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OWNER'S MANUAL

MODEL NO.

STARTING SERIAL #:
L221-221001

22020



HOBBY FARM PRO TOW BEHIND LOG SKIDDER



IMPORTANT

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

**Operation
Maintenance
Repair Parts**

SWISHER[®]

1/21/2022

SWISHER ACQUISITION INC.
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Made In The
USA
of US and Global Parts

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:

**1) Commercial Use
& Consumer Use**

This product has a 1 year Limited Commercial & Consumer warranty.

2) 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.

3) 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 Skidder 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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SPECIFICATIONS

	Description
Winch	1600 lb; Webbed Strap
Hauling Weight Capacity	1200 lbs
Log Diameter	20" Max.
Tires	18" x 8.5" x 8"
Overall Dimesions	62" L x 47.5" W x 43" H
Towing Speed	5 MPH (Flat Ground) 4 MPH max (Rough Ground)
Unit Dry Weight	127Lbs. (58 kg)
Tire PSI	20 PSI Recommended (Min. 15 PSI - Max 35 PSI)
Quick Reference - Maintenance Parts	
Description	Part Number
Winch	22018
Tong Arm	22008*
Chain	22025
Tire/Wheel	10394

When ordering replacement parts

* = USE PAINT CODE: TK=BLACK

Note:

- For other part numbers, refer to the Parts Diagrams on pages 14-16.



SAFETY PRECAUTIONS

Thank you for choosing Swisher's Tow-Behind Log Skidder. Before operating your Skidder, please read, understand and follow all of the safety precautions and other instructions explained in this manual.



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 piece of equipment is designed to lift very heavy objects. Failure to observe the following safety instructions could result in serious injury or death.



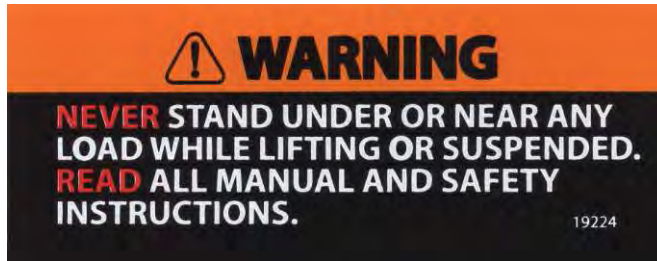
DO NOT EXCEED 1200 POUNDS!



- Read the manual. Learn to operate this machine safely.
- Understand the speed, steering and stability of this machine. Know the positions and operations of all controls before you operate this machine.
- Allow only responsible adults who are familiar with these instructions to operate this machine. **Never allow children to operate this machine.**
- Be sure the area is clear of other people before lifting & towing logs. **Stop the tow vehicle** if anyone enters the towing area. Children are often attracted to the machine and the hauling 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 a lifted log.
- Do not haul logs in reverse. **Always look down and behind before and during backing.**
- **Watch for traffic** when operating near or crossing roadways.
- Do not operate the Skidder if it has been dropped or damaged in any manner. Repair as necessary.
- Dress properly. Protect hands and feet from potential falling objects.
- Do not operate the equipment 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.
- **A log on the ground can have a tendency to roll.** Do not unload a log on a slope. It is recommended to chock a log on the ground to prevent it from rolling.

SAFETY AND OPERATION DECALS

Replace decal immediately if damaged.



