



54-Inch Snow Blade

Owner/Operator and Parts Manual

Model
815033

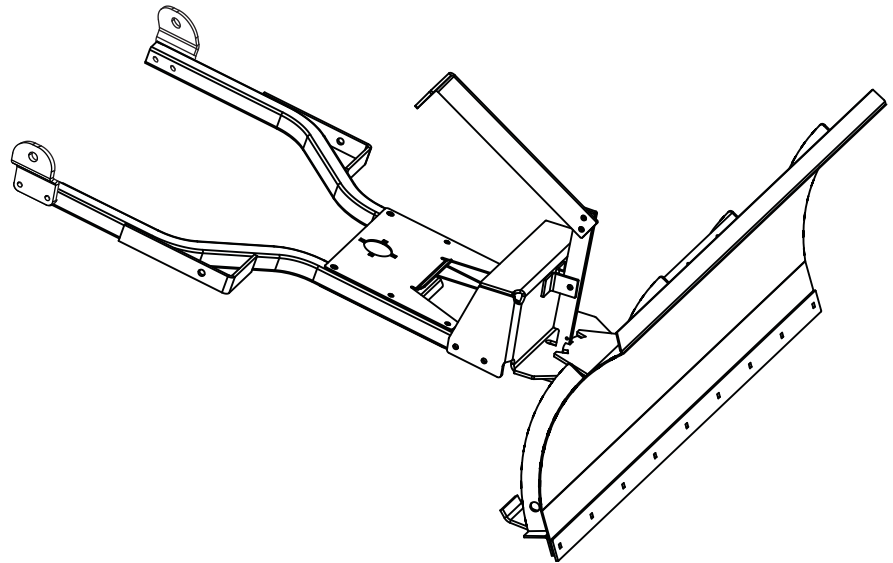


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INTRODUCTION

THE MANUAL

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

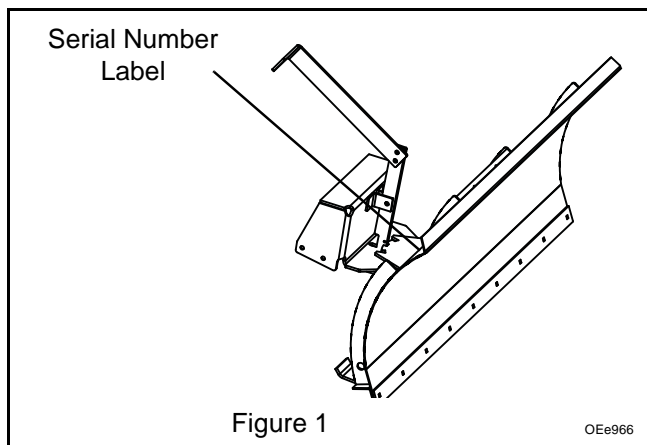
All reference to left, right, front, or rear are given from operator sitting in operation position and facing the direction of forward travel.

MODEL AND SERIAL NUMBERS

Transfer model & serial number label from product registration here.

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

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 numbers here.

UNAUTHORIZED REPLACEMENT PARTS

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

Customer Note: If the dealer does not register your product, please fill out, sign and return the product registration card to Ariens or Gravelly or go to www.ariens.com or www.gravelly.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 and safety interlock system works properly.

NOTE: To locate your nearest Ariens or Gravelly dealer, go to www.ariens.com or www.gravelly.com.



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 unit unless all controls function as described in this manual.
4. Review recommended lubrication, maintenance and adjustments.
5. Fill out Original Purchaser Registration Card and return the card to Ariens Company.

SAFETY

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. Always follow the practices set forth in this manual.

REQUIRED OPERATOR TRAINING

Original purchaser of this unit was instructed by the seller on safe and proper operation by the seller. 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.

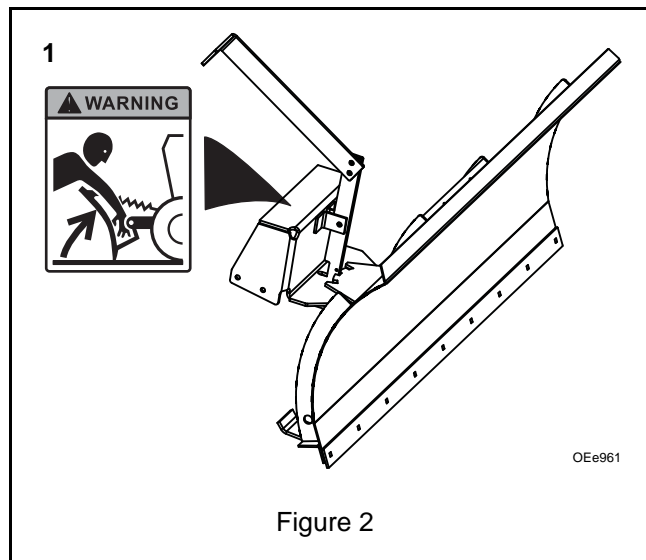


Figure 2

1. WARNING!



Avoid pinch points.

SAFETY RULES

Read, understand, and follow all safety practices in your unit's Owner/Operator Manual before assembling, using or working on this machine.

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.

Read, understand, and follow all safety practices in this Owner/Operator Manual before assembling, using or working on this machine.

ALWAYS remove key from ignition and wire from spark plug before assembly, or working on this unit.

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

ALWAYS check overhead and side clearances carefully before operation. **ALWAYS** be aware of traffic when crossing or operating along streets or curbs.

Keep children, people, and pets away. Be alert and shut off unit if anyone enters work area. Keep children under watchful care of a responsible adult.

NEVER allow children to operate or play on or near unit.

Stay alert for hidden hazards, holes, and ruts.

Avoid uneven or 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.

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

Data indicates that operators, age 60 and above, are involved in a larger percentage of riding mower related injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.

Only trained adults may operate unit. Training includes being familiar with controls and actual operation.

NEVER operate unit after or during the use of medication, drugs or alcohol.

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

Wear adequate safety gear, sturdy shoes, and protective gloves.

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. Always wear safety goggles or safety glasses with side shields when operating mower.

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

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 place your hands or any part of your body or clothing inside or near any moving part while unit is running.

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

Use extreme caution on gravel surfaces.

DO NOT operate unit if safety interlock system is damaged or disabled. Check safety interlock before each use.

ALWAYS remove key to prevent unauthorized use.

DO NOT operate at too fast a rate. Slow down before turning.

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

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

ALWAYS keep protective structures, guards and panels in good repair, in place and securely fastened.

DO NOT operate in reverse unless absolutely necessary. ALWAYS look down and behind before and while backing; especially for children.

Follow the manufacturer's recommendations for wheel weights or counterweights to improve stability when using attachments.

NEVER carry passengers—especially children—even with blade off.

Use extra care when approaching blind corners or objects that may obscure vision of hidden obstacles and children.

If you cannot back up a slope or you feel uneasy on it, do not operate unit on it.

Plow up and down slopes, not across them.

