Kubota

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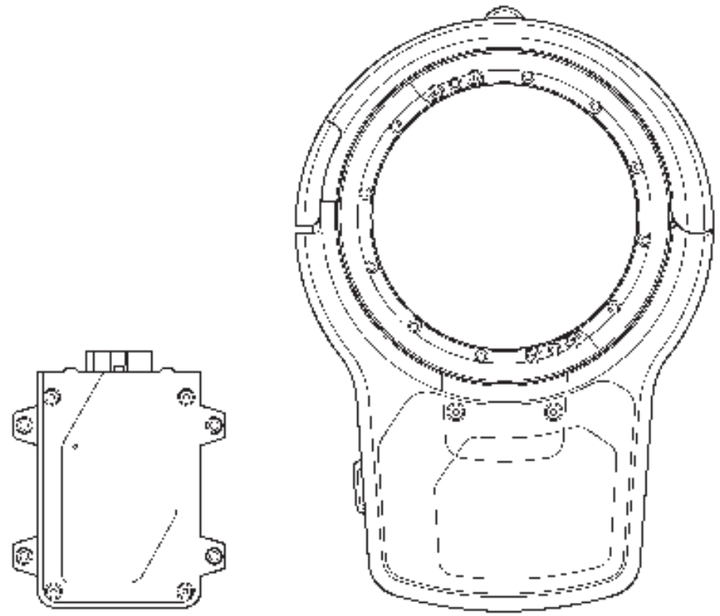
English (U.S.A.)
Code No. 77700-14021

WorkSmart Autosteer

OPERATOR'S MANUAL

WorkSmart Autosteer



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READ AND SAVE THIS MANUAL

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ABBREVIATION LIST

Abbreviations	Definitions
DGPS	Differential global positioning system
ECU	Electronic control unit
EGNOS	European geostationary navigation overlay service
EMC	Electromagnetic compatibility
EMI	Electromagnetic interference
ESA	European Space Agency
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
GNSS	Global navigation satellite system
GPS	Global positioning system
IMU	Inertial measurement unit
MSAS	MTSAT satellite augmentation system
NTRIP	Networked transport of RTCM via internet protocol
PPP	Precise point positioning
RRS	Real reference station
RTCM	Radio technical commission for maritime services
RTK	Real-time kinematic
SBAS	Satellite-based augmentation system
VRS	Virtual reference station
WAAS	Wide area augmentation system

CALIFORNIA PROPOSITION 65

⚠ WARNING: Handling passenger or off-highway motor vehicle parts can expose you to chemicals such as phthalates and lead, which can cause cancer and reproductive harm. To minimize exposure, service the vehicle in a well-ventilated area, wear gloves, and wash your hands. For more information see www.P65Warnings.ca.gov/motor-vehicle-parts.

Canadian Electromagnetic Compatibility (EMC):
This product is compliant with ICES-003.

DESCRIPTION OF TERMS

Term	Description
A + heading wayline	The A+ heading line is a straight wayline. The A+ line is defined by fixing a point, then heading in a direction.
AB line	The AB line is a straight wayline. Set a beginning point (A) and an end point (B).
Auto coverage	Auto coverage is a feature with which the application of coverage is synchronized with autosteer when it is engaged.
Autonomous GNSS positioning	Autonomous GNSS positioning uses no corrections. The rover receiver calculates its position using only the GNSS signals it receives.
Boundary	A line indicating the border surrounding a field
Backlash	The slack in a mechanism caused by gaps between parts, such as with a steering wheel. It can be a whole number from 0 to 90 degrees.
Calibration	Calibration is the process of verifying and adjusting the measurements made by the system sensors. This ensures that the measurement values align with the standard or true values.
Contour	Contour is a wayline that can include curves. Begin recording and drive until you are at the end of the curved line, then stop recording.
DGPS	Differential GPS (GNSS) positioning. The GPS (GNSS) receiver uses corrections from WAAS, EGNOS or MSAS satellites.
EGNOS	A regional SBAS that augments the GPS system, providing improved accuracy and integrity for users in Europe. EGNOS is developed by the European Space Agency (ESA), the European Commission, and Eurocontrol.
EMC	Electromagnetic compatibility (EMC) refers to the ability of electronic equipment and systems to function satisfactorily in their electromagnetic environment without causing or suffering from electromagnetic interference (EMI). Ensuring EMC is crucial for the reliable operation of electronic devices in various environments.
Farm	A collection of fields (in reference to the WorkSmart Autosteer application)
FCC	The Federal Communications Commission (FCC) is an independent agency of the United States government that regulates interstate and international communications by radio, television, wire, satellite, and cable. The FCC's regulations aim to ensure that communication systems operate without causing harmful interference to other systems and that they comply with established technical standards.
Field	Settings created in the WorkSmart Autosteer application to represent an actual field, one or more parts of an actual field, or a group of two or more fields. Field profiles include boundaries and waylines for steering.
GNSS	Global navigation satellite system. A satellite system that provides autonomous geo-spatial positioning with global coverage. GNSS allows a receiver to determine its position, velocity, and time by processing signals from satellites.
IMU	An inertial measurement unit (IMU) is a device that measures the acceleration, angular velocity, and magnetic field strength of an object. This allows for the calculation of the object's position, velocity, and orientation.
NTRIP	NTRIP is a standard protocol for transmitting RTCM (radio technical commission for maritime services) data over the internet. It is primarily used for distributing real-time kinematic (RTK) GNSS correction data.
Path	A path refers to the route taken by the machine as it moves from one end of the field to the other, performing a specific task.
Perfect trailed attachment	Trailed behind the machine with a pivot point at the machine hitch with swing arms that hold the attachment on the same path as the machine.
Pivot	A wayline pattern you define for your field by recording the outer circular boundary of the pivot area and then entering a value to compute the rows within the pivot.

PPP	Precise point positioning (PPP) is a GNSS positioning technique that provides highly accurate location data by using precise satellite orbit and clock information, along with corrections for various sources of error. Unlike NTRIP-RTK, PPP does not require an internet connection.
Pre-engage	Pre-engage allows you to press the *"Engage"* button for autosteering even from a stationary state. When the necessary conditions for autosteering, such as speed, are met, the system will automatically engage if pre-engage is used. If the necessary conditions for autosteering are not met within 10 seconds, such as remaining stationary after pressing the *"Engage"* button, the system will automatically disengage.
Rigid front attachment	Rigidly mounted to the front of the machine
Rigid attachment	Rigidly mounted to the machine with the 3-point hitch
RTK	Real-time kinematic. RTK GNSS positioning uses the RTK positioning method to achieve centimeter-level accuracy.
SBAS	A system that improves the accuracy, integrity, and availability of GNSS signals by using additional satellite-broadcast messages. SBAS includes systems like WAAS, EGNOS, and others.
Shuttle shift	Shuttle shift is a function that continues autosteering when the machine stops briefly or changes direction. When it is on, if the machine stops but starts moving again within 8 to 10 seconds, autosteer will remain engaged.
Trailed attachment	Trailing behind the machine, with a pivot point at the machine hitch.
WAAS	A type of SBAS developed by the Federal Aviation Administration (FAA) for aviation use in the United States. WAAS provides enhanced accuracy and reliability for GPS signals.
Wi-Fi Direct	Wi-Fi Direct is a technology that allows Wi-Fi-enabled devices to communicate directly with each other without the need for a Wi-Fi router. This enables the sharing of files, use of printers, and other tasks without an internet connection.
Xtrack error	Xtrack error is a measure of the distance between the current position of a machine and a predefined path or wayline that the machine is supposed to follow. It indicates how far off the machine is from its intended path.

FOREWORD

Thank you for the purchase of a Kubota product.
Before using this product, read this manual carefully and use the product correctly. After reading, keep the manual in a safe and easy-to-access place for future reference. Note that product specifications are subject to change without prior notice. The product delivered to you may differ slightly from the product described in the manual.

SAFETY FIRST

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and on labels on the machine itself to warn of the possibility of personal injury. Read these instructions carefully. It is essential that you read the instructions and safety regulations before you attempt to assemble or use this unit.

DANGER:	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING:	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION:	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.
IMPORTANT:	Indicates that equipment or property damage could result if instructions are not followed.
NOTE:	Gives helpful information.

CONTENTS

INTRODUCTION

NOTICE

1. Copyright and trademark

WorkSmart Autosteer™ is a trademark of Kubota.
Wi-Fi® is a registered trademark of Wi-Fi Alliance.
Bluetooth® is a registered trademark of Bluetooth SIG, Inc.
Company names, product names, and service names mentioned in this document are trademarks or registered trademarks of their respective companies. Trademark symbols may not be used in every instance within this document.

2. FCC compliance statement(USA)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation

This device complies with below part 15 of the FCC Rules.

- Part 15 Subpart C
- Part 15 Subpart E

FCC CAUTION:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

3. ISED compliance statement(Canada)

This device contains license-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

SAFE OPERATION

GENERAL

- WorkSmart Autosteer equipment must not be used by operators under the influence of alcohol or drugs.
- Read and understand this manual, and familiarize yourself with all controls before using the equipment.
- Keep the manual with the equipment.
- Transfer the manual with the equipment if it is moved to another machine.
- Refer to the manual for the equipment and ensure compliance with local regulations.
- Understand the speed, brakes, steering, stability, and load characteristics of the machine before starting.
- Check all controls in a clear area before starting work.
- Identify possible hazards.
- Machine and attachment parts can become hot during operation and may be under pressure. Refer to machine manuals
- Wear appropriate protective clothing for the task and conditions.
- The mobile application must be running and connected to the ECU for the autosteer to operate. It is recommended that the mobile device display is kept on with the application in focus and in an easy viewing position at all times. However, in consideration of open station machines the following allowances are made:
  - The application is always needed to start a task but then the mobile device display may be turned off. If the display is turned off, the power/engage switch can be used to engage autosteer for up to 30 seconds. After 30 seconds, the power/engage switch will not engage until the display is on and unlocked with the application in focus again.
  - Autosteer can remain engaged indefinitely while the mobile device display is off, provided the application keeps running and stays connected. When autosteer is disengaged with the display off, the power/engage switch can be used to re-engage for up to 30 seconds. For example, after making a turn. If there is a gap of 30 seconds or more between disengage and re-engage, the mobile device display must be turned on again and unlocked with the application in focus to engage again.
  - The power/engage switch can always disengage steering regardless of whether the display is on or off.
  - Bringing another application into focus has the same effect as turning off the display, the same 30 second limits apply.
- Store the WorkSmart Autosteer in an area protected from dust and water intrusion, at a temperature between -40 ℃ and 85 ℃ (-40 ℉ and 185 ℉).
- The magnetometer has a field shock specification of ±250 milliteslas. Exposure to magnetic fields or shocks beyond this limit may adversely affect the device's performance.

AUTOSTEER

- Never leave the operator's seat while the machine is moving and the autosteer system is engaged.
- Autosteer systems cannot detect or avoid field obstacles. Ensure you are adequately trained to operate the autosteer system. Obstacles in the field can cause collisions, which may injure you and damage the machine. If an obstacle makes it unsafe to continue operation, stop the machine and turn the steering wheel to disengage the system.
- If the speed detected by the system falls below the minimum speed or exceeds the maximum speed, the autosteer will disengage.
- Bluetooth connectivity may be lost if the device moves out of range. Ensure that the device remains within the appropriate distance during use. Bluetooth connectivity is required when using autosteer.
- When making turns, be cautious of the jack-knifing phenomenon. This occurs when a large angle forms at the connection point between the machine and the attachment during a turn. It can lead to loss of control, accidents, and damage to both the machine and the load.
- Only use this system under the following conditions:
  - Away from people and obstacles
  - Away from high voltage power lines or other overhead obstructions
  - On private property without public access
  - Within cleared fields
  - Off public roads or access ways
- Verify that the machine's movement direction matches the system's detected direction. Mismatched directions can cause sudden turns.
- The operator must be aware of the machine's position and field conditions at all times.

- Only use the console in areas free of obstacles and maintain a safe distance.
- The system assists in steering the machine, but the operator remains in control and must be alert at all times.

CALIBRATION

- Do not perform the calibration in the following environments:
- Areas with machine or pedestrian traffic, such as public roads
- Narrow farm roads calibration involves turning which requires sufficient clear space.
- Areas near power lines where electromagnetic interference may occur.
- Areas close to windbreaks, houses, or warehouses where there are obstructions.

TURN

- The “Min Radius” in “Turn Settings” can be bigger but not smaller than the minimum radius measured in “Minimum Turn Radius” calibration. If it is set smaller in the application then the minimum for the machine will apply. If you are going fast and the turn has to be made bigger to keep under the lateral acceleration limit, the number in “Turn Settings” will not apply.
  Since the “Minimum Turn Radius” set in the settings is not always applied, always be aware of your surroundings when making turns.

RADIO FREQUENCY RADIATION EXPOSURE INFORMATION

- This equipment complies with FCC and IC radiation exposure limits for an uncontrolled environment. This transmitter must not be located next to any other antenna or transmitter.
- Products using cellular modems or base stations can transmit radio frequency energy.

GNSS

- Significant and sudden changes in satellite signal can result in substantial positional errors. Under these conditions, the WorkSmart Autosteer system may react suddenly. To prevent injury or property damage under these conditions, disable the WorkSmart Autosteer and manually control the machine until conditions improve.
- The GNSS antenna may experience interference if the machine is operated close to power lines, radar dishes, or cell phone towers.

ELECTRICAL SAFETY

When working with electrical components, observe the following instructions.

- Disconnect the negative terminal of the battery before welding on the machine.
- Ensure all power cables are connected to the correct polarity.
- Ensure equipment is grounded according to installation instructions.
- The system will automatically disengage when the disengage reason events occur. Be careful, as continuing to operate the machine without noticing the disengagement could lead to injury or accidents.

SETTINGS

- Check the steering setting if your steering deviates more than 5 cm (2 inches).

MOBILE APPLICATION

The mobile application is used for operating the autosteer function.

NOTE :
The actual application and images in the manual may vary slightly depending on the device size and operating system.

INSTALLING THE WORKSMART AUTOSTEER APPLICATION

1. Android

Android users should follow the following steps to install the application.

1. Open Google Play.
2. Type *"WorkSmart Autosteer App"* and search in the search bar.
3. Select *"WorkSmart Autosteer App"* and tap "`Install`".

(1) "WorkSmart Autosteer App"

NOTE :
- **Use Android OS version 12 or higher, Bluetooth version 4.2 or higher, and support for Wi-Fi Direct.**
- **An internet connection is required.**

2. iOS

iOS users should follow the following steps to install the application.

1. Open the App store.
2. Type *"WorkSmart Autosteer App"* and search in the search bar.

3. Select *"WorkSmart Autosteer App"* and tap **"**`Install`**"**.

(1) "WorkSmart Autosteer App"

NOTE :
- **Use iOS version 15 or higher and Bluetooth version 4.2 or higher.**
- **An internet connection is required.**

END USER LICENSE AGREEMENT

To use WorkSmart Autosteer, you must agree to the end user license agreement.

1. Open the application.
2. Read and understand the end user license agreement.

3. If you agree to the end user license agreement, tap "AGREE". If you do not agree to the end user license agreement, stop using WorkSmart Autosteer.

(1) "AGREE" button

GRANTING PERMISSIONS

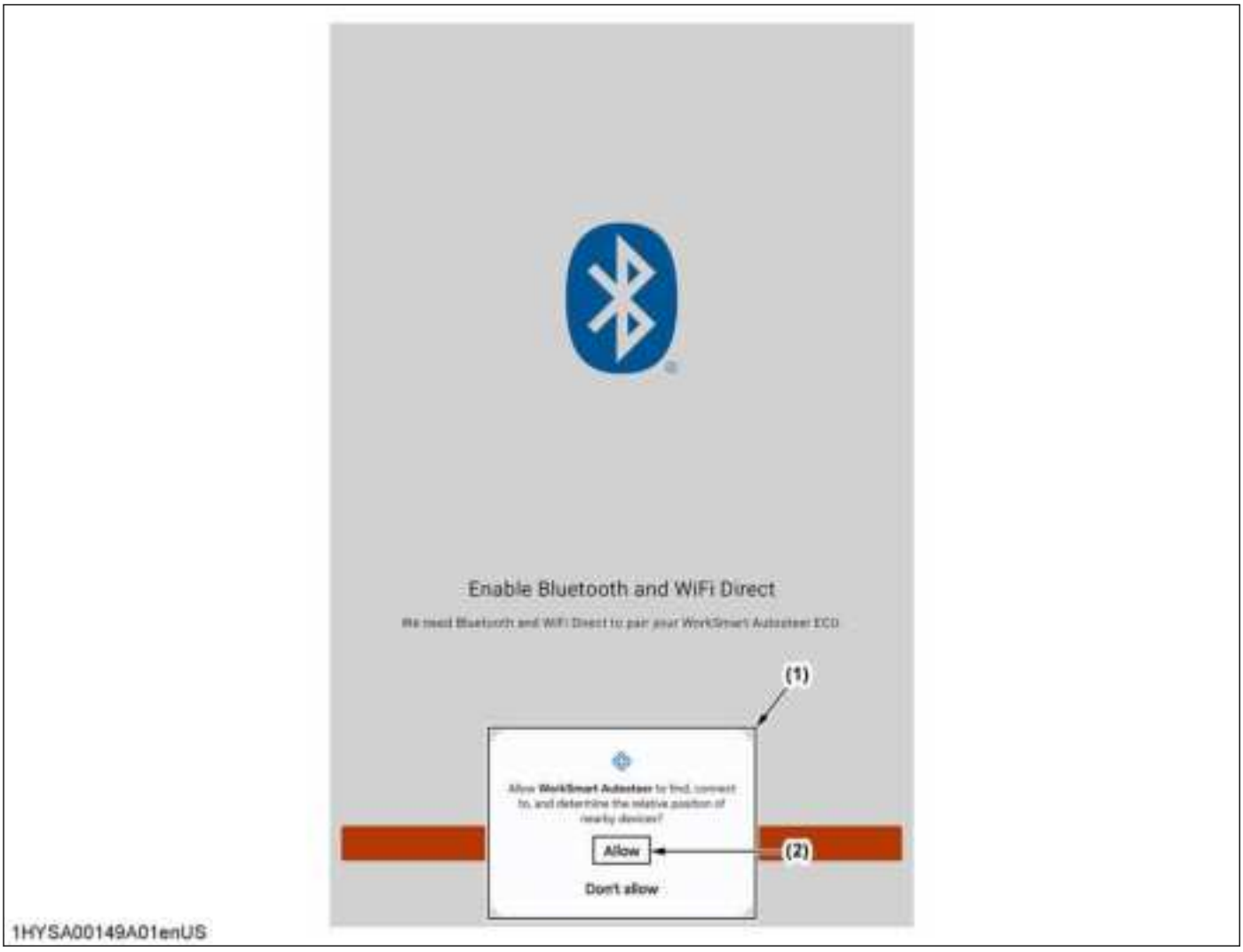
To use the WorkSmart Autosteer application, you need to grant the necessary permissions. Follow the following steps to grant necessary permissions.

Android OS

1. When you open the application, a window saying "Enable Bluetooth and WiFi Direct" will appear. Tap on the "Enable Bluetooth and WiFi Direct" button. If you agree, select "Allow".

(1) "Enable Bluetooth and WiFi Direct" button

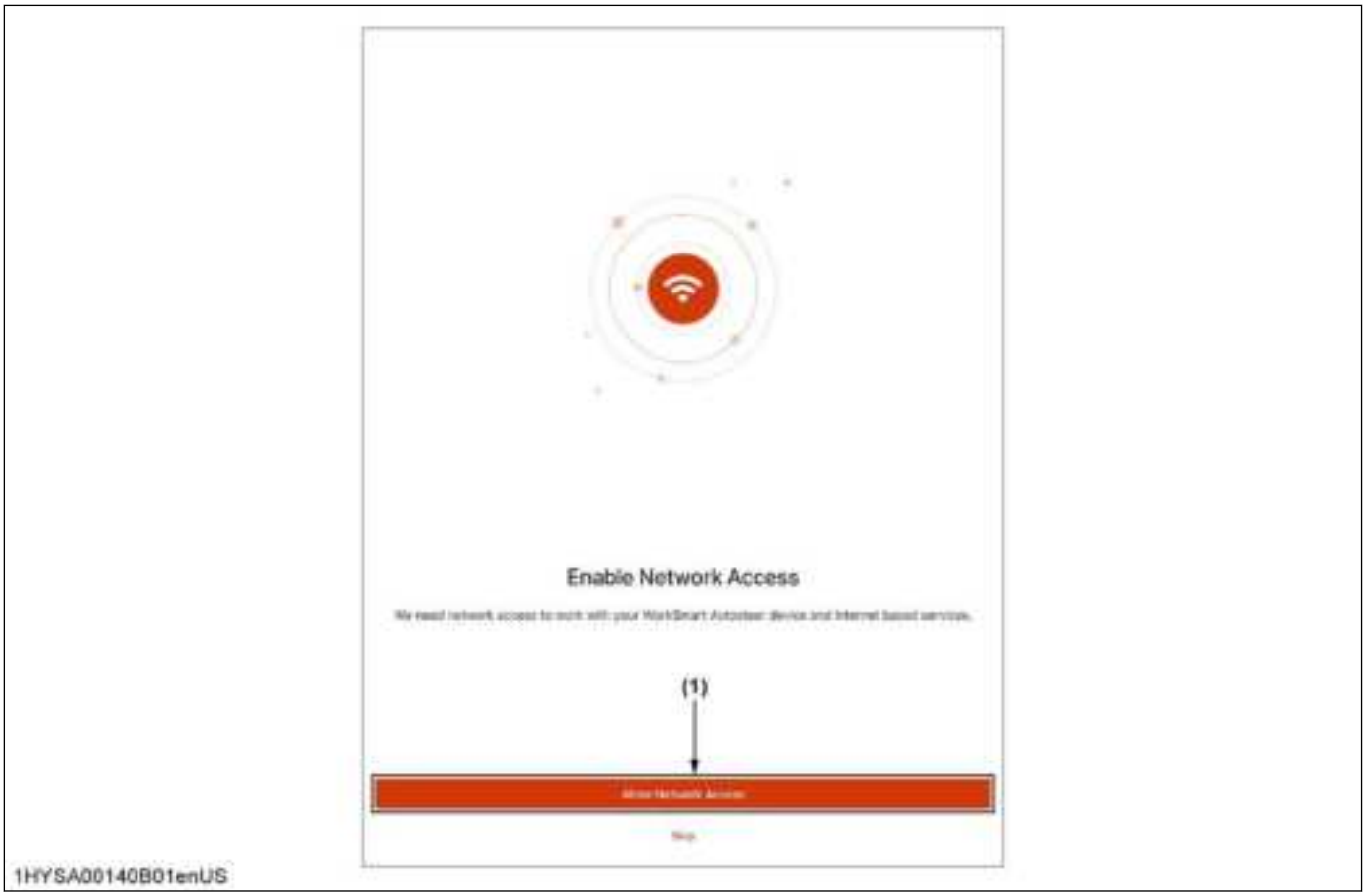
2. A pop-up window requesting permission will appear. If you agree, select "Allow".



(1) Pop-up window
(2) "Allow" button

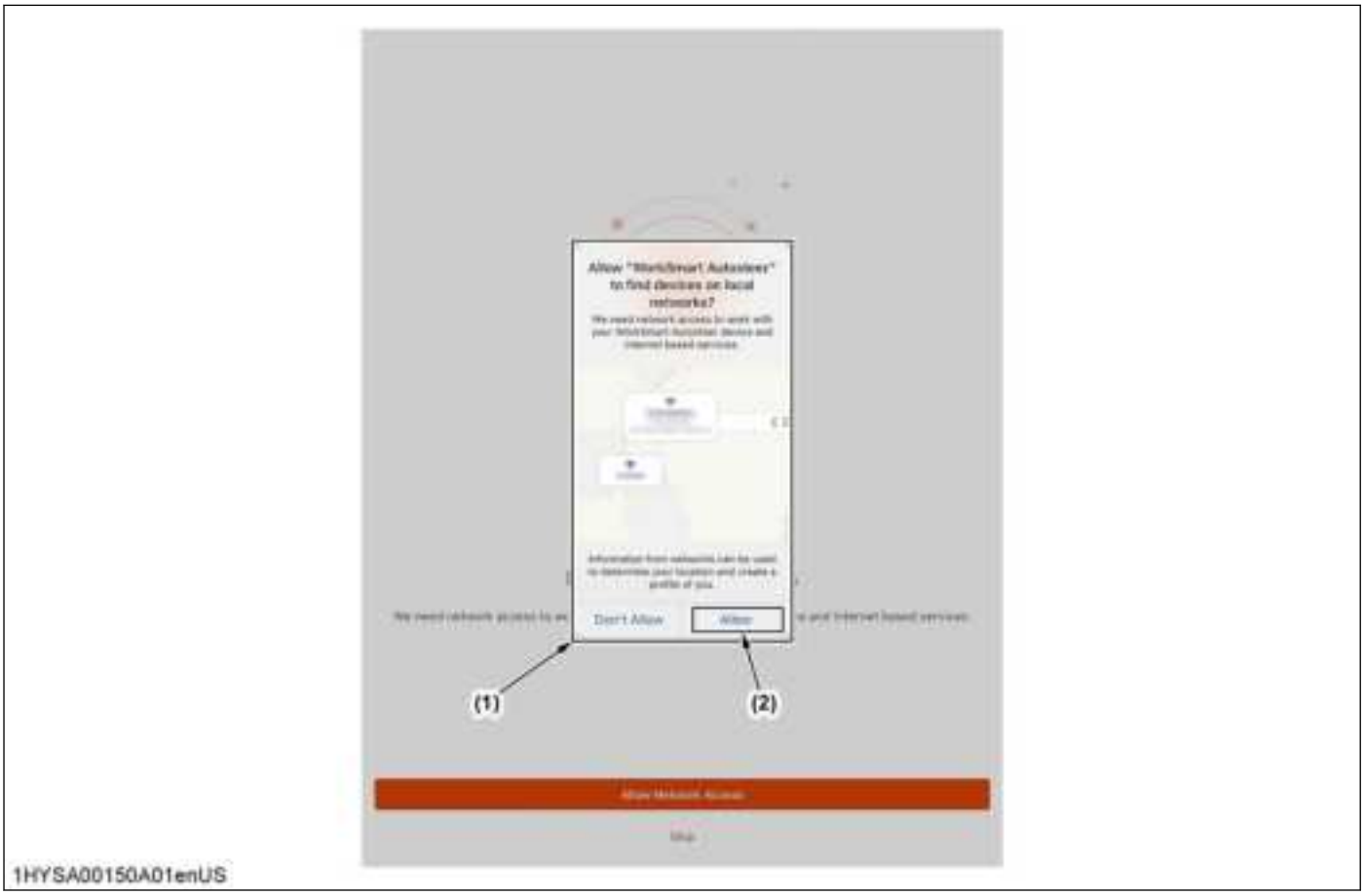
iOS

1. When you open the application, a window saying "Allow Network Access" will appear. If you agree, tap "Allow Network Access".



(1) "Allow Network Access" button

2. A pop-up window requesting permission will appear. If you agree, select "Allow".



(1) Pop-up window
(2) "ALLow" button

NOTE :
Depending on the system of the device you are using, the display of permissions may vary. Grant the necessary permissions to use WorkSmart Autosteer.

CREATE ACCOUNT, SIGN IN, OR SKIP SIGN IN

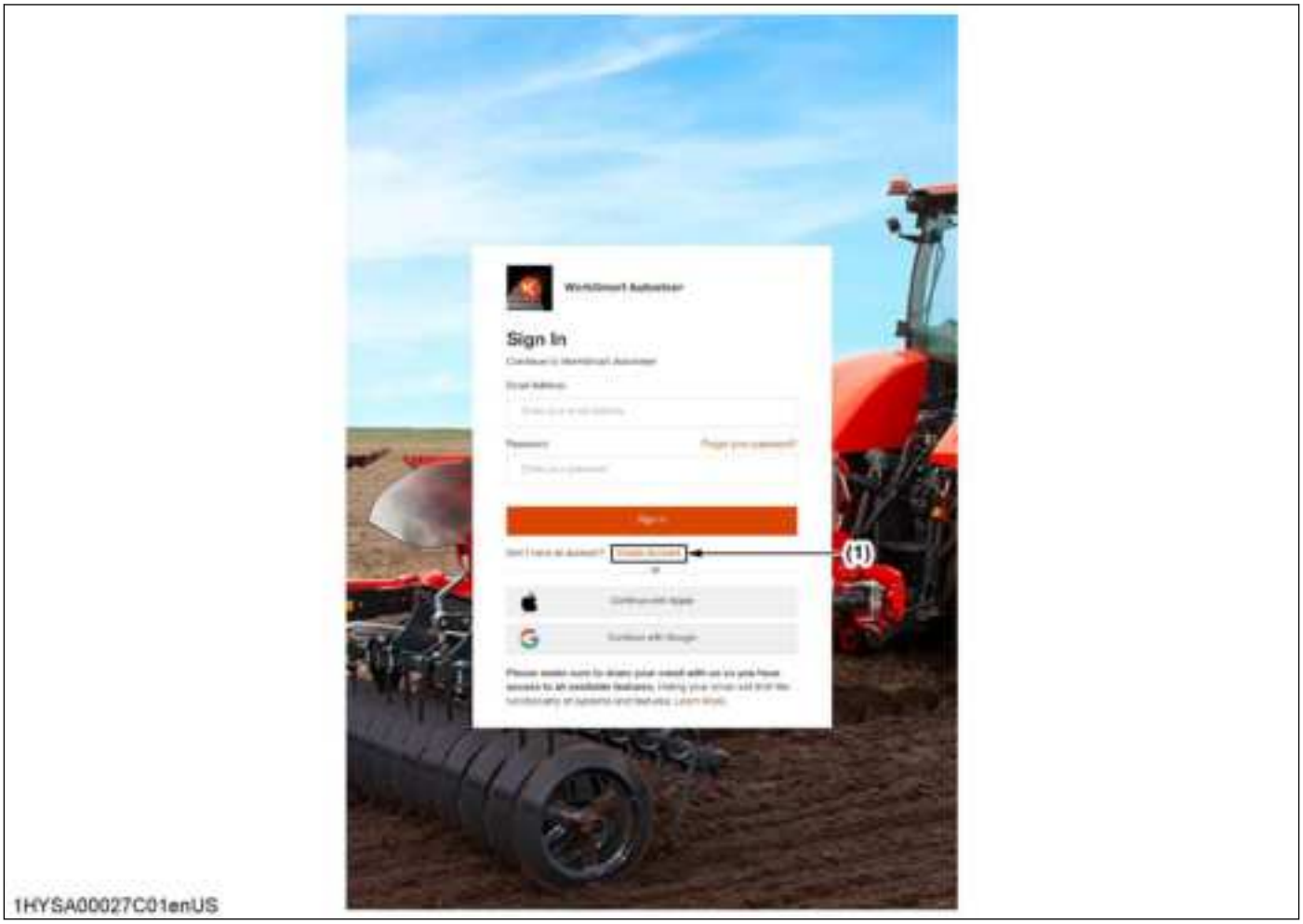
When starting to use the application, choose "Sign In or Create Account" if you want to back up data to cloud storage, use the web portal, or access the same data on multiple devices.
For new users: create an account.
For existing users: sign in.
For users who do not want to create an account or sign in: skip sign in.

NOTE :
- **Users can start using the autosteering function without creating an account or signing in.**
- **If you started using the web portal before the application, you can sign in to the application with the same account as the web portal.**

1. Creating an account

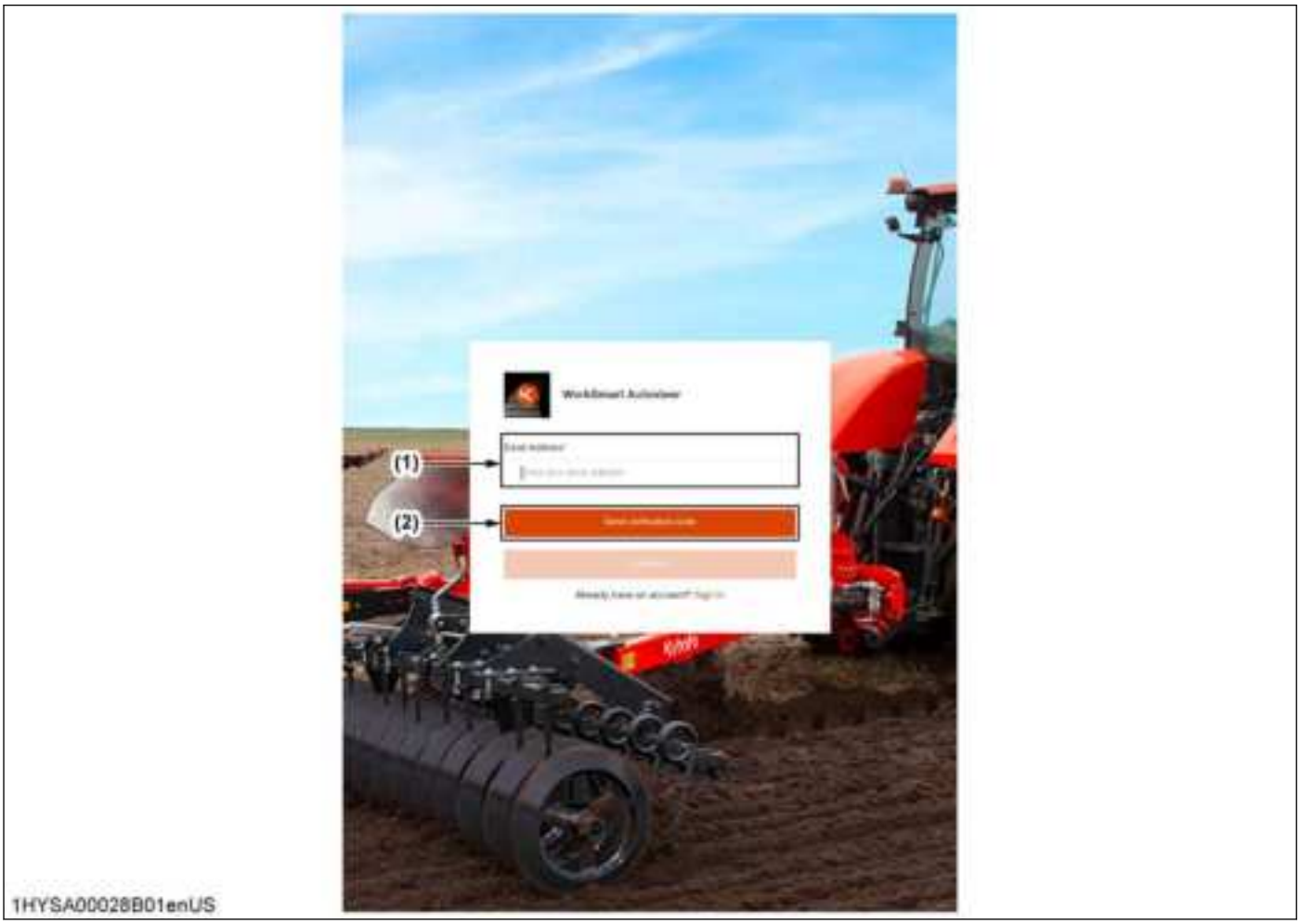
NOTE :
An internet connection is required for creating an account.

1. Tap “Create Account”.



(1) “Create Account”

2. Enter your email address and tap "Send verification code".

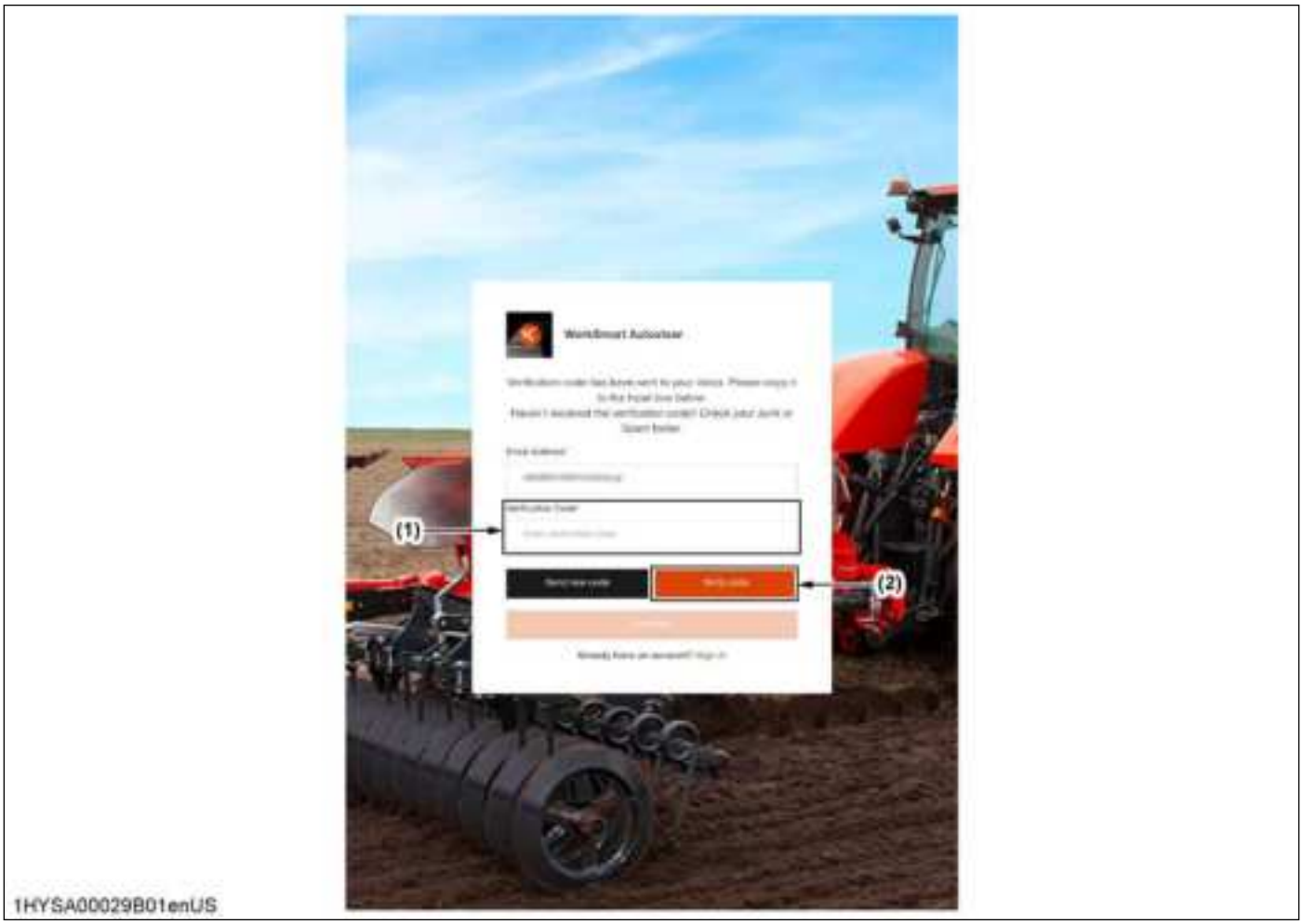


(1) Email address field
(2) "Send verification code" button

3. An input field for "Verification Code" will appear below the email address.
4. Open your email inbox and search for an email from kubota.com.

NOTE :
If you cannot find the email, check your spam or junk folder.

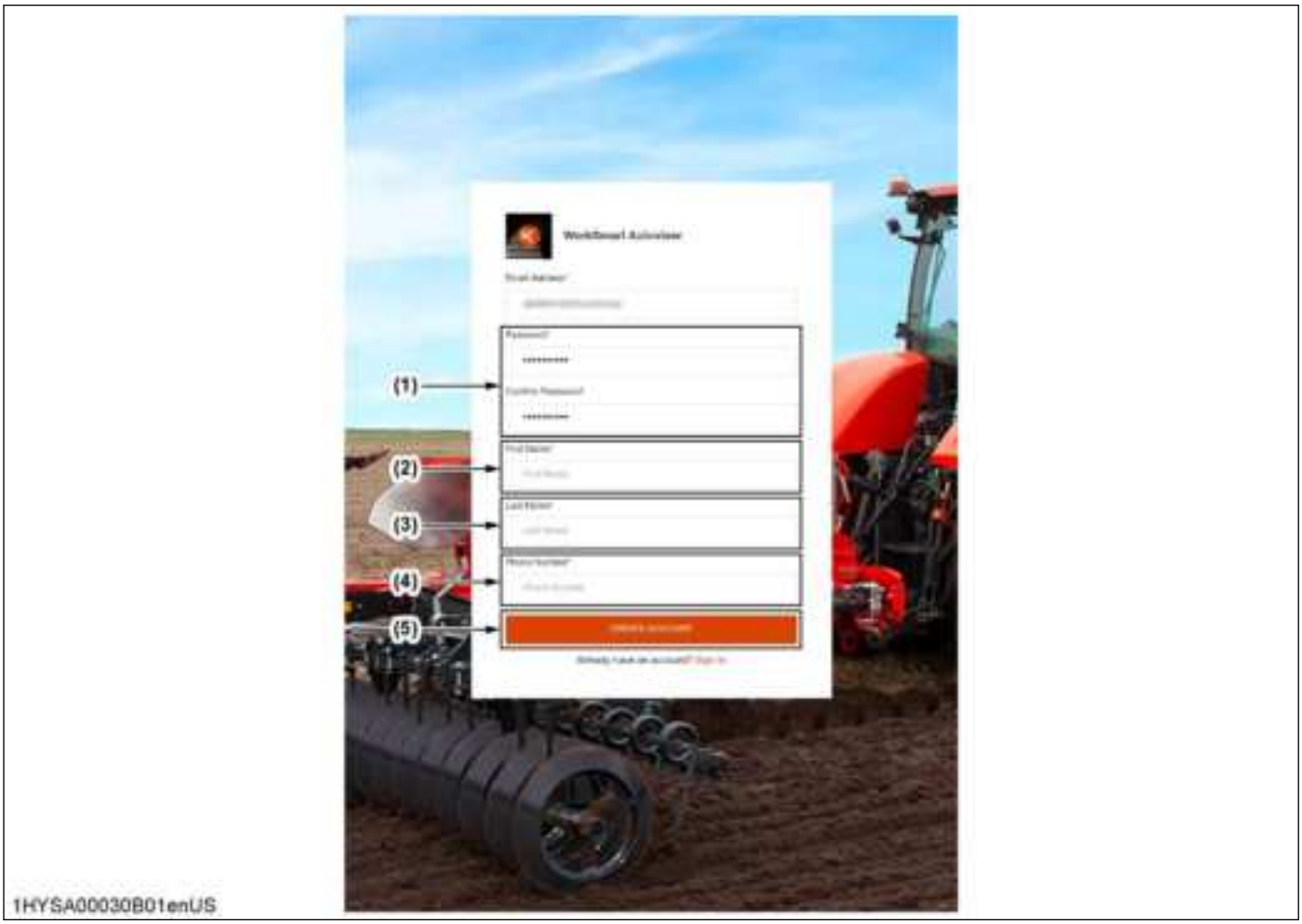
5. Enter the verification code that was provided in the email and tap "`Verify code`".



