INSTALLATION INSTRUCTIONS

Autopilot

automated steering system

John Deere 4xxR ATR Sprayer

- 400R
- 408R
- 410R
- 412R

John Deere 6xxR ATR Sprayer

- 600R
- 612R
- 616R
- 412R

Hagie STS AGR Sprayer

- STS 12
- STS 16
- STS 20

PTx Trimble

Version: 10.00
Revision: A
July 2026
Platform Kit: 54037-26
P/N: PTX1002679

Legal Notices

Agriculture Business Area

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This is the July 2026 release (Revision A) of the *Autopilot Automated Steering System Installation Instructions*, part number PTX1002679. It applies to Version 10.00 and later of the Autopilot automated steering system .

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Safety Information

Always follow the instructions that accompany a Warning or Caution. The information they provide is intended to minimize the risk of personal injury and/or damage to property. In particular, observe safety instructions that are presented in the following format:

DANGER! ALERTS YOU TO A SITUATION THAT IS LIKELY TO RESULT IN DEATH OR SERIOUS INJURY.

WARNING – This alert warns of a potential hazard, which, if not avoided, can cause severe injury.

CAUTION – This alert warns of a hazard or unsafe practice which, if not avoided, can cause injury or damage.

NOTE – An absence of specific alerts does not mean that there are no safety risks involved.

Warnings

DANGER! WHEN YOU ARE WORKING ON THE VEHICLE'S HYDRAULIC SYSTEMS, VEHICLE ATTACHMENTS THAT ARE SUSPENDED CAN DROP. IF YOU ARE WORKING AROUND THE VEHICLE, YOU COULD SUFFER SERIOUS INJURY IF AN ATTACHMENT DROPPED ON YOU. TO AVOID THIS RISK, LOWER THE BOOM TO THE LOWEST POSITION BEFORE YOU BEGIN WORK.

DANGER! IF SOMEONE ELSE ATTEMPTS TO DRIVE THE VEHICLE WHILE YOU ARE WORKING ON OR UNDER IT, YOU CAN SUFFER SERIOUS OR FATAL INJURIES. TO AVOID THIS POSSIBILITY, INSTALL A LOCKOUT BOX ON THE BATTERY TERMINAL TO PREVENT THE BATTERY FROM BEING RECONNECTED, REMOVE THE KEY FROM THE VEHICLE'S IGNITION SWITCH, AND ATTACH A "DO NOT OPERATE" TAG IN THE CAB.

DANGER! VEHICLE CABS CAN BE QUITE HIGH IN THE AIR. TO AVOID POTENTIALLY SERIOUS INJURY THROUGH FALLING FROM THIS HEIGHT, ALWAYS USE THE STEPS AND HANDRAILS, AND FACE THE VEHICLE, WHEN YOU ENTER OR EXIT IT.

WARNING – Agricultural chemicals can pose serious health risks. If the vehicle has been used to apply agricultural chemicals, steam clean the vehicle to remove any chemical residue from the areas of the vehicle where you will be working.

WARNING – Always wear protective equipment appropriate to the job conditions and the nature of the vehicle. This includes wearing protective glasses when you use pressurized air or water, and correct protective welder's clothing when welding. Avoid wearing loose clothing or jewelry that can catch on machine parts or tools.

WARNING – Parts of the vehicle may be under pressure. To avoid injury from pressurized parts, relieve all pressure in oil, air, and water systems before you disconnect any lines, fittings, or related items. To avoid being sprayed by pressurized liquids, hold a rag over fill caps, breathers, or hose connections when you remove them. Do not use your bare hands to check for hydraulic leaks. Use a board or cardboard instead.

Cautions

CAUTION – Damage will result to the cable if it is not routed correctly. When routing cables be sure to route them free from areas that may result in damage to the cables including pinching, stretching and rubbing.

CAUTION – Do not direct pressurized water at:
- Electronic or electrical components or connectors
- Bearings
- Hydraulic seals
- Fuel injection pumps
- Any other sensitive parts or components



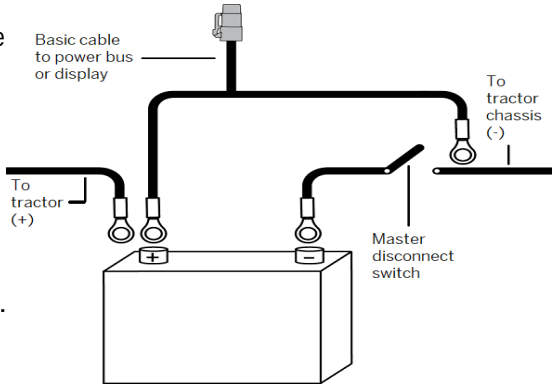
Set the hose pressure as low as practicable, and spray at a 45° to 90° angle. Keep the nozzle of the power washer away from the machine at the distance recommended by the manufacturer.

CAUTION – To prevent damage to the system, make sure that no wires interfere with or catch on any mechanical linkages, or contact any machine parts that get hot.

CAUTION – Before you drill any holes, check behind the drilling surface to ensure that you will not damage any hoses, wires, or other equipment. Failure to do so could result in damage to the vehicle.

CAUTION – If the vehicle has a master electrical disconnect, make sure the basic power cable (P/N 67258/92905) is ***not*** directly attached to the battery terminal that is disconnected by the master switch - the negative pole in this example.

Attach this terminal side just past the main disconnect so that it is as close as possible to the battery but still gets disconnected when the master disconnect is turned off. Failure to do so can result in damage to the display.



CAUTION – To route the cable, use existing hydraulic hoses, cable harnesses, etc. Pay attention to moving parts. In such places, the cable must be secured with a margin so that the cable is not damaged during movement.

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1

Introduction

- Technical assistance
- Manual system upgrade to the Autopilot system
- Preparing the vehicle for installation

This manual describes how to install the platform specific components of the Trimble® Autopilot™ automated steering system .

For installation of the GFX display and NAV-9xx guidance controller please review the separate display and NAV controller installation guide.

Even if you have used another GNSS (Global Navigation Satellite System), such as the United States' GPS (Global Positioning System), before, spend some time reading this manual to learn about the special features of this product. If you are not familiar with GNSS, go to the Trimble website (trimble.com) for an interactive look at Trimble and GNSS.

Technical assistance

Go to the Ag Resource Center for the latest support information, including:

- support notes detailing support issues
- documentation
- the latest files available for download

If you still cannot find the information that you need, contact your PTx Trimble reseller.

Manual system upgrade to the Autopilot system

Displays

Retain
GFX display: P/N 13x000-01 **NAV-960™ guidance controller: P/N 131800-04** **NAV-900 guidance controller: P/N 108993-05** **Trimble VDM-912 hydraulic valve driver controller for AM installs: P/N 94425-00**
Trimble NavController III for AM Installs (NAV-900): 64425-08 (NAV-900 Only) Power cable GFX display: P/N 110551 Base power cable: P/N 67258 NAV-900 guidance controller: P/N 108993-05 GFX display to NAV-900 comms cable: P/N 110540

Required components

Kits required	Special tools
Platform kit: P/N 54037-26	Drill 5/16" and 7/16" drill bits Allen wrench set (metric and SAE) Open ended wrench set (metric and SAE)

Antenna mounting kits

Antenna options
Adhesive base mount: P/N 109890 (QTY 3) John Deere NAV-960 factory adapter: P/N 132086 NAV-900, Mount, JD Adapter: P/N 111342

Preparing the vehicle for installation

1. Park the vehicle on a hard, level surface. Block the front and rear wheels.
2. Align the steering straight ahead. On an articulated vehicle, install the articulation locks.
3. Remove all dirt and debris from the areas of the vehicle where the system will be installed.
4. Open all kit boxes and check the contents of the box against the packing list/s. Lay all of the parts out on a clean workbench.

NOTE – The left and right sides of the vehicle are referenced while standing behind the unit, facing the normal direction of travel.

TIP – Read through the steps and make certain you have all the hand tools needed before starting installation.

2

AutoTrack Harness Component Connections – John Deere

- Introduction
- Valve connections
- Installing the steering sensor adapter cable
- Installing the manual override sensor and cable

Introduction

Before you start to connect the AutoTrack components, check that machine has a FEMA steering valve.

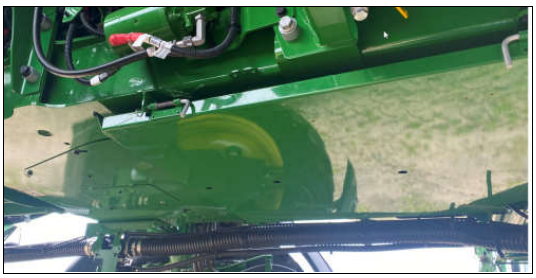
The valve is located on the left side of the machine below the cab; remove the cover shown to gain access to the valve.





NOTE – For the John Deere 408R, the back shield will need to be lowered by releasing the latches on the left side of the machine. This is to allow access to the right rear bolt holding the access plate in place.





Valve connections

Step 1

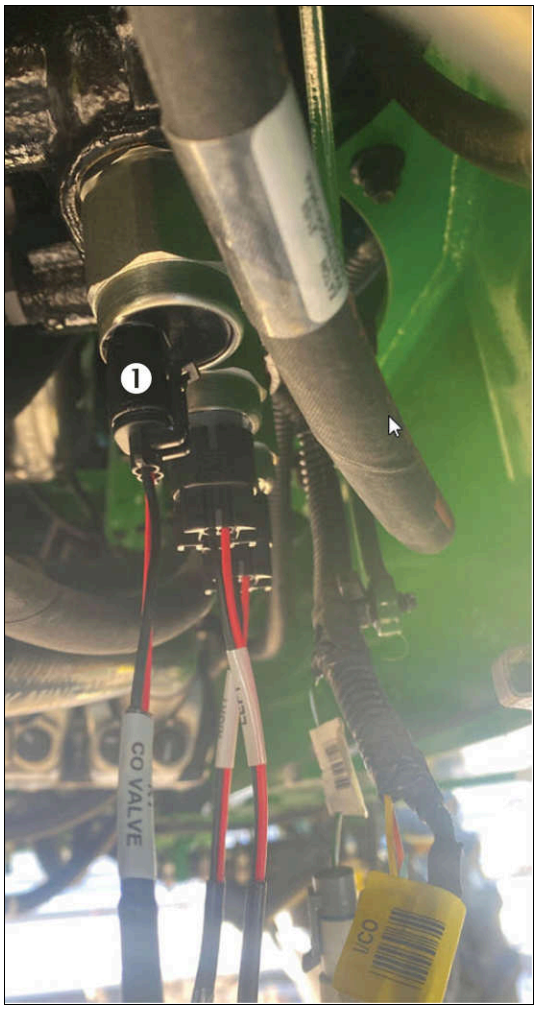
Identify the steering valve interface cables:

- P/N 84253
- P/N 54617
- P/N 84252
- P/N 102252

Step 2

Plug the R2 connector on cable P/N 84253 into any free connector on the power bus harness P/N 67259.

