Manufacture's Limited Warranty

The limited warranty set forth below is given by Precision Products Incorporated with respect to new merchandise purchased and used in the United States, its possessions and territories.

Precision Products Incorporated warranties the product(s) listed against defects in material and workmanship, and will at our option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been assembled, operated, and maintained in accordance with the owner's manual furnished with the product, and has not been subjected to misuse, abuse, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster.

Normal wear parts or components thereof are subject to separate terms as follows: All normal wear parts or component failures will be covered on the product for a period of one year. Parts found to be defective within the warranty period will be replaced at our expense. Our obligation under this warranty is expressly limited to the replacement or repair, at our option, of parts found to be defective in material and workmanship.

Contacting Service

Warranty parts replacements are available, ONLY WITH PROOF OF PURCHASE, through our Customer Service Department.

Call 1 (800) 225-5891

This limited warranty does not provide coverage in the following cases:

- 1. Routine maintenance items such as lubricants and filters.
- 2. Normal deterioration of the exterior finish due to use or exposure.
- 3. Transportation and/or labor charges.

No implied warranty, including any implied warranty of merchantability of fitness for a particular purpose, applies after the applicable period of expressed written warranty above as to the part as identified below. No other expressed warranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Precision Products Inc. during the period of the warranty, the exclusive remedy is repair or

the product as set forth above. The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the purchase

Pull Behind Accessories

Precision Products Inc. will not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services, or for rental expenses to temporarily replace a warranted product.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

During the warranty period, the exclusive remedy is replacement of the part. In no event shall recovery of any kind be greater that the amount of the purchase price of the product sold. Alteration of safety features of the product shall void this warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use this product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

Local Law to this Warranty

This limited warranty gives you specific legal rights, and vou may also have other rights which vary from state to state.

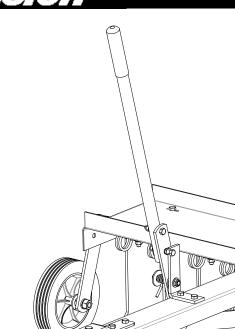
Warranty Period

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The warranty period stated below begins with the **Proof** of Purchase. Without the proof of purchase, the warranty period begins from the date of manufacture.

Product Warranty Period

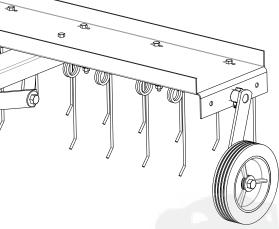
The warranty period for this product is as follows: All parts are covered for 1 year.



Manual Contents

Safety Instructions	2
Assembly	
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Owner's Manual | TT500 | 40" Tow Behind Dethatcher



Your New Dethatcher

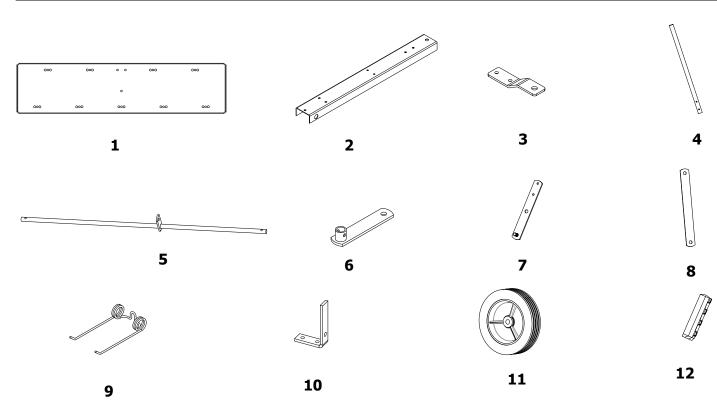
- **Congratulations** on your purchase of a new Precision Products Inc. dethatcher. Your dethatcher has been engineered and built to give you the most dependable and best performing product possible.
 - If you experience any problem you can not easily resolve, please feel free to contact our knowledgeable and helpful customer service department toll-free at 1 (800) 225-5891.

