37 pin AMP connection coming from the left 725400 adapter harness, and plug the secondary Smart Connector into the right 725400 adapter harness.

If repeating seed data to a third party monitor is desired, please plug the provided repeater module into the 8 pin Deutsch connections on the Smart Connector, and plug the 37 pin module into the remaining 37 pin AMP connection on the left 725400 adapter harness, and plug the second repeater module into the Secondary Smart connector, tying it into the remaining 37 pin AMP connection on the right 725400 adapter harness.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page



Great Plains YP 1225, 1625 w/Seed Manager			
Item	Part NO	Description	QTY
1	725411	RS485 Channel A/B extension	1
2	725714	Repeater Module	2
3	725712	Smart Connector	2
4	725400	GP Left/Right Adapter	2
5	OEM	OEM Planter Harness	1

The Smart Connector mounting location may vary slightly from planter to planter

Note A: The provided 725411 harness extends the 725499 Channel B connection to the hitch

Note B: Channel A Smart Connector will be plugged into the Left rows, Channel B Smart Connector will be plugged into the Right rows.

Note C: 725400 adapter harness requires the DJ Seed Module to be plugged in to power the Smart Connector

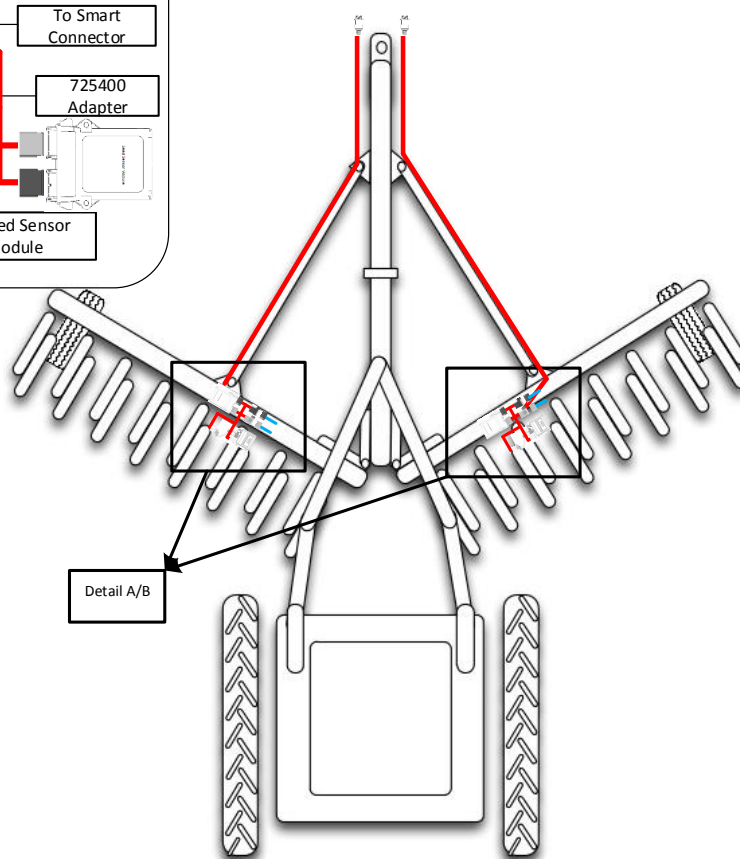


Figure 20.
YP1225, 1625 with Seed Manager Overview

YP2425/40 Finishing Kit Install

Includes finishing kits: 725531

Locate the three Dickey-John modules on the planter. There will be one on the left wing, one in the center, and one on the right wing. Follow the harness coming from the module.

Approximately two feet from it, there will be another junction with a set of two 12 pin deutsch connections. This will be the plug in location for the adapter harnesses.

Step 1:

Install the provided 725402 adapter harness, tying it into the junction coming from the left wing Dickey John module.

Step 2:

Install the provided 725401 adapter harness, tying it into the junctions coming from the center and right wing Dickey John module.

Step 3:

Plug a Smart Connector into the 37 pin AMP connection coming from the 725402 adapter harness, and plug the secondary Smart Connector into the 725401 adapter harness.

Step 4:

Route the 4 pin Channel A extension supplied with the planter harness kit from the Universal Tractor harness to the left wing Smart Connector.

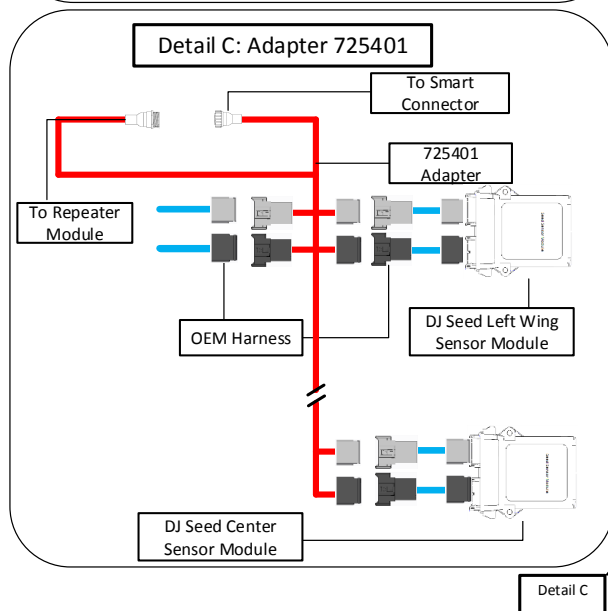
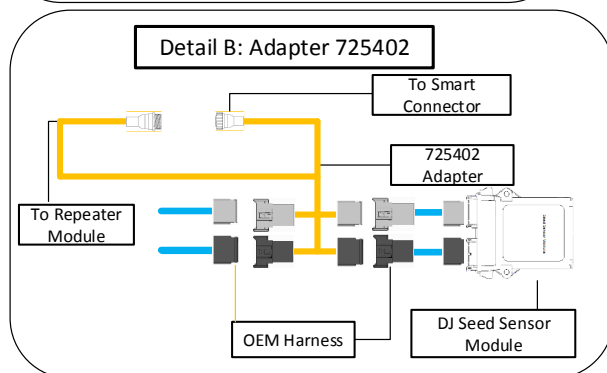
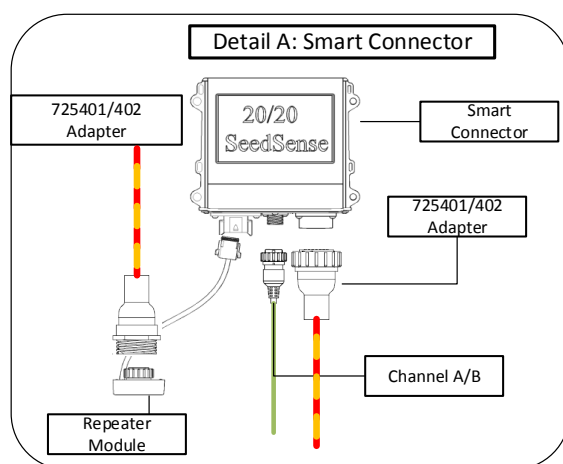
Step 5:

Route 725411 harness from Channel B connection on the Universal Tractor harness, and route remaining Channel B extension to the center and right wing Smart Connector.

If repeating seed data to a third party monitor is desired, please plug the provided repeater module into the 8 pin Deutsch connections on the Smart Connector, and plug the 37 pin module into the remaining 37 pin AMP connection on the 725401 adapter harness, and plug the second repeater module into the Secondary Smart connector, tying it into the remaining 37 pin AMP connection on the 725402 adapter harness.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



Great Plains YP 2425, 40 w/IntelliAg			
Item	Part NO	Description	QTY
1	725411-477	RS485 Channel A/B extension	3
2	725714	Repeater Module	2
3	725712	Smart Connector	2
4	725401	GP Left/Center Adapter	1
5	725402	GP Right Wing Adapter	1
6	OEM	OEM Planter Harness	1

The Smart Connector mounting location may vary slightly from planter to planter

Note A: The provided 725411 harness extends the 725499 Channel B connection to the hitch

Note B: Channel A Smart Connector will be plugged into the Left rows, Channel B Smart Connector will be plugged into the Right rows.