(1) Input field for "`Verification Code`"
(2) "`Verify code`" button

6. Tap "`Continue`".
7. Enter the password twice. Your password must have at least 3 of the following conditions:
   - a lowercase letter
   - an uppercase letter
   - a number
   - a symbol
8. Enter your first name and your last name.
9. Enter your phone number.

10. Tap "CREATE ACCOUNT".

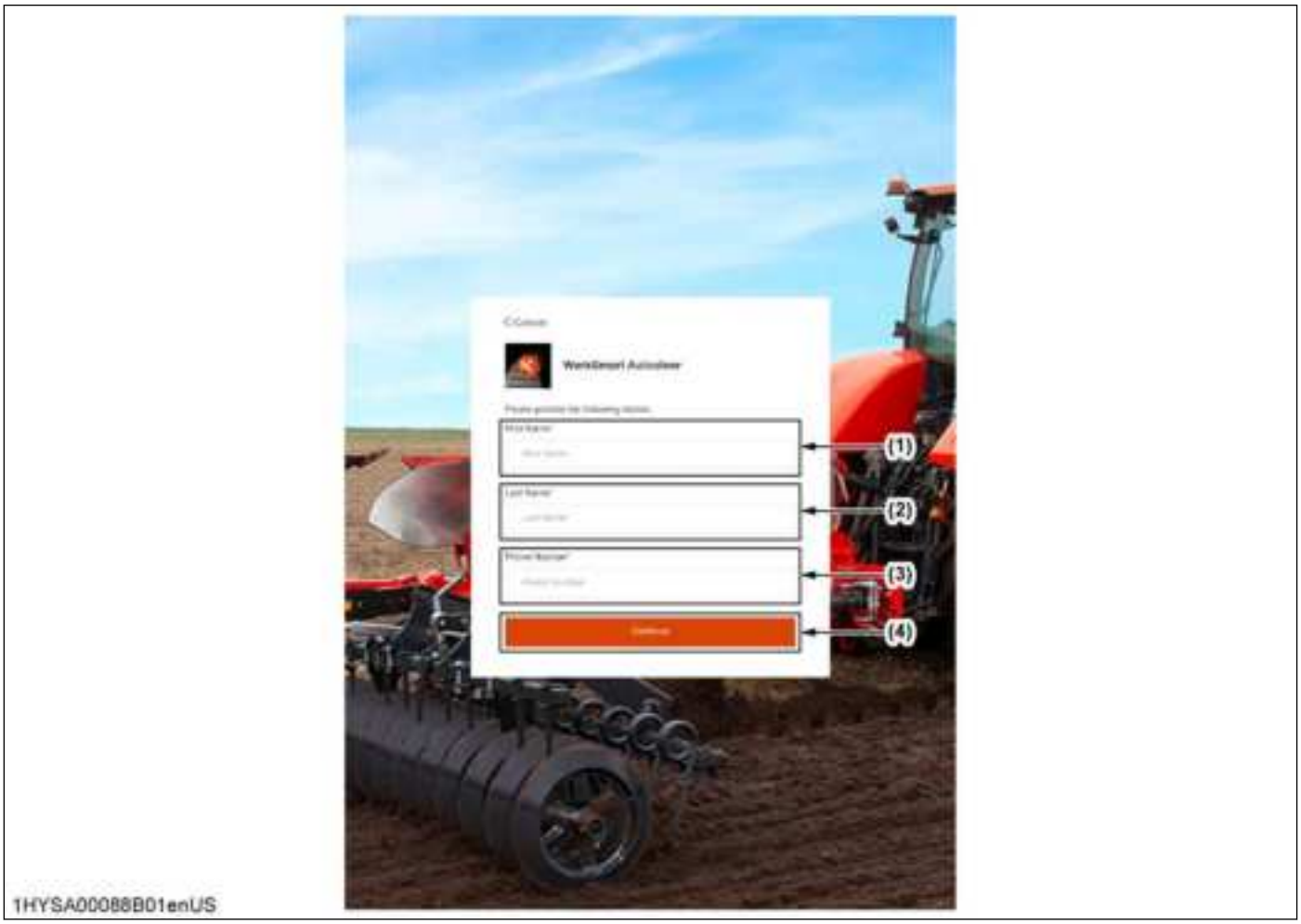


(1) Password fields
(2) First name field
(3) Last name field
(4) Phone number field
(5) "CREATE ACCOUNT" button

2. Creating an account with an Apple or Google account

1. To create a WorkSmart account using an Apple or Google Account, follow the instructions provided by each company.

2. After that, the following register user screen will be displayed. Enter your first name, last name, the phone number, and then tap "Continue".



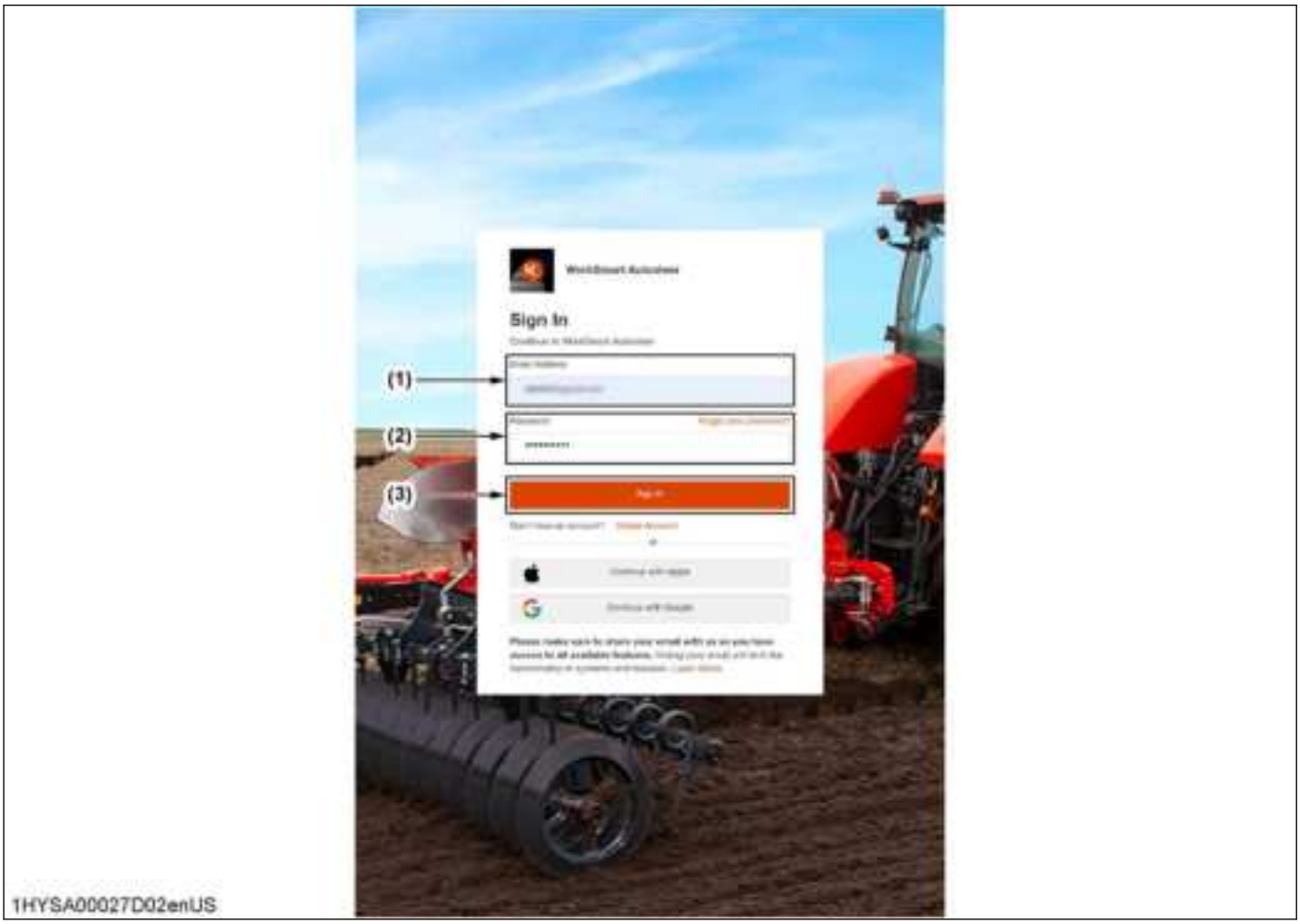
(1) First name field
(2) Last name field
(3) Phone number field
(4) "Continue" button

3. Sign in

NOTE :
- **An internet connection is required for signing in.**
- **Users need to sign in every 90 days.**

1. Enter the required information (email address and password).

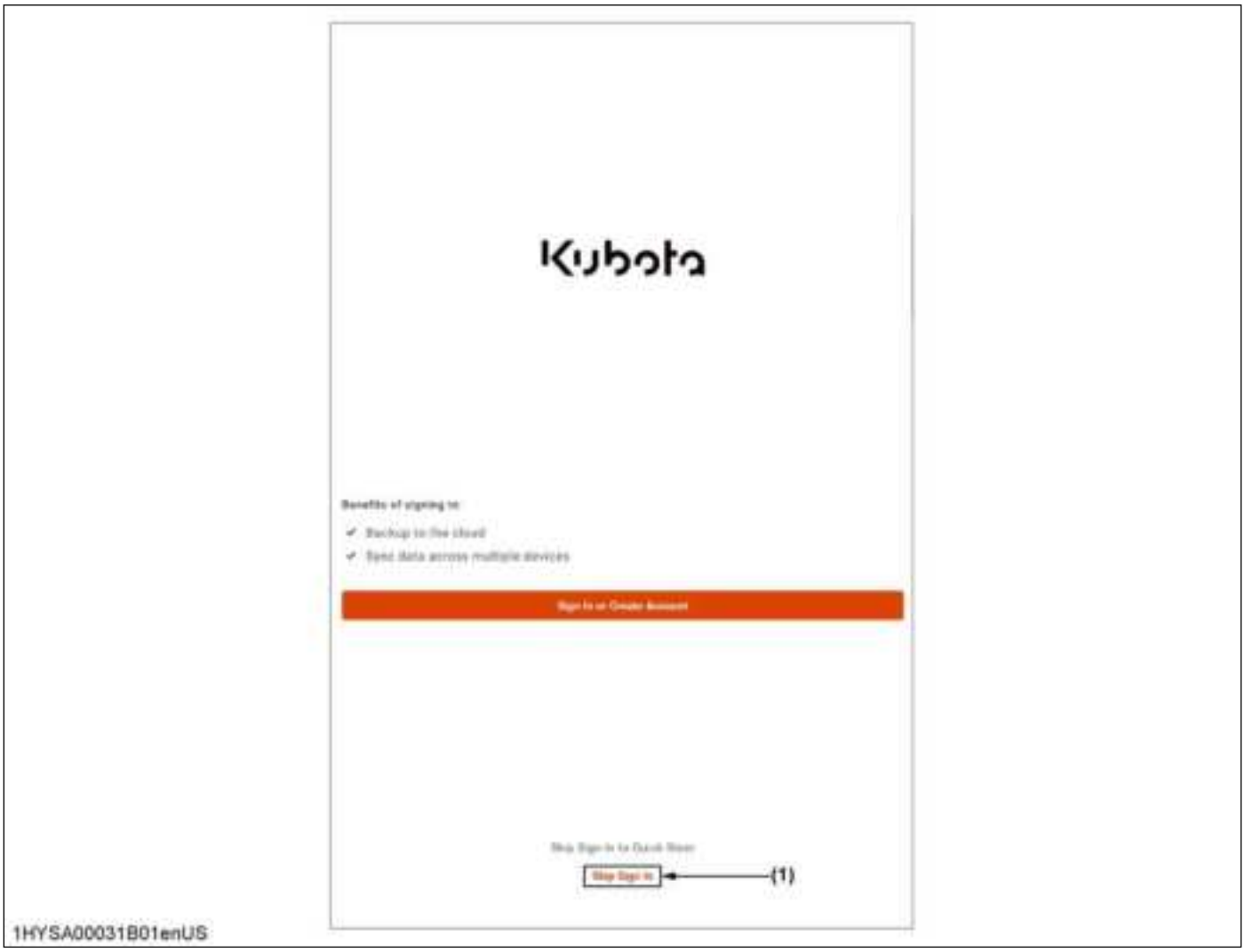
2. Tap “Sign In”.



(1) Email address field
(2) Password field
(3) “Sign In” button

4. Skip sign in

1. Tap “Skip Sign In”.

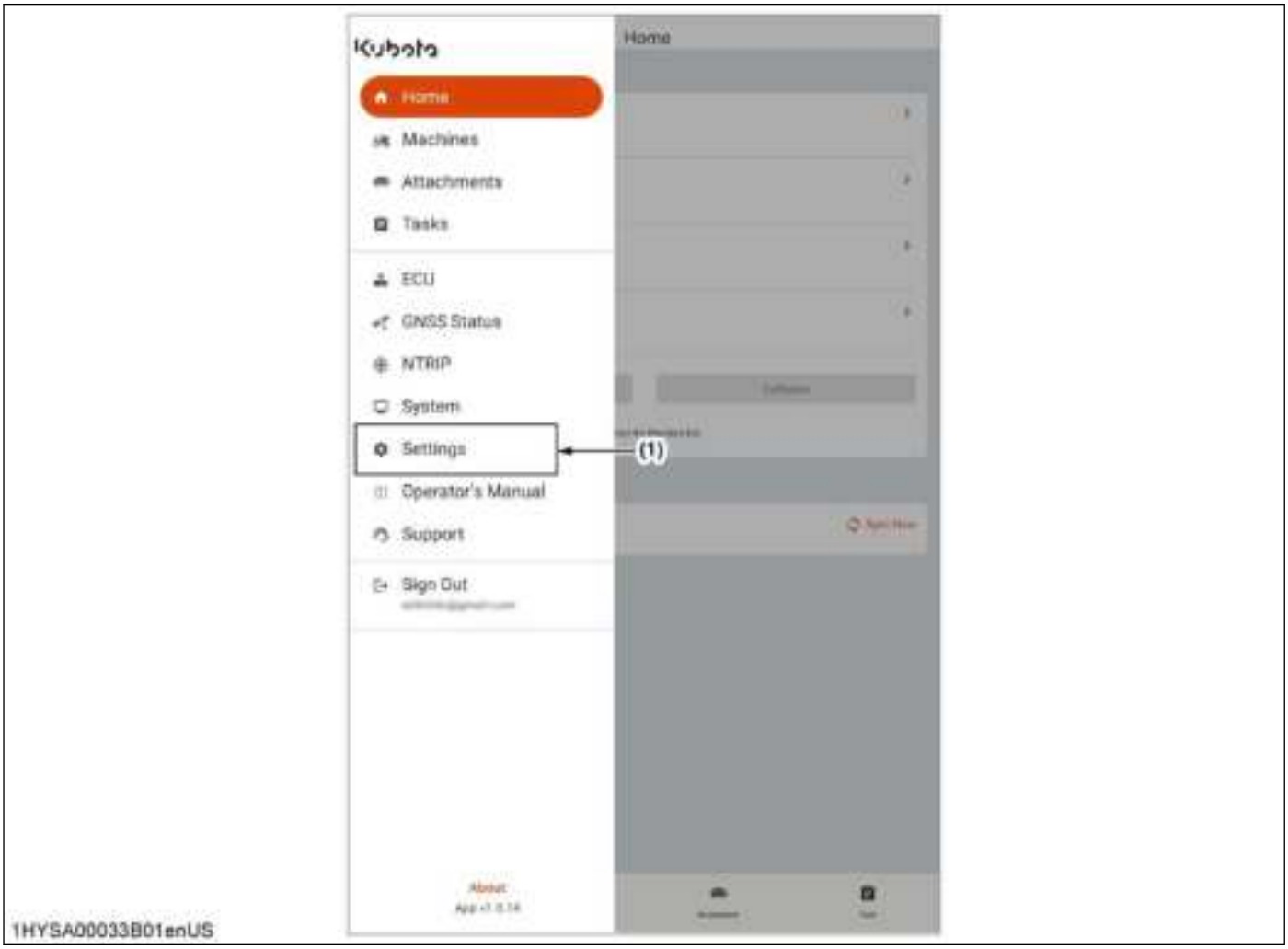


(1) “Skip Sign In”

MEASUREMENT SETTINGS

When using the application for the first time, set the measurement units.

1. Tap on the ☰ icon in the upper left corner, and then tap on “Settings”.



(1) “Settings” tab

2. In “Measurement”, select your preferred measurement, either “Imperial” or “Metric”.

(1) “Measurement” menu
(2) “Imperial” measurement
(3) “Metric” measurement

TURNING ON THE SWITCH

WARNING

To avoid personal injury or death, observe the following instructions.
When working with electrical components, observe the following instructions.

- **Disconnect the negative terminal of the battery before welding on the machine.**
- **Ensure all power cables are connected to the correct polarity.**
- **Ensure equipment is grounded according to installation instructions.**

CAUTION

To avoid personal injury, observe the following instructions.
This equipment complies with FCC and IC radiation exposure limits for an uncontrolled environment. This transmitter must not be located next to any other antenna or transmitter.

Check the installation manual and ensure that the WorkSmart Autosteer installation is complete. If it is complete, follow the next steps to turn on the power/engage switch.

1. Turn on the power/engage switch. If you are using the MDU, turn on the MDU switch. If you are using the PVED-CLS valve, turn on the switch for the valve in the tractor.

(1) Power/engage switch

(1) MDU switch

2. Check that your system is receiving power. Look for the LED of the ECU to be orange when booting up, and green when ready. The LED of the MDU turns green when it is on.

NOTE :
The power/engage switch has states for *"Power OFF"*, *"Power ON"*, and *"Engage"*.
- ***"Power OFF"*: the state where the switch is not pressed.**
- ***"Power ON"*: the state where the switch is latched in the middle position.**
- ***"Engage"*: the state where the switch is fully pressed into the momentary position, when released it springs back to the middle position.**

ECU CONNECTION

WorkSmart Autosteer requires a Bluetooth connection between the ECU and your Android or iOS device. Follow the following procedure to connect via Bluetooth.

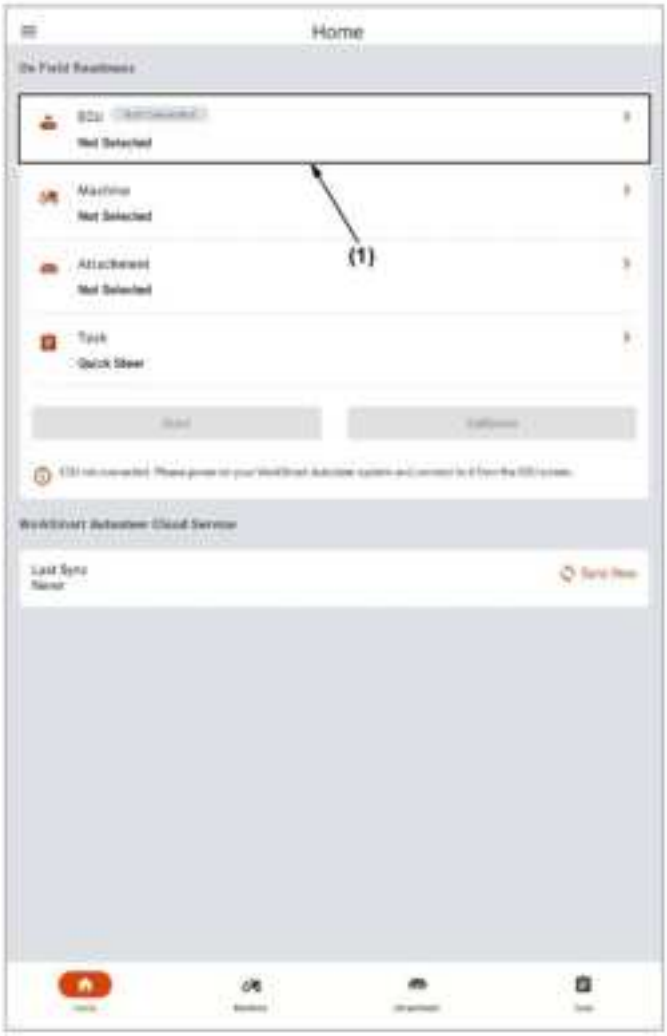
NOTE :
After connecting to the ECU, drive forward to align the system's direction with the actual direction of the machine.

WARNING

To avoid personal injury or death, observe the following instructions.

Bluetooth connectivity may be lost if the device moves out of range. Ensure that the device remains within the appropriate distance during use. Bluetooth connectivity is required when using autosteer.

1. After enabling Bluetooth on your smartphone, tap on "ECU".



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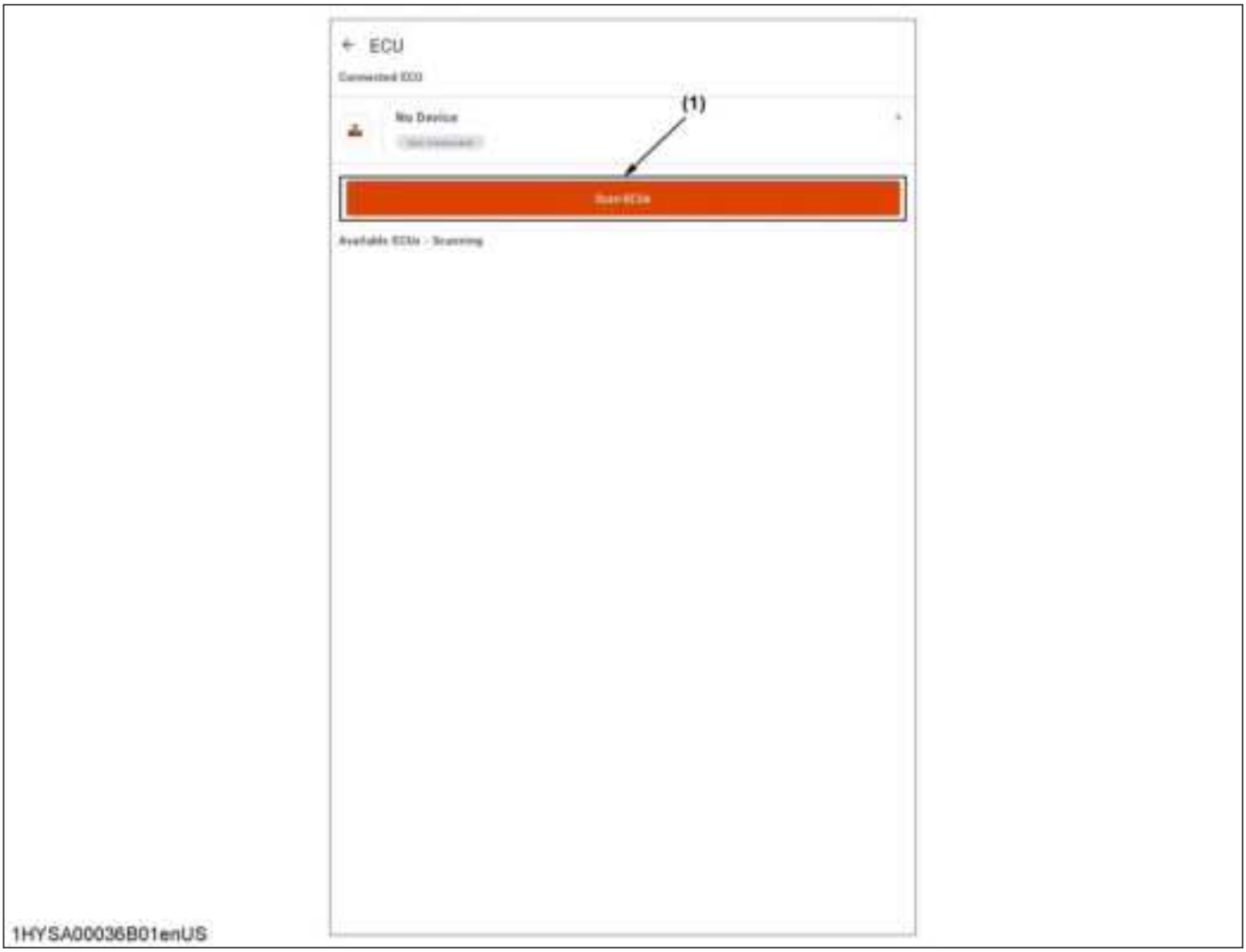
(1) "ECU" menu

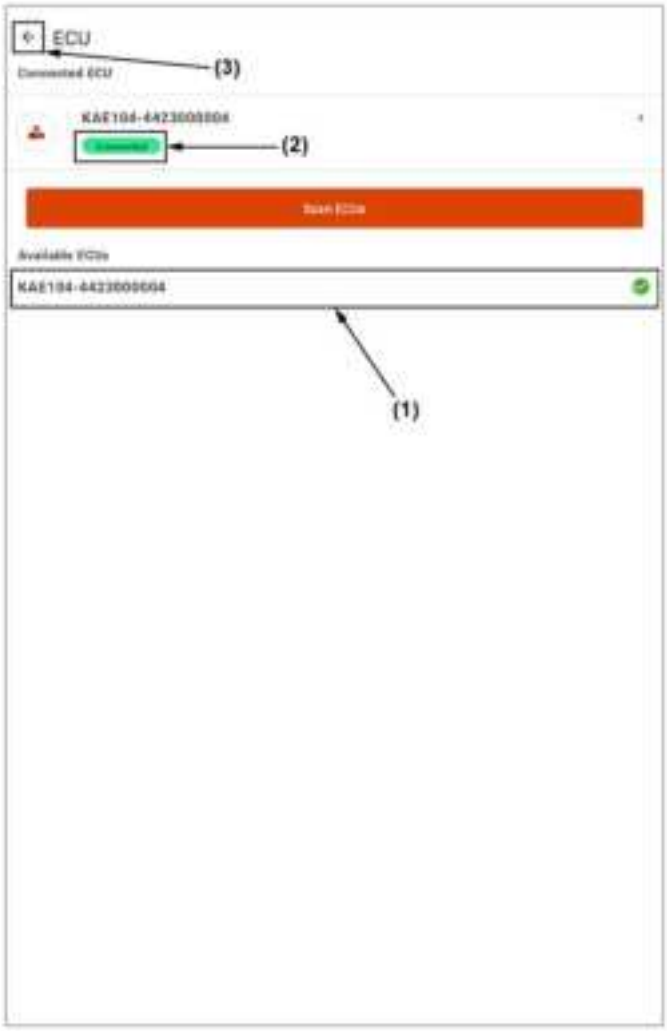
Android OS

2. Tap "Scan ECUs".



(1) "Scan ECUs" button

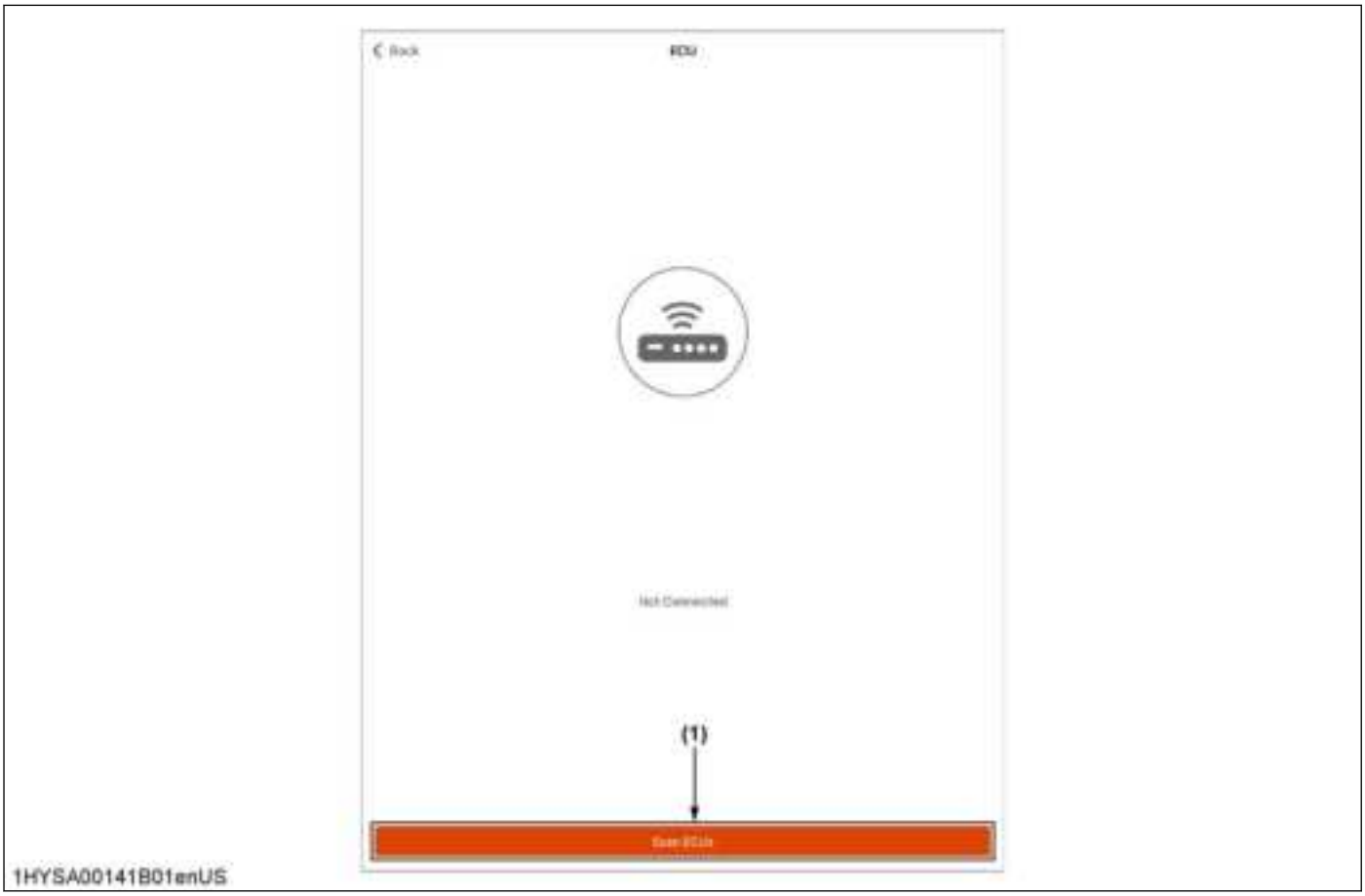
3. Select the Bluetooth device named "KAE104-xxxxx".
4. Confirm that "Connected" is displayed.
5. Tap the icon in the upper left corner to return to the home screen.



(1) "KAE104-xxxxx" field
(2) "Connected" status
(3) icon

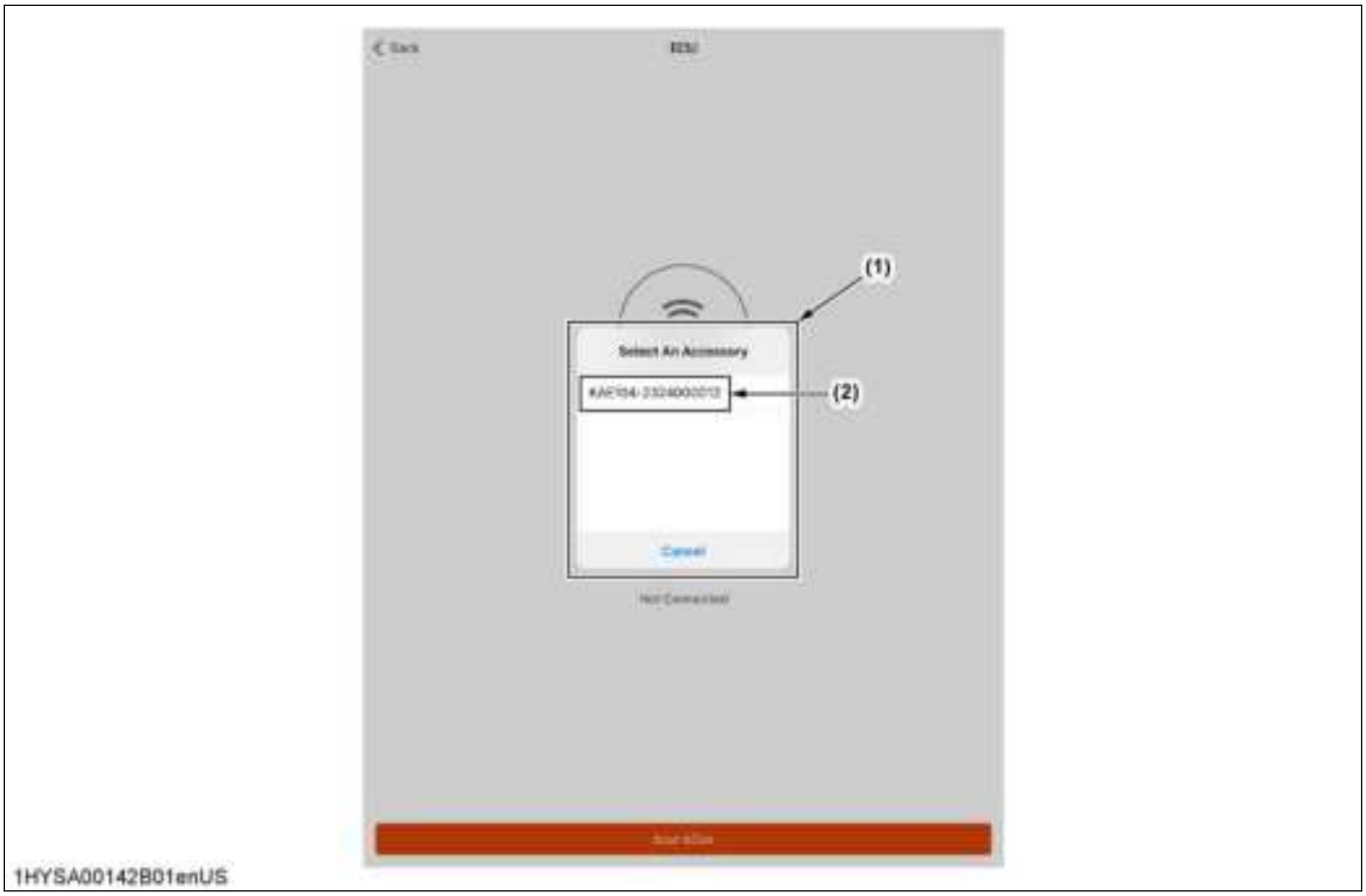
iOS

2. Tap "Scan ECUs".



(1) "Scan ECUs" button

3. A pop-up window saying "Select an Accessory" will appear. Select the Bluetooth device named "KAE104-xxxxx".



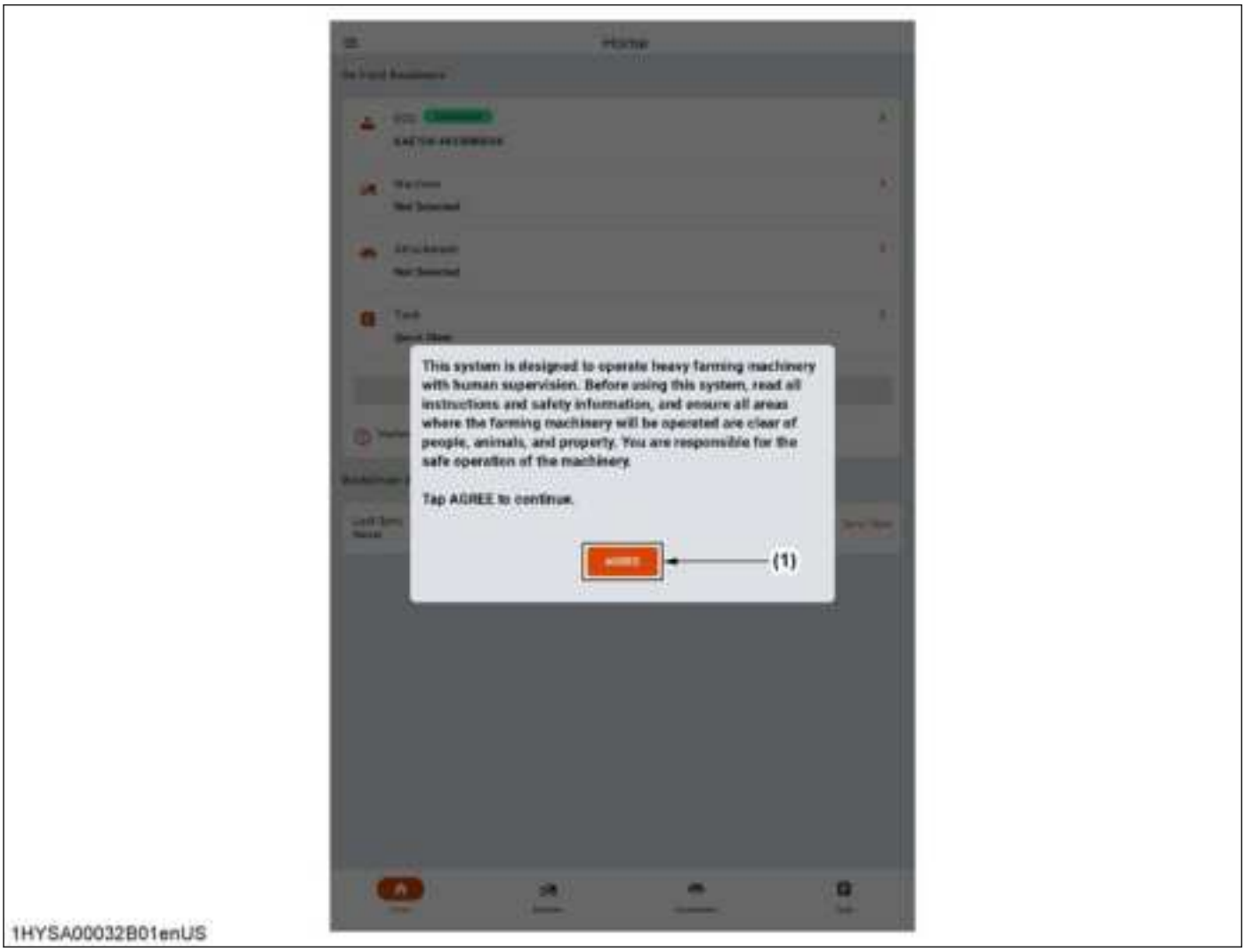
(1) Pop-up window
(2) "KAE104-xxxxx" field

AGREEMENT TO THE TERMS OF USE

To use WorkSmart Autosteer, you must understand and agree to the terms of use.

1. Read and understand the terms of use that appear after connecting to the ECU.

2. If you agree to the terms of use, tap "AGREE". If you do not agree to the terms of use, stop using WorkSmart Autosteer.



(1) "AGREE" button

MACHINE SETTINGS

Before using autosteer, configure the machine accordingly. Ensure the settings are accurate.

1. Creating a machine

To create a machine, follow the following steps.

1. Tap the + icon in the top right corner of the "Machines" tab or tap on the "Add Machine" button.

2. Refer to the following table and enter each item.

NOTE :
After installing the application, the "Template" will not be displayed until cloud data synchronization is performed. The "Template" will be displayed after performing cloud data synchronization.

Settings field

Input items	Required or optional	Description
"Template"	Optional	If you select a template, the type and machine size information will be automatically entered based on the catalog. If no matching template is available for your machine, do not select a template.
"Type"	Required	Refer to the following *"Machine type"* table to determine the appropriate type.
"Name"	Required	Enter the name of the machine (for example, M7).
"Make"	Required	Enter the manufacturer of the machine (for example, Kubota).
"Model"	Required	Enter the model of the machine (for example, M7-134).
"Front Hitch Length"	Optional	Horizontal distance from the front axle of the machine to the front hitch point
"Wheelbase"	Optional	Horizontal distance between the centers of the front and rear wheels
"Rear Hitch Length"	Optional	Horizontal distance from the rear axle to the rear hitch point
"Antenna Height"	Required	Vertical distance from the ground to the middle of the GNSS antenna
"Antenna Pivot"	Optional	Horizontal distance from the rear axle to the middle of the GNSS antenna
"Antenna is Mounted"	Optional	Select whether the GNSS antenna is mounted behind the rear axle or ahead of the rear axle
"Antenna Offset"	Optional	Only if the GNSS antenna is offset from the center, select the direction of the offset with the front of the machine as the reference.
"Antenna Offset Length"	Optional	Lateral (side-to-side) distance from the centerline of the machine to the GPS antenna
"ECU Orientation"	Required	Determine the orientation of the ECU box connected to the machine. Using the front of the machine as a reference, select the direction the logo is facing and the direction of the cable attachment.
"Steering Interface"	Required	Refer to the following *"Steering interface type"* table to determine which type should be used.

