

# Versa - RC

## **Commercial Pro 30" Brush Cutter**



Model #: VRC30

**Description: 30" Rough Cut Attachment** 

#### **SWISHER ACQUISITION INC.**

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Toll Free: 1-800-222-8183

Manufacturing quality lawn care equipment since 1945,

Celebrating over 70 years of innovation



#### **OWNER'S MANUAL**

STARTING SERIAL # L119-001001

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## LIMITED WARRANTY

The manufacturer's warranty to the original consumer purchaser is:

This product is free from defects in materials and workmanship for a period of three (3) years for residential use and one (1) year for commercial use from the date of purchase by the original consumer purchaser.

We will repair or replace, at our discretion, parts found to be defective due to materials or workmanship. This warranty is subject to the following limitations and exclusions:

1) Limitations This warranty applies only to products which have been

properly assembled, adjusted, and operated in accordance with the instructions contained within this manual. This warranty does not apply to any product of Swisher that has been subject to alteration, misuse, abuse, improper assembly or installation, shipping damage, or to normal wear of the product.

2) Exclusions Excluded from this warranty are normal wear, normal adjustments, normal

maintenance, and battery.

In the event you have a claim under this warranty, you must deliver the product to an authorized service dealer. All transportation charges, damage or loss incurred during transportation of parts submitted for replacement or repair under this warranty shall be borne by the purchaser. Should you have any questions concerning this warranty, please contact us toll-free at 1-800-222-8183. The model number, serial number, date of purchase and the name of the authorized Swisher dealer from whom you purchased the mower will be needed before any warranty claim can be processed.

THIS WARRANTY DOES NOT APPLY TO ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES AND ANY IMPLIED WARRANTIES ARE LIMITED TO THE SAME TIME PERIODS STATED HEREIN FOR ALL EXPRESSED WARRANTIES. Some states do not allow the limitation of consequential damages or limitations on how long an implied warranty may last, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights, which vary from state-to-state. This is a limited warranty as defined by the Magnuson-Moss Act of 1975.

## INTRODUCTION

**Congratulations!** Thank you for purchasing Swisher's Rough Cut Deck Attachment. This machine is built for the greatest efficiency and rapid clearing of large areas. The Heavy Duty Layered Steel Deck and Dual Break away Cutting Blades will make guick work in the most overgrown brushy areas!

This manual is a valuable document. Following the instructions for use, service, maintenance, etc. can greatly increase the performance and life of your machine.

**NOTE:** If you have never used a Hydrostatic Drive Equipment mower before, refer to the Operation Controls section of this manual before attempting to operate one for the first time.



THIS SAFETY ALERT SYMBOL IDENTIFIES AN IMPORTANT SAFETY MESSAGE IN THIS MANUAL THAT HELPS YOU AND OTHERS AVOID PERSONAL INJURY OR EVEN DEATH. DANGER, WARNING, AND CAUTION ARE SIGNAL WORDS USED TO IDENTIFY THE LEVEL OF HAZARD. HOWEVER, REGARDLESS OF THE HAZARD, BE EXTREMELY CAREFUL.

DANGER: Indicates an IMMINENTLY HAZARDOUS SITUATION! If not avoided, WILL

RESULT in death or serious injury.

WARNING: Indicates a POTENTIALLY HAZARDOUS SITUATION! If not avoided, COULD

RESULT in death or serious injury.

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.

#### General:

**IMPORTANT!** In this operator's manual, left and right, backward and forward are used in relation to the normal operator's position on the tractor.

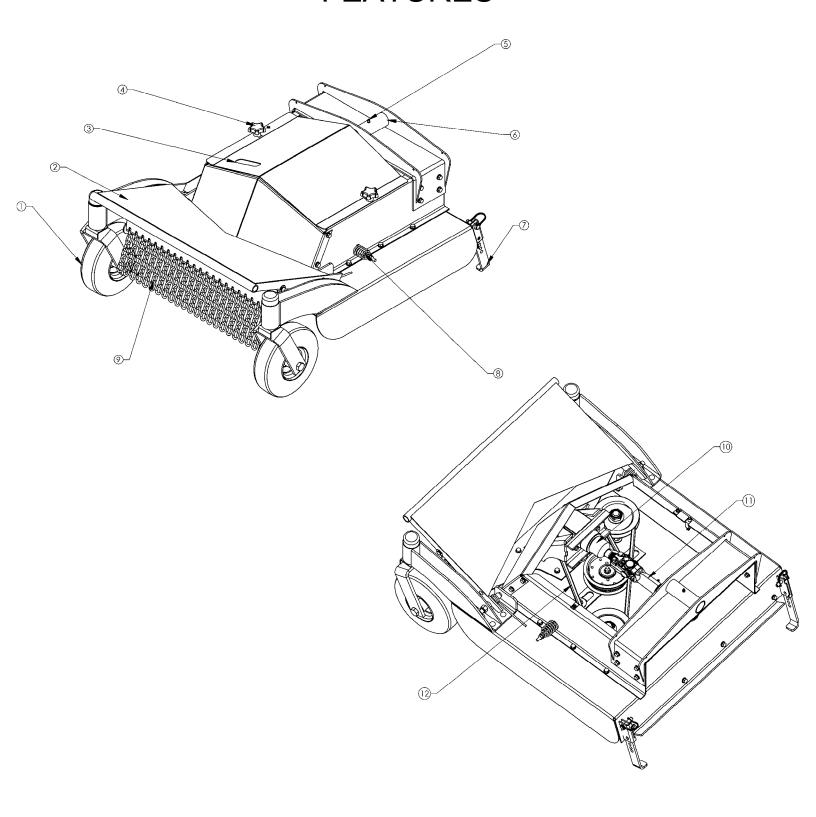
#### **Read Before Operating:**

- > This machine is constructed for cutting brush covered areas. The manufacturer's directions concerning operation, maintenance and repairs must be carefully followed.
- > This machine must only be operated, maintained and repaired by persons who are familiar with the machine's special characteristics and who are well versed in safety instructions.
- ➤ Accident prevention regulations, other general safety regulations, occupational safety rules and traffic regulations must be followed without fail.
- Unauthorized modifications to the design of the machine may absolve the manufacturer from liability for any resulting personal injury or property damage and may void the warranty.
- Read and observe all safety instructions on your mower and in the manual.

#### Refer to your tractor manual for the following instructions:

- ➤ Know how to set the parking brake Push down on brake lever with foot until it locks in place. Know how to turn mower blades off PTO switch pushed down.
- ➤ Know how to stop the engine –Turn key to off or in emergency flip emergency shut off switch.
- ➤ Know how to stop the unit Return control handles to neutral.

## **FEATURES**



- 1 Flat Free Caster Assembly
- 2 Pivoting Brush Guard
- 3 Tooless Belt Cover
- 4 Belt Cover Fasteners
- 5 Pivot Tube Grease Zerk
- 6 Pivot Tube

- 7 Deck Storage Stand
- 8 Deck Belt Idler Adjustment
- 9 Floating Chain Debris Guard
- 10 Heavy Duty 90° Gearbox
- 11 Quick Disconnect PTO
- 12 Heavy Duty 5/8" Deck Belt

## SAFETY INSTRUCTIONS

These instructions are for your safety. Read them thoroughly & carefully.



