

Assembly & Operation Instructions

Tow Behind & Walk Behind Models



WOODLAND POWER PRODUCTS, INC. 72 Acton Street, West Haven, Connecticut 06516 www.CycloneNutRake.com ©2020, Woodland Power Products, Inc.

TOLL-FREE 1-(888)-531-RAKE 09-06-001 F20

Thanks for your recent purchase of the Cyclone Nut Rake (CNR). We think you're really going to enjoy using it. This Quick Start Guide will give you a few tips to make sure it performs perfectly.

Whether you've purchased the Walk Behind or Tow Behind model, your Cyclone Nut Rake will come set up to pick up smaller nuts with a diameter up to 1 inch. If you need to pick up larger nuts, we've included spacer wheels which easily install on your CNR and let you collect larger nuts including hickory, chestnuts, black walnuts and sweet gum balls.

More information about the spacers wheels can be found on the next page.

Using Your New Cyclone Nut Rake

1. Try to do the nut collecting when the grass is at an average length.

If you use the CNR when the grass is very tall, the grass will tend to mat down under the wheels and may obstruct the wheels, making it harder for them to grab the nuts or the husks from the nuts.

2. Make sure your lawn is not overly saturated from recent rain.

If your lawn is too wet, your pickup wheels could sink into the wet soil and this would create less effective collection.

3. Try to use the CNR when the lawn is not totally covered with leaves or other debris. Again, this can cause the pickup wheels to be "blinded" and the wheels will be less effective. This does

not mean the lawn needs to be spotless. It's okay if the CNR picks up <u>some</u> leaves or twigs with the nuts. This is normal and to be expected.

4. Please try to avoid picking up larger sticks.

If you do get a stick caught, simply stop and remove it and you'll be back in action.

5. Push the Walk Behind CNR model at a comfortable walking speed.

You'll also want to keep the collection bin between 4 and 8 inches off the ground. If you push down on the handles and lift the bin too high creating a steeper incline, the nuts will not be tossed as effectively into the bin. Drive your mower with the Tow-Behind model at a similar speed.

6. Finally, it may be helpful to pass over some areas a few times.

This will allow you to collect any nuts that were missed on the first pass. You'll find that approaching the nuts from different directions will let you recover nuts you may have missed.

We know you'll love your new Cyclone Nut Rake and we hope these helpful tips will get your nut collection off to a great start. However if you have any questions or need help with this or any Cyclone Rake Product, we have an amazing Customer Service Team here to support you.



The Cyclone Nut Rake is a versatile tool that will help you collect a wide variety of nuts (and other items) that are on the ground. To get the maximum effectiveness from the tool, please review the information below regarding use of the spacer wheels.

The Cyclone Nut Rake comes from the factory assembled with all wheels and no spacers. So, the default setup is for small nuts that are less than 1" in diameter. While the Cyclone Nut Rake will pick up nuts that are slightly larger than 1" the default configuration, we strongly recommend that you use the spacer setup as outlined below. This will allow the Cyclone Nut Rake to operate more efficiently and will avoid damage to the pickup wheels and the ejector fins.

Please use this handy chart to determine if you should be using the spacers provided.

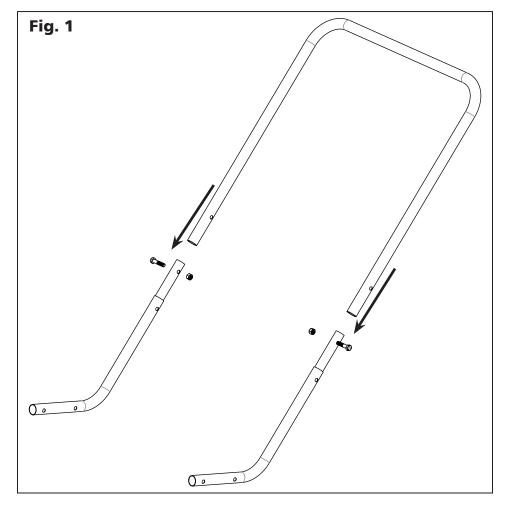
# OF SPACERS	SIZE RANGE	EXAMPLE
0 Spacers	Small Nuts Up to a 1" diameter	Small Acorns Small Hazelnuts
1 Spacer	Medium Nuts 1" to 1.5" diameter	Large Acorns Almonds Hickory Chestnuts Pecans Some Walnuts Sweet Gum Balls
2 Spacers	Large Nuts (and other things) Greater than 1.5" diameter	Black Walnuts Some Sweet Gum Balls Chestnuts Golf Balls Pinecones



ASSEMBLING YOUR CYCLONE NUT RAKE: WALK BEHIND

Tools Required: Two 1/2 inch open end or box wrenches. Yup, that's all you need!

