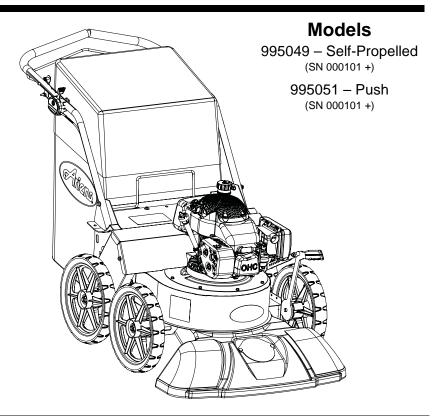


# **APV**

## Owner/Operator Manual Manuel Du Propriétaire/Utilisateur





The use of any gasoline exceeding 10% ethanol (E10) or 10% MTBE will void the product warranty.

L'utilisation d'une essence contenant plus de 10% d'éthanol (E10) ou de 10% de MTBE annulent la garantie.









#### 

## INTRODUCTION

### THE MANUAL

Before operating unit, carefully and completely read the manual. The contents provide you with an understanding of safety instructions and controls during normal operation and maintenance.

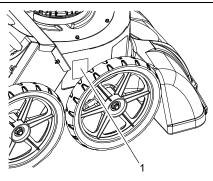
### **ENGINE MANUAL**

The engine on this unit is covered by a separate manual specific to the engine. This manual is included in the literature package that shipped with the unit. Refer to this manual for engine service recommendations. If the engine manual is unavailable, contact the engine manufacturer for a replacement.

### **MODEL AND SERIAL NUMBERS**

When ordering replacement parts or making service inquiries, know the model and serial numbers of the unit.

Numbers are located on the product registration form in the unit literature package. They are also printed on a label located on the unit. See Figure 1.



Unit Model & Serial Number Label
 Figure 1

•	here.

Record	engine	mode	el and	serial	
numbe	rs here.				

### PRODUCT REGISTRATION

The Ariens Dealer should register the product at the time of purchase. Registering helps Ariens process warranty claims or contact you with the latest service information. Claims meeting requirements during the limited warranty period will be honored, whether or not the product registration card is returned with proof of purchase.

**Customer Note:** If the Dealer does not register your product, please complete, 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 and safety of this unit and may void the warranty. Ariens disclaims liability for any claims or damages, whether warranty, property damage, personal injury or death arising out of the use of unauthorized replacement parts.

**NOTE:** A Parts Manual may be downloaded from www.ariens.com.

### **DELIVERY**

**Customer Note:** If this product was purchased without complete assembly and instruction by a retailer, it is your responsibility to read and understand all instructions in this manual. If you do not understand or have difficulty following the instructions, contact your Ariens Dealer for assistance. To locate your nearest Dealer, go to www.ariens.com.



**WARNING:** Improper assembly or adjustments can cause serious injury.

### **Before Operating Unit**

- 1. Make sure all assembly has been properly completed.
- 2. Understand all safety precautions provided in the manuals.
- Review control functions and operation of the unit. Do not operate the unit unless all controls function as described in this manual.
- Review recommended maintenance and adjustments.
- 5. Review Limited Warranty policy.
- Complete a product registration card and return it to Ariens Company or register the product at www.ariens.com.

### **DISCLAIMER**

Ariens reserves the right to discontinue, change and improve its products at any time without notice or obligation to the purchaser.

The descriptions and specifications contained in this manual were current at the time of printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your unit.

### SAFETY



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

Slopes are a major factor related to slip and fall accidents. Operation on all slopes requires extra caution.

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

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

Stop engine and allow moving parts to stop before leaving operator's position.

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

### SAFETY ALERT SYMBOL



These are safety alert symbols. They mean:

- 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 followed property damage could result.

### 5. Important

**IMPORTANT:** Indicates general reference information worthy of special attention.

### SAFETY DECALS

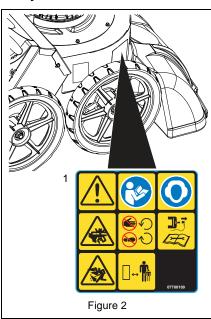
This machine is capable of crushing or amputating body parts. It is capable of throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

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

Always replace missing or damaged safety decals. Replacement decal information is in the Parts Manual for your machine. Decals can be ordered from your Dealer.

See Figure 2 for safety decal locations.

### Safety Decal Identification



### **Safety Decal Description**

### 1. DANGER!



Danger!



Read and understand the Operator's Manual before operating unit.



