



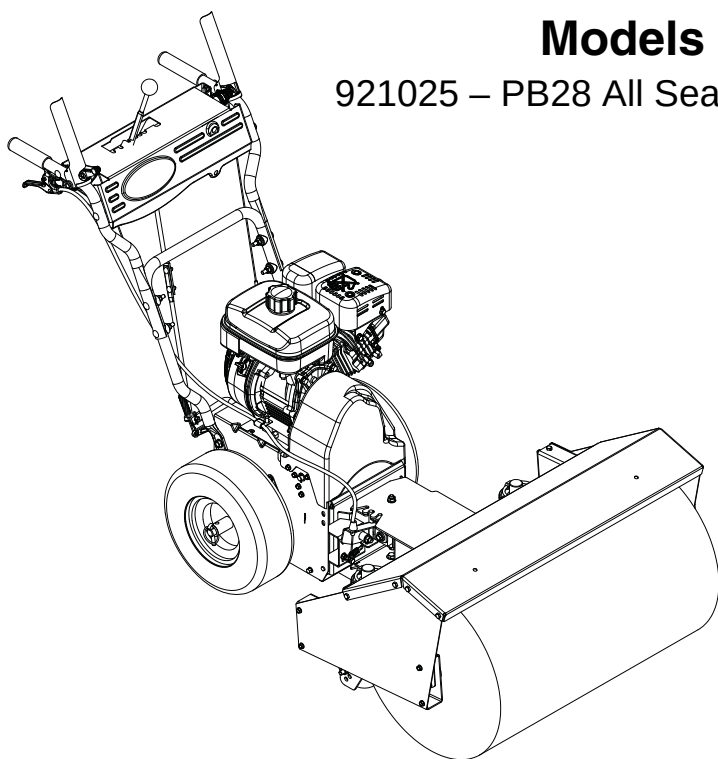
921 Series Brushes

Owner/Operator Manual

Manuel Du Propriétaire/Utilisateur

Models

921025 – PB28 All Season Brush



(GB) ENGLISH

(F) FRANÇAIS

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INTRODUCTION

NON-ENGLISH MANUALS



Manuals in languages other than English may be obtained from your Dealer. Visit your dealer or www.ariens.com for a list of languages available for your equipment.

Manuals printed in languages other than English are also available as a free download on our website:

<http://www.ariens.com>

MANUALES EN IDIOMAS DIFERENTES DEL INGLES



Puede obtener manuales en idiomas diferentes del inglés en su distribuidor. Visite a su distribuidor o vaya a www.ariens.com para obtener una lista de idiomas disponibles para su equipo.

También puede imprimir manuales en idiomas diferentes del inglés descargándolos gratuitamente de nuestra página Web:

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MANUELS NON ANGLAIS



Des manuels dans différentes langues sont disponibles chez votre revendeur. Rendez-vous chez votre revendeur ou allez sur le site www.ariens.com pour consulter la liste des langues disponibles pour votre équipement.

Les manuels imprimés dans des langues différentes de l'anglais sont également disponibles en téléchargement gratuit sur notre site Web :

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THE MANUAL

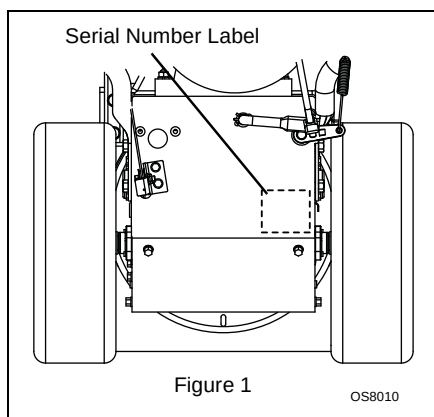
Before operation of unit, carefully and completely read your manuals. If used improperly, this unit could be dangerous and cause personal injury or property damage. The contents will provide you with safety instructions for the safe use of your unit during normal operation and maintenance.

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

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.



- Record Unit Model and Serial number here.

- Record Engine Model and Serial number 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 Dealer does not register your product, please fill out, sign and return the product registration card to Ariens or go to www.ariens.com.

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, or 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. To locate your nearest Ariens Dealer, go to www.ariens.com on the internet.

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 within this manual may be optional. Some illustrations may not be applicable to your unit.

DELIVERY

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

1. 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. Make sure all assembly has been properly completed.

NOTE: To locate your nearest Ariens Dealer, go to www.ariens.com on the internet.



WARNING: Improper assembly or adjustments can cause serious injury.

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 Original Purchaser Registration Card and return the card to Ariens Company or go to www.ariens.com on the internet.

SAFETY



WARNING: To avoid injury to hands and feet, always disengage clutches, shut off engine, and wait for all movement to stop before unclogging or working on snow brush. Keep hands and feet away from brush.

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 symbols above and signal words below are used on decals and in this manual. Read and understand all safety messages.



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



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



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.

PRACTICES AND LAWS

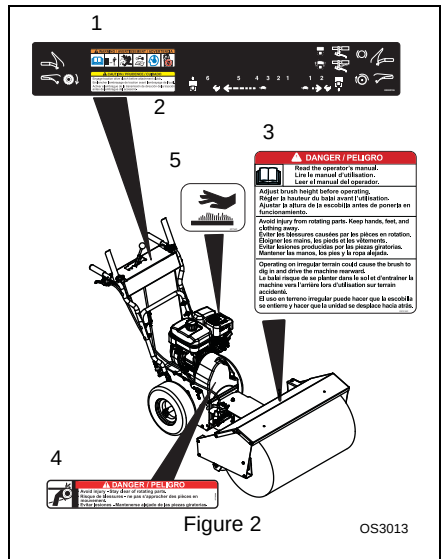
Practice usual and customary safe working precautions, for the benefit of yourself and others. Understand and follow all safety messages. Be alert to unsafe conditions and the possibility of minor, moderate, or serious injury or death. Learn applicable rules and laws in your area.

REQUIRED OPERATOR TRAINING

Original purchaser of this unit was instructed by the seller on safe and proper operation. If unit is to be used by someone other than original purchaser; loaned, rented or sold, ALWAYS provide this manual and any needed safety training before operation.

SAFETY DECALS AND LOCATIONS

ALWAYS replace missing or damaged Safety Decals. Refer to figure below for Safety Decal locations.



1. WARNING!



Read Owner/Operator Manual.

- Allow operation only by properly trained adult, never children.



OL4370

Keep people away from unit while operating.



OL0910

Never direct discharge towards persons or property that may be injured or damaged by thrown objects.



OL4010

Stop engine, remove key, read manual before making any repairs or adjustments.



ONLY use clean-out tool to clear blockages. NEVER use your hands.



OL4690

Wear appropriate hearing protection.

2. CAUTION!

- Engage traction drive clutch before attachment clutch.

3. DANGER!

- Read the Owner's Manual.
- Adjust brush height before operating.
- Engage traction drive clutch before attachment clutch.
- Operating on irregular terrain could cause the brush to dig in and drive the machine rearward.

4. DANGER!



OL1816

Avoid injury - Stay clear of rotating parts.

5. HOT SURFACES!



OL1801

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

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

Read, understand, and follow all safety practices in Owner/Operator Manual before beginning assembly or operating. Failure to follow instructions could result in personal injury and/or damage to unit.

ALWAYS remove key and/or wire from spark plug before assembly, maintenance or service. Unintentional engine start up can cause death or serious injury.

Complete a walk around inspection of unit and work area to understand:

- Work area • Your unit • All safety decals

ALWAYS check overhead and side clearances carefully before operation.

ALWAYS be aware of traffic when operating along streets or curbs.

Keep children and people away. Keep children out of work area and under watchful care of a responsible adult.

NEVER allow children to operate or play on or near unit. Be alert and shut off unit if children enter area.

DO NOT allow adults to operate unit without proper training.

Keep area of operation clear of all toys, pets, and debris. Thrown objects can cause injury.

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

Avoid uneven and rough terrain. DO NOT operate near drop-offs, ditches, or embankments. Unit can suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.

Falling snow, fog, etc. can reduce vision and cause an accident. Operate unit only when there is good visibility and light.

Only trained adults may operate unit.

Training includes actual operation.

NEVER operate unit after or during the use of medication, drugs or alcohol. Safe operation requires your complete and unimpaired attention at all times.

NEVER allow anyone to operate this unit when their alertness or coordination is impaired.

DO NOT operate unit without wearing adequate outer garments. Wear adequate safety gear, including safety glasses with side shields, and protective gloves. Wear proper footwear to improve footing on slippery surfaces.

DO NOT wear loose clothing or jewelry and tie back hair that may get caught in rotating parts.

Protect eyes, face and head from objects that may be thrown from unit. Wear appropriate hearing protection.

