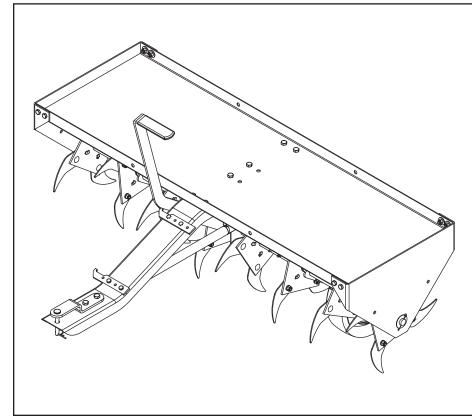


Model No. 45-0406



# **48" CURVED SPIKE AERATOR**

CAUTION: Read Rules for Safe Operation and Instructions Carefully

- Safety
- Assembly
- Operation
- Maintenance
- **Parts**

### **RULES FOR SAFE OPERATION**

Remember, any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment.



LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS -- ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

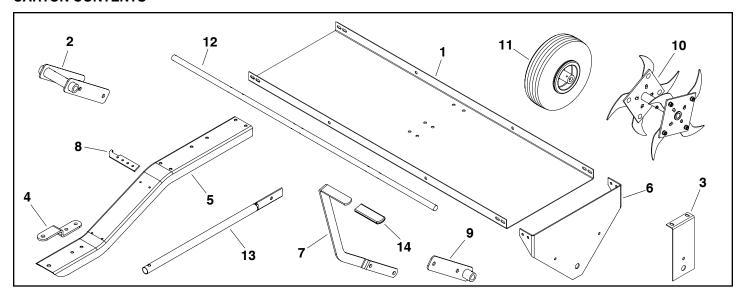


CAUTION: VEHICLE BRAKING AND STABILITY MAY BE AFFECTED WITH THE ADDITION OF AN ACCESSORY OR AN ATTACHMENT. BE AWARE OF CHANGING CONDITIONS ON SLOPES.

Exercise caution at all times when using power equipment.

- 1. Read this owner's manual carefully for operating and service instructions before attempting to assemble or operate this equipment. Be thoroughly familiar with the proper use of this equipment.
- 2. Read the vehicle owner's manual and vehicle safety rules, and know how to operate the vehicle before using this equipment.
- 3. Never allow children to operate the tractor or plug aerator attachment, and do not allow adults to operate without proper instructions.
- 4. This aerator attachment has sharp knife points. Always handle with care and wear substantial footwear when operating this aerator.
- 5. Do not allow anyone to ride or sit on plug aerator attachment frame or on towing vehicle.
- 6. Keep the area of operation clear of others, particularly small children and pets.
- 7. Always begin with the transmission in first (low) gear and engine at low speed, and gradually increase speed as conditions permit.
- 8. The vehicle braking and stability may be affected with the attachment of this equipment. Be aware of changing conditions on slopes. Refer to safety rules in the vehicle owner's manual concerning safe operation on slopes. **STAY OFF OF STEEP SLOPES.**
- 9. Always operate up and down a slope, never across the face of a slope.
- 10. This equipment should be operated at reduced speed on rough terrain, along creeks and ditches and on hillsides, to prevent tipping and loss of control. Do not drive too close to a creek or a ditch.
- 11. Do not tow this equipment on a highway or any other public thoroughfare.
- 12. Follow the maintenance instructions as outlined in this owner's manual.

