# **GB** - Assembly guide



## **Epsilon ZT10700Li**



# SAVE THIS GUIDE FOR FUTURE REFERENCE

A WARNING: To reduce the risk of injury, you must read and understand this assembly guide before attempting to assemble this product.

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## **RULES FOR SAFE ASSEMBLY**

**WARNING:** Strictly adhere to all torque wrench tightening specifications. Failure to do so could cause serious personal injury.

All information, illustrations, photographs, and specifications contained in this manual are based on the latest product information available at the time of publication. Due to up-dates or other changes, there may be some differences in this manual. We reserve the right to make product changes at any time, without notice and without incurring any obliga-tion to make the same or similar changes to any products previously built or sold.

- Any person attempting to assemble this product must have proper training and experience. Read this manual carefully and follow all assembly procedures as described.
- All assembly must be completed with the unit on a level surface.

## SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product. <b>SYMBOL SIGNAL MEANING</b>			
	DANGER:	Indicates a hazardous situation, which, if not avoided, will result in death or serious injury.	
	WARNING:	<b>G:</b> Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.	
	CAUTION:	Indicates a hazardous situation, that, if not avoided, may result in minor or moderate injury.	
	NOTICE:	(Without Safety Alert Symbol) Indicates information considered important, but not related to a potential injury (e.g. messages relating to property damage).	

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

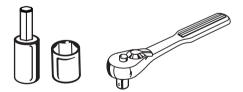
SYMBOL	NAME	DESIGNATION/EXPLANATION	
	Safety Alert	Indicates a potential personal injury hazard.	

## **TOOLS NEEDED**

The following tools (not included or drawn to scale) are needed for assembly:



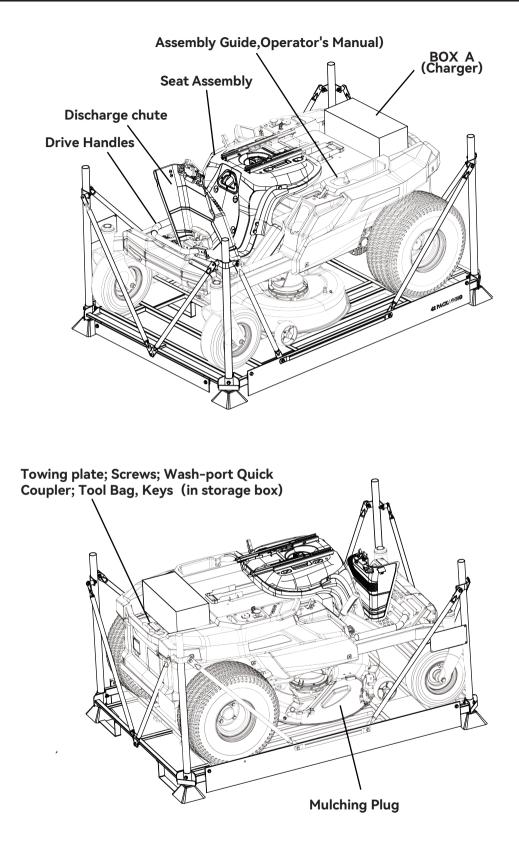
TORQUE WRENCH



SOCKET WRENCH WITH 12 mm AND 13 mm SOCKETS AND 6 mm HEX BIT (IF NOT USING TOOL KIT PROVIDED)

TIRE PRESSURE GAUGE

## LOOSE PARTS LIST

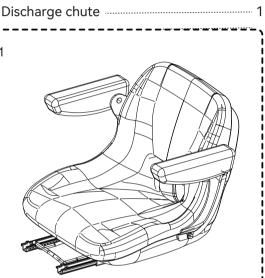


## LOOSE PARTS LIST

### Key

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No.	Description Qty	•
1	Seat Assembly with Safety Interlock Cable 1	
2	Drive Handles (Left and Right) 2	
3	Towing Plate Assembly	
	Towing Plate 1	
	Bolts	
4	Charger 1	
5	Tool Kit	
6	Keys	
7	Wash-port Quick Couple 1	
8	Wrie cover 1	
9	Side Discharge chute	
	< · · · · · · · · · · · · ·	
	1	



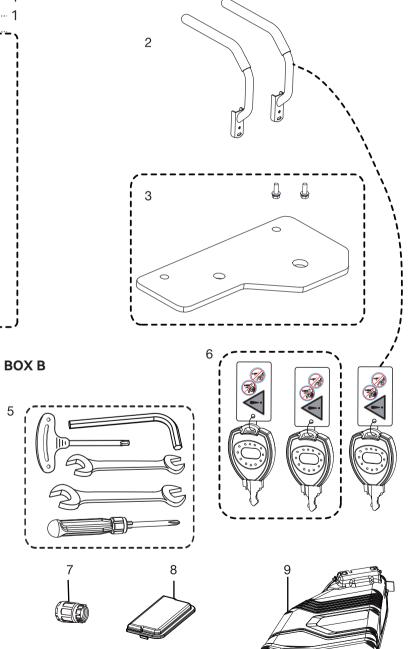
### Key

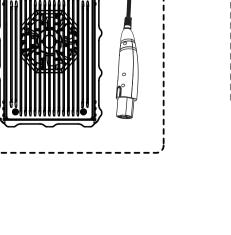
#### No. Description

Description	Qty.
Assembly Guide (Not Shown)	1
Operator's Manual (Not Shown)	1

#### 1 WARNING:

If any parts are damaged or missing do not assemble this product until the parts are replaced with new original manufacturer's parts or their equivalent. Assembly of this product with damaged, missing, or incorrect parts could result in serious personal injury.





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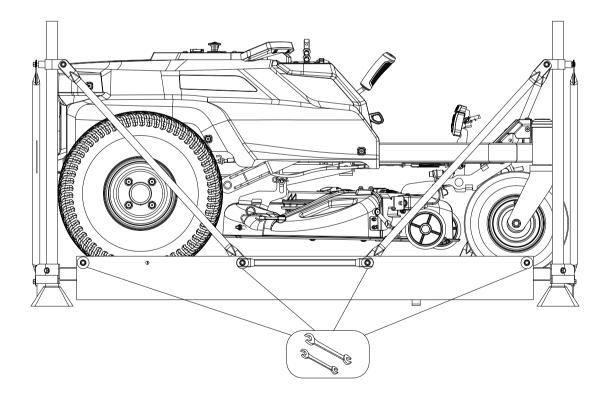
## UNPACKING

- Remove boxes containing loose parts, assembly hardware, and documentation.
- Remove the bolts securing the corner and side braces to the frame bottom, then lift the braces to remove. One side shown, another not.
- Cut the nylon straps securing the front and rear wheel axles to the frame. One side shown, another not.
- Remove and set aside all accessible packaging and wrap from unit and parts. Do not discard the packing material until you have carefully inspected and satisfactorily oper-ated the product.

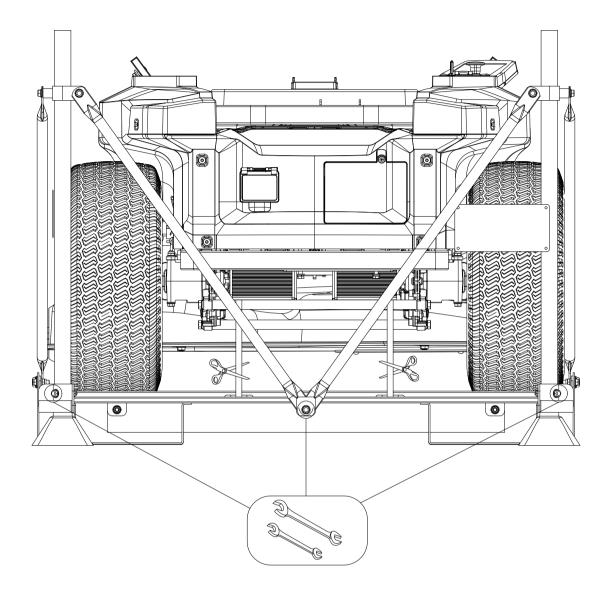
### WARNING:

If any parts on the Loose Parts List are already as-sembled to your product when you unpack it, verify the part is assembled correctly, is properly tightened, and is torqued correctly (where applicable) before proceeding to the next assembly step. Use of a product that may have been improperly assembled could result in death or serious personal injury.

- Inspect the product carefully to make sure no breakage or damage occurred during shipping.
- If any parts are damaged or missing, please call dealer for assistance.

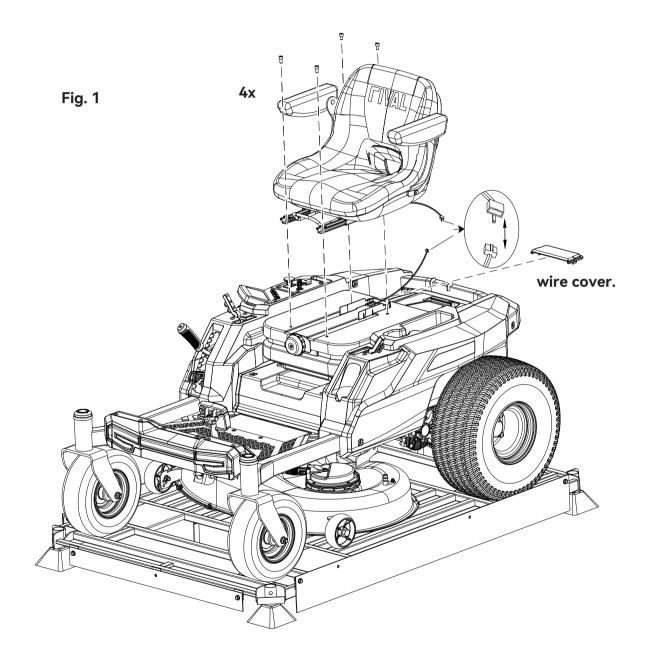


## UNPACKING



### **INSTALL THE SEAT** See Figure 1.

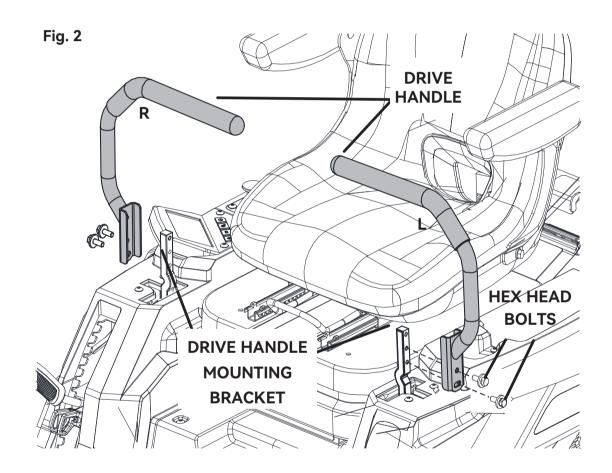
- Place the seat assembly over the mounting brackets and align holes as shown.
- Reinstall nuts and tighten securely.
  Connect the safety interlock cable on the seat with the plug on the mower as shown.
- Install the wire cover.



# INSTALL THE DRIVE HANDLES See Figure 2.

- Remove the hex head bolts from the drive Handle mounting bracket.
- Align the holes on the drive handle with the holes on the drive handle mounting bracket as shown.
- Reinstall the bolts and tighten securely.
- Repeat to install second drive handle. Do not misplace the left and right handles.

**NOTE:** Make sure to use the same holes for mounting the drive handle on each side. The handles must be even once installed.



