

PARMA[®]

Standard and Mini
Arena Groomer[®]
Owners Manual and Parts Catalog

Manual Number: 042908rev-AG

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INTRODUCTION

This manual has been prepared to acquaint you with the operation and maintenance of your **PARMA Arena Groomer**, and to urge you to read this manual carefully. The safe and trouble free operation of your machine.



you with the operation and maintenance of provide important safety information. We The recommendations will help assure the

When it comes to service, keep in mind that your dealer knows your Parma Arena Groomer well and is interested in your complete satisfaction. Your dealer invites you to call him for your service needs both during and after the warranty period.

We thank you for choosing a PARMA product and want to assure you of our continuing interest in your satisfaction. You have purchased a very good machine and with proper care it will give you good service.

SAFETY PRECAUTIONS

!!!Always shut off engine before:

- 1. Leaving Tractor Seat**
- 2. Lubricating**
- 3. Cleaning the machine**
- 4. Adjusting the machine**

Always block wheels before working on or under the machine.

Always use adequate lights or safety warnings when transporting machine on public roads and after dark. Check with your local law enforcement agencies for specific requirements.

Limit towing speed to 20 mph.

Never allow others to ride equipment during operation.

Before transporting the machine, install an SMV emblem.

Before working under a hydraulically supported assembly, block it securely or lower it to lowest position.

IMPORTANT!!

FOR YOUR SAFETY, PARMA ARENA GROOMER IS EQUIPPED WITH VARIOUS SAFETY DECALS. IF ANY OF THESE DECALS SHOULD BECOME LOST OR WORN, THEY SHOULD BE REPLACED.

DEALER AND CUSTOMER DELIVERY CHECKLIST

- ___ Give the operator's manual to the customer and ask him to familiarize himself with all sections of it.
- ___ Explain to the customer that when the equipment is transported on a road or highway at night or during the day, accessory lights and devices should be used for adequate warning to operators of other vehicles per local regulations.

DAILY CHECKLIST:

- ___ Remove all debris from s-tines, leveling bar, and roller.
- ___ Lubricate (as instructed) all lubrication points.
- ___ Check for loose or missing bolts or parts (**especially on S-Tines**).
- ___ Check for undue or excessive wear of parts.
- ___ Check S-tine chisel points for normal wear. Be sure to change the points **before** they wear to the S-Tine.

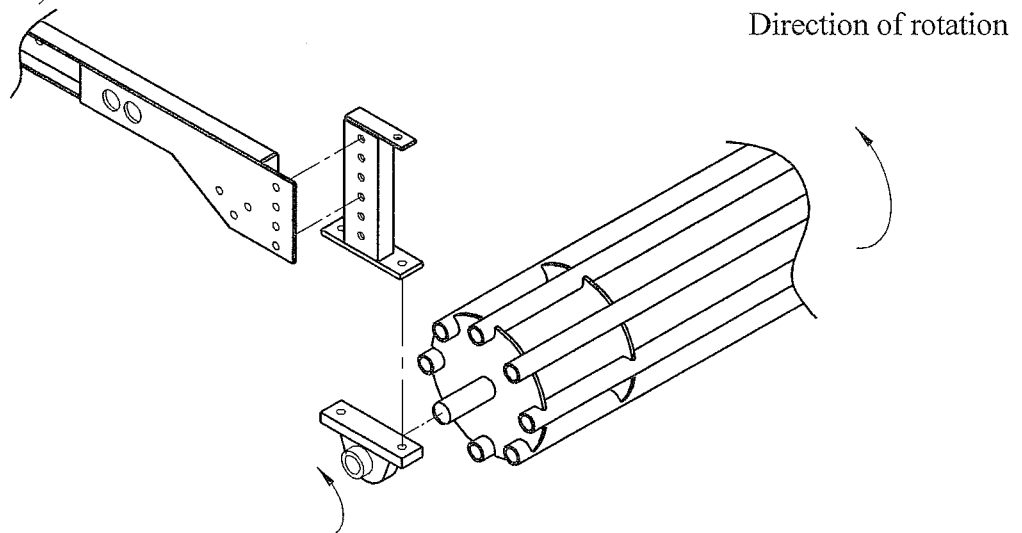
MAINTENANCE AND FIELD ADJUSTMENTS

LUBRICATION

The pillow block bearing units are factory pre-lubricated and do not require supplemental grease before service life begins. Re-lubrication, when administered correctly, can increase the life of a bearing substantially. **Bearing manufacturers recommend that all these bearings be greased daily to weekly**, considering the environmental condition that these machines are exposed to. **NOTE: Over lubrication is a major cause of bearing failures. Please re-lubricate conservatively.** When selecting a bearing lubrication use any lithium based NLGI #2 grease.

BEARINGS

When installing or replacing bearings, make sure all bearing lock collars are set correctly and tightened (see below).



