



Stump Grinder

for

Skid Steer Loaders

Operator's Manual

Set-Up Assembly

Maintenance

Parts Information



Read this Manual Before Use

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REFERENCE INFORMATION

Write the serial number for your attachment in the spaces below. Always refer to this serial number when calling for service or parts.

Serial Number.....

YOUR ATTACHMENTS DEALER

ADDRESS:

PHONE:

CONTACT:

NOTE: *Erskine Attachments LLC reserves the right to make improvements in design or changes in specifications at any time without notice and without incurring any obligations to install them on units previously sold.*

SAFETY

DO NOT use or perform maintenance on this machine until this manual has been read and understood. In addition, read the Operation and Maintenance Manual(s) pertaining to the attachment and the attachment carrier (“Loader”).

The user is responsible for inspecting the machine daily, and for having parts repaired or replaced when continued use of the machine would cause damage, excessive wear to other parts or make the machine unsafe for continued operation.

If an operating procedure, tool device, maintenance or work method not specifically recommended is used, you must satisfy yourself that it is safe for you and others. You must also ensure that the attachment will not be damaged or made unsafe by the procedures you choose.

Erskine Attachments LLC cannot anticipate every possible circumstance that might involve potential hazard. The safety messages found in this manual and on the machine are therefore not all inclusive.

The signal words **CAUTION**, **WARNING**, or **DANGER** are used to indicate hazards.

⚠ CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

⚠ WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ DANGER Indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.

The word **IMPORTANT** is used in the text when immediate damage will occur due to improper technique or operation.

The word **NOTE** is used to convey information that is out of context with the manual text; special information such as specifications, techniques, reference information, and other information of a supplementary nature.

Call Before You Dig
1-888-258-0808



Improper operation can cause serious injury or death.

Pre-operation

- This attachment is designed to be used for grinding stumps from just above ground level to below ground level. **NEVER** use this machine for any other purpose.
- Read the operator's manual for the "Skid Steer Loader." **NEVER** allow untrained people to operate.
- Operating instructions must be given to everyone before operating this attachment and at least once a year thereafter in accordance with OSHA regulations.
- **NEVER** exceed the maximum recommended input power or speed specifications for the attachment. Over-powering or over-speeding the attachment may cause personal injury and/or machine damage.
- Keep all shields, guards, and covers in place.
- Do not modify equipment or add attachments that are not approved by Erskine Attachments LLC.
- Use adequate safety warning lights and devices as required by local regulations. Obey all local laws and regulations regarding machine operation on public property. Always call before you dig (1-888-258-0808). When you call, you will be directed to a location in your state/city for information about buried lines (electric, telephone, cable TV, water, sewer, gas, etc.).

Operation

- To protect the operator from debris and cab intrusion, loader must have polycarbonate or similar strength door and door must be closed in order to operate the attachment.
- Hydraulic connections may be hot after use. Use gloves if connecting or disconnecting after use.
- Check and be sure all operating controls are in neutral before starting the engine.

Operation (continued)

- Keep people away from loader, attachment and discharge when in use. This attachment sends objects flying and has rotating parts. **NEVER** direct discharge toward people – rocks and debris can be thrown.
- **NEVER** operate near embankments or terrain that is so steep that rollover could occur.
- Always stay in the operator position when using the attachment. If you are using a walk-behind loader, stay behind the loader at the controls while operating.
- Before leaving the operators position, disengage hydraulic drive, lower the attachment to rest flat on the ground, stop engine, set park brake, and wait for all motion to stop.
- **NEVER** place hands in the discharge area or clear debris while the engine is running.

Avoid High Pressure Fluids Hazard



- Escaping fluid under pressure can penetrate the skin causing serious injury.
- Avoid the hazard by relieving the pressure before disconnecting hydraulic lines.
- Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks. Wear protective gloves and safety glasses or goggles when servicing or performing maintenance on hydraulic systems.
- If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

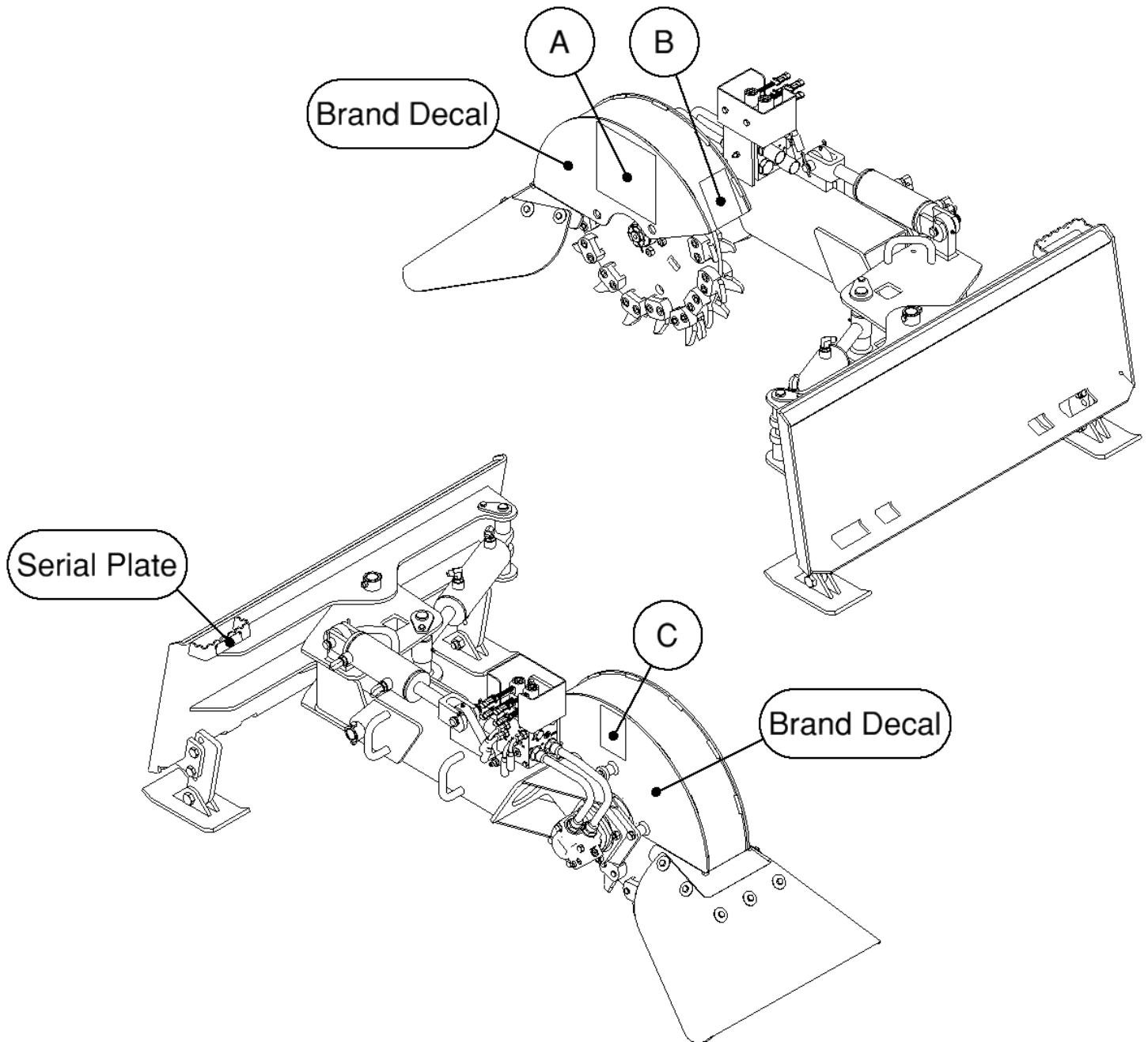
Maintenance

- **NEVER** make adjustments, lubricate, clean, or perform any service on the machine while it is in operation.
- Make sure the attachment is serviced on a daily basis. Improper maintenance can cause serious injury or death in addition to damage to the attachment and/or your equipment.

SERIAL NUMBER AND SAFETY DECAL LOCATIONS

Serial Number Location:

It is important to refer to the serial number of the attachment when making repairs or ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use different procedures in doing a specific operation.



SERIAL NUMBER AND SAFETY DECAL LOCATIONS

(A)



Part number: 316078

Location: On left side of shield

Quantity: 1

(B)



Part number: 203234

Location: On back of shield

Quantity: 1

(C)



Part number: 200001

Location: On right side of shield

Quantity: 1

Small Brand Decal

Location: On both sides of shield

Quantity: 2

Safety Decals Locations:

The locations of the safety decals are shown. If these decals are missing, damaged, or painted over they must be replaced. Call Erskine Attachments LLC (218-435-4045) for replacement decals.

USER'S MOUNTING INSTRUCTIONS

After the initial set-up assembly is completed use the following procedure to mount the attachment to the loader for user operation.

⚠ WARNING Coupler wedges or pins must extend through the holes in attachment. Levers must be fully down and locked. Failure to secure wedges or pins can allow attachment to come off and cause injury or death.



