



ARIENS®

RIDGELINE

OPERATOR'S MANUAL MANUEL DU UTILISATEUR

MODELS

994166 – RIDGELINE 32

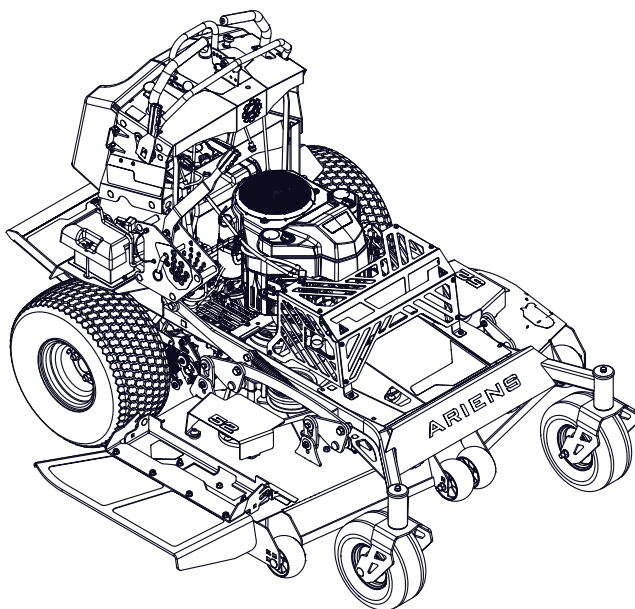
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WELCOME

Congratulations on your purchase and welcome to the Ariens family! Every machine in the Ariens lineup is designed for long-lasting and unsurpassed performance. We are confident your machine will be part of your family for many years to come.

Have Questions or Need Assistance?

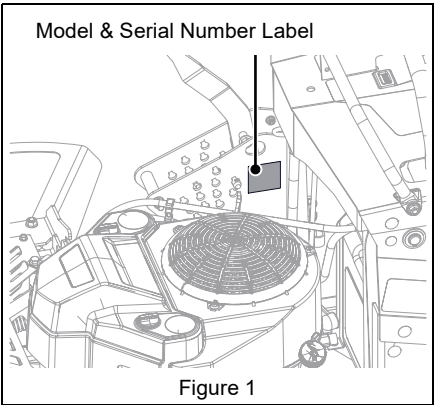
www.ariens.com

A parts manual for your unit is available for free download or purchase at www.ariens.com.

REGISTER YOUR PRODUCT!

It is extremely important to register your product at time of purchase. Product registration activates the warranty and establishes a communication link from AriensCo.

Locate the model and serial number decal on your unit and register those numbers online at www.ariens.com. See Figure 1 for decal location. Be aware that the original selling dealer may have already completed product registration on behalf of the original purchaser.



Record model number here.

Record serial number here.

MANUALS

Before operating or servicing the unit, carefully and completely read the manuals provided with the unit. They contain safety instructions and important information about unit controls.

The engine on this unit is covered by a separate manual. Refer to the engine manual for engine service recommendations. Contact the engine manufacturer for a replacement manual if necessary.

Your dealer must review important information in this manual with you before or upon delivery of the unit. It is your responsibility to read and understand all safety precautions and instructions in the manuals. If you do not understand or have difficulty following the instructions, contact your Ariens dealer for assistance. To locate your nearest Ariens dealer, go to www.ariens.com.

DISCLAIMER

Ariens reserves the right to discontinue, make changes to, and add improvements upon its products at any time without public notice or obligation. The descriptions and specifications contained in this manual were in effect at printing. Equipment described in this manual may be optional. Some illustrations may not be applicable to your unit.

SAFETY

Read these safety rules and follow them closely. Failure to follow these rules could lead to loss of control of unit, severe personal injury or death to you or bystanders, or result in damage to property or the machine.

PRACTICES & LAWS

Practice usual and customary safe working precautions. Learn applicable rules and laws in your area. Always follow the practices set forth in this manual.

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 dealer or an authorized engine manufacturer's service center. Contact your Ariens Equipment Retailer concerning emission controls and components.

REQUIRED OPERATOR TRAINING



Read and understand the Operator's Manual and decals on the unit. This information is for your safety and the proper use of your equipment. Failure to follow these

instructions and warnings may cause death or serious injury. If you have purchased this product from an Ariens dealer, the dealer can provide you with training.

Familiarize yourself and any other operators with all controls and the safe use of the features of this unit. If you loan, rent or sell this product to others, provide them with all manuals.

If you have any questions, please call our customer support line at 920-756-4688 or contact us at www.ariens.com. Do not use this equipment if, after reading the Operator's Manual and the on-board decals, you have any questions about the safe use of this product.



WARNING: AVOID INJURY. 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.

SAFETY ALERT SYMBOL



This is the safety alert symbol. It means:

- **ATTENTION!**
- **YOUR SAFETY IS INVOLVED!**

When you see this symbol:

- **BECOME ALERT!**
- **OBEY THE MESSAGE!**

SIGNAL WORDS

The safety alert symbols above and signal words below are used on decals and in this manual.

Read and understand all safety messages.

1. Danger



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

2. Warning



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

3. Caution



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

4. Notice

NOTICE: Indicates information or procedures that are considered important but not hazard related. If not avoided property damage could result.

5. Important

IMPORTANT: Indicates general reference information worthy of special attention.

SAFETY DECALS

The safety decals on your machine are visual reminders of the important safety information in this manual. All messages on your unit must be fully understood and carefully followed. Safety decals on the machine are explained below.

ALWAYS replace missing or damaged safety decals. Replacement decal information is in the parts manual for your unit. Decals can be ordered from your dealer. See Figure 2 for safety decal locations.

Safety Decal Locations

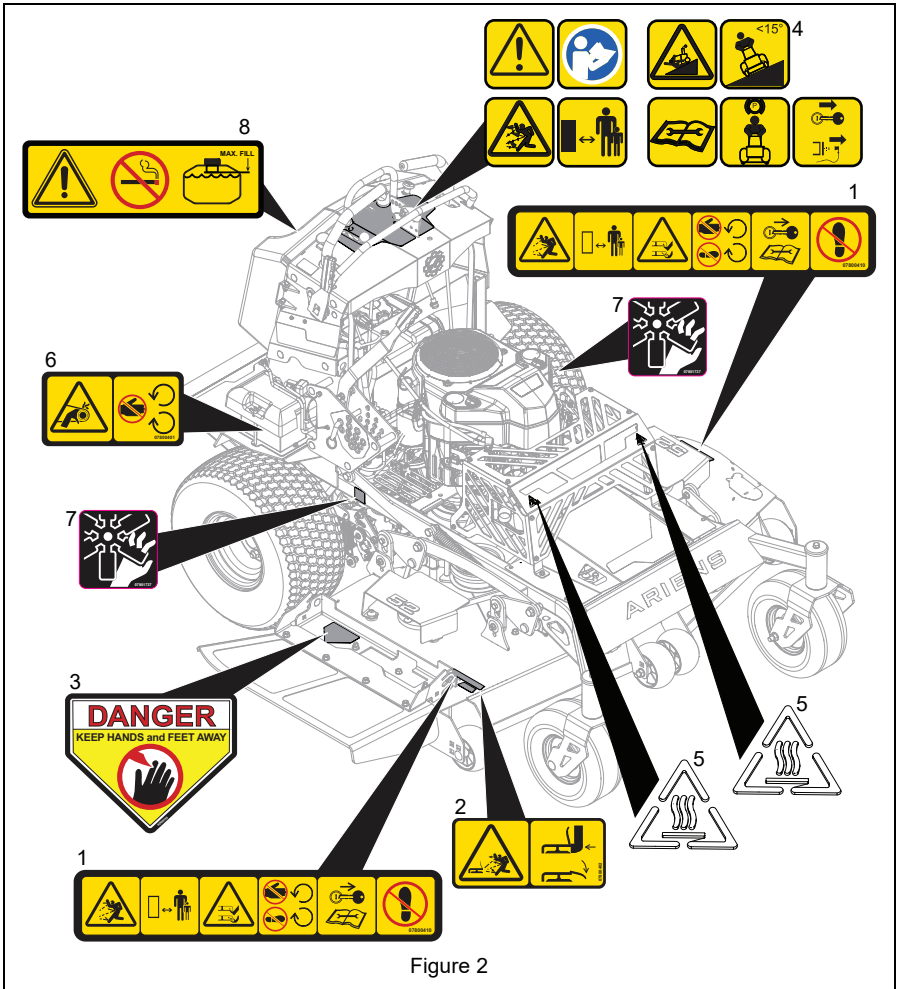


Figure 2

Safety Decal Descriptions

1. DANGER!



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.



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



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



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



DO NOT step or stand in this area.

2. 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.

3. DANGER!



ALWAYS keep hands and feet away from discharge chute.

4. CAUTION!



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



Read Owner/Operator Manual. Allow operation only by properly trained adult, never children.



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.



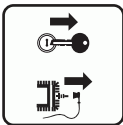
Operating on slopes may cause the unit to tip unexpectedly. Do not tip mower while operating the unit. Mow across slopes, not up and down.



Look down and behind before and while backing. DO NOT operate on slopes over 15°. This maximum degree of operation is without attachments. DO NOT operate on slopes over 10° when operating with attachments.



Read manual, set parking brake, remove key and remove spark plug before you adjust or repair unit.



5. HOT PARTS!



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

6. DANGER!



To avoid amputation hazard DO NOT put hands near moving belts.



Keep hands away from all rotating or moving parts.

7. ROTATING PARTS!



AVOID INJURY. Stay clear of rotating parts.

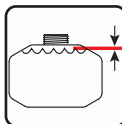
8. DANGER!



DANGER!



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.

SAFETY INSTRUCTIONS

The following safety instructions are based on B71.1, B71.4 specifications of the American National Standards Institute and ISO 5395 in effect at the time of production.

Safe Practices for Ride-On Mowers

If used improperly, this machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death. Use only for purposes intended as set forth in the Operator's Manual. Other use is improper and may cause serious injury or death.

General Information

Read, understand, and follow instructions and warnings in this manual and on the machine, engine and attachments.

Only allow operators, who are responsible, trained, familiar with the instructions, and physically capable to operate the machine.

DO NOT carry passengers and keep people or pets away from the mowing area.

DO NOT operate the machine while physically or mentally impaired, feeling tired, ill or under the influence of alcohol or drugs.

Follow the manufacturer's recommendation for wheel weights or counterweights.

DO NOT touch parts which are hot. Allow parts to cool.

Preparation Before Operating

Inspect unit before each use for missing or damaged decals and shields, correctly operating safety interlock system, ROPS and deterioration of grass catchers. Replace or repair as needed.

Clear the operating area of all objects which could be thrown by or interfere with operation of the machine.

Keep the area of operation clear of all bystanders, particularly small children. Stop the machine and attachment(s) if anyone enters the area

DO NOT operate the machine without the entire grass catcher, discharge chute, or other safety devices in place and functioning properly. Check frequently for signs of damage, wear or deterioration and replace as needed.

NEVER tamper with safety devices. Check their proper operation regularly. NEVER do anything to interfere with the intended function of a safety device or to reduce the protection provided by the safety device.