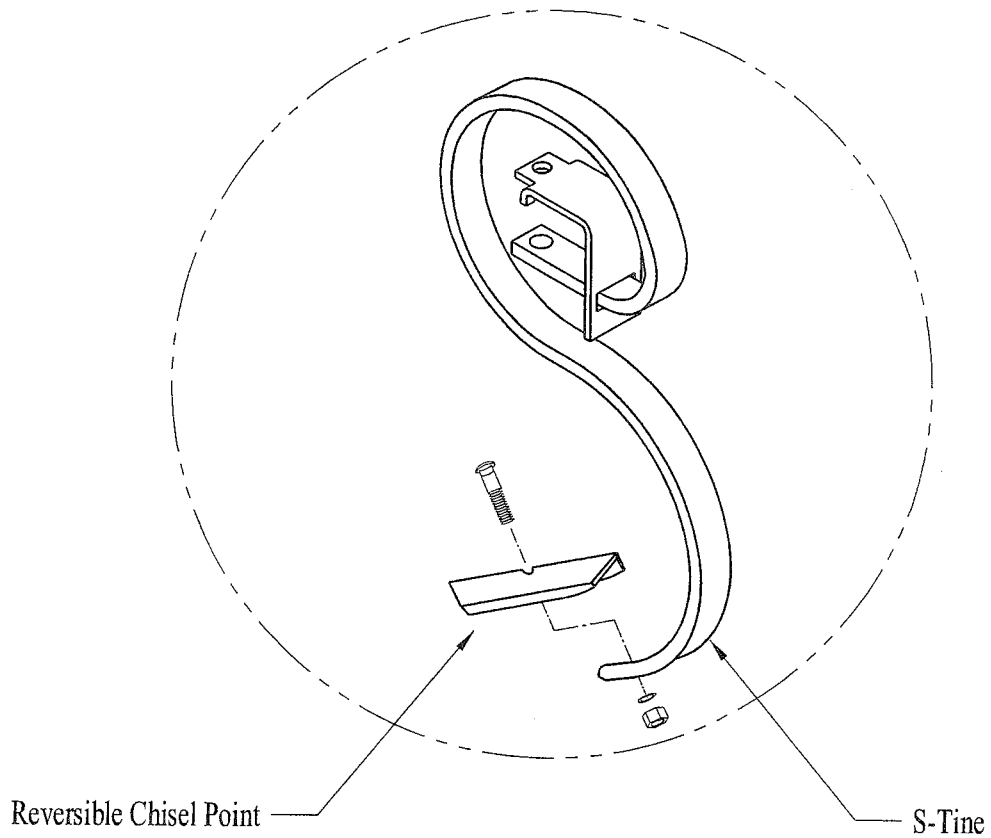
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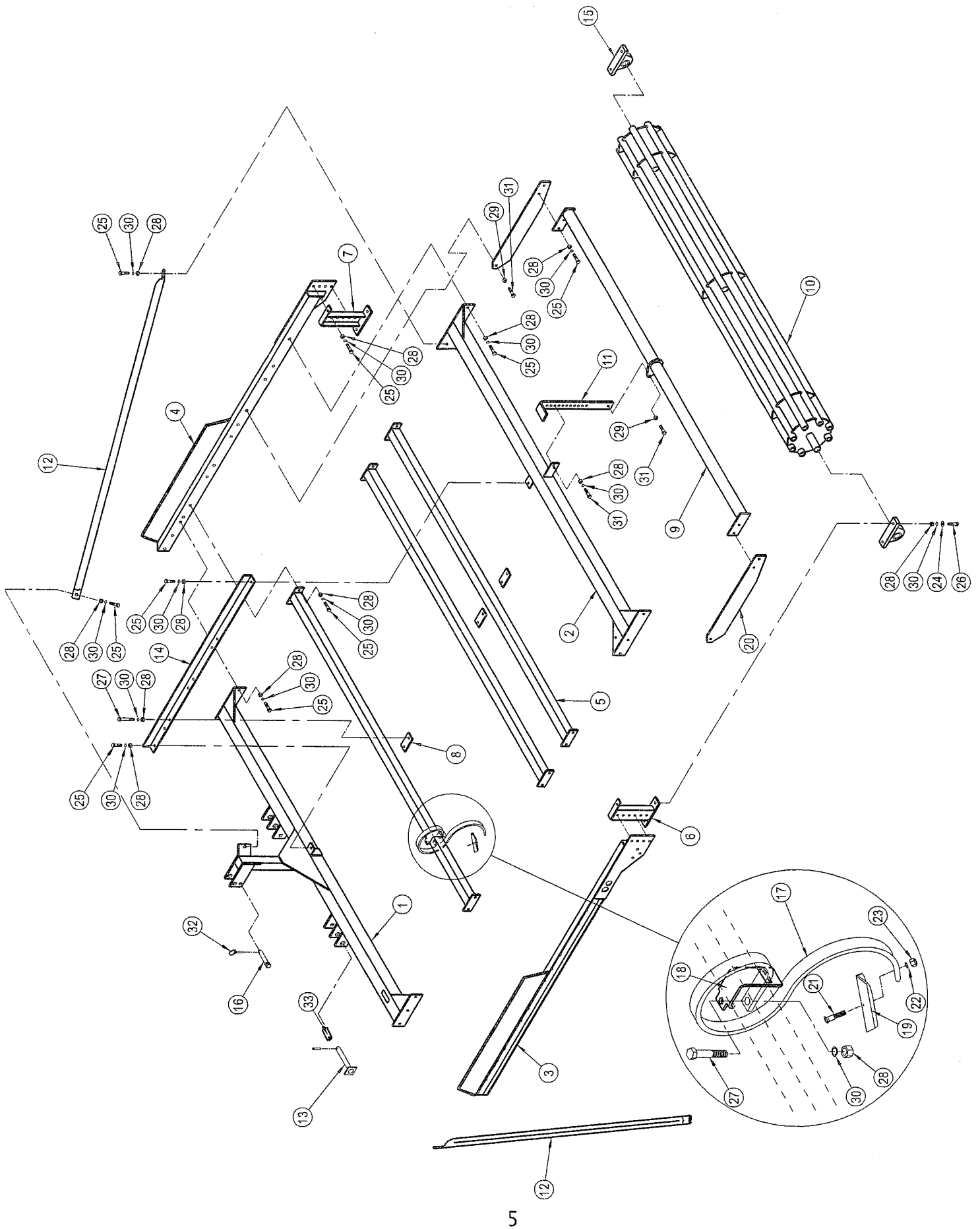
To avoid loosening of the lock collar, always set it in the direction of shaft rotation.