1. Use the steps, safety treads, and grab handles to get on and off the loader and attachment.

2. Sitting in the operator's seat, lower seat bar and fasten the seat belt.

3. Drive the loader to the rear of the attachment. Put the loader quick attach coupler into the attachment mounting bracket.

4. Tilt the loader coupler backward a small amount until it is fully engaged in the attachment mounting bracket.

5. Stop the engine and engage the park brake.

6. Secure the coupler locking mechanism that attaches the attachment to the loader.



USER'S MOUNTING INSTRUCTIONS

7. Connect the hydraulic quick couplers from the attachment to the loader.

IMPORTANT: Make sure the quick couplers are fully engaged. If the quick couplers do not fully engage, check to see that the couplers are the same size and brand. Do not force the quick couplers together.

IMPORTANT: Wipe the ends of the hydraulic quick couplers (both lead and loader) with a rag to remove any possible contamination. Contamination can cause hydraulic components to fail and is not covered under warranty.

NOTE: See the loader's operator's manual.

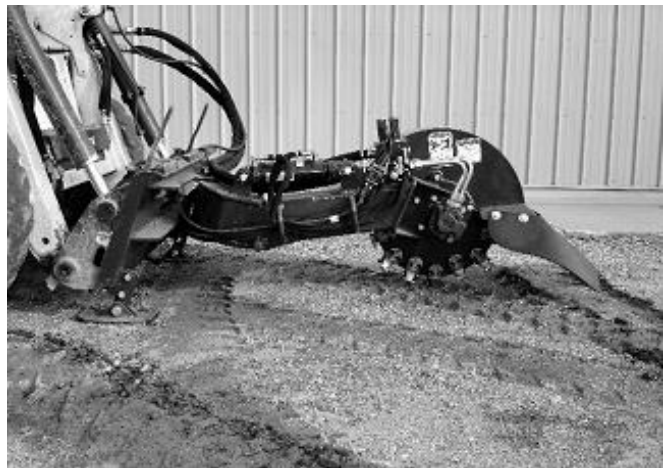
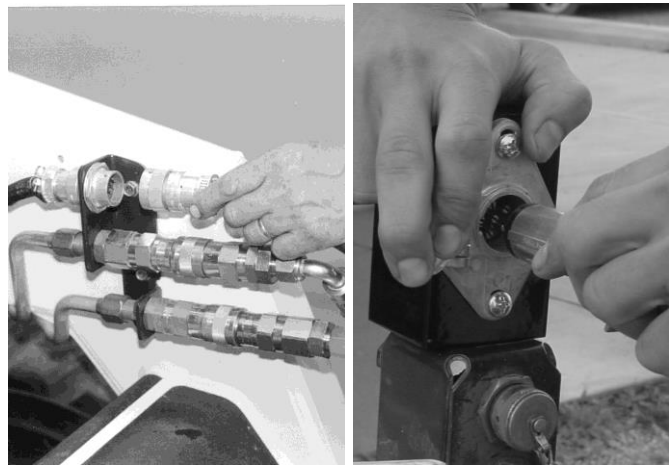
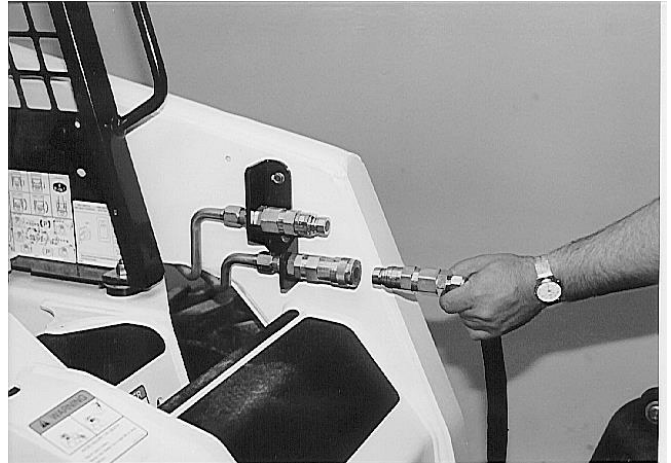
NOTE: Attachment is shipped with 12FJX (1-1/16" Female JIC Swivel) fittings on the ends of the lead hoses.

8. Make sure the hoses are properly routed to fit your specific loader. If the hoses are not routed correctly, hoses may get pinched or rub on tires. Be sure to check the hose routing through the full range of intended motion of the attachment before operating it.

More than one routing may be acceptable depending on the loader. Pick the routing that best suits your loader.

IMPORTANT: Proper hose routing is the responsibility of the owner and/or operator. Pinched or stretched hoses are not covered under warranty.

Mounting is now complete and you are ready to use the attachment. Use reverse order of above instructions to dismount the attachment from the loader.



OPERATING INSTRUCTIONS

Hydraulic Controls

All functions can be activated by the steering lever switches on the loader (if loader is equipped), or with the pistol grip control harness.

NOTE: Your loader must have the attachment control kit installed to make use of the lever switches.

The previously installed pistol grip allows the operator to engage all functions (see Set-Up Assembly).

FUNCTIONS ARE ACTIVATED AS FOLLOWS:

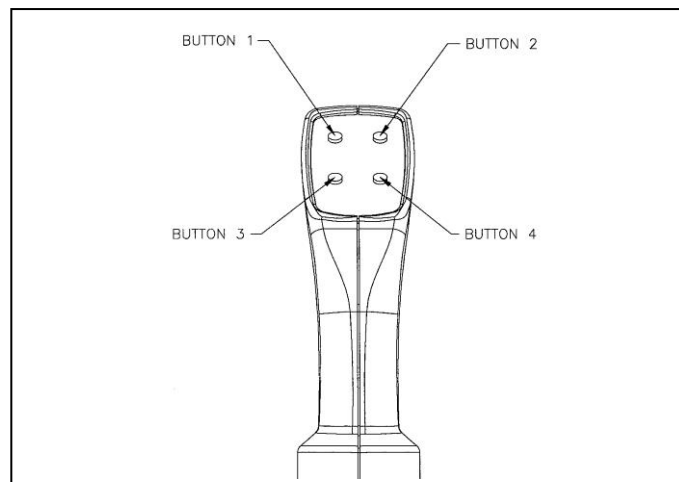
Button 1 **moves** grinder arm UP.

Button 2 **moves** grinder arm DOWN.

Button 3 **swings** grinder arm LEFT.

Button 4 **swings** grinder arm RIGHT.

NOTE: For steering lever functions, refer to your loader's operator's manual.



OPERATING INSTRUCTIONS



Operation

1. With the operator in the seat of the loader, the seat belt fastened and the seat bar lowered (if so equipped), start the engine.
2. Rest the attachment on the skid shoes.

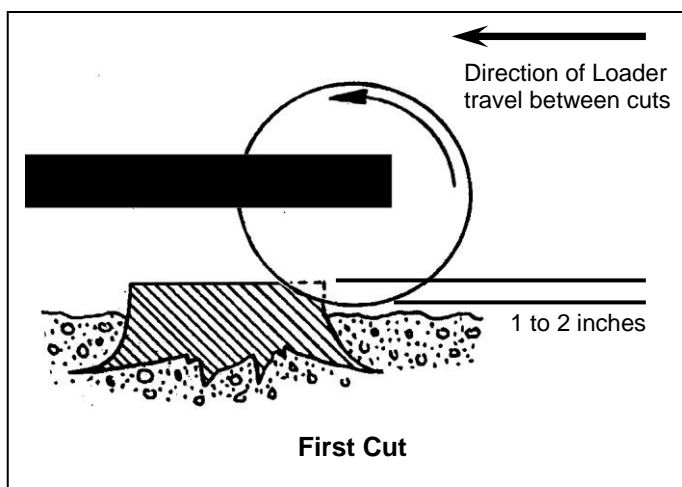
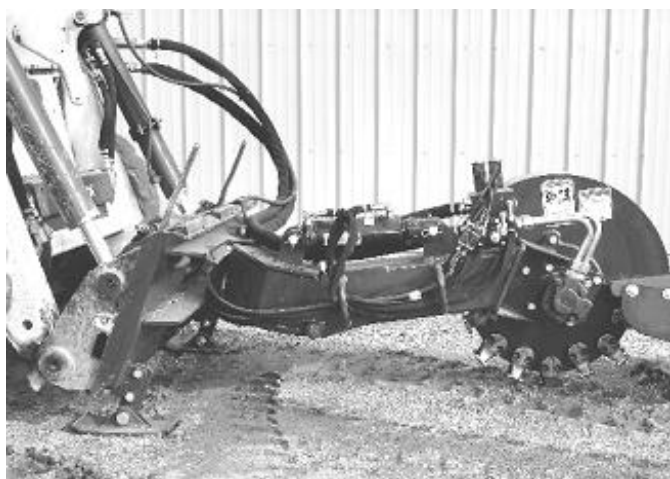
⚠ WARNING To avoid injury or death, the attachment must be resting on the skid shoes during operation.

