



Installation Instructions ISOBUS Kit (Fixed Cab, Tier 4 Final Engines)

Part Number: 86067148SRV

Models: See Table 1.

Approximate Installation Time - 2.0 hours

Table 1: Applicable Models				
NOTE: This kit applies to models listed below under the following conditions:				
<ul style="list-style-type: none"> • Vehicles must be equipped with a fixed cab. • Large frame models 520 570 610 prior to S/N 706486 must have cab distribution harness P/N 86059000 replaced with P/N 86067145 to be compatible with the ISOBUS electrical. 				
Region Emission Rating	L4WD Large Frame 4-wheel Drive	NFWD Narrow Frame 4-wheel Drive	MFWD Mechanical Front-wheel Drive	Sprayers
North America Tier 4 Final	520 570 610	380 405 430 460	-	-
North America Tier 4 Interim	-	-	-	-
North America Tier 3	-	-	-	-
International Tier 4 Final	-	-	-	-
International Tier 4 Interim	-	-	-	-
International Tier 3	-	-	-	-

C O N T A C T

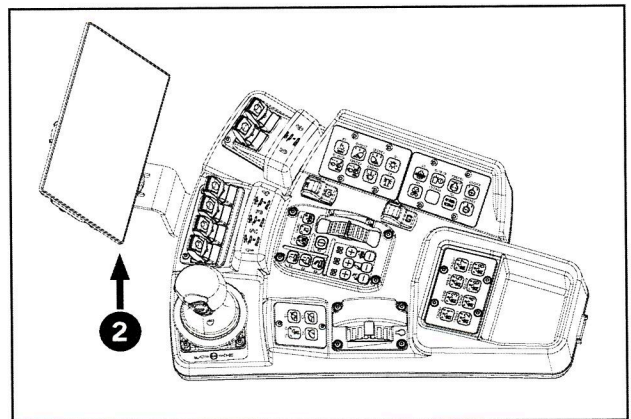
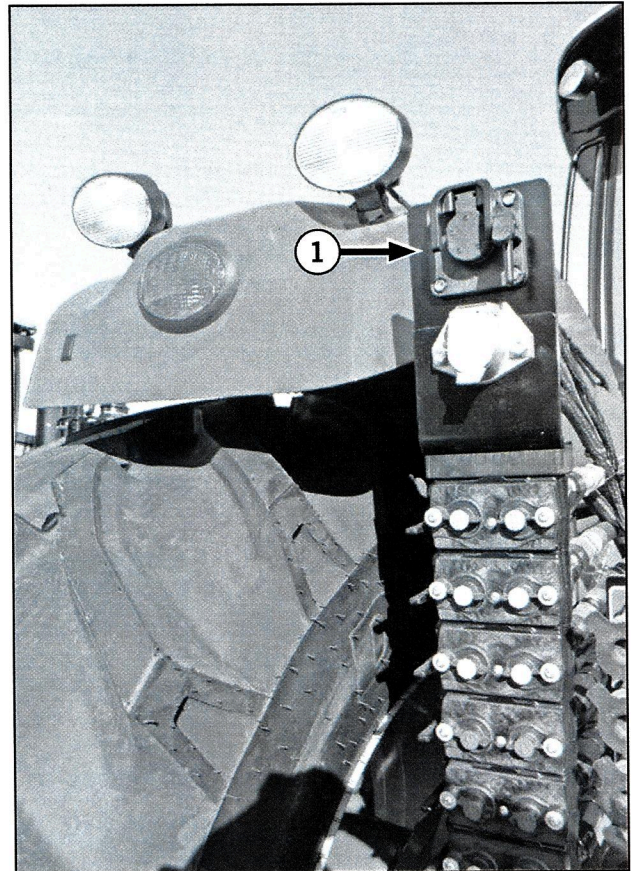
Introduction

This kit provides a coupler for ISOBUS-compatible implements and electrical components that will connect to an aftermarket ISOBUS system.

To operate ISOBUS-compatible implements, the tractor must be equipped with the ISOBUS ready option (this kit) and a universal terminal (UT) (not included in this kit).

- The Versatile UT is the 254 mm (10 in) “Parker” display monitor (2). Some aftermarket systems will require an aftermarket UT to be used instead of the Versatile UT. Tractors not equipped with the 254 (10 in) display monitor must operate the software using an aftermarket UT.

NOTE: As of October 10, 2018, the “ISOBUS VT” application used to operate the Versatile universal terminal (UT) is still under development. Only “single-node” or “multiple-node” configurations using an aftermarket UT are functional at this time. For more information see “Connecting an Aftermarket ISOBUS System” on page 15.



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Parts List

NOTE: See next page for pictures of the parts below.
 Also see "P/N 86080840 - Cab ISOBUS" on page 6 and "P/N 86057779 - Rear Frame ISOBUS" on page 8 for connector number details.

Kit: 86067148SRV

(NOTE: Do not order parts separately / part nos. for reference only.)

Ref	Qty	Part No.	Description
1	1	00570821	Screw Selftap 5/16x5/8hex Hd P
2	5	09804257	Bolt Hex Flg M 6 X 25 8.8pl
3	2	86055244	Deutsch DT Cap 12s
4	1	86058016	Isobus Brkt Cab Instl-Ps

NOTE: Items 5 – 9 are included in item 4 (P/N 86058016).

Ref	Qty	Part No.	Description
5	2	00044334	Ms Pan P M4x12 86505657
6	1	09804257	Bolt Hex Flg M 6 X 25 8.8pl
7	2	86050272	Bolt Hex Flg M 6 X 12 8.8pl
8	1	86058018	Isobus Module Bracket - Ps
9	2	86509264	Nut Hex M4 Class 10 Pl

Ref	Qty	Part No.	Description
10	1	86058161	Socket Adapter Mount-Isobus
11	1	86067147	Isobus L4wd T4f P.S. Elec

NOTE: Items 12 – 18 are included in item 11 (P/N 86067147).

Ref	Qty	Part No.	Description
-	2	09804276	Nut Hex Flg M6 Class 8 Pl
12	1	09843767	Relay - High Current (75a)
13	1	86051893	Fuse Bfi (60a) Colour Yellow
14	1	86052642	Lmi Fuse Module, 10-24 Stud
15	1	86057709	Module, Isobus-Tecu
16	1	86057779	Iso Bus L4wd Rear Frame Wha
17	1	86057808	Module, Isobus-Ibbc
18	1	86063793	Isobus-Tbc
-	2	86511893	Bolt Hex Flg Hvy M6 X 12 8.8pl