REVERSIBLE CHISEL POINTS

CAUTION

The chisel points **MUST** be reversed and/or replaced as they wear to prevent damage to the S-Tine



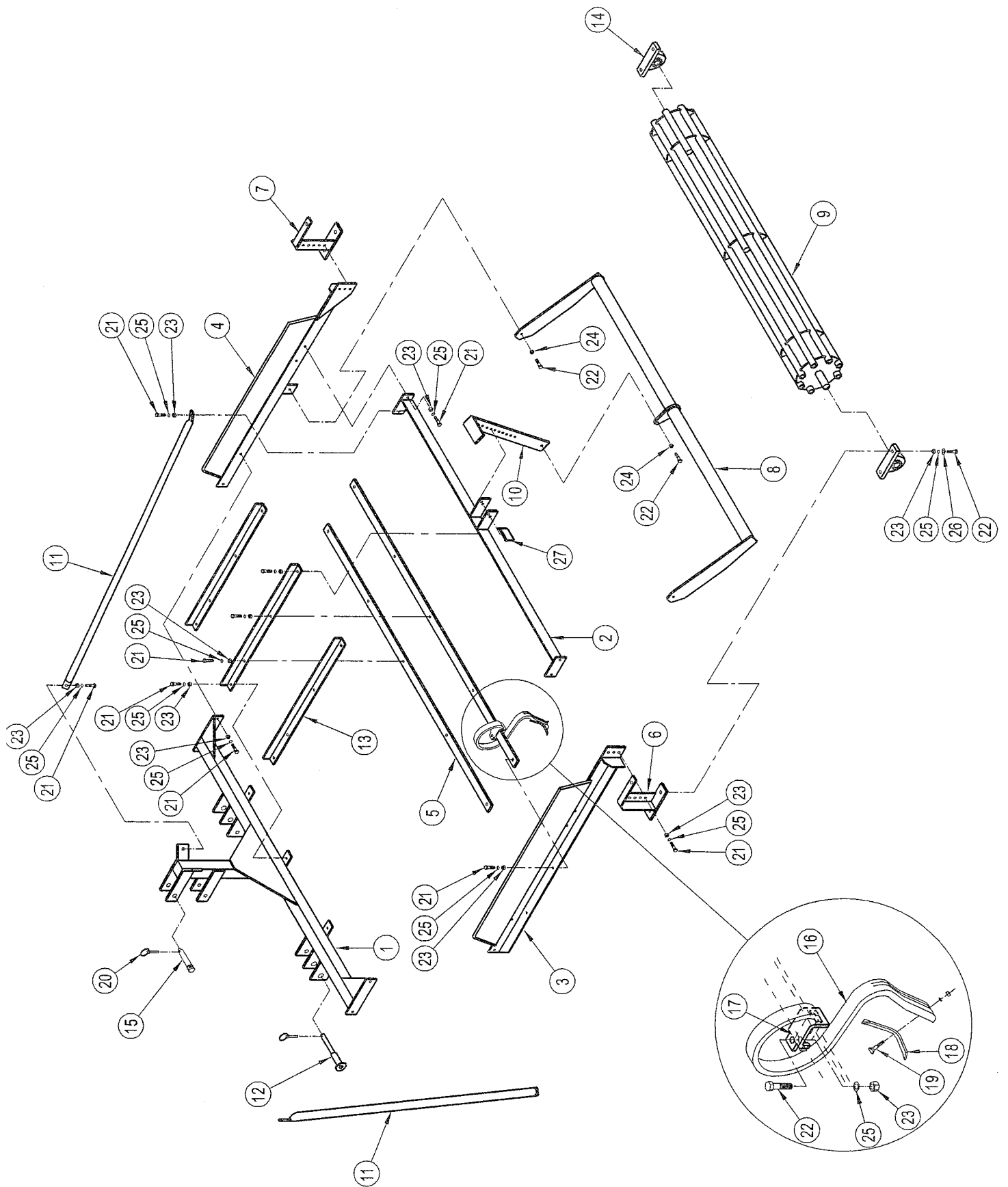


STANDARD ARENA GROOMER

8 Ft. with 2 or 3 bars

ITEM NO.	QTY. 3-BAR	QTY. 2-BAR	PART NO.	PART NO.	DESCRIPTION
			3-BAR	2-BAR	
1	1	1	530064		Front Bar
2	1	1	530065		Rear Bar
3	1	1	530069	530088	Side, LH
4	1	1	530070	530089	Side, RH
5	3	2	530083		Tine Bar
6	1	1	530061		Roller Adjuster, LH
7	1	1	530062		Roller Adjuster, RH.
8	3	2	530026		Clamp Plate
9	1	1	530073		Leveling Bar
10	1	1	530074		Roller
11	1	1	530032		Leveling Bar Adjuster
12	2		530079		3-Bar Brace
		1		530092	2-Bar Brace, LH
		1		530091	2-Bar Brace, RH
13	2	2	534104		Lower Hitch Pin
14	1	1	530037	530090	Center Support
15	2	2	980026		1 1/2" Pillow Block Bearing
