

Zoom[®]

Operator's Manual
Manuel du Utilisateur

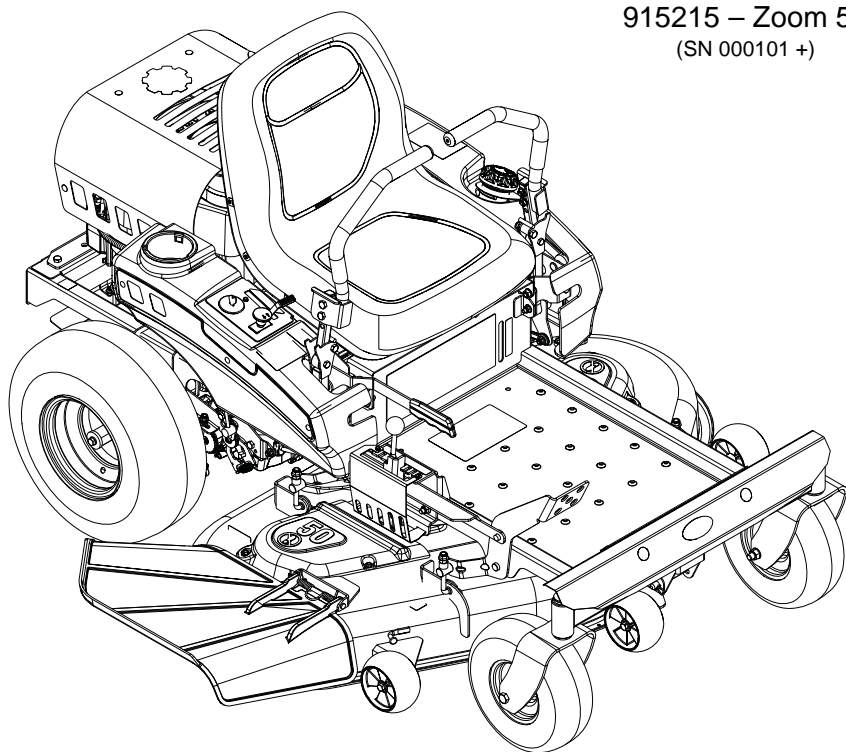


Models

915211 – Zoom 34
(SN 000101 +)

915213 – Zoom 42
(SN 000101 +)

915215 – Zoom 50
(SN 000101 +)



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INTRODUCTION

THE MANUAL

Before operation of unit, carefully and completely read your manuals. The contents will provide you with an understanding of safety instructions and controls during normal operation and maintenance.

All reference to left, right, front, or rear are given from operator seated in operation position and facing the direction of forward travel.

ENGINE MANUAL

The engine on this unit is covered by a separate manual specific to the engine. This manual is included in the literature package that shipped with the unit. Refer to this manual for engine service recommendations. If the engine manual is not available, contact the engine manufacturer for a replacement manual.

MODEL AND SERIAL NUMBERS

When ordering replacement parts or making service inquiries, know the Model and Serial numbers of your unit and engine.

Numbers are located on the product registration form in the unit literature package. They are printed on a serial number label, located on the frame of your unit under the seat (Figure 1).



- Record unit model and serial numbers here.

- Record engine model and serial numbers here.

PRODUCT REGISTRATION

The Ariens dealer must register the product at the time of purchase. Registering the product will help the company process warranty claims or contact you with the latest service information. All claims meeting requirements during the limited warranty period will be honored, whether or not the product registration card is returned. Keep a proof of purchase if you do not register your unit.

Customer Note: If the dealer does not register your product, please fill out, sign and return the product registration card to Ariens or go to www.ariens.com on the Internet.

UNAUTHORIZED REPLACEMENT PARTS

Use only Ariens replacement parts. The replacement of any part on this unit with anything other than an Ariens authorized replacement part may adversely affect the performance, durability, and safety of this unit and may void the warranty. Ariens disclaims liability for any claims or damages, whether warranty, property damage, personal injury or death arising out of the use of unauthorized replacement parts.

NOTE: A complete Parts manual may be downloaded from www.ariens.com on the Internet.

DELIVERY

Customer Note: If you have purchased this product without complete assembly and instruction by your retailer, it is your responsibility to:

- Read and understand all assembly instructions in this manual. If you do not understand or have difficulty following the instructions, contact your nearest Ariens dealer for assistance.

NOTE: To locate your nearest Ariens dealer, go to ariens.custhelp.com on the Internet.



WARNING: Improper assembly or adjustments can cause serious injury.

Before Attempting to Operate Your Unit:

1. Make sure all assembly has been properly completed.
2. Understand all Safety Precautions provided in the manuals.
3. Review control functions and operation of the unit. Do not operate the unit unless all controls function as described in this manual.
4. Review recommended lubrication, maintenance and adjustments.
5. Review Limited Warranty Policy.
6. Fill out a product registration card and return the card to the Ariens Company or go to www.ariens.com.

DISCLAIMER

Ariens reserves the right to discontinue, change, and improve its products at any time without notice or obligation to the purchaser. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your unit.

SAFETY



WARNING: This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the safety instructions in the manuals and on decals could result in serious injury or death.

Slopes are a major factor related to loss-of-control and tip-over accidents. Operation on all slopes requires extra caution.

Tragic accidents can occur if the operator is not alert to the presence of children. Never assume that children will remain where you last saw them.

Gasoline is extremely flammable and the vapors are explosive, handle with care.

Disengage attachment, stop unit and engine, remove key, engage parking brake, and allow moving parts to stop before leaving operator's position.



CAUTION: POTENTIALLY HAZARDOUS SITUATION! If not avoided, MAY RESULT in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTATIONS

NOTE: General reference information for proper operation and maintenance practices.

IMPORTANT: Specific procedures or information required to prevent damage to unit or attachment.

SAFETY DECALS AND LOCATIONS

ALWAYS replace missing or damaged Safety Decals. Refer to Figure 5 for safety decal locations.

SAFETY ALERTS



Look for these symbols to point out important safety precautions. They mean:



- **Attention!**
- **Personal Safety Is Involved!**
- **Become Alert!**
- **Obey The Message!**

The safety alert symbol is used in decals and with this manual. Understand the safety message. It contains important information about personal safety.



WARNING: POTENTIALLY HAZARDOUS SITUATION! If not avoided, COULD RESULT in death or serious injury.



DANGER: IMMINENTLY HAZARDOUS SITUATION! If not avoided, WILL RESULT in death or serious injury.

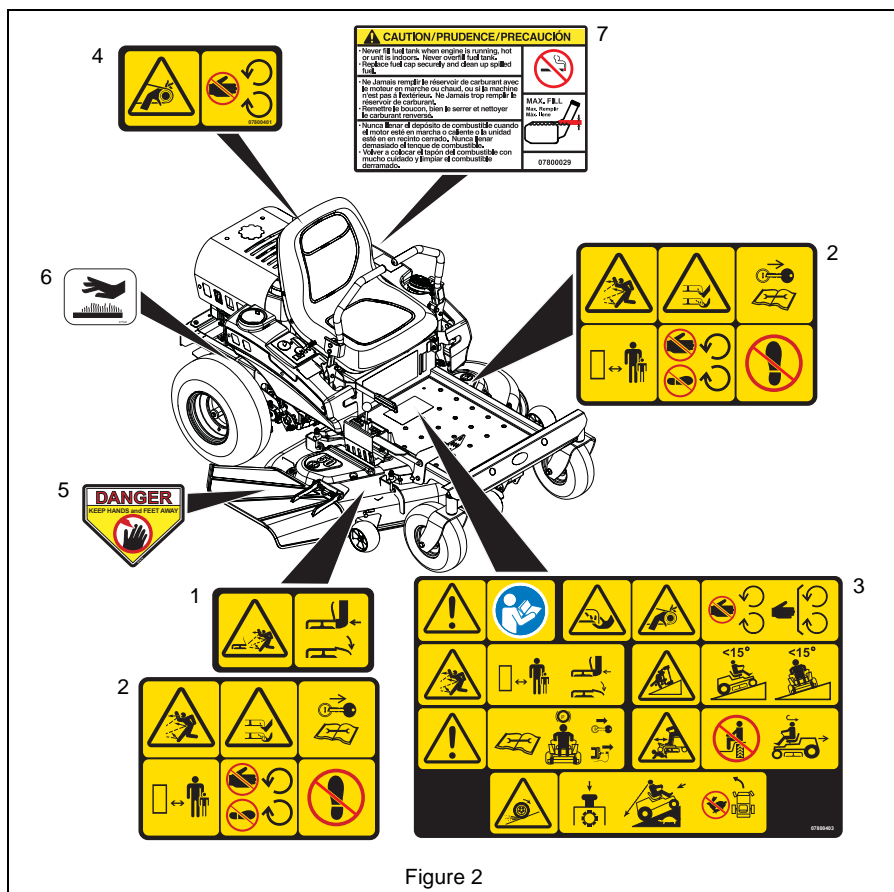

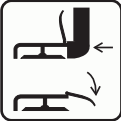


Figure 2

1. DANGER!




Discharge Hazard - NEVER operate unit without discharge chute in operating position. Thrown objects can cause injury or damage.




Do not operate mower unless all guards are in operating position or bagger is attached.


2. DANGER!



Discharge Hazard - NEVER direct discharge toward people, pets or property. Thrown objects can cause injury or damage.



Dismemberment Hazard - NEVER stick hands or feet under deck or shielded areas.



Shut off engine, remove key, and read manual before servicing or making adjustments to unit.



Keep children and others away from unit while unit is in operation.



Keep feet and hands away from all rotating or moving parts.




DO NOT step or stand in this area.

3. DANGER!




DANGER!



Read and understand the operator's manual before operating unit.

3.1 Amputation Hazard



To avoid amputation hazard do not put hands near rotating blades.



To avoid amputation hazard do not put hands near moving belts.



Keep hands away from all rotating or moving parts.



Keep all guards and shields in place.

3.2 Discharge Hazard



Discharge Hazard - NEVER direct discharge toward people, pets or property. Thrown objects can cause injury or damage.



Keep children and others away from unit while unit is in operation.



Do not operate mower unless all guards are in operating position or bagger is attached.

3.3 Tipping Hazard



Avoid tipping hazard.



DO NOT operate on slopes over 15°.



DO NOT operate on slopes over 15°.

3.4 Service Hazard



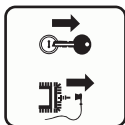
Before servicing unit do the following:



Read owners manual before servicing or making adjustments to unit.



Set parking brake.



Remove key and disconnect spark plug before servicing or making adjustments to unit.

3.5 Bystander Hazard



DO NOT operate the unit in the presence of bystanders.



Do not carry passengers.

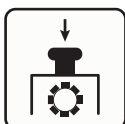


Look behind when operating the unit in reverse.

3.6 Loss of Traction Hazard



If loss of traction is experienced do the following:



Disengage PTO.



Proceed off slope slowly.



Do not try to turn or speed up.

4. DANGER!



To avoid dismemberment hazard do not put hands near moving belts.