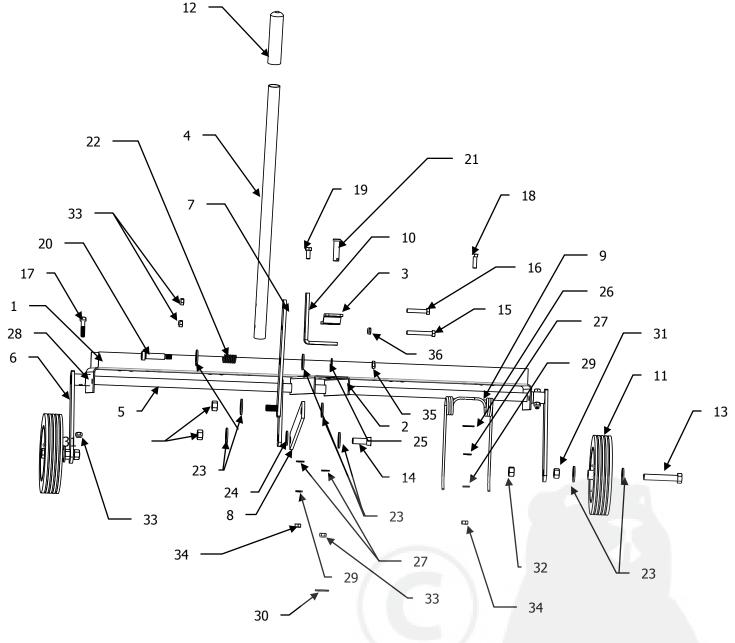
Rules for Safe Operation

All power equipment can cause injury or property damage if operated improperly. Please read and observe the following safety rules and exercise caution at all times when operating equipment.

- Read and understand your tractor owner's manual and towing safety rules.
- Never allow children to operate the towing vehicle. Do not allow adults to operate the tractor without having read the owner's manual or receiving proper instruction.
- Do not allow anyone to ride or sit on tow behind equipment during operation.
- Keep people and animals at a safe distance.
- Always wear substantial footwear. Do not wear loose fitting clothing that may get caught in moving parts.
- This unit may have sharp points. Handle with care.
- Keep your eyes and mind on your vehicle/attachment and area being covered. Do not let yourself be distracted.
- Stay alert for holes in the terrain and other hidden hazards.
- Tractor braking and stability may be affected with the attachment of this unit. Be aware of changing conditions on slopes. Refer to safety rules in your tractor owner's manual concerning safe operation on slopes. **Stay Off Steep Slopes.**
- Always operate up and down a slope, never across the face of a slope.
- This equipment should be operated at a reduced speed on rough terrain, along creeks, ditches and on hillsides, to prevent tipping and loss of control.
- Always begin with the transmission in first (low) gear and engine at low speed, gradually increasing speed as conditions permit.
- Keep the tractor and attachment in good operating condition and keep safety devices in place.
- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- The tractor and attachment should be stopped and inspected for damage after striking a foreign object. Any damage should be repaired before restarting and operating the equipment.
- Follow the maintenance instructions as outlined in this owner's manual.
- Do not exceed 3-4 miles per hour.