Avoid sharp edges. Sharp edges can cut. Moving parts can cut off fingers or a hand.

ALWAYS keep hands and feet away from all rotating parts during operation. Rotating parts can cut off body parts.

NEVER place your hands or any part of your body or clothing inside or near any moving part while unit is running.

ALWAYS keep hands away from all pinch points.

DO NOT touch unit parts which might be hot from operation. Allow parts to cool before attempting to maintain, adjust or service.

Never direct discharge towards persons or property that may be injured or damaged by thrown objects. Use extreme caution on gravel surfaces. Stay alert for hidden hazards or traffic.

Deflected materials can cause injury and property damage.

Always stand clear of the discharge area when operating this unit.

Fumes from engine exhaust can cause injury or death. DO NOT run engine in an enclosed area. Always provide good ventilation.

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

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

Understand:

- How to operate all controls.
- The functions of all controls.
- How to STOP in an emergency.

Before starting engine, disengage control(s).

Use only approved extension cords and receptacles when starting units equipped with electric starter. DO NOT connect electric starter cord to any wiring system that is not a three-wire grounded system.

ALWAYS allow unit and engine to adjust to outdoor temperatures before clearing snow.

Always be sure of your footing, especially when operating in reverse or leaving the operator's position. Walk, never run during operation.

DO NOT overload the machine capacity by attempting to clear snow at too fast a rate.

DO NOT operate at too fast a rate.

Slow down and turn corners slowly.

Do not operate in reverse unless absolutely necessary. ALWAYS back up slowly. Always look down and behind before and while backing.

Disengage attachment drive when traveling from one work area to another.

Abnormal vibrations are a warning of trouble. Striking a foreign object can damage unit. Immediately stop unit and engine. Remove key and wait for all moving parts to stop. Remove wire from spark plug. Inspect unit and make any necessary repairs before restart.

Before cleaning, removing clogs or making any inspections, repairs, etc.: disengage clutch(es), stop unit and engine, remove key, allow moving parts to stop. Allow hot parts to cool.

Run unit a few minutes after clearing snow to prevent freeze-up of attachment.

Disengage attachment when not in use.

Never leave a running unit unattended.

ALWAYS shut off engine before leaving unit.

ALWAYS remove key to prevent unauthorized use.

Never carry passengers.

Adjust brush height before operating. Engage traction drive clutch before attachment clutch. If brush is set too low or if terrain is irregular brush can drive machine rearward.

DO NOT operate on steep slopes. DO NOT clear snow across the face of slopes. Keep all movement on slopes slow and gradual. DO NOT make sudden changes in speed or direction. Use a slow speed to avoid stops or shifts on slopes. Avoid starting or stopping on a slope.

DO NOT park unit on a slope unless absolutely necessary. When parking on a slope always block the wheels.

ALWAYS shut off engine, remove key, and close fuel shut-off valve or drain fuel when transporting unit on a truck or trailer.

Use extra care when loading or unloading unit onto 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.

Keep unit free of ice or other debris. Clean up oil or fuel spills.

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.

Fuel is highly flammable and its vapors are explosive. Handle with care. Use an approved fuel container.

NO smoking, NO sparks, NO flames.

ALWAYS allow engine to cool before servicing.

NEVER fill fuel tank when engine is running or hot from operation.

NEVER fill or drain fuel tank indoors.

Replace fuel cap securely and clean up spilled fuel.

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.

When practical, remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment on a trailer 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 fueling is complete. Do not use a nozzle lock-open device.

If fuel is spilled on clothing, change clothing immediately.

Adjust brush height before operating. Refer to *Operation*.

Before separating brush attachment from unit frame, remove fuel so no spills will occur. Ensure unit is secure and will not tip over during maintenance.

ALWAYS keep protective structures, guards, and panels in good repair, in place and securely fastened. NEVER modify or remove safety devices.

DO NOT change engine governor settings or over-speed engine.

Fumes from engine exhaust can cause injury or death. DO NOT run engine in an enclosed area. Always provide good ventilation.

ALWAYS maintain unit in safe operating condition. Damaged or worn out muffler can cause fire or explosion.

Keep all hardware properly tightened.

Maintain or replace safety and instruction labels, as necessary.

NEVER store unit with fuel in fuel tank, inside a building where any ignition sources are present such as hot water heaters, space heaters, or clothes dryers. Allow the engine to cool before storing in any enclosure.

Shut off fuel and allow engine to cool completely before storing in closed area or covering unit.

For extended storage, clean unit thoroughly. See Engine Manual for proper storage.

Use only attachments or accessories designed for your unit.

Check components frequently. If worn or damaged, replace with manufacturer's recommended parts.

ASSEMBLY



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

Tools Required:

- Tire Gauge
- 1/2-In. Wrench

Unpacking Unit



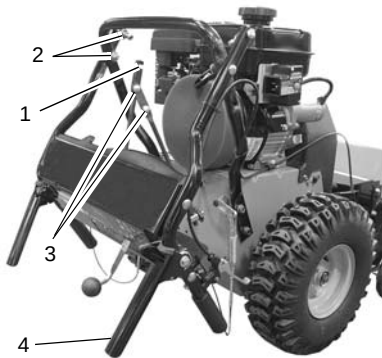
WARNING: Dropping or tipping over boxed unit could result in personal injury or damage to unit.

Unfold Handlebar (Figure 3)

1. Remove the lower and loosen the upper hardware on the handlebar assembly.
2. Loosen the hardware on the shift rod.
3. Put the speed selector lever in the sixth forward position.
4. Rotate the handlebars into operating position.

NOTE: Be careful not to damage cable spring hooks when rotating handlebars upward.

5. Install and tighten the hardware on the handlebar assembly and shift rod.



1. Shift Rod
2. Upper and Lower Handlebar Hardware
3. Shift Rod Hardware
4. Handlebar

Figure 3

OS8025

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 weld or heat a wheel and tire assembly. Heat can cause an increase in air pressure resulting in an explosion. Welding can structurally weaken or deform the wheel.
- Do not stand in front of 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 tire pressure and adjust to the pressure listed on tire sidewall.

Check Engine Crankcase Oil

IMPORTANT: Engine is shipped with 5W-30 oil in crankcase. Refer to Engine Manual for detailed instructions.

Fill Engine Fuel Tank

Refer to Engine Manual for proper type and capacity.

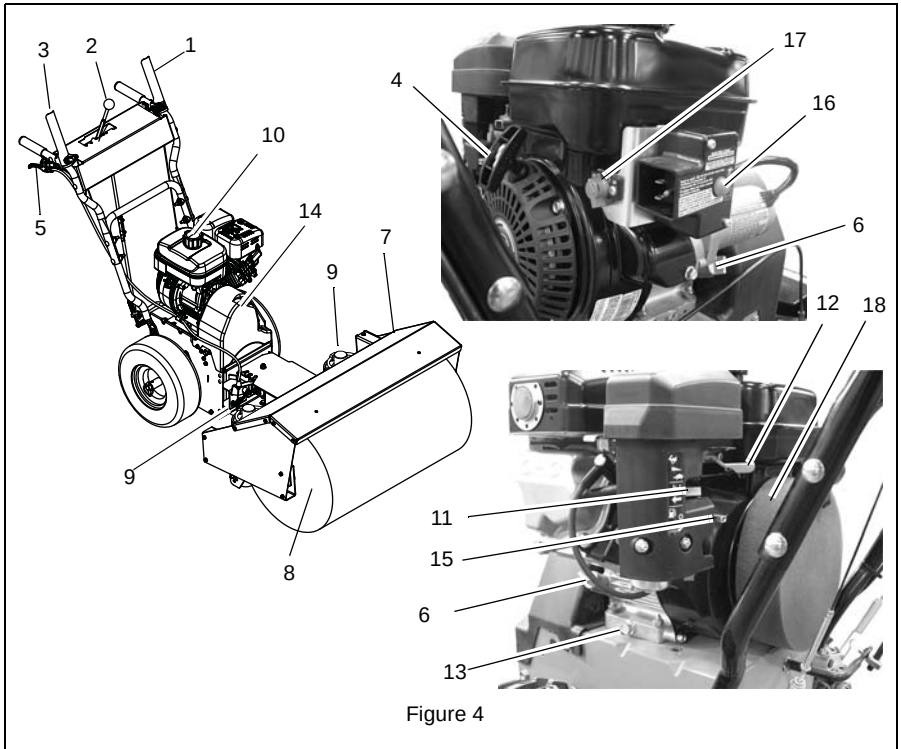
Check Function of all Controls

Ensure unit runs and performs properly. Refer to *Operation*.

