

# ReconBlockage™

## Installation Manual

Document number 600840-000069

Revision 2.1

Last revised: July 25, 2024



# **ReconBlockage™ Installation Manual**

© 2024 Precision Planting LLC. All Rights Reserved.

ReconBlockage Installation Manual. All content within is copyrighted by Precision Planting LLC and may not be reprinted without permission.

The content of this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Precision Planting LLC. Precision Planting LLC assumes no responsibility or liability for any errors or inaccuracies that may appear in the content contained in this guide.

Recon and ReconBlockage are trademarks or registered trademarks of Precision Planting LLC. Precision Planting and the Precision Planting logo are trademarks or registered trademarks of Precision Planting LLC. iPad is a registered trademark of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc. All other trademarks are property of their respective owner.

Precision Planting LLC, 23207 Townline Rd, Tremont, IL 61568 USA.

Visit us online at [precisionplanting.com](https://precisionplanting.com)  
Questions? E-mail us at [support@precisionplanting.com](mailto:support@precisionplanting.com)

# Table of Contents

- Related Documentation..... 5**
- 1. Introduction ..... 6**
  - 1.1. About ReconBlockage™ ..... 6
  - 1.2. Required Tools and Equipment ..... 6
  - 1.3. Installation Overview..... 6
- 2. Installing Flow Sensors ..... 7**
- 3. Installing ECUs..... 9**
- 4. Connecting Auditory Tubes to ECUs..... 15**
- 5. Installing the Work Switch..... 17**
  - 5.1. Installing the Work Switch..... 18
  - 5.2. Verifying Work Switch Installation ..... 18
- 6. Installing the Gateway ..... 19**
- 7. Installing the Wi-Fi Antenna ..... 21**
- 8. Installing Harnessing..... 24**
  - 8.1. Installing 10’ ECU Harnesses (353050-000099) (dual-shoot and triple-shoot only) ..... 24
  - 8.2. Installing 20’ ECU Harnesses (353050-000097)..... 25
  - 8.3. Installing the Gateway Harness (353050-000108 or 353050-000101) ..... 25
  - 8.4. Installing the Gateway Extension Harnesses (353050-000103) (Tow-Between Only) ..... 26
  - 8.5. Installing the Power Harness (353050-000098) ..... 26
  - 8.6. Installing the Tractor Harness (353050-000100)..... 26
  - 8.7. Securing Loose Harnessing..... 26
- 9. Installing the iPad Mount and App..... 27**
  - 9.1. Installing the iPad Mount ..... 27
  - 9.2. Downloading the ReconHub app..... 28
  - 9.3. Connecting the iPad to the Wireless Network ..... 28
- Appendix A: Wiring Harness Diagrams ..... 30**
- Appendix B: System Configuration Table..... 38**

## List of Figures

- Figure 1: Flow sensor .....7
- Figure 2: Flow sensor installation location .....7
- Figure 3: Installing flow sensors on a manifold .....8
- Figure 4: Correctly placing the hose clamps .....8
- Figure 5: ECU .....9
- Figure 6: ECU installation location .....9
- Figure 7: ECU installed on a tower (standard installation) ..... 10
- Figure 8: Installing the ECUs from left to right ..... 10
- Figure 9: Securing ECU to brackets ..... 11
- Figure 10: ECU installed on a tower (horizontal installation)..... 12
- Figure 11: Installing the ECUs from left to right ..... 13
- Figure 12: Securing ECU to brackets ..... 13
- Figure 13: Auditory tube ..... 15
- Figure 14: Order to connect flow sensors to ECU..... 16
- Figure 15: Work switch ..... 17
- Figure 16: Work switch mounting location..... 17
- Figure 17: Work switch functionality ..... 18
- Figure 18: Mounting a gateway..... 19
- Figure 19: Example gateway mounting locations ..... 20
- Figure 20: Mounting the Wi-Fi antenna ..... 21
- Figure 21: Example Wi-Fi antenna mounting locations..... 22
- Figure 22: Gateway connections..... 23
- Figure 23: Installing the iPad mount ..... 27

<b>Related Documentation</b>	
<b>Document Number</b>	<b>Document Title</b>
600820-000044	ReconBlockage Quick Reference Guide
600820-000045	ReconBlockage Troubleshooting Guide
600890-000075	ReconBlockage Operator's Guide

# 1. Introduction

## 1.1. About ReconBlockage™

ReconBlockage by Precision Planting® is an acoustic-based monitoring system that quickly and accurately notifies operators of blockages anywhere in their implement. Operators interact with the system via an iPad® app in the tractor cab.

Use the ReconHub app on your iPad® to monitor your system's performance. For instructions to configure the system after installation and use the app, see the ReconBlockage Operator's Guide from the app's About and Support tab.

For current documentation, iPad and software requirements, and other resources, visit [cloud.precisionplanting.com/product-resources](http://cloud.precisionplanting.com/product-resources).

## 1.2. Required Tools and Equipment

You will need the following tools and equipment to install ReconBlockage:

- Standard wrench and socket sets
- Measuring tape
- Cutting tool, such as a PEX tubing cutter, box cutter, or shears
- Pliers
- Phillips screwdriver
- Cordless drill and/or flathead screwdriver (optional)
- Paint pen or other permanent marking tool (optional)

## 1.3. Installation Overview

**ESTIMATED INSTALL TIME:** 6 hours

- Install flow sensors
- Install ECUs
- Connect auditory tubes to ECUs
- Install work switch
- Install gateway
- Install Wi-Fi antenna
- Install harnessing
- Install iPad mount and download app

## 2. Installing Flow Sensors

Flow sensors detect when product is flowing through the run.

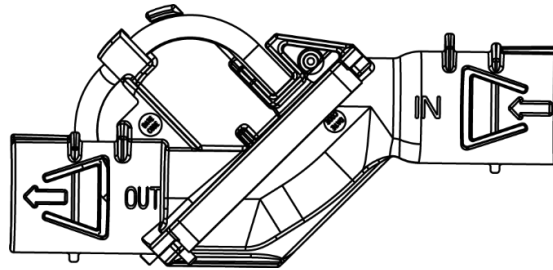


Figure 1: Flow sensor

### Provided Parts

Part Name	Part Number	Quantity
1-inch flow sensor <i>or</i> 1.25-inch flow sensor	153510-000022 <i>or</i> 153510-000066	1/run
Adapter (optional)	353070-000022 <i>or</i> 353070-000112 <i>or</i> 353070-000252	2/run
Hose clamp	356060-000025	2/run

### Tools Needed

- 5/16 inch socket, 5/16 inch nut driver on a cordless drill, or a flathead screwdriver
- Measuring tape
- Cutting tool, such as a PEX tubing cutter, box cutter, or shears

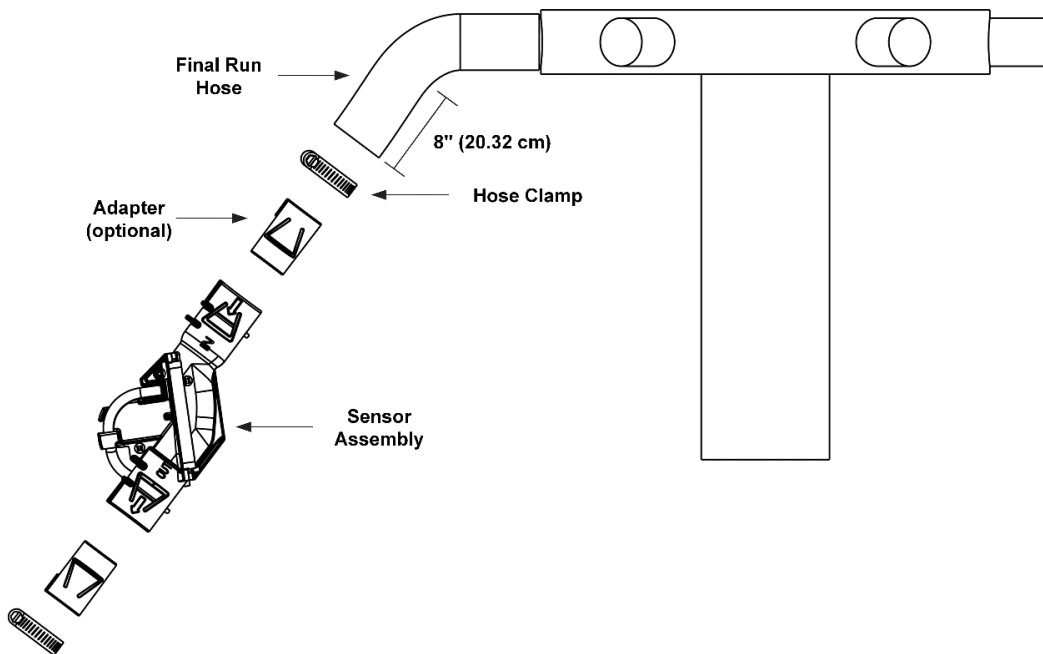
### Installation Location

Installed at the beginning of every final run hose.



Figure 2: Flow sensor installation location

## Installing Flow Sensors



**Figure 3: Installing flow sensors on a manifold**

1. If you are using adapters, snap them into the sensor in the orientation shown in Figure 3.
2. Cut each original run hose to about 8 inches (20.32 cm), or other length that allows for a downward flow and appropriate fit once the sensor and adapters (if applicable) are installed.
3. Orient the sensor (153510-000022 or 153510-000066) so that the flow arrows point away from the manifold. Slide a sensor assembly on each final run hose piece until the hose piece hits the backstop inside of the sensor assembly. Make sure that you install the sensor so that the auditory tube is pointing up.
4. Secure using a hose clamp (356060-000025) between the two ridges on the end of the sensor assembly, ensuring that the hose clamp lays flat and the head (worm drive) does not hit the sensor ridge, as shown in Figure 4.