19224-Decal - Warning, Lift



OD33-5MPH DECAL

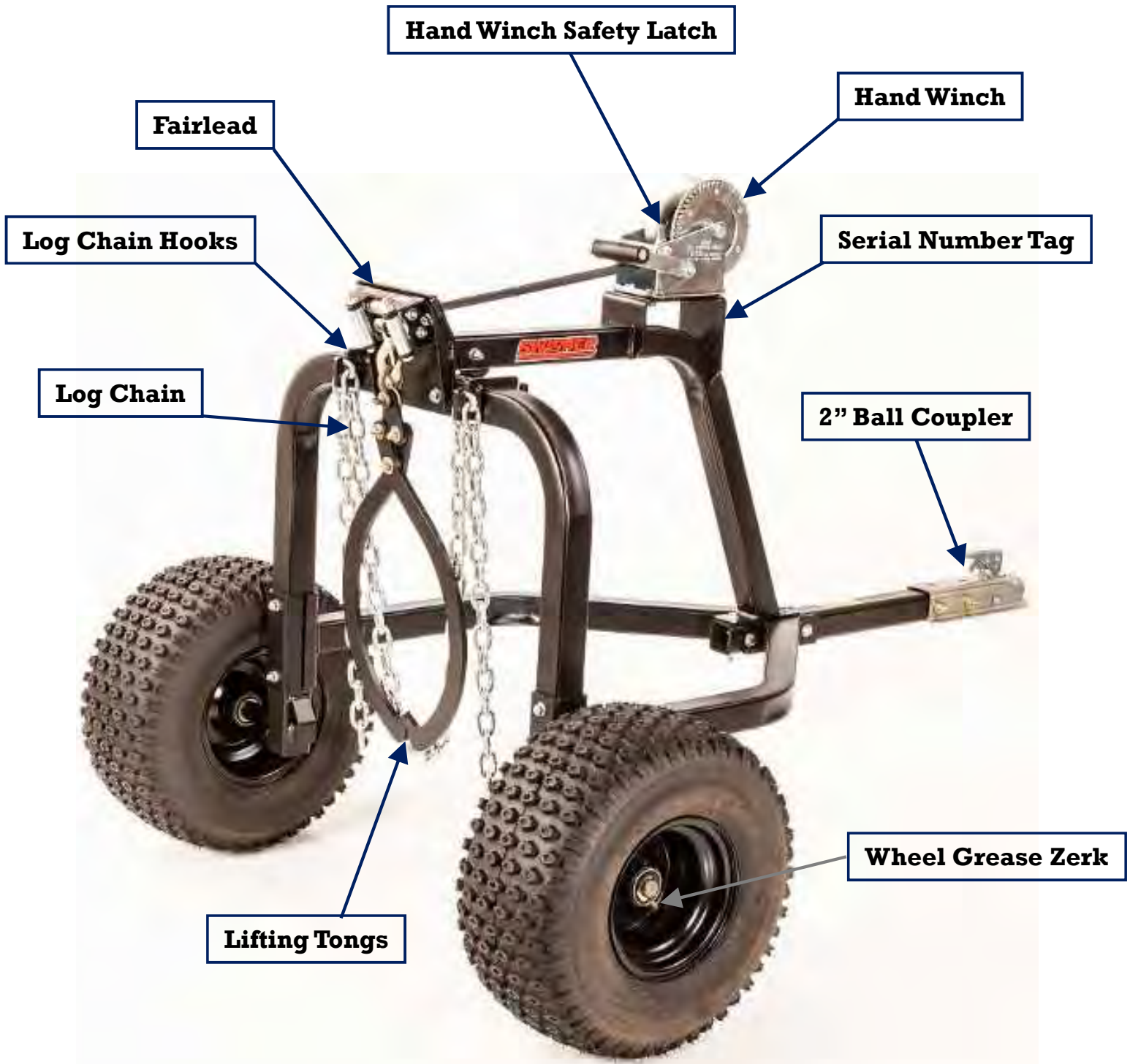


OD99112 LARGE SWISHER LOGO

KNOW YOUR LOG SKIDDER



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



TOWING



ALWAYS MAKE SURE THE TOW VEHICLE IS RATED AND CAPABLE OF TOWING THE WEIGHT OF A LOADED SKIDDER.

GENERAL RECOMMENDATIONS

- It is not recommended to tow behind a car or truck.
- Ensure the Tow Vehicle is rated to tow the weight of the loaded Skidder.
- Always use the chain when transporting a log. The winch strap is only designed for lifting the log, not for towing of the log.

TOW VEHICLE REQUIREMENTS

- The tow vehicle must be equipped with a 2" ball.
- The top of the 2" ball should be roughly 18" off the ground for the unit to be level with the ground. The closer to level the Skidder is, the better it will perform. Additional equipment may be required on the tow vehicle to raise or lower the ball. See **FIGURE 8.1**

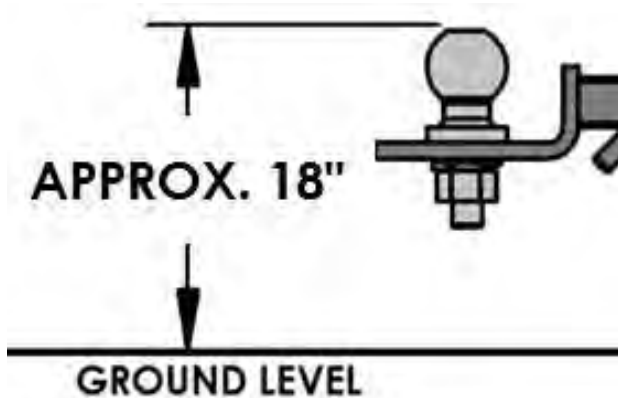


FIGURE 8.1

TRANSPORTING THE LOG SKIDDER

- Do not exceed 15 MPH when transporting an unloaded Log Skidder.
- Ensure the safety latch on the winch is in the locked position.
- The tongs can freely dangle by the winch strap when transporting.
- Loop the chain onto the provided chain hooks so that it does not drag on the ground. See **FIGURE 8.2**



FIGURE 8.2

- Insert a pin into the ball coupler latch so that the latch can not release while transporting.



CAUTION: NEVER ATTEMPT TO MANUALLY MOVE, CONNECT OR DISCONNECT A FULLY LOADED SKIDDER. THE WEIGHT OF THE LOG COULD CAUSE THE HITCH TO COME UPWARDS VERY RAPIDLY AND CAUSE SEVERE INJURY OR EVEN DEATH.

WOOD WEIGHT REFERENCE

GENERAL WOOD WEIGHTS

(See **FIGURE 9.1**)

- This chart is for **reference only**. The true weight of a log can change due to many factors including, but not limited to: moisture content, age, branches, external debris, wood species, hardwood content & variations in diameter.
- For calculating the general weight of a log use the following **FIGURE 9.1** & formula:
 - Overall Weight = Length (ft) x Weight per foot (lbs)
 - Example: A 10ft long Apple Log that is 16 inches in Diameter:
 - 10 (ft) x 77 (lbs) = 770 lb Log
- Utilize the **Notes Page 19** to write out log weight calculations.

