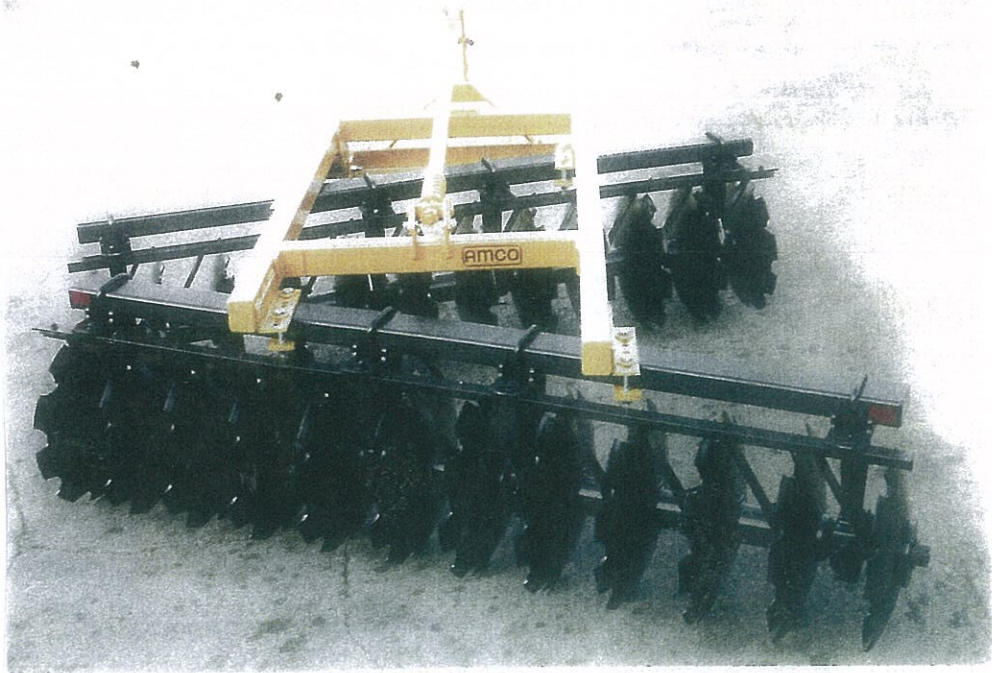




**LOF - 20 - 24  
LIFT OFFSET HARROW**

**OPERATION \*\* MAINTENANCE \*\* SET-UP  
INSTRUCTIONS**



**AMCO MANUFACTURING COMPANY**

800 South Industrial Parkway P.O. Box 1107  
Yazoo City, Mississippi (MS) 39194 USA  
(662) 746-4464 Toll free 800-748-9022 Fax (662) 746-6825  
[www.amcomfg.com](http://www.amcomfg.com)

## TO THE PURCHASER

The care you give your new AMCO LOF Lift Offset Disk Harrow will greatly determine the satisfaction and service you will obtain from it. By observing the instructions and suggestions in this manual, your AMCO LOF Lift Offset Disk Harrow will serve you well for many years.

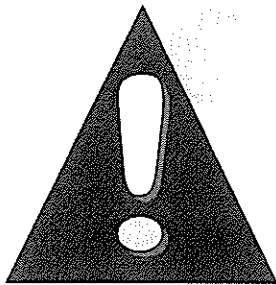
As an Authorized AMCO Dealer, we stock Genuine AMCO Parts, which are manufactured with the same precision and skill as the original equipment. For the best performance and longer life, use only genuine AMCO replacement parts. Our factory-trained staff is kept fully informed of the most efficient methods of servicing AMCO equipment and is ready and able to assist you.

When you sell your LOF Lift Offset Disk Harrow, you should pass this manual to the new owner.

If you should require additional aid or information, contact us.

YOUR AUTHORIZED AMCO DEALER

OSHA requires that, as a farm employer, you meet certain safety requirements. Become familiar with and comply with those requirements. Be sure anyone who operates this equipment understands all safety related items. If this harrow is repainted, be certain new decals are ordered. Decals pertaining to personal safety must be replaced.