This Safety Alert Symbol indicates important messages in this manual. When you see this symbol, carefully read the message that follows and be alert to the possibility of personal injury.



#### **General Use:**

- Read all instructions in this operator's manual and on the machine before starting it. Ensure that you understand them and then abide by them.
- > Learn how to use the machine, operate its controls safely, how to stop quickly and recognize safety decals.
- > DO NOT use this machine without the tractor in place and both machines properly connected.
- > Only allow the machine to be used by adults who are familiar with its use and operation.
- Make sure nobody else is in the area of the machine when you start the engine, engage the drive or operate the machine.
- > Stop the machine if someone enters the work area.
- > Clear the area of any objects such as stones, toys, etc. that may be caught or thrown by the blades.
- > DO NOT use this machine without the Guards or Belt Covers in place.
- > Stop the engine and disconnect the spark plug before performing maintenance checks.
- Never attempt to inspect the PTO shaft with the engine running and always remove the ignition key and spark plug wires before clearing debris.
- > Never take passengers. The machine is only intended for use by one person.
- Always look around before and during reversing maneuvers.
- > Slow down before turning.
- > Disengage the blades when not mowing.
- > Be careful when rounding fixed obstacles so that the blades do not hit them.
- > Keep the machine a safe distance from holes or other irregularities in the ground.
- Never use the machine if you are tired, if you have consumed alcohol or if you are taking other drugs or medications that can affect your vision, judgment or coordination.
- > Beware of traffic when working near or crossing a road.
- > Never leave the machine unsupervised with the engine running.
- ➤ Always disengage the blades, engage the parking brake, stop the engine and remove the ignition key before leaving the machine.
- ➤ Never allow children or other persons not trained in the use of the machine to use or service it. Local laws may regulate the age of the user.
- > Make sure that you have first aid equipment close at hand when using the machine.
- Always make sure long hair is not left down when servicing and/or operating the machine. Make sure hair is out of the way of any moving parts or pinch points.

- Inspect the attachment and tractor before each use. Make sure all hardware is in place and tightened properly.
- Make sure this attachment is in good operating condition and properly connected and secured.
- ➤ Check and double check that the drive line PTO locking collar moves freely and is securely engaged to the tractor's PTO groove.
- > Never use the machine when barefoot. Always wear protective shoes or boots.
- > Always wear protective glasses or full visor and hearing protection when assembling or operating.
- Never wear loose clothing that can get caught in moving parts.
- > Check that any safety or informational decals are in place and legible. Replace any damaged decals.

Safety instructions continued on next page....

Remember: The operator is responsible for avoiding dangers or accidents.



#### **WARNING**



When using the machine, approved personal protective equipment shall be used. Personal protective equipment cannot eliminate the risk of injury, but it will reduce the degree of injury if an accident does occur. Ask your retailer for help in choosing the right equipment.





## SAFETY INSTRUCTIONS

These instructions are for your safety. Read them thoroughly & carefully.



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#### **Children:**

- Children are often attracted to the machine and mowing work. Serious accidents may occur if you fail to be on guard for children in the area of the machine.
- > Never assume that children will stay put where you last saw them.
- > Keep children away from the mowing area and under close supervision by another adult.
- > Shut off the machine if children enter the work area.
- > Never allow a child to ride with you.
- > Never allow children to operate the machine.
- > Be extra cautious near corners, bushes, trees or other objects that block your view.

#### **Slope Operation:**

- > Remove obstacles such as stones, tree branches, etc.
- > Mow side to side, not up and down. Never drive the mower on terrain that slopes more than 15 degrees.
- Avoid starting or stopping on a slope. If the tires begin to slip, disengage the blades and drive slowly down the slope.
- > Always drive evenly and slowly on slopes.
- > Do not make sudden changes in speed or direction.
- Avoid unnecessary turns on slopes. If it becomes necessary, turn slowly and gradually downward if possible.
- Watch for holes, ruts or bumps. On uneven terrain, the machine can tip more easily. Long grass or other debris can hide obstacles.
- Drive slowly and use small movements of the steering controls.
- > Do not mow wet grass. It is slippery, and the tires can lose their traction, allowing the machine to slide.

#### **Mowing Safety:**

- Before using, always visually inspect to see that the blades, blade bolts and cutter assembly are not worn or damaged. Replace worn or damaged blades and bolts in sets to preserve balance.
- > On multi-bladed machines, take care as rotating one blade can cause other blades to rotate.
- > Before using, always visually inspect to see that all bolts and nuts are secure.
- Never mow in the direction of people or property. Debris could be thrown out of the front that can cause serious injury and property damage.

#### **Maintenance & Storage:**

- > Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- ➤ If storing equipment over long periods of time remove all grass clippings, grass build up and debris from the equipment to prevent corrosion.
- > Replace worn or damaged parts for continued safe operation.
- > When machine is to be parked, stored or left unattended the parking brake should be set.
- Remove the ignition key to prevent unauthorized use.

#### **Training:**

# All users should seek and obtain professional and practical instruction. Such instruction should emphasize:

- > The need for care and concentration when working with ride-on or walk-behind machines.
- > How to properly connect and disconnect the tractor and attachment.
- How to properly drive, control and operate a ride-on or walk-behind machine with an attachment connected.

#### Operation Safety:

- > Do not operate the machine in a confined space.
- ➤ Always disengage PTO, set parking brake, turn the engine off and remove the key when leaving the machine during operations.
- > Never direct discharge of material toward bystanders or allow anyone near the machine while in use.
- Never operate the machine near bodies of water, retaining walls, cliffs or tall curbs. Give the machine ample room to operate and turn around.
- > Never operate the machine with defective guards or without safety protective devices in place.
- ➤ Disengage the PTO switch, set the brake, stop the engine, remove the ignition key and disconnect the spark plug wires:
  - Before clearing blockages.
  - Before checking, clearing or working on the machine.
  - After striking a foreign object, inspect the machine for damage and make repairs before restarting and operating the equipment.
  - If the machine starts to vibrate abnormally (check immediately).

## SYMBOLS & DECALS



This Safety Alert Symbol indicates important messages in this manual. When you see this symbol, carefully read the message that follows and be alert to the possibility of personal injury.





Danger / Entanglement - 19486



No Step Decal - OD11



Triangle Danger Decal - OD55



Spinning Blades Decal - OD29



Serial # ID Tag

## **UNCRATING AND ASSEMBLY**

#### **Connecting and Disconnecting Implements**

#### **Tools Required:**

- · Tire pressure gauge
- · Nail bar or claw hammer
- · Wire snips
- · Protective eyewear

#### To remove the VRC30 from the crate:

- > Position crate on a flat, level surface
- > Dispose of top and side panels of the crate.
- > Remove packing material.
- Cut any banding or strapping that may be holding the unit to the crate.
- ➤ Remove and dispose of all wheel chocks that are holding the unit in place.
- ➤ Carefully push the attachment off the crate to a safe and level area to connect to the tractor. Alternatively, the attachment can be connected by rolling or driving the tractor up to the attachment while still on crate base and once pinned driving the attachment off of the crate base.
- Read all operating instructions, safety instructions, and customer responsibilities before operating this machinery.