Run-in Attachment Belt

1. Start unit in a well-ventilated area according to *Starting and Shut Off* on page 13.
2. Engage attachment clutch lever and run attachment for about 15 minutes.
3. Stop unit, wait for all moving parts to stop, and remove spark plug wire.
4. Adjust belt finger, if necessary. See *Attachment Drive Belt Replacement* on page 19.
5. Adjust clutch idler according to *Attachment Clutch/Brake Adjustment* on page 21.

CONTROLS AND FEATURES



- | | |
|------------------------------------|-----------------------------|
| 1. Traction Drive Clutch Lever | 10. Fuel Fill Cap |
| 2. Speed Selector Lever | 11. Choke |
| 3. Attachment Clutch Lever | 12. Throttle |
| 4. Recoil Starter Handle | 13. Oil Drain Plug |
| 5. Brush Angle Remote Trigger | 14. Belt Guard |
| 6. Oil Fill/Dipstick | 15. Fuel Shut-Off Valve |
| 7. Brush Guard | 16. Electric Starter |
| 8. Brush | 17. Engine Shut Off Switch |
| 9. Height Adjustment Caster Wheels | 18. Recoil Guard Foam Cover |

OPERATION



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

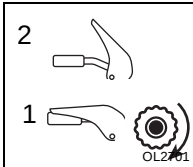


WARNING: To avoid injury to hands and feet, always disengage clutches, shut off engine, and wait for all movement to stop before unclogging or working on snow brush. Keep hands and feet away from brush.

STANDARD CONTROLS

See Figure 4 for all Controls and Features locations.

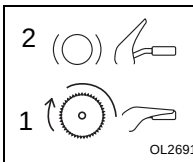
Traction Drive Clutch - Left Hand Lever



Squeeze the Traction Drive Clutch Lever against the Handlebar (1) to engage wheel drive for propelling unit. Release lever (2) to stop movement.

NOTE: Traction drive clutch should be engaged before the attachment clutch when brushing.

Attachment Drive Clutch - Right Hand Lever



Squeeze Attachment Clutch Lever against Handlebar (1) to engage brush. Release clutch lever (2) to disengage power and apply brake to brush.

IMPORTANT: If the belt squeals when the attachment clutch lever is engaged, the attachment drive may be frozen. Immediately release the attachment clutch lever and move the unit into a heated area to thaw.

Choke Control Knob

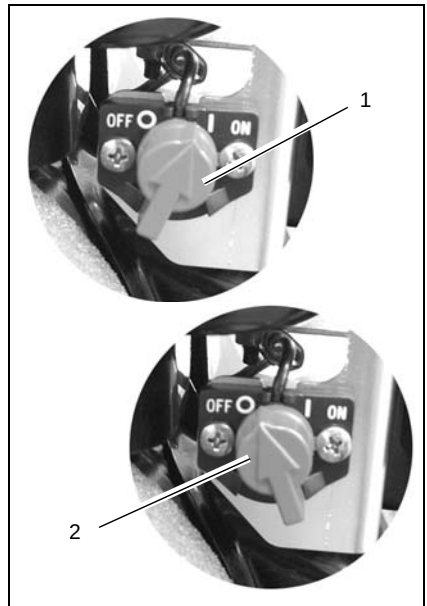
1. Choke Closed position: chokes off air to engine for easier start.
2. Choke Open position: allows for normal operation.

Gradually open choke after engine starts.

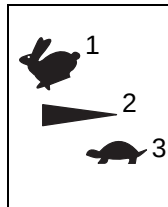


Engine Shut-Off Switch

1. Set the engine shut off switch to the On position to start and operate the engine.
2. Set the engine shut off switch to the Off position to shut off a running engine.



Throttle



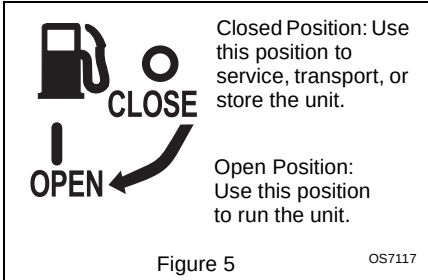
The Throttle controls the engine speed. To increase or decrease the engine speed, adjust to:

1. Fast (normal or warm starts)
2. Part-Throttle
3. Slow (cold weather starts)

Fuel Shut-Off Valve

IMPORTANT: The fuel shut-off valve **MUST** be in the closed position prior to transporting the unit.

The fuel shut-off valve has two positions:

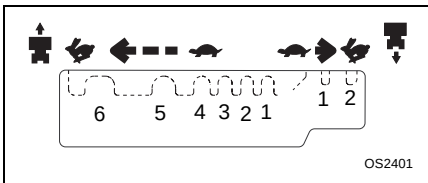


Recoil Starter Handle

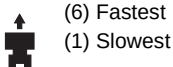
When pulled, handle will turn engine over.

Speed Selector

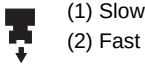
Position the Speed Selector in the appropriate speed notch to control forward and reverse travel.



Forward:



Reverse:



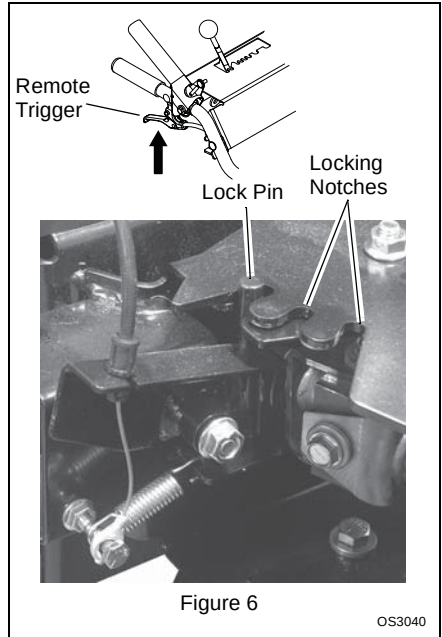
IMPORTANT: DO NOT change motion from forward to reverse with clutch engaged. Forward speed can be changed without declutching.

BRUSH ANGLE ADJUSTMENT

(Figure 6)

To adjust the angle of the brush:

1. Squeeze the remote trigger on the right handlebar fully to disengage the lock pin.
2. Turn the unit left or right until the desired brush angle is achieved.
3. Release the remote trigger, ensuring that the lock pin is firmly seated in one of the locking notches.



BRUSH HEIGHT ADJUSTMENT

(Figure 7)



DANGER: Avoid injury from rotating parts. ALWAYS shut off engine before adjusting brush height.

IMPORTANT: The brush may drive machine rearward if wheel drive is not engaged. Engage brush slowly with brush set at proper height.

Adjust caster wheels to 1/8 – 1/4 inch (3 – 6 mm) above surface. For hard surfaces, adjust the caster wheels so that brush just touches surface.

To adjust brush height:

NOTE: Placing the spacers above the caster arm lowers brush height. Placing the spacers below the caster arm raises the brush height. To change brush height, remove the lock pin from the top of the caster fork. Support and raise the housing slightly, turn the spacers so the open end aligns with the flat cut sides on the caster fork, and then slide the spacers off of the fork.

Install spacers on the wheel spindle above or below the wheel support as shown. Turn the spacers so the slot in the spacer does not align with the flat sides on the wheel spindle. Secure the spacers with the lock pin. (7).

NOTE: Set both wheels at the same height for a level cut.

Secure spacers above the
caster arm with the lock pin.



Align open end of the spacers with the
flat cut sides on the caster fork. Remove
the spacers from the bottom of the stack.

Figure 7

OS6080

- Do not modify the fuel system to use different fuels.
- Never mix oil and gasoline.

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.

To add fuel to the tank:

1. ALWAYS place unit in an open, well-ventilated area.
2. Stop engine and allow to cool.



WARNING: FLAMMABLE FUEL and its EXPLOSIVE VAPORS can result in death or serious injury. Handle fuel with extreme care. ALWAYS use an approved fuel container. NO Smoking! NO Lighted Materials! No Open Flames! Allow engine to cool before any service.

FILLING FUEL TANK

GASOLINE

IMPORTANT: ALWAYS use gasoline that meets the following guidelines:

- Clean, fresh gasoline.
- A minimum of 87 octane/87 AKI (91 RON). High altitude use may require a different octane. Consult your engine manual.
- Gasoline with up to 10% ethanol (gasohol) or up to 15% MTBE (methyl tertiary butyl ether) is acceptable.
- Use of any gasoline other than those approved above may void the engine warranty. If the pumps are not marked for the content of alcohol or ethers, check ethanol and MTBE levels with the fuel supplier.

3. Clean fuel cap and surrounding area to prevent dirt from entering the fuel tank.
4. Remove cap.

IMPORTANT: See engine manual for correct type and grade of fuel to use.