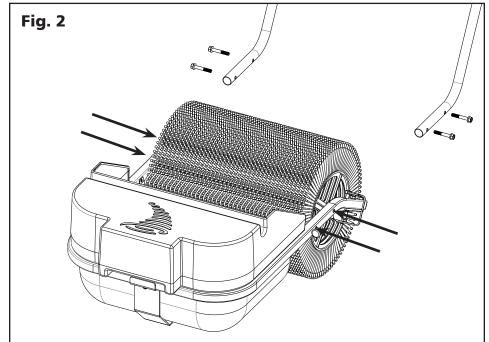
1. (Fig. 1) Start by assembling the three pieces of the handlebar using the 5/16-18 x 1¹/₂ inch hex bolts and nylon lock nuts.



2. (Fig. 2) Attach the handlebar to the main assembly using the four 5/16-18 x 2 inch flange head screws.

That's it, you're done!

Your Cyclone Nut Rake is completely assembled and ready to use.

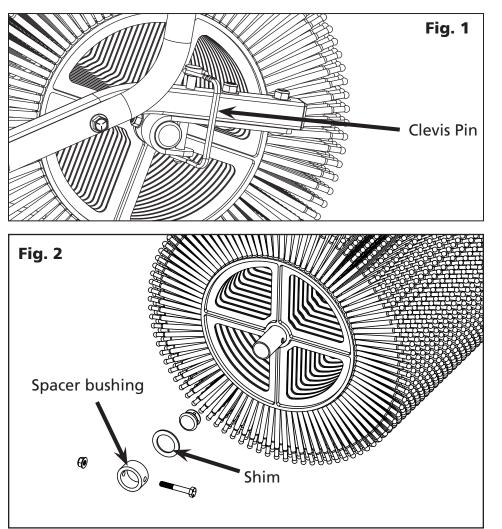


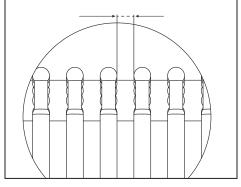
CHANGING THE SPACING OF THE WALK BEHIND NUT RAKE'S WHEELS

To accommodate different nut sizes with the Nut Rake, just follow these steps:

Tools Required: Two 7/16 inch open end or box wrenches. Phillips head screwdriver

- (Fig. 1) Unlock and remove the clevis pins from both sides of the frame that hold the axle of the wheel stack in place. Now, slide the entire wheel stack out of the J-hooks, and off the frame.
- 2. (Fig. 2) On one side of the wheel stack use the two 7/16 inch wrenches to remove the ¼-20 x 1 ¾ inch bolt and the ¼-20 inch nylon lock nut. Then, slide the spacer bushing and shim off the wheel stack axle.
- 3. Now, slide all of the pickup wheels off the axle *except the last one*.
- **4.** Put one spacer wheel on the axle (two spacers if you're adjusting to maximum width).
- **5.** Next, put a pickup wheel on the axle.
- 6. Repeat Steps 4 and 5.
 - 18 spacer wheels for nuts that are 1"-1 ½"
 - 24 spacer wheels for nuts 1 ¹/₂" and larger.
- **7.** Now, replace the shim, the spacer bushing, the nut, and the bolt you removed earlier.