3. For proper operation of the attachment, try to approach the stump from a position that will allow the loader to sit as level as possible. The skid shoes provide stability.
4. Swing the attachment all the way to the right side.
5. Position the loader so the attachment is on the far right side of the stump. Use the loader's tilt function to lift the attachment slightly above and to the right from the far side of the stump.
6. Fully lower the loader's boom arms so that the attachment is resting flat on both skid shoes.
7. Engage the hydraulics on the loader, increase the throttle to maximum speed, and using the controls, lower the cutting wheel into the stump.

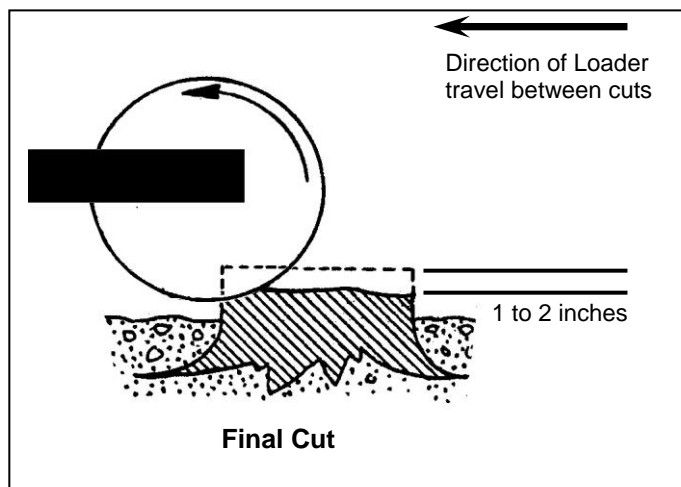
NOTE: Rate of cut will be determined by the condition of the teeth, type of tree, and condition the stump is in.

NOTE: Only cut approximately 1 to 2 inches of stump depth at a time.

IMPORTANT: Do not move backward into the stump while the grinder arm is in motion. Doing so may result in vibration and/or damage to the motor.



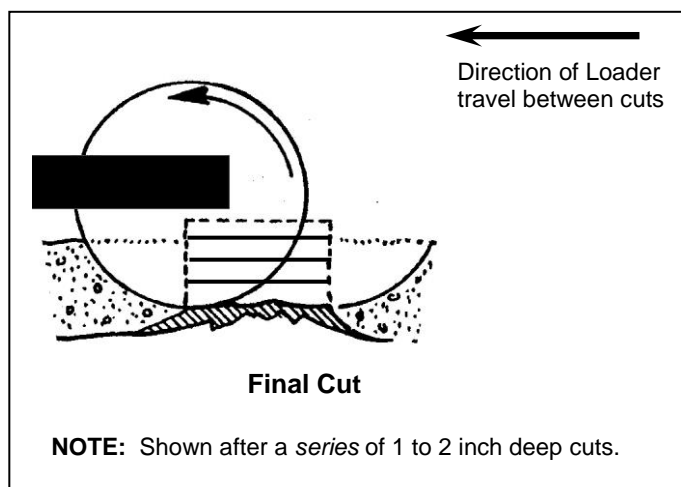
OPERATING INSTRUCTIONS



8. Once the attachment has started cutting, engage the control to start the grinder arm swinging.

NOTE: The arm senses the difficulty of the cut and will automatically adjust the travel speed.

9. When the attachment has completed a pass, move the loader rearward about 1-1/2" and engage the control to cut back across in the opposite direction.



10. Continue until a completed layer of the stump has been ground off and then repeat the procedure starting again at the front of the stump.

11. The next cuts will be performed to take the stump below ground level, if wanted.

⚠ WARNING To avoid injury or death, watch out for flying rocks and/or debris when cutting below ground level.



12. Follow the same procedures as cutting above ground level, with the exception of inspecting the area thoroughly for large rocks/debris that may damage the attachment.

ROUTINE MAINTENANCE

⚠ WARNING Lower the attachment to rest on the skid shoes, shut down the engine, relieve the hydraulic pressure to the attachment, wait for all motion to stop, and set park brake before leaving the operator's seat to perform service of any kind.

It is the operator's responsibility to make daily inspections of the loader and attachment for damage, loose bolts, fluid leaks, or anything else that could cause a potential service or safety problem. Preventive maintenance is the easiest and least expensive type of maintenance.

IMPORTANT: Bolts and set screws can loosen after initial usage. After the first hour of operation check all bolts and set screws.

LUBRICATION

Lubrication Legend



Multipurpose spray lube



No. 2 Lithium base gun grease

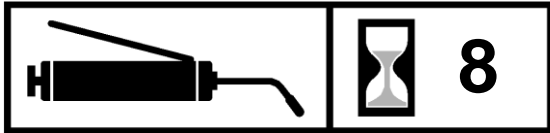


Multipurpose oil lube



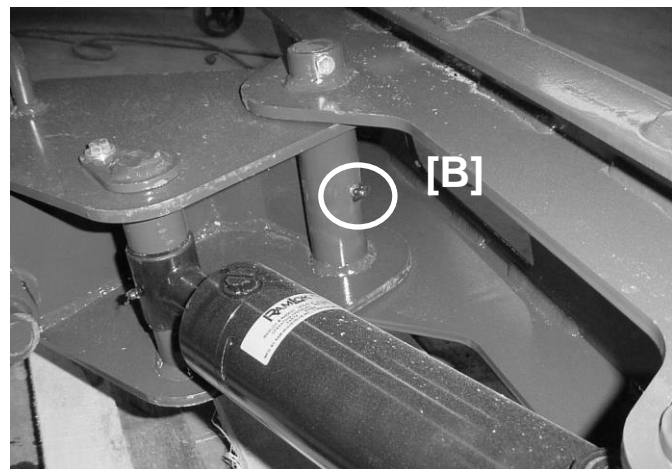
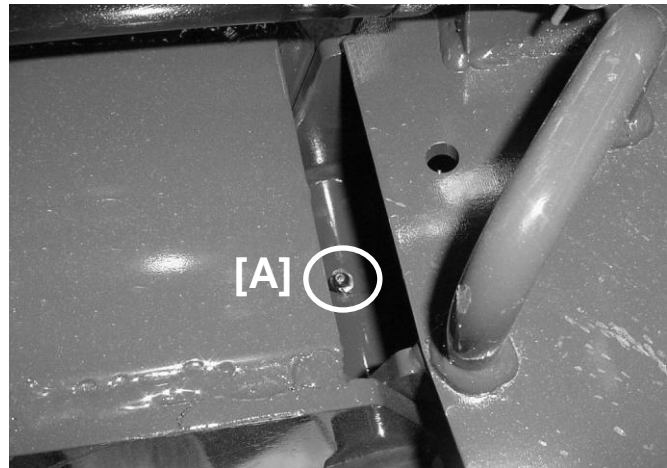
Intervals at which lubrication is required

Use No. 2 lithium base gun grease when lubricating all the attachment grease fittings.

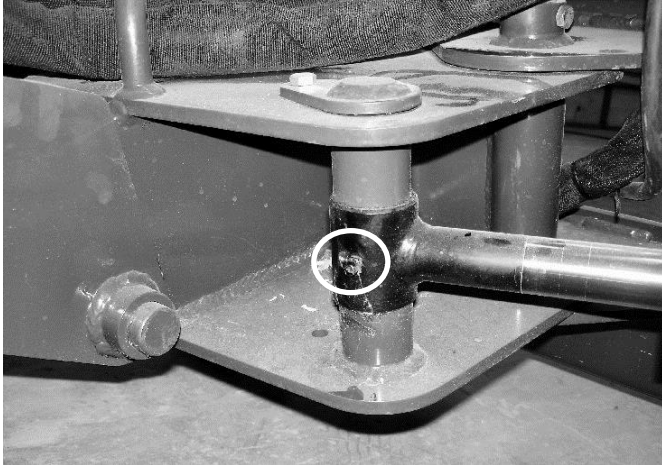


Grease the attachment Arm Pivot Bushing zerk [A] and the Swing Arm Pivot Bushing [B].

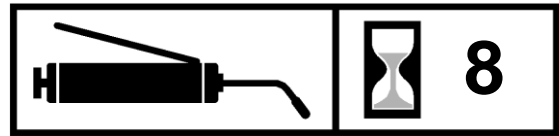
Grease all bushings once after every **8 hours** of operation.



