

GS2 Rate Controller



JOHN DEERE

INSTALLATION INSTRUCTIONS **PC20629 13NOV06 (ENGLISH)**

GS2 Rate Controller

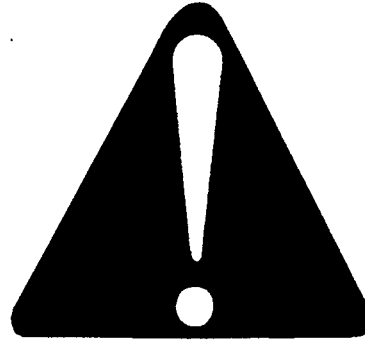
John Deere Ag Management Solutions
PC20629 (13NOV06)

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A John Deere ILLUSTRATION® Manual
PC20629-19-13NOV06

Recognize Safety Information

This is a safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to potential for personal injury.

Follow recommended precautions and safe operating practices.



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GS2 Rate Controller - Installation Overview

The GS2 Rate Controller Kit consists of the following contents:

- GS2 Rate Controller Flexbox (With cover)
- Foot Switch
- Wiring Harness
- Switch Box Controller (Optional kit)
- Implement Specific Bundle (Optional)

In order to operate the system, a GreenStar 2100 or 2600 display is required (The GreenStar Display is sold separately from the GS2 Rate Controller Kit).

Tractor or vehicle must be ready with implement/ISO connector installed (sold separately).

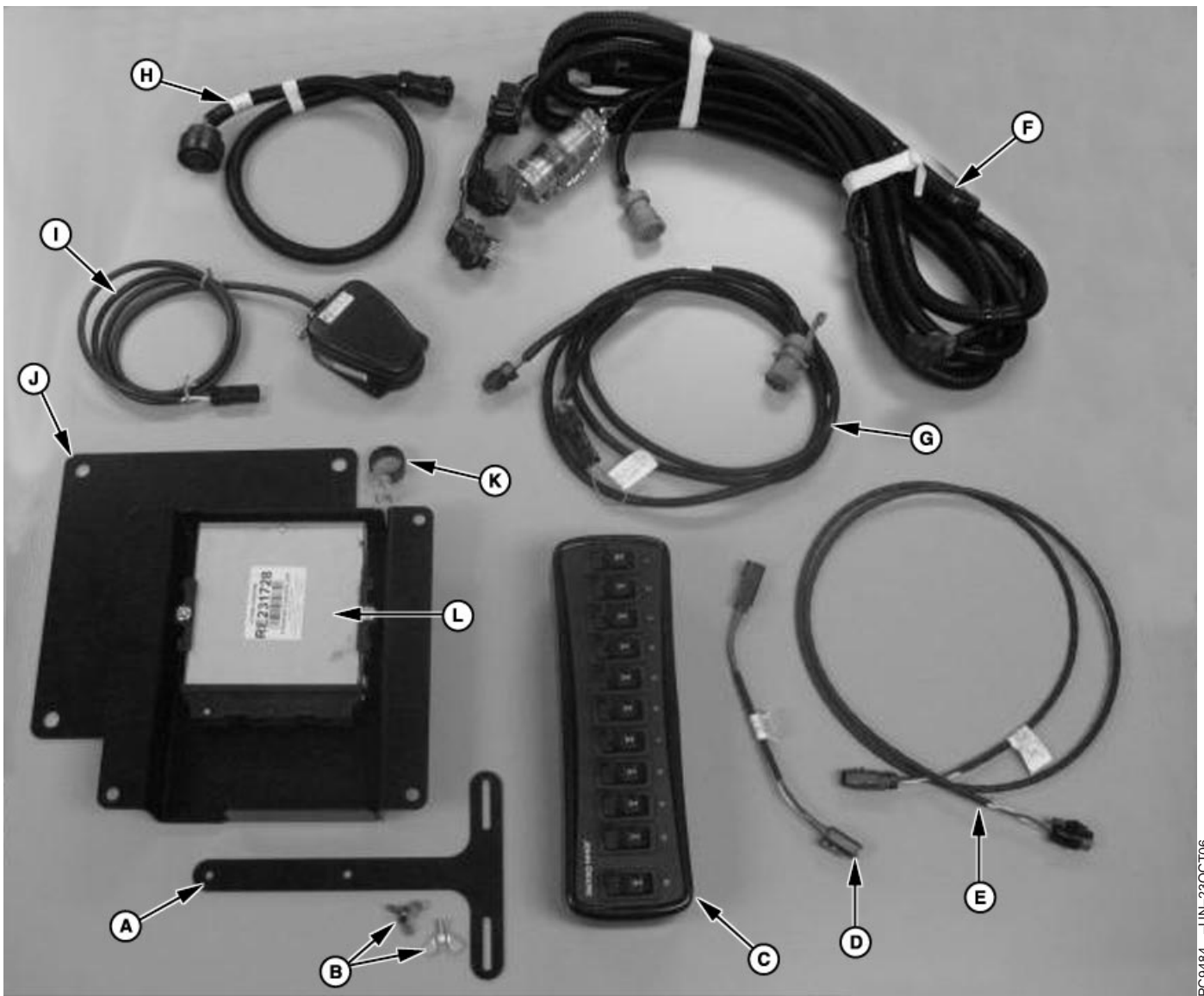
A StarFire iTC GPS Receiver and Swath Control Pro software are recommended in order to fully take advantage of the mapping and guidance capability of the GS2 Rate Controller,