Carton Contents





Ref.	Qty.	Part#	Description	-	Ref.	Qty.	Part#	Description
1	1	5592GY	Base Plate		19	5	1248	5/16" x 3/4" Hex Head Bolt
2	1	5561GY	Tow Bar		20	1	4011	1/2" x 1-3/4" Shoulder Bolt
3	1	1243GY	Clevis Plate		21	1	1840	1/2" x 1-3/4" Clevis Pin
4	1	5576GY	Handle	1.1	22	1	4272	Compression Spring
5	1	5593GY	Axle Assembly		23	6	1506	1/2" Flat Washer
6	2	5568GY	Wheel Bracket		24	2	5589	1/2" Nylon Washer
7	1	4263G	Lever Link		25	1	1278	3/8" Flat Washer
8	1	4240G	Link Bar		26	9	2172	5/16" Fender Washer
9	9	4005GY	Tine		27	14	1044	5/16" Flat Washer
10	1	5564GY	Handle Brace		28	2	4295	1/2" x 1" Spacer
11	2	3150CR	Wheels		29	14	1276	5/16" Lock Washer
12	1	3042	Handle Grip		30	1	1042	#14 Hitch Pin Clip
13	2	4271	1/2" x 3" Hex Head Bolt		31	2	4324	1/2" Jam Nut
14	1	5583	1/2" x 1-1/2" Hex Head Bolt		32	4	4327	1/2" Nylock Nut
15	1	1752	5/16" x 2-1/4" Hex Head Bolt		33	6	1749	5/16" Nylock Nut
16	1	2051	5/16" x 1-3/4" Hex Head Bolt		34	14	1275	5/16" Hex Head Nut
17	2	4014	5/16" x 1-1/2" Hex Head Bolt		35	1	5590	3/8" Nylock Jam Nut (thin)
18	11	3738	5/16" x 1" Hex Head Bolt		36	1	5591	5/16" Nylock Jam Nut (thin)

Operation

Raising/Lowering the Dethatcher

- 1. To raise the dethatcher for transport lift up the back until the tines are no longer in contact with the ground.
- 2. To lower the dethatcher for operation, move the Handle to the down position.
- 3. Do not use more than 75 lbs ballast on the Base.

Using the Dethatcher

Regular removal of thatch is a critical step for the maintenance of a healthy lawn. Thatch is a layer of stems, clippings, runners, roots, and leaves that has not decayed. Excessive thatch prevents air, water, and fertilizer from reaching the roots. The dethatcher will effectively dislodge excessive thatch from your lawn. Use your dethatcher in the mid-tolate Spring and/or in early Fall.

- 1. Your grass should be less than 3" tall for proper tine action.
- 2. Start with the tractor in low gear. Vary the forward speed to determine the best speed for maximum performance.
- 3. When in use, all tines on the dethatcher should bend to the back and "flip" the thatch forward as it is pulled.
- 4. Use a crisscross pattern to achieve the most even removal of thatch.
- 5. On slopes, always operate in an up and down direction only.
- 6. Avoid extremely sharp turns.
- 7. Not for use with Zero Turn Radius Mowers.

Maintenance

- 1. Before each use check all nuts and bolts for tightness.
- 2. Clean after each use to prevent rust. The key to years of trouble-free service is to keep your dethatcher clean and dry.
- 3. If rust should develop, sand lightly and then paint area with enamel.
- 4. Periodically check all moving parts for free movement and if necessary, lubricate with oil.

Storage

- 1. Be careful to store your dethatcher with the tines pointed towards the floor or a wall. Tines are sharp and can cause considerable damage.
- 2. Always store in a dry area, and coat exposed metal with light oil when not in use.

Parts and Support



Please do not return this product to the store prior to contacting Precision.

At Precision Products Inc. our goal is to deliver quality, value and outstanding service. If for any reason our product does not meet your expectations please contact us and we will take care of any problem you may have with this unit.