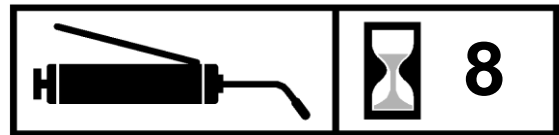
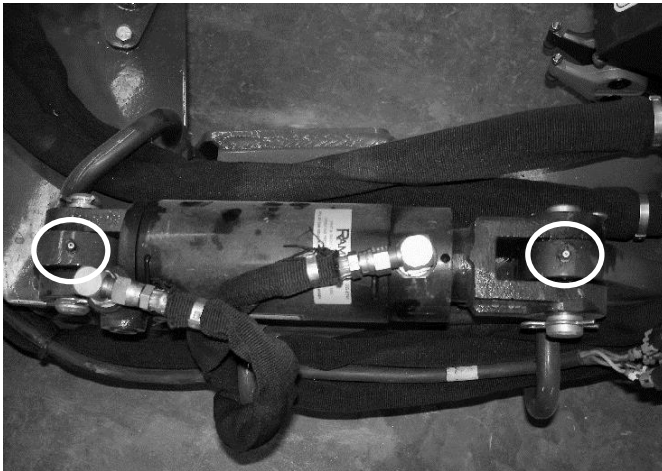
ROUTINE MAINTENANCE



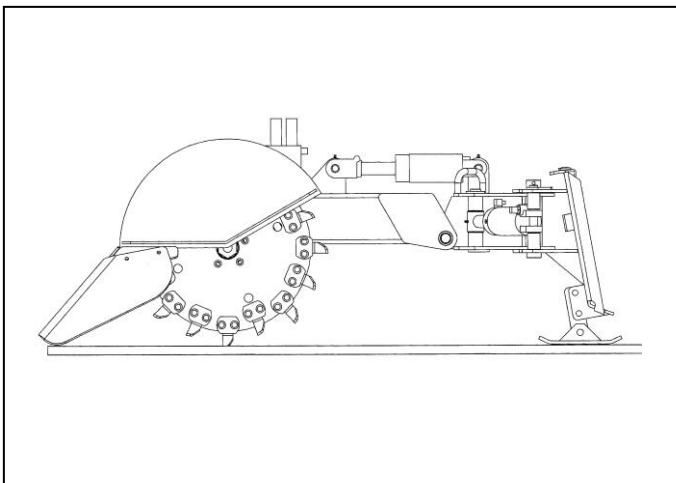
Lubrication (continued)



Grease the swing cylinder bushing after every **8 hours** of operation.



Grease the lift cylinder pins after every **8 hours** of operation.



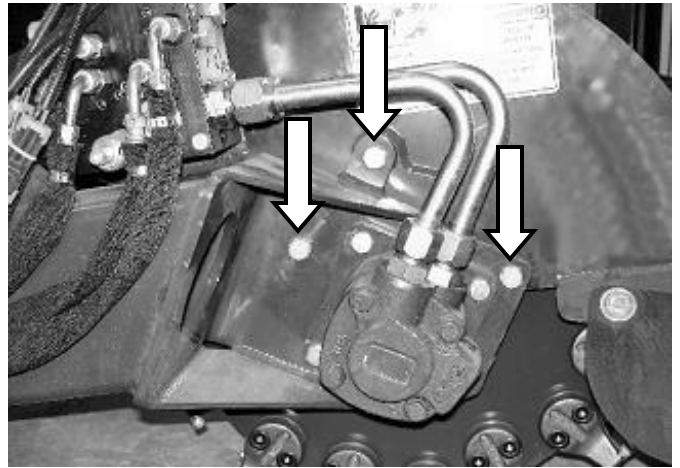
Teeth Removal and Replacement

1. With the attachment on a flat level surface, lift up the swing arm (using a jack or a hoist) and brace with jack stands or blocks in a lifted position. Make sure the (2) skid shoes stay flat on the ground.

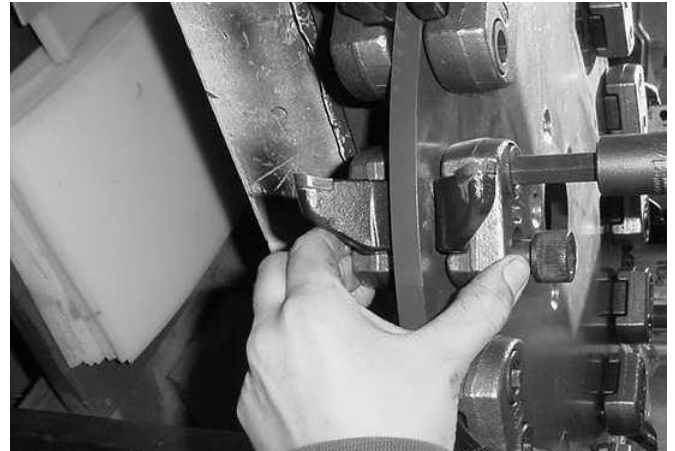
ROUTINE MAINTENANCE

Teeth Removal and Replacement (continued)

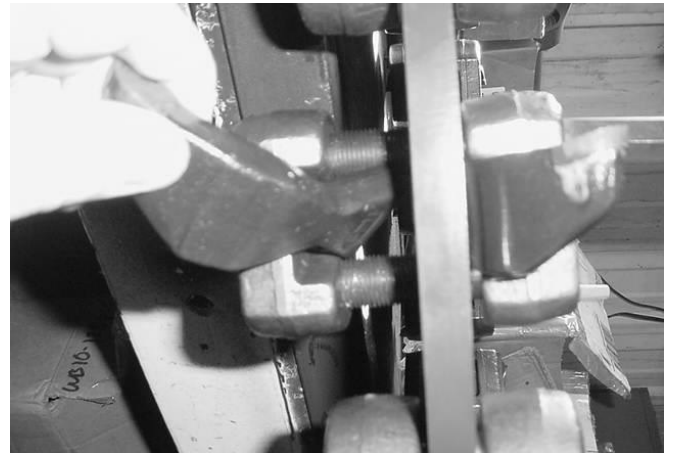
2. Remove the (3) bolts holding on the shield.



3. Loosen the (2) bolts that hold each tooth holder in place, until the tooth can be removed. Remove the tooth.



4. Use reverse order to put in new teeth. The straight teeth are used in 90-degree positions from each other, using one straight and left or right. Stagger the teeth as shown in the drawing.



NOTE: Torque the holder bolts to 200 ft/lbs.

BOLT TORQUE INFORMATION

Torque-Tension Relationships for SAE J429 Grade Bolts

Nominal Thread Size	SAE J429 Grade 2			SAE J429 Grade 5			SAE J429 Grade 8		
	Clamp Load (lbs)	Tightening Torque		Clamp Load (lbs)	Tightening Torque		Clamp Load (lbs)	Tightening Torque	
		K = .15	K = .20		K = .15	K = .20		K = .15	K = .20
Unified Coarse Thread Series									
1/4-20	1,300	49 in-lbs	65 in-lbs	2,000	75 in-lbs	100 in-lbs	2,850	107 in-lbs	143 in-lbs
5/16-18	2,150	101	134	3,350	157	210	4700	220	305
3/8-16	3,200	15 ft-lbs	20 ft-lbs	4,950	23 ft-lbs	31 ft-lbs	6,950	32.5 ft-lbs	44 ft-lbs
7/16-14	4,400	24	30	6,800	37	50	9,600	53	70
1/2-13	5,850	36.5	49	9,050	57	75	12,800	80	107
9/16-12	7,500	53	70	11,600	82	109	16,400	115	154
5/8-11	9,300	73	97	14,500	113	151	20,300	159	211
3/4-10	13,800	129	173	21,300	200	266	30,100	282	376
7/8-9	11,425	125	166	29,435	321	430	41,550	454	606
1-8	15,000	187.5	250	38,600	482.5	640	54,540	680	900
Unified Fine Thread Series									
1/4-28	1,500	55 in-lbs	75 in-lbs	2,300	85 in-lbs	115 in-lbs	3,250	120 in-lbs	163 in-lbs
5/16-24	2,400	112	150	3,700	173	230	5,200	245	325
3/8-24	3,600	17 ft-lbs	22.5 ft-lbs	5,600	26 ft-lbs	35 ft-lbs	7,900	37 ft-lbs	50 ft-lbs
7/16-20	4,900	27	36	7,550	42	55	10,700	59	78
1/2-20	6,600	41	55	10,200	64	85	14,400	90	120
9/16-18	8,400	59	79	13,000	92	122	18,300	129	172
5/8-18	10,600	83	110	16,300	128	170	23,000	180	240
3/4-16	15,400	144	193	23,800	223	298	33,600	315	420
7/8-14	12,610	138	184	32,480	355	473	45,855	500	668
1-12	16,410	205	273	42,270	528	704	59,670	745	995

Clamp load estimated as 75% of proof load for specified bolts.