Machine type

Type	Minimum speed for autosteer	Maximum speed for autosteer	Maximum speed in reverse
Standard	0.3 km/h (0.2 mph) with RTK (PPP) 1.0 km/h (0.6 mph) with DGPS	32.0 km/h (19.9 mph) with MDU 25.0 km/h (15.5 mph) with PVED-CLS	11.0 km/h (6.8 mph)

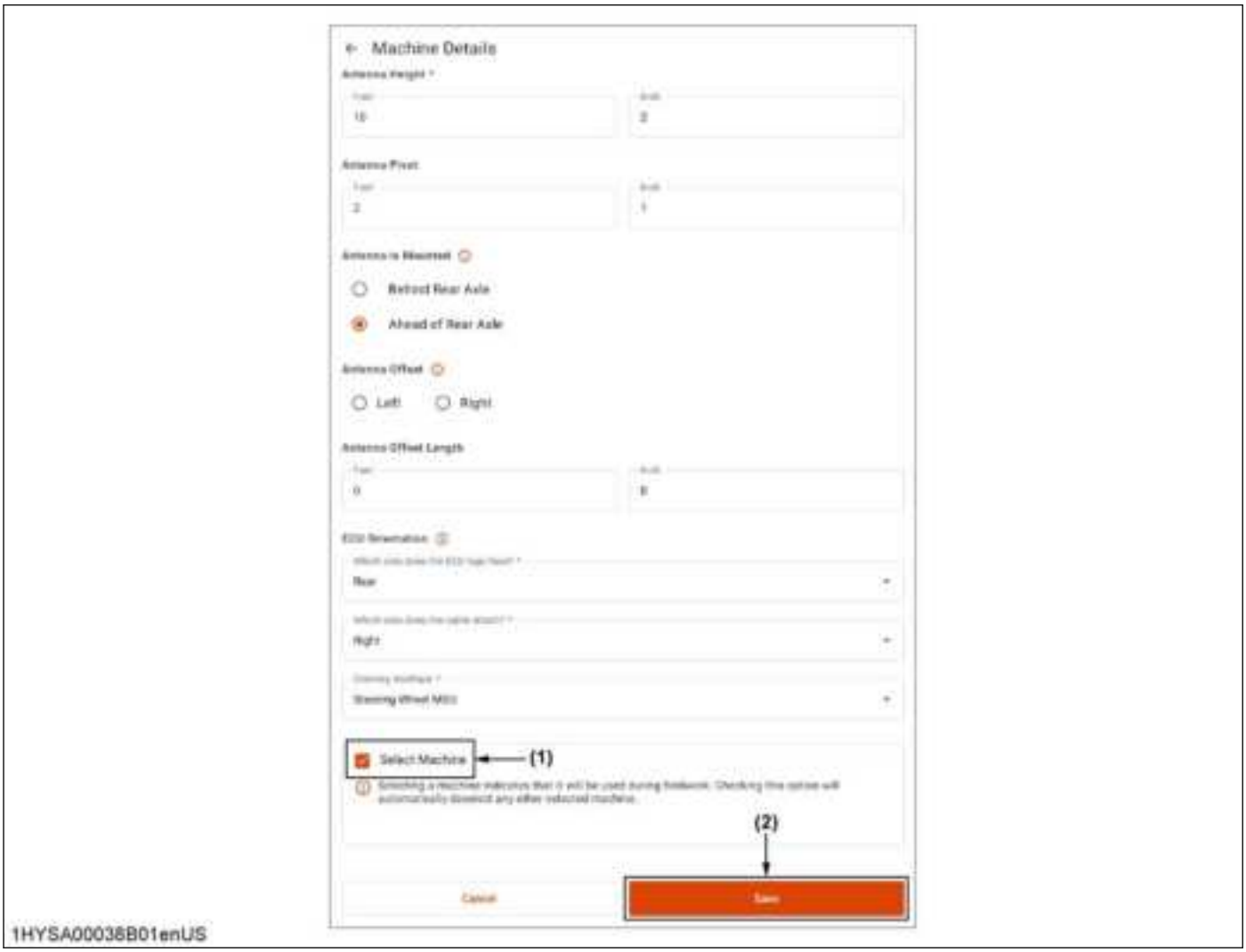
NOTE :
The minimum speed for disengage is lower than the minimum speed to engage, so operation at minimum is possible.

Steering interface type

Types	Description
"Steering Wheel MDU"	Users who use the actuator of WorkSmart Autosteer should select this type.
"Steer Ready PVED-CLS"	Users who use the M7's PVED-CLS valve should select this type.

3. If you want to use the machine now, check the "Select Machine" checkbox.

4. Tap “Save”.



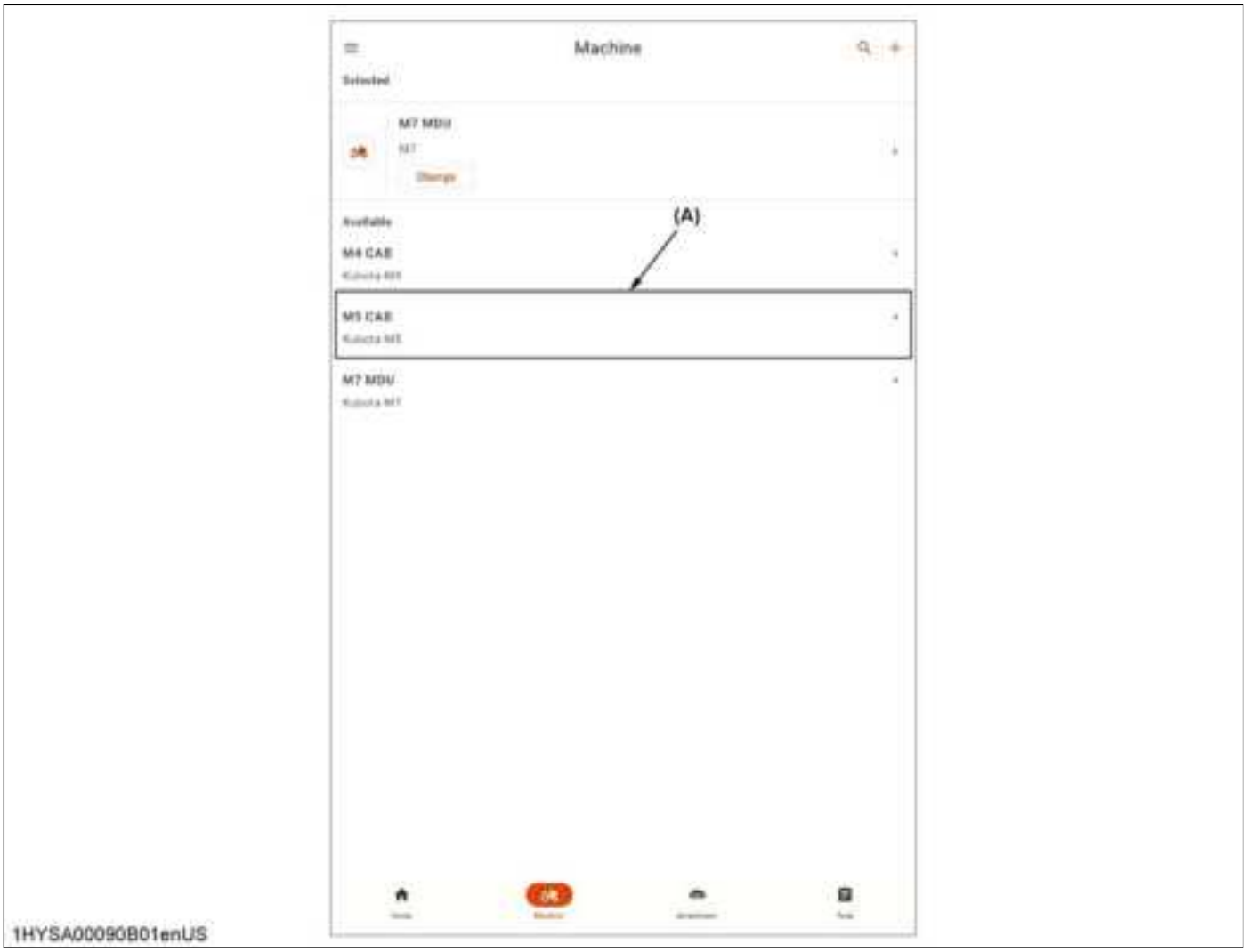
(1) “Select Machine” checkbox
(2) “Save” button

2. Deleting a machine

Follow procedure 1 or procedure 2 to delete a machine.

Procedure 1

1. Tap the machine you want to delete in the “Machines” tab.



(A) Tap

2. Tap the icon in the top right corner.

(1) *icon*

3. A pop-up window will appear asking for confirmation. Tap "`Delete`".

(1) "Delete" button

Procedure 2

1. Swipe the machine to the left.

(A) Swipe left

2. A pop-up window will appear asking if you want to delete. Tap "Delete".

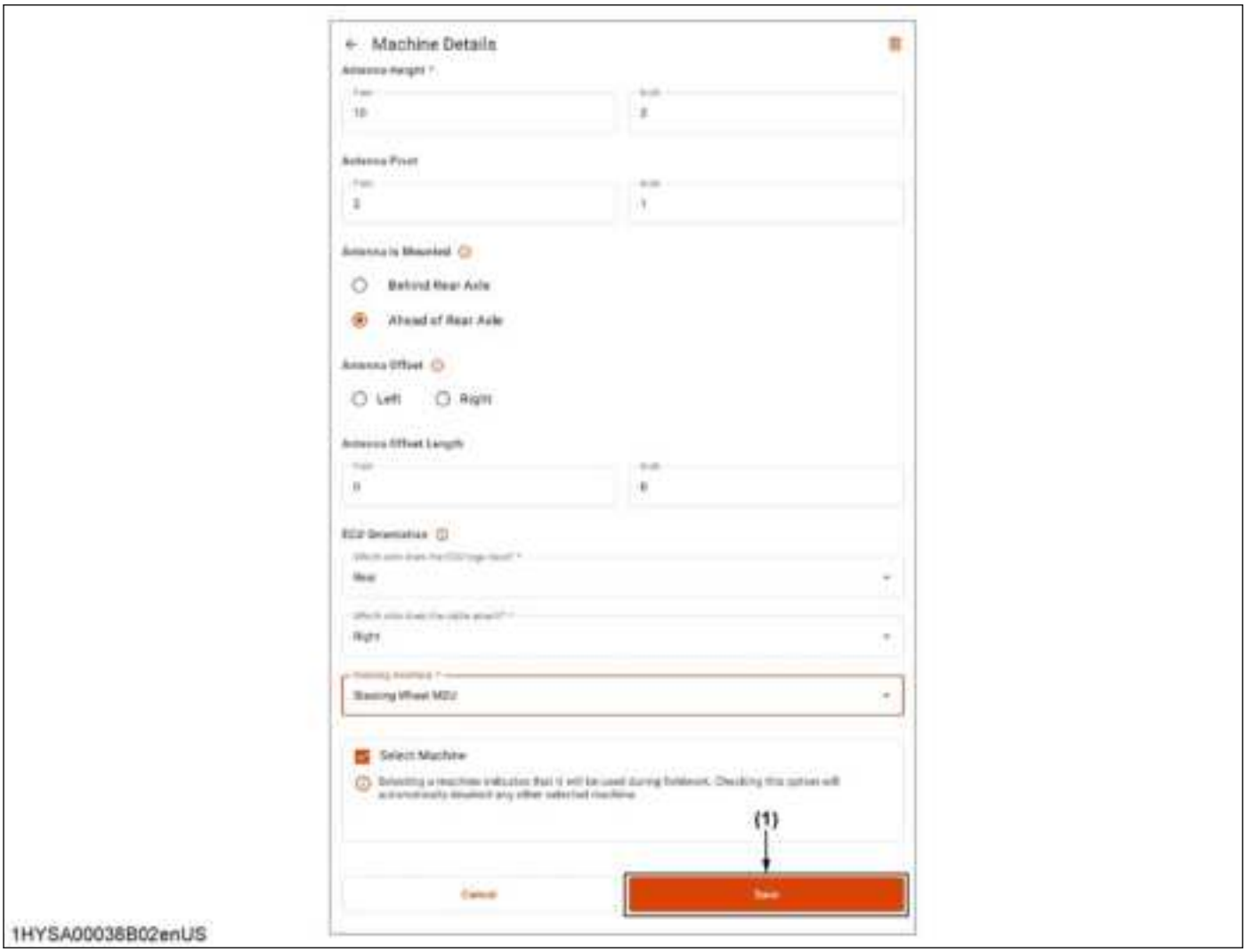
(1) "Delete" button

3. Editing and saving a machine

To edit and save a machine, follow the following steps.

1. Tap the machine you want to edit in the "Machines" tab.

2. Adjust any settings then scroll down and tap “Save”.



(1) “Save” button

4. Select a machine

WARNING

To avoid personal injury or death, note the following.

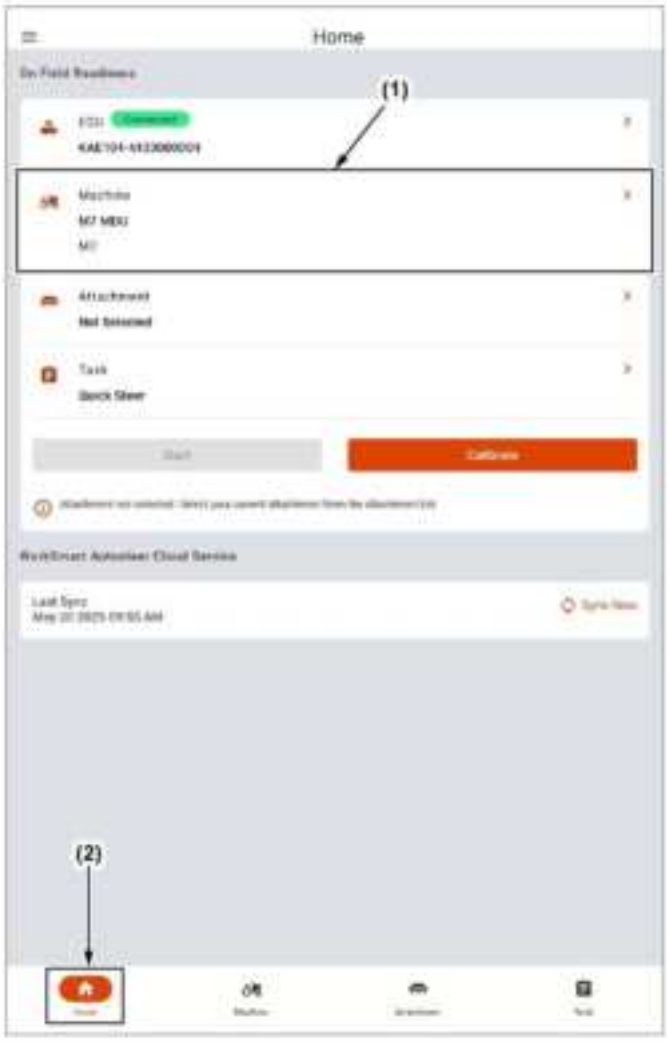
If the speed detected by the system falls below the minimum speed or exceeds the maximum speed, the autosteer will disengage.

IMPORTANT :

Selecting an unsuitable machine profile may degrade system performance.

To select a machine, follow the following steps.

1. Tap “Machine” in the “Home” tab, or “Select Now” in the “Machines” tab.

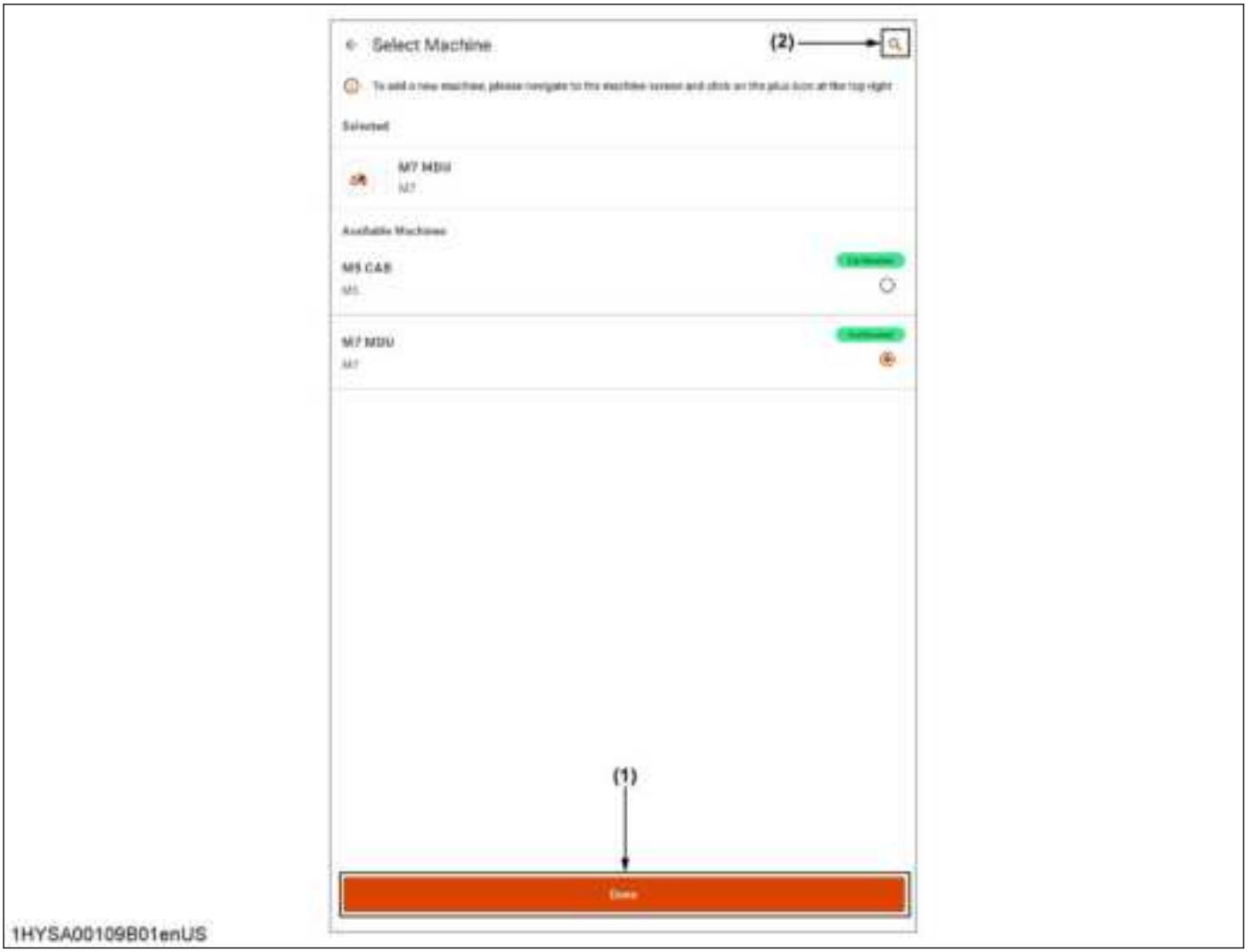


(1) “Machine” menu
(2) “Home” tab

2. Tap the machine you want to use.

3. Tap “Done”.

NOTE :
You can search for machines by tapping the search icon and entering text into the search field.



(1) “Done” button
(2) Search icon

ATTACHMENT SETTINGS

Before using autosteer, configure the attachment accordingly. Ensure the attachment settings are accurate.

1. Creating an attachment

To create an attachment, follow the following steps.

1. Tap the + icon in the top right corner of the “Attachments” tab or tap on the “Add Attachment” button.

2. Refer to the following table and enter each item.

Settings field

Input items	Required or optional	Description
“Name”	Required	Enter the name of the attachment (for example, Kubota BV4160 PREM).
“Mount”	Required	Select the type of mount way from “Rigid”, “Trailed”, “Rigid Front” and “Perfect Trailed”.
“Width”	Optional	The width refers to the working width of the attachment.
“Link Length”	Optional	The link length refers to the distance between the machine and the attachment.
“Overlap”	Optional	This item refers to the amount of overlap between paths. If you want to have an overlap width, enter the desired overlap width (for example, if “Width” is 3.0 m (9.8 ft) and “Overlap” is 0.1 m (0.3 ft), the actual working width is 2.9 m (9.5 ft)).
“Offset”	Optional	If the central axis of the attachment and the machine are not aligned, input the offset width of the attachment.
“Offset Length”	Optional	Offset width of the attachment

NOTE :
“Mount” and “Link Length” only affect the visuals of the application during operation.

3. If you are using this attachment for autosteer, check the “Set as Selected Attachment” checkbox.

4. Tap “Save”.

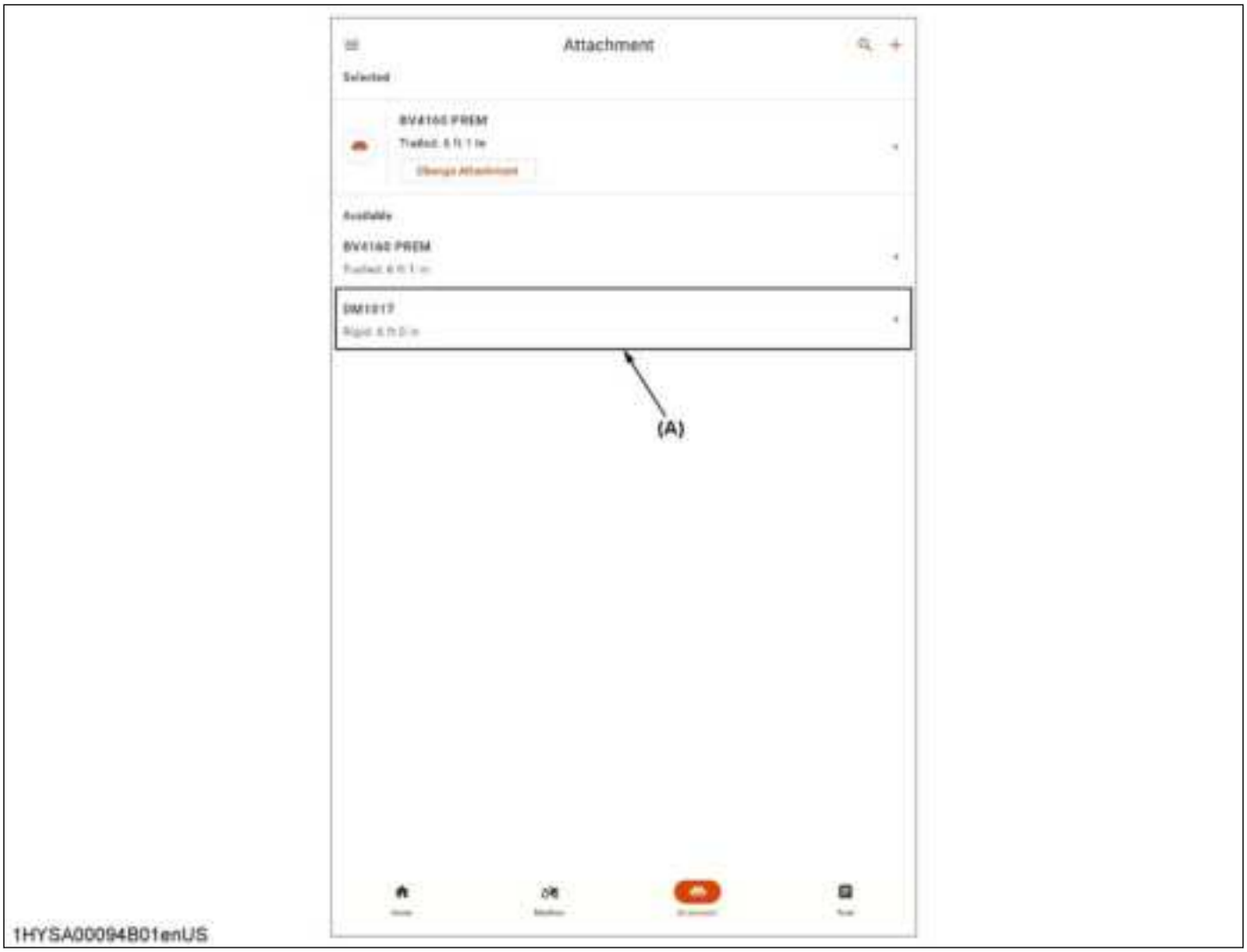
(1) “Set as Selected Attachment” checkbox
(2) “Save” button

2. Deleting an attachment

Follow procedure 1 or procedure 2 to delete an attachment.

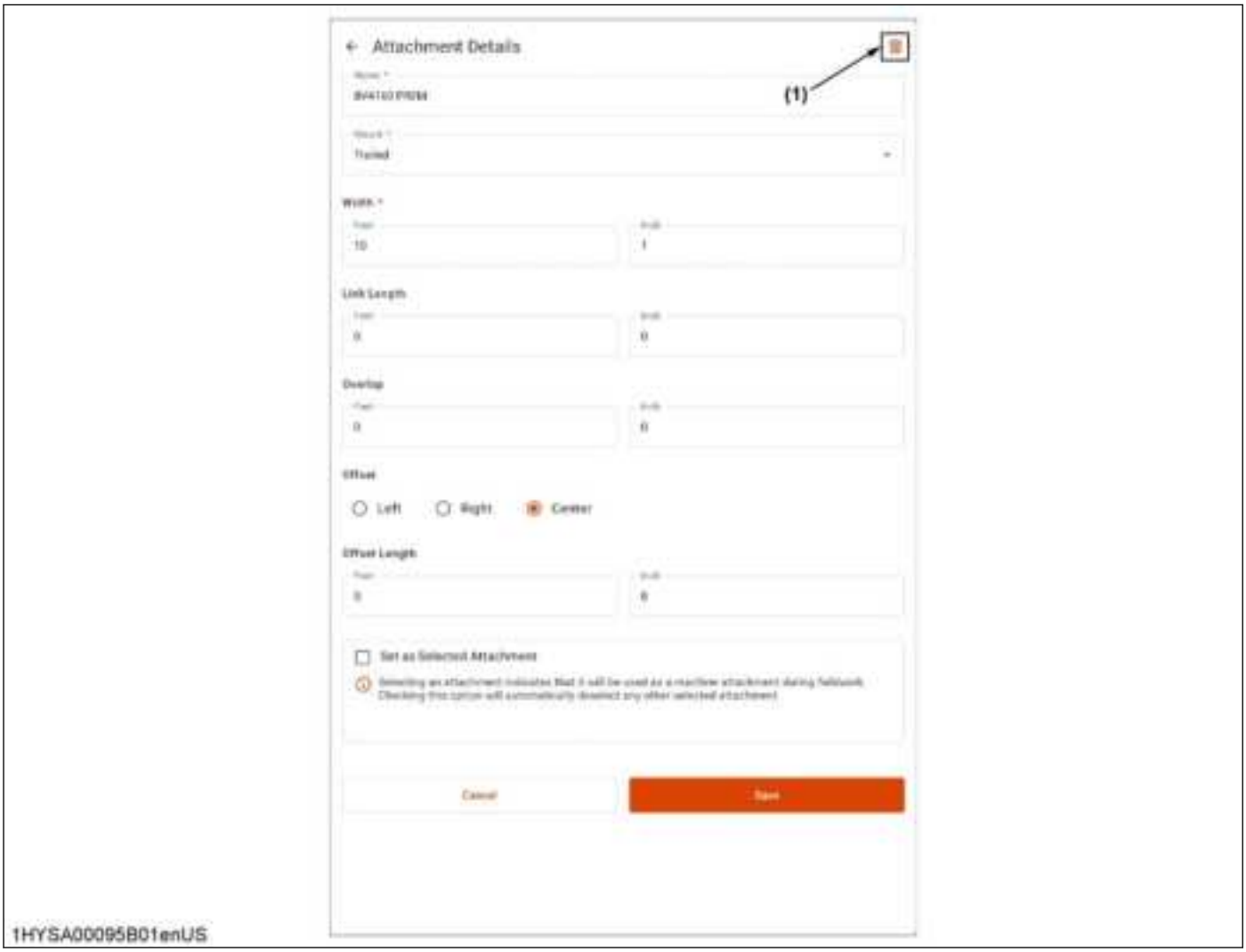
Procedure 1

1. Tap the attachment you want to delete in the “Attachments” tab.



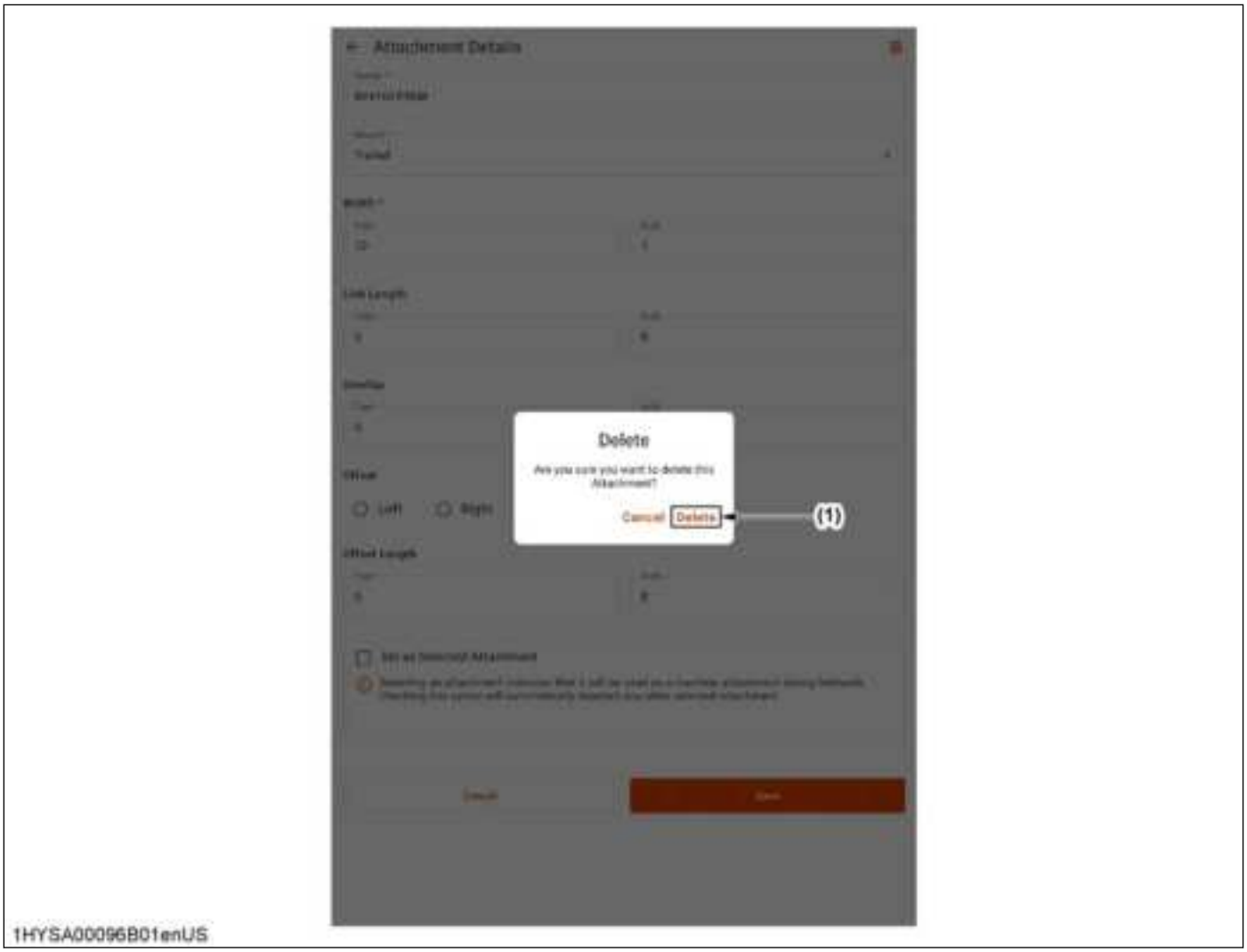
(A) Tap

2. Tap the icon in the top right corner.



(1) *icon*

3. A pop-up window will appear asking for confirmation. Tap "`Delete`".



(1) "Delete" button

Procedure 2

1. Swipe the attachment to the left

(A) Swipe left

2. A pop-up window will appear asking if you want to delete. Tap "`Delete`".

(1) "Delete" button

3. Editing and saving an attachment

To edit and save an attachment, follow the following steps.

1. Tap the attachment you want to edit in the "Attachments" tab.

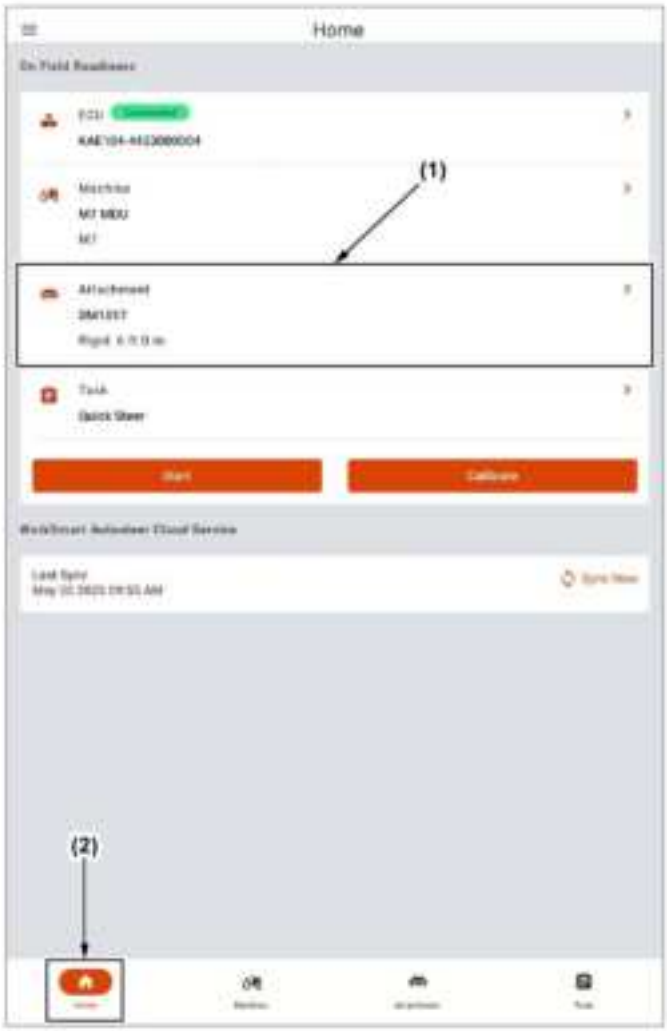
2. Adjust any settings then scroll down and tap “Save”.

(1) “Save” button

4. Selecting an attachment

To select an attachment, follow the following steps.

1. Tap “Attachment” in the “Home” tab, or “Select Now” in the “Attachments” tab.

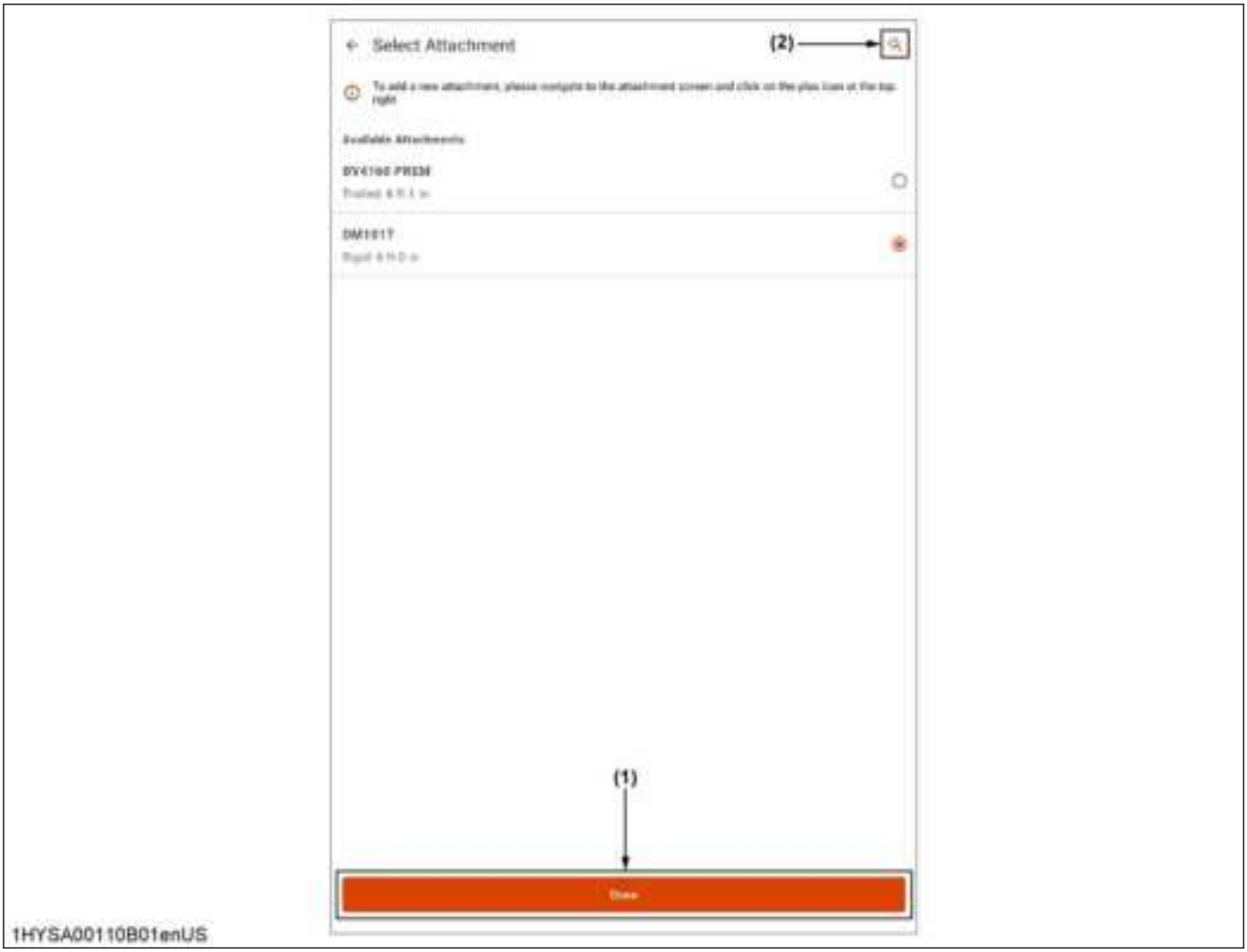


(1) “Attachment” menu
(2) “Home” tab

2. Tap the attachment you want to use.

3. Tap “Done”.

NOTE :
You can search for attachments by tapping the search icon and entering text into the search field.



(1) “Done” button
(2) Search icon

TASK SETTINGS

Before using autosteer, configure a task that will use autosteer. Ensure the task is appropriately set up.
The task has open or completed tabs at the top, with “Quick Steer”, “Created”, and “Paused” labels under “Open”, and “Completed” label under “Completed”.

Open or completed	Label	Description
“Open”	“Quick Steer”	Without setting a task, you can start the operation, but you cannot save waylines and boundaries for future use.
“Open”	“Created”	Task status when creating a new task
“Open”	“Paused”	Task status when pausing an operating task. You can keep coverage on the task.
“Completed”	“Completed”	Task status when completing an operating task. You cannot refer coverage. By duplicating a completed task, you can create a new task has the same boundary and wayline.

1. Creating a task

To create a task, follow the following steps.

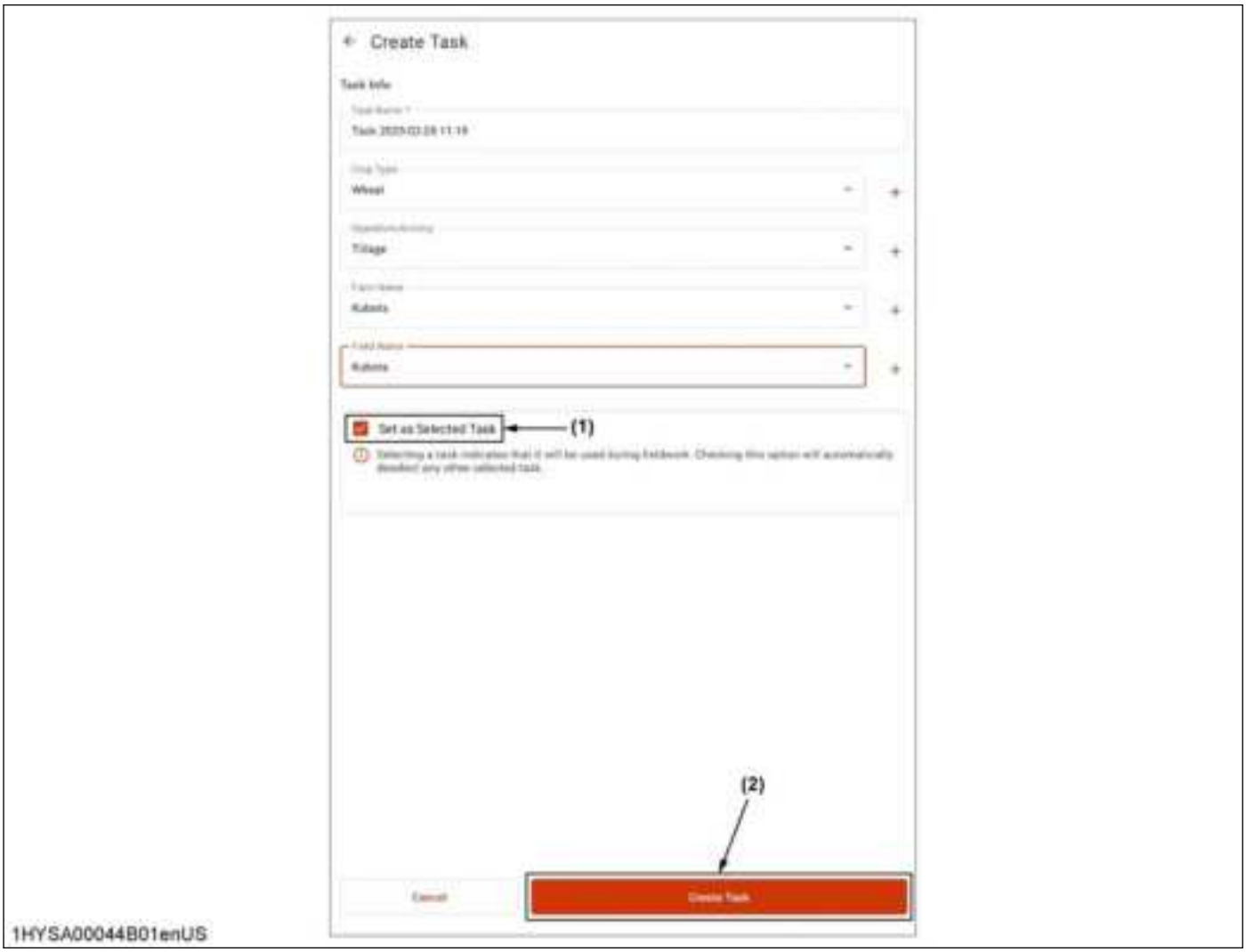
1. Tap the + icon in the top right corner of the “Task” tab.
2. Refer to the following table and enter each item.

Settings field

Input items	Required or optional	Description
“Task Name”	Required	Enter the name of the task. (for example, 2025-10-25 16:28)
“Crop Type”	Optional	Enter crop type. (for example, “Wheat”)
“Operation/Activity”	Optional	Enter operation or activity. (for example, “Tillage”)
“Farm Name”	Optional	Enter a farm name if you want to manage farms.
“Field Name”	Optional	Enter a field name if you want to manage fields.

3. If you are using this task for autosteer, check the “Set as Selected Task” checkbox.

4. Tap “Create Task”.



(1) “Set as Selected Task” checkbox
(2) “Create Task” button

2. Deleting a task

Follow procedure 1 or procedure 2 to delete a task.