Weight Table for Green Logs- FOR REFERENCE ONLY							
Species	Weight per Cubic Foot (lbs)	Weight per 1-foot section per Diameter Shown (Lbs)					
		10 in.	12 in.	14 in.	16 in.	18 in.	20 in.
Apple	55	30	43	59	77	97	120
Ash	48	26	38	51	67	85	105
Beech	54	29	42	58	75	95	118
Birch	57	31	45	61	80	101	124
Cherry, Black	45	25	35	48	63	79	98
Chesnut	55	30	43	59	77	97	120
Cottonwood	49	27	38	52	68	87	107
Elm, American	54	29	42	58	75	95	118
Gum, Black	45	25	35	48	63	79	98
Gum, Red	50	27	39	53	70	88	109
Hackberry	50	27	39	53	70	88	109
Hickory	64	35	50	68	89	113	140
Honeylocust	61	33	48	65	85	108	133
Magnolia	59	32	46	63	82	104	129
Maple, Red	50	27	39	53	70	88	109
Oak, Black	62	34	49	66	87	110	135
Oak, Live	76	41	60	81	106	134	166
Oak, Red	63	34	49	67	88	111	137
Oak, White	62	34	49	66	87	110	135
Osage, Orange	62	34	49	66	87	110	135
Pecan	61	33	48	65	85	108	133
Persimmon	63	34	49	67	88	111	137
Poplar, Yellow	38	21	30	41	53	67	83
Sassafras	44	24	35	47	61	78	96
Walnut, Black	58	32	46	62	81	102	126
Hemlock, Eastern	50	27	39	53	70	88	109
Pine, White	36	20	28	38	50	64	79
Spruce, Red	34	19	27	36	47	60	74
Tamarack	47	26	37	50	66	83	102

Weight Table values provided from U.S. Department of the Interior, National Park Service Manual "Safety for Tree Workers"

FIGURE 9.1

GENERAL OPERATIONS

WINCH OPERATION

- The Winch has a 2 way safety latch (see page 7) that will allow the spool to lock in either direction. Ensure the lock is in the correct position for the operation you are performing (lifting or lowering).
- Firmly grasp the handle with both hands and turn the crank to lower or lift.

⚠ WARNING: When lowering the log, do not let go of the handle until the log is completely resting on the ground. The handle can spin freely with the weight of a log on the strap and can cause serious injury.

CONNECTING & LIFTING A LOG

1. Position the Log Skidder so that it straddles the log. You can either back the Skidder over the log using the tow vehicle or you can disconnect the Skidder from the tow vehicle and manually roll it over the log. **Always have the Skidder connected to the tow vehicle before you attempt to lift a log.** Make sure the tow vehicle parking brake is set.
2. Position the Skidder over the log so that it does not go under or past the frame. The log should be as far forward in the frame as possible, but should not contact the frame tubes. **See Figure 10.1**



FIGURE 10.1

3. Locate the Handle and safety latch on the Winch. Make sure the lock is set as to let the line come out of the Winch.
4. Lower the Tongs over the log. Make sure the log splits the tongs. Lower the tongs until the top of the log touches the tongs.
5. **You may have to manually adjust the tongs to be centered over the log to ensure a good grip when lifting.**
6. Change the safety latch on the winch to allow the strap to be wound into the winch. Start cranking the Winch Handle to begin lifting the log. The Tong's points should bite into the log and create a very secure grip.
7. Continue lifting the log until the winch hook is about to touch the Fairlead roller. **Do not over draw the winch strap as this may damage the fairlead and/or the shackle. See FIGURE 10.2**

Stop lifting log before the hook contacts the bottom roller



FIGURE 10.2

8. Make sure the Winch is locked so that the log cannot lower on its own.

Instructions continued on page 11....



**DO NOT EXCEED
1200 POUNDS!**



GENERAL OPERATIONS

CONNECTING & LIFTING A LOG

CONTINUED

9. Locate the chain and wrap the log as shown in **FIGURE 11.1**. Hook one end of the chain on the chain hook leaving a minimum of 3 links
10. Run the remaining length of chain over the top of the log, wrap the chain around the side and back under the log.
 - **DO NOT PLACE HANDS OR FEET UNDER THE LOG TO APPLY THE CHAIN.** Toss the chain under the log or use a tool to grab the chain and pull it under the log.
11. Bring the chain back up the other side and over top again. Connect the free end of the chain into the chain hook on the opposite side of the rear frame than the first end of chain.
12. When wrapping & hooking the chain, ensure that the chain is as snug as possible. The tighter the chain is, the higher it will hold the log off the ground when towing.

13. You should now have a loop of chain that wraps the log and crosses over the top.
14. Once the chain is snug and secure in the chain hooks, firmly grasp the winch handle, and release the safety latch to be able to slightly lower the log. Lower the log only enough to take the weight off the strap and allow the chains to carry the weight.

⚠ The winch will have a large amount of weight, so use caution when releasing the safety latch.