Do not use P/N 09804276

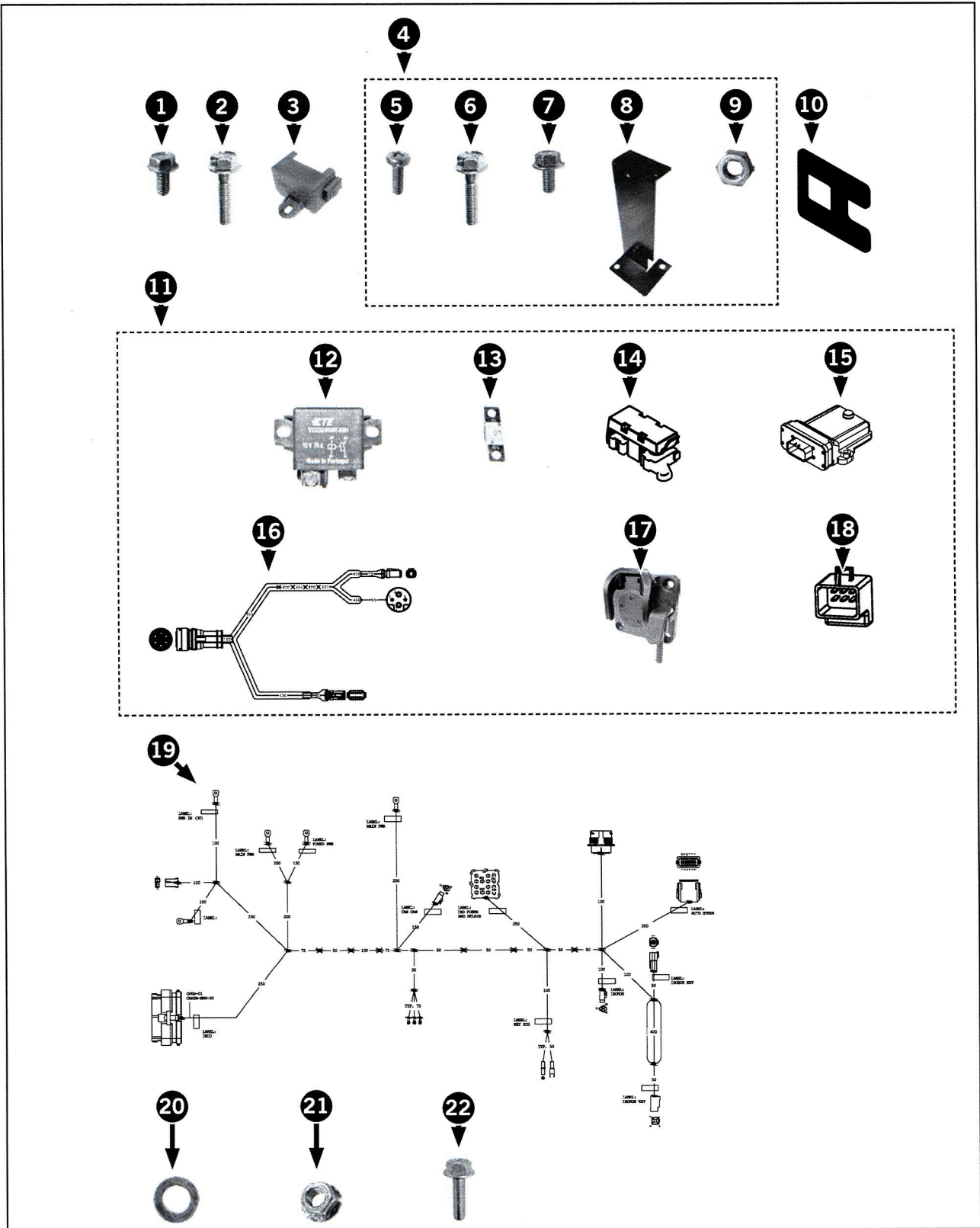
Do not use P/N 86511893

Ref	Qty	Part No.	Description
19	1	86080840	Wha - Isobus L4wd Cab
20	4	86511315	Washer 8.62x16.00x1.60 Pl
21	4	86511444	Nut Hex Flg Usr M 6 Pl
22	2	86511842	Bolt Hex Flg M 8 X 40 8.8pl
-	1	89004364	Installation Instructions

NOTICE

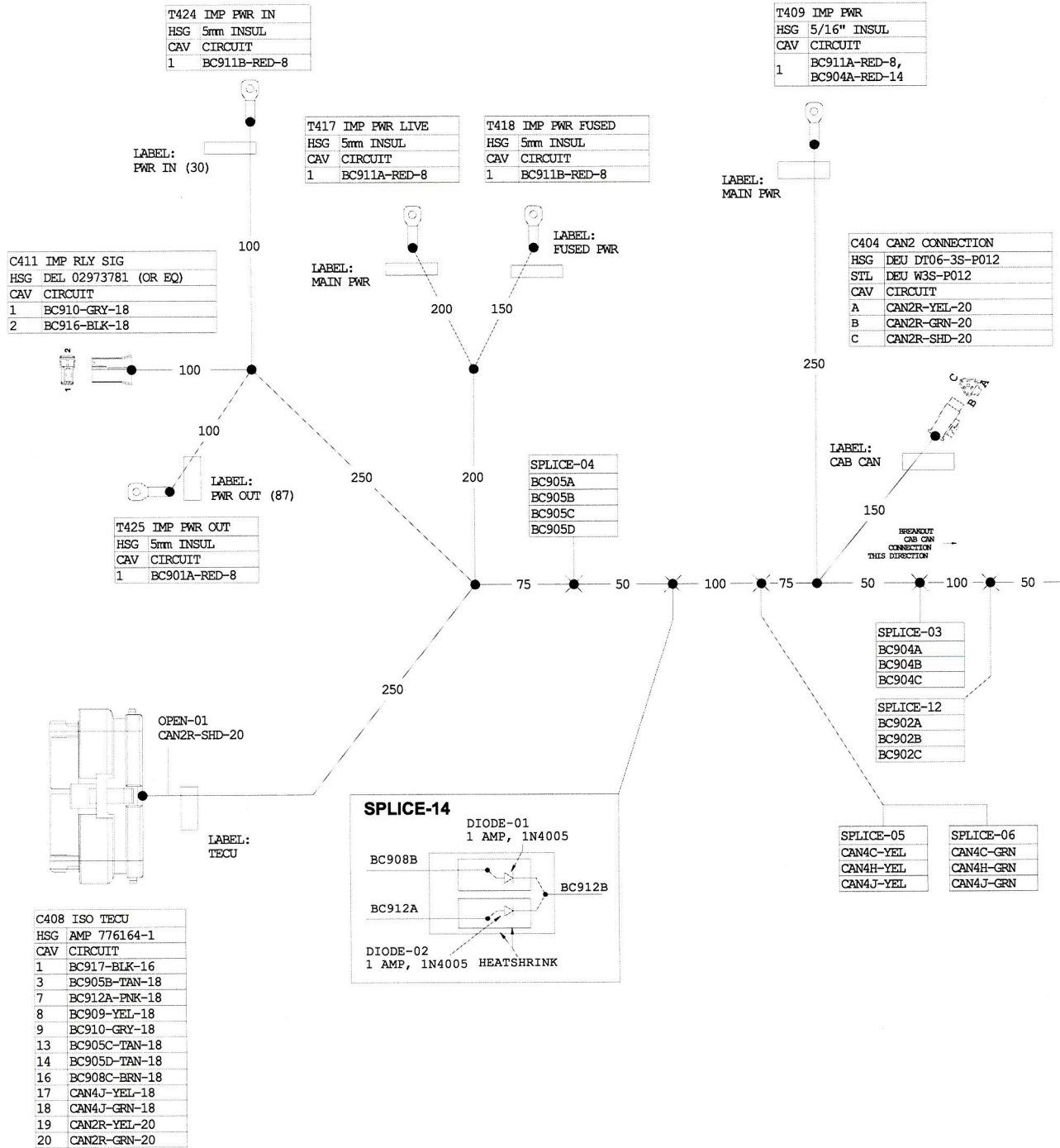
Large frame models 520 570 610 prior to S/N 706486 must have cab distribution harness P/N 86059000 replaced with P/N 86067145 to be compatible with the ISOBUS electrical.