Installation involves the following steps:

1. Install optional switch box.
2. Install tractor side wiring harness.
3. Install main harness.
4. Attach controller.

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Contents of GS2 Rate Controller Kit

- | | | | |
|-----------------------------------|--|---|--|
| A—"T" Bracket, PF12651 | E—Master Switch Extension Harness, PF80992 | H—Sprayer Adapter Harness, PF81008 (may vary) | K—Harness Clamp, T27550 |
| B—Wing Bolts, PF80912 | F—Main Harness, PF80993 | I—Foot Switch, PF81045 | L—Controller with Cover, PF81019 (controller only) |
| C—Switch Box, PF81000 | G—Tractor Side Harness, PF80989 | J—Controller Mounting Plate, PF12621 | |
| D—Switch Box CAN Harness, PF80991 | | | |

Also included in the kit are:

- Manuals
- Tie Bands
- Bolts (Used for mounting the controller plate and attaching the controller cover)

NOTE: Parts A, B, C, D, and E are part of the optional switch box kit.

NOTE: The sprayer adapter harness may differ depending upon the type of sprayer.

Installing Optional Switch Box



Installing Switch Box

A—"T" Bracket
B—Mounting Plate

C—Wing Bolts

D—Switch Box

E—GS2 Display

1. Insert "T" Bracket between the GS2 Display and the mounting plate.

NOTE: Switch Box can be mounted above or below the GS2 Display.

2. Tighten wing bolts to secure "T" Bracket and GS2 Display.

3. Attach Switch Box to "T" Bracket.
4. Tighten wing bolts to secure Switch Box to "T" Bracket.

NOTE: Switch Box can be slid left or right on "T" Bracket to desired placement.

Tractor Side Harness

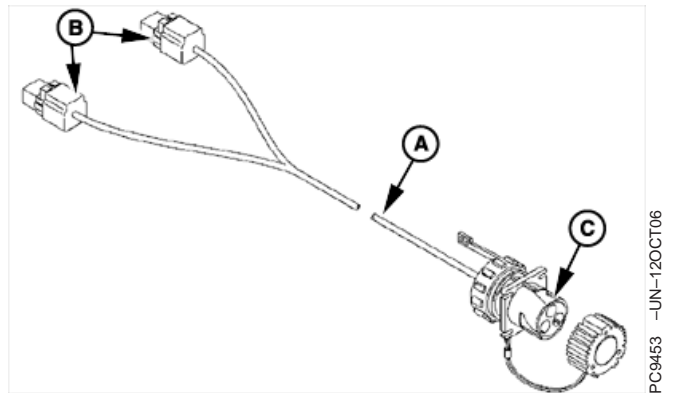
The tractor side harness connects the master foot switch and the master switch on the optional switch box to the main sprayer harness.

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Installing Tractor Side Harness

1. Connect one 2-pin connector to the foot switch.
2. Connect the second 2-pin connector to the switch box. Both 2-pin connectors are identical and can be interchanged between the foot switch and switch box.