15. Once all the log weight is on the chains, reset the safety latch to keep the winch from unwinding. The tongs should remain connected to the log.
16. You are ready to move the log to its next destination.

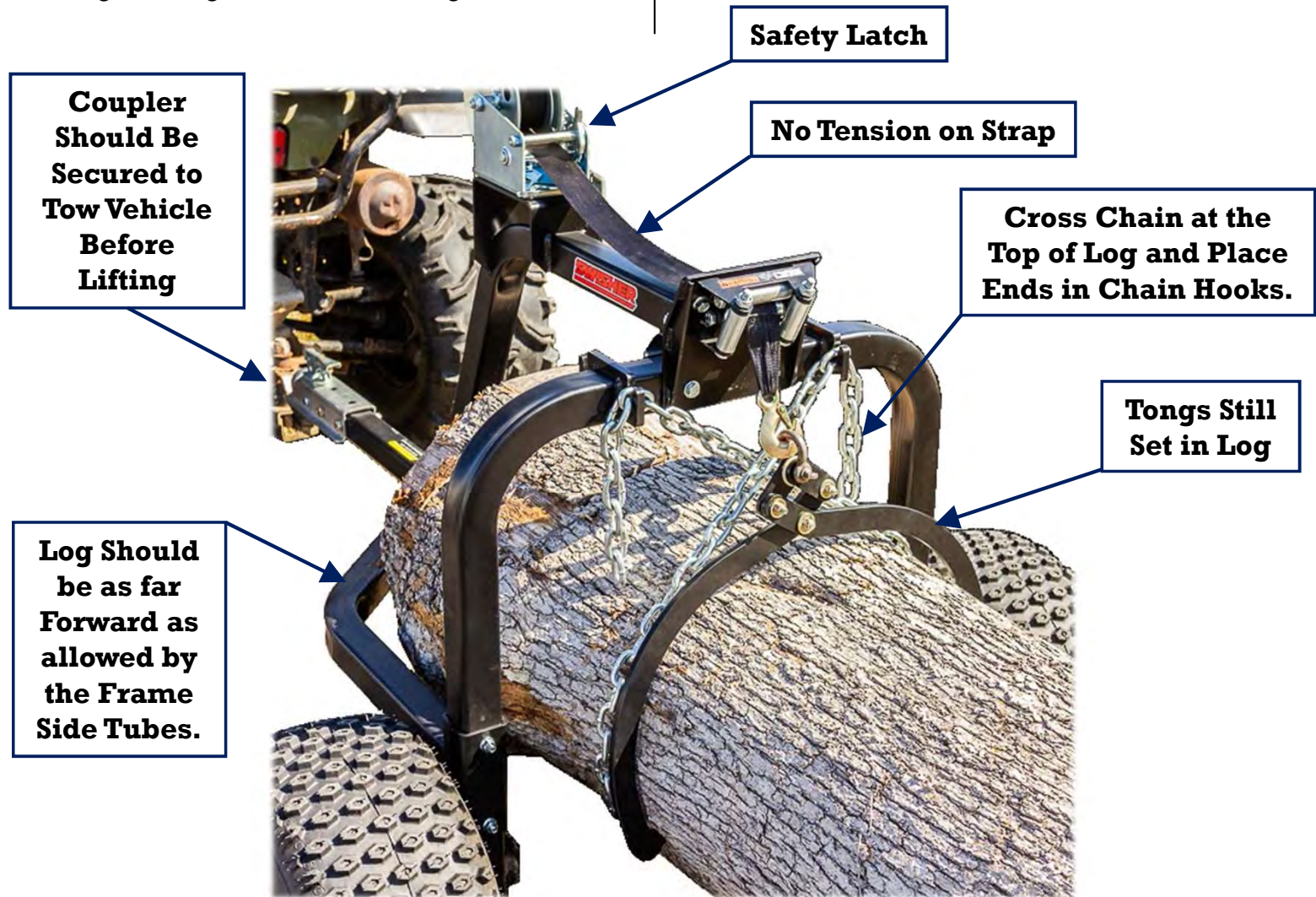


FIGURE 11.1

GENERAL OPERATIONS



NEVER PLACE ANY BODY PART UNDER THE SUSPENDED LOG. BE CAUTIOUS OF FOOT PLACEMENT WHEN LOWERING A LOG.

TOWING A LOG

- Only tow a log in the forward direction. Towing in reverse can cause damage to equipment and tow vehicle.
- When turning, make wide turns when possible.
- DO NOT tow sideways on a hill. A log will have a tendency to roll sideways down a hill and this can create instability and cause damage or injury.



- Do not exceed 5 MPH. For rough terrain a slower speed may be required to reduce bouncing.