Keep hands away from all rotating or moving parts.

5. DANGER!



DANGER!



ALWAYS Keep hands and feet away from discharge chute.



Dismemberment Hazard - NEVER put hands or feet beneath guards and or shields.

6. DANGER!

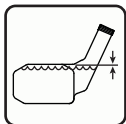


DO NOT touch parts which are hot from operation. ALWAYS allow parts to cool.

7. CAUTION!



No smoking.



IMPORTANT: DO NOT overfill.

Fill fuel tank to below bottom of filler neck.



WARNING: Overfilling may cause severe damage to evaporative system!

- Never fill fuel tank when engine is running, hot or unit is indoors. Never overfill fuel tank.
- Replace fuel cap securely and clean up spilled fuel.

EMISSION CONTROL SYSTEM

This equipment and/or its engine may include exhaust and evaporative emissions control system components required to meet U.S. Environmental Protection Agency (EPA) and/or California Air Resources Board (CARB) regulations. Tampering with emission controls and components by unauthorized personnel may result in severe fines or penalties. Emission controls and components can only be adjusted by an Ariens Company dealer or an authorized engine manufacturer's service center. Contact your Ariens Company Equipment Retailer concerning emission controls and component questions.

SAFETY RULES

The following safety instructions are based on the B71.1 specifications of the American National Standards Institute in effect at the time of production.

Training

Read, understand, and follow all instructions on the machine and in the manual(s) before starting.

Be sure the area is clear of bystanders and pets before operating. Stop machine if anyone enters the area.

Improper use of power equipment can cause serious permanent injury or death to the operator or a bystander.

Understand:

- How to operate all controls
- The functions of all controls
- How to STOP in an emergency
- Braking and steering characteristics
- Turning radius and clearances

If the operator or the mechanic cannot read the manual, it is the owner's responsibility to explain it to them.

ALWAYS train any inexperienced operators and require them to read and understand all manuals and decals.

Only allow responsible adults, who are familiar with the instructions, to operate this machine.

Only the operator can prevent and is responsible for accidents or injuries occurring to themselves, other people or property.

Operator Age

DO NOT allow children under the age of 18 to operate any outdoor power equipment.

Local regulations may restrict the age of the operator.

Data indicates operators age 60 years and above are involved in a large percentage of riding mower-related injuries.

These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.

Children	Inspect unit before each use for missing or damaged decals and shields, correctly operating safety interlock system, and deterioration of grass catchers. Replace or repair as needed.
Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. NEVER assume that children will remain where you last saw them.	Ensure Safety Interlock System is functioning properly. DO NOT operate unit if safety interlock is damaged or disabled.
Be alert and turn machine off if a child enters the area.	Start and operate unit only when seated in operator's position. Steering control levers must be in neutral, PTO disengaged and parking brake set when starting engine.
Before and while backing, look behind and down for small children.	NEVER interfere with the intended function of a safety device or reduce the protection provided by a safety device. Check their proper operation regularly.
NEVER carry children, even with the blade(s) shut off. They may fall off and be seriously injured or interfere with safe machine operation. 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 machine.	Keep machine free of grass, leaves or other debris build-up. Clean up oil or fuel spillage and remove any fuel-soaked debris.
NEVER allow children to operate the machine.	Operation
Use extreme care when approaching blind corners, shrubs, trees or other objects that may block your view of a child.	Be sure the area is clear of bystanders before operating. Stop machine if anyone enters the area.
Keep children out of the mowing area and in the watchful care of a responsible adult other than the operator.	NEVER operate machine in a closed or poorly-ventilated area.
Personal Protection	ALWAYS maintain unit in safe operating condition. Damaged or worn out muffler can cause fire or explosion.
DO NOT wear loose clothing or jewelry and tie back hair that may get caught in rotating parts.	This product is equipped with an internal combustion type engine. DO NOT use unit on or near any unimproved, forest-covered or brush-covered land unless exhaust system is equipped with a spark arrester meeting applicable local, state or federal laws. A spark arrester, if it is used, must be maintained in effective working order by operator.
Wear adequate outer garments.	DO NOT operate machine while under the influence of alcohol or drugs.
NEVER wear open sandals or canvas shoes during operation. Wear adequate safety gear, protective gloves and footwear.	DO NOT put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.
Wear proper footwear to improve footing on slippery surfaces.	DO NOT touch parts which are hot. Allow parts to cool.
ALWAYS wear eye and ear protection when operating machine.	DO NOT operate machine without the entire grass catcher, discharge guard or other safety devices in place and working.
Before Operating	ALWAYS keep hands and feet away from all pinch points.
Keep all nuts and bolts tight to be sure the equipment is in safe working condition.	Avoid slippery surfaces. ALWAYS be sure of your footing.
Maintain the machine to be in compliance with the maintenance schedule.	NEVER carry passengers.
Clean grass and debris from unit, especially from around muffler and engine, to help prevent fires.	
Check parking brake operation frequently. Adjust and service as required.	

NEVER direct discharged material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Stop the blade(s) when crossing gravel surfaces.

NEVER engage PTO when attachment, including mower blades, is not in use. ALWAYS turn off power to attachment when not in active use such as traveling or crossing driveways.

ALWAYS disengage PTO, stop unit and engine, remove key, engage parking brake and allow moving parts to stop before leaving operator's position.

NEVER engage PTO while raising the attachment, including mower blades, or when attachment is in the raised position.

Keep safety devices or guards in place and functioning properly. NEVER modify or remove safety devices.

DO NOT mow in reverse unless absolutely necessary. ALWAYS look down and behind before and while backing.

Stop engine before removing grass catcher or unclogging chute.

Slow down before turning.

If you strike a foreign object, stop and inspect the machine. Repair, if necessary, before restarting.

NEVER leave a running machine unattended. ALWAYS turn off blade(s), set parking brake, stop engine and remove key before dismounting.

Disengage blade(s) when not mowing. Shut off engine and wait for all parts to come to a complete stop before cleaning the machine, removing the grass catcher, or unclogging the discharge guard.

Know the weight of loads. Limit loads to those you can safely control and the unit can safely handle.

Operating Conditions

ALWAYS check overhead and side clearances carefully before operation.

Watch for traffic when operating near or crossing roadways.

Clear the area of objects such as rocks, wire, toys, etc., which could be thrown by the blades.

Check for weak spots on docks, ramps or floors. Avoid uneven work areas and rough terrain. Stay alert for hidden hazards or traffic.

Use care when approaching blind corners, shrubs, trees or other objects that may obscure vision.

Dust, smoke, fog, etc. can reduce vision and cause an accident.

Operate machine only in daylight or good artificial light.

Slope Operation

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 operate on slopes of more than 15°.

Mow up and down slopes, not across.

ALWAYS keep the machine in gear when going down slopes. DO NOT shift to neutral and coast downhill.

Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could overturn the machine. Tall grass can hide obstacles.

DO NOT mow on moist or wet grass. Tires may lose traction causing a loss of control.

Use extra care while operating machine with grass catchers or other attachments; they can affect the stability of the machine. DO NOT use on steep slopes.

Keep all movements on the slope *slow* and *gradual*. DO NOT make sudden changes in speed or direction, which could cause the machine to roll over.

Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the blade(s) and proceed slowly straight down the slope.

Operation on slopes may lead to loss of steering control. When operating on slopes be prepared to react to an emergency situation:

- Return steering levers to neutral position.
- Immediately set parking brake.
- Turn off PTO and engine.

DO NOT try to stabilize the machine by putting your foot on the ground.

DO NOT park on slopes unless necessary. When parking on slope ALWAYS chock or block wheels. ALWAYS set parking brake.

Choose a low ground speed so you will not have to stop or shift while on a slope.
DO NOT mow near drop-offs, ditches, or embankments. The machine could suddenly roll over if a wheel goes over the edge or if the edge caves in.
DO NOT bypass transmission or allow transmission to free-wheel when on a slope.

Fuel

To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.

Ethanol blends must not exceed E10. Higher ethanol content may cause your machine to run hotter and damage your engine.

Replace fuel cap securely and clean up spilled fuel before starting engine.

Extinguish all cigarettes, cigars, pipes and other sources of ignition.

Use only an approved gasoline container.

NEVER store the machine or fuel container where there is an open flame, spark or pilot light such as on a water or space heater or other appliances.

NEVER fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. ALWAYS place containers on the ground away from your vehicle before filling.

NEVER fuel the machine indoors.

NEVER remove gas cap or add fuel with the engine running. Allow engine to cool before fueling.

Fuel is highly flammable and its vapors are explosive. Handle with care. Use only an approved gasoline container with an appropriately-sized dispensing spout. NO smoking, NO sparks, NO flames.

Remove gas-powered equipment from the trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a gasoline dispenser nozzle.

Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until the fueling is complete. DO NOT use a nozzle lock-open device.

NEVER overfill fuel tank. Replace gas cap and tighten securely.

If fuel is spilled on clothing, change clothing immediately.

Towing

Follow the manufacturer's recommendations for weight limits for towed equipment and towing on slopes.

NEVER allow children or others in or on towed equipment.

Tow only with a machine that has a hitch designed for towing. DO NOT attach towed equipment except at the hitch point.

On slopes, the weight of the towed equipment may cause loss of traction and loss of control.

Travel slowly and allow extra distance to stop.

Accessories

Follow the manufacturer's recommendation for wheel weights or counterweights

Check grass catcher components and the discharge guard frequently and replace with the manufacturer's recommended parts, when necessary.

Use only Ariens Company-recommended attachments that are appropriate to your use and can be used safely in your application.

Batteries

Avoid electric shock. Objects contacting both battery terminals at the same time may result in injury and unit damage. DO NOT reverse battery connections.

Reverse connections may result in sparks which can cause serious injury. ALWAYS connect positive (+) lead of charger to positive (+) terminal, and negative (-) lead to negative (-) terminal.

ALWAYS disconnect negative (-) cable FIRST and positive (+) cable SECOND. ALWAYS connect positive (+) cable FIRST, and negative (-) cable SECOND.

Explosive gases from battery can cause death or serious injury. Poisonous battery fluid contains sulfuric acid and its contact with skin, eyes or clothing can cause severe chemical burns.

No flames, No sparks, No smoking near battery.

ALWAYS wear safety glasses and protective gear near battery. Use insulated tools.
ALWAYS keep batteries out of reach of children.
Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the state of California to cause cancer and reproductive harm. Wash hands after handling.

Service

Maintain or replace safety and instruction labels as necessary.
Keep unit free of debris. Clean up oil or fuel spills.
ALWAYS block wheels and know all jack stands are strong and secure and will hold weight of unit during maintenance.
Release any pneumatic or hydraulic pressure from components slowly.
NEVER attempt to make any adjustments to unit while engine is running (except where specifically recommended). Stop engine, remove key and spark plug wire and wait for all moving parts to stop before servicing or cleaning.
Lower cutting deck unless a positive mechanical lock is used.
Allow engine to cool before servicing.
Moving parts can cut or amputate fingers or a hand. On mulchblade mowers, rotation of one blade will cause all blades to rotate.
NEVER weld or straighten mower blades.
NEVER make adjustments or repairs with the engine running.
Mower blades are sharp. Wrap the blade or wear gloves, and use extra caution when servicing them.
ALWAYS keep body and hands away from pin holes or nozzles which eject hydraulic fluid under pressure.

