

BRADCO®

SILAGE DEFACER

S-671
11-13-03

76218

IMPORTANT: Read this manual carefully, It contains information about your safety and the safety of others.

BRADCO®

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SAFETY PRECAUTIONS

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOU PERSONAL SAFETY OR OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.

THIS SYMBOL MEANS:



**ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!**

SIGNAL WORDS: Note the use of signal words DANGER, WARNING, and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines:

- DANGER:** Indicates an imminently hazardous situation which, if not avoided, **will** result death or serious injury.
- WARNING:** Indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury, and includes hazards that are exposed when guards are removed.
- CAUTION:** Indicates a potentially hazardous situation which, if not avoided, **may result in minor or moderate injury. It may also be used to alert against unsafe practices.**

A careful operator is the best operator. Most accidents can be avoided by taking certain precautions. Read and understand these safety precautions before operating the skid-steer. Make sure that the equipment is operated only by responsible individuals with the proper instruction. The operator should be familiar with the controls, all safety precautions and all potential hazards.

THE SKID-STEER

1. **READ ALL OPERATOR'S & SAFETY MANUALS BEFORE EVER ATTEMPTING TO USE THE SKID-STEER.**
2. **FOLLOW ALL SAFETY DECALS** on the skid-steer. Keep them clean and replace them if they become worn and hard to read.
3. **PAY ATTENTION TO THE JOB AT HAND.** Do not let your mind lose concentration on what you are doing.
4. **KNOW THE LIMITATIONS OF YOUR EQUIPMENT.** Do not use equipment for anything other than what it was originally designed.
5. **ALWAYS USE THE SEAT BELT IF THE SKID-STEER HAS A ROPS. DO NOT USE IT IF THERE IS NOT ROPS.** Check the seat belt daily and replace if frayed or damaged.

SAFETY PRECAUTIONS

OPERATION (ALL ATTACHMENTS)

1. **SPECIFIED LIFT CAPACITIES MUST NOT BE EXCEEDED. SEE SKID-STEER SPECIFICATIONS**
2. **NEVER USE YOUR ATTACHMENT FOR A WORK PLATFORM OR PERSONNEL CARRIER.**
3. **ALWAYS CHECK LOCKING PINS BEFORE OPERATING ANY ATTACHMENT.**
4. **NEVER LIFT, MOVE OR SWING AN ATTACHMENT OVER ANYONE.**
5. **DON'T OBSTRUCT YOUR VISION WHEN TRAVELING OR WORKING.**
Carry the attachment LOW for maximum stability and visibility.
6. **AVOID STEEP SLOPES OR UNSTABLE SURFACES.** When operating on a slope keep the load low and proceed with extreme caution. Do not drive ACROSS a steep slope, drive straight up and down.
7. **ELECTROCUTION CAN RESULT FROM CONTACTING OR APPROACHING UNDERGROUND OR OVERHEAD POWER CABLES.**
Check overhead clearances: know your margin of safety. If possible, have power to the lines disconnected. If not possible, request a signal person for guidance.
8. **CLEAR THE WORK AREA OF ALL BYSTANDERS BEFORE OPERATION.**

WARNING!



SPECIFIED LIFT CAPACITIES MUST NOT BE EXCEEDED, OTHERWISE MACHINE STABILITY IS NOT SUFFICIENT. DANGER OF ACCIDENTS.
Always observe lift capacity limits listed in machine specifications.

TRANSPORTING THE ATTACHMENT

1. **Follow all federal, state and local regulations when transporting the unit on public roads.**
2. **Be sure all lights and turn signals are in working order.** Use them as required.
3. **Do not drive close to ditches, excavations, etc...cave in could result.**
4. **Carry unit low when transporting to lower its center of gravity.**
5. **Allow for added length of the defacer when transporting so as not to catch unit on obstacles.**
7. **Skid-steer may feel front end heavy with the added weight of the defacer.** Stability and handling may be affected. Use rear weights for added stability.