Check parking brake operation frequently. Adjust and service as required.

Wear appropriate personal protective equipment such as safety glasses, hearing protection, and substantial footwear. DO NOT mow barefoot or while wearing sandals.

Operating

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. Manuals are available in other languages at www.ariens.com.

Releasing the operator presence control (OPC) handle stops engine and blade within 3 seconds. Check this feature frequently. If feature fails to operate, disconnect spark plug wire and have the unit inspected and repaired by an authorized dealer before using.

Only run the engine in well ventilated areas. Exhaust gases contain carbon monoxide, an odorless deadly poison.

Only operate the machine in daylight or good artificial light.

Avoid holes, ruts, bumps, rocks and other hazards. Uneven terrain could overturn the machine, or cause operator to lose their balance, footing and/or control of the mower.

DO NOT put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.

Avoid slippery surfaces. ALWAYS be sure of your footing.

Stop engine before removing grass catcher or unclogging chute.

DO NOT direct discharge 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. DO NOT mow into roads or across sidewalks.	Do not mow within 1.2 M (4 feet) of a drop off. Do not mow within 1.2 M (4 feet) of a pond or other waterway. The primary hazard of slope operation is loss of control and/or roll over.
DO NOT leave a running machine unattended. ALWAYS park on level ground, disengage the attachment, set parking brake, stop engine and remove key (if applicable) before leaving the operator's position.	Mow up and down slopes, NEVER across. Exercise caution when changing direction on slopes. Use caution while operating near dropoffs.
DO NOT mow in reverse unless absolutely necessary. ALWAYS look down and behind before and while backing.	Avoid mowing wet grass. Wet surfaces can cause a loss of traction and control.
Lightning can cause severe injury or death. If lightning is seen or thunder is heard in the area, DO NOT operate the machine; seek shelter.	DO NOT operate machine under any condition where traction, steering, or stability is in question. Tires could slide even if the wheels are stopped.
If you strike a foreign object, stop and inspect the machine. Repair, if necessary, before restarting.	Always keep the machine in gear when going down slopes. Do not coast downhill.
ALWAYS check overhead and side clearances carefully before operation. Keep in mind that your mower deck may be wider than your track width.	Avoid starting and stopping on slopes. Avoid making sudden changes in speed or direction. Make turns slowly and gradually.
	Use extra care while operating machine with a grass catcher or other attachment(s). They can affect the stability of the machine.

Children Specific

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.
Keep children out of the operating area and under the watchful care of a responsible adult other than the operator.
Do not carry children, even with the blade(s) shut off. Children could fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past could suddenly appear in the mowing area for another ride and be run over or backed over.
DO NOT allow children under the age of 18 to operate any outdoor power equipment.

Slope Specific

Slopes are a major factor related to accidents. Operation on slopes requires extra caution. If you feel uneasy on a slope DO NOT mow it. Use the parking brake for emergency stops.
DO Not operate on slopes of more than 15°.

Fire and Fuel Specific

Extinguish all cigarettes, cigars, pipes and other sources of ignition.
Use only an approved fuel container.
DO NOT remove fuel cap or add fuel with the engine running or while hot.
DO NOT refuel indoors or in enclosed spaces.
DO NOT store the machine or fuel container, or refuel, where there is an open flame, spark, or pilot light such as on a water heater or other appliance.
If fuel is spilled, DO NOT attempt to start the engine and avoid creating any source of ignition until fuel vapors have dissipated.
To help prevent fires: keep machine free of grass, leaves, or other debris build up; clean up oil or fuel spillage and remove any fuel soaked debris; allow engine to cool before storing.
Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.

Hauling

Use a single full-width ramp for loading and unloading a machine for transport. Secure with appropriate straps.

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

Rollover Protection Structure (ROPS)
The ROPS is an integral safety device. Do not remove or alter the ROPS
Keep a folding ROPS in the raised and locked position and use the seat belt when operating the machine.
Lower a folding ROPS temporarily only when absolutely necessary. Do not wear the seat belt when folded down. There is no rollover protection when a folding ROPS is in the down position.
Frequently inspect the ROPS and the seatbelt for damage. Replace a damaged ROPS. Do not repair or alter

Service
Keep machine in good working order. Replace worn or damaged parts.
Use caution when servicing blades. Wrap the blade(s) or wear gloves. Replace damaged blades. DO NOT repair or alter blade(s).
Disconnect spark plug wire(s) and the negative battery cable before making any repairs.
Use only attachments recommended by AriensCo that are appropriate to your use and can be used safely in your application.
The use of non-genuine replacement parts or accessories could adversely affect machine operation and safety.
DO NOT change engine governor setting or overspeed the engine.

CONTROLS AND FEATURES

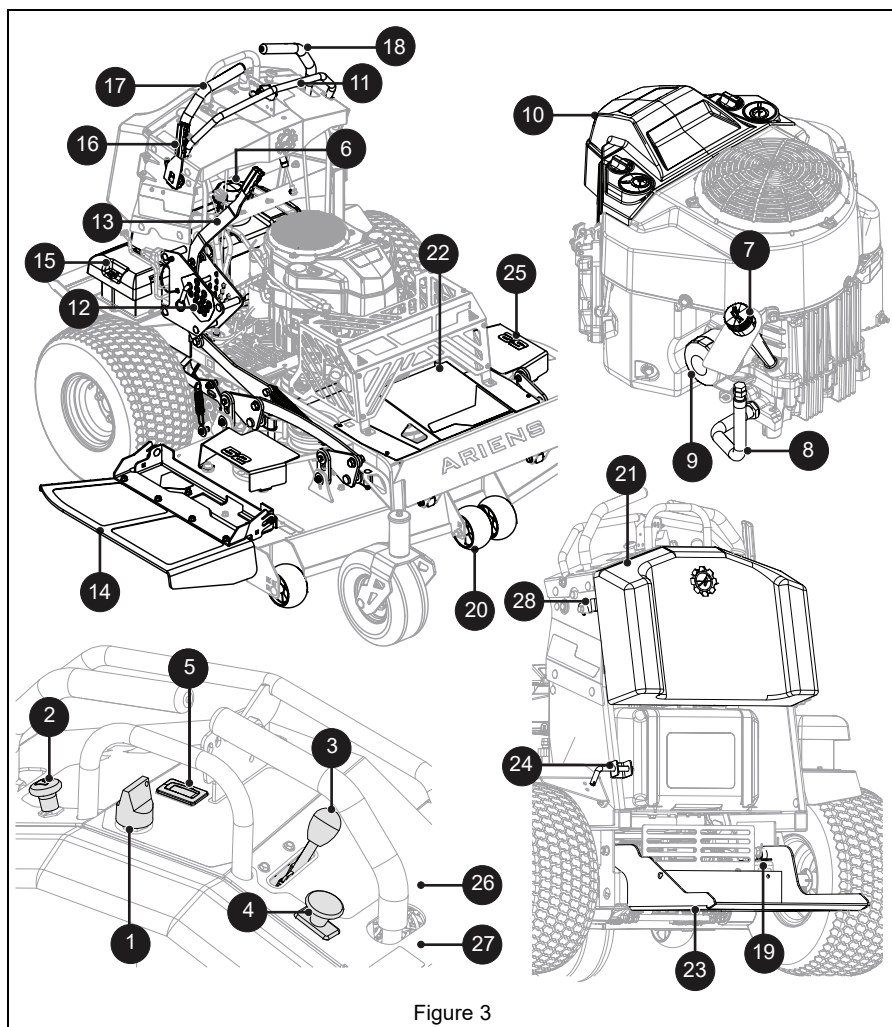


Figure 3

1. Ignition Key
2. Choke Control Knob
3. Throttle Control Lever
4. Power Take Off (PTO) Switch
5. Hour Meter
6. Fuel Tank and Cap
7. Oil Fill / Dipstick
8. Oil Drain
9. Engine Oil Filter
10. Air Filter
11. Speed Limiting Bar
12. Height-of-Cut (HOC) System
13. Deck Lift Lever
14. Discharge Chute
15. Battery
16. Parking Brake Lever
17. Steering Lever (2)
18. Operator Presence Control (OPC) Lever
19. Transaxle Bypass Lever (2) (Behind Operator Platform)
20. Anti-Scalp Wheels
21. Pad/Rear Access Panel
22. Belt Access Panel
23. Operator Platform
24. Platform Lock Pin
25. Belt Cover (2)
26. Fuse Box (Below Control Panel)
27. Relay (Below Control Panel)
28. Hinged Pad Latch



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

See Figure 3 for Controls and Features
locations.

IGNITION KEY

See Figure 4.

Controls power to the engine. The key cannot
be removed when in the on position.

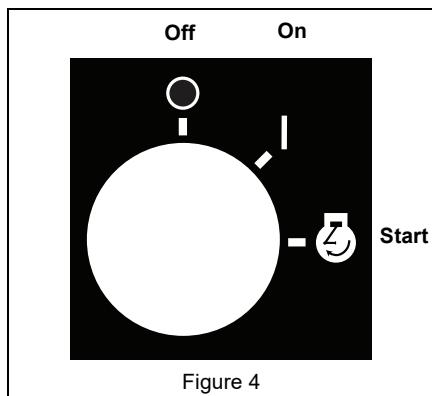


Figure 4

CHOKE CONTROL KNOB

See Figure 5.

Controls air intake to the engine.

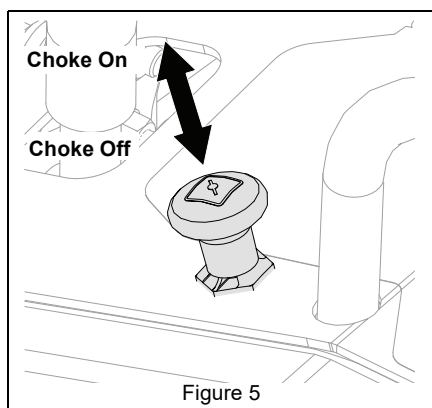


Figure 5

THROTTLE CONTROL LEVER

See Figure 6.

Controls engine speed.

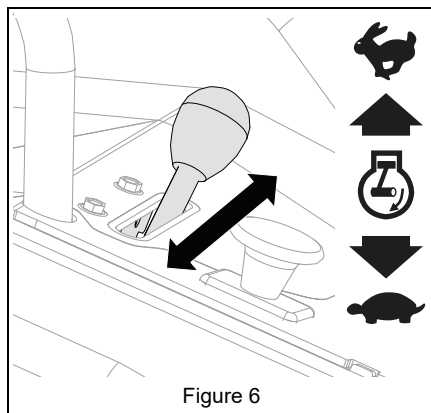


Figure 6

POWER TAKE-OFF (PTO) SWITCH

See Figure 7.

Controls power to the mower blades. The
engine will not start with the PTO switch
in the on position.

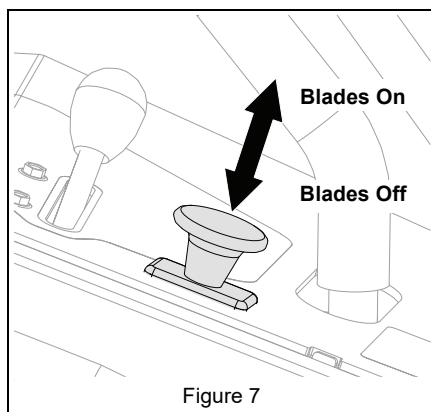


Figure 7

SPEED LIMITING BAR

Controls the speed of forward travel.

