PinPoint™ III ENVELOP Installation Instructions MY2008–2016 Case IH 3000–4000 Series

Table 1: Parts List

Part Number	Description	Qty
116301-014	PRESSURE TRANSDUCER ASSY	1
118640-038	PPIII, HUB MOUNT 300	2
118640-040	KEY FOB PP WITH KEY CHAIN	1
120048-001	GPS CABLE NH GUARDIAN INT	1
122100-010	INSTALLATION KIT PINPOINT ZIP	1
123000-013	MOUNTING PLATE PPIII	1
123000-150	ASSY, POWER HUB PPIII	1
123000-210	OP MANUAL PPIII ENVELOP	1
123000-228	INTEGRATION, CASE IH, MY17-22 PPIII	1
123100-074	HARNESS, CHASSIS, PPIII, CASE MY	1
620137-001	BOLT FLANGE 3/ 8"-16 X 1" GR8	4
706530-348	DUST PLUG 6-PIN DEUTSCH OT	11
706530-357	DUST CAP 12-PIN RECEPTACLE OT	1
706530-513	DUST CAP, 12 PIN, DTM	1
708000-051	TAPE TEFLON	1
713501-406	BOLT 5/ 16" X 3/ 4" SS	4
713501-447	NUT, FLANGE, 5/ 16 -18, ZINC	4
713501-905	NUT 3/ 8"-16 HEX W/K-LOCK	4
713600-003	WASHER FLAT 3/ 8	4

Requirements

- 2016–Prior Case IH Sprayer

For proper installation, additional harnesses may be required to accommodate the correct Task Controller. Several different Task Controllers can be installed on these machines. It is **VERY IMPORTANT** to order the correct adapter harness. If the machine is being upgraded from an Aim Command system to PinPoint III, additional boom section valve harnesses may be required (Ordered through CNH) to replace existing Aim Command harnesses.

Adapter Harnesses:

- Raven Viper 4 - 123100-080
- Raven Viper 4 W/O ISO components - 123100-079
- Ag Leader 1200 Command - None Needed
- AFS GPS - 120048-001

Requirements Cont'd

CNH Boom Section Valve Harnesses:

- 90ft (5 Section) - LH - 373957A1, RH - 343958A1
- 100ft (6 Section) - LH & RH - 47492140
- 120ft (7 Section) - LH - 87479157, RH - 87479158

ENVELOP Hub Installation

1. Open main power breaker before beginning installation.

Figure 1: Hub Bracket Installation

2. Assemble the hub mounting plate (Figure 1, Item 1) and strain brackets (Figure 1, Item 2) to the hub (Figure 1, Item 3) using the provided hardware.
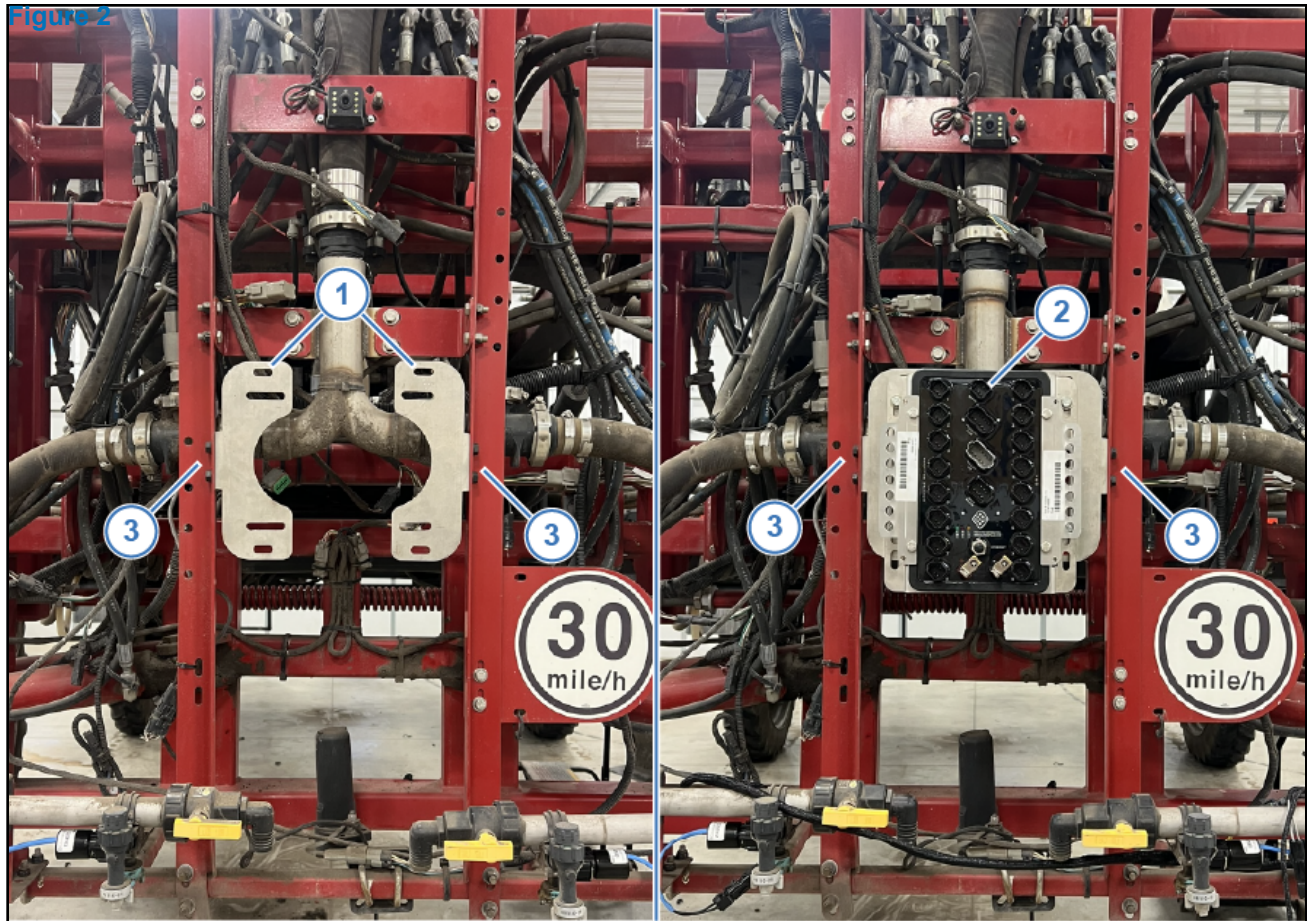
Figure 2: Hub Mounting (Without Aim Command)

