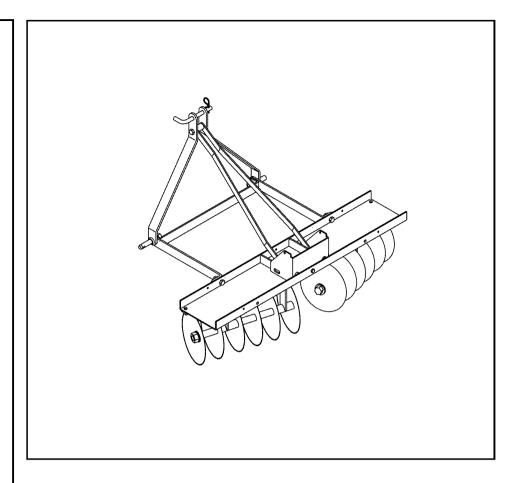
Agri-Fab®

**OWNER'S MANUAL** 

Model No. 45-0356



# **3-POINT HITCH DISC CULTIVATOR**

**CAUTION:** Read Rules for Safe Operation and Instructions Carefully

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

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## **SAFETY RULES**

Remember, any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times when using power equipment.



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

- Read this owner's manual before using this equipment.
- Do not allow children to operate the tow vehicle or the disc cultivator.
- 3. Do not allow adults to operate the tow vehicle or the disc cultivator without proper instruction.
- 4. Do not allow anyone to ride on the tow vehicle or the disc cultivator.
- 5. Before lowering the disc cultivator, make sure no one is near the area of operation.
- 6. Lower the disc cultivator when leaving the tow vehicle unattended.



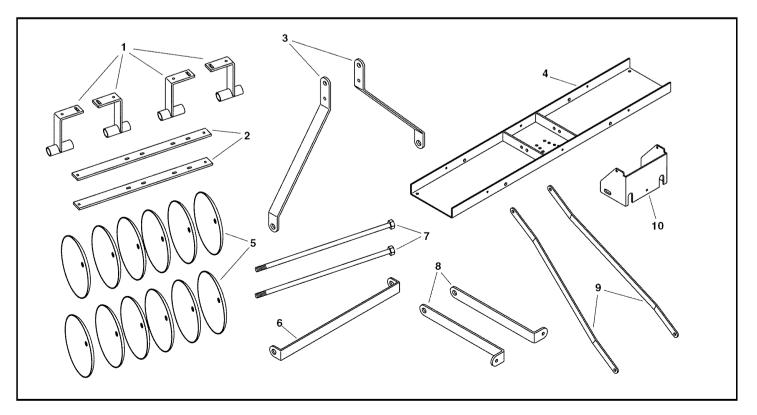
CAUTION: VEHICLE BRAKING AND STABILITY MAY BE AFFECTED BY THE ADDITION OF AN ACCESSORY OR AN ATTACHMENT. BE AWARE OF CHANGING CONDITIONS ON SLOPES.

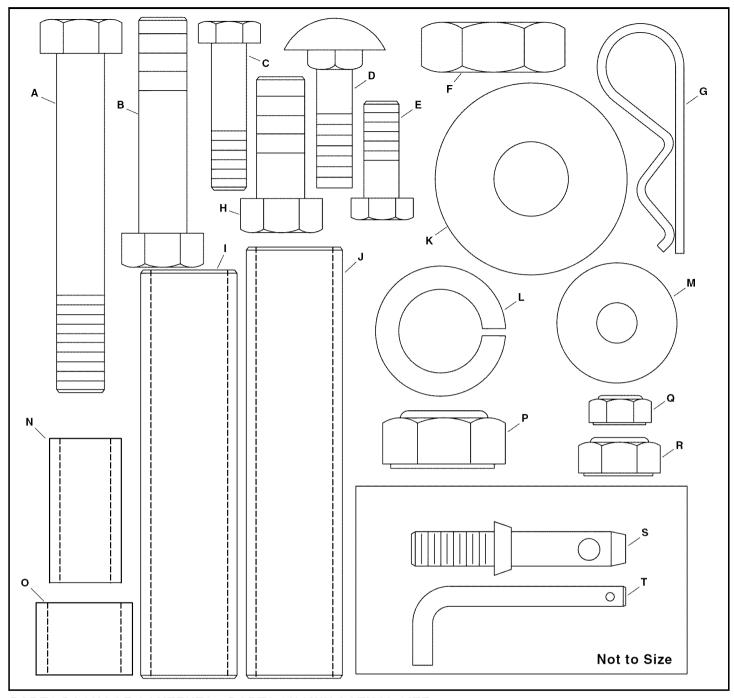
- 7. Wear appropriate footwear when using the disc cultivator. The disc edges are sharp!
- 8. Tow vehicle braking and stability may be affected by the disc cultivator. Drive slowly with the disc cultivator in the transport position. **Stay off steep slopes.**
- 9. Stop and inspect the equipment for damage after striking an object. Repair any damage before continuing operation.
- 10. Keep all nuts and bolts tight and be sure that the equipment is in safe operating condition.
- 11. Before attaching or removing the disc cultivator, park and lock the tow vehicle in a safe condition.