DECK LIFT LEVER

Deck lift lever or pedal raises and lowers
mower deck for mowing or transport.

TRANSAXLE BYPASS LEVERS

Engage and disengage transaxles so unit can
be moved with the engine off.

ANTI-SCALP WHEELS

Help prevent the deck from contacting the ground and scalping the lawn when mowing over high spots.

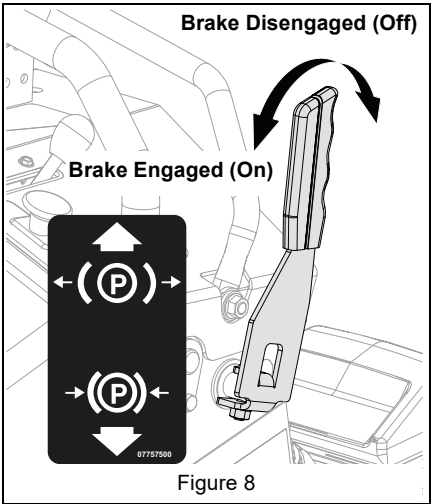
HOURLY METER

Measures and displays engine runtime.

PARKING BRAKE LEVER

See Figure 8.

Engages the parking brake. The engine will not start when brake is released.



STEERING LEVERS

Control the direction and speed of unit. The levers gradually return to neutral when released and are locked in neutral when parking brake is engaged.

SAFETY INTERLOCK SYSTEM

Monitors the interaction of various unit features for operator safety.

BEFORE OPERATION



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

1. Know how to stop in an emergency. See *Emergency Stopping* on page 14.
2. Check fuel level and add fuel if needed.

IMPORTANT: 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%. Ariens recommends using a quality fuel stabilizer in all fuel. See *Short-Term Storage* on page 32.

3. Check engine oil level and add oil if needed. Refer to engine manual.
4. Check hydraulic oil level. See *Check Hydraulic Oil Level* on page 18.
5. Check condition of air cleaner. Refer to engine manual.
6. Check function of all controls.
7. Check function of the Safety Interlock System by performing the tests below. Contact your Ariens dealer for repair if any of the tests fail.



WARNING: AVOID INJURY.
Failure of Safety Interlock System together with improper operation can result in severe personal injury.

Test	Steering Levers	PTO	Parking Brake	Result
Starting Interlock				
1	Neutral	Off	Engaged	Engine starts.
2	Forward, Neutral, Reverse	On	Engaged or Disengaged	Engine does not start.
3	Forward, Neutral, Reverse	On or Off	Disengaged	Engine does not start.

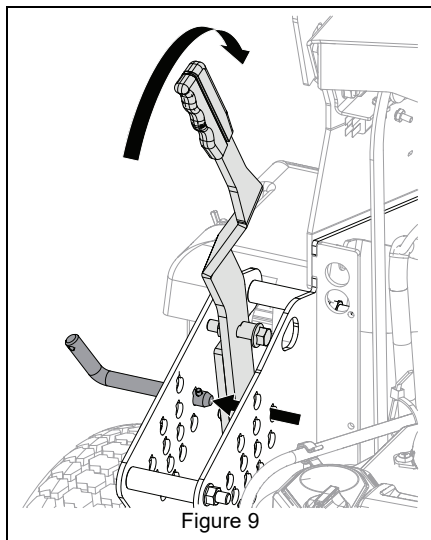
Test	Steering Levers	PTO	Parking Brake	Result
Operating Interlock (Engine On)				
4 *	Forward, Neutral, Reverse	On	Engaged or Disengaged	Engine shuts off.
5 *	Forward, Neutral, Reverse	On or Off	Disengaged	Engine shuts off.
* When operator lifts off operator presence control arm				

SET CUTTING HEIGHT

See Figure 9.

IMPORTANT: Model 994166: Minimum cutting height is 5.1 cm (2"). See *Specifications* on page 33.

1. Pull lift lever rearward to release deck pressure from HOC pin.
2. Move lever to the left to insert bolt through transport lock hole.
3. Rotate HOC pin and remove pin.



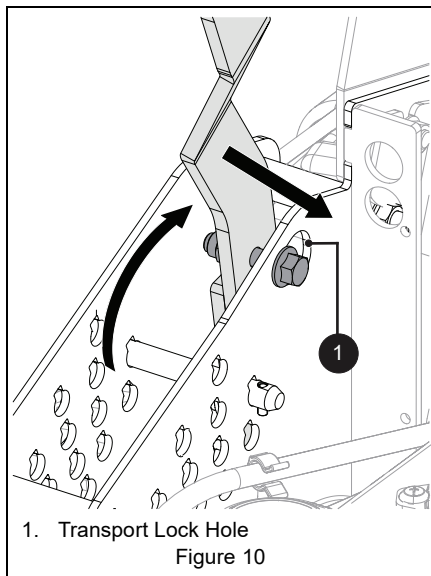
4. Align pin with desired HOC setting and insert pin.
5. Disengage lever from transport lock position and slowly release lever to resting position.

TRANSPORT UNIT

See Figure 10.

1. Pull lift lever rearward and move lever to the left to insert bolt through transport lock hole. Ensure washer is positioned against HOC plate.
2. Move unit to transport vehicle.
3. Stop engine, engage parking brake and remove key.
4. Secure mower frame to transport vehicle.

NOTICE: NEVER secure unit to vehicle from rods or linkages that could be damaged.



RELEASE TRANSPORT LOCK

1. Pull lift lever rearward and move lever to the right to release transport lock.
2. Slowly return lift lever to resting position.

SET OPERATOR PLATFORM



CAUTION: Platform will drop when lock pin is released. Stand clear when releasing platform.

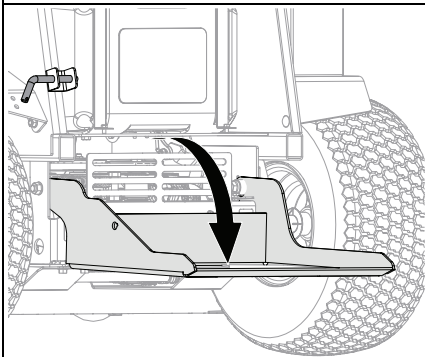
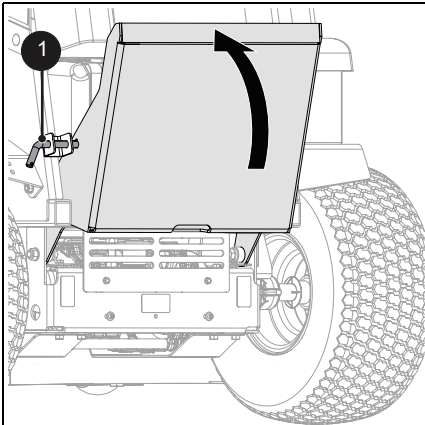
See Figure 11.

To rotate platform up (walk-behind mode):

1. Rotate platform up to the storage position.
2. Align pin with notch in platform and insert pin.
3. Rotate pin to lock platform in place.

To rotate platform up (walk-behind mode):

4. Rotate platform lock pin and release pin.
5. Rotate platform down to the standing position.



1. Platform Lock Pin

Figure 11

ADJUST SPEED LIMITING BAR

See Figure 12.

1. Pull the spring pin.
2. Move speed limiting bar rearward to decrease maximum speed or forward to increase maximum speed.
3. Reinstall spring pin into the desired speed setting.

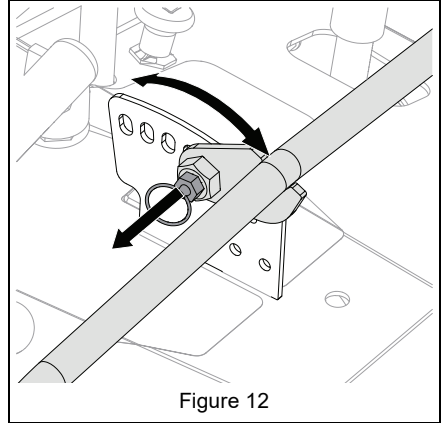


Figure 12

OPERATION



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

IMPORTANT: All references to left, right, front or rear are given from the perspective of operator in operator's position, facing the direction of forward travel.

EMERGENCY STOPPING



WARNING: AVOID INJURY.
Operating on slopes may lead to loss of steering control. Be prepared to react.

1. Return steering levers to neutral position.
2. Engage parking brake.
3. Push PTO switch down to off position.
4. Turn key to off position and remove from ignition.

START THE ENGINE

1. Move steering levers to neutral position.
2. Engage parking brake.
3. Push PTO switch down to off position.
4. If engine is cold, move choke control lever to the on position. DO NOT use choke on a warm engine.
5. Move throttle control lever to 3/4 fast position.
6. Insert ignition key and turn to the start position. Release key when engine starts.

NOTICE: Do not operate the starter for more than 10 seconds per starting attempt. If the engine does not start, allow a 60-second cool down period between starting attempts.

7. Gradually move choke control lever to the off position after engine starts.

NOTICE: Do not operate the starter for more than 10 seconds per starting attempt. If the engine does not start, allow a 60-second cool down period between starting attempts.

OPERATE UNIT

1. Start the engine. See *Start The Engine* on page 15.
2. With left steering control (OPC) depressed, release parking brake.
3. Move steering levers to neutral and set throttle control lever to fast position.

IMPORTANT: Engaging the PTO knob with the throttle lever set lower than fast position can cause excessive belt wear. ALWAYS use fast position when engaging the PTO.

4. With left steering control (OPC) depressed, pull PTO switch up to the on position.

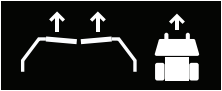
IMPORTANT: Never engage the PTO if the mower is plugged with grass or debris. This may cause damage to the electric clutch.



WARNING: AVOID INJURY.
Move the steering levers slowly and keep the throttle at slow speed until you learn how to operate the unit.

5. Move steering levers to begin mowing.

Direction of Travel	Lever Position
Forward	Push both levers forward from neutral position.

Direction of Travel	Lever Position
	
Reverse	Pull both levers backward from neutral position.
	
Right Turn	Push left lever farther forward than the right lever.
	
Left Turn	Push right lever farther forward than the left lever.
	
Stop	Return both levers to neutral position.
	

IMPORTANT: Aggressive turning can scuff or damage lawns. Always keep both wheels rotating when making sharp turns. DO NOT make turns with inside wheel completely stopped. For minimum turning radius, slowly reverse inside wheel while moving outside wheel slowly forward.

Slope Operation

DO NOT operate on slopes over 15°. Smartphone apps are available to assist in measuring the angle of a slope before use. Alternatively, refer to the chart on page 31 to determine the degree of the slope.

For Best Mowing Results

- Cut grass when it is dry.
- Keep mower blades sharp.
- Keep mower deck properly leveled.
- Adjust anti-scalp wheels to prevent scalping.
- Do not set height of cut too low. For very tall grass, mow twice.
- Do not travel too fast.
- Mow with engine at full throttle.
- When mulching, only remove 1/3 of grass length per cutting. Do not cut more than 2.5 cm (1") at a time.
- Discharge clippings into areas already cut.
- Change cutting pattern with each mowing.
- Do not allow grass or debris to collect inside mower deck. Clean after each use.