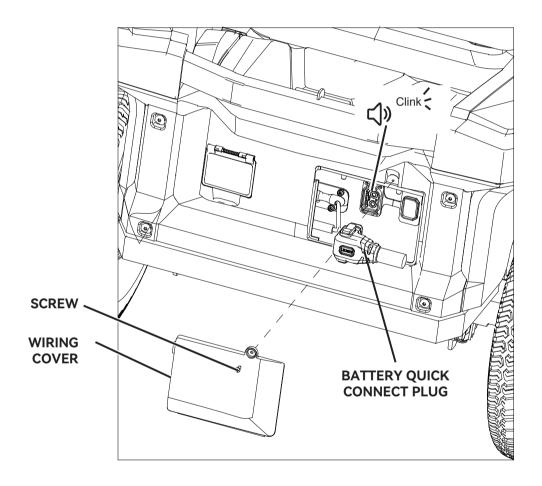
# CONNECT THE BATTERY See Figure 3.

When shipped from the factory, the mower's batteries are disconnected. **To connect:** 

- Using the Phillips screwdriver , remove the screws on the battery cover and lift the cover to remove.
- the battery quick-connect plug to the battery.

**Note :** You must hear the click sound to make sure the battery is connected well.Otherwise the mower may not work properly. Once plug installed, pull it again to ensure the plug is no loose.

Reinstall the battery cover and screw.



#### DRIVE OFF FRAME See Figure 4.

**NOTE:** raise the cutting deck to its highest position, position a ramp next to the frame bottom, release the parking brake and slowly and carefully drive mower off frame.

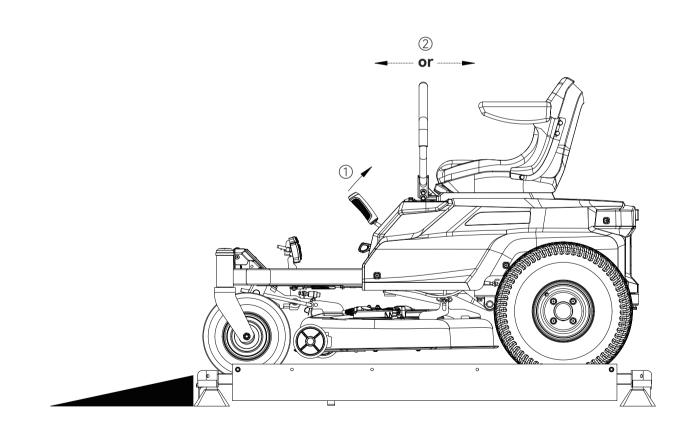
# A w

### WARNING:

Use extra care when driving the mower off of the frame. Press the low speed drive button and carefully move the drive levers and/or press the brake pedal as needed to control the speed. When driving the mower off of the frame, do not exceed the maximum recommended op-eration angle of 12°. Failure to follow these instructions can result in loss of control and result in death, serious personal injury, or property damage.

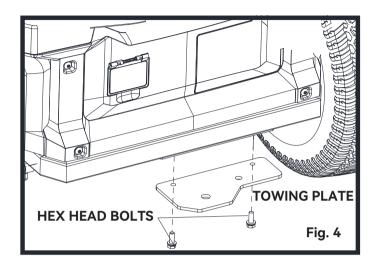
### NOTICE:

If no ramp is available, slowly and carefully drive the mower off the frame in reverse while looking down and behind. Driving the mower off the frame in the forward direction without a ramp can cause damage to the mower's cutting deck.



# INSTALL THE TOWING PLATE See Figure 5.

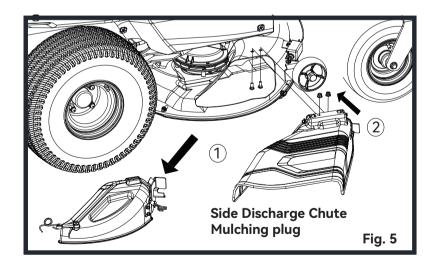
- Align the holes in the towing plate with the holes in the rear crossmember.
- Install two hex head bolts and tighten securely.



# INSTALL THE SIDE DISCHARGE CHUTE See Figure 6.

Remove the mulching plug cover, then take off 2 sets of nuts and bolts from discharge chute bracket, then Install side discharge chute.

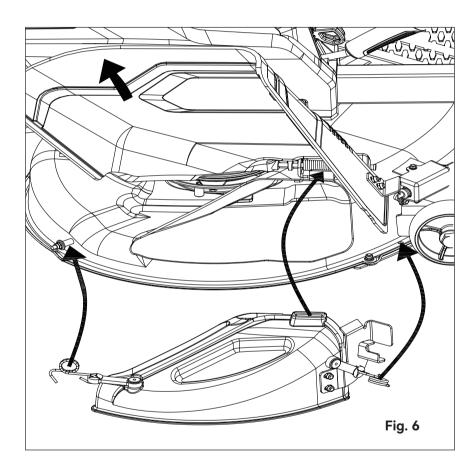
Please en sure it can hold the interlock switch.



# Install Mulching plug steps See Figure 7.

- Lowest the deck.

- Lift the side discharge chute .
  install mulching cover match the square
  hook the spring at both ends to the corresponding positions.Refer to Fig. 7.



## **FINAL PREPARATION**

### CHECK TIRE PRESSURE

Check the air pressure in all tires before use. Improper air pressure will affect handling, steering response, traction, tire life, level cutting, and operator comfort. Be sure tires are inflated to the pressure shown below. NOTE: Tire pressure should only be measured or adjusted when tires are cold.

Recommended Pressure	Front	Rear
	15 PSI	20 PSI

### VERIFY MOWER CONDITION

Inspect the entire product for damaged, missing, or loose parts such as screws, nuts, bolts, caps, etc. Tighten securely all fasteners and caps and do not operate this product until any missing or damaged parts are replaced.



## WARNING:

Check the tire pressure carefully while inflating.

Too much air in the tire could cause the tire to burst, causing serious personal injury.

## **FINAL PREPARATION**

### CHARGE THE MOWER See Figure 8.

Mower batteries must be charged overnight before first use. To verify mower batteries are fully charged, check the battery level indicator.

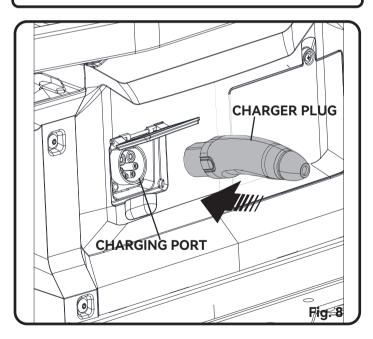
- To charge:
- Insert charger plug into charging port on mower, making sure it is properly connected.
- Connect charger to power supply using normal house hold 230 V, AC only, 50 Hz.
- Do not charge in an area of extreme heat or cold.
- Remove the charger from the mower once it is fully charged and ready for use.

## WARNING:

To avoid accidental starting or movement of the mower that could result in death or serious personal injury, always remove the start key and set the parking brake when leaving the mower unattended.

### NOTICE:

Always connect the mower to the charger when the unit is not in use. If it is not possible to leave the mower char-ger connected, make sure to charge the batteries fully at least once a month.



# TEST THE SAFETY INTERLOCK SYSTEM See Figure 9.

This mower features a Safety Interlock System to protect the operator by shutting off the blades if the operator leaves the seat with the blades running. Test the system to be sure it is working correctly.

- To test:
- Position the mower on a level surface.
- Set the parking brake.
- Make sure drive levers are in the neutral position and the blade engage knob is down.
- Install start key and turn to ON position.
- Raise blade engage knob to activate blades.
- Briefly lift off the seat, but do not get off the mower.

The blades should shut off within 5 seconds. If they don't, verify you connected the safety interlock cable as described on page 6. If the cable is connected but the system still doesn't function, contact customer service. Do not operate the mower until the safety interlock system has been repaired.



# GB - User manual



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# Epsilon ZT10700Li Epsilon ZT13700Li



### THIS USER MANUAL CONTAINS IMPORTANT SAFETY INFORMATION. PLEASE READ AND KEEP FOR FUTURE REFEREACE

A WARNING: To reduce the risk of injury, you must read and understand this assembly guide before attempting to assemble this product.

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**IMPORTANT!** It is essential that you read the instructions in this manual before assembling, operating, and maintaining the product. Subject to technical modification.

### INTENDED USE

The Ride-on mower is intended for outdoor use only. The product is designed for domestic lawn mowing. The cutting blade should rotate approximately parallel to the ground over which it is being wheeled. All four wheels should touch the ground while mowing.

The product is to be used only in domestic application by adults who have received adequate training on the hazards and preventive measures or actions taken while using it. The user must understand the instructions.

Do not use the product for any other purpose.

### **GENERAL MACHINE SAFETY WARNINGS**

A WARNING! Read all safety warnings, instructions, illustrations and specifications provided with this machine. Failure to follow all instructions listed below may result in electric shock, ire and/or serious injury. Save all warnings and instructions for future reference.

The term machine in the warnings refers to your mains- operated (corded) product or battery-operated (cordless) product.

### WORK AREA SAFETY

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate machines in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. machines create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a machine. Distractions can cause you to lose control.

### ELECTRICAL SAFETY

- Machine plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) machine. Unmodified plugs and matching outlets will reduce the risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.

- Do not expose machine to rain or wet conditions.
   Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the machine. Keep cord away from heat, oil, sharp edges, or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a machine outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a machine in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

### PERSONAL SAFETY

- Stay alert, watch what you are doing, and use common sense when operating a machine. Do not use a machine while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying machine with your finger on the switch or energizing machine that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the machine on. A wrench or a key left attached to a rotating part of the machine may result in personal injury.
- Do not overreach. Always keep proper footing and balance. This enables better control of the machine in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery, or long hair can be caught in moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- Do not let familiarity gained from frequent use of machine allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a second.

### MACHINE USE AND CARE

- Do not force the machine. Use the correct machine for your application. The correct machine will do the job better and safer at the rate for which it was designed.
- Do not use the machine if the switch does not turn it on and off. Any machine that cannot be controlled with a switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the machine before making any adjustments, changing accessories, or storing machine. Such preventive safety measures reduce the risk of starting the machine accidentally.
- Store idle machine out of the reach of children and do not allow persons unfamiliar with the machine or these instructions to operate the machine. Machines are dangerous in the hands of untrained users.
- Maintain machine and accessories. check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the machine's operation. If damaged, have the machine repaired before use. Many accidents are caused by poorly maintained machines
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the machine, accessories and tool bits etc. in accordance with these instructions, considering the working conditions and the work to be performed. Use of the machine for operations different from those intended could result in a hazardous situation.
- Keep handles and grasping surface dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the machine in unexpected situations

### **BATTERY TOOL USE AND CARE**

- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Use machines only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.

Liquid ejected from the battery may cause irritation or burns.

- Do not use a battery pack or machine that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- Do not expose a battery pack or machine to fire or excessive temperature. Exposure to fire or temperature above 130°C may cause explosion.
- Follow all charging instructions and do not charge the battery pack or machine outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

### SERVICE

- Have your machine serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the machine is maintained.
- Never service damaged battery packs. Service of battery packs should only be performed by the manufacturer or authorised service providers.

### **RIDE-ON MOWER SAFETY WARNINGS**

### TRAINING

- Always use safety protective devices. Do not use the product without the side discharge chute in place and working properly. The mulch cover should be correctly installed and working properly during mulching operation.
- Follow the manufacturer's instructions for proper operation and installation of accessories. Use only accessories approved by the manufacturer. The use of other accessories may increase the risk of injury.
- Never interfere with the intended function of a safety device or reduce the protection provided by a safety device. Check the proper operation of the safety devices regularly.
- Never use the product while people, especially children, or pets are within 30 m because of the danger of objects being thrown by contact with the blade.
- Do not use the product when there is a risk of lightning. Do not operate the product in poor lighting. The operator requires a clear view of the work area to identify potential hazards.
- Be familiar with the controls and the correct use of the product.
- Be aware of possible hazards when not using the

product or when changing accessories. Following this rule reduces the risk of electric shock, fire, or serious personal injury.

