www.swisherinc.com

OWNER'S MANUAL

MODEL NO. STARTING SERIAL #: L122-315001

### RC14544CP4K RC14544CP4K-CA



# COMMERCIAL PRO 44" BRUSH KING TRAIL CUTTER



Read and follow all Safety Precautions and Instructions before operating this equipment. Assembly Operation Service and Adjustment Repair Parts

SWISHER ACQUISITION INC. 1602 CORPORATE DRIVE, WARRENSBURG, MISSOURI 64093 PHONE (660) 747-8183 FAX (660) 747-8650 Made In The

(R)

**USA** of US and Global Parts

21276 REV 22-315

10/26/2022

### LIMITED WARRANTY

The manufacturer's warranty to the original consumer purchaser is: This product is free from defects in materials and workmanship for the period's shown below beginning 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:

As required by CFR § 1060.120, the fuel system related components, which have been certified to this equipment by SAI are to be free of defects in material and workmanship for a period of two (2) years from the date of purchase by the original consumer purchaser.

1) Engine Warranty	All engines utilized on our products have a separate warranty extended to them by the individual engine manufacturer. Any engine service warranty is the responsibility of the engine manufacturer and in no way is Swisher or its agents responsible for the engine warranty. The Kawasaki Engine Service Hotline is 1-877-364-6404 or email <u>kawpower-website@kmc- usa.com</u>
2) Commercial Use	This product has a 1yr Limited Commercial - 2 Year Limited Consumer on All Non-Engine Parts from the date of purchase.
3) Limitation	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.
4) Exclusions	Excluded from this warranty are normal wear, normal adjustments, and normal maintenance.

In the event you have a claim under this warranty, you must return 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 Cutter 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.

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# SAFETY PRECAUTIONS

Thank you for choosing Swisher's 44" Trail Cutter. Before operating your Cutter, please read, understand and follow all of the safety precautions and other instructions explained in this manual. As with all power equipment, lawn mowers and Cutters can be potentially dangerous if improperly used.



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.

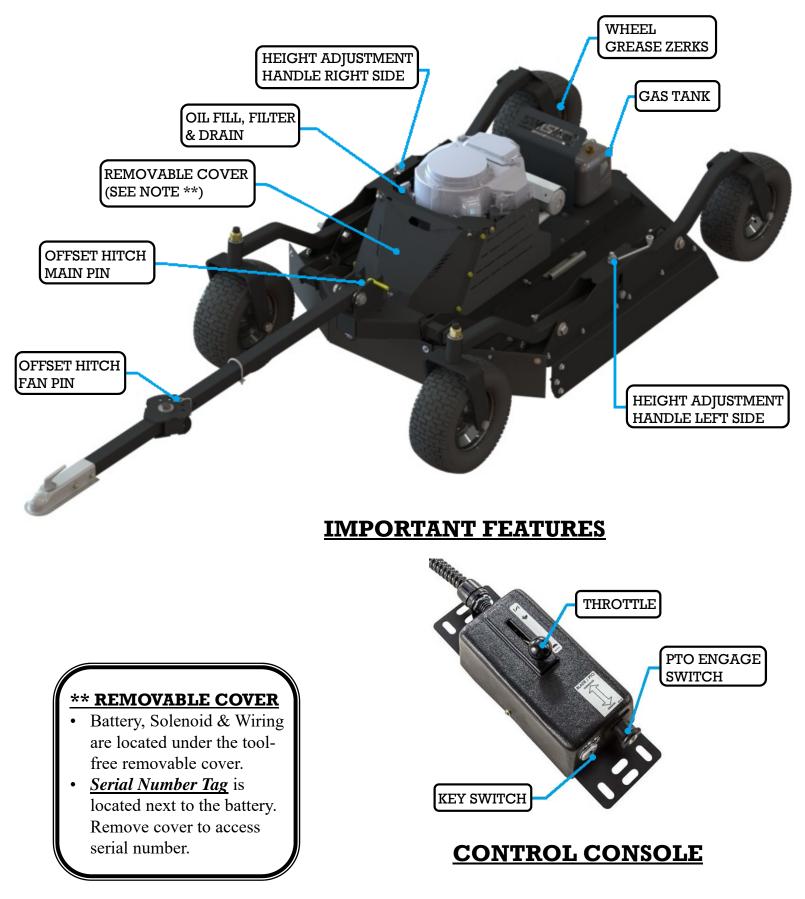
# Read this manual completely. This machine can amputate hands and feet, and throw objects. Failure to observe the following safety instructions could result in serious injury or death.

- Read the manual. Learn to operate this machine safely.
- Always disconnect the spark plug wire and place the wire where it cannot contact the spark plug, to prevent accidental starting the engine when setting up, transporting, adjusting or making repairs.
- Keep all shields and guards in place.
- Understand the speed, steering and stability of this machine. Know the positions and operations of all controls before you operate this machine. Check all of the controls in a safe area before starting to work with this machine.
- Allow only responsible adults who are familiar with these instructions to operate this machine. Never allow children to operate this machine.
- Clear the area of objects such as rocks, toys, wire, etc. that can be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing. Stop the machine if anyone enters the cutting area. Children are often attracted to the machine and the mowing activity. *Never assume that children will remain where you last saw them.* Keep children under the watchful care of another responsible adult.
- No riders!
- Do not put hands or feet near or under rotating parts.
- Do not mow in reverse. Always look down and behind before and during backing.
- Turn off the blades when not cutting. Before leaving the machine, turn off the blades and stop the engine.
- Watch for traffic when operating near or crossing roadways.
- Do not operate the Cutter if it has been dropped or damaged in any manner or if the Cutter vibrates excessively. **Excessive vibration is an indication of damage**. Repair Cutter as necessary.
- Dress properly. Do not operate the Cutter when barefoot or wearing open sandals. Wear only solid shoes with good traction when cutting.
- Never allow operation by untrained persons.
- Do not operate the machine while under the influence of alcohol or drugs.
- Do not operate on slopes greater than 15 degrees.
- Never tamper with safety devices. Check their proper operation regularly.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting. Never make adjustments or repairs with the engine running.
- Cutter blades are sharp and can cut. Wrap the blades or wear gloves, and use extra caution when servicing them. Do not operate at too fast a rate.

# **KNOW YOUR CUTTER**



It is important to know the features of the Cutter. Please review the entire manual for detailed operational and safety information.



# **GENERAL OPERATIONS**



The operation of any mower can produce foreign objects to be thrown into the eyes, resulting in severe eye damage. Always wear certified safety glasses or wide-vision safety goggles over spectacles before starting any cutting machine and while operating such a machine.



The operation of any mower produces sound waves that are damaging to the human ear. Ear protection is recommended.



**CAUTION!** Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. *Never assume that children will remain where you last saw them.* 

### **INTENDED USE**

The 44" Trail Cutter is designed to clear dense areas of grass and cut saplings up to 3" thick on meadows and small estates. **It is not intended to create a finish cut on lawns**. Your Trail Cutter should be towed behind an ATV, golf cart, lawn tractor or other approved vehicle. It is not recommended for speeds exceeding **5 MPH**.

### ATTACHING TRAIL CUTTER TO TOW VEHICLE

- Back vehicle up to desired towing position.
- If an offset is desired, position the Trail Cutter to the side opposite the tow vehicle discharge (if any). This prevents the tow vehicle from throwing grass into Trail Cutter engine.
- Using the 2" ball coupler, connect the hitch to the vehicle your machine will be towed with. Once attached, adjust the level of the Cutter by rotating the adjustment rods. See pages 17 for detailed instructions.

### **STARTING THE ENGINE**

See engine manufacturer's recommendations for the type and amount of oil and fuel used. Trail

Cutters equipped with an electric start engine will need a Battery (sold separately). Swisher recommends using a standard "U1" battery. **See pages 15** for detailed instructions.

- Make sure the tow vehicle parking brake is set, Cutter is level, and blades are disengaged. Engine must be level to accurately check and fill oil. Do not overfill.
- Check spark plug wire, oil, and fuel.
- Check all electrical connections for buildup of debris.
- Set engine throttle to "CHOKE" position.
- Turn key to the "RUN" position, then to the "START" position.
- Set engine throttle at maximum RPM for best performance.
- Allow engine to run a few moments before engaging blades.

### **ENGAGING BLADES**

Note: Do not attempt to start the unit with the PTO switch in the "ENGAGED" position.