5. Fill fuel tank to within 1/2 inch (1.27 cm) below bottom of filler neck.
6. Replace fuel cap and tighten.
7. ALWAYS clean up any spilled fuel.

PRE-START

1. Check Function of Clutches

Brush must stop quickly when attachment clutch lever is released.

Wheels must stop quickly when traction drive clutch lever is released.

If clutches do not engage or disengage properly, adjust or repair before operation (see *Service and Adjustments*).

2. Adjust Brush

Adjust brush height and angle before operation. See *Brush Angle Adjustment* on page 11 and *Brush Height Adjustment* on page 11.

3. Check Engine Fuel and Crankcase Oil



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

Check and add fuel if required. Check that the engine crankcase oil is full using dipstick. Refer to Engine Manual for detailed instructions.

TO STOP IN AN EMERGENCY

Immediately release both control levers to stop unit in an emergency. Stop engine and wait for all rotating parts to stop before leaving operator's position.

STARTING AND SHUT OFF

IMPORTANT: At start-up, allow unit and engine to adjust to the outside temperature before operating. Before shut-off, run unit a few minutes to prevent freeze-up.

NOTE: Try out each control without the engine running to see how they work and what they do.

Manual Start

1. Make sure that the traction clutch and attachment clutch levers are fully disengaged.
2. Open fuel shutoff valve.
3. Set the engine shut-off switch to the "On" position.
4. If engine is cold, apply choke. A warm engine requires less choking than a cold engine. See Engine Manual for detailed instructions.
5. Set throttle to proper starting position.
6. Pull rope with a rapid continuous full arm stroke. Let rope rewind slowly.

IMPORTANT: DO NOT let Starter Handle snap against Starter.

7. Repeat until engine starts. (If engine does not start, refer to *Troubleshooting* on page 26.)

8. Adjust choke as needed.

Electric Start (120V)

1. Connect extension cord to starter.

IMPORTANT: Prevent damage to unit. Know voltage of your starter and only use matching outlets.

2. Plug extension cord into 120V 3-wire, grounded outlet.

IMPORTANT: Use only Ariens extension cord (P/N 02483100) or an equivalent cord that is rated for a minimum of 13 amps, grounded, UL listed, CSA certified and labeled as suitable for outdoor use.

3. Make sure that the traction clutch and attachment drive clutch levers are fully disengaged.

4. Open fuel shutoff valve.

5. Set the engine shut off switch to the "On" position to start and operate the engine.

6. If engine is cold, apply choke. A warm engine requires less choking than a cold engine. See Engine Manual for detailed instructions.

7. Set throttle to proper starting position

8. Press starter button on engine until engine starts.

IMPORTANT: DO NOT operate starter more than 15 seconds per minute, as overheating and damage can occur. (If engine does not start, refer to *Troubleshooting* on page 26.)

9. Adjust choke as needed.

10. Disconnect power cord from outlet, then starter.

11. Set throttle to Part Throttle or Slow position for adaptation to outside temperature or travel. Set throttle to Fast position for normal operation.

Shut Off

1. Release attachment clutch lever and wait for all moving parts to come to a complete stop.
2. Release traction drive clutch lever and allow unit to come to a complete stop.
3. Run unit a few minutes after use to prevent freeze-up.
4. Move throttle to STOP position.
5. Set the engine shut off switch to the "Off" position to shut off a running engine.

USING THE BRUSH

After proper Pre-Start and Starting:

1. Select speed control position and direction.

IMPORTANT: DO NOT overload unit capacity by sweeping at too fast a rate.

2. Engage the traction drive clutch first.
3. Engage the attachment clutch next.

Tips for Sweeping

To clear an area, run unit in an overlapping series of paths. For large areas, start in the middle and sweep debris to each side, so it is not cleared more than once.

ALWAYS direct discharge away from area to be cleared and with direction of the wind.

Snow is best removed as soon as possible after snow fall.

TRAVELING

To travel from one work area to another:

1. Set throttle to SLOW position or slightly higher.
2. Press down the handlebars enough to raise the front of the unit slightly off the surface.
3. Engage traction clutch without engaging the attachment drive clutch.

TRANSPORT

ALWAYS shut off engine and close fuel shut-off when transporting unit on a truck or trailer.

Use extra care when loading or unloading unit onto 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.

STORAGE



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

SHORT TERM

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

Run unit a few minutes after each use to free unit of any debris.

Inspect unit for visible signs of wear, breakage or damage.

Keep all nuts, bolts and screws properly tightened and know unit is in safe working condition.

Store unit in a cool, dry protected area.

LONG TERM

Clean unit thoroughly with mild soap and low pressure water and lubricate (see *Maintenance*). Touch up all scratched painted surfaces.

Remove weight from wheels by putting blocks under frame or axle.

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.

To treat the fuel system for storage:

1. Add fuel stabilizer (Ariens p/n 00592900) according to manufacturer's instructions.
2. Run engine for at least 10 minutes after adding stabilizer to allow it to reach the carburetor.

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

MAINTENANCE

Ariens Dealers will provide any service or adjustments which may be required to keep your unit operating at peak efficiency. Should engine service be required, contact an Ariens dealer or an authorized engine manufacturer's service center.



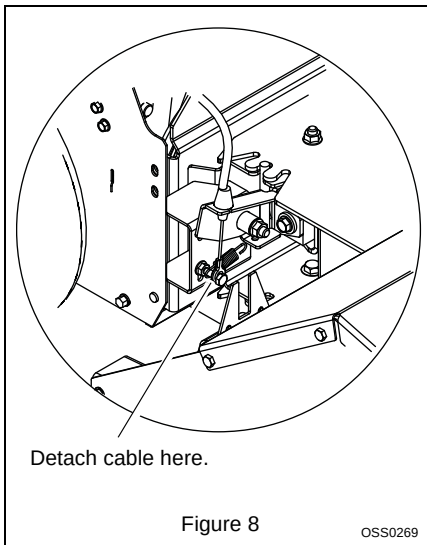
WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

SERVICE POSITION

IMPORTANT: DO NOT tip unit up onto brush. Remove the brush if maintenance requires tipping the unit forward. Ensure unit is secure and will not tip over. Strap or clamp unit onto bench if required.

To access components in the unit frame:

1. Shut off engine and allow unit to cool completely. Place unit on a flat level surface.
2. Remove belt cover.
3. Remove hardware attaching remote trigger cable to brush assembly and detach cable (Figure 8).



Detach cable here.

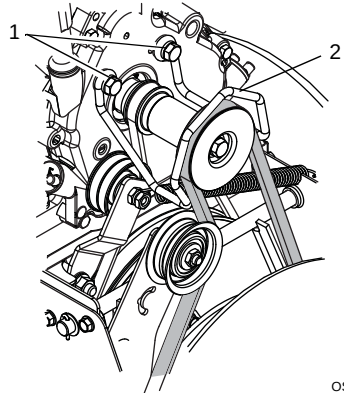
Figure 8

OSS0269

4. Remove the six cap screws from the bottom cover. Remove the bottom cover before separating unit.
5. Remove cap screws and belt finger (Figure 9).



WARNING: ALWAYS remove key and/or wire from spark plug before assembly, maintenance or service. Unintentional engine start up can cause death or serious injury.



1. Cap Screws
2. Belt Finger

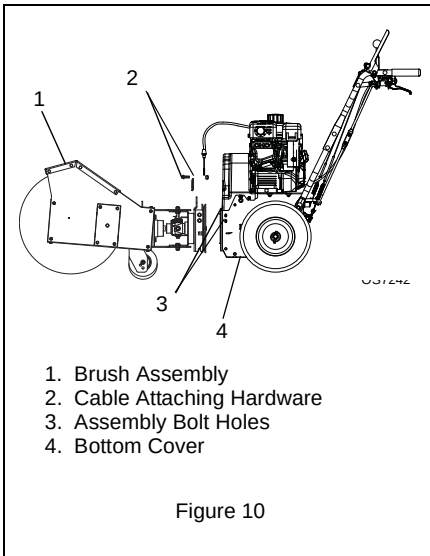
Figure 9

6. Remove attachment drive belt from engine sheave (it may be necessary to turn engine sheave using recoil starter handle).



CAUTION: Always support unit frame and brush attachment when loosening the cap screws holding them together.

7. Support unit frame and brush attachment.
8. Remove cap screws securing attachment to unit frame.
9. Remove attachment belt from attachment pulley.
10. Separate frame from brush.



MAINTENANCE SCHEDULE

The chart below shows the recommended maintenance schedule that should be performed on a regular basis. More frequent service may be required due to working conditions (heavy loads, high ambient temperatures, dusty conditions, or airborne debris).