Wear appropriate hearing protection.



Stay away from rotating parts.



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



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



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.

### **RULES FOR SAFE OPERATION**

This machine is capable of crushing or amputating body parts. It is capable of throwing objects. Failure to observe the following safety instructions could result in serious injury.

The following safety instructions are based on the B71.6 specifications of the American National Standards Institute in effect at the time of production.

### **Training**

Read, understand and follow all instructions on the machine and in the manual(s) before operating this unit. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the unit and disengage the controls quickly.

Never allow children to operate the equipment. Never allow adults to operate the equipment without proper instruction, including actual operation.

Keep the area of operation clear of all persons, particularly small children and pets. Keep children under watchful care of a responsible adult. Be alert and shut off unit if children enter area.

Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people, their property and themselves.

Always disconnect spark plug before assembly, maintenance or service. Unintentional engine start up can cause death or serious injury.

### Preparation

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

Always check overhead and side clearances carefully before operation.

Complete a walk-around inspection of the machine to understand the machine, your work area and all safety decals.

Thoroughly inspect the area where the equipment is to be used and remove all foreign objects, such as pets, doormats, sleds, boards, toys, wires and debris. Thrown objects can cause injury.

Inspect equipment before operation. Replace any worn or damaged parts.

Never attempt to make any adjustments while the engine (motor) is running (except when specifically recommended by manufacturer).

#### Personal Protection

Do not operate the equipment without wearing adequate outer garments and safety goggles. Avoid loose-fitting clothing and use protective footwear that will improve footing on slippery surfaces.

Do not wear jewelry or loose-fitting clothing that can get caught in moving parts. Tie back hair that may get caught in moving parts.

Wear adequate safety gear to protect eyes, face and head from objects that may be thrown from unit. Wear safety glasses with side shields, appropriate hearing protection and protective gloves.

### **Fuel**

**Warning**: Fuel is highly flammable. Take the following precautions:

- Store fuel in containers specifically designed for this purpose.
- Refuel outdoors only and do not smoke while refueling.
- Add fuel before starting the engine.
   Never remove the cap on the fuel tank or add fuel while the engine is running or when the engine is hot.
- 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 refueling is complete. Do not use a nozzle lockopen device.
- Replace all fuel tank and container caps securely.
- If fuel is spilled, do not attempt to start the engine, but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have disappeared.
- Wipe up spilled fuel. If fuel is spilled on clothing, change clothing immediately.

Do not operate the engine (motor) in a confined space where dangerous carbon monoxide fumes can collect. Open the outside doors; exhaust fumes are dangerous.

Fuel is highly flammable and its vapors are explosive. Handle with care. Use only an approved gasoline container with an appropriately sized dispensing spout.

No smoking, No sparks, No flames. Always allow engine to cool before removing fuel cap or servicing.

Check fuel supply before starting engine.

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

Do not mix oil with gasoline.

Do not overfill. Allow about 1/2" of tank space for fuel expansion.

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

Replace fuel cap securely and clean up spilled fuel.

Never fill fuel tank indoors. Always drain fuel outdoors away from ignition sources.

Never store the machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers and the like. Allow the engine to cool before storing in an enclosure.

### Operation

Start the engine (motor) carefully according to the manufacturer's instructions. Keep hands and feet away from inlet and discharge areas.

Do not put hands or feet near or under rotating parts or at inlet or discharge openings. Moving and/or rotating parts can cut off body parts, such as fingers or a hand.

Always keep hands away from all pinch points.

Keep children and pets away. Never allow bystanders near the unit while running.

Do not touch machine parts which might be hot from operation. Allow parts to cool before attempting to maintain, adjust or service.

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

Exercise extreme caution when operating on or crossing gravel drives, walks or roads. Stay alert for hidden hazards or traffic. Do not carry passengers.

Remove hearing protection and watch for traffic when operating near roadways.

Never pick up or carry machine while engine is running.

Walk; never run.

Exercise caution to avoid slipping or falling.

Never operate the machine at high transport speeds on hard or slippery surfaces.

After striking a foreign object, stop the engine (motor), remove spark plug wire and wait for all moving parts to come to a complete stop. Thoroughly inspect the machine for any damage and repair the damage before restarting and operating the machine.

If machine jams or hose becomes clogged, stop the engine and allow moving parts to completely stop. Use only a wooden stick to remove debris.

If the machine vibrates abnormally, stop engine (motor) and check immediately for the cause. Vibration is generally a warning sign of trouble.

