

# Standard and Mini ARENA GROOMER®

**Owner's Manual and Parts Catalog** 

Serial # \_\_\_\_\_

Manual Number: 07242013rev-AG



P.O. BOX 190 PARMA, ID 83660 PHONE (208) 722-5116 · FAX (208) 722-6012

> www.parmacompany.com www.arenagroomer.net



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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 recommendations will help assure the machine.

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.
DA	AILY 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.
1	Check S-tine chisel points for normal wear. Be sure to change the points <b>before</b> they wear to the S-Tine.

## MAINTENANCE AND FIELD ADJUSTMENTS

#### LUBRICATION

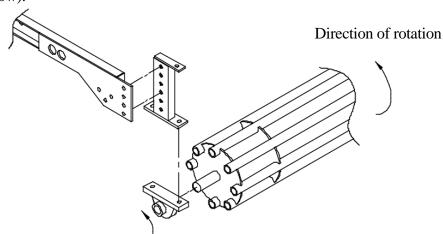
The pillow block bearing units are factory pre-lubricated and do not require supplemental grease before service life begins. Re-lubrication, when administered correctly, can increase the life of a bearing substantially. **Bearing manufacturers recommend that all these bearings be greased daily to weekly**, 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 Lock-Collar Type Only**

\*NOTE: Lock collar bearings are NO LONGER standard on all Arena Groomer® Models. \*

\*\*For Reference ONLY\*\*

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



NOTE:

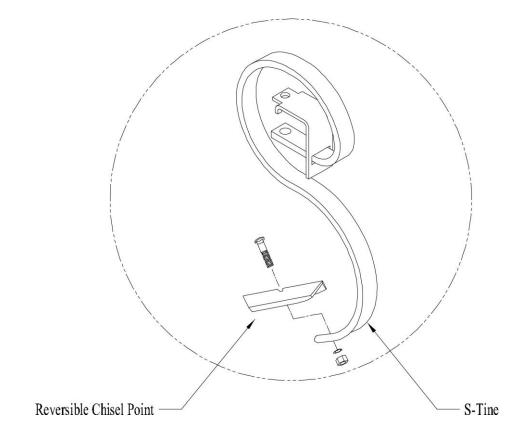
To avoid loosening of the lock collar, always set it in the direction of shaft rotation.