MAINTENANCE SCHEDULE				
Service Performed	Each Use	Every 5 hrs.	Every 25 hrs.	Yearly
Check Fasteners	•			
Check Clutch Operation	•			
Check Clutch Spring Adjustments		*	•	
Clean Engine	•			
Clean Recoil Guard Foam Cover	•			
Check Engine Oil		•		
Change Engine Oil		**	•	
Check Tire Pressure			•	
General Lubrication		***	•	•

* After first five hours of operation.

** After first two hours of operation.

*** Oil chains and u-joint friction areas after first 5 hours of operation and every 25 hours thereafter.

CHECK FASTENERS

Make sure all hardware is tightened properly.

CHECK CLUTCH OPERATION

Brush must stop quickly when attachment clutch lever is released.

Wheels must stop quickly when traction drive clutch lever is released.

If clutches do not engage or disengage properly, adjust or repair before operation (see *Service and Adjustments*).

CHECK CLUTCH SPRING ADJUSTMENT

Make sure the attachment clutch and traction drive clutch are adjusted to the range specified in *Attachment Clutch/Brake Adjustment* on page 21 and in *Check Belt Finger Clearance (Figure 25)* on page 24.

CLEAN ENGINE

Refer to Engine Manual for detailed instructions.

CLEAN RECOIL GUARD FOAM COVER

Make sure the recoil guard foam cover is always kept clean and free of snow and debris.

If cover becomes clogged with debris gently vacuum the foam or wash with warm water.

NOTE: Cover is not necessary for operation during the non-winter months.

If cover is clogged with snow remove it immediately and allow foam to thaw or rinse with warm water.

IMPORTANT: Allow foam to dry completely before reinstallation.

See *Recoil Guard Foam Cover Installation* on page 18.

CHECK ENGINE OIL

The engine crankcase oil should be checked every 5 hours of operation. Oil level **MUST** be maintained in safe operating range on dipstick at all times or engine damage will result (see Engine Manual).

Park unit on a level surface. Refer to Engine Manual for detailed instructions.

CHANGE ENGINE OIL

Change oil after first 2 hours of operation, thereafter change oil every 25 hours (more often if required). Refer to Engine Manual for detailed instructions.

Run engine just prior to changing oil. Warm oil will flow more freely and carry away more contamination.

CHECK TIRE PRESSURE



CAUTION: Avoid injury! Explosive separation of tire and rim parts is possible when they are serviced incorrectly:

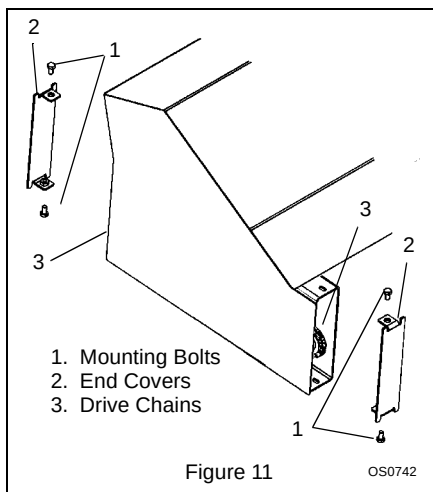
- Do not attempt to mount a tire without the proper equipment and experience to perform the job.
- Do not inflate the tires above the recommended pressure.
- Do not weld or heat a wheel and tire assembly. Heat can cause an increase in air pressure resulting in an explosion. Welding can structurally weaken or deform the wheel.
- 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.

Keep tires at pressure listed on the tire sidewall.

GENERAL LUBRICATION

Brush Drive Chains & U-joints

1. Chains and u-joint friction areas should be oiled after first 5 hours of operation and every 25 hours thereafter.
2. To access drive chains remove the two bolts attaching the front and rear end covers on each side of the brush guard. See Figure 11.



Casters

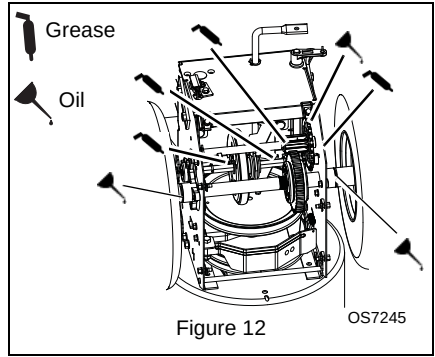
IMPORTANT: Wipe each lube fitting clean before and after lubrication.

1. Grease fittings on left and right side caster shafts.

Drive

IMPORTANT: Wipe each lube fitting clean before and after lubrication. DO NOT allow grease or oil to get on the friction disc, drive disc or belts.

NOTE: Apply Ariens Hi-Temp Grease (Ariens p/n)or equivalent to the lube fittings (Figure 12).



SERVICE AND ADJUSTMENTS



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

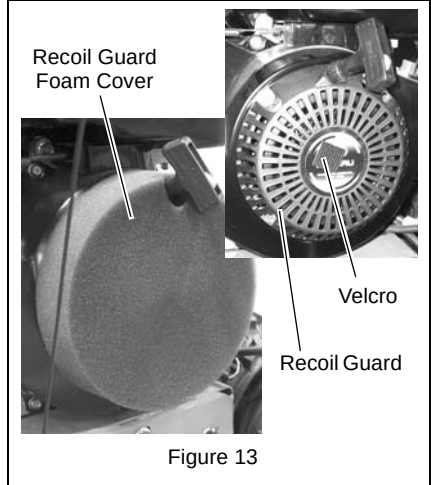
RECOIL GUARD FOAM COVER INSTALLATION

The recoil foam cover slides over the starter handle and attaches to the recoil guard with Velcro. See Figure 13.

NOTE: The recoil guard foam cover is not necessary for operation during the non-winter months.

IMPORTANT: When using the unit in the winter months the cover must be installed. The foam prevents snow from getting into the recoil guard and freezing the recoil pawls.

IMPORTANT: Be sure to keep the recoil foam cover clean and clear of snow and debris at all times. See *Clean Recoil Guard Foam Cover* on page 17.



SPEED SELECTOR ADJUSTMENT

To adjust (Figure 14):

1. Disconnect adjustment pivot pin from speed selector arm. Save hardware for reinstallation.
2. Place the speed selector on dash panel in the fastest forward speed position.
3. Turn the speed selector arm straight down towards the ground as far as it will go.
4. Thread the adjustment pivot pin along the shift rod until it aligns with the mating hole on the speed selector arm.
5. Connect the pivot pin to the speed selector arm with the hardware removed in step 1.
6. Check forward and reverse speeds:
 - a. Start unit.
 - b. Shift speed selector into the first forward speed.
 - c. Engage the traction clutch. Unit should move forward.
 - d. Stop unit.
 - e. Shift speed selector into first reverse speed.
 - f. Engage the traction clutch. Unit should move backward.
 - g. Shut off unit.
7. Adjust pivot pin on the shift rod as necessary so unit travels forward when speed selector is in first forward position and travels backward when speed selector is in first reverse position.
8. Connect the pivot pin to the speed selector arm with the hardware removed in step 1.

NOTE: If first forward speed is too fast, disconnect adjustment pivot pin from speed selector arm. Rotate pivot pin to move it up the shift rod a maximum of two turns and reconnect pivot pin to speed selector arm.

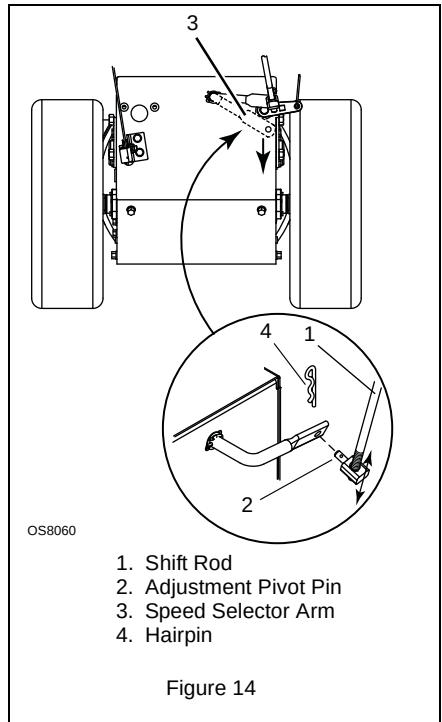


Figure 14

ATTACHMENT DRIVE BELT REPLACEMENT

Remove Attachment Drive Belt

(Figures 15 and 16)

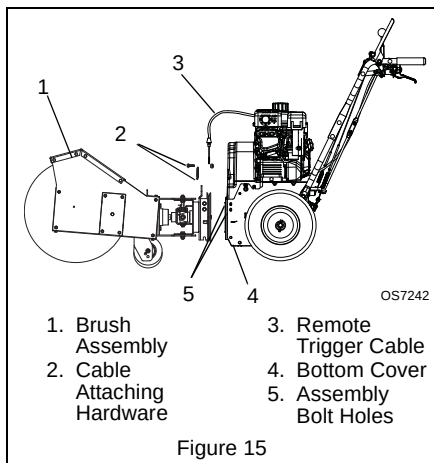
1. Shut off engine, disconnect spark plug wire and allow unit to cool completely.
2. Remove the hardware attaching the remote trigger cable to the brush assembly.
3. Remove two screws securing belt cover to unit and remove belt cover.
4. Remove belt finger by removing cap screws mounting belt finger to engine (Figure 16).
5. Remove attachment drive belt from engine sheave (it may be necessary to turn engine sheave using recoil starter handle).