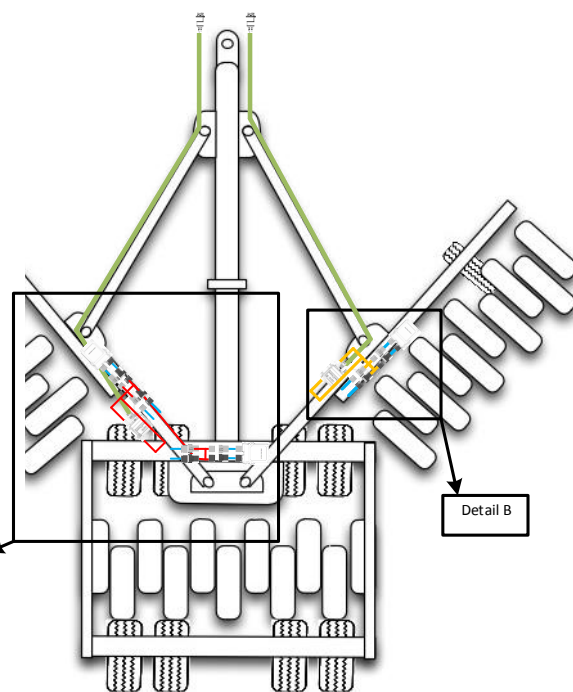


Figure 21.
YP2425/40 Overview

Monosem with MPM Finishing Kit Install

Includes finishing kits: 725849, 725850

This configuration requires the replacement of the planter harness. Please refer to the below planter diagram which show how to lay the harness on the planter.

Step 1:

Install the new planter harness and secure with zip ties.

Step 2:

Plug the new planter harness into the Smart Connector(s).

Step 3:

Route the 4 pin Channel A extension supplied with the planter harness kit from the Universal Tractor harness to the Smart Connector.

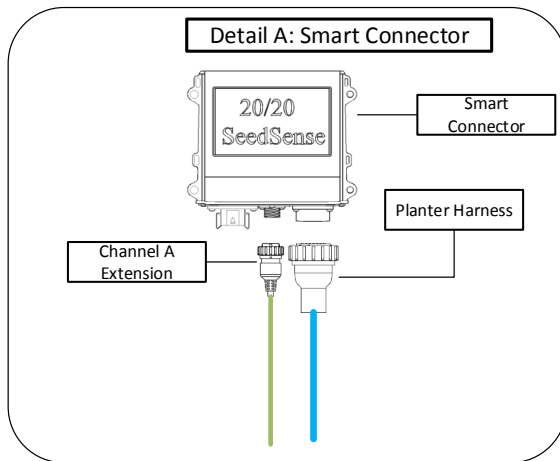
Step 4:

If rows are greater than 32, install secondary Smart Connector, route 725411 harness from Channel B connection on the Universal Tractor harness, and route remaining Channel B extension to the Secondary Smart Connector.

This configuration does not support sending seed data to the original monitor.

For Row Unit Module and Load Cell installation, refer to the index to find the corresponding installation sheet for the row unit.

Note: Diagram of the install is located on the next page.



Kinze KPM, Monosem MPM, White SM400SE/GTA/C3000, CaseIH 12X0 series <32 rows			
Item	Part NO	Description	QTY
1	725411-477	RS485 extension (channel A/B)	1
2	725301-345	Planter Harness*	1
3	725712	Smart Connector	1

The planter frame type and Smart Connector mounting location may vary slightly from planter to planter

Note A: This planter does not support sending seed data to the original 3rd party monitor

Note B: SeedTube sensors must be replaced with Dickey-John sensors on the Kinze and CaseIH planters. 2013+ Kinze 3XXX planters can use existing sensors with adapter harness 725720 (1 per row)

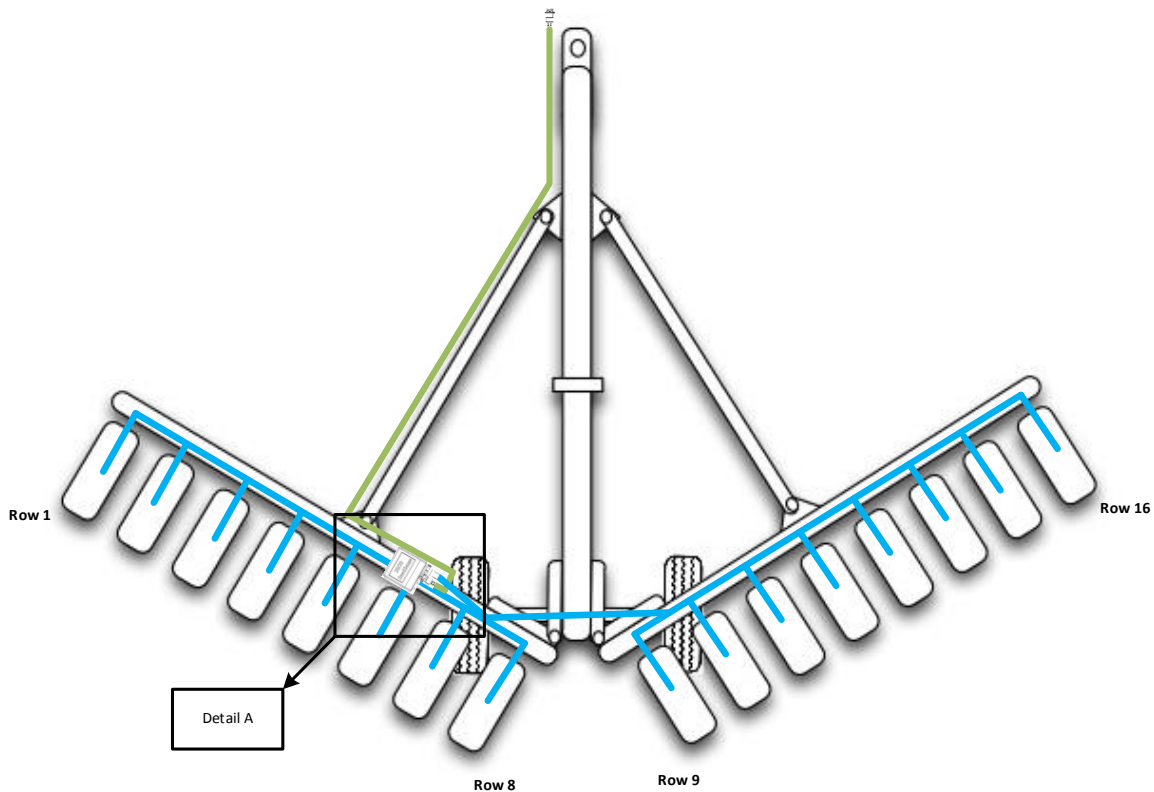


Figure 22.
Monosem with MPM Overview

RUM/Load Cell Install

John Deere 7000/Kinze 2000 RUM/Pin Installation

Step 1:

Prepare for Installation

- a: Raise the planter to remove the weight from gauge wheels.
- b: Remove appropriate tab on the RUM for the planter make and model. This ensures that the RUM stays vertical during the operation.

Step 2:

RUM Installation

- a: Locate the right goal post on the row unit.



- b: Using the supplied carriage bolt, nut and lock washer, mount the RUM and Ladder on the inside of the right hand corner-post with the RUM harnesses coming out of the bottom of the RUM. (vertical) Plug the RUM into the junction of the planter harness and original seed tube sensor

Note: For Kinze 2000 pusher units, a hole will need to be drilled into the hopper support bracket for RUM mounting instead of using the goal post.

Step 3:
Load Cell Installation



a: Using snap-ring pliers, remove the snap ring that secures the original depth adjustment pin.