MAINTENANCE

1. **Never work on equipment while it is running.** Lower unit to the ground,

SAFETY PRECAUTIONS

set brake, shut off engine and remove keys before performing repairs.

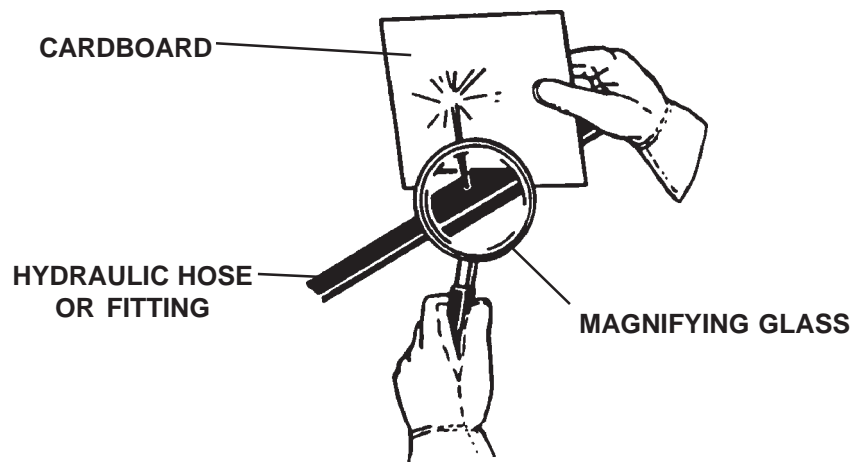
2. **Never make hydraulic repairs while the system is under pressure.**
Injury or death could result.
3. **Observe proper maintenance schedules and repairs to keep the unit in safe working order.**
4. **Always wear safety goggles or glasses when working on equipment.**
5. **Use only manufacturer recommended replacement parts.** Other parts may be substandard in fit and quality.

WARNING! Escaping fluid under pressure can have sufficient force to penetrate the skin causing serious personal injury. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands to search for suspected leaks.