#### **CARTON CONTENTS**

- 1. Bearing Hanger Bracket (4)
- 2. Disc Anchor Strap (2)
- 3. Mast Side (2)
- 4. Tray Frame
- 5. Disc Blade (12)
- 6. Cross Brace

- 7. Hex Bolt, 3/4" x 25" Lg. (2)
- 8. Mast Extension Strap (2)
- 9. Mast Lift Strap (2)
- 10. Weight Rack
- 11. Parts Package (see page 3)





PARTS PACKAGE CONTENTS - PARTS SHOWN ACTUAL SIZE

KEY	QTY.	DESCRIPTION	KEY	QTY.	DESCRIPTION
A B C	1 2 4	Hex Bolt, 1/2" x 3-1/2" Hex Bolt, 1/2" x 2-1/4" Hex Bolt, 3/8" x 1-1/2"  Carriago Polt, 3/8" x 1 1/4"	K L M	24 2 4	Flat Washer, 2" Lock Washer, 7/8" Flat Washer, 1.25"
E	8 1 2	Carriage Bolt, 3/8" x 1-1/4" Hex Bolt, 3/8" x 1" Hex Nut, 7/8"	N O P	2 2	Spacer, 1.5" Lg. Spacer, .75" Lg. Hex Nut, Nylock, 3/4"
G H J	1 2 6 4	Haircotter Pin Hex Bolt, 1/2" x 1-1/4" Spacer, 4.25" Lg. Spacer, 4.50" Lg.	Q R S T	13 5 2 1	Hex Nut, Nylock, 3/4" Hex Nut, Nylock, 3/8" Hex Nut, Nylock, 1/2" Category 1 Pin Pivot Pin

## **ASSEMBLY**

#### TOOLS REQUIRED FOR ASSEMBLY

- (2) 9/16" Wrenches
- (2) 3/4" Wrenches
- (2) 1-1/8" Wrenches
- (2) 1-5/16" Wrenches or 12" Adjustable Wrenches
- (1) Grease Gun



CAUTION: DISC BLADES HAVE SHARP EDGES. USE CARE IN HANDLING AND ASSEMBLY. WEAR GLOVES FOR EXTRA PROTECTION AGAINST CUTS.

Remove all loose parts and the hardware package from the shipping carton. Then lay out and identify each part and the common hardware as shown on pages 2 and 3. Be sure the carton is empty before it is discarded.

1. Refer to figure 1. Assemble the following onto each 3/4" x 25" hex bolt: six disc blades, two bearing hanger brackets, twelve 2" flat washers, two 4.50" spacers, three 4.25" spacers and one 3/4" Nylock hex nut. The 4.50" spacers fit inside the bearing hanger brackets. Be sure all parts are assembled in the same order as shown. Be sure the bearing hanger brackets face toward each other and that the disc blades all face the same direction. **Tighten** the Nylock hex nut.

**IMPORTANT:** Use only the 4.50" spacers (longest) inside the bearing hanger brackets.

2. Add grease to the bearing hanger brackets through the grease fittings until grease is forced out the ends of the brackets.

- 3. Assemble a disc anchor strap to a disc assembly using four 3/8" x 1-1/4" carriage bolts and 3/8" Nylock hex nuts. **Tighten.** Repeat for other disc assembly. See figure 2.
- 4. Assemble the tray frame to the disc anchor straps using four 3/8" x 1-1/2" hex bolts, four 1.25" flat washers, and four 3/8" Nylock hex nuts. Fasten to the rear-most holes in the middle of the tray frame for now. The dished (concave) surface of the disc blades should face to the outside with the heads of the 25" bolts on the inside. **Tighten.** See figure 2.