For Reference: The distance between the wheel fingers is:

No spacers - $\frac{1}{4}$ inch One spacer - $\frac{3}{4}$ inch Two spacers - $1\frac{1}{4}$ inch

Remove the Ejector Bar Assembly:

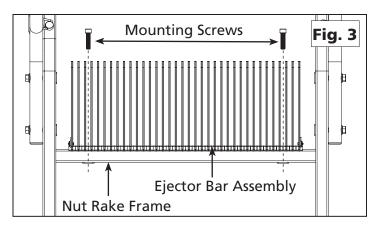
- 8. (Fig. 3) Remove the Ejector Bar Assembly from Cyclone Nut Rake Frame by unscrewing the two 5/16" mounting screws that are located between the third and fourth fin on each side of Ejector Bar Assembly.
- **9.** Take off End Stoppers (shown in Fig. 5) by unscrewing the side screws.

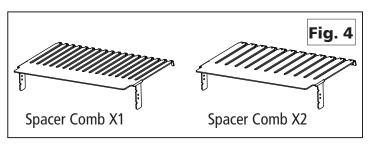
NOTE: Keep End Stoppers in safe place, you will need them if needed to convert Ejector Bar Assembly back to regular spacing.

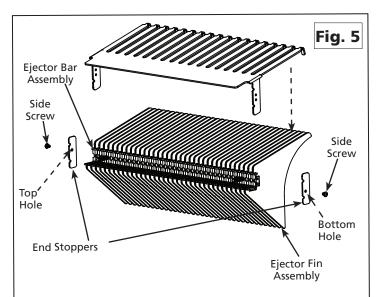
Install the Spacer Comb:

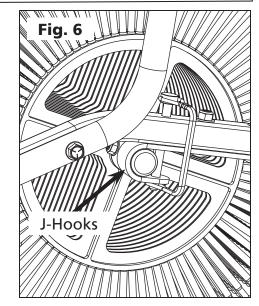
- (Fig 4) Spacer Comb X1 is used with <u>one</u> Spacer between the Pickup Wheels
 - Spacer Comb X2 is used with <u>two</u> Spacers between the Pickup Wheels.
- **10.** (Fig. 5) While holding Extractor Fins in place, slide the Spacer Comb onto the Extractor Fin Assembly aligning the holes on the side tabs with the screw holes on Ejector Bar Assembly.
- **11.** (Fig.5) Secure the Spacer Comb in place with the 2 side screws provided. Alternate the position of the screws on each side of Ejector Bar Assembly. On one side in the top hole and on the other side in the bottom hole.
- **12.** Make sure all Extractor Fins are straight and the Spacer Comb's tips are evenly separated.
- **13.** (Fig. 4) Reinstall the Extractor Fin Assembly with Spacer Comb back onto Cyclone Nut Rake Frame and secure with the 2 bolts you removed earlier.
- **14.** (Fig. 6) Slide the wheel stack back into the J-hooks and replace the clevis pin.

That's it, you're done.