Stop the engine (motor) whenever you leave the operating position, when making any repairs, adjustments or inspections, and before unclogging the discharge chute.

Take all possible precautions as recommended by the manufacturer when leaving the machine unattended.

Before cleaning, repairing or inspecting, shut off the engine (motor) and make certain that all moving parts have come to a complete stop. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.

Do not operate the engine (motor) in a confined space where dangerous carbon monoxide fumes can collect. Open the outside doors; exhaust fumes are dangerous.

Never operate machine without proper guards, plates or other safety protective devices in place. Always keep protective structures, guards, and panels in good repair and securely fastened. Never modify or remove safety devices.

Do not operate machine without collection bag attached.

Turn off engine when installing or removing block-off plate.

Do not overload the machine by attempting to chip or shred any material beyond manufacturer's recommendation.

Do not vacuum large amounts of sand or gravel. These items are heavy and may cause unit to become unstable and tip.

Do not vacuum flammable liquids, such as gasoline, kerosene, diesel fuel, paint thinner, etc.

Do not vacuum burning or smoldering materials, such as cigars, cigarettes, ashes or cinders.

Do not vacuum airborne combustibles, dust from wood, paper, metal, glass, wire, etc.

Do not vacuum areas that have recently been treated with fertilizers, pesticides or herbicides. Follow the chemical manufacturer's safety instructions regarding contact with treated areas.

Do not operate on a paved, gravel or hard surface without collection bag attached. Discharged material may bounce from a hard surface.

Do not change the engine govenor settings or overspeed the engine.

Use extreme caution when reversing or pulling machine toward you. Always back up slowly and look down and behind before and while backing.

Do not tilt machine when starting engine.

Use only attachments and accessories approved by the manufacturer of the machine.

This product is equipped with an internal combustion type engine. Do not use unit on or near any unimproved, forest- or brush-covered land unless exhaust system is equipped with a spark arrester meeting applicable local, state or federal laws. A spark arrester, if used, must be maintained in effective working order by operator.

Never operate machine without good visibility or light.

Do not operate machine while under the influence of alcohol, drugs or medication. Safe operation requires complete and unimpaired attention at all times.

Before installing or removing collection bag, shut off engine and allow all moving parts to completely stop.

Empty collection bag after each use. Do not leave debris in bag while stored.

Decomposed debris may generate enough heat to catch fire.

### **Slope Operation**

Exercise extreme caution when operating on slopes. Do not attempt to operate on steep slopes.

Do not operate on slopes with greater than a 20° grade.

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 to prevent unit from rolling.

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.

Be prepared to react to an emergency when operating on slopes:

- · Release drive control lever.
- Turn off engine.

### **Maintenance and Storage**

Secure unit so it will not tip over during maintenance.

Before inspecting or servicing machine, shut off engine, disconnect wire from spark plug and allow moving parts to completely stop. Allow hot parts to cool.

Keep machine, attachments and accessories in safe working condition.

Check engine-mounting bolts and other hardware at frequent intervals for proper tightness to be sure the equipment is in safe working condition. If components are worn or damaged, replace with manufacturer's recommended parts.

Check discharge area frequently for wear and/or deterioration.

Adjust and service as required. All motion of drive wheels and moving parts must stop quickly when control levers are released.

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

Keep engine and fuel storage area free of debris, such as grass, leaves or excessive grease. Clean up oil or fuel spills.

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

Follow the manufacturer's recommendations for safe loading, unloading and storage of machine.

Always refer to operator's manual for important details if the machine is to be stored for an extended period.

If fuel tank has to be drained, do this outdoors.

Maintain or replace safety and instruction labels as necessary.

### Towing/Transporting

Always shut off engine and close fuel shutoff valve or drain fuel when transporting unit on a truck or trailer.

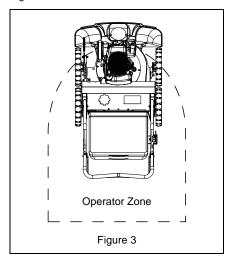
Use extra care when loading or unloading unit onto trailer or truck. Secure unit chassis to transport vehicle. Never secure from rods or linkages that could be damaged. Do not transport machine while engine is running.

### **Accessories**

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

### OPERATOR ZONE

This unit is designed to be operated by one person located in the operator zone. See Figure 3.



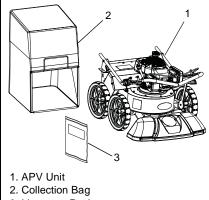
## **ASSEMBLY**



**CAUTION:** AVOID INJURY. Read and understand the entire SAFETY section before proceeding.

### **CARTON CONTENTS**

See Figure 4.