- Never carry passengers or children, even when the blades have stopped. They may fall off and be seriously injured or interfere with the safe operation of the product. Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the product.
- Never allow children or people with reduced physical, sensory, or mental capabilities, or persons who are unfamiliar with these instructions to operate, clean, or maintain the product. Local regulations may restrict the age of the operator. Children should be adequately supervised to ensure that they do not play with the product.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
- Keep hands and feet away from the cutting area, which is located under the mower deck and inside the side discharge chute. Always keep clear of the side discharge chute opening.
   Do not reach under the mower deck.

### PREPARATION

- Wear heavy, long trousers, long sleeves, and sturdy, anti-slip footwear. Do not wear short trousers, sandals, or go barefoot. Avoid wearing clothing that is loose-fitting or that has hanging cords or ties.
- Always wear safety glasses with side shields. Use a face mask if the operation is dusty.
- Objects struck by the blade can cause severe injuries to persons. Thoroughly inspect the area where the product is to be used, and remove all rocks, sticks, metal, wire, bones, toys, or other foreign objects. Remember that strings or wires may entangle with the blades.
- Before use, always visually inspect the product to ensure that blades, blade nuts, and the cutter assembly are not worn or damaged.
- Never direct discharged material towards anyone. Plan the mowing pattern to avoid discharge of material towards bystanders, roads, sidewalks, windows, and cars. Avoid discharging material against a wall or obstruction, which may cause the material to ricochet back towards the operator.

### OPERATION

Operating a Ride-on mower is different from

operating a standard riding mower. Ride-on mowers are rear-wheel drive. The wheels operate independently based on the position of the control lever. Practice operating the product in a large, level, and open area using the driving instructions before mowing your grass. Once you can comfortably and reliably perform the manoeuvres, you are ready to mow your grass.

- Before starting the product:
  - Check the brake operation.
  - Check the tyre pressure.
  - Check for loose fasteners.
  - Make sure that all guards are in place and working properly.
  - Check the side discharge chute safety interlock system
  - Test the operator presence safety interlock system.
  - Adjust the seat to the preferred position.
  - Verify the battery charge level.
- Do not mow in reverse unless absolutely necessary. Before and while reversing, look behind and down for small children, bystanders, and pets.
- Never leave a running product unattended. Always turn off the blades, engage the parking brake, stop the motor, and remove the start key before dismounting.
- The product must be started with the user properly seated. Never start the product if:
  - not all four wheels are on the ground
  - the side discharge chute is exposed and is not protected by the mulch cover
  - hands and feet of all persons are not clear of the cutting enclosure
- Never use the product in a closed area.
- Turn on the motor carefully according to instructions and keep hands and feet away from blades. Do not put hands or feet near or under rotating parts.
- Stop the blade when crossing gravel surfaces to avoid discharging gravel and rocks. Drive the product slowly and carefully to avoid loss of control.
- Use extra care when approaching blind corners, shrubs, trees, or other objects including overhanging shrubs, which may block your view.
- Slow down before turning.
- Watch for traffic when operating near roadways.
   Do not operate the mower on roadways.
- Slopes are a major factor related to loss of control and tip- over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it. Do not

reverse down a slope. Never use the product on steep slopes greater than 12°. Make a copy or cut out the slope guide at the back of this manual and use it to determine if your slope is too steep for safe operation.

- Mow up and down, not across the face of slopes.
- Avoid holes, ruts, bumps, rocks, property stakes, or other hidden objects. Uneven terrain could overturn the product. Tall grass can hide obstacles.
- Use a slow speed so you will not have to stop suddenly or accidentally accelerate while on a slope.
- Do not mow on wet grass when on a slope. Tyres may lose traction, and you may lose control.
- Always keep the control lever in the forward position when going down slopes. Do not move to neutral and coast downhill, which may cause you to lose control of the mower. Always use the control lever and brake when traveling down the slope.
- Keep all movement on slopes slow and gradual.
   Do not make sudden changes in speed or direction, which could cause the product to roll over.
- Use extra care while using the product with attachments, they can affect the stability of the product. Do not use the product on steep slopes greater than 12°.
- Do not try to stabilize the product by putting your foot on the ground.
- Do not use the product near drop-offs, ditches, excessively steep slopes, or embankments. The product could suddenly roll over if a wheel goes over the edge or if the edges caves in and result in death or serious personal injury.
- Operate the product only in temperatures between 0°C and 35°C.

### RIDE-ON MOWER SAFETY WARNINGS

- The charger is for indoor use only.
- Do not recharge primary cells (non-rechargeable).
- Before every use, examine the supply cord for damage. If there are signs of damage, it must be replaced by a qualified person at an authorised service centre to avoid a hazard.
- Charge the product indoors, in a well-ventilated area. Do not charge the product in a confined space.

The charger is equipped with a plug featuring a grounding pin and must be plugged into a matching outlet that has been properly installed and grounded in accordance with all local codes and ordinances. Do not use adaptors or modify the plug provided. If it does not fit the outlet, have the proper outlet ins.

### ADDITIONAL BATTERY SAFETY WARNINGS

**WARNING!** Risk of fire, explosion, or burns. Do not disassemble, expose to heat above 60°C, or incinerate the battery pack.

- To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse the product, battery pack, or charger in fluid or allow fluid to flow inside them. Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach-containing products etc. can cause a short circuit.
- Under extreme usage or temperature conditions, battery leakage may occur.
   If liquid comes in contact with the skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets into the eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention.
   Following this rule will reduce the risk of serious personal injury.
- Do not charge battery packs that show signs of leaks. Dispose of them properly.
- Store the battery pack in a location where the ambient temperature is between 5°C and 25°C

# INTEGRATED BATTERY REMOVAL AND PREPARATION FOR RECYCLING

- To preserve natural resources, recycle or dispose of batteries properly.
- Remove the battery by professional personnel from the after-sales center.

### TRANSPORTATION AND STORAGE

 Turn off the product, engage the parking brake, and remove the start key. Make sure that all moving parts have come to complete stop. Allow the product to cool down before storing or

### TRANSPORTATION AND STORAGE

transporting.

- Remove all foreign materials from the product. Store the product in a cool, dry and well-ventilated place that is inaccessible to children. The start key should be removed and stored in a separate location out of the reach of children.
- Keep the product away from corrosive agents, such as garden chemicals and de-icing salts. Do not store the product outdoor.
- For transportation in vehicles, remove the start key, and secure the product against movement or falling to prevent injury to persons or damage to the product.
- Use extra care when loading or unloading the product into a trailer. Select low speed and carefully move the control lever as needed to control the speed. Always back onto the trailer when loading. When loading or unloading the product, do not exceed the maximum recommended operation angle of 12°. Failure to follow these instructions can result in loss of control and result in death, serious personal injury, or property damage.
- Use extreme caution when lifting or tilting the product for maintenance, cleaning, storage, or transportation. The blade is sharp. Keep all body parts away from the blade while it is exposed.
- Store the product in a location where the ambient temperature is between 5°C and 25°C.

### TRANSPORTING LITHIUM BATTERIES

- Transport the battery in accordance with load and national provisions and regulations.
- Follow all special requirements on packaging and labelling when transporting batteries by a third party. Ensure that no batteries can come in contact with other batteries.

### MAINTENANCE

- Use only original manufacturer's replacement parts, accessories and attachments. Failure to do so can cause possible injury, can contribute to poor performance, and may void your warranty. Service on the product and the Charger must be performed by qualified repair personnel only.
- Service or maintenance performed by unqualified personnel could result in injury to user or

damage to the product. Have the product serviced by an authorized service enter only.

- Maintain the product with care and in good working condition. Keep blades sharp and guards in place and in working order. to prevent serious personal injury, prevent damage to the product, and to maintain best performance, replace damaged, bent, cracked, or unevenly worn out blades. An unbalanced blade caused vibration that could damage the motor drive unit or could cause personal injury.
- Turn off the product, engage the parking brake, and remove the start key. Make sure that all moving parts have come to a complete stop:
  - before leaving the product unattended (including disposal of grass clippings)
  - before clearing blockages or unclogging the discharge chute
  - before checking, cleaning, or working on the product
  - before removing the mulch cover
  - · before opening the grass discharge chute cover
  - after striking a foreign object o Thoroughly inspect the product for any damage.
    - o Replace the blade if it is damaged in any way.
    - o Repair any damage before restarting and continuing to operate the product.
  - whenever the product starts to vibrate abnormally (check immediately o Inspect for damage, particularly the blades.
    o Replace the blade if it is damaged in any way.
    o Replace or repair any damaged parts.
    o Check for and tighten any loose parts
  - The side discharge chute is a guard that covers the side discharge opening on the cutting deck and deflects grass clippings and debris away from the operator. Always ensure that the motor is off and the blades have stopped moving before inspecting, moving, cleaning, or performing maintenance on the side discharge chute.
  - Replace damaged blades and bolts in sets to preserve balance.
  - Remove the start key from the product before storing, servicing, or changing accessories. Such preventive safety measures reduce the risk of starting the product accidentally.
  - You may make adjustments and repairs described in this manual. For other repairs, have the product serviced by an authorised service center only.
  - · Contact an authorised service center to replace

damaged or unreadable labels.

- Check all nuts, bolts, and screws at frequent intervals for proper tightness to ensure that the product is in safe working condition.
- The blade bolts must be tightened to the recommended torque.
- Check the brakes before each use and frequently during use. Adjust and service the brakes as required.
- Be careful during adjustment of the product to prevent entrapment of the fingers between moving blades and fixed parts of the product.
- The cutting blades continue to rotate for a few seconds after the motor is turned off. When servicing the blades, be aware that even though the power source is switched off, the blades can still be moved. Never place any part of the body in the blade area until you are sure the blades have stopped rotating.
- The blade on the product is sharp. Use extreme caution and wear heavy-duty gloves when fitting, replacing, cleaning or checking bolt security
- After each use, clean the plastic parts with a soft, dry cloth. Any part that is damaged should be properly repaired or replaced by an authorised service center.
- Keep the product free of grass, leaves, or other debris build up.
- Do not use water to clean the product. Use an air moving device, such as a compressor or leaf blower to clean the product.

### TYRE MAINTENANCE

The product is equipped with tubeless tyres. When tyres are worn, the traction of the mower decreases, which increases the chance of having an accident. Replace the tyres when the depth on the tread is 4mm or less, or any time there is damage to the tyre. Always use original replacement tyres.

### **TYRE AIR PRESSURE**

Check the air pressure in all four tyres before each use. Improper air pressure affects handling, steering response, traction, tyre life, level cutting, and operator comfort. Make sure that tyres are inflated to the recommended air pressure. The tyre air pressure should only be measured or adjusted when tyres are cold.

### **TYRE ADJUSTMENT**

If a leak or flat tyre occurs due to a puncture, the tyre may be repaired using a plug-type patch. If the damage is from a cut, or if the puncture cannot be repaired using a plug, replace the tyre.

### **BRAKE ADJUSTMENT**

Ensure that the brakes are properly functioning before each use and frequently during use. Improper brake function can cause loss of control in an emergency situation and result in death or serious personal injury.

If the mower travels further before stopping when stepping on the brake pedal, the brakes need adjusting.

After final adjustment, test the brakes by driving the mower at normal speed on flat ground to be sure that the mower stops quickly when brake pedal is stepped on.

### **CLEARING BLOKAGES**

- Turn off the product, engage the parking brake, and remove the start key. Set the cutting deck to the maximum height. Make sure that all moving parts have come to a complete stop.
- Always wear heavy-duty gloves when checking or clearing a blockage. The blades are sharp and the blockage itself could be a sharp object.
- Check and carefully clear the side discharge chute for blockages. Remember that the blade may move during cleaning.

# SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING	
	DANGER:	Indicates a hazardous situation, which, if not avoided, will result in death or serious injury.	
	WARNING:	Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.	
	CAUTION:	Indicates a hazardous situation, that, if not avoided, may result in minor or moder- ate injury.	
	NOTICE:	(Without Safety Alert Symbol) Indicates information considered important, but not related to a potential injury (e.g. messages relating to property damage).	

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION		
	Safety Alert	Indicates a potential personal injury hazard.		
	Read Operator's Manual	To reduce the risk of injury, user must read and understand opera- tor's manual before using this product.		
	Eye Protection	Always wear eye protection with side shields marked to comply With ANSI 287.1		
Keep Children Away       Keep children out of the mowing area and in the watch responsible adult other than the operato		Keep children out of the mowing area and in the watchful care of a responsible adult other than the operato		
Wet Conditions Alert ele		Risk of fire and burns. Do not expose battery, battery compartment, or electronic components to rain, water, or liquids. Do not charge battery or expose mower to rain or damp locations. Do not operate on wet ground.		
*	Electric Shock	Failure to use in dry conditions and to observe safe practices can result in electric shock.		
4	Electricity	This product is considered to have hazardous voltage.		
	Keep Hands and Feet Away	Keep hands and feet away from blade and cutting area.		
	No Step	Do not step on the mower deck.		
	No Slope	Do not operate on steep slopes or inclines greater than 12°. Mow up and down the face of slopes, never across.		

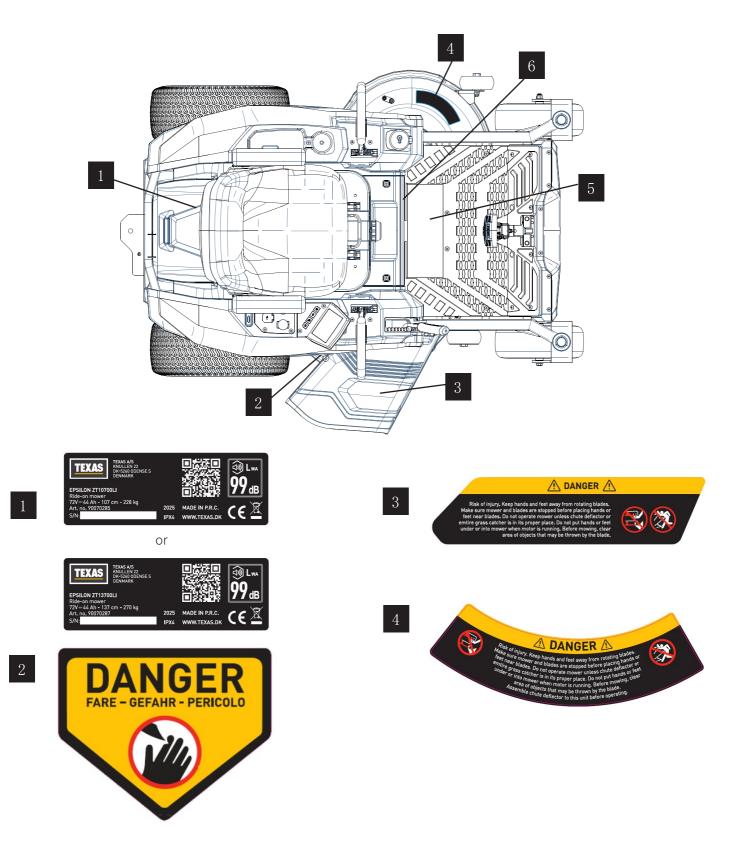
# SYMBOLS

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION	
	Keep Children and Bystanders Away	Keep all children, bystanders, and animals at least 30 m away.	
X	Ricochet	Thrown objects can ricochet and result in personal injury or property damage.	
	Thrown Objects	Thrown objects can result in personal injury or property damage. Never direct discharged material toward anyone.	
()	No Passengers	Never carry children or anyone, even when the blades are off.	
	Back With Caution	Always look down and behind you before and when manoeuvring in reverse or turning around. Make sure children, bystanders, and pets are clear of the area.	
	Reverse Mode Option Button	Mower can be operated in reverse with blades engaged when RMO button i pushed and red button light is on. Always look down and behind you before and when manoeuvring in reverse. Mowing in reverse is not recommended.	
	Blade Engagement / Actuation Button	Lift the blade engagement button up to engage. Press the blade engagement button down to disengage.	
	Recycle Symbol	This product uses lithium-ion (Li-ion) batteries. Local, state, or federal laws may prohibit disposal of batteries in ordinary trash. Consult your local waste authority for information regarding available recycling and/or disposal optio	
_	Direct Current	Type or a characteristic of current	
V	Volts	Voltage	
Α	Amperes	Current	
Hz	Hertz	Frequency (cycles per second)	
W	Watt	Power	
hrs	Hours	Time	

# SAFETY LABELS

The following labels are found on the product. For your safety, please review and understand all of the labels before starting the product. If any of the labels come off the unit or become hard to read, contact an authorized service center for replacement.



## SAFETY LABELS

OPEN NEUTRAL OPEN		FORWARD LEFT TURN	Push pedal to ENGAGE BRAKE     • The BRAKE PEDAL is	ver top of BRAKE own to engage
REVERSE Move BOTH levers towards NEUTRAL position for slowing and to brake the mower	LEFT ZERO TURN RIGHT ZERO TURN		stopping the mower in a semergency situation or parting. ALWAYS use • Press BRAK	RAKE OFF

6

### / WARNING

- Keep all safety devices, guards, shields and switches in place and in working condition.
- Learn location and function of all controls.

• Mowing in reverse is not recommended.

- Before leaving operators position, disengage blades, activate parking brake, switch off machine and remove key.
- Keep hands and feet away from rotating parts.
- Remove any objects from the mowing area that can be hit and thrown out by the blades.
- Store idle ride on mower indoors.

• Drive op and down slopes, not across.

- Do not expose battery, battery compartment, or electronic components to rain, water, or liquids.

• Avoid steep slopes greater than 15° and wet slopes.

• Do not charge battery or expose mower to rain or damp locations.

#### ROTATING BLADES AND TIP OVER/ROLL OVER CAN CAUSE DEATH OR SERIOUSLY INJURY. FOLLOW ALL OPERATOR INSTRUCTIONS.

A DANGER



😫 🔬 🛞

#### • Read the user manual.

- Do not operate within 30 m of children, bystanders or animals.
- Never carry children or anyone even when the blades are off.
- Mower can be operated in reverse and turned around with blades engaged.
  Always look down and behind before and when maneuvering in reverse is not recommended.
- If mower stops while going uphill, stop blades, look behind you and reverse slowly downwards. • Do not operate mower where it could slip or tip.
  - Avoid sudden turns.
  - Stay at least two moving widths (2 m) away from any ditches, drop-offs, or water. Front caster wheels can rotate when mower is stopped, even with brake applied, and cause mower to go over the edge or into the water.

## **PRODUCT SPECIFICATIONS**

Model	ZT10700Li	ZT13700Li	
Dimension(L*W*H)mm without side	1680*1100*1120	1680*1100*1420	
discharge deflector	1000*1100*1120	1000*1100*1420	
Net Weight(Kg)	228	269	
Front Wheel Size	13	) )	
Rear Wheel Size	20	)"	
Cutting width	1067mm	1372mm	
Blade Cutting Diameter	533mm	470mm	
Number Of Blades	2	3	
Number Of Deck Wheels	2	5	
Cold Tire Pressure	Front: 15PSI (103 kPa)	Front: 19PSI (131 kPa)	
	Rear: 20PSI (138 kPa)	Rear: 20PSI (138 kPa)	
Blade Speed	2700/2900/3100 rpm	3200/3400/3600 rpm	
Deck Lift System	Hand ope	eration	
Minimum Cutting Height	38 mm		
Maximum Cutting Height	114 mm		
Number of Cutting Height Positions	12		
Battery Type	LiFeF	204	
Battery Voltage(V)	72	2	
Battery Amp Hours (Ah)	44	59.8	
Charge Time (hours)(25-30°C)	3	4	
Number of Batteries	1	1	
Charge Cycle	1500		
Recommended Charging Temperature	10°C – 30°C		
Recommended Operating Temperature	0°C – 35°C		
Recommended Storage Temperature	5°C – 25°C		
Charger	Input:100-240V,50-60HZ,Max. 12A		
Charger	Output: 72V, DC 15A		
Maximum Forward Speed	Up to 12.88 km/h		

# **PRODUCT SPECIFICATIONS**

COMPATIBLE BATTERY PACKS ZT10700Li		COMPATIBLE BATTERY PACKS ZT13700Li	
Battery Model	FP72-44	Battery Model	FP72-60
ACCESSORIES ZT10700Li		ACCESSORIES ZT13700L	
Grass bagger	72280-G200001	Grass bagger	None
Grass collecting blade	73027-G150002	Grass collecting blade	73027-G060002

### **WARNING:**

Current attachments and accessories available for use with the product are listed above. Do not use any attachments or accessories not recommended by the manufacturer of the product. The use of attachments or accessories that are not recommended can result in serious personal injury.

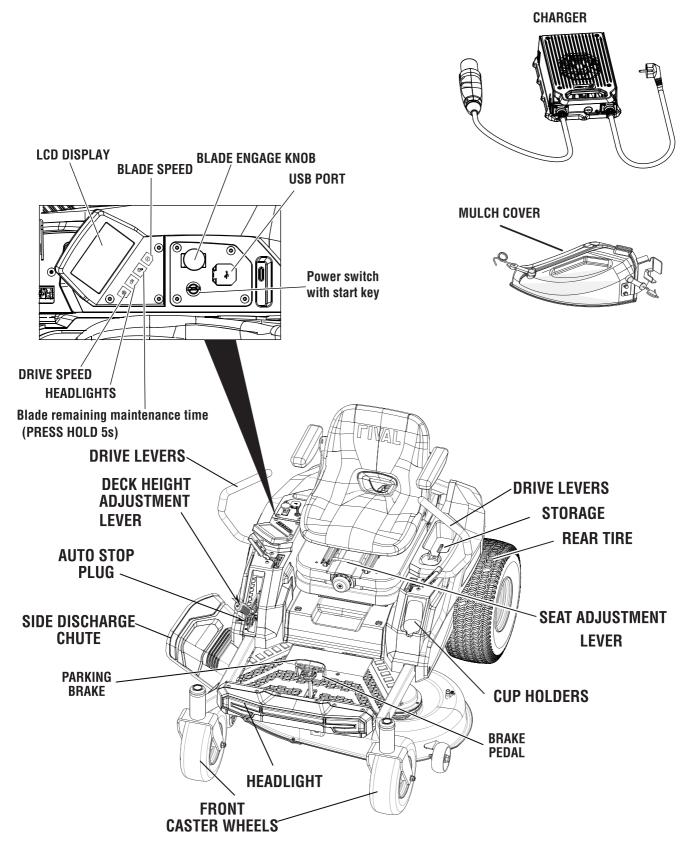
PARTS FOR ZT10700Li		PARTS FOR ZT13700Li	
Mulch cover	73029-G020003	Mulch cover	73029-G110003
Side discharge chute	72004-G020002	Side discharge chute	72004-G110004
Front wheels	77420-G150001	Front wheels	77420-G150001
Rear wheels	77410-G150001	Rear wheels	77410-G150001
Charger	1200CG7215L	Charger	1200CG7215L

NOTE: Visit your local special orders desk or contact TEXAS customer service for replacement parts.

