



Robotic Mower MOWiT 500F Series II



OPERATOR'S MANUAL

Robotic Mower

OMSAU15218 ISSUE J6 (ENGLISH)



SABO Maschinenfabrik GmbH

European Edition

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Introduction

Thank You for Purchasing a John Deere Product

We appreciate having you as a customer and wish you many years of safe and satisfied use of your machine.

MX00654,000020B-19-21AUG14

Using Your Operator's Manual

This manual is an important part of your machine and should remain with the machine when you sell it.

Reading your operator's manual will help you and others avoid personal injury or damage to the machine. Information given in this manual will provide the operator with the safest and most effective use of the machine. Knowing how to operate this machine safely and correctly will allow you to train others who may operate this machine.

This manual and safety signs on your machine may also be available in other languages (see your authorized dealer to order).

Sections in your operator's manual are placed in a specific order to help you understand all the safety messages and learn the controls so you can operate this machine safely. You can also use this manual to answer any specific operating or servicing questions. A convenient index located at the end of this book will help you to find needed information quickly.

The machine shown in this manual may differ slightly from your machine, but will be similar enough to help you understand our instructions.

When you see a broken line (-----), the item referred to is hidden from view.

Before delivering this machine, your dealer performed a predelivery inspection to ensure best performance.

OUMX068,0001026-19-10MAY16

Machine Use

This machine and charging station are designed solely for use in customary lawn mowing and light grounds care operations. Use in any other way is considered as contrary to the intended use.

The manufacturer accepts no liability for damage or injury resulting from this misuse, and these risks must be borne solely by the user. Compliance with and strict adherence to the conditions of operation, service and repair as specified by the manufacturer also constitute essential elements for the intended use.

This machine and charging station should be operated, serviced and repaired only by persons familiar with all its particular characteristics and acquainted with the relevant safety rules (accident prevention). The accident prevention regulations, all other generally recognized regulations on safety and occupational medicine and the road traffic regulations must be observed at all times.

Any arbitrary modifications carried out on this machine will relieve the manufacturer of all liability for any resulting damage or injury and invalidates the CE conformity.

OUMX068,0001025-19-10MAY16

Special Messages

Your manual contains special messages to bring attention to potential safety concerns, machine damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.



CAUTION: Avoid injury! This symbol and text highlight potential hazards or death to the operator or bystanders that may occur if the hazards or procedures are ignored.

IMPORTANT: Avoid damage! This text is used to tell the operator of actions or conditions that might result in damage to the machine.

NOTE: General information is given throughout the manual that may help the operator in the operation or service of the machine.

MX00654,000020D-19-21AUG14

Service Literature

If you would like a copy of the Parts Catalog or Technical Manual for this machine visit The John Deere Technical Information Store at:

https://techpubs.deere.com/?cid=VURL_TechInfoStore

or call:

- **U.S. & Canada:** 1-800-522-7448.
- **All Other Regions:** Your John Deere dealer.

TH84124,0000199-19-31MAY16

Parts

We recommend John Deere quality parts and lubricants, available at your John Deere dealer.

When you order parts, your John Deere dealer needs the serial number or product identification number (PIN) for your machine or attachment. These are the numbers that you recorded in the Product Identification section of this manual.

OUC02005,000056E-19-20OCT16

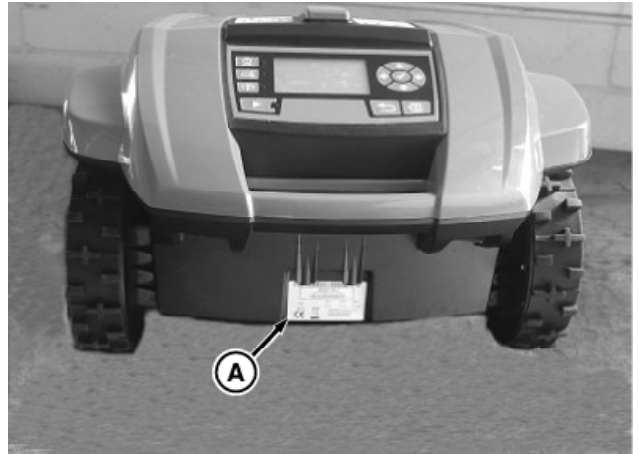
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Product Identification

Record Identification Numbers



MXT014487—UN—27MAY15



MXT016430—UN—10NOV15

When contacting an Authorized Service Center for information on servicing, always provide the product model and identification numbers.

Locate the identification numbers for the product. Record the information in the spaces provided.

DATE OF PURCHASE:

DEALER NAME:

DEALER PHONE:

PRODUCT IDENTIFICATION NUMBER (A):

CHARGING STATION TYPE (B):

CHARGING STATION SERIAL NUMBER (C):

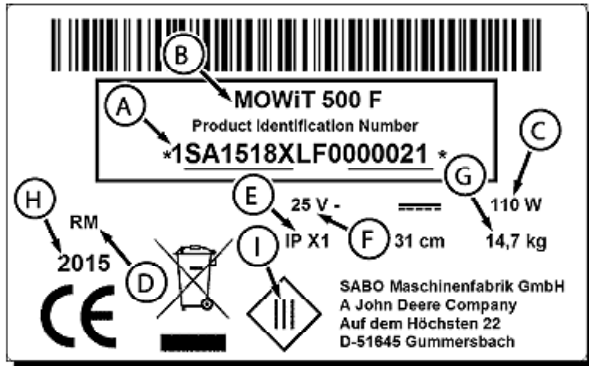
Original Instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

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Safety Labels

Mower Type or Serial Number Plate Information



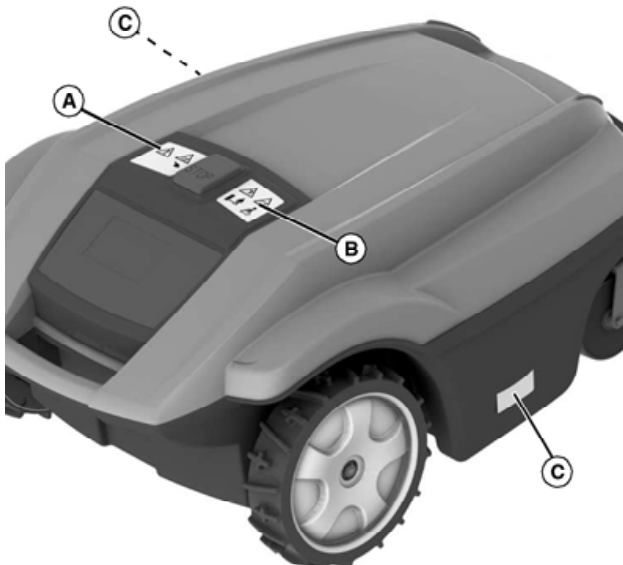
MXT016606—UN—24NOV15

ID Number (A)	SA1512 or SA1518
Description (B)	SABO MOWiT 500F Series II or JOHN DEERE TANGO E5 Series II
Power (C)	110W
Product Type (D)	Robotic Mower (RM) battery powered robotic electrical rotary lawn mower
Degree of Protection (E)	IPX1
Voltage (F)	25 V
Net Weight (G)	14.7 kg (32.4 lb.)
Total Weight	31 kg (66.4 lb.)
Year of Construction (H)	2017
Protection Class (I)	III

OUO2005,000056F-19-20OCT16

Safety Labels

Safety Label Locations



MXAL47260—UN—16APR13

Use label number to locate complete text of safety label message following this illustration.

- A — READ OPERATORS MANUAL BEFORE SERVICING SAU11722
B — KEEP A SAFE DISTANCE, NO RIDERS SAU12032

C — AVOID DANGER FROM ROTATING BLADE SAU12007

SW00544,000000D-19-04SEP13

Understanding The No-Text Machine Safety Labels



TCT005498—UN—11SEP12

At several important places on this machine safety signs are affixed intended to signify potential danger. The hazard is identified by a pictorial in a warning triangle. An adjacent pictorial provides information how to avoid personal injury. These safety signs, their placement on the machine and a brief explanatory text are shown in this Safety section.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

SW00544,0000021-19-04SEP13

Safety Labels

READ OPERATORS MANUAL



MXAL47261—UN—16APR13

- Attention! Read user instructions before operating the machine.
- Avoid injury from rotating blades.
- Press down on Stop button and push main switch to OFF position before working on or lifting the machine.
- Always wear gloves when moving, lifting, or working with machine.
- The machine is protected from theft or tampering by a PIN code.

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AVOID INJURY FROM THROWN OBJECTS



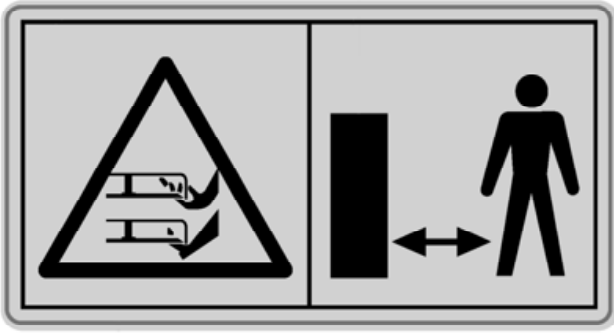
MXAL47262—UN—16APR13

- Keep a safe distance from the machine when operating.
- Avoid injury from rotating blades.
- Do not ride on the machine.