- Engage blades by pulling out on the PTO switch.
- Push PTO switch in to disengage blades.
- The braking system is applied when the blades become disengaged. It is designed to bring the blades to a quick stop (approximately 10 seconds). The electric clutch comes with an internal brake.

### **STOPPING THE ENGINE**

- Make sure the tow vehicle parking brake is set.
- Disengage cutting blades.
- Reduce engine to idle speed and allow engine to run momentarily for cooling.
- Turn the key to the off position.

### **BREAKING IN YOUR CUTTER**

- Set the vehicle parking brake and chock the wheels to prevent accidental rolling.
- While engine is running, engage the blade control.
- In a safe environment, (i.e. no children or pets) allow the blades to rotate and the engine to run at full throttle for 5 minutes, breaking in the belt for longer life.
- Disengage the blades and shut off the engine.

### TRANSPORTING CUTTER

- Ensure Trail Cutter is turned off.
- Place Trail Cutter deck in its highest position.
- When transporting without the use of a tow vehicle, remove spark plug wire and place it where it cannot contact the spark plug.



#### CAUTION: SHUT OFF THE CUTTER ENGINE AND REMOVE SPARK PLUG WIRE FROM SPARK PLUG BEFORE MAKING ANY ADJUSTMENTS TO THE CUTTER.

**IMPORTANT:** This engine is not equipped with a spark arrester muffler. It is a violation of California Public Resource Code Section 4442 to use or operate the engine on any forest-covered, brush-covered, or grass-covered land. Other states or federal areas may have similar laws.

### **CUTTER HEIGHT ADJUSTMENT**

- There is approximately 4" of height adjustment.
- Rotate height adjust crank handle in a clockwise direction to raise the Cutter deck. Rotate counterclockwise to lower the Cutter deck.
- Using indicator lines located on each side of the Cutter, set each side to the same height.
- Dense areas should be cut twice.
- Place handle down into the notch to lock height position.
- See Page 18 for more detailed instructions.

### TOW HITCH OFFSET

- If towing with a lawn tractor, offset the rough cut Cutter to the opposite side of the lawn tractor grass discharge.
- Swisher recommends if the tow vehicle is equipped with a mid-mount Cutter to overlap the cut approximately 6". This may vary depending on mowing terrain, obstacles, and/or tow vehicle. Always keep safety the first priority.
- See pages 18 & 19 for detailed instructions.

### STOPPING THE CUTTING SESSION

- Bring tow vehicle to a complete stop, set the parking brake and disengage blades.
- Turn key switch to the "OFF" position.
- Always remember to remove keys to avoid irresponsible usage.

### SUGGESTED CUTTING PRACTICES

- Operate Cutter engine at full throttle to assure the best cutting performance and maximum material discharge.
- Allow wet grass to dry. Wet grass will clump and collect under the mowing deck.
- Cutter should be started with tow vehicle in low gear and increased only as safe mowing conditions permit. Cutting speed should not exceed 5 MPH.
- Cutting conditions and the types of grass will vary from place to place. You may find when cutting dense areas that the pressure of the wheel tracks may cause the grass to be pushed down and not effectively mowed. If this happens you may want to mow the area twice. Once with the Cutter raised and the second cutting at the desired height. The second cutting should be at a right angle from the previous for best results.
- Reducing the travel speed will help cut dense growth. This allows the blades the time necessary to make its initial cut, and regain momentum to continue cutting. The engine may stall if you are mowing too fast!
- Do not attempt to cut areas that the tow vehicle cannot maneuver through and/or slopes that you do not feel comfortable riding.

### **GENERAL RECOMMENDATIONS**

The warranty on this cutter does **not** cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain unit as instructed in this manual.

Some adjustments will need to be made periodically to maintain your unit properly. Refer to your engine manual for recommended fuel, oil, and service parts.

### **BEFORE EACH SEASON**

A new spark plug and clean air filter assure proper air fuel mixture and help your engine run better and last longer.

- Replace the spark plug.
- Clean or replace the air filter.
- Check blades and belts for wear.
- Add grease to wheel bearings via grease zerks.

### **BEFORE EACH USE**

- Check engine oil level. Do this twice to ensure an accurate reading.
- Check condition of air filter and clean or replace if necessary.
- Check blade operation.
- Check for loose fasteners.
- Lubricate threads of adjustment rods P/N 21271. See Page 22.

### DAILY MAINTENANCE

Make sure all nuts and bolts are tight and cotter pins and retainer springs are secure. Keep blades sharp. Observe all safety precautions.

### **BLADE CARE AND SERVICE**

For best results Cutter blades must be kept sharp. The blades can be sharpened with a few strokes of a file or grinding wheel. Do Not attempt to sharpen while on the cutter.

### **Important:** Replace blades that have been damaged or deeply nicked.

### Important: Check blade and spindle hardware on a regular basis to make sure nuts are tight.



CAUTION: DO NOT HANDLE CUTTER BLADES WITH BARE HANDS. CARELESS OR IMPROPER HANDLING MAY RESULT IN SERIOUS INJURY.

ISSUE	SOLUTION
Engine Will Not Start	Disengage blades, turn key switch to the "OFF" position, check battery and all other electrical connections and inspect spark plug and wire.
	See Engine Manual for Troubleshooting.
	Contact Engine Manufacturer or Qualified Mechanic.
	See Engine Manual for Troubleshooting.
Engine Dune Deerly	Check the Throttle Adjuster.
Engine Runs Poorly	Check Spark Plug and Gap.
	Replace fuel, Check Fuel Filter and Fuel Line.
	Ensure each Height Adjustment is set to the same level.
The Unit is not Cutting Level	Check Tire PSI and for tire/wheel damage. Without the engine running, make certain blades are installed
	identically and not damaged.
The Cutter Bounces Excessively	Decrease Tire Pressure.
	Tow at a Lower Speed.
	Check all Hardware and Make Sure Nothing is Overtightened.
Hitch Will not Pivot	Check for Deformed Pins.
	Make sure all Moving Parts are Free of Debris.
Caster Wheels Wobble	Check tire pressure. May need to reduce PSI.
Excessively	Slighty tighten the nut on top of the caster. Do not Overtighten.
	Reduce Speed.



IF PROBLEMS PERSIST HAVE A QUALIFIED MECHANIC SERVICE THE CUTTER. NEVER ATTEMPT TO MAKE AN ADJUSTMENT THAT YOU ARE NOT SURE IS CORRECT. DOING SO CAN CAUSE OTHER PROBLEMS.

	Description			
Engine	14.5HP (603 CC) Kawasaki			
Engine Specifications	See engine Manual for Specifications			
Starting	Electric Start			
Battery	12 Volt ("U1" recommended), 340CCA			
Fuel	2.5 Gal. (9.46 L), Unleaded Gasoline (MIN 87 Octane) MAX 10% Ethanol			
Overall Dimesions	139.5" L x 47" W x 34" H (MAX)			
Console Cable Length	10' 4"			
Offset Distance				
(Tow ball to offset cutting edge)	Max 52", Mid 39" (See page 19 for details)			
Offset Positions	5 (2 Left, 1 Center, 2 Right)			
Cutting Height	3" - 7.5"			
Cutting Width	44"			
Blade Style	Swing Blade w/ Stump Jumper			
Discharge	Rear			
Drive System	Belt			
Blade Engagement	Electric Clutch			
Towing Speed	5 MPH MAX			
Mowing Speed	5 MPH (Flat Ground) 4 MPH MAX (Rough Ground)			
Unit Dry Weight	640 Lbs. (290 kg)			
Tire PSI	20 PSI Recommended (MIN 15 PSI - MAX 35 PSI)			
Quick Reference - Maintenance Parts				
Description	Part Number			
Belt - B X 56"	20937			
Wheel/Tire - 16/650X8	21262			
Bearing - Blade; RT44	4845			
Blade - Off-Set, Rough Cut	10358			

Note:

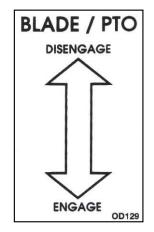
• For other part numbers, refer to the Parts Diagrams on pages 22-30.



# SAFETY AND OPERATION DECALS

OD36

Replace decal immediately if damaged. Order by part number from Swisher. 1-800-222-8183, 8-5 CT M-F



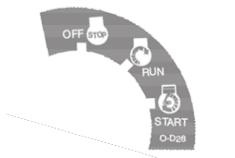
**OD129-ENGAGE DECAL** 



CE DÉFLECTEUR DOIT ÊTRE EN PLACE AVANT DE METTRE LE MOULIN EN MARCHE. GARDER TOUS LES GARDES DE SÉCURITÉ EN PLACE.