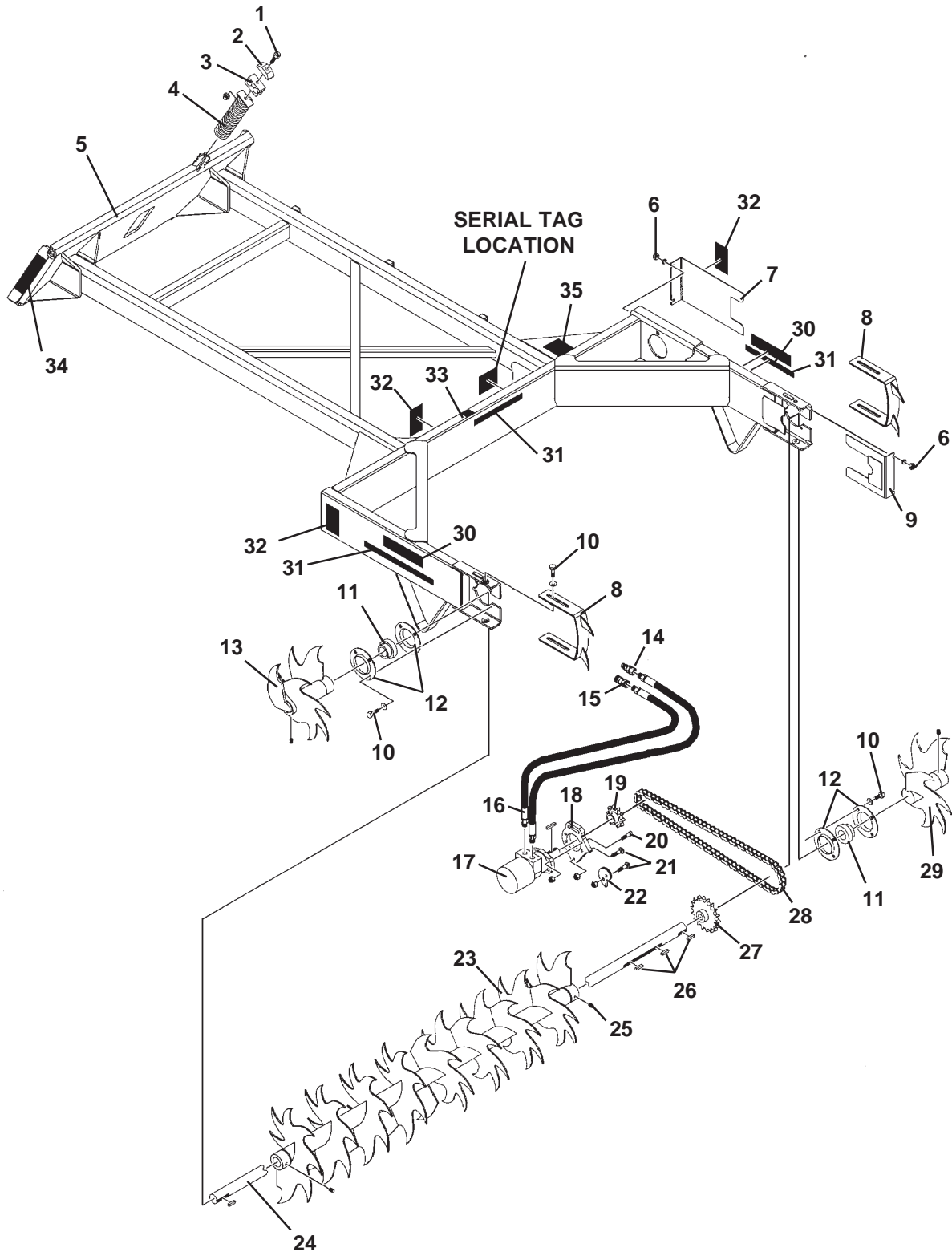
Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities.

If injured by injected fluid, see a doctor at once. If your doctor is not familiar with this type of injury, ask him to research it immediately to determine proper treatment.



SILAGE DEFACER ASSEMBLY

FIXED SILAGE DEFACER ASSEMBLY #16980



SILAGE DEFACER ASSEMBLY

FIXED SILAGE DEFACER ASSEMBLY #16980

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	1096	.50" UNC X 3.00" Hex Capscrew
	1	1790	.50" UNC Serrated Flange Lock Nut
2	2	22315	Hose Clamp Plate
3	1	22316	Hose Clamp Cushion
4	1	22288	Hose Holder Spring
5	1	16979	Defacer Frame
6	4	1837	.38" UNC Deformed Lock Nut
	4	1514	.38" Flat Washer
7	1	32849	Top Chain Cover
8	2	33427	Shoe
9	1	15751	Chain Cover
10	12	1088	.50" UNC X 1.00" Hex Capscrew
	12	1646	.50" Hard Flat Washer
11	2	89127	Ball Bearing With Collar
	-	1624	Replacement Set Screw
12	2	89129	Flangette Set
	-	6616	Replacement Grease Fitting
13	1	15457	Right Cutter
14	1	24001	Male Coupler
15	1	24002	Female Coupler
16	2	38029	Hose .62" X 152" 10MBo-10MBo-HS
17	1	16772	Hydraulic Motor
18	1	32847	Motor Mounting Plate
19	1	33249	10 Tooth Sprocket
20	4	22336	.50" X 1.50" Socket Head Capscrew-GR 8
	4	1228	.50" UNC Hex Nut
21	3	1872	.50" UNC X 1.50" Carriage Bolt
	3	1790	.50" UNC Serrated Flange Lock Nut
22	1	32848	Cam Lock
23	1	15459	Center Cutter
24	1	15463	Center Shaft
25	12	1572	Set Screw
26	4	32903	Key
27	1	32905	18 Tooth Sprocket
28	1	32906	Drive Chain, No. 80, 73 Pitches
	-	53298	Replacement Link, Master, No. 80
29	1	15458	Left Cutter
30	2	40092	BRADCO Logo Decal
31	3	4105	Danger Stand Clear Decal
32	3	4235	Danger Decal, Moving Paddles
33	1	4338	Made In USA Decal
34	2	40179	BRADCO Logo Decal - Vertical
35	1	40151	Warning ! High Pressure Fluid Decal