OUC2005,000049D-19-10NOV15

Safety

AVOID DANGER FROM ROTATING BLADE



MXAL47263—UN—16APR13

- Avoid injury from rotating blades.
- Keep a safe distance from the machine when operating.

OUC2005,000049E-19-10NOV15

Safety

Training

- Read the instructions carefully. Be familiar with the controls and the proper use of the equipment.
- Never allow children or people unfamiliar with these instructions to use the mower. Local regulations can restrict the age of the operator.
- Never mow while people, especially children, or pets are nearby without supervision.
- Keep in mind that the operator is responsible for accidents or hazards occurring to other people or their property.

OUC2005,0000570-19-20OCT16

Operation

- This mower is designed for mowing lawns. Any other use is not permitted. Using it for any other purposes is dangerous and can damage the machine. Any use other than for mowing invalidates the warranty.
- Never allow children, persons with reduced capabilities, or people unfamiliar with these instructions to use the machine. Reduced capabilities include lack of experience and knowledge, or physical, sensory, or mental abilities. Local regulations may restrict the age of the operator.
- Keep a safe distance from the machine when it is operating.
- Never allow children or animals to ride on the mower. Do not place objects on top of the mower during operation.
- Do not operate the machine if safety systems are not working.
- Make sure that the machine is in a safe condition.
- Do not mow on excessively steep slopes.
- Do not operate sprinkler systems at the same time the mower is operating.
- Start mower operation according to instructions and with feet well away from the blades.
- Do not put hands or feet near or under rotating parts.
- Always check to be sure that the main switch is in the OFF position before moving or transporting the mower.
- Push down on the Stop button and push the main switch to the OFF position before checking, cleaning, or working on the mower.
- Push down on the Stop button and push the main switch to the OFF position after striking a foreign object. Inspect the mower, checking

for damage. Make repairs before restarting and operating the equipment.

- Make sure that mower is in a safe position for good balance. Do not work on slopes (6 degrees (10%) one meter beside the boundary wire or 20 degrees (36%) in main lawn area).
- Immediately push down on the Stop button and push the main switch to the OFF position if the mower starts to vibrate. Check for cause of vibration. Remove any debris and restart. If vibration remains, turn the mower off and return mower to your authorized dealer for servicing.
- Read, understand, and follow all instructions in the manual and on the mower before starting.
- Inspect mower before operation. Make any necessary adjustments before operation.
- Do not allow children in the mowing area without supervision.
- Be aware of scheduled mow times. Check the system date and time on your mower regularly. Adjust the time for changes in local time.
- Use only accessories approved by the manufacturer of the mower.
- Do not use the machine in explosion protected areas.

OUC2005,0000571-19-27OCT16

Maintenance and Storage

- Do not attempt to remove mower battery or blades. Contact your authorized dealer for service and replacement.
- Push down on the Stop button and push the main switch to the OFF position after striking a foreign object. Inspect the mower, checking for damage. Make repairs before restarting and operating the equipment.
- Check to be sure that the main switch is in the OFF position before lifting or transporting the mower. Lift the mower by the handle and turn the machine so the mower blades are facing away from your body.
- Contact authorized dealer to replace worn or damaged parts for safety.
- Never allow untrained personnel to service mower. Understand service procedure before doing work.
- Use care when checking blades. Wrap the blades or wear gloves, and use caution when servicing them. Contact your authorized dealer for blade replacement.
- Keep hands, feet, clothing, jewelry, and long hair away from moving parts.
- Keep all parts in good working condition and all hardware tightened. Replace all worn or damaged decals.
- Edges of charging station plates can be sharp. Always wear gloves whenever touching or working near charging station plates.
- Store machine on its wheels. Make sure that machine maintenance and storage surfaces are well supported.
- Do not store machine in charging station.

OUC2005,0000572-19-27OCT16

Checking Mowing Area

- Clear the mowing area of potentially thrown or damaged objects. Check to be certain no ropes or wires are loose in the mowing area. If mower boundary wire is ground installed, it must be securely staked to avoid entanglement with the mower blade. Ropes or wires caught in the mower blade could cause injury to legs or feet.
- Keep people and pets out of the mowing area.
- Study the mowing area. Do not mow after heavy rains, or other yard condition changing events.

OUC1023,00008C2-19-16DEC14

Stopping Safely

1. If mower is operating, approach from behind. Be aware of any obstacles mower can come in contact with. Mower may change direction as you approach.
2. Push down on Stop button on top of mower.

3. Push the main switch to the OFF position.
4. Wait until display and all indicators are off.
5. Wait until blades have come to a full stop.

OUO2005,0000573-19-20OCT16

Rotating Blades are Dangerous - Protect Children and Prevent Accidents

- Children are often attracted to lawn-mowing machines and mowing activity. Keep children away from the machine when it is operating.
- Schedule mowing times for when children are least likely to be in the area.
- Send the machine home with Go Home Mode until the next scheduled day if children will be in the area.
- Never allow a child or an untrained person to operate the machine.
- Do not touch blades while power switch is in ON position.
- Do not touch rotating blades.
- Wait until blades have come to a full stop before moving or lifting machine.

OUO1023,00008C4-19-10JUN15

Wear Appropriate Clothing

- Always wear eye protection when working with the mower.
- Wear close fitting clothing and safety equipment appropriate for the job.
- While working with the mower, always wear substantial footwear and long trousers. Stay clear of the mower when barefoot or wearing open sandals.

OUO1023,00008C5-19-04SEP13

Electrical Hazards

- If the mower stops in water contact your authorized dealer. The dealer must disconnect the mower battery before moving the machine.
- Avoid further damage by contacting your authorized dealer before attempting to move the mower if it becomes damaged by impact, entering water or other accidents.
- Install the charging station in a protected outdoor location.
- Install the charging station power supply in an indoor location.
- Only use the charging station and charging station power supply which comes with your mower to charge the mower.
- Check the charging station power supply regularly for wear or damage. Contact your authorized dealer for replacement.
- Do not touch a damaged cord, or plug a damaged cord into an outlet.
- Do not attempt to remove the mower battery.
- Connect the charging station power supply to a power source which conforms with local standards and regulations. Consult an electrician. Dealer installation of charging station and initial mower setup is strongly recommended.
- Disconnect power supply from power source before servicing or cleaning components.

OUO2005,0000574-19-20OCT16

Handling Waste Product and Chemicals

Waste products, such as batteries, can harm the environment and people:

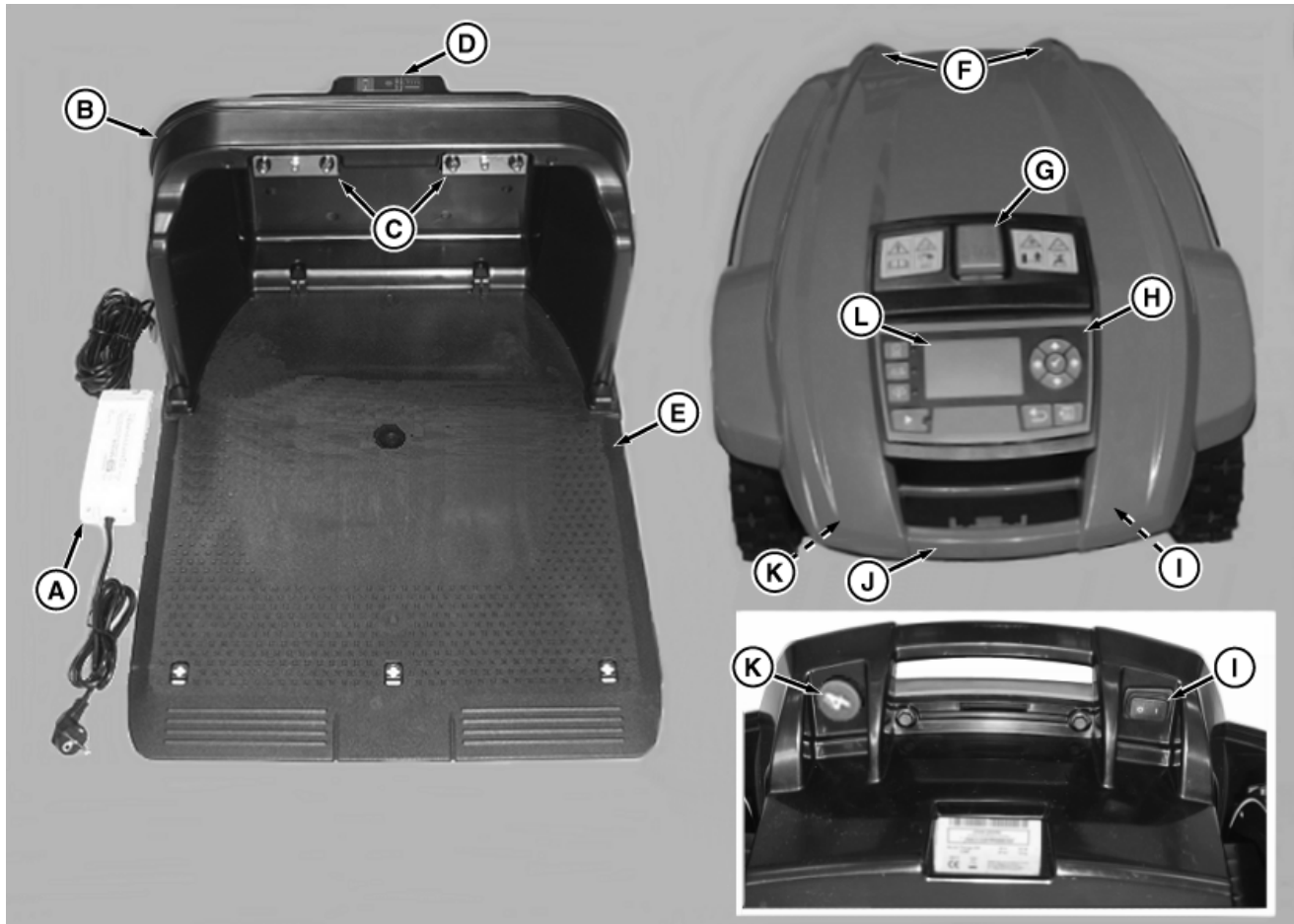
- See your local Recycling Center or authorized dealer to learn how to recycle or get rid of waste products.
- See your local Recycling Center or authorized dealer to learn how to put your mower out of service at the end of the mower's service life.
- All Waste Electrical and Electronic Equipment (WEEE) Directive requirements must be met **as well as** any requirements included in battery safety sheets at the end of this Operator's Manual.