Kit P/N 86067148SRV

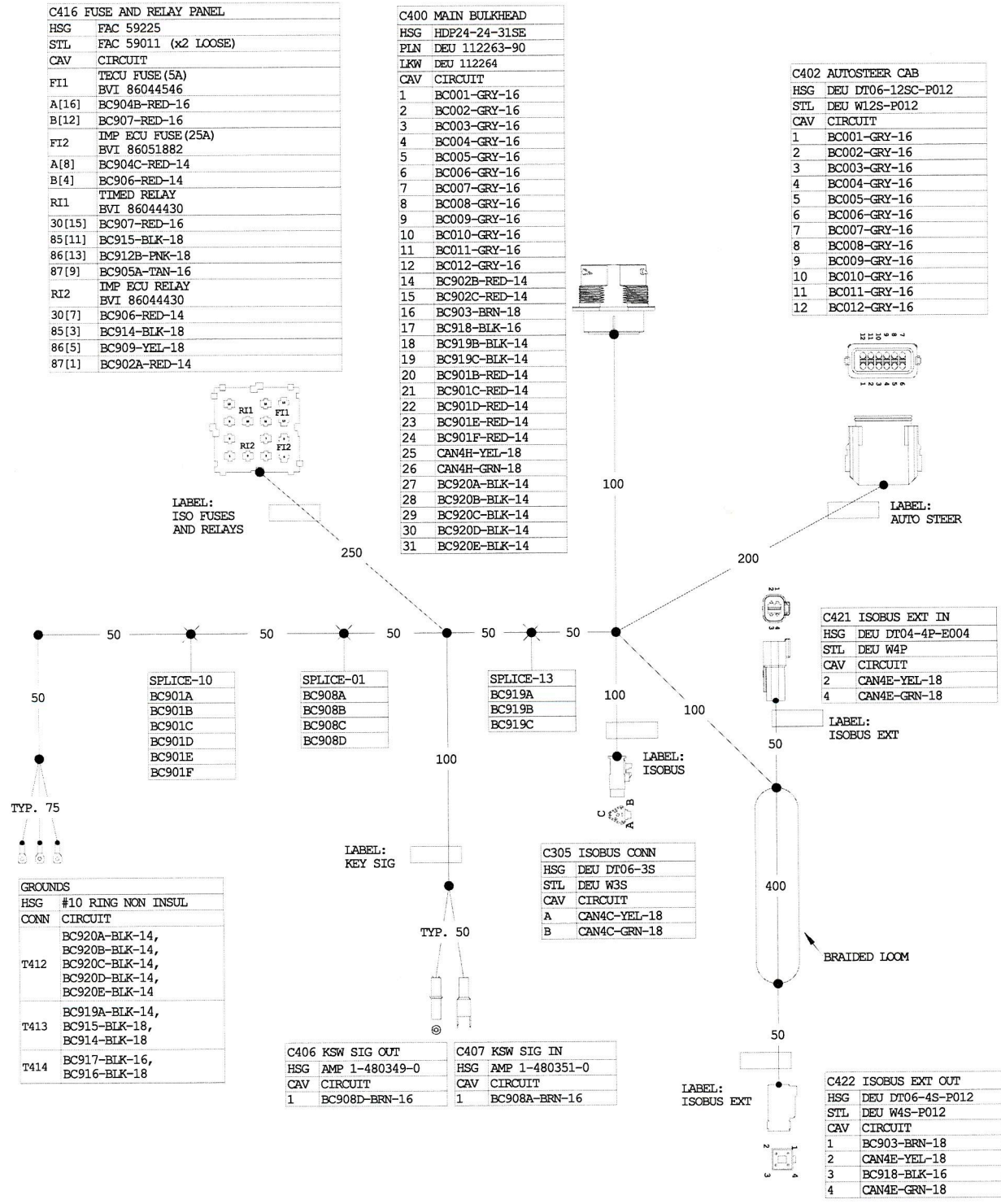


P/N 86080840 - Cab ISOBUS

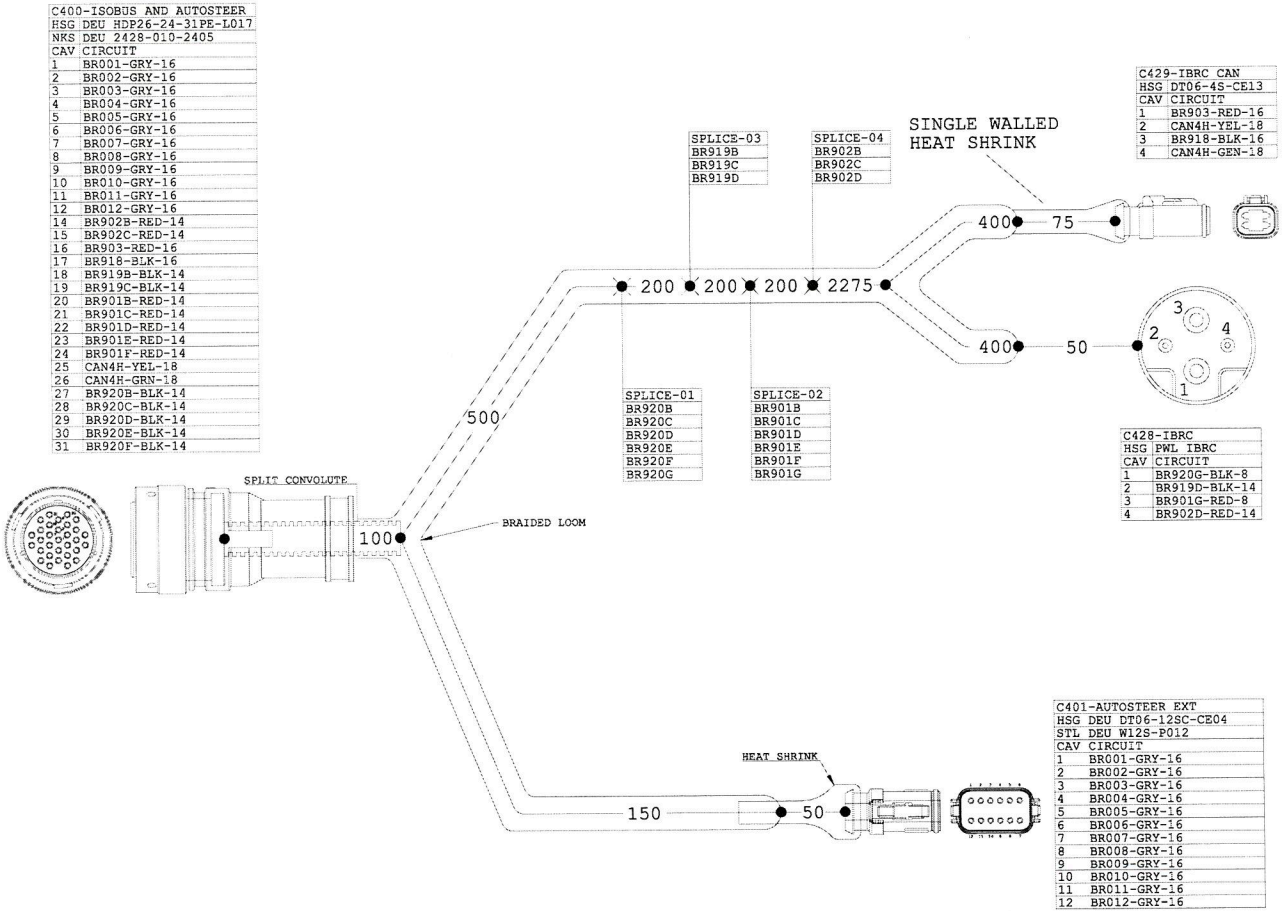
NOTE: continued on next page...