Plug the R1 connector on cable P/N 84253 into the FEMA valve where it is labeled **CO** (❶), on the left-hand side.



Step 3

Plug the connector labeled **Valve A P2** on cable P/N 54617 into the cable P/N 84252 labeled **Steering Right**.

Plug the other end of cable P/N 84252 into the FEMA valve at the location labeled **CB** (❶).

Plug the connector labeled **Valve B P3** on cable P/N54617 into the cable P/N84252 labeled **Steering Left**.

Plug the other end of cable P/N84252 into the FEMA valve at the location labeled **CA** (❷).



Step 4

Terminate the OEM steering harnesses with the following phantoms:

- CO valve: P/N 89231
- CA & CB valves: P/N 102252

Lightly tug the terminators to check that the connectors are fully seated. Use a wire wrap tie to fasten the phantoms securely to a stationary location.



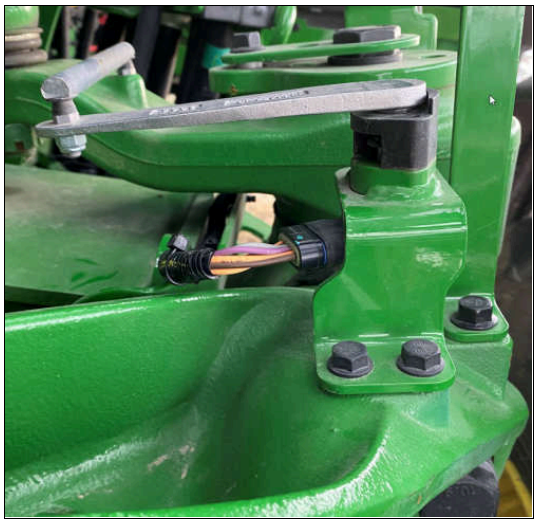


Installing the steering sensor adapter cable

Step 1

Locate the John Deere steering angle sensor located on the front left wheel.

Disconnect the John Deere cable from the sensor.



Step 2

Locate the steering sensor adapter cable P/N 129439 and connect P1 on P/N 129439 to the John Deere steering angle sensor.



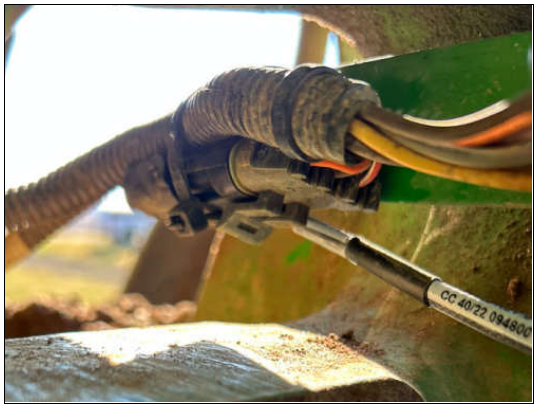
Step 3

Connect R2 on P/N 129439 to the John Deere steering sensor cable connector that was disconnected from the steering angle sensor in the previous steps.



Step 4

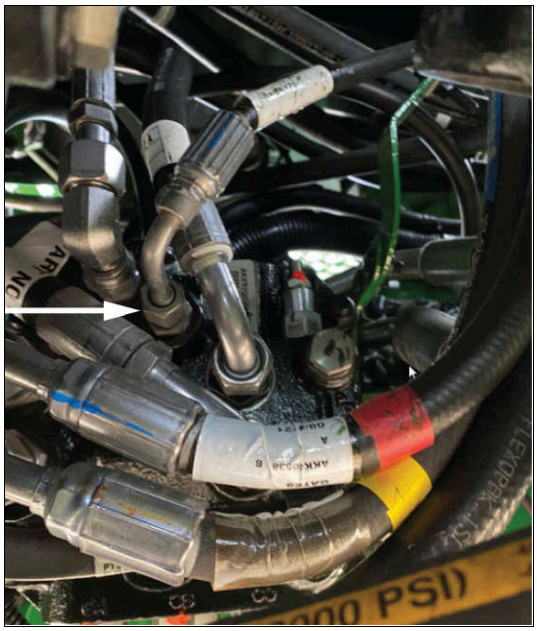
Connect R1 to the P2 connector on the steering sensor cable P/N 54616.



Installing the manual override sensor and cable

Step 1

Locate the Load Sense hydraulic fitting on the FEMA valve. The fitting is a 90° #6 ORFS fitting located between the two larger fittings.



Disconnect the John Deere hose from the fitting.



Step 2

Locate the hydraulic fitting kit P/N129444 and the pressure transducer P/N49669.

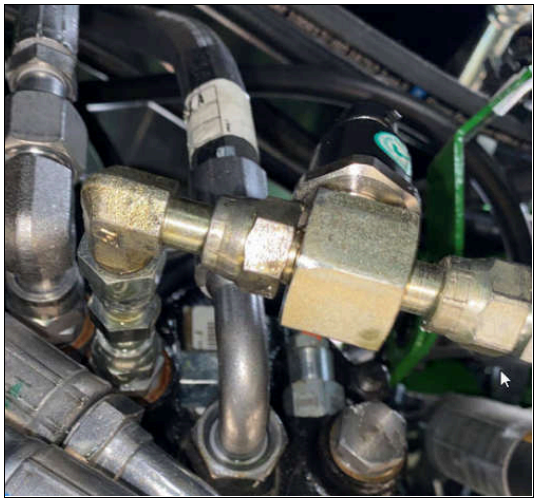
Install the pressure transducer in to the diagnostic tee fitting prior to installation to the machine.

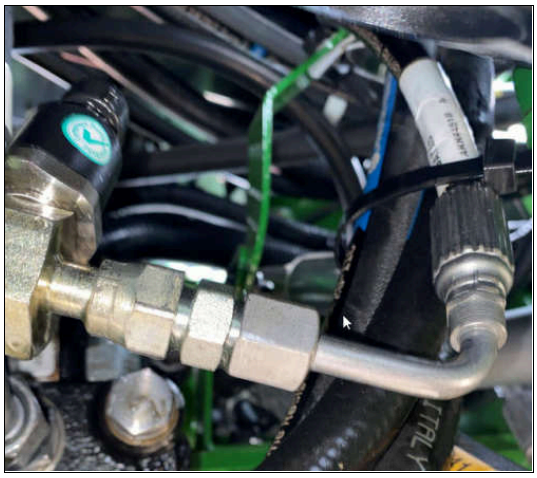
Connect the #6 ORFS swivel fitting to the FEMA valve fitting.

Connect the 90° #6 ORFS fitting to the opposite end of the swivel fitting.

Connect the 90° fitting to the diagnostic tee fitting.

Connect the diagnostic tee fitting to the John Deere load sense hose using the supplied #6 ORFS union.

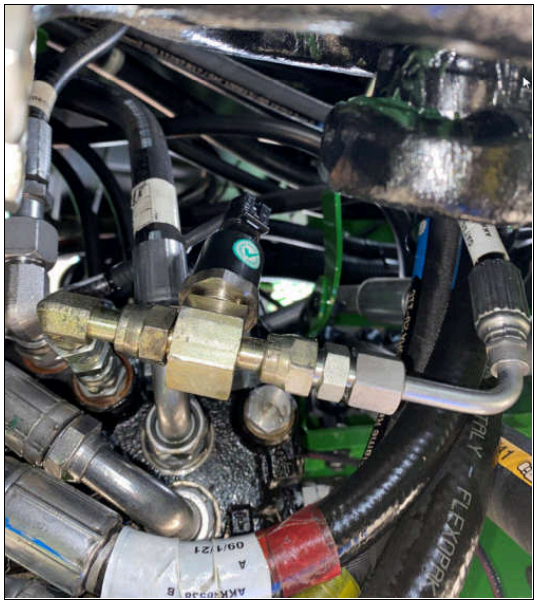




Step 3

Connect P2 of cable P/N 54618 to the pressure transducer.

Use zip ties to secure the hose and cable away from the drive shaft.



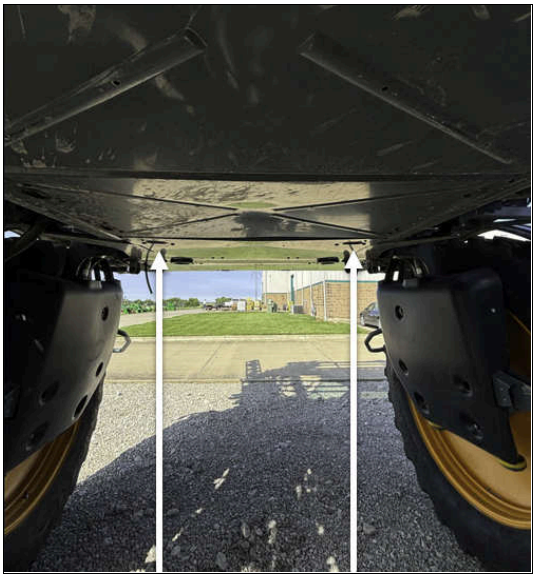
3

AutoTrack Harness Component Connections – Hagie

- Introduction
- Valve connections
- Installing the steering sensor adapter cable
- Installing the manual override sensor and cable

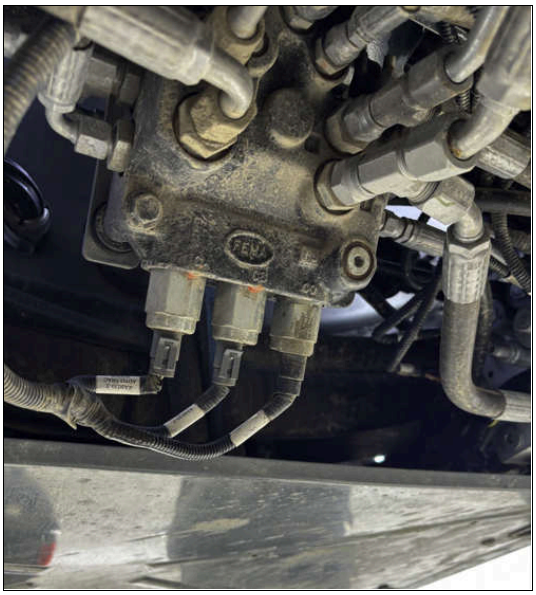
Introduction

Locate the AutoTrac steering valve behind the front axle.