Transporting Unit

Use extra care when loading or unloading the machine into a trailer or truck.
Secure unit chassis to transport vehicle. NEVER secure from rods or linkages that could be damaged.
DO NOT transport machine while engine is running.
ALWAYS turn off power to attachment and shut off fuel when transporting unit.

Storage

NEVER store unit with fuel in fuel tank inside a building where any ignition sources are present.
Keep machine free of grass, leaves or other debris build-up. Clean up oil or fuel spillage and remove any fuel-soaked debris. Allow machine to cool before storing.
For extended storage, close fuel shut off valve and clean unit thoroughly. See engine manual for proper storage.

ASSEMBLY



WARNING: AVOID INJURY.
Read and understand the entire *Safety* section before proceeding.

Tools Required

- Adjustable wrenches
- Petroleum jelly or dielectric grease

Unpack Unit

Remove unit and all other components from the shipping container. Engage transmission bypass lever. See *MOVING UNIT MANUALLY* on page 20. Push unit from container onto a level surface. Disengage transmission bypass lever.

Connect Battery

See *Install Factory-Installed Battery* on page 27 and perform steps 4 and 6 in the installation section.

Place Unit in Operating Position

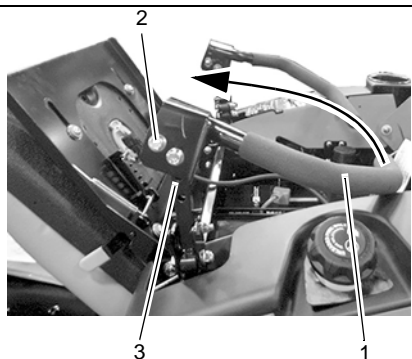
(Figure 3)

NOTE: The unit is shipped with the seat positioned as far forward as possible and in service position.

1. Remove steering lever hardware from bottom hole of the steering lever.
2. Rotate steering lever forward to align bottom hole with hole in pivot arm and reinstall hardware.

NOTE: Do not tighten hardware before reviewing *ADJUSTING STEERING LEVERS* on page 29. If no adjustment is desired, tighten hardware.

3. Push steering levers aside and tip seat into operating position.
4. Adjust the seat as needed. See *Seat Adjustment* on page 17.



1. Steering Lever
2. Steering Lever Hardware
3. Steering Pivot Arm

Figure 3

Check Engine Oil Level

Refer to Engine Manual.

Check Tire Pressure



CAUTION: Avoid injury!

Explosive separation of tire and rim parts is possible when they are serviced incorrectly:

- Do not attempt to mount a tire without the proper equipment and experience to perform the job.
- Do not inflate the tires above the recommended pressure.
- Do not stand in front or over the tire assembly when inflating. Use a clip-on chuck and extension hose long enough to allow you to stand to one side.

See Specifications on page 34.

Level Mower Deck

See *LEVELING AND ADJUSTING PITCH OF MOWER DECK* on page 24.

Fill Fuel Tank

Fill fuel tank. **DO NOT OVERFILL!** See *FILLING FUEL TANK* on page 18.

Check Safety Interlock System



WARNING: Safety interlock failure and improper operation of unit can result in death or serious injury. Check system before each use to make sure it is functioning properly.

See *Safety Interlock System* on page 16.

Check Function of all Controls

See *OPERATION* on page 16.

CONTROLS AND FEATURES

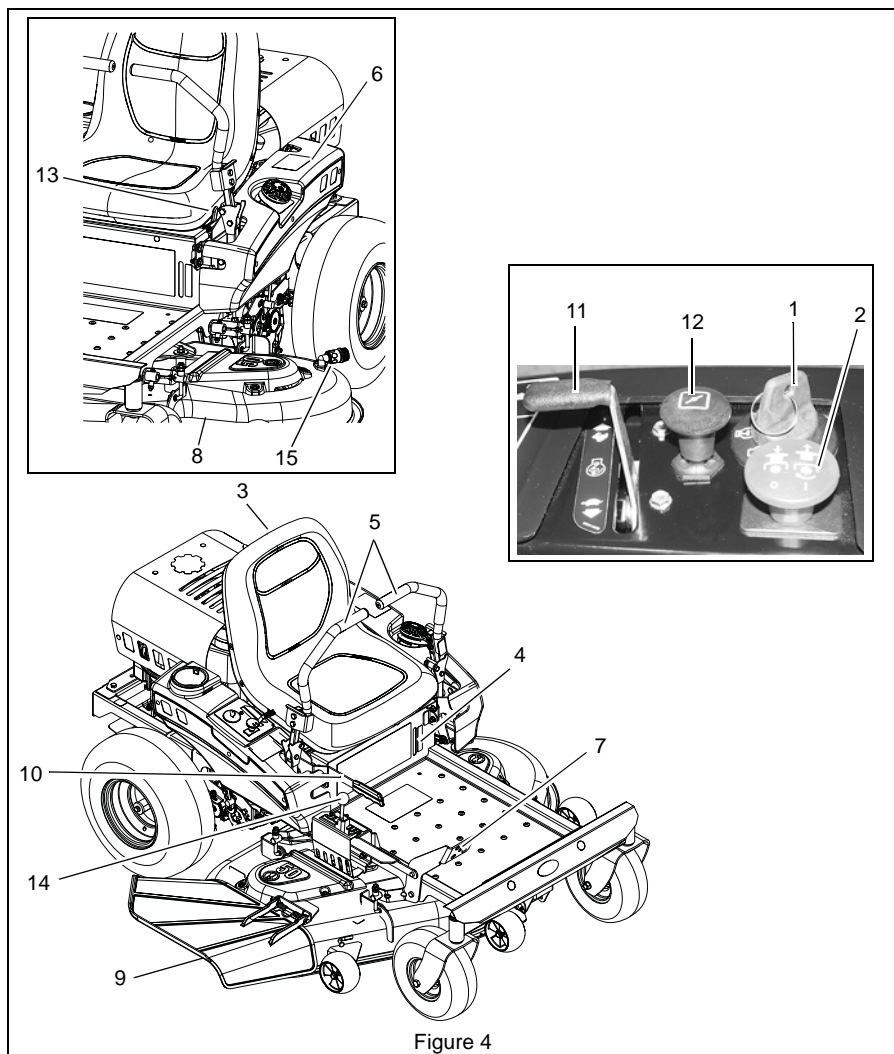


Figure 4

- | | |
|-------------------------|---|
| 1. Ignition Switch | 11. Throttle Lever |
| 2. PTO Switch | 12. Choke |
| 3. Seat | 13. Seat Adjustment Lever
(Models 915213, 215) |
| 4. Fuel Level | 14. Height of Cut Selector Lever |
| 5. Steering Levers | 15. Washout Port (Models 915213, 215) |
| 6. Fuel Tank | |
| 7. Mower Lift Pedal | |
| 8. Mower Deck | |
| 9. Discharge Chute | |
| 10. Parking Brake Lever | |

OPERATION



WARNING: AVOID INJURY.
Read and understand the entire
Safety section before proceeding.

CONTROLS AND FEATURES

See Figure 4 for all controls and features locations.

Safety Interlock System

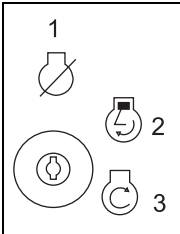


WARNING: Safety interlock failure and improper operation of unit can result in death or serious injury. Check system before each use to make sure it is functioning properly.

Perform the following tests to ensure the safety interlock system is working properly. If the unit does not perform as stated contact your Ariens dealer for repairs.

Test	Steering Lever	PTO	Parking Brake	Engine
1	Neutral Position	Off	Engaged	Starts
2	Neutral Position	On	Engaged	Doesn't Start
3	Neutral Position	Off	Disengaged	Doesn't Start
4*+	Out of Neutral Position	Off	Disengaged	Shuts Off
5*+	Neutral Position	On	Engaged	Shuts Off
* Test with engine running.		+ Operator lifts off seat.		

Ignition Switch



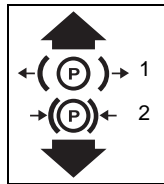
Operate ignition switch with a removable key. Ignition switch has three positions: Stop (1), Run (2), Start (3). See **STARTING AND SHUTTING OFF ENGINE** on page 19 for detailed instructions on how to start engine.

Choke



Pull choke control out to start a cold engine.
Push choke control in when engine is warm.

Parking Brake Lever



Engages (2) and disengages (1) parking brake.

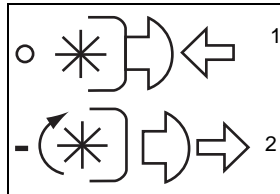
Throttle



Fast (1) – Increases engine speed.

Slow (2) – Decreases engine speed.

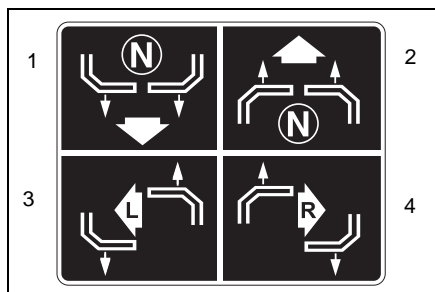
Power Take-Off (PTO) Switch



Engages (2) and disengages (1) mower blades.

Steering Levers

- Reverse (1) – Pull both steering levers backward.
- Forward (2) – Push both steering levers forward.
- Left (3) – Pull left steering lever back or push right steering lever forward or a combination of both.
- Right (4) – Pull right steering lever back or push left steering lever forward or a combination of both.



NOTE: To stop, return both steering levers to neutral.

NOTE: The steering levers must be in the neutral position to start the engine.

NOTE: The parking brake must be disengaged prior to moving the steering levers from the neutral position.

Height of Cut

(Figure 5)

1. Press the mower lift pedal to raise the deck.
2. Position height of cut selector lever at the desired setting in the height of cut bracket.
3. Release mower lift pedal.

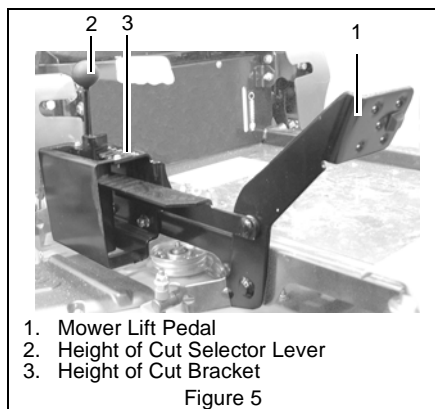


Figure 5

Seat Adjustment

Models 915213, 215

(Figure 6)

Push lever back and slide seat forward or backward to the desired position. Release lever to lock seat in position.