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PART #40092
BRADCO LOGO

PART #40179
BRADCO LOGO - VERTICAL

DANGER STAND CLEAR

PART #4105
DANGER STAND CLEAR



PART #40151
WARNING! HIGH PRESSURE FLUID



PART #4338
MADE IN U.S.A.



PART #4235
DANGER! MOVING PADDLES

INSTALLATION & OPERATION

GENERAL INFORMATION

The following instructions will help you to mount your silage defacer onto your skid-steer loader. The defacer uses the skid-steer's quick-attach system for ease of installation.

Remember to read all safety warnings, decals and operating instructions before operating the skid-steer or attachment.

MOUNTING INSTRUCTIONS

1. Remove the steel banding from around the silage defacer and the skid.
2. Remove any attachments from the front of the skid-steer loader.
3. Set the quick-attach locks on the skid-steer toolbar to the unlocked position. Lower the loader arms and tilt the toolbar down low enough to pass under the top lip of the mounting frame on the silage defacer.
4. Following all standard safety practices, start the skid-steer and slowly drive it in back of the silage defacer. Position the skid-steer so that the top of the toolbar is in under the lip of the hitch on the mounting frame.
5. Tilt the toolbar back to hook the defacer onto the toolbar.
6. Set the quick-attach locks to the locked position to secure the attachment onto the skid-steer. It may be necessary to raise, lower or tilt the toolbar to properly align so the locking mechanism can be activated.
7. With the auxiliary hydraulic system turned off, route the hydraulic hoses through the hose clamp(s) on the attachment frame and then up through the hose clamp mounted on the spring. Connect the couplers on the attachment to their proper auxiliary couplers on the skid-steer.

DETACHING EQUIPMENT

1. Position the quick-attach locks in the unlocked position.
2. Gently set the attachment on firm, level ground in an area that is protected from personnel inadvertently contacting the auger teeth.
3. Tilt the toolbar forward and slowly back the skid-steer until the toolbar is disengaged from the quick-attach mounting frame.
4. Following all standard safety practices, shut off the skid-steer, relieve any pressure in the auxiliary hydraulic system and disconnect the hydraulic couplers from the auxiliary hydraulics. Connect the couplers together to prevent contaminants from entering the system.
5. It is recommended that the defacer be inspected for loose bolts, nuts and hydraulic connections before and after each use.

CLEAR THE WORK AREA OF ALL BYSTANDERS BEFORE OPERATING!

OPERATING TIPS

1. The BRADCO silage defacer was designed to be operated using a downward motion. Using an upward cutting motion will affect skid-steer stability and handling resulting in a rough face and continuous machine stalling.
2. To prevent attachment and property damage avoid direct contact of auger teeth with the bunker walls and floor.
2. Due to silage piling up on the ground, to obtain a clean cut of the entire bunker face you may wish to first cut the bottom 4 feet and then reposition the defacer at the top and finish the downward cut.
3. A 2" depth of cut is recommended to avoid stalling and obtain a clean face.

MAINTENANCE & SERVICE

GENERAL INFORMATION

Your attachment was designed to be virtually maintenance free. Very little effort is needed to keep it in top condition. It is however, important to follow these procedures to get full performance and longevity out of the attachment.