DISCONNECTING A LOG

1. Once you have moved to log to its final destination, you will need to disconnect the log from the Skidder.
2. Make sure the tow vehicle parking brake is set.
3. Follow the CONNECTING A LOG instructions in reverse.
4. Reset the tongs into the log if they came loose while transporting.
5. Once the tongs are correctly positioned on the log, turn the winch handle to lift the tongs until they raise the log enough to take the weight off of the chains.
6. Once the weight is off the chains and the winch is locked in position by the safety latch, remove the chain. Take the chain off of the chain hooks and remove from under the log. **NEVER GET UNDER THE SUSPENDED LOG TO REMOVE THE CHAIN.**
7. After the chain is removed, crank the winch handle to lift the log enough to disengage the safety latch on the winch. Slowly lower the log using both hands if possible to ensure a good grip on the winch handle.
8. **ONCE THE SAFETY LATCH IS REMOVED THE OPERATOR WILL BE SUPPORTING THE ENTIRE LOG BY THE WINCH HANDLE. DEPENDING ON THE SIZE OF THE LOG THIS CAN CREATE A LOT OF FORCE ON THE HANDLE. BE SURE THE OPERATOR IS PHYSICALLY CAPABLE OF CONTROLLING THE WINCH HANDLE UNDER A LOAD.**
9. Continue lowering the log until it is on the ground and stable.
10. Remove the tongs from the log.
11. Pull the Log Skidder forward and off of the log.
12. Replace the chain in the chain hooks for storage.

MAINTENANCE PROCEDURES

MAINTENANCE SCHEDULE			
Procedure	Before Each Use	After Each Use	Every Year
Check ALL Hardware	X	X	
Check Frame for Damage	X	X	
Lubricate Hitch Coupler Latch			X
Check Tire Pressure & Wear	X		
Grease Wheel Bearings			X
Inspect Strapping	X	X	
Inspect Winch Hook	X	X	
Inspect Handle Hardware	X	X	
Inspect Safety Lock	X	X	
Inspect Fairlead Roller	X	X	
Inspect Tongs	X	X	
Inspect Tong Hardware	X	X	
Inspect Shackle	X	X	
Inspect Chain	X	X	

MAINTENANCE GUIDELINES

- Always be sure that **ALL** hardware is securely in place. Replace any damaged or missing hardware. **See pages 15-17 for Part Diagrams.**
- Never attempt to do any work on the equipment that you are uncomfortable performing. When in doubt refer the work to a professional that can ensure it is performed correctly.
- If **ANY** damage is seen to the equipment, **DO NOT** use the Log Skidder. Repair or replace the damaged parts before use.
- Proper maintenance and regular inspections are imperative for safety, longevity and performance of the equipment.

TROUBLESHOOTING

ISSUE	SOLUTION
<p>Winch will not Operate</p>	Check for Damage to the Winch or Handle.
	Ensure Strap or Hook is Not Stuck in Fairlead.
	Check for Correct Position of Winch Safety Switch.
	Check Gears for Damage.
	Check for Debris in Winch.
	Make Sure Winch is Properly Lubricated.
<p>The log will not raise</p>	Ensure Winch Lock Tab is in the Correct Position.
	Make Sure the Log is Under the Weight Capacity of the Winch.
	Make Sure Log is Not Stuck Under the Frame.
<p>The log will not lower</p>	Make Sure Log is Not Stuck on the Frame.
	Make Sure the Winch Lock Tab is in the Correct Position.
	Ensure There is Nothing Under the Log.



