



Install hydraulic kit

Schedule an appointment with your dealer to complete the installation of your vehicle's REBEL autosteer hydraulic kit.



Check package contents

Refer to the Kit Contents page(s) and, if applicable, the Optional Upgrades page(s), in this guide to confirm you have received all parts of your REBEL install kit.

We recommend recording your dealer and product information below for quick reference should you require help during this install or while using REBEL.

Dealer Name:	
Dealer Phone:	
Dealer Email:	
Rebel Terminal	Serial Number:



Connect terminal

Use the instructions in this guide to connect your terminal. Pages are coded by product to help you find the right steps for installing your REBEL terminal and any additional components that came with your installation kit.



Power on

Turn on your REBEL terminal and other components then register REBEL.

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Get help when needed

Learn how to access the Help built into your REBEL terminal and how to contact us if you have any questions.



Broad-Acre Kit Contents

Unpack your REBEL Broad-Acre kit and identify the parts as shown.

Part Number	Qty	Description	Photograph
752-0005-01	1	7" terminal	Guthach'
804-0107-000#	1	A101 GPS smart antenna	
910-1063-000	1	eDriveXD autosteering controller	
604-0015-000#	1	 Terminal mounting hardware Round base (attach to terminal) Double socket arm mount Bar mount base with U-bolts/nuts 	8/2
050-0020-01	1	LAN/USB cable Connects LAN/USB port on terminal to eDriveXC/XD cable	
050-0022-01	1	Power cable Connects power port on terminal to power adapter cable	

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Part Number	Qty	Description	Photograph
050-0043-01	1	COM1 cable	
		Connects COM1 port on terminal to switchbox, lightbar/AC110 cable, and antenna cable	
050-0045-01	1	Antenna extension cable	1-1
		Connects COM1 cable to antenna	
050-0046-01	1	Power adapter cable	
		Connects power cable to power source	
720-0033-00A	1	Antenna mount	
676-0024-000#	1	Antenna mount adapter	
520-0022-01	1	USB drive, 8 GB	SanDisk'

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Row-Crop Kit Contents

Unpack your REBEL Row-Crop kit and identify the parts as shown.

Part Number	Qty	Description	Photograph
752-0005-01	1	7" terminal	Guithach;
804-0107-000#	1	A101 GPS smart antenna	
910-1064-000	1	eDriveXC autosteering controller	
604-0015-000#	1	 Terminal mounting hardware Round base (attach to terminal) Double socket arm mount Bar mount base with U-bolts/nuts 	8/2
050-0020-01	1	LAN/USB cable Connects LAN/USB port on terminal to eDriveXC/XD cable	
050-0022-01	1	Power cable Connects power port on terminal to power adapter cable	

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Part Number	Qty	Description	Photograph
050-0043-01	1	COM1 cable	
		Connects COM1 port on terminal to switchbox, lightbar/AC110 cable, and antenna cable	
050-0045-01	1	Antenna extension cable	
		Connects COM1 cable to antenna	
050-0046-01	1	Power adapter cable	
		Connects power cable to power source	
720-0033-00A	1	Antenna mount	
676-0024-000#	1	Antenna mount adapter	
520-0022-01	1	USB drive, 8 GB	Cruzer Blade 8 or San Disk

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Sub-Inch Kit Contents

Unpack your REBEL Sub-Inch kit and identify the parts as shown.

Part Number	Qty	Description	Photograph
752-0005-01	1	7" terminal	Outhack'
804-0106-000#	1	A325 GNSS smart antenna	
910-1064-000	1	eDriveXC autosteering controller	
604-0015-000#	1	 Terminal mounting hardware Round base (attach to terminal) Double socket arm mount Bar mount base with U-bolts/nuts 	8/28
050-0020-01	1	LAN/USB cable Connects LAN/USB port on terminal to eDriveXC/XD cable	
050-0022-01	1	Power cable Connects power port on terminal to power adapter cable	

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Part Number	Qty	Description	Photograph
050-0043-01	1	COM1 cable	
		Connects COM1 port on terminal to switchbox, lightbar/AC110 cable, and antenna cable	
050-0045-01	1	Antenna extension cable	
		Connects COM1 cable to antenna	
050-0046-01	1	Power adapter cable	
		Connects power cable to power source	
720-0033-00A	1	Antenna mount	
676-0024-000#	1	Antenna mount adapter	
520-0022-01	1	USB drive, 8 GB	Cruzer Blade URI Play Department The Play Department SanDisk

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Optional Upgrades

10" Terminal Kit Contents (optional)

Unpack your 10" terminal kit and identify the parts as shown.