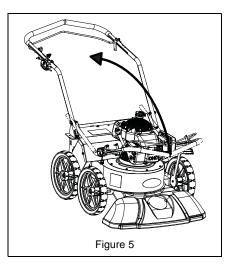


3. Literature Pack

Figure 4

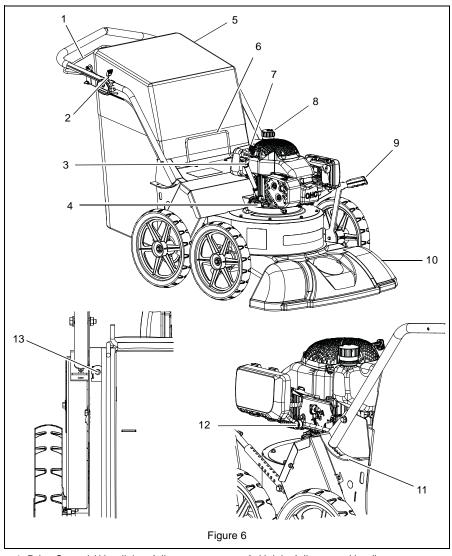
### **ASSEMBLY**

 Push down on handlebar adjustment bar and rotate handlebar to desired position.
 See Figure 5. See Drive Control Bar / Handlebar Adjustment Bar on page 12 and Height Adjustment Handle on page 12.



- Hook bottom of collection bag under unit frame and move bag handle forward and upward to attach collection bag. See Collection Bag on page 12.
- 3. Check engine oil level and add oil if necessary. See *Engine Oil* on page 14.
- 4. Fill fuel tank. See Fuel Tank on page 13.

## **CONTROLS AND FEATURES**



- Drive Control / Handlebar Adjustment Bar
- 2. Throttle / Choke Control Lever
- 3. Oil Fill & Dipstick
- 4. Oil Drain Plug
- 5. Collection Bag
- 6. Collection Bag Handle
- 7. Recoil Starter Handle
- 8. Fuel Tank & Cap

- 9. Height Adjustment Handle
- 10. Vacuum Inlet
- 11. Handlebar Adjustment Bracket
- 12. Fuel Shut-off Valve
- 13. Interlock Switch

## **OPERATION**

### CONTROLS AND FEATURES



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

See Figure 6 for all controls and features locations.

### Drive Control Bar / Handlebar Adjustment Bar (Item 1)

**Model 995049:** Hold the drive control bar against the handlebar to engage traction.

Push down on handlebar adjustment bar to adjust handlebar height. See *Handlebar Adjustment Bracket* on page 13.

# Throttle / Choke Control Lever (Item 2)



Push choke lever to FULL CHOKE (1) to start a cold engine. Pull lever to the rear as engine temperature rises.



Move throttle lever to FAST (2) to increase engine speed.



Move throttle lever to SLOW (3) to decrease engine speed.

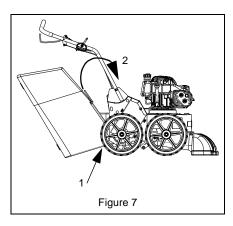


Move throttle lever to STOP (4) to shut off engine.

# Collection Bag (Item 5)

Empty collection bag when full and after each use.

- 1. To remove bag, lift collection bag handle (Item 6) upward and backward.
- To attach bag, hook bottom of bag under unit frame and move bag handle forward and upward. Make sure bag engages the interlock switch for proper starting and operation. See Figure 7.



**IMPORTANT:** Bag must be in proper position to engage interlock switch and start engine.

## Recoil Starter Handle (Item 7)

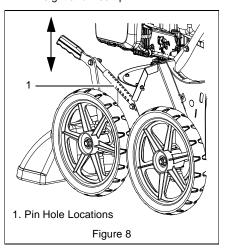
When pulled, handle will start engine.

**IMPORTANT:** Do not let handle snap back against engine.

## Height Adjustment Handle (Item 9)

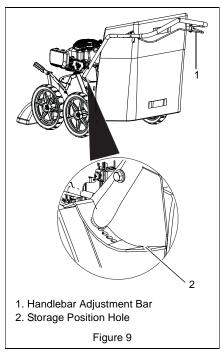
To adjust the height of operation, push down on height adjustment handle and remove pin from pin hole. See Figure 8.