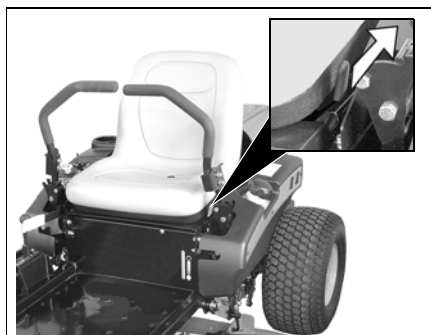


Figure 6

Seat Adjustment

Model 915211

1. Tip the seat forward. See *TIPPING SEAT FORWARD* on page 23.
2. Loosen mounting hardware and slide seat forward or backward to desired position. Tighten mounting hardware (figure 9).
3. Tip seat back.

Washout Port

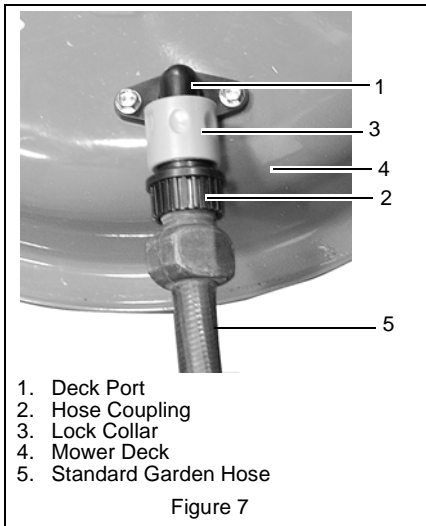
Models 915213, 215

(Figure 7)



WARNING: A broken or missing deck port can result in exposure to harmful thrown objects or blade contact. Replace broken or missing deck port before using unit. NEVER put your hands or feet under the mower or through openings in the mower.

NOTE: Wash the underside of the mower after each use to prevent grass buildup and improve mulch action and clipping dispersal.



1. Park the unit on a level surface, within reach of hose and in a location where the dispersal of wet grass clippings is acceptable.
2. Disengage the PTO switch, shut off the engine, remove key, engage parking brake and allow unit to cool for at least 30 minutes.

IMPORTANT: Do not wash the unit with water when the unit is warm from operation. Water can seep into bearings and cause damage.

3. Attach the hose coupling to a standard garden hose connected to a water supply.
4. Pull back the lock collar of the hose coupling and push the coupling onto the deck port until the coupling is tightly in place. Release the lock collar to lock the coupling to the deck port.

NOTE: Apply petroleum jelly to washout fitting O-ring to allow the coupling to slide on easier and to protect the O-ring.

NOTE: The coupling contains a valve that will not allow water flow unless coupling is attached to washout fitting. Water supply should be turned off before attaching coupling to the fitting.

5. Lower deck to lowest cutting height.
6. Turn the water supply on high.

NOTE: If water leaks excessively from hose coupling onto top of deck, coupling may not be fully seated onto washout port. Turn off water supply and repeat steps 4 through 6. Use firm pressure while installing coupling onto washout port.



WARNING: When using the deck wash system, NEVER engage the deck from any position other than the operator's seat.

DO NOT engage deck in the presence of ANY bystander.

7. From the operators seat, start the engine and engage the PTO. Allow unit to run as needed - typically 2 to 3 minutes.

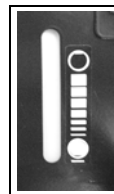
NOTE: Water spraying from discharge chute should change from green to clear when deck is clean.

8. Disengage the PTO, turn off engine, remove key and wait for all moving parts to stop.
9. Turn the water supply off and remove coupling from the washout fitting.

NOTE: If the mower deck is not clean after one washing, soak it and let stand for 30 minutes. Then repeat process.

10. After cleaning the mower deck, run the unit again for 2 to 3 minutes to remove access water.

Fuel Level



Slot in seat plate shows the fuel level in the tank. Refill when level reaches bottom of slot.

FILLING FUEL TANK

IMPORTANT: DO NOT OVERFILL!

To add fuel to the fuel tank:

1. Clean fuel cap and surrounding area to prevent dust, dirt, and debris from entering fuel tank.
2. Remove fuel cap.

IMPORTANT: Refer to Engine Manual for correct type and grade of fuel.

3. Fill fuel tank to the bottom of filler neck. See for fuel tank capacity.

IMPORTANT: DO NOT OVERFILL! This equipment and/or its engine may include evaporative emissions control system components, required to meet EPA and/or CARB regulations, that will only function properly when the fuel tank has been filled to the recommended level. Overfilling may cause permanent damage to evaporative emissions control system components. Filling to the recommended level ensures a vapor gap required to allow for fuel expansion. Pay close attention while filling the fuel tank to ensure that the recommended fuel level inside the tank is not exceeded. Use a portable gasoline container with an appropriately sized dispensing spout when filling the tank. Do not use a funnel or other device that obstructs the view of the tank filling process.

4. Replace fuel cap and tighten.
5. ALWAYS clean up spilled fuel.

GASOLINE

Use fresh unleaded fuel with an octane rating of at least 87. DO NOT use E85 blended fuels; the engine is not E20 / E30 / E85 compatible. The maximum recommended ethanol content is 10%.

NOTE: All gasoline is not the same. If the engine experiences starting or performance problems after using a new gasoline, switch to a different fuel provider or fuel brand.

IMPORTANT: Excessively oxygenated or reformulated fuels (fuels blended with alcohols or ethers) can damage the fuel system or cause performance problems. If any undesirable operating problems occur, use a gasoline with a lower percentage of alcohol or ether.

Fuel Stabilizer

Gasoline left in the fuel system for extended periods without a stabilizer will deteriorate, resulting in gum deposits in the system. These deposits can damage the carburetor and the fuel hoses, filter and tank. Prevent deposits from forming in the fuel system during storage by adding a quality fuel stabilizer to the fuel. Follow the recommended mix ratio found on the fuel stabilizer container.

STOPPING IN AN EMERGENCY



WARNING: Operating unit on slopes may lead to loss of steering control. When operating on slopes be prepared to react to an emergency situation.

1. Return steering levers to neutral position.
2. Immediately set parking brake.
3. Turn off PTO and engine.

NOTE: This unit is equipped with the return to neutral function. The control arms will automatically return gradually to neutral when released from the forward position.

STARTING AND SHUTTING OFF ENGINE

Starting the Engine

NOTICE: Disengage the PTO, engage the parking brake, and place the steering levers in neutral prior to starting the engine.

1. If the engine is cold, apply choke. If the engine is warm or hot, do not use choke. See *Choke* on page 16.

IMPORTANT: DO NOT operate starter for more than 10 seconds per minute as damage can occur.

2. Turn ignition key to start position and release once the engine has started.
3. Let the engine warm up several seconds to several minutes depending on outside temperature.

Stopping the Engine

1. Stop unit.
2. Disengage PTO.
3. Set throttle lever to slow.
4. Turn ignition switch to off position and remove key.
5. Set parking brake.

OPERATING MOWER

1. Start engine.
2. Set throttle lever to fast.

IMPORTANT: Never engage PTO if mower is plugged with grass or other material.

3. Engage PTO to start mower blades. It will take 2 – 3 seconds for the blades to engage.

NOTE: The parking brake must be disengaged prior to moving the steering levers from the neutral lockout position.

4. Release parking brake.

5. Use steering levers to move the unit.
6. Disengage PTO to stop mower blades.

TRANSPORTING UNIT

ALWAYS shut off engine, set parking brake, remove key, and properly remove fuel when transporting unit on a truck or trailer. Tie unit down securely. Do not tie down by linkages, guards, cables or other parts that may be damaged.

FOR BEST PERFORMANCE

Cut grass when it is dry.
Keep mower blades sharp.
Keep mower deck properly leveled.
Do not set height of cut too low. For very tall grass, mow twice.
Do not travel too fast.
Mow with the engine set at full throttle.
When mulching, only remove one-third of grass length per cutting.
Discharge clippings into areas already cut.
Vary cutting pattern with each mowing.
Do not allow grass or debris to collect inside of mower deck. Clean after each use.

MOVING UNIT MANUALLY

(Figure 8)

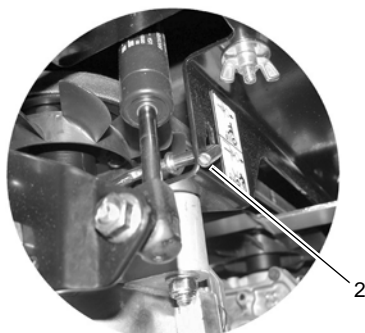
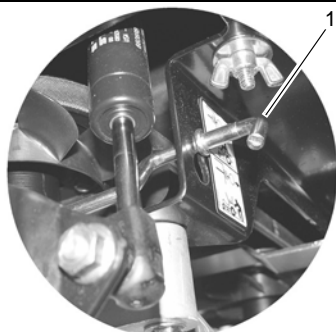


WARNING: DO NOT disengage or bypass transmission and coast downhill.

Pull the bypass lever out and lock it in place, and then release the parking brake to push the unit by hand.

Push the bypass lever in to drive the unit normally.

NOTE: There are two bypass levers (one on each side of the unit).



1. Bypass lever pulled out to push the unit by hand.
2. Bypass lever pushed in to drive the unit.

Figure 8



MAINTENANCE SCHEDULE

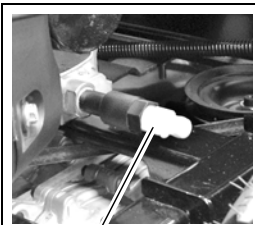
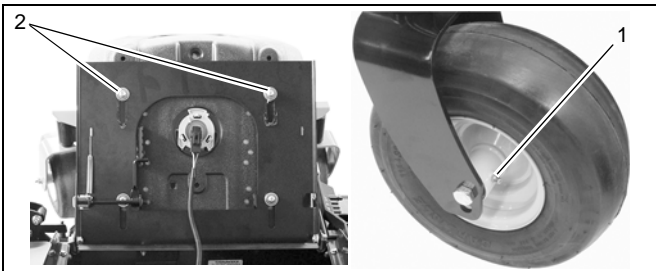


WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

NOTE: To have full access to the engine, the seat must be tipped forward (see *TIPPING SEAT FORWARD* on page 23) and the hood opened (see *OPENING AND CLOSING HOOD* on page 23).

IMPORTANT: Proper maintenance can prolong the life of unit. The following chart shows the recommended service schedule. Refer to the maintenance instructions in the Engine Manual for additional information.