Procedure 1

1. Tap the task you want to delete in the “Task” tab.

(A) Tap

2. Tap the icon in the top right corner.

(1) *icon*

3. A pop-up window will appear asking for confirmation. Tap "`Delete`".

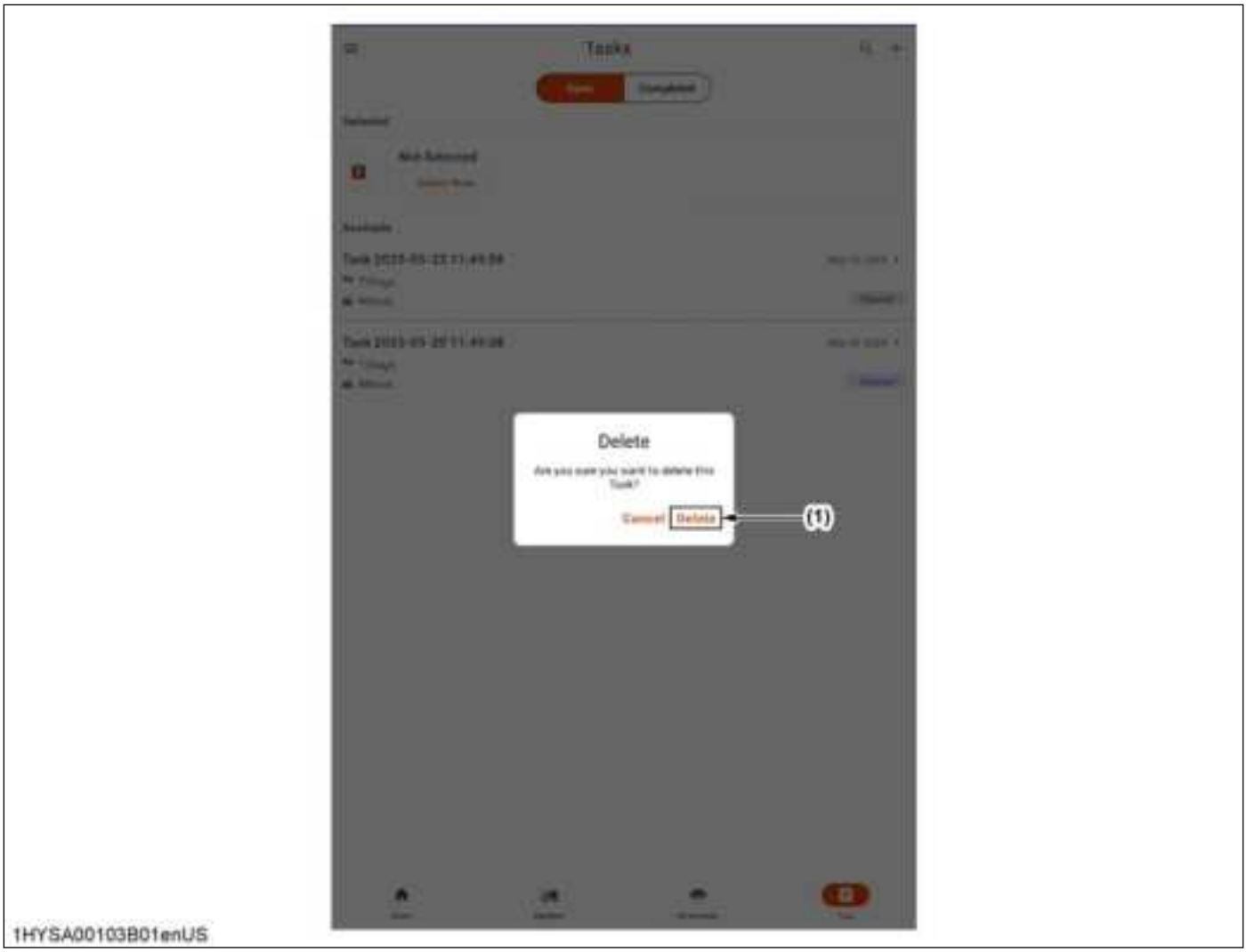
(1) "Delete" button

Procedure 2

1. Swipe the task to the left.

(A) Swipe left

2. A pop-up window will appear asking if you want to delete. Tap “Delete”.



(1) "Delete" button

3. Editing and saving a task

To edit and save a task, follow the following steps.

1. Tap the task you want to edit in the "Task" tab.

2. Adjust any settings then scroll down and tap “Save Task”.

(1) “Save Task” button

4. Selecting a task

To select a task, follow the following steps.

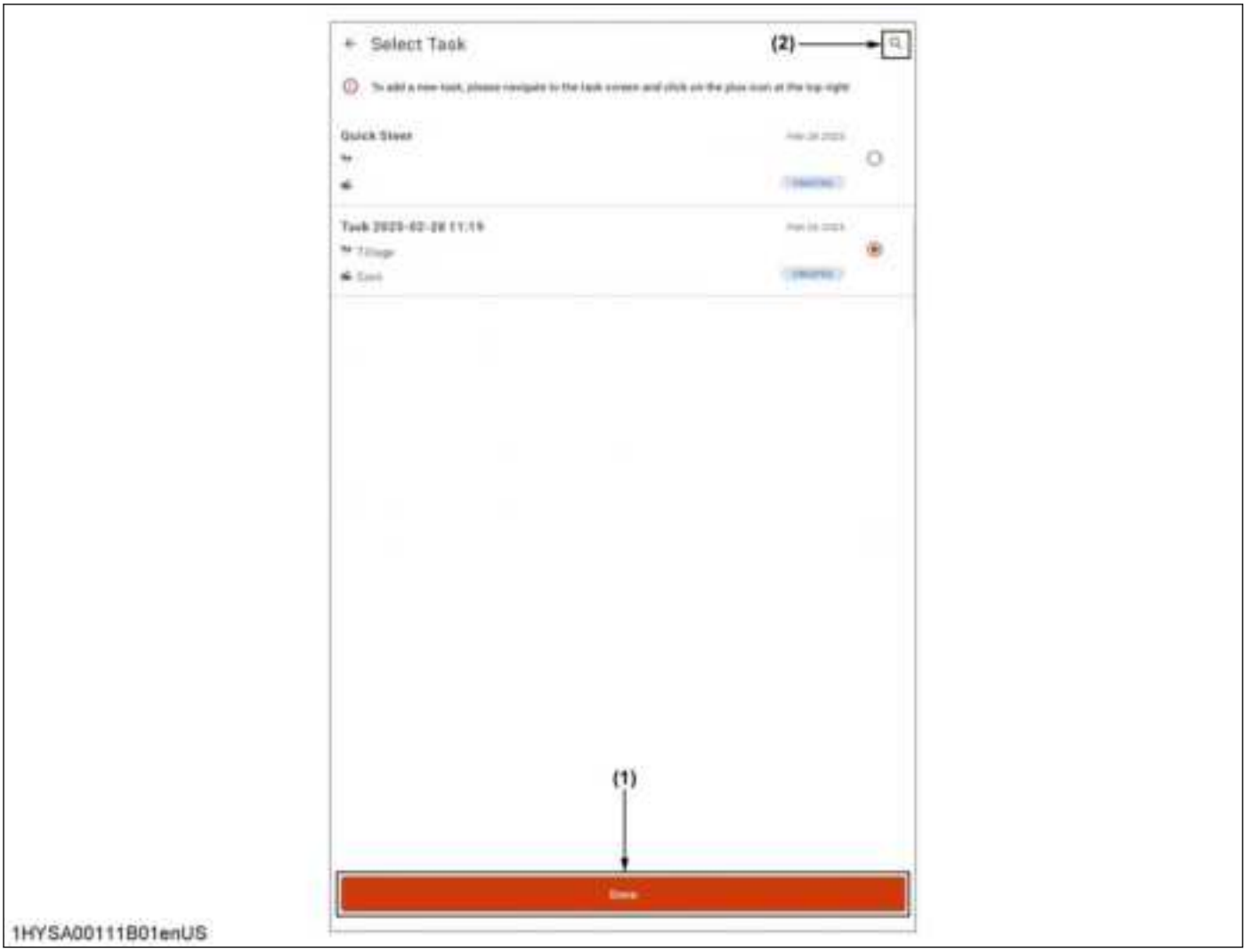
1. Tap “Task” in the “Home” tab, or “Select Now” in the “Tasks” tab.

(1) “Task” menu
(2) “Home” tab

2. Tap the task you want to use.

3. Tap “Done”.

NOTE :
You can search for tasks by tapping the search icon and entering text into the search field.



(1) “Done” button
(2) Search icon

5. Duplicating a completed task

NOTE :
By duplicating a completed task, you can create a new task that has the same boundary and wayline.
To duplicate a completed task, follow the following steps.

1. Tap the completed task you want to duplicate.

2. Tap “Duplicate Task”.

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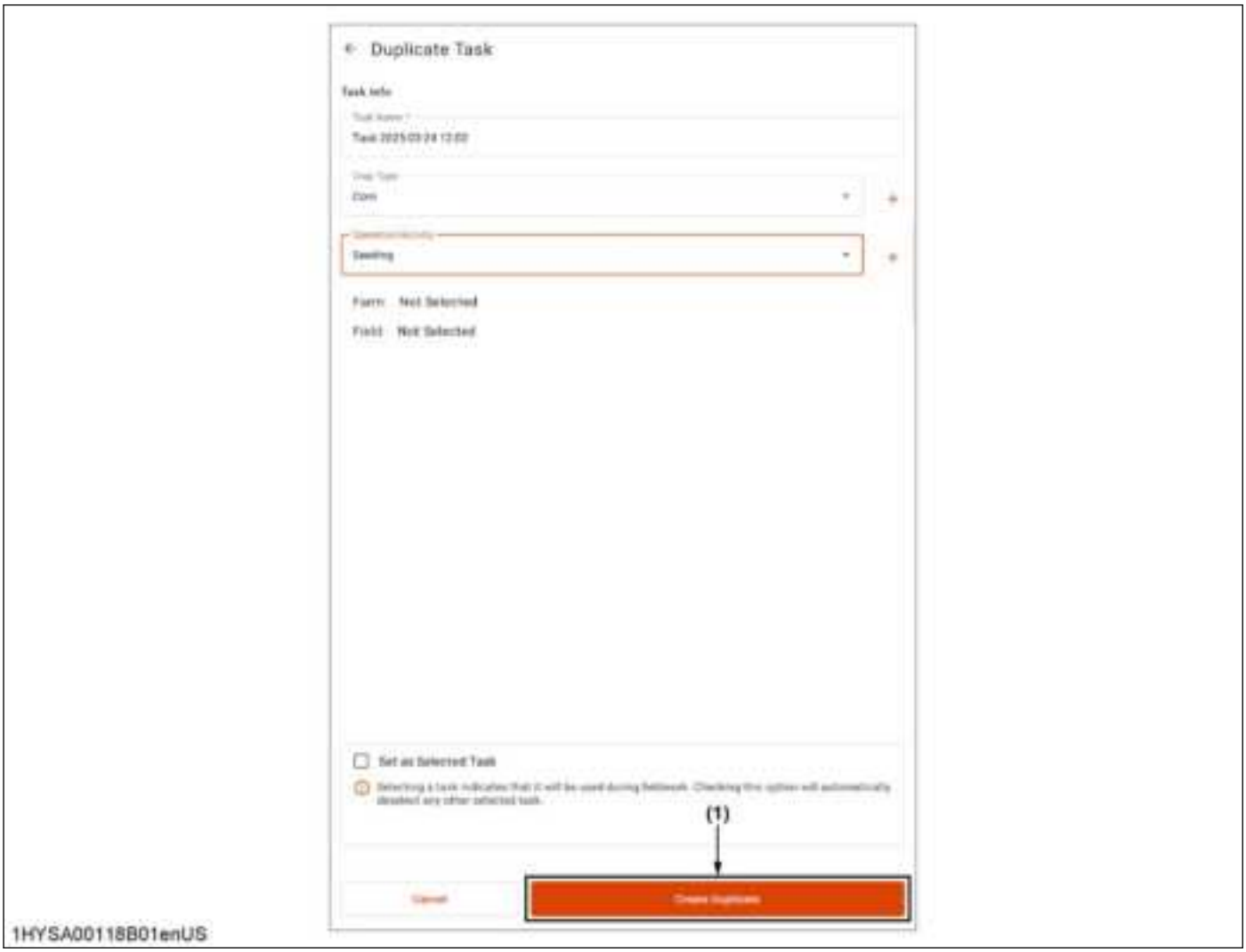
(1) “Duplicate Task” button

3. Tap “Create Duplicate”.



(1) “Create Duplicate” button

RTK SETTINGS

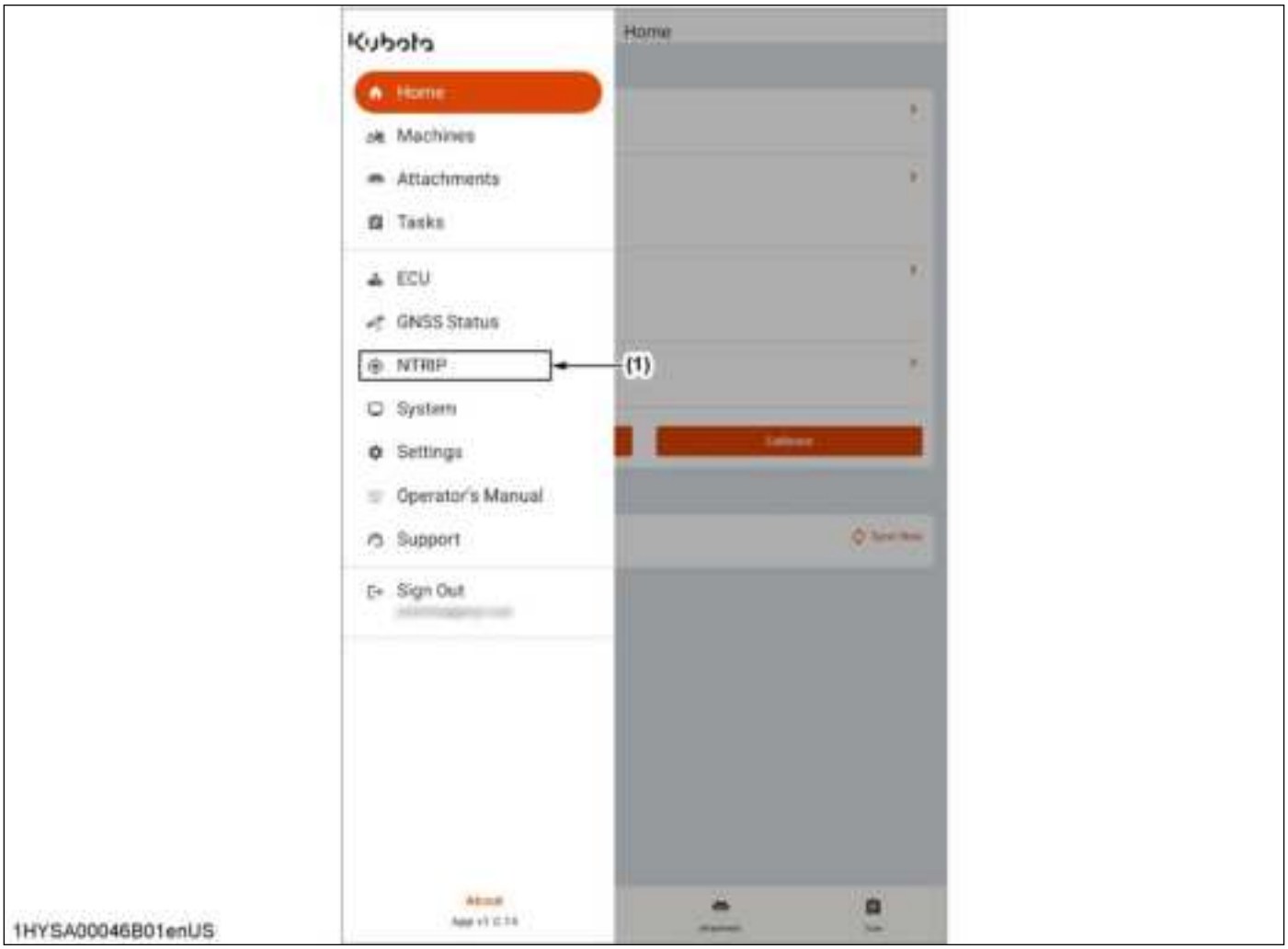
CAUTION

To avoid personal injury, note the following.
Products using cellular modems or RTK base stations can transmit radio frequency energy.

To use NTRIP-RTK, configure the NTRIP client based on the following steps.

1. Tap on the ☰ icon in the upper left corner.

2. Tap “NTRIP”.



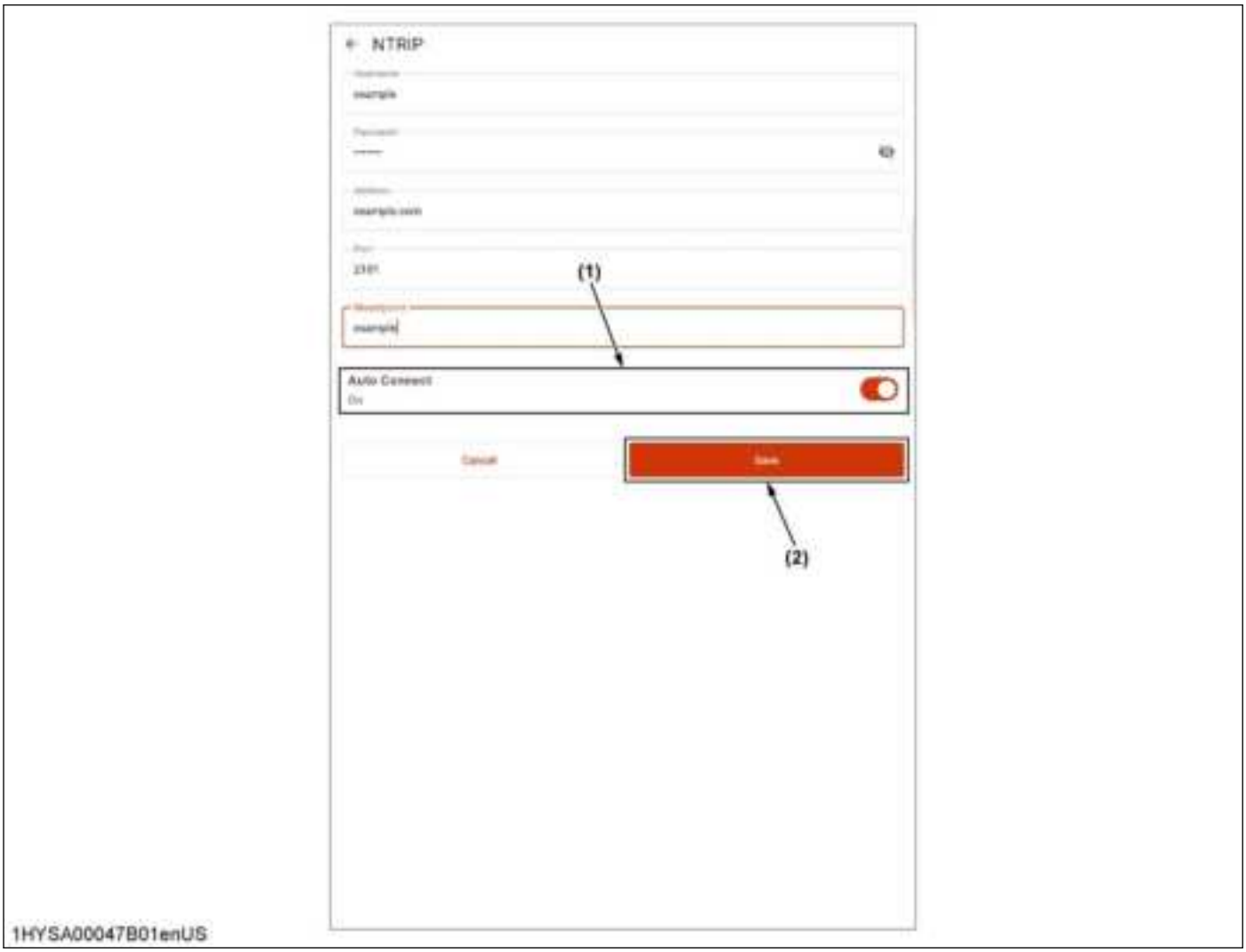
(1) “NTRIP” tab

3. Enter the following input fields.

Input items	Description
“Username”	The username is the identifier used to authenticate the NTRIP client with the NTRIP caster. It is typically provided by the service provider.
“Password”	The password is used in conjunction with the username to authenticate the NTRIP client with the NTRIP caster.
“Address”	The address refers to the IP address or domain name of the NTRIP caster. The NTRIP caster is the server that provides the RTK correction data. For example: IP address: 192.168.1.1 Domain name: example.com
“Port”	The port is the network port number used to connect to the NTRIP caster. It specifies the entry point to the server. For example: 2101
“Mountpoint”	The mountpoint is the specific data stream or source point on the NTRIP caster from which the RTK correction data is received. Each mountpoint represents a different data stream, select the mountpoint that you want to use.

4. Set “Auto Connect” to “On” or “Off”. If “Auto Connect” is set to “On”, the reception of RTK correction information will automatically start the next time the application is used.

5. Select "Save".



(1) "Auto Connect" and "On" or "Off" button
(2) "Save" button

NOTE :
- **An internet connection is required to receive NTRIP RTK-GNSS correction.**
- **With the NTRIP method, both RRS and VRS can be used.**

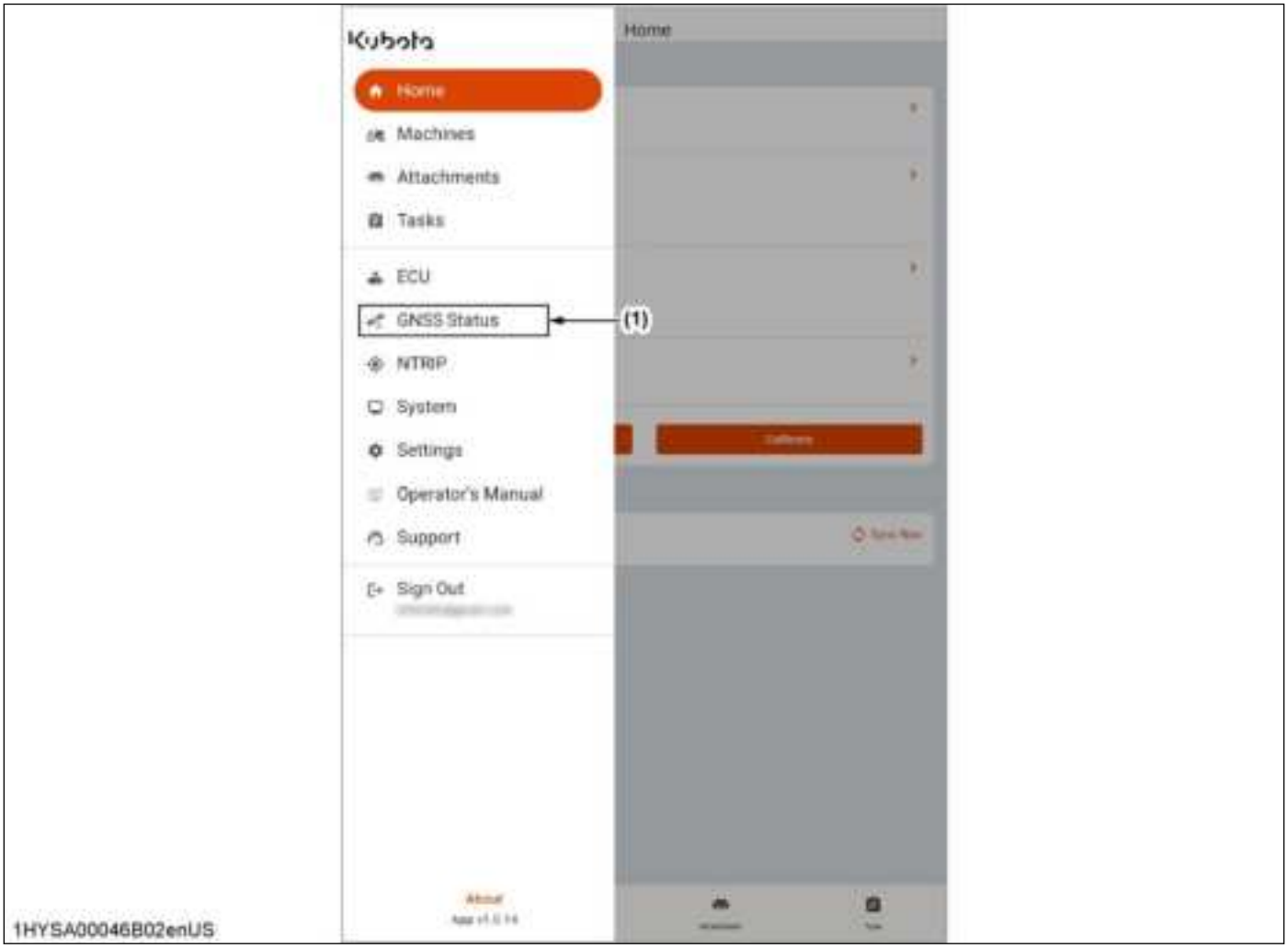
CHECKING GNSS STATUS

WARNING

To avoid personal injury or death, observe the following instructions.
- **Significant and sudden changes in satellite signal can result in substantial positional errors. Under these conditions, the WorkSmart Autosteer system may react suddenly. To prevent injury or property damage under these conditions, disable the WorkSmart Autosteer and manually control the machine until conditions improve.**
- **The GNSS antenna may experience interference if the machine is operated close to power lines, radar dishes, or cell phone towers.**

You can check if the system is working normally by checking "GNSS Status". It is recommended that you check this before starting a task or if the system reports an error or poor performance.

1. Tap on the ☰ icon in the upper left corner.
2. Tap "GNSS Status".



(1) "GNSS Status" tab

3. Check if “Solution Status” is the GNSS correction type you want to use and the “Position Accuracy” is not larger than you expect.

Item	Description
“Latitude”	Latitude is a geographic coordinate that specifies the north-south position of a point on the Earth's surface. It is measured in degrees, with values ranging from -90° (South Pole) to +90° (North Pole).
“Longitude”	Longitude is a geographic coordinate that specifies the east-west position of a point on the Earth's surface. It is measured in degrees, with values ranging from -180° (west of the prime meridian) to +180° (east of the prime meridian).
“Satellites”	The number of satellites refers to the total count of GNSS satellites that are currently being used to determine the receiver's position.
“Solution Status”	The GNSS status indicates the quality and type of the GNSS fix obtained.
“Position Accuracy”	The estimated error refers to the expected accuracy of the GNSS position fix.
“Diff Age”	Differential age represents the age of the differential correction data in seconds. It indicates the time elapsed since the last differential correction was received.
“NTRIP Bytes Received”	“NTRIP Bytes Received” refers to the total amount of data, measured in bytes, that has been received from the NTRIP caster.

Types of “Solution Status”

“Solution Status”	Description
“No GNSS”	GNSS data is not transmitted to the WorkSmart Autosteer ECU from the GNSS antenna.
“Autonomous”	State of positioning where the correction data is not used.
“DGPS”	State in SBAS positioning where the correction data from satellite as WAAS and EGNOS is used, which is also called DGNSS.
“RTK Float”	State in RTK (PPP) positioning with unresolved ambiguities, resulting in lower positioning accuracy compared to “RTK Fix” status.
“RTK Fix”	State in RTK (PPP) positioning with resolved ambiguities, resulting in higher positioning accuracy compared to other states.

NOTE :
When the GNSS solution changes, a message will be displayed.

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(1) Message

CHECKING SYSTEM STATUS

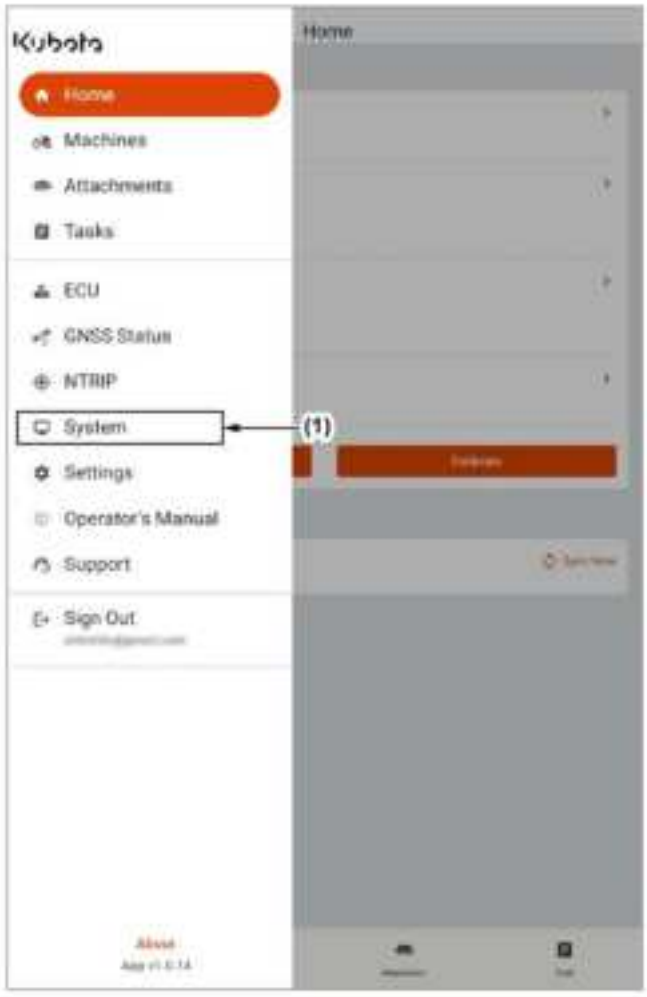
WARNING

To avoid personal injury or death, observe the following instructions.

- **The system will automatically disengage when the disengage reason events occur. Be careful, as continuing to operate the machine without noticing the disengagement could lead to injury or accidents.**
- **Verify that the machine's movement direction matches the system's detected direction. Mismatched directions can cause sudden turns.**

You can check if the system is working normally by checking "System".

1. Tap on the ☰ icon in the upper left corner.
2. Tap "System".



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(1) "System" tab

3. Ensure there is no error.

(1) Status showing no errors

Item	Description
“IMU Status”	Indicates whether IMU is working normally. Confirm it shows “OK” when you perform autosteer. When it shows “Error”, verify the ECU orientation set in the machine profile matches the physical orientation of the ECU.
“GNSS Status”	Indicates whether GNSS is working normally. Confirm it shows “OK” when you perform autosteer. This status only shows whether GNSS data is received normally. Check “Solution Status” on the GNSS status. When it shows “Error”, verify the cable to the antenna is securely connected and the system has a clear view of the sky.
“Filter Status”	Indicates whether filters in the ECU firmware are working and ready. These filters blend data from multiple sensors and require some machine movement to initialize. Confirm it shows “OK” when you perform autosteer. When it shows “Error”, verify the antenna offsets set in the machine profile matches the physical location of the antenna and the ECU orientation is correct. Drive a tight full circle to the left, then drive a tight full circle to the right.
“Steering Interface”	Indicates whether the steering interface as WorkSmart Autosteer actuator or PVED-CLS valve is working normally. Confirm it shows “OK” when you perform autosteer. When it shows “Error”, check the following parts. MDU : verify the cable to the actuator is securely connected and the actuator is powered on. PVED-CLS : verify the steering switch is on. If the problem persists, turn the steering switch off and on again.

(Continued)

Item	Description
“Operator Presence”	Indicates whether operator is on the seat when a seat switch is connected. Confirm it shows “OK” when you perform autosteer. When it shows “Error”, verify the cable to the seat switch is securely connected and sit on the operator seat.
“Last Disengage”	Indicates the last disengage reason. The last disengage reasons are listed in the following table.
“Direction”	Indicates the direction detected by the system. By pressing the “Override” button while driving, you can reverse the direction detected by the system by 180 degrees.
“ECU version”	Indicates the firmware version of the ECU. By pressing the “Update” button, you can update the firmware.
“ECU Serial”	Indicates the serial number of the ECU.
“GNSS Serial”	Indicates the serial number of the GNSS antenna.
“App Version”	Indicates the mobile application version.

“Last Disengage” reason list

“Last Disengage” reason	Description
“none”	No specific reason for disengagement.
“too fast”	The machine is moving faster than the maximum allowable speed.
“too slow”	The machine is moving slower than the minimum allowable speed.
“outside path”	The machine has deviated too far from the wayline (for example, driving off the end of a contour).
“lost path”	The machine has deviated too far from the wayline (for example, driving away from a freeform contour).
“parked”	The machine is stopped or stationary.
“xtrack oob”	The xtrack error (lateral deviation from wayline) is too large.
“heading error oob”	The heading error is too large.
“not converged”	The filters have not converged.
“position error”	There is a position error.
“steering override”	The user has manually overridden the steering.
“valve error”	The steering interface has reported an error or there is a loss of communication with the steering interface.
“in reverse”	Not applicable to WorkSmart Autosteer.
“terminal disconnected”	Communication with the mobile application has been lost.
“user commanded”	The user has pressed “Disengage”.
“attachment position error”	Not applicable to WorkSmart Autosteer (attachment position error).
“imu error”	There is an IMU hardware error or bad configuration.
“gnss mode change”	The GNSS solution has changed (for example, from DGPS to RTK).
“operator not present”	The seat switch is detecting that the operator is not seated.

CALIBRATION

WARNING

To avoid personal injury or death, observe the following instructions.

- **Significant and sudden changes in satellite signal can result in substantial positional errors. Under these conditions, the WorkSmart Autosteer system may react suddenly. To prevent injury or property damage under these conditions, disable the WorkSmart Autosteer and manually control the machine until conditions improve.**
- **The GNSS antenna may experience interference if the machine is operated close to power lines, radar dishes, or cell phone towers.**

WARNING

To avoid personal injury or death, observe the following instructions.

- **Never leave the operator's seat while the machine is moving and the autosteer system is engaged.**
- **Autosteer systems cannot detect or avoid field obstacles. Ensure you are adequately trained to operate the autosteer system. Obstacles in the field can cause collisions, which may injure you and damage the machine. If an obstacle makes it unsafe to continue operation, stop the machine and turn the steering wheel to disengage the system.**
- **If the speed detected by the system falls below the minimum speed or exceeds the maximum speed, the autosteer will disengage.**
- **Bluetooth connectivity may be lost if the device moves out of range. Ensure that the device remains within the appropriate distance during use. Bluetooth connectivity is required when using autosteer.**
- **When making turns, be cautious of the jack-knifing phenomenon. This occurs when a large angle forms at the connection point between the machine and the attachment during a turn. It can lead to loss of control, accidents, and damage to both the machine and the load.**
- **Only use this system under the following conditions:**
  - **Away from people and obstacles**
  - **Away from high voltage power lines or other overhead obstructions**
  - **On private property without public access**
  - **Within cleared fields**
  - **Off public roads or access ways**
- **Verify that the machine's movement direction matches the system's detected direction. Mismatched directions can cause sudden turns.**
- **The operator must be aware of the machine's position and field conditions at all times.**
- **Only use the console in areas free of obstacles and maintain a safe distance.**
- **The system assists in steering the machine, but the operator remains in control and must be alert at all times.**

CAUTION

To avoid personal injury, observe the following instructions.

Do not perform the calibration in the following environments:

- **Areas with machine or pedestrian traffic.**
- **Narrow farm roads (calibration involves weaving, which is very dangerous.)**
- **Areas near power lines where electromagnetic interference may occur.**
- **Areas close to windbreaks, houses, or warehouses where there are obstructions.**

Calibration is the process of verifying and adjusting the accuracy of measurements made by instruments or sensors. Users seeking high accuracy must perform this procedure. For those who do not require high accuracy and have installed the ECU in the same orientation as the template, it is possible to start autosteer operations without calibration.

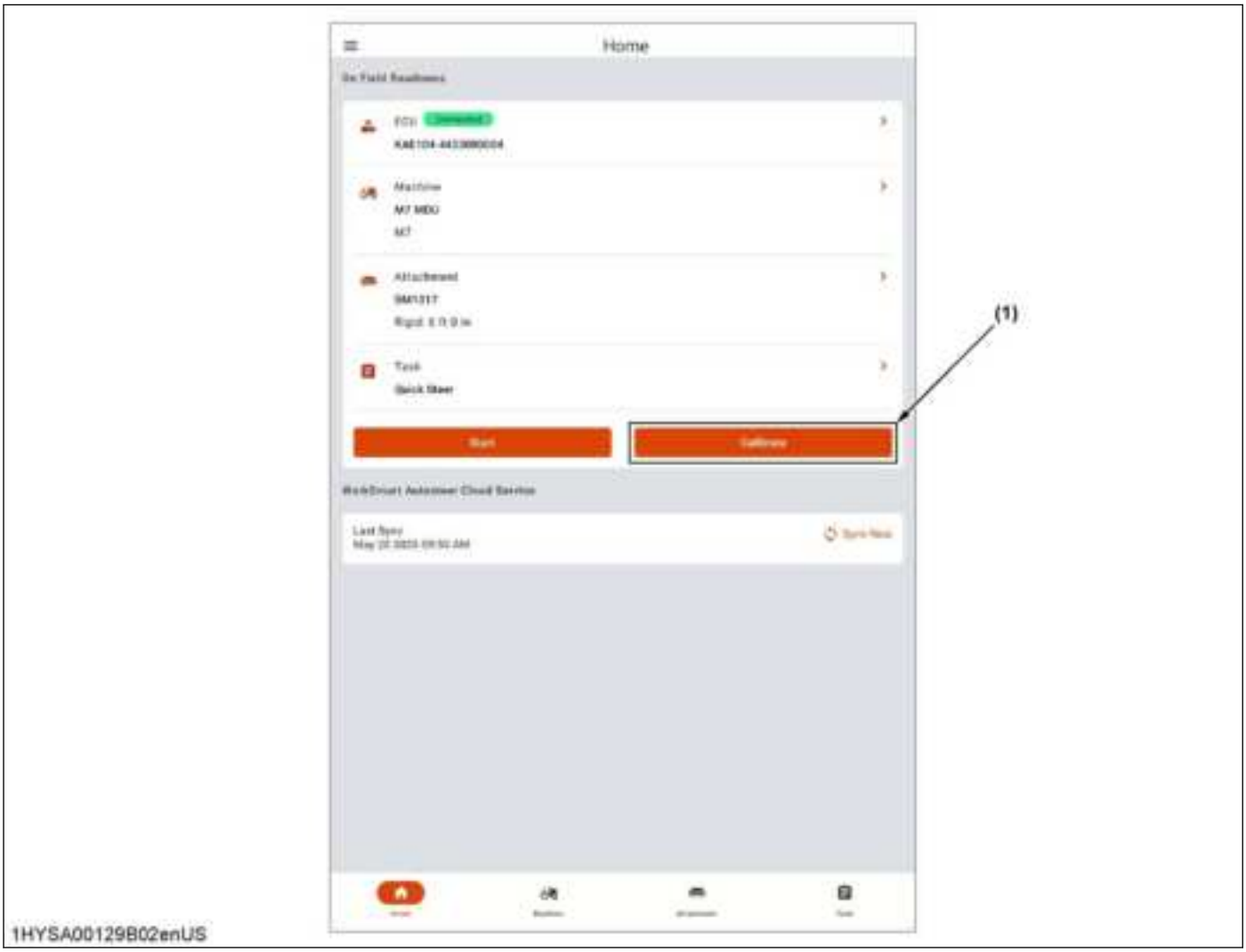
Before performing calibration:

- Ensure your machine does not have an attachment attached.
- Choose a location with a minimum area of 50 m × 10 m (165 ft × 35 ft).
- Follow the instruction for each calibration step.
- Stop your machine if the situation becomes unsafe.

NOTE :

- **For the calibration, DGPS, PPP, or RTK is required. Autonomous positioning is not allowed.**
- **If you require high-precision work, it is recommended to perform calibration annually.**
- **For users seeking high accuracy in the range of a few inches or centimeters only.**
  When using high-precision GNSS correction information such as RTK, if the alignment is not correct, check as follows:
  1. **Verify that the following settings are entered correctly:**
     - **Check the antenna left or right offset in the machine settings.**
     - **Check the left or right offset in the attachment settings.**
  2. **If the alignment is off when the attachment is attached, check the following and adjust the attachment:**
     - **Ensure there is no looseness in the attachment connection.**
     - **Ensure the attachment is not unbalanced left to right.**
     - **Ensure the sway blocks are of equal length on both sides.**
  3. **Check if the alignment is correct without the attachment attached. If it is not correct, perform a GNSS offset adjustment. Perform this in the following cases:**
     - **When creating a machine profile**
     - **Before the start of the farming season**
     - **When changing tires or altering tire pressure**
  4. **Align the right side of the machine tire with a straight line on the ground and set a straight wayline. The machine tires should be straight.**
  5. **Engage auto-steering and ensure the right side of the machine tire is perfectly aligned with the straight line on the ground.**
  6. **Disengage auto-steering, turn around, and auto-steer in the opposite direction on the same path. Ensure the left side of the machine tire is perfectly aligned with the straight line on the ground.**
  7. **If the left side of the machine tire is to the left of the straight line on the ground, select "`right`" in the GNSS offset setting for the machine and enter half the distance of the misalignment. If the left side of the machine tire is to the right of the straight line on the ground, select "`left`" in the GNSS offset setting for the machine and enter half the distance of the misalignment.**
     For example, if the left side of the machine is 5 cm (1.9 in.) to the left of the straight line on the ground, adjust the GNSS offset by 2.5 cm (0.95 in.) to the right.

1. Tap "`Calibrate`" and follow the instructions for the calibration steps displayed in the application as described in the following procedures.