Locate the shield behind the front axle and release the latch on each side of the shield to access the valve location.





Valve connections

Step 1

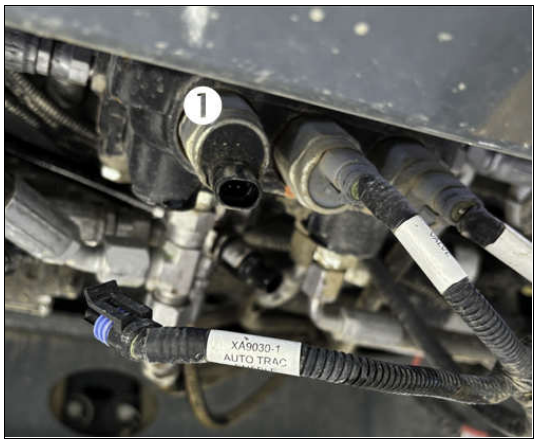
Identify the steering valve interface cables:

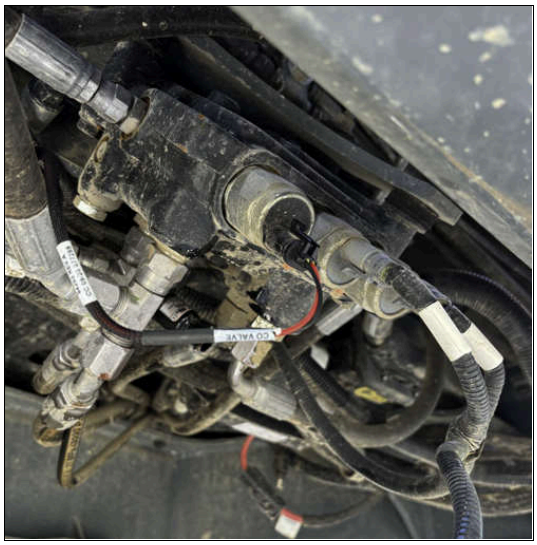
- P/N 84253
- P/N 54617
- P/N 84252
- P/N 102252

Step 2

Plug the R2 connector on cable P/N 84253 into any free connector on the power bus harness P/N 67259.

Plug the R1 connector on cable P/N 84253 into the FEMA valve where it is labeled **CO** (❶), on the left-hand side.



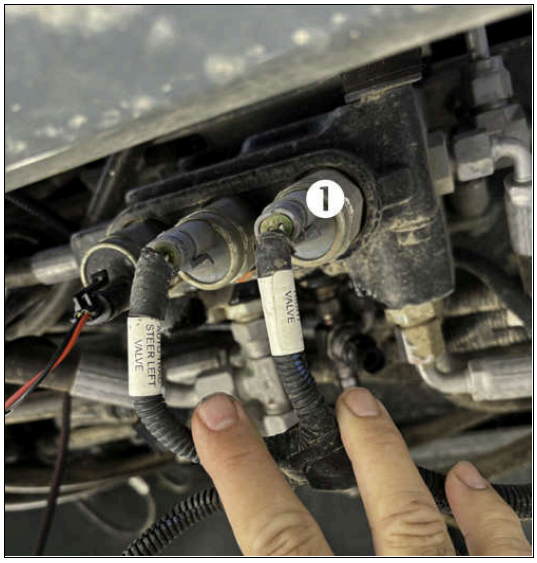


Step 3

Disconnect the existing Hagie AutoTrac Steer Left and Steer Right connectors from the valve.

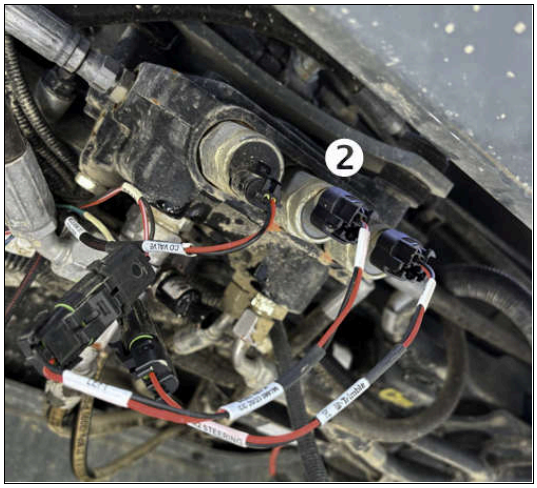
Plug the connector labeled **Valve A P2** on cable P/N 54617 into the cable P/N 84252 labeled **Steering Right**.

Plug the other end of cable P/N 84252 into the FEMA valve at the location labeled **CB** (❶).



Plug the connector labeled **Valve B P3** on cable P/N 54617 into the cable P/N 84252 labeled **Steering Left**.

Plug the other end of cable P/N 84252 into the FEMA valve at the location labeled **CA** (❷).



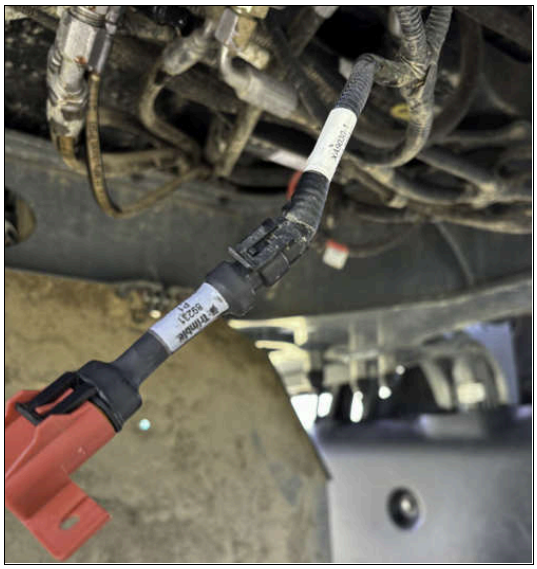
Step 4

Terminate the OEM steering harnesses with the following phantoms:

- CO valve: P/N 89231
- CA & CB valves: P/N 102252

Lightly tug the terminators to check that the connectors are fully seated. Use a wire wrap tie to fasten the phantoms securely to a stationary location.





Installing the steering sensor adapter cable

Step 1

Locate the Hagie steering angle sensor located on the front left wheel.

Disconnect the Hagie cable from the sensor.



Step 2

Locate the steering sensor adapter cable P/N 129439 and connect P1 on P/N 129439 to the Hagie steering angle sensor.



Representative photo shown

Step 3

Connect R2 on P/N 129439 to the Hagie steering sensor cable connector that was disconnected from the steering angle sensor in the previous steps.



Step 4

Connect R1 to the P2 connector on the steering sensor cable P/N 54616.

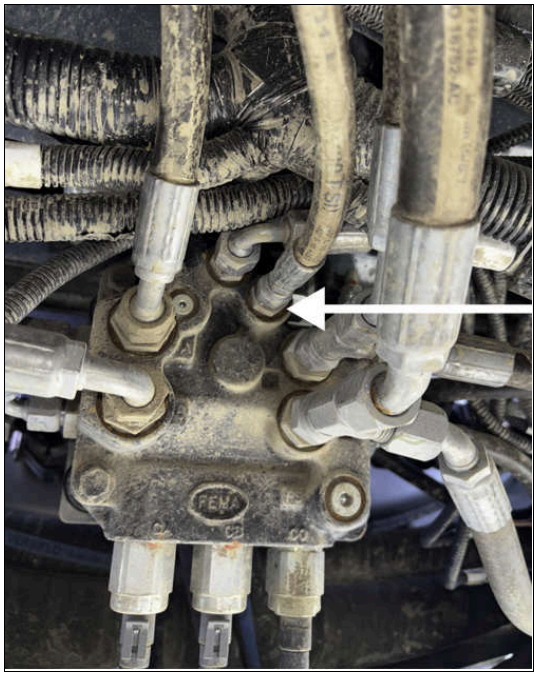
Representative photo shown



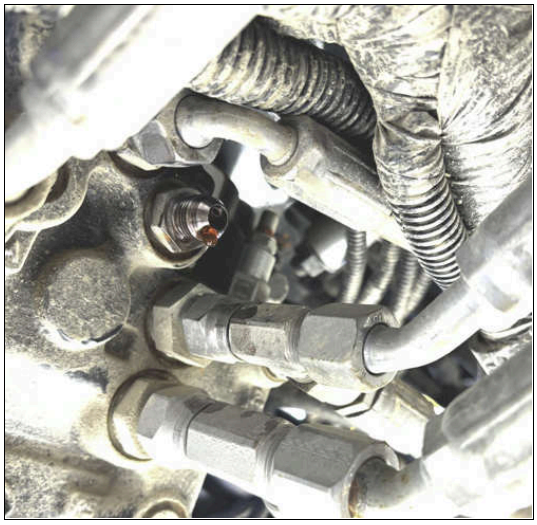
Installing the manual override sensor and cable

Step 1

Locate the Load Sense hydraulic fitting on the FEMA valve. The fitting is a straight #6 JIC fitting located between the two larger fittings.



Disconnect the Hagie hose from the fitting.