A—Tractor Side Harness
 B—Master Switch 2-Pin Connector
 C—3 Pin Connector



Tractor Side Harness

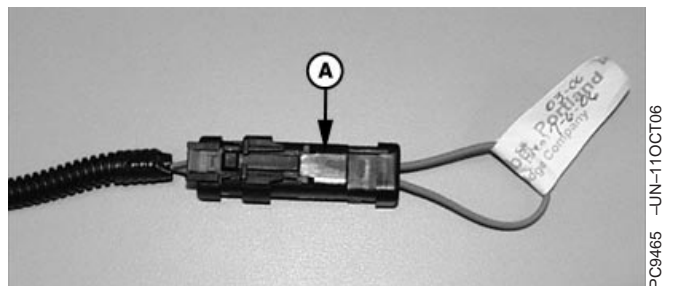
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JS56696,0000071 -19-16OCT06-2/9

- If both 2-pin connectors are being used, remove the tractor side harness end jumper cap from the second 2-pin connector.

Do not discard jumper cap. If foot switch or switch box becomes no longer necessary, the jumper cap must be reinstalled.

A—Tractor Side Harness Jumper Cap



Jumper Cap

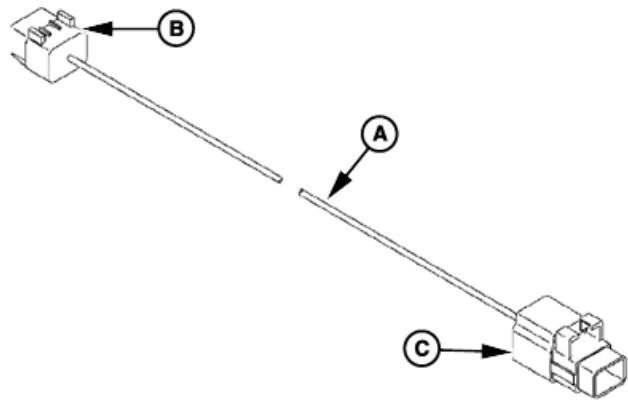
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JS56696,0000071 -19-16OCT06-3/9

- The included master switch extension harness may be necessary to connect the switch box to the tractor side harness.

A—Master Switch Extension Harness
 B—2-Pin Connector to Tractor Side Harness
 C—2-Pin Connector to Switch Box



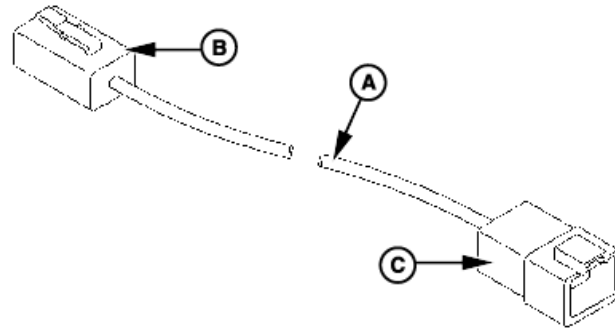
Master Switch Extension Harness

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- Connect switch box CAN harness to the existing GS2 harness and the switch box.

A—Switch Box CAN Harness
 B—Switch Box Connector
 C—GS2 Harness Connector

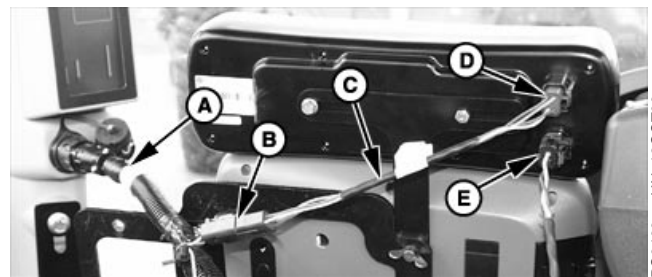


Switch Box CAN Harness

PC9452 -UN-12OCT06

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A—Existing GS2 Harness
 B—GS2 Harness Connector
 C—Switch Box CAN Harness
 D—Switch Box Connector
 E—Master Switch Connector