- b: Using the load cell, slide the original pin out of the shank from the right side to the left.
- c: Install a snap ring on the load cell protruding from the left side of the shank.
- d: Thread the provided hex bolt through the nut on the top of the load cell bracket and into the front hole of the depth adjustment position. This will secure the load cell from rotating.
- e: Route the load cell cable through the depth adjustment slot, running the cable to the right side of the seed tube, up to the RUM. Connect the load cell to the RUM
- f: Secure the load cell cable, any applicable AUX cable, and the seed tube cable to the ladder bracket using zip ties. Be cautious to ensure that there are no cables that could get pinched, and that the zip ties are not excessively tight

John Deere 7200/17X0 RUM/Pin Installation

Step 1:

Prepare for Installation

- a: Raise the planter to remove the weight from gauge wheels.
- b: Remove appropriate tab on the RUM for the planter make and model. This ensures that the RUM stays vertical during the operation.

Step 2:

RUM Installation

- a: Remove the 9/16" bolt on the right hand row unit corner-post.



- b: Using the supplied carriage bolt, nut and lock washer, mount the RUM and Ladder on the inside of the right hand corner-post with the RUM harnesses coming out of the bottom of the RUM. (vertical) Plug the RUM into the junction of the planter harness and original seed tube sensor

Step 3:
Load Cell Installation

- a: Using snap-ring pliers, remove the snap ring that secures the original depth adjustment pin.



- b: After sliding a washer onto the load cell, use the load cell to slide the original pin out of the shank from the left side to the right.

Note: If the depth adjustment pin hole is excessively worn (excessively ‘egg-shaped’), drill out the hole with a $\frac{3}{4}$ ” and insert supplied step bushing for more accurate load cell readings.

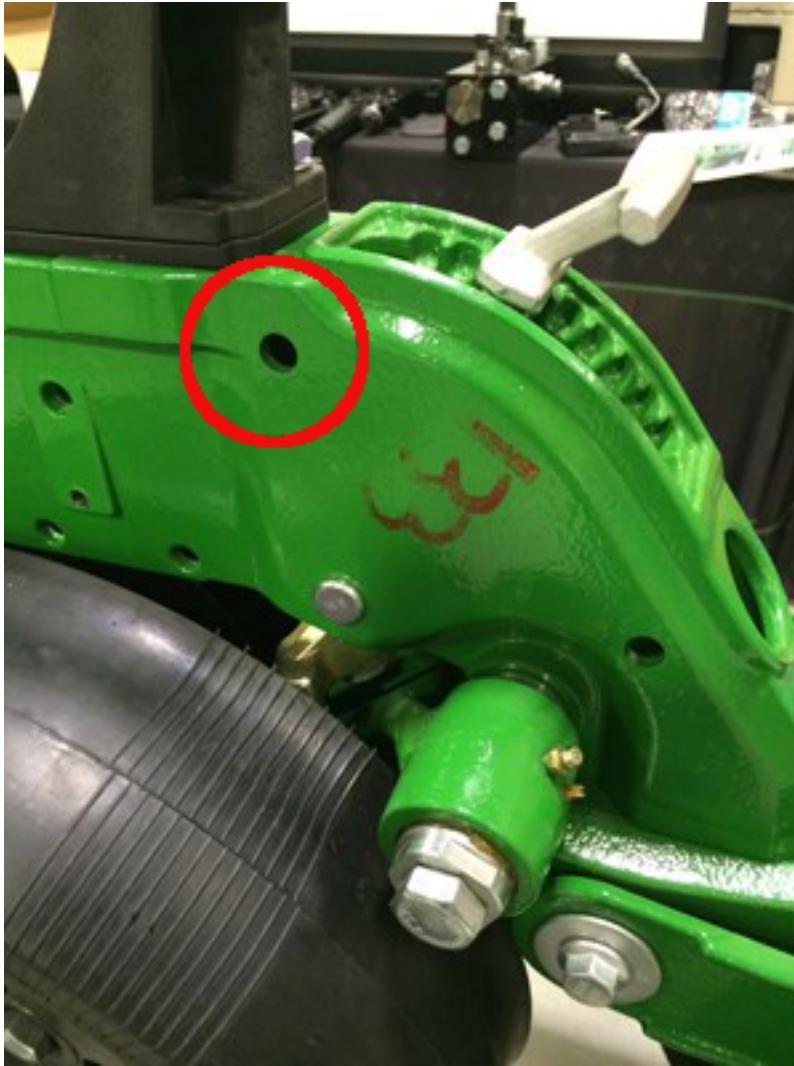
- c: Slide the remaining washer onto the load cell protruding from the right side of the shank, and install a snap ring to secure it.
- d: Thread the provided hex bolt through the nut on the top of the load cell bracket and into the front hole of the depth adjustment position. This will secure the load cell from rotating.
- e: Route the load cell cable through the depth adjustment slot, running the cable to the right side of the seed tube, up to the RUM. Connect the load cell to the RUM.
- f: Secure the load cell cable, any applicable AUX cable, and the seed tube cable to the ladder bracket using zip ties. Be cautious to ensure that there are no cables that could get pinched, and that the zip ties are not excessively tight.

John Deere 17X5 RUM/Pin Installation

Step 1:

Prepare for Installation

- a: Raise the planter to remove the weight from gauge wheels.
- b: Remove appropriate tab on the RUM for the planter make and model. This ensures that the RUM stays vertical during the operation.



- c: Identify location for installation of bolt & spacer for the Load Cell.

Note: The Bolt and Spacer are not needed for installation if the bracket for insecticide or a 3 bu. Box is present

Step 2:

RUM Installation

- a: Remove 9/16" bolt on the right hand row unit corner-post.
- b: Using the supplied carriage bolt, nut and lock washer, mount the RUM and Ladder on the inside of the right hand corner-post with the RUM harnesses coming out of the bottom of the RUM. (vertical) Plug the RUM into the junction of the planter harness and original seed tube sensor

Step 3:
Load Cell Installation



- a: Insert the supplied bolt into the upper hole of the row unit from the right side, when looking at the row unit from behind. The spacer should be installed on the left side of the row unit between the row unit and the nut. This bolt prevents the load cell from rotating.

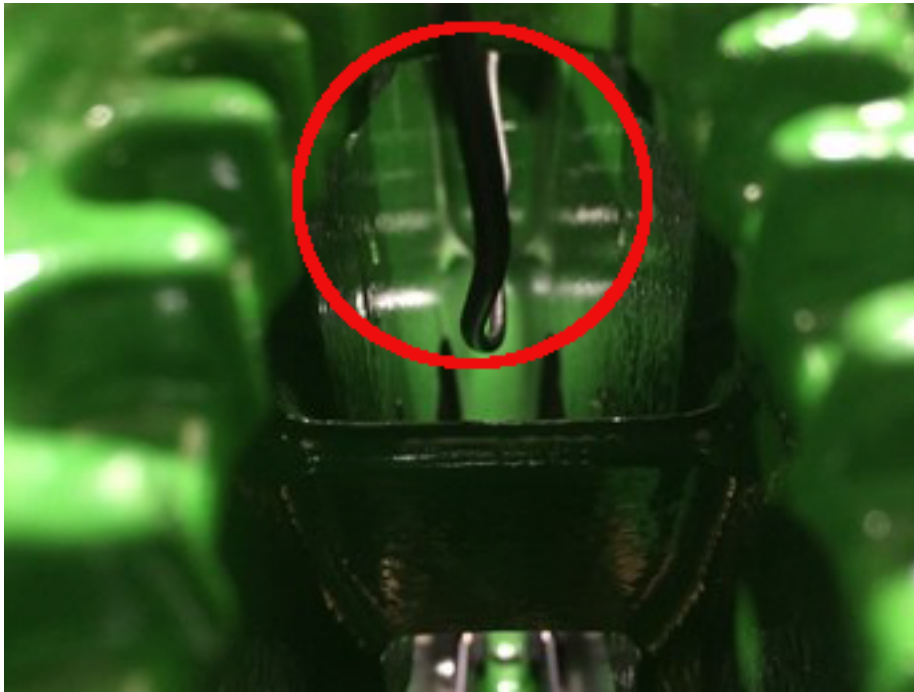
Note: For installations with insecticide or 3 bu. boxes, use the existing bolt and ensure the nut is on the left side of the row unit. The supplied bolt will not be needed.



