

MID WEST PRODUCTS, INC.

40" TRAILING SPIKE AERATOR – HDS-40



Owner's Manual and Parts List

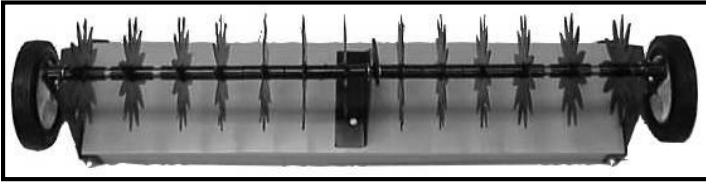
SAVE THIS MANUAL

You will need this manual for the safety instructions, assembly instructions and parts list. Put it in a safe, dry place for future reference.

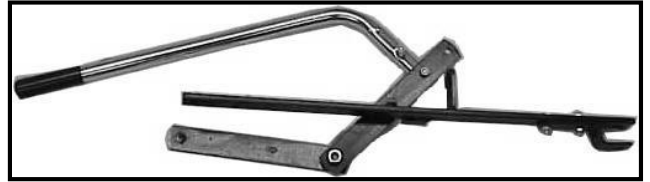
ASSEMBLY

All reference to left and right are made while standing behind the Spike Aerator and facing the tractor.

Your Carton should contain the following pieces:



TRAY ASSEMBLY

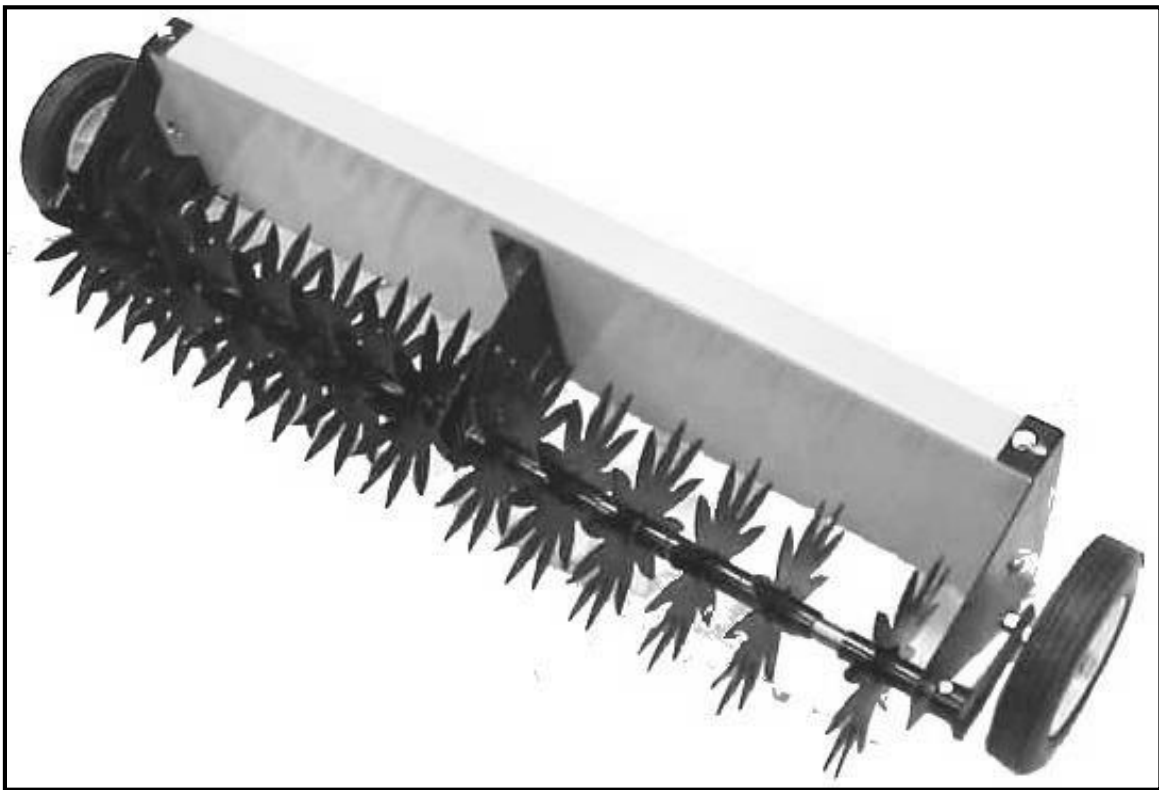


TONGUE ASSEMBLY

You will need: two (2) 1/2" wrenches and two (2) 3/4" wrenches for assembly. Your carton should contain two (2) pieces – the Tray Assembly and the Tongue Assembly.