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

PARTS DIAGRAMS

FRAME & HITCH ASSEMBLY

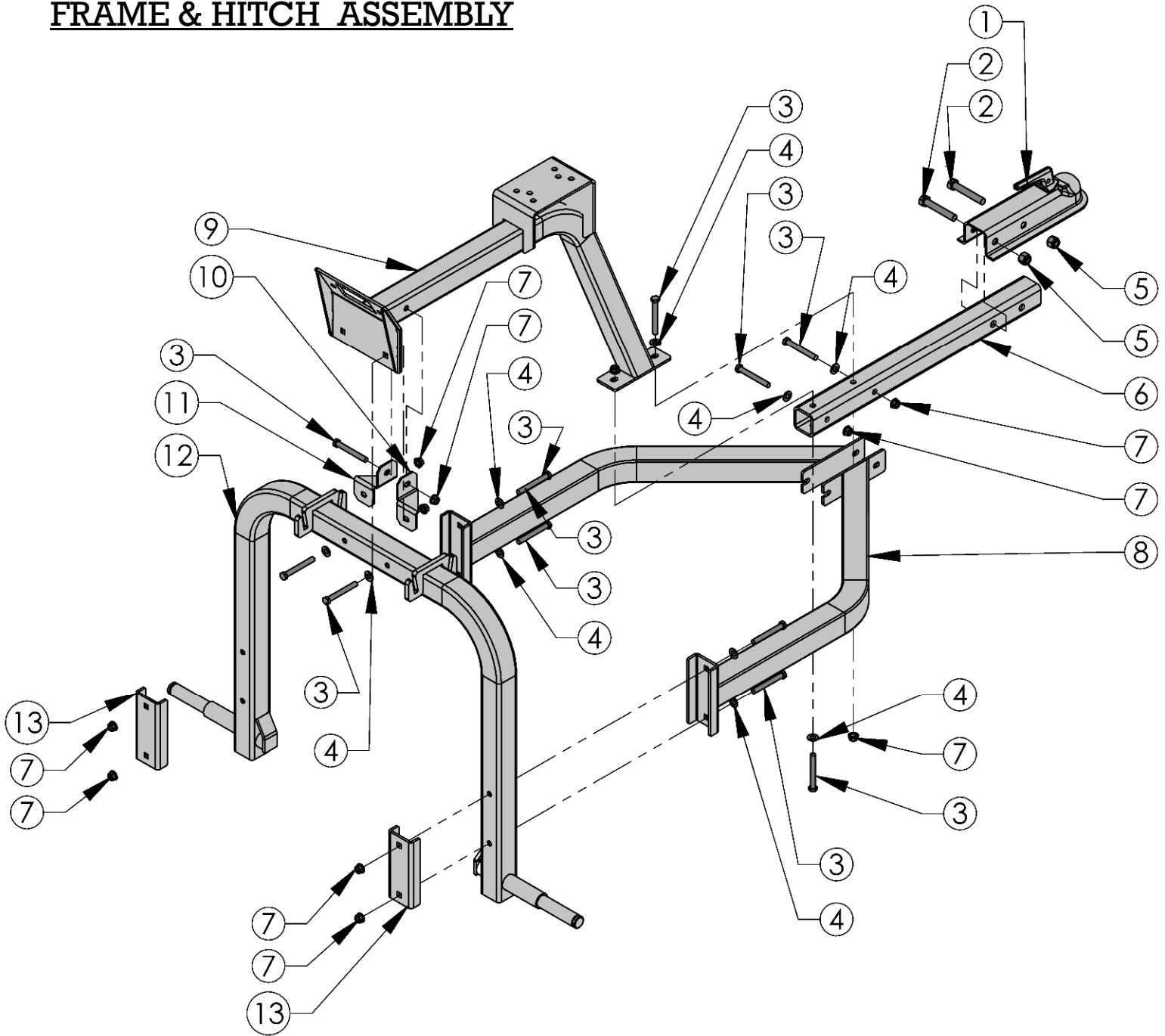


FIGURE 15.1

ITEM	DESCRIPTION	PART #	ITEM	DESCRIPTION	PART #
1	COUPLER - 2" BALL	7365	9	WELDMENT - TOP FRAME, WINCH MOUNT	22013*
2	BOLT - 1/2-13 X 3 HCC GR5 ZP	NB131	10	BRACKET- TOP-REAR FRAME, RIGHT	22016*
3	BOLT 3/8-16 X 3 GR5	19831	11	BRACKET- TOP-REAR FRAME, LEFT	22017*
4	WASHER - 3/8 SAE	19826	12	WELDMENT - REAR FRAME	22006*
5	NUT - 1/2-13 NYLON LOCK	NB281	13	BRACKET - FRAME MOUNT, REAR	22009*
6	TUBE - HITCH BAR, 24"	22002*			
7	NUT - SERR FLANGE, 3/8-16	19799			
8	WELDMENT - BASE FRAME, SIDE	22024*			

Note: Some parts not shown for clarity.