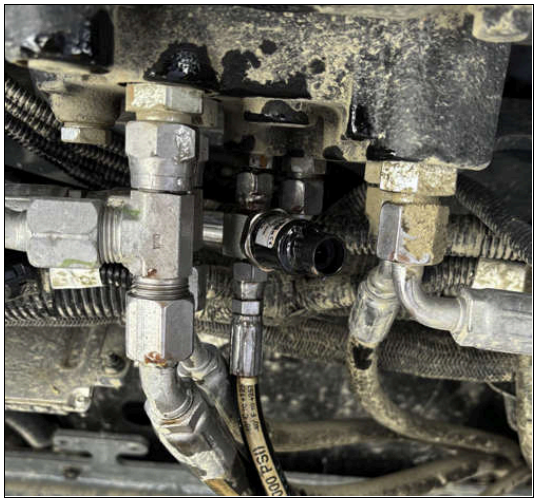
Step 2

Locate the hydraulic fitting kit P/N 132733 and the pressure transducer P/N 49669.

Install the pressure transducer in to the diagnostic tee fitting prior to installation to the machine.

Connect the #6 JIC diagnostic tee swivel fitting to the FEMA valve fitting.

Connect the diagnostic tee fitting to the Hagie load sense hose.



Step 3

Connect P2 of cable P/N 54618 to the pressure transducer.



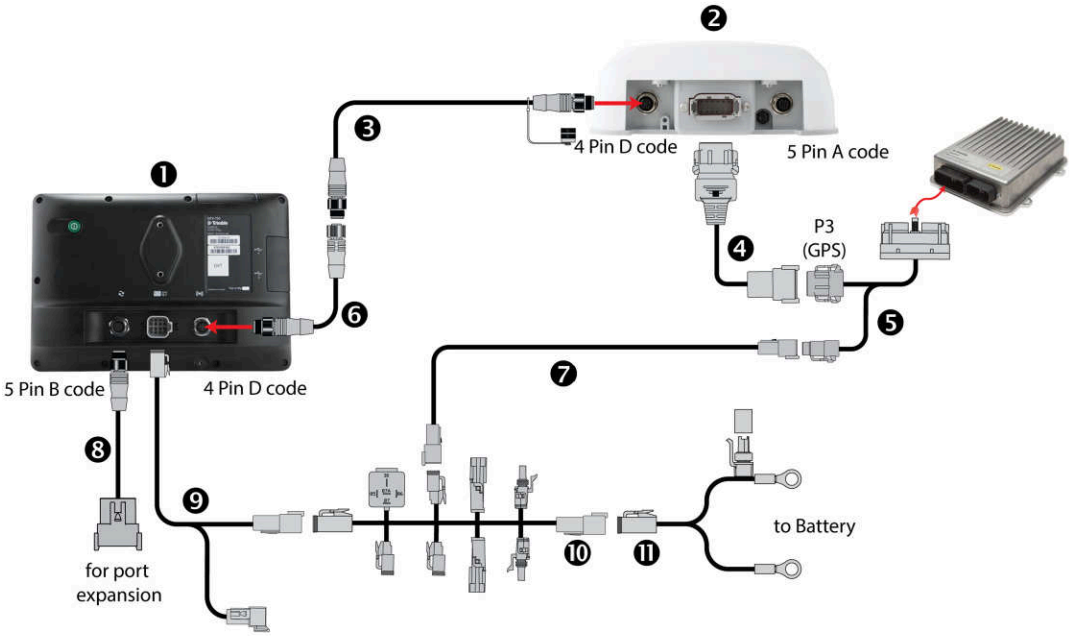
4

Display Installation

- GFX series display: Components
- GFX series display: Preparation
- GFX series display: Installation
- GFX series display: Installing the wiring harness

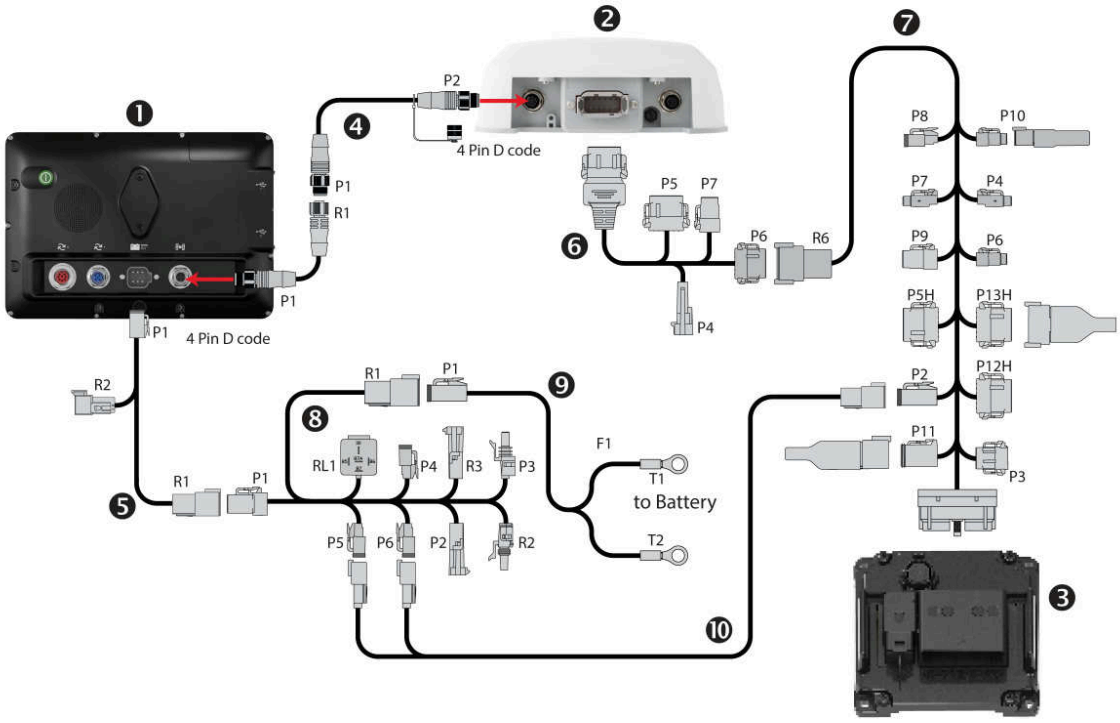
GFX series display: Components

Autopilot using NavController III and NAV-900 guidance controller



Item	Description	P/N
1	GFX display, with PIQ App	13x000-01
2	NAV-900 Guidance controller	108993-05
3	Cable Assy, GFX to NAV-500/900, Power/Ethernet (BRR), 5 m	110540
4	Cable Assy, NAV-900 to Nav II/III, Autopilot	110547
5	Cable, NavController II/III, Main	54601
6	Cable Assy, GFX to NAV-500/900, Power/Ethernet (BRR) Extension, 2.5 m	112082
7	Cable Assy, 2 PIN DTM to 2 PIN DT Power Adapter	67095
8	Cable Assy, Display, Expansion Port, RS232, Dig I/O, 2.5 m	110545
9	Cable Assy, GFX, Power to display, CAN, 2.5 m	110551
10	Cable Assy, GFX, Power with Relay and Switch (Acc)	67259
11	Cable Assy, GFX, Basic Power, 4 m	67258

Autopilot using VDM-912 valve driver and NAV-9x0 guidance controller



Item	Description	P/N
1	GFX display, with PIQ App	13x000-01
2	NAV-900 guidance controller	108993-05
3	VDM-912 hydraulic valve driver module	
4	Cable Assy, GFX to NAV-500/900, Power/Ethernet (BRR), 5 m	110540
5	Cable Assy, GFX, Power to display, CAN, 2.5 m	110551
6	Cable Assy, NAV-900, CAN ISO to cab Guidance, 4 m	110550
7	Cable Assy, VDM-9xx, Main	116982
8	Cable Assy, GFX, Power with Relay and Switch (Acc)	67259
9	Cable Assy, GFX, Basic Power, 4 m	67258
10	Cable Assy, VDM-9xx, PWR	116985

GFX series display: Preparation

The GFX display utilizes the RAM mount system.



Attach the diamond based ram mount to the back of the display using the provided fasteners.





GFX series display: Installation

Step 1

Use the supplied V bolts or alternate (not supplied) hardware to affix the RAM base mount to the desired location in the cab. Ideally this position should be readily viewable and within easy reach of the operator.



Step 2

Use the supplied RAM clamp to connect the RAM base mount to the RAM ball attached to the display.



Step 3

Position the display as desired, and then tighten the clamp.



Step 4

John Deere

Use the John Deere adapter bracket P/N 132086 to mount the NAV-960 controller.

Use the John Deere adapter bracket P/N 111342 to mount the NAV-900 controller.

NOTE – NAV-900 and bracket shown for reference.



Hagie

Use the provided adhesive base mount feet (P/N 109890) to mount the NAV-900 controller on the roof.





GFX series display: Installing the wiring harness

The GFX series display requires a nominal 12 volt power source. The P/N 67258 cable has ring terminal leads for connecting to a battery or other cable mount point.

The P/N 67259 is the power buss cable and is optional. P/N 67258 is shown here.

WARNING – If the machine has a master electrical disconnect, ensure that the display/receiver is disconnected from the battery when the master disconnect is used. Failure to do so may result in hardware damage and void warranty. Additionally, it is recommended to use power terminals located within the cab of the vehicle that ground in the same location as the cab components to avoid ground shifts between the display and any vehicle ECUs.

Step 1

Connect the 4-pin DEUTSCH connector of cable P/N 110551 to the P/N 67258 base power cable.



Step 2

Connect the 6-pin DT power/CAN cable P/N 110551 to the middle port of the display.



Step 3

Connect the 4-pin M12 connector to the 4-pin receiver connector. Note the keying and number of pins.




Trimble

5

Power Harness Installation

- Installing the power harness
- Configuring the power bus options

Installing the power harness

WARNING – To avoid potentially serious personal injury or illness, and to prevent damage to equipment, make sure that you read and understand the Safety Information chapter.

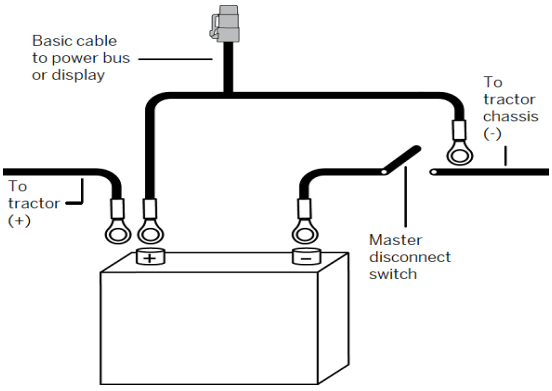
Step 1

Connect the basic power cable to the vehicle battery and then route the cable into the cab.