### **WARNING**:

The declared vibration total values and the declared noise emission values given in this instruction manual have been measured in accordance with a standardized test and may be used to compare one tool with another. They may be used for a preliminary assessment of exposure. The declared vibration and noise emission values represent the main applications of the tool. However, if the tool is used for different applications, used with different accessories. Or poorly maintained, the vibration and noise emission may differ. These conditions may significantly increase the exposure levels over the total working period. An estimation of the level of exposure to vibration and noise should take into account the times when the tool is turned off or when its running idle. These conditions may significantly reduce the exposure level over the total working period. Identify additional safety measures to protect the operator from the effects of vibration and noise, such as maintaining the tool and the accessories, keeping the hands warm (in case of vibration), and organizing work patterns.

## **PRODUCT SPECIFICATIONS**



14-English

#### KNOW YOUR LAWN MOWER

See Figure 1.

The safe use of this product requires an understanding of the information on the product and in this operator's manual as well as a knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules.

#### Battery status bar and Hour meter on LCD

The Battery status bar shows the amount of battery charge remaining. The hour meter tracks the total number of hours the mower has been used (key in on position) for maintenance purposes.

### **BLADE ENGAGE KNOB**

Pull the blade engage knob up to activate the mower's cut-ting blades. Push the knob down to stop the cutting blades.

### **BRAKE PEDAL**

The brake pedal is used for stopping the mower in an emer-gency situation or when parking.

### CHARGER

The mower's charger has a key hole hanging feature for convenient, space saving storage. When hanging by the keyhole slots, use at least one additional screw in the hole in the mounting flange to secure in place. Always mount in such a way that the charger's LED status light is visible while charging.

#### **DRIVE LEVERS**

The drive levers are used to direct the mower, and for start-ing and stopping during normal operation.

#### DECK HEIGHT ADJUSTMENT LEVER

The deck height adjustment lever is used to raise or lower the cutting deck. Set the auto stop plug at your normally desired cutting height for ease of use when mowing.

#### **HEADLIGHT BUTTON**

Turn the headlights on and off using the headlight button.

#### LOW SPEED CUT BUTTON

Press the low speed cut button to prolong battery run time when the cutting load requirement is low.

#### LOW SPEED DRIVE BUTTON

Press the low speed drive button to limit the speed of the mower when you're operating in tight spaces or on slopes. This setting is also useful for inexperienced users when they are first learning to operate the mower.

#### **MEDIA STORAGE**

Two storage areas offer a convenient place to store your cell phone or MP3 player.

#### **MULCH COVER**

Your mower is equipped with a mulch cover that covers the side discharge opening, which allows the mower blade to cut and recut for finer clippings.

#### **PARKING BRAKE**

Use the parking brake to lock the mower in the braked position.

#### POWER SWITCH WITH START KEY

The power switch is used to turn the mower on and off. The start key must be inserted before the switch can be oper-ated. When the key is in the accessory position, the power switch is also used to power optional manufacturer-approved mower accessories.

#### SEAT ADJUSTMENT LEVER

Use the seat adjustment lever to move the seat to the desired position.

#### **USB PORT**

The USB charging port provides charging power of 5 Volts DC at up to 2 amps for your cell phone, MP3 player, or other USB devices. Consult the owner's manual for your device for specific charging requirements.

Connect one end of a USB cable (not provided) to your device and the other end to the USB charging port on the mower, to begin charging your device.

#### NOTICE:

Attempting to charge devices rated more than 2 amps could damage the USB charging port and/or the mower. Always close the USB cover when not in use to prevent debris from becoming trapped in port.

**NOTE:** The USB port is only powered when the start key is in the ON position.

### WARNING:

Never use headphones or any electronic device, such as a smart phone or tablet, while operating the mower. Distracted operation can result in an accident that could result in death or serious personal injury to the operator or a bystander.

#### **Interlock System**

Side discharge chute with safety interlock system The side discharge chute deflects grass clippings. Before using the product, check that the side discharge chute is properly closed. It has an interlock system that stops the blades if the chute is opened during operation. Stop using the product and have it serviced by an authorized service center if the blades do not stop when the side discharge chute is lifted during use by an obstacle.

### WARNING:

Do not allow familiarity with products to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

### A WARNING:

Always wear eye protection with side shields marked to comply with ANSI Z87.1. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

## WARNING:

Always turn off mower, make sure blades have stopped moving, and remove the start key from the mower when you are assembling parts, making adjustments, cleaning, or when not in use. This will prevent accidental starting that could cause serious personal injury.

## WARNING:

Always inspect mower for missing or damaged parts and blades for damage or uneven or excessive wear prior to use. Use of the mower with damaged or missing parts can result in serious personal injury.

### NOTICE:

Before each use, inspect the entire product for damaged, missing, or loose parts such as screws, nuts, bolts, caps, etc. Tighten securely all fasteners and caps and do not operate this product until all missing or damaged parts are replaced. Please contact customer service or an authorized service center for assistance.

### APPLICATIONS

You may use this product for the purpose listed below:

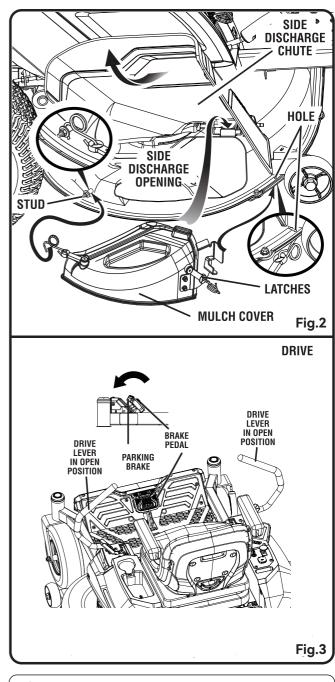
Mowing your lawn

### INSTALLING MULCH COVER

See Figure 2.

The mower is configured for side discharge when shipped. If mulching is desired:

- Lift the side discharge chute.
- Place the mulch cover on the tab on the mower housing.
- Connect the mulch cover latches to the two side mount-ing points on the mower deck housing.
- Release the side discharge chute.



### A WARNING:

Make sure the side discharge chute fully closes when finished. Failure to do so could cause serious personal injury.

### SETTING THE PARKING BRAKE

See Figure 3.

- To set the parking brake:
- Place the drive levers in the open position.
- Fully depress and hold the brake pedal.

- Press your foot forward and fully depress the parking brake with your toes.
- Release the brake pedal.
- To release the parking brake: depress and release the brake pedal.

### A WARNING:

Never leave the mower unattended when the motor is running or with the key in the power switch. Verify that the parking brake is set and the key has been removed. Failure to set the parking brake could cause the mower to move, and leaving the key could allow unauthorized use that could result in serious personal injury.

### ADJUSTING THE SEAT

#### See Figure 4.

Adjust the seat position to ensure you are able to make firm contact with the brake pedal before operating the mower.

To move the seat:

- Turn key to OFF position and set the parking brake.
- Sit down on seat and lift the seat adjustment lever.
- While holding the lever, slide the seat to the desired position.

### A WARNING:

Be sure the seat is locked into place before operating the mower. A seat that is not secure can cause the operator to shift and lose control of the mower and result in pos-sible death or serious personal injury.

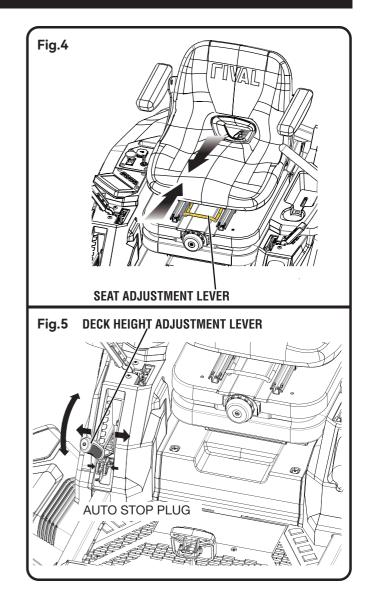
### SETTING THE CUTTING DECK HEIGHT

See Figure 5.

Before using the mower, raise the deck height to the cutting position best suited for your lawn.

**NOTE:** To prevent scalping the lawn when encountering high spots, the cutting deck wheels should be positioned approximately 12.7mm. off the ground when the mower is at the desired cutting height. When shipped, the cutting deck wheels are set to the 67mm. position. Depending on your desired cutting height, you may need to change the position of the cutting deck wheels. To do so, refer to Adjusting Cut-ting Deck Wheels in the Maintenance section of this manual.To adjust the cutting deck height:

- Štop the mower and disengage blades.
- Turn key to OFF position and set the parking brake.
- To raise the cutting deck, grasp the deck height adjustment lever, push left to disengage from slot, move toward the back of the mower, then push right into slot to secure.



To lower the cutting deck, grasp the deck height adjust-ment lever, push left to disengage from slot, move toward the front of the mower, then push right into slot to secure.

### CAUTION:

Make sure the side discharge chute fully closes when finished. Failure to do so could cause serious personal injury.

**NOTE:** Once you have determined the correct cutting height for your lawn, install the auto stop plug just below that posi-tion to easily return to the correct mowing height every time.

#### CHARGING THE MOWER

Mower batteries must be fully charged before first use. To verify mower batteries are fully charged, check the mower LCD or the LED indicator on the charger.

For best results:

- Do not charge in an area of extreme heat or cold. (Recommended Temperature: 10°C 30°C)
- Never charge a frozen battery.
- Mount or place the charger in an area with adequate ventilation, ideally with the charger in a horizontal position with the cooling fins facing up.

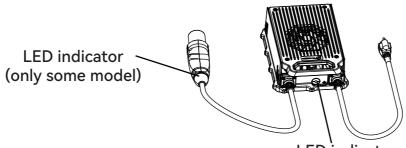
#### To charge:

- Make sure both the charger and mower connections are clean and free of dirt or debris.
- Insert charger plug into charging port on mower, making sure it is properly connected.
- Connect charger to power supply using normal household of 230V,Ac only 50Hz .

The batteries should automatically begin to charge.

**NOTE:** The charger is equipped with a plug featuring a grounding pin and must be plugged into a matching standard three-prong outlet that has been properly installed and grounded in accordance with all local codes and ordinances. Do not use a two-prong outlet, adaptors, or modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

When powered, the LED indicator on the charger will illuminate to indicate the charger's status. Refer to the chart below Fig. to determine the meaning of the LED's display.



LED	ind	licator	

LED INDICATOR	BATTERY/CHARGER STATUS	
Solid red	Batteries are not being charged	
One green flash	Batteries are being charged	
Solid green	Batteries are fully charged	
Green and red light alternately flash	Temperature is too high or too low	

• When you are ready to mow, disconnect the charger from the power supply, then disconnect the charger from the mower.

### NOTICE!

Always turn power switch to OFF position and remove key when charging mower and when mower is not in use.

### NOTICE!

Always connect the mower to the charger when the unit is not in use. If it is not possible to leave the mower charger connected, make sure to charge the batteries fully at least once a month.

### NOTICE:

Always connect the mower to the charger when the unit is not in use. If it is not possible to leave the mower char-ger connected, make sure to charge the batteries fully at least once a month.

### SAFETY INTERLOCK SYSTEM

#### See Figure 9.

This mower features a Safety Interlock System to protect the operator by shutting off the blades if the operator leaves the seat with the blades running. Test the system before each use to be sure it is working correctly.

#### To test:

- Position the mower on a level surface.
- Set the parking brake.
- Make sure drive levers are in the neutral position and the blade engage knob is down.
- Install start key and turn to ON position.
- Raise blade engage knob to activate blades.
- Briefly lift off the seat, but do not get off the mower.

The blades should shut off within 5 seconds. If they don't, contact customer service. Do not operate the mower until the safety interlock system has been repaired.