Part Number	Qty	Description	Photograph
752-0006-01	1	10" terminal	Q* Outback*

Lightbar Kit Contents (optional)

Unpack your lightbar kit and identify the parts as shown. See "Installing the Lightbar" on page 17 for instructions on installing the lightbar in your preferred location.

Part Number	Qty	Description	Photograph
806-1036-000#	1	Lightbar	
604-0008-000#	1	Mounting ball	
604-0019-000#	1	Suction cup mounting kit	
		Note: Use mounting ball 604-0008-000# (above) in place of the mounting ball included with this part (X at right)	



Switchbox Kit Contents (optional)

Unpack your switchbox kit and identify the part as shown. See "Installing the Switchbox" on page 17 for instructions on installing the switchbox in your preferred location.

Part Number	Qty	Description	Photograph
806-1035-000#	1	Switchbox	
604-0019-000#	1	Suction cup mounting kit	

Foot Switch Kit Contents (optional)

Unpack your foot switch kit and identify the parts as shown. See "Installing the Foot Switch" on page 16 for instructions on installing the foot switch in your preferred location.

Part Number	Qty	Description	Photograph
720-0035	1	Run/hold foot switch	
		This kit does not include mounting hardware (such as fasteners)	
050-0041-01		COM2 cable	
		Connects COM2 port on terminal to foot switch	



RTK Rover Kit Contents (optional)

Unpack your RTK rover kit and identify the parts as shown. See "Installing the Rover Radio" on page 16 for instructions on installing the rover radio.

Part Number	Qty	Description	Photograph
050-0044-01	1	RTK cable	
		Connects COM1 cable to antenna and rover radio	
802-1069-000#	1	Rover radio (400 MHz)*	
802-1075-000#	1	Rover radio (900 MHz)*	
		*Your RTK kit will include one of the rover radios listed above	T. O. Bearsdorfficer
601-1136	1	Rover radio mounting plate	
150-0008-000	1	Antenna (for 400 MHz rover radio)*	¥
150-0010-000	1	Antenna (for 900 MHz rover radio)*	
		*Your RTK kit will include the antenna that matches your rover radio (400 MHz radio or 900 MHz radio)	



Camera Kit Contents (optional)

Unpack your camera kit and identify the parts as shown. Contact your dealer for supported camera models.

Part Number	Qty	Description	Photograph
050-0021-01	1	Steering, camera cable	ID .
		Connects LAN/USB port on terminal to eDriveXC/XD cable and camera	

ISOBUS Cable Kit Contents (optional)

Unpack your ISOBUS cable kit and identify the parts as shown.

Part Number	Qty	Description	Photograph
050-0042-01	1	COM2 cable	
		Connects COM2 port on terminal to ISOBUS extension cable and foot switch	

ISOBUS Extension Cable Kit Contents (optional)

Unpack your ISOBUS extension cable kit and identify the parts as shown.

Part Number	Qty	Description	Photograph
054-0197-000#	1	ISOBUS extension cable	
		Connects the ISOBUS connector on ISOBUS cable to the ISOBUS connector on your vehicle	



ISOBUS Retrofit Kit Contents for Non-ISO-Ready Vehicles (optional)

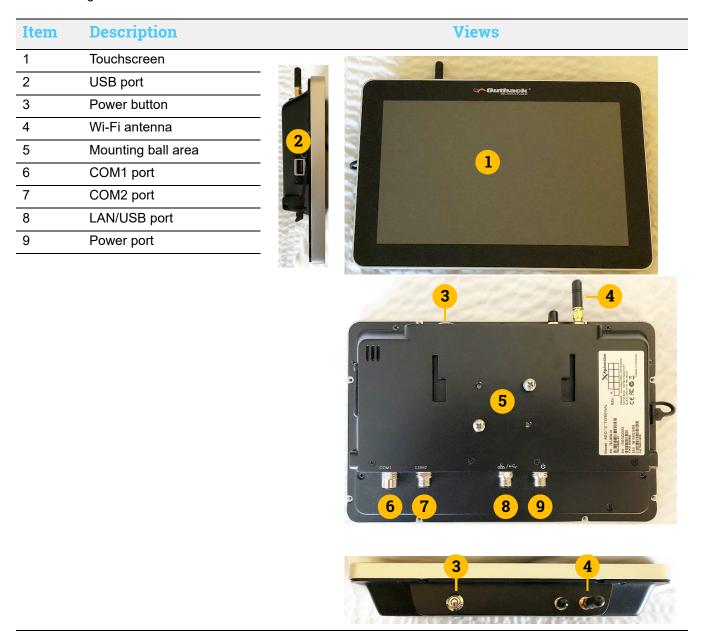
Unpack your ISOBUS retrofit kit and identify the parts as shown. There are two kits available—each with the same bracket and but different (the 'Short' kit cables are shorter than the 'Long' kit cables).