P/N 86080840 - Cab ISOBUS (continued from previous page)



P/N 86057779 - Rear Frame ISOBUS



Preparation



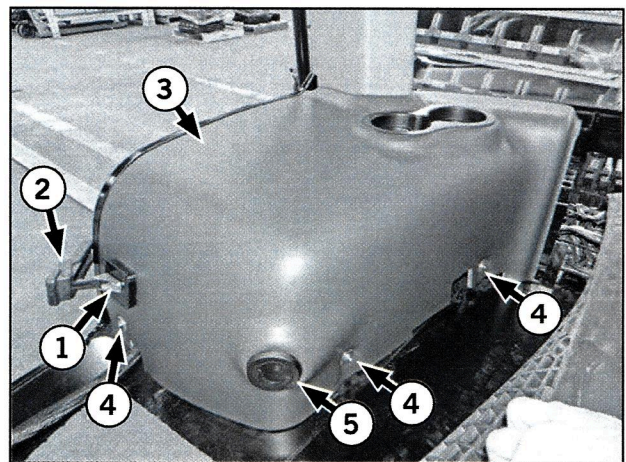
DANGER

- Before performing any maintenance operations, always engage the parking brake fully, place the transmission in neutral, shut the engine off, install the articulation lock, block the wheels.
- Wait for the power-off indicator (POI) to lamp turn off before turning the battery shut-off switch to OFF. Turn the battery shut-off switch to OFF.



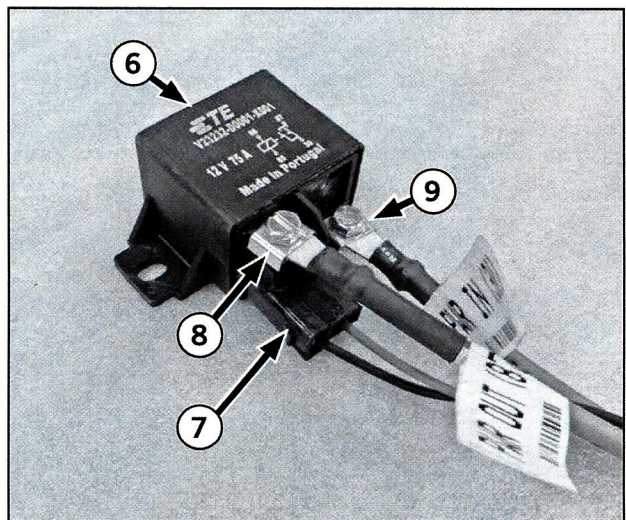
Install Components to Cab

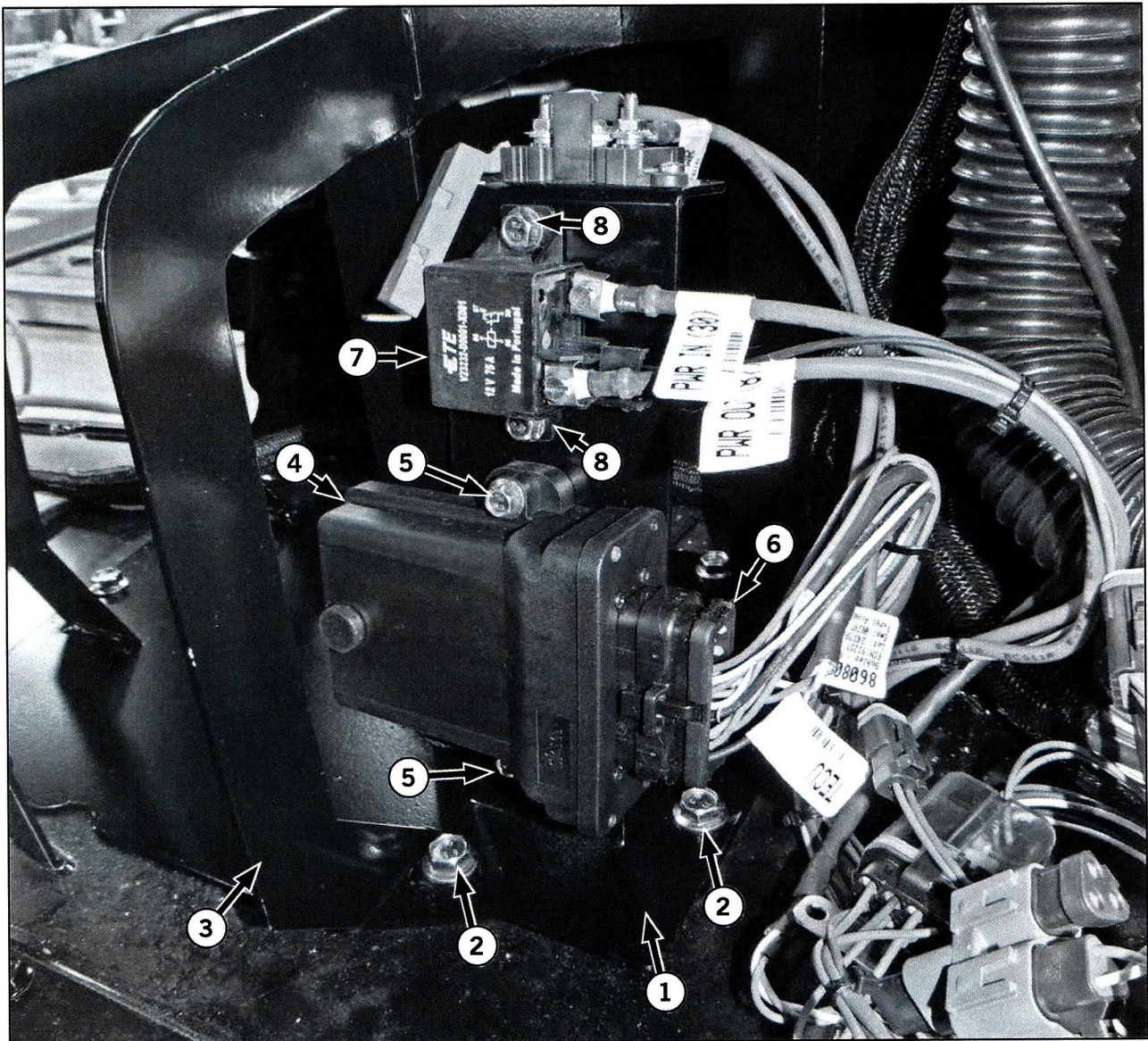
1. Remove the cover panel (not shown) directly behind the operator's seat.
2. Remove the 2 screws (1) attaching the door seal latch (2) to the bottom trim panel (3) if equipped. Remove latch from panel.
3. Remove the 3 bolts (4) attaching the panel. Set panel aside. If needed unscrew the A/C hose connected to the vent (5).