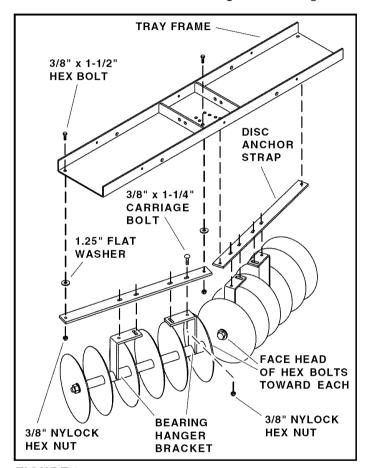


FIGURE 2

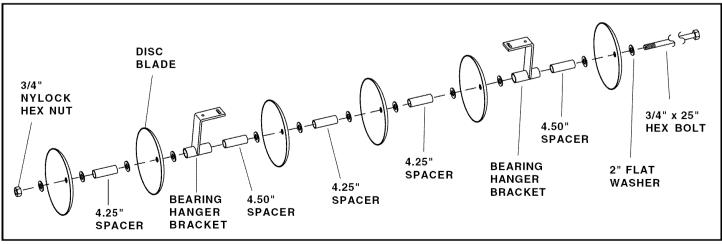


FIGURE 1

- 5. Attach two mast extension straps to the front of the frame tray so that the bent end of each strap points outward. Use two 1/2" x 1-1/4" hex bolts and two 1/2" Nylock hex nuts. **Do not tighten yet.** See figure 3.
- 6. At the other end of the mast extension straps, attach the cross brace to the inside and two mast sides to the outside of the straps. Use the two category 1 pins, two 7/8" lock washers, and two 7/8" hex nuts. Do not tighten yet. See figure 3.

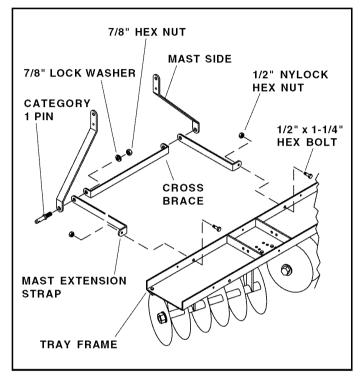


FIGURE 3

- 7. Install a pivot pin through the holes in the ends of the mast sides and secure the pin using the haircotter pin. See figure 4.
- 8. Arrange the mast lift straps as shown in figure 4. Assemble the straps and the 1-1/2" spacer between the mast sides using a 1/2" x 3-1/2" hex bolt and 1/2" Nylock hex nut. **Do not tighten yet.**

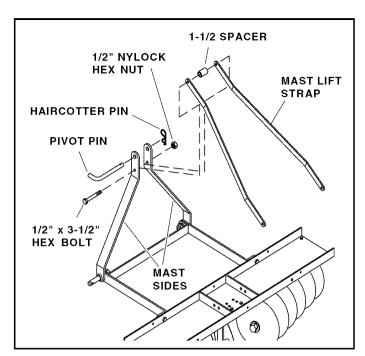


FIGURE 4

- 9. Attach the weight rack to the back of the tray frame using a 3/8" x 1" hex bolt and a 3/8" Nylock hex nut. **Do not tighten yet.** See figure 5.
- 10. Assemble the mast lift straps on the outside of the frame tray braces using two 1/2" x 2-1/4" hex bolts, 3/4" spacers and 1/2" nylock hex nuts. Place the spacer between the strap and the side of the weight rack. See figure 5. Refer also to figure 6.
- 11. Tighten all loose nuts and bolts.

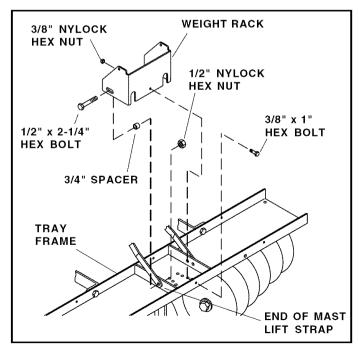


FIGURE 5

## **OPERATION**

The disc cultivator is used to break up clods of dirt and to uproot small weeds in plowed soil.

- 1. Before starting, make sure the soil is dry enough by squeezing some in your hand. If it forms a ball that doesn't crumble, the soil is too wet for discing. Wet soil will pack between the disc blades.
- 2. Adjust the discs to the desired angle setting. The disc cultivator has five angle adjustment positions. The adjustment holes are located in the center of the tray frame, inside the weight rack. For more aggressive cultivating, move to the rear adjustment position. For less aggressive cultivating, move to the front adjustment position.

To adjust the angle of a disc assembly, remove the innermost 3/8" x 1-1/2" hex bolt, 1.25" washer, and 3/8" Nylock hex nut that secures the disc anchor strap to the tray frame. Then move the disk assembly so that the anchor strap is lined up with the desired adjustment hole. Install the bolt and washer, then tighten the nut to lock in the setting. Repeat this procedure for the other disc assembly. See figure 6.