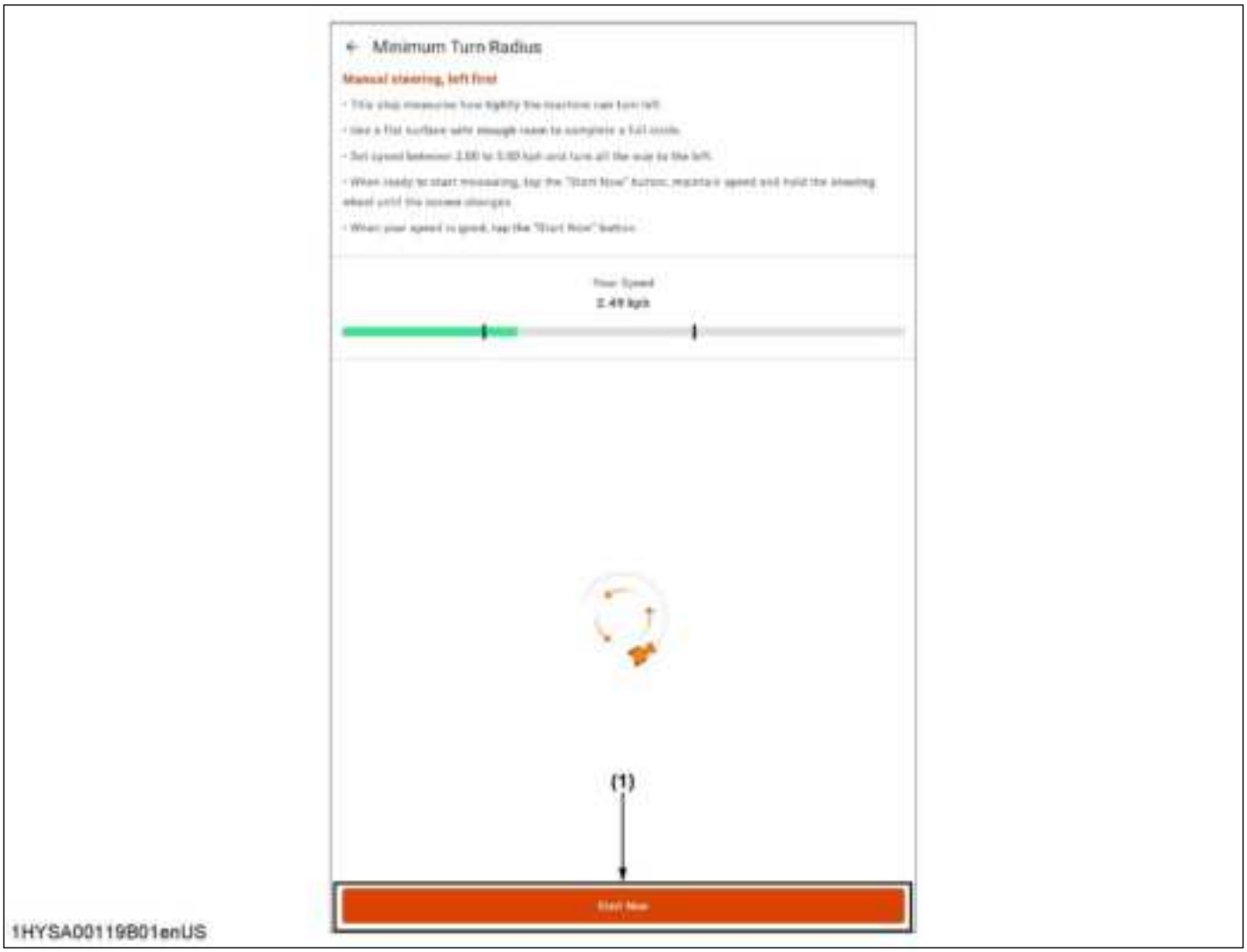
(1) "Calibrate" button

1. Minimum turn radius calibration

NOTE :
This measures how tightly your machine can turn left and right.

Perform the left turn first, and then carry out the right turn following the same steps.

1. Start turning left or right as tightly as possible and bring your speed to between 2.0 km/h (1.24 mph) to 5.0 km/h (3.11 mph) until this calibration step is complete.
2. When your speed is good, tap “`Start Now`”.



(1) “`Start Now`” button

3. Keep going by holding the wheel all the way while the application shows “`Calibrating`”.

4. If the application shows “Success”, you can steer the machine to reposition it for the next step.

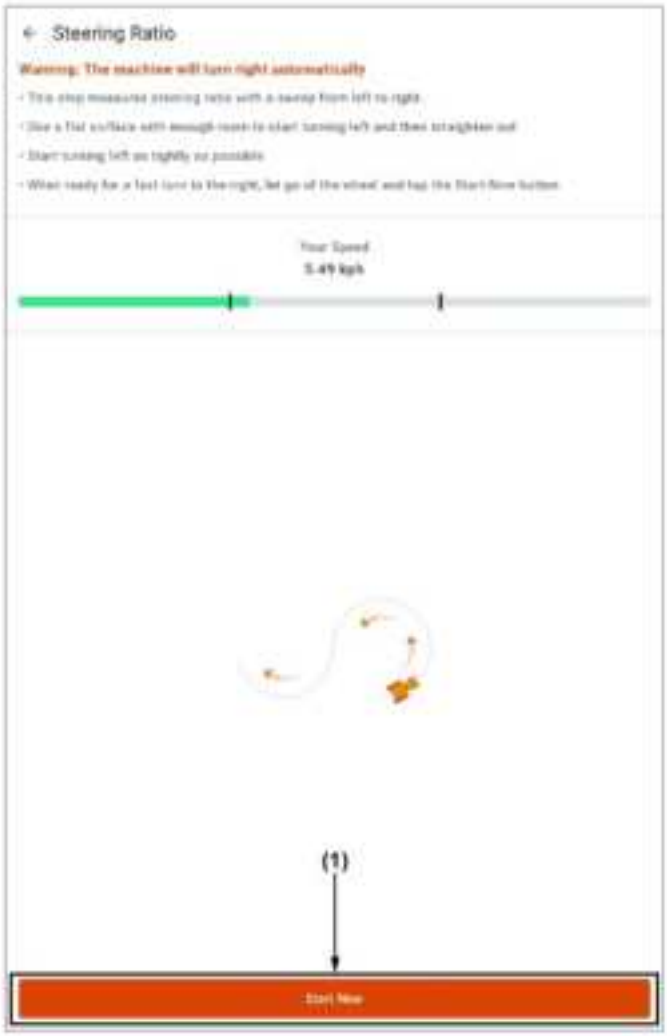
(1) “Success” message

2. Steering ratio calibration

NOTE :
This measures your machine steering ratio.

1. Start turning left as tightly as possible and bring your speed to between 5.0 km/h (3.1 mph) to 10.0 km/h (6.21 mph) until this calibration step is complete.

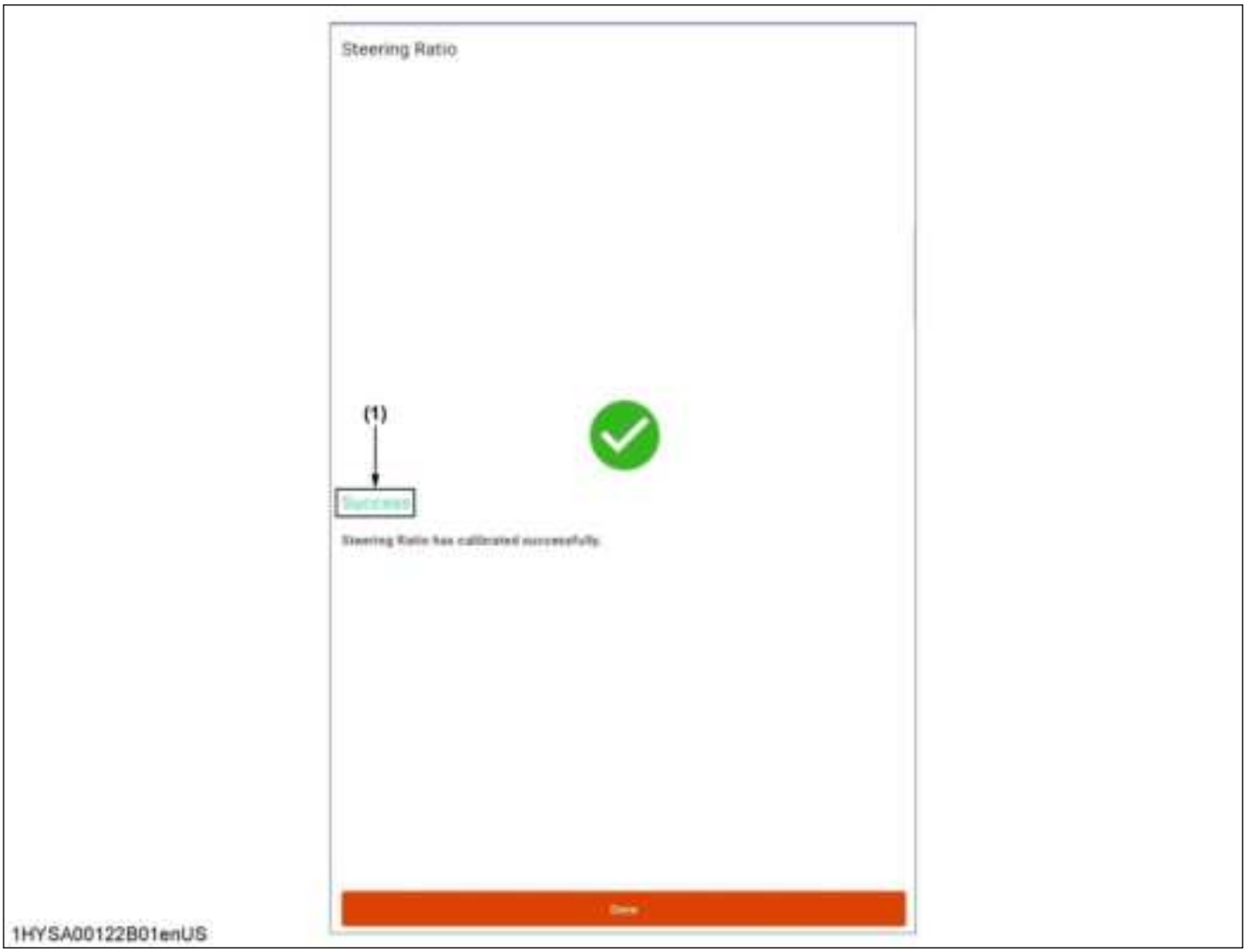
2. When you are fully turning, take your hands off the wheel and tap "`Start Now`".



(1) "`Start Now`" button

3. The WorkSmart Autosteer system steers your wheel to the right.

4. If the application shows “Success”, you can steer the machine to reposition it for the next step.



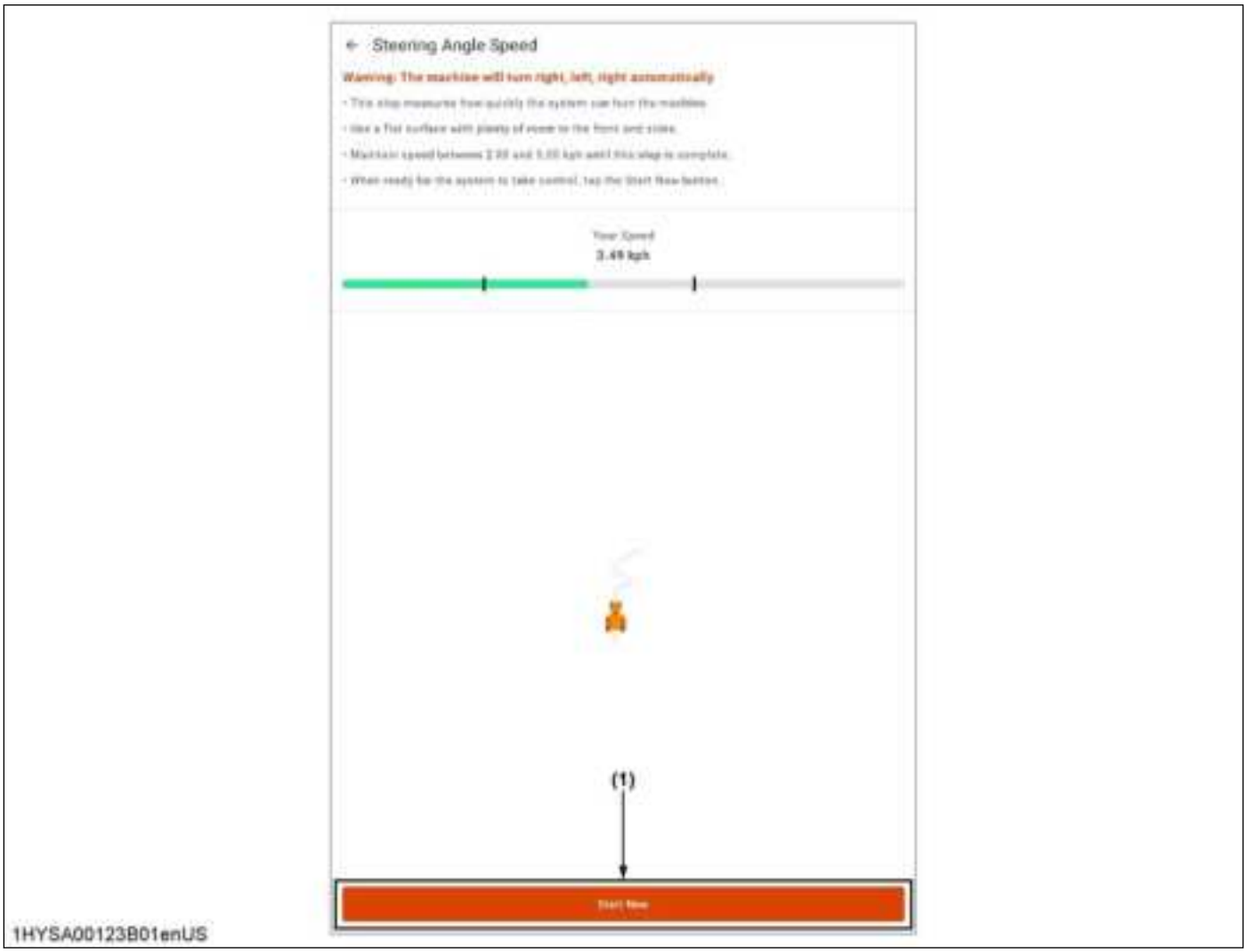
(1) “Success” message

3. Steering angle speed calibration

NOTE :
This measures how quickly the system can turn your machine.

1. Bring your speed to between 2.0 km/h (1.24 mph) to 5.0 km/h (3.11 mph) until this calibration step is complete.

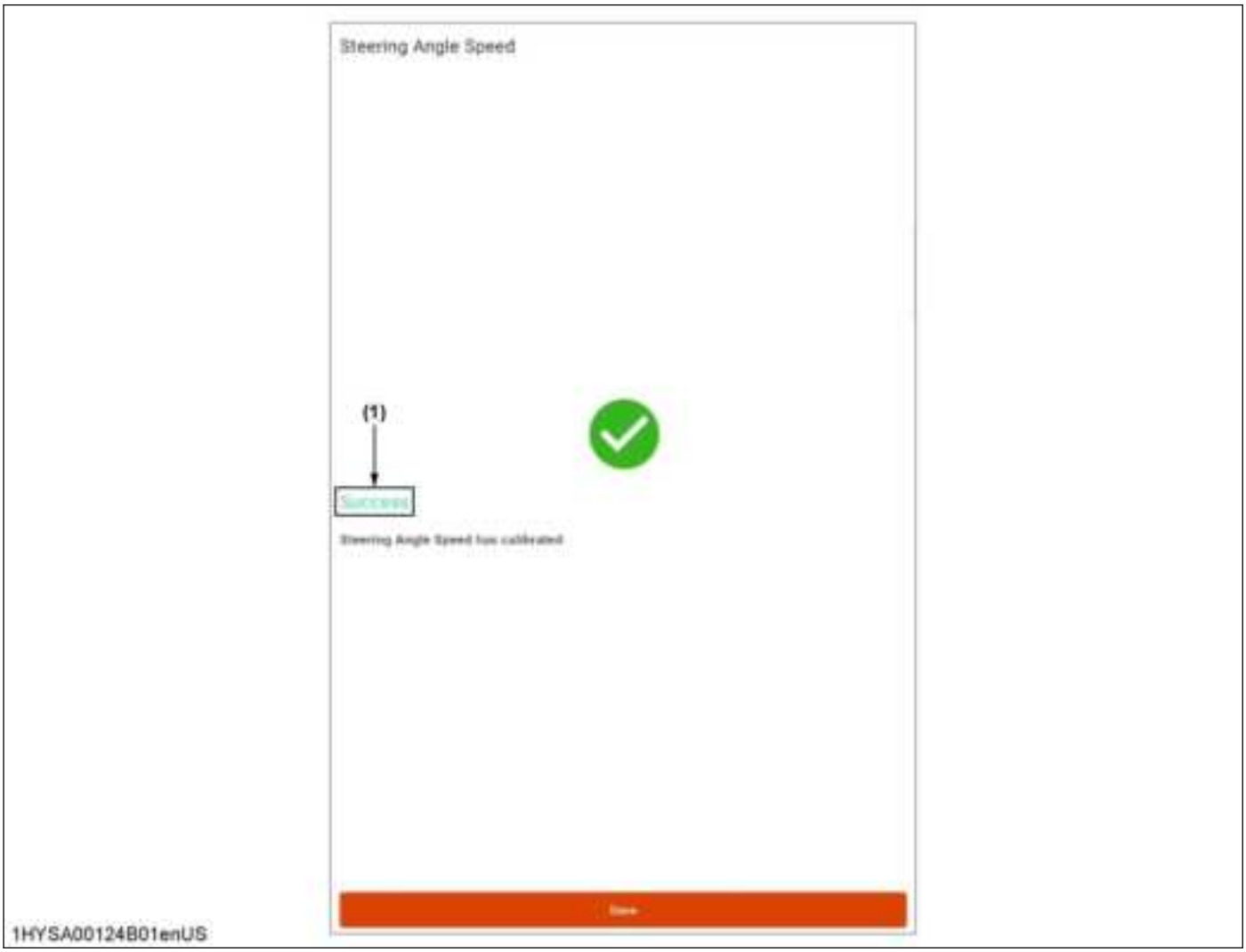
2. Take your hands off the wheel and tap “Start Now”.



(1) “Start Now” button

3. The WorkSmart Autosteer system steers your wheel left and then right, then left, then right again.

4. If the application shows “Success”, you can stop to run the machine.



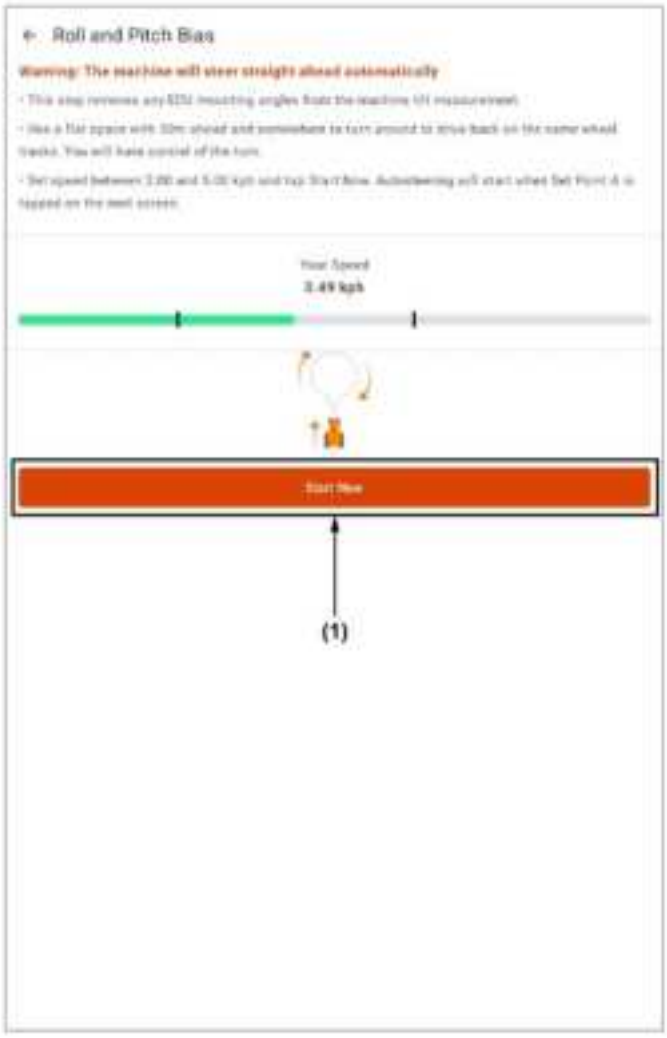
(1) “Success” message

4. Roll and pitch bias calibration

NOTE :
This measures any tilt in the mounting of the ECU.

1. Bring your speed to between 2.0 km/h (1.24 mph) to 5.0 km/h (3.11 mph) until this calibration step is complete.

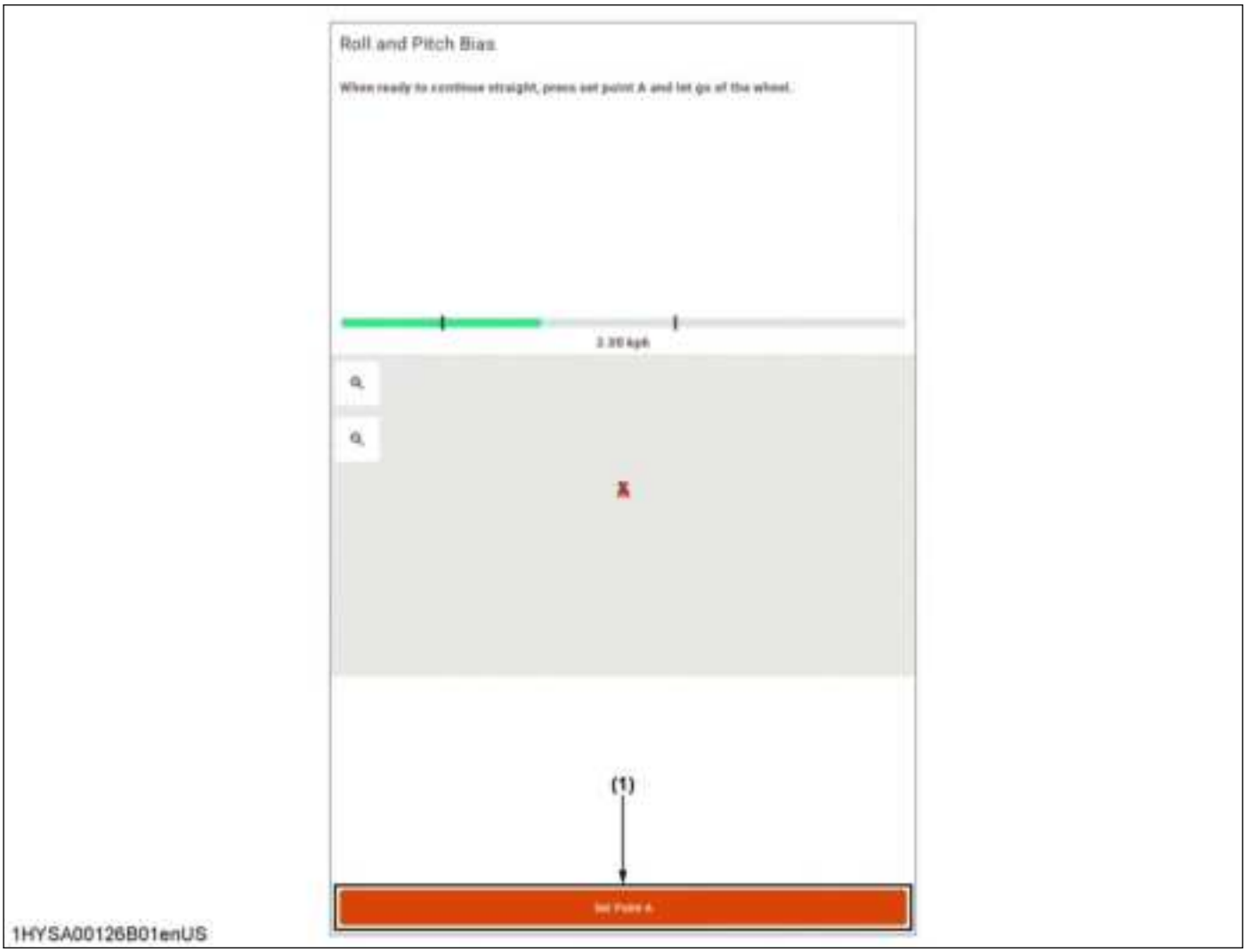
2. Tap “Start Now”.



1HYSA00125B01enUS

(1) “Start Now” button

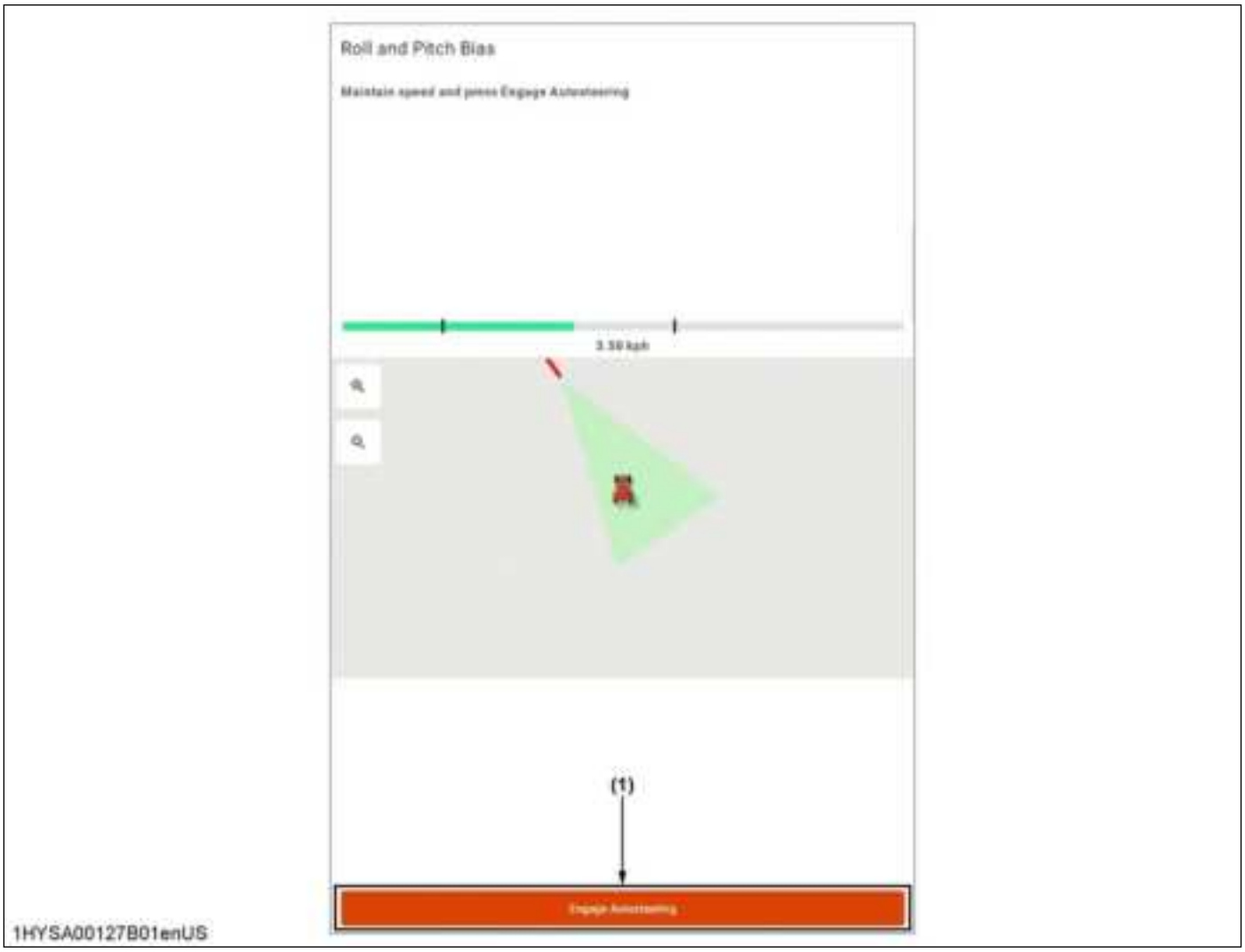
3. Take your hands off the wheel and tap “`Set Point A`”.



(1) “`Set Point A`” button

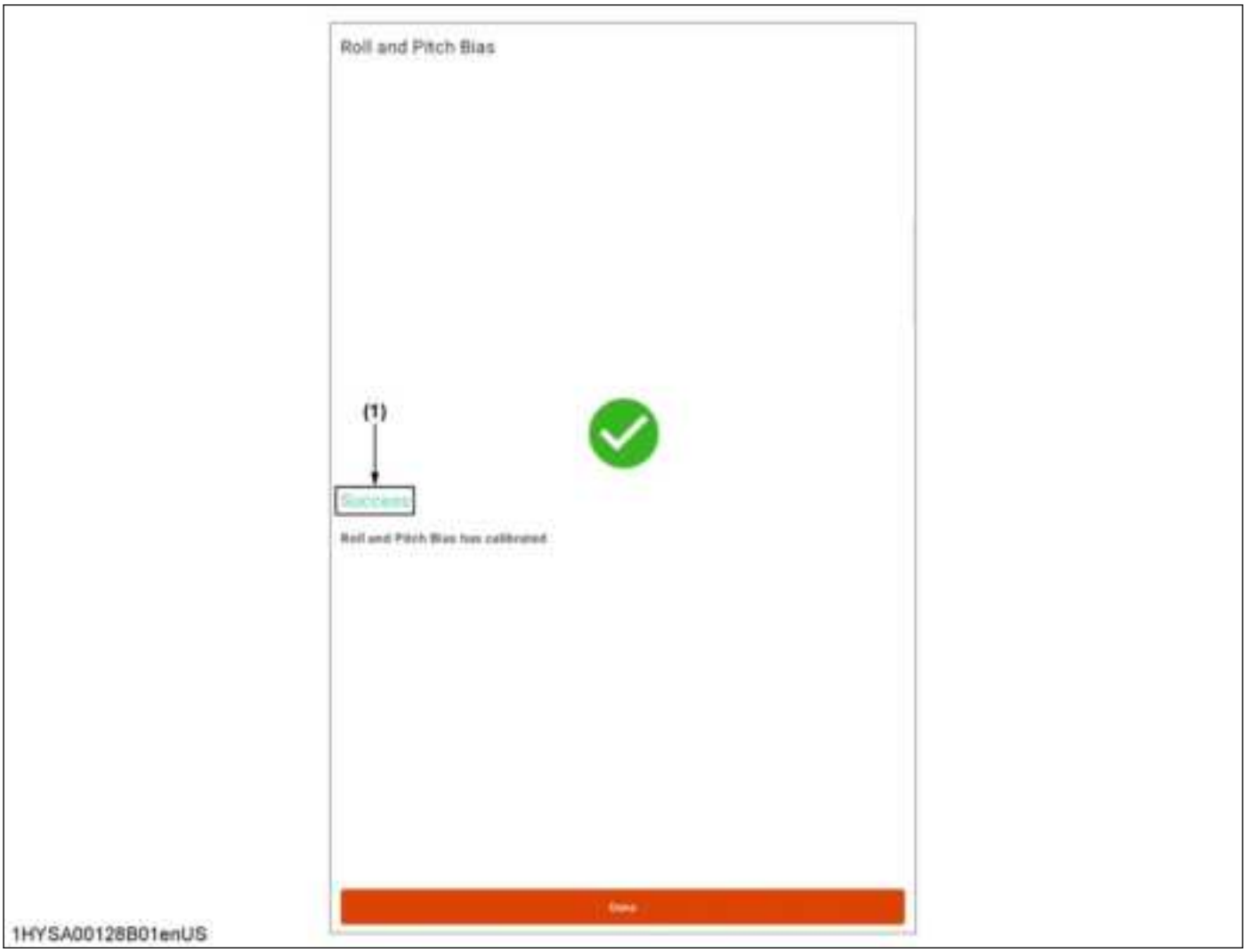
4. The WorkSmart Autosteer system steers your wheels.
5. Drive about 10 m (50 ft), point B will be automatically set.

6. Drive past the green area, then around to approach point B, take your hands off the steering wheel, and then tap "Engage Autosteering".



(1) "Engage Autosteering" button

7. If the application shows “Success”, you can stop to run the machine.



(1) “Success” message

STARTING OPERATION

1. Check whether "Device", "Machine", "Attachment" and "Task" are selected properly.
2. Tap "Start".

(1) "Start" button

(1) Machine icon

NOTE :

- **Check machine direction.**
  Ensure the machine icon moves forwards on the map when driving the machine forward.
- **Change machine direction.**
  If the machine icon looks like it is reversing while driving the machine forward, tap "Status" in the ☰ menu, and tap the "Override" button in "Direction" to reverse the direction.

Quick tour

After pressing "Start", the system will provide a quick tour explaining the meaning of the main icons and the layout.

By pressing “Skip Tour”, you can skip the guide, and by pressing “Don't show this again” you can prevent this guide from being displayed in the future. If you would like to watch the guide, press “Next” to check the layout and meaning of the icons.

Features not covered in the quick tour
The following features are not covered in the quick tour

menu

- When you tap on the icon, the name of the current task you are working on will be displayed.
- You can end the task by selecting either “Pause” or “Complete”.
- If you are using “Quick Steer” for the task, you can end the task by selecting “Quit”.

Task details

- When you tap “Task Details”, you can view the details of the task such as:
- “Task Name”
- “Crop Type”
- “Operation/Activity”
- “Farm Name”
- “Field Name”
- “Created Date”
- “Last Updated”
- If you are using “Quick Steer”, “Task Details” will not be available.

Select wayline

- When you tap “Select Wayline”, you can create or select waylines.
- For more details, see WAYLINE SETTINGS on page 88

Field boundary

- When you tap “Field Boundary”, you can create or select field boundaries.
- For more details, see BOUNDARY SETTINGS on page 85

Show quick tour

- When you select “Show Quick Tour”, you can view the quick tour again. This is useful for checking the meanings of icons and the layout.

menu

- When you tap on the icon, you can access the following submenus.
- Tap “Machine” to view and change the information of the machine you are using.
- Tap “Attachment” to view and change the information of the attachment you are using.
- Tap “Steering Settings” to adjust the responsiveness of autosteer. For more details, see STEERING SETTINGS on page 93.
- Tap “Turn Settings” to adjust the turning settings. For more details, see TURN SETTINGS on page 89.
- Tap “On Field Settings” to configure “Shuttle Shift”, “Auto Coverage”, “Nudge Amount”, and “Contour Smoothing”. For more details, see ON-FIELD SETTINGS on page 107.

menu

- When you tap on the icon, you can toggle the display of the following elements in the application.
- “Nudge Bar”: this controls whether the nudge icons are displayed.
- “Satellite Map”: this sets the background of the work area to satellite imagery. It is recommended to turn this off if the satellite images are hard to see.
- “Info Bar”: you can configure the display of “Signal Strength”, “Position Accuracy”, “Swath Number”, “Speed”, and “Heading”.

Icon	Description
 1HYSA00067A01enUS	The “Turn” button allows the machine to make a turn onto the next wayline.
 1HYSA00068A01enUS	The “Coverage” button records the worked area.
 1HYSA00069A01enUS	The “Engage” button is used to engage or disengage autosteer.
 1HYSA00076A01enUS	The status icon shows the current status of autosteer.
	The nudge icons move the wayline by the specified nudge amount or move the wayline to the current position of the machine.
	Tap this icon to expand the menu and display various options.
 1HYSA00071A01enUS	This displays the crosstrack error, which is the distance from the wayline. For example, if “>11 cm” is shown, it means you are 11 cm (4.3 in.) to the right of the wayline.

NOTE :

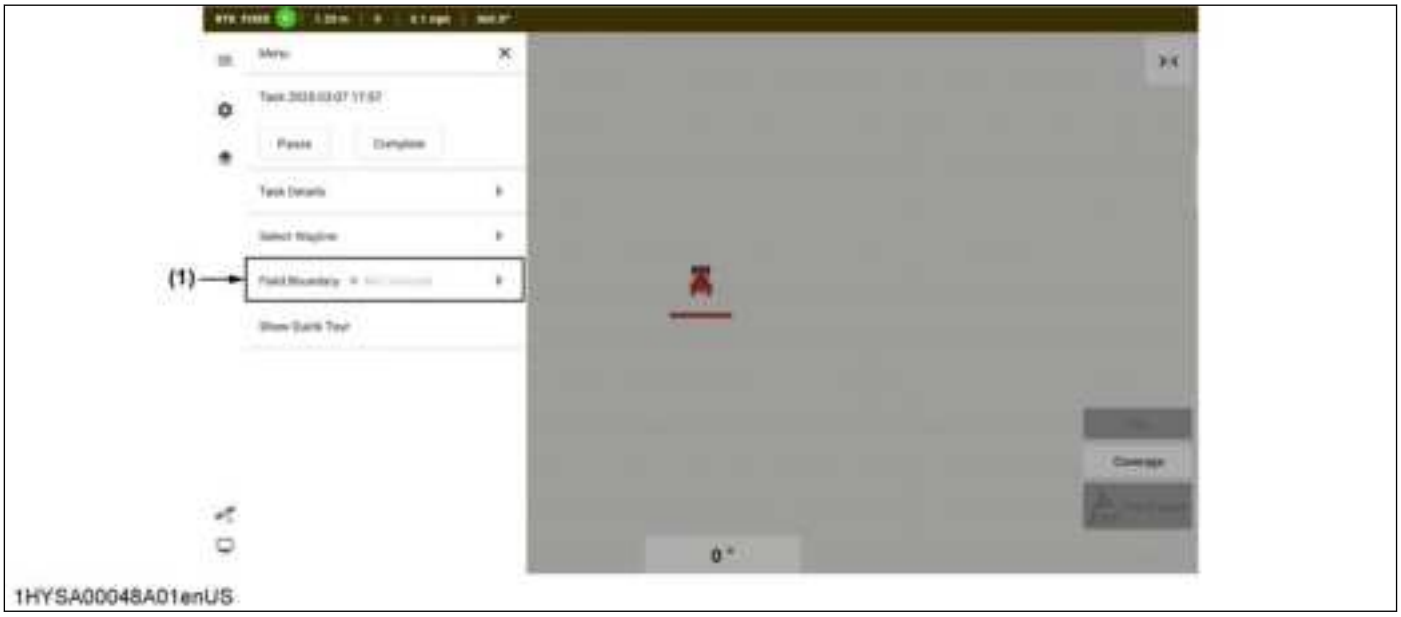
By pinching in, you can zoom in on the screen. By pinching out, you can zoom out the screen. Pinch in refers to the action of bringing two fingers together as if pinching the screen. Pinch out is the opposite of pinch in, where you spread two fingers apart.

BOUNDARY SETTINGS

By setting a boundary, you can link the field with the wayline and use the turning feature within the boundary. Even without setting a boundary, you can still use the autosteering function.

1. Adding a boundary

1. Tap on the ☰ icon in the upper left corner.
2. Tap "`Field Boundary`".



(1) "`Field Boundary`" menu

3. Tap the ✛ icon in the top right corner or tap "`Add Boundary`".

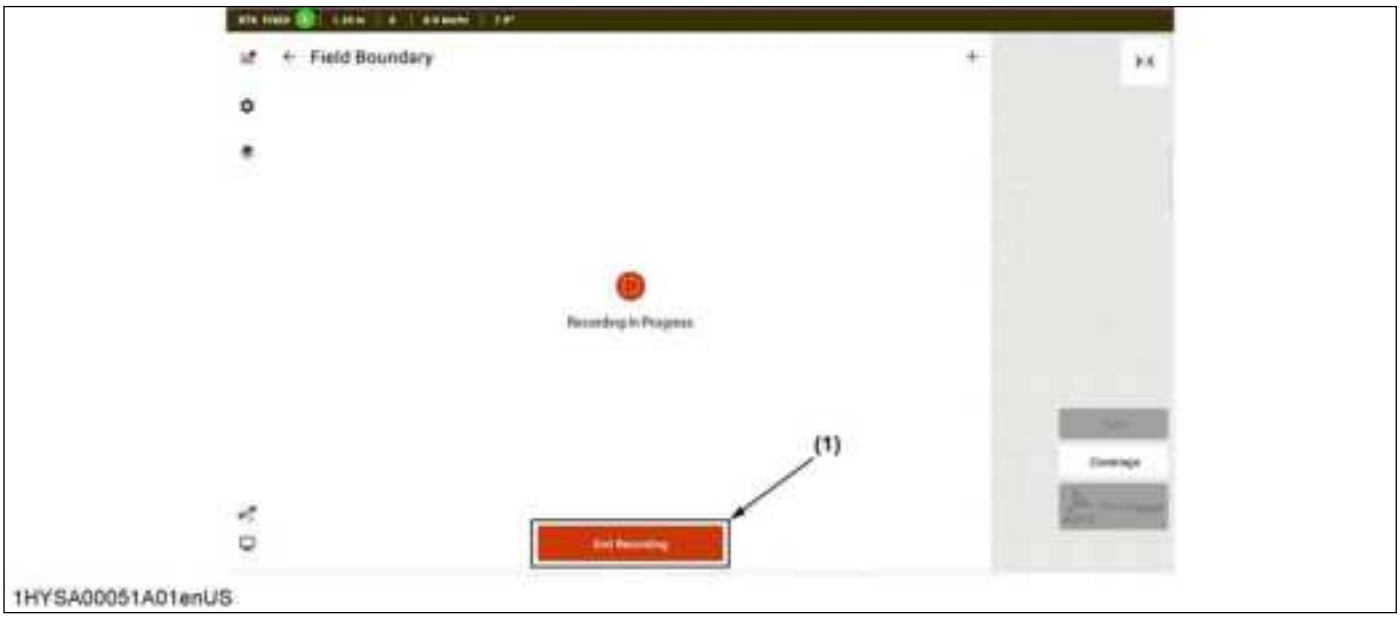
(1) ✛ icon

(2) "`Add Boundary`" button

4. Select whether to create the boundary based on the right or left side of the attachment, then tap "Done".

(1) "Done" button

5. Drive the machine along the desired field boundary.
6. Tap on the ☰ icon in the upper left corner.
7. Tap "Field Boundary".
8. Tap "End Recording".

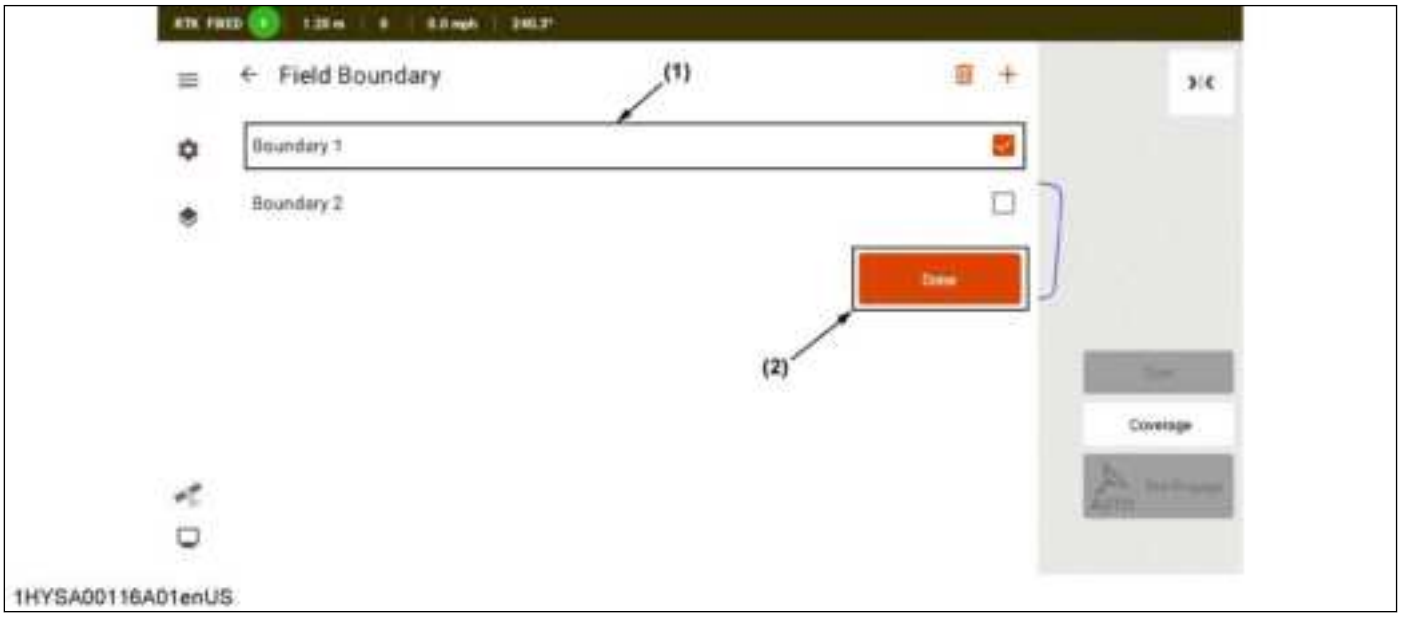


(1) "End Recording" button

2. Selecting a boundary

1. Tap on the ☰ icon in the upper left corner.
2. Tap "Field Boundary".

3. Select the boundary that you want to apply, then tap "Done".



(1) Boundary
(2) "Done" button

WAYLINE SETTINGS

The system controls the steering to follow the wayline.
When using the autosteering function, you must set the wayline.