OUO1023,00008C7-19-04SEP13

Operating Controls

Operating Controls

Controls and Features



MXT014483—UN—20MAY15

A — Power Supply
B — Charging Station
C — Charging Plates
D — Status Indicator
E — Traction Mat
F — Charging Contacts
G — Stop Button

H — User Interface
I — Main Power Switch
J — Carry Handle
K — Communication Port
L — Display Screen

OUC1023.00008C8-19-28MAY15

Operating

Operating Checklist

Before First Use

- ☐ Cut grass to normal maintenance height with a conventional lawn mower.
- ☐ Test safety systems.
- ☐ Check mowing area within boundary wire for any objects which the mower could pass over and strike with the blade. Remove objects.

Monthly

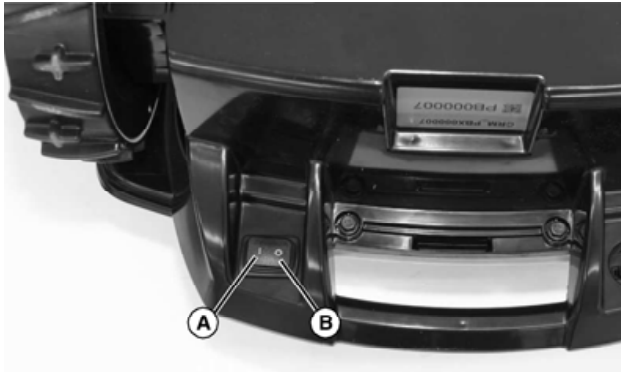
- ☐ Test safety systems.
- ☐ Check mowing area within boundary wire for any objects which the mower could pass over and strike with the blade. Remove objects.

- ☐ Check wire boundary for breaks. If wire is installed underground, check for digging or trenching.
- ☐ Inspect the charging contacts on the mower and the charging station and wipe clean if needed.
- ☐ Check machine and blades for any damage.

OUC1023.00008C9-19-18DEC14

Operating

Activate and Deactivate the Mower



MXAL47271—UN—16APR13

Mower shown upside down.

A — Main Power Switch ON position
B — Main Power Switch OFF position

Starting Mower

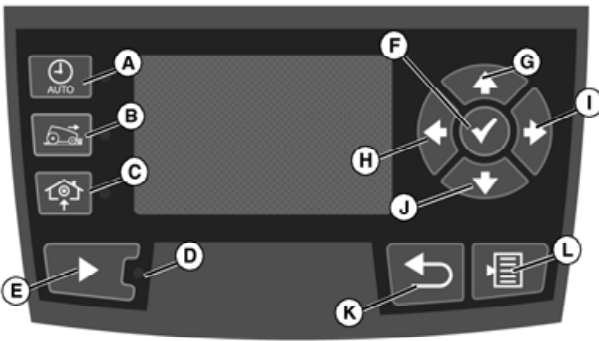
Push the main switch to the ON (A) position.

Stopping Mower

1. Push down on the Stop button.
2. Push the main switch to the OFF (B) position.

OUC2005.0000578-19-20OCT16

Using the Control Panel



MXAL47265—UN—16APR13

A - Mow on Schedule (AUTO) Button

This light shows solid green when the mower is in Mow on Schedule Operating Mode.

B - Mow Now Button

This light shows solid green when the mower is in Mow Now Operating Mode.

C - Go Home Button

This light shows solid green when the mower is in Go Home Operating Mode.

D - Run LED

This light shows solid green when:

- The mower is actively mowing with the blades turning.
- The mower is seeking the charging station and the blades are not turning.
- The mower is in the charging station and is not charging because it is waiting on the schedule.

This light shows flashing green when the Stop button is pressed and the mower has paused mowing.

This light shows flashing red when the mower has detected a condition and stopped itself.

E - Start Button

Start mower operation in selected mode.

F - Enter Button

Save selections.

G - Up Arrow Button

Navigate up.

H - Left Arrow Button

Navigate left.

I - Right Arrow Button

Navigate right.

J - Down Arrow Button

Navigate down.

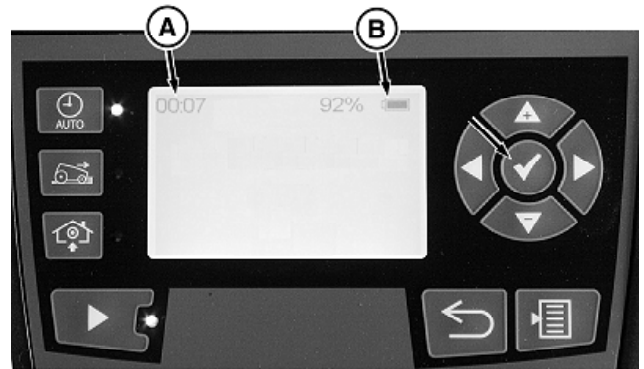
K - Back Button

Go back or undo an entry.

L - Menu Button

Access the user interface menu.

User Interface Display Information



MXT018839—UN—20OCT16

A - Time

Mower displays current time.

B - Battery Charge Icon

Graphic representation of battery charge remaining. Displayed through a menu selection.

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Machine Sounds

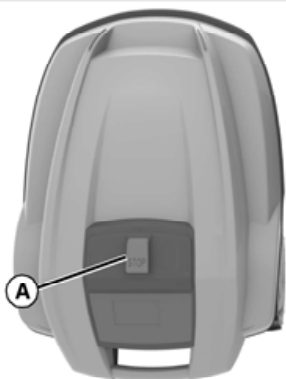
The mower will make sounds as operator feedback:

- Every time a user interface button is pushed.
- When the mower starts to move.
- When the mower blade is going to turn on.
- Refer to local requirements for when the machine may be allowed to run based on noise requirements.

OUC2005.0000561-19-18OCT16

Operating

Emergency Stopping



MXAL47272—UN—16APR13

Push down on the Stop button (A):

- Mower will stop.
- Blades will stop.
- Run LED light will be flashing green.

OUC2005,000057E-19-20OCT16

Testing Safety Systems

Check safety systems installed on your machine monthly, after servicing, or when a diagnostic trouble code (DTC) occurs. Read the machine operator manual and be familiar with the operation of the machine before performing listed safety system checks.

Check for normal operation of machine by using the following checkout procedures.

Do not operate machine if there is a malfunction during one of these procedures **See your authorized dealer for service.**

Perform these tests in a clear open area. Keep bystanders away.

Preliminary Test Steps

1. Push main switch to OFF position.
2. Position mower within boundary wire area.
3. Push main switch to ON position.
4. Enter PIN code.
5. Start mower operation in Mow Now Mode.

Testing Stop Button Function

- When the mower starts moving, push down on the Stop button.

Result: The mower and blade stop. The Run LED light flashes green.

If the mower or the blades continue to run **see your authorized dealer for service.**

Testing Handle Presence Function

- After the mower is moving and the blade starts, grasp the mower handle for at least five seconds without lifting the mower from the ground.

Result: The mower and the blade stop. The user interface display shows fault code information.

If the mower drives or blade continues to operate, immediately turn the main power switch OFF. **See your authorized dealer for service.**

Caster Wheels

1. Push main switch to OFF position.
2. Lift front of mower. Make sure that caster wheel spindles drop freely in bushings.

Result: Caster wheels move freely in and out.

OUC2005,000057E-19-27OCT16

Using PIN Code

PIN code entry is required after the main switch is moved to ON position.

The default PIN code is 0 0 0 0

A user-defined PIN code may be set. Set a user-defined PIN code to protect the machine from manipulation by unauthorized persons.