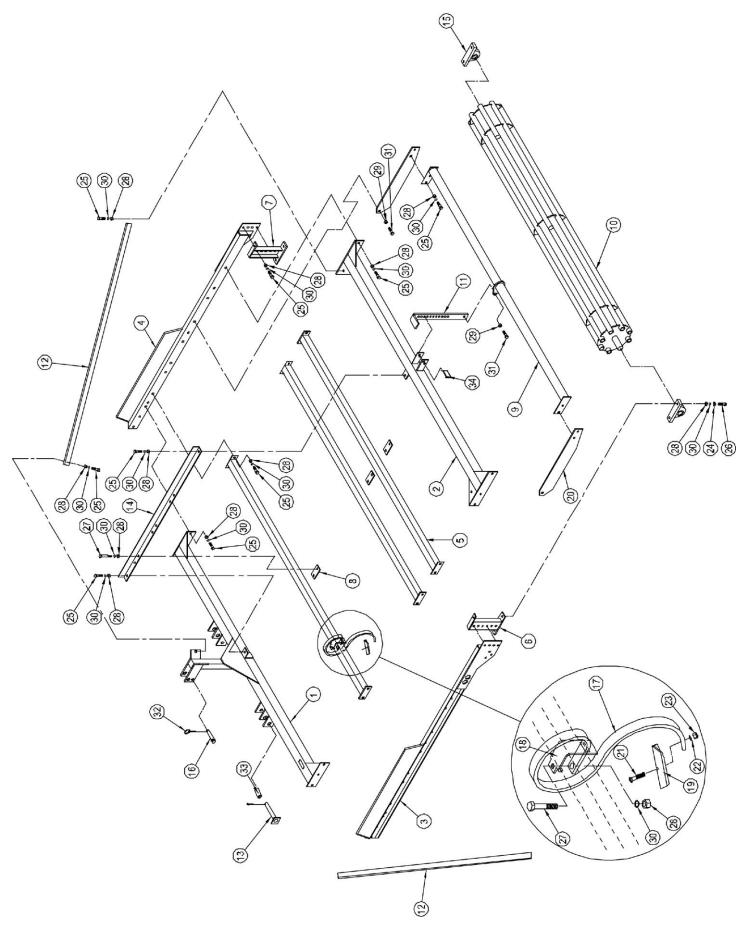
# **REVERSIBLE CHISEL POINTS**

# **CAUTION**

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







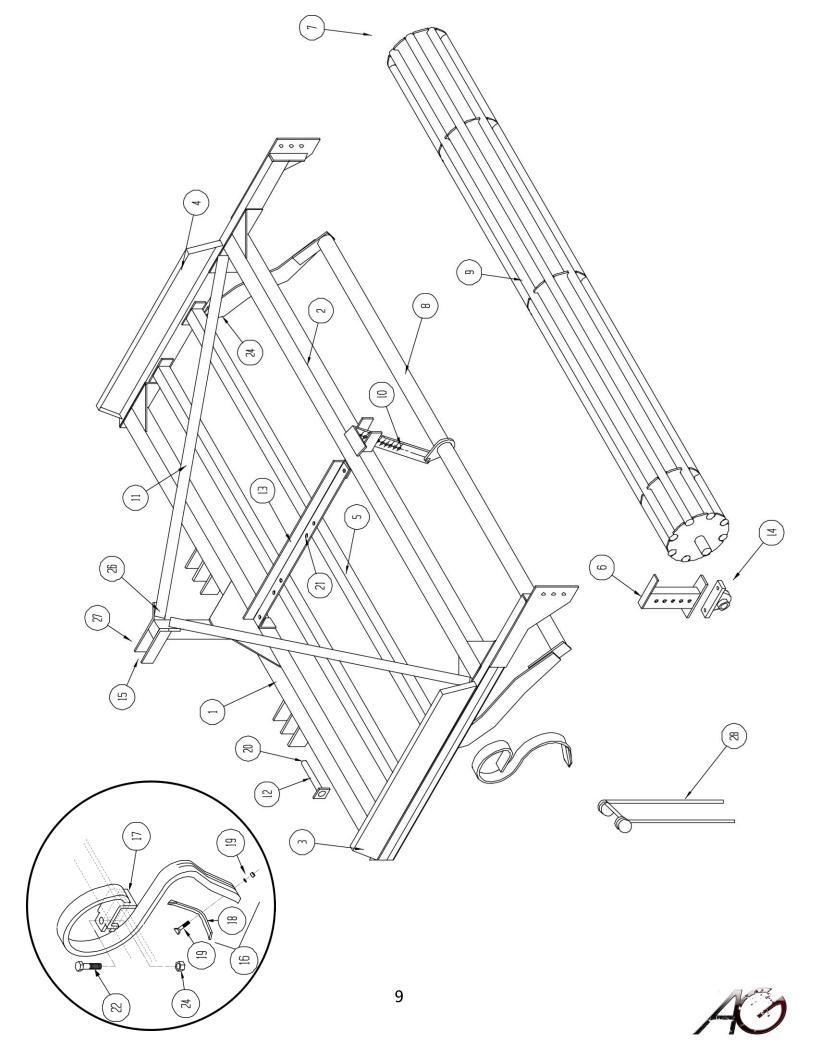


# STANDARD ARENA GROOMER® 8' and 10' Models

ITEM NO.	QTY. 8 Ft.	QTY. 10 Ft.	PART NO. 8 Ft.	PART NO. 10 Ft.	DESCRIPTION
1	1	1	530064	530223	Front Bar
2	1	1	530065	530224	Rear Bar
3	1	1	530069		Side, LH
4	1	1	530070		Side, RH
5	3	3	530083	530225	Tine Bar
6	1	1	530061		Roller Adjuster, LH
7	1	1	530062		Roller Adjuster, RH.
8	3	9	530026		Clamp Plate
9	1	1	530073	530226	Leveling Bar
10	1	1	530074	530227	Roller
11	1	1	530032		Leveling Bar Adjuster
12	2	2	530400	530402	3-Bar Brace
13	2	2	534104		Lower Hitch Pin
14	1	3	530037		Center Support
15	2	2	530398		1 ½" Pillow Block Bearing
16	1		530110		Top Link Pin, 3/4" Category 1