PARTS FOR THE WALK BEHIND NUT RAKE

COMPONENT LIST

PART NO. 09-03-004	NAME	QTY		
	Walk Behind single wheel stack	1		
09-01-017	J-hook	2		
07-01-075	Carriage bolt 5/16 - 18 x 1.5	4		
07-01-151	5/16-18 Nylon insert flange nut	4		
09-01-018	Clevis pin with wire lock	2		
09-03-011	Walk Behind Chassis with cap plugs	1		
09-02-009	1" round finishing plug	1		
09-03-014	Walk Behind Handle with grip	1		
09-01-029		4		
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		1		
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			H T	
	-			
		1		
09-02-059	Ejector Bar Assembly	1		
	07-01-075 07-01-151 09-01-018 09-03-011 09-02-009 09-03-014	07-01-075 Carriage bolt 5/16 - 18 x 1.5 07-01-151 5/16-18 Nylon insert flange nut 09-01-018 Clevis pin with wire lock 09-03-011 Walk Behind Chassis with cap plugs 09-02-009 1" round finishing plug 09-03-014 Walk Behind Handle with grip 09-01-029 Flange Head Screw 5-16 18 x 2 09-01-005 Molded collector bin 09-01-045 Kickstand 07-01-137 1/4 - 20 Nylon insert flange nut 09-01-046 1/4 - 20 x 1.5 Pan head screw 09-01-014 Lower handle tube assembly 01-10-170 5/16-18 x 1.5 Hex bolt 01-01-151 5/16-18 Nylon lock nut 09-02-059 Ejector Bar Assembly 10 10 10 10 14 14	07-01-075 Carriage bolt 5/16 - 18 x 1.5 4 07-01-151 5/16-18 Nylon insert flange nut 4 09-01-018 Clevis pin with wire lock 2 09-03-011 Walk Behind Chassis with cap plugs 1 09-02-009 1" round finishing plug 1 09-03-014 Walk Behind Handle with grip 1 09-01-029 Flange Head Screw 5-16 18 x 2 4 09-01-029 Flange Head Screw 5-16 18 x 2 4 09-01-025 Molded collector bin 1 09-01-045 Kickstand 1 07-01-137 1/4 - 20 Nylon insert flange nut 1 09-01-046 1/4 - 20 x 1.5 Pan head screw 1 09-01-014 Lower handle tube assembly 2 01-01-170 5/16-18 x 1.5 Hex bolt 2 01-01-151 5/16-18 Nylon lock nut 1 09-02-059 Ejector Bar Assembly 1	07-01-075 Carriage bolt 5/16 - 18 x 1.5 4 07-01-151 5/16-18 Nylon insert flange nut 4 09-01-018 Clevis pin with wire lock 2 09-03-011 Walk Behind Chassis with cap plugs 1 09-02-009 1" round finishing plug 1 09-01-029 Flange Head Screw 5-16 18 x 2 4 09-01-045 Kickstand 1 07-01-137 1/4 - 20 Nylon insert flange nut 1 09-01-046 1/4 - 20 x 1.5 Pan head screw 1 09-01-046 1/4 - 20 x 1.5 Pan head screw 1 09-01-046 1/4 - 20 x 1.5 Pan head screw 1 09-01-045 Kickstand 1 09-01-045 S/16-18 Nylon lock nut 1 09-02-059 Ejector Bar Assembly 1 10 10 10 10 10 10 10 10 10 1

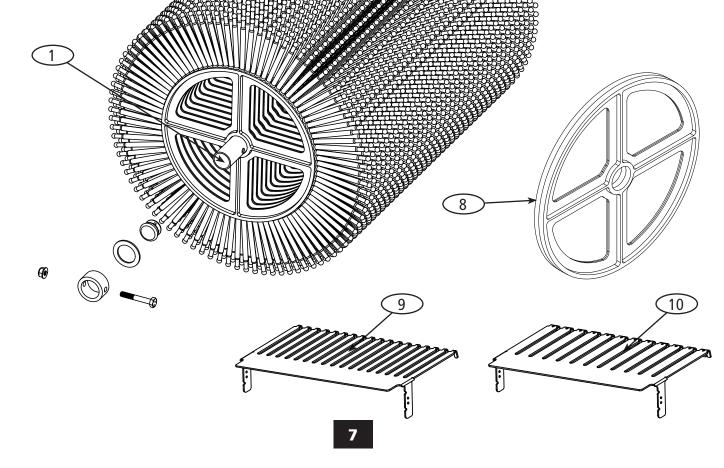
PARTS FOR THE WALK BEHIND NUT RAKE - WHEEL STACK

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COMPONENT LIST

Key NO.	PART NO.	NAME	QTY
1	09-01-022	Shaft tube - Walk Behind	1
2	09-01-002	Pick-up wheel	37
3	09-01-014	1" Round tube finishing plug	2
4	09-01-024	Spacer bushing - Walk Behind	2
5	07-01-476	1/4 - 20 x 1.75 Hex bolt	2
6	07-01-137	1/4 - 20 Nylon insert flange nut	2
7	09-01-057	Nut Rake Axle shim	2
8	09-01-004	Spacer Wheel	24
9	09-01-064	Spacer Comb 1x	1
10	09-01-065	Spacer Comb 2x	1



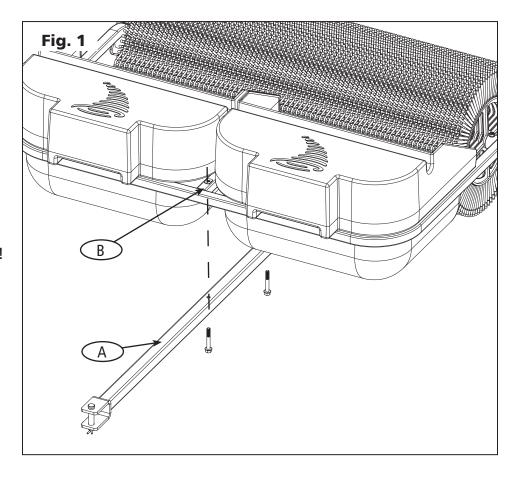
ASSEMBLING YOUR CYCLONE NUT RAKE: TOW BEHIND

Tools Required: One ¹/₂ inch open end or box wrench. Yup, that's all you need!