Interval	Task	Action
Each Use	Check Safety Interlock System	 WARNING: Safety interlock system failure and improper operation of unit can result in death or serious injury. Test this system each time the unit is operated. If this system does not function as described, do not operate until repairs are made. See <i>Safety Interlock System</i> on page 16.
	Check Parking Brake	Engage parking brake and engage transmission bypass lever. See <i>MOVING UNIT MANUALLY</i> on page 20. Push unit. If unit rolls, contact your Ariens dealer.
	Clean Unit	Clean engine, battery, seat, etc. of all dirt and debris. Do not use solvents, hard cleaners, or abrasives. For deck cleaning instructions, see <i>Washout Port</i> on page 17. NOTE: Protect painted surfaces with automotive type wax. IMPORTANT: Do not spray the unit with water, especially when the unit is warm from operation.
	Check Tires	See Specifications on page 34 for correct tire pressure.  CAUTION: Avoid injury! Explosive separation of tire and rim parts is possible when they are serviced incorrectly: <ul style="list-style-type: none"> • Do not attempt to mount a tire without the proper equipment and experience to perform the job. • Do not inflate the tires above the recommended pressure. • Do not stand in front or over the tire assembly when inflating. Use a clip-on chuck and extension hose long enough to allow you to stand to one side.
	Check Mower Blades	Check for worn or damaged mower blades. See <i>SHARPENING MOWER BLADE</i> on page 26.

Interval	Task	Action
Each Use	Follow Engine Manual Maintenance Schedule	<p>Perform scheduled engine maintenance. Refer to Engine Manual for detailed instructions.</p> <p>NOTE: To drain the oil, remove oil drain cap and attach the oil drain hose, supplied in the lit pack, to the drain plug. Rotate the drain to the left to allow oil to drain. Turn the drain to the right to close.</p>  <p>Oil Drain Plug</p>
25 Hours or Every Season	Check Battery	Keep battery and battery terminals clean. See <i>Cleaning Battery and Battery Cables</i> on page 28.
	Lubricate Unit	<ol style="list-style-type: none"> 1. Apply grease to zerk (1) on each front wheel. 2. Apply grease to quick adjust seat mechanism through slots (2) on bottom side of seat plate. Work grease into mechanism by sliding seat back and forth repeatedly. 
50 Hours or Every Season	Check Fasteners	Check mower blade mounting hardware and all other fasteners. Replace fasteners that are missing or damaged. Tighten all nuts and bolts to the correct torque values.
100 Hours or Every Season	Check All Belts	<p>Replace worn or deteriorated belts.</p> <ul style="list-style-type: none"> • Check hydrostatic belt. See <i>REPLACING HYDROSTATIC BELT</i> on page 31 for hydrostatic belt location. • Check PTO belt. See <i>REPLACING PTO BELT</i> on page 30 for PTO belt location.

SERVICE AND ADJUSTMENTS

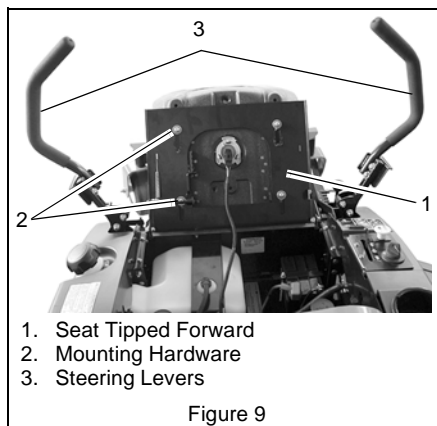


WARNING: AVOID INJURY.
Read and understand the entire
Safety section before proceeding.

TIPPING SEAT FORWARD

(Figure 9)

Move steering levers to neutral position and rotate handles outward. Tip seat forward.



1. Seat Tipped Forward
2. Mounting Hardware
3. Steering Levers

Figure 9

OPENING AND CLOSING HOOD

(Figure 10)

Open:

Tip seat forward and pull up on the back of the hood until hood rests on the hood stops.

Close:

Push down on back of hood to close.

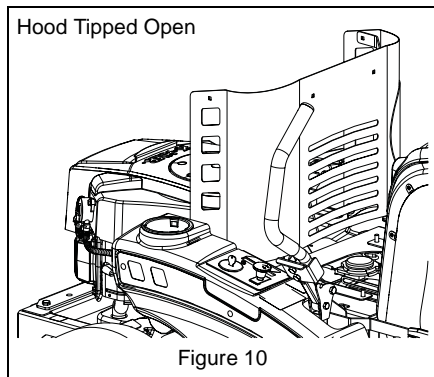


Figure 10

MOWER DECK REMOVAL AND INSTALLATION

Remove

(Figure 11)

1. Remove PTO belt from the engine drive pulley. See *REPLACING PTO BELT* on page 30.
2. Disconnect drag link from the front deck bracket.
3. Disconnect front and rear trunnions from the lift arms on both sides of the unit by removing the 3/8 nuts. Keep hardware for reinstallation.
4. Slide mower deck out from under unit.

Install

(Figure 11)

1. Slide mower deck under unit.
2. Connect drag link to front deck bracket.
3. Connect front and rear trunnions to the lift arms on both sides of the unit using 3/8 nuts.
4. Install PTO belt on the engine drive pulley. See *REPLACING PTO BELT* on page 30.
5. Level and adjust pitch of mower deck. See *LEVELING AND ADJUSTING PITCH OF MOWER DECK* on page 24.

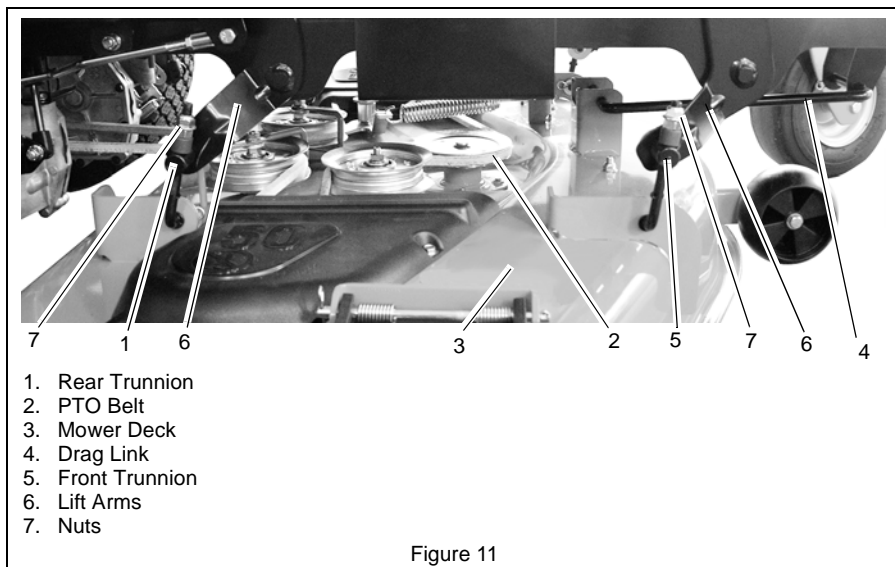


Figure 11

LEVELING AND ADJUSTING PITCH OF MOWER DECK

Pitch is the difference in blade height from front to back or from side to side.

Adjust on a level surface with the tires inflated to the correct air pressure. See Specifications on page 34.

Three measurements are required to level and adjust the pitch of the mower deck:

1. The distance from the mower blades to the ground.
2. The forward pitch of the mower blades.
3. The side-to-side pitch of the mower blades.

The Distance From The Mower Blades To The Ground

(Figure 12)

- In the lowest cutting position should be $3.175 \text{ cm} \pm .635 \text{ cm}$ ($1 \frac{1}{2}'' \pm \frac{1}{4}''$).
- In the highest cutting position should be $10.795 \text{ cm} \pm .635 \text{ cm}$ ($4 \frac{1}{2}'' \pm \frac{1}{4}''$).

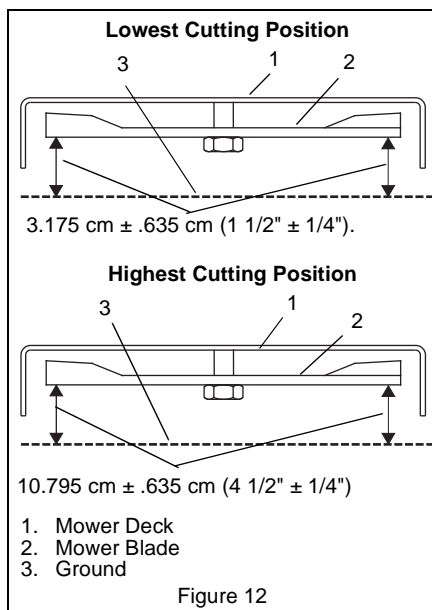


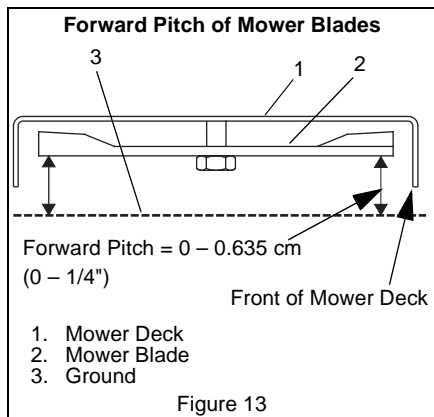
Figure 12

The Forward Pitch Of The Mower Blades

(Figure 13)

- Front tip of blades should be 0 – 0.635 cm (0 – 1/4") lower than the rear of the blades.

NOTE: This measurement must be taken when the mower blade ends point forward.

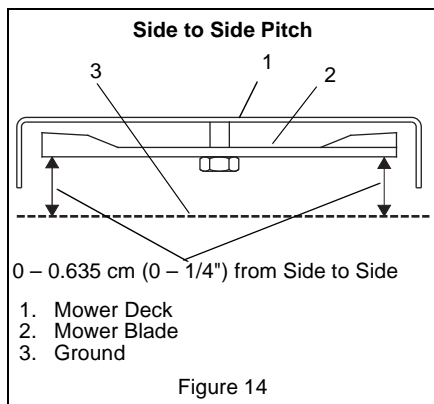


The Pitch Of The Mower Blades From Side To Side

(Figure 14)

- Should be within 0 – 0.635 cm (0 – 1/4") as measured on each side of the mower deck.

NOTE: This measurement must be taken when the mower blade ends point left and right.



Adjusting The Mower Deck To Adjust Mower Blade Height And Pitch

(Figure 15)

NOTE: Adjusting the mower deck will adjust the height and pitch of the mower blades.

1. Adjust the trunnions first and re-take the three measurements required to level and adjust the pitch of the mower deck. These measurements are:

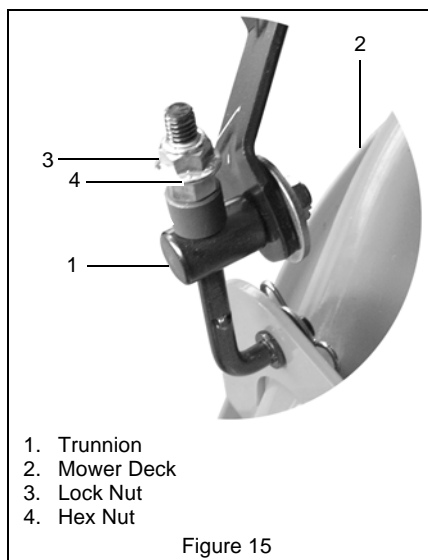
- a. The distance from the mower blades to the ground.
- b. The forward pitch of the mower blades.
- c. The pitch of the mower blades from side to side.