		1		340019	Top Link Pin, 1" Category II
17	21	27	530051		S-Tine
18	21	27	521485		S-Tine Clamps
19	21	27	521484		Chisel Points
			530293		Optional Chromo-Alloy Point
20	2	2	530072		Side Bar
21	21	27	530052		Elliptical Cultivator Bolt: 3/8-16 x 1 ½
22	21	27			Lock Washer: 3/8"
23	21	27			Hex Nut: 3/8-16
24	8	4			Flat Washer: 1/2" S.A.E.
25	36	40	530274		Hex Bolt: 1/2-13 x 1 1/4
26	4	4			Hex Bolt: 1/2-13 x 2
27	27	45			Hex Bolt: 1/2-13 x 3 1/2
28	-	-	-	-	Hex Nut: ½" (REPLACED by lock nut)
29	75	93	530372		Hex Lock Nut: 1/2-13
30	-	-	530279		Lock washer: ½" (REPLACED by lock nut)
31	8	4			Hex Bolt: 1/2-13 x 1 1/2
32	1	3	530053		Lynch Pin: 3/8 x 1 1/4
33	2	2	534105		Bushing, Lift Arm
34	1	1	530340		Squared Retainer Snap Pin

Note: Unless otherwise noted in the 10 FT. part number column, both models will be the same. Quantities will vary.