**Figure 4: Correctly placing the hose clamps**

5. Slide the remaining final hose piece into the lower end of the sensor assembly until the hose piece hits the backstop inside of the sensor assembly. Secure using a hose clamp between the two ridges on the end of the sensor assembly, ensuring that the hose clamp lays flat, and the head (worm drive) does not hit the sensor ridge.



### 3. Installing ECUs

Electronic Control Units (ECUs) communicate the flow measurement data recorded by the flow sensors to the gateway.



Figure 5: ECU

#### Tools Needed

- Standard socket set

#### Installation Location

Installed underneath each implement manifold.

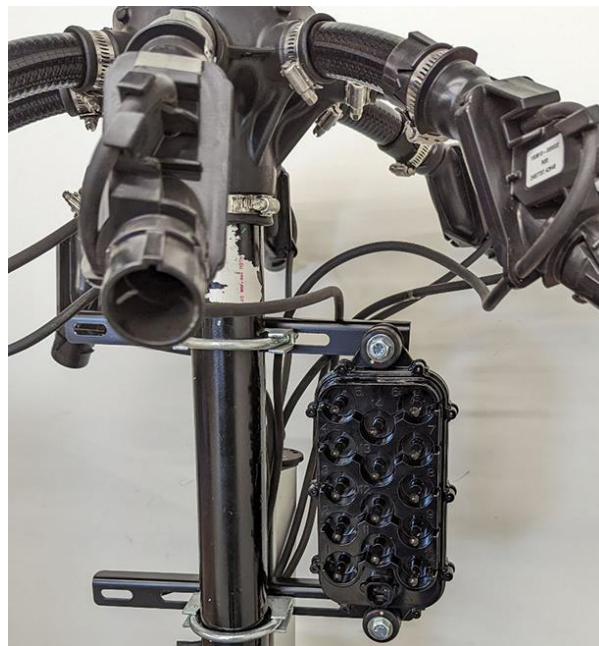


Figure 6: ECU installation location

## Installing the ECUs (Standard Orientation)

**NOTE:** This section is for installing the ECUs in the standard (vertical) orientation. If your dealer ordered you a horizontal mounting kit, skip this section and use the instructions in *Installing the ECUs (horizontal installation)*.

### Provided Parts

Part Name	Part Number	Quantity
ECU	153510-000182	1/manifold (for standard setup)
3/8" lock nut	352011-000045	2/ECU
3/8" flat washer	352012-000031	4/ECU
2.5" diameter U-bolt <i>or</i> 5" diameter U-bolt	352013-000007 <i>or</i> 356060-000108	2/manifold
Vibration damping mount	353070-000239	2/ECU
ECU mounting bracket	353070-000490	2/manifold
3/8" x 2.5" bolt	356060-000237	2/ECU



1 ECU per manifold



2 ECUs per manifold

**Figure 7: ECU installed on a tower (standard installation)**

**NOTE:** ECUs can be mounted in any order; however, we recommend installing the ECUs in numeric order from left to right (when facing the back of the tractor) based on the ECU's serial number. The serial number is located on the front of the ECU. Use the table in Appendix B to record your system setup.

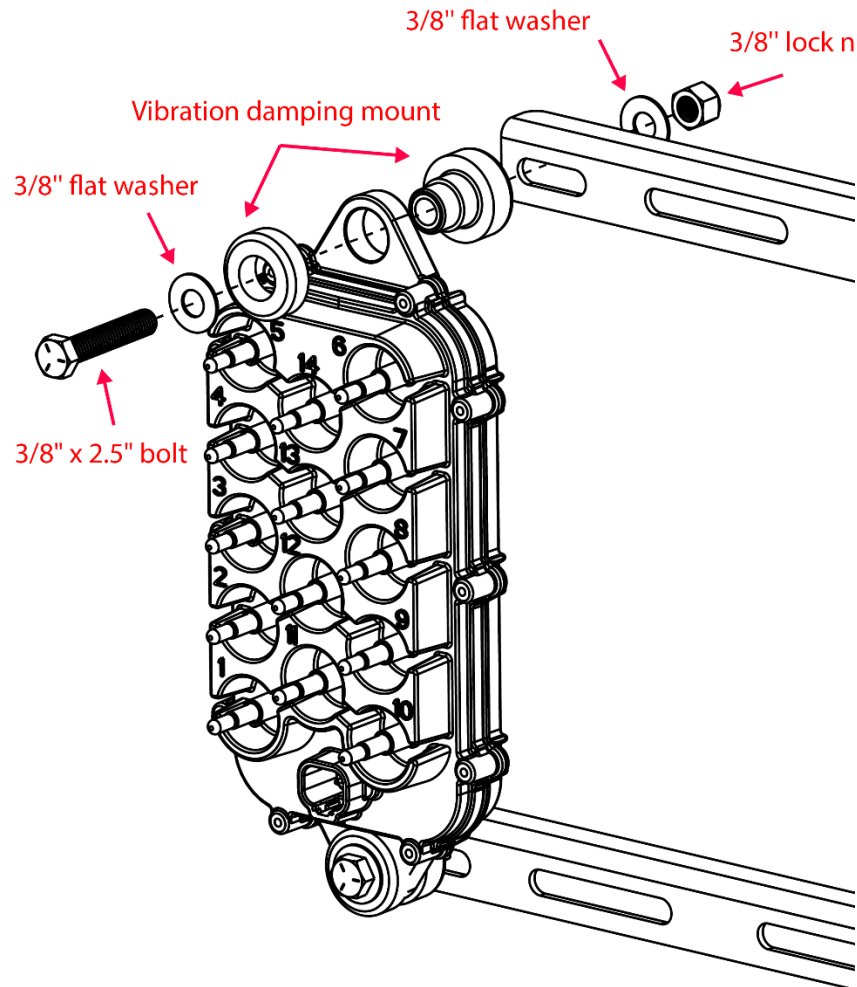


**Figure 8: Installing the ECUs from left to right**

1. Determine the number of ECUs (153510-000182) you need per manifold. The number of ECUs you use depends on the number of runs per manifold.

Runs per Manifold	ECUs
7 or fewer	1 ECU for 2 manifolds
8-14	1 ECU per manifold
More than 14	2 ECUs per manifold

2. Secure the top and bottom of the ECU to a bracket using a 3/8" x 2.5" bolt (356060-000237), washers (352012-000031), vibration damping mount (353070-000239), and lock nut (352011-000045) as shown in Figure 9. Hand tighten.



**Figure 9: Securing ECU to brackets**

3. If you're using 2 ECUs per manifold, install another ECU onto the other end of the brackets.
4. Orient the ECU so that the LED faces the tractor (recommended). Use u-bolts (352013-000007 or 356060-000108) to secure the center of the brackets to the manifold post, right below the manifold. Hand tighten.
5. Adjust the assembly as needed and fully tighten the hardware.

## Installing the ECUs (Horizontal Installation)

**NOTE:** This section is for installing the ECUs in the horizontal orientation. If you've already installed your ECUs in the standard (vertical) installation, skip this section.

### Provided Parts

Part Name	Part Number	Quantity
ECU	153510-000182	1/manifold (for standard setup)
3/8" lock nut	352011-000045	2/ECU, plus 2
3/8" flat washer	352012-000031	4/ECU, plus 4
2.5" diameter U-bolt <i>or</i> 5" diameter U-bolt	352013-000007 <i>or</i> 356060-000108	1/manifold
Vibration damping mount	353070-000239	2/ECU
ECU mounting bracket	353070-000490	2/ECU, plus 1
3/8" x 1" bolt	356060-000400	2/manifold
3/8" x 2.5" bolt	356060-000237	2/ECU



**Figure 10: ECU installed on a tower (horizontal installation)**

**NOTE:** ECUs can be mounted in any order; however, we recommend installing the ECUs in numeric order from left to right (when facing the back of the tractor) based on the ECU's serial number. The serial number is located on the front of the ECU. Use the table in Appendix B to record your system setup.