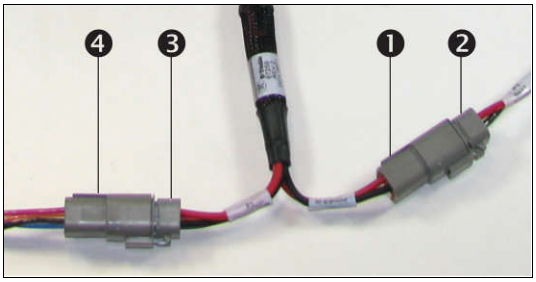
CAUTION – If the vehicle has a master electrical disconnect, make sure the basic power cable (P/N 67258/92905) is ***not*** directly attached to the battery terminal that is disconnected by the master switch - the negative pole in this example.

Attach this terminal side just past the main disconnect so that it is as close as possible to the battery but still gets disconnected when the master disconnect is turned off. Failure to do so can result in damage to the display.



Step 2

Locate and connect the 4-pin DEUTSCH DTP receptacle on the power bus ❶ to the 4-pin DEUTSCH DTP plug ❷ on the basic power cable and then remove the protective cap from the 4-pin DEUTSCH DTP plug ❸ on the power bus and connect the plug to the 4-pin DEUTSCH DTP receptacle ❹ on the display power adapter.



Step 3

Route the display power adapter to the display mounting location and then connect it to the display.



Configuring the power bus options

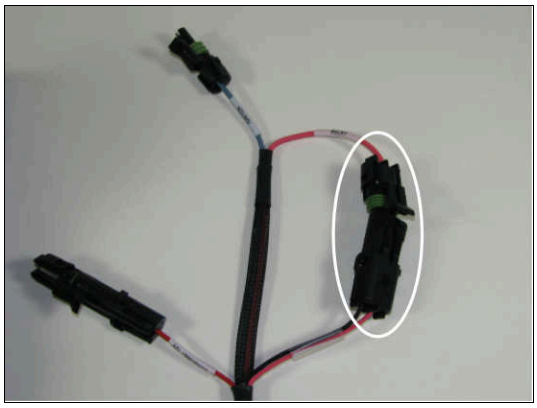
WARNING – To avoid potentially serious personal injury or illness, and to prevent damage to equipment, make sure that you read and understand the Safety Information chapter.

When you use the power bus cable, use one of the following configuration methods to turn on the Autopilot system:

- Display power button is used to turn on the Autopilot system
- External switch is used to turn on the Autopilot system
- Ignition is used to turn on the Autopilot system

Display power button is used to turn on the Autopilot system

Connect the 2-pin connectors labeled **R2** and **P2** on the power bus.

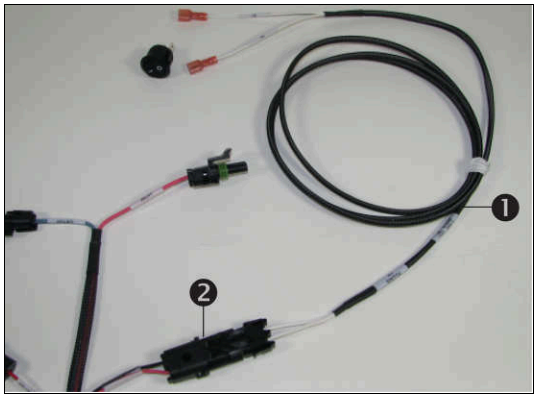


External switch is used to turn on the Autopilot system

Step 1

Connect the cable labeled **R7** switch ❶ (included with the power bus) to connector labeled **P2** on the power bus ❷ and then route the cable labeled **R7** to a switch location.

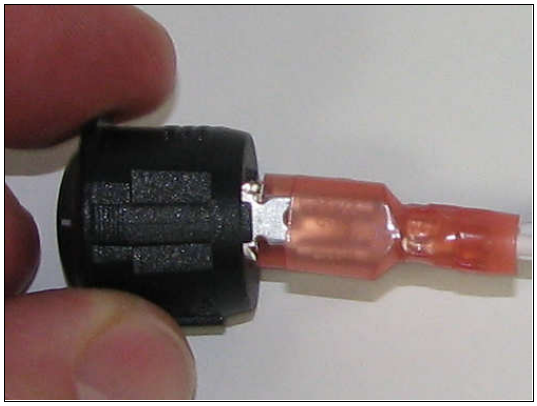
NOTE – To install the switch provided, drill a 3/4" hole.



Step 2

Connect the cable labeled **R7** to the switch pins.

NOTE – Polarity is not important.



Installing the optional illuminated full or standard Euro switch

Step 1

Find an available knockout location on the vehicle console.

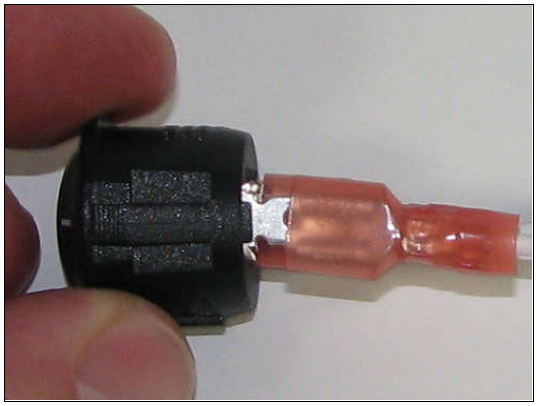
NOTE – An alternative location is required for the switch provided.



Step 2

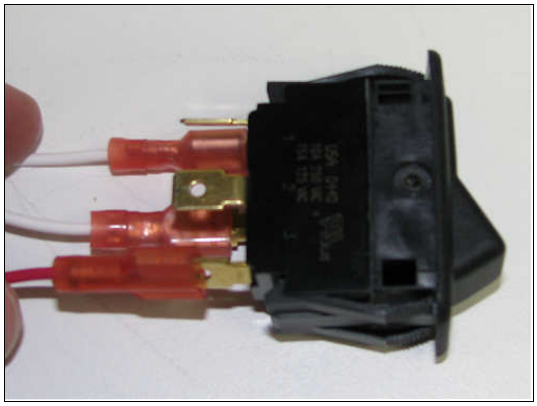
Route the cable labeled **R7** to the switch location and then connect the cable to the illuminated switch.

Connect the wire labeled **S1** to pin 5 on the switch and then connect the wire labeled **S2** to pin 4 on the switch.



NOTE – Polarity is important.

Connect a separate wire to pin 3 on the switch using a spade connector. Route the wire and then connect it to the vehicle switched power.

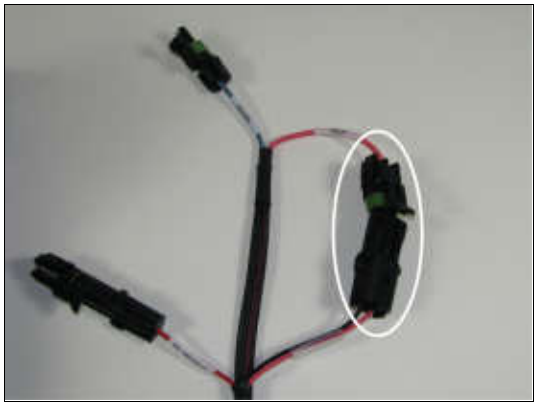


NOTE – This additional wire is required to allow the switch to illuminate.

Ignition is used to turn on the Autopilot system

Step 1

Connect the 2-pin connectors labeled **R2** and **P2** on the power bus.

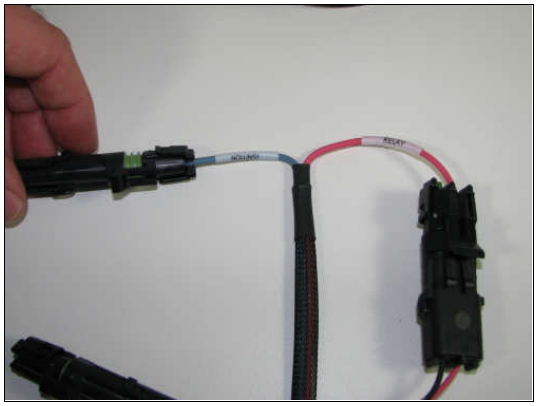


Step 2

Connect the cable labeled **R8 Ignition** (included with the power bus) to connector **P3 Ignition** on the power bus.

Step 3

Route the cable to the vehicles ignition.