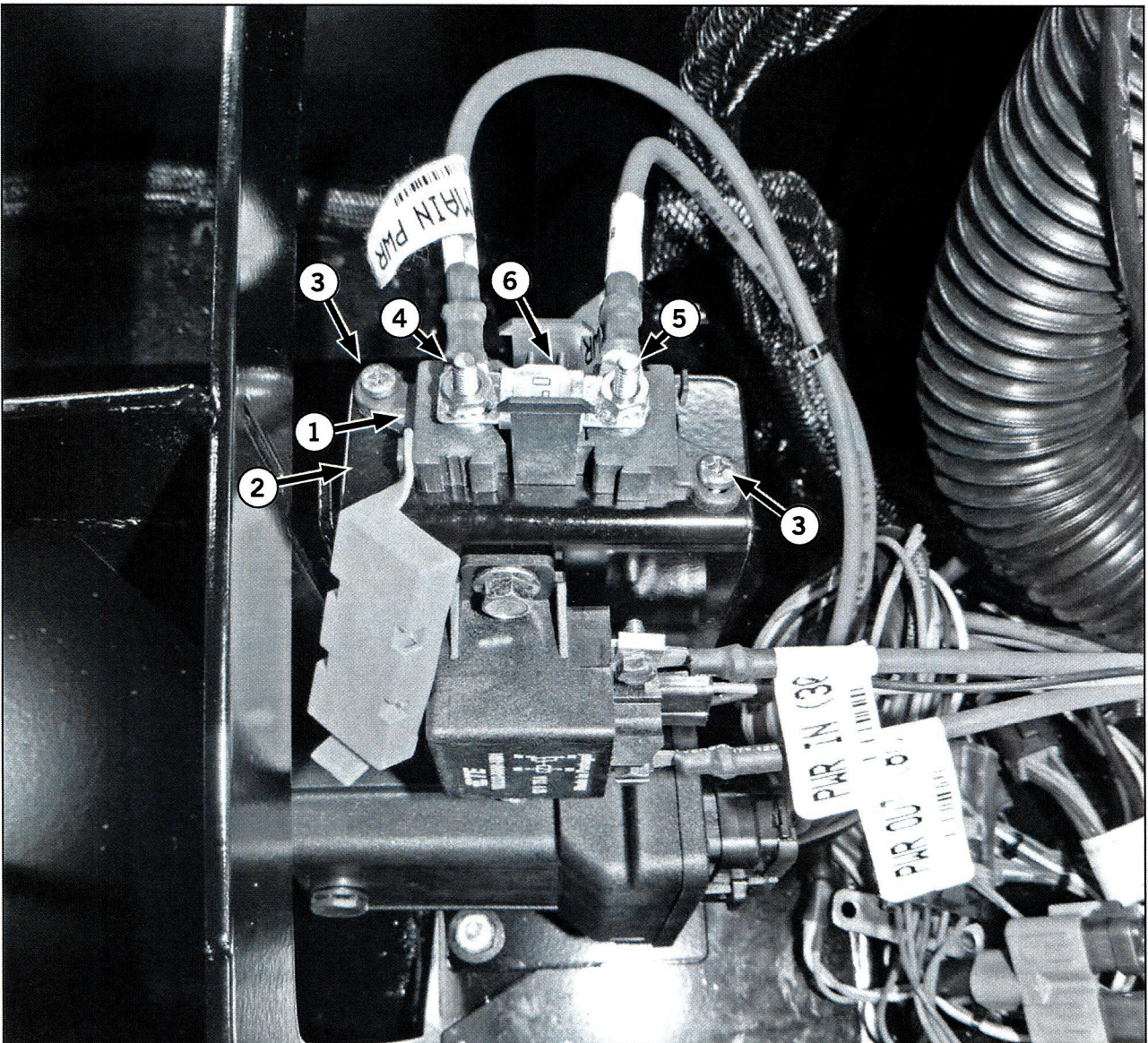
NOTE: ISOBUS harness (P/N 86080840) is used for all electrical connections in the cab. See "P/N 86080840 - Cab ISOBUS" on page 6 for a diagram.

4. Attach the following ISOBUS connector and terminal rings to relay (6) (P/N 09843767):
 - (7) C411 not labeled
 - (8) T425 labeled PWR OUT (87)
 - (9) T424 labeled PWR IN (30)