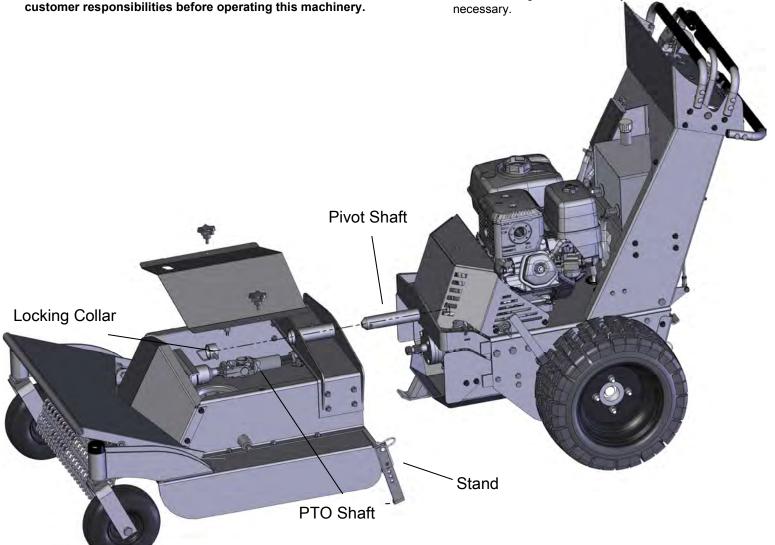
- Always make sure that the tractor and attachment are both on flat ground before attempting to connect or disconnect the units.
- Always check that there are no children around that can be harmed when connecting or disconnecting units.
- Always check that there are no other persons around the immediate area that could potentially activate the tractor.

#### Connecting

- 1. Remove any covering necessary on the attachment.
- 2. Roll or drive the tractor into the attachment by inserting the pivot shaft into the pivot tube of the attachment. It may be necessary to assist the connection by applying the brake to the tractor and sliding the attachment onto the shaft.
- Once connected, secure the attachment by installing locking collar and pin onto the pivot shaft.
- 4. Connect PTO shaft if provided.
- 5. Replace any guards and plug in wiring harness.

#### **Disconnecting**

- Make sure the brake on the tractor is on and the PTO is disengaged before attempting to disconnect the unit.
- Remove any covering necessary on the attachment and disconnect the PTO shaft from the tractor if provided.
- 3. Unpin the locking collar and remove from the pivot shaft.
- 4. Carefully slide the tractor and attachment apart. The tractor can be running and driven away from the attachment if



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## **CUSTOMER RESPONSIBILITIES**



STOP THE ENGINE AND
DISCONNECT THE SPARK PLUGS
BEFORE MAKING ANY
ADJUSTMENTS TO THE MACHINE!

#### **Operator Presence System:**

- ➤ Be sure to check that the operator presence and interlock systems are working properly before every use. If your mower does not function as described, repair the problem immediately.
- ➤ The Control Levers must be in the neutral position in order for the machine to start. If the controls are not exactly at neutral the unit will not start.
- ➤ The attachment wiring harness must be connected in order to run the PTO system. If it is not properly or securely connected, the PTO will not engage.

#### Tires:

- > Keep tires free of gasoline, oil or insect control chemicals which can harm rubber.
- > Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

#### **Blade Maintenance:**

- > For best results, mower blades must be kept sharp.
- > Replace bent or damaged blades.
- Engage brakes & safely tilt front of mower (SEE WARNING).
- > Refer to Service and Adjustments section for instructions.

#### V-Belts:

Check V-belts for deterioration and wear before each use and replace if necessary. Replace belts if they begin to slip from wear. Refer to Quick Reference and Service & Adjustment sections of this manual for instructions on belt part numbers and how to properly replace belts.

#### **Overall Unit Care:**

- ➤ Reduce the risk of fire by removing grass, leaves and other debris that may accumulate on the machine.
- ➤ Allow the machine time to cool before cleaning or putting it in storage.
- ➤ Wash mower periodically. Clean above and below deck.
- > Keep all electrical connections clean and secure.

#### <u>Driving & Transport on Public Roads:</u>

- > Check applicable road traffic regulations before driving and transporting on public roads.
- > If the machine is transported, you should always use approved fastening equipment and ensure that the machine is well anchored to the towing vehicle.
- The cutting deck should also be lowered to the lowest position and the parking brake engaged during transport.



#### WARNING

When it is necessary to tilt the mower for any repair or service, use safety chains and/or jack stands to provide adequate support. DO NOT rely on hydraulic or mechanical jacks.



#### **WARNING**

Do not overinflate the tires. Serious injury can occur if the tire explodes



#### **CAUTION**

Stop engine, apply brakes, and remove ignition key for safety.
Disconnect spark plug wires. Wear heavy, thick gloves when holding onto blade. Avoid the sharp edge of the blade.

## **CUSTOMER RESPONSIBILITIES**

**Specifications** 

PTO STYLE	Splined w/ Spring Loaded Locking Collar, Guarded
ARTICULATION DIRECTION	Side to Side
TIRE SIZE	FRONT: 9X3.50-4 Flat Free
3/4-10 BLADE BOLT TORQUE	200 ft. lbs
CENTER 1/2-20 SPINDLE BOLT TORQUE	75 ft. lbs
CUTTING HEIGHT	Approximately 4"
CUTTING WIDTH	30"
BLADES	Two Break Away Blade Assemblies
UNIT MEASUREMENTS	LENGTH: 38.5"  WIDTH: 35"  HEIGHT: 19"  WEIGHT: 243lbs

### Maintenance Schedule

	Before Each Use	8 Hours	25 Hours	50 Hours	100 Hours	Season	Before Storage
Check Operator Presence	Х						
Check for Loose Fasteners	Х				Х		Х
Sharpen/Replace Mower Blades			X <sup>3</sup>				
Grease PTO Shaft Joints		X <sup>2</sup>		Х			
Grease Pivot Tube			X <sup>2</sup>				
Check Belts	Х						
Remove Any Debris	X <sup>4</sup>					Х	Х

- 1 Change more often when operating under a heavy load or in high ambient temperatures.
- 2 Service more often when operating in dirty or dusty conditions.
- 3 Replace blades more often when mowing in sandy soil.
- 4 Clean off more frequent when mowing in tall or dry grass conditions or with excessive debris.

### **OPERATION**



#### **WARNING**

Carbon Monoxide. A running engine gives off carbon monoxide, a poisonous gas that can kill you. Do not operate the engine in an enclosed area. Only operate in a well ventilated area.

#### Starting

- > Before starting the tractor, be sure the area is clear of any people or animals.
- Control handles must be in the neutral lockout position.
  - PTO switch must be in the disengaged position (pushed down).
  - Turn ignition key until engine starts. If the engine struggles to start, engage the choke until the engine fires, then disengage the choke before operating.
- > Once started, increase the engine RPM to desired speed.