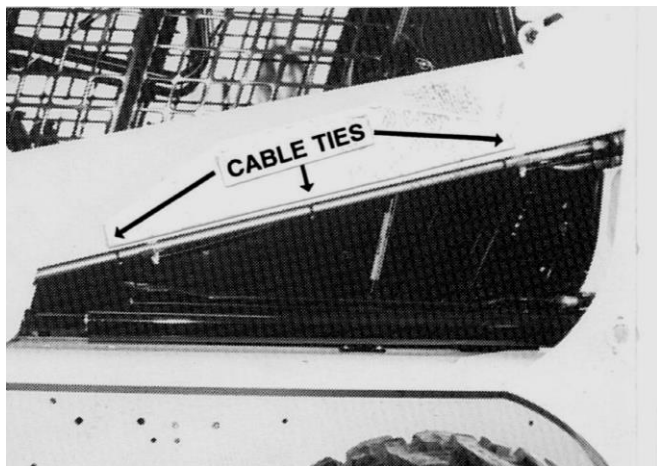
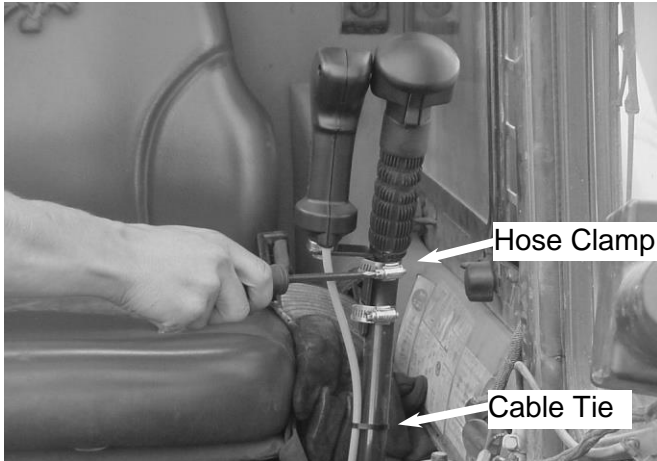
Torque values for 1/4 and 5/16 inch series are in inch-pounds. All other torque values are in foot-pounds.

Torque values calculated from formula $T = KDF$

where: $K=0.15$ for "lubricated" conditions

$K=0.20$ for "dry" conditions

SET UP ASSEMBLY



Wire Harness Installation

NOTE: If the loader is equipped with an Attachment Control package, the appropriate harness should be installed from the factory.

If the attachment was ordered with the pistol grip control harness, follow these instructions:

1. Install the control handle on either steering lever, whichever you prefer, with (2) hose clamps.

IMPORTANT: The control handle bracket can be positioned several different ways. We recommend it be positioned as shown.

2. Put a cable tie around the wiring harness and the steering lever.
3. Install the wiring harness receptacle bracket on either the loader arm or near the hydraulic quick couplers.

IMPORTANT: It may be necessary to make an adapter bracket in order to attach the wire harness to the loader.

4. Route the wiring harness back along the tube lines on the loader arms and fasten with cable ties.
5. Open the rear door. Pull the excess wiring harness into the engine compartment.
6. Raise the operator cab. (See loader's operator's manual for the correct procedure.)

SET UP ASSEMBLY

Wire Harness Installation (continued)

7. Connect the red fused wire to the positive battery terminal or to a suitable accessory wire with a minimum rating of 5 amps. Route the wiring along the loader main frame toward the front of the loader.

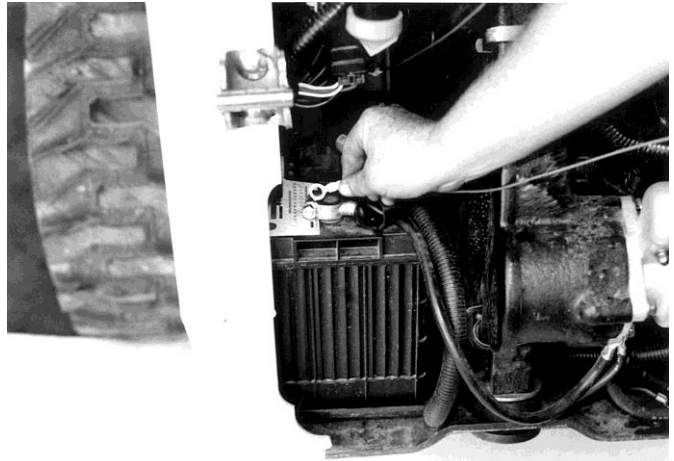
Connect the black wire from the harness to a frame ground.

8. Fasten the control handle wiring harness connector to the main wiring harness connector.

IMPORTANT: Secure the wiring harness in place with plastic cable ties, making sure it is clear of extra hot areas or any moving parts on the engine or loader. Pinched, stretched, or melted wire harnesses are not covered under warranty.

9. Lower the cab. (See loader's operator's manual for the correct procedure.)

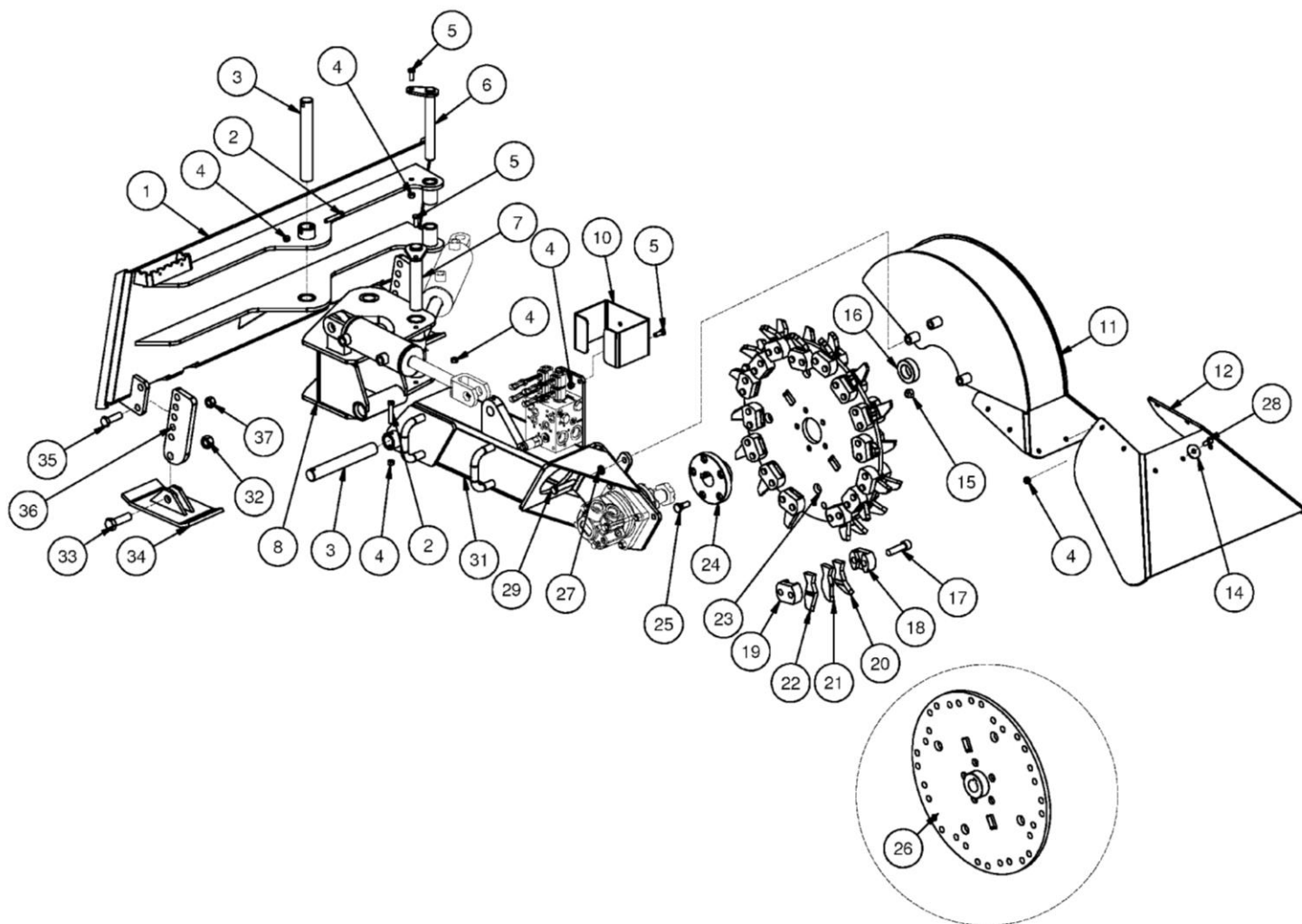
NOTE: Be sure the control handle wiring harness is properly positioned as the cab is lowered.



PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	1	311600	MOUNT FRAME STUMP GRINDER W/A	
	1	422184	MOUNT FRAME STUMP GRINDER MULTIHOG W/A	
2	2	13112	BOLT 3/8 X 2 1/4 NC GR 5	BOLT 3/8 X 2 1/4 NC GR 5
3	2	311648	PIN 1.25 X 9.25 W/HOLE	
4	13	37212	NUT REV LOCK 3/8 NC	NUT REV LOCK 3/8 NC
5	4	103116	BOLT 3/8 X 1 NC GR 5	BOLT 3/8 X 1 NC GR 5
6	1	310198	PIN 1.00 X 7.625 W/A	
7	1	311605	PIN 1.25 X 6.75 W/A	
8	1	311601	SWING FRAME STUMP GRINDER W/A	
10	1	311681	BRACKET GUARD PAINTED	
11	1	311603	SHIELD STUMP GRINDER W/A	
12	1	311657	SHIELD RUBBER SG	
14	7	33220	WASHER FENDER	3/8 X 1 1/2
15	5	103925	NUT LUG 1/2 NF	USED WITH BOLT ON HUB
16	1	311676	BUSHING 2.50 x 1.50 x .75 Z	OBSOLETE (HUB VERSION 1)
17	32	311630	BOLT SOCKET HEAD CAP SCREW	5/8 X 2-1/4 NF
18	16	311629	TOOTH HOLDER SG BLANK	
19	16	311677	TOOTH HOLDER SG THREADED	
20	14	311627	TOOTH SG LEFT	
21	4	311628	TOOTH SG STRAIGHT	
22	14	311626	TOOTH SG RIGHT	
	1	311661	PKG TEETH STUMP GRINDER	INCLUDES HWD/HOLDERS
	1	311678	PKG TEETH ONLY STUMP GRINDER	
23	1	311679	ASSY WHEEL W/TEETH PAINTED	
	1	311610	PLATE WHEEL GRINDER	INCLUDED IN WHEEL ASSY
24	1	311614	HUB MOTOR 1-5/8 TAPER 5-BOLT	
25	5	103970	BOLT STUD 1/2 X 1 3/4 NF	USED WITH BOLT ON HUB
26	1	311606	DISK GRINDER W/A	OBSOLETE (WELD IN HUB)
27	3	33626	WASHER LOCK	1/2"
28	7	13107	BOLT HEX	3/8 X 1 1/4 NC GR 5
29	3	13207	BOLT HEX	1/2 X 1-1/4 NC GR 5
	3	13214	BOLT HEX 1/2 X 2-3/4 NC GR 5	USE WITH OLD STYLE ONLY
31	1	311602	ARM STUMP GRINDER W/A	
32	2	37217	NUT REV LOCK	3/4 NC
33	2	13363	BOLT HEX	3/4 X 2 1/2 NC GR 5
34	2	100472	SKID SHOE 840/780/720 (PARTS)	
35	4	13311	BOLT HEX	5/8 X 2 NC GR 5
36	2	311654	BRKT SKID SHOE PAINTED	(311653 UNPAINTED)
37	4	37216	NUT REV LOCK	5/8 NC

PARTS INFORMATION

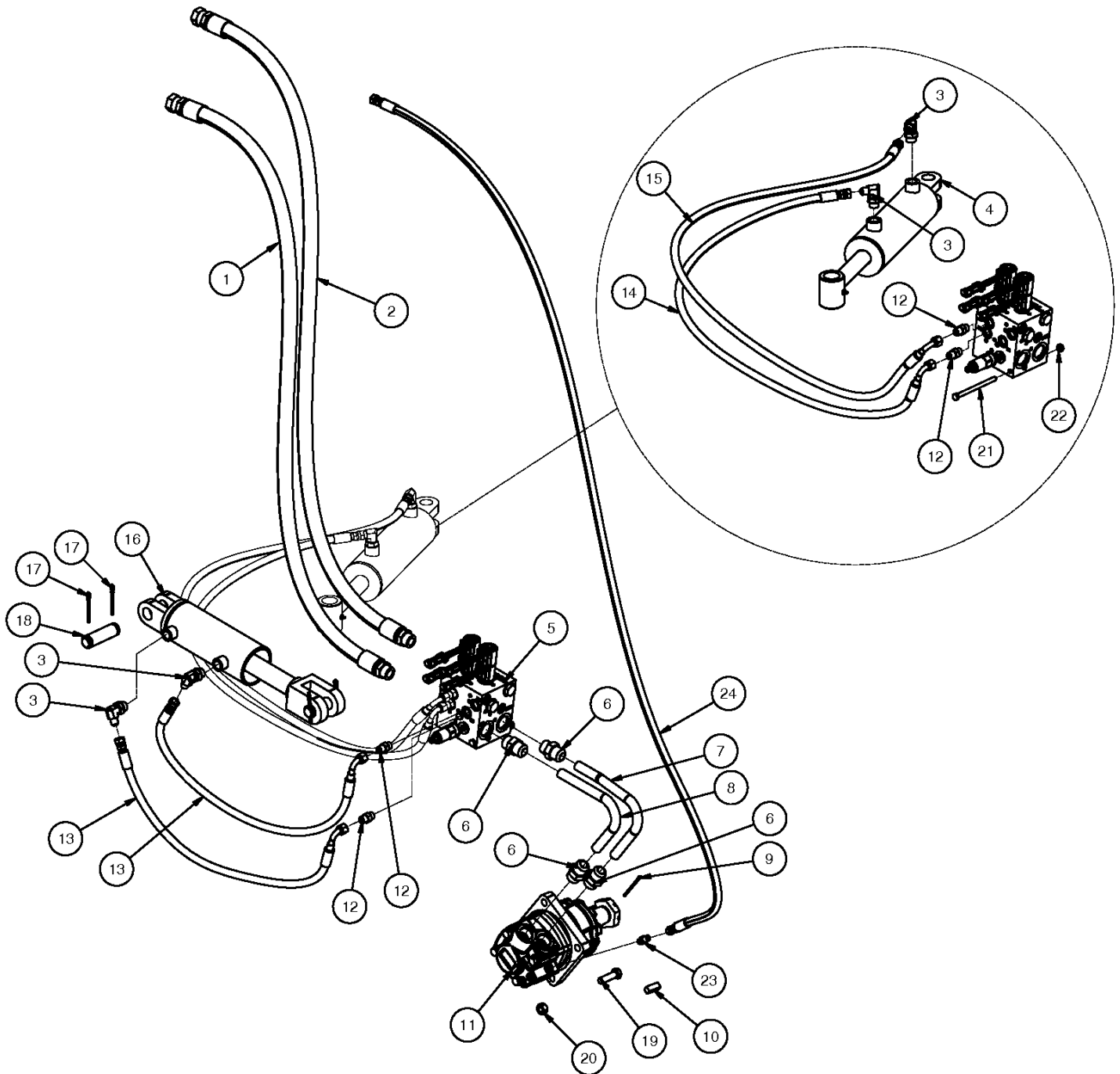


Old style wheel with welded in hub

STUMP GRINDER PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	1	311669	HOSE 3/4 X 82 12FJX-12MB 2250	LEAD
2	1	311668	HOSE 3/4 X 82 12FJX-12MB	RETURN
3	4	320089	ADPT ELB 8MB-6MJ-90	
4	1	317063	CYLINDER 3 X 6 16.25 C-B	
5	1	311659	VALVE ASSM	
6	4	103431	ADPT STR 12MB-12MJ	
7	1	311665	TUBELINE RETURN SG	
8	1	311664	TUBELINE PRESSURE SG	
9	1	65082	PIN COTTER 1/8 X 2 1/2	
10	1	300418	KEY SQ 7/16 X 1 1/4	
11	1	311674	MOTOR HYD 6.7 CID (110-1214)	STD FLOW
	1	311675	MOTOR HYD 7.9 CID (110-1227)	HI FLOW ONLY
12	4	311673	ADPT STR 6MB-6MJ	
13	2	311670	HOSE 1/4 X 37 6FJX-6FJX90	LIFT CYLINDER
14	1	311671	HOSE 1/4 X 53 6FJX-6FJX90	SWING CYL ROD
15	1	311672	HOSE 1/4 X 60 6FJX-6FJX90	SWING CYL BASE
16	1	317037	CYLINDER 3 X 4 C-C	
17	4	65107	PIN COTTER 5/32 X 2	
18	2	320127	PIN CYLINDER	
19	4	13210	BOLT HEX	1/2 X 1 3/4 NC GR 5
20	4	37214	NUT LOCK	1/2 NC
21	2	13073	BOLT HEX	5/16 X 5 NC GR 5
22	2	37211	NUT REV LOCK	5/16 NC
23	1	330918	ADPT STR 4MB-6MJ (CASE DRAIN)	REPLACED 203212
23	1	203212	ADPT STR 4MB-4MJ (CASE DRAIN)	REPLACED BY 330918
24	1	330896	HOSE 1/2 X 108 6FJX-8FJX	CASE DRAIN
	1	311688	HOSE 1/4 X 108 4FJX-6FJX	REPLACED BY 330896