CAUTION: Always support Sno-Brush frame and brush assembly when loosening the cap screws holding them together.

IMPORTANT: To avoid bending bottom cover, when tipping unit apart, support handlebars firmly and remove bottom cover by removing four cap screws before separating unit.

6. Support frame and housing.
7. Remove cap screws holding brush assembly to frame (two on each side).
8. Separate assembly from unit. Lower handlebar on floor.
9. Remove attachment drive belt from lower pulley (hold brake away from belt).

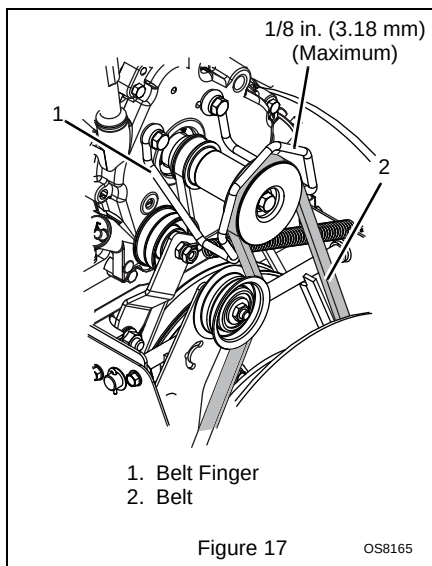
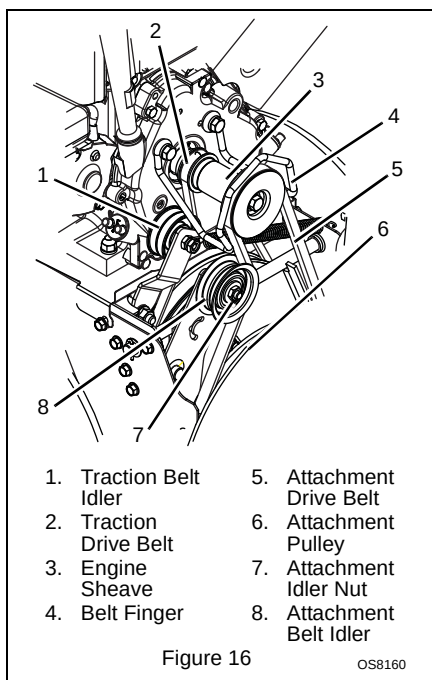


Replace Attachment Drive Belt

1. Place new belt onto lower pulley and while holding brake out of way, tip unit together.
2. Secure brush to frame with cap screws.
3. Place belt onto engine sheave.
4. Replace belt finger.

IMPORTANT: With the clutch lever engaged, the belt finger located opposite the belt idler must be less than 1/8 in. (3.18 mm) from the belt, but not touching the belt, or belt grabbing may occur causing impeller to rotate while the attachment clutch is disengaged (Figure 17).

5. Adjust clutch (see *Attachment Clutch/Brake Adjustment* on page 21).
6. Replace belt cover and secure with cap screws.



TRACTION DRIVE BELT REPLACEMENT

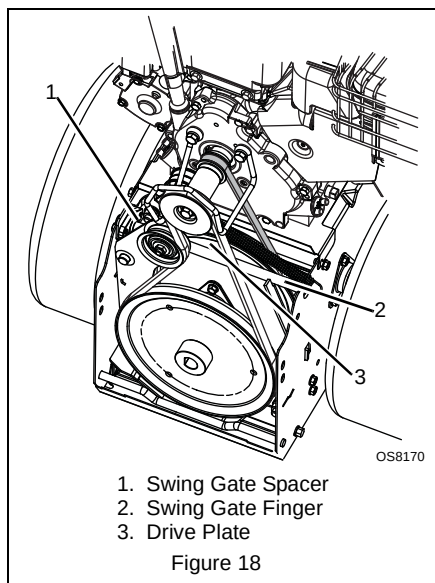
NOTE: Brush assembly and frame must be separated and attachment drive belt removed from engine sheave in order to change traction drive belt (Figure 16).



CAUTION: Always support Sno-Brush frame and brush assembly when loosening the cap screws holding them together.

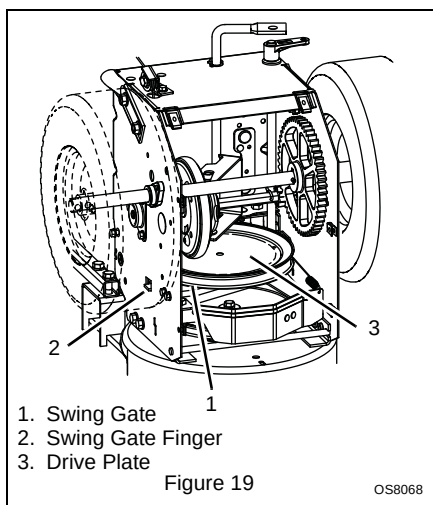
1. Remove attachment drive belt (See *Remove Attachment Drive Belt* on page 19).

NOTE: To gain belt clearance, remove swing gate spacer (Figure 18) so drive plate can be slid over until finger is out of frame and drive plate can swing past stop hole in frame. See Figure 18.



1. Swing Gate Spacer
2. Swing Gate Finger
3. Drive Plate

Figure 18



1. Swing Gate
2. Swing Gate Finger
3. Drive Plate

Figure 19

2. Pull idler away from traction drive belt and remove belt from idler, crankshaft pulley and driven pulley (it may be necessary to turn crankshaft pulley using recoil starter handle).
3. Replace traction drive belt.
4. Swing drive plate toward friction disc to slide finger into stop hole in frame. Reinstall swing gate spacer.

NOTE: Make sure drive plate spring remains connected to the frame and drive plate.

5. Replace attachment drive belt (See *Replace Attachment Drive Belt* on page 20).

ATTACHMENT CLUTCH/BRAKE ADJUSTMENT



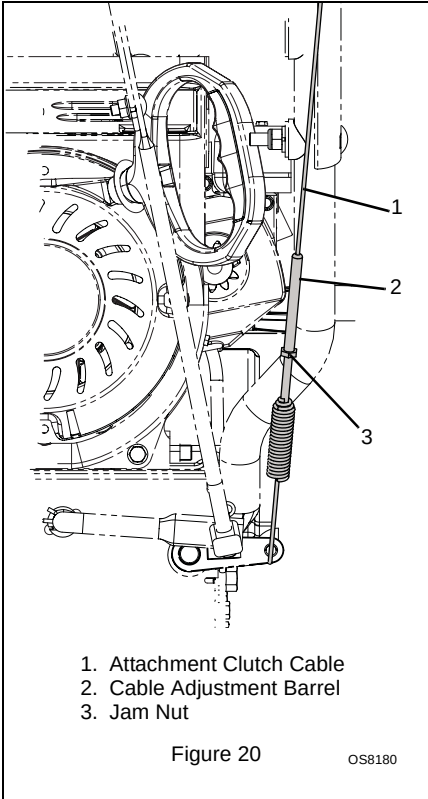
WARNING: IMPROPER ADJUSTMENT could result in unexpected movement of auger and impeller causing death or serious injury. **AUGER / IMPELLER MUST STOP** within 5 seconds when Attachment Clutch/Impeller Brake Lever is released.



WARNING: Adjustment procedure requires the engine to be run with the belt cover off. **AVOID INJURY.** Read and understand the entire *Safety* section before proceeding.

Remove Attachment Cable Slack

1. Remove the belt cover.
2. Loosen jam nut on cable adjustment barrel, and then turn the adjustment barrel down to shorten cable and remove all cable slack. See Figure 20.



1. Attachment Clutch Cable
2. Cable Adjustment Barrel
3. Jam Nut

Figure 20

OS8180

3. With the attachment clutch disengaged, check that the attachment idler arm lightly touches the frame. See Figure 21.
4. Tighten jam nut on cable adjustment barrel.

With the attachment clutch disengaged, check the attachment idler arm position here. The attachment idler arm should lightly touch the frame.