- To raise height, push down on handle to desired height and insert pin.
- To lower height, lift handle to desired height and insert pin.



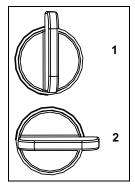
## Handlebar Adjustment Bracket (Item 11)

To adjust handlebar position, push down on handlebar adjustment bar (Item 1), move handlebar to desired position and release bar. Make sure locking pin is fully seated in bracket hole. See Figure 9.



# Fuel Shut-off Valve (Item 12)

**IMPORTANT:** The fuel shut-off valve MUST be closed (OFF) before transporting the unit. The valve has two positions:



### 1. OFF

Use this position to service, transport or store the unit.

### 2. ON

Use this position to run the unit.

## Interlock Switch (Item 13)

The interlock switch engages when the collection bag is attached, allowing the unit to start and continue running. Unit will shut off if switch is not activated.

**IMPORTANT:** Bag must be in proper position to engage the interlock switch. See *Collection Bag* on page 12.

### **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. See Engine Manual.
- Gasoline with up to 10% ethanol (gasohol) or up to 10% MTBE (methyl tertiary butyl ether) is acceptable.
- Use of any gasoline other than those approved above may void the engine warranty. If gas pumps are not marked for the content of alcohol or ethers, check ethanol and MTBE levels with the fuel supplier.
- Do not modify the fuel system to use different fuels.
- · Never mix oil and gasoline.

**NOTICE:** 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 Tank**

To add fuel:

- 1. Turn engine off and let cool for at least three minutes.
- Clean fuel cap and surrounding area to prevent moisture and debris from entering fuel tank.
- Remove fuel cap and fill fuel tank to bottom of filler neck. See SPECIFICATIONS on page 19 for fuel tank capacity. Do not overfill.

**IMPORTANT:** See Engine Manual for correct type and grade of fuel.

4. Clean up any spilled fuel. Replace fuel cap and tighten.

### **ENGINE OIL**

**IMPORTANT:** Make sure engine is level when checking oil.

To check oil level:

- 1. Turn engine off and let cool for at least three minutes.
- 2. Remove cap from oil fill.
- Check oil level on dipstick. Oil level must be maintained at safe operating level.
   See SPECIFICATIONS on page 19. See Engine Manual for detailed information.
- 4. Replace cap.

### To add oil:

- 1. Turn engine off and let cool for at least three minutes.
- Remove cap from oil fill and add oil. Do not overfill. See Engine Manual.
- 3. Replace cap.
- 4. Clean up any spilled oil.

### **OPERATION**

### For Best Performance

Operate with vacuum inlet as close to ground as possible without blocking airflow.

Under extremely dusty conditions, empty and clean bag frequently.

### Start Engine

- 1. Check oil level. See *Engine Oil* on page 14.
- Make sure collection bag is properly attached. See Collection Bag on page 12 and Interlock Switch on page 13.
- 3. Open fuel shut-off valve.
- 4. Move throttle control lever to FAST.

**IMPORTANT:** If engine is cold, move throttle control lever to FULL CHOKE. Do not apply choke to a warm engine.

- Slowly pull recoil starter handle until engine compression makes pulling difficult. Let starter rewind a little and then pull smoothly and quickly.
- 6. Repeat Step 5 as needed.
- Gradually move throttle control lever out of FULL CHOKE position after engine starts.

**IMPORTANT:** If engine does not start after three attempts, see *TROUBLESHOOTING* on page 18.

### Stop Engine

- 1. Release drive control bar.
- 2. Move throttle control lever to STOP.

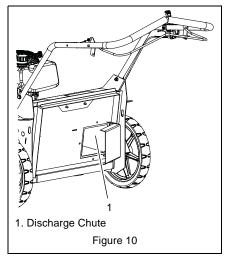
- 3. Remove hearing protection and listen for all moving parts to completely stop.
- 4. If finished with unit, close fuel shut-off valve.

### **CLEARING CLOGS**



**WARNING:** AVOID INJURY. Never use hands to clear clogs.

- If discharge clogs, STOP THE ENGINE IMMEDIATELY and disconnect the spark plug wire from the spark plug. Wait for all moving parts to completely stop.
- Empty and clean collection bag if overfilled. While bag is removed, use a stick to clear any debris from discharge chute. See Figure 10.