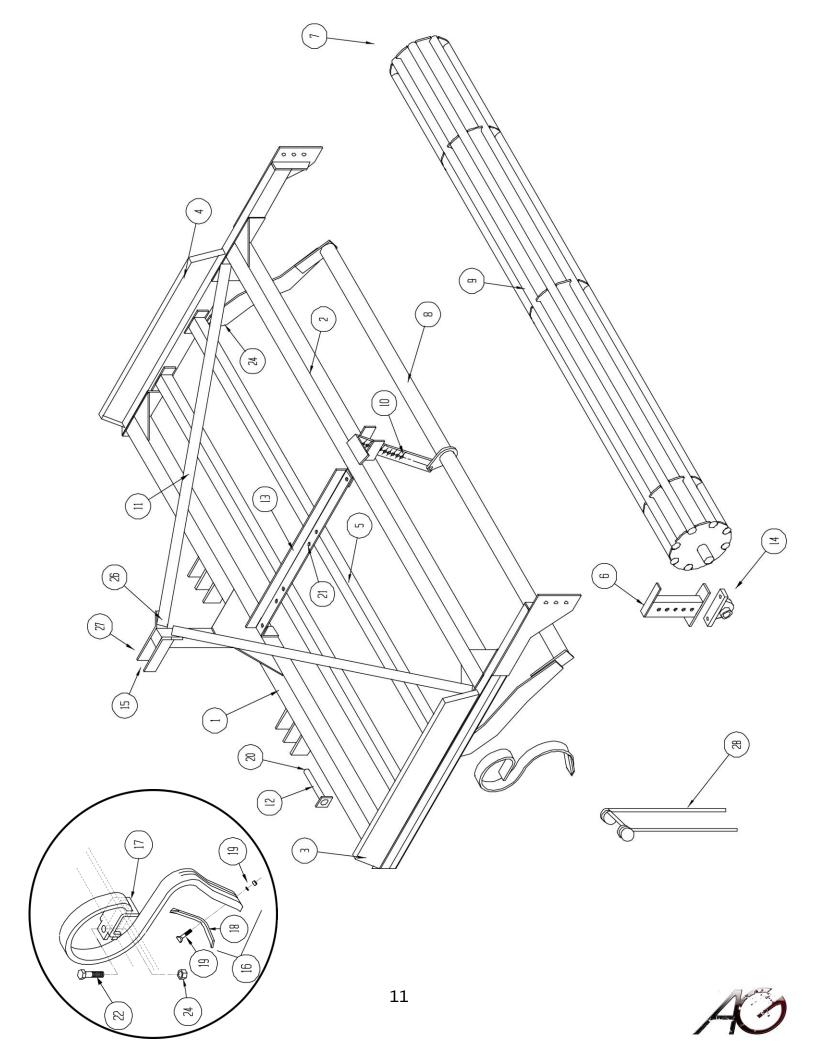


5' & 6' ARENA GROOMER®

ITEM NO.	QT 5 Ft. (		PART NO. 5 Ft.	PART NO. 6 Ft.	DESCRIPTION
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	530396	530397	Brace
12		2	534104		Lower Hitch Pin
13		3	530131		Center Support
14		2	530395		1" Pillow Block Bearing
15		1	530110		Top Link Pin, 3/4" Category 1
16	13	15	530154		S-Tine (Point and Bolt included)
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	3	530053		Lynch Pin: 3/8 x 1 1/4
21	3	32			Hex Bolt: 3/8-16 x 1
22	21	23	530277		Hex Bolt: 3/8-16 x 1 1/2
23	-	-	530278		Hex Nut: 3/8-16 (REPLACED by lock nut)
24	53	55	530371		Hex Lock Nut: 3/8-16
25	-	-	530279		Lock Washer: 3/8 (REPLACED by lock nut)
26	4	4			Flat Washer: 3/8
27	1	1	521442		Pin, Locking
28			530465	530466	Spring Tine Conversion Kit
	1	1	530480	530482	Tine Bar
	1	1	530479	530481	Tine Bar
	4	4	530511	530511	Square Beveled Washer
	14	17	530307	530307	Spring Coil Tine
	14	17	999868	999868	Washer, Heavy Duty

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





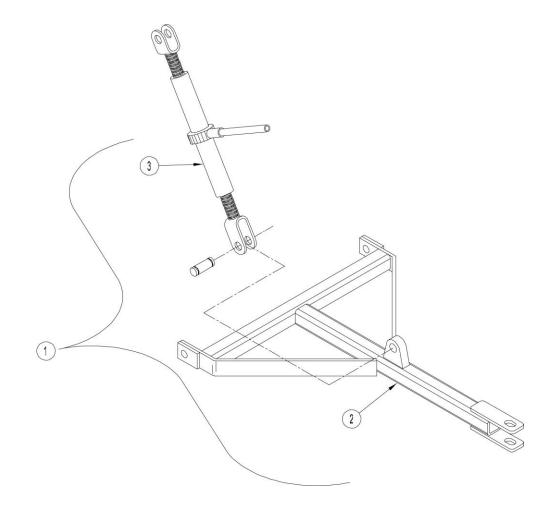
# 7' ARENA GROOMER®

ITEM NO.	QTY 7 Ft.	PART NO. 7 Ft.	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	530394	Brace
12	2	534104	Lower Hitch Pin
13	3	530131	Center Support
14	2	530395	1" Pillow Block Bearing
15	1	530110	Top Link Pin, 3/4" Category 1
16	19	530154	S-Tine (Point and Bolt included)
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	3	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	_	530278	Hex Nut: 3/8-16 (REPLACED by lock nut)
24	59	530371	Hex Lock Nut: 3/8-16
25	-	530279	Lock Washer: 3/8 (REPLACED by lock nut)
26	4		Flat Washer: 3/8
27	1	521442	Pin, Locking
28		530467	Spring Tine Conversion Kit
	1	530483	Tine Bar
	1	530484	Tine Bar
	4	530511	Square Beveled Washer
	20	530307	Spring Coil Tine
	20	999868	Washer Heavy Duty