Adjust Trunnions:

1. Using an adjustable or open ended wrench tighten or loosen the lock nut on top.

NOTE: To avoid over-adjustment note which nuts have been adjusted and the amount each has been loosened or tightened.

2. Using the same tool, tighten the bottom hex nut to raise the deck OR loosen the bottom hex nut to lower the deck.
3. Tighten the lock nut on top to secure the link in the desired location.
4. Repeat step 1 as needed until all three measurements (a, b, and c) are within the tolerances specified.



REPLACING MOWER BLADE

Remove

(Figure 16)



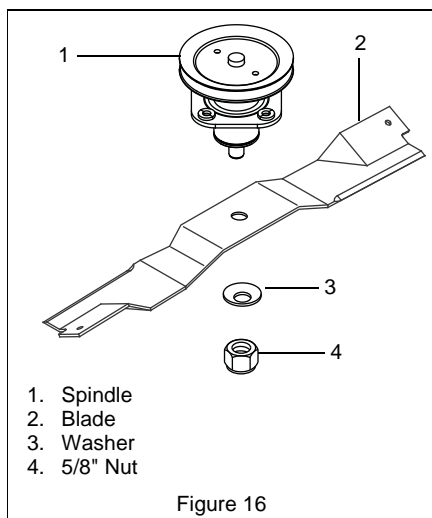
CAUTION: Mower blades are sharp and can cut you. Wrap the blades or wear gloves, and use extra caution when servicing them.

1. Block mower blades to prevent rotation.
2. Remove mounting hardware and mower blades from spindles.

Install

(Figure 16)

1. Install mower blades on spindles with mounting hardware.
2. Torque 5/8" nut to 136 to 163 N•m (100 to 120 lb-ft).



SHARPENING MOWER BLADE



CAUTION: DO NOT sharpen mower blade while on unit. An unbalanced mower blade will cause excessive vibration and eventual damage to unit. Check mower blade balance prior to reinstalling mower blades. NEVER weld or straighten mower blades.

1. Remove mower blade from unit. See *REPLACING MOWER BLADE* on page 26.

Ariens recommends having mower blades sharpened by a professional. Contact your Ariens dealer.

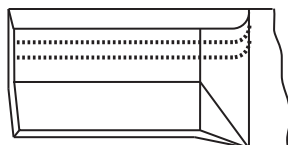
Discard mower blade if (Figure 17):

- more than 1.27 cm (1/2") of metal is removed.
- the air lift erosion area is eroded.
- the mower blade is bent or broken.

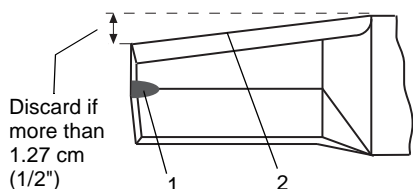
Do not change angle of cutting edge or round the corner at the end of mower blade.

2. Sharpen mower blade by removing an equal amount of material from each end of mower blade.
3. Check mower blade balance by sliding mower blade on an unthreaded bolt. If blade is balanced, it should remain in a horizontal position. If either end of mower blade moves downward, sharpen the heavy end until mower blade is balanced.
4. Install mower blade on unit. See *REPLACING MOWER BLADE* on page 26.

DO NOT sharpen to this pattern.



Sharpen to this pattern.



1. Air Lift Erosion
2. Cutting Edge

Figure 17

SERVICING THE BATTERY

NOTE: Unit comes equipped with a maintenance-free battery that requires no regular maintenance except cleaning the terminals.



WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

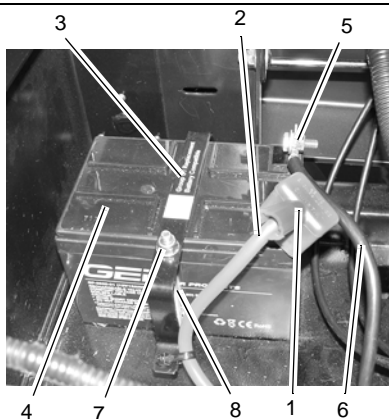
Factory-Installed Battery Removal and Installation

Remove Factory-Installed Battery

(Figure 18)

1. Lower deck to the lowest cutting height.
2. Tip seat forward. See *TIPPING SEAT FORWARD* on page 23.
3. Disconnect negative (-) cable first, then positive (+) cable.

NOTE: Do not cut cable tie securing positive cable to battery hold-down bracket unless installing U1 battery.



1. Positive (+) Terminal
2. Positive (+) Cable
3. Battery Hold-Down Bracket
4. Battery
5. Negative (-) Terminal
6. Negative (-) Cable
7. Nut
8. Bolt

Figure 18

4. Remove nut and bolt securing battery hold down bracket. Save for reinstallation.

NOTE: The bolt securing the battery is mounted through the underside of the frame. Place hand beneath frame to catch loose bolt.

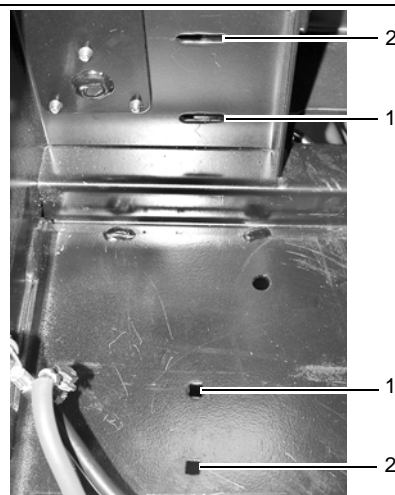
5. Remove battery from unit.

Install Factory-Installed Battery

(Figure 18)

1. Tip seat forward. See *TIPPING SEAT FORWARD* on page 23.
2. Set battery inside the frame, underneath the seat with battery terminals positioned as shown (Figure 18).
3. Place battery hold down bracket on top of the battery. Hook the curved end of the bracket in the lower mounting hole in the wall of the frame (Figure 19).
4. Position bolt through the mounting hole nearest to the battery and through mounting bracket. Secure with nut.

IMPORTANT: Tighten nut until battery is secure and will not move or rattle during operation. DO NOT overtighten.



1. Factory Battery Mounting Hole
2. U1 Battery Mounting Hole

Figure 19

5. Connect positive (+) cable first, then negative (-) cable.
6. Apply petroleum jelly or dielectric grease to battery cable ends and terminals.
7. Tip seat back. See *TIPPING SEAT FORWARD* on page 23.

U1 Battery Installation

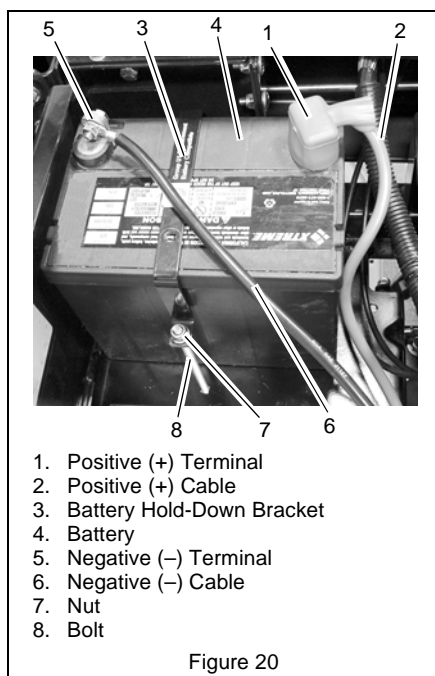
(Figures 19 and 20)

1. Remove factory battery. See *Remove Factory-Installed Battery* on page 27.

NOTE: Be sure to cut cable tie connecting positive battery cable to battery hold down bracket.

2. Set battery inside the frame, underneath the seat with terminals positioned as shown (Figure 20).
3. Place battery hold down bracket on top of the battery. Attach the curved end of the bracket in the upper mounting hole in the wall of the frame (Figure 19).
4. Position bolt through the mounting hole nearest to the battery and through mounting bracket. Secure with nut.

IMPORTANT: Tighten nut until battery is secure and will not move or rattle in the frame.



5. Connect positive (+) cable first, then negative (-) cable.
6. Apply petroleum jelly or dielectric grease to battery cable ends and terminals.
7. Tip seat back. See *TIPPING SEAT FORWARD* on page 23.

Cleaning Battery and Battery Cables

(Figure 18)

1. Tip seat forward. See *TIPPING SEAT FORWARD* on page 23.
2. Disconnect negative (-) cable first, then positive (+) cable.
3. Clean battery cable ends, negative (-) terminal, and positive (+) terminal with a wire brush and rinse with a weak baking soda solution.
4. Connect positive (+) cable first, then negative (-) cable.
5. Apply petroleum jelly or dielectric grease to battery cable ends and terminals.
6. Tip seat back. See *TIPPING SEAT FORWARD* on page 23.

Charging the Battery

(Figure 18)



WARNING: FROZEN BATTERIES CAN EXPLODE and result in death or serious injury. **DO NOT** charge a frozen battery. Let the battery thaw before charging.

IMPORTANT: DO NOT fast charge. Charging at a higher rate will damage or destroy battery.

IMPORTANT: ALWAYS follow information provided on battery and battery charger. Contact battery and battery charger manufacturers' for detailed instructions.

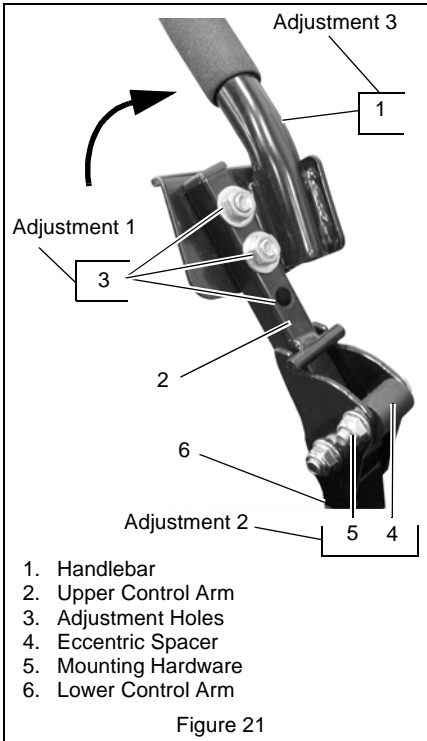
1. Remove battery from unit. See *Factory-Installed Battery Removal and Installation* on page 27.
2. Place battery in a well-ventilated area.
3. Connect positive (+) lead of charger to positive (+) terminal, and negative (-) lead of charger to negative (-) terminal.
4. Charge battery according to battery charger and battery manufacturers' instructions.
5. Install battery on unit. See *Factory-Installed Battery Removal and Installation* on page 27.

Jump-Starting

Ariens does not recommend jump-starting your unit. Jump-starting can damage engine and electrical system components. See your engine manual for more detailed information.

ADJUSTING STEERING LEVERS

(Figure 21)



IMPORTANT: Adjust each steering lever equally.