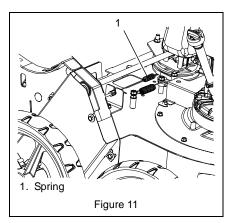


# ADJUSTING DRIVE BELT TENSION

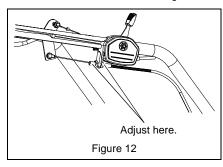
### Model 995049

If unit starts to slow (especially while moving uphill) or seems to be losing power, adjust tension on the drive belt.

- 1. Loosen four screws on transmission cover and slide cover forward to remove.
- 2. Remove two screws on belt cover and remove cover. Retain hardware.
- 3. Engage drive control bar. The extension spring will lengthen. See Figure 11.



4. Set the drive control tension at the point when the spring first begins to lengthen by tightening or loosening the nuts on the drive control cable. See Figure 12.



**NOTICE:** For maximum belt life, use the minimum amount of tension needed for unit to operate properly. Over-tensioning leads to premature belt failure.

- 5. Reinstall belt cover using hardware removed in Step 2.
- Reinstall transmission cover using hardware from Step 1.

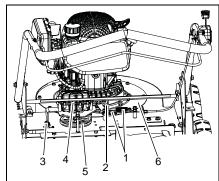
### REPLACING DRIVE BELT Model 995049

See Figure 13.

- Loosen four screws on transmission cover and slide cover forward to remove.
- 2. Remove two screws on belt cover and remove cover. Retain hardware.
- Disconnect springs from idler and drive control cable and rotate idler away from engine mounting plate.
- 4. Remove block-off plate from frame. Retain plate, spring and hardware.

- 5. Remove belt from transmission sheave.
- 6. Rotate transmission toward engine.
- Remove screws from engine mounting plate and lift engine from unit. Retain hardware.

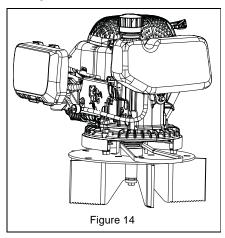
**IMPORTANT:** DO NOT remove impeller assembly from engine.



- 1. Springs
- 2. Idler
- 3. Block-off Plate and Spring
- 4. Transmission
- 5. Transmission Sheave
- 6. Engine Mounting Plate

Figure 13

Remove belt from engine sheave. See Figure 14.



- 9. Install new belt on engine sheave.
- 10. Reinstall engine on unit and secure with screws removed in Step 7.
- 11. Install belt on transmission sheave and rotate transmission away from engine.

- 12. Reinstall spring and block-off plate using hardware removed in Step 4.
- 13. Attach springs to idler and rotate idler into position.
- 14. Reinstall belt cover using hardware removed in Step 2.
- 15. Reinstall transmission cover using hardware from Step .

### TRANSPORTING UNIT

 Always shut off engine and close fuel shut-off valve when transporting on a truck or trailer.

- 2. Use extra care when loading or unloading onto truck or trailer.
- Secure unit chassis to transport vehicle. Never secure from rods or linkages that could be damaged.
- 4. Do not transport unit while engine is running.

## **MAINTENANCE SCHEDULE**



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

**IMPORTANT:** Proper maintenance can prolong the life of unit. The following chart shows the recommended service schedule.

Interval	Task	Action		
	Check and clean collection bag.	Remove and vigorously shake bag or use compressed air to remove dust and debris.		
		Check bag for wear or deterioration. Replace worn or damaged bag with Ariens original replacement bag only.		
Each Use		IMPORTANT: If necessary, use a pressure washer to clean bag. Allow bag to completely dry before use. It may be useful to have a spare bag available.		
	Clean unit.	Remove debris with a soft-bristled brush. Do not use harsh abrasives or cleaners.		
	Check engine oil.	See Engine Oil on page 14.		
	Follow engine maintenance schedule.	Perform scheduled engine maintenance. See Engine Manual for detailed instructions.		
Every 10 Hours	Check fasteners.	Check all fasteners. Replace missing or damaged fasteners. Tighten all nuts and bolts to correct torque values.		
As Needed	Lubricate throttle control cable.	Add a few drops of oil to throttle control cable and wire for smooth operation.		

### **STORAGE**

### SHORT TERM

Clean unit thoroughly with mild soap and lowpressure water. Never spray unit with highpressure water. Do not use abrasives, solvents or harsh cleaners.

Inspect unit for visible signs of wear, breakage or damage and repair as needed. Keep all nuts, bolts and screws properly tightened and know unit is in safe working condition.

Do not store unit outdoors. Store in a cool, dry, protected area.

Protect bare-metal areas with a light coat of oil or anti-rust compound.