**OD36-DEFLECTOR DECAL** 





**OD28-OFF/RUN/START DECAL** 



**OD29-DANGER DECAL** 

CAUTION A ATTENTION **DO NOT EXCEED 5 MPH NE PAS SURPASSER 8 Km/h** 

**OD33-5MPH DECAL** 



**OD45-WARNING DECAL** 



**OD99112 LARGE SWISHER LOGO** 

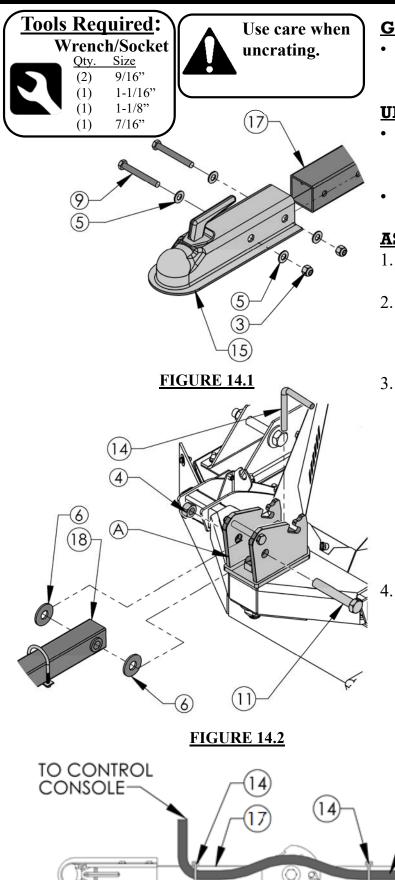
## **ASSEMBLY PARTS**

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Before assembling the Cutter make sure that all assembly parts are present.

Item #	Description	Part #	Qty	1
1	Key Set ( 2 Keys)	KSK	<b>uty</b>	
2	Nut - 1/4-20 Flange	NB524	2	
3	Nut - 3/8-16 Nylon-Insert Lock	NB182	2	
4	Nut - 3/4-10 Nylon-Insert Lock	21132	1	
5	Washer - 3/8 SAE Flat	NB272	4	<b>•</b>
6	Washer - 3/4" SAE Flat	NB146	2	•
7	Bolt - 1/4-20 X 3/4"	NB250	2	
8	Bolt - 5/16-18 X 1 3/4" Flange Head	NB515	1	
9	Bolt - 3/8-16 X 3"	NB150	2	(5)
10	Bolt - Serr Flng 5/16-18 X 3 1/2"	18634	1	
11	Bolt - 3/4 - 10 X 4 1/2"	21130	1	
12	Pin - 3/8" X 2.5" Usable, Tab Retainer	21225	1	
13	U-Bolt - 1/4-20 X 2", w/ Plate & Nuts	21231	3	
14	Pin - 1/2" OD Bent	21257	1	
15	2" Ball Coupler	7365	1	
16	Plate - Battery Strap	21252	1	
17	Weldment - Offset Hitch Tube	21117	1	
18	Weldment - Hitch Bar Lower	21256	1	
	Required Parts Not Included	-		
19	U1 Battery	N/A	-	
	Included Parts Not Shown	•	•	
-	Tube - Oil Drain, Clear Plastic	AS161	1	
•	-16	- <u>15</u> 0		
	-17	)		SOLD SEPARATELY
•	•			$\bigcirc$

# **SET-UP DIRECTIONS**



### **GENERAL RECOMMENDATIONS**

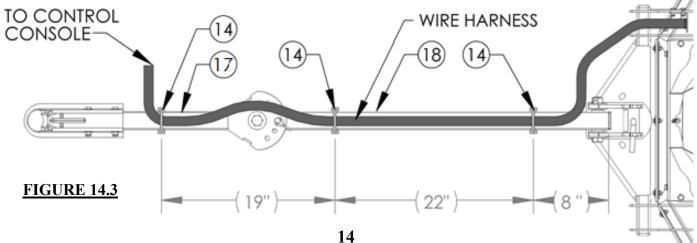
• Use at least two people to uncrate & assemble the unit. The cutter and its components are very heavy.

### **UNCRATING**

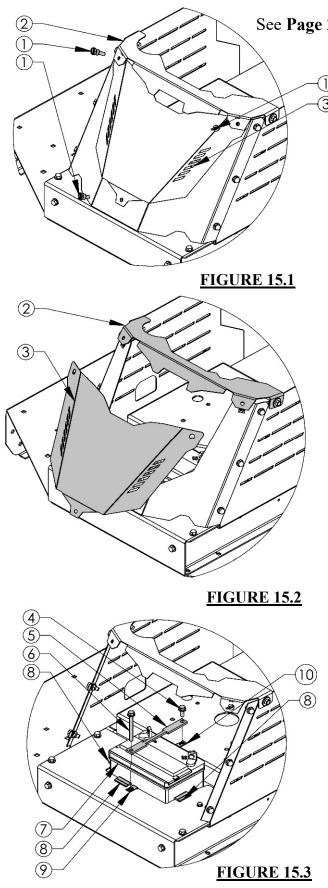
- Using a hammer and pry bar, separate the boards of the crate starting with the top. Use caution to not damage the equipment inside the crate.
- Always wear gloves and safety glasses when disassembling the crate.

### ASSEMBLY DIRECTIONS

- 1. Check that all parts are present before beginning assembly. See page 13
- Place 2" Coupler (15) over Hitch Bar(17). Fasten as shown using (2) 3/8-16 x 2" Bolts (9), (4) 3/8 washers (5), and (2) 3/8-16 lock nuts (3).
   FIGURE 14.1
- 3. Position Hitch Bar (18) into the Hitch Pivot Assembly (A). Attach the Hitch Bar with (1) <sup>3</sup>/<sub>4</sub>-10 x 4 <sup>1</sup>/<sub>2</sub>" Bolt (1), (2) <sup>3</sup>/<sub>4</sub> Washers (6), and (1) <sup>3</sup>/<sub>4</sub>-10 Lock Nut (4). Fasten the hardware tightly using one 1-1/8" wrench/socket (bolt) & one 1-1/16" wrench/socket (nut). The Hitch Bar should be able to pivot up and down freely and have no side to side play. If the Hitch Bar will not pivot up and down, loosen the Nut slightly. FIGURE 14.2
  - Run the Wire Harness along the top of the Hitch Bar (17)(18) and fasten using the supplied U-bolts (14). Be sure to leave enough slack at the pivot locations so hitch can freely offset without placing tension on the wire harness. Dimensions given are just for reference. Actual U-bolt locations may vary by tow vehicle. FIGURE 14.3



### BATTERY



See Page 24 for replacement part numbers



### **GENERAL RECOMMENDATIONS**

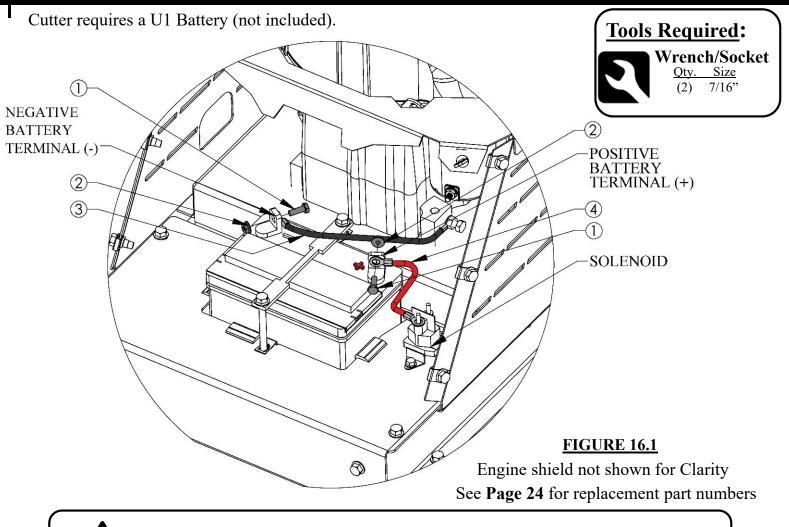
- A standard "U1" Battery is recommended. If the Battery is put into service after the "month and year" of the date on the Battery, it may need to be charged with a 12 volt Battery charger for a minimum of 1 hour, but no more than 2 hours at a rate of 6 to 10 amps.
- Use pliers on Thumbscrews if they are too tight to turn by hand. Do not re-tighten with pliers.