NOTE: When adjusting steering levers for the first time it is recommended that you make adjustments in the following order.

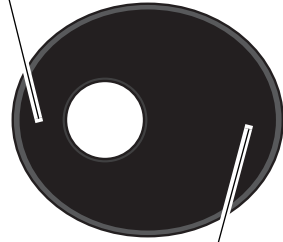
1. Adjust Steering Lever Height

1. Remove mounting hardware that attaches the handlebars to the upper control arm. Move handlebar up or down until the handlebar mounting holes are aligned with the preferred adjustment holes.
2. Install mounting hardware and tighten.

2. Adjust Steering Lever Width

1. Loosen hardware at the base of the lower control arm (item 5).
2. Rotate eccentric spacer to move the levers away from or closer to the operators position (figure 22).
3. Tighten hardware.

Rotate this end away from the operator position to move the steering levers in.



Rotate this end away from the operator position to move the steering levers out.

Figure 22

3. Adjust Steering Lever Forward or Backward

1. Loosen, do not remove, the bolts securing the handlebar to the upper control arm.
2. Rotate steering lever forward or backward to desired position and tighten bolts.

NOTE: Tighten upper bolt first.

Forward Speed Adjustment

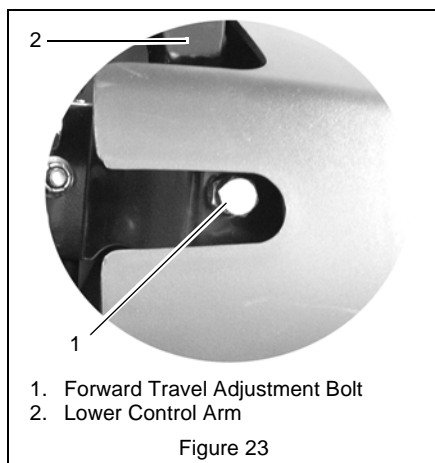
(Figure 23)

The travel of the steering levers may need adjustment if the unit turns to the right or left when both steering levers are pushed as far forward as possible. The unit should track within 0.61 m (2 feet) of a straight line for 9.14 m (30 feet).

The side the unit turns toward indicates that the drive wheel on that side is turning slower than the opposite drive wheel. Either the wheel that is turning faster needs to slow down or the wheel that is turning slower needs to speed up to allow the unit to travel in a straight line.

IMPORTANT: Check tire pressure before making adjustments. Incorrect or inconsistent pressure between tires may cause unit to track incorrectly.

1. Determine which way the unit turns.
2. Loosen jam nut on the adjustment bolt.
3. Adjust speed by:
 - Turning adjustment bolt clockwise to decrease steering lever travel.
 - Turning adjustment bolt counterclockwise to increase steering lever travel.
4. Tighten the jam nut.



NOTE: Reverse speed cannot be adjusted. If unit tracks excessively left or right in reverse, see your dealer for repair.

REPLACING PTO BELT

Remove

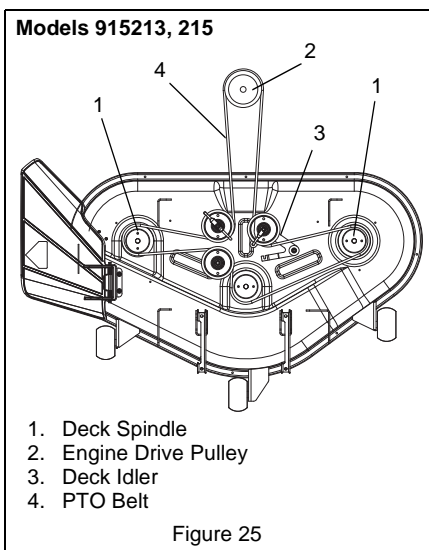
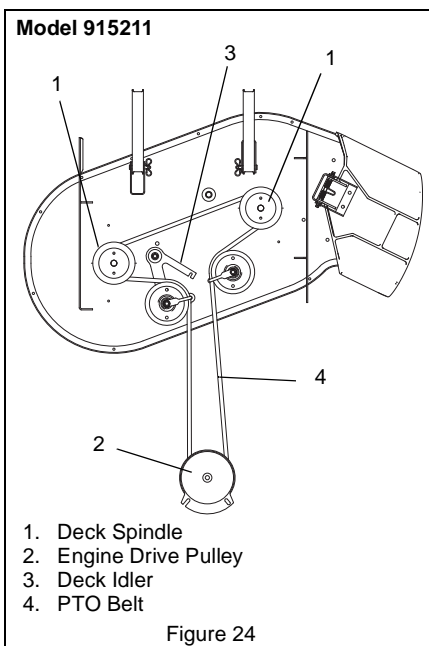
(Figure 24)

1. Lower mower deck to the ground.
2. Remove belt covers from mower deck.



CAUTION: Use care when releasing idler spring tension. Keep body parts well away from idler when performing this operation.

3. Rotate idler arm clockwise until tension is removed from PTO belt.
4. Remove PTO belt from left mower deck pulley.
5. Slowly release idler arm until tension is removed from idler spring.
6. Remove PTO belt from mower deck and engine drive pulley.



Install

(Figure 24)

NOTE: Do not install PTO belt on left mower deck pulley in step 1.

1. Install PTO belt on engine drive pulley and mower deck.

2. Rotate idler arm clockwise until PTO belt can be routed around left mower deck pulley.
3. Slowly release idler arm until idler pulley rests firmly against PTO belt.
4. Install belt covers on mower deck.

NOTE: Ensure that belt is still positioned in the groove of the sheaves after belt covers are installed.

REPLACING HYDROSTATIC BELT

Remove

(Figure 26)

1. Remove PTO belt. See *REPLACING PTO BELT* on page 30.



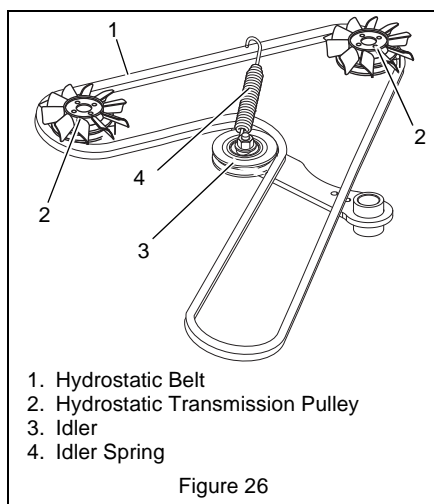
CAUTION: Use care when releasing idler spring tension. Keep body parts well away from idler when performing this operation.

2. Disconnect idler spring.
3. Remove hydrostatic belt from hydrostatic transmission pulleys, drive pulley, and idler.

Install

(Figure 26)

1. Install hydrostatic belt on idler, drive pulley, and hydrostatic transmission pulleys.
2. Connect idler spring.
3. Install PTO belt. See *REPLACING PTO BELT* on page 30.



STORAGE

Short Term Storage

IMPORTANT: NEVER clean unit with high-pressure water or store unit outdoors.

Remove all dirt, grease, leaves, etc. Store in a clean dry area.

Inspect unit for signs of wear or damage. Ensure all fasteners are properly tightened.

Long Term Storage

Follow all instructions under *Short Term Storage*.

Remove and fully charge battery. Store in a clean dry area.

Refer to Engine Manual for the proper engine storage procedures.

Touch up all scratched or chipped paint surfaces.

Fuel System

Gasoline left in the fuel system for extended periods without a stabilizer will deteriorate, resulting in gum deposits in the system. These deposits can damage the carburetor and the fuel hoses, filter and tank. Prevent deposits from forming in the fuel system during storage by adding a quality fuel stabilizer to the fuel. Follow the recommended mix ratio found on the fuel stabilizer container.

IMPORTANT: NEVER store the engine with fuel in the fuel tank inside of a building with potential sources of ignition.

Add Fuel Stabilizer

1. Drain fuel from fuel tank.
2. Allow the engine to run until it stops. Turn engine OFF when it begins surging to avoid engine damage.
3. Add fuel stabilizer to fuel, following the manufacturer's instructions.
4. Pour fuel into the tank.
5. Re-start engine.
6. Run the engine outdoors for 1 to 2 minutes to be sure that treated gasoline has replaced the untreated gasoline in the carburetor.
7. Slow the engine to an idle speed.
8. Repeat step 2.

TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	CORRECTION
Engine will not crank/start.	<ol style="list-style-type: none"> 1. Safety interlock system is not engaged or is faulty. 2. Fuel tank is empty. 3. Discharged battery. 4. Poor connection between battery and battery cables. 5. Spark plug wire(s) loose or spark plug(s) faulty. 6. Faulty electrical system. 7. Faulty engine. 	<ol style="list-style-type: none"> 1. Check safety interlock system. See <i>Safety Interlock System</i> on page 16. 2. Fill fuel tank. See <i>FILLING FUEL TANK</i> on page 18. 3. Charge battery. See <i>Charging the Battery</i> on page 28. 4. Tighten battery cables and/or clean battery and battery cables. See <i>Cleaning Battery and Battery Cables</i> on page 28. 5. Connect spark plug wire(s) or replace spark plug(s). Refer to Engine Manual for detailed instructions. 6. Contact your Ariens dealer. 7. Contact your Ariens dealer.
Engine runs rough.	<ol style="list-style-type: none"> 1. Choke engaged. 2. Air filter cartridge plugged. 3. Faulty engine. 	<ol style="list-style-type: none"> 1. Disengage choke. 2. Clean or replace air filter cartridge. Refer to Engine Manual for detailed instructions. 3. Contact your Ariens dealer.
Unit does not move with engine running when using steering levers.	<ol style="list-style-type: none"> 1. The transmission bypass lever is engaged. 2. Faulty hydrostatic belt. 3. Faulty transmission. 	<ol style="list-style-type: none"> 1. Disengage transmission bypass lever. See <i>MOVING UNIT MANUALLY</i> on page 20. 2. Replace hydrostatic belt. See <i>REPLACING HYDROSTATIC BELT</i> on page 31. 3. Contact your Ariens dealer.
PTO or mower blades do not engage or shut off.	<ol style="list-style-type: none"> 1. Operator presence switch not depressed. 2. Faulty operator presence switch. 3. Faulty PTO belt. 4. Faulty PTO switch, wires, connectors, or clutch. 	<ol style="list-style-type: none"> 1. Depress operator presence switch by sitting on seat. 2. Contact your Ariens dealer. 3. Replace PTO belt. See <i>REPLACING PTO BELT</i> on page 30. 4. Contact your Ariens dealer.
Engine overheats.	<ol style="list-style-type: none"> 1. Engine oil level low. 2. Cooling system plugged. 3. Faulty engine. 	<ol style="list-style-type: none"> 1. Add engine oil. Refer to Engine Manual for detailed instructions. 2. Clean cooling system. Refer to Engine Manual for detailed instructions. 3. Contact your Ariens dealer.
Unit moves with engine off and parking brake engaged.	<ol style="list-style-type: none"> 1. The parking brake needs adjustment. 2. Faulty parking brake. 	<ol style="list-style-type: none"> 1. Contact your Ariens dealer. 2. Contact your Ariens dealer.