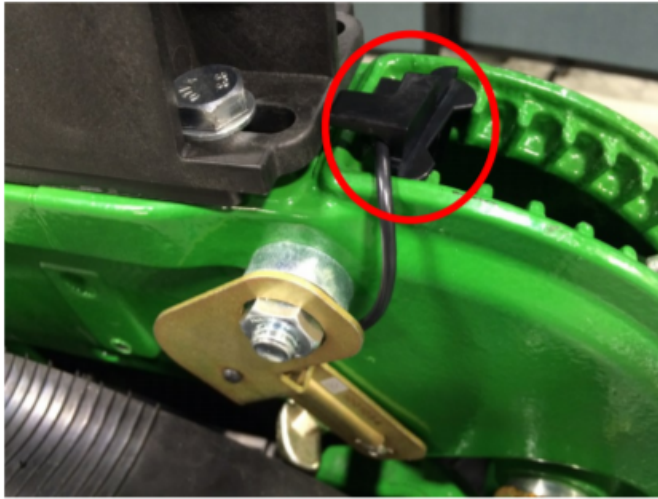
- b: Insert the load cell into the row unit and depth adjustment mechanism from the left side (when viewing the row unit from behind). Slide the circle cutout in the bracket over the nut installed in step 1. Ensure that the wire is not pinched between the bracket and the nut/washer.



c: Secure the load cell with the supplied snap ring.



d: Route the wire from the load cell through the row unit and above the cross brace inside the row unit.



e: Use the supplied clip to secure the load cell wire in the top of the depth adjustment guide.



- f: Route the wire down the channel in the left side of the row unit that allows the wire to run alongside the seed tube
- g: Plug the Load Cell into the RUM. Secure the load cell cable, any applicable AUX cable, and the seed tube cable to the ladder bracket using zip ties. Be cautious to ensure that there are no cables that could get pinched, and that the zip ties are not excessively tight.

John Deere ExactEmerge RUM/Pin Installation

Step 1:

Prepare for Installation

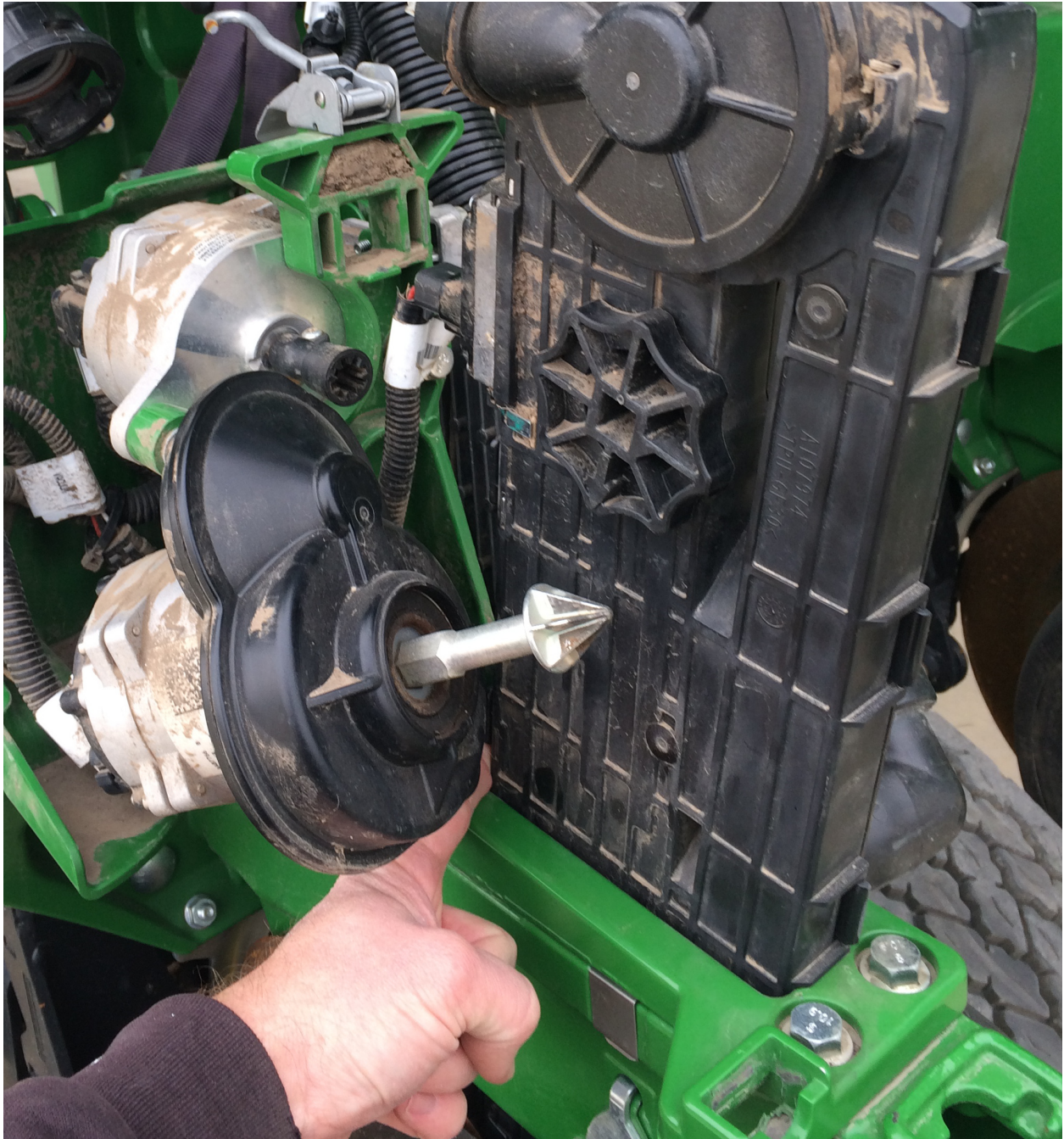
- a: Raise the planter to remove the weight from gauge wheels.
- b: Remove appropriate tab on the RUM for the planter make and model. This ensures that the RUM stays vertical during the operation.

Step 2:
RUM Installation



- a: Remove the meter shroud and install the RUM/SRM bracket on the right goal post.
- b: Using the supplied carriage bolt, nut and lock washer, mount the RUM and Ladder on the inside of bracket with the RUM harnesses coming out of the bottom of the RUM. (vertical) Plug the RUM into the junction of the new planter harness and seed data adapter.

Step 3:
Seed Adapter Installation



- a: Locate the 4 pin connection going into the John Deere brush tube on the front side. Install the 725746 adapter in-line. Plug the 3 pin weatherpack connection into the RUM.

Step 4:
Load Cell Installation



- a: Insert the supplied bolt into the upper hole of the row unit from the right side, when looking at the row unit from behind. The spacer should be installed on the left side of the row unit between the row unit and the nut. This bolt prevents the load cell from rotating.

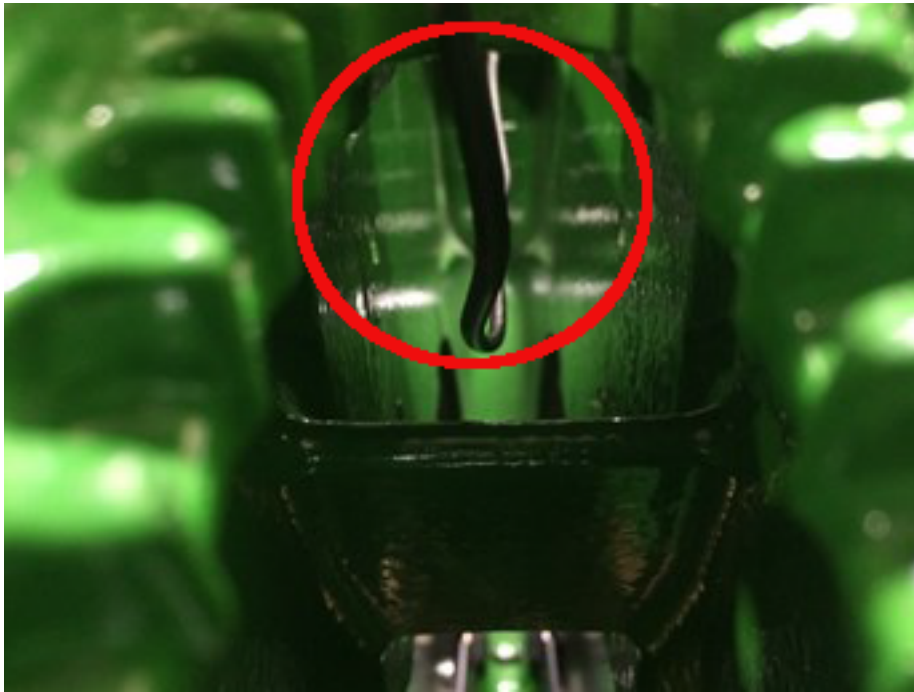
Note: For installations with insecticide or 3 bu. boxes, use the existing bolt and ensure the nut is on the left side of the row unit. The supplied bolt will not be needed.