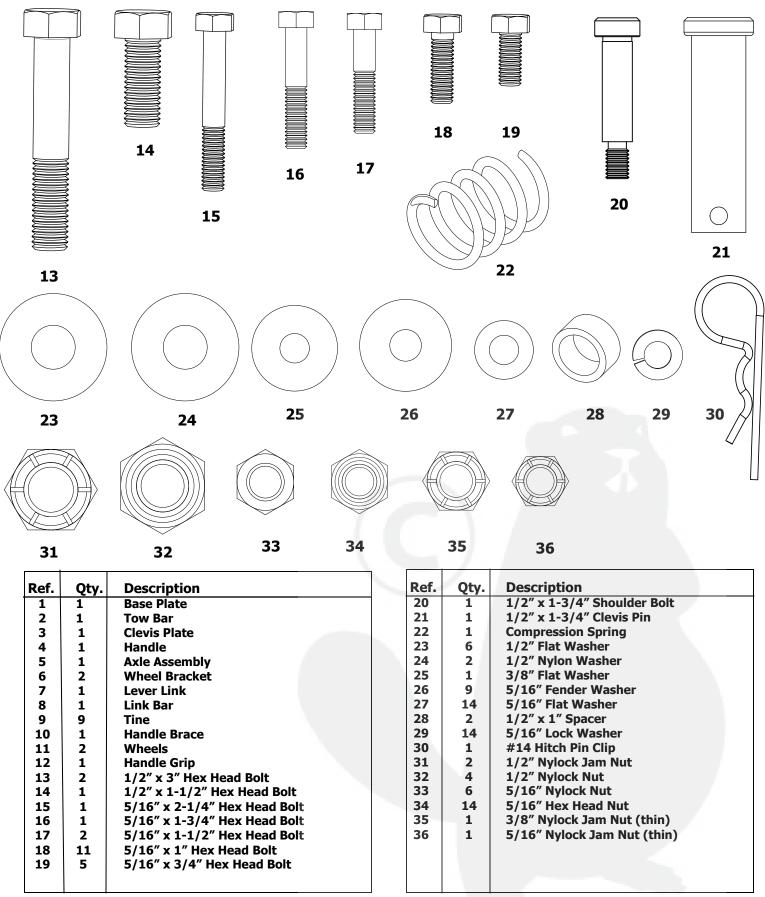
When ordering replacement parts please have the model number, part description and part number, inspector number and date on box available so that we can best serve you.

1 (800) 225-5891

www.precisionprodinc.com

Precision Products Inc.

Hardware Package Contents



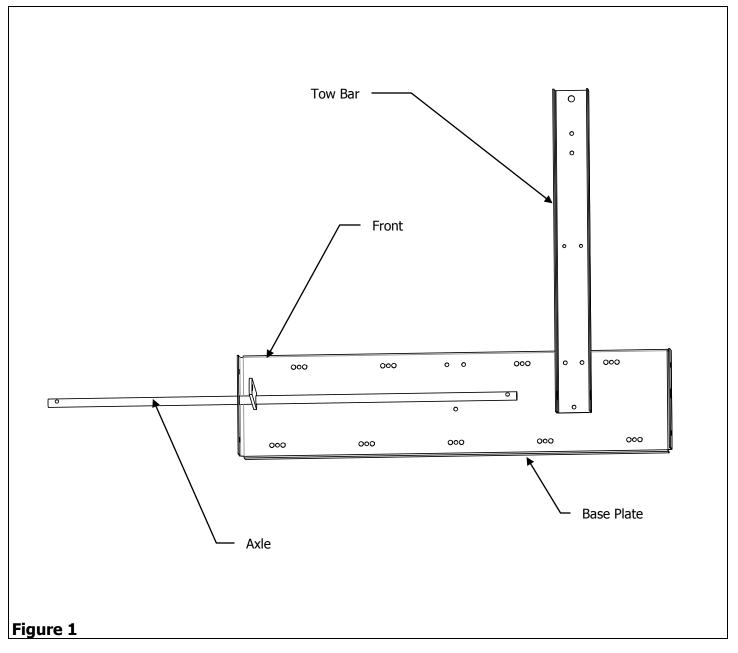
20 1 1/2" x 1-3/4" Shoulder Bolt	
21 1 1/2" x 1-3/4" Clevis Pin	
22 1 Compression Spring	
23 6 1/2" Flat Washer	
24 2 1/2" Nylon Washer	
25 1 3/8" Flat Washer	
26 9 5/16" Fender Washer	
27 14 5/16" Flat Washer	
28 2 1/2" x 1" Spacer	
29 14 5/16" Lock Washer	
30 1 #14 Hitch Pin Clip	
31 2 1/2" Nylock Jam Nut	
32 4 1/2" Nylock Nut	
33 6 5/16" Nylock Nut	
34 14 5/16" Hex Head Nut	
35 1 3/8" Nylock Jam Nut (thin)	
36 1 5/16" Nylock Jam Nut (thin)	