Part Number	Qty	Description	Photograph
750-0161-000	1	IBBC bracket Included in both 'Short' and 'Long' kits	
054-0192-000#	1	Power cable, 12 ft ('Short' kit)*	
054-0193-000#	1	Power cable, 21 ft ('Long' kit)*	
		*Your kit includes one of the above cables	
054-0194-000#	1	Data/relay cable, 10 ft ('Short kit)*	
054-0195-000#	1	Data/relay cable, 20 ft ('Long' kit)*	
		*Your kit includes one of the above cables	



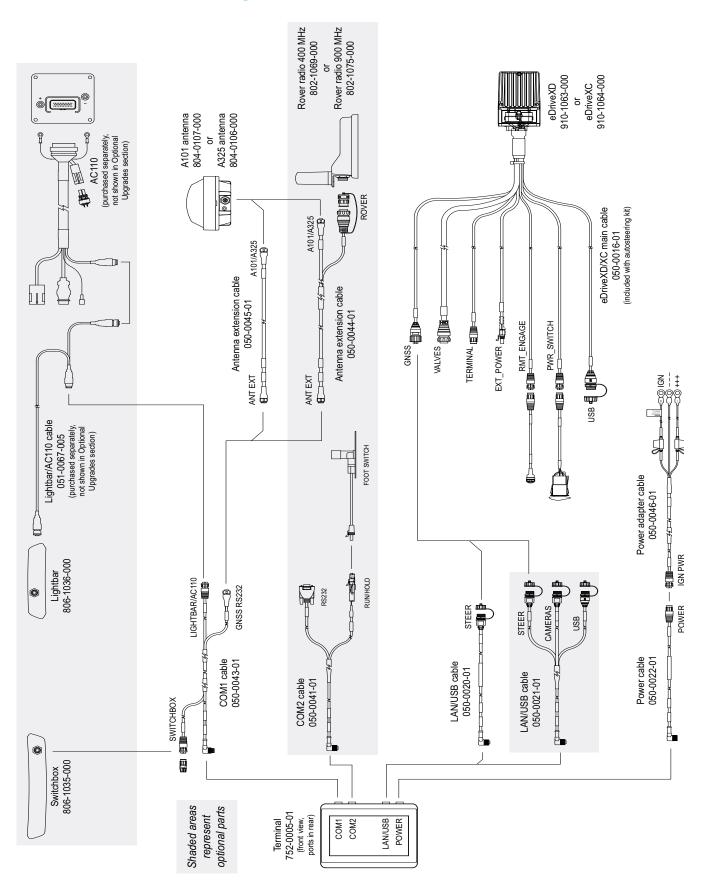
REBEL Terminal Overview

The following table shows the front and rear views of the REBEL terminal and describes each numbered feature.





REBEL Connection Diagram



Installing REBEL

Note: Proper installation is critical for safe and optimal REBEL operation.

The following steps represent typical installation order; however, install components in your preferred order.

- Install your autosteering console (eDriveXC or eDriveXD). See the installation instructions included with your autosteering console kit.
- 2. Install the optional rate/section control controller (AC110). See the installation instructions included with your rate/section controller kit.
- 3. Install other optional parts (foot switch, lightbar, switchbox) then route the appropriate cables into the cab for connection to the terminal.
- 4. Mount the antenna.
- 5. Install the terminal mounting hardware both in the cab and on the terminal.
- 6. Connect the appropriate cables to the terminal.
- 7. Connect the terminal to the mounting hardware.

Mounting the Antenna

You should install the antenna on the vehicle's left/right centerline and front/back pivot point. If you cannot install the antenna at the exact centerline and/or pivot point, refer to REBEL Help installed on your terminal for instructions on entering offsets for these values.