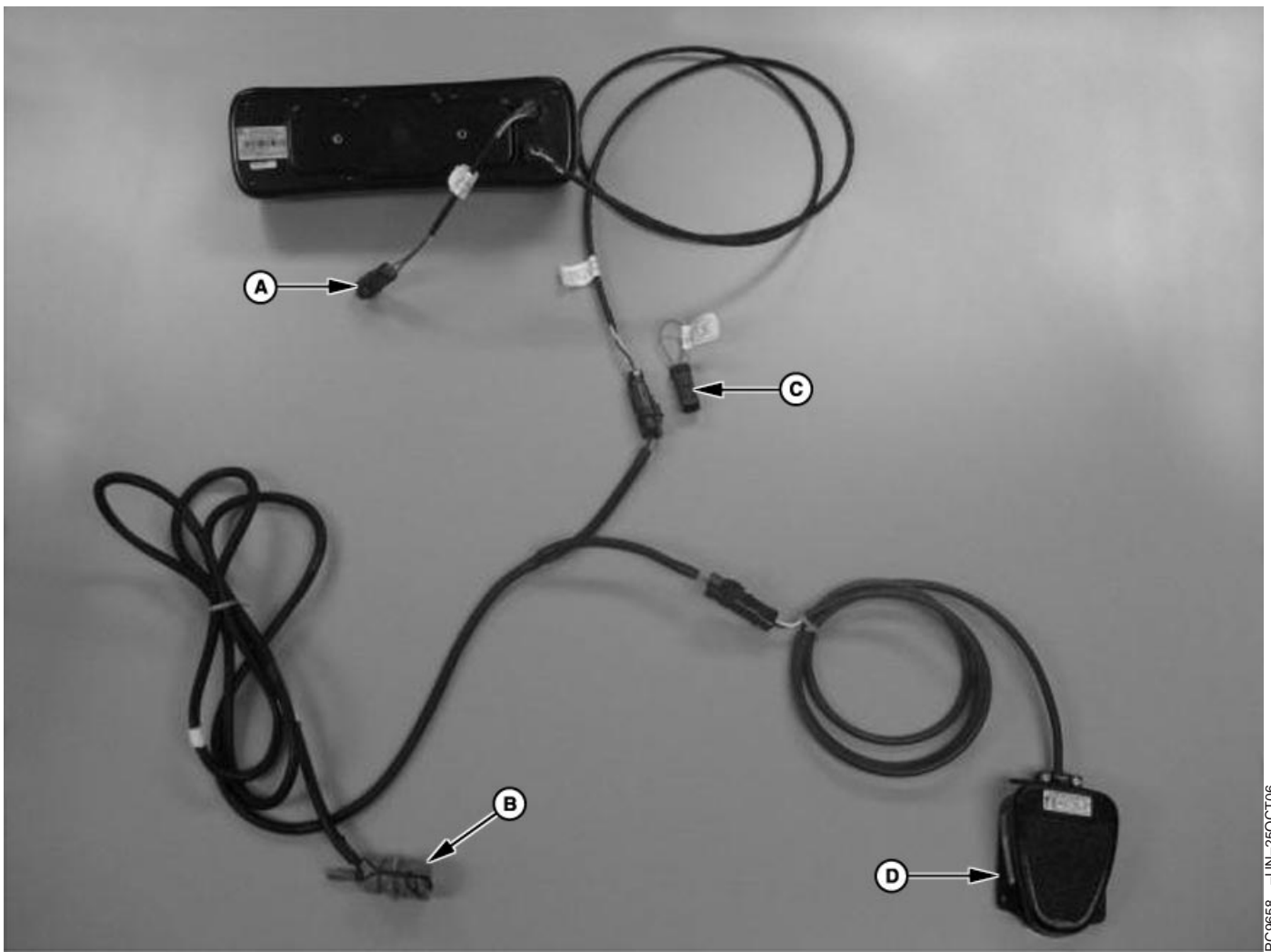


Switch Box CAN Harness

PC9466 -UN-12OCT06

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Tractor Side Harness

**A—To Existing GS2 Display
Harness**

B—To Main Harness

**C—Jumper Cap Shown
Removed for Switch Box
Attachment**

D—Foot Switch

The above picture illustrates the tractor side harness with foot switch and switch box connectors attached.

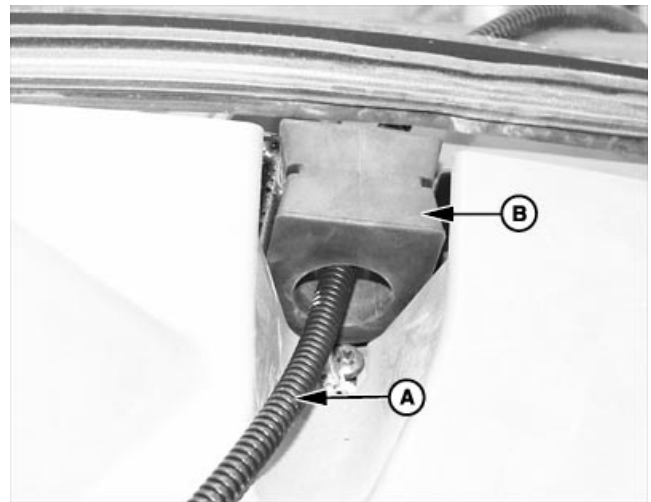
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Routing Tractor Side Harness

1. Route tractor side harness along the floor of the cab by the control console up to the back window.
2. Make a hole in the rubber boot located in the back window.
3. Route tractor side harness through the rubber boot.
4. Secure the 3 pin adapter in an available hole in the implement harness bracket located on back of tractor.