#### **Operating the Brush Mower**

- Before operating this attachment make sure you are familiar and comfortable with the tractor controls and operation and have read the tractor owner's manual.
- > Make sure there are no bystanders in the area. Flying debris could cause serious injury.
- It is recommended to first drive around in a clear level area to become familiar with the operation and feel of the machine without the blades engaged. This machine is heavy and will effect maneuvering at different speeds.
- The correct ground speed for cutting depends on the terrain conditions and material density. Traveling too fast can cause a loss of control and poor cutting performance.
- Always be aware of your surroundings while operating the cutter. If operating near trees or tall brush be mindful of overhead dangers such as dead limbs falling on to the operator. Avoid areas where falling debris is a danger.
- > This brush cutter is capable of cutting down trees up to 3 inches in diameter. Make sure you know which way trees will fall so they do not fall on top of you!
- > Inspect the area to be cut for utilities, rocks, fences, fence posts or any other objects you do not intend to cut or it could cause damage to the brush mower.
- > Before approaching the area to be cut, engage the blades and make sure they are up to cutting speed.
- It is best to engage the PTO drive in areas that have been cut already or do not contain tall grasses and weeds. Shut off the ignition and remove the spark plug wires before clearing debris wrapped on the PTO shaft. Do not operate until the debris has been removed to prevent damage to the shaft.
- > If the blade speed slows down while cutting, slow down your travel speed and allow the blades to regain the proper rotating speed.

## **SERVICE & ADJUSTMENTS**

#### **Deck Belt Routing & Replacement**

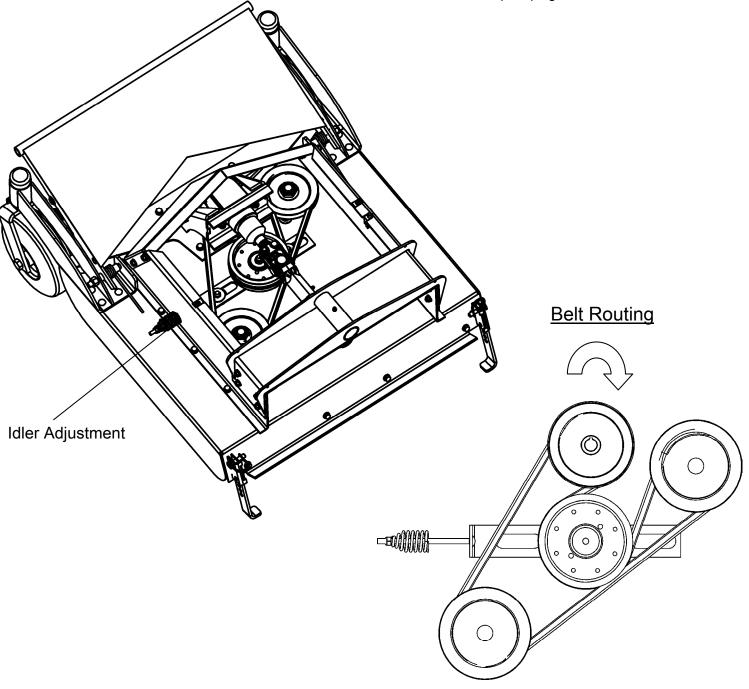
For replacement belt part number refer to Replacement Parts Quick Reference Chart in this manual.

#### **Removal**

- > Apply parking brake.
- > Turn off machine and disconnect spark plug wires.
- > Release the tensioning idler by loosening the nut on the idler assembly bolt.
- > Once loose, remove the belt from the deck.

#### Replacement

- > Install new belt by placing it around all pulleys. Refer to routing diagram below.
- > The belt should be loose at this time.
- ➤ Return tension to the belt by tightening the idler until spring begins to compress and belt has sufficient tension..
- > Reconnect the spark plugs.



## **SERVICE & ADJUSTMENTS**

#### **PTO Shaft**

- ➤ Before every use, check to make sure the PTO shaft is securely attached to both the tractor and attachment gearboxes.
- Before every use, check the PTO shaft u-joints to make sure they are not damaged or worn. Simply lift up and down on the shaft when it is securely connected to both pieces of equipment. If there is excessive movement then the PTO shaft may need to be replaced.
- If there is excessive vibration during operation, disengage the PTO switch, set the brake, stop the engine, remove the ignition key and disconnect the spark plug wire(s) and immediately inspect the PTO shaft. Refer to Troubleshooting section.
- > It is recommended to grease all PTO Shaft joints every 8 hours (50 hours for extended intervals).
- Lubricate all fittings with a good quality lithium soap compatible EP grease meeting the N.L.G.I. #2 specification and containing no more than 1% Molybdenum Disulfide.
- An EP grease meeting the N.L.G.I. #2 specification and containing 3% Molybdenum Disulfide may be substituted in the telescoping members only.

#### **Gearbox**

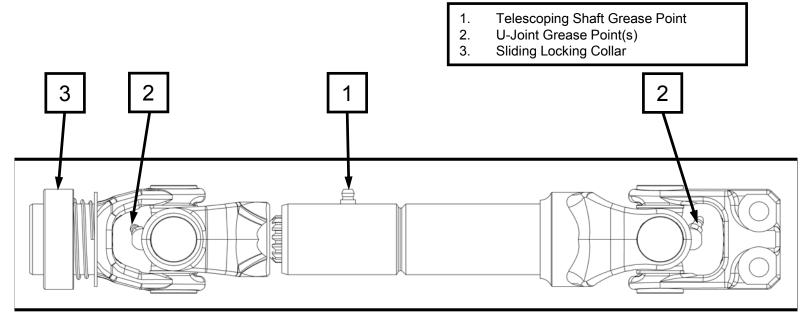
- ➤ The gearboxes are lubricated and sealed components. If used and maintained properly, these gearboxes do not require lubrication changes.
- ➤ If there are internal component failures within the gearbox, it is recommended to replace the entire gearbox.
- ➤ However, if the failed internal components are serviced and/or replaced then new lubrication is required.
- ➤ This gearbox requires 4 oz. of Bentonite grease. A recommended brand is Brooks Benalene 900-P-RP.

## Mower Blades Sharpening and Replacement



#### **WEAR HEAVY GLOVES**

- ➤ The blade disc assembly can be removed from the keyed spindle shaft by removing the center ½" bolt, washer and ¼" key.
- > Alternatively the blade disc assembly can be left on the spindle and the individual blades can be removed by removing the 3/4" bolts from the top side of the disc that hold the blade nuts.
- > The blades should be professionally sharpened equally in sets to maintain balance.
- > The blades are bi-directional and can be turned over to the unused side between sharpening.
- Reinstall the bolts and washers in the reverse order they were removed or refer to page 20 for assembly order.
- ➤ If the entire blade disc assembly was removed it is recommended to use a thread locking compound on the center ½" bolt during reassembly.