Use slow speed on any slope. Tires may lose traction on slopes even though the brakes are functioning properly.

Keep all movements on the slope *slow* and *gradual*. DO NOT make sudden changes in speed or direction.

Use extra care while operating machines with attachments. They can affect stability of the machine.

Avoid starting, stopping, or turning on a slope. If tires lose traction, raise the blade and proceed slowly *straight* down the slope.

DO NOT operate on slopes over 10°.

DO NOT park on slopes unless necessary. If unit is parked on a slope, ALWAYS chock or block wheels and set parking brake.

DO NOT disengage or bypass transmission and coast downhill.

Do not tow equipment while snow blade is installed.

Travel slowly and allow extra distance to stop.

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 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.

NEVER overfill fuel tank.

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.

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

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

NO flames, NO sparks, NO smoking near battery.

ALWAYS wear safety glasses and protective gear near battery.

DO NOT TIP battery beyond a 45° angle in any direction.

ALWAYS keep batteries out of reach of children.

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

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

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

A frozen battery can explode and result in death or serious injury. DO NOT charge or jump start a battery containing frozen fluid. Thaw the battery before putting on a charger or jump starting.

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.

Stop and inspect equipment if you strike an object or if there is an unusual vibration. Repair, if necessary, before restarting. Never make adjustments or repairs with the engine running.

Check brake operation frequently. Adjust and service as required.

Keep all hardware properly tightened.

Stored energy in springs can cause injury.

Maintain or replace safety and instruction labels, as necessary.

Never store the machine or fuel container inside a building where there is an open flame, such as a water heater.

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

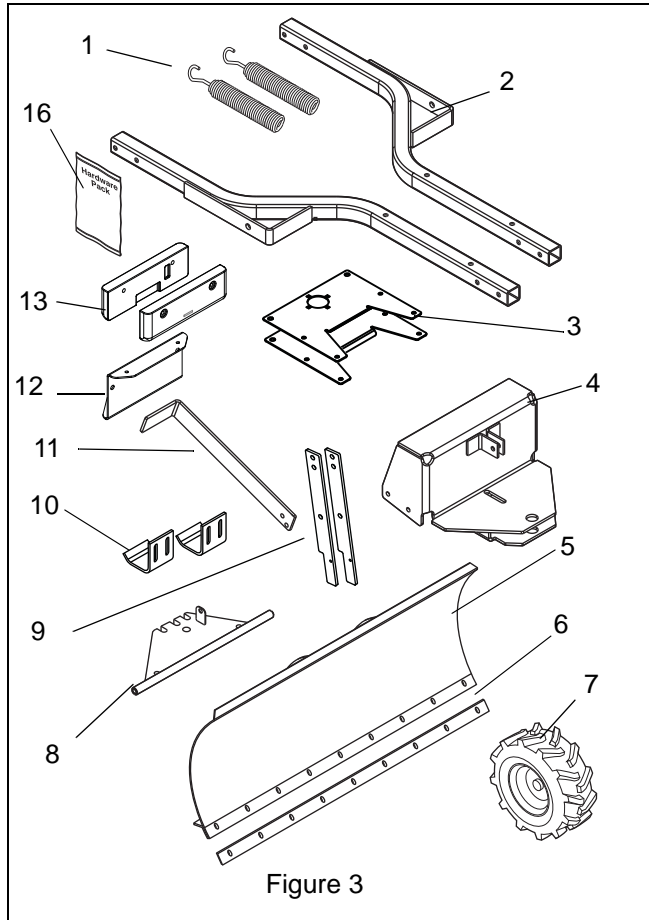
ASSEMBLY



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

Package Contents:

Check your package contents to make sure you have all the parts listed in Figure 3.



Item	Part No.	Qty.	Description
1	00260600	2	Blade Adj. Spring
2	03788651	2	Sub Frame Tube
3	04446351	2	Sub Frame Top Plate
4	00181451	1	Blade Mount Yoke
5	03255851	1	54-Inch Blade Assembly
6	03255951	1	Wear Plate
7	00259000	2	Tire/Wheel Weldment, 18 x 16.5
8	00260900	1	Pivot Plate
9	00181551	2	Latch
10	03127151	2	Skid Shoe
11	00181651	1	Pedal
12	03789051	1	Weight Bracket
13	00172000	2	Cast Iron Weight
14	07754100	2	Decal, Hot Surface (Not shown)
15	07732500	1	Decal, Pinch Point (Not shown)
16	AR	AR	Hardware Package

Hardware Package:

Check the hardware package for the items listed below. See the parts list starting on page 14 for illustrations and locations.

Item	Part No.	Qty.	Description
17	03788851	2	Pivot Bracket
18	03788900	2	Lift Link
19	01590400	2	1/2" Trunnion
20	06430200	5	Flat Steel Washer, 17/32 x 1-1/4
21	06714900	5	#16 Hair Pin
22	01582800	1	Spacer, 3/4 x 1 x 1-9/16
23	05962200	2	Hex Bolt, 1/2-13 x 5 Gr 5
24	06543600	2	1/2-13 Top-Locking Flange Nut
25	05958000	5	Hex Bolt, 3/8-16 x 1-1/4 Gr 5
26	05962900	12	Hex Bolt, 3/8-16 x 2-1/4 Gr 5
27	06542000	25	3/8-16 Top-Locking Flange Nut
28	05961700	1	Hex Bolt, 3/4-10 x 3 Gr 5
29	06537900	1	Nylon Locking Jam Nut, 3/4-10
30	00261000	1	Special Washer
31	00261100	1	Latch Spring
32	05981300	2	Hex Bolt, 3/8-16 x 4 Full Thread
33	06714000	5	Internal Hair Pin, 5/32 x 2-15/16
34	06529400	4	Hex Nut, 3/8-16
35	06215700	9	Round Head Square Neck Bolt, 5/16-18 x 3/4 Grade 5
36	06543100	9	5/16-18 Top-Locking Flange Nut
37	06537300	4	Hex Nut, 1/2-13
38	05959700	2	Hex Bolt, 1/2-13 x 2 Gr 5
39	06212000	4	Round Head Square Neck Bolt, 3/8-16 x 1 Gr 5
40	03789100	1	Pin, Left Rear Lift Pivot
41	03838600	1	Right Rear Lift Pivot
42	06439000	3	Flat Steel Washer, 13/16 x 1-1/4

Tools Required

- 7/16" Wrench
- 1/2" Wrench
- 9/16" Wrench
- 3/4" Wrench
- Adjustable Wrench

Blade Assembly

1. Assemble wear plate (item 6) to 54-inch snow blade (item 5) with nine 5/16-18 x 3/4 round head square neck bolts (item 35) and 5/16-18 top lock flange nuts (item 36). See Figure 4.
2. Assemble skid shoes (item 10) to the 54-inch snow blade (item 5) with 3/8-16 x 1 round head square neck bolts (item 39), and 3/8-16 top lock nuts (item 27). See Figure 4.