### **INSTALLATION / REMOVAL**

- Remove the three Thumbscrews (1) holding the Battery Cover as shown in **Figure 15.1**.
- Tilt top Cover ② slightly upward and slide Battery Cover ③ down & out to remove. Figure 15.2
- Place U1 Battery into opening. Ensure the three rubber edge guards (8) are in place before inserting Battery. Figure 15.3
- Lay Battery strap (5) over Battery. Insert one 5/16-18 x 1" Bolt (4) thru Battery strap hole near engine and hand thread into the Tinnerman Clip (10). Insert 5/8-16 x 3" Bolt (6) thru hole in opposite end of strap and thread into Tinnerman Clip (9) shown in Figure 15.3. Tighten both bolts with ½" wrench being careful not to over tighten and deform the Battery strap.
- For removal of Battery, follow steps in reverse order.
- See Page 16 for Battery wiring directions

CAUTION: USE CARE HANDLING BATTERY. CARELESS OR IMPROPER HANDLING MAY RESULT IN SERIOUS INJURY.

# **BATTERY CABLES**



NOTE: The positive and negative terminals may be in a different location on your Battery than what is shown. Image is for reference only.

### **BATTERY WIRING**

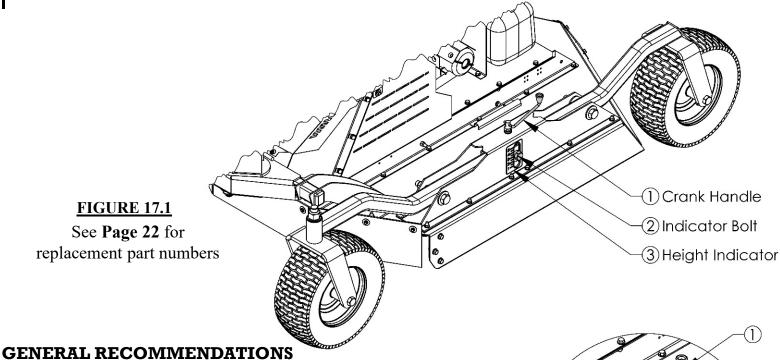
#### \* ALWAYS CONNECT POSITIVE CABLE FIRST WHEN CONNECTING BATTERY \* ALWAYS REMOVE NEGATIVE CABLE FIRST WHEN DISCONNECTING BATTERY (See FIGURE 16.1)

- Locate (+) Red Cable ④ coming from Solenoid. Attach Red Cable ④ to the (+) positive terminal on Battery and fasten with provided ¼-20 Nut and Bolt ①② using 7/16" wrenches.
- Locate (-) Black Cable ③ and using ¼-20 Nut and Bolt ①② attach it the (-) Battery terminal.
- Replace Cover and fasten with three Thumbscrews previously removed. (See Page 15)
- For removal of Battery, follow steps in reverse order.

### **BATTERY MAINTENANCE**

- The Battery can be accessed without tools by removing the Thumbscrews holding on the front Cover.
- Keep Battery charged for best performance. Run unit for at least 45 minutes at a time to properly charge the Battery during use.
- Clean any corrosion build-up from terminal.
- Check terminal bolts for looseness. Tighten if needed.

# HEIGHT ADJUSTMENT



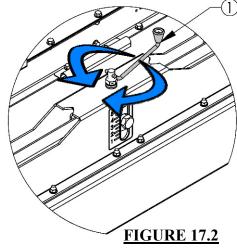
- Set the Cutter to an appropriate height for the media being cut. Taller/Thicker grass & brush may require a higher first cut and a lower second cut for best results. It's recommended to cut the second pass perpendicular to the first pass.
- Height indicator decal contains number references. These numbers **do not** reflect cutting height or inches. They are only a quick reference to note where the height is set on each side of the unit.

### <u>ADJUSTING HEIGHT</u>

- Attach unit to the tow vehicle.
- Find the Crank Handle ① located on either side of the Cutter. Figure 17.1
- To raise deck Rotate Handle ① clockwise. Figure 17.2
- To lower deck Rotate Handle ① counter-clockwise. Figure 17.2
- Lock handle at chosen height by pivoting the handle and placing it into the notch located at either end of the Height Adjustment Housing ④. Figure 17.3
- Take note of the Bolt (2) location on the Height indicator Decal (3).
- Repeat steps on opposite side of the Cutter. Ensure Bolt is in the same location on the Height Indicator Decal on both sides. This will help provide a level cut.

### HEIGHT ADJUSTMENT MAINTENANCE

- Apply multipurpose grease/oil to Height Adjustment Threaded Rod regularly.
- Ensure all hardware is tight and in place before each use.
- Check tires for low pressure, punctures, or wear.



Unlocked Crank Handle

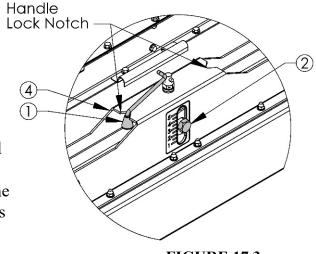
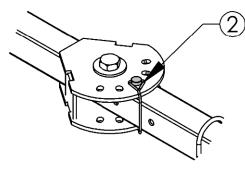


FIGURE 17.3 Locked Crank Handle

17

## **HITCH OPERATIONS**



#### FIGURE 18.1

See **Page 26** for replacement part numbers

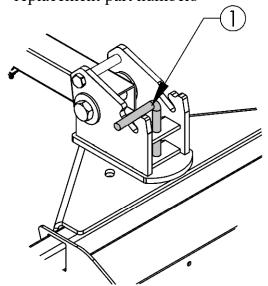


FIGURE 18.2 Unlocked Pin

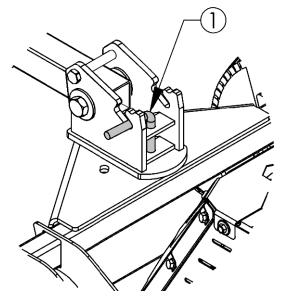
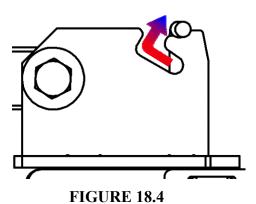


FIGURE 18.3 Locked Pin



### **GENERAL RECOMMENDATIONS**

- It is recommended to set the hitch bar in the straight position when an offset is not needed. DO NOT ADJUST HITCH ON HILLS. The Cutter may roll once the pins are removed on a slope. This can cause injury or damage the equipment.
- The unit can be unattached from the tow vehicle for easier adjustment of the hitch. Be sure to detach the console from the tow unit to avoid damage to the wiring harness.

### **ADJUSTING THE OFFSET**

- Place cutting unit on a level area where the Cutter will not roll by itself.
- Unlatch & remove the 3/8" Pin (2) located in the center of the Hitch Bar. Figure 18.1
- Rotate Hitch Arm until the desired offset location is achieved. Reinstall 3/8" Pin and lock retainer. **Figure 18.1**
- Next, remove the ½" Pin 1 by guiding handle of Pin through the slot. The Pin only needs to come out enough to rest on the notch as shown. Figure 18.4
- The hitch bar will now be free to rotate to the desired offset side.
- Once the hitch bar is close to the desired offset location, slide the Pin handle back in the slot. To lock the Pin, simply rotate the hitch bar slightly until the Pin falls into place by itself.
   Figure 18.3