## **TROUBLESHOOTING**

Problem	Cause	Correction
Engine Will Not Turn Over	<ol> <li>Control levers not in neutral position.</li> <li>Battery is undercharged or failing.</li> <li>Circuit breaker on engine tripped.</li> </ol>	<ol> <li>Make sure control levers are in the middle of their travel.</li> <li>Charge or replace the battery.</li> <li>Reset circuit breaker at engine.</li> </ol>
Excessive Vibration	<ol> <li>Worn, bent or loose blade(s).</li> <li>Bent or damaged blade driver component(s).</li> <li>Loose part(s) and/or fastener hardware.</li> <li>Faulty blade driver assembly.</li> <li>Damaged or loose PTO Shaft.</li> </ol>	<ol> <li>Replace blade(s); Tighten blade bolt.</li> <li>Replace blade driver or component(s).</li> <li>Tighten loose part(s) and/or hardware; Check for damage.</li> <li>Replace blade driver assembly.</li> <li>Replace or tighten PTO shaft and any associated hardware.</li> </ol>
Loss of Power To Engine	Faulty fuse.     Wire harness not fully connected.	Replace faulty fuse.     Ensure wire harness is connected.
Poor Cutting Performance	<ol> <li>Worn, bent or loose blade(s).</li> <li>Buildup of debris under deck.</li> <li>Faulty /damaged blade driver assembly or components.</li> </ol>	<ol> <li>Replace blade(s); Tighten blade bolt.</li> <li>Clean underside of mower deck.</li> <li>Replace blade driver assembly or components.</li> </ol>
No Power To Blades	<ol> <li>Operator presence not engaged.</li> <li>PTO shaft not connected to Tractor Gearbox.</li> <li>Bent or Damaged PTO shaft.</li> <li>Loose or damaged deck belt.</li> <li>Loose or damaged engine-togearbox belt (Tractor).</li> <li>Loose or faulty clutch wiring harness.</li> <li>Faulty clutch.</li> </ol>	<ol> <li>Must be an operator at the operator position.</li> <li>Ensure the PTO shaft is connected to the Tractor gearbox.</li> <li>Replace PTO shaft.</li> <li>Tighten or replace deck belt.</li> <li>Tighten or replace engine-to-gearbox belt.</li> <li>Ensure clutch wiring is properly connected to clutch and harness.</li> <li>Replace clutch.</li> </ol>

Note: Refer to the tractor manual for more troubleshooting tips that may include other symptoms or causes not included in this list.

## MOWER IDENTIFICATION

#### **Mower Identification**

Each mower has its own model number and serial number. The number for the attachment can be found on the back side of the upper belt surround (refer to Symbols & Decal section for reference). All mower parts listed herein may be ordered directly from Swisher or your nearest Swisher dealer.

#### **Unauthorized Replacement Parts**

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

#### WHEN ORDERING PARTS, PLEASE HAVE THE FOLLOWING INORMATION AVAILABLE:

•MODEL NUMBER
•SERIAL NUMBER
•DATE PURCHASED
•PURCHASE FROM
•PART NUMBER (W/ PAINT CODE)
•PART DESCRIPTION -

**S.A.I.** 1602 CORPORATE DRIVE WARRENSBURG, MO 64093 **www.swisherinc.com**TELEPHONE - 1-800-222-8183
FAX - 1-660-747-3160

## REPLACEMENT PARTS

### **Quick Reference**

Swisher Part #	Part Description
21365	Blade - Rough Cut, 5/16" X 6.3"
21366	Nut – RC Blade
4845	Bearing - Blade, 1"ID X 2"OD
21371TK	Housing - RC Blade, Short
21555	Belt - V; 5/8" X 76"
21515	Tire/Wheel - 9X3.50-4 Hollowmatic/Smooth
21513	Shaft - PTO, 6E Drive



## **CAUTION**

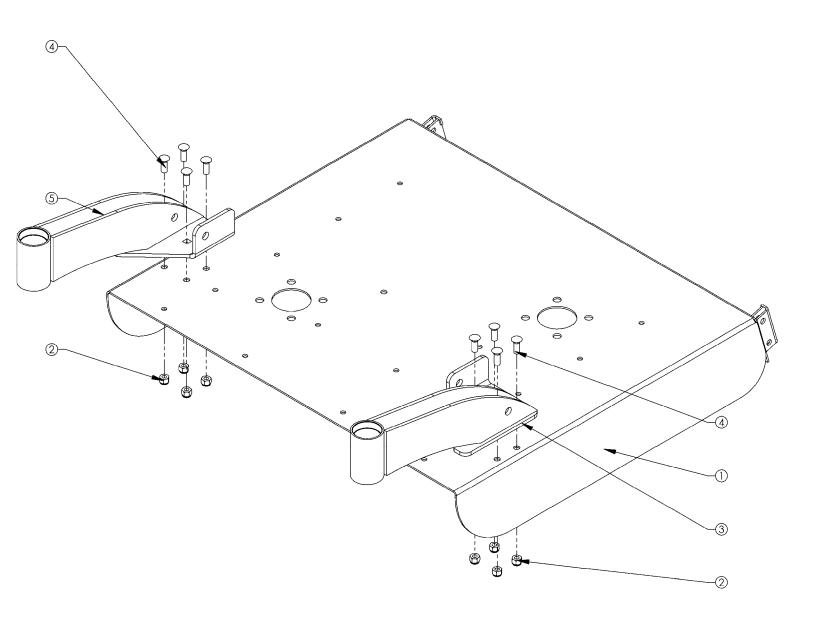
Use extreme care when working on machinery.

Before performing any maintenance, turn off engine, allow the unit to cool and remove the key. Disconnect spark plug wire.

Set Parking Brake by pushing on the brake lever until locked into the "engaged" position.

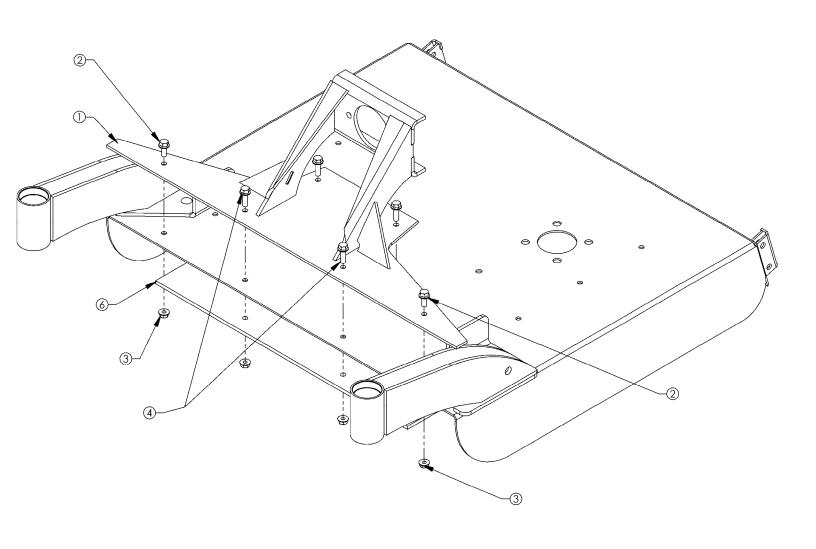
Do not wear watch or jewelry. Do not wear loose fitting clothes. Observe all common safety practices with tools.