### **CARTON CONTENTS**



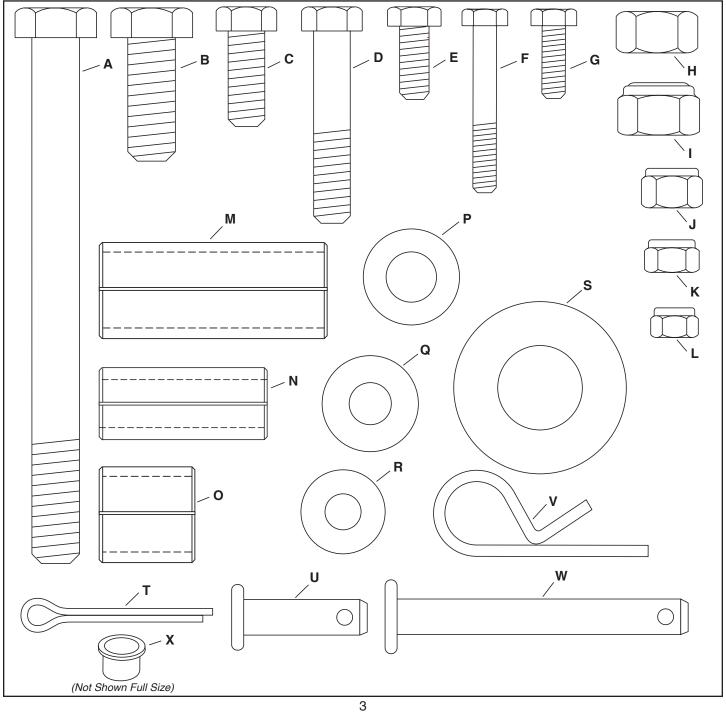
- 1. Tray
- 2. Wheel Brackets (2)
- 3. Middle Brace
- 4. Hitch Bracket
- 5. Tongue

- 6. End Plates (2)
- 7. Lift Handle
- 8. Lift Stop Brackets (2)
- 9. Lift Bracket Assy.
- 10. Double Spool Assy. (4)
  Pre-Assembled with Blades
- 11. Wheel and Tire Assy. (2)
- 12. Shaft
- 13. Brace Tube
- 14. Handle Grip

Hardware Package (Shown next page)

### HARDWARE PACKAGE CONTENTS (Shown full size except where noted)

Key	Qty.	Description	Key	Qty.	Description
Α	2	Hex Bolt, 1/2-13 x 5-1/2 in.	M	1	Spacer Tube, 2.38 in. Long
В	1	Hex Bolt, 1/2-13 x 1-1/4 in.	N	2	Spacer Tube, 1.75 in. Long
С	8	Hex Bolt, 3/8-16 x 1 in.	0	2	Spacer Tube, 1.00 in. Long
D	1	Hex Bolt, 3/8-16 x 2 in.	P	5	Flat Washer, 1/2 in.
E	8	Hex Bolt, 5/16-18 x 3/4 in.	Q	2	Flat Washer, 3/8 in.
F	6	Hex Bolt, 1/4-20 x 1-3/4 in.	R	8	Flat Washer, 5/16 in.
G	4	Hex Bolt, 1/4-20 x 3/4 in.	S	2	Flat Washer
H	2	Hex Nut, 1/2-13	Т	2	Cotter Pin, 9/64 x 1-1/2 in. Long
I	3	Nylock Nut, 1/2-13	U	1	Clevis Pin
J	9	Nylock Nut, 3/8-16	V	2	Hair Pin, 3/32 x 1.80 in. Long
K	8	Nylock Nut, 5/16-18	W	1	Hitch Pin, 3/8 x 3.00 in. Long
L	10	Nylock Nut, 1/4-20	X	8	Bearing (Plastic)



### **ASSEMBLY INSTRUCTIONS**

#### **TOOLS REQUIRED FOR ASSEMBLY**

- (2) 7/16 in. wrenches
- (2) 1/2 in. wrenches
- (2) 9/16 in. wrenches
- (2) 3/4 in. wrenches or adjustable wrenches

Before assembling the aerator, lay out all the parts and hardware as shown on previous pages.



CAUTION: POINTS OF AERATOR KNIVES ARE SHARP! EXERCISE CAUTION AT ALL TIMES WHILE ASSEMBLING AND USING THE AERATOR.