3. If the machine is equipped with an Air Command system, proceed to Step 4.

Install hub mounts (Figure 2, Item 1) to the vertical brackets on the rear rack of the machine using the provided hardware. Install the hub (Figure 2, Item 2) onto the hub mounts.

Note: The hub mounts may need to be mounted to the outside of the vertical brackets (Figure 2, Item 3) on certain models to allow the hub mounting plate holes to align with the mount holes.
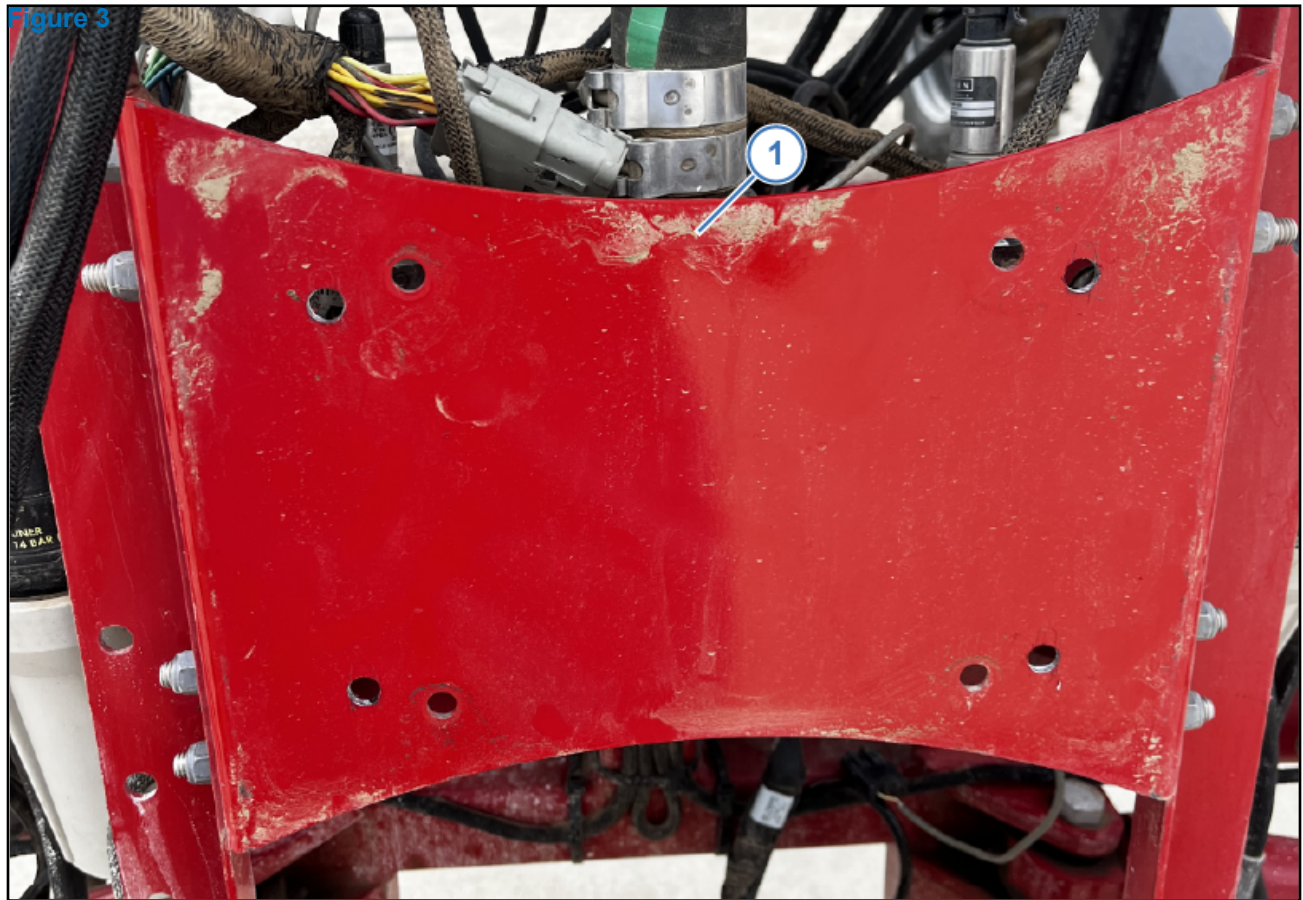
Proceed to Step 5.