Do not place the antenna within two feet of a transmitting radio antenna (such as for a 2-way or business band radio).

- 1. Clean and dry the vehicle surface where you will attach the antenna mounting plate.
- 2. Remove the paper backing from the adhesive on the back of the mounting plate (see photo at right).
- 3. Position the mounting plate and press down hard for proper adhesion.



- 4. Attach the antenna to the antenna mounting base (see photo at right).

 Note: The photo at right shows the plastic wrapping still on the magnetic mount. Before placing the antenna and mount on the vehicle in the next step, remove the plastic wrapping from the mount.
- 5. Place the magnetic mounted antenna on the plate and on the vehicle's centerline and pivot point.





Routing the Antenna Cable

Adhere to the following when routing the antenna cable:

- Make sure the REBEL terminal is powered off before attaching the cables.
- Do not bend the cable to a radius of less than 6 inches.
- Do not route the cable within 12 inches of radio wires, power generator wires, a heat source, or moving parts.
- Coil excess cable in a protected location and secure the installation with tie straps.

To route the antenna cable:

- 1. Securely attach one end of the antenna cable to the antenna.
- 2. Route the cable through a cab opening where rubber protection exists that will protect the cable (see photo at right).
- Attach the other end of the antenna cable to the terminal (see "REBEL Terminal Overview" on page 13 and "REBEL Connection Diagram" on page 14).



Installing Optional Parts

A camera is not included in your REBEL kit; you must purchases that separately (not sold by Outback Guidance). Follow the camera manufacturer's instructions for installing your cameras.

To install the foot switch, rover radio, lightbar, switchbox, or connect to the ISOBUS ECU see the sections that follow.

Installing the Foot Switch

Use the foot switch as a remote to pause or restart REBEL's mapping/data logging function (similar to pressing Apply on the touchscreen—refer to the Help on the REBEL terminal for more information on the Apply button).

Using "REBEL Terminal Overview" on page 13 and "REBEL Connection Diagram" on page 14, install the foot switch:

- 1. Connect the foot switch cable of the COM2 cable to the foot switch.
- 2. Install the foot switch in an easily accessible position.

Installing the Rover Radio

Mount the rover radio on top of the vehicle cab to ensure line-of-sight to the RTK base station. The bottom of the rover radio includes a built-in magnet for easy placement on the included mounting plate.

- Clean and dry the vehicle surface where you will attach the rover radio mounting plate.
- 2. Remove the paper backing from the adhesive strips on the back of the mounting plate (see photo at right).
- 3. Position the mounting plate and press down hard for proper adhesion.
- 4. Place the rover radio on the plate.
- 5. Attach the rover radio antenna to the rover radio, tightening until snug.



Installing the Lightbar

The lightbar kit includes suction cup mounting hardware (with mounting ball), a separate mounting ball, and an extension cable. Use the separate mounting ball in place of the mounting ball included with the suction cup mounting hardware.

AWARNING:

Do not mount the lightbar in a location where it interferes with seeing other information, controls, or the field.

Using the photos at right install the suction cup mounting hardware on the lightbar then install the lightbar in your preferred location.

Before installation, thoroughly clean the mounting location (such as the inside cab window surface).

- 1. Attach the mounting ball to the back of the lightbar.
- Using the two screws included with the suction cup hardware, assemble the suction cup mount.
- Attach the suction cup mount to the mounting ball on the lightbar then tighten.
- 4. Press the vacuum mount to the window.
- Turn the vacuum cup's twist lock counterclockwise to create the seal.
- 6. Adjust the lightbar to a suitable viewing angle.



Step 1: Attach mounting ball to lightbar



Step 2: Assemble suction cup mount



Step 3: Attach suction cup mount to mounting ball and tighten



Steps 4/5: Attach suction cup mount to mounting location and tighten

Installing the Switchbox

The switchbox kit includes suction cup mounting hardware similar to the lightbar. Using the photo at right and the lightbar installation photos above as reference, install the switchbox in your preferred location.





Connecting to Your ISOBUS ECU

If your vehicle is ISOBUS-ready see "ISOBUS-Ready Vehicle Connections" immediately following. If your vehicle is not ISOBUS-ready see "Non ISOBU-Ready Vehicle Connections" starting further below.