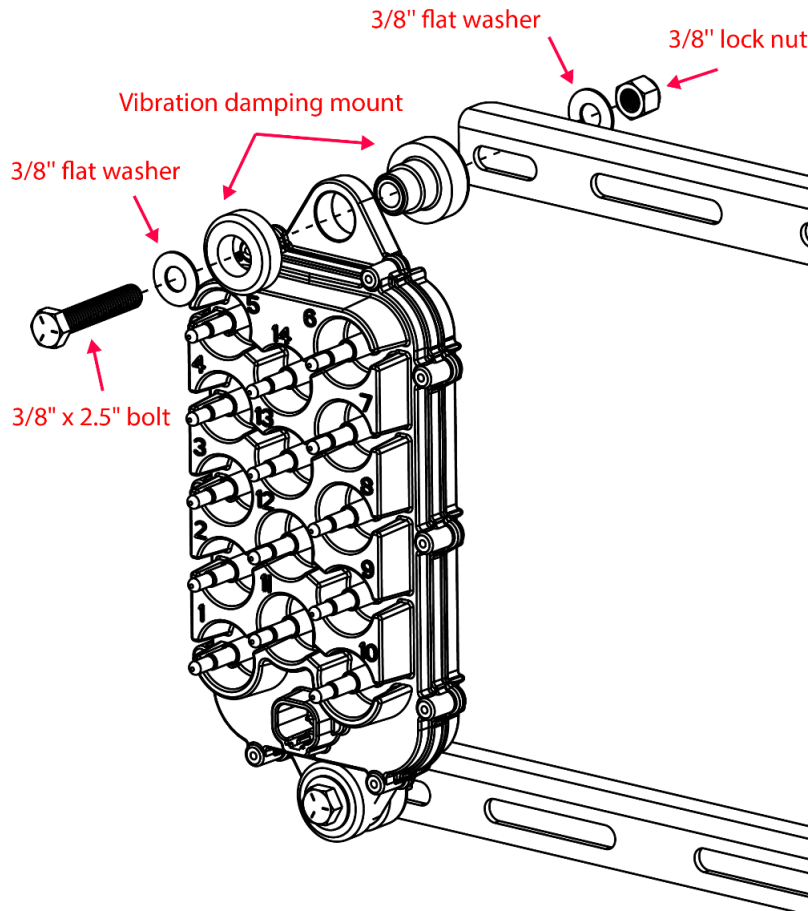


**Figure 11: Installing the ECUs from left to right**

1. Determine the number of ECUs (153510-000182) you need per manifold. The number of ECUs you use depends on the number of runs per manifold.

Runs per Manifold	ECUs
7 or fewer	1 ECU for 2 manifolds
8-14	1 ECU per manifold
More than 14	2 ECUs per manifold

2. Secure the top and bottom of the ECU to a bracket using a 3/8" x 2.5" bolt (356060-000237), washers (352012-000031), vibration damping mount (353070-000239), and lock nut (352011-000045) as shown in Figure 12. Hand tighten.



**Figure 12: Securing ECU to brackets**

3. If you're using 2 ECUs per manifold, install another ECU onto the other end of the brackets.

4. Use 3/8" x 1" bolts (356060-000400), washers (352012-000031), and locknuts (352011-000045) to install a third bracket across the center of the two brackets, as shown in Figure 10.
5. Orient the ECU so that the LED faces the tractor (recommended). Use a u-bolt (352013-000007 or 356060-000108) to secure the center bracket to the manifold post. Hand tighten.
6. Adjust the assembly as needed and fully tighten the hardware.

## 4. Connecting Auditory Tubes to ECUs

The auditory tubes on the sensors allow sound to be transmitted from the sensor to the ECU.

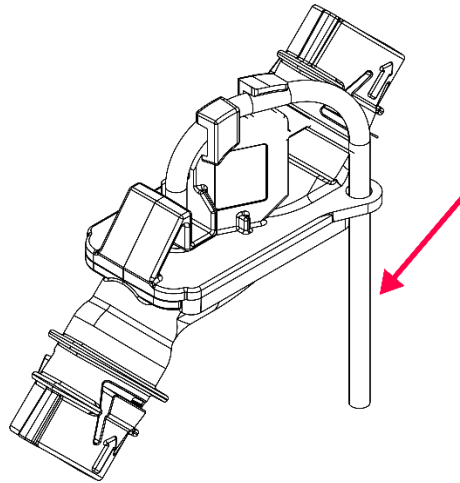


Figure 13: Auditory tube

### Tools Needed

- Pliers
- Paint pen or other permanent marking tool (optional)

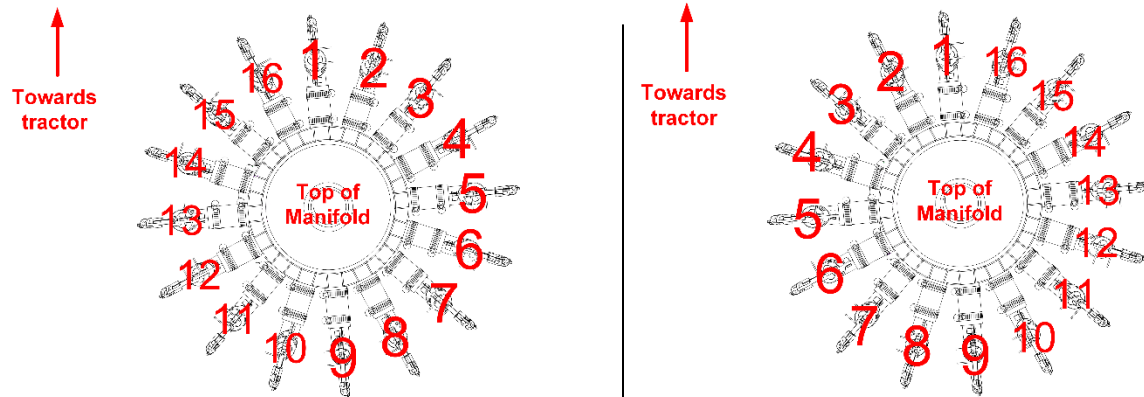
### Connecting Auditory Tubes to ECUs

**IMPORTANT:** Do not cut or change the length of the auditory tubes. This will cause incorrect readings.

1. Remove the caps from the ECU ports that you will be using, beginning with ECU port 1. You will use one ECU port per sensor on the manifold. The number of ECUs you use depends on the number of runs per manifold.

Runs per Manifold	ECUs
7 or fewer	1 ECU for 2 manifolds
8-14	1 ECU per manifold
More than 14	2 ECUs per manifold

2. Locate the auditory tube of the sensor that is closest to the tractor when facing the back of the tractor (labeled “1” in Figure 14) and route it toward the ECU. connect the auditory tube to the port labeled “1”. Make sure that the hose is not kinked.



**Figure 14: Order to connect flow sensors to ECU**

**Default order on left (clockwise), Reverse order on right (counterclockwise)**

3. **Optional:** Mark the flow sensor hose with the ECU port number that the sensor is connected to.
  4. Continue connecting auditory tubes to the ECU, working clockwise around the manifold as shown in Figure 14.
- NOTE:** If you connect ports in the reverse order, you can change the run direction while configuring the system in the app.
5. Make sure that unused ECU ports are covered with the caps originally supplied on the ECU.



**WARNING:** Damage can occur, and warranty may be voided if unused ports are not covered.



## 5. Installing the Work Switch

The work switch signals to the app when the implement is in or out of the ground.



Figure 15: Work switch

### Provided Parts

Part Name	Part Number	Quantity
Work switch assembly	353070-000534	1

### Tools Needed

- None

### Installation Location

Installed in a location where the work switch tilts from one end to the other when the toolbar is changing from raised to lowered positions.



Figure 16: Work switch mounting location

## 5.1. Installing the Work Switch

The work switch is a mercury switch, meaning the switch is engaged when the mercury inside is tilted toward the wires and it contacts the electrical leads.

Mount the work switch (353070-000534) in a location where the work switch tilts from one end to the other when the toolbar is changing from raised to lowered positions.

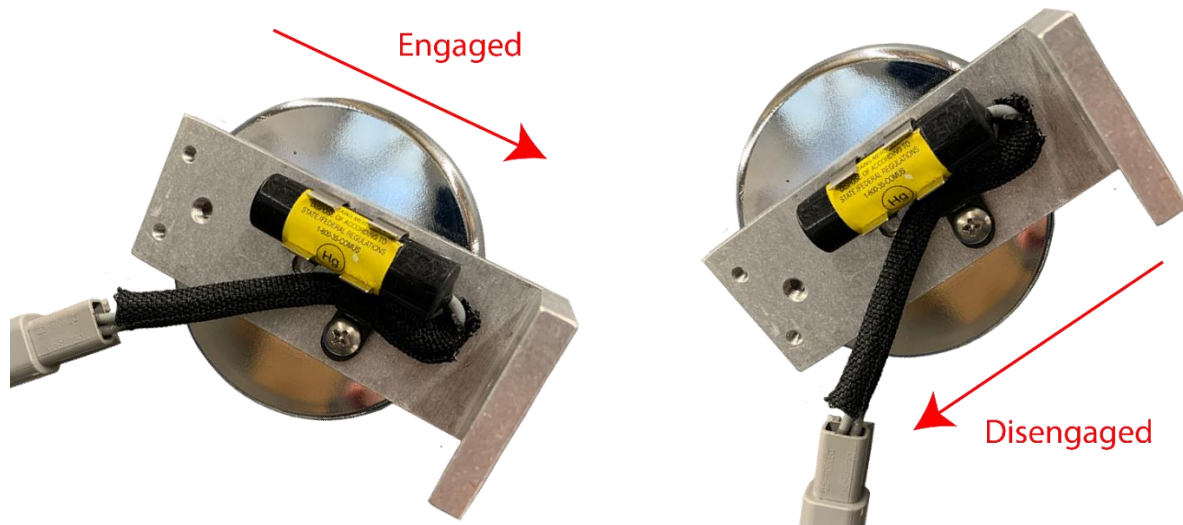


Figure 17: Work switch functionality

## Determining Work Switch Method

The work switch uses one of two methods to determine when the implement is in the ground:

- **Default method**
  - The work switch is **tilted toward the wires** when the implement is **in the ground**.
  - The work switch is **tilted away from the wires** when the implement is **out of the ground**.
- **Inverted method**
  - The work switch is **tilted away from the wires** when the implement is **in the ground**.
  - The work switch is **tilted toward the wires** when the implement is **out of the ground**.