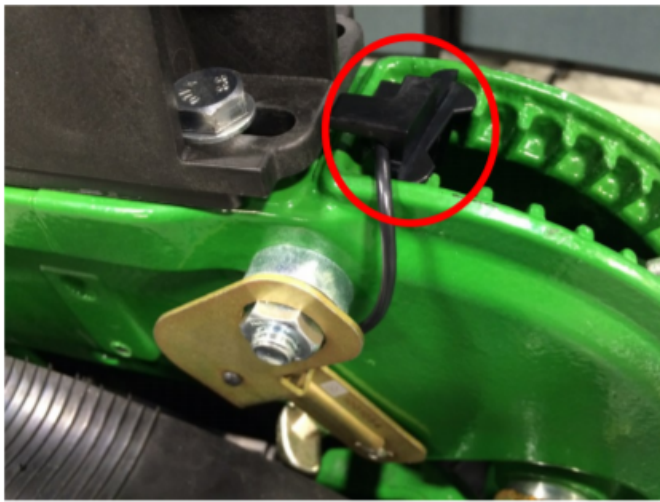
- b: Insert the load cell into the row unit and depth adjustment mechanism from the left side (when viewing the row unit from behind). Slide the circle cutout in the bracket over the nut installed in step 1. Ensure that the wire is not pinched between the bracket and the nut/washer.



c: Secure the load cell with the supplied snap ring.



d: Route the wire from the load cell through the row unit and above the cross brace inside the row unit.



e: Use the supplied clip to secure the load cell wire in the top of the depth adjustment guide.



- f: Route the wire down the channel in the left side of the row unit that allows the wire to run alongside the seed tube
- g: Plug the Load Cell into the RUM. Secure the load cell cable, any applicable AUX cable, and the seed tube cable to the ladder bracket using zip ties. Be cautious to ensure that there are no cables that could get pinched, and that the zip ties are not excessively tight.

Kinze 3000 RUM/Pin Installation

Step 1:

Prepare for Installation

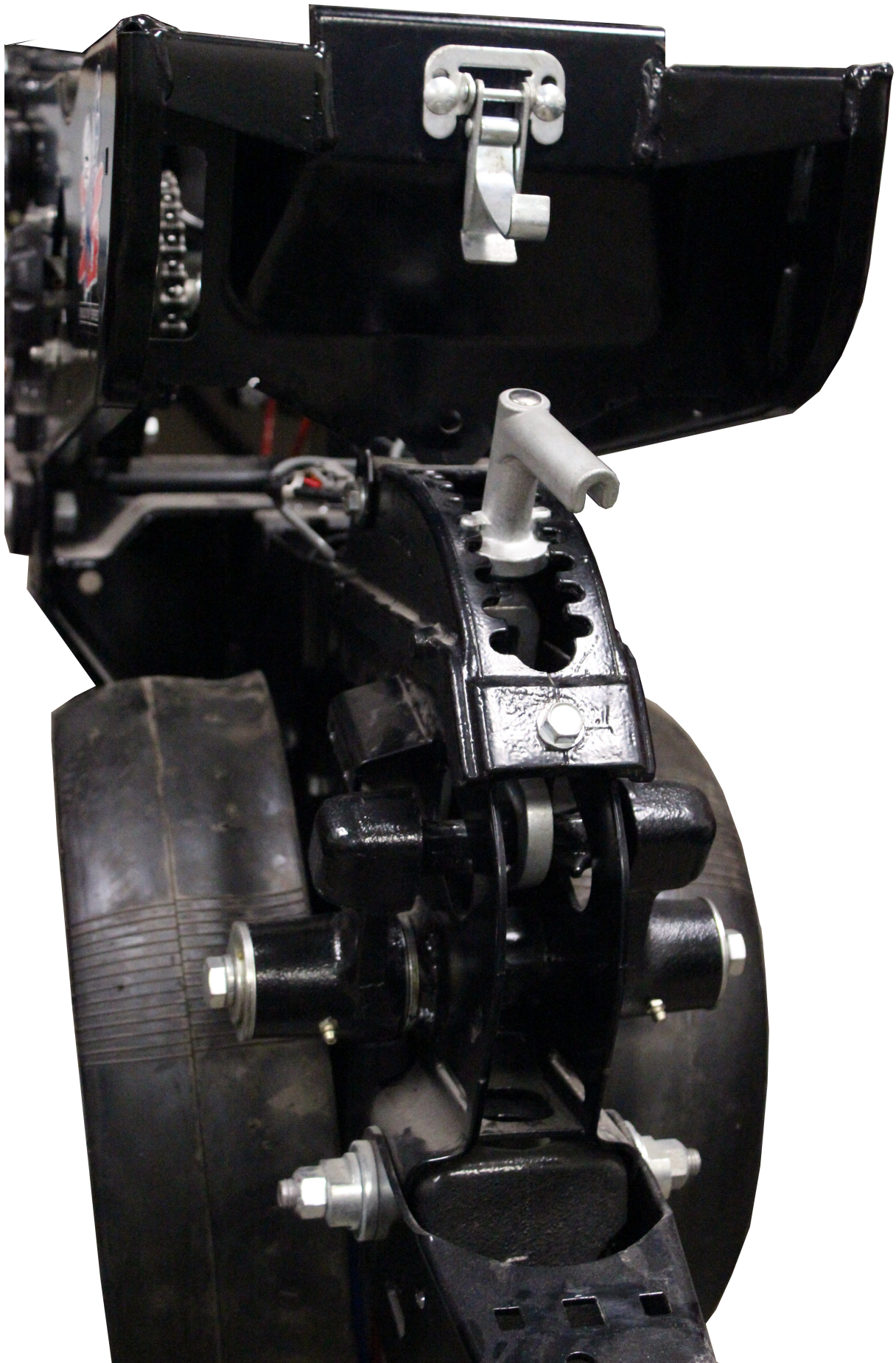
- a: Raise the planter to remove the weight from gauge wheels.
- b: Remove appropriate tab on the RUM for the planter make and model. This ensures that the RUM stays vertical during the operation.