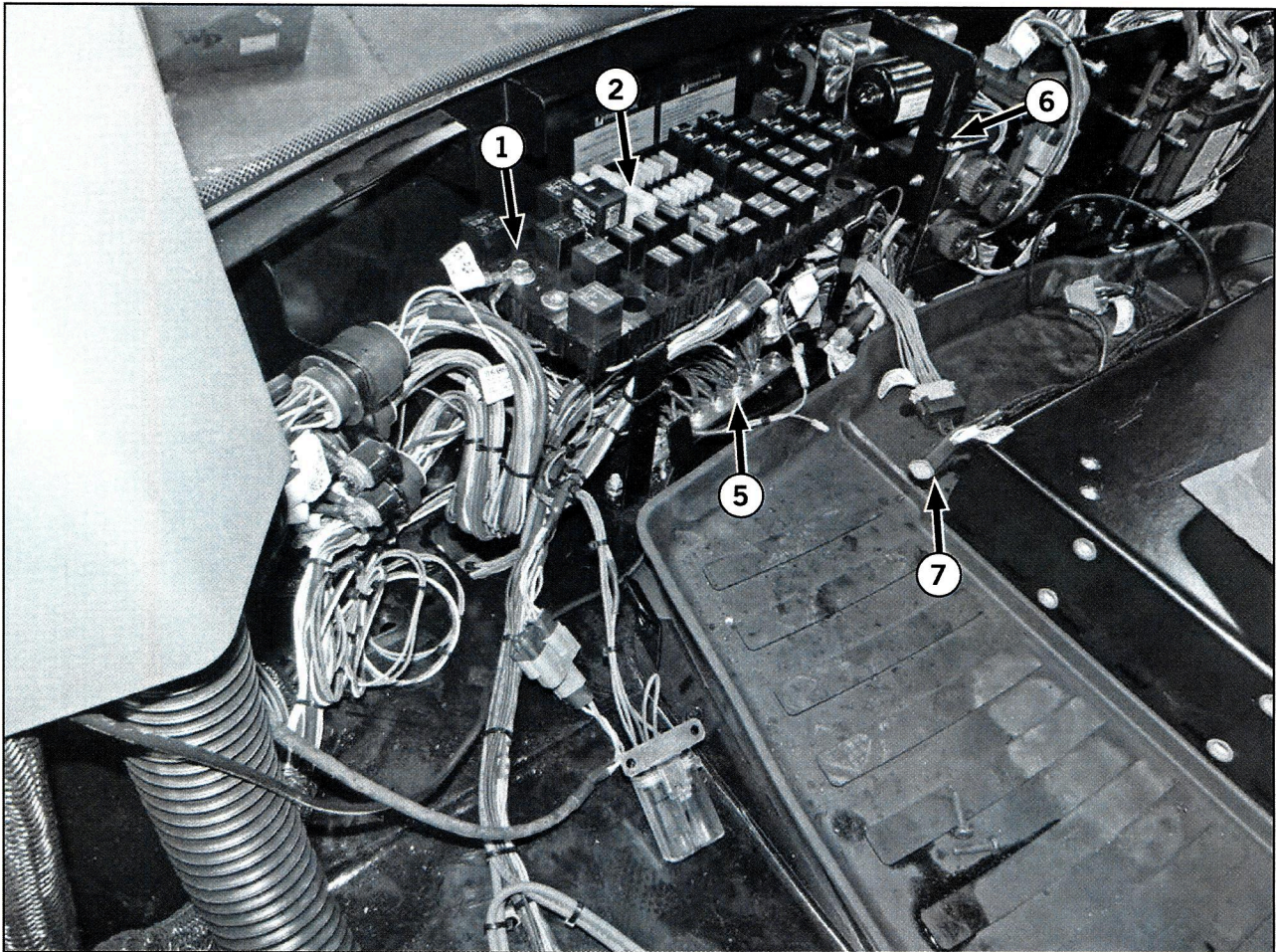




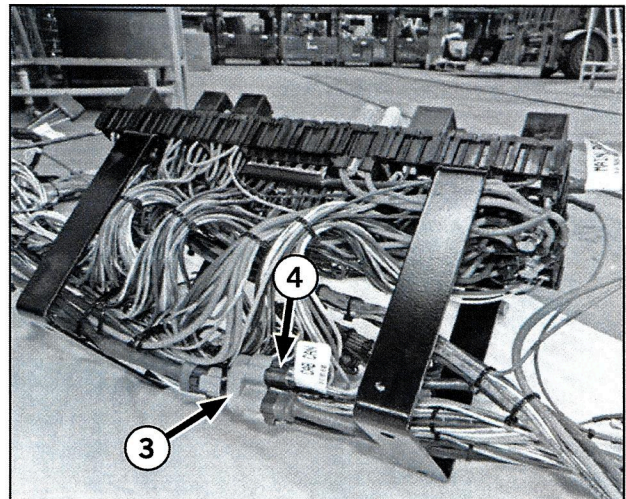
5. Attach ISOBUS bracket (1) (P/N 86058018) to the cab floor using existing bolts (2) used by the trim panel support bracket (3).
6. Attach module (4) (P/N 86057709) to ISOBUS bracket using 2 bolts (5) (P/N 09804257).
7. Attach ISOBUS connector C408 (6) (labeled TECU) to module (4).
8. Attach relay (7) to ISOBUS bracket using 2 bolts (8) (P/N 86050272).

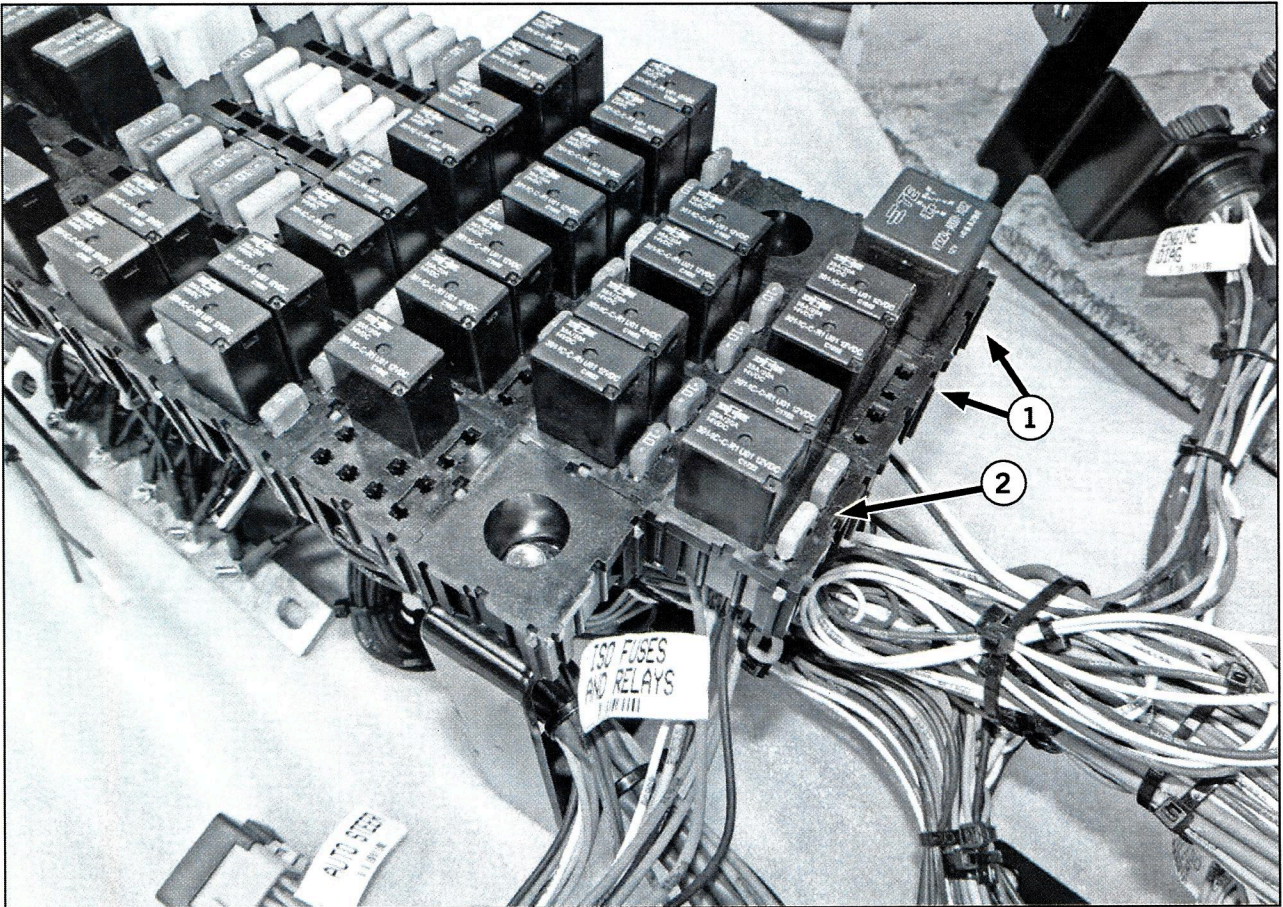


9. Attach fuse holder (1) (P/N 86052642) to the top of the ISOBUS bracket (2) using:
 - (3) 2 screws (P/N 00044334)
 - (not shown) 2 nuts (P/N 86509264)
10. Attach ISOBUS terminal rings to the posts of the fuse holder (which post does not matter):
 - (4) T417 (labeled MAIN PWR)
 - (5) T418 (labeled FUSED PWR)
11. Place fuse (6) (P/N 86051893), clear side up, on top of the terminal rings. Secure fuse and terminals with nuts provided with fuse holder.