ISOBUS-Ready Vehicle Connections

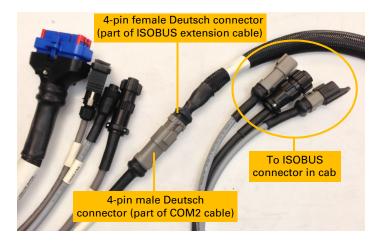
- 1. Locate the ISOBUS connector in the tractor cab. Typically, the connector is a 4-pin female Deutsch connector and is found behind the access panel on the right side of the cab.
- 2. Using "REBEL Connection Diagram" on page 14 as a guide, connect the 4-pin male Deutsch (ISOBUS) connector on the COM2 cable to the tractor ISOBUS connector.

If an ISOBUS extension cable is needed (COM2 cable does not reach the tractor ISOBUS connector) or the ISOBUS connector is something other than a 4-pin Deutsch female connector, use the ISOBUS extension cable.



(part of COM2 cable)

4-pin male Deutsch connector 4-pin female Deutsch connector (in tractor cab)

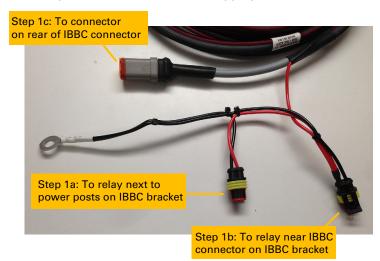


Non ISOBU-Ready Vehicle Connections

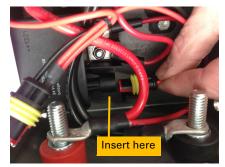
Non ISOBUS-ready vehicles (that do not have an IBBC connector on the back of the vehicle) require a retrofit kit. There are two kits available—each with a bracket and two cables (power cable and data/relay cable). The bracket is the same in each kit; however, the 'Short' kit cables are shorter than the 'Long' kit cables. The power cable connects to the battery and the data/relay cable connects to the 4-pin male Deutsch connector on the COM2 cable or on the ISOBUS extension cable.

Note: Tie straps are included in each retrofit kit—use the straps to secure cables where appropriate.

1. Connect the data/relay cable (there are two different data/relay cables; only the appropriate cable is included in your kit) to the IBBC bracket. You will make three connections, one each in steps a-c below. Use the diagram at right for reference when completing steps a-c.



a. Insert the 2-pin weather pack closest to the negative ring terminal into the relay next to the power posts on the IBBC bracket. Apply enough pressure until the plug snaps into the relay.





b. Insert the 2-pin weather pack farther from the negative ring terminal into the relay near the IBBC connector on the IBBC bracket. Apply enough pressure until the plug snaps into the relay.





Insert the large 4-pin
 Deutsch connector into the
 connector on the rear of
 the IBBC connector. Apply
 enough pressure until the
 plug snaps into the
 connector.



Insert here and snap into place

 On the IBBC bracket remove the nuts and washers from the power posts then attach the ring terminator from the data/ relay cable to the negative power post.





3. Attach the shorter leads of the power cable to the power posts on the IBBC bracket. Replace the washers and nuts then tighten with a 9/16" wrench.





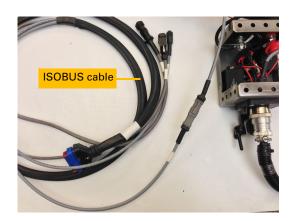




4. Mount the bracket (that holds the IBBC) near the rear of the vehicle where the implement's ISOBUS cable can reach it.



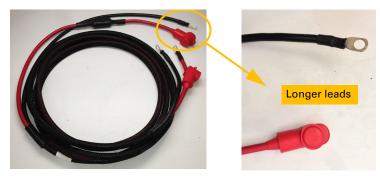
5. Connect the 4-pin Deutsch connector on the retrofit kit to the 4-pin Deutsch connector on the COM2 cable.



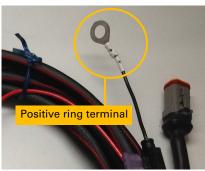
Connect the implement's IBBC connector to the retrofit kit's IBBC connector.



7. Attach the longer leads (at right) of the power cable to the vehicle's battery.



8. Connect the positive ring terminal of the data/relay cable to "KEY ON" of the vehicle's ignition switch so power is applied as you turn on the switch.



Connecting to a Power Source

Using "REBEL Terminal Overview" on page 13 and "REBEL Connection Diagram" on page 14, connect the power adapter cable to your preferred power source.