Look for this symbol to point out important safety precautions. It means: ATTENTION! Become Alert! Your safety is involved.

To insure efficient and prompt service, please provide the model number and serial number of your AMCO LOF Lift Offset Disk Harrow in all correspondence or contacts. Remember, the right- and left-hand sides of the harrow are determined by standing at the rear of the harrow and facing the direction of travel.

MODEL NUMBER

SERIAL NUMBER

# LIFT OFFSET HARROWS

## MODEL "LOF"

9" Spacing

### STANDARD SPECIFICATIONS

<b>AXLES:</b>	1-1/2" square, high carbon cold rolled steel	<b>GANG ANGLE:</b>	14° to 18° front to rear
<b>BLADES:</b>	24" x 1/4"(6mm) Cut out with right front and right rear blades stepped down 2" less	<b>HITCH:</b>	3-Point - Fits Cat II or Cat III
<b>SPACING:</b>	9 Inches	<b>BEARINGS:</b>	Protect-O-Shield®, heavy duty, 1-1/2" square bore regreasable triple ball type, toggle mounted, with zerker guards & wear guards
<b>SCRAPERS:</b>	HD high carbon steel blades on 1/2" x 1-1/2" shanks, mounted on 2" x 2" x 3/8" angle iron bars	<b>GANG TUBING:</b>	3 x 5 x 1/4" Wall rectangular tubing on gangs
		<b>MAIN FRAME TUBING:</b>	3 x 4 x 1/4" Wall rectangular tubing on main frame

### SPRING LOADED LEVELING SYSTEM

Model No.	Cutting Width	No. of Discs	No. of Bearings	Approximate Drawbar HP Required	Approximate Weight	
LOF-2024	7'6"	20	8	45	2152 LBS	
LOF-2224	8'3"	22	8	50	2272 LBS	
LOF-2424	9'0"	24	8	50	2392 LBS	
<b>OPTIONAL EQUIPMENT</b>						
	24" X 1/4" (6MM) Plain Blades in lieu of standard				Add ea.	2.0