STOP THE ENGINE



WARNING: AVOID INJURY.
Wait for all moving parts to stop before leaving operator's position.

1. Move steering levers to the neutral position.
2. Engage parking brake.
3. Reduce throttle to 3/4 fast position.
4. Push PTO switch down to the off position.
5. Move throttle control lever to slow position.
6. Turn key to off position and remove from ignition.

MOVE UNIT MANUALLY

Bypass the transaxles to move the unit with the engine off.

1. Place steering levers in neutral position and engage parking brake.
2. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
3. Rotate platform up and engage platform lock.
4. Pull both transaxle bypass levers out into bypass position. See Figure 13.

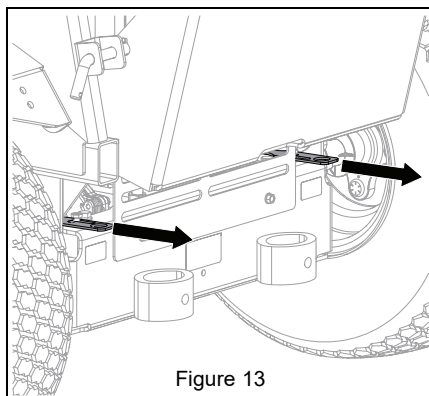


Figure 13

5. Release parking brake and push unit to desired location.
6. Engage parking brake.
7. Push bypass levers into operating position. See Figure 14.

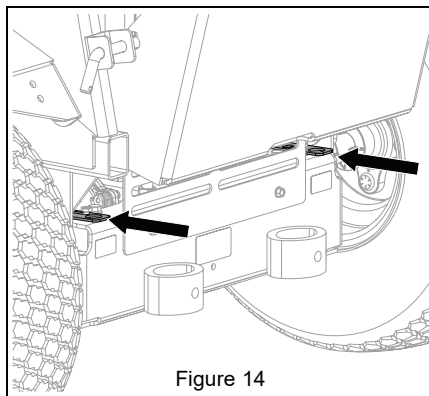


Figure 14

8. To return platform to standing position, release platform lock pin and lower platform.

MAINTENANCE



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

Proper maintenance can prolong the life of unit. The *Maintenance Schedule* on page 17 shows the recommended service schedule. Your Ariens dealer can provide service and adjustments to keep your unit operating at peak efficiency. Contact an authorized engine manufacturer's service center for engine service.

More frequent service may be required due to working conditions (heavy loads, high ambient temperatures, dusty conditions, or airborne debris).

See the maintenance instructions in the Engine Manual for additional information.

SERVICE POSITION

1. Park unit on a flat, level surface.
2. Place steering levers in neutral position and engage parking brake.
3. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
4. Chock wheels. Strap and clamp unit onto lift, if used.
5. Disengage pad latch and rotate swing operator pad outward. See Figure 15.

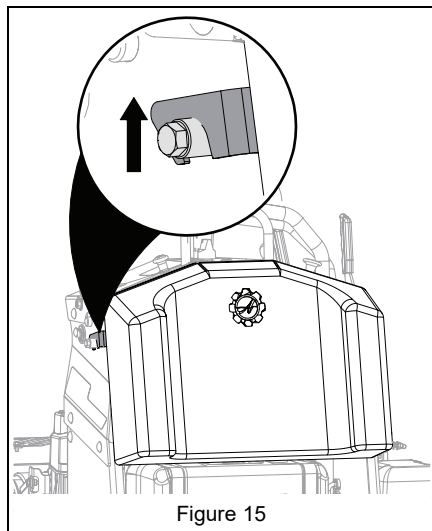


Figure 15

HOUR METER

See Figure 16.

Timer measures engine runtime and cannot be reset.

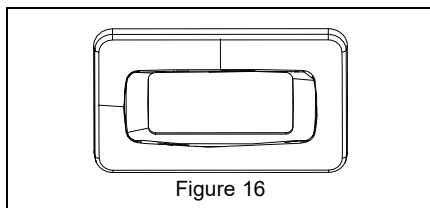


Figure 16

MAINTENANCE SCHEDULE

Service Performed	Each Use	Every 25 hrs.	Every 50 hrs.	Every 100 hrs.	Every 400 hrs.	Every 500 hrs.
Clean Debris from Engine	•					
Inspect Belt Cover Grommets for Damage	•					
Check Engine Oil *	•					
Change Engine Oil *						
Check Air Filter *			•			
Change Air Filter *						
Clean Engine * Cooling System				•		
Check Safety Interlock System	•					
Check Hydraulic System	•					
Check Tire Pressure	•					
Check Mower Blades		•				
Lubricate Unit			•			
Check Parking Brake	•					
Clean Battery				•		
Check Fasteners				•		
Check Belts				•		
Change Hydraulic Oil and Filter **					•	

* Refer to engine manual for instructions.

** Change after first 75 hours of operation.

SERVICE PARTS

See your Ariens dealer to purchase service parts for your unit.

Description	Qty	Part No.
Air Filter Outer Element	1	21537000
Air Filter Inner Element	1	21536900
Engine Oil Filter	1	21535800
Fuel Filter	1	21538400
Hydraulic Oil Filter	2	21545100
PTO Belt (Engine to Deck) – 48"	1	07200729
PTO Belt (Engine to Deck) – 52"	1	07200819
PTO Belt (Engine to Deck) – 32"	1	07200917
Traction Belt (Hydro Pump) – 48" & 52"	1	07200919
Traction Belt (Hydro Pump) – 32"	1	07200918
Mower Blade – 48"	3	00450200
Mower Blade – 52"	3	03253800
Mower Blade – 32"	2	00450200
48" Blade Kit	1	70763500
52" Blade Kit	1	70763600
Maintenance Kit	1	70734800

CHECK SAFETY INTERLOCK SYSTEM

Parking Brake Interlock System

With the parking brake engaged, the steering levers must be locked in neutral.

With the parking brake disengaged, the engine must not start and the engine must shut off if the operator releases the operator presence control (OPC) lever. See *Before Operation* on page 12. If system does not operate correctly, see your dealer for repair. DO NOT operate until repairs are made.

CHECK HYDRAULIC SYSTEM

Check Hydraulic Oil Level

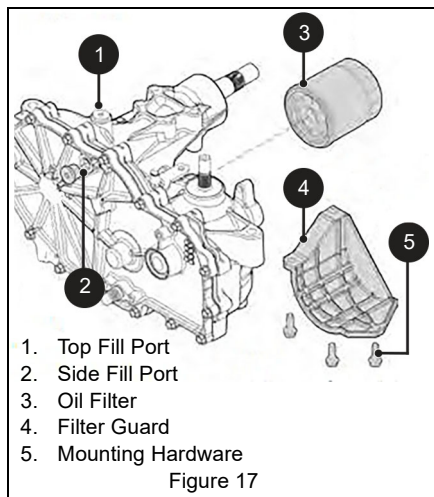
1. Place unit in service position. See *Service Position* on page 17.
2. Remove side port plug and check oil level in transaxle. Oil level MUST reach the bottom edge of the side fill port. See Figure 17.

IMPORTANT: Engine should be cold when checking initial oil level.

3. Operate engine for one minute and recheck oil levels.
4. Add hydraulic oil, if needed. See *Add Hydraulic Oil* on page 18.

Add Hydraulic Oil

1. Place unit in service position. See *Service Position* on page 17.
 2. Lift and properly support rear of unit and remove wheel.
- See Figure 17.
3. Remove fill port plugs from transaxle.
 4. Add 15W-50 Full-Synthetic Hydraulic Fluid (Ariens p/n 00057100) or equivalent until oil reaches the bottom edge of the side fill port. (approximately 1.9 L (2 qt) per transaxle).
 5. Reinstall fill port plugs. Torque to 20.3 N•m (120 in-lbs)
 6. Repeat steps 4 – 12 for the other transaxle.



Change Hydraulic Oil and Filter

1. Operate unit for a few minutes to warm hydraulic oil.
2. Stop engine, remove key and wait for all moving parts to stop and for hot parts to cool.
3. Lift and properly support rear of unit and remove wheel.
4. Position container under oil filter to catch used oil.

See Figure 17.

5. Remove filter guard and oil filter from transaxle. Allow the transaxle to drain completely.
6. Wipe filter-mounting surface clean.
7. Lubricate rubber gasket on new oil filter with clean hydraulic oil.
8. Spin filter onto filter housing until it makes contact, and then turn filter 3/4 turn to tighten.
9. Reinstall filter guard. Torque hardware to 13.0 N•m (115 in-lbs). DO NOT overtighten.
10. Add hydraulic oil. See *Add Hydraulic Oil* on page 18.
11. Purge hydraulic system. See *Purge Hydraulic System* on page 19.

Purge Hydraulic System

Purge air from hydraulic system after draining oil or changing the filter.



WARNING: AVOID INJURY. This adjustment requires operating the engine. Use extreme care to avoid contact with moving parts and hot surfaces. Be sure rear of unit is well supported and secure before starting engine.

1. Park unit facing a wall or chock wheels.
2. Release parking brake.
3. Support unit so drive wheels are off the ground.
4. Bypass transaxles. See *Move Unit Manually* on page 16.
5. Start the engine and slowly move steering levers forward and backward five or six times.
6. Stop engine.
7. Return transaxle bypass levers to operating position. See *Move Unit Manually* on page 16.
8. Start engine.

9. Slowly move steering levers forward and backward five or six times.
10. Stop engine, lower unit to ground and check oil level. Add oil if needed.
11. Repeat steps 1 – 10 until transaxles operate smoothly in forward and reverse at normal speeds without excessive noise.

CHECK TIRE PRESSURE

See *Specifications* on page 33 for recommended tire pressure.



WARNING: AVOID INJURY.

Explosive separation of tire and rim parts is possible.

- DO NOT inflate tires above the recommended pressure.
- DO NOT inflate tires with a compressor; use a hand pump.
- DO NOT stand in front of tire assembly when inflating. Use a clip-on chuck and extension hose long enough to allow you to stand to one side.
- DO NOT mount a tire without proper equipment and experience.

CHECK MOWER BLADES

Check blades for wear. Replace or sharpen as needed.



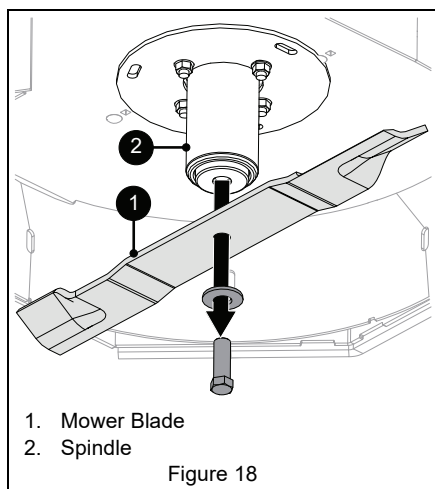
CAUTION: AVOID INJURY.

Use sturdy gloves or padding to protect hands when working with mower blades.