### LEARNING TO DRIVE THE MOWER

#### See Figures 10 - 12.

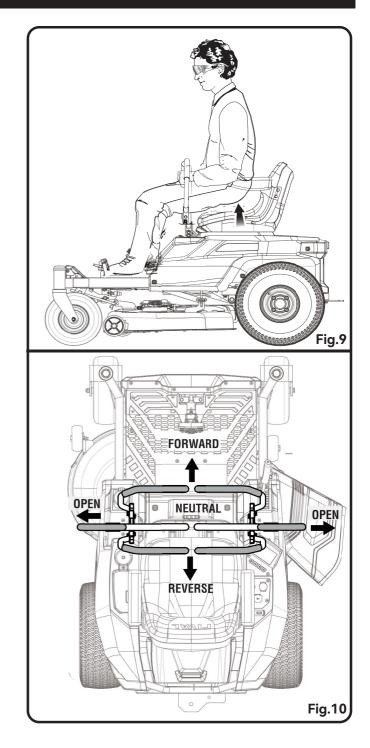
Operating a zero turn mower is different than operating a standard riding mower. Zero turn mowers are rear-wheel drive and the wheels operate independently based on the po-sition of the drive levers. Before you begin to mow your grass, we strongly encourage you to find a large, level, and open area to practice operating the mower using the instructions that follow. Once you can comfortably and reliably perform each of these maneuvers, you are ready to begin mowing.

### A WARNING:

Clear the area of bystanders before operating the mower. If anyone enters the practice area, stop immediately and do not continue practicing until the bystanders leave the area.

### **WARNING**:

Avoid sudden starts, stops, and turns, as well as exces-sive speed, especially when first learning to operate the mower. The mower can spin rapidly, which may cause you to lose control and could result in death, serious per-sonal injury and/or damage to the mower. Engage the low speed drive function to limit the amount of speed avail-able until you are fully capable of operating the mower in all situations.



The two drive levers are used to control the mower's direc-tion, as well as starting and stopping.

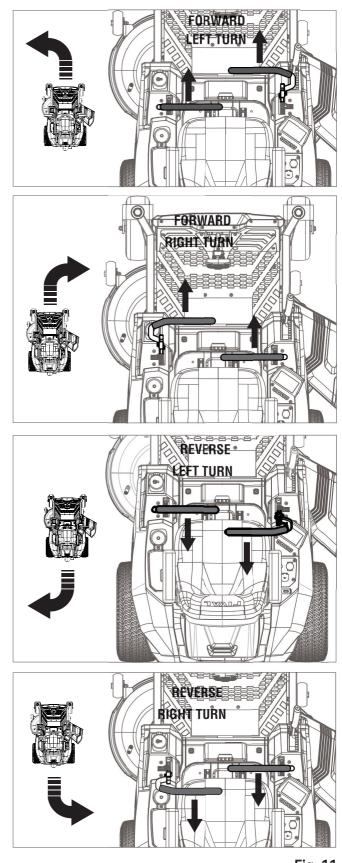
### A WARNING:

Keep both hands on the drive levers at all times when the mower is in motion. Do not release the drive levers to slow or stop the mower. Releasing the drive levers while the mower is in motion could lead to loss of control and result in death, serious personal injury, and/or damage to the mower.

### NOTICE:

When the word "together" is used in the instructions that follow, it means that both the left and right drive levers should be even or aligned in whatever position is being described. If one of the levers is in a different position, a different outcome will result other than the one being described.

- When entering and exiting the mower seat, both drive levers should be in the open position (pushed away from the seat in both directions).
- Once you are seated and ready to begin, press and re-lease the brake pedal to make sure the parking brake is released.
- Insert the start key and turn to the ON position.
- Pull both levers all the way in toward the seat. This is the neutral position, which is used for starting the mower and also to bring the mower to a gradual stop.
- Press the low speed drive button to activate.
- Push both drive levers forward (past neutral) together to drive the mower forward in a straight line. The farther forward the levers are pushed, the faster the mower will go. To slow down, pull both levers together back toward the neutral position.
- Pull both drive levers backward (before neutral) together to drive the mower in reverse in a straight line. The farther back the drive levers are pulled, the faster the mower will go. To slow down, push both levers together back toward the neutral position.
- To make turns, the drive levers will no longer be moved together. One drive lever will be forward or behind the other, depending on the direction being traveled (forward or reverse) and the desired turn direction. If driving for-ward, the drive lever in the rear position will control the direction of the turn. If driving in reverse, the lever in the front position will control the direction of the turn.



To make a zero turn, slow down, but make sure the rear wheels are still in motion. Then move the drive levers in opposite directions one past neutral and one before neutral. Which lever is in which position determines the direction of the turn. NOTE: Perform zero turns at slow speed to help prevent damage to your lawn.

#### **OPERATING THE MOWER**

See Figures 9 - 14.

### WARNING:

Clear the area of bystanders before operating the mower. If anyone enters the mowing area, stop immediately and do not return to mowing until the bystanders leave the area.

#### Before starting the mower:

- Ensure work area is clear of children, bystanders, and pets.
- Clear the work area of objects that may be thrown by the mower blades.
- Check brake operation.
- Check tire pressure.
- Check for loose fasteners.
- Check to make sure all guards are in place and working properly.
- Clean debris from mower.
- Test safety interlock system.
- Adjust seat to desired position.
- Verify battery charge level.

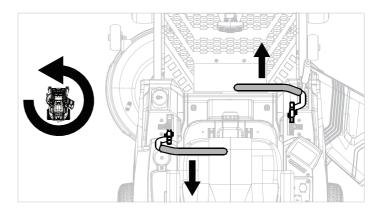
### NOTICE:

When the level of battery charge reaches the red zone on the battery charge indicator, the blades will automatically shut off. Return immediately to recharge. Continuing to mow when the battery charge level is in the red zone can cause the mower to become stranded away from the charging area.

**NOTE:** If the mower becomes stranded away from the charger, it will be necessary to place the drive levers in neutral and push the mower back to the charging location.

#### Mowing:

- Raise the mower deck to its highest position.
- Make sure the drive levers are in the open position.
- Insert start key and turn to ON position.
- Release the parking brake.
- Move drive levers to neutral position, then drive to desired mowing location.



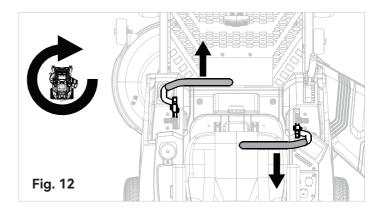




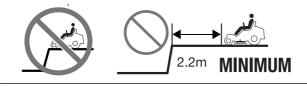
Fig. 13

# **OPERATION**

- Stop the mower, turn key to OFF position, and set the parking brake.
- Lower the cutting deck to desired position.
- Turn start key to ON position and release parking brake.
- Raise blade engage knob to activate blades and mow as desired.

# A DANGER:

Stay at least two mowing widths (2.2m) away from any ditches, drop-offs, or water. Front caster wheels can rotate when mower is stopped, even with the brake ap-plied, and cause the mower to go over the edge or into the water and result in death or serious personal injury.



# A WARNING:

Use caution when crossing over gravel paths or drive-ways. Before crossing, disengage the blades and raise the cutting deck to the highest position to minimize the possibility of ricochet. Drive slowly to avoid loss of trac-tion and control.

# WARNING:

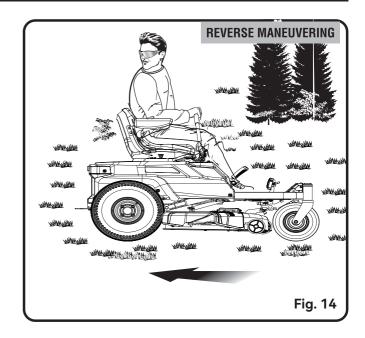
Do not mow in reverse unless absolutely necessary. Al-ways look down and behind before and while backing to make sure no children, bystanders, or pets enter the mow-ing area. Remember that a careless fraction of a second is sufficient to inflict death or serious injury.

# **WARNING**:

Be especially careful before and when backing and turn-ing around with the bagger kit installed, as it may limit visibility. Always look closely behind and down for small children, bystanders, and pets and move the mower slowly to prevent back over accidents that can cause death or serious personal injury.

# WARNING:

Do not attempt to change direction suddenly between forward and reverse while the mower is in motion. Always come to a complete stop before changing the mower direction to avoid loss of control and prevent death or serious personal injury.



## When mowing is complete:

- Stop mower on a flat, level surface by pulling the drive levers together to the neutral position. Do not stop the mower on a slope.
- Push the blade engage knob down to turn blades off.
- Place the drive levers in the open position.
- Set the parking brake.
- Turn the start key OFF.
- Remove the start key if leaving the mower unattended, even if just for a brief period.

# WARNING:

If the mower emits a beeping noise after you leave the seat, verify that the parking brake is set and the key has been removed. Failure to set the parking brake could cause the mower to move, and leaving the key could allow unauthorized use that could result in serious per-sonal injury.

# **OPERATION**

### **MOWING TIPS**

See Figure 15.

- Keep mower blades sharp.
- Make sure the lawn is clear of stones, sticks, wires, toys, tree nuts, tree branches, and other objects that could damage the lawn mower blades or motor. Do not mow over property stakes or other metal posts. Such objects could damage the blade or be accidentally thrown by the mower in any direction and cause serious personal injury to the operator and others.
- For a healthy lawn, always cut off one-third or less of the total length of the grass.
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow back and forth across the lawn, turning around in the edges of already mowed grass.

## NOTICE:

To prevent damage to your lawn, use a slow speed while turning rather than spinning in a tight circle.

- When cutting heavy grass, reduce speed to allow for more effective cutting and a proper discharge of the clippings.
- Do not cut wet grass. Mowing on wet surfaces can cause loss of control, and wet grass will stick to the underside of the deck and prevent proper bagging or mulching of grass clippings.
- New or thick grass may require a narrower cut or a higher cutting height.
- Keep the mower deck and side discharge chute clean. Remove grass clippings, leaves, dirt, and any other ac-cumulated debris before and after each use.

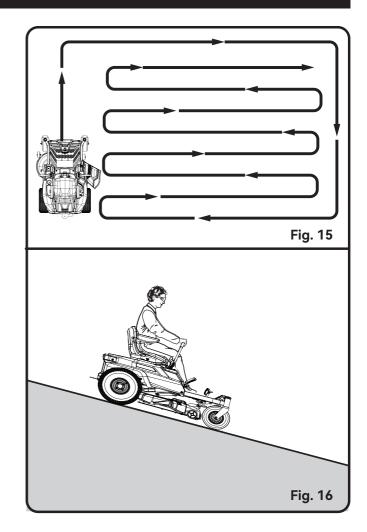
**NOTE:** Always stop mower, allow blades to completely stop, and remove the start key before cleaning underneath the mower.

### **SLOPE OPERATION**

See Figure 16.

# **DANGER**:

Slopes are a major factor related to tip-over and roll-over accidents that result in death or severe injury. Operation on slopes requires extra caution. If you feel uneasy on a slope, do not mow it. For your safety, do not attempt to mow steep slopes greater than 12 degrees. Do not operate in reverse down a slope, unless the mower stops while going uphill. In that situation, stop the blades, look behind you, and back up slowly. Make a copy or cut out the slope guide image later in this manual and use to determine if your slope is too steep for safe operation.



- Mow up and down, not across the face of slopes.
- Do not mow on wet grass. Wet grass can cause the tires to lose traction or slip on slopes, even though the brakes are functioning properly.
- Watch for holes, ruts, rocks, hidden objects, or bumps which can cause you to slip or trip. Tall grass can hide obstacles. Remove all objects such as rocks, tree limbs, etc., which could be tripped over or thrown by the blade.
- Do not mow near drop-offs, ditches, or embankments.
- Drive slowly and do not make sudden changes in speed or direction.
- Avoid stopping on slope if at all possible. If stopping is unavoidable, make sure to engage parking brake. When restarting, use lowest possible speed. If turning is neces-sary, exercise extreme caution when changing direction and always turn downhill.
- Never attempt to stabilize the mower on a slope by plac-ing your foot on the ground during operation.