Assembly Instructions

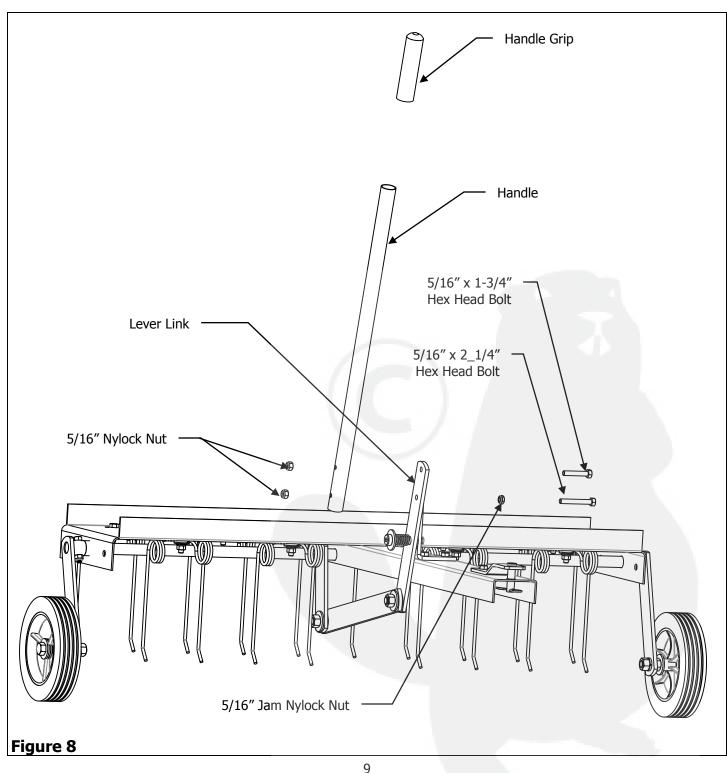
(2) 1/2" Wrenches (2) 3/4" Wrenches (2) 9/16" Wrenches (1) 1/4" Allen Wrench **Remove from Carton**

Remove and layout all parts and hardware packages from the carton. Identify them using the illustrations on pages 2 and 3.

1. Place the Base Plate on a flat surface with the front facing away for you (the front will have three bolt holes in the center). Insert the short side of the Axle into the Axle Hole to your left. Slide the Tow Bar onto the Axle. Slide the Axle into the Axle Hole on the right side of the Base Plate. See Figure 1.