LUBRICATION

The only lubrication your attachment needs is the greasing of the bearings in the flangette sets. A grease fitting has been installed in both of the flangette sets to facilitate this task.

We recommend greasing all grease fittings after the initial 8 hours of operation and then every 40 hours of operation thereafter.

MONTHLY

Once a month your attachment should be thoroughly inspected for loose nuts, capscrews, bearings etc. Tighten as required and replace where necessary. It is important to keep all blades secure.

Clean equipment of all silage, dirt, oil, grease, etc. This will assist you in making visual inspections and help avoid overlooking worn or damaged components.

Keep all safety decals clean and legible. Replace if damaged or worn.

Inspect all hydraulic hoses for deterioration and replace if necessary.

Adjust and lubricate the drive chain. (See Chain Adjustment) To lubricate the drive chain: Remove the top chain cover and spray a chain lubricant along the top of the upper and lower portion of the drive chain.

WARNING! DO NOT OPERATE THE DEFACER DURING ANY MAINTENANCE OR WHILE THE TOP CHAIN COVER IS REMOVED.



Adjust the shoe weldments on the defacer so material is removed but the shoe is never less than 1/2" shorter than the blades.

CHAIN ADJUSTMENT

We recommend adjusting the chain on the silage defacer after the initial 4 hours and then monthly thereafter. **TO ADJUST THE CHAIN:** Remove the top chain cover and loosen the two bolts on the motor mounting plate and the one bolt on the cam lock. Insert a 1/2" ratchet into the cam lock and rotate until chain is tight. (A properly adjusted chain will have a minimal amount of chain deflection. Over tensioning will cause premature wear.) **NOTE: If all of the cam lock adjustment is used and the chain and sprocket are still serviceable you can remove a "half link" from the chain at the master link location.**



BOLT TORQUE

BOLT TORQUE SPECIFICATIONS

GENERAL TORQUE SPECIFICATION TABLE

Use the following torques when special torques are not given. These values apply to fasteners as received from suppliers, dry, or when lubricated with normal engine oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads. Remember to always use grade five or better when replacing bolts.

SAE Grade No.		2				5				8*				
Bolt head identification marks as per grade. NOTE: Manufacturing Marks Will Vary														
		TORQUE		TORQUE		TORQUE		TORQUE		TORQUE		TORQUE		
Bolt Size	Inches	Millimeters	Pounds Feet		Newton-Meters		Pounds Feet		Newton-Meters		Pounds Feet		Newton-Meters	
			Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1/4		6.35	5	6	6.8	8.13	9	11	12.2	14.9	12	15	16.3	30.3
5/16		7.94	10	12	13.6	16.3	17	20.5	23.1	27.8	24	29	32.5	39.3
3/8		9.53	20	23	27.1	31.2	35	42	47.5	57.0	45	54	61.0	73.2
7/16		11.11	30	25	40.7	47.4	54	64	73.2	86.8	70	84	94.9	113.9
1/2		12.70	45	52	61.0	70.5	80	96	108.5	130.2	110	132	149.2	179.0
9/16		14.29	65	75	88.1	101.6	110	132	149.2	179.0	160	192	217.0	260.4
5/8		15.88	95	105	128.7	142.3	150	180	203.4	244.1	220	264	298.3	358.0
3/4		19.05	150	185	203.3	250.7	270	324	366.1	439.3	380	456	515.3	618.3
7/8		22.23	160	200	216.8	271.0	400	480	542.4	650.9	600	720	813.6	976.3
1		25.40	250	300	338.8	406.5	580	696	786.5	943.8	900	1080	1220.4	1464.5
1-1/8		25.58	-	-	-	-	800	880	1084.8	1193.3	1280	1440	1735.7	1952.6
1-1/4		31.75	-	-	-	-	1120	1240	1518.7	1681.4	1820	2000	2467.9	2712.0
1-3/8		34.93	-	-	-	-	1460	1680	1979.8	2278.1	2380	2720	3227.3	3688.3
1-1/2		38.10	-	-	-	-	1940	2200	2630.6	2983.2	3160	3560	4285.0	4827.4