1. Push one split plastic bearing into each end of each double spool knife assembly. See figure 1.

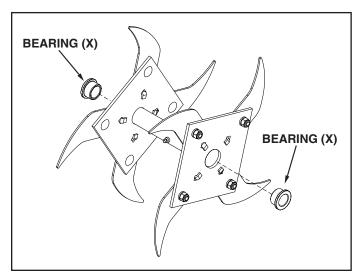
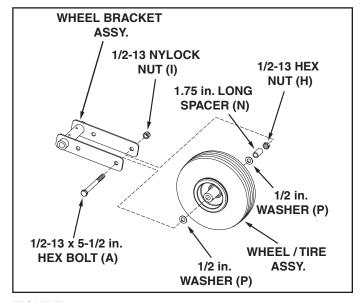


FIGURE 1

 Assemble each wheel and tire assembly to each wheel bracket using one 1/2-13 x 5-1/2 in. hex bolt, one 1/2-13 hex nut, one 1.75 in. long tube spacer, two 1/2 in. flat washers and one 1/2-13 nylock hex nut. See figure 2.



### FIGURE 2

- Measure the distance of the center "set" of drilled holes to either end of the shaft to find the "short end" of the shaft. The holes are offset from center to allow assembly of the handle. See figure 3.
- 4. Position the shaft with the "short end" to left for assembly. See figure 3.

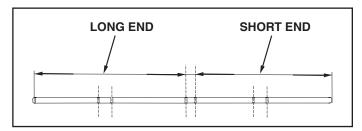


FIGURE 3

5. Fasten the lift handle bracket to the middle of the shaft using two 1/4-20 x 1-3/4 in. hex bolts and 1/4-20 nylock hex nuts. Turn the middle brace as shown. Slide the middle brace and then the 2.38 in. long tube spacer onto the long end of the shaft. See figure 4.

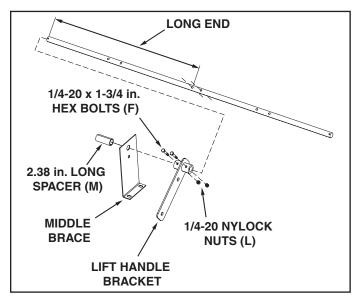


FIGURE 4

6. Fasten the handle to handle bracket using one 1/2-13 x 1-1/4 in. hex bolt and one 1/2-13 nylock hex nut in the lower hole and a clevis pin, washer and hair pin in the upper hole. Slide the plastic grip onto handle. See figure 5.

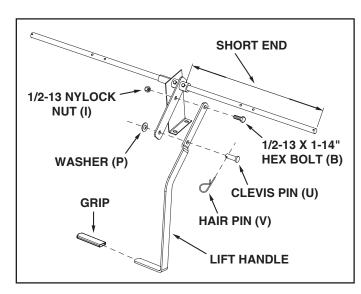


FIGURE 5

- 7. Slide two double spool assemblies onto the shaft (one on each side). See figure 6.
- 8. Slide both wheel bracket assemblies onto the shaft (one on each side) with the head of the wheel hex bolt facing outward. Fasten the wheel bracket assemblies to the shaft (in the opposite direction as the lift handle) using four 1/4-20 x 1-3/4 in. hex bolts and four 1/4-20 nylock hex nuts. See figure 6.
- 9. Slide the final two double spool assemblies onto the shaft (one on each side).

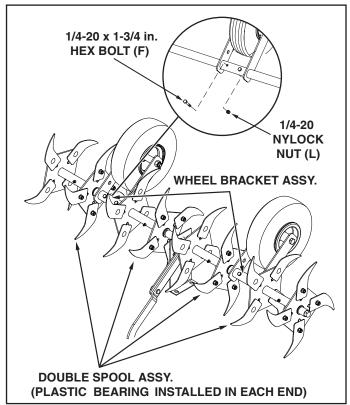


FIGURE 6

10. Loosely fasten both end plates to the tray using eight 5/16 x 3/4 in. hex bolts, eight 5/16 in. flat washers and eight 5/16-18 nylock hex nuts. **Do not tighten at this time.** See figure 7.