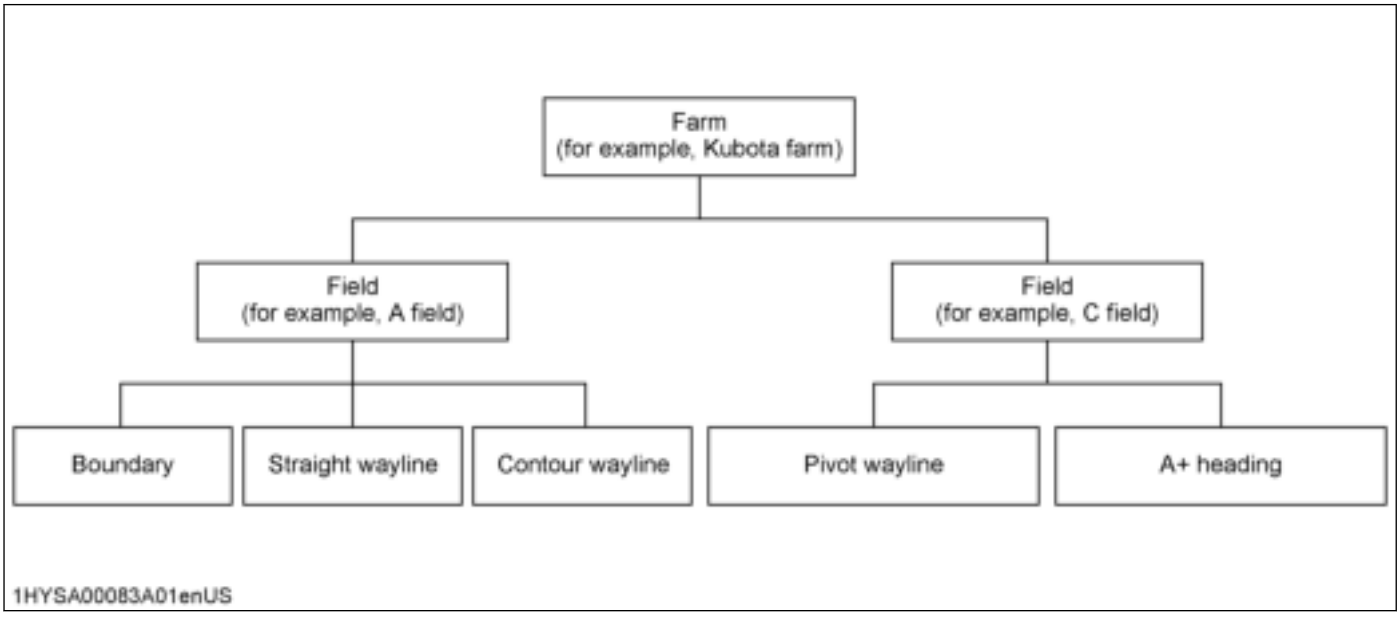
1. Tap on the ☰ icon in the upper left corner.
2. Tap "Select Wayline".

(1) "Select Wayline" menu

3. You can choose to use a previous wayline or create a new wayline. To use a previous wayline, tap "Previous wayline". To create a new wayline, select the best wayline type for your operation from the following options.

Type	Description	Step
"Straight"	Straight is a wayline that connect the A and B point set by the user.	1. Tap "Set A Point". 2. Drive to the end of your wayline. 3. Tap "Set B Point".
"Contour"	Contour is a wayline that can include curves.	1. Tap "Start Recording". 2. Drive until you are at the end of the curved line. 3. Tap "End Recording".
"Freeform Contour"	The freeform wayline fills the adjacent lane that is covered. This is effective when you want to drive around the perimeter of the field and then work on everything inside it. This wayline will not be saved.	1. Turn on coverage and start driving. 2. Select "Freeform Contour". 3. A wayline is shown next to previously applied coverage areas.
"A + Heading"	A+ heading line is a straight wayline. The A+ line is defined fixing a point, then heading in a direction.	1. Tap "Set A Point". 2. Enter the heading in degrees.
"Pivot"	Pivot is a wayline pattern you define for your field by recording the outer circular boundary of the pivot area and then entering a value to compute the rows within the pivot.	1. Tap "Start Pivot". 2. Continue driving in a circle as even as possible. 3. Tap "Finish Pivot".

NOTE :
To use a previously created boundary and wayline, you need to select the same field name.



TURN SETTINGS

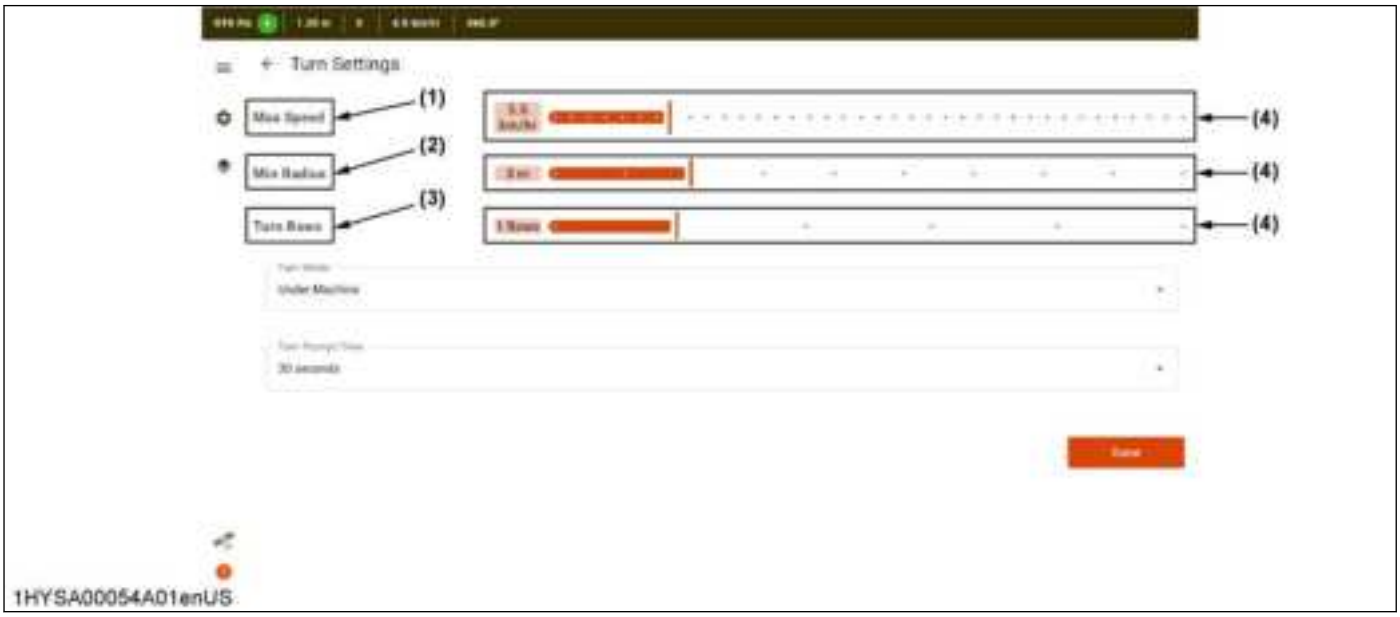
CAUTION
To avoid personal injury, observe the following instructions.
The "Min Radius" in "Turn Settings" can be bigger but not smaller than the minimum radius measured in "Minimum Turn Radius" calibration. If it is set smaller in the application then the minimum for the machine will apply. If you are going fast and the turn has to be made bigger to keep under the lateral acceleration limit, the number in "Turn Settings" will not apply.

Since the "Minimum Turn Radius" set in the settings is not always applied, always be aware of your surroundings when making turns.

1. Tap on the icon in the upper left corner.
2. Tap "Turn Settings".

(1) "Turn Settings" menu

3. For “Max Speed”, “Min Radius”, and “Turn Rows”, adjust the sliders.



(1) “Max Speed”
(2) “Min Radius”
(3) “Turn Rows”
(4) Sliders

NOTE :

- **“Max Speed” indicates the maximum turning speed allowed by the system. If the speed exceeds “Max Speed”, the system will disengage the autosteer.**
- **“Min Radius” refers to the minimum turning radius.**
- **“Turn Rows” indicates the number of lines to skip when turning. If set to 1, the turn will move to the adjacent line. If set to 2, it will skip one line.**
- **Setting “Max Speed” high makes the turn bigger. For the smallest possible turns, “Max Speed” should only be set a little bit higher than the intended turning speed.**

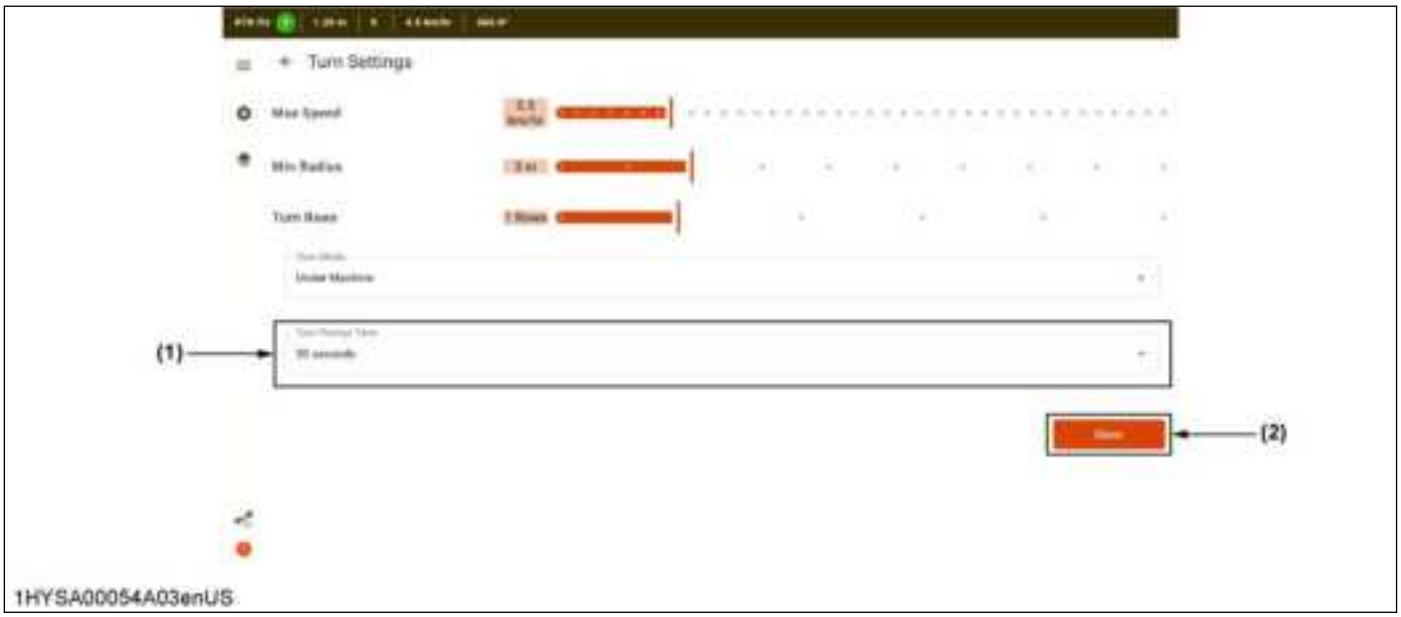
4. For “Turn Mode”, select either “Inside boundary” or “Under Machine”.

(1) “Turn Mode”

NOTE :

- **“Under Machine” means that the turn will occur at the timing when the user presses the “Turn” button.**
- **“Inside boundary” means performing a turn within the created boundary.**
- **When turning inside boundaries there is a 2 meter safety margin (6.5 ft). This is not adjustable.**
- **A turn can go outside the boundary if the operator waits too long to press turn so that turning inside the boundary becomes impossible.**

5. “Turn Prompt Time” refers to the timing of the pop-up window that appears to confirm whether to turn when “Inside boundary” is selected. For example, if set to 15 seconds, the prompt will appear 15 seconds before the boundary. For machines with a larger turn radius or higher speed turns select a larger “Turn Prompt Time”.
6. After modifying the settings, Tap “Done”.



(1) “Turn Prompt Time”
(2) “Done” button

STEERING SETTINGS

To adjust the responsiveness of autosteer, follow the following steps.

IMPORTANT :
Check the steering setting if your steering deviates more than 5 cm (2 inches).

1. Tap on the icon in the upper left corner.
2. Tap “Steering Settings”.

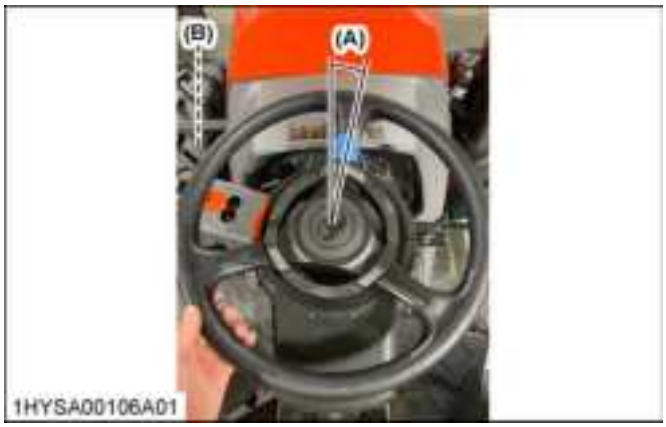
(1) “Steering Settings” menu

3. Measure the backlash and move the slider.

(1) Slider

Options to measure backlash:
- Measure it directly with an angle finder.
- Measure the free movement at the outside edge of the steering wheel and the diameter, and calculate as follows: (freeplay (cm or in.) / diameter (cm or in.) x 115) = backlash (degree).

4. Autosteer from a point slightly away from the wayline to check the approach strength to the wayline, and adjust the attack slider as needed.
5. Based on the movement on the line and the Xtrack error values, adjust the sensitivity slider as necessary.

Setting item	Description
"Sensitivity"	Determines how aggressively your machine steers onto the guideline when approaching it from close proximity. It can be a whole number from 1 % to 100 %. Default is 50 %. To steer aggressively, increase the value. To steer passively, decrease the value.
"Attack"	Determines how aggressively your machine steers onto the guideline when approaching it from a distance. It can be a whole number from 1 % to 100 %. Default is 50 %. To steer aggressively, increase the value. To steer passively, decrease the value.
"Backlash"	The slack in a mechanism caused by gaps between parts, such as with a steering wheel. It can be a whole number from 0 to 90 degrees.  *(A) Backlash* *(B) Straight wheels*

NOTE :
"Steering Settings" values are linked to the machine.

START AUTOSTEER

WARNING
To avoid personal injury or death, observe the following instructions.
- **Significant and sudden changes in satellite signal can result in substantial positional errors. Under these conditions, the WorkSmart Autosteer system may react suddenly. To prevent injury or property damage under these conditions, disable the WorkSmart Autosteer and manually control the machine until conditions improve.**
- **The GNSS antenna may experience interference if the machine is operated close to power lines, radar dishes, or cell phone towers.**

(1) Power/engage switch

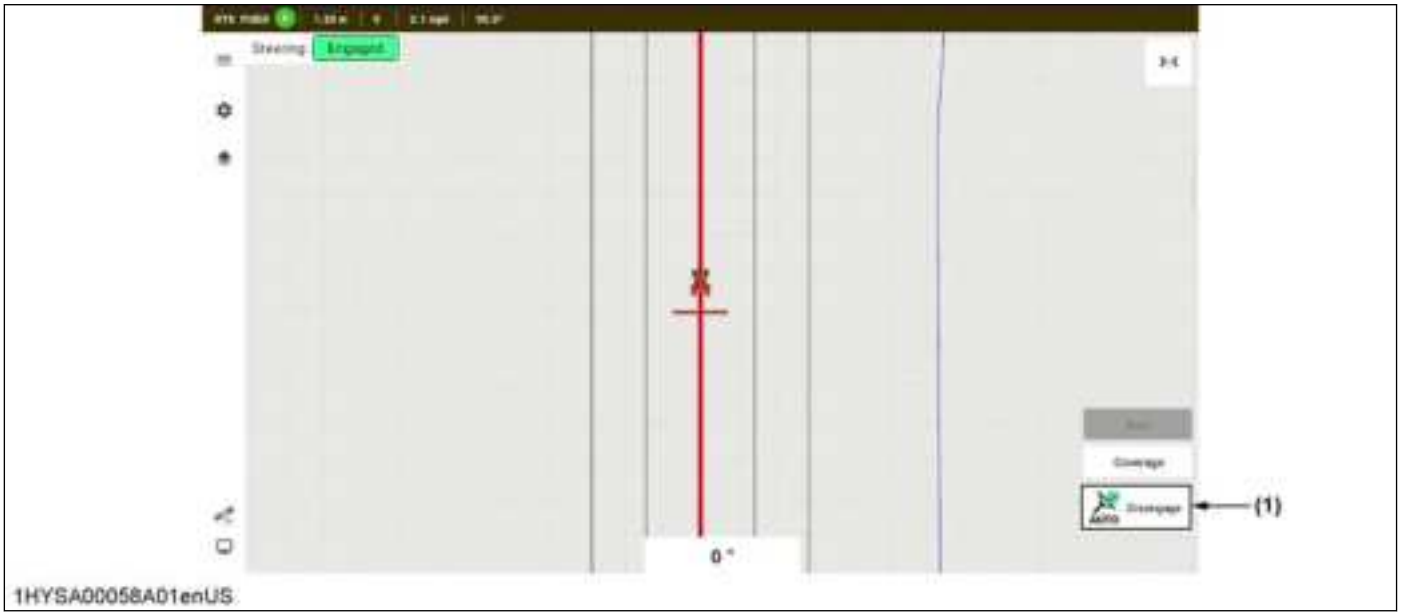
NOTE :
The power/engage switch has states for *"Power OFF"*, *"Power ON"*, and *"Engage"*.
- ***"Power OFF"*: the state where the switch is not pressed.**
- ***"Power ON"*: the state where the switch is latched in the middle position.**
- ***"Engage"*: the state where the switch is fully pressed into the momentary position, when released it springs back to the middle position.**

There are two ways to engage autosteer.
- Tap the *"Engage"* button on the application.
- Press the power/engage switch.

(1) "Engage" button

There are four ways to disengage autosteer.

- Tap the *"Disengage"* button on the application.
- Press the power/engage switch.

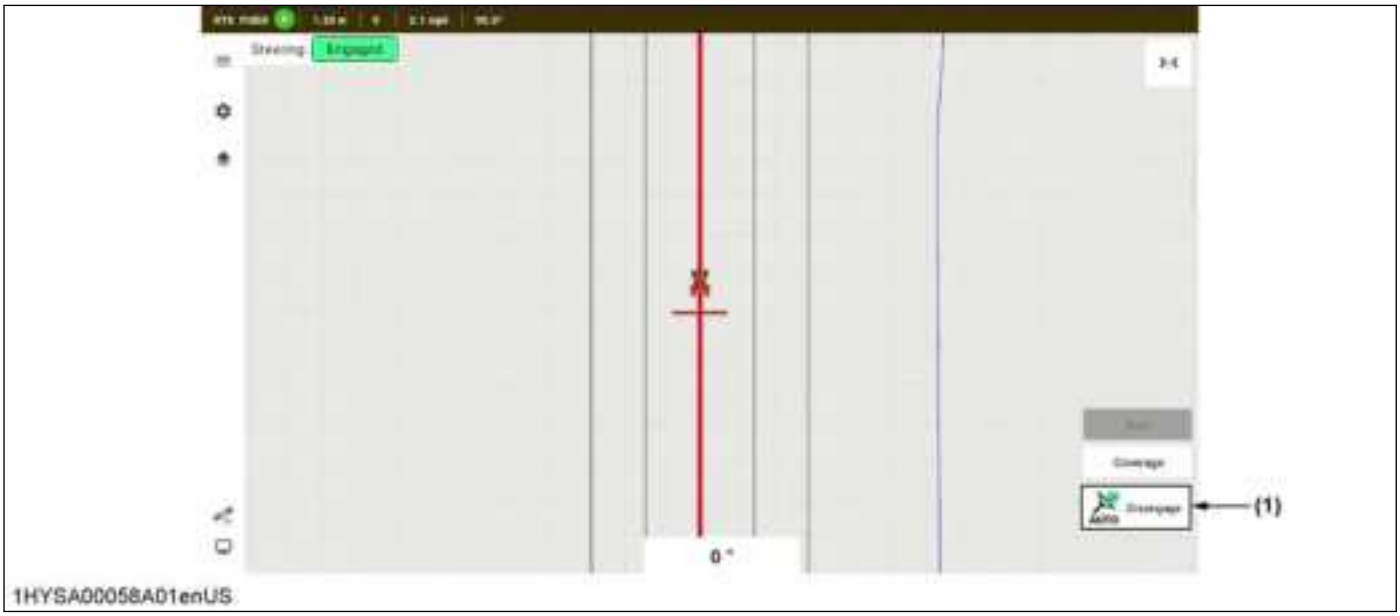


(1) "Disengage" button

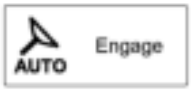
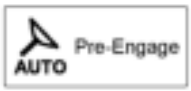
- Manually turn the steering wheel until autosteer disengages.
- Reduce the speed below the minimum speed or exceed the maximum speed required for autosteer.

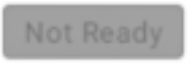
NOTE :
If an error occurs in "System" or an event that causes disengage occurs, the system will stop steering. For events that cause disengage, refer to the "Last Disengage" reason list.

The *"Engage"* button is at the bottom right, and the status is at the top left.



(1) "Engage" button
(2) Status

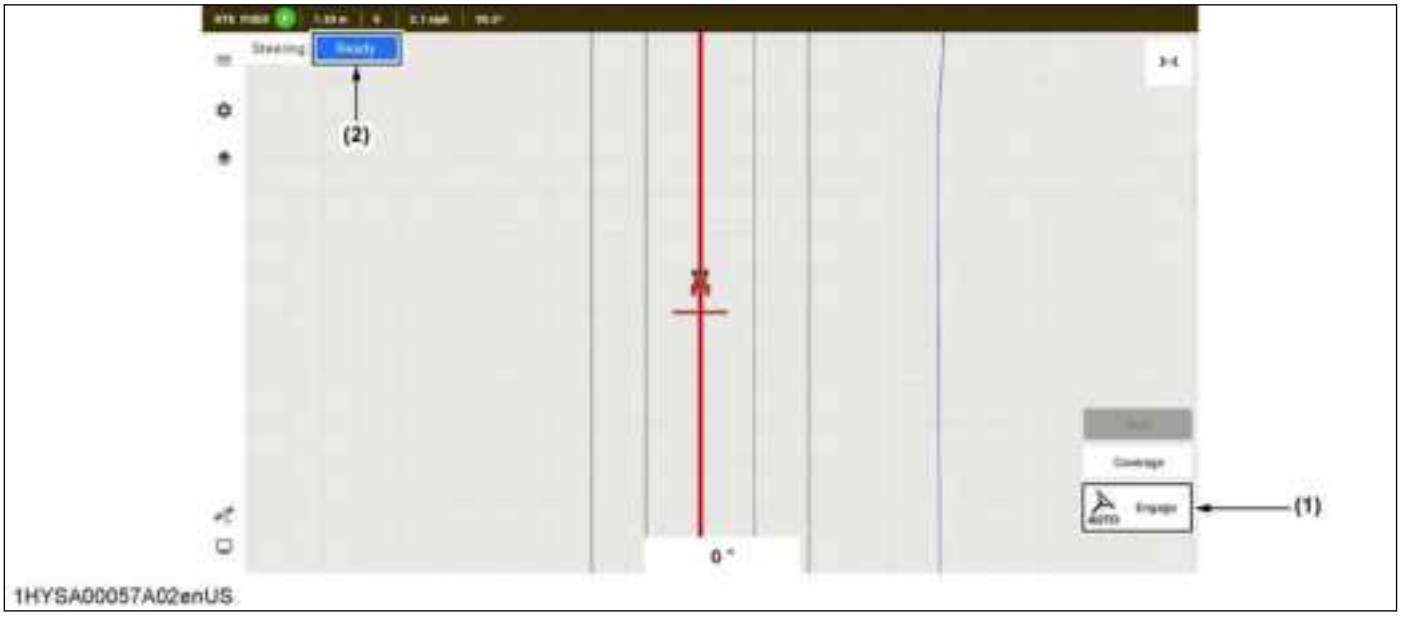
Button	Description
 1HYSA00069A01enUS	"Engage" button The "Engage" button is the button that indicates autosteer is not active and the machine's speed is at the autosteer-supported speed. Press this button to activate autosteer.
 1HYSA00072A01enUS	"Pre-Engage" button The "Pre-Engage" button is the button that indicates autosteer is not active and the machine's speed is not at the autosteer-supported speed or some other engage condition is not met. For example, the angle of attack is greater than 80 degrees, the distance to the line is more than 9 m (29.5 ft), or the seat switch detects that the operator is not seated. Press this button to activate pre-engage.
 1HYSA00073A01enUS	"Disengage" button with a light green checkmark This button is displayed when autosteer is active. Press this button to deactivate autosteer.
 1HYSA00074A01enUS	"Disengage" button with a yellow checkmark This button is displayed when pre-engage is active. Press this button to deactivate pre-engage. **NOTE :** • **When the necessary conditions for autosteering, such as speed, are met, the system will automatically engage if pre-engage is used.** • **If the necessary conditions for autosteering are not met within 10 seconds, such as remaining stationary after pressing the "Engage" button, the system will automatically disengage.**
 1HYSA00075A01enUS	"Error" button (grayed-out) This button is displayed when autosteer is unavailable due to an error.
 1HYSA00113A01enUS	"Pre-Engage" button (grayed-out) This button is displayed when a wayline is not set and autosteer cannot be engaged.

Status	Description
 1HYSA00076A01enUS	"Not Ready" status This status is displayed when autosteer is not active and conditions for autosteer are not met. **NOTE :** **If the status icon continues to show "Not Ready" when the machine is moving close to the line and there is no GNSS or status warning, it could be the seat switch.**
 1HYSA00077A01enUS	"Ready" status This status is displayed when autosteer is not active but conditions for autosteer are met.
 1HYSA00078A01enUS	"Engaged" status This status is displayed when autosteer is active.
 1HYSA00079A01enUS	"Pre-Engaged" status This status is displayed when pre-engage is active.
 1HYSA00080A01enUS	"Error" status This status is displayed when autosteer is unavailable.
 1HYSA00114A01enUS	"Not Ready" status (grayed-out) This status is displayed when a wayline is not set and autosteer cannot be engaged.

1. Starting autosteer when the machine is moving

The following conditions are required to start autosteer when the machine is moving:

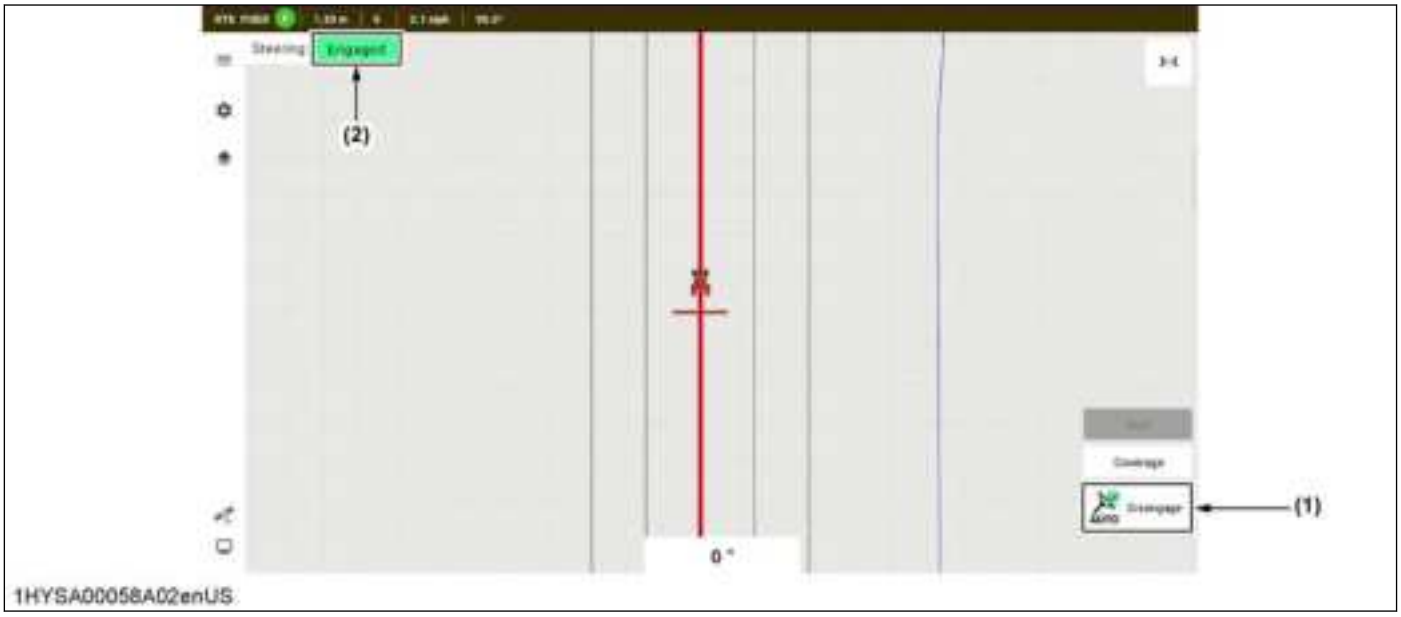
- The speed detected by the system is at or above the minimum autosteer speed.
- The speed detected by the system is at or below the maximum autosteer speed.
- The machine is being driven manually.
- The *"Engage"* button displays "Engage".
- The status displays "Ready".



(1) "Engage" button
(2) "Ready" status

If the *"Engage"* button is tapped in this state, the display changes as follows.

- *"Engage"* button: "Disengage"
- Status: "Engaged"

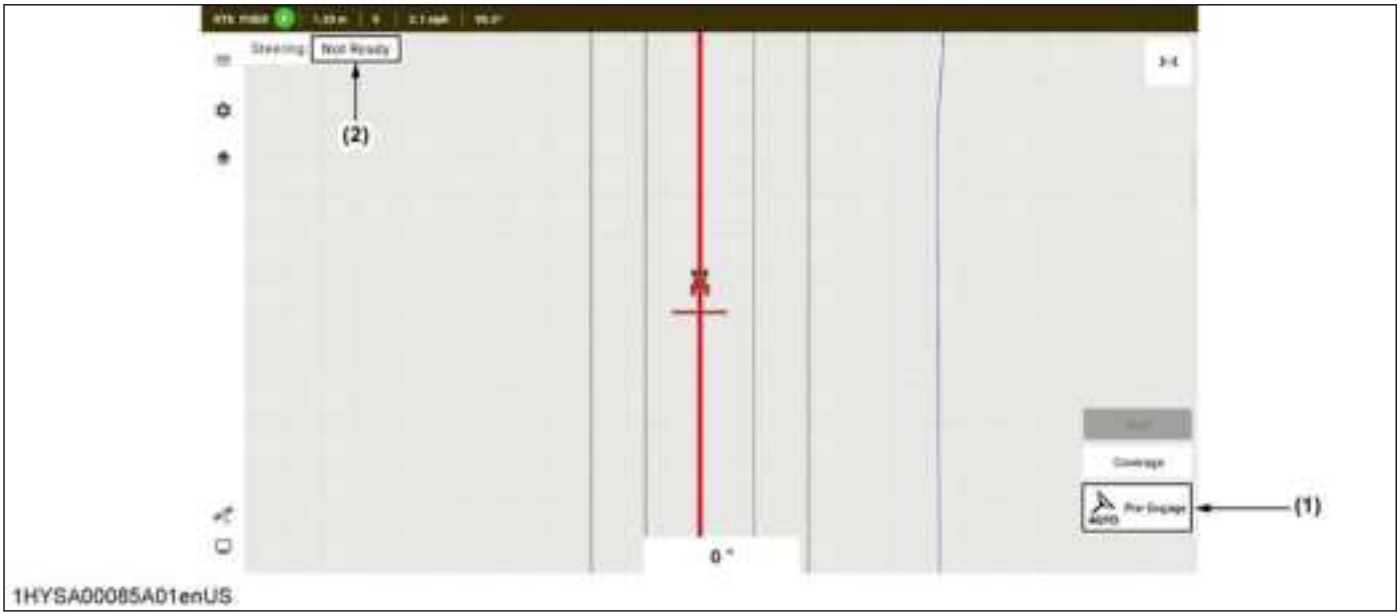


(1) "Disengage" button
(2) "Engaged" status

2. Starting autosteer when the machine is stopped

The following conditions are required to start autosteer when the machine is stopped:

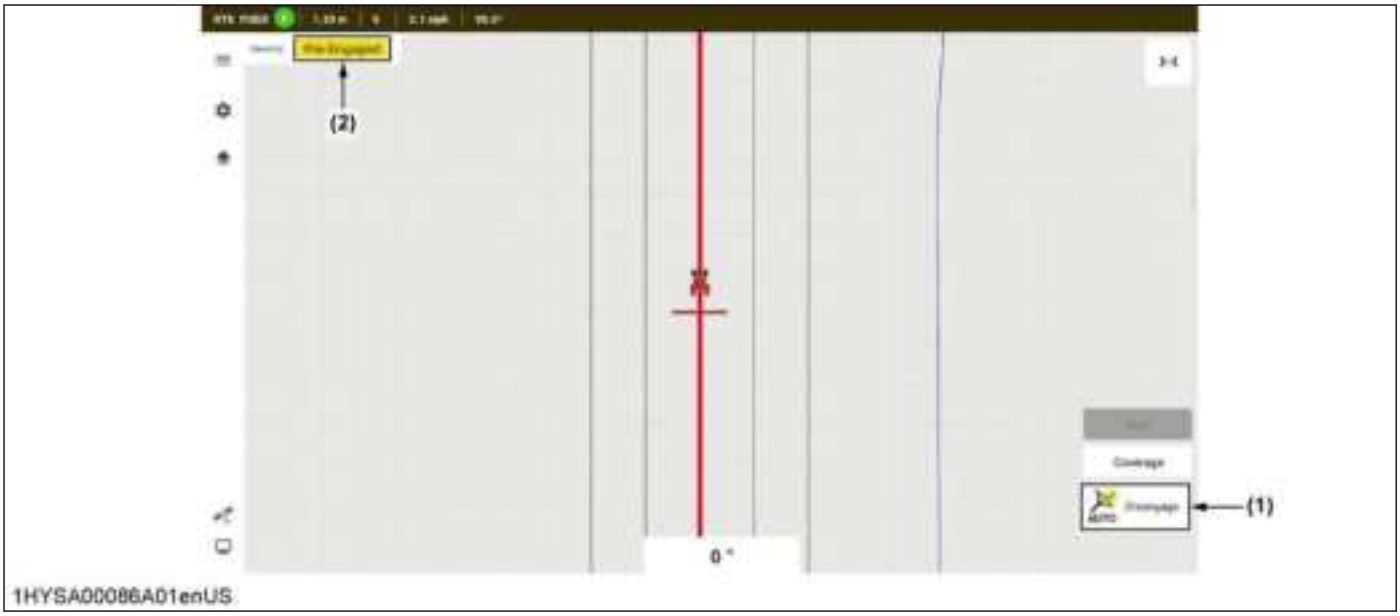
- The speed detected by the system is below the minimum autosteer speed.
- The *"Engage"* button displays "`Pre-Engage`".
- The status displays "`Not Ready`".



(1) "`Pre-Engage`" button
(2) "`Not Ready`" status

If the *"Engage"* button is tapped in this state, the display changes as follows.

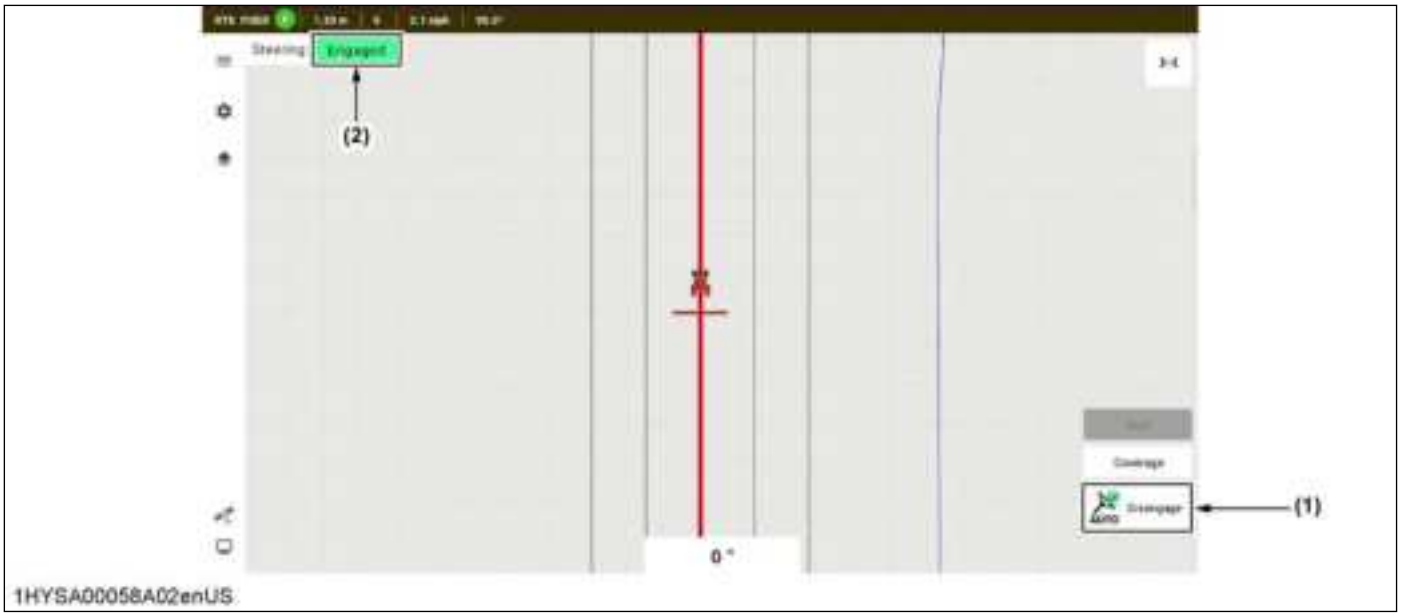
- *"Engage"* button: "`Disengage`"
- Status: "`Pre-Engaged`"



(1) "`Disengage`" button
(2) "`Pre-Engaged`" status

When you increase the speed and it is above the minimum autosteer speed and below the maximum autosteer speed within 10 seconds after reaching the pre-engaged status, the display changes as follows.

- *"Engage"* button: "`Disengage`"
- Status: "`Engaged`"



(1) "Disengage" button
(2) "Engaged" status

NOTE :

- **When autosteer is activated, a 0.5-second beep will sound from the application.**
- **When autosteer is deactivated, a 1-second beep will sound from the application.**

TURN COMMAND

WARNING

When making turns, be cautious of the jack-knifing phenomenon. This occurs when a large angle forms at the connection point between the machine and the attachment during a turn. It can lead to loss of control, accidents, and damage to both the machine and the load.

1. Turn mode: under machine

NOTE :

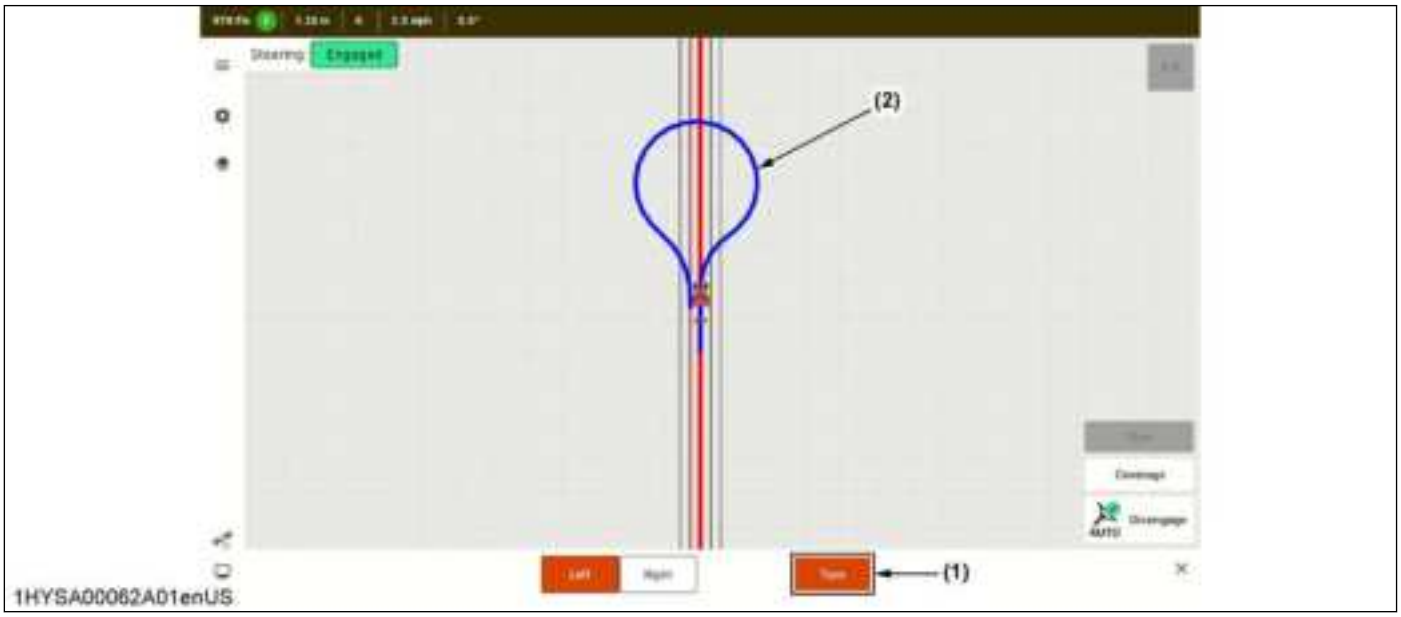
"Under Machine" means that the turn will occur at the timing when the user presses the "Turn" button.