* Thick Nuts must be used with Grade 8 bolts

METRIC BOLT TORQUE SPECIFICATIONS

Size of Screw	Grade No.	Coarse Thread			Fine Thread		
		Ptich (mm)	Pounds Feet	Newton-Meters	Pitch (mm)	Pounds Feet	Newton-Meters
M6	5.6	1.0	3.6-5.8	4.9-7.9	-	-	-
	8.8		5.8-9.4	7.9-12.7		-	-
	10.9		7.2-10	9.8-13.6		-	-
M8	5.6	1.25	7.2-14	9.8-19	1.0	12-17	16.3-23
	8.8		17-22	23-29.8		19-27	25.7-36.6
	10.9		20-26	27.1-35.2		22-31	29.8-42
M10	5.6	1.5	20-25	27.1-33.9	1.25	20-29	27.1-39.3
	8.8		34-40	46.1-54.2		35-47	47.4-63.7
	10.9		38-46	51.5-62.3		40-52	54.2-70.5
M12	5.6	1.75	28-34	37.9-46.1	1.25	31-41	42-55.6
	8.8		51-59	69.1-79.9		56-68	75.9-92.1
	10.9		57-66	77.2-89.4		62-75	84-101.6
M14	5.6	2.0	49-56	66.4-75.9	1.5	52-64	70.5-86.7
	8.8		81-93	109.8-126		90-106	122-143.6
	10.9		96-109	130.1-147.7		107-124	145-168
M16	5.6	2.0	67-77	90.8-104.3	1.5	69-83	93.5-112.5
	8.8		116-130	157.2-176.2		120-138	162.6-187
	10.9		129-145	174.8-196.5		140-158	189.7-214.1
M18	5.6	2.0	88-100	119.2-136	1.5	100-117	136-158.5
	8.8		150-168	203.3-227.6		177-199	239.8-269.6
	10.9		175-194	237.1-262.9		202-231	273.7-313
M20	5.6	2.5	108-130	146.3-176.2	1.5	132-150	178.9-203.3
	8.8		186-205	252-277.8		206-242	279.1-327.9
	10.9		213-249	288.6-337.4		246-289	333.3-391.6

LIMITED WARRANTY

EFFECTIVE ON PRODUCTS MANUFACTURED AFTER JANUARY 1, 2001

All new BRADCO products are warranted to be free from defects in materials or workmanship which may cause failure under normal usage and service when used for the purpose intended.

In the event of failure within twenty four (24) months from initial retail sale, lease or rental date (excluding cable, ground engaging parts such as sprockets, digging chain, bearings, teeth, tamping and demolition heads, blade cutting edges, pilot bits, auger teeth, auger heads & broom bristles), if after examination, BRADCO determines failure was due to defective material and/or workmanship, parts will be repaired or replaced. BRADCO may request defective part or parts be returned prepaid to them for inspection at their place of business at Delhi, Iowa, or to a location specified by BRADCO.

Any claims under this warranty must be made within fifteen (15) days after the Buyer learns of the facts upon which such claim is based. All claims not made in writing and received by BRADCO within the time period specified above shall be deemed waived.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED AND THERE ARE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL BRADCO BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGE.

BRADCO'S LIABILITY FOR ANY AND ALL LOSSES AND DAMAGES TO BUYER, RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING BRADCO'S NEGLIGENCE, IRRESPECTIVE OF WHETHER SUCH DEFECTS ARE DISCOVERABLE OR LATENT, SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PARTICULAR PRODUCTS WITH RESPECT TO WHICH LOSSES OR DAMAGES ARE CLAIMED, OR, AT THE ELECTION OF BRADCO, THE REPAIR OR REPLACEMENT OF DEFECTIVE OR DAMAGED PRODUCTS.