AMCO PL Effective May 15, 2008

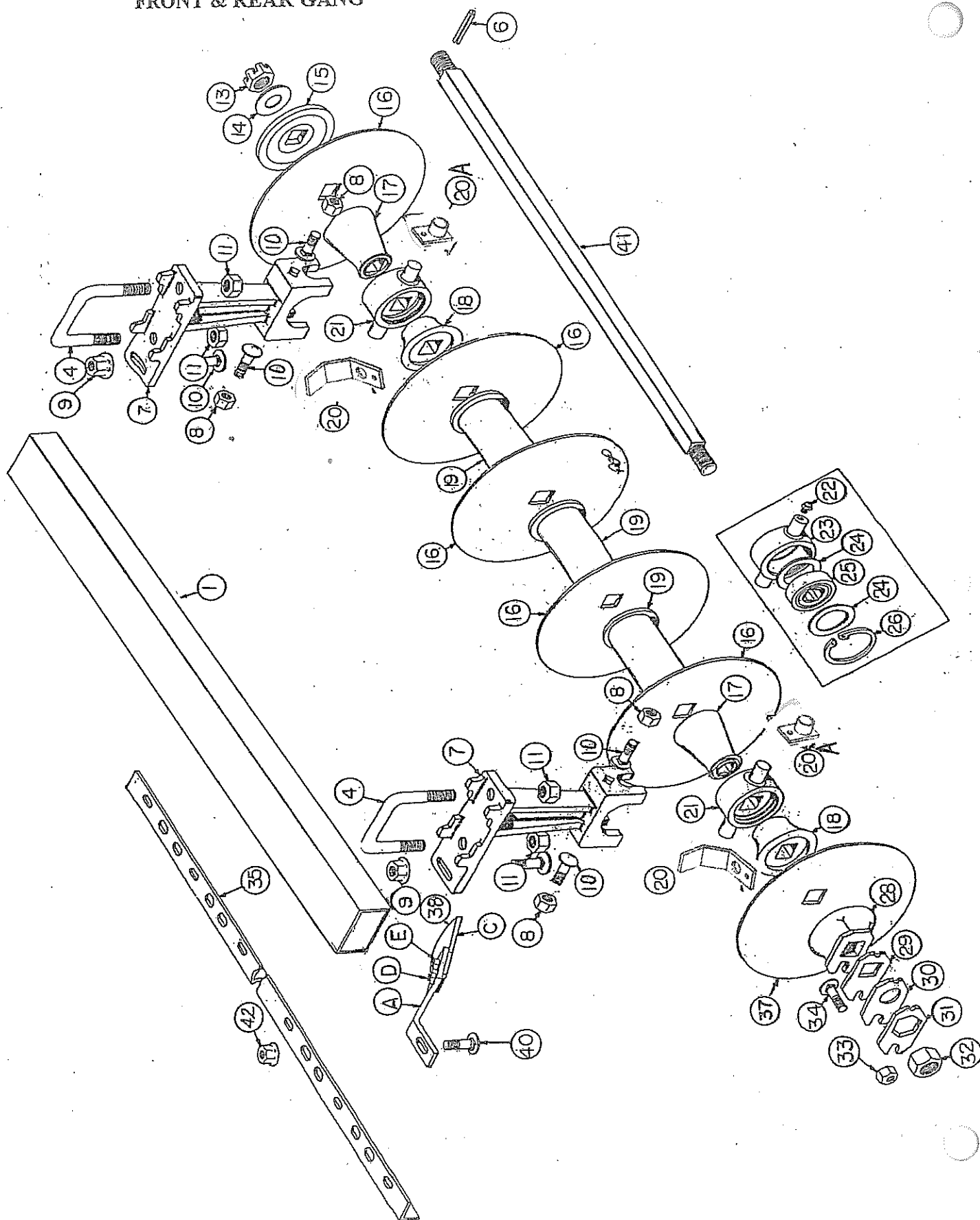
F.O.B. Yazoo City, Mississippi

SPECIFICATIONS AND PRICES SUBJECT TO CHANGE WITHOUT NOTICE



**AMCO Manufacturing, Inc.**  
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# LOF SERIES DISK HARROW FRONT & REAR GANG










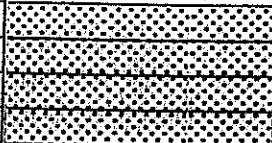
## LOF Main Frame, Leveling System and A-Frame Hitch

<u>Ref No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd</u>
<b>LOF Main Frame</b>			
1	20650	Main Frame.....	1
2	102735	Set Bracket 3/4 x 3 x 8-1/2" Long.....	4
3	12075	Hex Bolt 3/4 x 5-1/2 NC, PLT.....	8
4	10300	Lock Nut 3/4 NC PLT Gr B.....	8
5	102737	Washer.....	8
6	9628	Trunion clamp.....	2
7	10818	Hex Bolt 5/8 x 1-1/2 NC PLT.....	2
8	11647	Flange Locknut 5/8 NC PLT.....	2
<b>LOF Spring Loaded Level System</b>			
9	20651	Back Post Bar.....	1
10	10460A	Spring.....	1
11	9892A	Swivel.....	1
12	10606	Grease Fitting.....	1
13	11279	Slotted Nut 1-3/8 NC.....	1
14	10910	Roll Pin.....	1
<b>LOF A-Frame Hitch</b>			
16	20652	Top Hitch.....	1
17	10113	Hex Bolt 3/4 x 4 NC PLT Gr 5.....	1
18	10300	Lock Nut 3/4 NC PLT Gr B.....	3
19	10317	Klik Pin 1/4".....	1
20	0871	Upper Hitch Pin.....	1
21	12090	Hex Bolt 3/4 x 6-1/2 NC PLT.....	2
22	102736	Bushing 3/4 x 6-1/2.....	2
23	101739	Lower Hitch Pin 1-7/16 Dia. x 12-9/16 Long.....	2
24	11697	Klik Pin 7/16".....	2
25	10866	Flat Washer 3/4 PLT.....	1