Figure 3: Hub Mounting (With Aim Command)

4. If the machine was equipped with an Aim Command system, the hub mounts (Figure 2, Item 1) will not be used. Holes will be match-drilled into the existing rear rack plate (Figure 3, Item 1) using the hub mounting plate. The hub plate will mount directly to the rear rack plate.
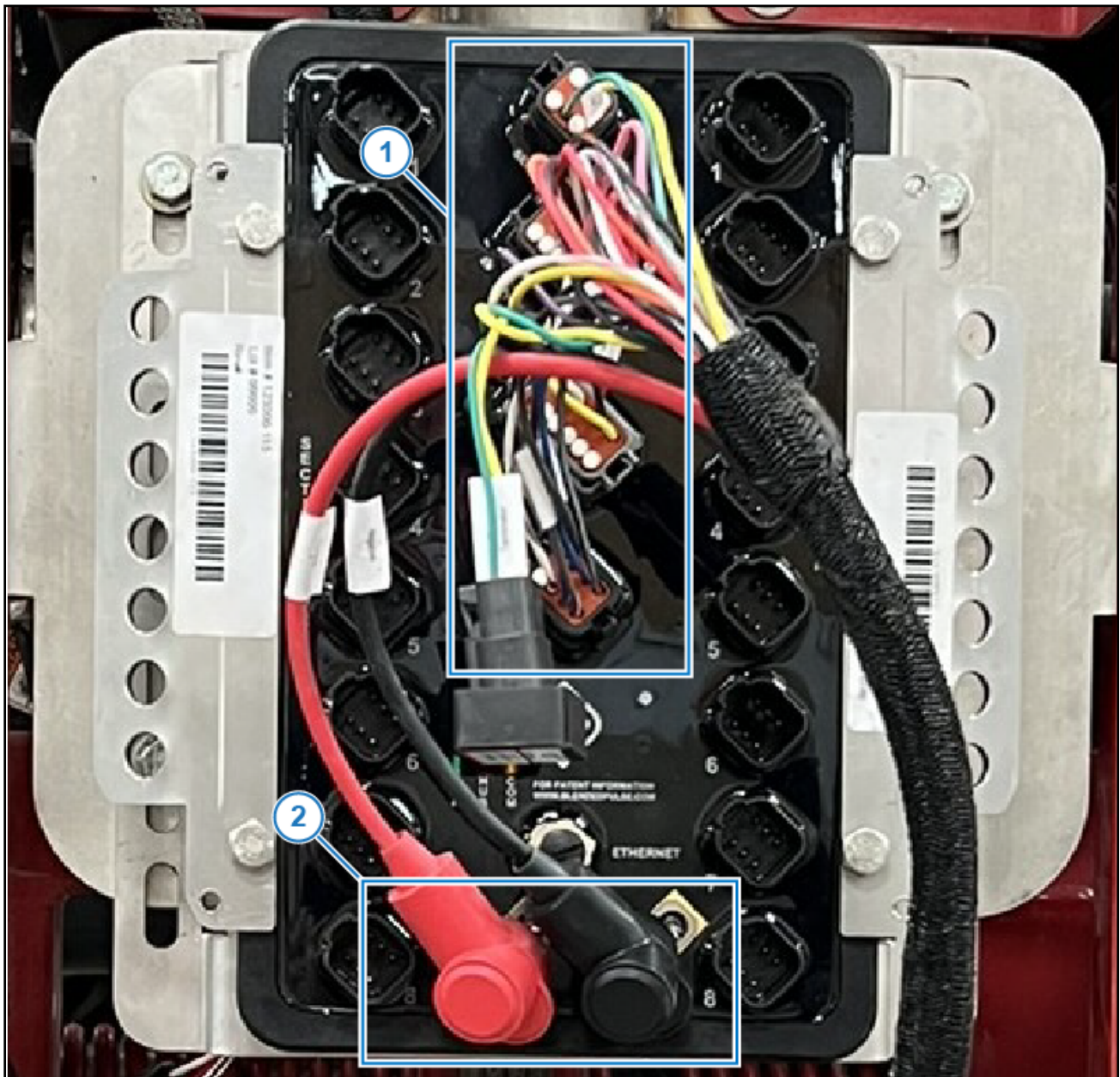
Chassis Harness Installation

Figure 4: Hub Connections

5. Install the Servo, Pressure/Flow, ISO CAN/GPS, and Boom Switch connectors (Figure 4, Item 1) into the corresponding ports on the hub.