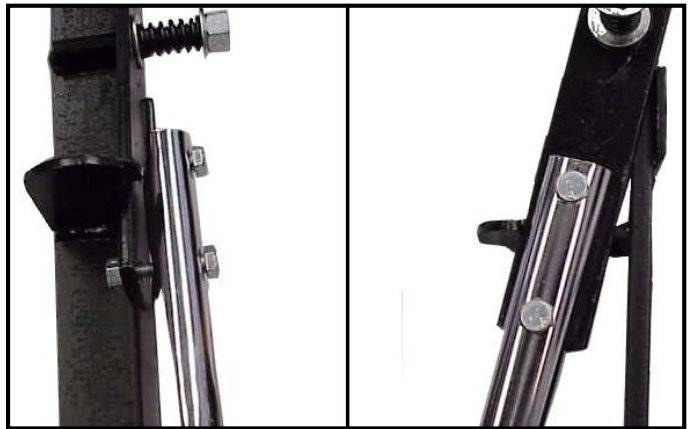
Step 1: Remove the Tray and the Tongue Assemblies from the box.

Step 2: Tilt the Tray Assembly away from you so that the Wheels are to the back of the unit and Spikes are sitting on the ground.

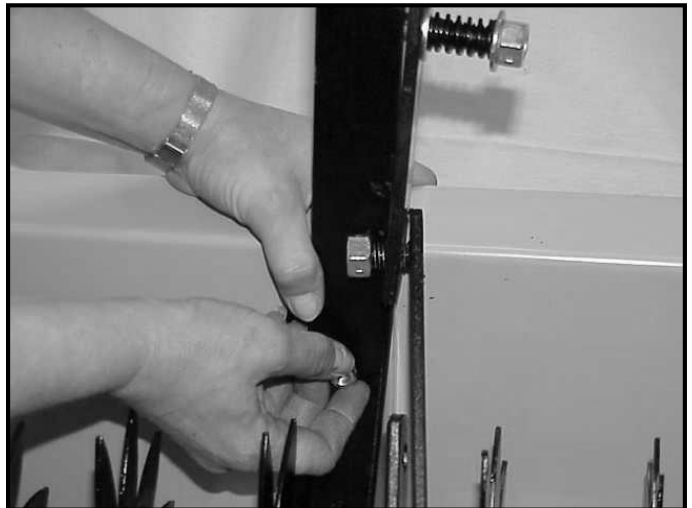


Step 3: Complete the Tongue Assembly:

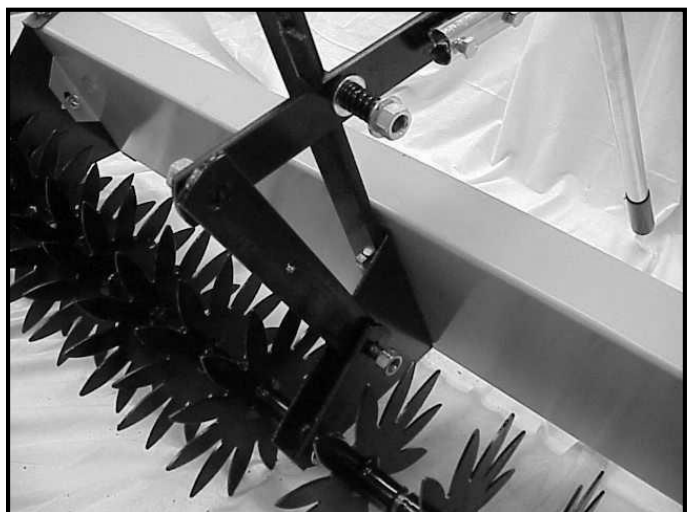
1. Raise the Lift Tube (10) into position and insert Bolt (25) through the Lift Tube (10) and Handle Link (13) and secure with Nut (20). Note: The Bolt and Nut needed are already inserted in the Lift Tube for your convenience.



2. Attach the Tongue Assembly (9) to the Tray (2) using two Bolts (28) and two Nuts (20). Note: The Bolts and Nuts are already inserted in the Tray for your convenience. Facing the Aerator the Lift Tube will be on the right hand side of the attachment.



3. Position the Lift Tube (10) over the Tray and attach the Shaft Link (12) to the Shaft Assembly (3) using Bolt (23) and Nut (21).



This completes the assembly of your new Spike Aerator.

Thank you for purchasing a Mid West Products Trailing Spike Aerator.

Please read the Operator's Manual and take note of the Safety Precautions before using your Spike Aerator.

1. Your Spike Aerator was designed to be used on riders and lawn/garden tractors.
2. Do not stand or ride on the Spike Aerator.
3. Never allow children to operate the tractor or the Spike Aerator attachment. Adult operators should be provided with proper operating instructions prior to use of your Spike Aerator attachment.
4. The Spike Aerator has sharp points. Always handle with care during actual aeration use. Caution should be exercised at all times when the spike points are rotating or when points are being handled.
5. Exercise caution when backing. To avoid jackknifing, back straight. Jackknifing could result in damage to your equipment.
6. Repairs, adjustments, and service to your Spike Aerator should be done only while the engine has been stopped, the ignition key has been removed, and the Spike Aerator disconnected from the rider and/or lawn/garden tractor.
7. Never exceed the recommended operating speed range of 3 to 5 MPH to avoid personal injury and/or equipment damage.