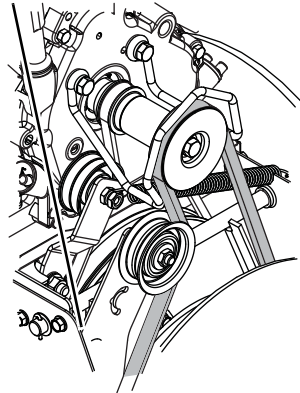


Figure 21

OS7188

Check Attachment Idler Arm Roller Clearance

1. Place the unit into the service position. Remove the bottom cover.
2. With the clutch lever engaged, check the clearance between the frame and plastic roller on the lower end of the attachment idler arm. See Figure 22.
 - If roller is $\frac{1}{2}$ – $\frac{7}{8}$ in. (12.7 – 22.2 mm) from frame, go to *Adjust the Attachment Clutch Cable Spring Extension* on page 23.
 - If roller is less than $\frac{1}{2}$ in. (12.7 mm) from frame, loosen idler adjustment nut and move idler closer to the belt. Tighten adjustment nut and recheck the roller clearance.
 - If roller is more than $\frac{7}{8}$ in. (22.2 mm) from frame, loosen idler adjustment nut and move idler away from the belt. Tighten adjustment nut and recheck roller clearance.

Roller should be $\frac{1}{2}$ – $\frac{7}{8}$ in. (12.7 – 22.2 mm) from the frame when the attachment clutch is engaged.

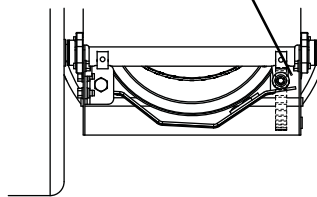


Figure 22

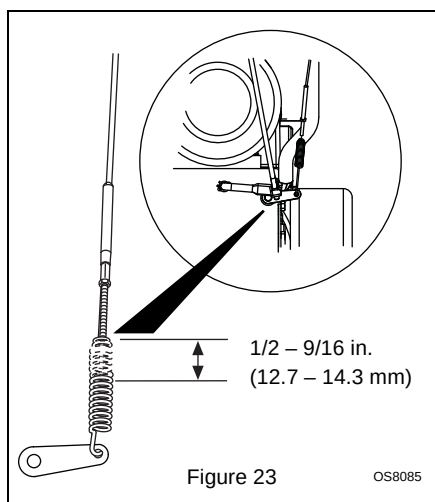
OS8080

Adjust the Attachment Clutch Cable Spring Extension

1. Check the attachment clutch cable spring extension.
Measure the length of the attachment clutch cable spring with the clutch lever disengaged.

Then measure the attachment clutch spring with the clutch lever engaged. See Figure 23. The spring should be 1/2 – 9/16 in. (12.7 – 14.3 mm) longer when the clutch lever is engaged.

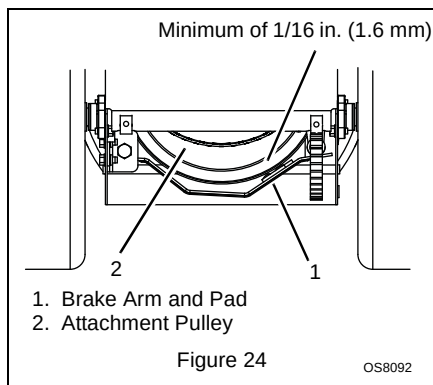
- If spring extension is within the specified range, go to *Check Attachment Brake (Figure 24)* on page 23.
- If spring extension is outside of specified range, go to step 2.



2. Adjust cable length (See Figure 23).
 - a. Loosen jam nut on cable.
 - b. To increase spring extension, adjust barrel down the cable and tighten jam nut.
 - c. To decrease spring extension, adjust barrel up the cable and tighten jam nut.

Check Attachment Brake (Figure 24)

1. With the clutch lever disengaged, brake pad must contact attachment belt. With clutch lever engaged, brake pad must be more than 1/16 in. (1.6 mm) from belt. If there is more than 1/16 in. (1.6 mm) gap, go to *Check Belt Finger Clearance (Figure 25)* on page 24. If there is less than 1/16 in. (1.6 mm) gap, go to Step 2.



2. If there is less than 1/16 in. (1.6 mm) gap between brake pad and belt, follow these steps:
 - a. To increase brake pad gap, loosen idler adjustment nut, and move idler away from belt. Position idler to achieve a 1/16 in. (1.6 mm) minimum brake pad gap and a 1/2 – 7/8 in. (12.7 – 22.2 mm) gap between the plastic roller and the frame.
 - b. Check the clutch cable spring extension and adjust as necessary to achieve a 1/2 – 9/16 in. (12.7 – 14.3 mm) spring extension.
 - c. If the cable needed adjustment, recheck gaps described in step 1. Repeat steps as necessary until brake clearance, roller gap and spring extension are within specified ranges.

IMPORTANT: If adjustments cannot be brought into specified ranges see your Dealer for repairs.

Check Belt Finger Clearance (Figure 25)

1. With clutch lever engaged, the belt finger located opposite the belt idler must be less than 1/8 in. (3.18 mm) from belt, but not touching the belt.
To adjust belt finger, loosen the bolts and move the finger to the proper position. Tighten the bolts and recheck the belt finger clearance.
2. Replace the belt cover.

Check belt finger clearance here. With the attachment clutch engaged, there should be less than 1/8 in. (3.18 mm) clearance between the belt and the belt finger. The belt finger should not touch the belt.

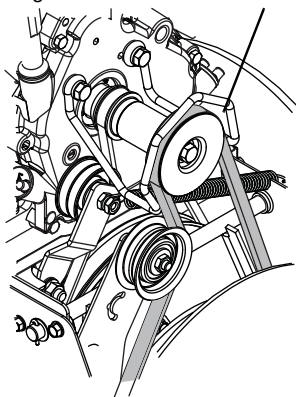


Figure 25

OS8067

TRACTION DRIVE CLUTCH ADJUSTMENT

If drive slips, adjust traction clutch to compensate for friction disc wear.

To test traction clutch (Figure 26):

1. Put unit in first forward speed.
2. Without engine running, push unit forward while slowly moving the traction drive clutch lever toward the handlebar.
3. Measure distance between lever and handlebar when the wheels begin to brake. If distance is not 7 – 7-1/2 in. (17.8 – 19.0 cm), adjust the traction clutch.

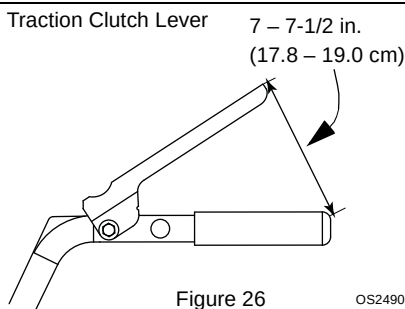


Figure 26

OS2490

To adjust traction clutch (Figure 27):

1. With the traction drive clutch lever disengaged, loosen the jam nut on the cable adjuster.
Turn adjustment barrel up the cable to decrease the distance between clutch lever and handlebar.
Turn the adjustment barrel down the cable to increase the distance between clutch lever and handlebar.
2. Check traction clutch lever distance and repeat adjustment steps if necessary.
3. Tighten jam nut on traction cable adjustment barrel.
4. With the clutch disengaged, check that there is more than 1/32 in. (0.8 mm) clearance between friction disc and drive plate assembly. See Figure 28 on page 25.

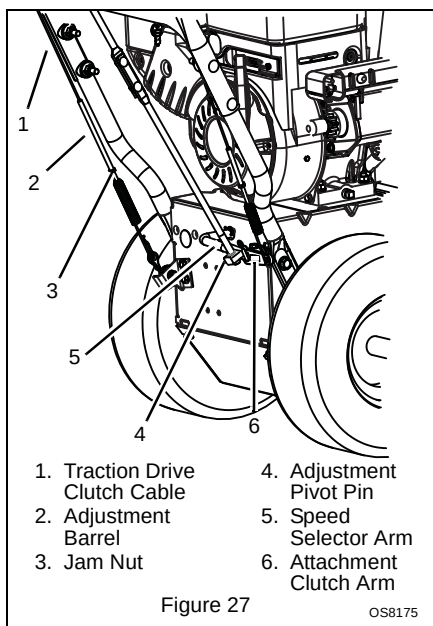


Figure 27

OS8175

FRICION DISC REPLACEMENT

Remove Friction Disc

(Figure 28):

1. Shut off engine, disconnect spark plug wire and allow unit to cool completely.

NOTE: Brush assembly and frame must be separated in order to remove friction disc (See Figures 15 and 16).



CAUTION: Always support Sno-Brush frame and brush assembly when loosening the cap screws holding them together.



CAUTION: Before tipping unit, remove enough fuel so that no spills occur.