- Connect the red (+), black (-), and orange (IGN) leads of terminal power adapter cable to a reliable 12 VDC power source as follows:
 - Option 1: Connect to the ignition switch—connect red to positive, black to negative, and orange to signal wire.
 - Option 2: Connect to the battery—connect red to positive, black and orange to negative.
- 2. Connect the other end of the terminal power adapter cable to the terminal power cable.
- 3. Route the terminal power cable into the cab for connection to the power port on the REBEL terminal.
- 4. Coil excess cable in a protected location then secure the installation with tie straps.

Option 1: Connect to ignition switch

Negative Positive Signal Wire



Negative Positive Negative

Option 2: Connect to battery



Connecting the Cables to the Terminal

Using "REBEL Terminal Overview" on page 13 and "REBEL Connection Diagram" on page 14, and the photo at right as guides, connect the appropriate cables to the REBEL terminal.



Mounting the Terminal

Before you mount the terminal determine an appropriate mounting location. Locate the terminal within easy reach and visibility of the driver; typically, this is in the front, right corner of the cab. Additionally, allow enough room for any optional equipment, such as the lightbar and/or switchbox.

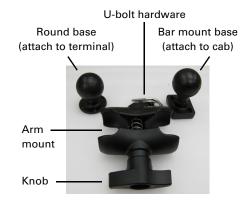
A WARNING: Do not mount the terminal in a location where it interferes with seeing other information, controls, or the field. Looking at the screen for too long while operating the vehicle can cause a crash.

Use the terminal mounting hardware to mount the terminal.

- 1. Review the terminal mounting hardware (top photo at right).
- 2. If necessary, loosen the knob on the arm mount and remove the ball mounts from the mounting assembly.

Using the bottom photo at right as a guide, complete the following steps:

- 3. Attach the round base to the back of the terminal using the screws provided.
- Attach the bar mount base to your preferred location using the included U-bolt hardware.
- 5. Place one end of the arm mount over the ball of the bar mount base then tighten the knob enough so the arm mount stays attached.
- 6. Position the terminal so the round base fits in the open end of the arm mount then tighten the knob securely.
- 7. Adjust the terminal to your preferred viewing angle.





Powering REBEL

Powering Up and Registering Your Product

Depending on the components of your system you may have to power up more than one component. For example, if your REBEL system includes eDriveXC you must power up both the REBEL terminal and the eDriveXC ECU.

1. Power up the REBEL terminal and any other components.

The REBEL terminal power button is located on the top right behind the touchscreen (circled at right). Press and hold the power button for approximately three seconds until the screen illuminates and the AgJunction logo appears.



2. Power up any optional components. Refer to your installation documentation for detailed instructions on installing optional components.

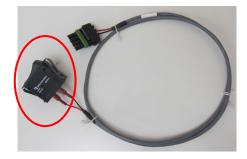
eDriveXC or eDriveXD

Turn the eDriveXC/XD power switch to the on (middle) position—the long thin LED on the switch illuminates red when on. eDriveXC/XD will establish communication with the REBEL terminal and wait for the DGPS signal to be acquired.

AC110

Turn the AC110 power switch (at right) to the ON position.





ESi electric steering wheel

Power is supplied to eDriveESi by eDriveXC/XD.



ISOBUS

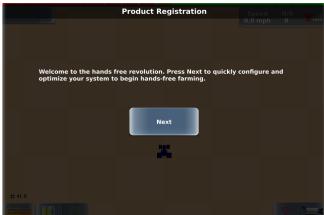
The implement's ISOBUS ECU receives power via the vehicle's IBBC connector or the ISOBUS retrofit kit. See "Connecting to Your ISOBUS ECU" on page 18 for more information.

Note: For information on configuring your ISOBUS implement refer to REBEL Help installed on your terminal.



- 3. Upon power up, REBEL completes a self test and the screen at right appears.
- 4. Acknowledge the warning and accept the End User License Agreement (EULA):
 - a. Press the underlined 'here' to display the End User License Agreement (EULA).
 - b. Read the EULA then press **Back** to return to the Warning screen at right.
 - c. (Optional) Adjust the brightness slider (along right of Warning screen) to adjust the screen brightness. Otherwise, refer to REBEL Help to use the System Preferences panel to adjust the screen brightness.
 - d. Press I Accept to display the first Product Registration screen, then press Next to begin the registration process.





- Connect to a Wi-Fi network and register your product:
 - a. Use the up/down arrows to scroll through the list of available Wi-Fi networks (if necessary) then press the network you want to connect to (the selected network button is green).



b. Press Connect.