Rotation of one blade rotates the other blades.

Remove Blades

1. Place unit in service position. See *Service Position* on page 17.
2. Disconnect spark plug wires. See Figure 18.
3. Remove and retain hardware securing mower blades and remove blades.

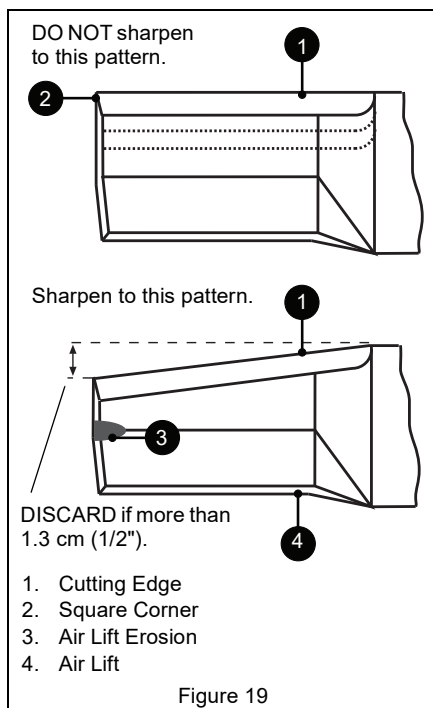


Sharpen Blades



CAUTION: DO NOT sharpen blades while attached to unit.

1. Remove blades. Discard blades if:
 - More than 1.3 cm (1/2") of metal is removed.
 - Air lifts are eroded.
 - Blades are bent or broken.
2. File or grind an equal amount of metal from each cutting edge of the blade until sharp. DO NOT change angle of cutting edge or round the corner of the blade. See Figure 19.



CAUTION: Unbalanced blades cause excessive vibration and eventual damage to unit. Balance blades before reinstalling on unit. NEVER weld or straighten blades.

3. Check blade balance by sliding an unthreaded bolt through center hole. Hold the bolt level. If blade does not remain horizontal, sharpen the heavy end until blade is balanced.

Install Blades

See Figure 18.

1. Secure blades to spindles with washers and hex bolts removed earlier. Torque to 156 – 217 N•m (115 – 160 lb-ft).
2. Reconnect spark plug wires.

CHECK PARKING BRAKE

IMPORTANT: Parking brake lever engages drive wheels with two independent cables. It is possible for parking brake to engage one drive wheel only.

1. Place unit in service position. See *Service Position* on page 17.
2. Bypass transaxles. See *Move Unit Manually* on page 16.
3. Push unit forward.
 - If unit does not move forward, parking brake is functioning correctly.
 - If unit easily moves forward, repair is required. Contact your Ariens dealer.
4. Return transaxle bypass levers to operating position. See *Move Unit Manually* on page 16.

CLEAN BATTERY



WARNING: AVOID INJURY. 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.

Remove Battery

See Figure 20.

1. Place unit in service position. See *Service Position* on page 17.
2. Remove wing nuts retaining battery cover and remove cover.
3. Remove hardware retaining battery hold-down bracket and remove bracket.
4. Disconnect the negative cable and then the positive cable from battery.
5. Remove battery.

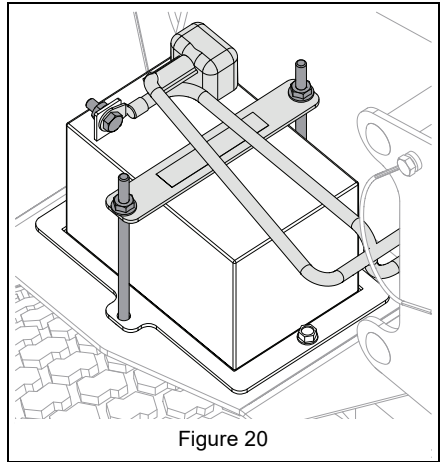


Figure 20

Clean Battery

1. Clean terminals and battery cable ends with wire brush.
2. Coat terminals with dielectric grease or petroleum jelly.

Install Battery

1. Install battery.
2. Reconnect positive cable and then the negative cable.
3. Reposition boot over positive terminal.
4. Secure hold-down bracket to battery using original hardware.
5. Reinstall battery cover and secure with wing nuts.

CHARGE BATTERY

NOTICE: DO NOT fast charge. Charging at a higher rate damages or destroys battery. ONLY use an automatic charger designed for use with your battery.

NOTICE: ALWAYS follow information provided on battery by battery manufacturer. Contact battery manufacturer for details regarding charging.

1. Remove battery from unit. See *Remove Battery* on page 21.
2. Place battery on bench or other well-ventilated place.
3. Connect positive lead of charger to positive terminal.
4. Connect negative lead of charger to negative terminal.
5. Charge battery according to charger and battery manufacturers' instructions.

6. Reinstall battery. See *Install Battery* on page 21.

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.

CHECK FASTENERS

Check for loose hardware and tighten if necessary.

LUBRICATE UNIT

1. Apply oil to all pivot points and pin connections.

SERVICE AND ADJUSTMENTS



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

ADJUST TRANSAXLES

Check for Excessive Creep



WARNING: AVOID INJURY.
This adjustment requires operating the engine. Use extreme care to avoid contact with moving parts and hot surfaces. Be sure rear of unit is well supported and secure before starting engine.

1. Operate unit for a minimum of five minutes to warm hydraulic system.
2. Stop engine and engage parking brake.
3. Chock front wheels and support unit so both drive wheels are off the ground.
4. Remove drive wheels.
5. Start engine, move throttle lever to fast position and release parking brake.
6. Move steering levers forward and backward five or six times and then return levers to neutral position.
7. Check wheel hubs for rotation.
 - If there is only slight rotation, stop engine, reinstall wheels and lower unit to ground.
 - If there is excessive rotation, adjust neutral position. See *Adjust Neutral Position* on page 22.

Adjust Neutral Position

If wheel hub has excessive rotation after checking for excessive creep, adjust neutral position.

1. Loosen the return-to-neutral screw on the transaxle. See Figure 21.

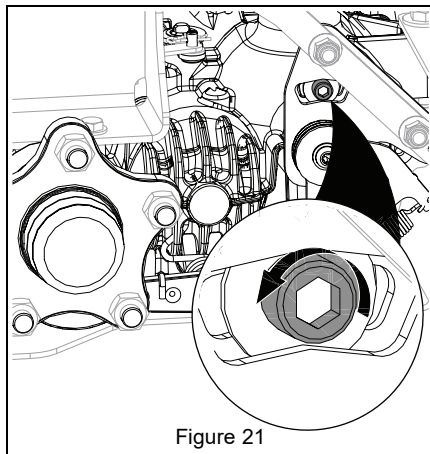


Figure 21

2. Slowly turn transaxle control arm in the opposite direction of hub rotation until hub stops. See Figure 22.

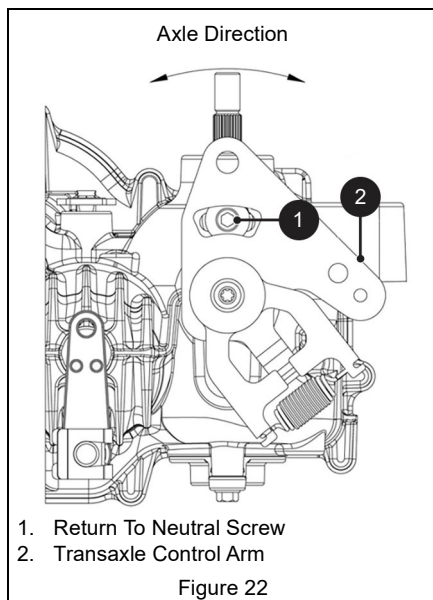


Figure 22

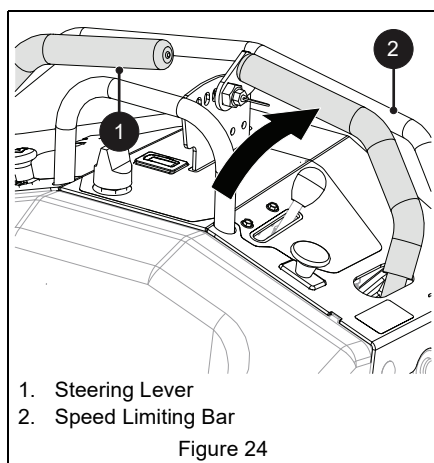
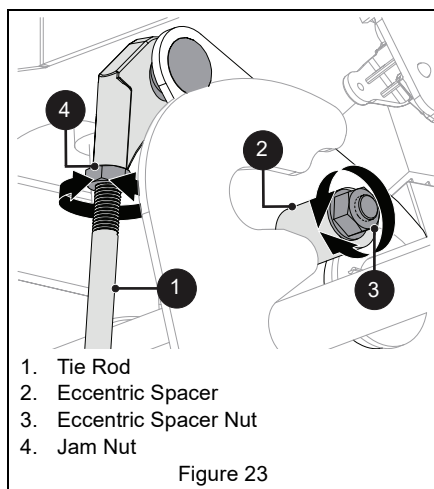
3. Hold the transaxle control arm in position and tighten the return-to-neutral screw.

4. Start engine, move throttle lever to fast position and release parking brake.
5. Move steering levers forward and backward five or six times and then return levers to neutral position.
6. Check wheel hubs for rotation:
 - If there is only slight rotation, stop engine, reinstall wheels and return unit to operating position.
 - If there is excessive rotation, repeat steps 1 – 5.

ADJUST STEERING LEVERS

1. Stop engine, remove key and wait for all moving parts to stop and for hot parts to cool.
 2. Engage parking brake.
- See Figure 23 and 24.
4. Loosen the eccentric spacer nut.
 5. Loosen the jam nuts located on the tie rod.
 6. Push and hold a steering control lever forward and turn the control rod until the steering lever makes contact with the speed limiting bar.
 7. Repeat step 6 on other side.
 8. Return the steering levers to the neutral position.
 9. If necessary, slightly adjust the control rods so the steering levers are aligned with each other.
 10. Turn tie rod until steering levers align. Adjust both left and right sides as needed.
 11. Tighten jam nuts and eccentric spacer nut.

NOTICE: Adjust steering lever interlock if the steering levers are shifted during application of the brake. See *Steering Lever Interlock Adjustment* on page 23.



Steering Lever Interlock Adjustment

See Figure 25.

1. Stop engine, remove key and wait for all moving parts to stop and for hot parts to cool.
2. Chock wheels to prevent unit from rolling.
3. Release parking brake.
4. Loosen but do not remove the outer lock nut on the eccentric brake bushing.
5. Engage the parking brake. Bushing will seat in notch in brake lever bracket.
6. Tighten lock nut.
7. If necessary, adjust steering levers to ensure full alignment with each other.

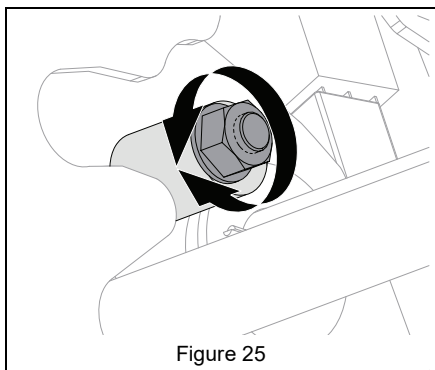


Figure 25

ADJUST UNIT TO DRIVE STRAIGHT

1. Park unit on a flat, level surface.
2. Check tire pressures. If needed, adjust to recommended pressures. See *Specifications* on page 33.