Entering PIN Code

1. Position mower within boundary wire area.
2. Push main switch to ON position.
3. Mower will Initialize. User interface display reads Mower Initializing.
4. User interface display reads Enter Current PIN Code.
 - a. Use Left, Right, Up, and Down buttons to position block on desired number. Press Enter button to select number.
 - b. Enter current PIN code.

OUC2005,00004B4-19-16NOV15

Operating the Mower

The robotic mower is programmed to mow grass within a boundary wire. The mower moves into and out of a charging station which charges the mower battery when needed.

A boundary wire surrounding the mowing area perimeter contains the robotic mower. A boundary wire extension is used to keep the mower out of areas within the mowing area. The mower recognizes approach to a boundary wire and steers in an arc to avoid the boundary. If an obstacle is not protected by a boundary wire extension, the machine deflects upon contact.

A guide loop extends from the charging station into the mowing area. The guide loop directs the machine to the charging station when returning from the mowing area.

Dealer installation of boundary wires and charging station, and initial robotic mower setup is recommended.

Separate mowing areas from any open water with a physical barrier.

The robotic mower is designed to mow on an optimized schedule within a mowing area to keep the grass at a desired height (physical barrier needs to have a minimum height of 10 cm (4 in)). Mow the grass to the desired height using a conventional mower before installation of the robotic mower.

Machine adjustments to compensate for operation on side slopes can result in the machine following a curved path. The curved path does not affect area coverage performance.

The charging station and mower are paired with an ID. This ID allows robotic mowers to be installed and operate near each other. The mower ID must match the charge station ID.

The robotic mower can operate during rain. Avoid mower operation in areas prone to flooding after rain.

A safety awareness message appears at the user interface during start-up and at other times during use. This message clears itself. To interact with the mower during normal mowing, press the stop button and clear the safety message.

Mowing schedules are programmed using the user interface. There are three operating modes: Mow on Schedule (AUTO), Mow Now and Go Home.

OUC2005,0000579-19-27OCT16

Scheduled Mowing

Program and run the robotic mower on a schedule appropriate for the mowing area and season for best lawn health and longer machine life. Schedule the mower to run no longer than is required. Dealer installation provides optimal scheduling.

Do not schedule mower to run when children or pets are around the mowing area.

Operating

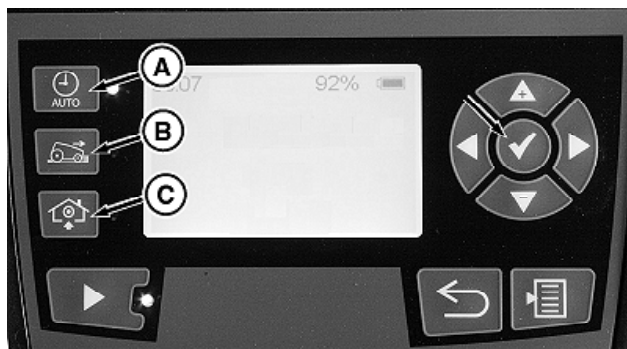
Do not schedule mowing during irrigation in order to protect sprinkler heads and to eliminate pressured water on the mower. Allow grass to dry after irrigation for improved mower traction.

1. Position mower at the charging station.
2. Push main switch to ON position.
3. Mower goes through initializing routine.
 - User interface display shows Mower Initializing.
4. User interface display shows Enter Current PIN Code. All LED lights will display solid green.
5. Enter PIN code.
6. User interface shows safety awareness message. Press Enter button to agree.

NOTE: The mower defaults to Go Mow Now.

7. Select Mow on Schedule (AUTO), Go Mow Now, or Go Home by pushing button at desired mode.

Mow on Schedule (AUTO Mode)



MXT018840—UN—18OCT16

- A — Mow on Schedule (AUTO Mode)
B — Go Mow Now Mode
C — Go Home Mode

Use Mow on Schedule (AUTO) mode for fully programmed mowing. Up to three separate mowing schedules can be programmed for different mowing conditions.

1. Press STOP button at top of mower.
2. Confirm user interface message with enter button.
3. Press Mow on Schedule button.

NOTE: Only mowing programs with operating data entered appear.

4. The screen shows a list of available mowing schedules. Use Left or Right arrow to highlight desired schedule.
5. Confirm schedule selection by pressing Enter button.
6. The screen displays programmed mower operation for chosen schedule. If this operation is not as desired, press Back button to return to schedule list.
7. If displayed operation is correct, press Enter button to confirm.
8. Execute Mow on Schedule command by pressing Start button. The mower begins operating under chosen mowing schedule at scheduled start time. If not at charging station, mower goes home if mowing is not scheduled.

Go Mow Now Mode

Operate the mower under Go Mow Now command to

- Mow for a specific time from a specific point. The mower operates for up to 90 min. (less if charging is required).
- Mow with or without a charge station.

- Mow a clean-up pass with or without a charging station in the mowing area.
- The mower will request after mowing in the charge station area whether you want to return to mowing on the schedule or “stop” and stay home. If you choose mow on the schedule, the mower will go out on the scheduled time.
- When choosing without a charge station, enter the distance that the mower should travel for a complete clean up pass.

Go Home Mode

Mowing on a set schedule or Go Mow Now mode can be interrupted, and the mower sent home with options for resumption of mowing. Use the Go Home mode to send the mower to the charge station for situations such as:

- Unusually dry turf conditions that make mowing on schedule temporarily unnecessary.
 - Rain is forecast during a scheduled mowing period.
 - Children, pets, or persons unfamiliar with the mower are in the operating area.
- There are two options under Go Home.
- Stay Home sends mower to charge station until instructed to resume mowing.
 - Number of Days sends mower to charge station until selected number of calendar days have passed.

Setup Assistant

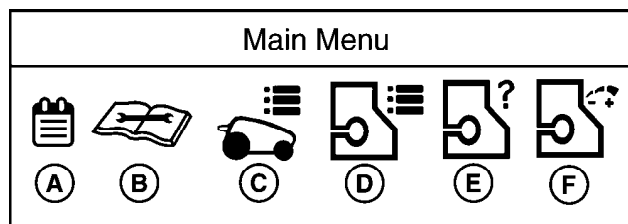
Setup Assistant provides access, through the User Interface, for setting of mower operation and navigation, mowing schedule, and mowing area. Through Setup Assistant you can change:

- Mower settings
- Language
- Date/Time
- Schedule Name
- Corridor Docking - Perimeter (Automatically)
- Launch Points
- Schedule Settings
- Boundary Wire
- Clean Up Pass

OUC02005,000057A-19-20OCT16

Using Menu Tree

Main Menu



MXT018838—UN—18OCT16

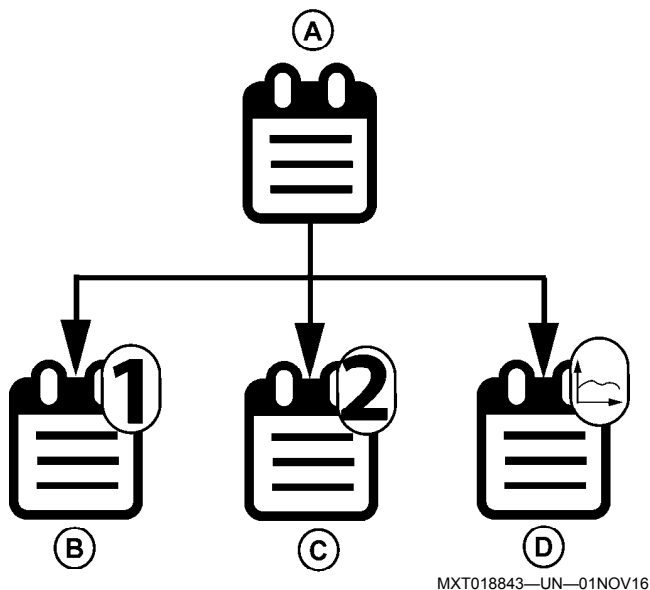
- A — Schedule
B — Diagnostics
C — Mower Settings
D — Garden Settings
E — Setup Assistant
F — Quick Adjust

The Main Menu presents sub-menu options for Schedule, Diagnostics, Mower Settings, Garden Settings, Set Up Assistant, and Quick Adjust.

Your authorized dealer programs most functions during mower installation. Some programming is only done by your dealer.

Operating

Schedule



A — Schedule
B — Schedule 1
C — Schedule 2
D — Seasonal

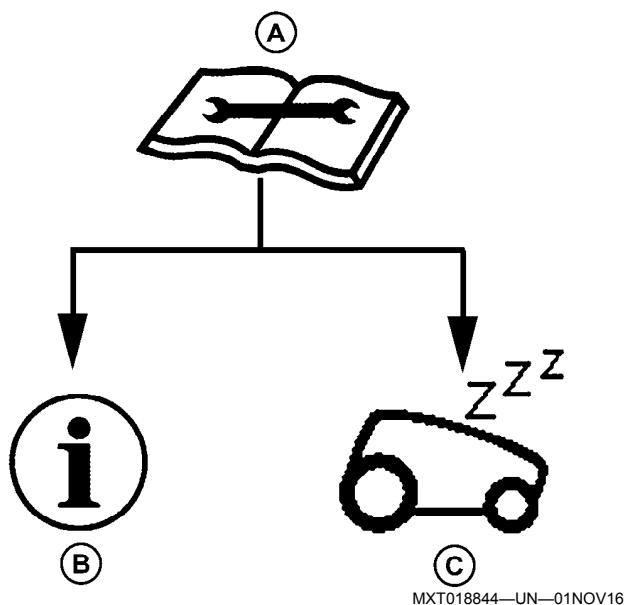
Schedule 1 & 2

- Settings - To schedule mowing time each day with four time frames in total.
- Boundary Cleanup - Schedule how often you will do a cleanup. Set boundary following: Up to six distances Exact or in a range.
- Edit Schedule Name
- Delete Schedule
- Suggest Schedule - Based on yard perimeter the mower will create a schedule.