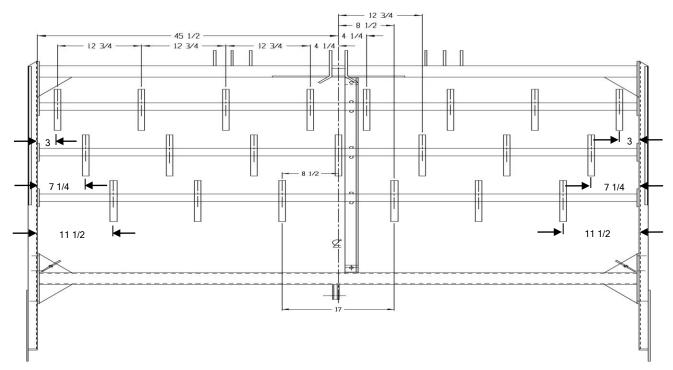
# TONGUE ASSEMBLY

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

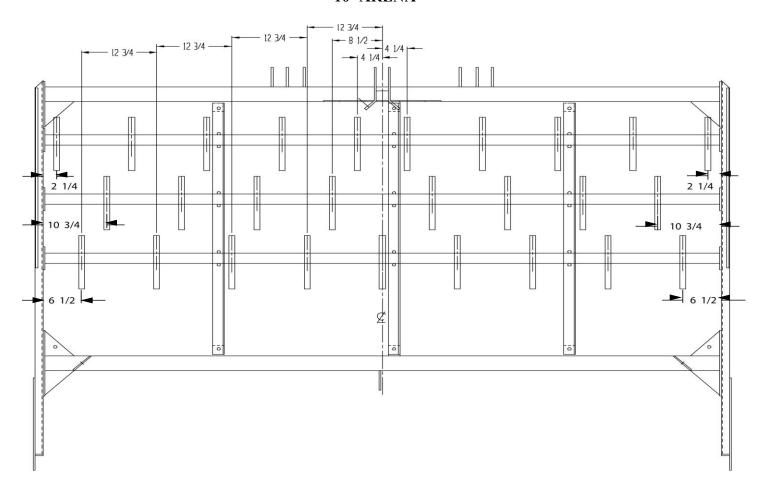




# TINE SPACING 8' ARENA



## 10' ARENA





#### 8' AND 10' ARENA GROOMER® ASSEMBLY INSTRUCTIONS

- 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 7). 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.
- 3. Attach the LH and RH side rails to the front bar using the  $\frac{1}{2}$ " x 1  $\frac{1}{4}$ " long hex bolts and the  $\frac{1}{2}$ " lock nuts. You will need 3 bolts and lock nuts per side. Match the first 3 holes on the side rail with the first 3 holes on the front bar. Place the bolt from the inside with the lock nut on the outside. Double check that the Parma® logo is facing outwards on both sides. (Items #3 & #4 on page 7).
- 4. Next, attach the 3 tine bars to the side rails using  $\frac{1}{2}$ " x 1  $\frac{1}{4}$ " long hex bolts and the  $\frac{1}{2}$ " lock nuts. Notice the hole spacing on the side rails; match the two holes of each tine bar to the corresponding pairs of holes on the side rails. (Item #5 on page 7)
- 5. Attach the points to the s-tines with the  $3/8 \times 1 \frac{1}{2}$ " elliptical bolts with nut and lock washer. Tighten properly. (Items #17, 19, 21, 22, 23 on page 7)
- **6. 8' MODEL:** Place all the s-tines with points and clamps on the tine bars with  $\underline{8}$  on the *front* tine bar,  $\underline{7}$  on the *middle* tine bar and  $\underline{6}$  on the *back* tine bar. **10' MODEL:** The *front* tine bar has  $\underline{10}$  s-tines and clamps,  $\underline{8}$  on the *middle* tine bar and  $\underline{9}$  on the *back* tine bar.
- 7. Install the s-tines on the clamps by putting the s-tine through the clamp until the hole on the clamp and on the s-tine match up. Place a  $\frac{1}{2}$ " x 3  $\frac{1}{2}$ " long hex bolt downward with a  $\frac{1}{2}$ " lock nut on the bottom. Until tightened, the s-tine is able move along the tine bar.
- **8.** Place the center brace for a guide only. You will attach it later. **NOTE:** The 10' Model has 3 braces. (Item #14 on page 7)
- 9. Measure and space out the s-tines. See adjacent page for complete s-tine spacing for the 8' and 10' models. With each tine bar start from the each side on the side rail and measure towards the center. When all s-tines have be properly measured proceed to tighten down each s-tine. Before tightening each s-tine, pull back on the s-tine until the bolt rests against the tine bar. This will help the s-tines from moving and loosening during operation.
- 10. Before placing the rear bar, make sure it is facing correctly. The two smoothing bar tabs should face the rear, while the upright tabs for the braces should face the front. Attach the rear bar to the side rails. Match the last 3 holes on the side rails to the 3 holes of the rear bar. Place the  $\frac{1}{2}$  x 1  $\frac{1}{4}$  long hex bolt to the inside with the  $\frac{1}{2}$  lock nut on the outside. (Item #2 on page 7)
- 11. Attach the center brace(s) to the rear and front bars. (Item #14 on page 7) Double check the correct hole placement. The pairs of holes on the center brace should each straddle a tine bar. With the center brace plates (item #8 on page 7) and the  $\frac{1}{2}$ " x 3  $\frac{1}{2}$ " long hex bolts with  $\frac{1}{2}$ " lock nut, place the plate on the underside of the tine bar. The hex bolts are installed from the bottom with the lock nuts on top. **NOTE:** 10' model has 3 center braces and 9 brace plates.
- 12. Attach the two braces that connect the rear bar to the front bar with the  $\frac{1}{2}$ " x 1  $\frac{1}{4}$ " long