6. Connect the power and ground lugs to the positive and negative studs (Figure 4, Item 2) on the hub.

7. Route the harnesses along with the existing machine harness up and over the back rack and along the left side frame of the machine.

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Figure 5: C522F Connector

8. Locate the Aim Command Section Interface 12-pin Connector C522F (Figure 5, Item 1) and (if equipped) its accompanying 2-pin connector for boom section 7 on the center of the back rack.

   - On machines equipped with Aim Command, there will be an existing harness plugged into the connector(s). Remove and dust cap it.

   - On machines without Aim Command, the connector(s) will be loose and dust capped, remove the caps.

9. Plug the appropriate Chassis Harness connectors into the 12-pin C522F connector and the 2-pin boom section 7 connector.

   - If the machine is not equipped with a separate boom section 7 2-pin connector, remove the signal wire from the Chassis Harness 2-pin connector and install it into pin 7 of the Chassis Harness 12-pin connector. Plug this connector into the machine 12-pin C522F connector.

Figure 6: C517 Connector

10. Locate the Remote/AIM interface connecter C517 (Figure 6, Item 1) and disconnect it.

11. Plug the appropriate Chassis harness connectors (Figure 6, Item 2) into each of the disconnected plugs so that the Chassis harness sits in-line with the existing machine harness (Figure 6, Item 3).

> **IMPORTANT:** there are two connectors labelled REMOTE/AIM. DO NOT connect to the harness which runs to the pwm valve or boost module.

Pressure Sensor Installation

Figure 7: Pressure Sensor

12. Locate the existing pressure sensor on the right side of the back rack (Figure 7, Item 1) and remove.

13. Install the PinPoint III pressure sensor and connect it to the Chassis harness.

    On machines equipped with an Aim Command system, there will be a Capstan pressure sensor on the left side (Figure 7, Item 2) with a 3-pin weather pac connector. Remove and replace this sensor with the PinPoint III pressure sensor, if equipped.

Figure 8: Power Harness

14. Continue routing the Power and Flowmeter harnesses to the machine battery tray, following the machine's battery cables located under the radiator mounting frame.

15. Connect the red power (+) (Figure 8, Item 1) and black ground (-) (Figure 8, Item 2) cables to the batteries, installing the provided 80 amp circuit breaker (Figure 8, Item 3) inline with the red power (+) cable.
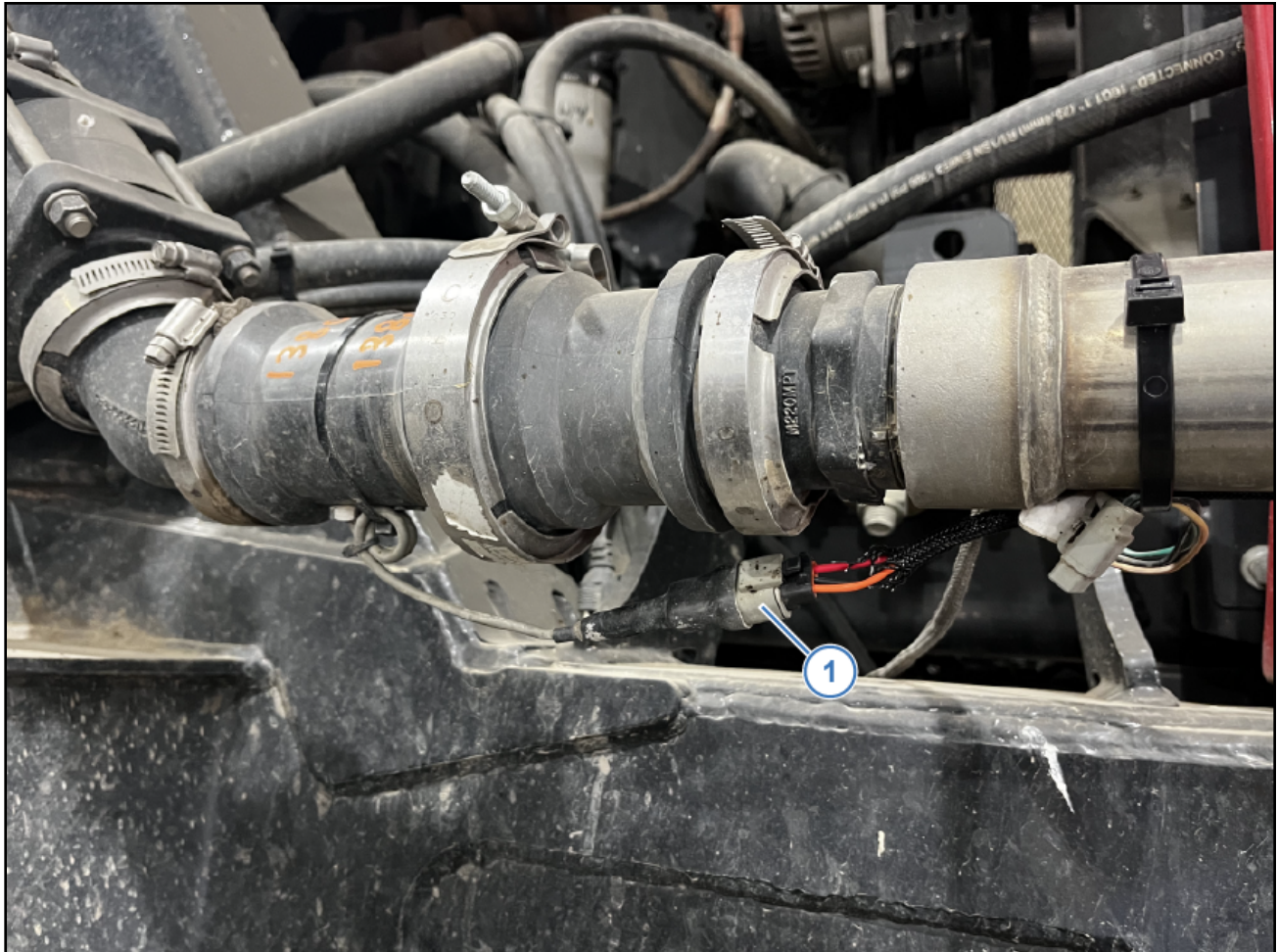
Figure 9: Flowmeter Harness