## CASTER SUPPORTS



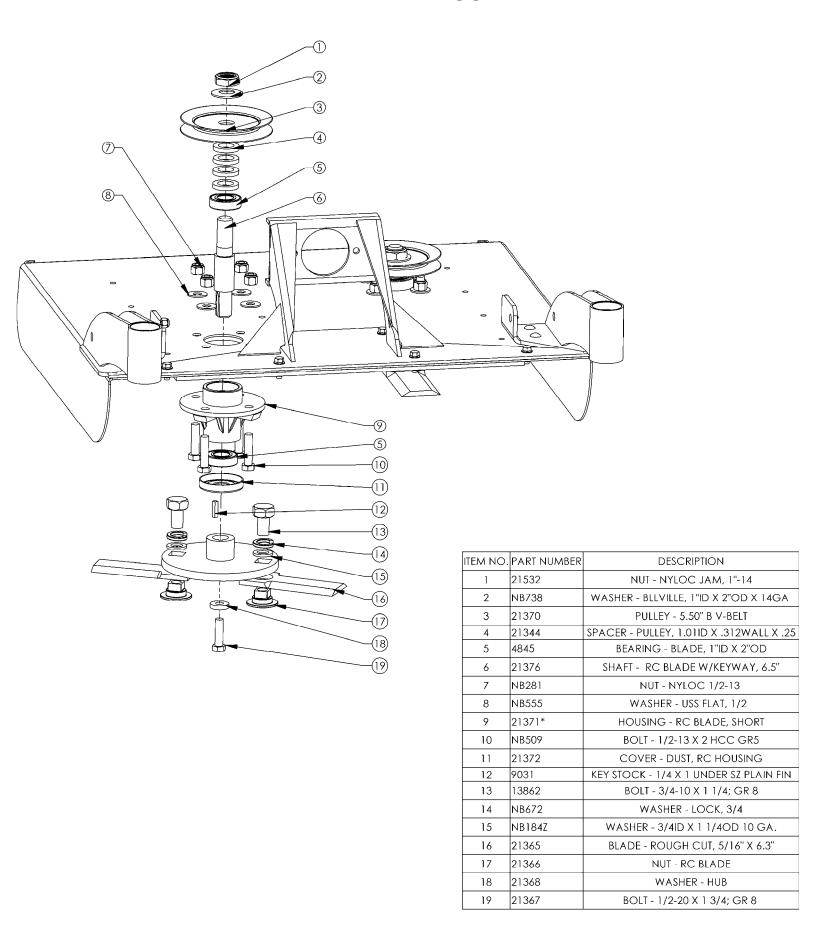
ITEM NO.	PART NUMBER	DESCRIPTION
1	21676*	WELDMENT - RC DECK
2	NB182	NUT - NYLOC 3/8-16
3	21651*	WELDMENT - CASTER SUPPORT , LEFT
4	10503	BOLT - CARRIAGE 3/8-16 X 1 GR5
5	21652*	WELDMENT - CASTER SUPPORT , RIGHT

## **GEARBOX MOUNT**

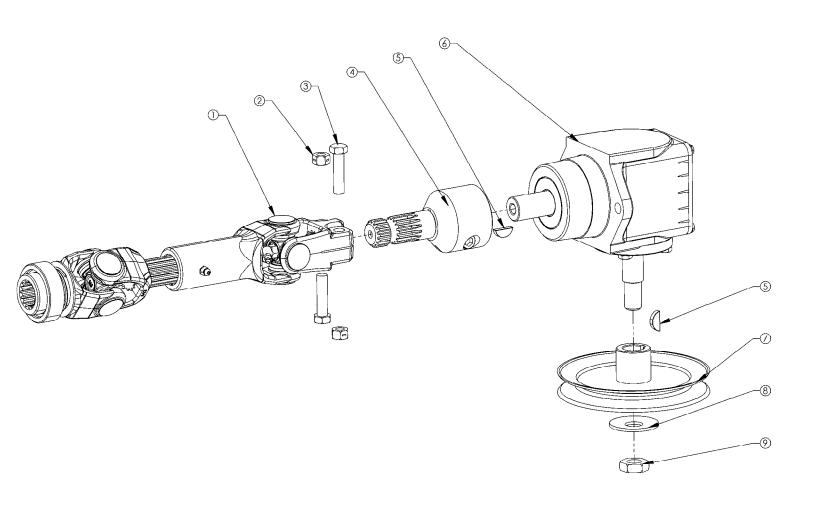


ITEM NO.	PART NUMBER	DESCRIPTION
1	21600*	WELDMENT - GEARBOX MOUNT , RC
2	NB596	BOLT - 5/16" X 18 UNC X .75" FLANGE HEAD
3	NB170	NUT - 5/16-18 SERR FLANGE
4	10548	BOLT - SERR FLANGE, 5/16-18 X 1 GR5
5	10503	BOLT - CARRIAGE 3/8-16 X 1 GR5
6	21646*	PLATE - RC DECK SUPPORT

### **BLADE DRIVER ASSEMBLY**

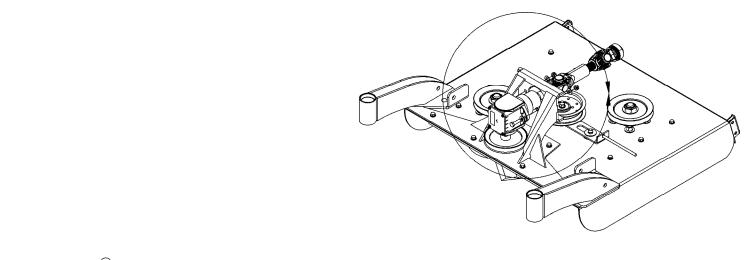


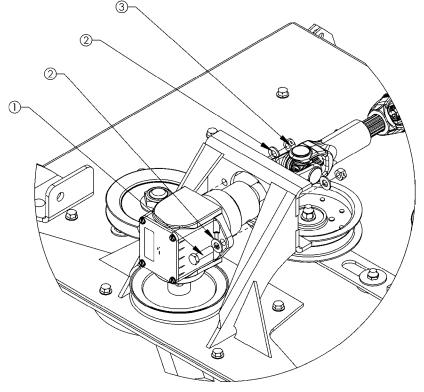
## GEARBOX ASSEMBLY



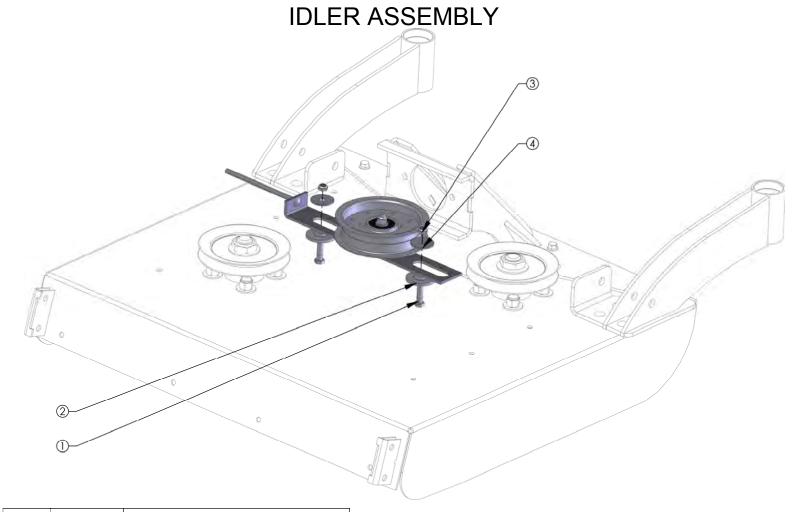
ITEM NO.	PART NUMBER	DESCRIPTION
1	21513	SHAFT - PTO, 6E DRIVE
2	NB280	NUT - LOCKING, 2 WAY 3/8-16 & WAS GR A
3	NB107	BOLT - 3/8-16 X 1 1/2 HCC GR5
4	19337	ADAPTER - Ø7/8 TO Ø1-15 SPLINE
5	NB638	KEY - WOODRUFF, 3/16 X 3/4 #9
6	19330	GEARBOX - 90°-1:1; CW INPUT/CCW OUPUT
7	19283	PULLEY - DECK DRIVE, 5.5"
8	19814	WASHER - BELLVILLE, 5/8 ID X 1 3/4 OD X .098
9	19370	NUT - HEX JAM, 5/8-18