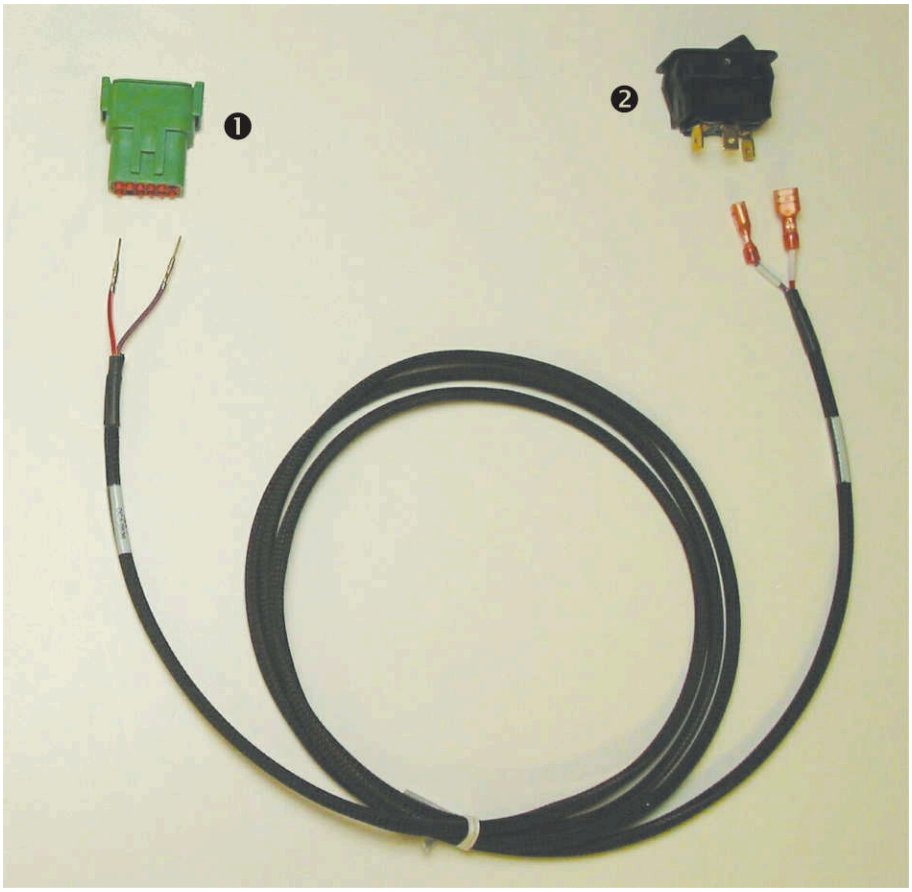


6

Remote Engage Switch Installation

- Remote engage switch components: Rocker switch
- Remote engage switch components: Foot switch
- Preparing the remote engage cable
- Using the remote engage switch

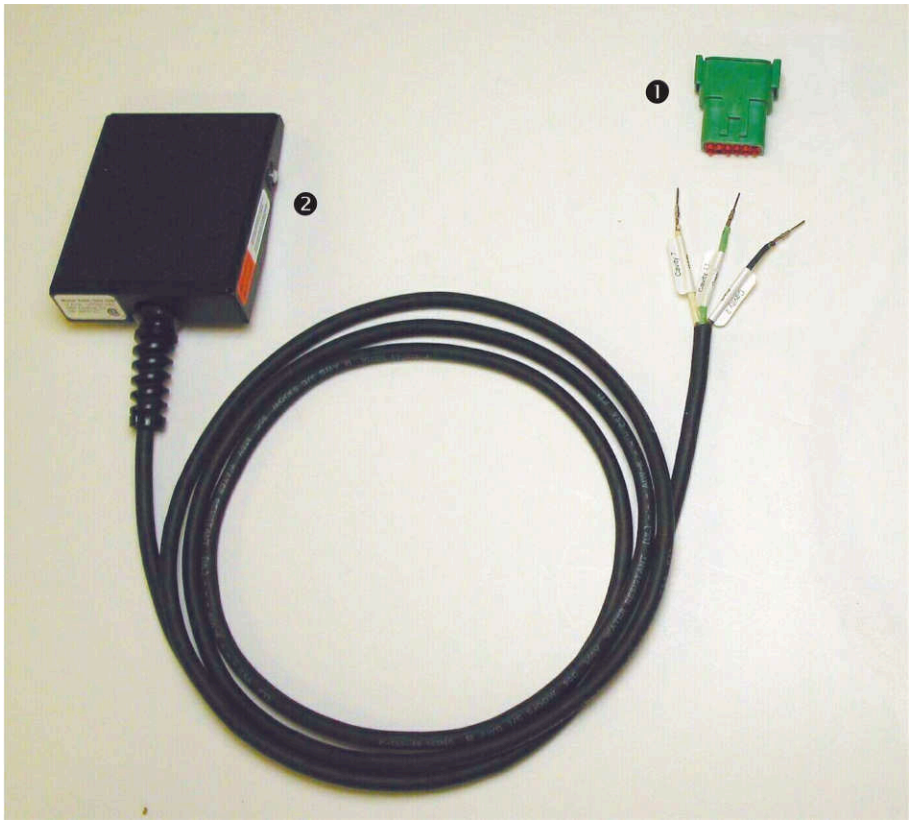
Remote engage switch components: Rocker switch



Item	Description
1	DTM receptacle
2	Remote engage rocker switch

NOTE – This is a Full or Standard Euro switch, depending on the kit ordered.

Remote engage switch components: Foot switch

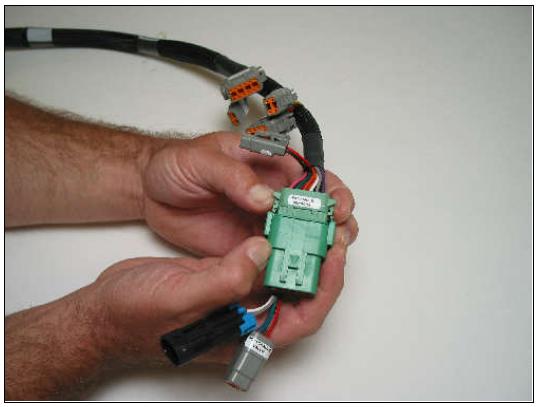


Item	Description
1	DTM receptacle
2	Remote engage foot switch

Preparing the remote engage cable

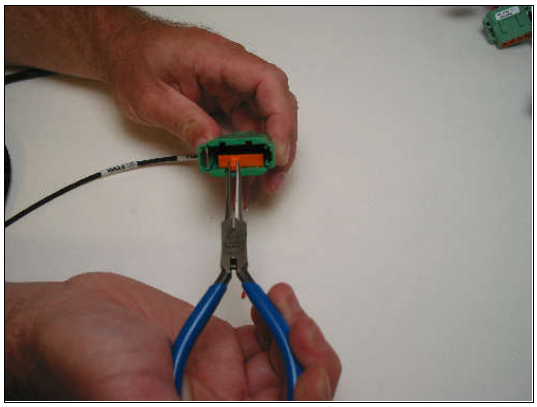
Step 1

Locate the green 12-pin DEUTSCH receptacle on the P5 leg of the main controller harness. For more information, see Connecting the NavController, page 51.



Step 2

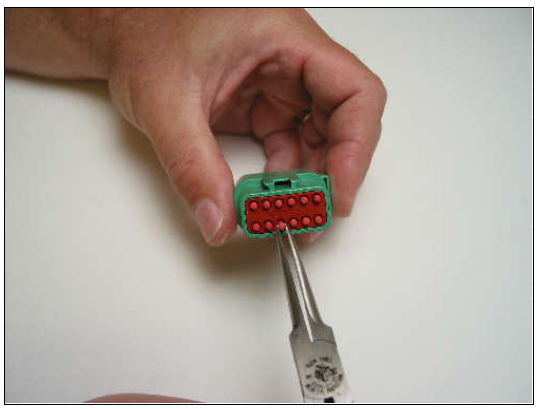
Remove the wedge from the connector.



Step 3

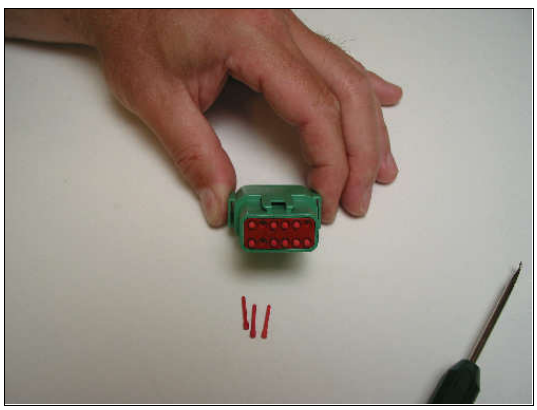
Rocker switch only

Remove the plugs from cavity 2 and cavity 7.



Foot switch only

Remove the plugs from cavity 2, cavity 7, and cavity 11.

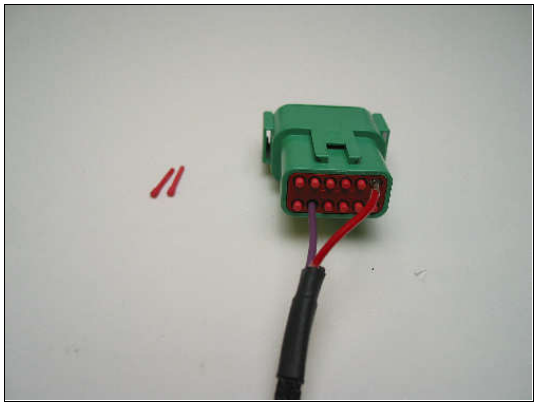


Step 4

Rocker switch only

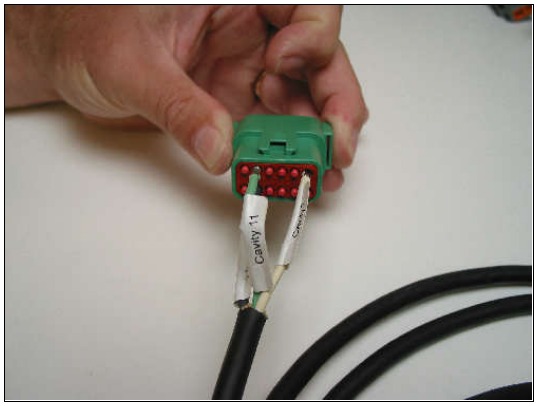
Insert the DTM pins into cavity 2 and cavity 7, according to the labels on the wires.

.



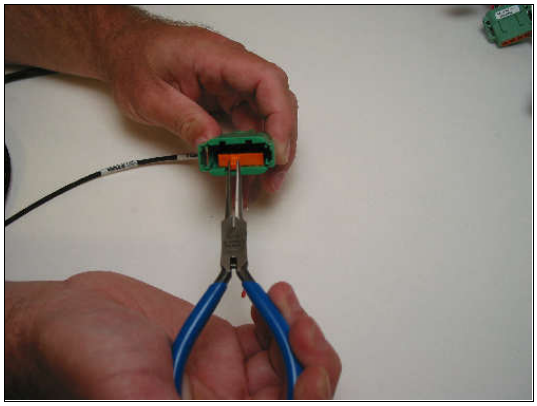
Foot switch only

Insert the DTM pins into cavity 2, cavity 7, and cavity 11, according to the labels on the wires.



Step 5

Pull on the wires to seat them in place and then replace the wedge in the connector.



Step 6

Replace the receptacle on the P5 plug of the NavController harness.

Step 7

Rocker switch only

Run the spade ends of the cable to a knockout location in the operator console.