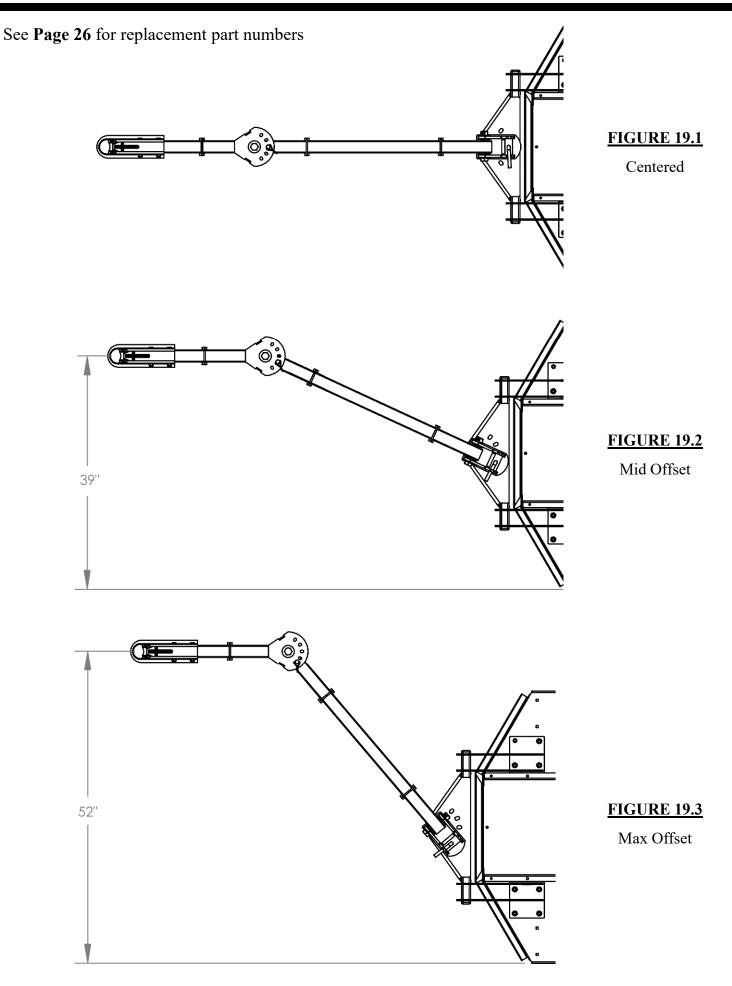
### **HITCH MAINTENANCE**

- Apply grease to Hitch pivot points to ensure free movement.
- Ensure all hardware is tight and in place before each use.
- Check locking pins for deformation or damage.

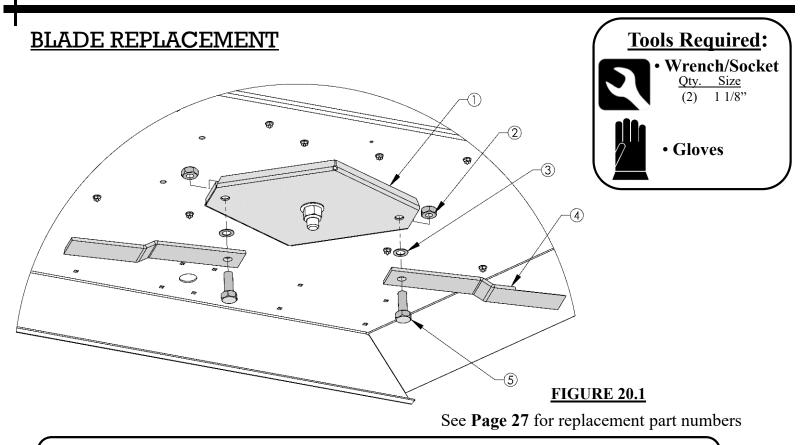
### <u>NOTES</u>

• If the locking pins are difficult to remove it may be required to slightly rock the hitch side to side to relieve any pressure that may be on the pins.

# HITCH OPERATIONS



# **BLADE REPLACEMENT**



Wear gloves when handling the blades and when using tools around the blades. Always be aware of the sharp edges of blades. Use caution when turning wrench to remove & install blade bolts.

### **BLADE REMOVAL**

### (See FIGURE 20.1)

- Disconnect spark plug wire before working on unit!
- Use Jack Stands or ramps to lift the Cutter off of the ground. Chock the wheels to prevent the Cutter from moving.
- Using the 1-1/8" wrench loosen the Nut (2) on the top of the Stump Jumper (1). After loose, hold nut in place with wrench.
- Using the 1-1/8" wrench/socket remove the Bolt (5) from the Stump Jumper (1). The Blade (4) should come off along with the Bolt (5) and Washer (3). Ensure no body parts are under the Blade to avoid possible injury.
- Repeat steps for both blades.

### **BLADE INSTALLATION**

### (See FIGURE 20.1) \*\* Apply Blue Thread Locking Compound to all Threads\*\*

- Hold new/sharpened blade (4) and washer (3) up to Stump Jumper (1) and thread the Bolt (5) into the tapped hole in the Stumper Jumper (1).
- Tighten the Bolt until snug. Back off <sup>1</sup>/<sub>4</sub> turn to allow the Swing Blade to pivot freely around the Bolt.
- Hold Bolt with one 1 1/8" wrench and thread the Lock Nut (2) onto to Bolt and tighten securely against the top of the Stump Jumper using second 1 1/8" wrench. Torque to 150 ft.lbs.
- Check that Bolt feels tight and that the blade can pivot freely around the Bolt.
- Repeat steps for both blades.

# **BELT REMOVAL/INSTALLATION**

**Tools Required:** 

(1)

(1)

Gloves

Wrench/Socket

9/16"

1/2"

### **REMOVING BELT**

### (See FIGURE 21.2)

- Disconnect negative Battery
- terminal before working on
- the Cutter.
- Locate the six Screws ⑦ securing the Belt Cover⑥.
   Using the 9/16" wrench/socket, remove the screws.
- Carefully slide Cover to the fuel line side of the Cutter deck and set out of the way of the Blade Pulley (4). Do not place tension on the fuel lines.
- Wearing **Gloves**, remove the Belt (5) from the Engine Pulley (1) and Blade Driver Pulley (4) by rotating the Driver Pulley and rolling the Belt over the edge as you rotate.
- Once the Belt is loose, remove it from the Engine Pulley and remove the Belt from the Cutter.
- If Belt is too difficult to roll off, you may need to loosen the tension of the Idler Pulley 23. Loosen the Idler Spring Nut (8) until the Belt can be removed. Be sure to re-tighten the Nut when the new Belt is installed. Check for proper belt tension after tightening.

### INSTALLING BELT

### (See FIGURE 21.1)

- Wrap new Belt around the Engine Pulley ①.
- Wrap the Belt around the Blade Pulley ④.
- Place Belt against Idler Pulley (2) and reapply tension to the Idler Spring (3)(8) if required.
- Check to ensure Belt is properly seated on all pulleys.
- Replace Cover and fasten with removed Screws (D).

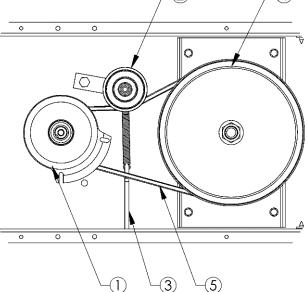
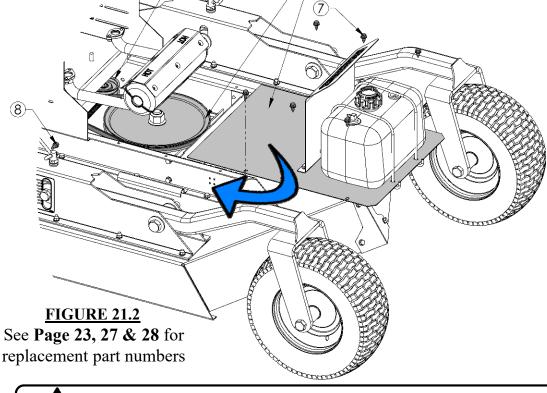


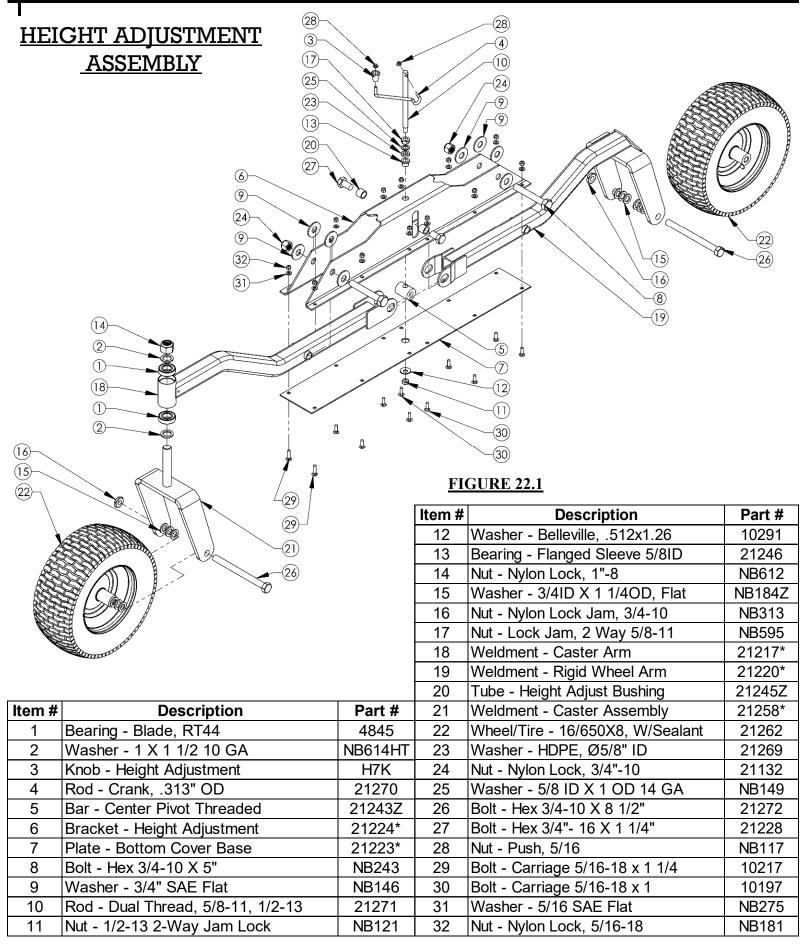
FIGURE 21.1 See Page 27 & 28 for replacement part numbers



NOTE: Use caution when moving gas tank. Wait until muffler has cooled before attempting work on the belt.