LOFMainFramePartsList.xls

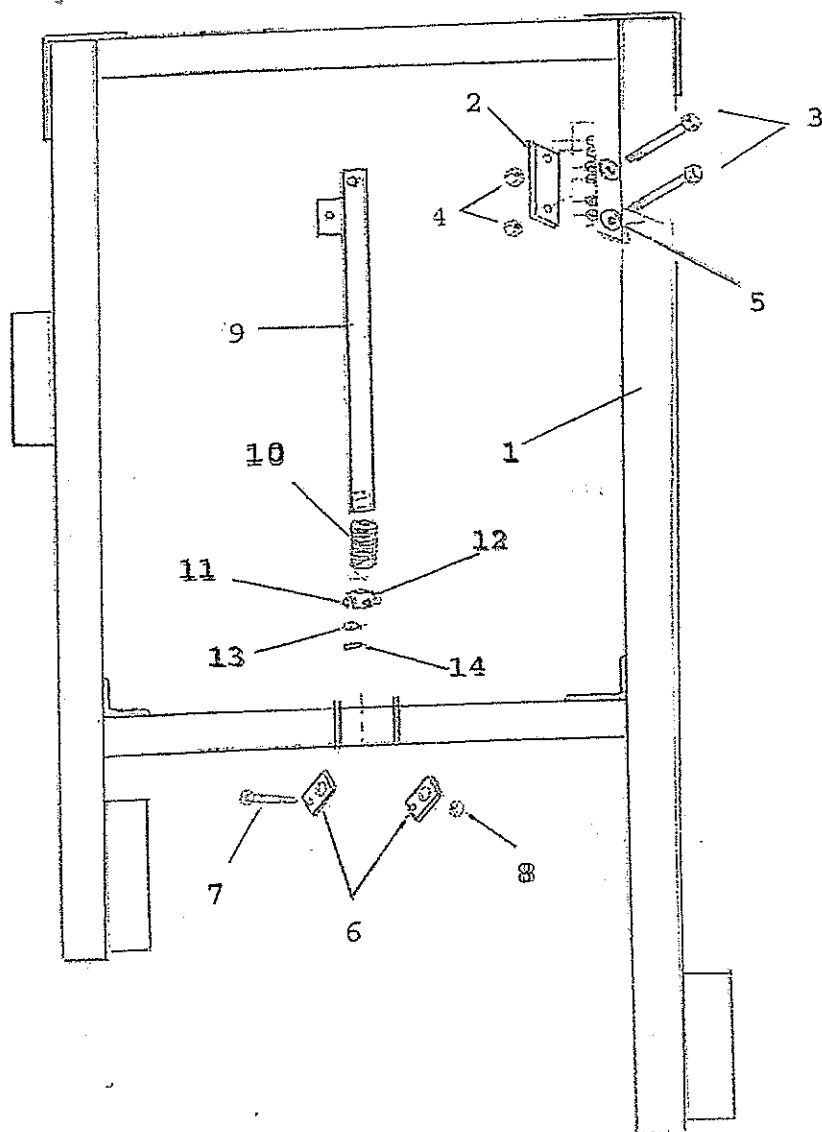
## GENERAL TORQUE SPECIFICATION TABLE

ALL BOLTS SHOULD BE TIGHTENED TO THE  
RECOMMENDED TORQUES SHOWN IN THE  
"GENERAL TORQUE SPECIFICATION TABLE"