16. Route the Flowmeter lead of the Chassis Harness to the machine flowmeter.

17. Disconnect the existing machine harness from the flowmeter and connect the Chassis Harness connector (Figure 9, Item 1).

18. Continue routing the Chassis Harness toward the machine cab.
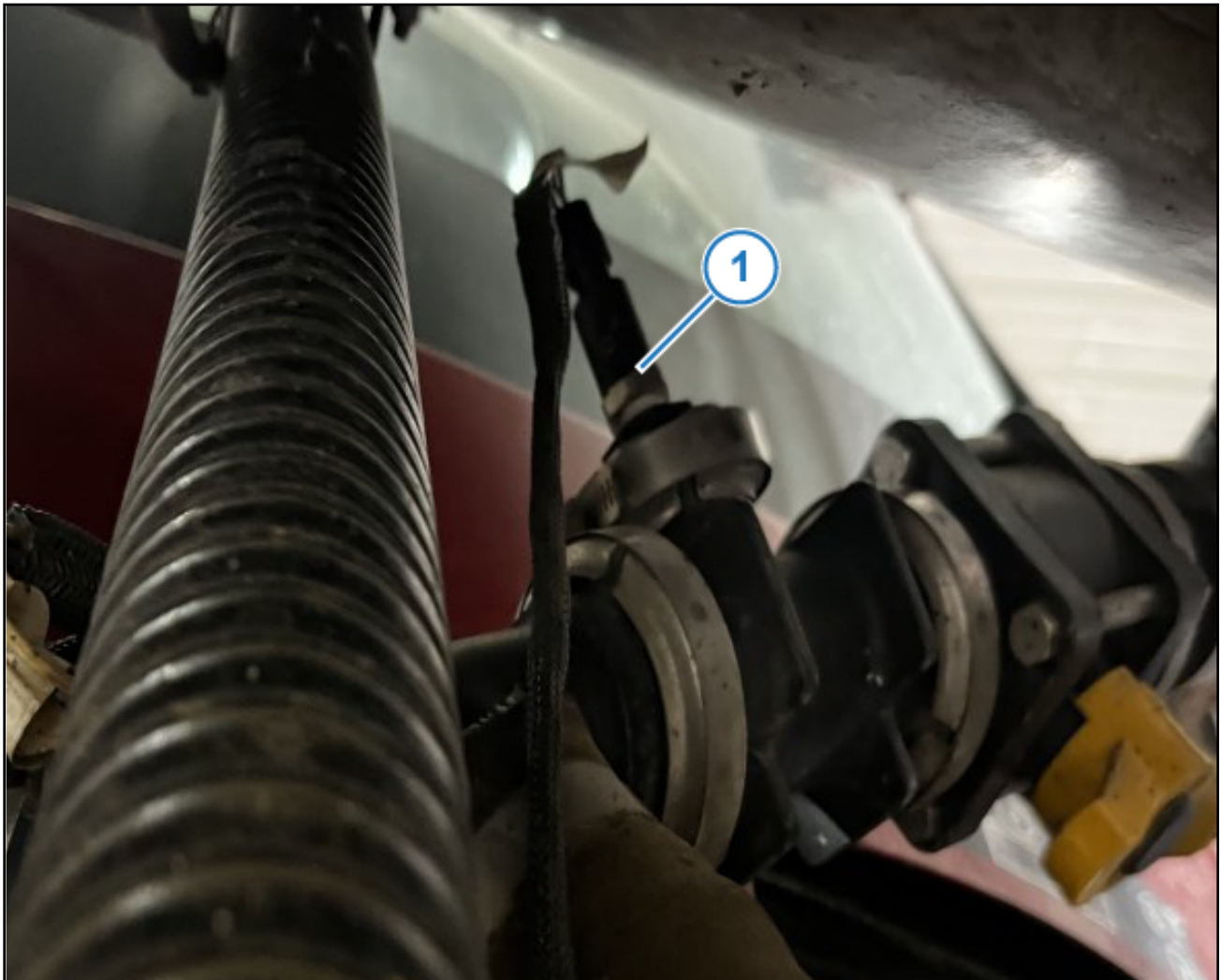
Sparge Sensor

Figure 10: Sparge Sensor

19. Locate the sparge pressure sensor (Figure 10, Item 1) between the back of the cab and front of the tank.

20. Remove the existing connector from the sensor.

21. Route the Chassis harness to the sparge sensor and connect it.

22. Continue routing the remaining Chassis harness toward the machine cab.

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AccuBoom Connector

Figure 11: Figure