IMPORTANT: DO NOT inflate tires outside recommended range.

3. Drive machine forward, pushing both control levers all the way to speed limiting bar.
4. Check tracking. If unit does not drive in a straight line, adjust steering levers. See *Adjust Steering Levers* on page 23.

REPLACE MOWER BELTS



CAUTION: Damaged or worn belts may result in injury and / or damage to the unit. Check belts for excessive wear or cracks often.

Belt Access

1. Place steering levers in neutral position and engage parking brake.
2. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
3. Position mower deck at lowest cutting height.
4. Lift belt covers to remove from mower deck. See Figure 26.

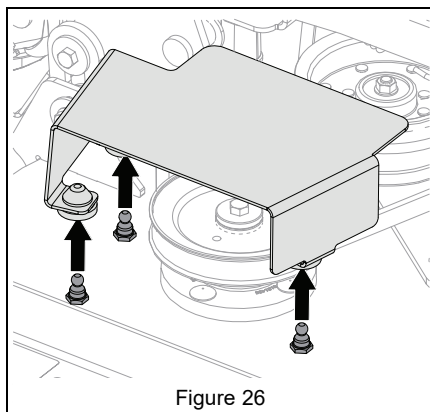


Figure 26

Remove PTO Belt

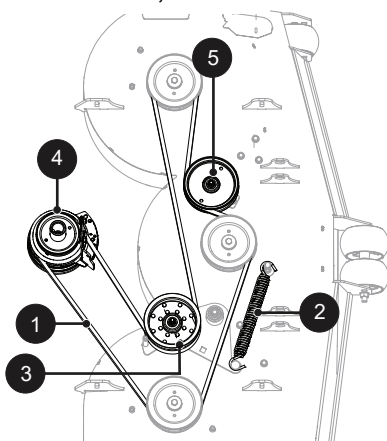


CAUTION: Use care when releasing idler spring tension. Keep body parts well away from idlers when performing this operation.

See Figure 27 and 28.

1. Using a spring puller, slowly remove spring from anchor bolt until all tension is removed.
2. Remove PTO belt from deck sheaves.

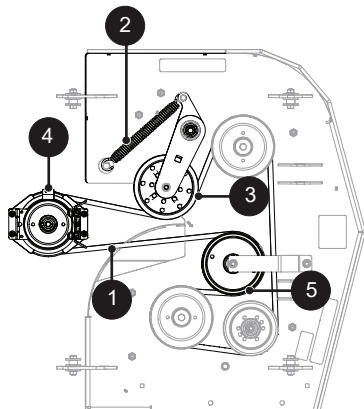
Models 994167, 994168



1. PTO Belt
2. Spring
3. PTO Belt Idler
4. Mower Clutch Sheave
5. Center Sheave

Figure 27

Model 994166



1. PTO Belt
2. Spring
3. PTO Belt Idler
4. Mower Clutch Sheave
5. Center Sheave

Figure 28

Install PTO Belt

1. Install PTO belt around deck sheaves. See Figure 27 and 28.

IMPORTANT: Verify that there are no twists in belts and that they are routed correctly.

2. Close belt access panel and reinstall belt covers.

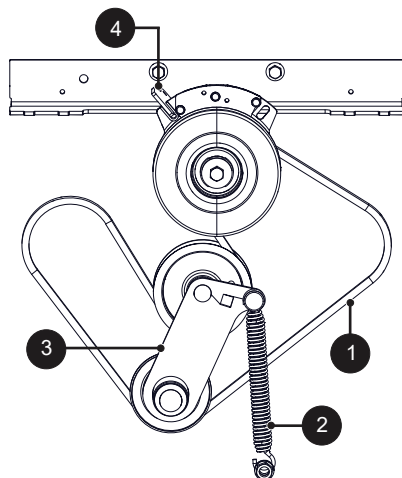
Remove Hydro Pump Belt

See Figure 29.



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

1. Remove PTO belt. See *Remove PTO Belt* on page 24.
2. Using a spring puller, slowly remove spring from anchor bolt until all tension is removed.
3. Remove hardware securing clutch stop bracket to frame and remove bracket.
4. Remove hydro pump belt.



1. Hydro Pump Belt
2. Spring
3. Idler Arm
4. Clutch Stop

Figure 29

Install Hydro Pump Belt

See Figure 29.

IMPORTANT: Hydro pump belt **MUST** be installed before PTO belt.

1. Install hydro pump belt around sheaves. Route belt as shown in Figure 29.
2. Reinstall clutch stop bracket and secure with original hardware.
3. Reinstall PTO Belt. See *Adjust Anti-Scalp Wheels* on page 26.

IMPORTANT: Verify that there are no twists in belts and that they are routed correctly.

4. Close belt access panel and reinstall belt covers.

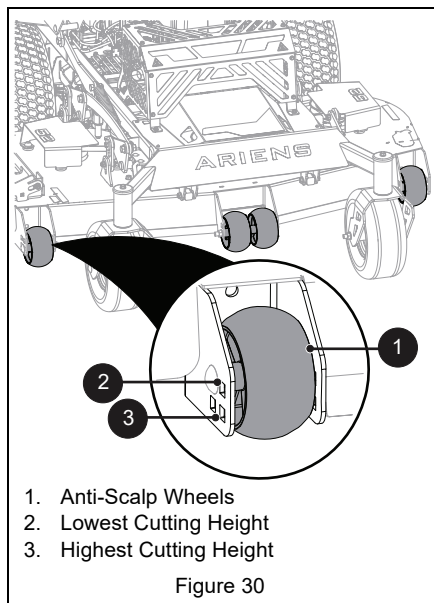
ADJUST ANTI-SCALP WHEELS

See Figure 30.

The anti-scalp wheels are set at the factory for typical mowing height, but can be adjusted for high or low cutting conditions.

1. Place steering levers in neutral position and engage parking brake.
2. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
3. Remove hardware securing anti-scalp wheels to deck and remove wheels.
 - For a very high cutting height, set the anti-scalp wheels in the lowest position on the bracket.
 - For a very low cutting height, set the anti-scalp wheels in the highest position on the bracket.

NOTICE: All anti-scalp wheels MUST be set to the same height.



ADJUST DECK LIFT

Models 994167, 994168

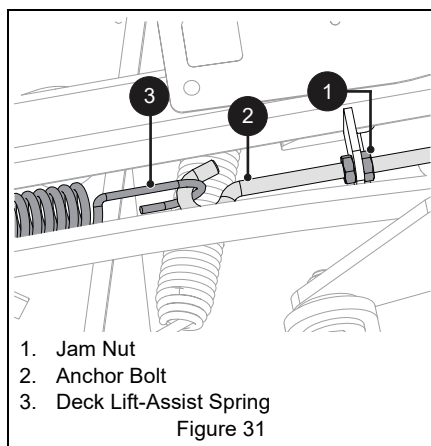
See Figure 31.

The deck-lift assist tension may be adjusted to modify deck lift assist and deck stability. Increased spring tension leads to easier deck lifting, but also decreases deck stability.

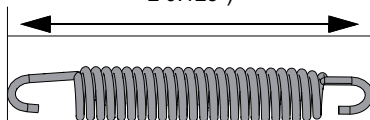
1. Loosen jam nuts on anchor bolt.
2. Adjust the anchor bolt to the desired setting:
 - Turn anchor bolt counterclockwise to decrease lift assist and increase deck stability.
 - Turn anchor bolt clockwise to increase lift assist and decrease deck stability.

NOTICE: Excessive spring tension increases the potential for deck to lift and bounce over rough terrain and affect cut quality.

3. Measure the spring length between the outside edges of spring hooks at 3.25" HOC position. Readjust spring tension if necessary. See Figure 32 for spring length range for each deck size.
4. Tighten jam nuts against anchor bolt.



48" / 52" Decks: 25.7 cm $\pm$ 0.32 cm (10.12" $\pm$ 0.125")



HOC Position: 3.25"

Figure 32

REMOVE / INSTALL MOWER DECK

Remove Deck

1. Place unit in service position. See *Service Position* on page 17.



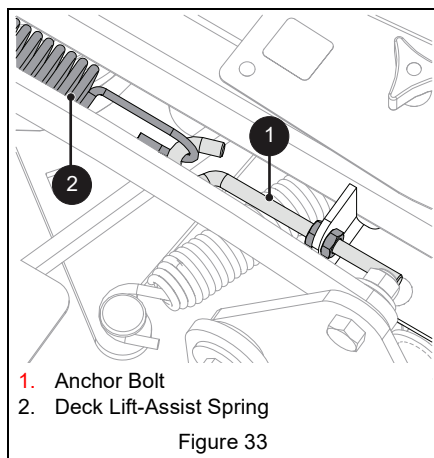
WARNING: AVOID INJURY!
Springs store energy. Keep body parts well away from pinch points when removing the deck.

2. Remove PTO belt from clutch. See *Remove PTO Belt* on page 24.



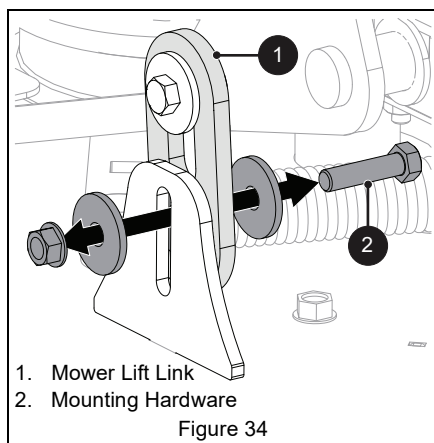
WARNING: AVOID INJURY.
Mower lift arms and lift pedal could cause severe injury if the lift-assist springs are not disconnected before the lift links.

3. Engage transport lock and slowly disconnect lift-assist spring from mower lift arm by unthreading the anchor bolt. See Figure 33.

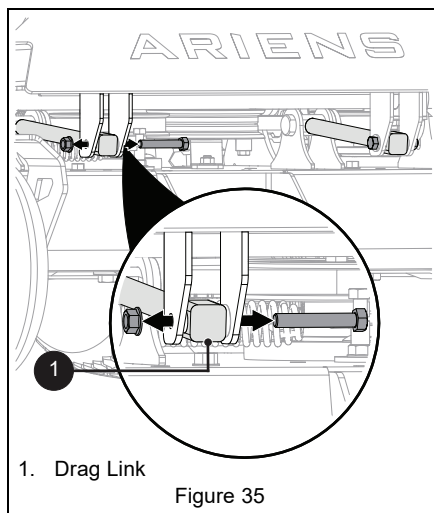


NOTICE: Position supports such as blocks or jack stands under each side of the deck.

4. Release transport lock and slowly lower deck until it rests on supports.
5. Remove hardware securing mower lift links to the deck. See Figure 34.