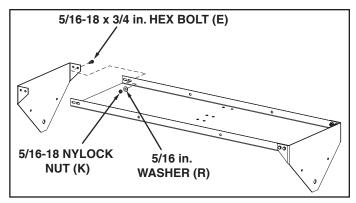
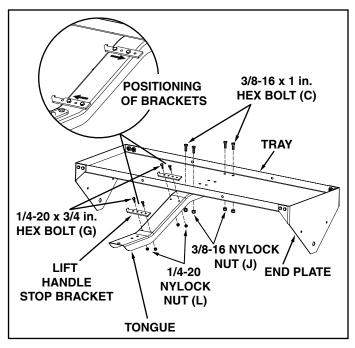


FIGURE 7

- 10. Fasten the lift handle stop brackets to the tongue in the positions shown using four 1/4-20 x 3/4 in. hex bolts and four 1/4-20 nylock hex nuts. See figure 8.
- 11. Assemble the tongue to the tray using four 3/8-16 x 1 in. hex bolts and four 3/8-16 nylock hex nuts. See figure 8.



#### FIGURE 8

- 12. Turn tray upside down and install two 1 in. long steel tube spacers, one on each end of shaft. See figure 9.
- 13. Position the shaft assembly with each end of the shaft extending through the holes in the end plates and secure each end of the shaft with a large flat washer and cotter pin. See figure 9.
- 14. Fasten the middle bracket to the tray assembly using two 3/8-16 x 1 in. hex bolts and two 3/8-16 nylock hex nuts. **Tighten** tray to end plate bolts. See figure 9.

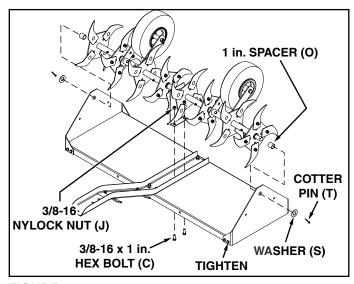


FIGURE 9

- 15. Apply grease to the grease fitting of each spool assembly until grease is squeezed out from each end. See figure 10.
- 16. Loosely fasten the tube brace to the middle bracket with one 3/8-16 x 1 in. hex bolt, one 3/8 in. flat washer and one 3/8-16 nylock hex nut. See figure 10.

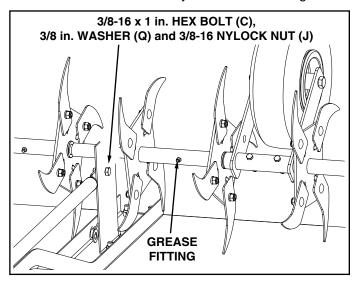


FIGURE 10

- 17. Align the hitch bracket with the mounting holes in the tongue and tube brace, and loosely fasten with one 3/8-16 x 2 in. hex bolt, 3/8 in. flat washer and 3/8-16 nylock hex nut. See figure 11.
- 18. Install one 3/8-16 x 1 in. hex bolt and one 3/8-16 nylock hex nut into the front hole of the hitch bracket to fasten the hitch bracket to the tongue. See figure 11.
- 19. Tighten both tube brace hex bolts and the front hitch bracket bolt. See figure 11.

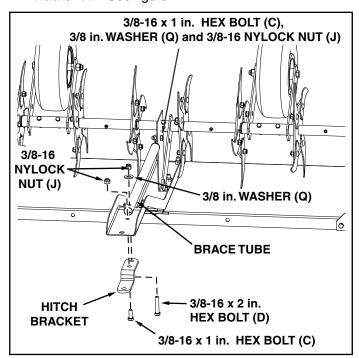


FIGURE 11

20. Insert the hitch pin through the hitch bracket and tongue. Secure with a hair pin. See figure 12.

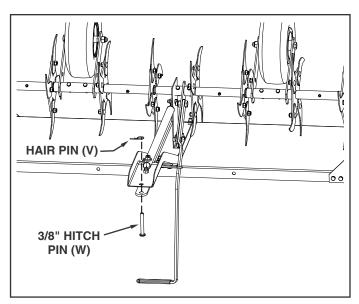
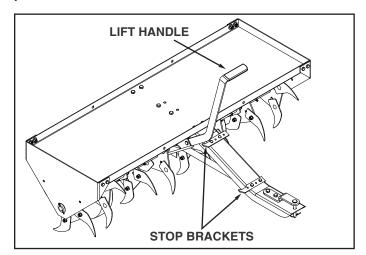


FIGURE 12

### **OPERATION**

#### KNOW YOUR SPIKE AERATOR

Read this owner's manual and safety rules before operating your spike aerator. Use the illustration below to familiarize yourself with the handle control and locations.