Collection bag may be stored in position on unit

### LONG TERM

Perform all short term storage items.

Touch up all scratched painted surfaces. Matching touch-up paint is available from your Dealer.

Remove all fuel from fuel tank and carburetor (run dry). See Engine Manual.

Remove all debris from collection bag. Decomposed debris may generate enough heat to catch fire.

#### 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 treat the fuel system for storage:

- Add fuel stabilizer (Ariens part number 00592900) according to manufacturer's instructions.
- 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.

### To Take Unit Out of Storage

- See Engine Service Manual to prepare engine for service.
- 2. Put fresh, clean fuel in fuel tank.
- 3. Begin maintenance schedule.

## TROUBLESHOOTING

Problem	Probable Cause	Correction	
	Fuel tank empty.	Fill fuel tank with fuel. See Fuel Tank on page 13.	
	Throttle is in STOP position.	Move throttle control lever to desired position. Use FAST to start a warm engine; use FULL CHOKE to start a cold engine.	
Engine will not start.	Buildup of dirt and residue around govenor/carburetor.	Clean around govenor/carburetor.	
	Interlock switch is not engaged.	Ensure collection bag is properly installed. See Collection Bag on page 12 and Interlock Switch on page 13. See Dealer for repair.	
Vacuum fails to	Collection bag is full.	Shut off engine and empty bag. See Collection Bag on page 12.	
pick up debris.	Clog in vacuum inlet.	Shut off engine and check for clog in discharge chute or vacuum inlet. See <i>Clearing Clogs</i> on page 14.	
Engine runs	Polluted fuel supply.	Replace with clean fuel. See Fuel Tank on page 13.	
briefly and stops.	Interlock switch is not engaged.	Ensure collection bag is properly installed. See Collection Bag on page 12 and Interlock Switch on page 13. See Dealer for repair.	
	Drive control bar is not engaged.	Engage the drive control bar. See <i>Drive Control Bar / Handlebar Adjustment Bar</i> on page 12.	
Vacuum will not self-propel (if equipped).	Drive belt is worn or broken.	Replace belt. See Replacing Drive Belt on page 15.	
,	Drive belt cable is out of adjustment or broken.	Adjust cable. See <i>Adjusting Drive Belt Tension</i> on page 14.	

#### SERVICE PARTS See your authorized Ariens dealer for genuine OEM service parts. Part No. Qty Description Fuel Stabilizer (4 oz) 00592900 AR 04675700 1 Felt Bag 21100122 1 Spark Plug 21100120

Air Filter

CESSORIES				
See your authorized Ariens dealer to add these optional accessories to your unit.				
Description				
Hose Kit				
Mesh Bag Kit				

SPECIFICATIONS						
Model Number	<b>Model Number</b> 995049 995051					
Model	Self-Propelled	Push				
Starter	Re	coil				
Engine						
Engine	Engine Subaru					
Engine Model Number	EA1	EA190V				
Engine Size	189	189cc				
Max RPM	3800					
Oil Capacity: Pt. (L)	1.3 (0.6)					
Fuel Tank Capacity: Qt. (L)	1.28	(1.2)				
Fuel Octane Rating	See Engir	See Engine Manual				
Size and Weight						
Length: in. (cm)	53 (134.6)					
Width: in. (cm)	Width: in. (cm) 31.25 (79.4)					
Height: in. (cm)	eight: in. (cm) 18.25 (46.4)					
Weight: lbs. (kg)	170 (77.1) 152 (68.9)					



## Sno-Thro<sup>®</sup>, Sno-Tek<sup>®</sup> and Chore Performing Equipment Limited Warranty

Ariens Company (Ariens) warrants to the **original purchaser** that Ariens, Gravely, Parker, and Countax brand chore performing equipment (including Sno-Thro® and Sno-Tek® equipment) purchased on or after 1/1/2013 will be free from defects in material and workmanship for the time period noted in the chart below. Equipment put to personal use around a single household or residence is considered "Consumer Use"; equipment put to any business use (agricultural, commercial, or industrial) or used at multiple locations is considered "Commercial Use." If any product is rented or leased, then the duration of these warranties shall be 90 days after the date of purchase.