Step 2:**RUM Installation**

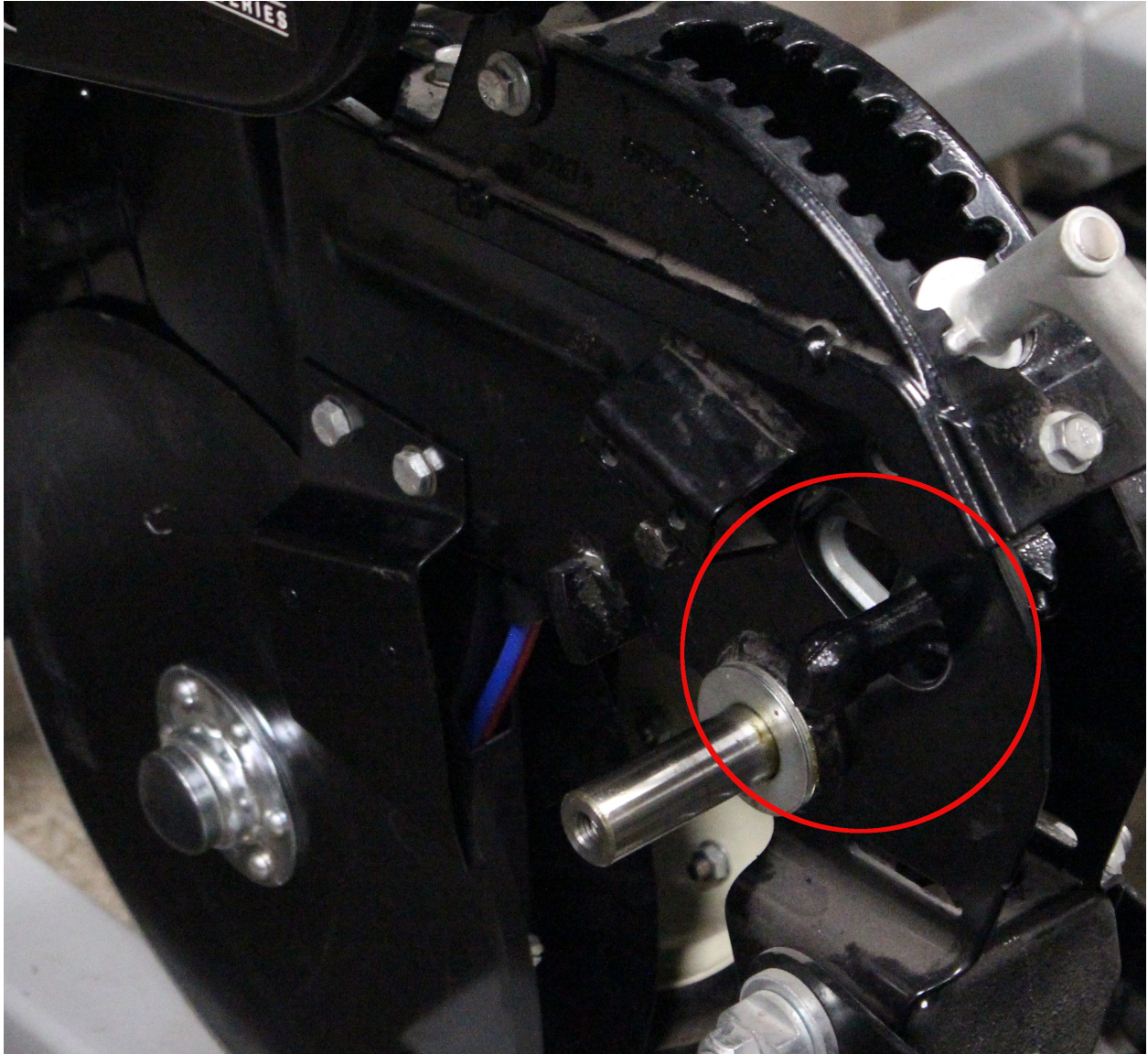
- a: Remove the 9/16" bolt on the right hand row unit corner-post.
- b: Using the supplied standard bolt, nut and lock washer, mount the RUM and Ladder on the inside of the right hand corner-post with the RUM harnesses coming out of the bottom of the RUM. (vertical) Plug the RUM into the junction of the new planter harness and seed tube sensor.

Note: If an AirForce lift bag is installed, refer to the AirForce installation manual for specific RUM mounting steps.

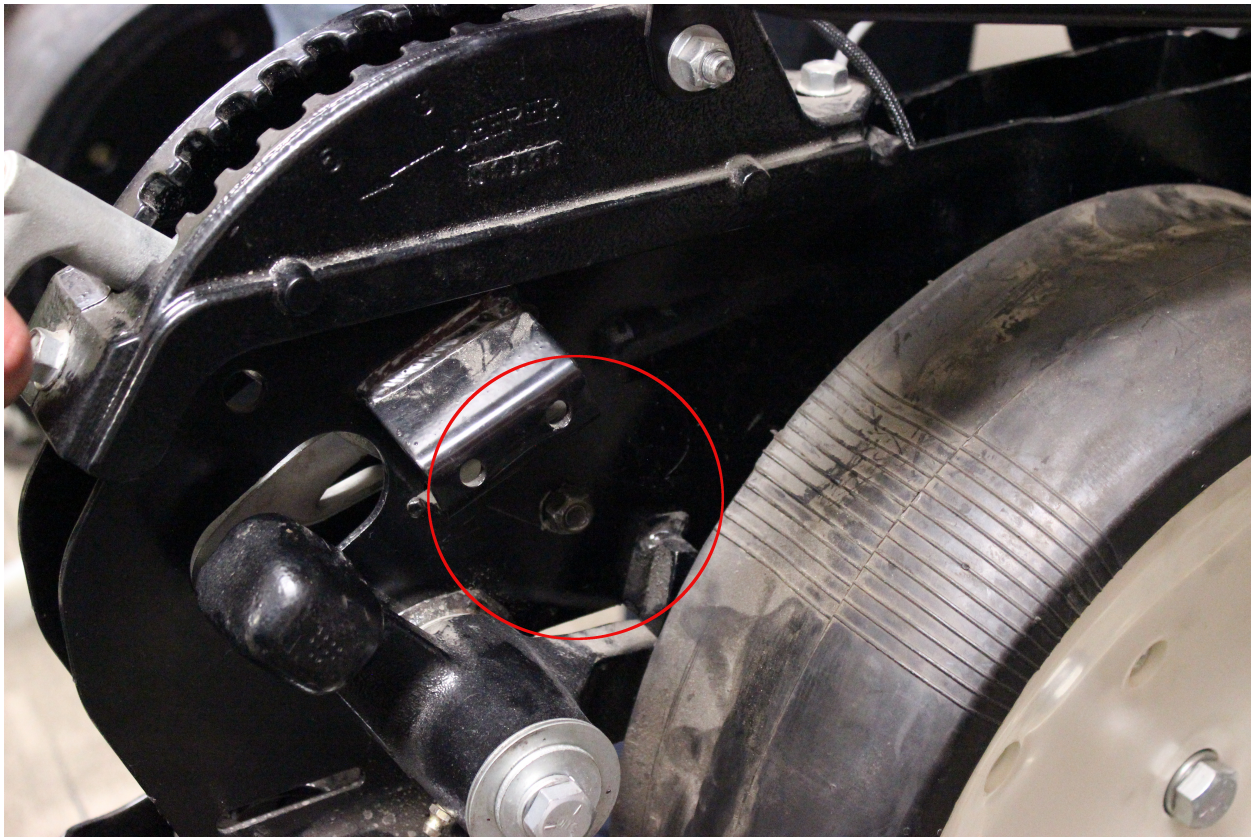
Step 3:
Load Cell Installation



a: Remove the gauge wheel and gauge wheel arm from one side of the planter row unit.