PARTS INFORMATION

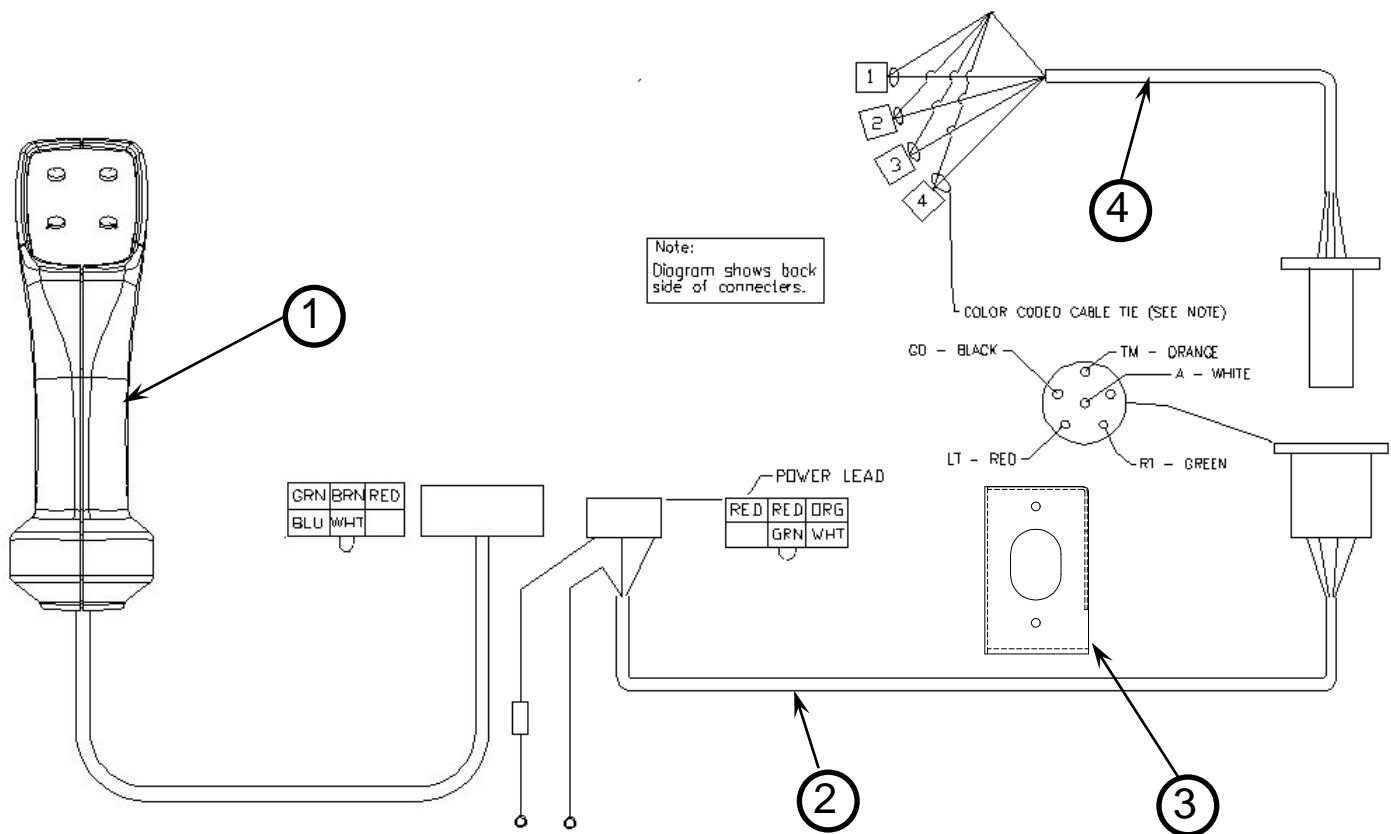


PARTS INFORMATION

	1	315128	PKG HRN - FUNC CONTROL	
1	1	315110	PISTOL GRIP ASSM ALL	
2	1	315126	HRN LOADER GENERIC	
3	1	300247	BRKT WR HRN GEN MINI PNT	
4	1	315127	HRN BLOWER GENERIC	

OPTIONAL WIRE HARNESSES (NOT SHOWN)

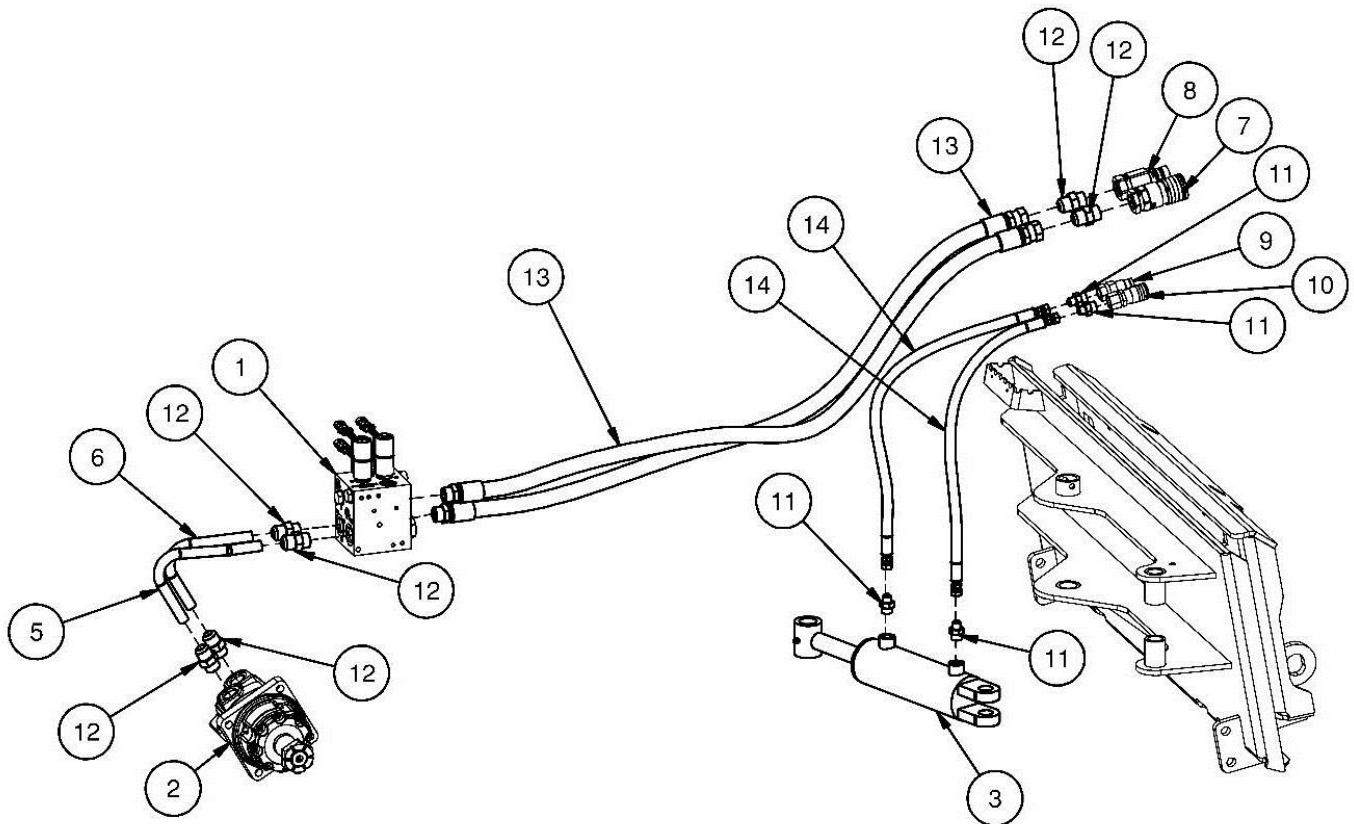
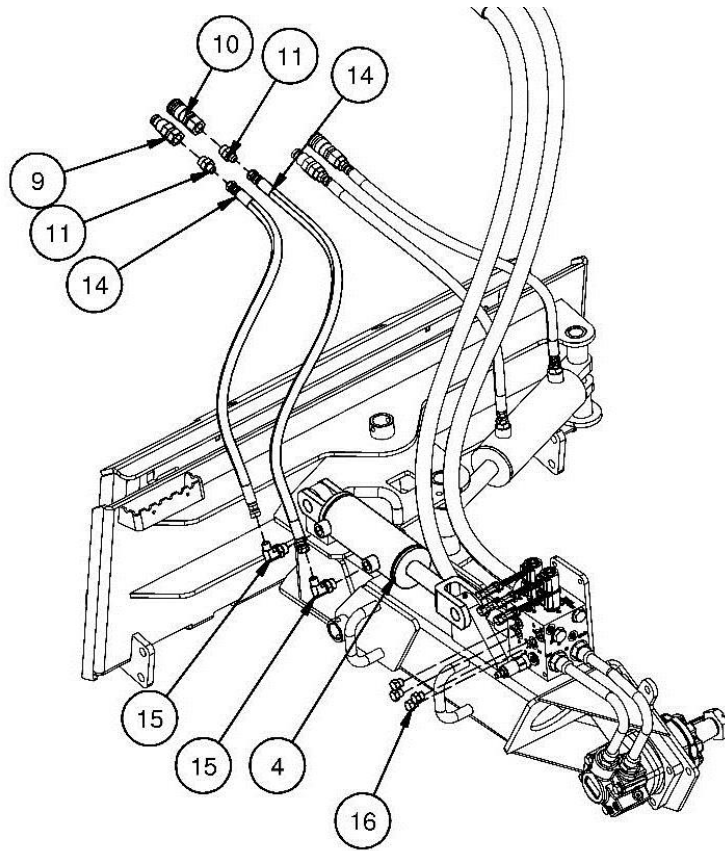
315090	HRN 14 PIN COMMON	Bobcat® Loaders
315152	HRN 14 PIN CASE/NH	Case® & New Holland® Loaders
320084	PKG HRN 14-PIN	JOHN DEER LOADERS
200008	HRN 8 PIN CAT A	Caterpillar® A series Loaders
315153	HRN 8 PIN ASV	ASV® Loaders
315339	HRN 8 PIN CAT B/C	Caterpillar® B series High-Flow Loaders