A—Tractor Side Harness
B—Rubber Boot

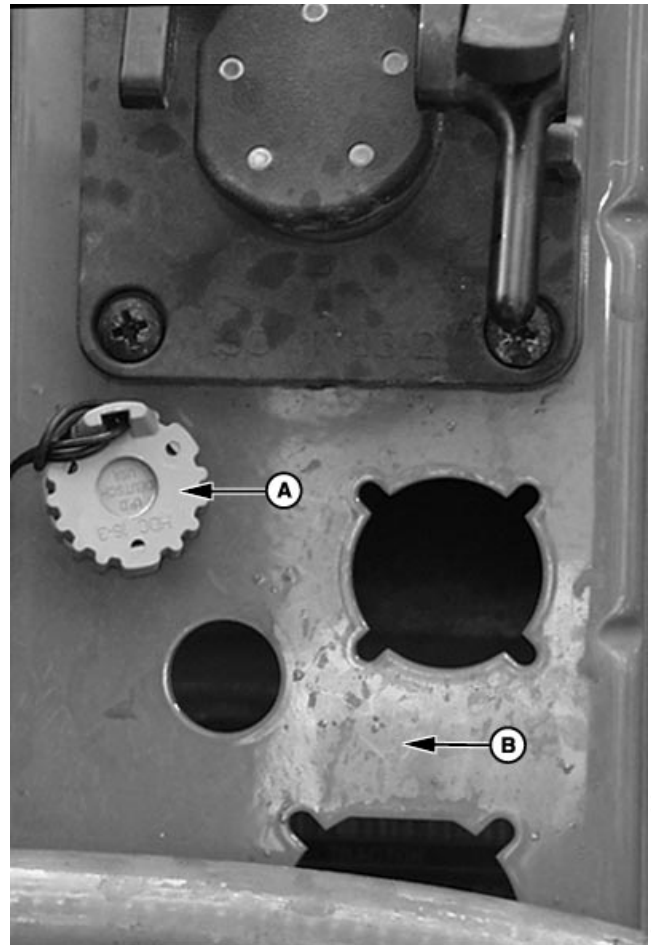


Rubber Boot

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A—3 Pin Circular Connector
B—Implement Harness Bracket