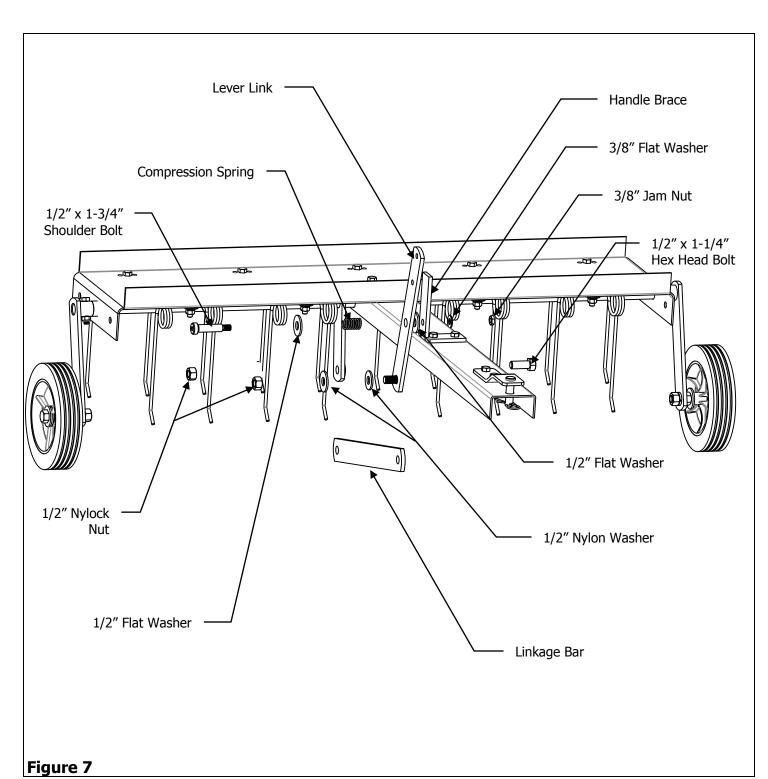


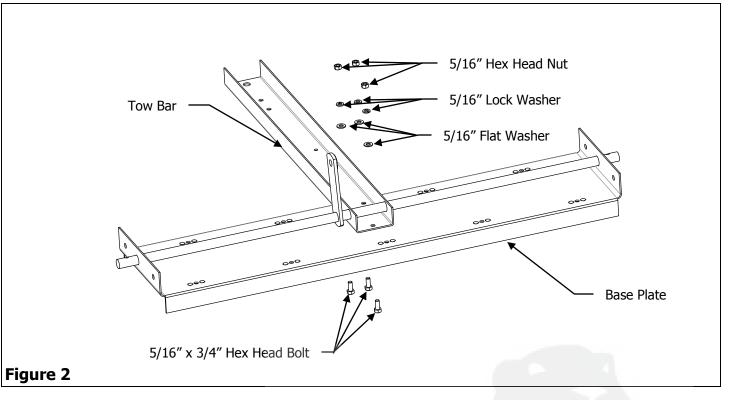
8. Attach the Handle Grip to the Handle. Insert the 5/16" x 1-3/4" Hex Head Bolt in to the top hole in the Handle (from the right side as us are facing the unit), then through the top hole of the Lever Link and secure with a 5/16" Nylock Nut. Attach the 5/16" Nylock Jam Nut to the 5/16" x 2-1/4" Hex Head Bolt (leaving about 1/2" spacing at the top). Insert the bolt into the second hole of the Handle (from the right as you are facing the unit), and the Lever Link, then secure with a 5/16" Hex Head Nut. See Figure 8.



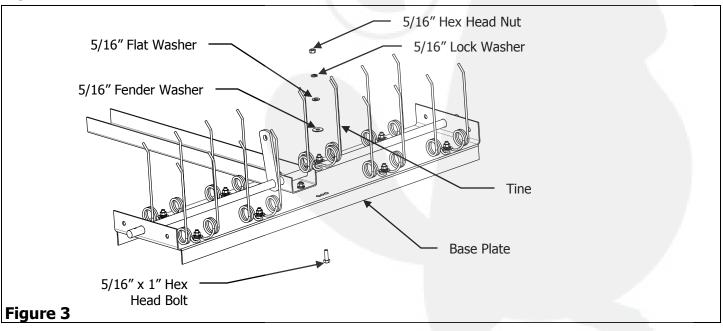
7. Place the 1/2" Nylon Washer onto the threaded stud on the Lever Link, insert the stud into one of the holes of the Linkage Bar, and secure with a 1/2" Nylock Nut (Tighten all the way until snug then back off 1/2 a turn). Insert $1/2" \times 1-1/2"$ Hex Head Bolt into the Axle Link, place a 1/2" Nylon Washer on to the bolt, insert the bolt into the rear hole of the Linkage Bar, secure a 1/2" Nylock Nut. Insert the $1/2" \times 1-3/4"$ Shoulder Bolt into a 1/2" Flat Washer, the Compression Spring, another 1/2" Flat Washer. Insert the bolt into the larger center hole of the Lever Link, followed by a 1/2" Flat Washer. Insert the bolt into the one hole on the vertical portion of the Handle Brace, and secure with a 3/8" Jam Nut. See Figure 7.

2. Align the three rear holes in the Tow Bar with the corresponding hole in the Base Plate. Insert a $5/16'' \times 3/4''$ Hex Head Bolt into one of the holes in the Base Plate then through the corresponding hole in the Tow Bar. Insert a 5/16'' Flat Washer onto the bolt followed by a 5/16'' Lock Washer, then secure with a 5/16'' Hex Head Nut. Repeat process on the remaining two holes. See Figure 2.