**LIFT HANDLE**: Raises the aerator to the transport position and lowers it to the operating position.

**STOP BRACKETS**: Lock the lift handle in the transport position (upper bracket) or operating position (lower bracket).

#### **BEFORE USE**

- Mow lawn and remove loose clippings prior to using lawn aerator.
- 2. If the soil is extremely hard and dry, it is recommended that it be sprinkled or watered down for one to two hours before aerating.



CAUTION: POINTS OF AERATOR KNIVES ARE SHARP! EXERCISE CAUTION AT ALL TIMES WHILE USING THE AERATOR.

#### **HOW TO USE YOUR SPIKE AERATOR**

Aerating involves cutting small holes in the soilt to create small reservoirs that will bring oxygen, fertilizer and water down into the root zone. For best performance of the spike aerator attachment, the following lawn preparation and aerator operation is recommended.

- Mow lawn and remove loose clippings prior to using lawn aerator.
- 2. Start tractor engine with controls in neutral and place throttle at slow engine speed.

- 3. Engage shift lever at lowest possible forward speed and lower aerator, allowing spike points to enter the ground. Increase speed as conditions permit.
- 4. Aerate in the straightest line possible, making overlapping passes to increase the density of spike point pattern.
- 5. **Avoid extremely sharp turns** with spike points engaged in ground to prevent damage to lawn.
- 6. **DO NOT** cross over walks or drives without first raising the aerator to the transport position.
- On sloped lawns, always aerate in an up and down direction. DO NOT attempt to follow the contour of the ground.
- 8. To increase the depth of spike point penetration, up to 140 lbs. of weight, such as bags of sand or (4) concrete blocks, may be added to the tray. The weight can be secured to the tray with ties or straps fastened to the front and rear of the tray. Fasten so that the ties or straps cannot become entangled on rotating parts.
- 9. If the soil is extremely hard and dry, it is recommended that it be sprinkled or watered down for one or two hours prior to aerating.
- DO NOT attempt to aerate if ground is too wet or muddy.



CAUTION: TO PREVENT INJURY, DISMOUNT FROM THE TRACTOR TO RAISE OR LOWER AERATOR CONTAINING ADDED WEIGHT.

### **MAINTENANCE**

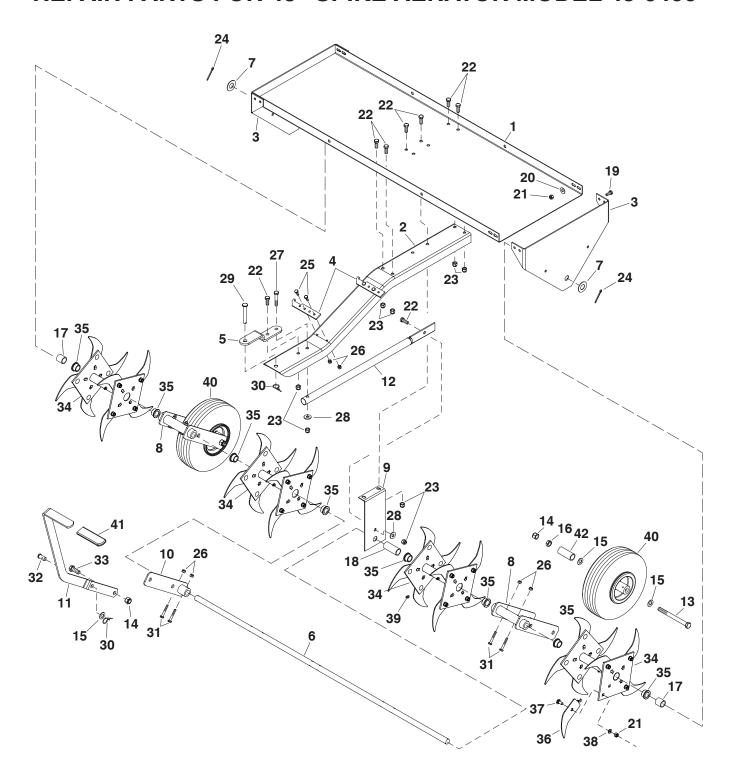
- 1. Plugger points can periodically be sharpened with a small grinder to maintain good penetration.
- 2. For storage, clean the aerator and lightly oil all exposed metal parts to prevent rust.