When ordering replacement parts

* = USE PAINT CODE: TK=BLACK

PARTS DIAGRAMS

WINCH, FAIRLEAD, & WHEEL ASSEMBLY

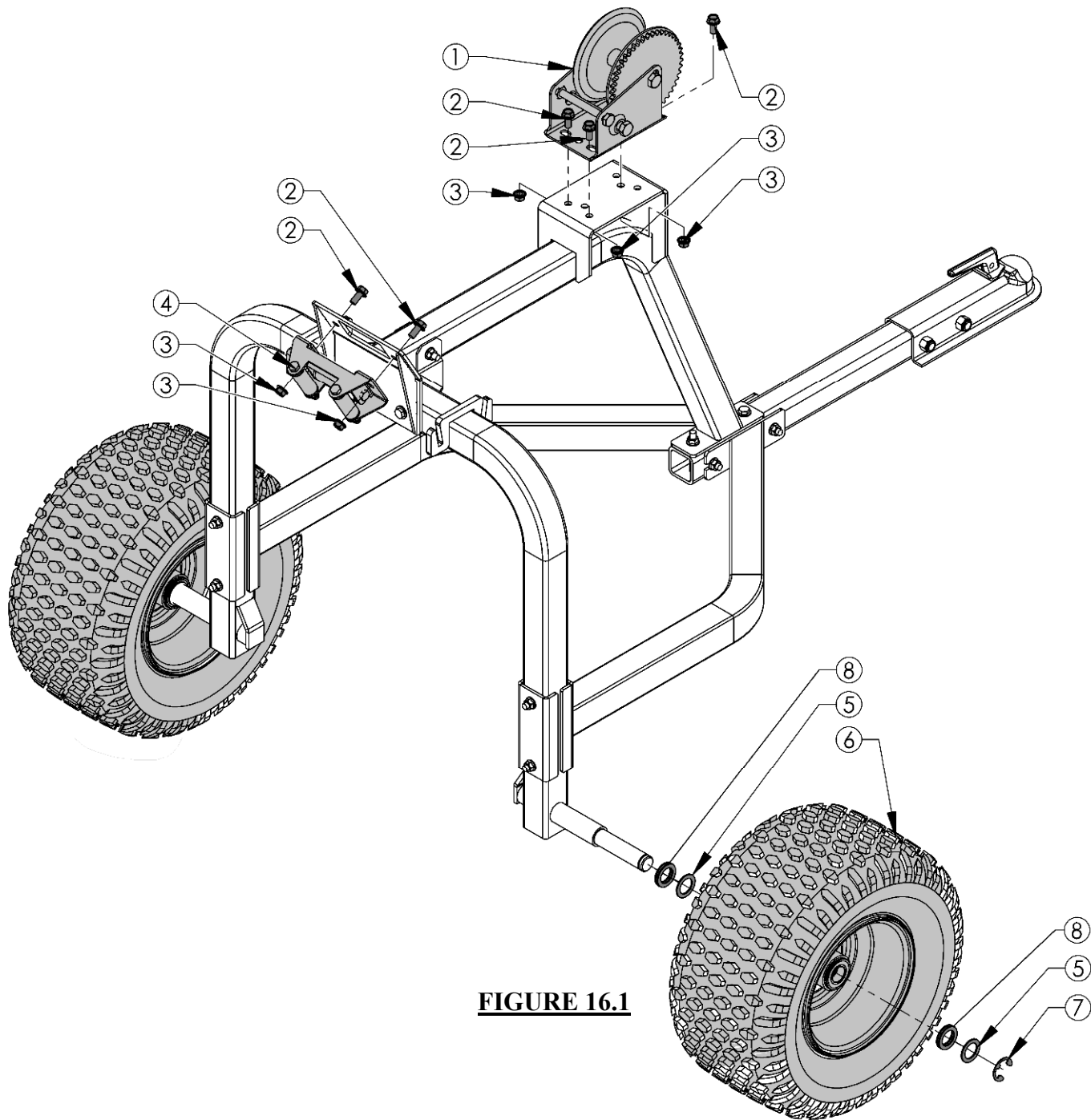


FIGURE 16.1

ITEM #	DESCRIPTION	PART #
1	WINCH - HAND, 1600 LB, STRAP W/HOOK	22018
2	BOLT- SERR FLANGE, 3/8-16 X 1"	19830
3	NUT - SERR. FLANGE, 3/8-16	19799
4	FAIRLEAD	8003
5	WASHER - 1" ID, 14 GA	10914
6	TIRE/WHEEL - 18X9.5, BLACK	10394
7	RETAINING RING - E-CLIP, 1"	10915
8	SPACER - 1" ID , 10 GA THICK	NB614HT

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

Note: Some parts not shown for clarity.

PARTS DIAGRAMS

LOG TONG ASSEMBLY

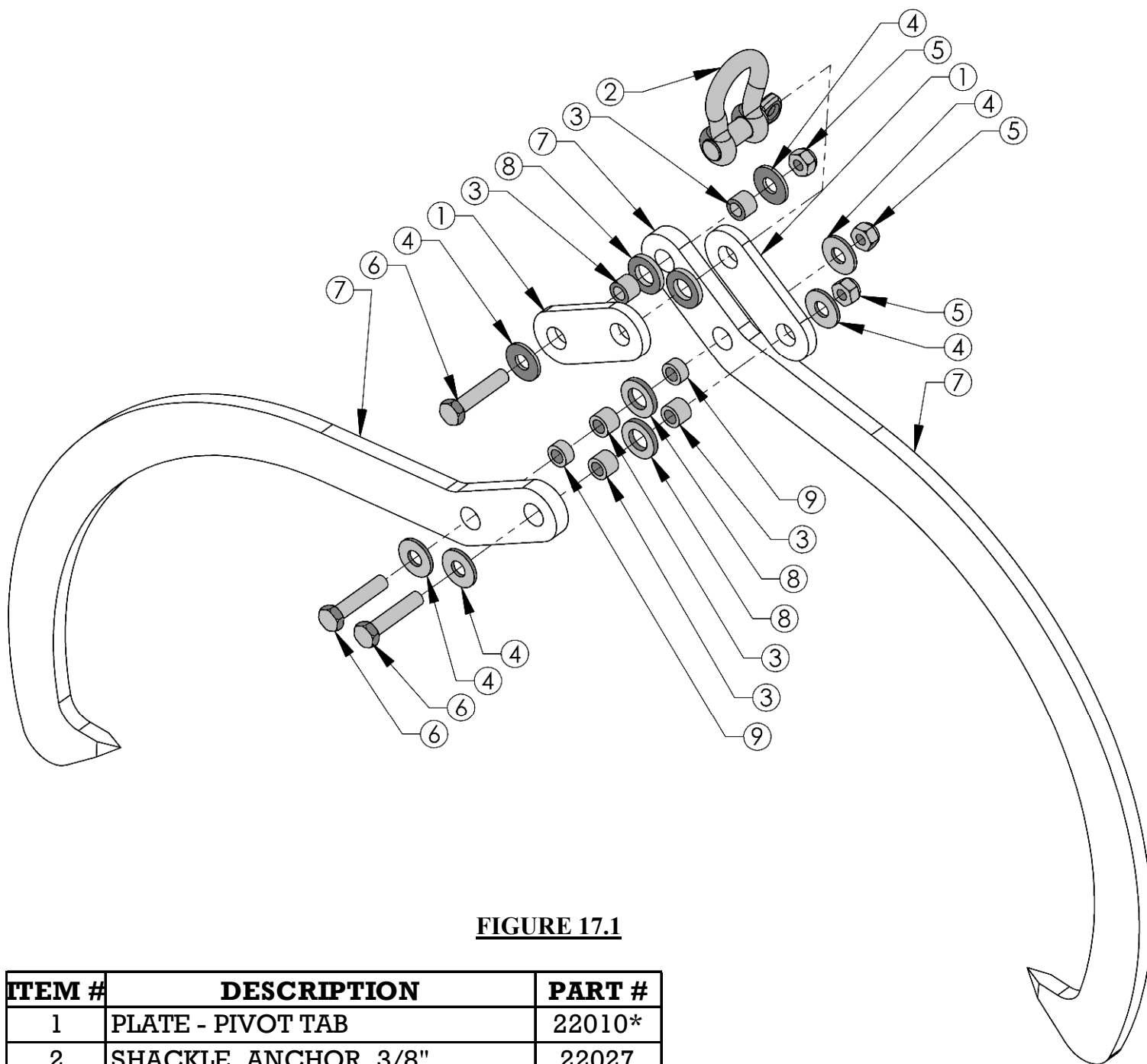
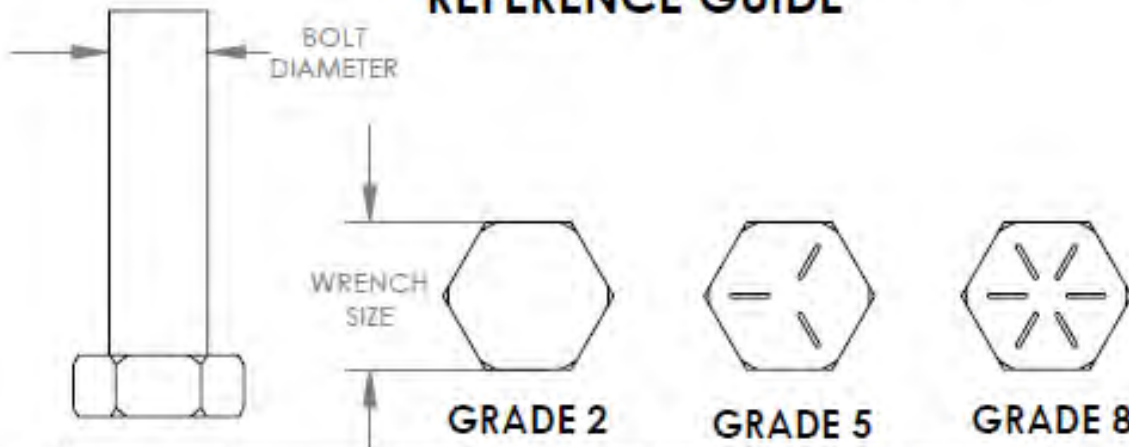