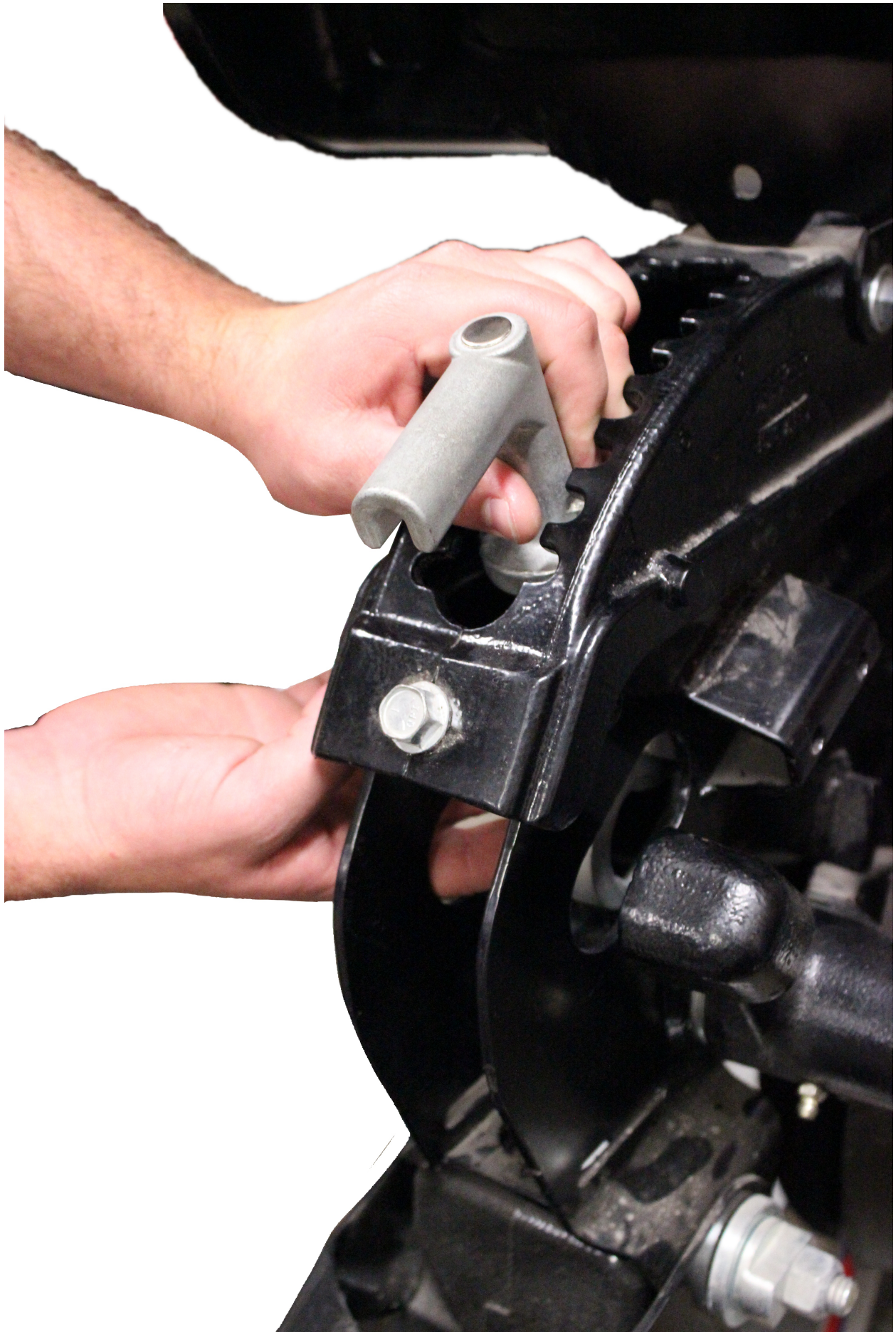
b: Remove the cross-bar that connects the top of both gauge wheel arms through the shank.



- c: Remove the bolt that holds the depth adjustment linkage. Once this is complete, separate the linkage from the depth adjustment handle and remove the handle from the shank. This is best accomplished by twisting the handle and pulling it out of the rear portion of the shank.
- d: Remove the depth adjustment linkage. This is best done by pulling the top shaft of the linkage partially through the top of the shank, then aligning the link with the linkage and pulling it out of the back of the shank.



- e: Remove the Kinze link from the linkage. Knock out the original roll pin and install the load cell in its place. The thicker side of the load cell with the strain gauge installed will be pointed up. Reinsert the bushing into the linkage below the load cell.



- f: Reinsert the linkage with the load cell installed and the depth adjustment handle into the row unit and install the bolt through the side of the row unit into the bushing of the linkage.
- g: Route the cable through the row unit shank and to the right of the seed tube, plugging it into the RUM
- h: Plug the Load Cell into the RUM. Secure the load cell cable, any applicable AUX cable, and the seed tube cable to the ladder bracket using zip ties. Be cautious to ensure that there are no cables that could get pinched, and that the zip ties are not excessively tight.

CaseIH RUM/Pin Installation

Step 1:

Prepare for Installation

- a: Raise the planter to remove the weight from gauge wheels.
- b: Remove appropriate tab on the RUM for the planter make and model. This ensures that the RUM stays vertical during the operation.

Step 2:

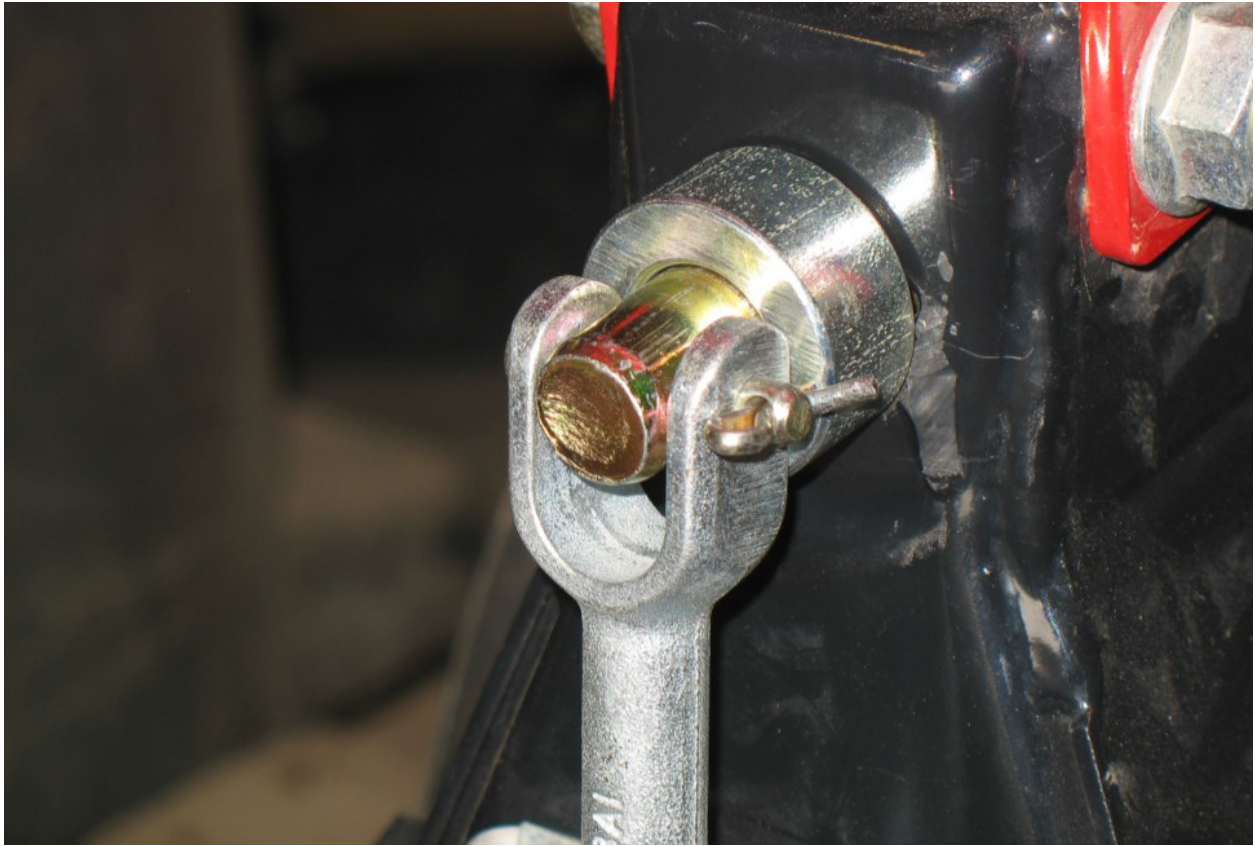
RUM Installation

- a: Locate the right corner-post and remove the 9/16" bolt if one is already installed.



- b: Using the supplied carriage bolt, nut and lock washer, mount the RUM upside down and mount the ladder pointed towards the planter bar on the inside of the right hand corner-post with the RUM harnesses pointed up. Plug the RUM into the junction of the new planter harness and seed tube sensor.

Step 3:
Load Cell Installation



- a: Remove the cotter pin on the depth adjustment handle. Remove the spacer in between the handle and the row unit shank.



- b: Insert the load cell onto the depth adjustment shaft with the three divots towards the row unit shank and the harness pointed up. Reattach the depth adjustment handle.

Note: The load cell may rotate up to about 30 degrees in both directions; this does not affect performance in any way. The load cell harness will keep it in a relative vertical position.