23. Locate the AccuBoom boom interface connector C523F (Figure 11, Item 1) under the cab, behind rear axle. Disconnect and remove the 2-wire fence row jumper (Figure 11, Item 2). Reconnect the existing harness connectors.

Cab Harness Connections

24. Route the remaining Chassis harness toward the machine cab.
    - 3000 series: Harness will enter the cab through the back window on, the right side
    - 4000 series: Harness will enter the cab underneath on the right side, in front of the front axle.
25. Locate the machine Advance Disable C202F connector and remove the jumper connector from it.
26. Install master switch connector C202F from the Chassis harness into the machine C202F connector.

    Note: The location of this connector varies by model. Below are pictures and descriptions of locations for each model.
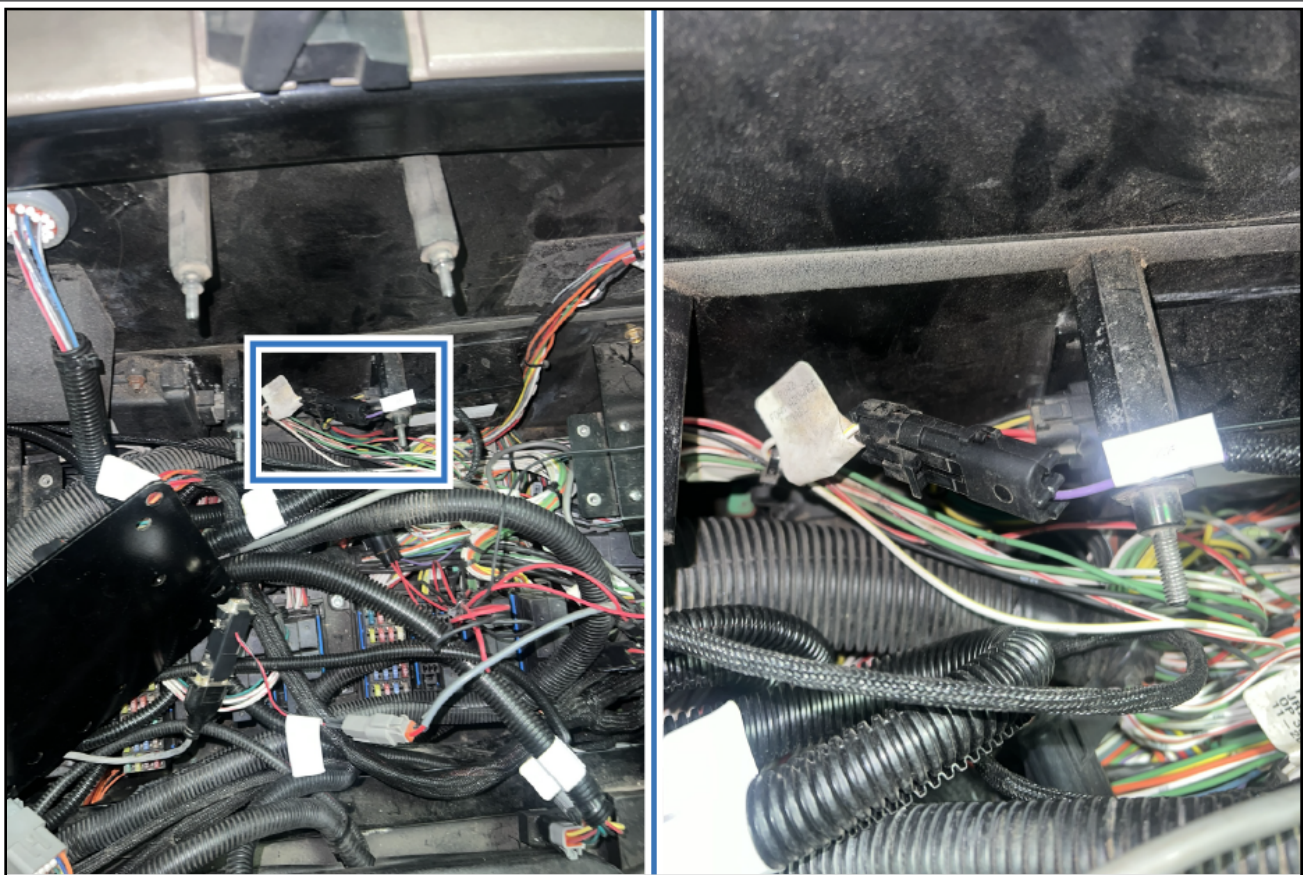
3000 Series C202F Connector Location