Take note of your work switch method. It will be configured during system configuration in the app. See the ReconBlockage Operator's Guide (document number 600890-000075) for instructions.

## 5.2. Verifying Work Switch Installation

Refer to Section 2.3 of the Operator's Guide for instructions to verify that the work switch was correctly installed and configured.

## 6. Installing the Gateway

The gateway is a computing platform that sends ECU data to the iPad through the Wi-Fi antenna.

### Provided Parts

Part Name	Part Number	Quantity
Gateway 260	153010-000085	1
1/4" flat washer	352012-000002	8
Gateway mounting bracket	353070-000079	1
3/8" locknut	356060-000094	4
U-bolt	356060-000152 <i>or</i> 356060-000403	2
3/8" washer	356060-000239	4
1/4" nut	356060-000241	4
1/4" x 2-1/2" screw	356060-000303	4

### Tools Needed

- Standard wrench set

### Installation Location

Mounted on the tractor or on top of the air cart. Refer to the steps below for specific mounting locations for your air cart configuration.

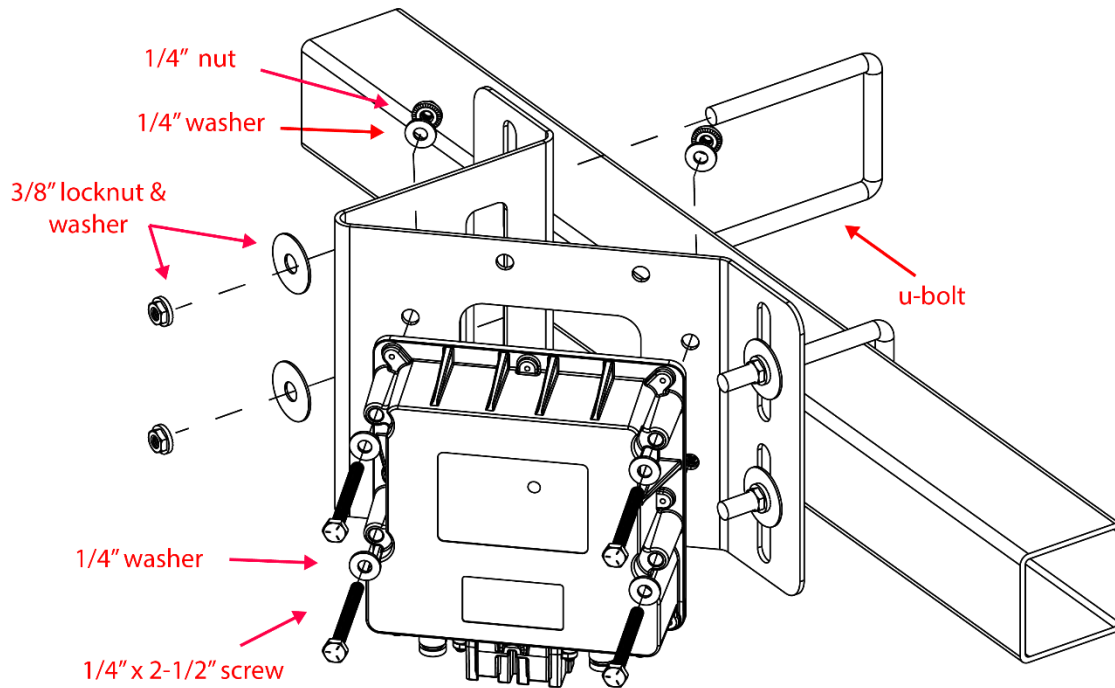
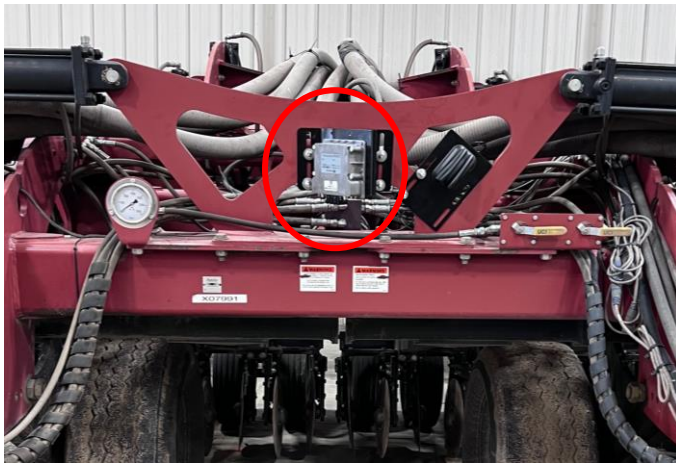


Figure 18: Mounting a gateway

1. Position the gateway (153010-000085) on the mounting bracket (353070-000079). The gateway can be mounted on the bracket in any direction, but the connectors should not face up when the bracket is mounted on the air cart or tractor.
2. Secure the gateway to the mounting bracket using the provided screws (356060-000303), washers (352012-000002), and nuts (356060-000241) as shown in Figure 18.
3. Mount the gateway according to the instructions below for your air cart configuration. The mounting location must be at least 8 inches (20 cm) away from the operator to ensure safe operation.
  - **Tow-behind:** Mount the gateway on the toolbar. Alternatively, mount the gateway on the exterior frame of the tractor. Make sure that the gateway is within reach of the antenna cables. Secure it to the mounting location using u-bolts, washers (356060-000239), and locknuts (356060-000094).
  - **Tow-between:** Mount the gateway on the rear of the air cart catwalk, facing rearward. Make sure that the gateway is within reach of the antenna cables. Secure it to the mounting location using u-bolts, washers (356060-000239), and locknuts (356060-000094).



Example tow-behind mounting location  
(on the toolbar)



Example tow-behind mounting location  
(on the frame)



Example tow-between mounting location

**Figure 19: Example gateway mounting locations**

## 7. Installing the Wi-Fi Antenna

The Wi-Fi antenna sends information from the ReconBlockage™ system to the iPad.

### Provided Parts

Part Name	Part Number	Quantity Needed
SMA cap	251015-000139	2
SMA terminator jack	251015-000272	1
Wi-Fi antenna	252005-000010	1
Antenna bracket	353070-000083	1
3/8" locknut	356060-000094	4
U-bolt	356060-000152	2
3/8" washer	356060-000239	4

### Tools Needed

- Standard wrench set

### Installation Location

Mounted on the rear of the tractor or on top of the air cart. Refer to the steps below for specific mounting locations for your air cart configuration.

### Installing the Wi-Fi Antenna

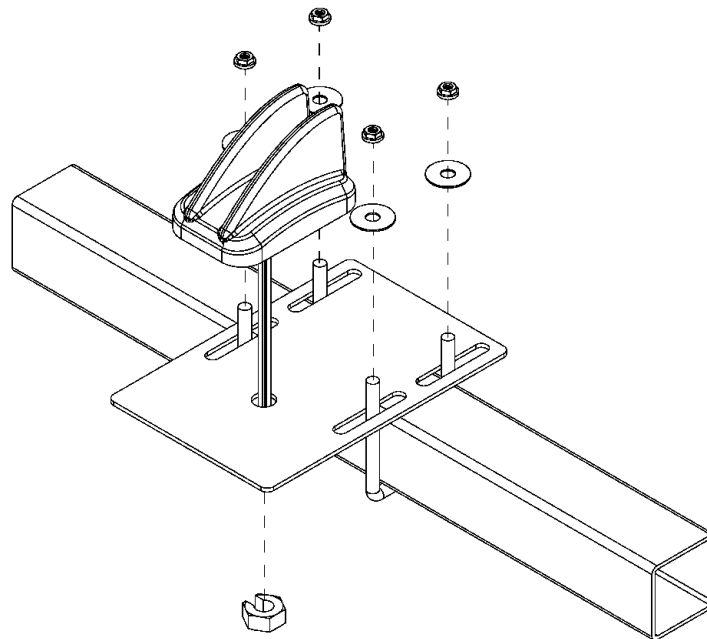


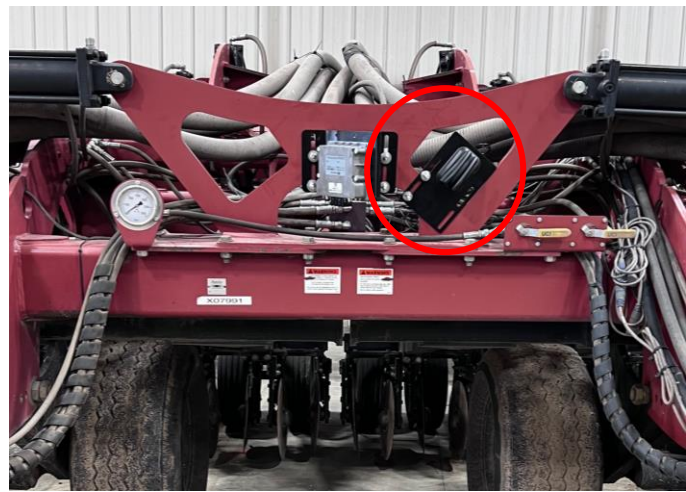
Figure 20: Mounting the Wi-Fi antenna



1. Thread the Wi-Fi antenna (252005-000010) cables through the hole in the mounting bracket (353070-000083) and through the nut. Tighten the nut to secure the antenna to the bracket. Do not over-torque.
2. Mount the antenna and bracket according to the instructions below for your air cart configuration. The mounting location must be at least 2 feet (60 cm) away from the operator and at least 8 inches (20 cm) from the gateway to ensure safe operation.
  - **Tow-behind cart:** Mount the bracket high on the exterior of the rear of the tractor cab or on the toolbar using u-bolts (356060-000152). Secure with washers (356060-000239) and locknuts (356060-000094).
  - **Tow-between cart:** Mount the bracket on the air cart catwalk using u-bolts (356060-000152). Secure with washers (356060-000239) and locknuts (356060-000094).