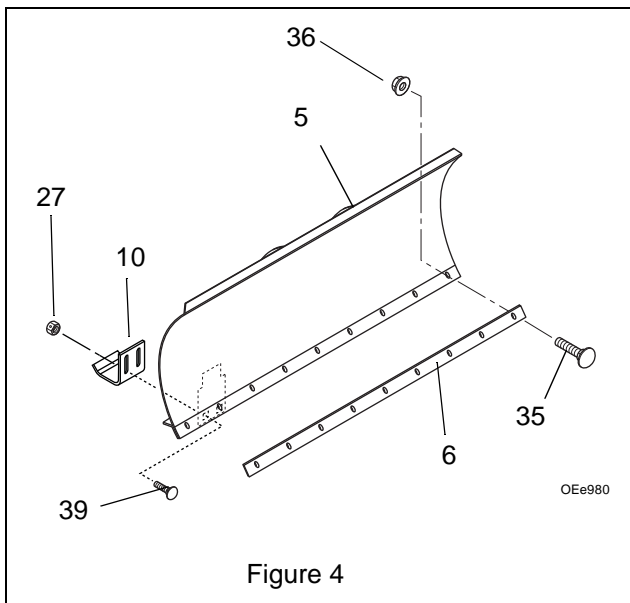


Figure 4

3. Thread a 1/2-13 hex nut (item 37) all the way up each 1/2-13 x 2 hex bolt (item 38), and then mount both bolts to the pivot plate (item 8) with the remaining 1/2-13 hex nuts (item 37). These bolts act as stop bolts for the blade. See Figure 5.

NOTE: Tighten the nuts firmly against the pivot plate to lock the bolts in position.

4. Slide the pivot plate (item 8) into mounting holes on the back of the 54-inch snow blade (item 5) and secure with two hair pins (item 33). See Figure 5.

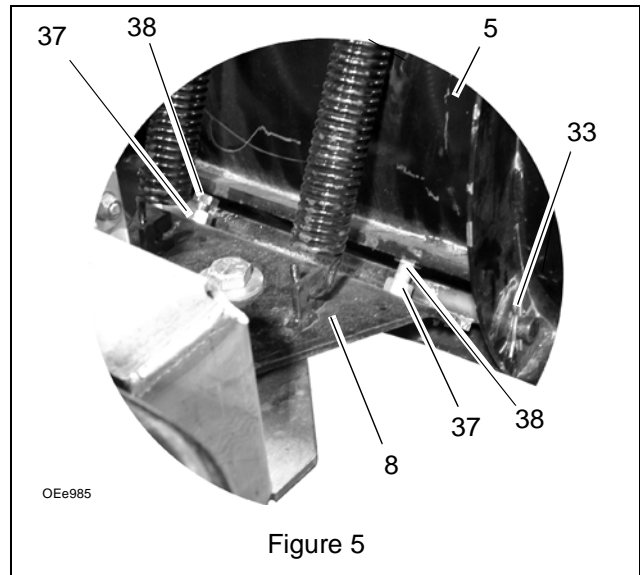


Figure 5

Sub Frame Assembly

1. Connect the two sub frame tubes (item 2) with the two sub frame plates (item 3), four 3/8-16 x 2-1/4 hex bolts (item 26), and four 3/8-16 top locking flange nuts (item 27). See Figure 6.
2. Connect two pivot brackets (item 17) to the rear left and rear right sides of the sub frame assembly with two 3/8-16 x 2-1/4 hex bolts (item 26) and two 3/8-16 top locking flange nuts (item 27). See Figure 6.

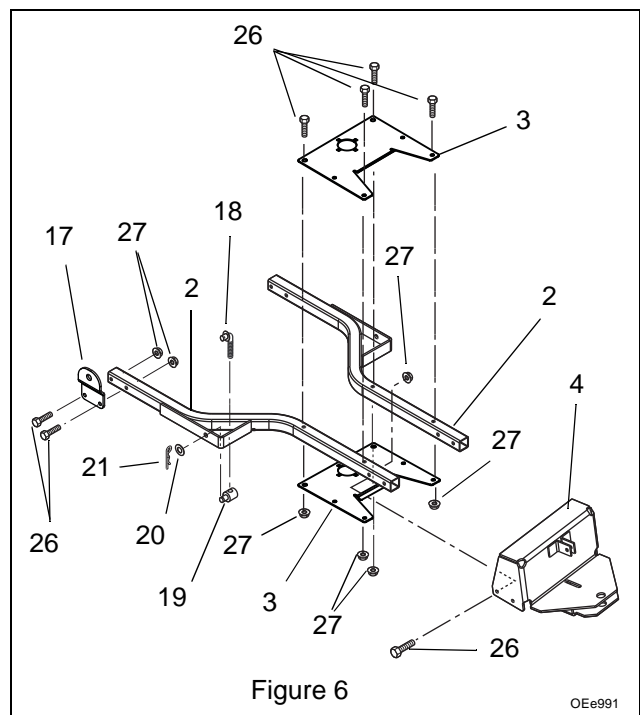


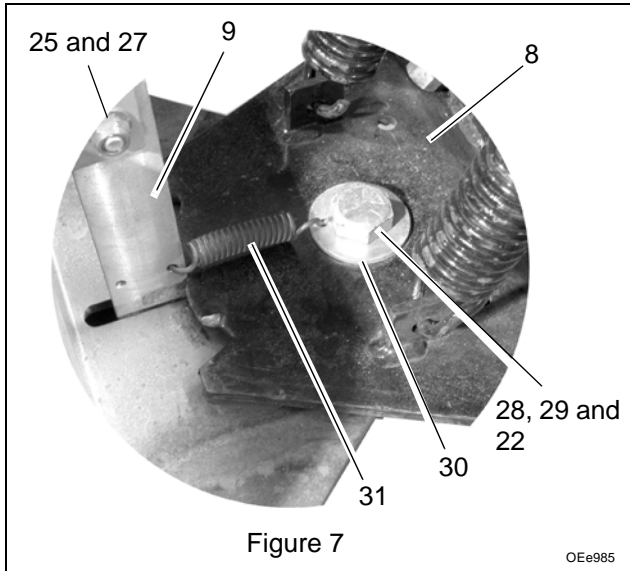
Figure 6

3. Connect a trunnion (item 19) to each front sub frame hanger with a 17/32 x 1-1/4 flat steel washer (item 20) and an external hair pin (item 21). Thread a lift link (item 18) into each trunnion. See Figure 6.

4. Install the blade mount yoke (item 4) to the sub frame assembly with four 3/8-16 x 2-1/4 hex bolts (item 26) and 3/8-16 top locking flange nuts (item 27). See Figure 6.

NOTE: Hook the z-bend end of the latch spring (item 31) into the hole in the special flat steel washer (item 30) before mounting the snow blade assembly. See Figure 7 and Figure 8.