### **LUBRICATION**

- Apply grease to the spool assemblies and shaft as needed. A small amount of grease should squeeze out from each end.
- 2. Oil the wheel hubs as needed.

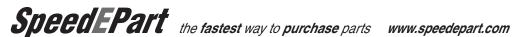
# **NOTES**

# **REPAIR PARTS FOR 48" SPIKE AERATOR MODEL 45-0406**



## **REPAIR PARTS FOR 48" SPIKE AERATOR MODEL 45-0406**

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	25648	1	48 in. Tray	23	HA21362	9	Hex Nut, 3/8-16 Nylock
2	25800	1	Tongue	24	43501	2	Cotter Pin, 9/64 x 1-1/2 in. Long
3	24619	2	End Plate	25	43012	4	Hex Bolt, 1/4-20 x 3/4 in. Long
4	25665	2	Lift Stop Bracket	26	47189	10	Hex Nut, 1/4-20 Nylock
5	23687	1	Hitch Bracket	27	43054	1	Hex Bolt, 3/8-16 x 2 in. Long
6	25663	1	48 in. Shaft	28	43070	2	Washer, 3/8 in.
7	43009	2	Washer	29	47623	1	Flat Head Hitch Pin, 3/8 in. x 3 in.
8	65337	2	Wheel Bracket Assembly	30	43055	2	Hair Cotter Pin, 3/32 x 1.80 in.
9	24623	1	Middle Brace	31	1509-69	6	Hex Bolt, 1/4-20 x 1-3/4 in. Long
10	65336	1	Lift Bracket Assembly	32	44056	1	Clevis Pin
11	25664	1 1 2	Lift Handle	33	43351	1	Hex Bolt, 1/2-13 x 1-1/4 in. Long
12	49791		Brace Tube	34	65338	4	Double Spool Assembly
13	B74760884		Hex Bolt, 1/2-13 x 5-1/2 in. Long	35	44798	8	Bearing, Flange
14 15 16	712-3083 R19171616 712-0206	3 5 2	Hex Nut, 1/2-13 Nylock Washer, 0.5312 in. Hex Nut, 1/2-13	36 37 38	25833 43080 43086	32 32 32	Aerator Point Carriage Bolt, 5/16-18 x 3/4 in. Lock Washer, 5/16 in.
17 18 19	44500 44474 43182	2 1 8	Spacer, 1.00 in. Long Spacer, 2.38 in. Long Hex Bolt, 5/16-18 x 3/4 in. Long	39 40 41	49798 46503 43943	4 2 1	Grease Fitting, 1/4 in. Wheel/Tire Assy., 4.10/3.5-4 Handle Grip
20 21 22	43081 47810 43001	8 40 8	Washer, 5/16 in.  Hex Nut, 5/16-18 Nylock  Hex Bolt, 3/8-16 x 1 in. Long	42	44593 40221	2	Spacer, 1.75 in. Long Owners Manual





### **REPAIR PARTS**

Agri-Fab, Inc. 809 South Hamilton Sullivan, IL 61951 217-728-8388 www.agri-fab.com

© 2006 Agri-Fab, Inc.