16	1	1	530110		Top Link Pin, 3/4" Category 1
17	21	21	530051		S-Tine
18	21	21	521485		S-Tine Clamps
19	21	21	521484		Chisel Points
			530293		Optional Chromo-Alloy Point
20	2	2	530072		Side Bar
21	21	21	530052		Elliptical Cultivator Bolt: 3/8-16 x 1 1/2
22	21	21			Lock Washer: 3/8"
23	21	21			Hex Nut: 3/8-16
24	4	4			Flat Washer: 1/2" S.A.E.
25	40	36	530274		Hex Bolt: 1/2-13 x 1 1/4
26	4	4			Hex Bolt: 1/2-13 x 2
27	27	25			Hex Bolt: 1/2-13 x 3 1/2
28	72	66	530275		Hex Nut: 1/2-13
29	3	3			Hex Lock Nut: 1/2-13
30	72	66	530276		Lock Washer: 1/2"
31	4	4			Hex Bolt: 1/2-13 x 1 1/2
32	1	1	530053		Lynch Pin: 3/8 x 1 1/4
33	2	2	534105		Bushing, Lift Arm

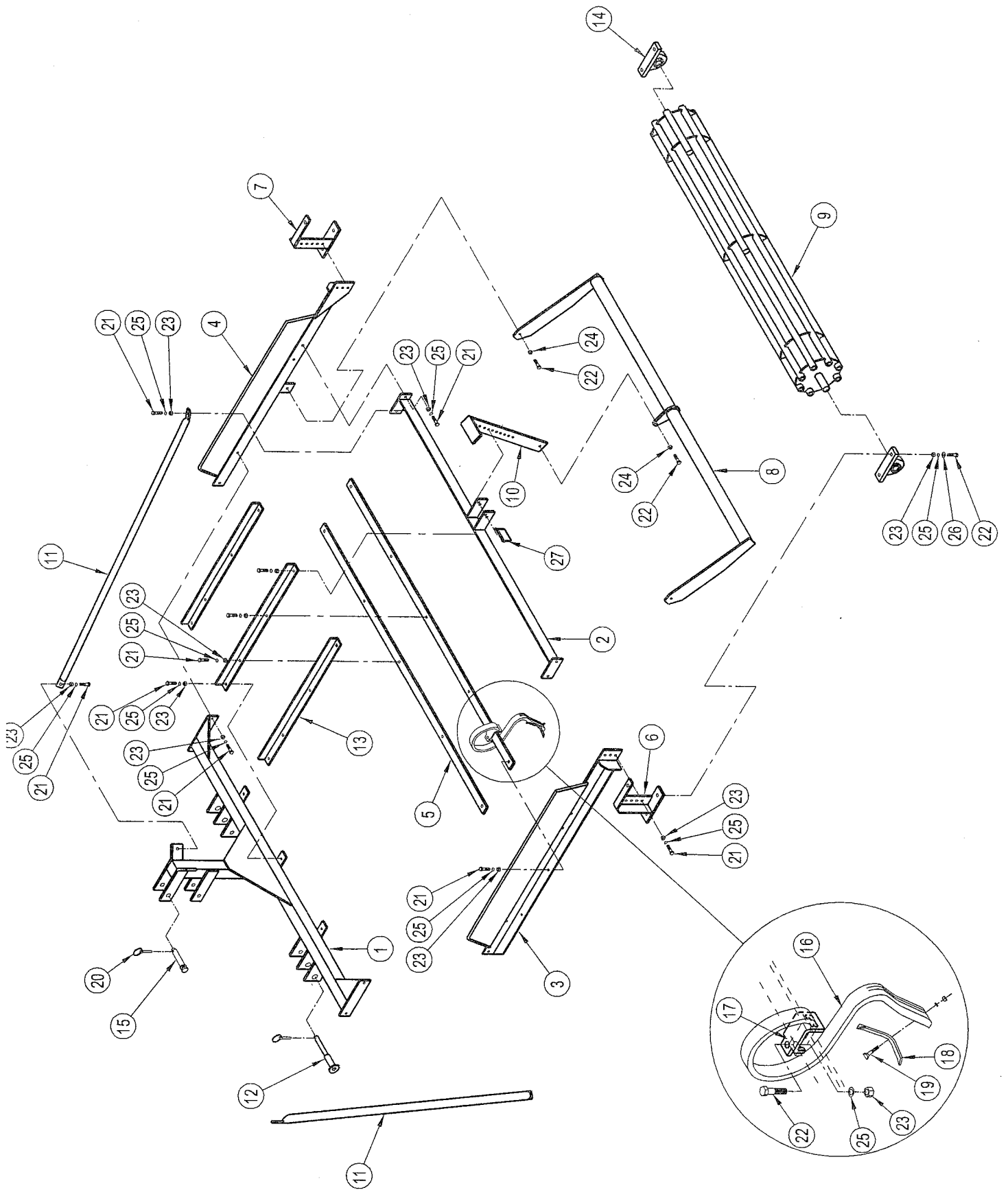
Note: Unless otherwise noted in the 2-bar part number column, all two bar parts will be the same as the 3-bar (quantities may vary).