 (Fig. 1) Attach the Drawbar Weldment (A) to the Main Assembly (B) using the two included 5/16-18 x 2¼ inch hex bolts.

Yup, that's it.

You're finished! You're now ready to go gather those nuts!



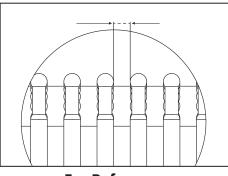
CHANGING THE SPACING OF THE TOW BEHIND NUT RAKE'S WHEELS

To accommodate different nut sizes with the Nut Rake, just follow these steps:

Tools Required: Two 7/16 inch open end or box wrenches.

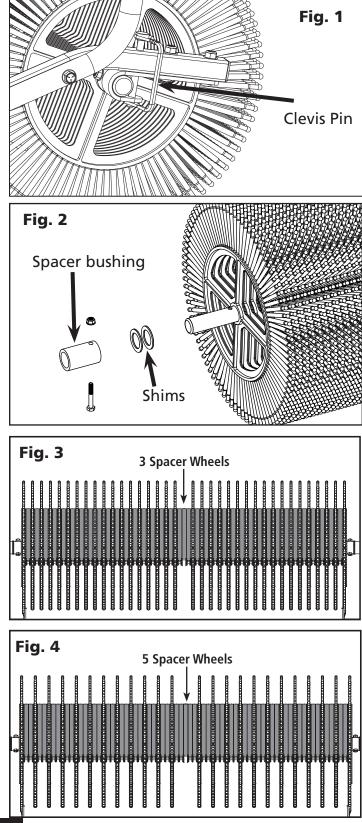
Phillips head screwdriver

- **1.** (Fig. 1) Unlock and remove the clevis pins from both sides of the frame that hold the axle of the wheel stack in place. Now, slide the entire wheel stack out of the J-hooks, and off the frame.
- (Fig. 2) On one side of the wheel stack use the two 7/16 inch wrenches to remove the ¼-20 x 1¾ inch bolt and the ¼-20 inch nylon lock nut. Then, slide the spacer bushing and both spacers off the wheel stack axle.
- 3. Now, slide all of the pickup wheels off the axle *except the last one*.
- **4.** Put one spacer wheel on the axle (two spacers if you're adjusting to maximum width).
- 5. Next, put a pickup wheel on the axle.
 - When adding 1 Spacer Wheel between the pickup wheels add 3 spacer wheels after the 18th pickup wheel. (Fig. 3)
 - When adding 2 Spacer Wheels between the pickup wheels add *5 Spacer Wheels after the 12-th pickup wheel*. (Fig. 4)
- **6.** Replace the 2 shims, the spacer bushing, the nut, and the bolt you removed earlier.



For Reference: The distance between the wheel fingers is:

No spacers - $\frac{1}{4}$ inch One spacer - $\frac{3}{4}$ inch Two spacers - $1\frac{1}{4}$ inch



Remove the Ejector Bar Assemblies:

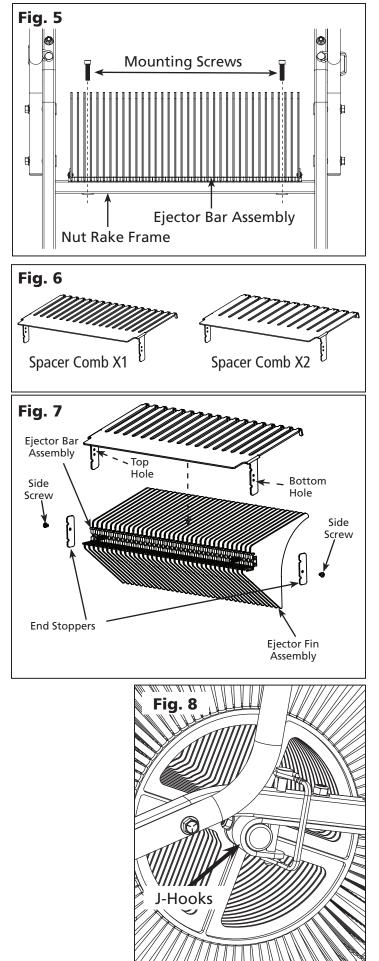
- 7. (Fig. 5) Remove one of the Ejector Bar Assemblies from Cyclone Nut Rake Frame by unscrewing the two 5/16" mounting screws that are located between the third and fourth fin on each side of Ejector Bar Assembly.
- **8.** Remove the End Stoppers (shown in Fig. 7) from the Ejector Bar Assembly by unscrewing the side screws.

NOTE: Keep End Stoppers in safe place, you will need them if needed to convert Ejector Bar Assembly back to regular spacing.

Install the Spacer Combs:

- (Fig 6) Spacer Comb X1 is used with <u>one</u> Spacer Wheel between the Pickup Wheels
 - Spacer Comb X2 is used with <u>two</u> Spacers Wheels between the Pickup Wheels.
- **9.** (Fig. 7) While holding Extractor Fins in place, slide the Spacer Comb onto the Extractor Fin Assembly aligning the holes on the side tabs with the screw holes on Ejector Bar Assembly.
- **10.** (Fig. 7) Secure the Spacer Comb in place with the 2 side screws provided. Alternate the position of the screws on each side of Ejector Bar Assembly. On one side in the top hole and on the other side in the bottom hole.
- **11.** Make sure all Extractor Fins are straight and the Spacer Comb's tips are evenly separated.
- **12. Repeat Steps 7-11** on the other Ejector Bar Assembly.
- **13.** (Fig. 5) Reinstall both Extractor Fin Assemblies with Spacer Combs back onto Cyclone Nut Rake Frame and secure with the bolts you removed earlier.
- **14.** (Fig. 8) Slide the wheel stack back into the J-hooks and replace the clevis pin.

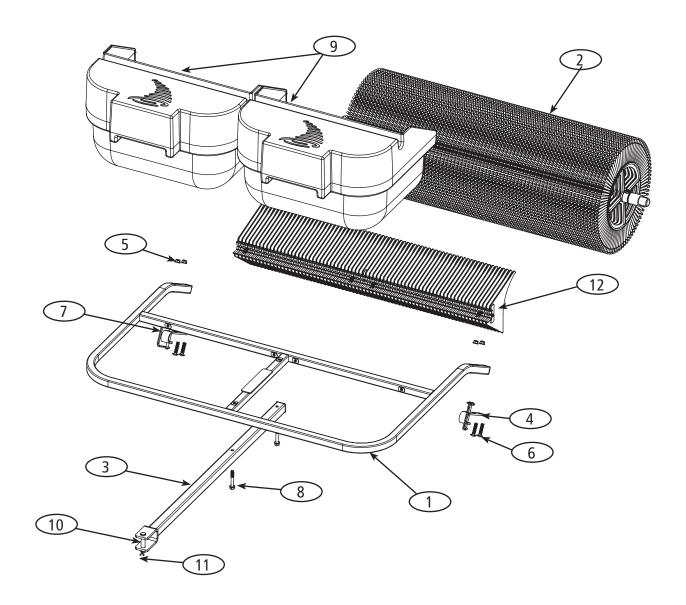
That's it, you're done.