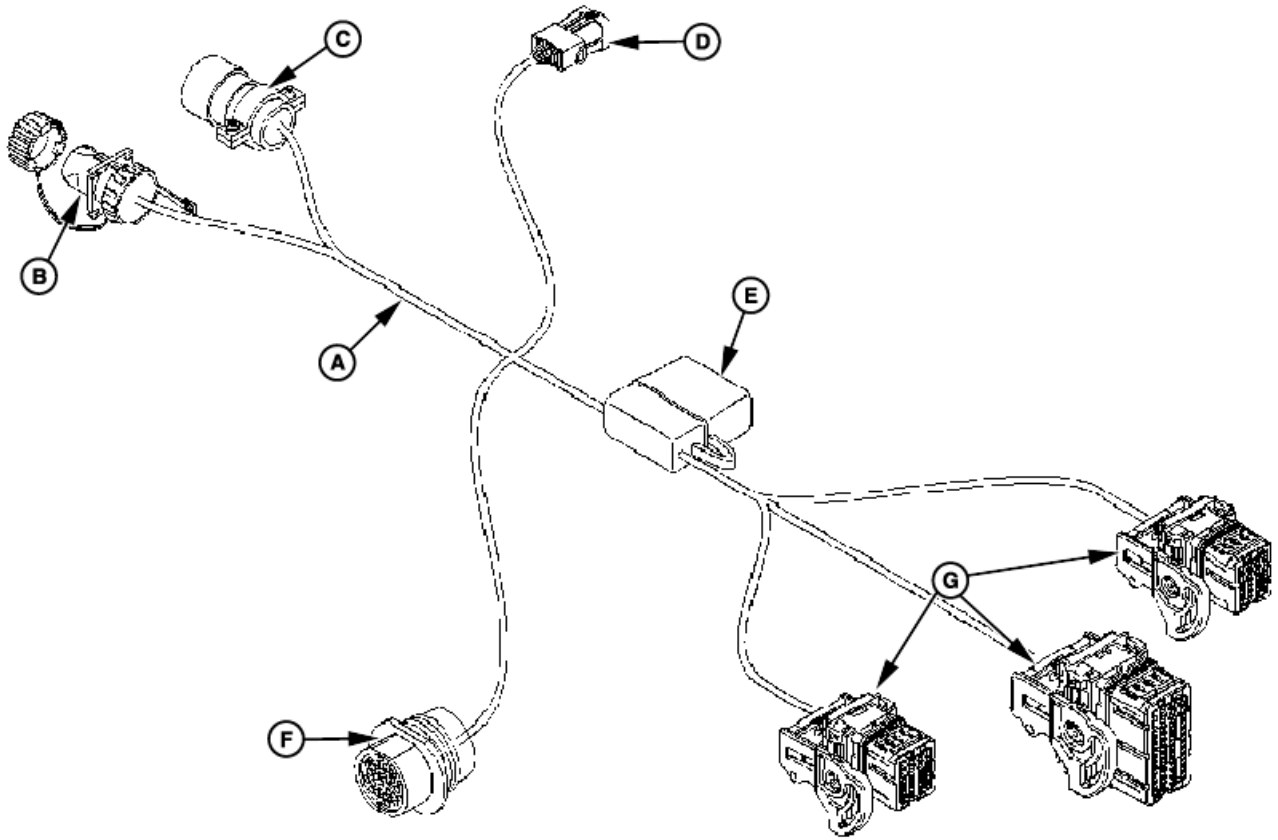


Implement Harness Bracket

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Installing Main Harness



Main Harness

A—Main Harness
B—3 Pin Connector

C—9 Pin Implement
Connector

D—CAN Terminator
E—Limp Home Fuse

F—31 Pin Deutsch Connector
G—Rate Controller Connector

Installing Main Harness

1. Connect the 3 pin connector (B) to the newly installed tractor side harness located on the implement harness bracket.

- Dust caps from both 3 pin connectors may be connected together to prevent loss of a dust cap.

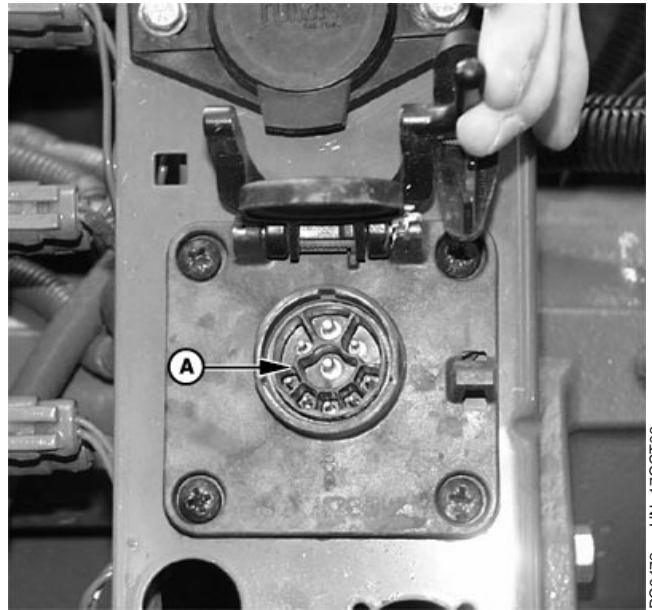
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JS56696,0000070 -19-16OCT06-1/5

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2. Connect the 9 pin implement connector (C) harness to the 9 pin IBBC connector located on the implement harness bracket.
3. Route main harness from the tractor to the sprayer in any available safe location.
4. Connect the 31 pin Deutsch connector on the main harness to the supplied sprayer adapter harness.

A—9 Pin IBBC (Implement Bus Breakaway Connector)



9 Pin IBBC Connector on Implement Harness Bracket

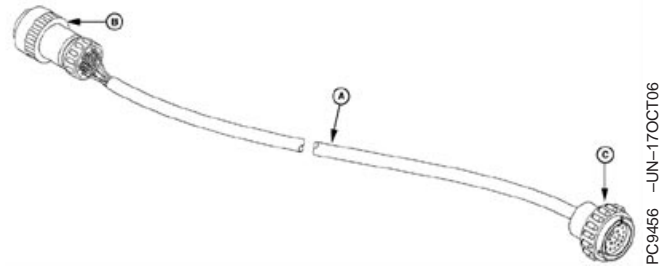
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5. Connect the 16 pin connector on the sprayer adapter harness to the sprayer harness.