# **OPERATION**

- If using the optional bagger kit, use extreme caution and operate the mower slowly when operating on slopes, as the bagging kit can change the stability of the mower.
- Always use the drive levers and brake when traveling down the slope. Do not attempt to let the mower coast downhill in neutral.
- If at any point the tires lose traction while operating on a slope, disengage the blades and proceed slowly and carefully straight down the slope.
- If the mower stops while going uphill, stop blades, look behind you, and back up slowly.

### TRANSPORTING THE MOWER

See Figure 17.

## A WARNING:

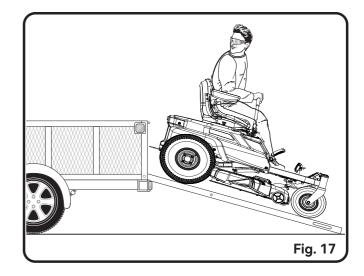
Use extra care when loading or unloading the machine into a trailer. Press the low speed drive button and careful-ly move the drive levers as needed to control the speed. Always back onto the trailer when loading. When loading or unloading the mower, do not exceed the maximum recommended operation angle of 12°. Failure to follow these instructions can result in loss of control and result in death, serious personal injury, or property damage.

## A WARNING:

Use care when loading or unloading the mower onto a trailer. Ensure the cutting deck is raised to the highest position so that it is not caught on the ramp. The wheels on the mower can go off the ramp or trailer, causing the mower to pivot or tip over, and result in a crush hazard that can cause death or serious personal injury.

Park the mower on a level surface.

Raise the cutting deck to the highest position.



Position and secure ramp to the trailer according to manufacturer's instructions. NOTE: We recommend you use one full width

loading ramp that is at least 1 ft. wider than the mower to minimize the risk of the mower's wheels going off the side of the ramp.

- Slowly back the mower onto the ramp and into the trailer.
- Lower mower deck completely.
- Set the parking brake.
- Turn off mower and remove key.
- Secure the mower as needed using straps or cables to prevent movement during transport.

## WARNING:

To avoid accidental starting or movement that could result in serious personal injury, always remove the start key and set the parking brake when transporting the mower.

# **WARNING**:

Before performing any maintenance, stop the mower on a level surface, wait for the blades to come to a complete stop, set the parking brake, and remove the start key to avoid accidental starting and possible serious personal injury.

# A WARNING:

Always wear eye protection with side shields marked to comply with ANSI Z87.1. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

# WARNING:

When servicing, use only authorized replacement parts. Use of any other parts can create a hazard or cause product damage.

# WARNING:

Strictly adhere to all torque wrench tightening specifica-tions. Failure to do so could cause serious personal injury.

## NOTICE:

Periodically inspect the entire product for damaged, missing, or loose parts such as screws, nuts, bolts, caps, etc. Tighten securely all fasteners and caps and do not operate this product until all missing or damaged parts are replaced. Please contact customer service or an authorized service center for assistance.

## **GENERAL MAINTENANCE**

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

# WARNING:

Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken, or destroy plastic which can result in serious personal injury.

Remove any build-up of grass and leaves on or around the motor cover. Wipe the mower clean with a dry cloth occasionally. Do not use water.

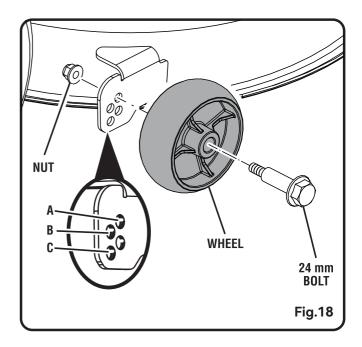
## ADJUSTING CUTTING DECK WHEELS

#### See Figure 18.

The cutting deck wheels should be positioned approximately 12.7mm. off the ground when the mower is at the desired cutting height. This will minimize the chance of scalping the lawn in most situations. When shipped, the wheels are positioned in Position A.

### To adjust the cutting deck wheels:

- Park the mower on a level surface and set the parking brake.
- Stop the motor and remove the start key. Allow blades to come to a complete stop.
- Raise the cutting deck to the desired height setting.
- Remove nut and bolt holding cutting deck wheel in place.
- Move wheel to desired position. Available hole positions are 38mm. (A), 45mm. (B) and 57mm. (C).
- Replace bolt and nut; tighten securely. Torque nut to 38N.m.
- Repeat with remaining cutting deck wheel, making sure both wheels are installed in the same position.



## **REPLACING CUTTING BLADES**

See Figures 19 - 20.

## A WARNING:

Only use replacement blades and blade bolts authorized by the manufacturer of your riding mower. Unauthorized blades and/or blade bolts could break, allowing the blade to come loose, resulting in possible serious personal injury and damage to the mower.

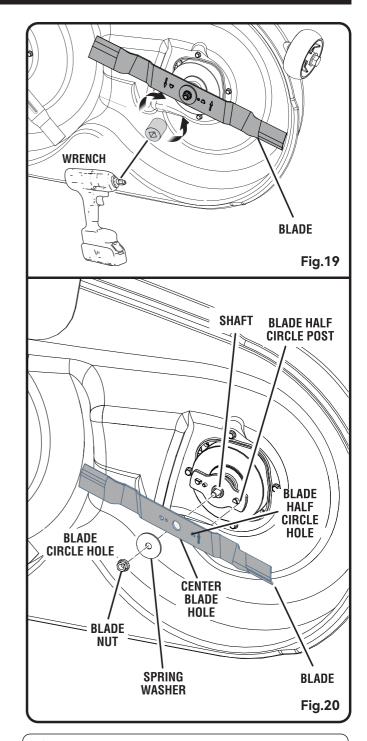
**NOTE:** Make certain all parts are replaced in the exact order in which they were removed.

- Make sure drive levers are in open position and blade engage knob is down.
- Stop the motor, remove the start key, and set the parking brake.
- Raise the height of the cutting deck to its highest position to allow access to blades.
   NOTE: If necessary, raise the mower by placing on a lift or using a jack and jack stands to gain access to the blades.

# A WARNING:

If raising the mower to access the blades, make sure the mower is properly secured and the parking brake is set before proceeding. Failure to properly secure the mower could cause it to fall, resulting in death or possible serious personal injury.

- Wedge a block of wood between the blade and mower deck to prevent the blade from turning.
- Loosen the blade nut by turning it counterclockwise (as viewed from bottom of mower) using a 15 mm wrench or socket (not provided).
- Remove the blade nut, spring washer, and blade.
- Place the new blade on the shaft against the corresponding blade posts. Ensure blade is properly seated with shaft going through center blade hole and the two blade posts inserted into their respective holes on the blade. Make sure it is installed with the curved ends pointing up toward the mower deck and not down toward the ground. When seated properly, the straight sides should be aligned and the blade should be flat against the blade posts.
- Replace the spring washer, then thread the blade nut on the shaft and finger tighten.
- Torque the blade nut down clockwise using a torque wrench (not provided) to ensure the bolt is properly tightened. The recommended torque for the blade nut is 70N.m.



## WARNING:

Ensure blade is properly seated and the blade nut is tightened to the torque specifications above. Failure to properly attach the blade could cause it to come loose and result in possible serious personal injury.

Repeat with second blade, if needed.

### TIRE MAINTENANCE

This mower is equipped with tubeless tires of the size and type listed below:

	Front	Rear
Size	13x5x6	20x8x8

### **Tire Air Pressure**

Check the air pressure in all tires before use. Improper air pressure will affect handling, steering response, traction, tire life, level cutting, and operator comfort. Be sure tires are inflated to the pressure shown below.

**NOTE:** Tire pressure should only be measured or adjusted when tires are cold.

Recommended	Front	Rear
Pressure	15 PSI (RI42) 19PSI (R	RI54) 20 PSI

## WARNING:

Check the tire pressure carefully while inflating. Too much air in the tire could cause the tire to burst, causing seri-ous personal injury.

# WARNING:

Maintaining correct air pressure in the tires is very impor-tant. Too little pressure could allow the tire to rotate off the wheel rim. Too much pressure could cause the tire to burst. Failure to maintain correct air pressure in the tires could cause problems with mower operation and stability, causing death or serious personal injury.

### **TIRE REPAIR**

If a leak or flat tire occurs due to a puncture, the tire may be repaired using a plug-type patch. If the damage is from a cut, or if the puncture cannot be repaired using a plug, the tire should be replaced.

#### **REPLACING TIRES**

When tires are worn, the traction of the mower will be de-creased, which increases the chance of having an accident. Tires should be replaced when the depth on the tread is 1.6mm or less, or any time there is damage to the tire. Always use identical replacement tires. Using improper tires on the mower could cause loss of control, which could cause serious personal injury.

Have tires replaced by an authorized service center or a qualified tire repair station

### ADJUSTING THE BRAKES

See Figure 21.

## **DANGER**:

Ensure the brakes are properly functioning at all times and prior to each use. Improper brake function can cause loss of control in an emergency situation and result in death or serious personal injury.

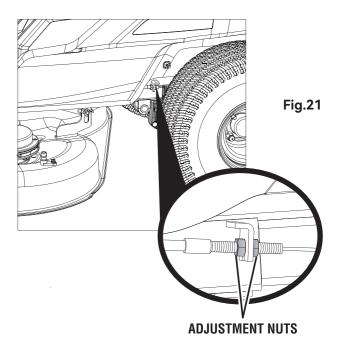
Being able to stop the mower properly is critical to mowing safety. If you've noticed your mower traveling farther before stopping when you depress the brake pedal, the brakes may need adjusting. **To test:** 

- Park the mower on a level surface and set the parking brake.
- Place the drive levers in the open position.
- Stand behind the mower and try to push it forward. If the rear tires turn, the brakes need to be tightened.

#### To tighten:

- Locate the brake adjustment nuts along the frame in front of each of the rear wheels.
- Turn each adjustment nut 1/4 turn clockwise, then try again to push the mower.
- Continue rotating each nut 1/4 turn and testing until the mower can no longer be moved by pushing.

After final adjustment, test the brakes by driving the mower at normal speed on flat ground to be sure the mower stops quickly when the brake pedal is depressed.



## LEVELING THE CUTTING DECK

#### See Figures 22 - 23.

If your lawn appears unevenly cut after using the mower, the cutting deck may need adjusting. Before deciding that leveling the cutting deck is necessary, make sure tires are properly inflated to the recommended PSI when mowing. Over- or under-inflated tires can affect the appearance of the cut, and proper inflation of the tires may be all that is needed to resolve uneven cutting issues.

**NOTE:** Always check side-to-side alignment and adjust as needed before measuring and adjusting front to back.

### Before beginning:

Make sure drive levers are in open position and blade engage knob is down.

■ Stop the motor, allow the blades to come to a complete stop, remove the start key, and set the parking brake.

Raise the height of the cutting deck to its highest position.

### To make side-to-side adjustment:

■ Position the blades so that the ends point toward the sides of the mower.

■ On the outside edge of each blade, measure the distance from the bottom edge of the side of the blade to the ground. If the distance between the two sides is greater than 5mm., a side-to-side adjustment is necessary.

■ On the side you wish to adjust, loosen the jam nuts as shown.

■ Turn the adjustment nuts clockwise to raise or counter-clockwise to lower the side of the cutting deck. Each full turn of the adjustment nut will change the deck height approximately 1.5mm.

NOTE: If raising the side, you will need to turn the top adjustment nut first. If lowering, turn the bottom nut first.