PARTS FOR THE TOW BEHIND NUT RAKE

COMPONENT LIST

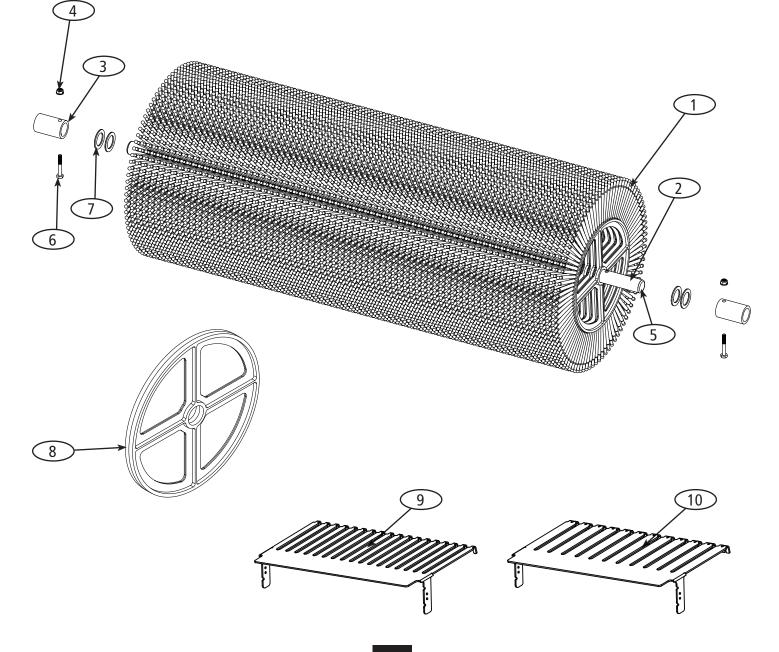
Key N	O. PART NO.	NAME	QTY
1	09-03-012	Tow Behind frame with cap plugs	1
2	09-03-002	Tow Behind wheel stack and axle	1
3	09-03-013	Drawbar Assembly	1
4	09-01-017	J-hook	2
5	07-01-151	5/16-18 Nylon insert flange nut	4
6	07-01-075	Carriage bolt 5/16 - 18 x 1.5	4
7	09-01-018	Clevis pin with wire lock	2
8	09-01-020	Flange head screw 5/16 18 x 2.25	2
9	09-01-005	Molded collector bin	2
10	09-01-012	Hitch pin	1
11	01-01-203	Bridge pin	1
12	09-02-059	Ejector Bar Assembly	2



PARTS FOR THE TOW BEHIND NUT RAKE - WHEEL STACK

COMPONENT LIST

Key N	O. PART NO.	NAME	QTY
1	09-01-002	Pick-up wheel	73
2	09-01-012	Shaft tube - Tow Behind	1
3	09-01-013	Spacer bushing - Tow Behind	2
4	07-01-137	1/4 - 20 Nylon insert flange nut	2
5	09-01-014	1" Round tube finishing plug	2
6	07-01-476	1/4 - 20 x 1.75 Hex bolt	2
7	09-01-057	Nut Rake Axel shim	4
8	09-01-004	Spacer Wheel	49
9	09-01-064	Spacer Comb 1x	2
10	09-01-065	Spacer Comb 2x	2



TIPS & TRICKS

Now that your Cyclone Nut Rake is completely assembled, you're ready to start collecting! Here are a few tips and tricks to make sure your nut gathering goes as smoothly as possible:

- To gather the most nuts in one go with the Tow Behind you should drive your mower at a speed that's the equivalent of a swift walk forward. If you drive too quickly the nuts may be popped a bit farther than the collector bin. With the Walk Behind model, just walk normally! A comfortable walking pace will be perfect.
- If your property is a bit uneven or you have divots in your lawn where the nuts can hide, you may just find you have to go over the nuts from more than one angle. If the pickup wheels can't reach the nuts from one angle, try another and you'll be all set.
- The best time to go out and collect the nuts off your property is shortly after they fall. If nuts are left to sit on your property, they're more likely break up. Fragments of nuts, and their shells, are a bit harder to pick up than a whole nut is as it gives the pickup wheels less to grab onto.
- If there's a heavy, dense layer of leaves covering the nuts, they may have a hard time reaching the pickup wheels. The wheels can reach through a certain level of leaves and other debris if the nuts aren't very deeply buried.
- One last thing to keep in mind is if you're collecting nuts and other things from a hard surface, like driveways, parking lots etc., the Cyclone Nut Rake may just be a bit squirrelly (pun intended). Because concrete, pavement, and packed in dirt doesn't have as much give as grass does your Nut Rake may be a bit wobbly looking but will still collect the debris without trouble!

You're ready! Go out there and make all the squirrels on your property jealous with how many nuts you're able to collect!