7. Remove and retain the drag link hardware. See Figure 35.
8. Slide deck out from under unit.



Install Deck

1. Position deck under unit.
2. Reinstall drag links to deck with original mounting pins and hardware.
3. Reinstall lift links using original hardware. Torque to 31.2 N•m (23 lb-ft).
4. Install PTO belt. See *Adjust Anti-Scalp Wheels* on page 26.
5. Raise deck to transport (fully raised) position and reconnect lift assist springs.
6. Adjust spring length to specifications. See *Adjust Deck Lift* on page 26.

LEVEL AND PITCH MOWER DECK

IMPORTANT: Make sure unit is on a flat, level surface and that tires are inflated to the recommended pressures.

Check Blade Level and Pitch

1. Place steering levers in neutral position and engage parking brake.
2. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
3. Raise mower deck to 3.25" cutting height.
4. Place blocks at each corner of the deck to support the weight of the deck.

NOTICE: Place blocks under the bottom edge of the deck, not under the reinforcement bar welded along deck face.

See Figure 36.

5. Position mower blades so ends point left to right across the width of the deck.
6. Measure the distance between the ground and cutting edge of the left blade and right blades. Distances should be within 4.7 mm (3/16").

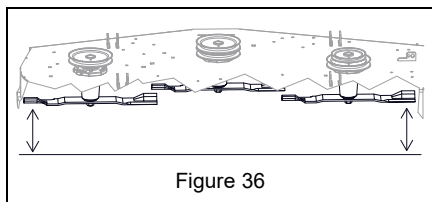


Figure 36

See Figure 37.

7. Position mower blades so ends point front to back and measure the following:
 - At the front of the deck, measure the distance between the ground and the cutting edge of the middle blade.
 - At the rear of the deck, measure the distance between the ground and the cutting edge of the left and the right blades.
8. The cutting edge at the front of the deck should be 3.2 mm (1/8") lower than the cutting edges at the rear of the deck.

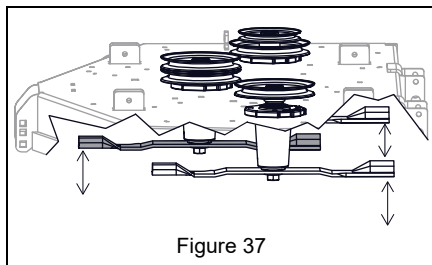


Figure 37

If measurements are out of range, raise the low side of the deck using the height adjusters on the deck lift brackets. See *Adjust Blade Height* on page 28.

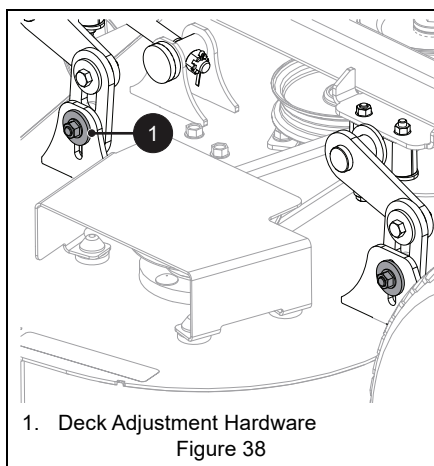
Adjust Blade Height

See Figure 38.

1. Park unit on a flat, level surface.
2. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
3. Set mower deck to transport (fully raised) position.
4. Position mower blades so ends point front to back.
5. Place spacers under mower blade tips.

IMPORTANT: Place taller spacers in rear blade position to set deck pitch. For example, 7.6 cm (3") front spacers and 7.9 cm (3 1/8") rear spacers will set deck to 0.3 cm (1/8") front pitch.

6. Set deck to 7.6 cm (3") HOC position and lower deck onto spacers.
7. Loosen deck adjustment hardware on the four deck hangers. If not adjusted properly, bolt location should move up or down in the adjustment slots.
8. Tighten deck adjustment hardware.
9. Set mower deck to transport (fully raised) position and remove spacers.



ELECTRICAL SERVICE

See *Controls and Features* on page 9 for fuse box location.

See Figure 39.

Replace Fuse

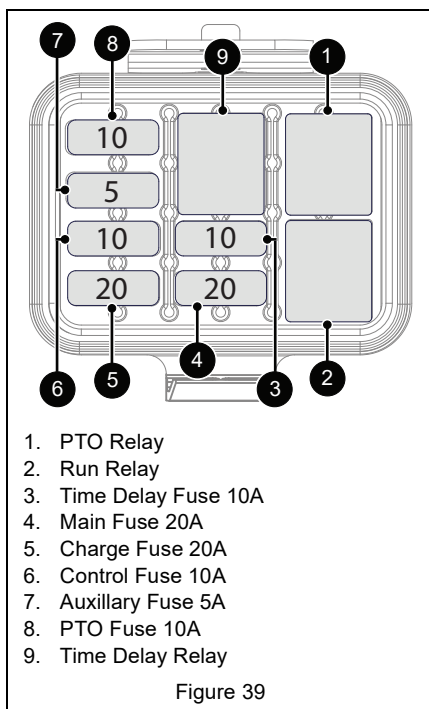
IMPORTANT: To avoid damaging the circuit, replace fuses with fuses of the same amperage (A) rating. Determine the cause of electrical failure and repair before replacing failed electrical components.

1. Press locking clip and pull fuse box down from cover.
2. Remove defective fuse.
3. Determine cause of fuse failure and repair condition.
4. Install new fuse.
5. Insert fuse box into cover and push up until locking clip snaps into place.

Replace Relay

NOTICE: Relays are interchangeable. Use only quality replacement parts.

1. Press locking clip and pull fuse box down from cover.
2. Remove defective relay.
3. Determine cause of relay failure and repair condition.
4. Install new relay.
5. Insert fuse box into cover and push up until locking clip snaps into place.

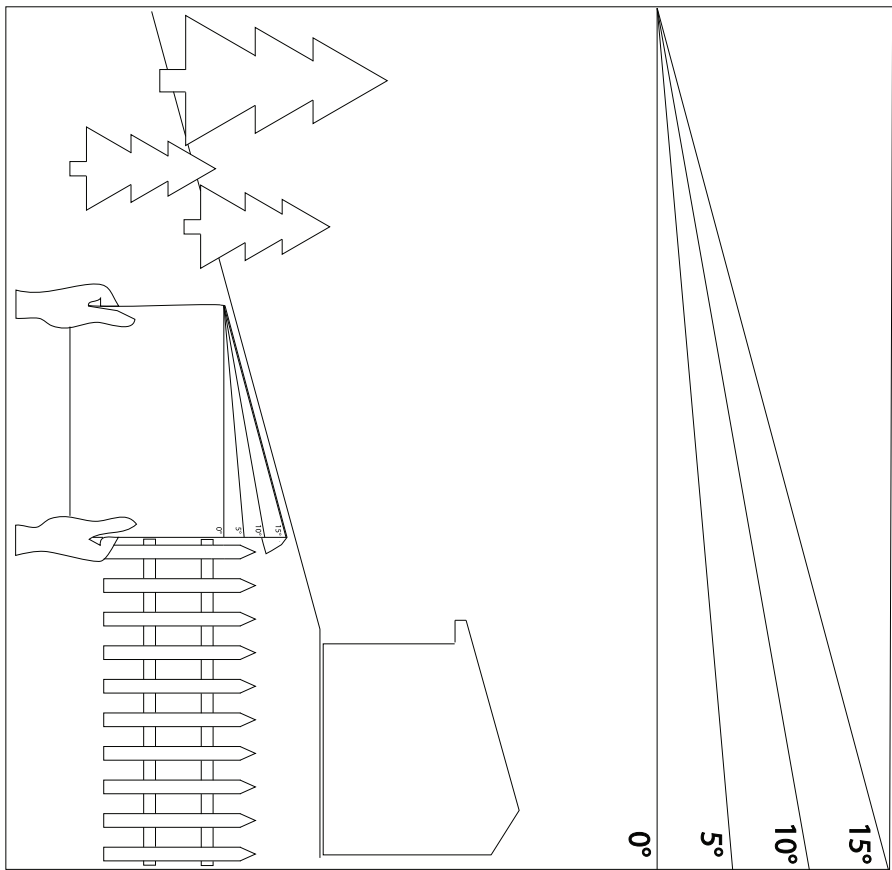


TROUBLESHOOTING

Problem	Probable Cause	Correction
Engine does not crank.	PTO engaged.	Disengage PTO.
	Parking brake disengaged.	Engage parking brake.
	Loose or corroded battery cables.	Clean and tighten battery cables. See <i>Clean Battery</i> on page 21.
	Discharged battery.	Charge battery. See <i>Charge Battery</i> on page 21.
	Faulty starter.	See your Ariens dealer.
	Blown fuse.	Check main fuse and replace if necessary.
	Failed relay.	Check relays in fuse block and replace if necessary
	Loose or broken wires.	Check wire harness and connections.
	Weak battery.	Check voltage and charge if required. See <i>Charge Battery</i> on page 21.
Engine cranks but does not start.	Fuel tank empty.	Fill fuel tank. See <i>Before Operation</i> on page 12.
	Faulty spark plug.	Replace spark plug. Refer to Engine Manual.
	Air cleaner is plugged or dirty.	Clean or replace air cleaner. Refer to Engine Manual.
	Fuel filter is dirty.	Clean or replace fuel filter. Refer to Engine Manual.
	Faulty engine.	Refer to Engine Manual or see your Ariens dealer.
	Weak battery.	Check voltage and charge if required. See <i>Charge Battery</i> on page 21.
Engine continues to run when ignition key is in the off position.	Ignition ground wire disconnected.	Connect ground wire to clean metal surface.
	Ignition switch failure.	Replace ignition switch. See your Ariens dealer.
PTO or mower blades do not engage or shut off.	Operator presence switch not depressed.	Depress operator presence switch by holding down left steering control handle.
	Faulty PTO switch.	Check the electrical system to the clutch for damage or wear. See your Ariens dealer.
Unit does not drive.	Parking brake engaged.	Disengage parking brake.
	Transmission bypass levers open.	Close transmission bypass levers. See <i>Move Unit Manually</i> on page 16.
	Hydraulic oil level low.	Add hydraulic oil. See <i>Check Hydraulic Oil Level</i> on page 18.
	Faulty hydraulic drive system.	See your Ariens dealer.
Blades do not stop within 7 seconds.	Clutch brake plates worn.	See your Ariens dealer.

SLOPE INDICATOR

- 1. Align the edge of this sheet with a vertical surface.
- 2. Fold the appropriate line to match the required slope.



STORAGE



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

SHORT-TERM STORAGE

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

1. Allow unit to cool and clean with mild soap and water.
2. Tighten all hardware to correct specifications.
3. Inspect unit for visible signs of wear or damage. Repair as needed.
4. Prepare fuel system for storage.

NOTICE: Ariens recommends using a quality fuel stabilizer in all fuel. Gasoline left in the fuel system without a stabilizer, even for short periods of time, deteriorates and leaves gummy deposits in the system that may damage the carburetor and fuel hoses, filter and tank. For the best effectiveness, add stabilizer to all fuel containers whenever purchasing fuel. Add the stabilizer to the container before adding fuel.