5' & 6' GROOMER

ITEM NO.	QTY		PART NO. 5 Ft.	PART NO. 6 Ft.	DESCRIPTION
	5 Ft.	6 Ft.			
1	1		530121	530201	Front Bar
2	1		530127	530202	Rear Bar
3	1		530132		Side, LH
4	1		530133		Side, RH
5	2		530130	530204	Tine Bar
6	1		530142		Roller Adjuster, LH
7	1		530148		Roller Adjuster, RH
8	1		530140	530205	Leveling Bar
9	1		530145	530206	Roller
10	1		530161		Leveling Bar Adjuster
11	2		530150	530207	Brace
12	2		534104		Lower Hitch Pin
13	3		530131		Center Support
14	2		980021		1" Pillow Block Bearing
15	1		530110		Top Link Pin, 3/4" Category 1
16	13	15	530154		S-Tine
17	13	15	530156		S-Tine Clamps
18	13	15	530155		Chisel Points
			530292		Optional Chromo-Alloy Point
19	13	15	530157		Elliptical Cultivator Bolt: 5/16-18 x 1 1/4 w/ nuts & lock washers
20	1		530053		Lynch Pin: 3/8 x 1 1/4
21	32				Hex Bolt: 3/8-16 x 1
22	21	23	530277		Hex Bolt: 3/8-16 x 1 1/2
23	49	51	530278		Hex Nut: 3/8-16
24	4				Hex Lock Nut: 3/8-16
25	49	51	530279		Lock Washer: 3/8
26	4				Flat Washer: 3/8
27	1	1	530321		Pin, Locking

Note: Unless otherwise noted, quantities & part numbers for
6' Groomer will be the same as the 5' Groomer.