PARTS INFORMATION

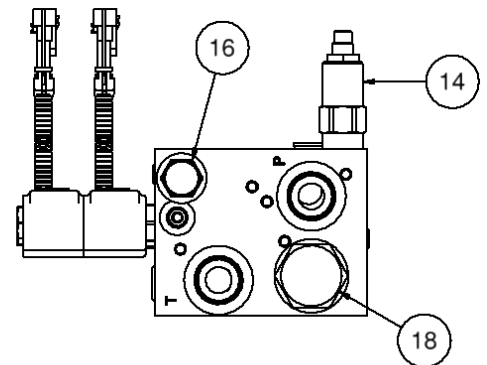
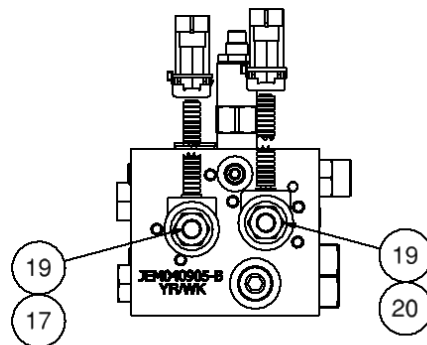
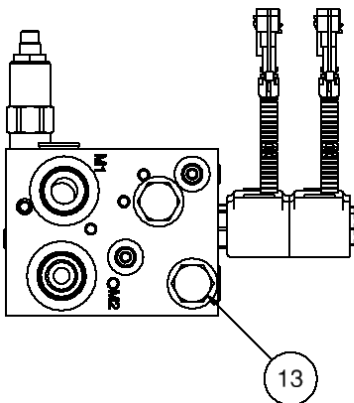
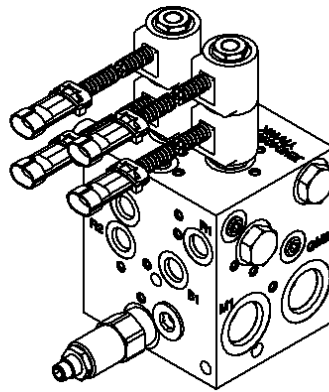
ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	1	311659	VALVE ASSM STUMP GRINDER	
2	1	311674	MOTOR 6.7 4K WHEEL 1.62 TAPER	
3	1	317063	CYLINDER 3 X 6 16.25 C-B	
4	1	317037	CYLINDER 3 X 4 C-C	
5	1	311665	TUBELINE RETURN SG	
6	1	311664	TUBELINE PRESSURE SG	
7	1	320222	COUPLER HYD 3/4-12OR FM FF	
8	1	320223	COUPLER HYD 3/4-12OR M FF	
9	2	201934	COUPLER HYD 3/8-8OR M FF	
10	2	201933	COUPLER HYD 3/8-8OR FM FF	
11	4	201925	ADPT STR 8MB-6MJ	
12	2	103431	ADPT STR 12MB-12MJ	
13	2	311668	HOSE 3/4 X 82 12FJX-12MB	LEAD
14	4	422189	HOSE 3/8 X 60 6FJX-6FJX	CYLINDERS
15	2	320089	ADPT ELB 8MB-6MJ-90	
16	4	320102	ADPT PLUG 6MB	

PARTS INFORMATION



PARTS INFORMATION

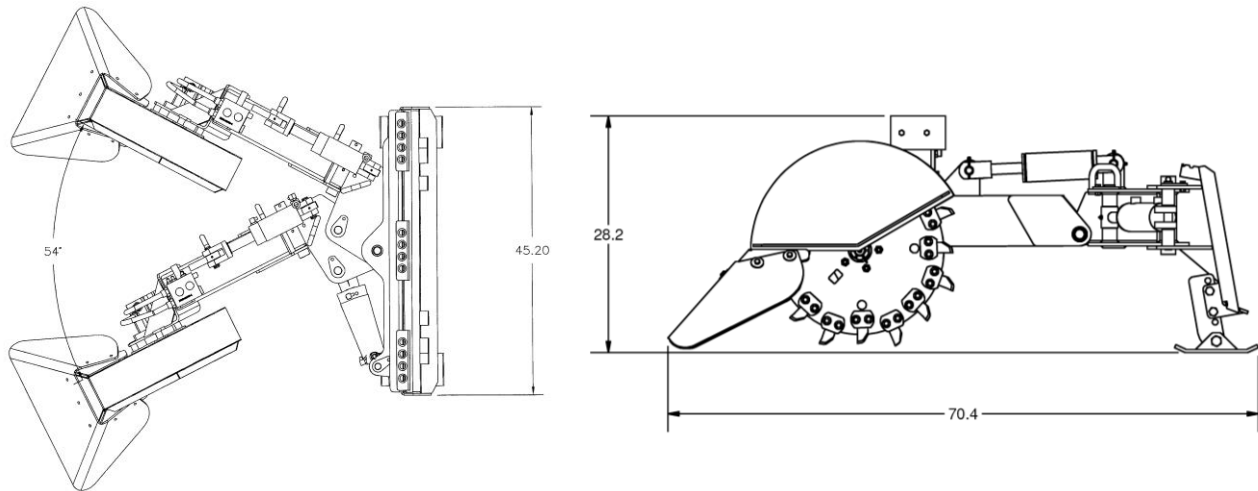
ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
	1	311659	VALVE ASSM STUMP GRINDER	
13	1	311682	VALVE CHECK	
14	1	311683	VALVE RELIEF ADJ	
16	1	311685	LOGIC ELEMENT SG	
17	1	320604	VALVE DIRECTIONAL "D"	
18	1	311684	LOGIC ELEMENT SG	
19	4	300796	COIL VALVE 12V ECOIL #8	REPLACED D-COILS
	4	320096	COIL VALVE DIR 12V DC - METPAC	REPLACED BY E-COILS
20	1	320475	VALVE DIRECTIONAL "C"	



GENERAL SPECIFICATIONS

Model

Drive System	Direct Drive Hydraulic
Hydraulic Requirements	15 to 30 GPM, 31 to 42 GPM for high flow version
Maximum Cutting Diameter	45"
Maximum Cutting Depth	10" below ground
Cutting Arc	55°
Cutting Wheel Diameter	Approx. 24"
Cutting Wheel Speed	500 to 1100 RPM
Operating Weight	540#



All dimensions are in INCHES.



LIMITED WARRANTY

Erskine Attachments, LLC warrants each new machine manufactured by us to be free from defects in material and workmanship for a period of twenty-four (24) months from date of delivery to the original purchaser.

Our obligation under this warranty is to replace free of charge, at our factory or authorized dealership, any part proven defective within the stated warranty time limit.

All parts must be returned freight prepaid and adequately packaged to prevent damage in transit.

This warranty does not cover:

1. New products which have been operated in excess of rated capacities or negligence
2. Misuse, abuse, accidents or damage due to improperly routed hoses
3. Machines which have been altered, modified or repaired in any manner not authorized by our company
4. Previously owned equipment
5. Any ground engaging tools in which natural wear is involved, i.e. tooth tips, cutting teeth, etc
6. Normal maintenance
7. Fork tines
8. Hydraulic motors that have been disassembled in any manner

In no event will the Sales Representative, Dealership, Erskine Attachments, LLC, or any other company affiliated with it or them be liable for incidental or consequential damages or injuries, including but not limited to the loss of profit, rental or substitute equipment or other commercial loss. Purchaser's sole and exclusive remedy being as provided here in above.

Erskine Attachments, LLC must receive immediate notification of defect and no allowance will be made for repairs without our consent or approval.

This warranty is in lieu of all other warranties, express or implied by law or otherwise, and there is no warranty of merchantability or fitness purpose.

No agent, employee, or representative of Erskine Attachments, LLC has any authority to bind Erskine Attachments, LLC to any warranty except as specifically set forth herein. Any of these limitations excluded by local law shall be deemed deleted from this warranty; all other terms apply.

This warranty may not be enlarged or modified in any manner except in writing signed by an executive officer of Erskine Attachments, LLC to improve its products whenever it is possible and practical to do so. Erskine Attachments, LLC reserves the right to make changes and or add improvements at any time without incurring any obligation to make such changes or add such improvements to products previously sold.

Erskine Attachments, LLC
P.O. Box 1083 Alexandria, MN 56308
Phone (218) 435-4045



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Erskine Attachments LLC

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