Seasonal

- Max Mowing times - To set a maximum mowing time.
- Boundary Cleanup - Schedule how often you will do a cleanup. Set boundary following: Up to six distances exact or in a range.
- Season Setup - Max Mowing time is 100%. Set each month individual how many % mower should mow based on max mowing time.
- Current Schedule - Shows graph with switching mowing times between Max and shortest mowing time.
- Delete Schedule

Diagnostic



A — Diagnostic
B — System Info
C — Mower Storage

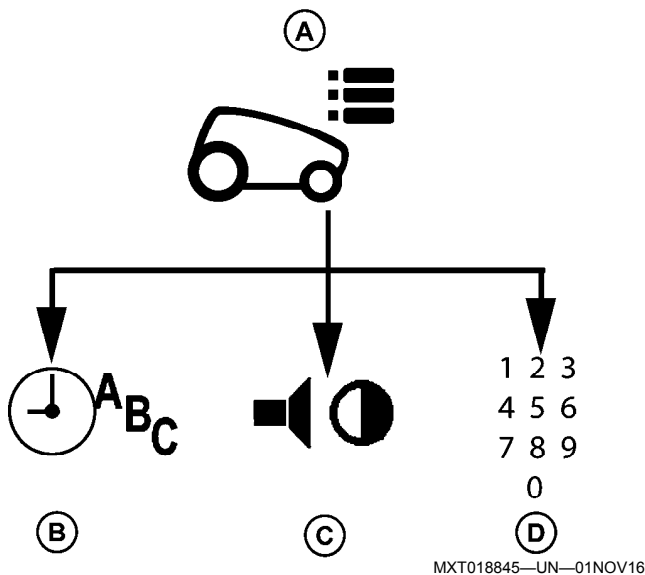
System Info

- Logs - Will show the protocol of the mower.
- System Info - General Mower Info with current Software and saved serial no. Sensor Board Info with current Software and appointed Boundary ID.
- Hours - Mow and total hours

Mower Storage

- Will bring battery to sleep automatically. When battery reaches a status of 50%, mower will go to sleep for storage.

Mower Settings



A — Mower Settings
B — Language/Date/Time
C — Contrast/Sounds

Operating

D — PIN/Screen Lock

Language/Date/Time

- Language
- Date
- Time
 - Operation Volume
 - Button Press Volume
 - Demo Beep

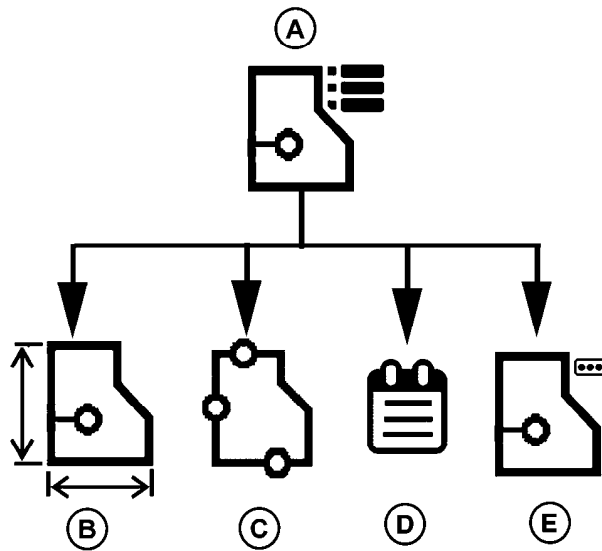
Contrast/Sounds

- Contrast
- Sounds

PIN Code/Screenlock

- PIN Code
- Screen Lock

Garden Settings



MXT018846—UN—01NOV16

A — Garden Settings
B — Yard Perimeter
C — Launch Points
D — Schedule
E — Advanced Settings

Yard Perimeter

- Language Measure the perimeter of the yard

Launch Points

- Set up to five launch points
- Edit name
- Set boundary following
 - Up to six distances
 - Exact or in a range

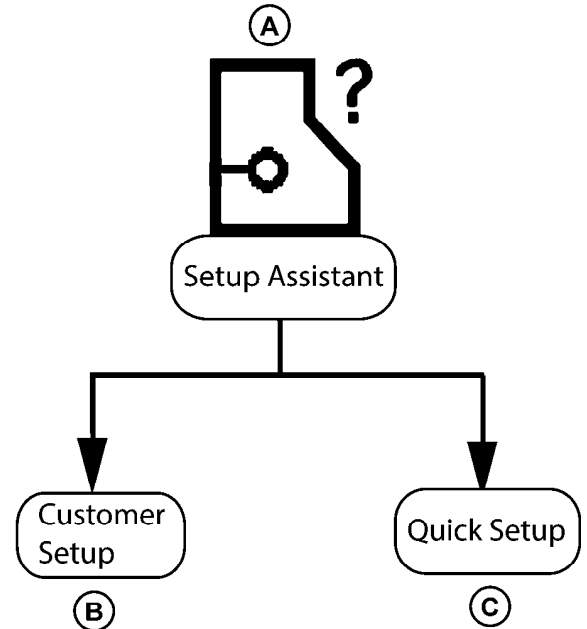
Schedule

- Settings
- Boundary Cleanup
- Edit Schedule Name
- Delete Schedule
- Suggest Schedule

Advanced Settings

- Spiral Mode on/off
- Corridor Docking
 - For a special installation for the charge station
- Homing
 - Direction
 - Distance:
 - a. Up to six distances
 - b. Exact distance or in a range band
 - Maneuver:
 - a. Homing Simple to follow the guide loop into the charge station
 - b. Homing Loop to drive a loop into the charge station

Setup Assistant



MXT018847—UN—01NOV16

A — Setup Assistant
B — Customer Setup
C — Quick Setup

Customer Setup

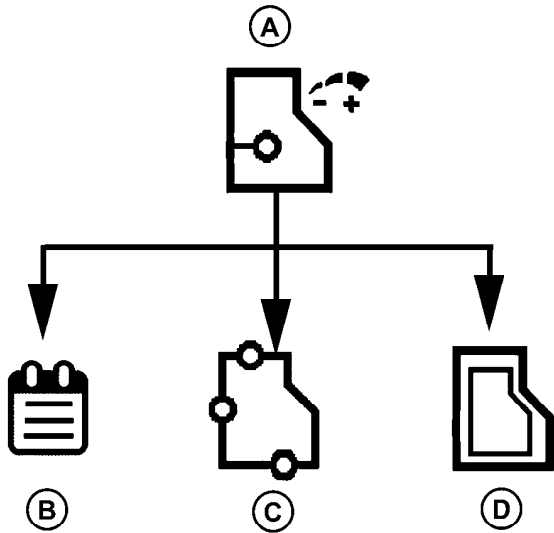
- Manual setup of the yard
 - Through setup you can set:
 - a. Language
 - b. Date/Time
 - c. Corridor Docking
 - d. Perimeter (will set automatically)
 - e. Launch Points
 - f. Schedule
 - g. Boundary Cleanup

Quick Setup

- One-Click Setup of the Yard
 - Mower is doing a measuring lap to define the yard perimeter and will set automatically five launch points. Based on these settings, a schedule will be created.
 - After measuring the yard perimeter, the mower will mow one battery charge and switch after docking into schedule mode.

Operating

Quick Adjust



MXT018848—UN—01NOV16

A — Quick Adjust
B — Total Mow Time
C — Launch Point Mow Time
D — Boundary Cleanup

Total Mow Time

- Increase or reduce total mow time from 0 minutes to ± 600 minutes

Launch Point Mow Time

- Increase or reduce each Launch Points from 0 minutes to ± 600 minutes

Boundary Cleanup

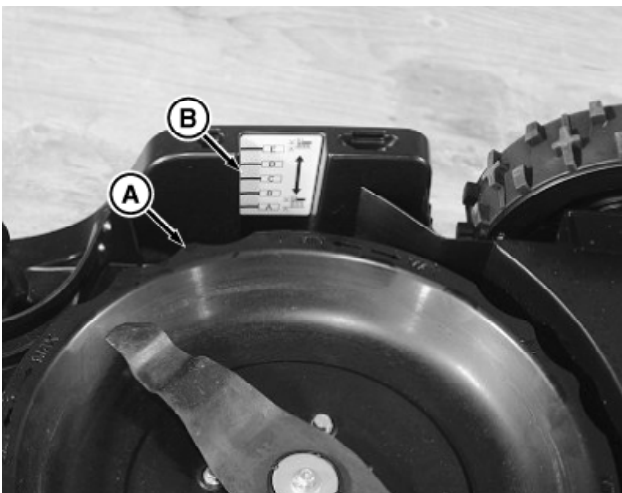
- Set how often the mower has to do the Boundary Cleanup

OUO2005,000057C-19-01NOV16

Adjusting Cutting Height

Mower blade cutting height can be adjusted from 19 mm (0.75 in.) to 102 mm (4 in.) in 14 mm (0.55 in.) increments.