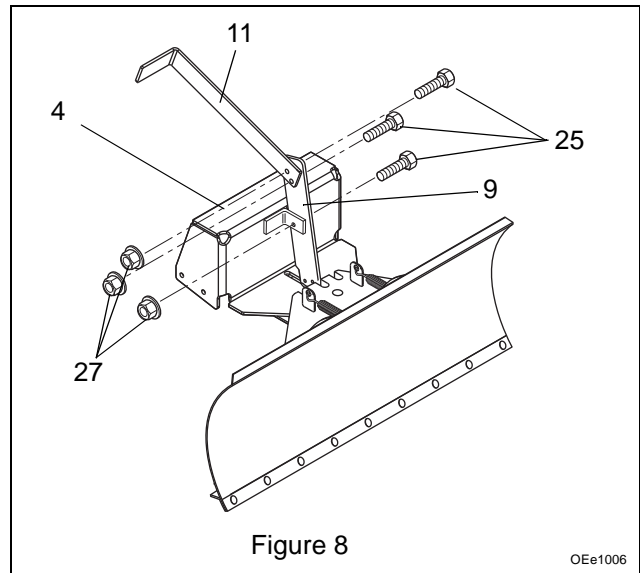
5. Mount the snow blade assembly to the sub frame assembly with a 3/4-10 x 3 hex bolt (item 28), latch spring (item 31), special flat steel washer (item 30), spacer (item 22), and a 3/4-10 nylon locking jam nut (item 29). See Figure 7.



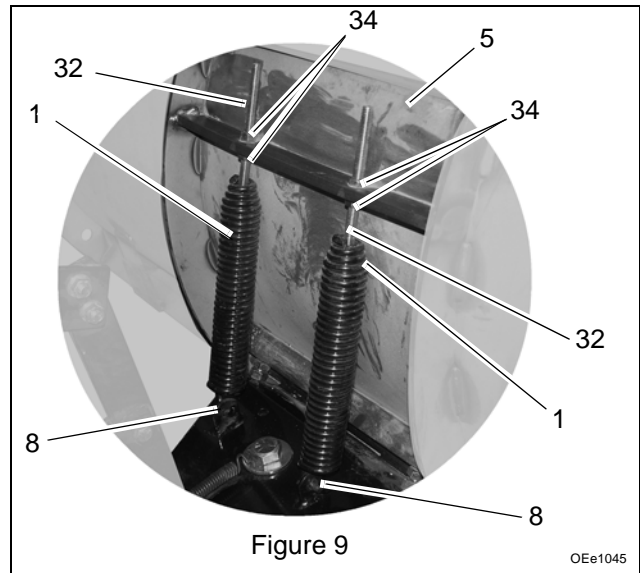
NOTE: Make sure the latches (item 9) catch the center notch in the pivot plate (item 8) as you install them on the blade mount yoke (item 4).

NOTE: DO NOT overtighten the hardware holding the latches to blade mount yoke.

6. Install the two latches (item 9) on the blade mount yoke (item 4) with a 3/8-16 x 1-1/4 hex bolt (item 25) and a 3/8-16 top locking flange nut (item 27). See Figure 8.
7. Hook the loop end of the latch spring into the latches (item 9). See Figure 7.
8. Connect the pedal (item 11) to the latch (item 9) with two 3/8-16 x 1-1/4 hex bolts (item 25) and 3/8-16 top locking flange nuts (item 27). See Figure 8.



9. Slide a 3/8-16 x 4 hex bolt (item 32) through each blade adjustment spring (item 1) and thread a 3/8-16 hex nut (item 34) most of the way up the bolt. Hook the loop end of each blade adjustment spring (item 1) through an eye on the pivot plate (item 8), and put the hex bolt through a hole in the support bracket on the backside of the snow blade (item 5). Secure the bolt/spring assemblies in place with 3/8-16 hex nuts (item 34) and tighten these nuts until the spring starts to extend. Tighten the lower nut against the blade to hold the spring tension. See Figure 9.



INSTALLING SNOW BLADE ON UNIT

NOTE: Before installing the snow blade, remove the mower deck and other accessory items such as baggers and trailers according to instructions provided in their owner's manuals.

Replace Rear Wheels

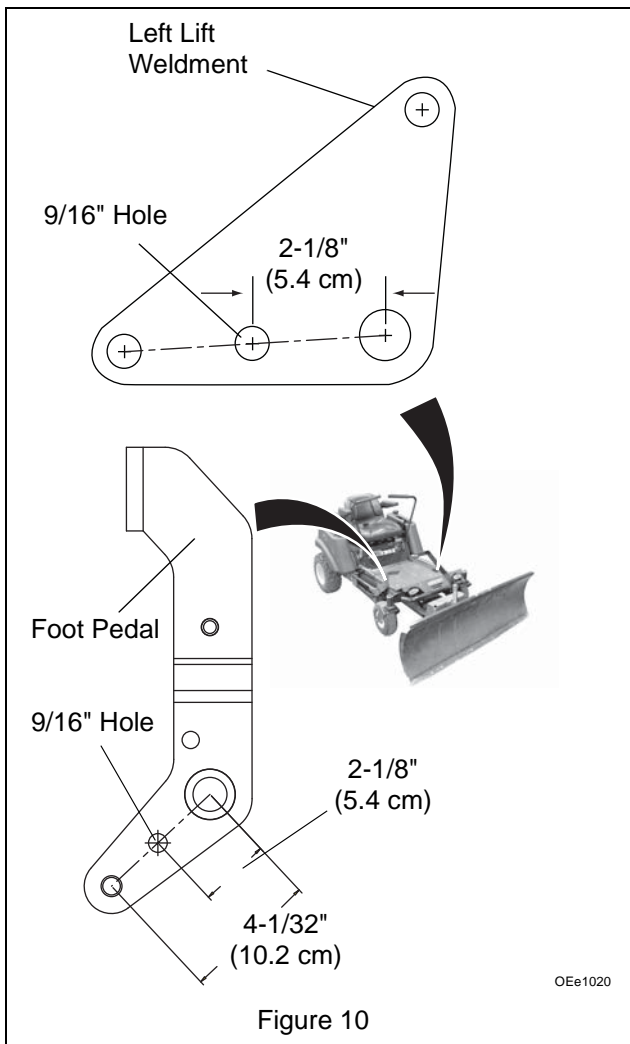
1. Remove the two rear wheels and replace them with the snow tire/wheels (item 7) provided with the snow blade kit. Save the rear wheels to use next season for mowing.

INSTALL SUB FRAME AND BLADE ASSEMBLY

Modify Front Lift Weldment and Attachment Lift Pedal (Figure 10)

NOTE: Go to *Install Snow Blade Frame on Unit* on page 9 if a 9/16 in. hole is already drilled through the left front lift weldment and attachment lift pedal.