Figure 12: 3000 Series C202F Connector

The back cover and lower plate will need removed to locate connector.

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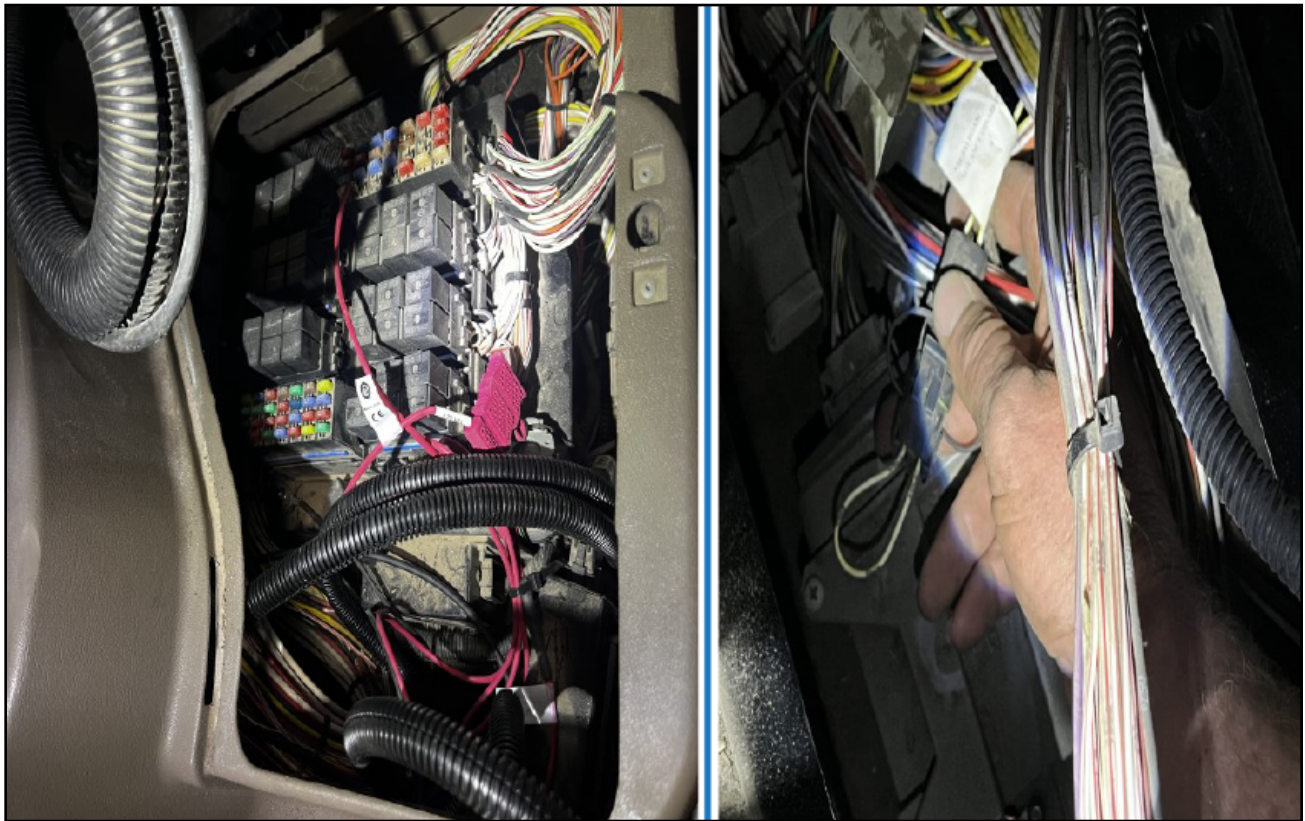
4420 Series C202F Connector Location