When ordering replacement parts \* = USE PAINT CODE: TK=BLACK

### 21



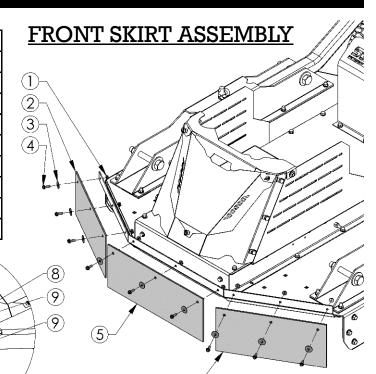
Note: Some parts not shown for clarity.

Item #	Description	Part #
1	Nut - Serr Flange, 1/4-20	NB524
2	Debris Guard - Outer	21233
3	Washer - Fender, 1/4X1 1/4OD	11520
4	Bolt - Serr Flange, 1/4-20 X 3/4	NB690
5	Debris Guard - Center	21234
6	Bolt - Carriage, 1/4-20	10547
7	Plate - Harness, Mount Support	21274*
8	Plate - Harness, Cable Support	21260*
9	Nut - Nylon Lock, 1/4-20	NB180

6

(7

6



(2)

6 7

(1)

**FIGURE 23.1** 

STRIGUES .

### **COVERS**

ltem #	Description	Part #
1	Screw312-18 x .75, Black	26X249
2	Bolt - Serr. Flange, 5/16-18	10548
3	Weldment - Motor Mount	21248*
4	Plate - Battery Mount	21268*
5	Nut - Serr. Flange, 5/16-18	NB170
6	Guard - Fuel Tank	20938*
7	Cover - Gas Tank Mount	21249*

Note: Some parts not shown for clarity.

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**FIGURE 23.2** 

23

(5)

2

r b

0

1

3

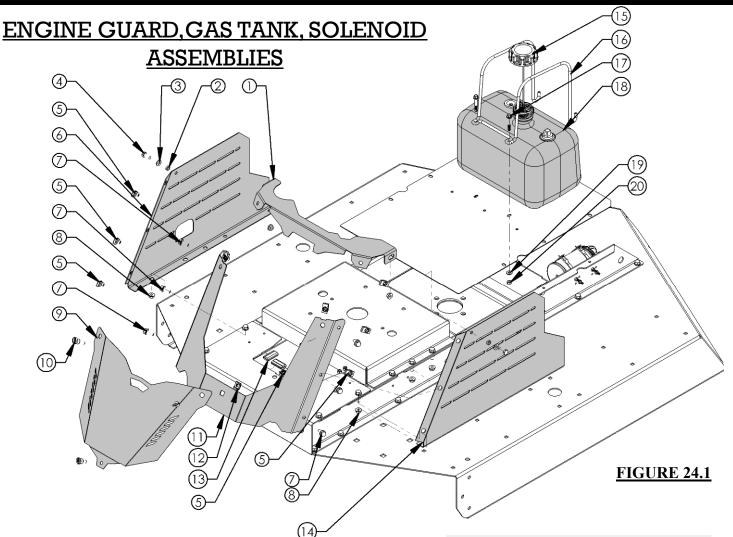
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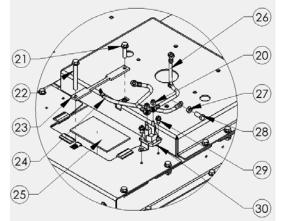
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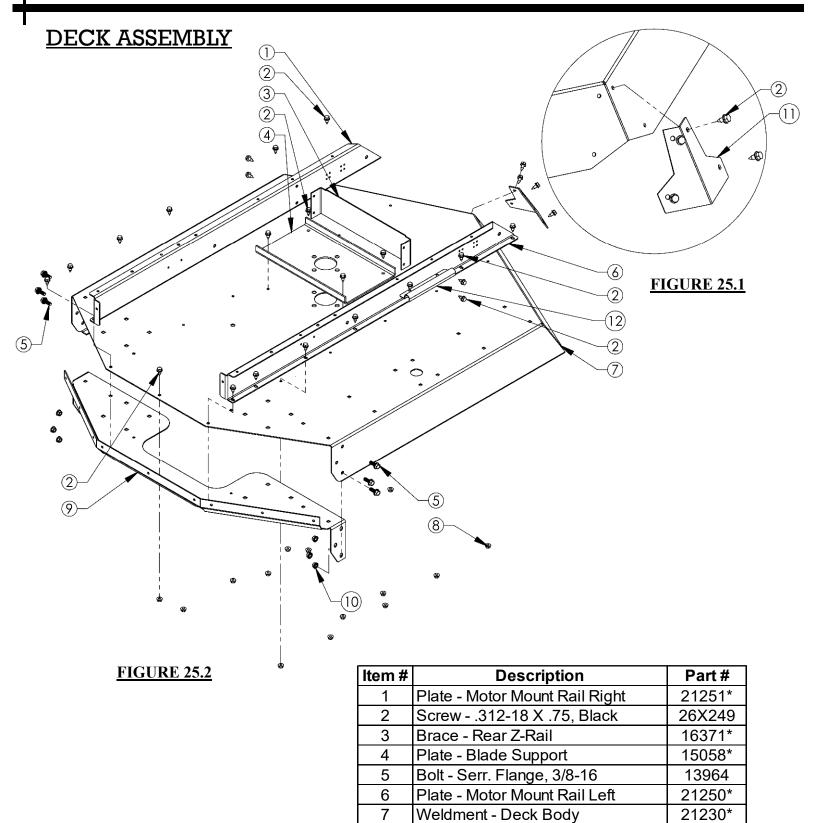
ltem #	Description	Part #
1	Cover - RC Engine Guard	21263*
2	Bushing33ID X .493OD X .135 ZP	23320Z
3	Washer - SAE Flat 5/16 ZY	NB275
4	Bolt - 5/16-18 X 3/4 GR5 ZY	NB578
5	Clip - Tinnerman, 5/16-18	3706
6	Guard - Engine Right Side	21267*
7	Bolt - Serr. Flange, 5/16-18	NB596
8	Nut - Serr. Flange, 5/16-18	NB170
9	Guard - Battery Access Panel	21264*
10	Screw - Thumb, Shoulder; 5/16-18	18802
11	Guard - RC Engine	21265*
12	Cage Nut - 5/16-18	21087
13	Edge Trim - TrimLok, Black, 2"	AS116
14	Guard - Engine Left Side	21266*
15	Cap - Fuel Tank, Carb Sealed	18221
16	Bracket - Fuel Tank	18225
17	Bolt - Serr. Flange, 1/4-20	18236
18	Fuel Tank - 2.5 Gallon	18214
19	Washer - 1/4 SAE Flat	NB274
20	Nut - Nylon Lock, 1/4-20	NB180



#### **FIGURE 24.2**

ltem #	Description	Part #
21	Bolt - Serr Flange, 5/16-18 X1 1/4ZY Gr5	NB253
22	Bolt - Serr Flange, 5/16-18 x 3; GR5 ZP	18580
23	Plate - Battery Strap	21252*
24	Cable - Black	BCS
25	Battery Pad	BATPAD
26	Cable - Red	BCSR
27	Nut - M8-1.25	NB718
28	Bolt - M8-1.25 X 20mm	NB719
29	Bolt - TCS 1/4-20 X 1/2	NB114
30	Solenoid - 3 Pole	1002004