Example tow-behind mounting location  
(on the frame)



Example tow-behind mounting location  
(on the toolbar)



Example tow-between mounting location

**Figure 21: Example Wi-Fi antenna mounting locations**

3. Connect the Cellular Main and Wi-Fi/BT antenna cables to the gateway.

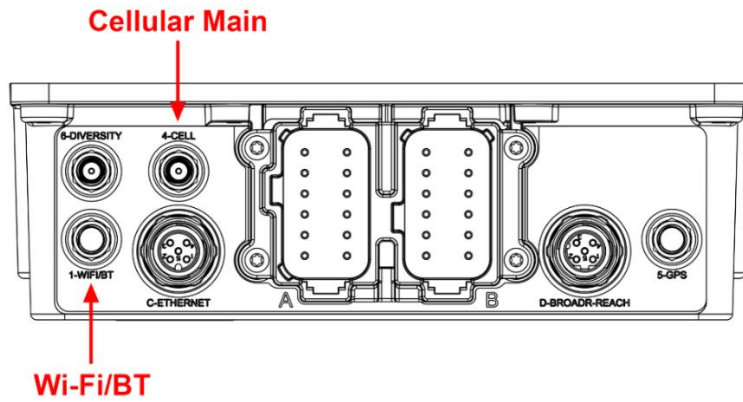


Figure 22: Gateway connections

4. Cap the 433 MHz antenna cable with the SMA terminator jack (251015-000272). Zip-tie the cable to the other cables.
5. Cover connectors 5 and 6 with the provided caps (251015-000139).

## 8. Installing Harnessing

The wiring harnesses provide power from the tractor to ReconBlockage™.

**NOTE:** The gateway uses the tractor's key switch for proper operation. Make sure that the key switch is wired to the key switch terminal of the 3-pin power outlet in the tractor cab.

Part Name	Part Number	Quantity
4 pin terminator plug	153510-000051	2
Cable tie	355032-000004	varies
Work switch extension harness (optional)	353050-000011	1
20' ECU harness	353050-000097	1/ECU
Power harness	353050-000098	1 (tow-behind cart) or 2 (tow-between cart)*
10' ECU harness (dual-shoot and triple-shoot systems only)	353050-000099	1/ECU
Tractor harness	353050-000100	1
Gateway extension harness (tow-between carts only)	353050-000103	2*
Gateway harness	353050-000108 or 353050-000101	1

\*Contained in the Tow-Between Extension kit (153010-000167) (sold separately).

### Tools Needed

- None

### Installation Location

Refer to Appendix A for wiring diagrams for your implement type.

#### 8.1. Installing 10' ECU Harnesses (353050-000099) (dual-shoot and triple-shoot only)

**NOTE:** If you have a single-shoot system, skip this step.

1. Connect **S2** of a 10' ECU harness (353050-000099) to each **4-pin connector** on a Product A ECU.
2. Connect **S3** of the 10' ECU harness to the **4-pin connector** on each Product B ECU near it.
3. **Triple-shoot:** Connect **S2** of another 10' ECU harness to the **4-pin connector** on each Product C ECU.
4. **Triple-shoot:** Connect **S1** of the first 10' ECU harness to **S3** of the second 10' ECU harness.



## 8.2. Installing 20' ECU Harnesses (353050-000097)

1. Connect **S3** of a 20' ECU harness (353050-000097).
  - **Dual-shoot and triple-shoot:** Connect **S3** of a 20' ECU harness to each open **S1** connector on a 10' ECU harness.
  - **Single-shoot:** Connect **S3** of a 20' ECU harness to each ECU's **4-pin connector**.
2. Locate the two centermost ECUs, then connect the gateway harness.
  - a. Connect **S4** of the gateway harness to **S1** of the left-center 20' ECU harness.
  - b. Connect **S3** of the gateway harness to **S1** of the right-center 20' ECU harness.
3. Chain the remaining 20' ECU harnesses together by connecting **S1** to **S2**.
4. Insert a **4 pin terminator plug** (153510-000051) into **S2** of the leftmost and the rightmost 20' ECU harnesses at the end of the implement.

## 8.3. Installing the Gateway Harness (353050-000108 or 353050-000101)

**NOTE:** Gateway extension harnesses for tow-between carts are found in the Tow-Between Extension kit (sold separately).

1. Connect **S6** of the gateway harness (353050-000108 or 353050-000101) to the **connector on the work switch**.

**NOTE:** If S6 does not reach the work switch, connect a work switch extension harness (353050-000011) between S6 and the work switch.
2. Connect **S1** of the gateway harness.
  - a. **Tow-behind:** Connect **S1** of the gateway harness to **Port A** of the gateway.
  - b. **Tow-between:** Connect **S1** of the gateway harness to **S3** of a gateway extension harness (353050-000103).
3. Connect **S2** of the gateway harness.
  - a. **Tow-behind:** Connect **S2** of the gateway harness to **Port B** of the gateway.
  - b. **Tow-between:** Connect **S2** of the gateway harness to **S4** of a gateway extension harness.
4. If your gateway harness has two open CAN terminator receptacles and you received CAN terminator plugs with your shipment, insert a **3 pin CAN terminator plug** (356070-000104) into **T1** and **T2** of the gateway harness.

## 8.4. Installing the Gateway Extension Harnesses (353050-000103) (Tow-Between Only)

**NOTE:** If you have a tow-behind air cart, skip this step.

1. Connect **S2** of the gateway extension harness that you just installed to **S4** of another gateway extension harness.
2. Connect **S1** of the gateway extension harness that you just installed to **S3** of another gateway extension harness.
3. Connect **S1** of the second gateway extension harness to **Port A** of the gateway.
4. Connect **S2** of the second gateway extension harness to **Port B** of the gateway.

## 8.5. Installing the Power Harness (353050-000098)

**NOTE:** An additional power harness for tow-between carts is found in the Tow-Between Extension kit (sold separately).

1. Connect **S2** of the power harness (353050-000098) to **S5** of the gateway harness.
2. If you're installing on a **tow-between cart**, connect **S1** of the power harness to **S2** of another power harness.

## 8.6. Installing the Tractor Harness (353050-000100)

1. Connect **S2** of the tractor harness (353050-000100) to **S1** of the closest power harness (if you have more than one).
2. Connect **S1** of the tractor harness to the tractor's **three-pin power outlet** in the tractor cab.

**NOTE:** If your tractor does not have a convenience plug, contact your dealer for assistance.

## 8.7. Securing Loose Harnessing

Coil any loose harnessing around a hydraulic line or electrical wire. Secure all harnessing to the tractor and/or implement using cable ties (355032-000004)

## 9. Installing the iPad Mount and App

### 9.1. Installing the iPad Mount

Part Name	Part Number	Quantity needed
USB charger	254040-000014	1
Tablet mount arm	352004-000003	1
Rail attachment	352004-000004	1
iPad mount (for 9"-11.5" iPads)	356070-000089	1

#### Tools Needed

- Phillips screwdriver

#### Installation Location

Installed on a mounting bar in the tractor cab, or anywhere in the tractor cab where it is easily visible and within reach of the operator while seeding.



Figure 23: Installing the iPad mount

#### Installing the iPad Mount

1. Connect the iPad mount (356070-000089) to the tablet mount arm (352004-000003) and rail attachment (352004-000004) according to the instructions provided with the mount. Then, mount it to the cab's mounting bar or other desired installation location.
2. Place the iPad into the iPad mount.
3. Plug the USB charger (254040-000002) into the tractor's cigarette lighter socket. Use it to keep the iPad charged while using the system.

## 9.2. Downloading the ReconHub app

To interface with the system, download the ReconHub app from the Apple App Store and install it onto your iPad.

1. Connect the iPad to the internet.
2. Tap the **App Store** icon from the iPad's home screen.
3. Tap **Search** in the bottom right corner of the App Store screen.
4. Type *ReconHub* in the search field, then tap **Search**.
5. Tap the ReconHub app when it appears in your search results.
6. Tap the **Get** button, then tap **Install**. Enter your Apple ID and password, if prompted. A progress bar will appear over the app's icon while it is downloading.

**IMPORTANT:** If you are prompted to enable location services, select **Only While Using the App** or **Always Allow**. If you select **Don't Allow**, this will prevent the iPad from connecting to the gateway network.

**IMPORTANT:** If you are prompted to allow the app to find and connect to devices on your local network, select **OK**. If you select **Don't Allow**, this will prevent the iPad from connecting to the gateway network.

## 9.3. Connecting the iPad to the Wireless Network

The iPad must be in close range of the gateway and connected to the gateway's wireless network to communicate with the system.

Make sure that your iPad is connected to the wireless network at the beginning of every planting session. This is especially important if your iPad is connected to another network, such as a home wireless network, between sessions.

To connect the iPad to the wireless network:

1. Make sure that you have power to the gateway. The gateway's LED is green when it's done starting up.
2. Tap the **Settings** icon on your iPad's home screen.