FOR MOUNTING AND OPERATION

Aerating involves cutting small holes in the soil to create small reservoirs that will allow oxygen, fertilizer, and water to reach the roots. The following lawn preparation and aerator operation is recommended for optimal performance of your Spike Aerator attachment:

Mow the lawn and remove loose clippings prior to use of the Spike Aerator.

Your Spike Aerator has been manufactured for ease of transport from your garage or driveway to your lawn. Simply pull the Lift Tube (1) towards the tractor into the transport locked position.

Start the tractor engine with controls in neutral and then place throttle at a slow engine speed.

Engage the shift lever in lowest possible forward speed and then lower the aerator by pulling the Lift Tube slightly forward, to the side, and releasing the Lift Tube, allowing the spike points to enter the ground. Speed can be increased as conditions permit. Aeration should be done in a straight line. Overlapping passes can be done to increase the density of the spike point pattern. **DO NOT make sharp turns** while the spike points are engaged in the ground as this will damage the lawn.

Weight can be added to the tray as necessary to increase depth of spike point penetration. Weight may be needed for many applications. The Tray has been designed to hold concrete blocks. Secure the concrete blocks by using suitable binding material such as rubber tie down straps or wire.

The condition of the ground is most important to successful aeration – do not aerate when the ground is extremely hard and parched, or muddy and saturated.

MAINTENANCE

Your new Spike Aerator is precision made using the finest tools and materials. Although it is ruggedly constructed, do not subject it to misuse. Always check the nuts and bolts to insure that they are

tightened. We suggest that you apply a light coat of oil to the metal to prevent rust on the spike points, the shaft area (the shaft on which the spikes rotate or any exposed metal. Always store your spike aerator in a dry area. Your spike points can be removed for sharpening. Sharpened spike points on your implement will allow you to maintain good soil penetration.

PLEASE DO NOT RETURN THIS MERCHANDISE TO THE STORE. CALL US AND WE WILL TAKE CARE OF ANY PROBLEMS YOU MIGHT HAVE WITH THIS PRODUCT.

INSTRUCTIONS FOR ORDERING PARTS

(Minimum Parts Order Charge \$20.00)

1. Address all parts orders or correspondence regarding customer service to one of the following:

Parts Dept.	Phone: (937) 337-3641
Mid West Products, Inc.	Fax: (937) 337-0755
P.O. Box 301	E-mail: Parts@Mid-West-Products-Inc.com
Phillipsburg, OH 45354	Website: www.Mid-West-Products-Inc.com
2. Write your name and address plainly (print or type).
3. Explain where and how to ship.
4. Give model number of unit.
5. Give part number from parts list, as well as a description, including color, of the part and the quantity you need.
6. Inspect all shipments you receive. If any parts are damaged or missing, file a claim with the carrier before accepting.
7. If you are returning parts, be sure to include WITH THE SHIPMENT a list of the parts with your name and address.
8. All orders for repair and replacement parts will be shipped when paid with Master Card, Visa, or personal check/money order. Prices subject to change without notice.

GUARANTEE

The merchandise you have purchased from us has been carefully engineered and manufactured under Mid West Products rigid quality standards and should give you satisfactory, dependable operation. However, like all mechanical merchandise, it may occasionally require adjustment or maintenance. Should you need technical assistance, please contact MID WEST PRODUCTS.

PARTS LIST

Key	Part No.	Description	Qty
1	21-1008	Tray	1
2	21-1010	End Plate	2
3	21A-1011	Shaft Assembly	1
4	21A-1013	Spike Assembly	13
5	21A-1014	Wheel Bracket	2
6	21A-1015	Shaft Link Assembly	1
7	21-1016	Handle Link	1
8	21A-1017	Hitch Assembly	1
9	1-2829	Hitch Bracket	1
10	21-1018	Lift Tube	1
11	16-3080B	Grip	1
12	21-1000R	Rib Tread Wheel/Tire	2
-	21-1000D	Diamond Tread Wheel/Tire	2
13	1-2670	Spring	1
14	L-64A	½ " Flat Washer	6
15	X-1353	½" X 13 Lock Nut	7
16	L-303	¼" -20 Lock Nut	2
17	L-276	1/4 " – 20 X 1 ½ H.H.C.S.	2
18	L-59	5/18-18 X ¾ H.H.C.S.	6
19	L-99	5/16 Flat Washer	12
20	X-1107	5/16-18 Lock Nut	12
21	X-1048	¾" Flat Washer	3
22	X-1698	½-13 X 3" H.H.C.S.	2
23	L-81	5/16-18 X 1 ¼" H.H.C.S.	4
24	L-127	5/16 – 18 X 1 1/2 " H.H.C.S.	2
25	21-1043	Center Support	1

PARTS DRAWING