- a. Add Ariens fuel stabilizer (see *Service Parts* on page 18) or equivalent according to manufacturer's instructions to the fuel tank and any fuel containers with remaining fuel.
 - b. Operate engine outdoors for at least five minutes to allow stabilizer to reach the carburetor.
5. Turn key to off position and remove from ignition.
 6. Store unit in a cool, dry, protected area. DO NOT store unit outdoors.

LONG-TERM STORAGE

1. Perform short-term storage procedures.
2. Lubricate as directed in *Maintenance Schedule* on page 17.
3. Touch-up all scratched painted surfaces.
4. Remove and charge battery as directed in *Charge Battery* on page 21. Store battery in a cool, dry, protected area.
5. Store unit in a cool, dry, protected area. Do not store unit outdoors.

START-OF-SEASON PREPARATION

1. Before adding fuel for the first time after long-term storage, add fresh, stabilizer-treated fuel to fuel tank and any fuel containers with remaining fuel.
2. Charge and install the battery.

ACCESSORIES

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

Description	Part No.
Mulch Kit (Model 994166)	79403200
Mulch Kit (Model 994167)	79404600
Mulch Kit (Model 994168)	79220200
Composite Grass Catcher	79404800
Light Kit	79402800
Operator Controlled Discharge Baffle (OCDB) Kit (Models 994167, 994168)	79406300
Operator Controlled Discharge Baffle (OCDB) Kit (Model 994166)	79406400
LaserEdge Mower Blade Kit (Models 994166, 994167)	79406500
LaserEdge Mulch Blade Kit (Models 994166, 994167)	79406600
LaserEdge Mower Blade Kit (Model 994168)	79406700
LaserEdge Mulch Blade Kit (Model 994168)	79406800
LaserEdge Blade Kit (Set of 2) (Models 994166, 994167)	79406900
Front Weight Kit (Models 994167, 994168)	79407000
Front Weight Kit (Model 994166)	79407100
Tweel Tire Kit	79404100

SPECIFICATIONS

Model Number	994166	994167	994168
Description	RIDGELINE 32	RIDGELINE 48	RIDGELINE 52
Engine	Kawasaki FS600	Kawasaki FS651	
Displacement – cm ³ (in ³)	603 (36.8)	726 (44.3)	
High Idle – RPM (min.)	3600 ± 100		
Liquid or Air Cooled	Air		
Speed			
Forward Maximum – km/h (mph)	11.3 (7)		
Reverse Maximum – km/h (mph)	4.8 (3)		
Turning Radius	Zero		
Electrical			
Starter	Electric		
Battery	12 Volt 12A-190 CCA (U1 Replaceable)		
Power Take-Off	Electric PTO Clutch/Brake		
Fuel			
Fuel Type	Refer to engine manual		
Tank Capacity – L (Gal)	17.0 (4.5)		
Transmission			
Type	Hydrostatic Drive		
Transmission Oil	Use 15W-50 Full-Synthetic Hydraulic Fluid (Ariens p/n 00057100) or equivalent		
Hydraulic Oil Filter	Yes		
Size and Weight			
Length – cm (in.)	166.3 (65.5)		
Width – cm (in.)	113.8 (44.8)	154.9 (61.0)	169.7 (66.8)
Discharge Chute: Down	83.3 (32.8)	125.7 (49.5)	139.7 (55.0)
Discharge Chute: Up			
Weight – kg (lbs)	318.4 (702)	326.1 (719)	331.6 (731)
Tires			
Front Tire Size – in.	11 x 6-5		
Rear Tire Size – in.	20 x 6.5-8	20 x 10-8	
Front Tire Pressure – kPa (psi)	186 – 228 (27 – 33)		
Rear Tire Pressure – kPa (psi)	83 – 103 (12 – 15)		
Mower Deck			
Cutting Width – cm (in.)	81.3 (32)	121.9 (48)	132.1 (52)
Cutting Height – cm (in.)	5.1 – 12.7 (2 – 5)	3.8 – 12.7 (1.5 – 5)	
Cutting Height Increments – cm (in.)	.635 (.25)		



ARIENS®

Outdoor Power Equipment Limited Warranty

AriensCo warrants to the **original purchaser** that Ariens® brand products purchased on or after 09/01/2022 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 "Residential 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 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. Pick-up and delivery are at the owner's expense.

The warranty code is found on the model and serial number identification label on the unit.

Warranty Code	Product Group	Warranty Period
AA	Serialized Attachments	1 Year.
CH, CQ	ZENITH Mowers	4 Years or 750 Hours.*
CL	ARROW Mowers	5 Years or 1000 Hours.* No Hour Limit for First 2 Years.
HD	RAZOR Walk-Behind Mowers	3 Years Residential Use. 90 Days Commercial Use.
HE	EDGE Mowers	2 Years or 150 Hours.*
HF	IKON Mowers	3 Years or 300 Hours.*
HG	RIDGELINE® Mowers	4 Years or 400 Hours.*
HH	APEX® Mowers	4 Years or 500 Hours.*
HI	RAZOR Walk-Behind Mowers	4 Years Residential Use. 90 Days Commercial Use.
PA	921-Series Brushes	3 Years Residential Use. 90 Days Commercial Use.
PB	926-Series Brushes	3 Years Residential Use. 1 Year Commercial Use.
SA	Professional Sno-Thro®	3 Years Residential Use. 1 Year Commercial Use.
SB	Compact, Deluxe and Platinum Sno-Thro and Path-Pro	3 Years Residential Use. 90 Days Commercial Use.
SC	S18	2 Years Residential Use. 90 Days Commercial Use.
SD	Deluxe and Platinum EFI Sno-Thro	3 Years Residential Use. 90 Days Commercial Use.
SE	920-Series Classic Sno-Thro	3 Years Residential Use. 90 Days Commercial Use.
SF	MAMMOTH® Tractor	2 Years or 500 Hours.*

* Whichever comes first.

Special Extensions

The chart below details special **extensions** to warranty terms. Warranty terms are total time periods covered. If any product is rented or leased, there are no extensions to the 90-day warranty.

Warranty Code	Warranty Term Extension	Warranty Period	Detail
SA	Cast Iron Auger Gear Case	5 Years.	Warranty is for parts only after the initial warranty period. Components are covered for manufacturer's defect only, not wear.
SB, SD	Cast Iron Auger Gear Case	5 Years Residential Use. 1 Year Commercial Use.	
CL	Mower Deck Shell and Main Frame	Lifetime Limited.	



ARIENS

Exclusions and Limitations

The charts below detail special **exclusions and limitations** to this warranty.

Warranty Term Exclusions	Warranty Period
Air filters, auger paddles, brake arms, brake linings, brake shoes, brushes, cutters, fuel filters, halogen headlights, knives, halogen light bulbs, lubricants, mower blades, oil, oil filters, spark plugs, scraper blades, shear bolts and skid shoes.	Components are not covered under warranty.

Hydro-Gear Transaxle Limitation

See Hydro-Gear warranty. The warranty is administrated by AriensCo. Refer to www.ariens.com for warranty statement.

Warranty Term Limitations	Warranty Period
Cloth, Plastic and Rubber Components. Mufflers, Tires and Belts.	Components are covered for manufacturer's defect only, not wear.
Parker Actuators	1 Year.

Exclusions – Items Not Covered by This Warranty

- Parts that are not genuine Ariens service parts are not covered by this warranty and may void the warranty if the parts result in premature wear or damage to the product.
- Damages resulting from the installation or use of any part, accessory, or attachment which is not approved by AriensCo for use with product(s) identified herein are not covered by this warranty.
- Any misuse, alteration, improper assembly, improper adjustment, neglect, or accident which requires repair is not covered by this warranty.
- Repairs or adjustments required due to failure to use fresh fuel or failure to properly prepare the unit for periods of non-use.
- **Use of gasoline blends exceeding 10% ethanol voids any and all warranties.**
- **Any tampering with the hour meter 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. AriensCo 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 AriensCo dealer for warranty policies that govern within your country. Rights may vary from country to country and within any one country.

Evaporative Emissions Control Warranty Exception

As required by the California Air Resources Board (CARB) and the US Environmental Protection Agency (EPA) the evaporative emissions control system is warranted to the ultimate purchaser, and any subsequent owner, for two years.

The CARB and EPA evaporative emissions control system warranty is described in a separate evaporative emission control warranty statement.

Battery Warranty

Battery warranty is one year. Units used for rental or lease have no exceptions to the 90-day warranty. Total battery claim reimbursement will not exceed 65.00 USD.

Transmissions

The chart below details transmission warranty information. Transmission warranty terms may vary from the specific terms of this warranty. If inconsistent, the terms of the transmission warranty shall apply to the transmission and its component parts.

Transmission Manufacturer	Detail
Hydro-Gear Transaxle	See Hydro-Gear warranty. The warranty is administrated by AriensCo. Refer to www.ariens.com for warranty statement.
Parker Hannifin Drive & Valve Systems	Parker Transaxles, Pumps, Wheel Motors and Valves* are warranted for the length of equipment warranty period. Refer to Warranty Code chart above. Warranty is administered by AriensCo.

* Parker Actuators see Limitations chart above.

Engines

The chart below details engine warranty information. Engine warranty terms may vary from the specific terms of this warranty. If inconsistent, the terms of the engine warranty shall apply to the engine and its component parts.

Engine Manufacturer	Detail
Ariens AX	Ariens-branded engines are warranted by the manufacturer and the warranty is administrated by AriensCo. Refer to the engine manual or www.ariens.com for warranty statements.
Briggs & Stratton, Kawasaki, Kohler	Covered by the engine manufacturer's warranty. Refer to the engine manufacturer's warranty statements.

Parts and Accessories

Service replacement parts and non-serialized accessories are warranted for 90 days from date of purchase. Labor is not included.

Customer Responsibilities

Register the product immediately at the time of sale. If the dealer does not register the product, the customer must register the unit on-line at www.ariens.com.

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

- Ensure that the maintenance and adjustments explained in the Operator's Manual are routinely completed.
- Promptly notify AriensCo or an authorized Ariens 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 service representative.

To find an authorized dealer use the dealer locator on our websites, or contact us by mail or phone.

Globally (Except Australia or New Zealand):	Australia:	New Zealand:
AriensCo 655 W. Ryan Street Brillion, WI 54110 Phone: (920) 756 - 4688 www.ariens.com	Roy Gripske & Sons Pty Ltd 11 Sodium Street Narangba Queensland 4504 Australia Phone: (61130) 036 3004 www.rgs.com.au	Masport Ltd 320 Ti Rakau Drive East Tamaki Auckland 2013 New Zealand Phone: 0800 627 7678 www.masport.co.nz

Disclaimer

AriensCo may from time to time change the design of its products. Nothing contained in this warranty shall be construed as obligating the AriensCo 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

AriensCo 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. AriensCo 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.

AriensCo shall not be held liable for damages, including premature wear and tear, or injuries caused by installation of unauthorized parts and accessories or for parts and accessories not installed by an authorized Ariens dealer.

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

AriensCo 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 AriensCo, 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.



ARIENS®

655 WEST RYAN ST.
BRILLION, WI 54110

WWW.ARIENS.COM



PARTS.ARIENS.COM



WARNING: Cancer
and Reproductive Harm -
www.P65Warnings.ca.gov

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