1. Tap "Turn".

(1) "Turn" button

2. Commands will appear from the bottom, and the turn line will be displayed.

3. Choose whether to turn left or right, and press **"Turn"** to start the turn.



(1) "Turn" button
(2) Turn line

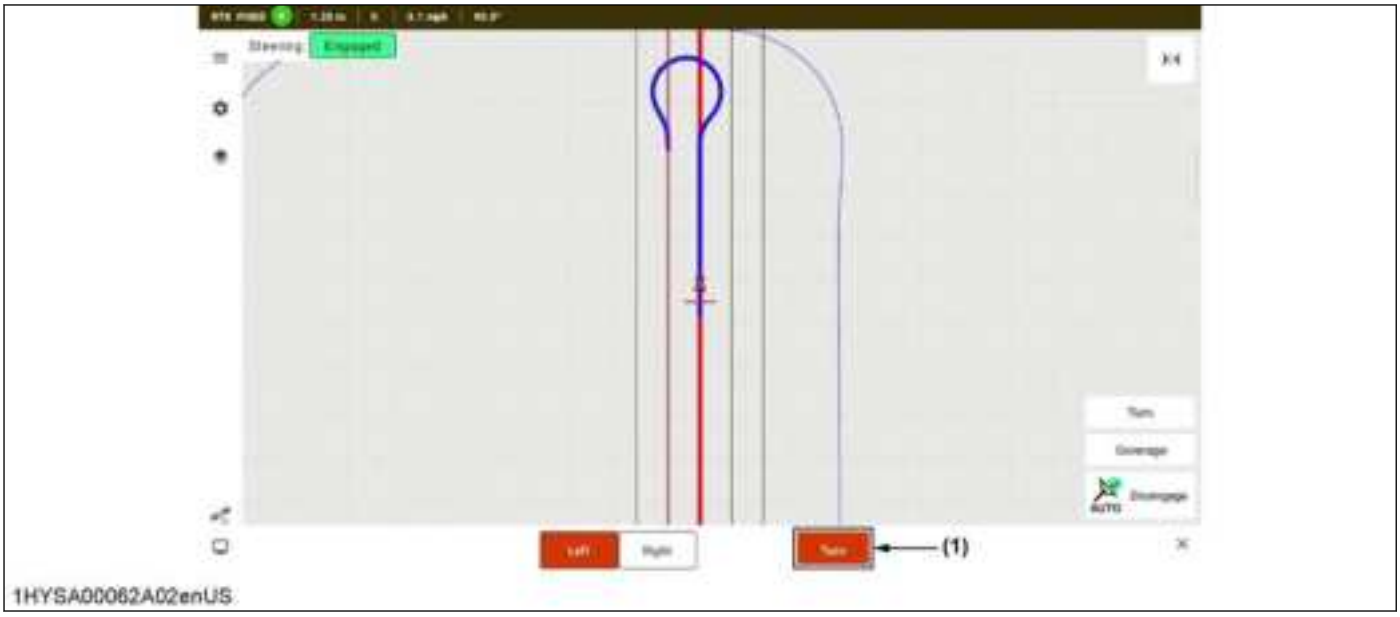
2. Turn mode: inside boundary

NOTE :
"Inside boundary" means performing a turn within the created boundary.

1. Commands will appear from the bottom before the turn. These commands will appear based on the turn prompt time. For example, if the turn prompt time is set to 15 seconds, the turn command will appear 15 seconds before the machine is expected to cross the boundary.

2. Choose whether to turn left or right, and press "Turn". The system turns inside the boundary.

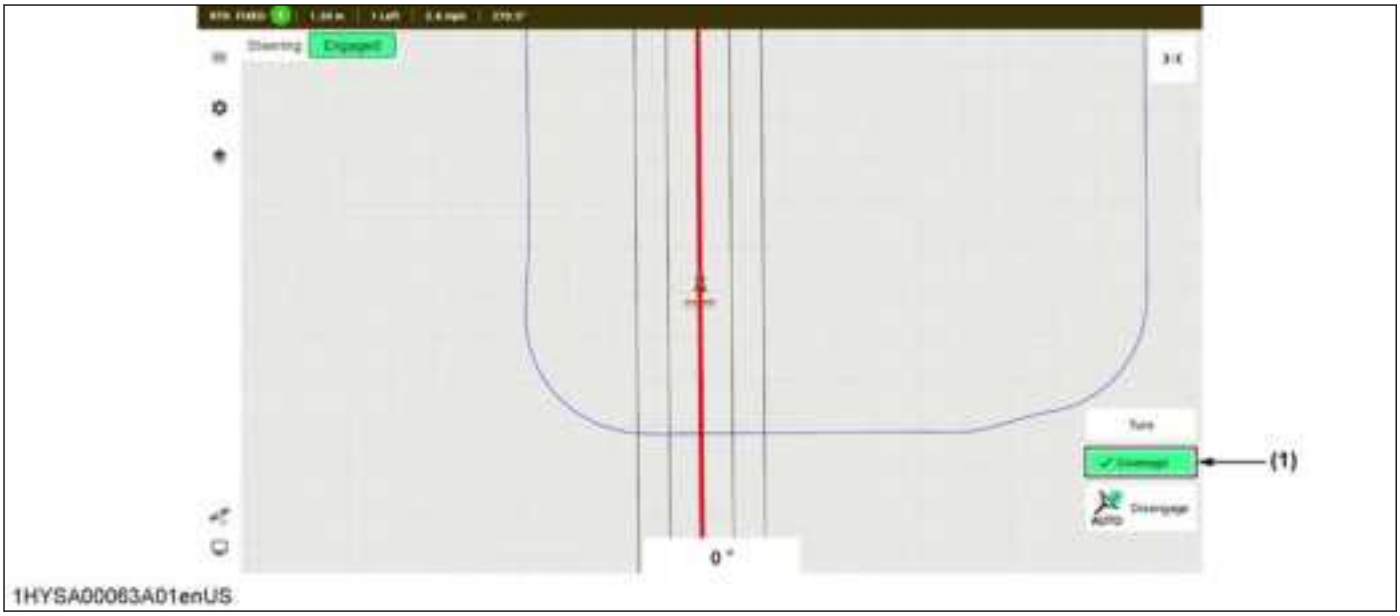
   NOTE :
   If the user does not press "Turn" and the machine gets too close to the turn, the turn will move forward with the machine and could go outside the boundary.



(1) "Turn" button

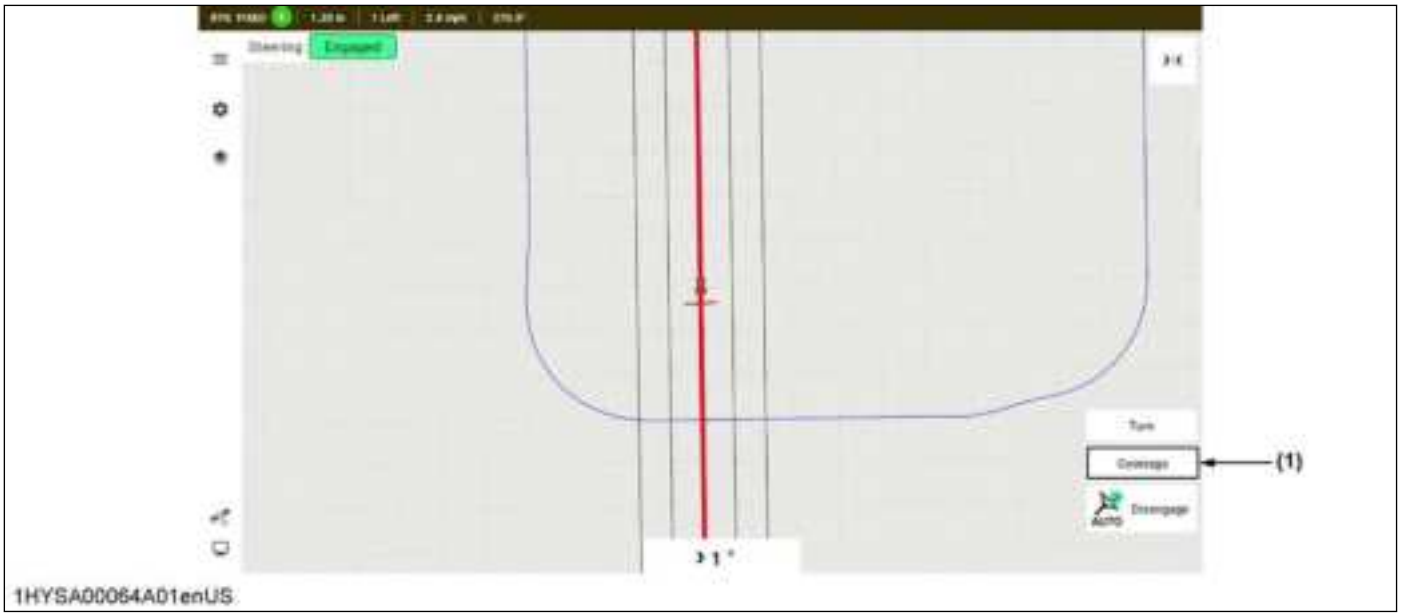
COVERAGE ON OR OFF

You can turn the manual coverage on or off.
To turn on coverage, tap "Coverage" so that it turns green and the checkbox is checked.



(1) "Coverage" button

To turn off coverage, tap "Coverage" so that it turns white.



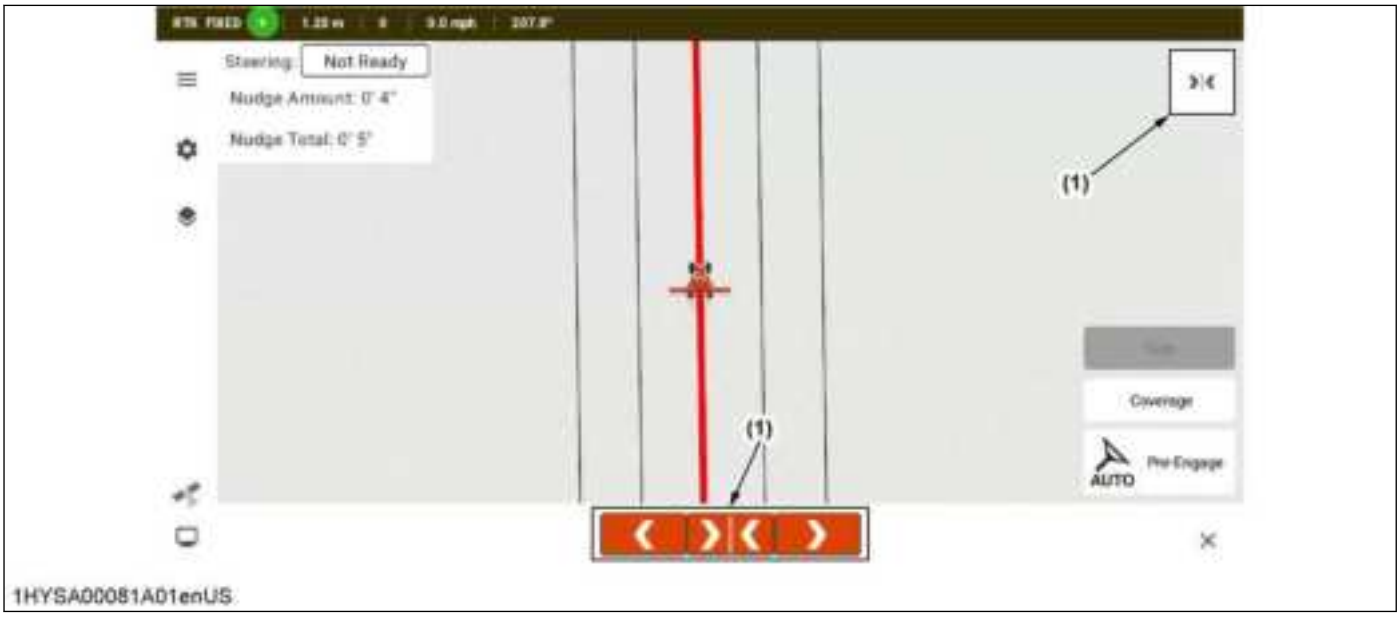
(1) "Coverage" button

NOTE :

- **The areas where work has been done more than one time will become darker in color.**
- **Coverage can also be linked to autosteering from on-field settings.**
  See ON-FIELD SETTINGS on page 107

NUDGE

1. Tap the nudge icon in the top right corner, and then tap a nudge icon at the bottom of the screen.
   a. Tap the icon to nudge the wayline to the left according to the set nudge width.
   b. Tap the icon to nudge the wayline to the right according to the set nudge width.
   c. Tap the icon to move the wayline to the current position of the machine.



(1) Nudge icons

NOTE :
See ON-FIELD SETTINGS on page 107 to set the nudge width.

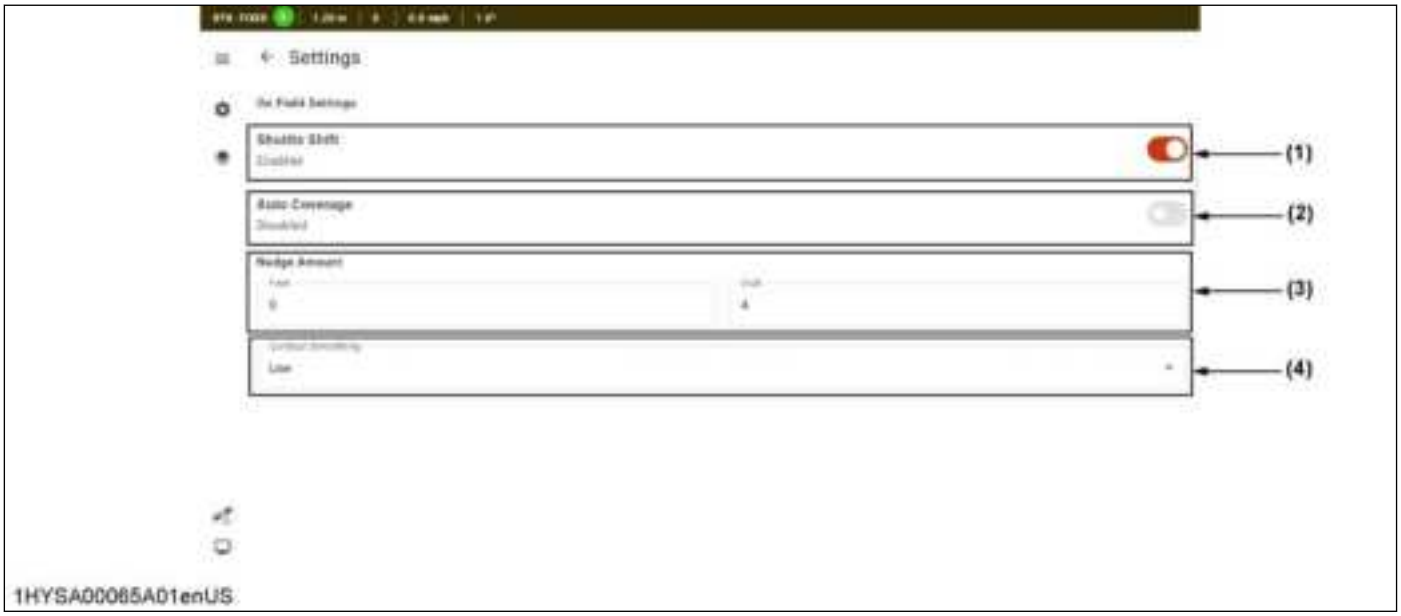
ON-FIELD SETTINGS

1. Tap on the icon in the upper left corner.

2. Tap “On Field Settings”.

(1) “On Field Settings” menu

3. Set the following setting items as you wish.



No.	Setting item	Description
(1)	“Shuttle Shift”	“Shuttle Shift” is a function that continues autosteer. When it is on, if the machine stops but starts moving again within 8 to 10 seconds, autosteer will remain engaged.
(2)	“Auto Coverage”	“Auto Coverage” is a feature where the application of coverage is synchronized with autosteer when it is engaged.
(3)	“Nudge Amount”	This determines the nudge width of the left nudge and right nudge buttons. Enter the number you want to set as the nudge width.
(4)	“Contour Smoothing”	This applies to “AB Contour” and “Freeform Contour” wayline paths. It sets the level of smoothing applied to the paths. Use “low” or “none” to closely follow turns, especially with small machines and attachments. Use “medium” or “high” on gentle curves where smooth steering is more important than closely following the edge of previous paths.

TASK COMPLETE OR PAUSE

NOTE :

- **Do not leave the system powered on after turning off the machine's ignition. This can drain the battery.**
- **Turning off the power/engage switch will reset the heading, and you will need to acquire the heading again the next time you work.**
- **When using "`Quick Steer`" as a task, the button displays "`Exit`" instead of "`Complete`" or "`Pause`".**

1. Tap on the ☰ icon in the upper left corner.
2. Select "`Complete`" or "`Pause`".

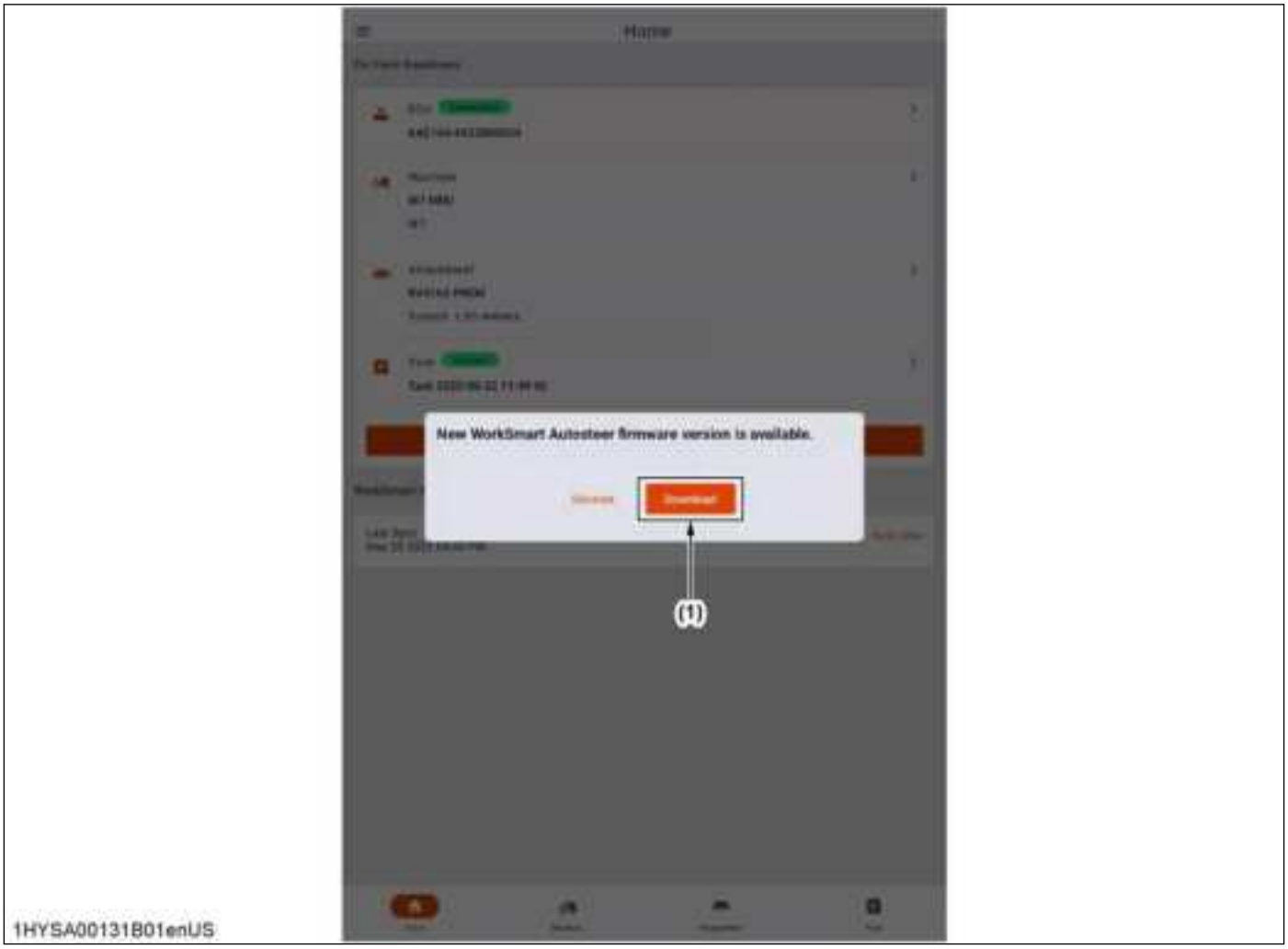
(1) "`Complete`"
(2) "`Pause`"

SOFTWARE UPDATE

1. Software update (ECU)

1. Connect to the internet and tap the "Sync Now" button on the home tab.
2. The application will display the following pop-up window: "New WorkSmart Autosteer firmware version is available".
3. To download the firmware, tap "Download".

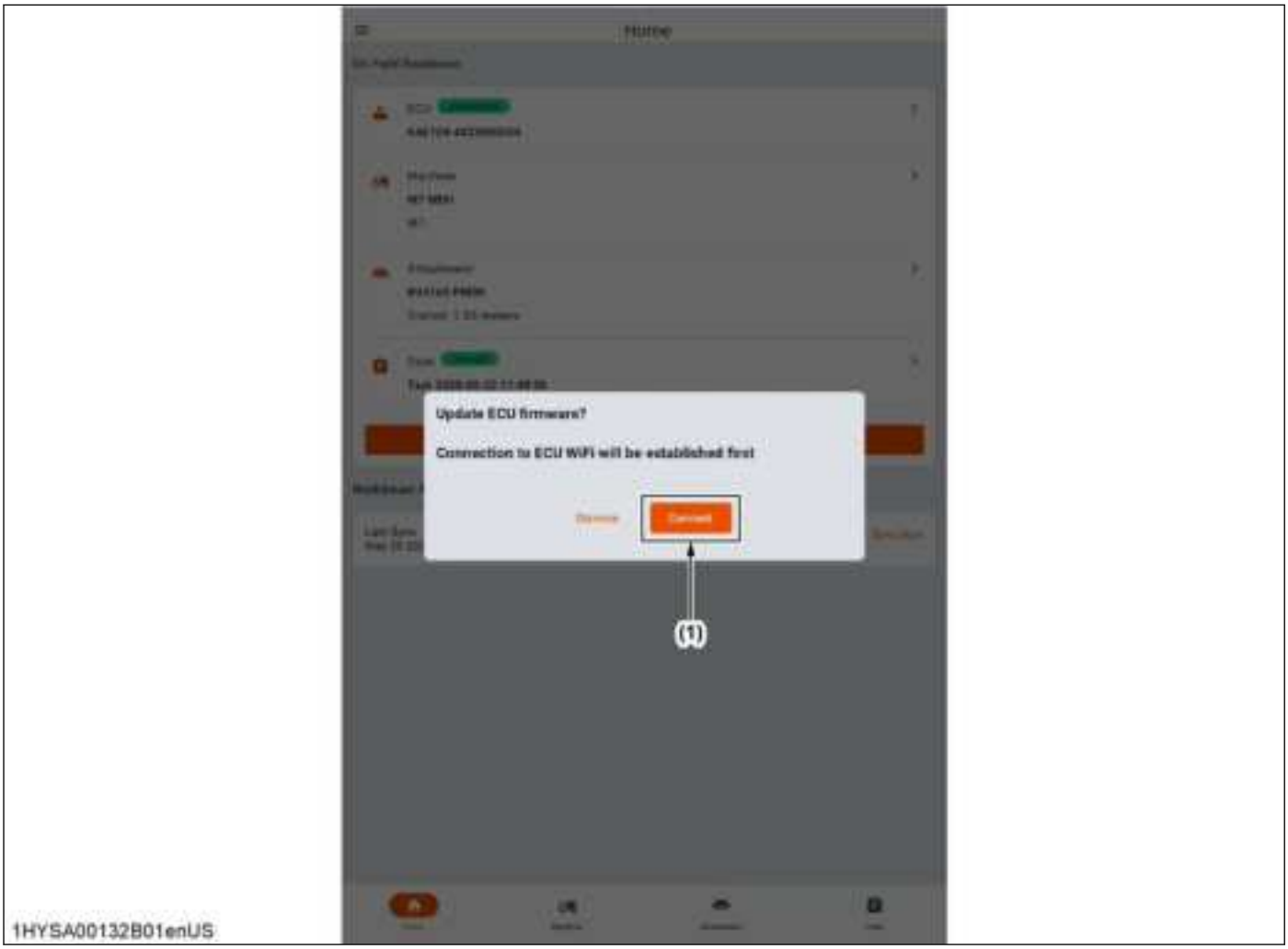
NOTE :
Be aware that this will consume your internet data.



(1) "Download" button

Android OS

4. Tap "Connect" to connect to "WiFi Direct" and the firmware update will start.



(1) "Connect" button

iOS

4. Connect to the ECU WiFi first in your iPad or iPhone settings. Open the *"Settings"* application, select the network named "KAE104-xxxxx" from the WiFi settings, and enter *"topsecret"* as the password to connect to WiFi. After connection, return to the WorkSmart Autosteer application and the firmware update will start.

(1) "Settings" application
(2) "KAE104-xxxxx" network

NOTE :

- **The ECU firmware update can also be performed by following these procedures:**
  - **Tap on the ☰ icon in the upper left corner, tap "System", tap the "Update" button in "ECU version".**
  - **Tap on the ☰ icon in the upper left corner, tap "ECU", tap on the arrow to display "ECU Detail", and then tap "Update ECU Version".**
  - **Tap "ECU" in the home tab, tap on the arrow to display "ECU Detail", and then tap "Update ECU Version".**

2. Software update (MDU)

1. "Update MDU Version" will fail if the MDU has been used for autosteer since it was powered up. Use the MDU power button to turn it off and then on again.

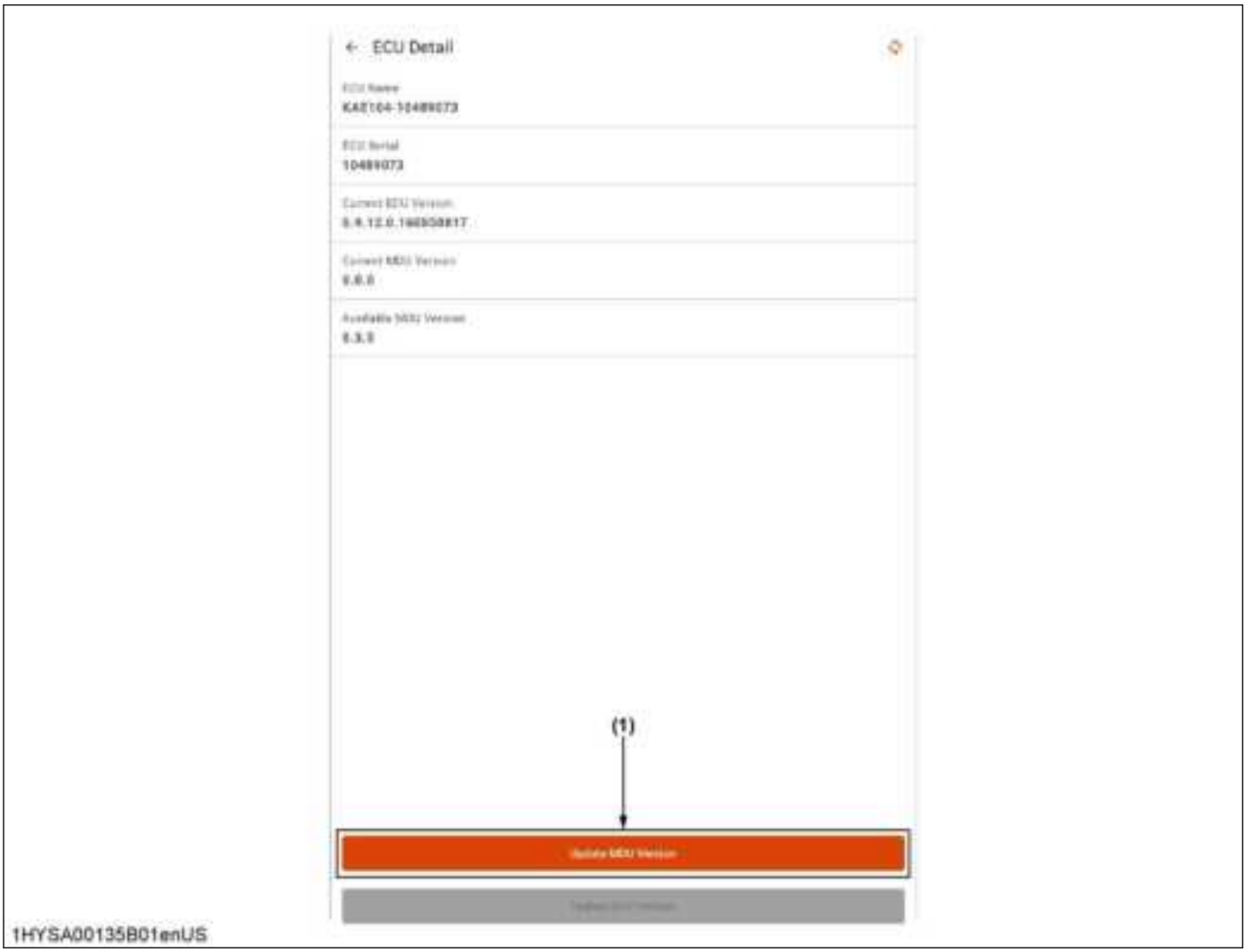
2. Tap on "ECU" in the home tab, or in the ☰ menu.

(1) "ECU" menu
(2) "Home" tab

3. With Bluetooth connected, tap the button to display "`ECU Detail`".

(1) button

4. Tap "`Update MDU Version`" to start the software update.



(1) "`Update MDU Version`" button

CLOUD DATA SYNCHRONIZATION

By performing cloud data synchronization, you can back up the data with the web portal, which can then be used on different mobile devices.

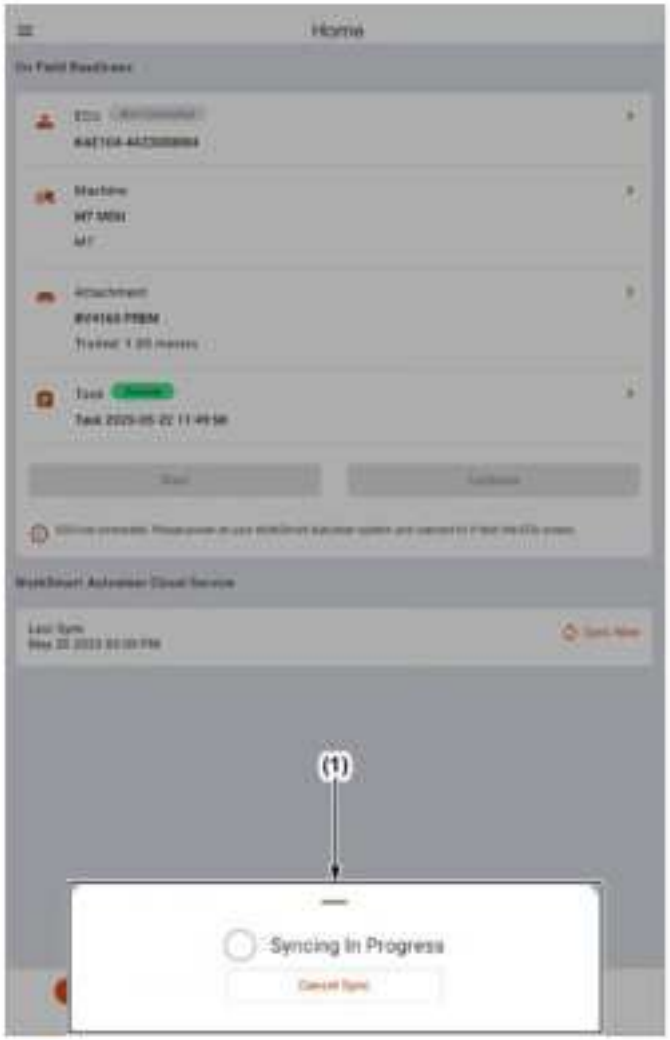
1. Connect to the internet.

2. Tap “Sync Now”.

1HYSA00129B01enUS

(1) “Sync Now” button

3. A pop-up window will appear displaying “Syncing in Progress”.



(1) Pop-up window

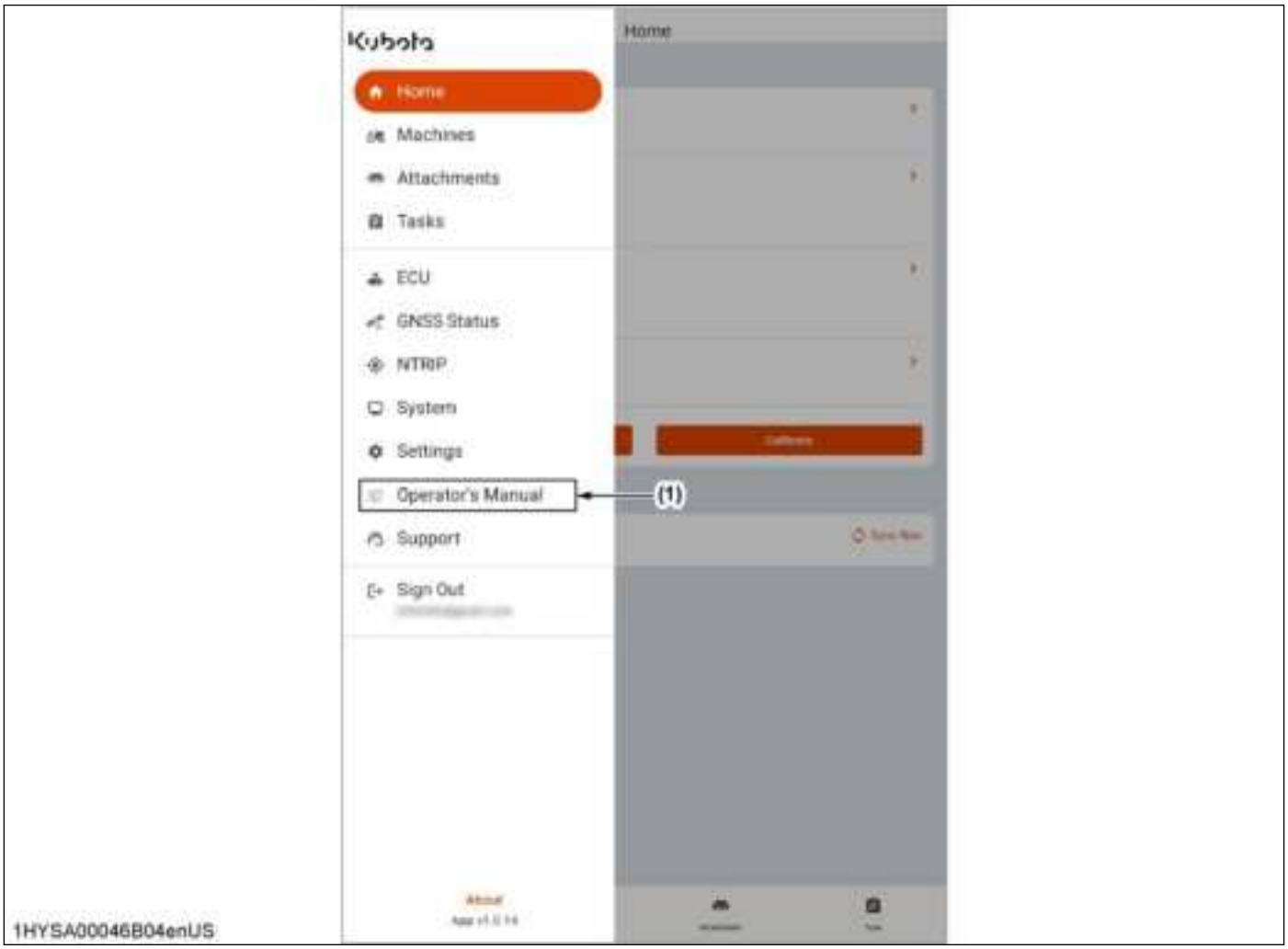
4. A pop-up window will appear displaying “Sync Complete” when synchronization is completed.

OPERATOR'S MANUAL

You can check the operator's manual from the application.

1. Tap on the ☰ icon in the upper left corner.

2. Tap “Operator's Manual”.



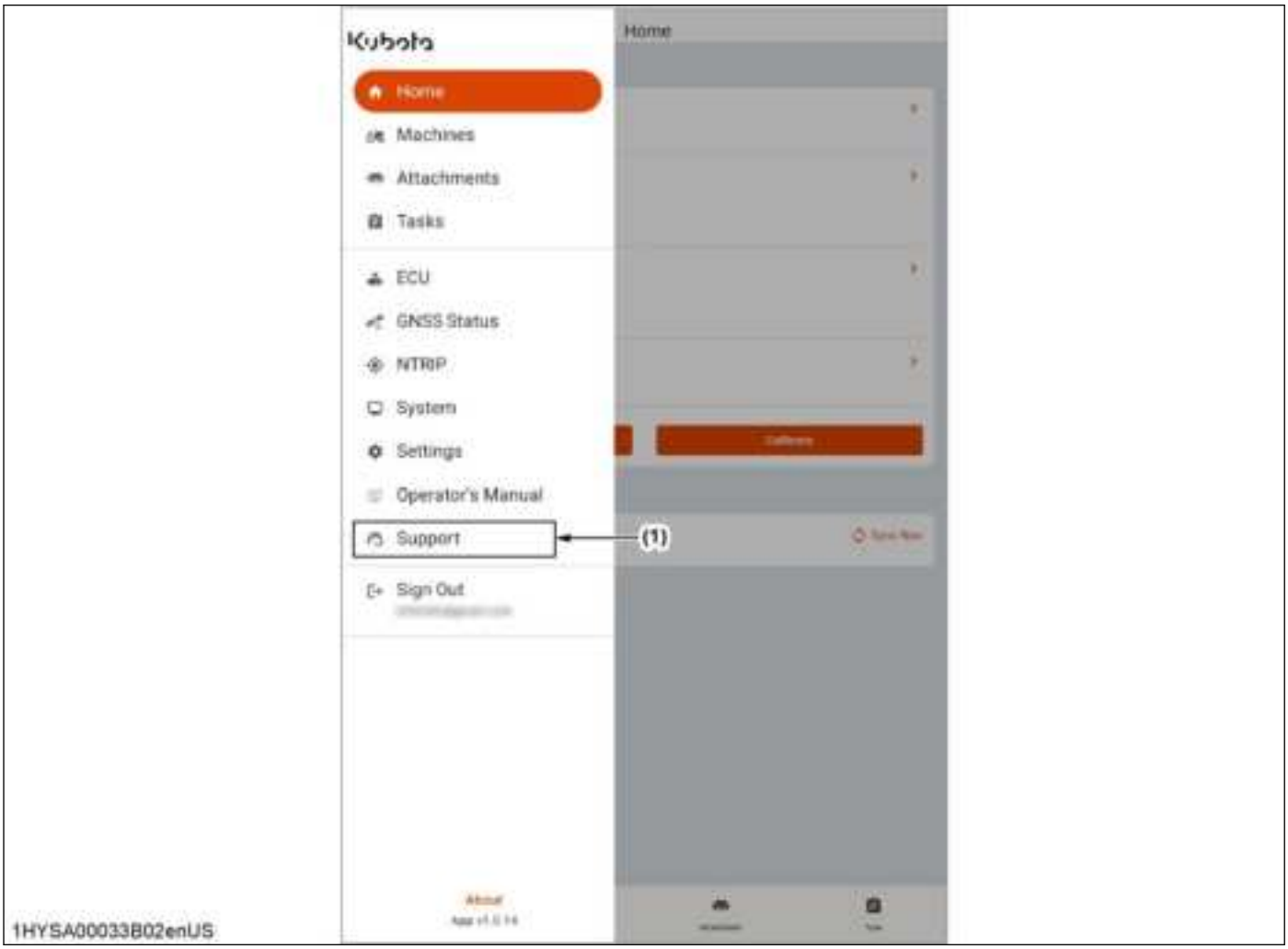
(1) “Operator's Manual” tab

SUPPORT

If you need support, you can check the dealer's contact information and address, as well as submit logs from the support menu.