3. Tap **Wi-Fi**. Then, connect to the gateway's network.

**If it's your first time connecting to the gateway:**

- a. Connect to the **IAS-Base-Image-XXXXXX** network.  
*"XXXXXX" represents the gateway's serial number.*
- b. Open the ReconHub app from the iPad's Home screen. Once the gateway is configured for ReconBlockage™, close the app and navigate back to the iPad's Wi-Fi settings.
- c. Connect to the **PrP-XXXXXX** network.

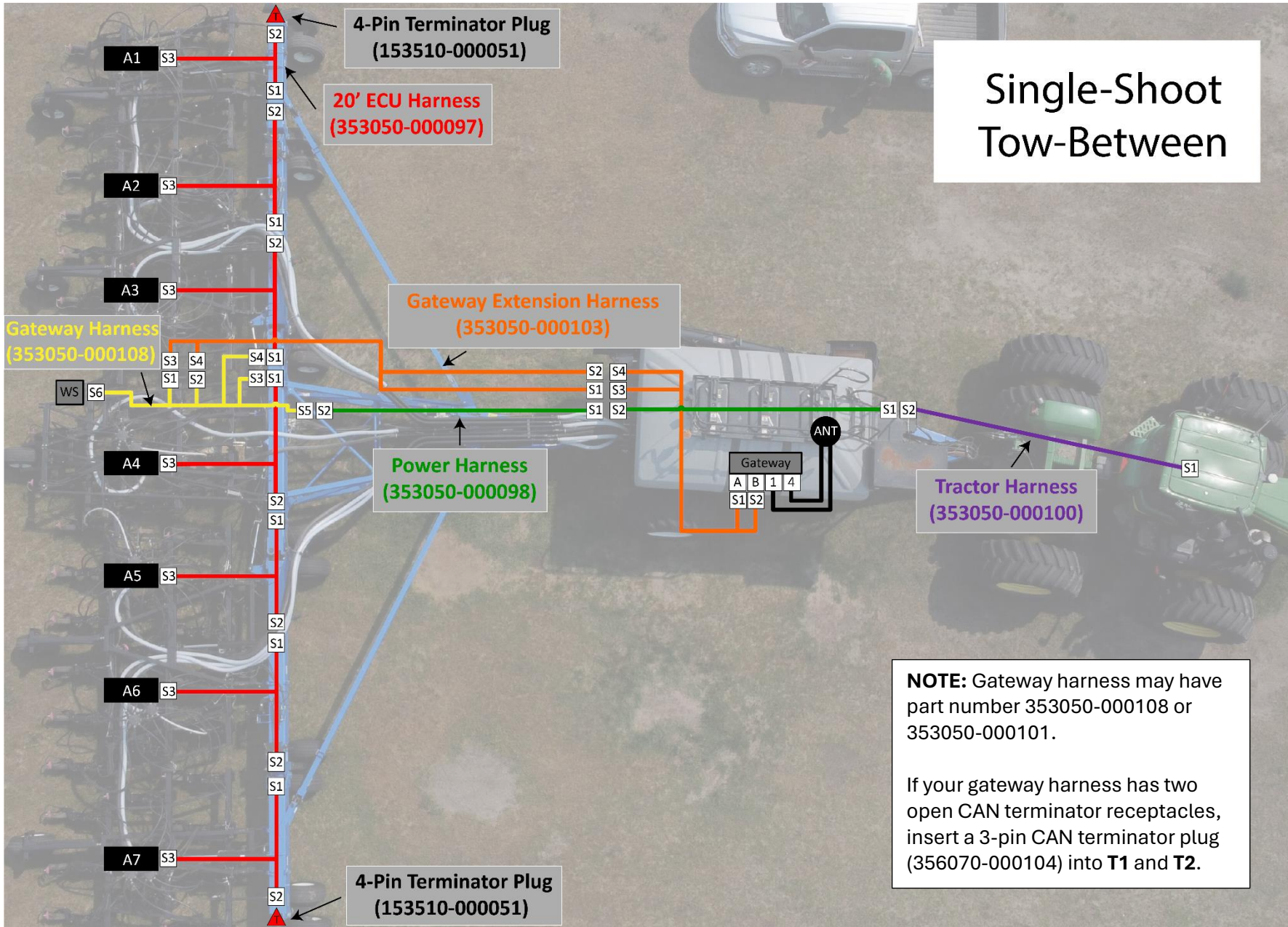
**If you've connected to the gateway before:** Connect to the **PrP-XXXXXX** network.

4. Press the iPad's Home button or swipe up and open the ReconHub app.

For instructions to configure and use ReconBlockage after installation, see the ReconBlockage Operator's Guide (600890-000015) from the app's Manuals screen.