- c: Route the wire from the load cell through gap at the bottom of the hopper support bracket. Secure it to the 1/4" bolt using the supplied P-clip, and route it along the bottom of the right hand hopper bracket, securing it every 6-8" with the adhesive cable mounts. Plug the Load Cell into the RUM.
- d: Plug the Load Cell into the RUM. Secure the load cell cable, any applicable AUX cable, and the seed tube cable to the ladder bracket using zip ties. Be cautious to ensure that there are no cables that could get pinched, and that the zip ties are not excessively tight.

White 5000, 6000, 8000 RUM/Pin Installation

Step 1:

Prepare for Installation

- a: Raise the planter to remove the weight from gauge wheels.
- b: Remove appropriate tab on the RUM for the planter make and model. This ensures that the RUM stays vertical during the operation.

Step 2:

RUM Installation

- a: Remove 9/16" bolt on the left hand row unit corner-post.
- b: Using the supplied carriage bolt, nut and lock washer, mount the RUM on the inside of the left hand corner-post. Plug the RUM into the junction of the planter harness and seed tube sensor.

Note: White 8000: mount the RUM upside down and mount the ladder pointed towards the planter bar



Figure 23.
White 8000 RUM Mount

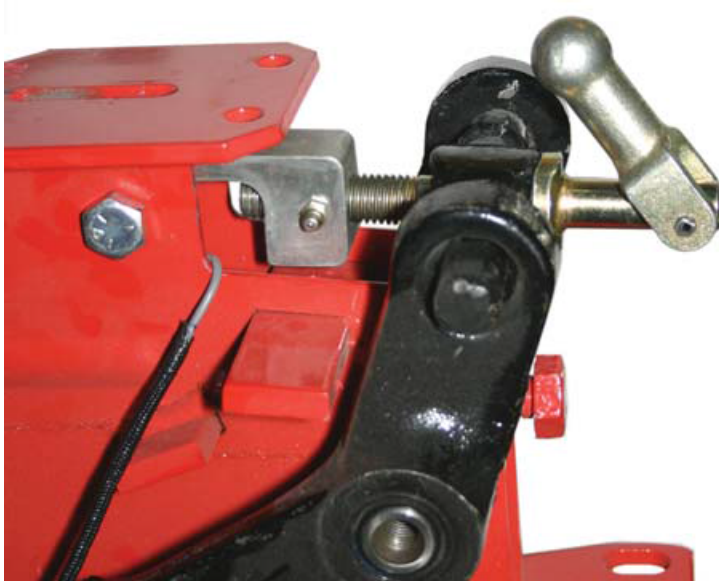


Figure 24.
White 5/6000 RUM Mount

Step 3:

Load Cell Installation

- a: Remove the bolt from the shank that holds the depth adjustment linkage and unscrew the depth adjustment handle from the linkage.



- b: Insert the load cell into the shank with the cross section on top. Install the original bolt.
- c: Screw the depth adjustment handle into the load cell. Once installed, verify that the row unit is set to the correct depth adjustment.

Note: White 5000: Do not insert the depth adjustment screw too far into the load cell. Hitting the strain gauge will damage the load cell.



- d: Route the cable through the row unit shank, to the left or right of the seed tube, and up the slot in the row unit ahead of the shank. Plug the load cell into the RUM.
- e: Secure the load cell cable, any applicable AUX cable, and the seed tube cable to the ladder bracket using zip ties. Be cautious to ensure that there are no cables that could get pinched, and that the zip ties are not excessively tight.

White 9000 RUM/Pin Installation

Step 1:

Prepare for Installation

- a: Raise the planter to remove the weight from gauge wheels.
- b: Remove appropriate tab on the RUM for the planter make and model. This ensures that the RUM stays vertical during the operation.

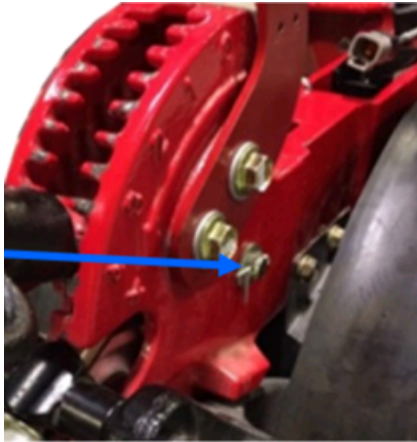
Step 2:

RUM Installation

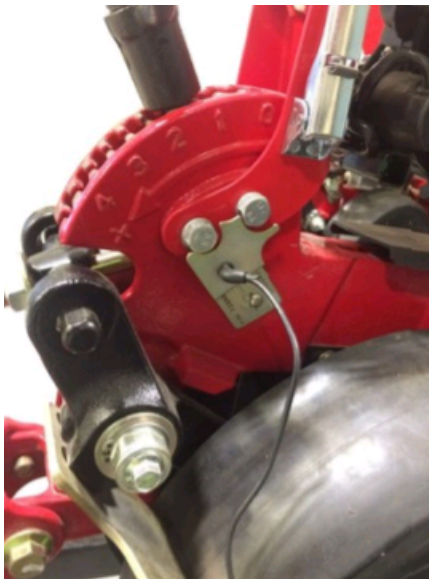


- a: Mount the supplied bracket included in the Load Cell kit to the row unit goal post.
- b: Mount the RUM to the bracket and plug the RUM into the junction of the planter harness and seed tube sensor.

Step 3:
Load Cell Installation



- a: Remove the cotter pin from the depth adjustment mechanism.

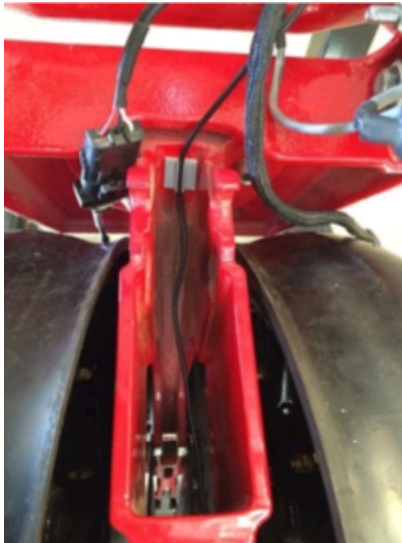


- b: Use the load cell pin to push the existing pin out of the shank. The load cell bracket will align with the two hopper support bracket bolts.

Note: It may be necessary to add washers behind the bracket bolts so that the load cell bracket prevents rotation.



c: Install the Snap ring to secure the load cell into place.



- d: Route the cable through the row unit under the equalizer arm, then under the depth adjustment mechanism. Then route the harness along the right side of the seed tube. The supplied self adhesive clips can be used to secure the wire. Plug the load cell into the RUM.
- e: Secure the load cell cable, any applicable AUX cable, and the seed tube cable to the ladder bracket using zip ties. Be cautious to ensure that there are no cables that could get pinched, and that the zip ties are not excessively tight.

Great Plains RUM/Pin Installation

Step 1:

Prepare for Installation

- a: Raise the planter to remove the weight from gauge wheels.
- b: Remove the XP tab on the RUM. This ensures that the RUM stays vertical during the operation.

Step 2:
RUM Installation



- a: Using the supplied carriage bolt, nut and lock washer, mount the RUM and Ladder upside-down (wires up) on the right side of the vertical post to the front of the meter. It is best if the forward row unit is used when on a twin row configuration due to potential for interference. Plug the RUM into the junction of the planter harness and original seed tube sensor.

Step 3:

Load Cell Installation

- a: Using snap-ring pliers, remove the snap ring that secures the original depth adjustment pin.



- b: After sliding a washer onto the load cell, use the load cell to slide the original pin out of the shank from the right side to the left.
- c: Slide the remaining washer onto the load cell protruding from the right side of the shank, and install a snap ring to secure it.
- d: Thread the provided hex bolt through the nut on the top of the load cell bracket and into the front hole of the depth adjustment position. This will secure the load cell from rotating
- e: Route the cable through the row unit shank, to the left or right of the seed tube, and up the slot in the row unit ahead of the shank. Plug the load cell into the RUM.
- f: Secure the load cell cable, any applicable AUX cable, and the seed tube cable to the ladder bracket using zip ties. Be cautious to ensure that there are no cables that could get pinched, and that the zip ties are not excessively tight.