hex bolts and ½" lock nuts. If the bolts have been tightened on the unit, the braces may not fit. Loosen all bolts until the braces fit. (Item #12 on page 7)

- 13. Assemble the leveling bar by attaching the side plates (Item #20 on page 7) with  $\frac{1}{2}$ " x 1  $\frac{1}{4}$ " hex bolts and  $\frac{1}{2}$ " lock nuts. The top of the plate should be flush with the leveling bar. Tighten the bolts. After the side plates have been installed, position the leveling bar underneath the Arena Groomer® unit. Attach the side plates of the leveling bar to the side rails of the unit with  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " long hex bolts with  $\frac{1}{2}$ " lock nuts. Do not over tighten, as the leveling bar needs to be able to adjust up and down.
- 14. Fasten the leveling bar adjuster (item #11 on page 7) to the tab located on the center of the leveling bar with  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " hex bolt and  $\frac{1}{2}$ " lock nut. Next, lift up on the leveling bar adjuster and the leveling bar until the holes in the middle of the adjuster match with the holes on the tabs on the rear bar. With the squared retainer snap pin (item #34 on page 7), attach the leveling bar adjuster.
- 15. Before placing the pillow block bearings on the roller shafts, clean off any rust or snags with light sandpaper. A light application of grease or anti-seize may also be needed. Insert the pillow block bearings (item #15 on page 7) onto each side of the roller on each shaft. Each bearing has two set screws; the set screws face to the outside of the roller. DO NOT tighten the set screws at this point.
- 16. Before attaching the bearing brackets to the bearing, make sure the correct brackets are on the correct sides. The flat side of the bracket should face outward with the top handle on the bracket facing towards the back. (items #6 & 7 on page 7) Fasten the bearing bracket to the bearing with the ½" x 2" hex bolt, ½" flat washer, and ½" lock nut. Place the hex bolts and flat washers on the bottom of the bearing with the lock nuts on top. Tighten the bolts.
- 17. Lift the roller into place by grabbing the bearing brackets and fastening them to the side rails with the  $\frac{1}{2}$ " x 1  $\frac{1}{4}$ " hex bolts and  $\frac{1}{2}$ " lock nuts. Initially, leave one to two holes showing above on the bearing brackets.
- **18.** Tighten down all bolts. Move through the unit tightening all bolts. Remember to leave the bolts for the leveling bar a little loose to adjust the leveling bar.
- 19. After all Bolts have been tightened lock the roller into place. First, check to make sure the roller is centered and can turn freely. Once the roller is properly in place, set the bearings by tightening the two set screws in each bearing. This requires an Allen wrench to complete. Tighten down both set screws until tight, then loosen and tighten again. This step is important, as it locks the roller to the bearings. Repeat for the other side.
- **20.** If not yet completed, insert the front hitch pins with the red handles (item #13 on page 7) with associated bushings (item #33) to the bottom tabs on the front bar. Insert the top link pin (item #16) with associated lynch pin into the top tabs of the front bar.
- 21. Congratulations! Your Arena Groomer<sup>®</sup> unit is ready to use. Double check that all bolts and lock nuts have been securely fastened. After making several rounds in your arena, check the bolts again to be sure they are all tight.