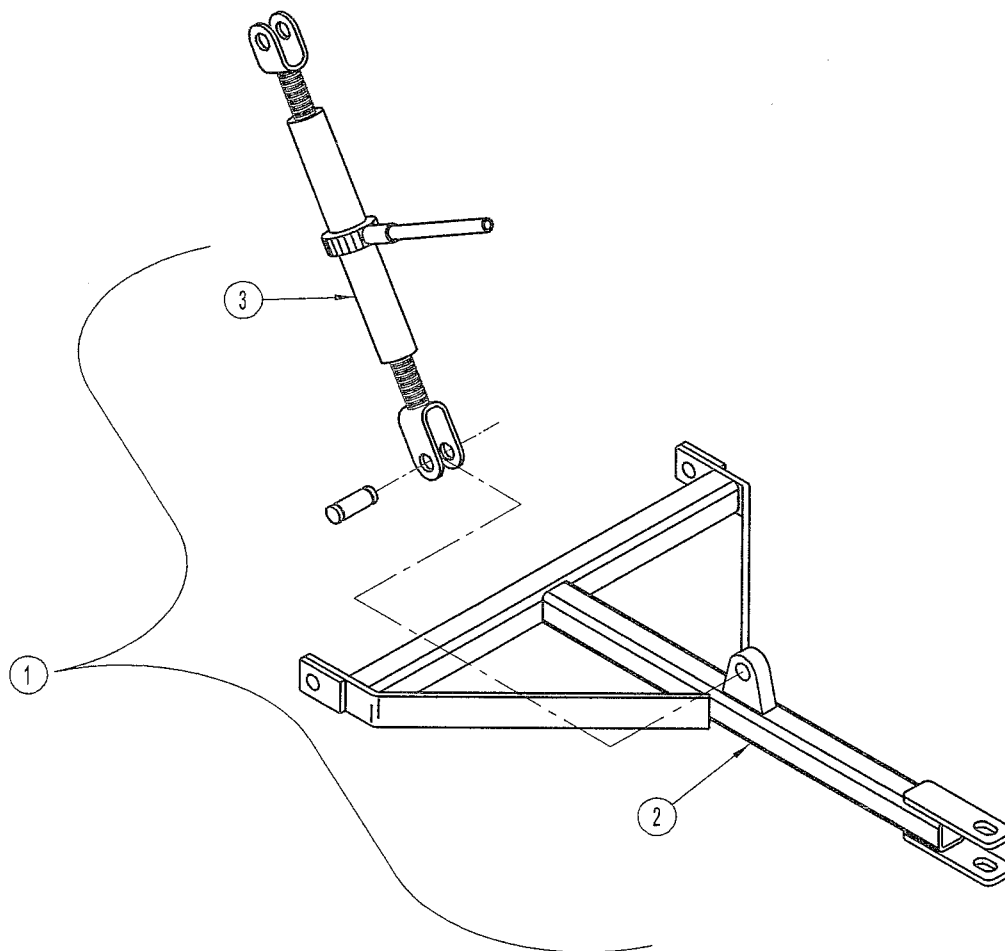


7' GROOMER

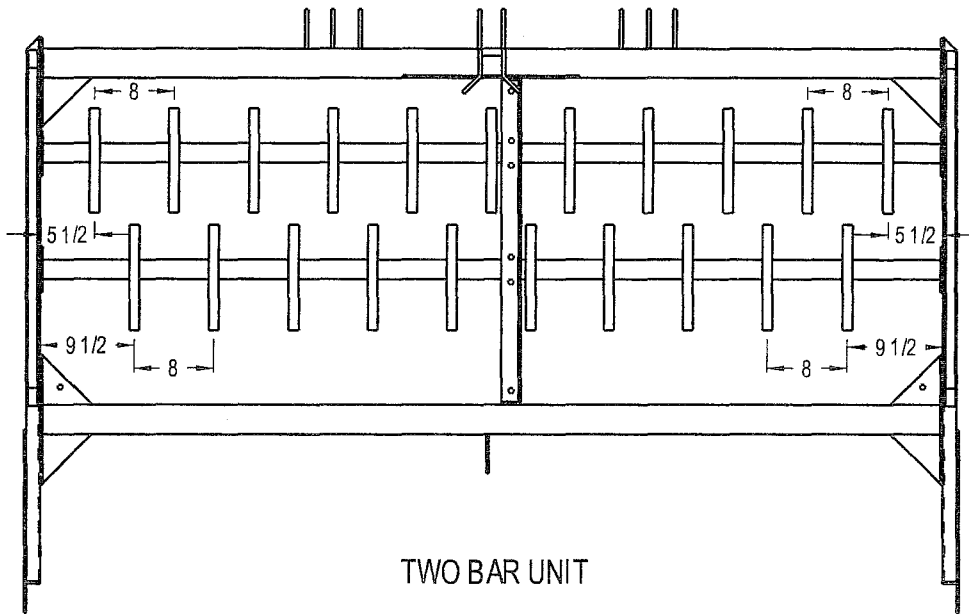
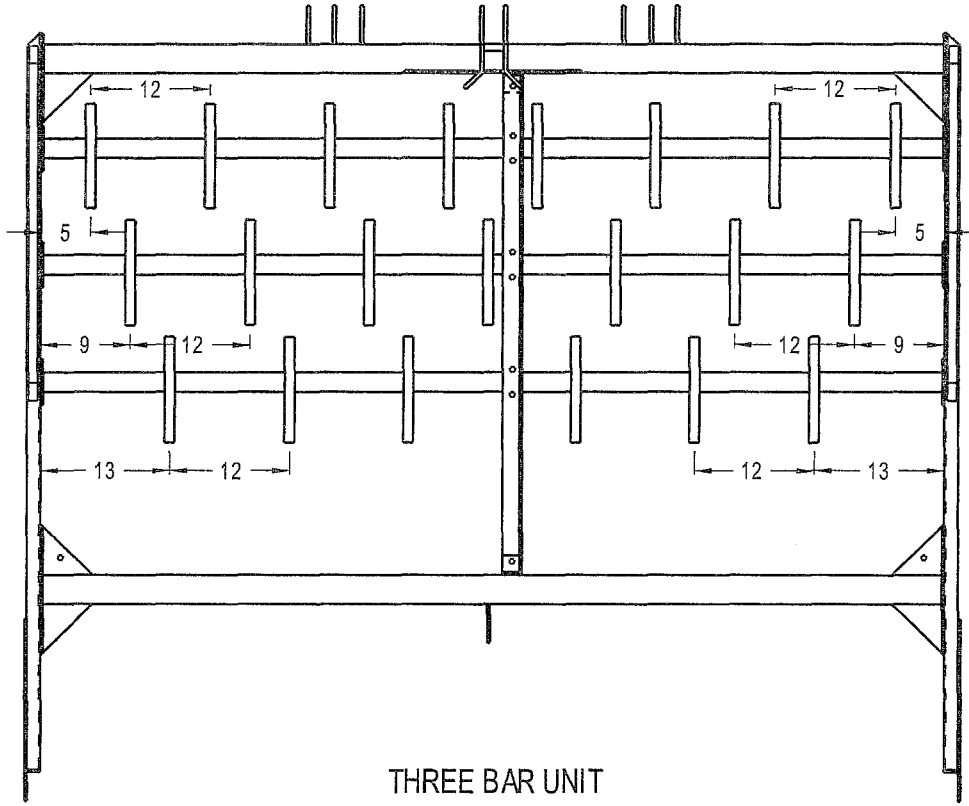
ITEM NO.	QTY 7'	PART NO. 7'	DESCRIPTION
1	1	530311	Front Bar
2	1	530312	Rear Bar
3	1	530132	Side, LH
4	1	530133	Side, RH
5	2	530313	Tine Bar
6	1	530142	Roller Adjuster, LH
7	1	530148	Roller Adjuster, RH
8	1	530314	Leveling Bar
9	1	530315	Roller
10	1	530161	Leveling Bar Adjuster
11	2	530316	Brace
12	2	534104	Lower Hitch Pin
13	3	530131	Center Support
14	2	980021	1" Pillow Block Bearing
15	1	530110	Top Link Pin, 3/4" Category 1
16	19	530154	S-Tine
17	19	530156	S-Tine Clamps
18	19	530155	Chisel Points
		530292	Optional Chromo-Alloy Point
19	19	530157	Elliptical Cultivator Bolt: 5/16-18 x 1 1/4 w/ nuts & lock washers
20	1	530053	Lynch Pin: 3/8 x 1 1/4
21	32		Hex Bolt: 3/8-16 x 1
22	27	530277	Hex Bolt: 3/8-16 x 1 1/2
23	55	530278	Hex Nut: 3/8-16
24	4		Hex Lock Nut: 3/8-16
25	55	530279	Lock Washer: 3/8
26	4		Flat Washer: 3/8
27	1	530321	Pin, Locking