## **GEARBOX MOUNTING**

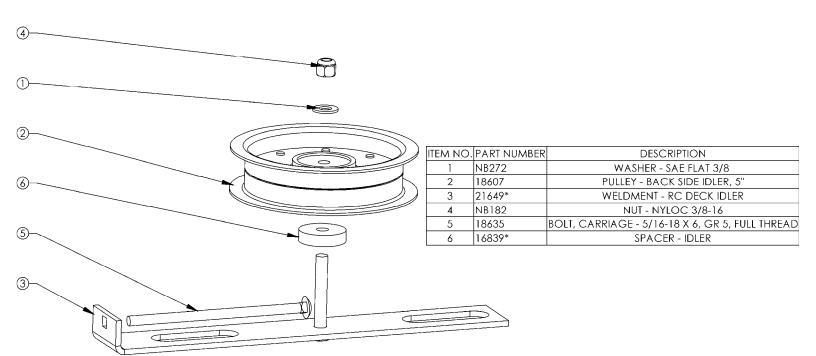




ITEM NO.	PART NUMBER	DESCRIPTION
1	NB618	BOLT - 3/8-16 X 1 1/4 GR5
2	NB272	WASHER - SAE FLAT 3/8
3	NB280	NUT - LOCKING, 2 WAY 3/8-16 & WAS GR A



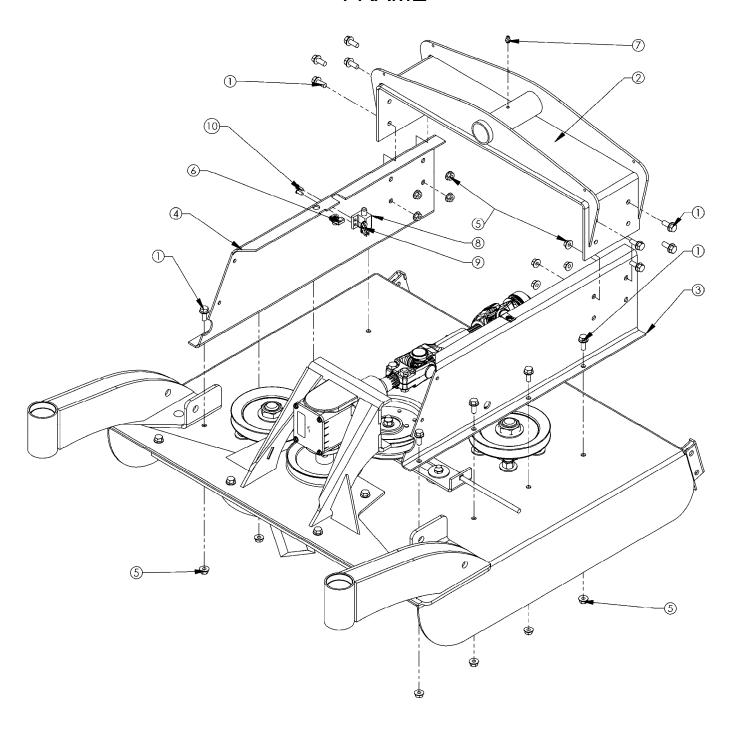
ITEM NO.	PART NUMBER	DESCRIPTION
1	NB618	WASHER - SAE FLAT 3/8
2	6037	BUSHING - IDLER
3	NB207	NUT - 3/8-16 NYLOC JAM
4	10177	WASHER - FENDER 3/8 X 1 1/2, CRBN STL GR2



#### **When Ordering Replacement Parts:**

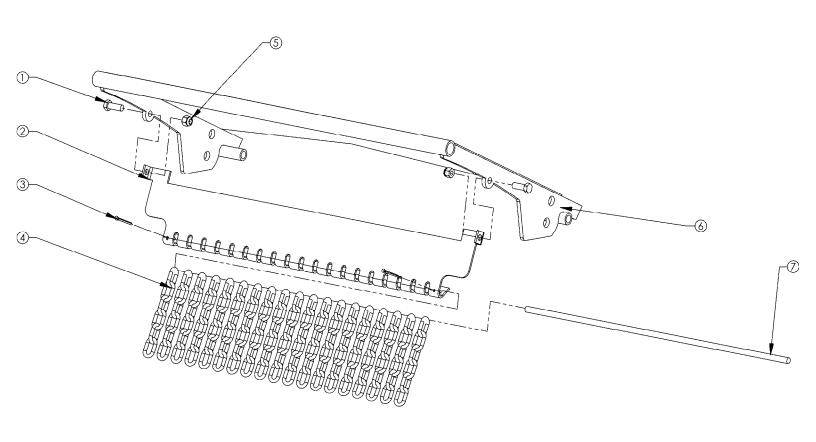
\* = USE PAINT CODE: TK=BLACK

## **FRAME**



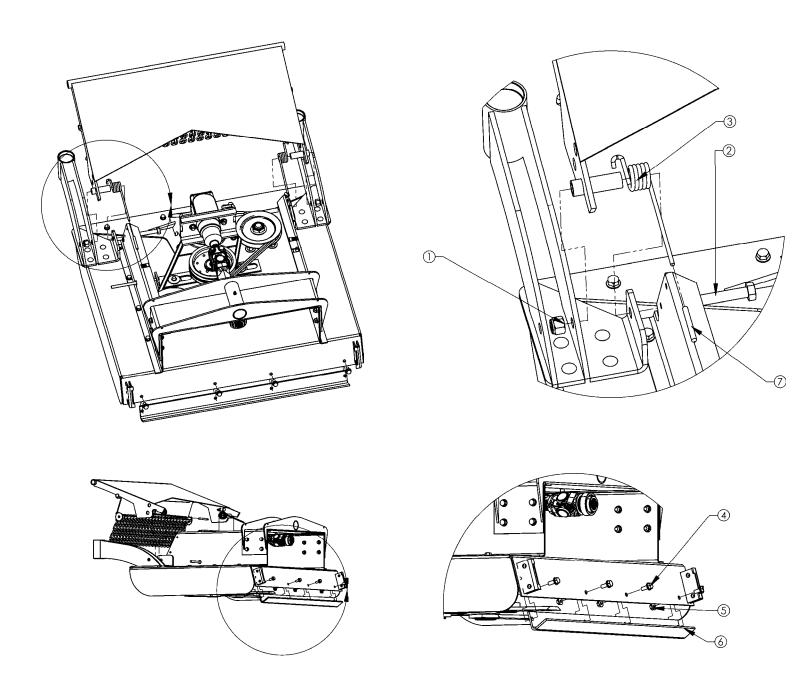
ITEM NO.	PART NUMBER	DESCRIPTION
1	NB596	BOLT - 5/16" X 18 UNC X .75" FLANGE HEAD
2	21604*	WELDMENT - RC DECK PIVOT
3	21596*	PANEL - WB RC SIDE , LEFT
4	21597*	PANEL - WB RC SIDE , RIGHT
5	NB170	NUT - 5/16-18 SERR FLANGE
6	3706	TINNERMAN CLIP 5/16-18
7	15355	FITTING - GREASE ZERK, 1/4-28
8	3695	SWITCH - SAFETY
9	NB201	NUT - KEP 8-32
10	NB197	SCREW - PHILLIPS TRUSS 8-32 X 1/2