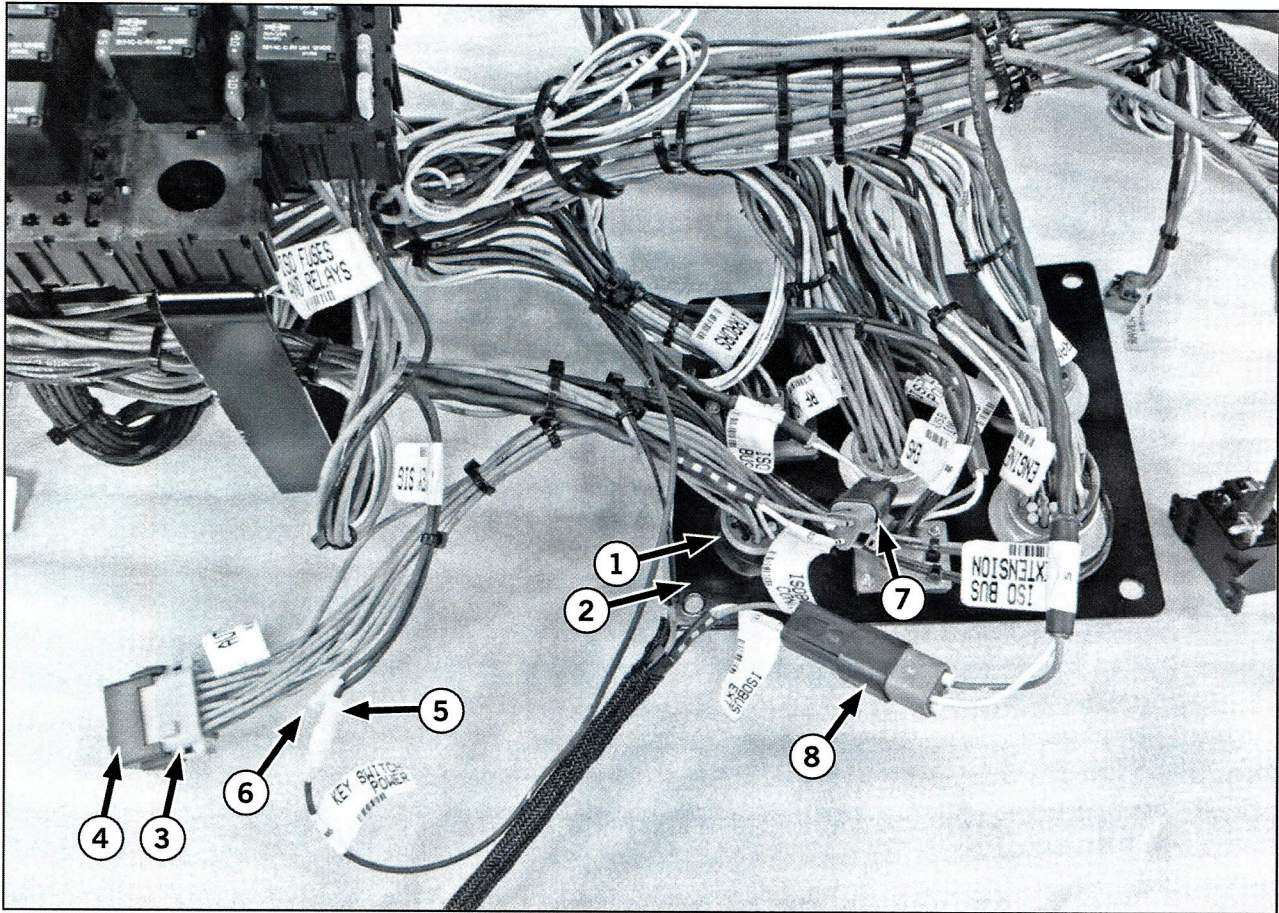


12. Connect ISOBUS terminal T409 (labeled MAIN PWR) to the second power terminal (1) on main distribution panel (2) (MDP) using bolt (P/N 00570821) or existing bolt if present.
13. Route the remainder of the harness under the MDP and toward the left side of the tractor.
14. Located at the bottom-rear of the MDP, remove plug C382 (not shown) from the cab distribution (CD) harness Y-receptacle C379 (3). Connect ISOBUS C404 (4) (labeled CAB CAN) to Y-receptacle C379.
15. Connect all 3 ISOBUS ground terminals (5) T412, T413, T414 to the ground bar. Tighten ground bar nut to 4.1 N·m (36 in·lb).
16. Remove the hardware (not shown) attaching the diagnostic bracket (6) to the cab. Pull bracket off of studs.
17. Route ISOBUS connector C422 (7) (labeled ISOBUS EXT) under the floor mat and out of the hole behind the seat pedestal.





18. Remove the relay block (1) from the MDP.
19. Attach the ISOBUS fuse and relay block (2) C416 (labeled ISO FUSE AND RELAYS) to the relay block (1) using the red tabs included with the ISOBUS harness.
20. Attach blocks to the MDP.

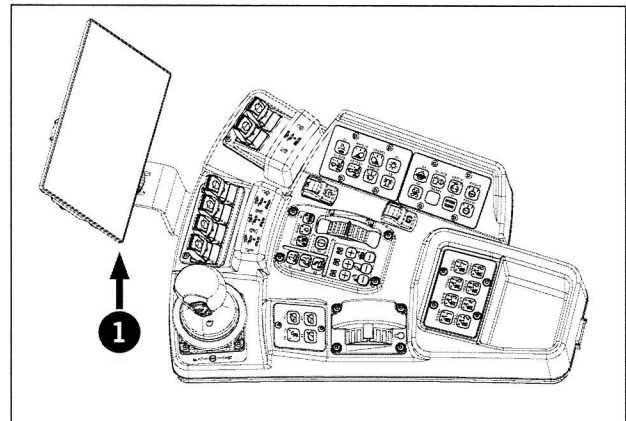


21. Attach ISOBUS bulkhead C400 (1) (not labeled) to the bulkhead plate (2). If the tractor is equipped with the autosteer ready option, then the ISOBUS connector C400 replaces the autosteer connector installed at this location. Reconnect the autosteering system to ISOBUS C402 (3) (labeled AUTO STEER). Otherwise cap C402 with (4) P/N 86055244.
22. Connect the following ISOBUS connectors to the CD harness:
 - (5) ISOBUS C407 (labeled KEY SIG) to C324 (labeled KEY SWITCH POWER).
 - (6) ISOBUS C406 to the key signal connector of optional equipment (example: inverter).
 - (7) ISOBUS C305 (labeled ISOBUS CONN) to C334 (labeled ISO BUS).
 - (8) ISOBUS C421 (labeled ISOBUS EXT) to C333 (labeled ISO BUS EXTENSION)

23. Reinstall the diagnostic connector bracket.
24. Bend the ISOBUS module bracket slightly towards the right side of the tractor. This avoids conflict with the cup holder in the trim panel during reinstallation.
25. Reinstall the cover panels.
26. The installation of terminator bias circuit (TBC) terminator (P/N 86063793) and connection of C422 (routed through the hole in the floor mat) depends on the type of aftermarket system. Proceed to "Connecting an Aftermarket ISOBUS System" on page 15.

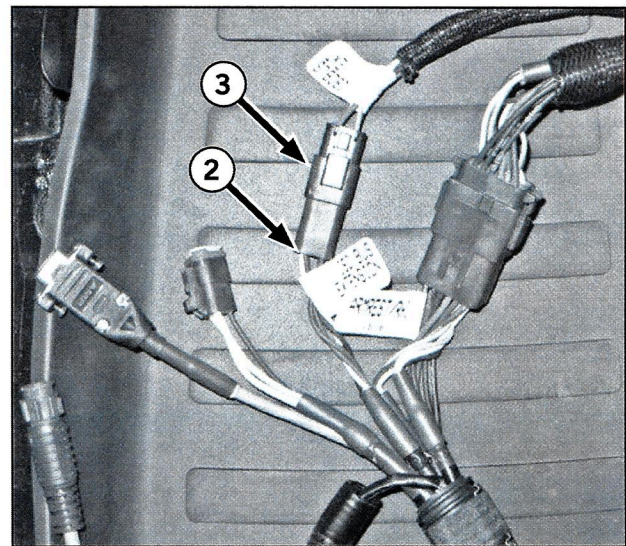
Connecting an Aftermarket ISOBUS System

Connect equipment according to the type of aftermarket system identified below. Some aftermarket systems will require the aftermarket UT to be used in lieu of the Versatile UT (1) (case 3 for example).



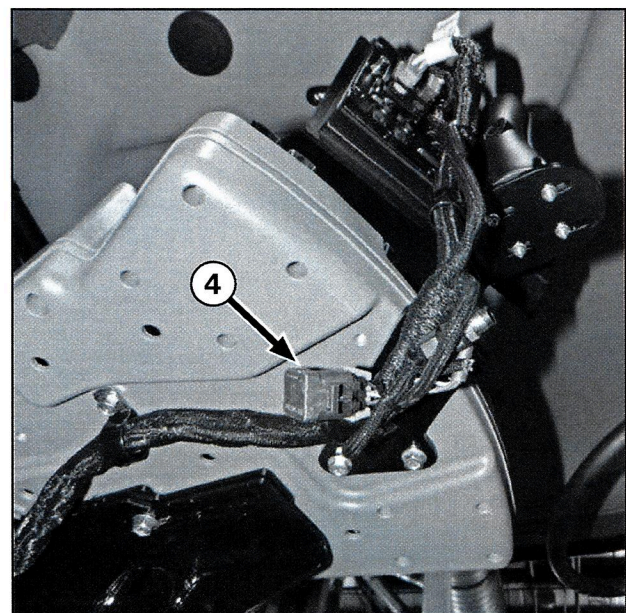
Case 1: No-node aftermarket system

- Aftermarket system cannot connect any nodes (a separate monitor for example).
- Software is operated using the Versatile UT virtual terminal (VT) screen.
- Connect armrest harness C333 (2) (labeled ISO BUS EXTENSION) to ISOBUS harness C422 (3) (labeled ISOBUS EXT).
- Connect terminator (4) (P/N 86063793) to armrest harness connector C402 (not labeled).