Figure 13: 4420 Series C202F Connector

The connector is located under the fuse panel below the armrest. The fuse panel must be lifted out to access the connector below it. The connector can be found close to the seat side toward the back.
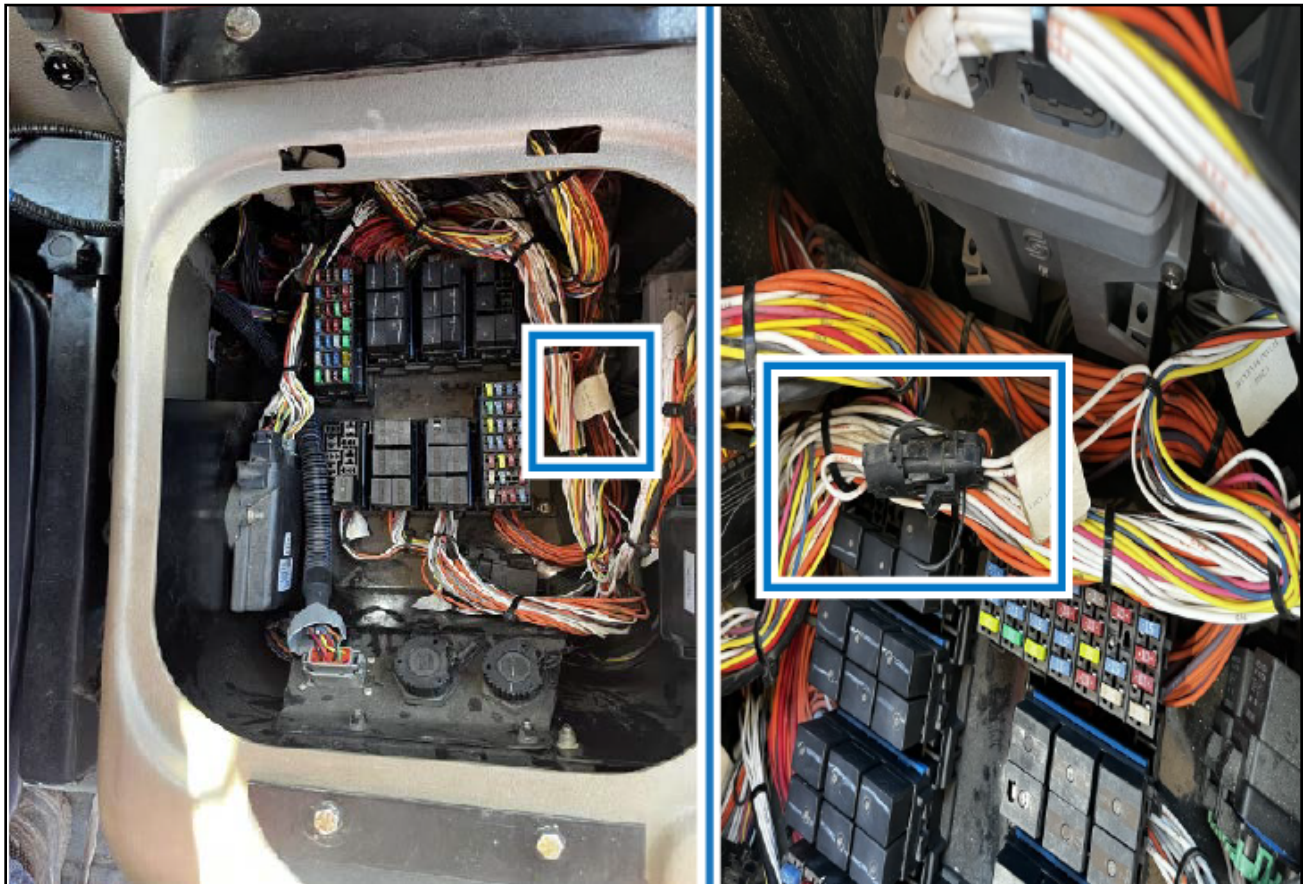
4430 Series C202F Connector Location

Figure 14: 4430 Series C202F Connector

The connector can be found under the buddy seat toward the side of the operators seat.

GPS and Task Controller Connections

Figure 15: GPS Connector

27. Make the Chassis Harness GPS connection.

   - If the machine is an AFS (Advanced Farming System) ready machine equipped use the AFS Adapter Harness to connect the Chassis Harness GPS DP9 connector to the AFS 12-pin diagnostic port on the machine (Figure 15, Item 1).

   - If the machine is equipped with PinPoint I or PinPoint II, connect the Chassis Harness GPS DP9 connector to the Serial GPS DB9 connector on existing PinPoint Serial GPS extention harness.

   - For all other types of task controllers, locate the DB9 Serial GPS-Out port and connect the Chassis Harness GPS DB9 connector.

28. Connect the ISO/keyswitch power connector to the Task Controller display using the corresponding display adapter harness for the Task Controller the machine is eqipped with.

   Refer to Adapter Harnesses under Requirements on Page 1 of this document.

   The Agleader AG Command monitor will not need an adapter harness and should plug directly into the ISO/Keyswitch Power Chassis harness connector.

   Trimble 1260 displays will use an external power adapter harness, plugged into a power port in the cab, for keyswitch power.

29. After installation is complete, set up the system in accordance with integration instructions (PN 123000-241) Case IH MY2016-prior Series PPIII Integration.