TONGUE ASSEMBLY

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1		530190	Tongue Assembly
2	1	530189	Tongue Weldment
3	1	990700	Ratchet Jack



SPACING TINE
8' GROOMER



ASSEMBLY INSTRUCTIONS

8' Groomer

1. If your tractor is available, mount the front hitch bar to the three point hitch lower links with the pins provided (items #1 and #13 on page 3). If your tractor is not available, either set the front hitch bar on two blocks approximately 16" high.
2. **IMPORTANT!** Do not tighten any bolts beyond finger tight until all the frame parts are assembled.
2. Attach the LH and RH side panels to the front hitch bar using only one $\frac{1}{2} \times 1 \frac{1}{4}$ bolt on each side. (Items #3 & #4 on page 3).
3. Attach the LH and RH bearing brackets to the inside of the side panels using (3) $\frac{1}{2} \times 1 \frac{1}{4}$ bolts per side. The initial position of the bearing brackets should be so that the top hole of the bearing brackets show above the side panel plates.
4. There are two pillow block bearings provided for the rear roller. First match the locking collars provided with the bearings to proper side of each bearing. Then slide the bearings onto the rear roller shafts so the bearing lock collars face toward the end of the shafts. Do not tighten the bearing lock collars at this time.
5. Assemble the roller and bearings to the bearing brackets using (4) $\frac{1}{2} \times 1 \frac{3}{4}$ bolts. Now install the remaining (4) $\frac{1}{2} \times 1 \frac{1}{4}$ bolts into the front hitch bar ends (reference instruction #1).
6. Assemble the tine bars to the LH and RH side panels in the holes provided starting from the front using (4) $\frac{1}{2} \times 1 \frac{1}{4}$ bolts each (Item #5 on page 3). Remember not to tighten the bolts beyond finger tight!
7. Install the rear cross bar (Item #2 on page 3). Be sure the angle clip in the middle of the bar is facing the front of the machine and on the top. The tab for the leveling bar adjuster goes to the rear of the Groomer. Use (6) $\frac{1}{2} \times 1 \frac{1}{4}$ bolts.
8. Assemble the center support angle and clamp plates (Items #8 & #14 on page 3) as shown on page 1 using $\frac{1}{2} \times 1 \frac{1}{4}$ bolts front and rear. Insert $\frac{1}{2} \times 3 \frac{1}{2}$ bolts into the remaining holes and attach the clamp plates to the bottom of each tine bar.
9. Assemble the two pipe braces (Item #12 on page #3) to the front hitch and rear corners using (4) $\frac{1}{2} \times 1 \frac{1}{4}$ bolts provided.
10. Now tighten all bolts previously installed securely. When all the bolts are tightened, center the rear roller between the roller brackets and lock the bearing collars by putting the collar over the extended inner race of the bearing and turning it against the direction of travel. When it is in position, set the collar with a punch and hammer and then tighten the allen screw on the collar to hold it in position. This is important because it is what holds the rear roller in place.