Case 2: Single-node aftermarket system

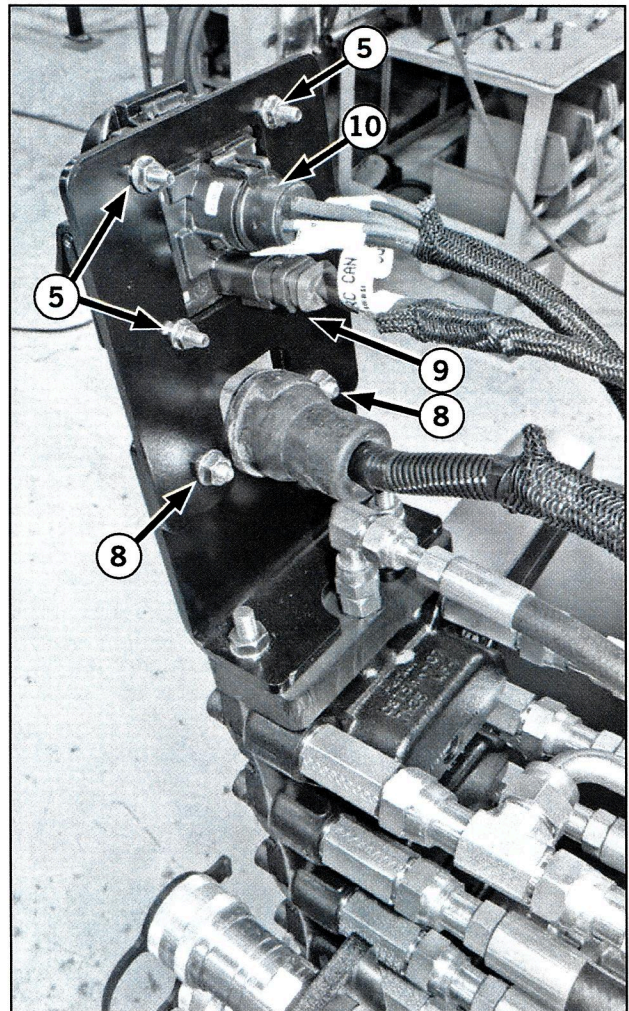
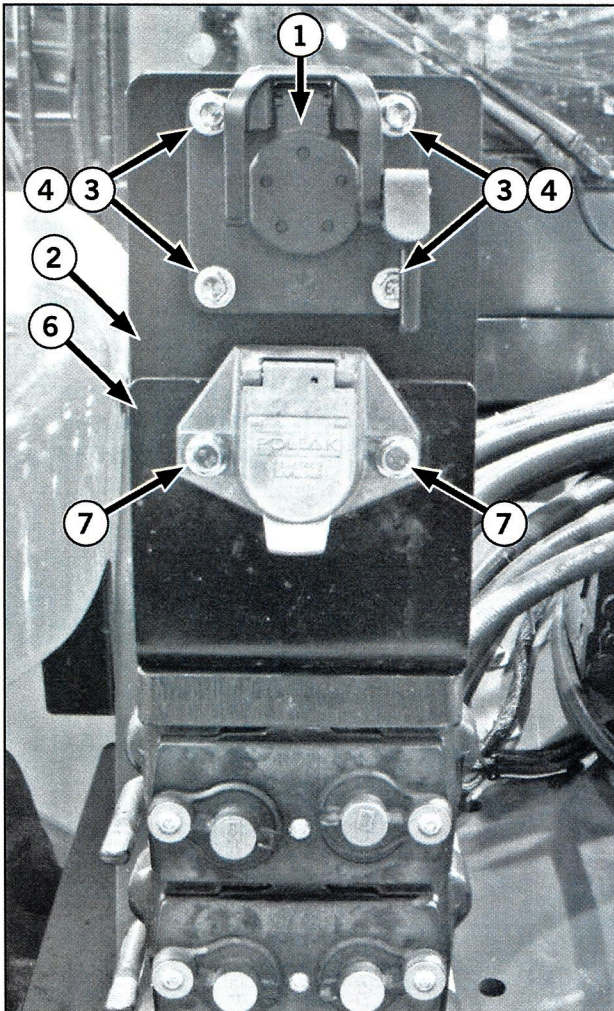
- Aftermarket system can connect a single node (a separate UT for example).
- Aftermarket harness connects to connectors labeled "ISOBUS EXTENSION" (2) and "ISOBUS EXT" (3). The aftermarket manufacturer must ensure the stub length ("stub" is the harness connected to items 2 and 3) to the aftermarket node does not exceed 1 m (39.37 in) in length, as per ISO 11783-2.
- Connect terminator (4) (P/N 86063793) to armrest harness connector C402 (not labeled).
- Software is operated using aftermarket UT or Versatile UT.



Case 3: Multiple-node aftermarket system

- Aftermarket system can connect multiple nodes (a separate UT and controller for example).
- Do not connect terminator bias circuit (TBC) terminator (4) to the armrest harness. The aftermarket system must have a TBC.
- Aftermarket harness connects to connectors labeled "ISOBUS EXTENSION" (2) and "ISOBUS EXT" (3) in lieu of the Versatile UT. These connectors are bundled at the base of the operator's seat, on the right side of the tractor
- Operator must operate the software using the aftermarket UT as the Versatile UT is disconnected from ISOBUS.

Install Components to Rear Frame



NOTE: ISOBUS harness (P/N 86057779) is used for all rear frame connections. See "P/N 86057779 - Rear Frame ISOBUS" on page 8 for a diagram.

1. Attach ISOBUS coupler (1) (P/N 86057808) to the bracket (2) (P/N 86058161) using:
 - (3) 4 bolts (P/N 09804257)
 - (4) 4 washers (P/N 86511315)
 - (5) 4 nuts (P/N 86511444)
2. Attach bracket (2) to the trailer socket bracket (6) using:
 - (7) 2 bolts (P/N 86511842)
 - (8) 2 nuts retained from existing assembly

3. Attach the ISOBUS harness connectors to coupler:
 - (9) C429 (not labeled)
 - (10) C428 (not labeled)

NOTE: Narrow frame tractor shown.

4. Route ISOBUS harness (1) along rear frame harness, to the left side (2) of the implement valve into the hose sock (3) and over the top of the support bracket. Route the harness through the hole (4) in the cab frame as shown by the white dotted line.
5. Connect ISOBUS bulkhead C410 (labeled ISO BUS) to the bulkhead plate ISOBUS port (5). If the tractor is equipped with the autosteer ready option, then the ISOBUS connector C400 replaces the autosteer connector installed at this location. Reconnect the autosteering system to ISOBUS C401 (not labeled, see page 8). Otherwise cap C401 with P/N 86055244.
6. Strap the ISOBUS harness where there is excess slack.
7. Procedure is complete.