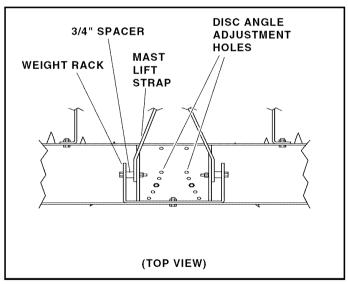


FIGURE 6

3. To break up dirt clods in plowed soil, start discing slowly at first. As the clods are broken up, the speed may be gradually increased. Disc the soil using a crisscross pattern for best results.

4. Up to 160 lbs. of weight may be added to help increase penetration. 40 lb. suitcase weights can be attached to the center weight rack, or concrete blocks or other weights may be tied or strapped to the cultivator tray. Before adding weight, the disc cultivator should be attached to the tow vehicle with the cultivator lowered to the ground.

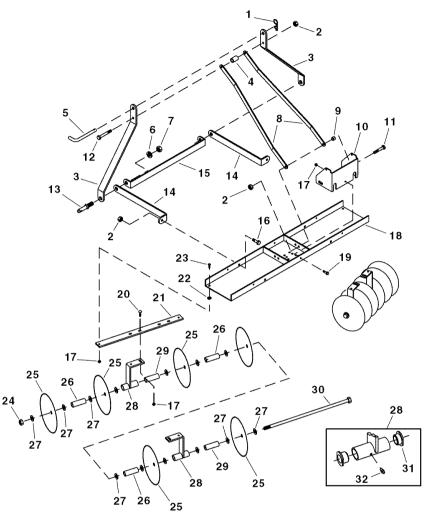
## **MAINTENANCE**



CAUTION: DISC BLADES HAVE SHARP EDGES. USE CARE WHEN WORKING AROUND THE DISC CULTIVATOR. WEAR GLOVES FOR EXTRA PROTECTION AGAINST CUTS.

- 1. Check for and tighten any loose hardware before each use.
- Clean the discs and lightly oil only bare metal after each use.
- 3. Lubricate all four bearing hanger brackets at grease fittings with grease after each use.
- 4. Remove all dirt and rust. Touch up paint before placing disc cultivator in storage.
- 5. Store disc cultivator inside a dry area.

## REPAIR PARTS FOR MODEL NO. 45-0356 3-POINT HITCH DISC CULTIVATOR



REF.	PART	QTY.	DESCRIPTION	REF.	PART	QTY.	DESCRIPTION
NO.	NO.			NO.	NO.		
1	43343	1	Haircotter Pin, 1/8" x 2-3/8"	18	64781	1	Tray Frame
2	712-3083	5	Hex Nut, Nylock, 1/2"	19	43001	1	Hex Bolt, 3/8" x 1"
3	25158	2	Mast Side	20	710-0305	8	Carriage Bolt, 3/8" x 1-1/4"
4	25167	1	Spacer, .53" I.D. x .75" O.D.	21	25168	2	Disc Anchor Strap
			x 1.5" Lg.	22	736-0247	4	Washer, .41" x 1.25" x .156"
5	48978	1	Pivot Pin	23	43062	4	Hex Bolt, 3/8" x 1-1/2"
6	48982	2	Lock Washer, 7/8"	24	48911	2	Hex Nut, Nylock, 3/4"
7	48970	2	Hex Nut, 7/8"	25	46856	12	Disc Blade
8	25180	2	Mast Lift Strap	26	46859	6	Spacer, .80" I.D. x 1" O.D.
9	23368	2	Spacer, .76" I.D. x 1" O.D.				x 4.25" Lg.
			x .75" Lg.	27	1540-162	24	Washer, .77" x 2" x .1345"
10	25194	1	Weight Rack	28	63510	4	Bearing Hanger Bracket
11	HA180183	2	Hex Bolt, 1/2" x 2-1/4"	29	24240	4	Spacer, .80" I.D. x 1" O.D.
12	46526	1	Hex Bolt, 1/2" x 3-1/2"				x 4.50" Lg.
13	48979	2	Category 1 Pin	30	48966	2	Hex Bolt, 3/4" x 25" Lg.
14	25169	2	Mast Extension Strap	31	44488	8	Bearing (included in 63510)
15	25154	1	Cross Brace	32	46858	4	Grease Fitting (included in
16	43351	2	Hex Bolt, 1/2" x 1-1/4"				63510)
17	HA21362	13	Hex Nut, Nylock, 3/8"		48974	1	Owners Manual (not shown)

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#### **REPAIR PARTS**

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