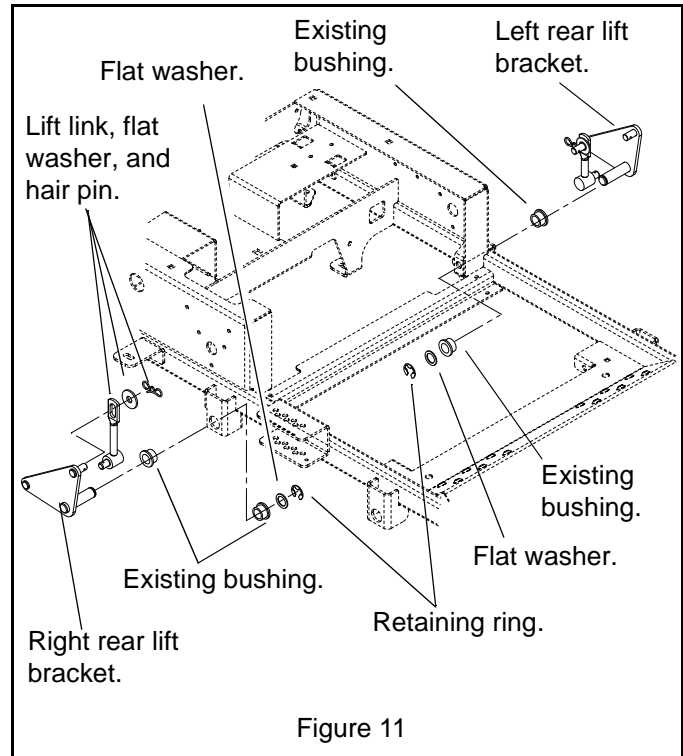
1. Place the attachment lift pedal in the lowest position.
2. Drill a 9/16 in. hole through the left front lift weldment and attachment lift pedal as shown in Figure 10.



Install Snow Blade Frame on Unit (Figure 11 and Figure 12)

1. Set the attachment lift pedal to the lowest attachment height.
2. Slide snow blade assembly under the unit.

3. Remove retaining rings, flat washers, left and right rear lift brackets and four bushings from the frame. Save the bushings to install the snow blade. Save the lift brackets, lift linkages, and hardware to reinstall the mower deck. See Figure 11.



4. Connect the snow blade frame to the left side of the unit with the flange bushings removed in step 3, left rear pivot pin (item 40), two 13/16 x 1-1/2 x 9/64 flat steel washers (item 42) and 5/32 x 2-15/16 internal hair pins (item 33). See Figure 12.
5. Connect the snow thrower frame to the right side of the unit with flange bushings removed in step 3, right rear lift pivot bracket (item 41), one 1-1/4" flat steel washer (item 20) and #16 hair pin (item 21), and one 13/16 x 1-1/2 x 9/64 flat steel washer (item 42) and 5/32 x 2-15/16 internal hair pin (item 33). See Figure 12.
6. Install 1/2" trunnions (item 19) on lift links (item 18).
7. Install a lift link (item 18) on front lift weldment and on the lift pedal with a 1-1/4" flat steel washer (item 20) and #16 hair pin (item 21). See Figure 12.

NOTE: Turn 1/2" trunnion (item 19) clockwise or counter clockwise until 1/2" trunnion (item 19) aligns with snow thrower frame. Always make sure the link is threaded completely into the trunnion.

8. On each side of the unit connect 1/2" trunnion (item 19) to the snow thrower frame with 1-1/4" flat steel washer (item 20) and #16 hair pin (item 21). See Figure 12.

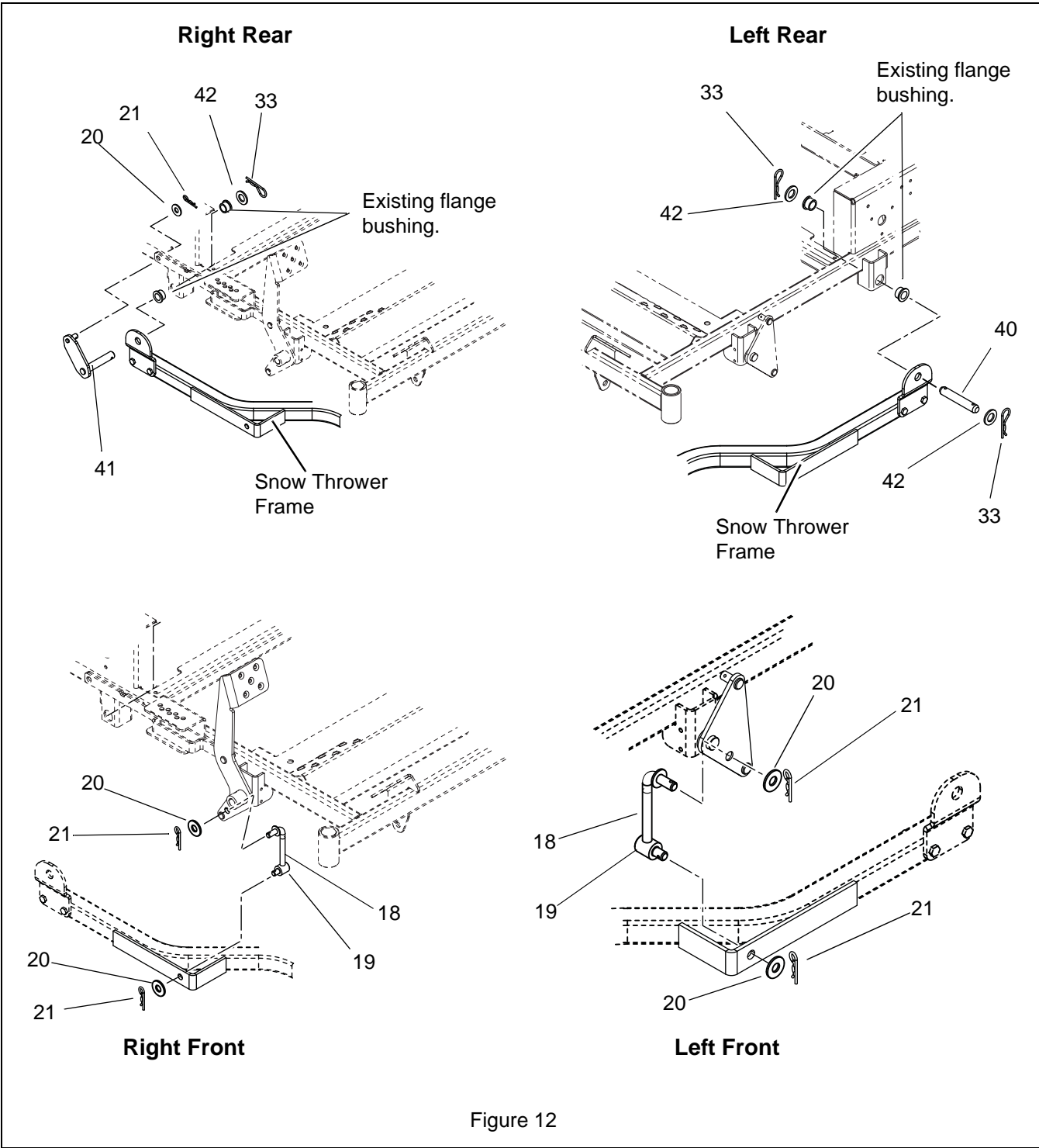


Figure 12

INSTALL COUNTERWEIGHTS

(Figure 13)



WARNING: ALWAYS install counterweights before operating unit with snow blade attached. ALWAYS remove counterweights when snow blade is removed from unit.