1. Stop machine safely. (See Stopping Safely in the Safety Section.)
2. Protect the mower by placing a soft cloth on the work surface. Position the mower on its side with the main switch at the top.



MXT010461—UN—18JUL14

A — Blade Shield
B — Height of Cut Label

3. Grasp blade shield (A) and rotate to adjust cutting height.
 - Rotate blade shield clockwise to raise blade height.
 - Rotate blade shield counterclockwise to lower blade height.
4. Rotate blade shield to detent position for desired height shown on the height of cut label (B).

The height of cut label (B) is provided as a guide to the approximate cut height. The edge of the blade shield aligns with label letters when it is adjusted to a detent position. See following table for approximate height settings. The lowest two detent positions occur below the bottom of the label.

Position	Cutting Height
A	102 mm (4.0 in.)
B	88 mm (3.5 in.)
C	74 mm (3.0 in.)
D	60 mm (2.4 in.)
E	46 mm (1.8 in.)

OUO2005,00004AC-19-10NOV15

Using Diagnostic Trouble Codes

If a problem occurs with the mower, a diagnostic trouble code (DTC) with a code number is displayed at the user interface. Most diagnostic trouble codes can be cleared; others indicate that dealer service is required.

To clear the trouble code, press the Enter button. Press the Play button to resume operation.

If the trouble code does not clear, see your authorized dealer for service.

OUO2005,000057D-19-20OCT16

Transporting Mower

1. Make sure that main switch (A) is in OFF position.



MXT018842—UN—20OCT16

2. Lift mower by handle and turn to position as shown with mower blade facing away from your body.

Transporting in Vehicle

IMPORTANT: Avoid Damage! Do not leave the mower in a vehicle with excessive heat (temperatures above 65°C (150°F)). Damage to the battery results from overheating.

Service

Make sure that the temperature inside the transporting vehicle does not become excessive (temperatures above 65°C (150°F)).

Secure the machine on or in the transporting vehicle so that the machine cannot move. Use approved load restraints or tie-down straps. Tie-down straps are belt bands made of synthetic material, and incorporate hook ends and a tightening device. Approved tie-down straps have a label with load rating information and important details regarding application and use.

When the machine main power switch is off, the drive wheels are free to rotate. For loaded goods that can roll, use direct strapping with four tie-downs. Secure the machine on its wheels so that it does not move during transportation.

OUO2005,0000588-19-27OCT16

Service

Checking Boundary Wires

If a break occurs in the boundary wire or guide loop, mower operation is affected. If a wire is broken or disconnected, a diagnostic trouble code (DTC) shows at the charging station LED indicator.



MXT010470—UN—22JUL14

A — Status Indicator
B — Blink Code

NOTE: Charging station must be powered to show boundary wire and guide loop status.

1. Check the charging station status indicator (A). If there is a problem, indicator flashes a code sequence. Refer to charging station label blink code chart (B) or table.

Charging Station Diagnostic Blink Code	
	Solid green - Both wires are in proper condition
	1 long, 1 short flash - Boundary wire fault
	1 long, 2 short flashes - Guide loop fault
	Rapid short flashes - No signal sensed in either wire

2. Inspect wires based on status indication for charging station connections. Check for breaks if wires are ground installed. Check for digging or trenching if installed underground.
3. Contact your authorized dealer for service if wire condition or connections appear to be good.

OUO2005,000057F-19-20OCT16

Cleaning the Mower

IMPORTANT: Do not use pressurized or running water on the mower. Water results in damage to electrical components.

Do not wash mower handle. Water can enter vents in handle and damage mower.

1. Stop machine safely. (See Stopping Safely in the Safety Section.)
2. Let machine cool if it has been operating in hot conditions.
3. Do not tilt mower if any moisture is suspected to be on top of the blade shield or in the mower. Allow the mower to rest on its wheels until fully dry.
4. Turn mower onto its side with blade facing outward, away from your body.

CAUTION: Avoid injury! Blades are sharp. Always wear gloves when handling blades or working near blades.

5. Clean the blades with a brush and damp cloth.
6. Clean the underside of the mower with a soft bristle brush or cloth as needed for your mowing conditions.
7. Return the mower to upright, operating position.

IMPORTANT: Improper care of machine plastic surfaces can damage surfaces:

8. Clean exterior surfaces.
 - Do not wipe plastic surfaces when they are dry. Dry wiping results in minor surface scratches. Use a damp, soft cloth.
 - Do not use abrasive materials, such as polishing compounds, anywhere on mower.
 - Clean plastic surfaces with mild soap. Wipe off with a damp, soft cloth.
 - Wipe off with a soft cloth to bring out lustre.

CAUTION: Avoid injury! Edges of charging station plates may be sharp. Always wear gloves whenever touching or working near charging station plates.

9. Clean the charging station and charging contacts with a damp cloth.

OUO2005,00004AF-19-10NOV15

Servicing the Mower Blade

Do not attempt to remove or sharpen blade. Contact your authorized dealer for blade replacement.

Checking Mower Blade Condition

1. Stop machine safely. (See Stopping Safely in the Safety Section.)
2. Let machine cool if it has been operating in hot conditions.
3. Turn mower onto its side with blade facing outward, away from your body.
4. Inspect blade for wear or damage.
5. Contact your authorized dealer for replacement.

OUO2005,0000580-19-20OCT16

Servicing the Battery

Do not attempt to remove battery from mower.

Contact your authorized dealer for battery service or replacement.

OUO2005,0000581-19-20OCT16

Preparing for Winter Storage

NOTE: Dealer service is recommended at the end of the mowing season before storing the machine.

Service Miscellaneous

It is important to prepare the machine for storage to extend battery life.

Boundary wire and guide loop signal strength are vital to proper robotic mower performance. Check and record boundary and guide loop wire resistance at the end of each mowing season. Check resistance again at the beginning of the following mowing season to detect any changes. Contact your authorized dealer for assistance with off season storage and maintenance of the robotic mower system.

1. Press STOP Button.
2. Remove mower from charging station.
3. Go to "MAIN MENU".

NOTE: Mower date and time information are lost in going to storage mode. Date and time information must be entered as a part of mowing season preparation.

4. Go to "DIAGNOSTICS".
5. Select "MOWER STORAGE".
6. Mower display will show blank screen when WINTER STORAGE mode is activated and battery charge is at 50%.
7. Put main switch in OFF position.
8. Store mower and charging station components separate from each other in a dry, dust-free area out of the reach of children.
9. Do not store mower in the charging station.

OUO2005,0000582-19-24OCT16

Service Miscellaneous

Fact Sheet for Product Safety

Manual for Lithium-Ion Battery for Robotic Mower

The version for Germany is based on German applicable law.

Device Data	
Designation:	Robotic Mower MOWIT 500 F Series II/ TANGO E5 Series II
Article ID:	SA1512/SA1518
Manufacturer:	SABO-Maschinenfabrik GmbH A John Deere Company Auf dem Hoechsten 22 D - 51645 Gummersbach Tel.: + 49 2261 704-0 Fax.: + 49 2261 704 104 e-Mail: post@sabo-online.de Homepage: www.sabo-online.com
Battery Data	
Trade Name:	7S3P ICR18650-HA1 73SP INR-18650-13L Lithium-Ion Manganese Battery, rechargeable
Application Area:	Li-Ion Rechargeable battery for robotic mower (Mowit / Tango)
Article ID:	SAA11051
Manufacturer:	Batterien-Montage-Zentrum Am Sportplatz 28-30 D-63791 Karlstein am Main
Technical data:	• Nominal voltage: DC 25,2V • Nominal capacity: 3,9 Ah • Nominal energy: 98,28 Wh • Optimal performance: + 0 to + 60°C • Weight: 1000g

Service Miscellaneous

Device Data	
	- Number / cell type: INR18650-13L - Number / cell type: ICR 18650HA1
Equipment classification / Legal basis:	The battery is subject to the following regulations in Germany: - The Equipment and Product Safety Act (GPSG) on Consumer Products and Technical Work Equipment - The legal requirements based on the Dangerous Goods Act - The legal requirements based on the Battery Act
Certificates / Features / Standards:	CE Labeling: The battery is currently not subject to any regulation requiring CE labeling. Safety Requirements: The battery was tested and certified pursuant to The UN MANUAL of TESTS and CRITERIA, PART III; SUB-SECTION 38.3. The Lithium-Ion Battery complies with the regulations of the EU.