- If the network requires no login information (unlocked lock to far right of button), a spinning progress circle appears to the right of the button you pressed and when connected, the lock changes to a green check (at right).
- If the network requires a password, enter the password in the window that appears then press **Done**. A green check mark replaces the lock.
- Upon a successful Wi-Fi connection, press
 Next to display the product registration
 screen with the product information pre-filled.





- d. Enter your personal information. The fields circled at right are required (upon first displaying this screen the field labels are red)—for each field press **Edit** to display a keypad, enter a value, then press **Done**. After completing all fields, the field labels turn from red to blue.
- e. Press **Register**. When registration is complete ('Registration Successful' appears on the screen) press **Complete** to display the Start Up Menu.



6. The Start Up Menu includes read-only fields for the current vehicle, current implement, and last job number. When you start REBEL for the first time only those buttons shown at right appear; you will not see any 'job' buttons. You must define a vehicle and an implement before any job functionality is enabled.

If your system has a Task Controller subscription, the Start Up Menu displays similar vehicle and implements fields/buttons, but Task-related field/buttons replace the Job field/buttons.



7. You can press **Vehicle Profiles** to start adding a vehicle or press **Implement Profiles** to start adding an implement; however, to learn more about adding vehicles and implements, press **Skip** to close the Start Up Menu then refer to REBEL Help on your terminal—see "Using Onscreen Help" on page 26.



REBEL must have a GPS position to begin a job and provide guidance. REBEL starts acquiring a DGPS signal (as long as the antenna has a clear view of the sky)—this may take several minutes, during which time the vehicle can be moving and you can perform certain functions.

- Upon achieving a GPS position, the satellite icon on the real-time status tab (upper right of map) turns orange and '3d' appears on the tab indicating a 3-dimensional solution.
- Upon acquiring a DGPS position, the satellite icon turns green and the real-time status tab displays '3D' indicating a differentially corrected 3-dimensional solution.
- Upon acquiring an RTK position (with optional RTK equipment) the tab displays 'RTK'.



Powering Down

Depending on the components of your system you may have to power down more than one component. For example, if your REBEL system includes eDriveXC you must power down both the REBEL terminal and the eDriveXC ECU. See "Powering Up and Registering Your Product" on page 23 for power button/switch photos of the REBEL terminal and eDriveXC/XD ECU.

- 1. Power down the REBEL terminal by pressing (and releasing) the terminal power button. REBEL will go through its power down sequence.
- 2. Power down any additional components:
 - eDriveXC/XD turn the eDriveXC/XD ECU power switch to the off position
 - AC110 turn the AC110 power switch to the OFF position
 - eDriveESi this will power down when you power down eDriveXC/XD



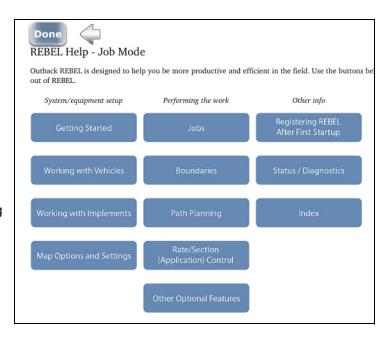
Obtaining Help for REBEL

The following sections provide instructions on using terminal onscreen Help and list support contact information.

Using Onscreen Help

REBEL includes onscreen Help available from the terminal. Press **Menu > Help** to display the Help window (at right).

- The first column of topics provides such information as understanding the touchscreen (Getting Started), adding a vehicle (Working with Vehicles), and adding an implement (Working with Implements.
- The second column describes how to perform work, such as starting a job (Jobs), creating a boundary (Boundaries), and setting a straight line path to autosteer along (Path Planning).
- The third column provides information on registering REBEL (if you skipped registration at startup), viewing status data (Status/Diagnostics), and using the Index to find a specific topic (Index).



Customer Support

North America

Outback Guidance AgJunction 2207 Iowa Street Hiawatha, KS 66434 Phone: (800) 247-3808

Fax: (785) 742-4584

outbackCS@outbackguidance.com

Outback Canada 100-105 Fort Whyte Way Oak Bluff, MB R4G 0B1 Phone: (866) 888-4472

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Australia

Outback Australia Unit 5A, 305 Montague Road West End, QLD 4101 Phone: (07) 3004 6789

Fax: (07) 3004 6799

outbackAUCS@outbackguidance.com