WARNING: Each counterweight weighs 56 lb (25.54 kg) for a combined total weight of 112 lb (50.8 kg).



WARNING: Do not use the trailer hitch while the counterweight is attached.

1. Position the weight bracket (item 12) in the center of the rear frame rail so the two 1/2" mounting holes align with the holes in the rear frame rail. Use weight bracket as a template to lay out two 7/16" mounting holes in the top of rear frame rail.
2. Drill two 7/16" holes through the upper frame rail as shown in Figure 13.
3. Install the weight bracket (item 12) on the rear frame rail with two 3/8"-16 x 1-1/4 hex bolts (item 25) and 3/8"-16 top locking flange nuts (item 27).
4. Install the two cast iron weights (item 13) on weight bracket (item 12) with two 1/2"-13 x 5 hex bolts (item 23) and 1/2"-13 top locking flange nuts (item 24). The bolts go through the weights, weight bracket and frame.
5. Install two hot surface decals (item 14) on unit.

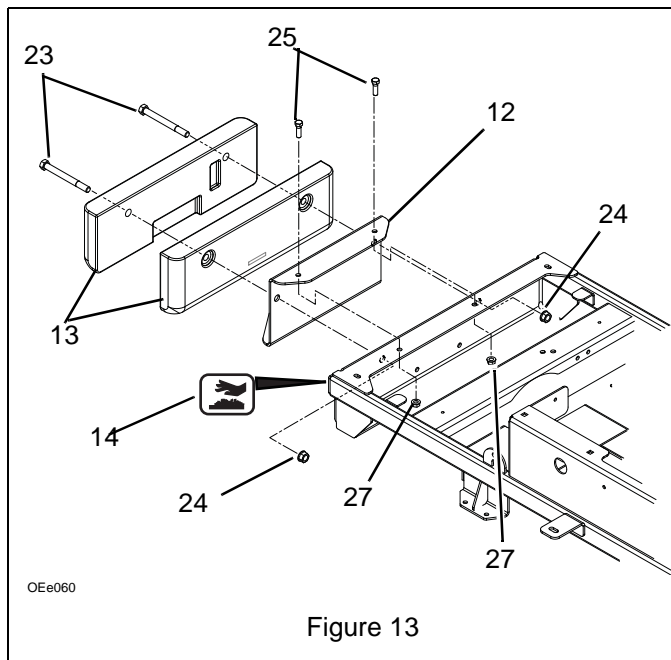


Figure 13

REMOVING SNOW BLADE

Remove Blade Assembly

1. Stop unit and engine, remove key, set the parking brake, and wait for all moving parts to stop before removing attachment.
2. Lower snow blade to the ground.
3. Disconnect left and right front lift links from the lift pedal and lift bracket. Keep hardware to reinstall blade next season.
4. Remove the left rear lift pin and right rear lift bracket from the rear lift brackets. Save hairpins and flat washers to reinstall blade. Save bushings to reinstall the deck.
5. Lower the subassembly to the ground and slide it from under the unit. Keep the assembly together and keep all the mounting hardware to save time reinstalling the snow blade.
6. Replace the left and right rear lift brackets and secure with retaining rings removed in step 3 of (Figure 11 and Figure 12) on page 9.

Remove Rear Counterweight

1. Remove the counterweight from the unit. Save it and the mounting hardware for next season.

Replace Standard Tires

1. Remove the snow tire/wheel assemblies from the unit and replace the standard tire/wheels that came with your unit.

Replace Mower Deck

1. Replace mower deck and any other optional accessories you had installed according to instructions in their owner's manuals.

OPERATION



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

Never operate snow blade without counterweight attached.

Always remove the counterweight when removing the snow blade.

BEFORE EACH USE

1. Make sure your engine has been setup for the proper season according to your engine manual. Make sure the oil weight and air filters are correct for cold or warm weather use.
2. Check snow parts for wear, deterioration or damage. Replace **ONLY** with Ariens original service parts before operating.
3. Ensure all hardware is tight.
4. Remove any debris or snow build up from snow parts.

PLOWING SNOW

Pre-Start

Refer to unit Owner/Operation Manual for unit Pre-Start and Operation.



CAUTION: Make sure all hardware is tight, all safety devices are in place and all adjustments are correct. Replace any lost parts.

Starting



CAUTION: DO NOT attempt to operate Front Blade at this time. Thoroughly read this entire manual as well as the unit Owner/Operator Manual.

IMPORTANT: Allow engine to warm up to operating temperature before applying load.

Speed



CAUTION: DO NOT operate unit at high transport speeds on slippery surfaces. Use care when backing.

Refer to unit Owner/Operator Manual and select forward speed that meets conditions.

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

NOTE: Slow speed is recommended for removing deep or hard packed snow.

Stopping

Stop the unit and set the parking brake according to instructions in the unit's owner/operator manual.



WARNING: Take all possible precautions when leaving unit unattended, such as lowering attachment, stopping engine and removing key to prevent unauthorized use.

Changing the Blade Angle

The blade can be set to clear to the left, right or center.

To change the blade angle:

1. With the engine running and while seated in the operator's position, lower the snow blade.
2. Push the foot pedal forward to release the latch.
3. With the latch released, turn the unit left to angle the blade to the right, or turn the unit right to angle the blade to the left.
4. When the blade faces the desired direction, release the foot pedal to latch the blade in place.

IMPORTANT: Make sure the latch secures the blade in position before plowing.

Changing the Blade Height

The skids adjust blade height to prevent the blade from digging into the ground when dozing snow on gravel or crushed rock surfaces. Adjust blade height to about 1/4" (.64 cm) for hard, smooth surfaces, and about 1/2" (1.27 cm) or more for gravel and crushed rock surfaces.

Setting Blade Trip Tension

The blade will trip forward when it hits a solid obstruction and return to its operation position automatically. Increase tension on the springs by loosening the lower 3/8-16 hex nuts (item 34) and then tightening the upper 3/8-16 hex nuts (item 34) to increase spring extension. Tighten the lower nuts against the blade to hold the spring tension. See Figure 9.

Tips for Operation

Snow is best removed as soon as possible after a snow fall. Operate front blade in a overlapping series of paths. For larger areas, start in middle and plow snow to each side for better distribution.



CAUTION: NEVER attempt or make adjustments to front blade while engine is running.

MAINTENANCE

Ariens Dealers will provide any service or adjustments which may be required to keep your unit operating at peak efficiency.