1. Tap on the ☰ icon in the upper left corner.

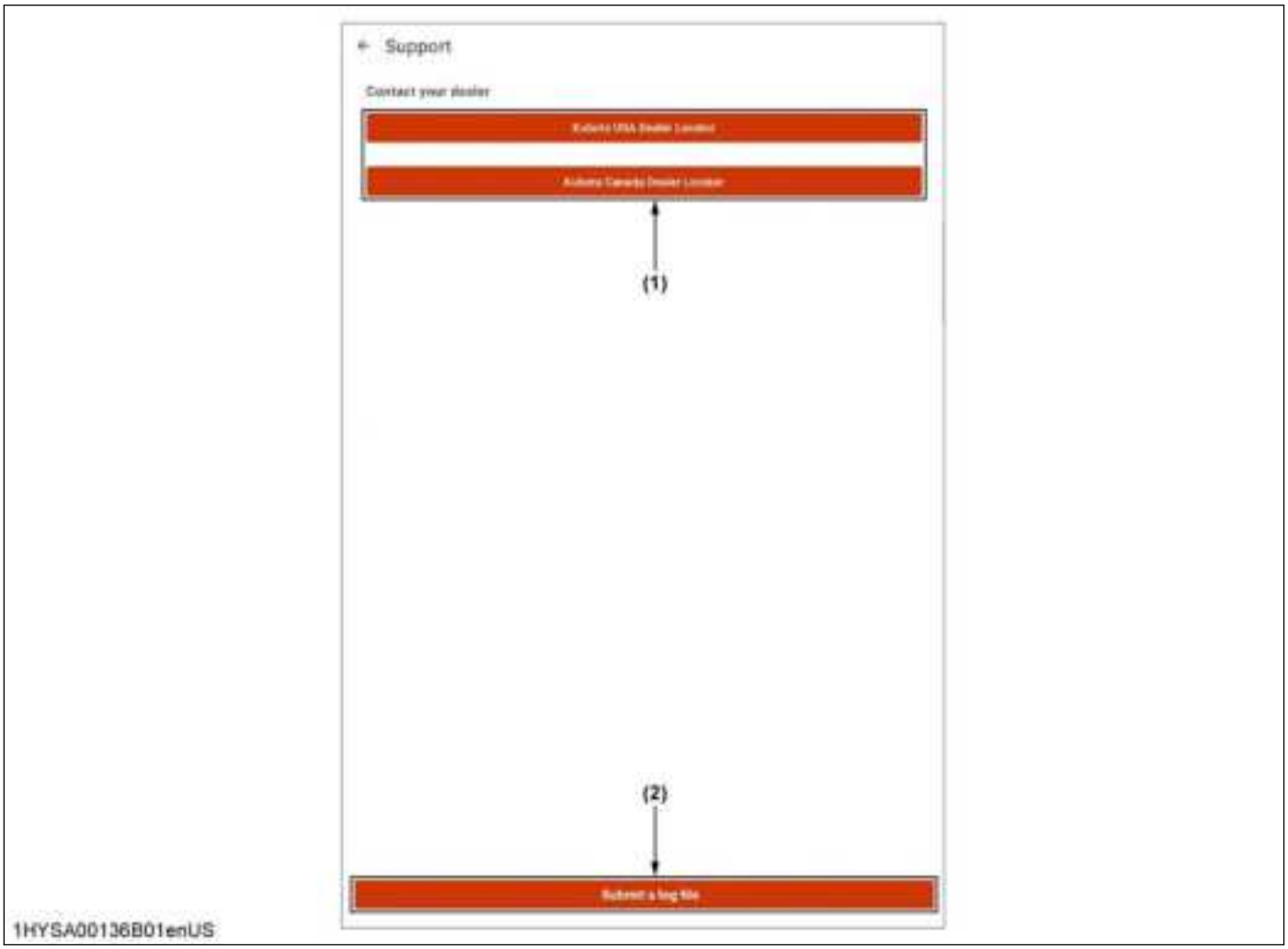
2. Tap on "Support".



(1) "Support" tab

3. Tap one of the *"Dealer Locator"* buttons to search for dealer information. First contact the dealer where you purchased the product. If the dealer instructs you to submit logs, follow the following steps to submit the logs.

4. Tap “Submit a log file”.

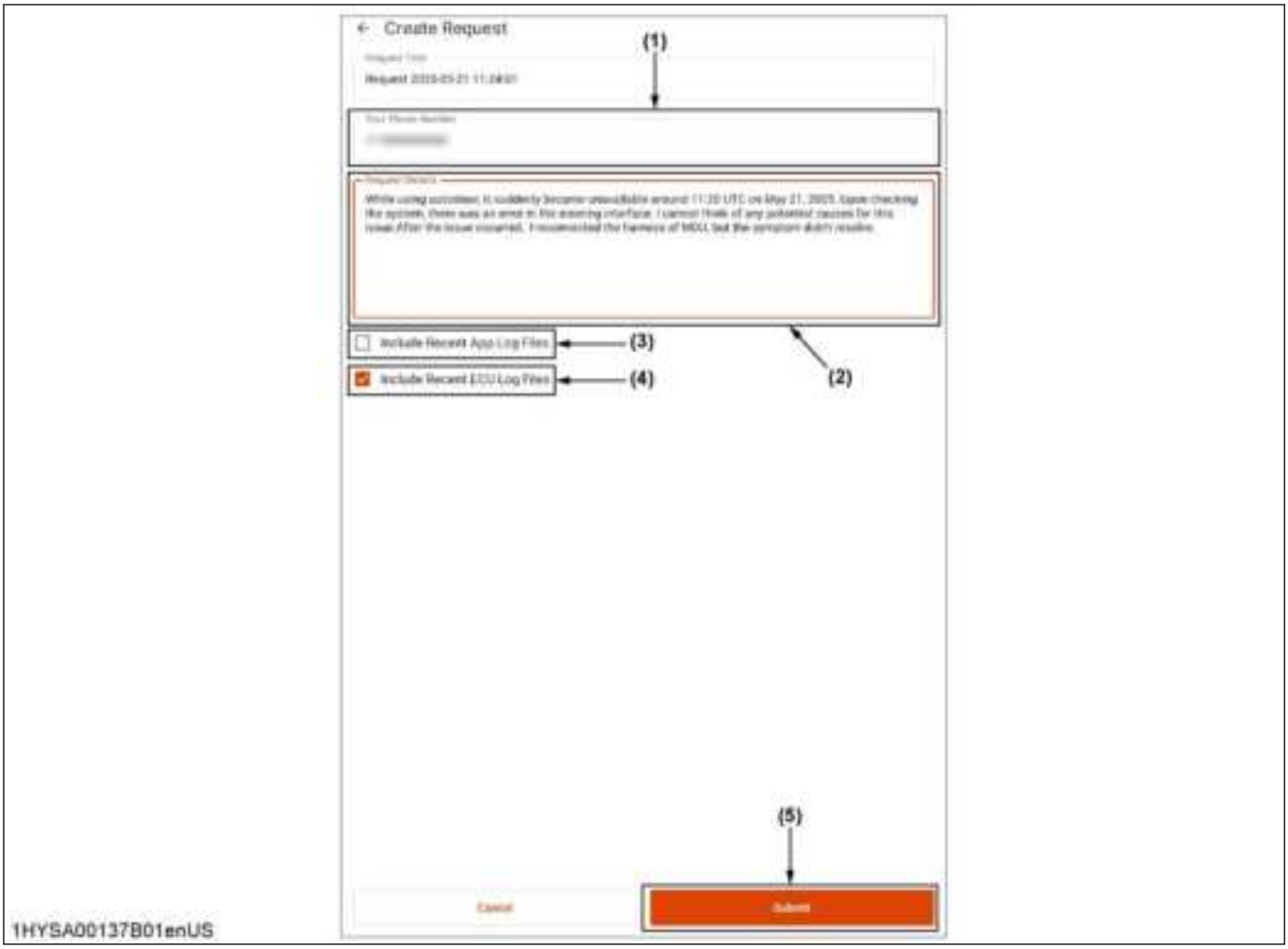


(1) “Dealer Locator” buttons
(2) “Submit a log file” button

5. Fill in the phone number and request details. In the request details, include the time the issue occurred, symptoms, any suspected causes, and what you tried to resolve the issue.
6. If you believe the issue is related only to the application on the mobile device, check the box called “Include Recent App Log Files”. If you think the issue is related to ECU firmware, check the box called “Include Recent ECU Log Files”.
7. Tap “Submit”.

8. After establishing a Wi-Fi connection between the ECU and the mobile device, the log download will begin.
   If there are no logs on the mobile device, or if the user chooses to download new logs, the log download will start.
   If the ECU logs have already been downloaded, select either "`Download New`" or "`Upload Existing`".
   "`Upload Existing`" is useful in cases where there is no internet connection in the field, allowing you to download the logs in the field and upload them later.

   NOTE :
   - **The "`Support`" menu item only appears if you are signed in.**
   - **The ECU can only store logs for a maximum of about 5 hours while it is running. If an issue occurs, you need to download the log within 5 hours.**
   - **An internet connection is required to submit the request.**



(1) Phone number
(2) Request details
(3) "`Include Recent App Log Files`" checkbox
(4) "`Include Recent ECU Log Files`" checkbox
(5) "`Submit`" button

WEB PORTAL

The web portal is an application that allows you to manage data on the cloud. To use the web portal, an internet connection is required. Unless you perform a cloud data synchronization with the mobile application, you will not be able to link the data with the mobile application.

NOTE :
We recommend using the web portal with Google Chrome on PC. This manual is created based on PC operation.

CREATE AN ACCOUNT OR SIGN IN

To use the web portal, you must sign in to your account. If you already created an account when you started using the application, sign in with the same account to link the data.

1. Creating an account

1. Left-click on "Create Account".

(1) "Create Account"

2. Enter the email address and left-click on "Send verification code".

(1) Email address field
(2) "Send verification code" button

3. An input field for "Verification Code" will appear below the email address.
4. Open your email inbox and search for the email from WorkSmart Autosteer.

   NOTE :
   If you cannot find the email, check your spam or junk folder.

5. Enter the verification code that was provided in the email and left-click on "Verify code".

(1) Input field for "Verification Code"
(2) "Verify code" button

6. Left-click on "Continue".

7. Enter the password twice. Your password must have at least 3 of the following conditions:
   - a lowercase letter
   - an uppercase letter
   - a number
   - a symbol
8. Enter your first name and last name.
9. Enter your phone number.
10. Left-click on “Create”.

(1) Password fields
(2) First name field
(3) Last name field
(4) Phone number field
(5) “CREATE ACCOUNT” button

11. After that, follow the instructions in Sign in on page 125 in this manual.

2. Creating an account with an Apple or Google account

1. To create a WorkSmart account using an Apple or Google Account, follow the instructions provided by each company.

2. After that, the following register user screen will be displayed. Enter your first name, last name, the phone number, and then left-click on "Continue".

(1) First name field
(2) Last name field
(3) Phone number field
(4) "Continue" button

3. Sign in

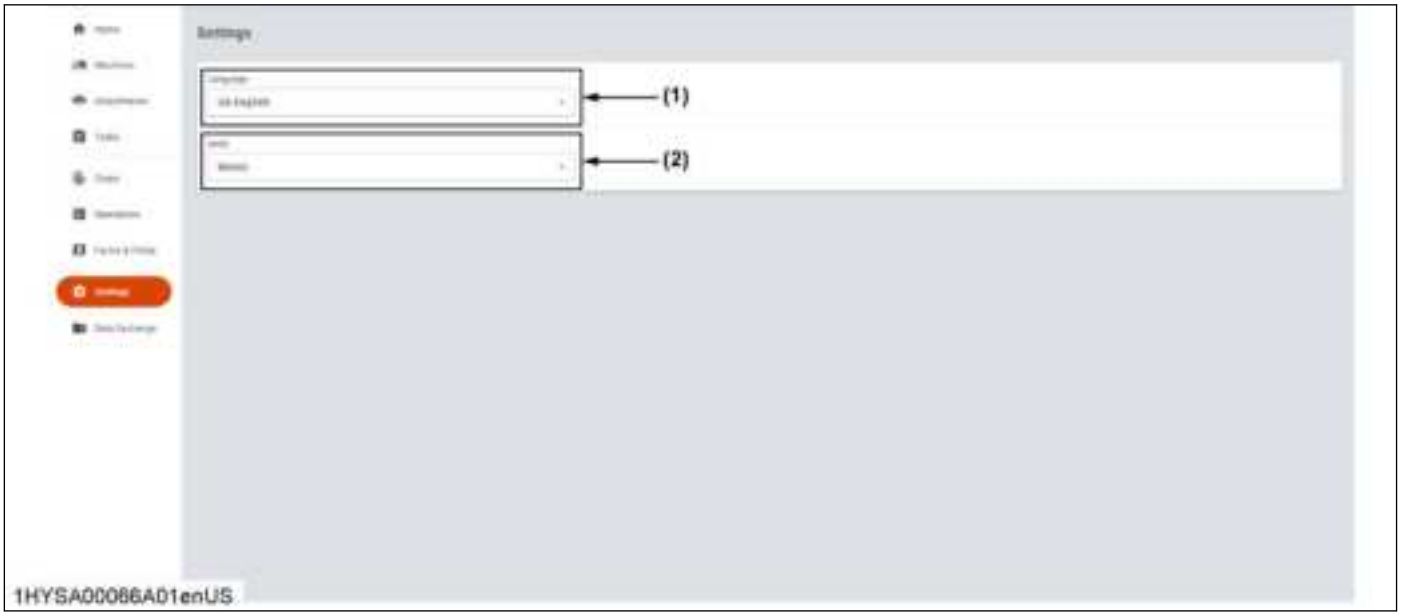
1. Enter the required information (email address and password).
2. Left-click on "Sign In".

(1) Email address field
(2) Password field
(3) "Sign In" button

GENERAL SETTINGS

You can change the language and units.

1. Left-click on “Settings” from the left menu.
2. Left-click on the items for “Language” and “Units” to display the options.



(1) “Language” field
(2) “Units” field

DEVICE LOCATION

1. Left-click on "Home" from the left menu. The system shows tracking location information of the system while a task is running.
   The location information is updated every 30 seconds.
   a. Left-click on the top right icon to maximize the map.
   b. Left-click on the second icon from the top right to tilt or rotate the map.
   c. Left-click on the third icon from the top right to zoom and move the map.
   d. Left-click on the fourth icon from the top right to display street view.

(1) Left-click to maximize the map.
(2) Left-click to tilt or rotate the map.
(3) Left-click to zoom and move the map.
(4) Left-click to display street view.

MACHINE SETTINGS

NOTE :
Setting an unsuitable calibration value may degrade system performance.

After pressing left-click on "Machines" from the left menu, follow the following steps.
Regarding the setting items of the machine, see MACHINE SETTINGS on page 29
In the web portal, in addition to the application settings, you can also change the steering options and calibration values.

1. Creating a machine

To create a machine, follow the following steps.

1. Left-click on “Create Machine” in the top right corner.

(1) “Create Machine” button

2. Enter each item.
3. Left-click on “Create”.

(1) “Create” button

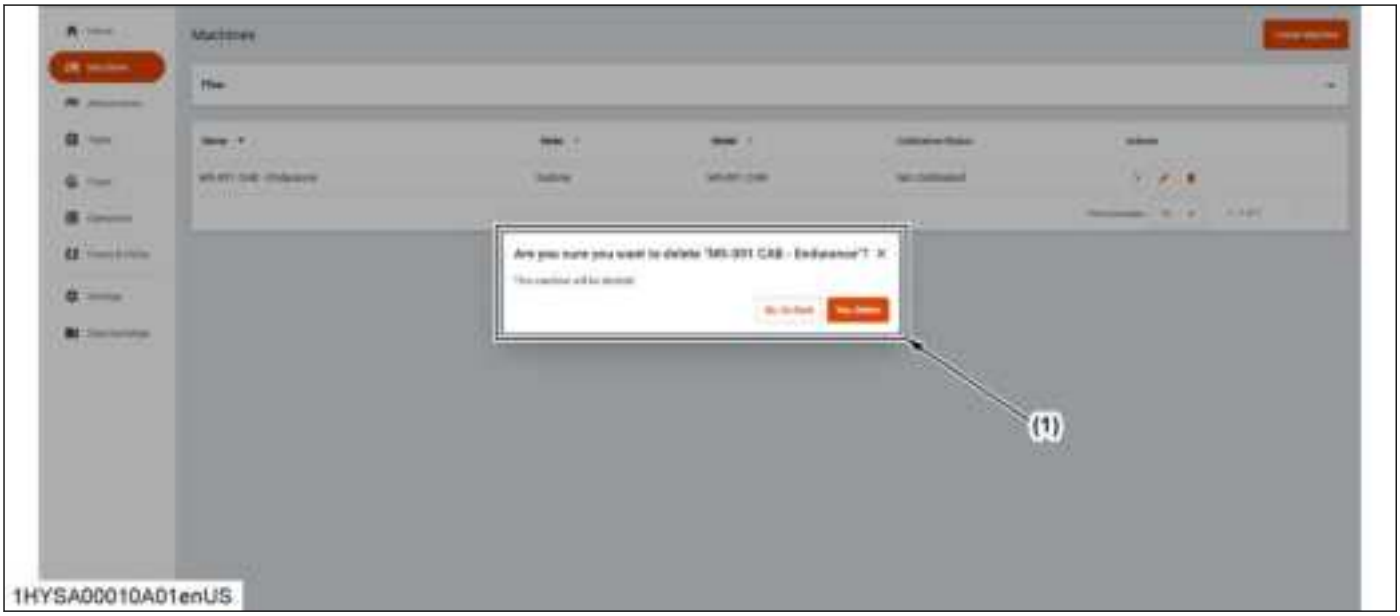
2. Deleting a machine

To delete a machine, follow the following steps.

1. Left-click on the icon placed for each machine.

(1) icon

2. A pop-up window will appear and ask for confirmation as in the following illustration.



(1) Pop-up window

3. If you agree, left-click on "`Yes, Delete`".

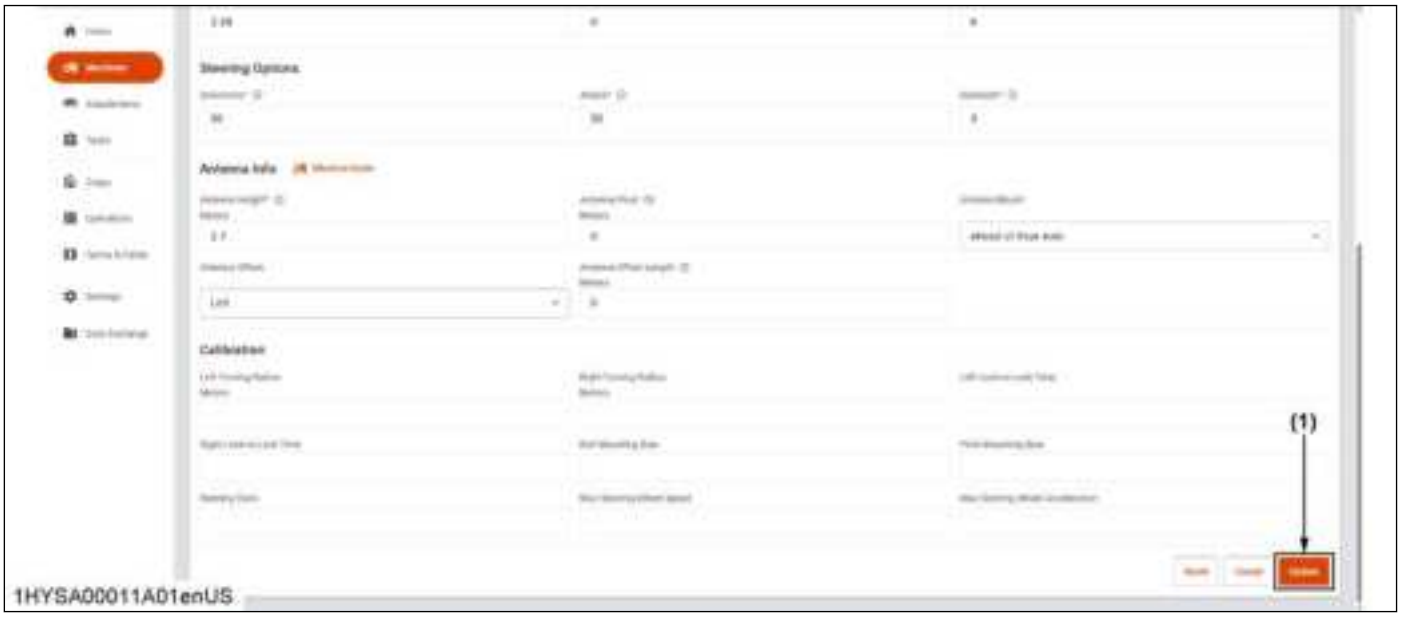
3. Editing a machine

To edit a machine, follow the following steps.

1. Left-click on the icon placed for each machine.

(1) icon

2. Edit items.
3. Left-click on "Update".



(1) "Update" button

4. Viewing a machine details

To view a machine details, follow the following steps.

1. Left-click on the icon placed for each machine.

(1) icon

2. To edit or delete, select the icon or the icon in the upper right corner.

ATTACHMENT SETTINGS

After pressing left-click on “Attachments” from the left menu, follow the following steps.

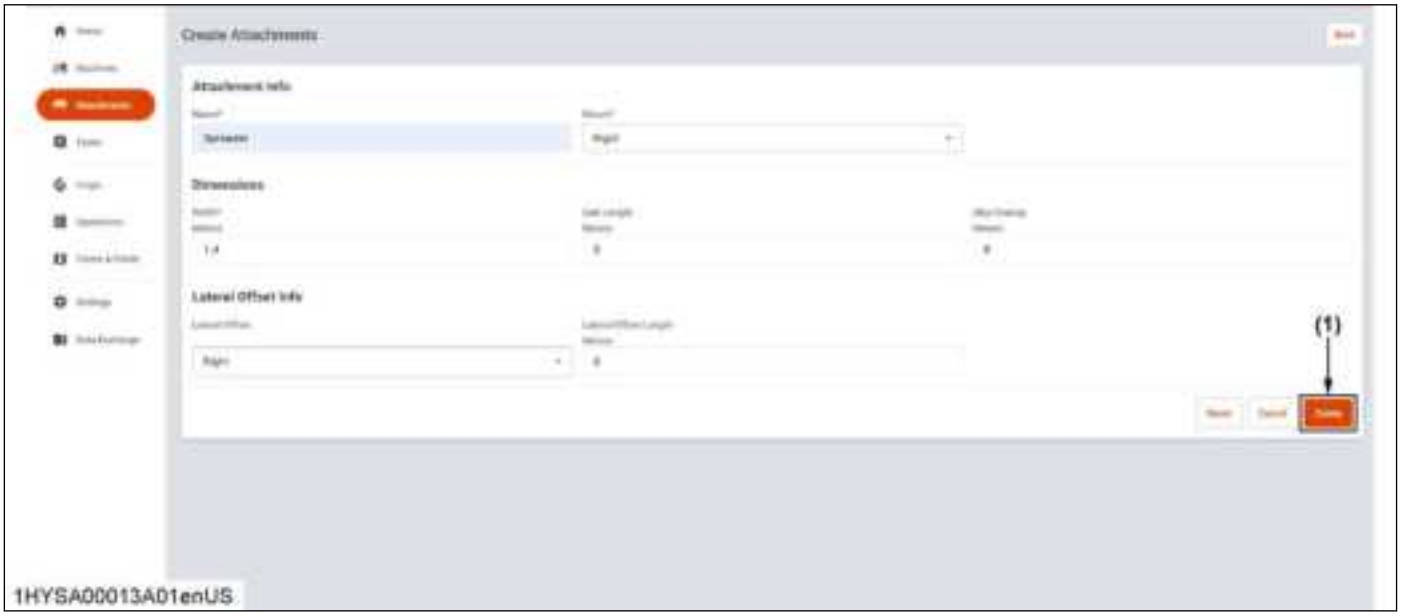
1. Creating an attachment

To create an attachment, follow the following steps.

1. Left-click on “Create Attachment” in the top right corner.

(1) “Create Attachment” button

2. Enter each item.
3. Left-click on “Create”.



(1) “Create” button

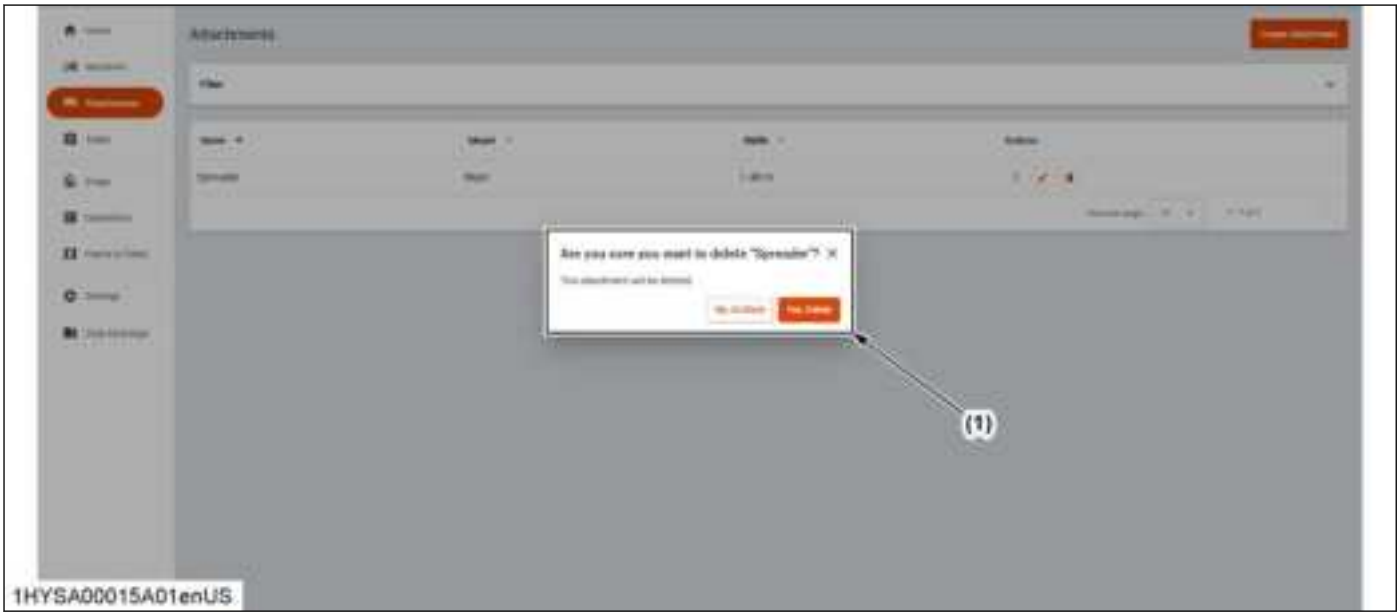
2. Deleting an attachment

To delete an attachment, follow the following steps.

1. Left-click on the icon placed for each attachment.

(1) icon

2. A pop-up window will appear and ask for confirmation as in the following illustration.



(1) Pop-up window

3. If you agree, left-click on "`Yes, Delete`".

3. Editing an attachment

To edit an attachment, follow the following steps.

1. Left-click on the icon placed for each attachment.

(1) icon

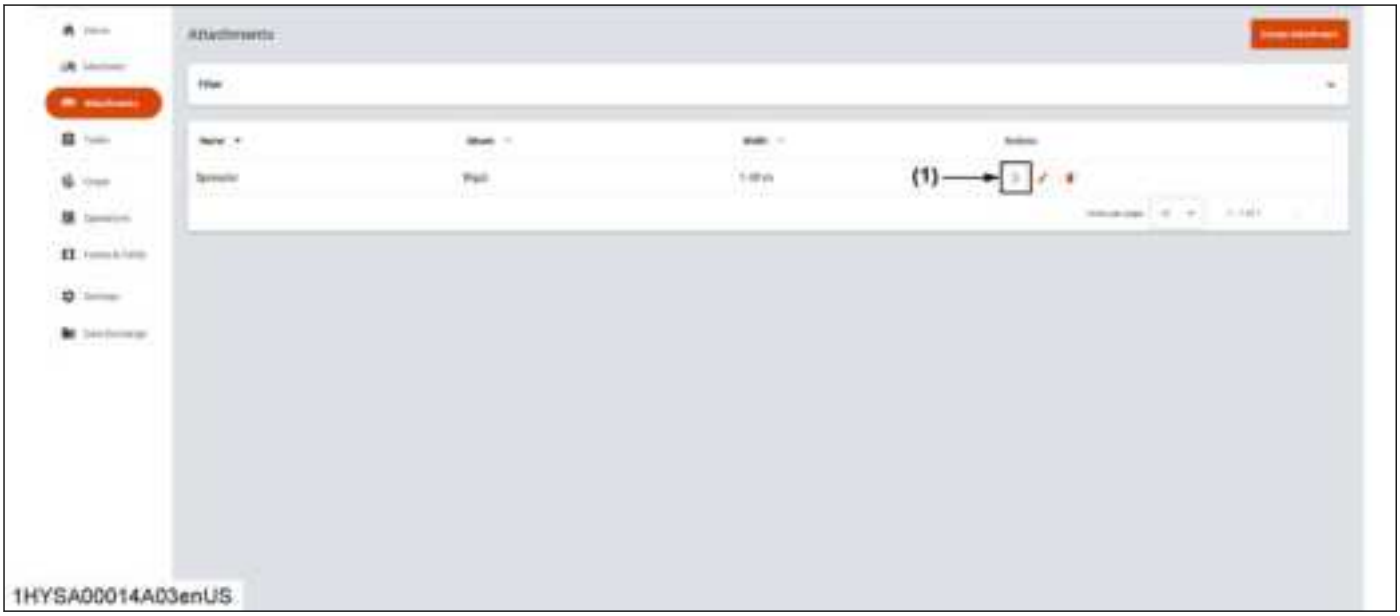
2. Edit items.
3. Left-click on "`Update`".

(1) "`Update`" button

4. Viewing an attachment details

To view an attachment details, follow the following steps.

1. Left-click on the icon placed for each machine.



(1) icon

2. To edit or delete, select the icon or the icon in the upper right corner.

TASK SETTINGS

After pressing left-click on “Tasks” from the left menu, follow the following steps.
“Crops”, “Operations”, and “Farms & Fields” in the task can also be created, deleted or edited from each tab.

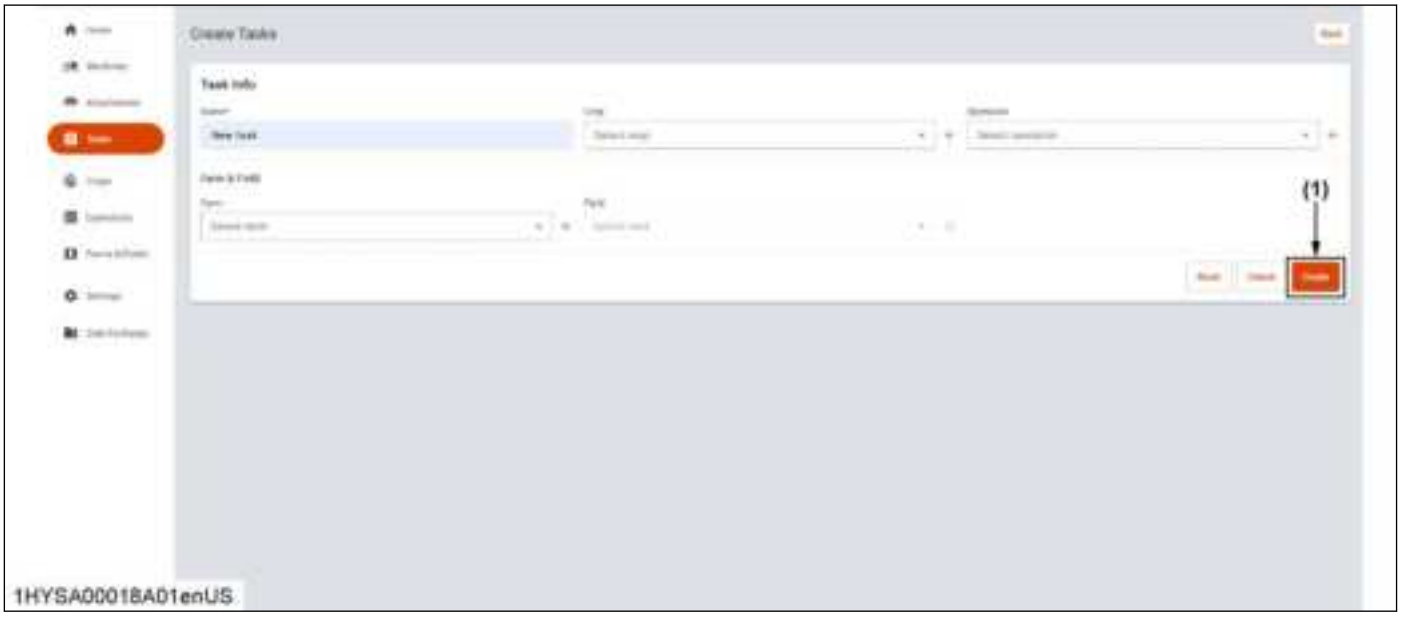
1. Creating Tasks, Crops, Operations, Farms & Fields

To create “Tasks”, “Crops”, “Operations”, or “Farms & Fields”, follow the following steps.

1. Left-click on “Create Task”, or the respective button for each tab (“Create Crop”, “Create Operation”, or “Create Farm”) in the top right corner.

(1) “Create Task” button

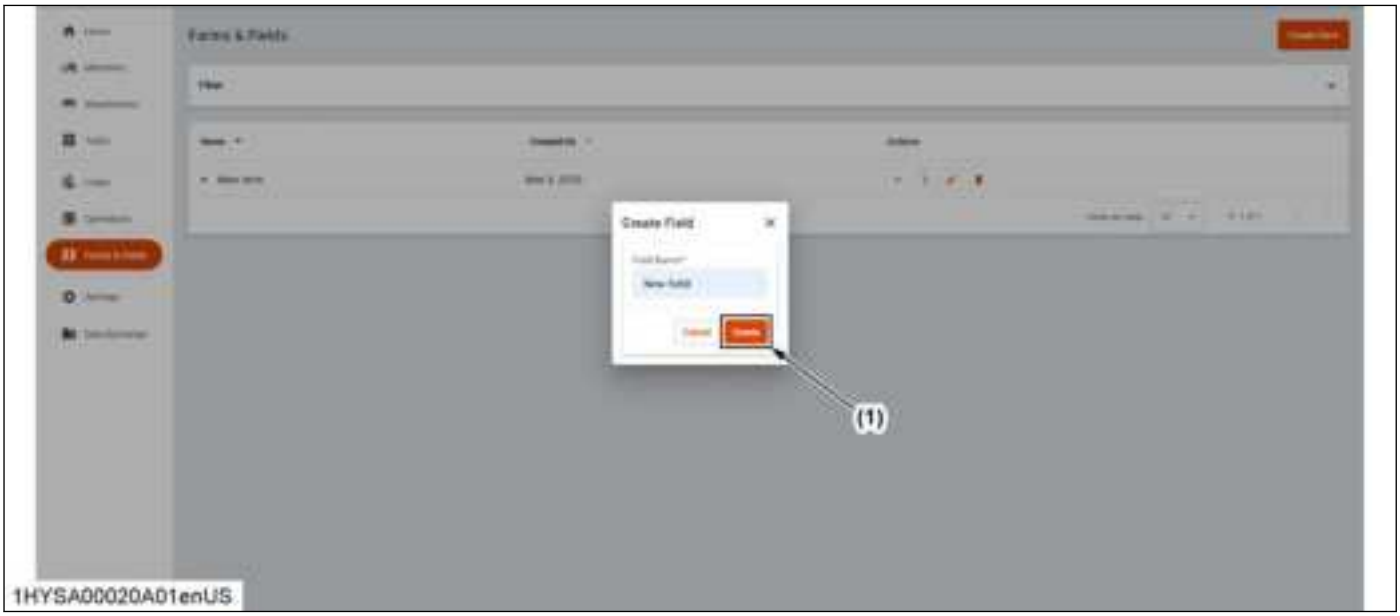
2. Enter each item.
3. Left-click on “Create”.



(1) “Create” button

4. To add “Fields” from the “Farms & Fields” tab, left-click on the icon placed for each farm, and left-click on “Create”.

(1) icon



(1) “Create” button

2. Deleting Tasks, Crops, Operations, Farms & Fields

To delete “Tasks”, “Crops”, “Operations”, or “Farms & Fields”, follow the following steps.

1. Left-click on the icon placed for each task.

(1) icon

2. A pop-up window will appear and ask for confirmation.
3. If you agree, left-click on "`Yes, Delete`".

3. Editing Tasks, Crops, Operations, Farms & Fields

To edit "`Tasks`", "`Crops`", "`Operations`", or "`Farms & Fields`", follow the following steps.

1. Left-click on the icon placed for each task.

(1) icon

2. Edit items.

3. Left-click on “Update”.

(1) “Update” button

NOTE :
In “Tasks”, the only modifications that can be made are changing the text of “Name”, and selecting “Status”, “Crop”, and “Operation” from the drop down list. To change text of “Crop”, “Operation”, “Farm”, and “Field”, edit each item by left-clicking on the icon placed in the corresponding tab.

4. Viewing Tasks, Crops, Operations, Farms & Fields details

To view “Tasks”, “Crops”, “Operations”, or “Farms & Fields” details, follow the following steps.

1. Left-click on the icon placed for each “Tasks”, “Crops”, “Operations”, or “Farms & Fields” in the corresponding tab.

(1) icon

2. To edit or delete, select the icon or the icon in the upper right corner.

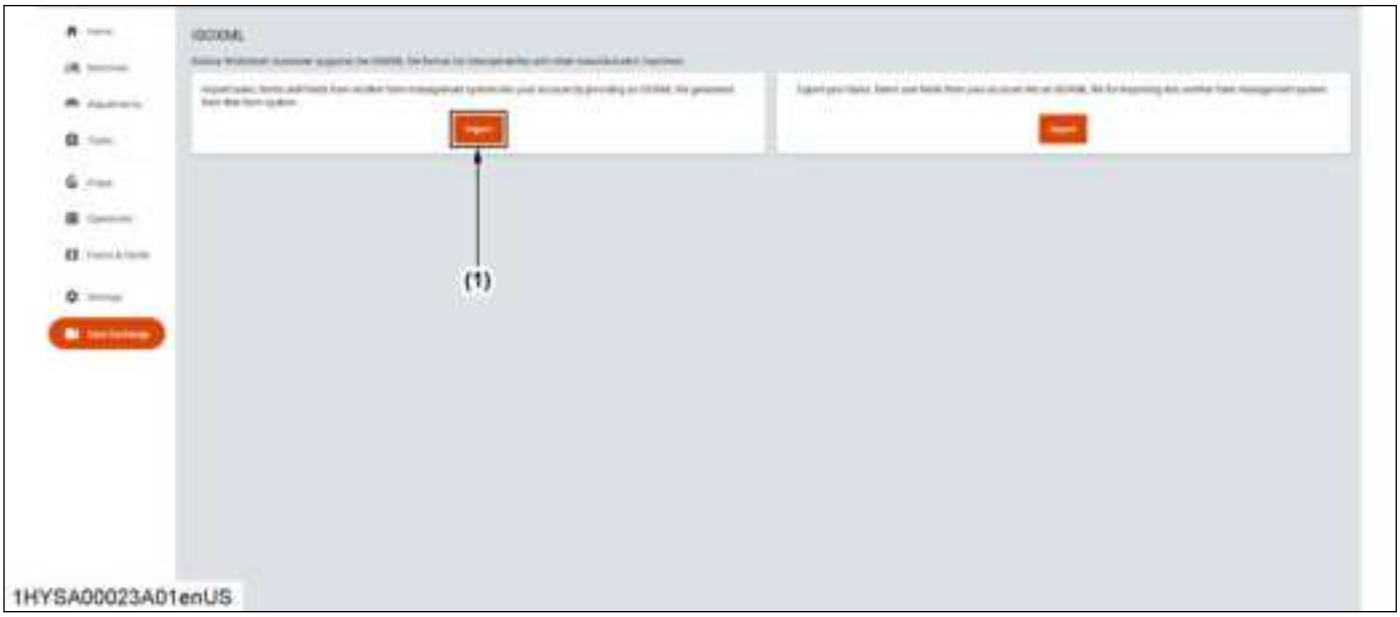
DATA EXCHANGE

WorkSmart Autosteer supports the ISOXML file format for interoperability with other manufacturers' machines.
After pressing left-click on “Data Exchange” from the left menu, follow the following steps.

1. Importing data

Import tasks, farms and fields from another farm management system into your account by providing an ISOXML file generated from that farm system.

1. Left-click on "`Import`" and select a zip file you want to import to WorkSmart Autosteer.



(1) "`Import`" button

2. Open the file.

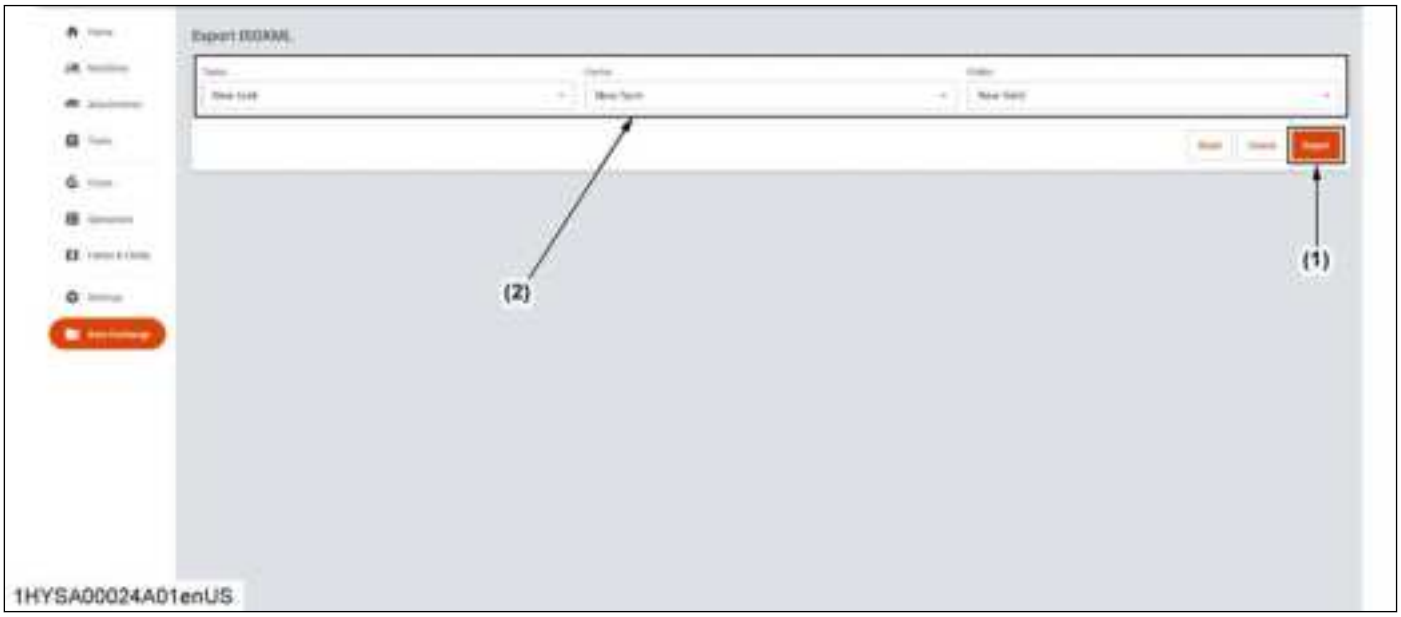
2. Exporting data

Export your tasks, farms and fields from your account into an ISOXML file for importing into another farm management system.

1. Left-click on “Export”.

(1) “Export” button

2. Select the corresponding items from the “Tasks”, “Farms”, and “Fields” sections.
3. Left-click on “Export”.
4. The system outputs the ISOXML file as a zip file.



(1) “Export” button
(2) “Tasks”, “Farms”, and “Fields” sections

ACCOUNT DELETION

If you want to delete your account, follow the following steps:

1. Left-click on your name in the upper right corner of the web portal, then left-click on "`My Profile`".

(1) Name field
(2) "`My Profile`" button

2. Left-click on "`Delete`".

(1) "`Delete`" button

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