2. Tip the tractor frame up onto its front on a level surface.
3. Remove both wheels.
4. Remove bottom cover by removing six hex bolts.
5. Disconnect pivot pin from the speed selector arm. Save the hardware for reinstallation.
6. Remove spring clip pin nearest drive sprocket from hex shaft.
7. Remove left bearing flange from frame.
8. Slide hex shaft to the left to remove the pinion sprocket and friction disc assembly from the hex shaft.

NOTE: Be sure to save washers between bearing and sliding fork for reassembly.

9. Remove friction disc assembly from frame.
10. Remove three screws holding friction disc to carrier bearing.
11. Remove old friction disc. Put the new friction disc in place, cup side to carrier bearing.
12. Reinstall three screws into new friction disc and carrier bearing. Torque to 5 – 6 lbf-ft. (6.8 – 8.13 N•m).

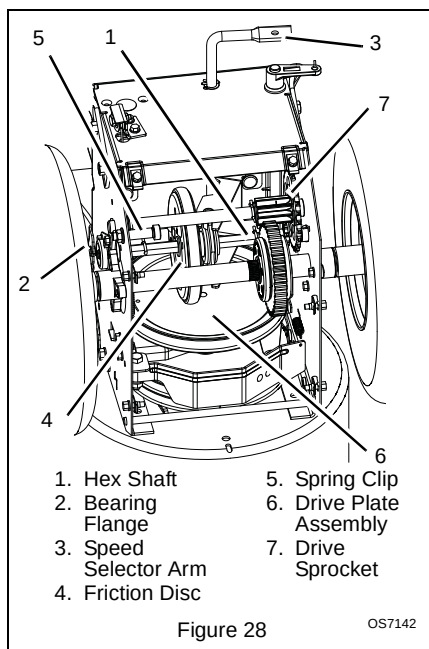


Figure 28

OS7142

13. Insert new friction disc assembly into frame. Install washers onto carrier bearing and slide into speed selector arm.
14. Slide hex shaft through new friction plate assembly. Install pinion sprocket onto hex shaft and slide shaft into right bearing.
15. Install left bearing using hardware removed in step 7.
16. Reinstall clip pin into hex shaft.
17. Connect pivot pin to speed selector arm. See *Speed Selector Adjustment* on page 19.
18. Install bottom cover.
19. Reinstall wheels.
20. Return unit to upright position.
21. Connect spark plug wire to spark plug.
22. Adjust traction drive clutch. See *Check Belt Finger Clearance (Figure 25)* on page 24.

TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	CORRECTION
Engine will not crank/start.	1. Fuel tank is empty. 2. Fuel shut-off valve closed. 3. Engine shut off switch turned off. 4. Engine ignition problems.	1. Fill fuel tank. 2. Open fuel shut-off valve. 3. Turn on engine shut off switch. 4. See Engine Manual.
Engine stops.	1. Out of fuel. 2. Mechanical jam in brush. 3. Polluted fuel supply. 4. Faulty spark plug.	1. Fill fuel tank. 2. Turn off engine and wait for all moving parts to stop. Check for and remove obstruction and repair before restart. 3. Replace with clean fuel. 4. Replace or clean spark plug.
Engine problems.	1. See Engine Manual.	1. See Engine Manual.
Does not operate in Forward/Reverse.	1. Friction disc not adjusted properly. 2. Traction belt not functioning.	1. Repair or replace friction disc. See <i>Service and Adjustments</i> on page 18. 2. Repair or replace traction drive belt. See <i>Service and Adjustments</i> on page 18.
Small rubber beads collect in frame	1. Friction disc wear.	1. Normal friction disc wear. Chunks or large pieces of rubber mean friction disc should be checked and replaced as necessary.
U-joint is noisy	1. Friction. 2. Wear.	1. Lubricate u-joint. 2. Replace worn parts.
Caster wheels do not pivot as expected	1. Debris in casters. 2. Friction.	1. Clean debris from casters. 2. Lubricate casters.

SPECIFICATIONS

Model Number	921025
Engine	Subaru EX17
Displacement - in ³ (cc)	10.3 (169)
Fast Idle Speed-RPM	3800±100
Start	120V
Fuel	See Engine Manual
Tank Capacity - qts. (L)	3.0 (2.85)
Clearing Width - in (cm)	28 (71.1)
Brush Diameter-in (cm)	18 (45.7)
Brush Rotation Speed - RPM	200
Drive	Disc-O-Matic
Drive Speeds	6 Forward 2 Reverse
Pneumatic Tires - in	15 x 5-6
Brush Rotation Angle	40°
Size	
Length - in (cm)	65 (165.1)
Height - in (cm)	44 (111.8)
Width - in (cm)	33 (83.8)
Weight - lbs. (kg)	202 (91.6)

SERVICE PARTS

Order the following parts through your Dealer:

Part No.	Description
07200111	Traction Drive Belt
07238500	Attachment Drive Belt
21547200	Spark Plug
00170800	Friction Disc
00036800	Ariens Hi-Temp Grease (3- 3 oz. (85 g) cartridges)
00592900	Fuel Stabilizer 4 oz. (113 g)

To obtain a complete parts manual, find your model and serial number. Then go to www.ariens.com.



Two-Year Limited Lawn and Garden Warranty

This warranty statement applies only to 21-Inch Walk Behind Lawn Mowers, Wide Area Walks, AMP Wide Area Walks, Tillers, String Trimmers, Log Splitters, Edgers and Power Brushes

Ariens Company (Ariens) warrants to the **original purchaser** that Ariens and Gravely brand consumer products manufactured and sold by Ariens will be free from defects in material and workmanship for a period of two years after the date of purchase. An authorized Ariens dealer (Ariens brand products) or Gravely dealer (Gravely 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.

Two-Year Limited Warranty on AMP™ Series Battery Packs and Subassemblies

The battery pack and/or battery subassemblies on AMP series electric mowers is/are warranted to the **original purchaser** for two years from the date of purchase. Ariens will replace, free of charge to the original purchaser, any battery pack and/or battery subassembly that fails due to defect in material or workmanship for one year after the date of purchase. For the next 12 months, Ariens will cover the pro-rated cost of replacing a battery pack and/or battery subassembly that fails due to defect in material or workmanship. This warranty does not apply to battery packs or battery subassemblies that fail due to accident, neglect, abuse, improper maintenance, improper storage or improper charging procedures.

One-Year Limited Warranty on Professional/Commercial 21-inch Walk-Behind Lawn Mowers

21-inch walk-behind lawn mowers labeled or designated by Ariens as a Professional/Commercial product put to any business use, agricultural, commercial, or industrial, are warranted to the **original purchaser** to be free from defects in material and workmanship for a period of one year after the date of purchase.

90-Day Limited Warranty on Service Parts and Accessories

Genuine Ariens or Gravely brand service parts and accessories are warranted to be free from defects in material and workmanship for a period of 90 days after the date of purchase. An authorized Ariens or Gravely dealer will repair or replace any such part or accessory free of charge, except for labor, during that period.

Except for 21-inch walk-behind lawn mowers labeled or designated by Ariens as a Professional/Commercial product, the duration of all warranties herein applies only if the product is put to personal use around a household or residence. If the product is put to any business use, agricultural, commercial, or industrial, then the duration of these warranties shall be 90 days after the date of purchase. If any product is rented or leased, then the duration of these warranties shall be 90 days after the date of purchase.

Exceptions, Limitations, Exclusions

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 or www.gravely.com.

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

- Perform the maintenance and minor adjustments explained in the owner's manual.
- Promptly notify Ariens or an authorized Ariens or Gravely service representative of the need for warranty service.
- Transport the product to and from the place of warranty service.
- Have the warranty service performed by an authorized Ariens or Gravely service representative.

To find an Ariens or Gravely authorized service representative, contact Ariens at:

655 W. Ryan Street
Brillion, WI 54110
(920) 756 - 2141
www.ariens.com
www.gravely.com

Exceptions and Limitations

- Batteries are warranted only for a period of 12 months after date of purchase, on a prorated basis. For the first 90 days of the warranty period, a defective battery will be replaced free of charge. If the applicable warranty period is more than 90 days, Ariens will cover the prorated cost of any defective battery, for up to 12 months after the date of purchase. This battery limited warranty does not apply to the battery packs on AMP series products.

Exclusions – Items Not Covered by This Warranty

- Engines and engine accessories are covered only by the engine manufacturer's warranty and are not covered by this warranty.
- Parts that are not genuine Ariens or Gravely service parts 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, runners, scraper blades, shear bolts, mower blades, mower vanes, tines, 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.
- This warranty applies only to products purchased in the United States (including Puerto Rico) and Canada. In all other countries, contact place of purchase for warranty information.

Disclaimer

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

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 state to state.



Ariens Company
655 West Ryan Street
Brillion, WI 54110-1072
920-756-2141
www.ariens.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.