Foot switch only

Run the cable to a clear location on the floor board. Use double-sided tape to secure the pedal.

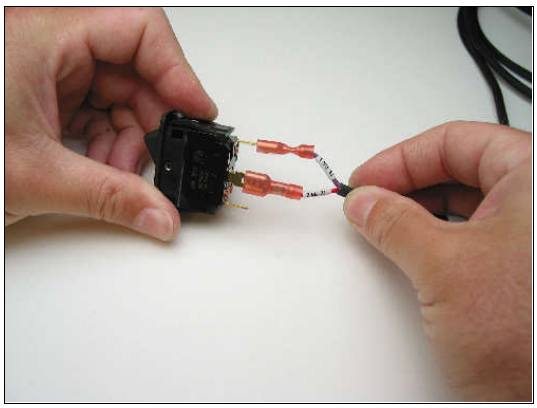
Route the cable under the floor mat.



Step 8

Rocker switch only

Connect the wires to the switch. Match the print on the switch body with the labels on the wires.



Step 9

Rocker switch only

Place the switch in the console.



Using the remote engage switch

To engage a system using NavController do one of the following:

- Firmware versions 5.20 and earlier: Hold down the remote engage switch for longer than 0.5 seconds and less than 4 seconds.
- Firmware 5.21 and later: Hold the switch down for longer than 0.15 seconds and less than 4 seconds.

The system engages when you release the switch.

7

Controller Installation

- Installing the controller
- Connecting the NavController
- Connecting the VDM-912 controller
- VDM-912 power harness connection

Installing the controller

WARNING – To avoid potentially serious personal injury or illness, and to prevent damage to equipment, make sure that you read and understand the Safety Information chapter.

Step 1

Using the NavController III

Use the supplied hardware and the NavController mounting plate to mount the NavControllerIII to the floor on the right side of the seat.



Before you install the controller, attach the main and auxiliary cable harnesses. Use an Allen wrench to secure the connectors to the controller.



Step 2

Using the NavController III

Use the four provided 10-32 screws to attach the NavController to the mounting bracket.



Alternate step, using the VDM-912

Use the supplied hardware and the VDM-912 mounting plate to mount the VDM-912 to the floor on the right side of the seat.



Use the supplied hardware to secure the VDM-912 to the VDM-912 plate.

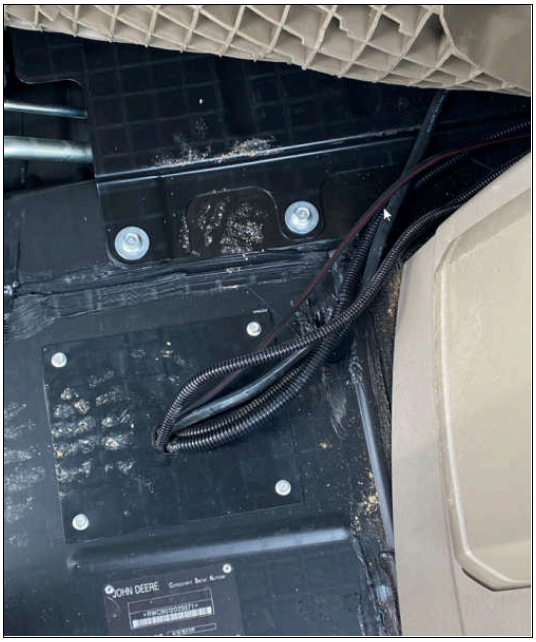


Step 3

John Deere

Route the cables from the valve and steering sensor to inside the cab. A hole can be drilled through the access plate below the floor mat near the cab door to allow the cables to enter the cab.

Route the cables through the plate and behind the seat to the right side where the NavControllerIII or VDM-912 is installed.



Hagie

Route the cables from the valve and steering sensor to inside the cab. Use a Torx T-25 tool to remove the 5 screws from the plastic cover in the right corner of the cab.

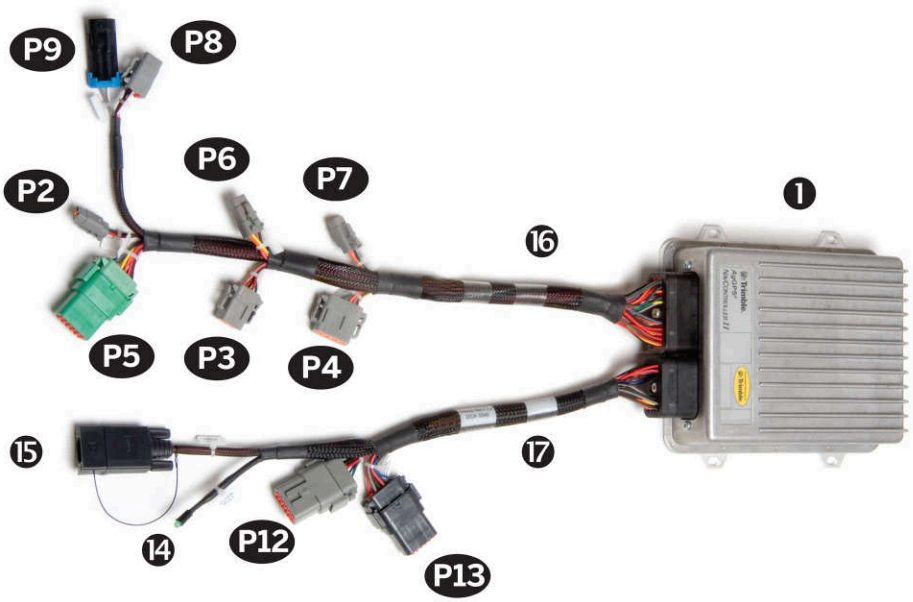


Route the cables through the cab in the back right corner of the cab.





Connecting the NavController



Item	Description	Item	Description
1	NavController III	**P9**	Sonalert connector
P2	Power connector	**P12**	Lightbar/spare connector
P3	GNSS connector	**P13**	Spare sensors connector
P4	Display connector	**14**	Status indicator
P5	Vehicle sensors connector	**15**	Laptop connector
P6	Steering sensor connector	**16**	Main harness
P7	Manual override connector	**17**	Auxiliary harness
P8	Hydraulic valve connector		

Step 1

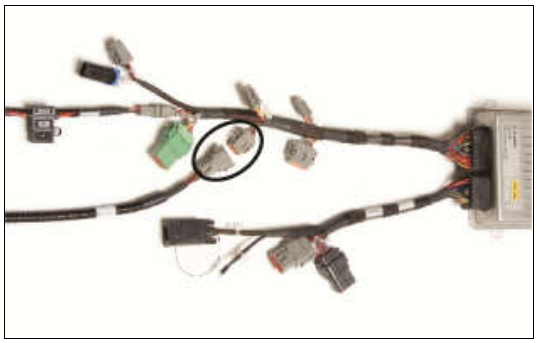
Connect the power cable connection to P2, which is labeled **Power**. P2 is located on the main wiring harness.

> **NOTE** – The power connection supplies power through the controller to all connected devices, including GNSS and displays.



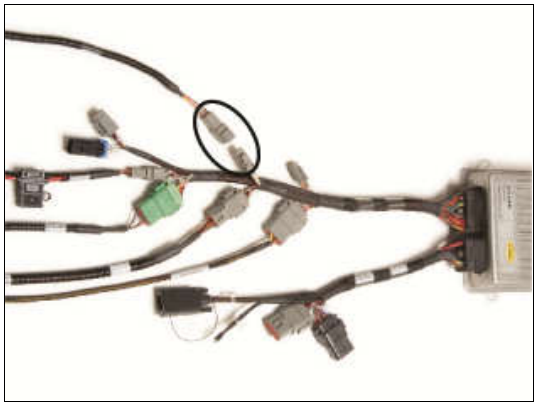
Step 2

Connect the GNSS cable connection to P3, which is labeled **GPS**. P3 is located on the main wiring harness.



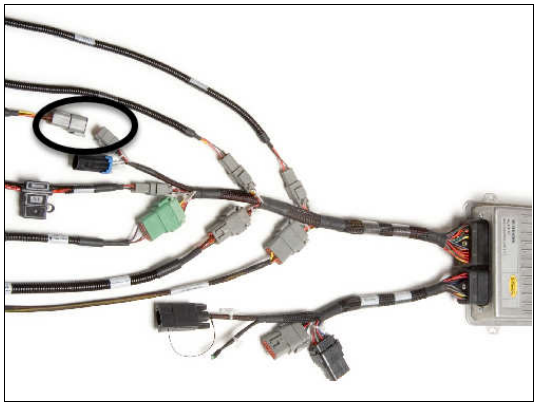
Step 3

Connect the steering sensor cable connection to P6, which is labeled **Steering Sensor**. P6 is located on the main wiring harness.



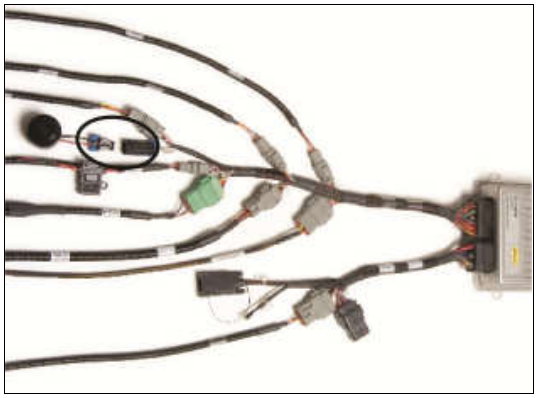
Step 4

Connect the hydraulic steering valve cable connection to P8, which is labeled **Hydraulic Valve**. P8 is located on the main wiring harness.



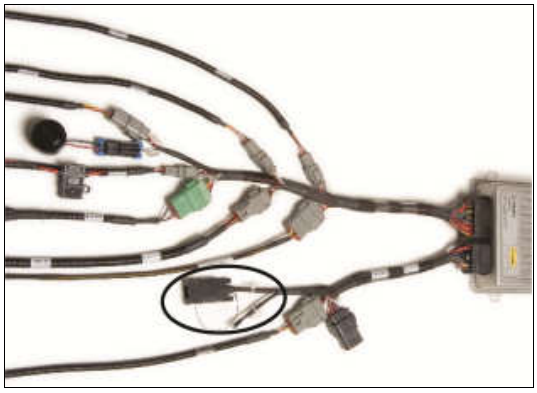
Step 5

Connect the Sonalert P9 to the two-pin Delphi connector on the main wiring harness. Route the cable so the Sonalert warning device is in a position that is audible to the operator.