11. Mount the two sidebars to the leveling bar (Items #9 & #20 on page 3) with (4) $\frac{1}{2}$ x $1\frac{1}{4}$ bolts. Position the leveling bar under the Groomer and attach the arms to the sides of the groomer with (2) $\frac{1}{2}$ x $1\frac{1}{4}$ bolts. Use the nylon lock nuts furnished on these bolts. Attach the adjusting lever (Item #11 on page 3) to the leveling bar using (1) $\frac{1}{2}$ x $1\frac{1}{4}$ bolt and nylon lock nut. Then pull the adjusting lever up to about the middle hole and attach it to the tab on the rear bar using (1) $\frac{1}{2}$ x $1\frac{1}{4}$ bolt.

12. Bolt the points to the tines using the $\frac{3}{8}$ x $1\frac{1}{4}$ elliptical head plow bolts in the bolt package.

13a. **(THREE BAR MODEL)** Install the tines to the tine bars (Refer to page #8). Start with the front bar and work from each side to the middle. The front bar takes eight tines, the second bar takes seven, and the third bar takes six. It is easiest to mark the locations on the bar and then put a clamp on each mark. Clamps go with the bolt hole to the front. **First Bar:** Make a mark 5" in from the inside of the front bar on each side. Make three additional marks 12" apart on each side and place a clamp centered on each mark. **Second Bar:** Measure in 9" from each side and make a mark. On the left side make three additional marks 12" apart and on the right side make two additional marks 12" apart and place a clamp centered on each mark. **Third Bar:** Measure in 13" from each side and then make two additional marks 12" apart on each side and place a clamp centered on each mark. Tines are then inserted into the clamp from the back of the bar and fastened with $\frac{1}{2}$ x $3\frac{1}{2}$ bolts.

13b. **(TWO BAR MODEL)** This model takes eleven tines on the front bar and ten on the second bar (Refer to page #8). To install, measure in $5\frac{1}{2}$ " from each side of the front bar for the first tine location. Then place the remaining tines on the front bar at 8" centers. On the second bar, locate each tine so it is between the tines on the front bar.

14. **OPTIONAL SCARIFIER ATTACHMENT:** Each shank bracket will attach to the front bar with the two U-bolts, lockwashers and hex nuts. Once the brackets are placed and tightened to the front bar, the two hitch pins will be used to secure the Scarifier Shank into the bracket.

15. Check all bolts again to see that everything is tight. You are now ready to go to the arena. After making several rounds of your arena, stop and check the bolts again to be sure they are all tight.

ASSEMBLY OF THE 5', 6' & 7' GROOMERS

These groomers are shipped from the factory nearly assembled. The work to complete is to loosen the bolts on the front bar, rotate the bar 90°, reinstall the bolts, install the pipe braces similar to the 8' groomer, then attach the rear roller. Check all bolts on the unit to be sure they are securely fastened.

FINAL ADJUSTMENTS

When you work your arena, adjust the position of the top link on the three-point hitch and the rear roller to give a smooth surface behind you as you go. There should not be grooves in the surface caused by the tines if you have the proper pressure on the leveling bar and rear roller.

Adjust the leveling bar so it just touches the surface. If it carries too much dirt, raise it one hole at a time until you are satisfied with the results. The rear roller and digging depth can be adjusted by moving the roller higher or lower with the holes in the rear brackets. Also, adjust the length of your top link on the three-point hitch to give you the best surface and digging depth. It will take some practice and experimenting to find the best settings for your conditions. If you have any problems please call us and discuss them.

WARRANTY POLICY

Parma Company warrants to each purchaser of new equipment manufactured by Parma Company, that such equipment is, at the time of delivery to such purchaser, free from defect in material and workmanship under normal use if serviced in accordance with the recommendations of the Operator's Manual. All Parma Company products are warranted for a period of one year from the date of the original purchase unless otherwise specified. When parts are purchased by Parma Company that are produced by other manufacturers, Parma will assist customers in making claims to the manufacturer by completing all necessary warranty claim documents, but assumes no responsibility. The ultimate responsibility for warranty on these purchased parts rests with the original manufacturer.

Parma Company's obligation under this warranty is limited to repairing, or at its option, replacing any part that in Parma's judgement proved defective.

To make this warranty effective, the owner's Warranty Registration Form furnished with each unit must be on file at Parma Company, Parma, Idaho at the time of receipt of the Warranty Claim. **The warranty claim must be submitted within thirty (30) days of the claimed failure.**

DISCLAIMER OF ALL OTHER WARRANTIES AND CONSEQUENTIAL DAMAGES

The foregoing is in lieu of all other warranties, whether expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose, and there are no warranties, which extend beyond the description of the products. The liability of Parma Company is expressly limited to repairing, or at its option, replacing any part that is returned transportation prepaid to Parma Company, Parma, Idaho that in Parma's judgement proved defective during the warranty period.

No representative of Parma Company, no dealer or dealer's representative or any other person has authority to waive, alter, vary, or add to the terms hereof without prior approval in writing signed by an officer of Parma Company. Parma Company will not be liable for any other expense, injury, loss, or damage, whether direct or consequential, arising in connection with the sale or use of or inability to use, any product of the company for any purpose.

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