# Appendix A: Wiring Harness Diagrams

## Single-Shoot Tow-Between

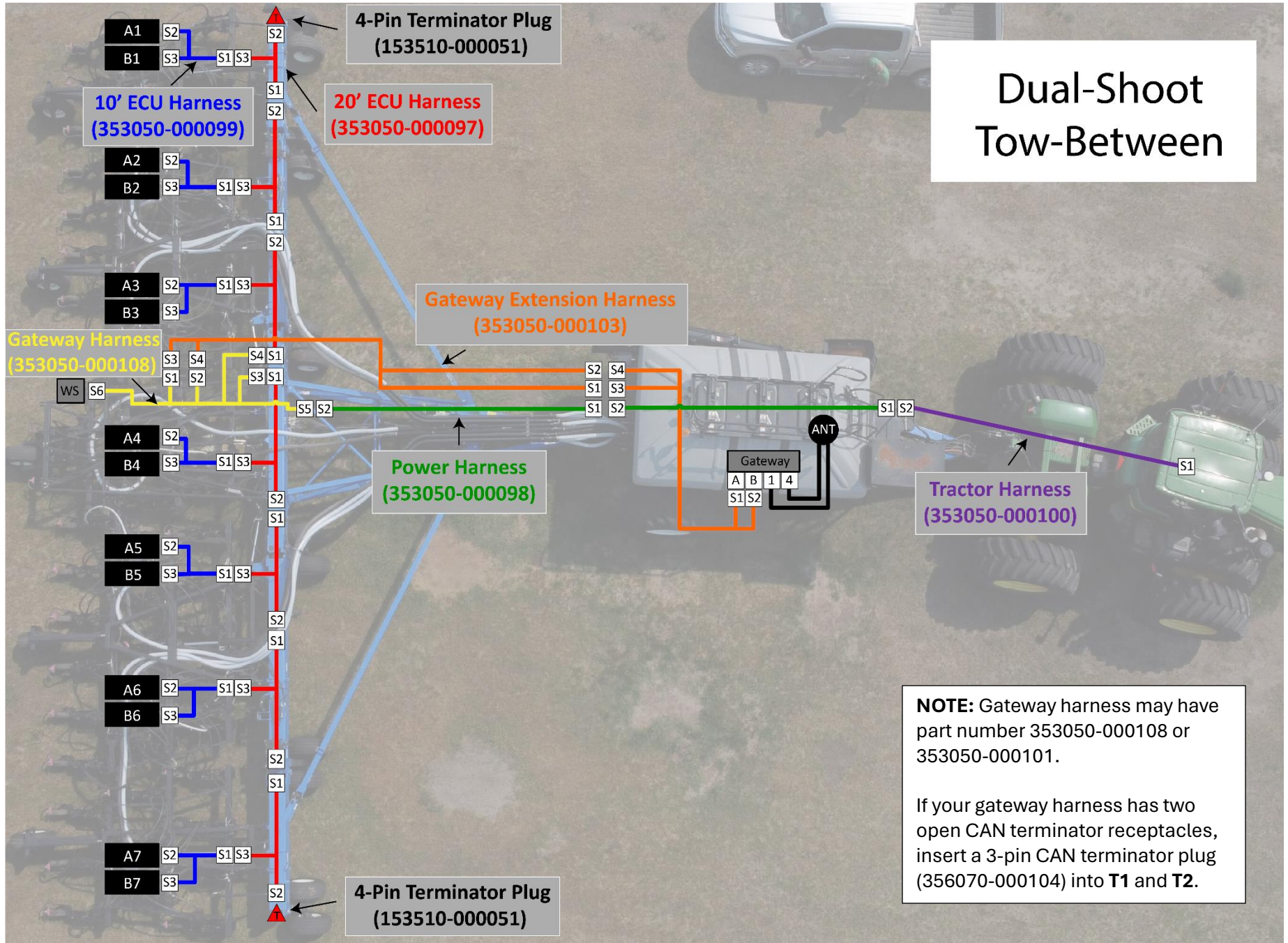


**NOTE:** Gateway harness may have part number 353050-000108 or 353050-000101.

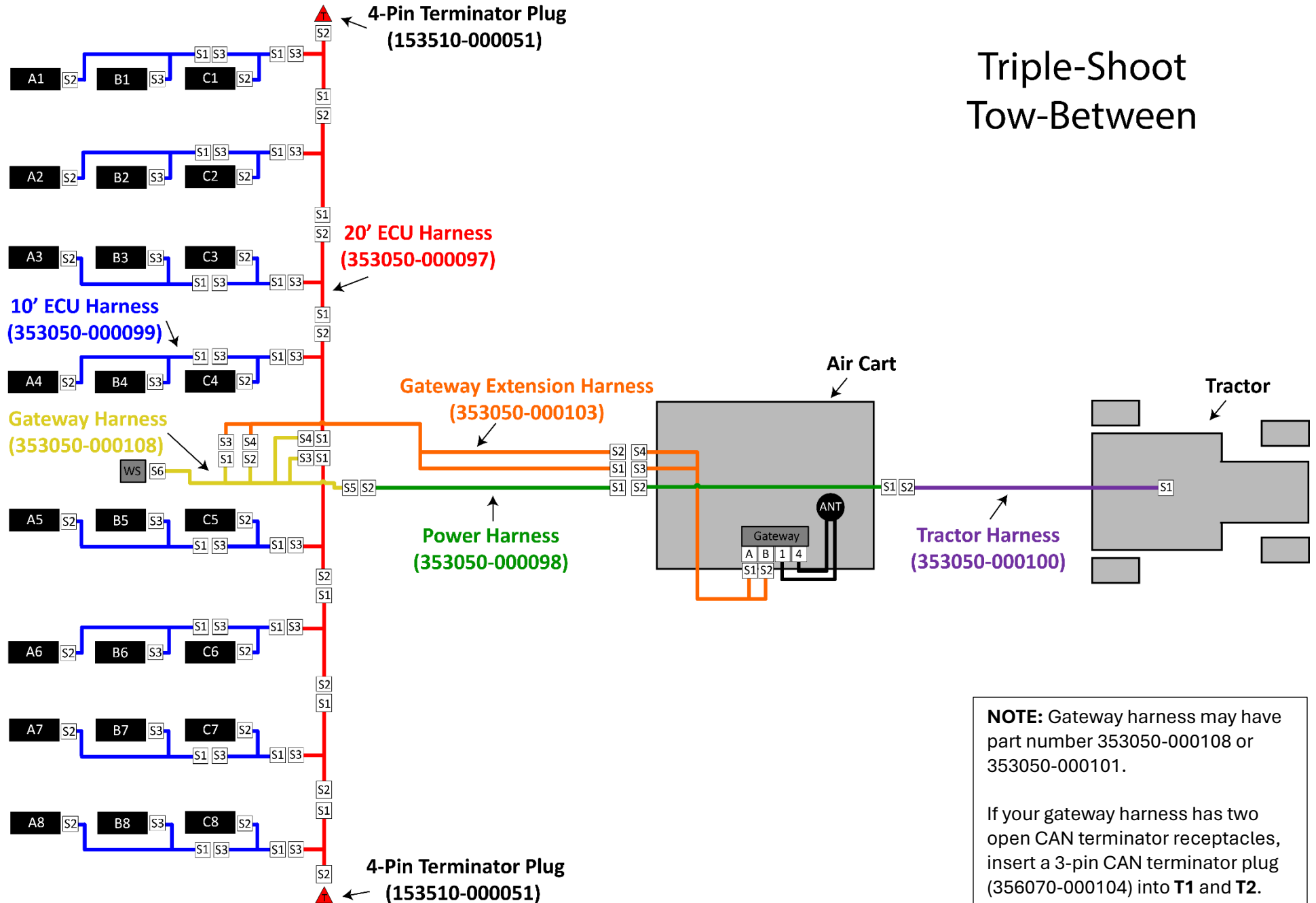
If your gateway harness has two open CAN terminator receptacles, insert a 3-pin CAN terminator plug (356070-000104) into T1 and T2.