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

MAINTENANCE SCHEDULE

	Before Storage	After Storage
Oil Unit	•	•

OIL UNIT

Oil movable parts on blade pivot plate and sub frame before and after storing unit for the season.

STORAGE



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

IMPORTANT: NEVER spray metal components with water. DO NOT store unit outdoors.

Clean plastic surfaces with sponge and mild detergent. Dry with a soft cloth.

Remove all snow, dirt, grease, leaves, etc. from unit.

Store in a clean, dry area.

Ensure all fasteners are properly tightened. Inspect moving parts for damage and wear.

Touch up all rusted or chipped painted surfaces.

SPECIFICATIONS

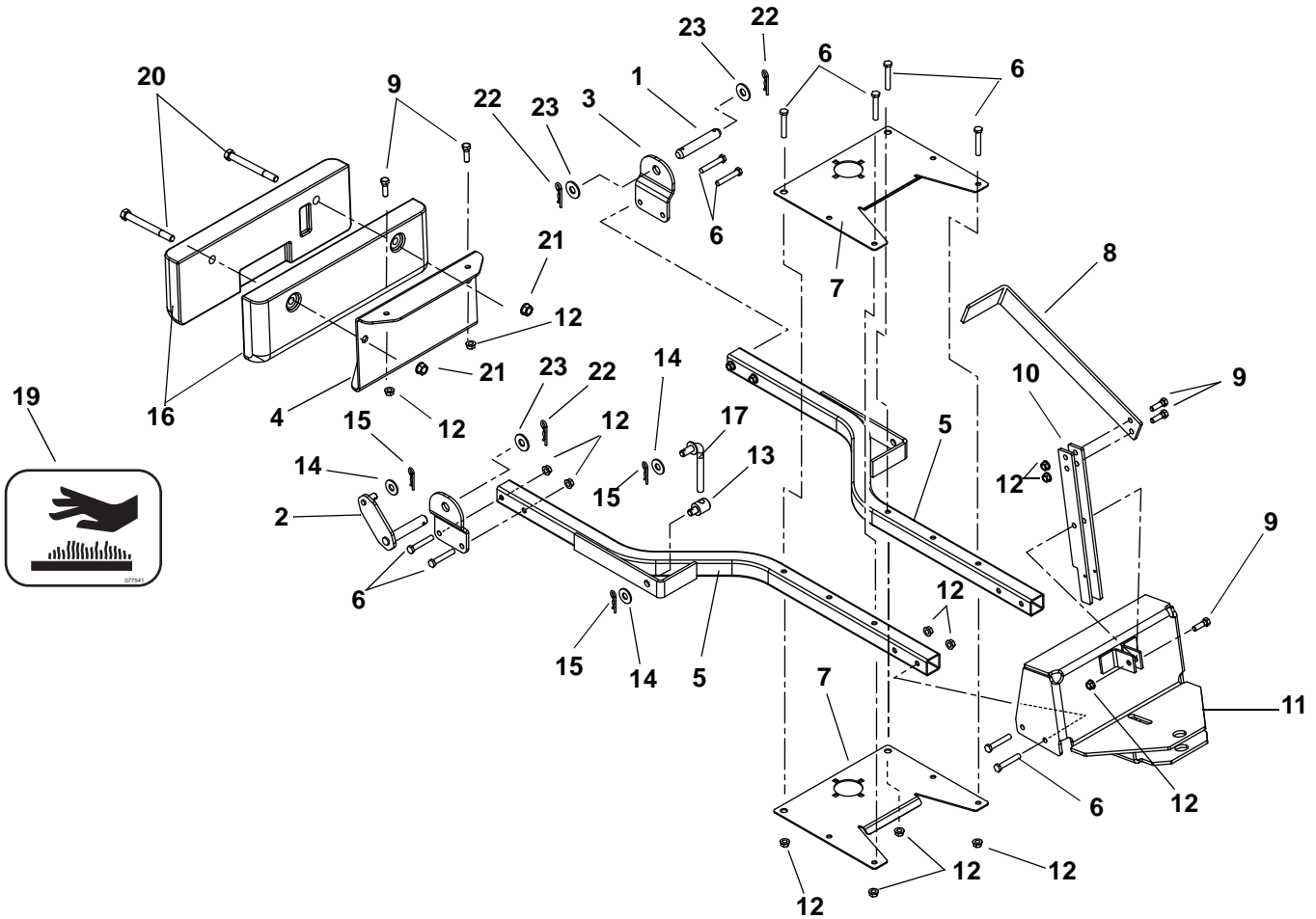
Model No.	815033
Clearing Width	54" (137.2 cm) @ 0°
Blade Turning Angle	50° @ 25° Increments

SPECIFICATIONS

Model Number	815033
Description	54-inch Snow Blade
Added Length	18 in. (45.7 cm)
Total Width	54 in. (137.2 cm)