When ordering replacement parts



NB170

21227\*

19799

21242\*

6052\*

Nut - Serr. Flange, 5/16-18

Nut - Serr. Flange, 3/8-16

Shield - Heat, Fuel Line

Plate - Debris Guard Support

Plate - Rear Deck Reinforce

8

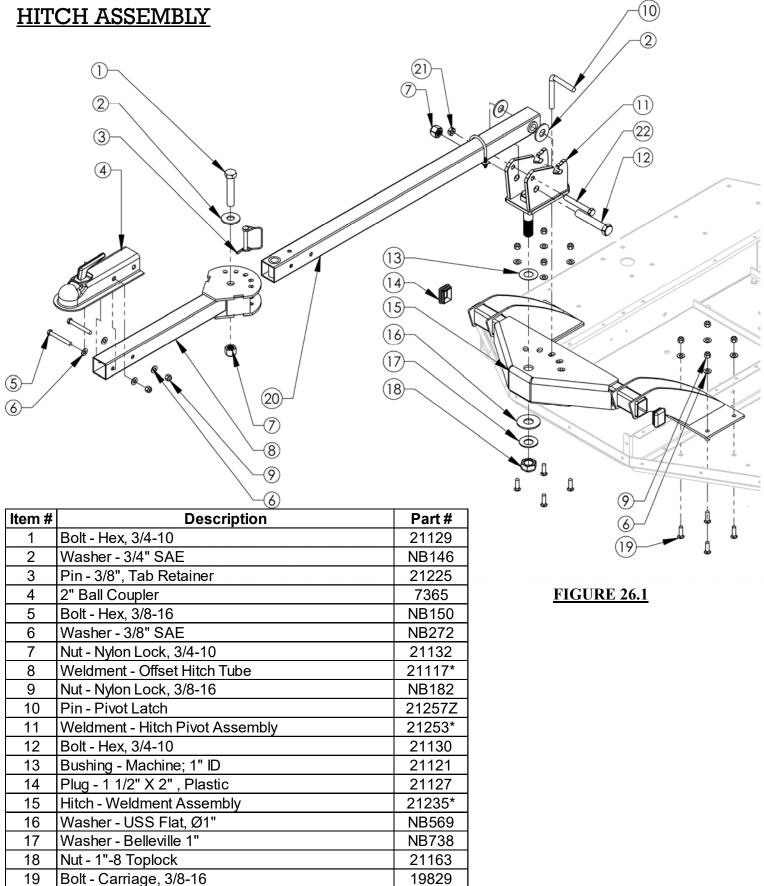
9

10

11

12





Weldment - Hitch Tube Rear

Nut - Lock, 1/2-13

Bolt - Hex 1/2-13 x 4"

20

21

22

21256\*

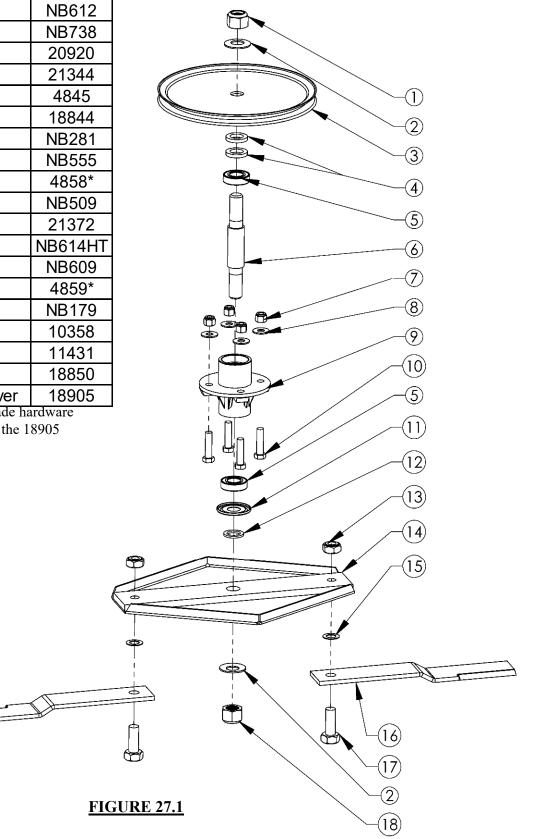
NB121

NB132

Item #	Description	Part #
1	Nut - Nylon Lock, 1"-8	NB612
2	Washer - 1" X 2" X 14GA	NB738
3	Pulley - Blade, 12" OD	20920
4	Spacer - Pulley	21344
5	Bearing - Blade	4845
6	Shaft - Blade	18844
7	Nut - Nylon Lock, 1/2"-13	NB281
8	Washer - USS Flat, 1/2"	NB555
9	Blade Driver Housing	4858*
10	Bolt - Hex 1/2"-13 X 2"	NB509
11	Cover - Dust, RC Housing	21372
12	Washer - Flat, 1" X 1 1/2"	NB614HT
13	Nut - Nylon Lock, 3/4"-10	NB609
14	Weldment - Stump Jumper	4859*
15	Washer - Flat, 3/4" X 1 1/4"	NB179
16	Blade - Off-Set, Rough Cut	10358
17	Bolt - Hex, 3/4-10 X 2"	11431
18	Nut - Nylon Lock, 1"-14	18850
19	Kit - Replacement, Blade Driver	18905

Note: The pulley, stump jumper, blades, blade hardware and housing hardware are not included with the 18905 replacement blade driver kit.

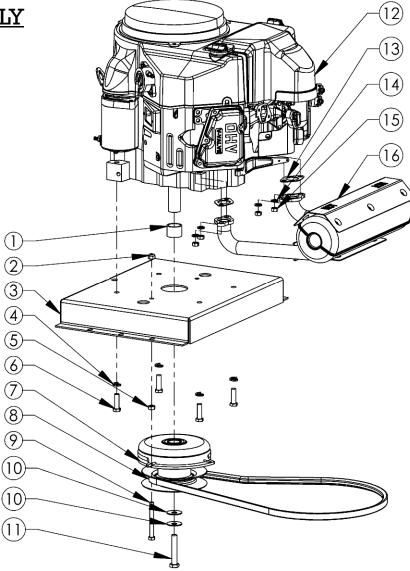
### **BLADE DRIVER ASSEMBLY**



When ordering replacement parts \* = USE PAINT CODE: TK=BLACK

### ENGINE PULLEY/BELT ASSEMBLY

ltem #	Description	Part #
1	Spacer - 1.032 ID X .90 L	20572*
2	Nut - Nylon Lock, 5/16-18	NB181
3	Weldment - Motor Mount	21248*
4	Washer - Split Lock, 3/8"	NB711
5	Nut - Locking, 2 Way 5/16-18	NB558
6	Bolt - Hex 3/8-16 X 1 1/4	NB618
7	Clutch - Electric, 1" Crank	3813
8	Belt - B X 56"	20937
9	Bolt - Hex, 5/16-18 X 3"	NB563
10	Washer - Belleville 7/16 X 1 1/4	699
11	Bolt - Hex, 7/16-20 X 2.5"	NB685
12	Engine -14.5Hp Kawasaki	20918
13	Gasket - Kawasaki Muffler	N/A
14	Washer - M8, Split-Lock	N/A
15	Nut - M8 X 1.25	N/A
16	Muffler - Kawasaki, 14.5Hp FS481V	20919
17	Adapter - Oil Drain, Kawasaki	18810
18	Valve - Oil Drain	16000