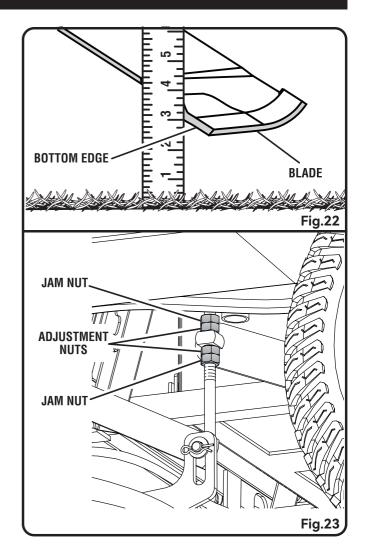
■ Measure again. Continue to adjust and measure until the difference between the distance on each side is 5mm. or less.

■ Proceed to front-to-back adjustment or re-tighten jam nuts to secure.

### To make front-to-back adjustment:

**NOTE:** Always level the deck side to side before making a front to back adjustment.

- Position the blade nearest the side discharge chute so that the ends now point toward the front and back of the mower.
- Measure the distance from the tip of the blade to the ground. For best results, the front tip of the blade should be from 6mm to 12mm. lower than the rear tip.



- If front-to-back adjustment is needed, turn the adjustment nuts clockwise to raise or counterclockwise to lower the back of the cutting deck. Each full turn of the adjustment nut will change the deck height approximately 1.5mm.
   NOTE: Make sure to turn the adjustment nuts on both sides equally to prevent throwing the side-to-side mea-surement off again.
- Measure again to verify the front tip is now 6mm to 12mm. lower than the rear tip. If not, continue to adjust and measure until they are.
- Without moving the adjustment nuts, re-tighten the jam nuts to secure the adjustment nuts in place.

### ADJUSTING THE DRIVE LEVERS

#### See Figure 24.

To maximize operator comfort and control, the height and angle of the mower drive levers can be adjusted.

## To adjust the drive lever height:

- Remove the hex head bolts from the drive lever mounting bracket.
- Shift the drive lever up or down as needed.
- Reinstall the bolts and tighten securely.

### To change the drive lever angle:

- Loosen the hex head bolts on the drive lever mounting bracket, but do not remove.
- Move the lever forward or backward to achieve the desired angle.
- Retighten the bolts to secure.

**NOTE:** Always keep both drive levers at the same height and angle. Neutral position for the drive levers should always be even.

### **STORING THE MOWER**

The following steps should be taken before storing the mower for the season.

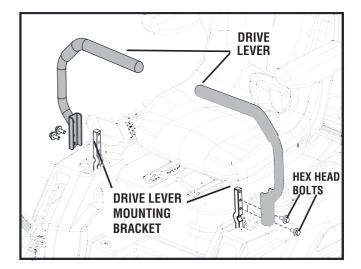
- Remove any build-up of grass and leaves on or around the motor cover. Wipe the mower clean with a dry cloth. Do not spray with a garden hose, water, or liquids to clean.
- Plug the mower up to charge for the entire time of storage.

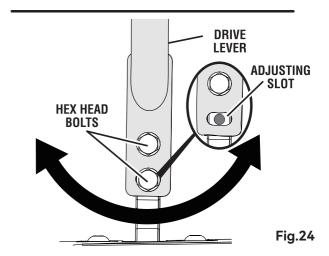
**NOTE:** If it is not possible to leave the mower charger connected during storage, charge the batteries at least once a month during storage.

Store mower in a clean, dry place that is inaccessible to children. Do not store near any appliance that operates with flame such as a gas water heater, clothes dryer, or furnace.

**NOTE:** Set the parking brake and do not leave the key in the mower during storage. Place the key in a location that is inaccessible to children.

- If the mower must be stored outside, make sure it is covered completely to protect it from the elements.
- Keep away from corrosive agents such as garden chemi-cals and de-icing salts.





### PREPARING FOR USE AFTER STORAGE

The following steps should be taken before using the mower after it has been stored:

- Review maintenance chart.
- Fully charge the batteries.
- Check tire pressure and inflate as needed.
- Briefly drive the mower and check all systems and components to ensure they are functioning correctly.

# BATTERY REMOVAL AND PREPARATION FOR RECYCLING

To preserve natural resources, please recycle or dispose of batteries properly.

This product uses Lithium battery. Local, state or federal laws may prohibit disposal of batteries in ordinary trash.

Consult your local waste authority for information regarding available recycling and/or disposal options.

# **WARNING**:

Upon removal, Do not attempt to destroy or disassemble battery or remove any of its components. Lithium battery must be recycled or disposed of properly. Also, never touch both terminals with metal objects and/or body parts as short circuit may result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.

	Inspect Before Each Use	Every 25 Hours	Every 50 Hours or Yearly	Every 100 Hours	Before Storage
Check Brake Operation	Х				
Check Tire Pressure	Х				
Check Safety Interlock System	Х				
Check for Loose Fasteners	Х				Х
Clean Debris From Mower	Х		Х		Х
Check/Replace Mower Blades		Х	Х		

## MAINTENANCE SCHEDULE

NOTE: Maintenance should be performed more frequently when mower is used in dusty areas.

When mower has exceeded the maximum figures specified in the table, maintenance should still be cycled according to the intervals of time or hours stated herein.

If you are unsure how to perform any of the maintenance items listed above, take the mower to an authorized service center for assistance.

# TROUBLESHOOTING

## IF THESE SOLUTIONS DO NOT SOLVE THE PROBLEM CONTACT YOUR AUTHORIZED SERVICE DEALER.

PROBLEM	PROBLEM	SOLUTION	
Mower not starting.	Battery charge is low. Charger is connected to mower. Start key not installed or is in OFF position. Poor battery cable connections.	Charge the battery. Disconnect charger from mower. Install start key and turn to ON position. Check/clean all battery connections.	
Mower won't move.	Start key not installed or is in OFF position. Drive levers are in neutral or open position. Brake is depressed and/or parking brake is engaged. Charger is connected to mower. Operator is not fully seated.	Install start key and turn to ON position. Move the drive levers in desired direc-tion (forward or reverse). Release the brake pedal and/or the parking brake, then open and close the drive levers to reset. Disconnect charger from mower. Sit down fully on the seat, return the drive levers to the neutral position, then try again.	
Mower cutting grass unevenly.	Uneven tire pressure. Mower deck not level. Worn, bent, loose, or dull blade. Build-up of debris under mower deck. Mowing speed is too fast.	Check tire pressure in all four tires. Perform cutting deck level adjustment. Replace blade. Clean underside of mower deck. Mow at a slower speed.	
Mower not mulching properly.	Wet grass clippings sticking to the underside of the deck. Grass is too high. Worn, bent, loose, or dull blade. Mowing speed is too fast.	Wait until the grass dries before mowing. Mow once at a high cutting height, then mow again at the desired height. Replace blade. Mow at a slower speed.	
Mower vibrating at higher speed.	Blade is unbalanced, loose, or exces-sively or unevenly worn. Bent motor shaft.	Replace the blade. Stop the motor and remove start key. Inspect for damage. Have repaired by an authorized service center before restarting.	
Poor grass discharge.	Side discharge chute or opening is plugged. Grass is wet. Mowing speed is too fast. Grass is too high.	Clean side discharge chute and/or opening. Allow grass to dry before mowing. Mow at a slower speed. Mow once at a high cutting height, then mow again at the desired height.	

# TROUBLESHOOTING

PROBLEM	PROBLEM	SOLUTION	
Motor stops while cutting.	Cutting height set too low. Battery charge is low. Operator is not fully seated.	Raise the cutting height. Charge the battery. Sit down fully on the seat, return the drive levers to the neutral position, and push the blade engage knob down. Then try again.	
Blades do not rotate.	Battery charge is low. Blade engage knob is down. Operator is not fully seated. Build-up of debris under mower deck.	Charge the battery. Raise blade engage knob. Sit down fully on the seat, return the drive levers to the neutral position, and push the blade engage knob down. Then try again. Clean underside of mower deck.	
Blades do not rotate while moving in reverse.	Blade engage knob is down.	Raise blade engage knob.	
Mower won't reach full speed.	Battery charge is low. Low speed drive feature.	Charge the battery. Choose low speed drive.	
Blades continue to turn after operator leaves seat without parking brake set.	Safety interlock system is not func-tioning correctly.	Ensure safety interlock system seat plug is fully connected. If blades still won't stop, take mower to authorized service center for repair.	
Headlights not working.	Headlights are off. Headlights are damaged.	Press headlight button to turn head-lights on. Have headlights replaced at an autho-rized service center.	
Battery will not charge.	Bad battery cells. Poor cable connections.	Replace battery. Check/clean all battery connections.	

If problem persists after trying the above solutions, contact customer service or an authorized service center for assistance.

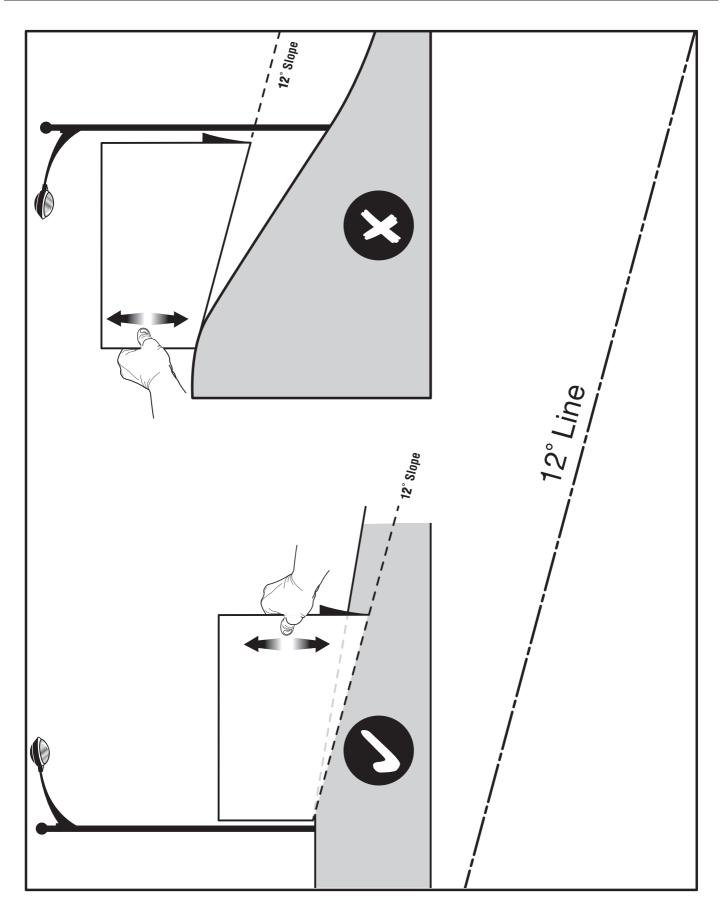
# SLOPE GUIDE

# **WARNING:**

Slopes are a major factor related to tip-over and roll-over accidents that can result in severe injury or death. Operation on all slopes requires extra caution. If you cannot back up the slope or if you feel uneasy on a slope, do not mow it. For your safety, do not attempt to mow slopes greater than 12 degrees. Do not operate in reverse down a slope, unless the mower stops while going uphill. In that situation, stop the blades, look behind you, and back up slowly. Make a copy or cut out the slope guide image on the back of this page and use to determine if your slope is too steep for safe operation.

- Fold page on dotted line.
- Locate a vertical object on or behind your slope (i.e., pole, building, fence, tree, etc.).
- Align either edge of slope guide with vertical object.
- Adjust gauge until bottom left corner touches the slope.
- Do not attempt to mow slopes greater than 12 degrees.

# SLOPE GUIDE



# NOTES / NOTAS