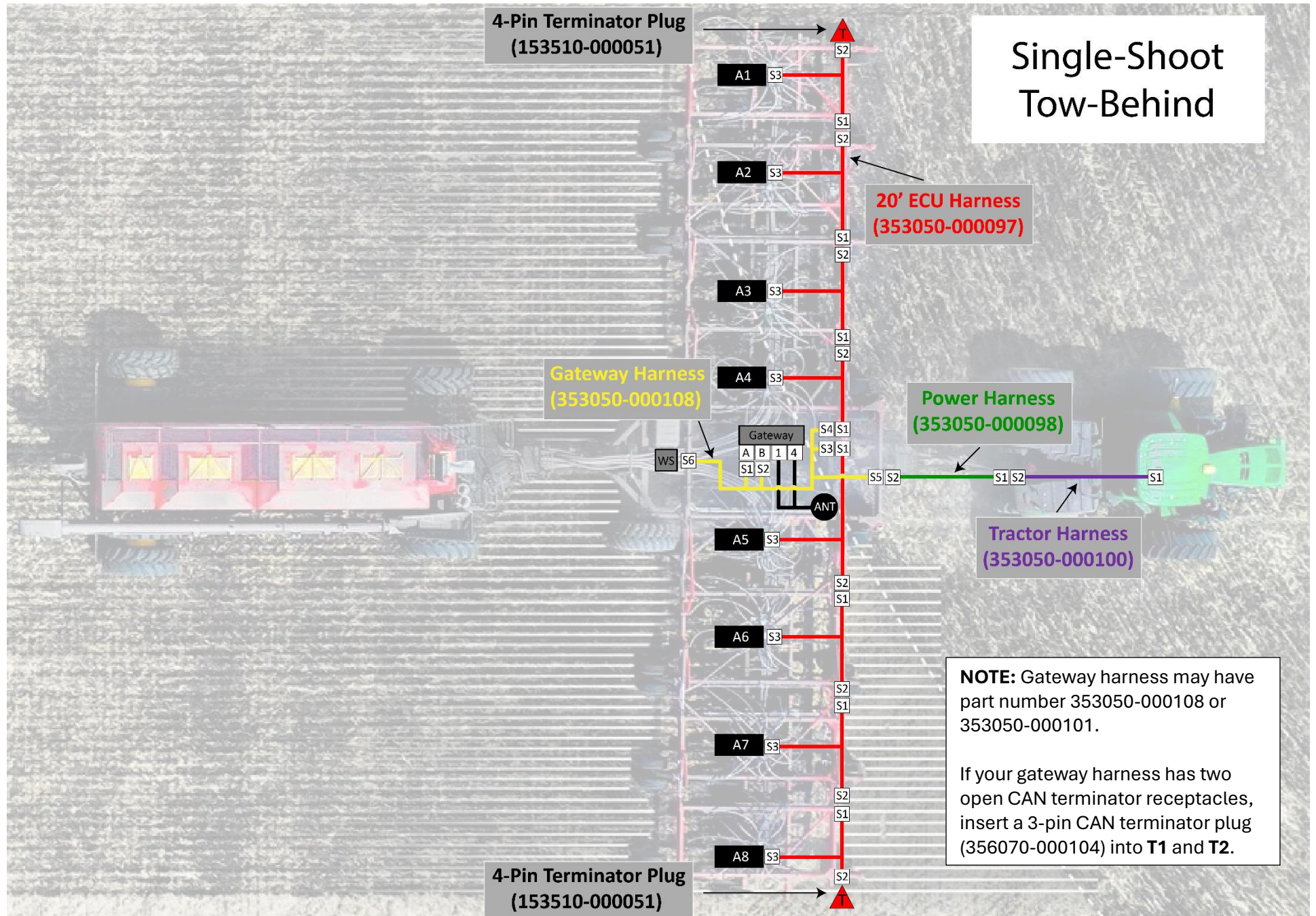
# Dual-Shoot Tow-Between



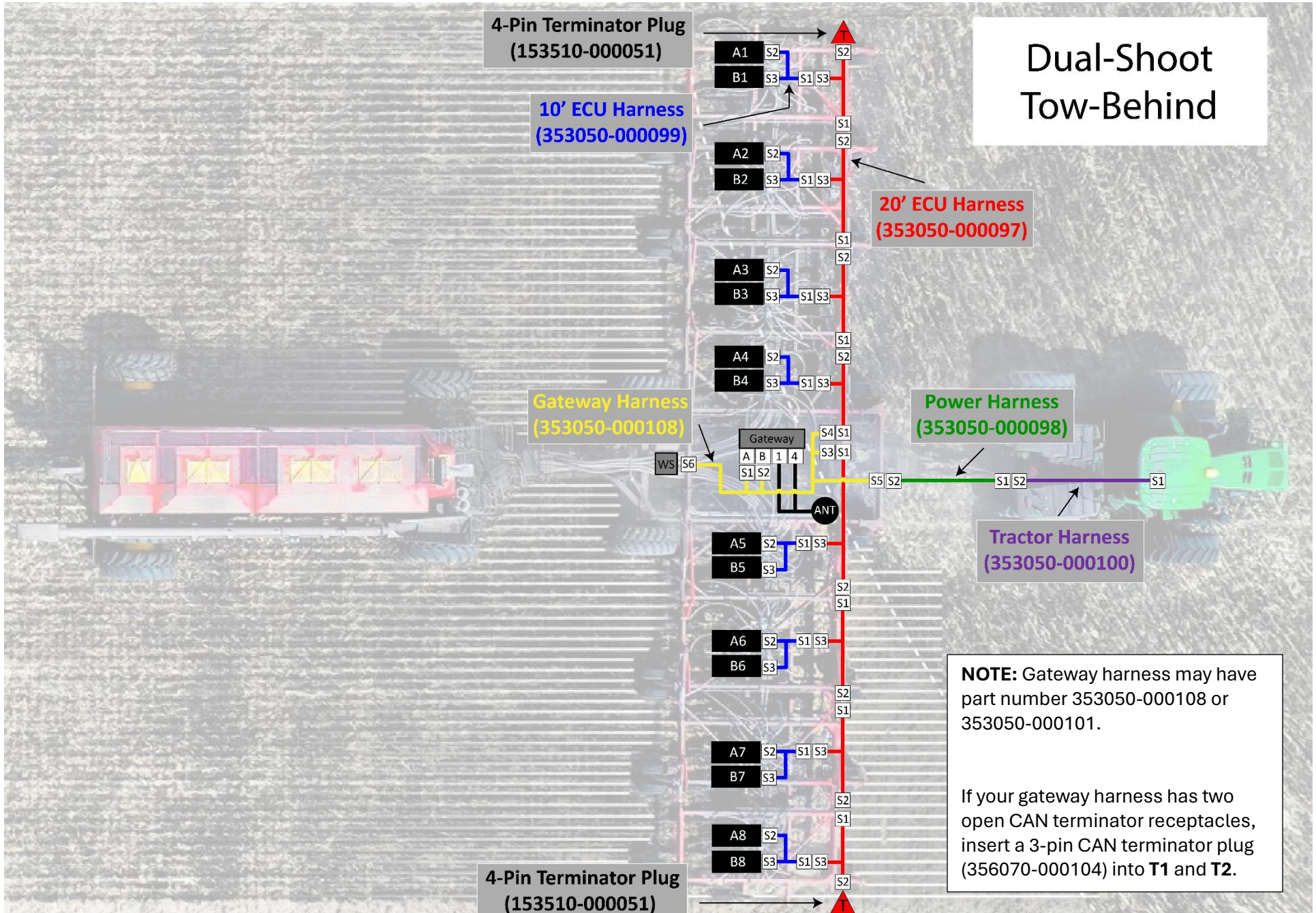
# Triple-Shoot Tow-Between

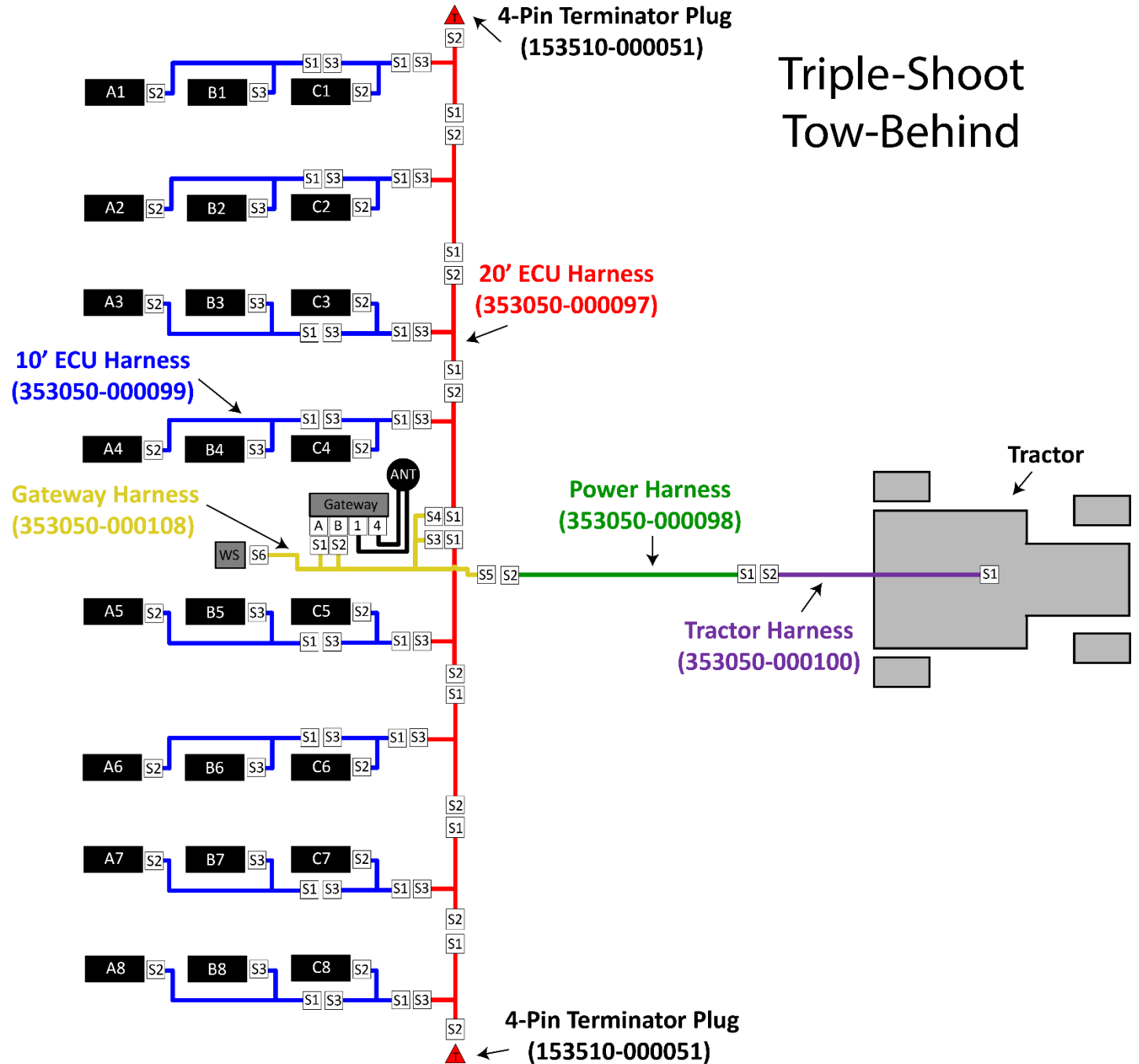




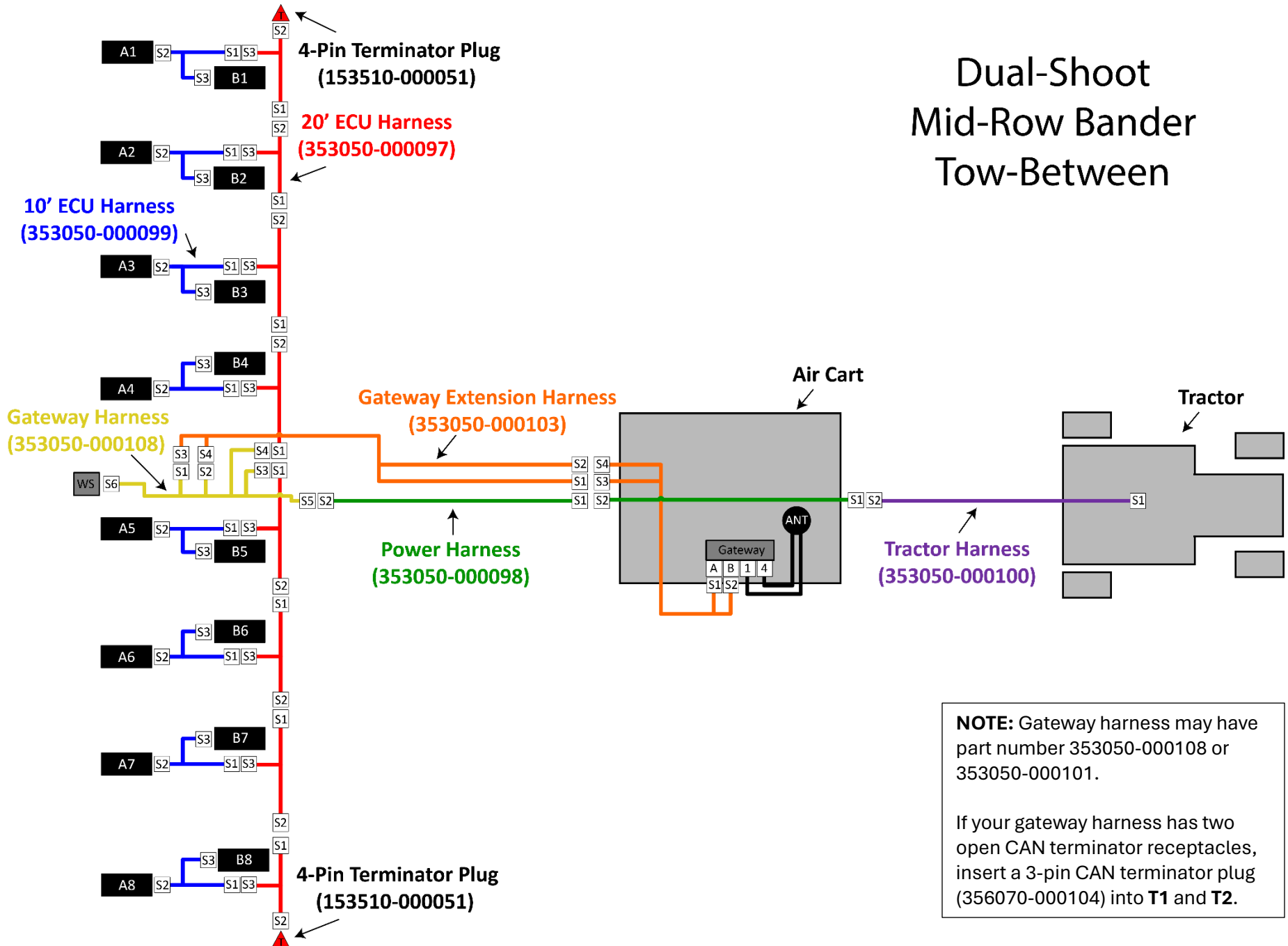








# Dual-Shoot Mid-Row Bander Tow-Between



**NOTE:** Gateway harness may have part number 353050-000108 or 353050-000101.

If your gateway harness has two open CAN terminator receptacles, insert a 3-pin CAN terminator plug (356070-000104) into **T1** and **T2**.

# Dual-Shoot Mid-Row Bander Tow-Behind