NOTE: Sprayer adapter harness may vary depending upon sprayer type.

IMPORTANT: See Section 50 in GS2 Rate Controller Operator's Manual for 16-Pin and 31-Pin Connectors Pin-Out Tables.

6. Connect the three GS2 Rate Controller connectors to the GS2 Rate Controller Flexbox.

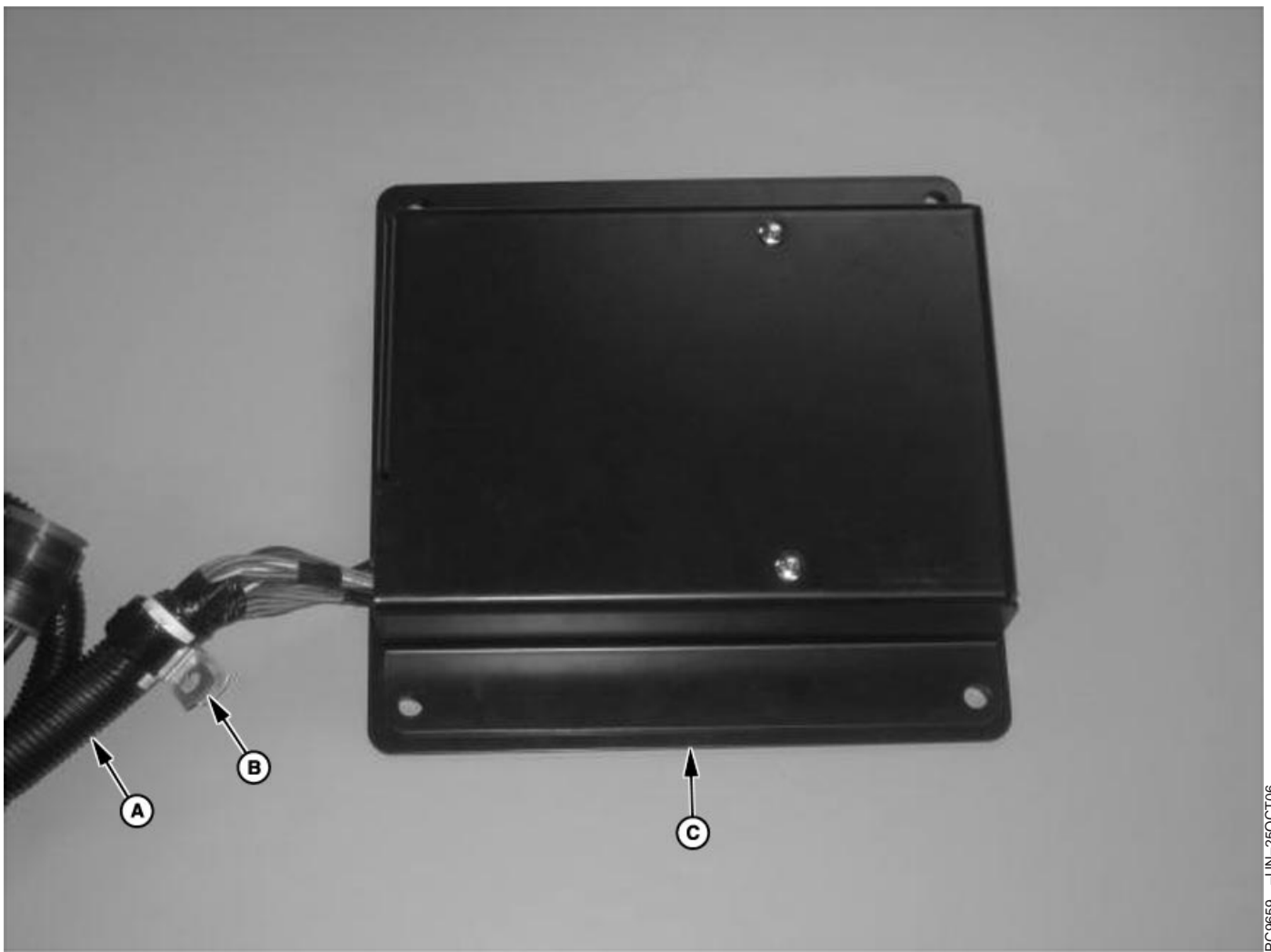


Sprayer Harness Adapter

**A—Sprayer Harness Adapter
B—31 Pin Deutsch Connector
C—16 Pin Connector**

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GS2 Rate Controller Flexbox

A—Main Harness

B—Clamp