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

Warranty Code	Product Group	Warranty Period Consumer Use	Warranty Period Commercial Use
PA	Log Splitters, Brushes, String Trimmers, Edgers	3 Years	90 Days
PB	Professional Powered Brushes	3 Years	1 Year
PC	Tillers	2 Years	90 Days
PD	Vacuums, Blowers, Sweepers, Truck Loaders, Lawn Rakes, Sprayers, Aerators, etc.	1 Year	1 Year
PE	Pressure Washer, Generators	3 Years	1 Year
SA	Professional Sno-Thro®	3 Years	1 Year
SB	Compact, Deluxe, Platinum, AMP™ Sno-Thro <sup>®</sup> , Path-Pro <sup>®</sup>	3 Years	90 Days
SC	Sno-Tek <sup>®</sup>	2 Years	90 Days
UA	Utility Vehicles	1 Year	1 Year
N/A	Service (Replacement) Parts	90 Days (no labor)	90 Days (no labor)

### Special Extensions

The chart below details special extensions to this warranty:

Warranty Code	Warranty Exception	Warranty Period	Use	Detail
SA	Cast Iron Auger Gear Case	5 Years	All	5 Years for all users including Commercial
SB	Cast Iron Auger Gear Case	5 Years	Consumer	5 Years for Consumer use; 1 Year for Commercial Use
SB	Batteries for AMP™ Sno-Thro®	2 Years	Consumer	100% first year; prorated second year.

### **Exceptions and Limitations**

The chart below details special exceptions to this warranty:

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

### **Customer Responsibilities**

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

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

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

### To Find an Authorized Service Representative:

In the U.S. and Canada:							
Use the dealer locator on our websites: v	Use the dealer locator on our websites: www.ariens.com • www.gravely.com						
Or contact us by mail or by phone:							
In the U.S., Canada, Mexico, Caribbean, Central and South America:	In Europe, Asia, Africa or the Middle East:	In Australia or New Zealand:					
Ariens Company 655 W. Ryan Street Brillion, WI 54110 Phone: (920) 756 - 4688 www.ariens.com	Countax Ltd, Countax House Great Haseley, Oxfordshire, OX44 7PF Phone: 0800 597 7777 www.countax.com	Ariens Company Building 2 6 Wedgewood Rd. Hallam, Victoria 3803 Australia Phone: (03) 9796 4244 1800 335 489 www.ariens.com.au					

### Exclusions - Items Not Covered by This Warranty

- Parts that are not genuine Ariens, Gravely, Parker or Countax service parts are not covered by this
  warranty and may void the warranty.
- Damages resulting from the installation or use of any part, accessory, or attachment which is not approved by the Ariens Company for use with product(s) identified herein are not covered by this warranty.
- The following maintenance, service and replacement items are not covered by this warranty unless
  they are noted in the Limitations section above: lubricants, spark plugs, oil, oil filters, air filters, fuel
  filters, brake linings, brake arms, brake shoes, skid shoes, scraper blades, shear bolts, mower
  blades, mower vanes, brushes, headlights, light bulbs, knives, cutters, and single-stage impellers.
- Any misuse, alteration, improper assembly, improper adjustment, neglect, or accident which
  requires repair is not covered by this warranty.
- · Use of gasoline blends exceeding 10% ethanol voids any and all warranties.
- Products are designed to the specifications in the area that the product was originally distributed.
  Different areas may have significantly different legal and design requirements. This warranty is limited to the requirements in the area in which the unit was originally distributed. Ariens Company does not warrant this product to the requirements of any other area. Warranty service is limited to service within the area originally distributed.
- In countries other than the United States and Canada, contact the Ariens Company dealer for warranty policies that govern within your country. Rights may vary from country to country and within any one country.
- Normal Wear: This warranty does not cover repair when normal use has exhausted the useful life of
  a part such as a high pressure hose, spray wand, nozzles, trigger handle, supply hoses, quick couplers, gaskets, valves, pistons, pump valve assemblies, o-rings, water and oil seals.

### Special Exclusions on Utility Vehicles

The following uses void the warranty terms on Utility Vehicles (Warranty Code UA):

- · Renting or leasing the utility vehicle.
- Using the utility vehicle to tow or carry loads in excess of the limits specified in the Owner/Operator Manual.
- Modifying the utility vehicle with parts and accessories that are not genuine or authorized Ariens or Gravely parts or accessories.
- · Modifying the utility vehicle without express written authorization from Ariens Company.
- Operating the utility vehicle when it has not been completely and properly assembled and pre-delivered by an authorized Gravely dealer.

#### Disclaimer

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

### LIMITATION OF REMEDY AND DAMAGES

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

### **AUSTRALIAN CONSUMER LAW**

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

### **DISCLAIMER OF FURTHER WARRANTY**

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

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





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

An **Ariens** Company Brand