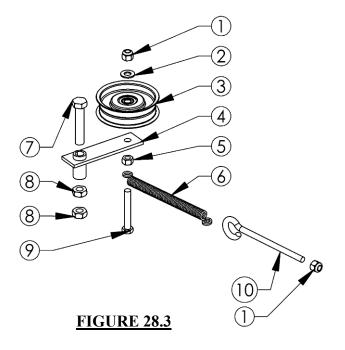


**FIGURE 28.1** 

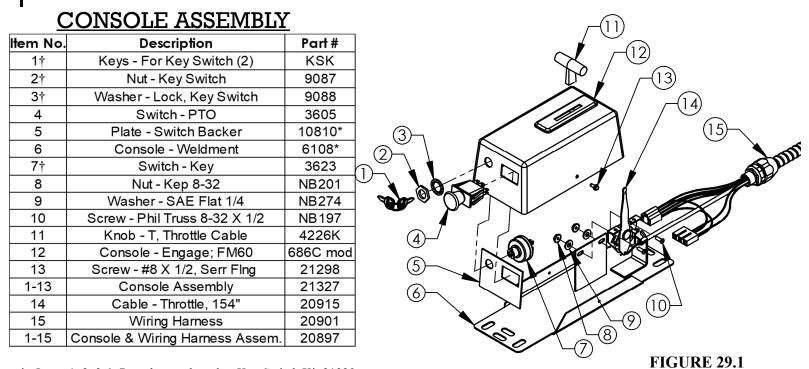
### **IDLER CONFIGURATION**

**FIGURE 28.2** 

Item #	Description	Part #
1	Nut - Nylon Lock, 3/8-16	NB182
2	Washer - SAE Flat 3/8	NB272
3	Pulley - Idler, OD3.25" ID3/8"	B527
4	ldler - Weldment	21285*
5	Nut - Hex, 3/8-16	NB212
6	Spring - Clutch Rod	682S
7	Bolt - Hex, 1/2-13 X 2 1/2	NB510
8	Nut - Jam Lock, 1/2-13 2-Way	NB121
9	Bolt - Hex, 3/8-16 X 2 1/2	NB619
10	Eyebolt - Turned 3/8-16 X 5	11223



When ordering replacement parts \* = USE PAINT CODE: TK=BLACK Note: Some parts not shown for clarity.

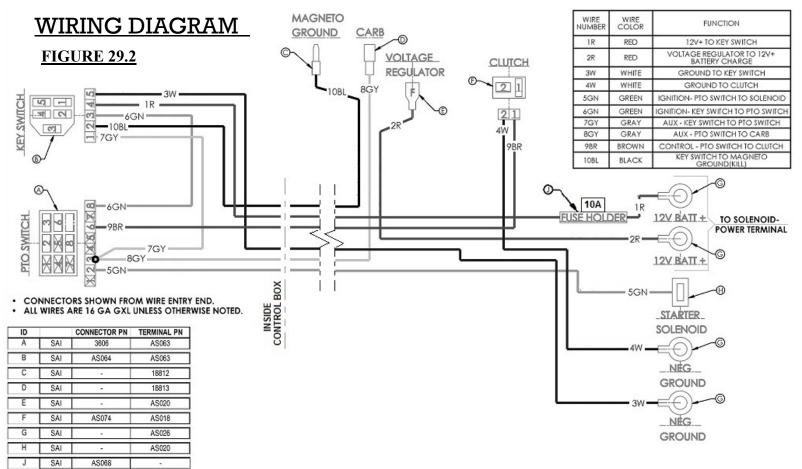


† Items 1, 2, 3 & 7 can be purchased as Key Switch Kit 21329.

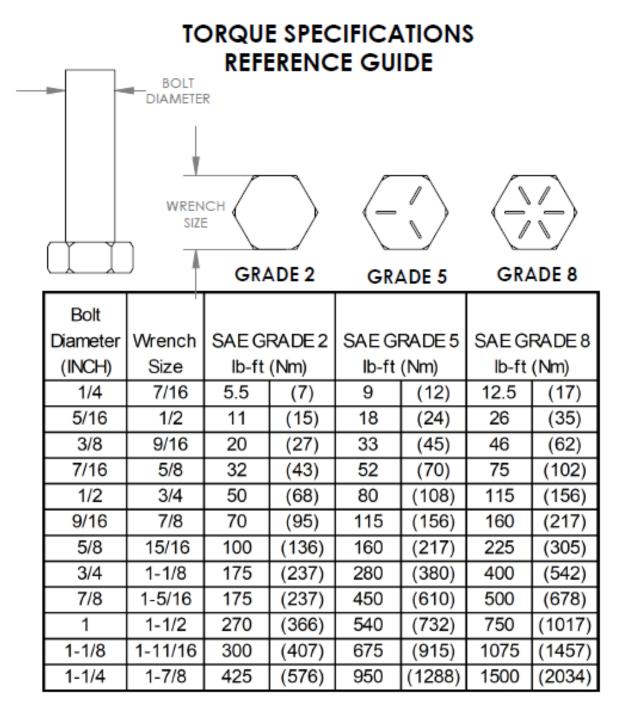
FIGURE 23.1



When mounting the console assembly it may be necessary to mount it directly to the hitch tube depending on the vehicle you are towing it with. Some vehicle configurations will allow the console to be mounted to the vehicle (i.e. ATV rack). Make sure the wiring harness is secure and will not drag the ground. Periodically check to make sure all hardware is tight and the wiring harness is secure. NEVER operate this machine without the wiring harness being secure.



When ordering replacement parts \* = USE PAINT CODE: TK=BLACK



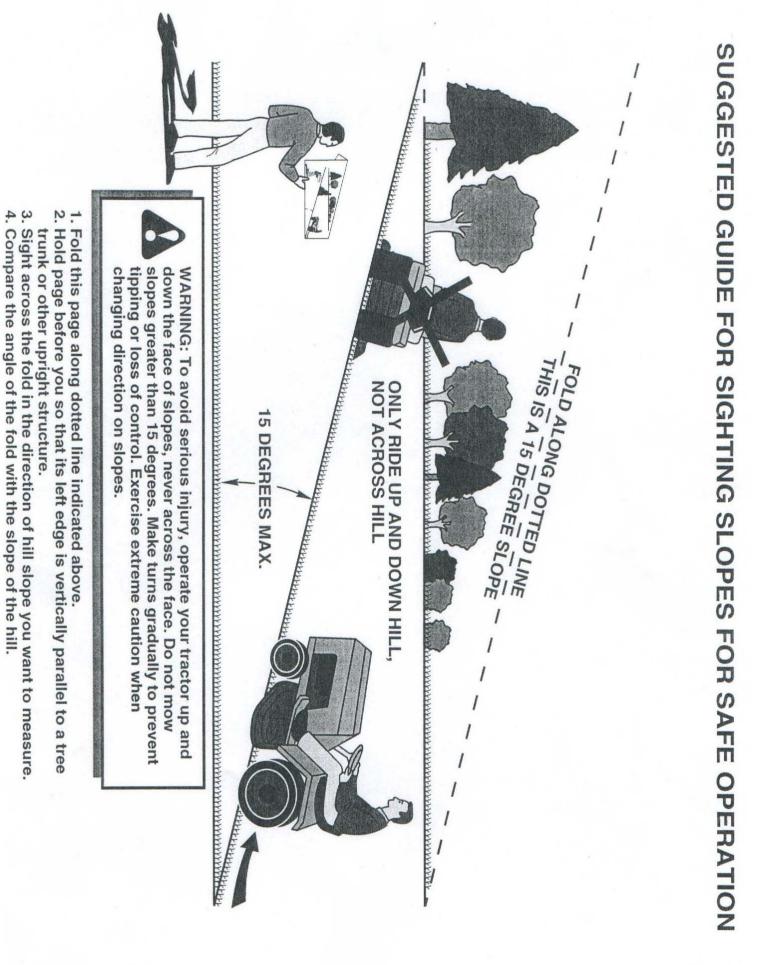
Torque values are for reference. 10% variance is allowable. Use these values unless specific torque values are given for a specific application.

Fasteners should be replaced with the same grade. Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

Tighten toothed or serrated-type lock nuts to the full torque value.

# NOTES

# NOTES



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** ** ***			COM

# OWNER'S MANUAL

MODEL NO.

### RC14544CP4K RC14544CP4K-CA



Read and follow all Safety Precautions and Instructions before operating this equipment.

# 44" BRUSH KING TRAIL CUTTER

Each Cutter has its own model number. Each engine has its own model number. The model number for the Cutter will be found on the right hand side of the motor mount. The model number for the engine will be found on the top of the valve cover.

All Cutter parts listed herein may be ordered directly from Swisher or your nearest Swisher dealer.

All engine parts may be ordered from the nearest dealer of the engine supplied with your Cutter.

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

- \* PRODUCT RC44'' BRUSH KING TRAIL CUTTER
- \* SERIAL NUMBER \_
- \* MODEL NUMBER -
- \* ENGINE MODEL NUMBER \_\_\_\_ TYPE -
- \* PART NUMBER
- \* PART DESCRIPTION

TELEPHONE - 1-800-222-8183 FAX - 1-660-747-8650

SWISHER ACQUISITION INC. 1602 CORPORATE DRIVE WARRENSBURG, MO 64093 www.swisherinc.com