## **BRUSH GUARD**



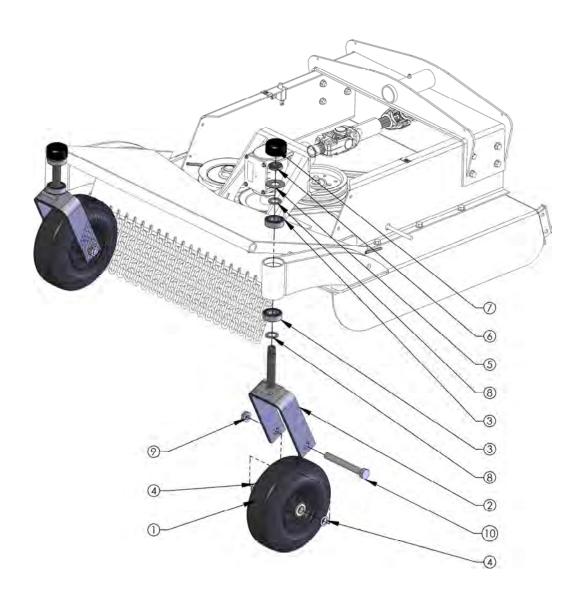
ITEM NO.	PART NUMBER	DESCRIPTION	
1	NB604	3/8-16 X 1" GR5 ZP B	
2	21672	PLATE - CHAIN GUARD	
3	NB580	COTTER PIN 1/8 X 1 1/2	
4	18722	CHAIN - DECK HANGGER, SIX LINKS	
5	NB182	3/8-16 NYLOC NUT	
6	21639*	WELDMENT - RC GUARD	
7	21527	ROD - CHAIN GUARD ; RC DCK	

## **BRUSH GUARD**



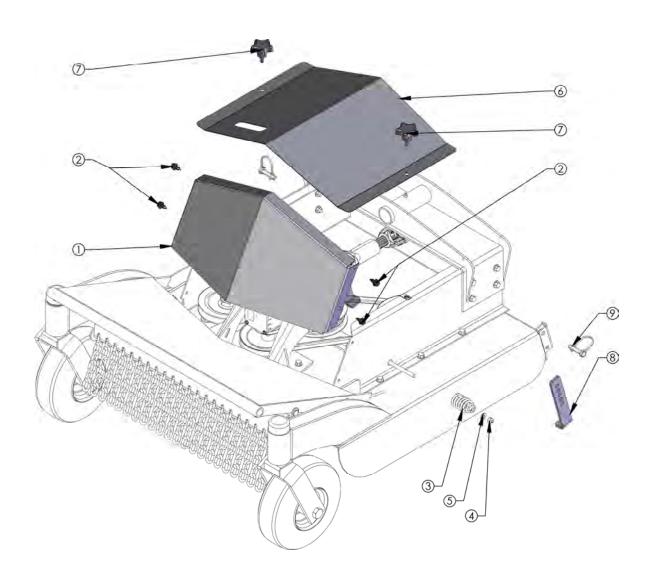
ITEM NO.	PART NUMBER	DESCRIPTION	
1	NB281	NUT - NYLOC 1/2-13	
2	NB679	BOLT - 1/2-13 X 4 HCC GR5	
3	9040	SPRING - TORSION BRAKE	
4	NB596	BOLT - SERR FLANGE, 5/16-18 X 3/4 GR 5	
5	NB170	NUT - SERR FLANGE 5/16-18	
6	21707*	PLATE - GEAR BOX SUPPORT RC, RT	
7	21798	GRIP - SPRING	

## CASTER ASSEMBLY



ITEM NO.	PART NUMBER	DESCRIPTION	
1	21515	TIRE/WHEEL - 9X3.50-4 HOLLOWMATIC/SMOOTH	
2	19638*	WELDMENT - CASTER	
3	B98	BEARING - BLADE	
4	NB195	WASHER - 13/16 ID X 1 1/4 OD X 1/8	
5	17X195	WASHER - FLAT	
6	NB122	NUT - NYLOC JAM 3/4-10	
7	094618	CAP - HUB	
8	NB149	WASHER - 5/8 ID X 1 OD 14 GA	
9	NB595	NUT - LOCKING JAM, 2 WAY 5/8-11	
10	19642	BOLT - 5/8-11 X 5.000 GR5	

## BELT COVERS / TENSIONER



ITEM NO.	PART NUMBER	DESCRIPTION		
1	21598*	ENGINE GUARD - FRONT		
2	26X249	SCREW312-18 X .75 BLACK ZINC		
3	3609	TAPERED SPRING		
4	NB181	5/16-18 NYLOC NUT		
5	NB275	5/16 SAE WASHER		
6	21613*	COVER - ACCESS , RC		
7	21562	KNOB - 5/16-18 OPEN, BLACK PLASTIC		
8	21769*	STAND - RC DECK		
9	NB632	PIN - SNAP Ø3/8 X 1 3/8 USABLE		

## NOTES


## SWISHER HISTORY







Back before electricity came to rural Missouri Max Swisher was producing lawn mowers from his mother's chicken house. Max never liked to mow grass. He installed a gearbox on his family's lawn mower creating a self-propelled unit. By tying one end of a rope to the mower and the other end to a tree in the center of the yard the mower circled the tree, shortening the rope and guiding the mower in concentric circles. Max enjoyed relaxing under a shade tree while his invention did all the work.

Max had designed his first self-propelled rotary lawn mower to do his dirty work for him. Neighbors noticed his new invention and began asking him to make more. Today, over 70 years later, Swisher is still producing innovative lawn and garden and ATV/UTV equipment designed to give us all more "relaxing in the shade" time.

Swisher products have been featured nationally on television programs such as Regis and Kathie Lee and seen in publications like <u>ATV Magazine</u>, <u>Country Journal</u>, <u>Popular Mechanics Magazine</u> and others. In January 2000 <u>Popular Mechanics</u> <u>Magazine</u> named Max's zero turning radius riding mower one of the 20<sup>th</sup> century's top household inventions.

Swisher offers value and function in its products to meet your grounds maintenance needs.

# CELEBRATING OVER 70 YEARS OF INNOVATION SINCE 1945