C—Controller with Cover

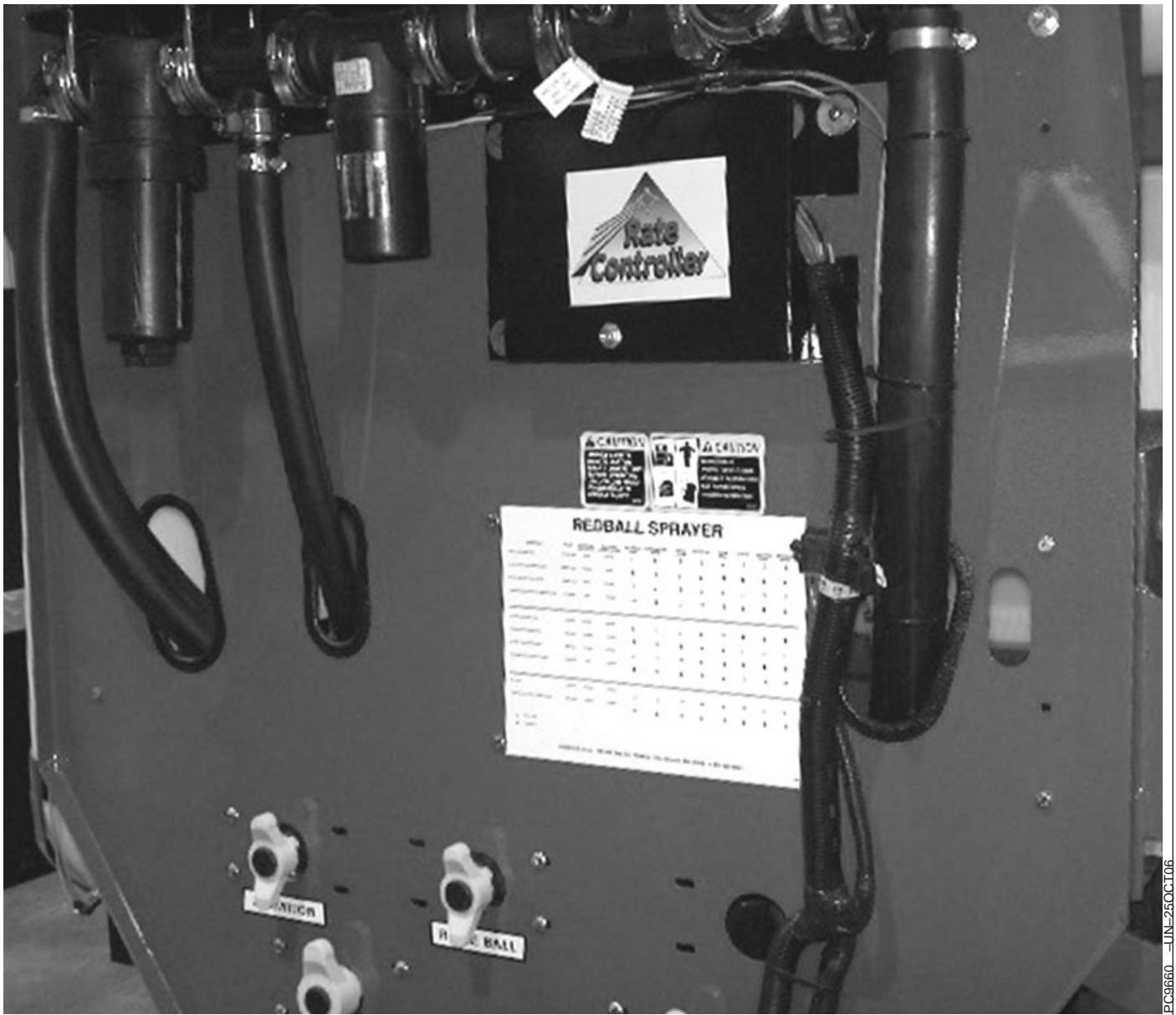
Installing and Mounting Controller Flexbox

1. With connector attached to controller, mount controller and cover to sprayer with bolts provided. Use back mounting plate if necessary.

2. Insert bolt through clamp (B) when attaching cover to provide harness strain relief.

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GS2 Rate Controller Flexbox Mounted on REDBALL® Sprayer

JS56696,0000070 -19-16OCT06-5/5

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