PROBLEM	PROBABLE CAUSE	CORRECTION
Unit does not travel in a straight line.	<ol style="list-style-type: none"> 1. Incorrect tire pressure. 2. Steering levers need adjustment. 3. Hydrostatic transmission and/or linkage needs adjustment. 	<ol style="list-style-type: none"> 1. Check tire pressure. See Specifications on page 34. 2. Adjust steering levers. See <i>Forward Speed Adjustment</i> on page 29. 3. Contact your Ariens dealer.
Unit creeps with steering levers in neutral position.	<ol style="list-style-type: none"> 1. Hydrostatic transmission and/or linkage needs adjustment. 	<ol style="list-style-type: none"> 1. Contact your Ariens dealer.
Poor cutting quality.	<ol style="list-style-type: none"> 1. Mower deck not level or mower pitch is incorrect. 2. Dull or faulty mower blades. 	<ol style="list-style-type: none"> 1. Level and adjust pitch of mower deck. See <i>LEVELING AND ADJUSTING PITCH OF MOWER DECK</i> on page 24. 2. Sharpen mower blades (see <i>SHARPENING MOWER BLADE</i> on page 26) or replace mower blades (see <i>REPLACING MOWER BLADE</i> on page 26).

SERVICE PARTS

Be sure to always use genuine Ariens parts to keep your unit running like new.

Part No.	Description
51519500	34- and 50-Inch Spindle Assembly
51520900	42-Inch Spindle Assembly
07100124	Front Wheel
07200116	34-Inch Deck Belt
07200010	HA Raw Laminated Belt – Hydraulic Drive
03971900	34-Inch Mower Blade
03797300	34-Inch Mulching Blade
04265400	42-Inch Mower Blade
07200523	42-Inch Deck Belt
03971900	50-Inch Mower Blade
07200524	50-Inch Deck Belt
21500009	Spark Plug (Models 915211, 213)
21401700	Spark Plug (Model 915215)
21541500	Fuel Filter
21550800	Oil Filter
21555500	Air Cleaner

ACCESSORIES

See your authorized Ariens dealer to add these optional accessories to your unit.

Part No.	Description
71503300	36-Inch Roller
71503400	48-Inch Dethatcher
71503600	Spreader
71508200	48-Inch Aerator
71510800	34-Inch Mulch Kit
71510900	Trailer Hitch Kit
71513000	Washout Port Kit (Model 915211)
81504000	34-Inch Non-Powered Bagger
81504100	42-Inch Non-Powered Bagger
81504200	50-Inch Non-Powered Bagger
71513100	42-Inch Mulch Kit
71513200	50-Inch Mulch Kit

SPECIFICATIONS

Model Number	915211	915213	915215
Model	Zoom 34	Zoom 42	Zoom 50
Engine			
Type	Kohler 6000		
Engine Displacement – cm ³ (in. ³)	660 (40.3)		
Governed RPM (May be different from maximum RPM)	3600 + 0 / - 100		
Drive			
Forward Max. – km/h (m.p.h)	9.6 (6.0)		
Reverse Max. – km/h (m.p.h)	4.8 (3.0)		
Turning Radius	Zero		
Brakes	Internal Transmission		
Transmission	Hydrostatic Drive		
Electrical			
Starter	Electric		
Battery	12V Maintenance Free 190 CCA		
PTO (Power Take-Off)	Electric Clutch		
Fuel			
Fuel Type	Refer to Engine Manual		
Fuel Tank Capacity – L (gal.)	7.49 (1.97)		
Size and Weight			
Length – cm (in.)	65 (165.1)		
Width – cm (in.)	114.3 (45)	137.2 (54)	157.5 (62)
Weight – lbs (kg)	201 (443)	222 (489)	227 (501)
Height – cm (in.)	102 (40)		106.7 (42)
Tires			
Front Tire Size – in.	4 x 11		
Rear Tire Size – in.	18 x 6.5 x 8	18 x 8.5 x 8	18 x 9.5 x 8
Front Tire Pressure – kPa (psi)	317 (46)		
Rear Tire Pressure – kPa (psi)	68.95 (10)		
Mower Deck			
Cutting Height – cm (in.)	3.8 – 11.4 (1.5 – 4.5)		
Cutting width – cm (in.)	86 (34)	106.7 (42)	127 (50)
Max. Towing Capacity – kg (lbs)	136 (300)		
Max. Tongue Weight – kg (lbs)	13.6 (30)		



Consumer Mowing Equipment Limited Warranty

Ariens Company (Ariens) warrants to the **original purchaser** that Ariens, Gravely and Countax brand lawn and garden consumer products purchased on or after 9/1/2015 will be free from defects in material and workmanship for the time period noted in the chart below. Equipment put to personal use around a single household or residence is considered "Consumer Use"; equipment put to any business use (agricultural, commercial, or industrial) or used at multiple locations is considered "Commercial Use." If any product is rented or leased, then the duration of these warranties shall be 90 days after the date of purchase.

An authorized Ariens dealer (Ariens brand products), Gravely dealer (Gravely brand products), or Countax dealer (Countax brand products) will repair any defect in material or workmanship, and repair or replace any defective part, subject to the conditions, limitations and exclusions set forth herein. Such repair or replacement will be free of charge (labor and parts) to the original purchaser except as noted below.

Warranty Code	Product Group	Warranty Period Consumer Use	Warranty Period Commercial Use
HA	Zoom, ZT, IKON-X, IKON-XL, ZT-X, ZT-XL Zero-Turn Riders	3 Years	90 Days
HB	Max Zoom & ZT HD Zero-Turn Riders	3 Years	1 Year
HC	"936" Tractors, "961" Series Walk-Behind Mowers	2 Years	90 Days
HD	Classic LM Series Mowers; Wide Area Walk Mowers; Razor, XD3	3 Years	90 Days
N/A	Service (replacement) Parts	90 Days (no labor)	90 Days (no labor)
AA	Serialized Attachments	1 Year	1 Year

Special Extensions

The chart below details special extensions to this warranty:

Warranty Code	Warranty Exception	Warranty Period	Use	Detail
HA, HB	Mower Deck Shell on Zero-Turn Riders	5 Years	Consumer	3 years parts and labor Additional 2 years parts only
HA, HB	Main Frame on Zero-Turn Riders	5 Years	Consumer	3 years parts and labor Additional 2 years parts only
HA	Batteries for AMP™ Rider	2 Years	Consumer	100% first year; prorated second year

Exceptions and Limitations

The chart below details special exceptions to this warranty:

Warranty Code	Warranty Exception	Warranty Period	Use	Detail
All	Batteries	1 Year	Consumer	Prorated
All	Belts, Muffler, Tires	None	Commercial	These components are not covered when used commercially.
All	Cloth, Plastic, and Rubber Components (Including Belts and Cables)	Maximum 2 Years	All	Warranty is limited to 2 years for consumer use. Except as noted above, these components are covered for defect, not for wear.
All	Engines	See Engine Manufacturer's Warranty	All	Engines are covered by engine manufacturer's warranty. Refer to engine manufacturer's warranty statement.

Customer Responsibilities

Register the product immediately at the time of sale. If the dealer does not register the product, the customer must complete the product registration card in the literature package and return it to the Ariens Company, or register the unit online at www.ariens.com, www.gravely.com, www.countax.com.

To obtain warranty service, the **original purchaser** must:

- Perform the maintenance and adjustments explained in the owner's manual.

- Promptly notify Ariens or an authorized Ariens, Gravely or Countax service representative of the need for warranty service.
- Transport the product to and from the place of warranty service at owner's expense.
- Have the warranty service performed by an authorized Ariens, Gravely or Countax service representative.

To Find an Authorized Service Representative:

In the U.S. and Canada:		
Use the dealer locator on our websites: www.ariens.com • www.gravely.com		
Or contact us by mail or by phone:		
In the U.S., Canada, Mexico, Caribbean, Central and South America:	In Europe, Asia, Africa or the Middle East:	In Australia or New Zealand:
Ariens Company 655 W. Ryan Street Brillion, WI 54110 Phone: (920) 756 - 4688 www.ariens.com	Ariens Company Limited Great Haseley, Oxford OX44 7PF United Kingdom Phone: +44 800 597 7777 www.countax.co.uk	Allpower Industries Pty Ltd 128 Bridge Rd Keysborough VIC 3173 Australia Phone: +61 1800 333 428 www.allpower.com.au

Exclusions – Items Not Covered by This Warranty

- Parts that are not genuine Ariens, Gravely or Countax service parts are not covered by this warranty and may void the warranty.
- Damages resulting from the installation or use of any part, accessory, or attachment which is not approved by the Ariens Company for use with product(s) identified herein are not covered by this warranty.
- The following maintenance, service and replacement items are not covered by this warranty unless they are noted in the Limitations section above: lubricants, spark plugs, oil, oil filters, air filters, fuel filters, brake linings, brake arms, brake shoes, skid shoes, scraper blades, shear bolts, mower blades, mower vanes, brushes, headlights, light bulbs, knives, cutters.
- Any misuse, alteration, improper assembly, improper adjustment, neglect, or accident which requires repair is not covered by this warranty.
- **Use of gasoline blends exceeding 10% ethanol voids any and all warranties.**
- Products are designed to the specifications in the area that the product was originally distributed. Different areas may have significantly different legal and design requirements. This warranty is limited to the requirements in the area in which the unit was originally distributed. Ariens Company does not warrant this product to the requirements of any other area. Warranty service is limited to service within the area originally distributed.
- In countries other than the United States and Canada, contact the Ariens Company dealer for warranty policies that govern within your country. Rights may vary from country to country and within any one country.

Disclaimer

Ariens Company may from time to time change the design of its products. Nothing contained in this warranty shall be construed as obligating the Ariens Company to incorporate such design changes into previously manufactured products, nor shall such changes be construed as an admission that previous designs were defective.

LIMITATION OF REMEDY AND DAMAGES

Ariens Company's liability under this warranty, and under any implied warranty that may exist, is limited to repair of any defect in workmanship, and repair or replacement of any defective part. Ariens Company shall not be liable for incidental, special, or consequential damages (including lost profits). Some states do not allow the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

AUSTRALIAN CONSUMER LAW

The following applies solely to warranties subject to Subsection 102(1) of the Australian Consumer Law: Our goods come with guarantees that cannot be excluded by the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and failure does not amount to a major failure.

DISCLAIMER OF FURTHER WARRANTY

Ariens Company makes no warranty, express or implied, other than what is expressly made in this warranty. If the law of your state provides that an implied warranty of merchantability, or an implied warranty of fitness for particular purpose, or any other implied warranty, applies to Ariens Company, then any such implied warranty is limited to the duration of this warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from region to region.



655 West Ryan Street
Brillion, WI 54110

ariensstore.com
ariens.custhelp.com



WARNING



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

An *Ariens* Company Brand