**OPTIONAL SCARIFIER ATTACHMENT:** Each shank bracket will attach to the front bar with the two U-bolts, lock washers 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.

#### ASSEMBLY OF THE 5', 6' & 7' ARENA GROOMER®

These sizes 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, and install the angle braces similar to the 8' Arena Groomer<sup>®</sup> unit. 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.



# **NOTES**





P.O. Box 190 101 Main Street Parma, ID



Phone: 208-722-5116 Fax: 208-722-6012

E-mail: parmacom@parmacompany.com Website: www.parmacompany.com

#### WARRANTY POLICY

PARMA COMPANY warrants to each purchaser from an Authorized dealer of new equipment manufactured by PARMA COMPANY, that such equipment is, at the time of delivery to such purchaser, free from defects in material and workmanship under normal use, if serviced in accordance with the recommendations of the Operator's Manual. All PARMA COMPANY harvesting equipment products are warranted for 120 days from the first day of use or 800 acres, whichever occurs first. All PARMA COMPANY soil preparation products are warranted for 120 days from first day of use or 1600 acres, whichever occurs first. All PARMA COMPANY water and waste pump products and the Arena Groomer®harrow are warranted for one year from date of purchase. All PARMA COMPANY farm box and forage products are warranted for one season from date of purchase. Warranty on defective parts purchased by PARMA COMPANY or produced by other manufacturers for PARMA COMPANY may be allowed only after the approval of the vendor or manufacturer.

PARMA COMPANY's obligation under this warranty is limited to repairing or replacing any part that, in PARMA COMPANY's judgment, is proved defective. Under the terms of this warranty, PARMA COMPANY assumes no cost for shop supplies, travel, labor related to travel, or service charges associated with the removal of defective parts or the installation of new parts.

All warranty claims are to be initiated through an authorized PARMA COMPANY dealer and <u>must be submitted within 30 days of the date of failure</u>. PARMA COMPANY may ask for defective parts to be returned to the factory; therefore, hold all warranty claim parts until advised if the parts are needed by vour dealer.

To make this warranty effective, this owner's **Warranty Registration Form** must be on file at PARMA COMPANY, Parma, Idaho, at the time of receipt of the warranty claim.

## 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 COMPANY's judgment 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.

#### DELIVERY & WARRANTY REGISTRATION SERVICE, SAFETY & PREDELIVERY OPERATIONS CHECK EACH SOUARE AS COMPLETED

	Farm Equipment Instruct buyer as to safe, efficient operation.		Emphasize importance of safety precautions.			
	Emphasize importance of safety precautions.  All shields in place.  Proper lubrication.  Field set-up checks for proper row spacing/adjustments.  Gearbox and reservoir oil levels.  V-belt and/or chain alignment and tension.  Check tire pressure.  Closely examine to assure all nuts, bolts, set screws and bearing lock collars are properly tightened.  Familiarize buyer with Operator's Manual.  Pump Products Instruct buyer as to safe, efficient operation.		All shields in place. Lubrication (oil tank full). Proper V-belt adjustment and alignment. Check motor rotation. Check motor current after start-up. Familiarize buyer with Operator's Manual.			
I A	Delivery Date I Model No		Serial No StateZip Code			
THIS WARRANTY MUST BE VALIDATED The Parma warranty is validated after all sections of this form are filled in completely and has been received by PARMA COMPANY.						
I hereby acknowledge: (1) That all information required on this form has been provided; (2) That I have read and understand the nature, extent, limitations, and exclusions of the manufacturer's warranty, and further; (3) That there were and are no other representations or warranties, either expressed or implied by anyone; (4) That the service, safety and pre-delivery operations have been performed as required.						
	Dealer or Dealer Re	pres	sentative Signature			
	Buyer Signature					