FIGURE 17.1

ITEM #	DESCRIPTION	PART #
1	PLATE - PIVOT TAB	22010*
2	SHACKLE, ANCHOR, 3/8"	22027
3	BUSHING - 5/16" ID X 3/8"	7825Z
4	WASHER - USS FLAT, 5/16	NB556
5	NUT - NYLON LOCK, 5/16-18	NB181
6	BOLT - 5/16-18 X 1 1/2"	NB505
7	ARM - GRABBER	22008*
8	WASHER - NYLON, 1/2 ID	NB682
9	BUSHING - 5/16" ID X 1/4"	7839Z

TORQUE SPECIFICATIONS REFERENCE GUIDE



Bolt Diameter (INCH)	Wrench Size	SAE GRADE 2		SAE GRADE 5		SAE GRADE 8	
		lb-ft	(Nm)	lb-ft	(Nm)	lb-ft	(Nm)
1/4	7/16	5.5	(7)	9	(12)	12.5	(17)
5/16	1/2	11	(15)	18	(24)	26	(35)
3/8	9/16	20	(27)	33	(45)	46	(62)
7/16	5/8	32	(43)	52	(70)	75	(102)
1/2	3/4	50	(68)	80	(108)	115	(156)
9/16	7/8	70	(95)	115	(156)	160	(217)
5/8	15/16	100	(136)	160	(217)	225	(305)
3/4	1-1/8	175	(237)	280	(380)	400	(542)
7/8	1-5/16	175	(237)	450	(610)	500	(678)
1	1-1/2	270	(366)	540	(732)	750	(1017)
1-1/8	1-11/16	300	(407)	675	(915)	1075	(1457)
1-1/4	1-7/8	425	(576)	950	(1288)	1500	(2034)

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.

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OWNER'S MANUAL

MODEL NO.

22020



IMPORTANT

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

Hobby Farm Pro Log Skidder

Each Skidder has its own model number. The model number for the Skidder will be found under the winch mount plate. All Skidder parts listed herein may be ordered directly from Swisher or your nearest Swisher dealer.

WHEN ORDERING PARTS, PLEASE HAVE THE FOLLOWING INFORMATION AVAILABLE:

- * PRODUCT – ATV LOG SKIDDER
- * SERIAL NUMBER - _____
- * MODEL NUMBER - _____
- * PART NUMBER
- * PART DESCRIPTION

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

SWISHER ACQUISITION INC.
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