Step 6

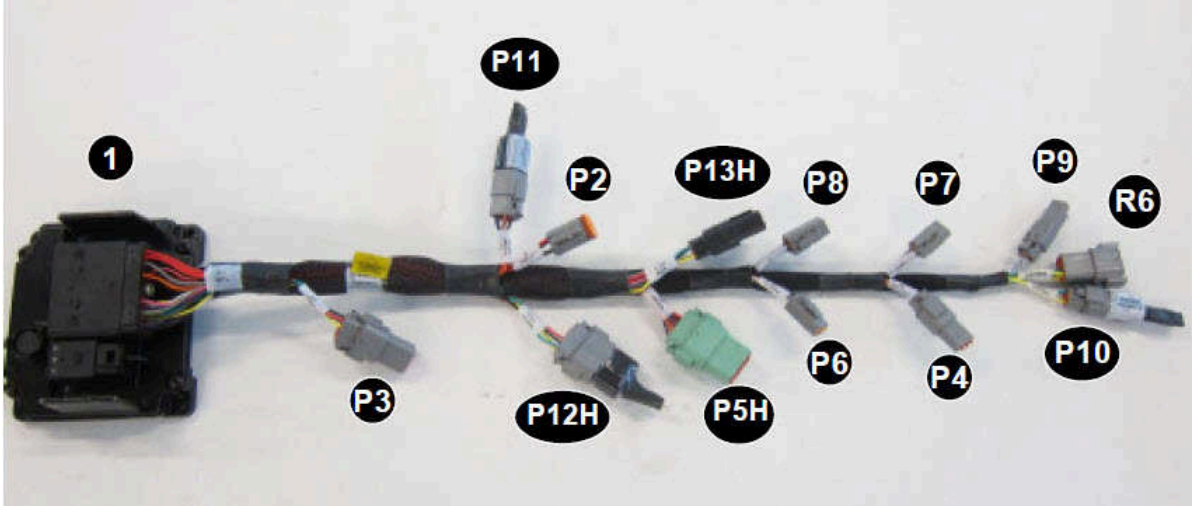
Route the LED and laptop lead, which is located on the auxiliary wiring harness, to a location that allows the operator to determine the controller status. See controller LED status for status determination. Six flashes per second indicates a correctly functioning controller.



Step 7

Use the provided sleeving to secure the harness cables with tie wraps. Cover and route the cable bundle to avoid damage to connectors and strain on wire connections.

Connecting the VDM-912 controller



Item	Description	Item	Description
1	VDM-912 controller	**R6**	NAV-900 connector
P11	Roading/R.E. switch/System Enable	**P3**	GPS2 connector
P2	Power In connector	**P12H**	IMD-900 sensor connector
P13H	Auxiliary connector	**P5H**	Inputs
P8	Hydraulic valve connector	**P6**	POT / ROWG
P7	Manual override connector	**P4**	Override 2 / aux input
P9	Isolation valve connector	**P10**	Auxiliary harness

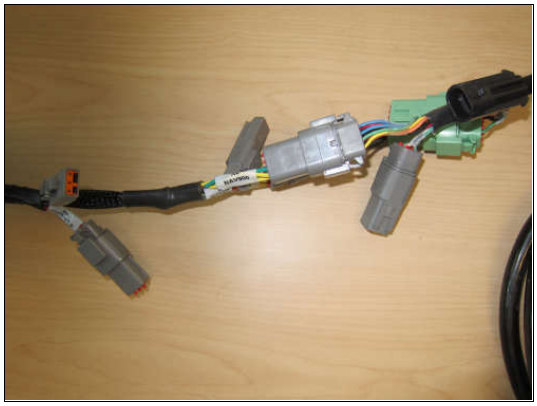
Step 1

The P/N 110550 cable will connect the NAV-900 guidance controller and the VDM-912 controller harness.



Step 2

Connect the 8-pin DTM connector on the P/N 110550 harness to the 8-pin R6 receptacle on the VDM-912 controller harness. R6 is labeled **NAV900**.



Step 3

Connect the Sonalert P9 to the 2-pin Delphi connector on the P/N 110550 wiring harness. Route the cable so the Sonalert warning device is in a position that is audible to the operator.



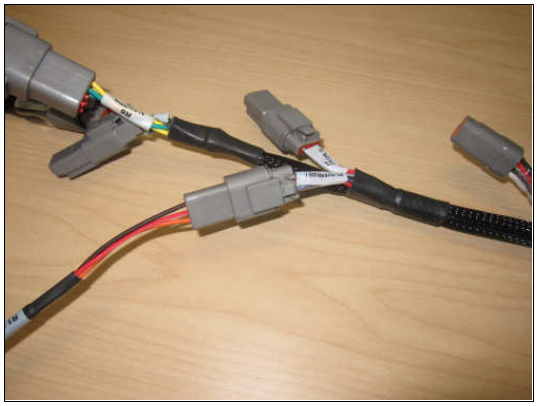
Step 4

Connect the steering sensor cable connection to the P6 connector on the main VDM-912 controller harness.



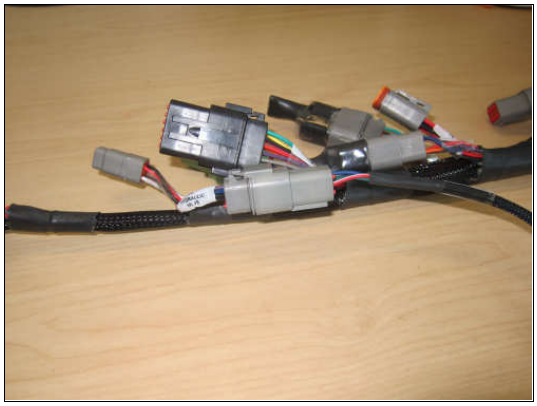
Step 5

Connect the manual override cable connection to P7, which is labeled **Manual Override**.



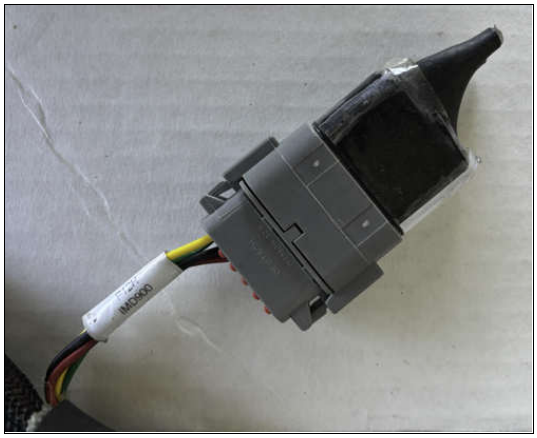
Step 6

Connect the hydraulic steering valve cable connection to P8, which is labeled **Hydraulic Valve**.



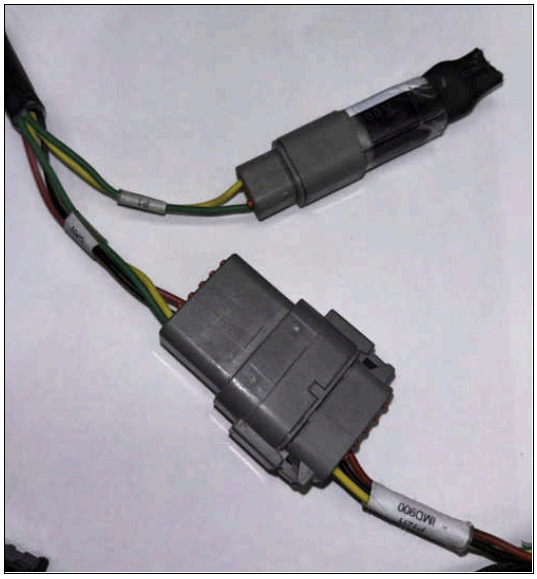
Step 7

Remove the CAN terminator P/N 116983 from connector P12H, which is labeled **IMD900**.



Step 8

Connect the R1 connector on the IMD-900 cable P/N 114675 to ther P12H, labeled **IMD900**.



VDM-912 power harness connection

Step 1

The VDM-912 harness is connected to the P/N 67259 power bus with the P/N 116985 harness shown here.



Step 2

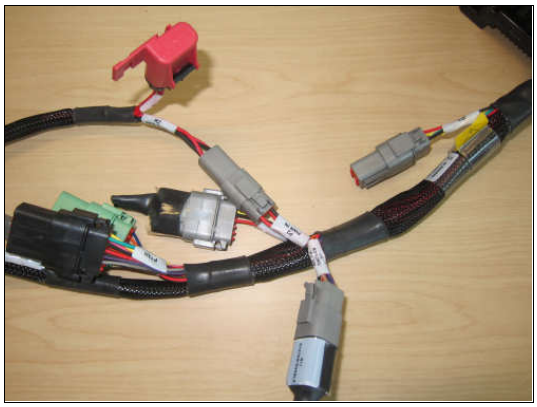
Connect the two power bus connectors R1 and R3 to the power bus as shown. Both connectors must be connected.

> **WARNING** – Failure to connect both connectors could result in failure of the power harness or electrical short.



Step 3

Connect the R2 VDM-912 power connector to the P2 connector on the main VDM-912 harness. The connector is labeled **PWR IN**.



7

Final Machine Check

WARNING – To avoid potentially serious personal injury or illness, and to prevent damage to equipment, make sure that you read and understand the Safety Information chapter.

To perform the final machine check:

1. Start the machine and check for hydraulic leaks. Correct as needed.
2. Update the Trimble display and the NAV-9xx to the latest firmware from Ag Resource Center.
3. Configure the correct vehicle in the GFX display.
4. Calibrate the Autopilot system using the Trimble display. Depending on your machine type, the following items must be calibrated before you can use the Autopilot system:
   - NavController III mounting orientation (if used)
   - Antenna height/Antenna axle offset, and Roll offset
   - Steering sensor
   - Deadzone
   - P-Gain


PTx
Trimble