FRAME SUBASSEMBLY

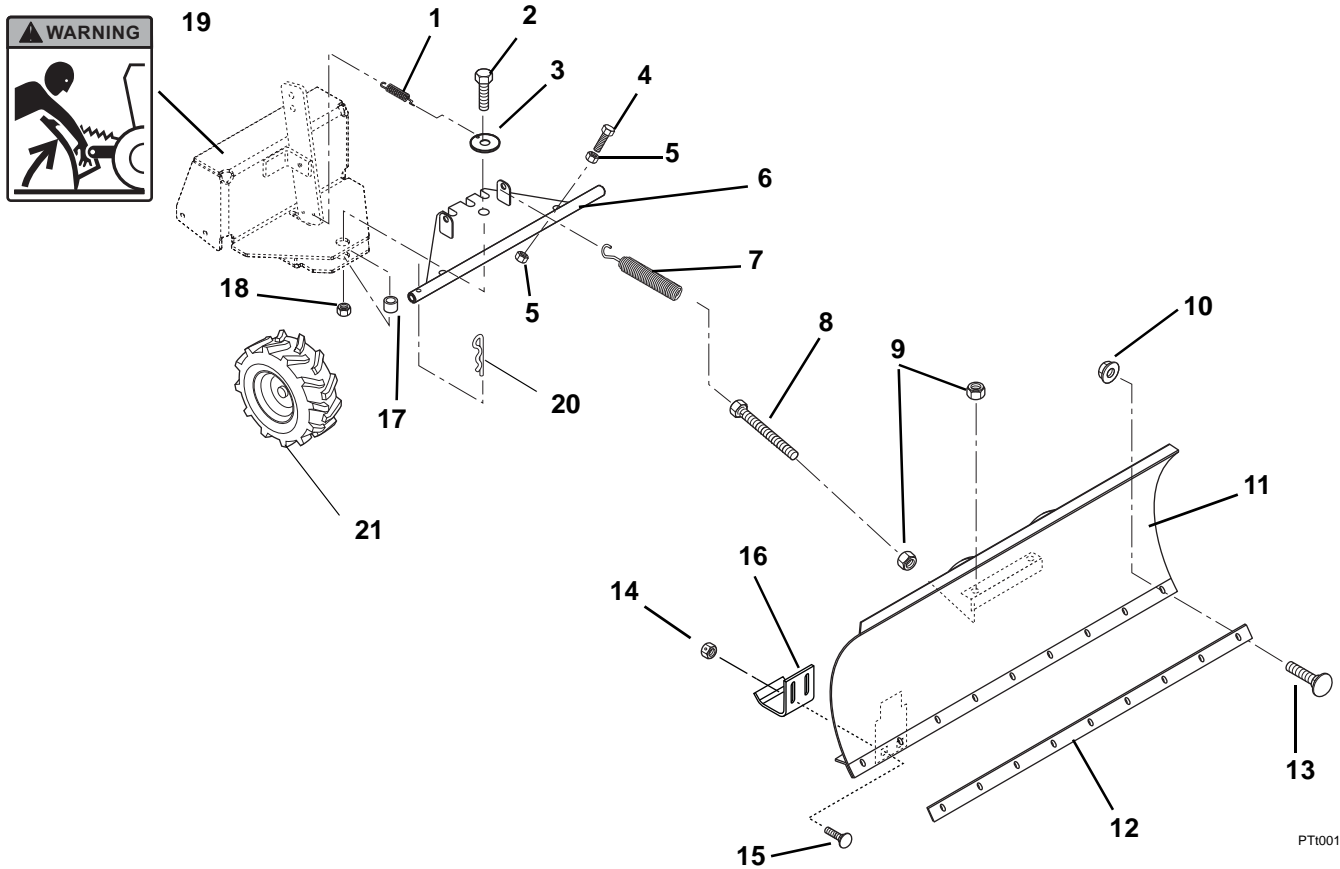
Model 815033



Item	Part No.	Qty.	Description
1	03789100	1	Pin, Left Rear Lift Pivot
2	03838600	1	Bracket, Right Rear Lift Pivot
3	03788851	2	Bracket, Pivot
4	03789051	1	Weight Bracket
5	03788651	2	Sub-Frame Tube
6	05962900	12	Hex Bolt, .38-16 x 2.25 Gr 5
7	00260351	2	Sub-Frame Plate
8	00181651	1	Pedal
9	05958000	5	Hex Bolt, .38-16 x 1.25 Gr 5
10	00181551	2	Latch
11	00181451	1	Blade Mount Yoke
12	06542000	25	Top Locking Flange Nut, .38-16
13	01590400	2	Trunnion
14	06430200	5	Flat Steel Washer, .531 x 1.250 x .100
15	06714900	5	External Hair Pin, #16
16	00172000	2	Weight, Cast Iron
17	03788900	2	Lift Link
18	00259000	2	Tire/Wheel Assembly, 18 x 16.5
19	07754100	2	Decal, Hot Surface
20	05962200	2	Bolt, Hex .50-13 x 5.00 Gr 5
21	06543600	2	Nut, Top Locking Flange, .50-13
22	03714000	3	Pin, Hair .15 x 2.937
23	06439000	3	Washer, Flat Steel .812 x 1.50 x .135

SNOW BLADE ASSEMBLY

Model 815033



PT10011

Item	Part No.	Qty.	Description
1	00261100	1	Spring, Latch
2	05961700	1	Bolt, Hex .75-10 x 3.00 Grade 5
3	00261000	1	Washer, .38 Special
4	05959700	2	Bolt, Hex .50-13 x 2.00 Grade 5
5	06537300	4	Nut, Hex .50-13
6	00260900	1	Weldment, Pivot Plate
7	00260600	2	Spring, Blade Adjustment
8	05981300	2	Bolt, Hex .38-16 x 4.00 Full Thread
9	06529400	4	Nut, Hex .38-16
10	06543100	9	Nut, Locking-Top Flange .31-18
11	03255851	1	Weldment, 54" Blade
12	03255951	1	Plate, Wear
13	06215700	9	Bolt, Round Head Square Neck .31-18 x .75 Grade 5
14	06529400	4	Nut, Hex .38-16
15	06212000	4	Bolt, Round Head Square Neck, 3/8-16 x 1 Grade 5
16	03127151	2	Skid Shoes
17	01582800	1	Spacer .753 x 1.00 x 1.60
18	06537900	1	Nut, Locking-Jam-Nylon .75-10
19	07732500	1	Decal, Pinch Point
20	06714000	2	Internal Hair Pin, .15 x 2.937
21	00259000	2	Tire/Wheel Weldment, 18 x 16.5



Consumer Mowing Equipment Limited Warranty

Ariens Company (Ariens) warrants to the **original purchaser** that Ariens, Gravely and Countax brand lawn and garden consumer products purchased on or after 1/1/2012 will be free from defects in material and workmanship for the time period noted in the chart below. Equipment put to personal use around a single household or residence is considered "Consumer Use"; equipment put to any business use (agricultural, commercial, or industrial) or used at multiple locations is considered "Commercial Use." If any product is rented or leased, then the duration of these warranties shall be 90 days after the date of purchase.

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

Warranty Code	Product Group	Warranty Period Consumer Use	Warranty Period Commercial Use
HA	Zoom & ZT Zero-Turn Riders; AMP™ Rider	3 Years	90 Days
HB	Max Zoom & ZT HD Zero-Turn Riders	3 Years	1 Year
HC	Tractors, "961" Series Walk-Behind Mowers	2 Years	90 Days
HD	Classic LM Series Mowers; Wide Area Walk Mowers	3 Years	90 Days
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
HA, HB	Mower Deck Shell on Zero-Turn Riders	5 Years	Consumer	3 years parts and labor Additional 2 years parts only
HA, HB	Main Frame on Zero-Turn Riders	5 Years	Consumer	3 years parts and labor Additional 2 years parts only
HA	Batteries for AMP™ Rider	2 Years	Consumer	100% first year; prorated second year

Exceptions and Limitations

The chart below details special exceptions to this warranty:

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

Customer Responsibilities

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

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

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

To Find an Authorized Service Representative:

In the U.S. and Canada:		
Use the dealer locator on our websites: www.ariens.com • www.gravely.com		
Or contact us by mail or by phone:		
In the U.S., Canada, Mexico, Caribbean, Central and South America:	In Europe, Asia, Africa or the Middle East:	In Australia or New Zealand:
Ariens Company 655 W. Ryan Street Brillion, WI 54110 Phone: (920) 756 - 4688 www.ariens.com	Countax Ltd, Countax House Great Haseley, Oxfordshire, OX44 7PF Phone: 0800 597 7777 www.countax.com	109-111 Abbot House Hallam, Victoria 3803 Australia Phone: (03) 9796 4244 1800 335 489 www.bynorm.com.au

Exclusions - Items Not Covered by This Warranty

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

Disclaimer

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

LIMITATION OF REMEDY AND DAMAGES

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

AUSTRALIAN CONSUMER LAW

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

DISCLAIMER OF FURTHER WARRANTY

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

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



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An *Ariens* Company Brand