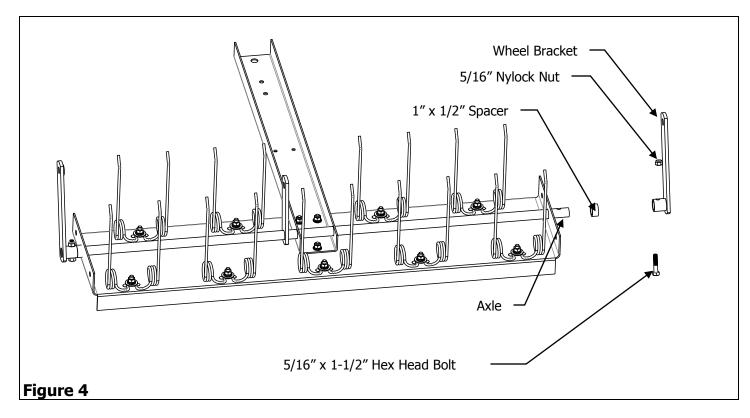




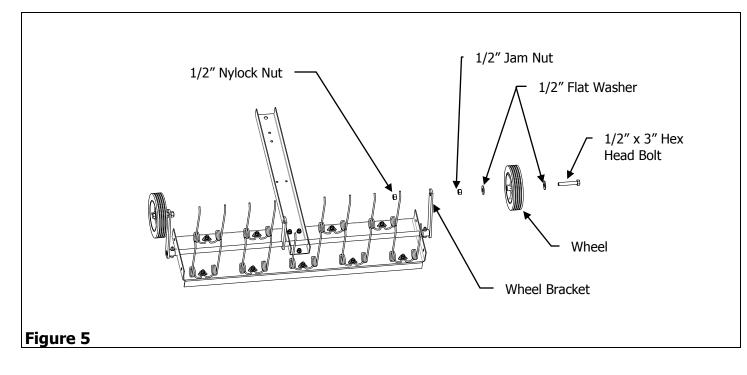
3. Insert a 5/16" x 1" Hex Head Bolt into one of the nine remaining holes in the Base Plate, place a 5/16" Fender Washer onto the bolt followed a 5/16" Flat Washer and a 5/16" Lock Washer. Loosely attach a 5/16" Hex Head Nut. Repeat process on the remaining eight holes. Slide a Tine between a Fender Washer and the Base Plate, secure Hex Head Nut, repeat on the remaining eight Tines. See Figure 3.



4. Place a $1'' \ge 1/2''$ Spacer onto the Axle, followed by a Wheel Bracket. Align the hole of the Wheel Bracket with the hole in the Axle. Insert a $5/16'' \ge 1-1/2''$ Hex Head Bolt into the hole in the Wheel Bracket and Axle. Secure with a 5/16'' Nylock Nut. Repeat process on the other side. See Figure 4.



5. Place a 1/2" Flat Washer onto a $1/2" \times 3"$ Hex Head Bolt, followed by a Wheel and then another 1/2" Flat Washer and secure with a 1/2" Jam Nut (Do not over tighten or the Wheel will not turn). Insert this assembly into the hole in the Wheel Bracket, then secure with a 1/2" Nylock Nut. Repeat process on the other side. See Figure 5.



6. Align the two holes of the Tow Bar and Handle Brace as shown. Insert a $5/16'' \times 1''$ Hex Head Bolt into one of the holes in the Handle Stop and then through the corresponding hole in the Tow Bar, place a 5/16'' Flat Washer on to the bolt, and secure with a 5/16'' Nylock Nut. Repeat process on the next hole. Insert a $5/16'' \times 3/4''$ Hex Head Bolt into one of the two smaller holes on the Clevis Plate and then into the corresponding hole in the Tow Bar, place a 5/16'' Lock Washer onto the bolt and secure with a 5/16'' Hex Head Nut. Repeat process on the next hole. Insert the Clevis Plate and then into the corresponding hole in the Tow Bar, place a 5/16'' Lock Washer onto the bolt and secure with a 5/16'' Hex Head Nut. Repeat process on the next hole. Insert the Clevis Plate the larger front hole of the Clevis Plate and through the hole in the Tow Bar and secure with the Hitch Pin Clip. See Figure 6.