Potential Dangers
Safety Indications for Handling the Battery: - Do not open, take apart, solder or drop the battery. - Protect the battery from a short circuit - risk of explosion! - Protect the battery from rain, do not immerse in liquids - risk of short circuit. - Protect the battery from direct sun light, heat, and fire. - Never throw the battery in a fire - risk of explosion! - Do not use a defect, leaking, or deformed battery. - Please use only John Deere, SABO, original batteries. When using other batteries, risk of serious injury exists. In this case, John Deere, SABO, does not assume any liability. Mower warranty is void if a battery other than a John Deere or SABO battery is used. - Battery fragile - take care with handling. - Protect the lithium-ion battery from microwaves and high pressure. - The battery must be protected against shocks. During transportation, it must be secured,. Transported according to regulations. See below. - In the event battery produces smoke, Make sure the battery is well ventilated.- breathing in smoke may have transitory adverse effects. - Do not use any battery that does not look normal (deformation, abnormal smell, etc.). - Use the battery only for the original purpose provided. - If the power supply cable is damaged, the complete power supply must be returned to the dealership where it was bought. - When damaged, battery contents may seep out. Do not touch. - Contact may cause skin irritation, burns, and chemical burns. - Do not breathe any vapors that may be generated or are released.  MXAL47276—UN—16APR13

Measures
First-Aid Measures: If the electrolyte or its vapors are released: Contact with the skin: wash the skin parts involved with plenty of water and soap, consult a physician if the irritation persists. Contact with the eyes: rinse with plenty of clean water for at least 15 minutes without rubbing the eyes, and consult a physician. Inhalation: Immediately move to fresh air and oxygen, and consult a physician. Ingestion: If the electrolyte is ingested, consult a physician immediately. Medical information: Hazardous materials are: Cells containing electrolytes with an alkaline corrosive effect (Lithium salt in organic solvents) with Li-, Ni- and Co/LiMn oxide cathode, however no Li-metal or lithium alloys. Measures for accidental release: Contain leaking electrolyte liquids with sand and collect in a suitable container. Wear protective clothing: - Gas mask for organic gases - Safety glasses - Gloves The battery removed immediately from the perimeter of the fire! Dispose of as dangerous waste in a special waste collection site according to national regulations (Disposal Code EAK: 16 06 05 or 20 01 34).

Service Miscellaneous

Measures for Fire-fighting:

In case of fire:

Stay away from gases that may be released. Watch the wind direction. If possible, without running any danger, remove the batteries away from the area of the fire. If the danger situation is not clear, extinguish only with metal fire extinguisher, class D. When fighting the fire, only approach the fire with protective clothing and an independent protective breathing apparatus. After the fire is successfully brought under control, the area must be monitored in general (fire watch) and must be cleared by skilled and appropriately equipped personnel. Fire residue must be secured in an orderly fashion and disposed of.

After the successful fire fighting:

Is the area to monitor general (fire watch) and clearance by trained and appropriately equipped personnel, fire residues must be properly secure and disposed.

Handling and Storage

Use and treatment of lithium-ion battery for the robotic mower:

Under normal use the battery should not cause exposure to hazardous substances.

Under normal use no environmental damage should occur.

The battery must be disposed of separately after use because it contains dangerous chemicals. See "Disposal".

- Charge the battery only in the charging accessories that are recommended by the manufacturer. A charger that is suitable for a particular type of batteries can create a fire hazard if it is used with other batteries.
- Use only the designated battery into the mower. The use of other batteries can cause injury or fire.
- Keep the unused battery away from paper clips, coins, keys, nails, screws or other small metal objects that could cause a bridging of the contacts. A short circuit between the battery contacts can result in burns or fire.
- When used incorrectly, liquid can leak from the battery. Avoid contact with it. In case of accidental contact, rinse with water. When the liquid comes into your eyes, you also take medical help. Leaking fluid can cause skin irritation or burns.
- Avoid accidental activation. Make sure the power switch is turned off position before inserting a battery. The insertion of the battery to the switched mower can cause accidents.
- Do not open the battery. There is a danger of a short circuit.
- Protect the battery from heat, for example, against continuous sunlight, and fire. There is danger of explosion.
- In case of damage and improper use of the battery can escape fumes. Go to fresh air and seek for medical attention. The vapors can irritate the respiratory tract.
- Defective batteries can leak fluid and wet the adjacent items. Check the affected parts. Clean it or replace it if necessary.
- The battery should be operated within a temperature range between -5 to 30 degrees Celsius (23 to 86 degrees Fahrenheit). If the battery for a week, temperatures over 55 degrees Celsius (131 degrees Fahrenheit) is exposed, it can cause a loss of capacity of 1 to 4 percent.
- Over time, the capacity of the battery falls. If half of the original battery capacity is reached, the battery should be replaced.

Caution!

Wrong handling may cause an explosion or cause a fire! Store the battery outside the reach of children.

For service or repair, please contact a specialized John Deere, SABO authorized dealer.

For maintenance or repair, please contact John Deere or SABO authorized dealer.

Storage:

- Storage temperature range: 0 to 25 degrees Celsius (32 to 77 degrees Fahrenheit).
- The manufacturer recommends storage at 10 degrees Celsius (50 degrees Fahrenheit) at a loading level of 30 to 50 percent for best battery life. A compromise between accelerated aging and self-discharge.
- The battery must be stored in a dry, well-ventilated room.
- Air humidity range: 0 to 85 percent.
- Do not use the battery, and do not store the battery, near a source of heat (> 98 degrees Celsius / 208 degrees Fahrenheit).
- The lithium-ion battery should be charged every six months to about 40 to 60 percent. These values are determined by the self-discharge-rate of the cell and the quiescent current of the circuit board. When delivered, the lithium-ion battery has an approximate charge of 30 percent.

Handling and Storage

Specific Use:

- The lithium-ion battery is only intended for use for the robotic mower and may be used only for this purpose.
- John Deere and SABO accept no liability for damages which were caused by improper use.
- Please use only John Deere or SABO original parts. John Deere and SABO assume no liability for damages caused by the use of foreign parts or accessories.

Read all warnings and instructions.

Failure to follow safety warnings and instructions can cause electric shock, fire and / or serious injury.

Function battery charge:

- Do not store the mower with the original cloth cover.
- Do not leave the mower sitting against the charge station with the power button off. The battery can be damaged.
- The battery is sent partially charged. Fully charge the mower battery before first use.
- The lithium-ion battery can be recharged at any time, without shortening the life span.
- An interruption of the charging process does not damage the battery.

Deep Discharge Protection:

The lithium-ion battery is protected by a protection circuit against deep discharge. When the mower is put in a storage mode. The battery will be in a sleep mode. The mower will not turn on when the power switch is in the "on" position. To wake up the mower spin a rear wheel and quickly place on the charging station.

Service Miscellaneous

Transport

- The battery is in accordance with UN Manual ST/SG/AC.10/11/Rev.3 Part III, Subpart 38.3 test. It has an effective protection against internal overpressure and short circuit and facilities to prevent violence breaking and dangerous reverse flow.

Meanwhile, despite the battery must be protected from shocks during shipping and are additionally secured against movement.

- Generally, lithium-ion batteries are classified as dangerous goods and have the transportation and packaging requirements according to the dangerous goods law.

Transport of the battery according UN 3480/3481.

Transportation as per dangerous goods regulations:

Transportation by road / by rail / by ship / by air (ADR / RID / IMDG / IATA)

Battery (alone): UN 3480 LITHIUM ION BATTERY, KI.9, II

• ADR/RID

Packaging regulations: P903, P903a, P903b

Special regulations: 188, 230, 310, 348, 636, 661

• IMDG

Packaging regulations: P903

Special regulations: 188, 230, 310, 348, 957

• IATA

Packaging regulations: PI 965 Teil II max. 1 Batterie pro Versandstück

Special regulations: A51, A88, A99, A154, A164, A183

Battery (packaged in robotic mower): UN3481 LITHIUM ION BATTERIES, CONTAINED IN EQUIPMENT, KI.9, II

• ADR/RID not regulated per ADR

Packaging regulations:

Special regulations: not regulated to SV188 if max. 2 batteries included

• IMDG

Packaging regulations:

Special regulations: to SV 188 not regulated if max. 2 batteries included

• IATA

Packaging regulations: PI 967 Part II max. 1 contained battery

Special regulations: A48, A99, A154, A164, A181

Web adresse for internet dangerous information:

e-Mail: dangood@iata.org

Customer Information dangerous goods: +1 (514) 390 6770

Website: www.iata.org/dangerousgoods

Information about ADR and RID:

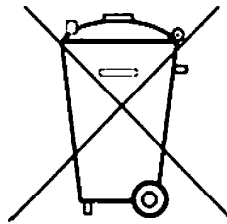
e-Mail: info@balzer-online.de

Helpline: 08001718900

Website: www.balzer-online.de

Take-back obligations/Disposal

Based on the Battery Act manufacturers assume the cost of collection, processing, and recycling of equipment, batteries and accumulators.



MXAL47277—UN—16APR13

For this purpose, batteries must be disposed of in the collection systems established according to national law. Joint disposal with municipal solid waste is not permitted; the waste must be separated by type of battery, which is symbolized by the symbol of the crossed-out garbage bin.

After the end of the batteries life-cycle, return the battery free of charge for disposal to your John Deere or SABO dealer or give it to a corresponding public collection point (in Germany, for example, the collection sites of the GRS - the Common Return System for Batteries), so that the battery may be dispose according to the waste and dangerous goods regulations.

IMPORTANT: Only discharged batteries without voltage on the external contacts can be dropped off. If they are only partially discharged, they must be secured against short circuit before being returned (stable cardboard packaging, ideal: original cardboard packaging).

Only for EU countries:

According to the European Directive 2002/96/EC on Waste Electrical and Electronic Equipment and its implementation into national law, Li-Ion powered device must be collected separately and fed to environmentally friendly recycling system.

According to the Directive 91/157/EEC, used batteries must be recycled.

For Germany:

GRS

Common Foundation

Return system batteries

Heidenkampsweg 44

D 20097 Hamburg

Phone: +49 (40) 23 77 88

E-Mail: info@GRS-Batterien.de

Troubleshooting

subject to change

Miscellaneous

Independent laboratory tests have demonstrated that the battery's housing does not contain PAK and that the electrical components correspond to the requirements regarding Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (Directive 2002/95/EC of 1/27/2003) (no Hg, Cd, Pb, or Cr).

If a lithium-ion battery visually damaged or it seems to be a defect of the battery (no function in a short time), also other emergency, call GBK/Infotrac ID 107624: (USA national) 1 800 535 5053 or International (001) 352 323 3500.

The data on this fact sheet are not guaranteed product properties, but information for the user. They are issued based on the best knowledge of the regulations currently in effect. Status as of October, 2016.

OUO2005,0000583-19-27OCT16

Troubleshooting

Using Troubleshooting Chart

If you are experiencing a problem that is not listed in this chart, see your authorized dealer for service.

When you have checked all the possible causes listed and you are still experiencing the problem, see your authorized dealer.

OUO2005,0000584-19-20OCT16

Robotic Mower

IF	CHECK
Mower goes outside boundary wire area.	Contact your authorized dealer.
Mower stops in mowing area.	Confirm that main switch is in ON position. Check for and clear faults. Move main switch to OFF position then ON position. Confirm that battery is not dead. Check User Interface for diagnostic trouble codes or to clear codes. Check charging station indicator light for boundary wire status. Confirm scheduled mow times. Confirm that charging station is getting power. Move the mower to a different point in the yard and press start. If the mower has the same behavior contact your authorized dealer.
Mower does not bounce off obstacle.	Obstacle is not high enough to detect. Remove obstacle or contact authorized dealer for installation of keep out area. Avoid mowing in low traction areas or rain. Clean rear wheels to ensure traction.
Mower does not return to charging station.	Check boundary wires for breaks. If wires are installed underground, check area for digging or trenching. Check for faults. Check charging station LED (see Checking Boundary Wires.)
Mower does not leave charging station.	Check for objects blocking wheels or debris in drive wheels. Check mowing schedule. Confirm that charging station is getting power. Confirm that main switch is in ON position. Check for and clear faults. Move main switch to OFF position then ON position. Confirm that battery is not dead. Check charging station indicator light for boundary wire breakage. Make sure that the mower is in Auto mode, not Mow Now.
Grass in mow area is not cut evenly.	Check blade condition. Check for heavy grass or wet areas. Grass is too high. Cut with conventional mower or increase scheduled mow time. Contact authorized dealer to confirm size of working area and mow time schedule. Check for debris. Clean the mower. Check launch point settings to address areas of the yard not being cut.
Mower does not follow schedule.	Confirm scheduled mow times. Confirm that system date and time are set correctly. Contact authorized dealer to check battery condition.
Mower runs in circle or arcs.	Contact authorized dealer to check sensors and wheel motors. Check for heavy grass.
Mower does not make contact in charging station.	Confirm that charging station is flat on ground. Check charging station power source. Clean contacts on mower and station. Check wire connections at charging station.

Troubleshooting

IF	CHECK
	Confirm that the guide loop is parallel for its entire length (Guide loop is wire that allows mower to travel straight into charging station contacts.) Make sure to check under the charging station pad for parallel wires and no bumps or holes.
Mower gets stuck often during mowing.	Check mowing area for obstacles. Cutting height is too low. Avoid low traction areas, rain, hills.
Mower vibrates, shakes, or makes too much noise during mowing.	Stop using the machine. Check blade condition. Contact your authorized dealer if the blade is damaged or in poor condition. Check for debris on blade or blade shield. Clean the mower if debris is present. Contact your authorized dealer if vibration continues after cleaning. Check for contact between blade and blade shield. Contact your authorized dealer if component contact is apparent.
Grass is cut too short.	Adjust cutting height.
Mower will not power up.	IMPORTANT: Avoid Damage! Spin the rear wheel a maximum of 40 cm (half wheel rotation) to wake user interface. Activate the User Interface by spinning a rear wheel, and put mower in charging station. If User Interface does not activate, or mower does not begin charging, contact your authorized dealer.
Grass is trampled.	Reduce scheduled mow time. Decrease mower cut height.

OUO2005,0000586-19-27OCT16

Diagnostic and Warning Codes

Diagnostic trouble codes (DTCs) or warning codes may appear at the user interface display. If a DTC or warning code continues to appear, contact your authorized dealer.

OUO2005,0000585-19-20OCT16

Specifications

Specifications

Robotic Mower

Software Version	17.2 ^a
Weight	14.7 kg (32.3 lb)
Power Supply Input	120/230 V AC, 50/60 Hz
AC Power Input to Power Supply	110 W
Charging Station and Mower Voltage Input	36 V DC
Battery	Lithium Ion, 25.2 V, 98.28 Wh
Typical Charging Time	80 Minutes
Running Time (Typical)	90 Minutes
Mowing System	All Steel, One Piece Blade
Blade Motor Speed	2600 RPM
Blade Motor	60 W brushless
Traction Motors	46 W brushless @ 40 output RPM
Cutting Height	19—102 mm (3/4—4 in)
Cutting Width	31 cm (12.2 in)
Working Capacity	Up to 2200 m ² (23,681 ft ²)
Maximum Boundary Wire Length	350 m (1147.5 ft)
Maximum Incline Inside Working Area (with traction kit)	36%
Maximum Incline Near Boundary Wire (with traction kit)	10%
Disable Device and Theft Protection	PIN code
A Weighted Emission Sound Power (Determined in accordance with EN 50636-2-107)	62.2 dB(A)
Measurement Uncertainty (In accordance with EN ISO4871)	0.8 dB(A)
A Weighted Emission Sound Pressure (Determined in accordance with EN ISO 11203)	51.2 dB(A)
Measurement Uncertainty (In accordance with EN ISO4871)	0.8 dB(A)

^aIn case your product was updated with the latest software version, this information appears in the menu.

Dimensions:

Length	79 cm (31.1 in)
Width	53 cm (21 in)
Height	36 cm (14 in)

OUO2005,0000568-19-27OCT16

Declaration of Conformity

Declaration of Conformity

EC Declaration of Conformity

SABO-Maschinenfabrik
Auf dem Höchsten 22
D-51645 Gummersbach

The person named below declares that

Machine Type: Robotic Mower (RM)
Models: MOWIT 500F Series II and TANGO E5 Series II
Serial Numbers: SA1518 and SA1512

fulfills all relevant provisions and essential requirements of the following directives:

DIRECTIVE	NUMBER	CERTIFICATION METHOD
Machinery Directive	2006/42/EC	Self-Certification
Electromagnetic Compatibility Directive	2014/30/EC	TUV Rheinland of North America 762 Park Avenue Youngsville, NC 27596
RoHS Directive	2011/65/EC	Self-Certification

Name and address of the person in the community authorized to compile the technical construction file:

Knut Viebahn
SABO-Maschinenfabrik GmbH
A John Deere Company
Auf dem Höchsten 22
D-51645 Gummersbach
SA_doc@JohnDeere.com

Place of Declaration: Gummersbach, Germany
Date of Declaration: July 31, 2015
Manufacturing Unit: SABO-Maschinenfabrik GmbH



DXCE01—UN—28APR09

Signature

MXT016669—UN—12JAN16

Title: Manager Product Development

OUO2005,0000587-19-24OCT16

Name: Dietmar Steinhoff

Service Statement

Service Statement

John Deere Parts



MXAL41923—UN—18FEB13

We help minimize downtime by putting genuine John Deere parts in your hands in a hurry.

That's why we maintain a large and varied inventory - to stay a jump ahead of your needs.

OUO1082,0000010-19-31MAY13

Prompt Service



MXAL41926—UN—18FEB13

Our goal is to provide prompt, efficient care when you want it and where you want it.

We can make repairs at your place or at ours, depending on the circumstances: see us, depend on us.

JOHN DEERE SERVICE SUPERIORITY: We'll be around when you need us.

OUO1082,0000013-19-31MAY13

The Right Tools



MXAL41924—UN—18FEB13

Precision tools and testing equipment enable our Service Department to locate and correct troubles quickly...to save you time and money.

OUO1082,0000011-19-31MAY13

Well-Trained Technicians



MXAL41925—UN—18FEB13

School is never out for John Deere service technicians.

Training schools are held regularly to be sure our personnel know your equipment and how to maintain it.

Result? - Experience you can count on!

OUO1082,0000012-19-31MAY13

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