GENERAL TORQUE SPECIFICATION TABLE									
USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN									
Note: These values apply to fasteners as received from supplier, dry, or when lubricated with normal engine oil. They do not apply if special graphited or moly-disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.									
SAE Grade No.		2		5		8 *			
Bolt head identification marks as per grade NOTE: Manufacturing Marks Will Vary				  		  			
		Torque		Torque		Torque			
Bolt Size		Foot Pounds		Foot Pounds		Foot Pounds			
Inches	Millimeters	Min.	Max.	Min.	Max.	Min.	Max.		
1/4	6.35	5	6	9	11	12	15		
5/16	7.94	10	12	17	20.5	24	29		
3/8	9.53	20	23	35	42	45	54		
7/16	11.11	30	35	54	64	70	84		
1/2	12.70	45	52	80	96	110	132		
9/16	14.29	65	75	110	132	160	192		
5/8	15.88	95	105	150	180	220	264		
3/4	19.05	150	185	270	324	380	456		
7/8	22.23	160	200	400	480	600	720		
1	25.40	250	300	580	696	900	1080		
1-1/8	25.58			800	880	1280	1440		
1-1/4	31.75			1120	1240	1820	2000		
1-3/8	34.93			1460	1680	2380	2720		
1-1/2	38.10			1940	2200	3160	3560		
					* Thick nuts must be used with Grade 8 bolts				

# LOF SERIES DISK HARROW

REF. NO.	PART NO.	FRONT & REAR GANG	20 BLADE		22 BLADE		24 BLADE	
			F	R	F	R	F	R
1	20661	ASSEMBLY GANG FRAME	1	1				
1	20654	ASSEMBLY GANG FRAME			1	1		
1	20653	ASSEMBLY GANG FRAME					1	1
4	11280	U BOLT 7/8" DIA.	4	4	4	4	4	4
6	10910	ROLL PIN 5/16 X 2-1/4"	1	1	1	1	1	1
7	16012A	BEARING RISER	4	4	4	4	4	4
8	10299	LOCK NUT 5/8 NC, PLT	8	8	8	8	8	8
9	11647	FLANGE LOCK NUT 5/8 NC, PLT	4	4	4	4	4	4
10	10135	CARRIAGE BOLT 5/8 X 1-3/4" NC, PLT	12	12	12	12	12	12
11	10396	LOCK NUT 7/8 NC, PLT	8	8	8	8	8	8
13	10226	GANG BOLT NUT 1-1/2" NF SLOTTED	1	1	1	1	1	1
14	10872	CUT WASHER 1-3/8" PLT	1	1	1	1	1	1
15	2404	BUMPER WASHER	1		1		1	
15A	100738A	BUMPER WASHER (DRILLED & TAPPED)		1		1		1
16	3250	BLADE 24 X 1/4" CUT OUT	9	9	10	10	11	11
16	3275	BLADE 22 X 1/4" CUT OUT (STEP DOWN)	1	1	1	1	1	1
17	17014	END BELL - SMALL	4	4	4	4	4	4
18	17010	END BELL - LARGE	4	4	4	4	4	4
19	0522	SPACER SPOOL	5	5	6	6	7	7
20	20579	GREASE FITTING GUARD	4	4	4	4	4	4
20A	102489	WEAR GUARD	4	4	4	4	4	4
21	FB-09-0015	SUB ASSEMBLY BEARING & HOUSING	4	4	4	4	4	4
22	12384	GREASE FITTING MPT 1/8" STRAIGHT	1	1	1	1	1	1
23	16003	BEARING HOUSING	1	1	1	1	1	1
24	100104	WASHER	2	2	2	2	2	2
25	11503	BEARING	1	1	1	1	1	1
26	11064	RETAINER RING	1	1	1	1	1	1
28	1222A	END GANG WASHER	1	1	1	1	1	1
29	100099	SPACER PLATE	1	1	1	1	1	1
30	100098	BEARING PLATE	1	1	1	1	1	1
31	5622A	LOCK PLATE	1	1	1	1	1	1
32	10489	GANG BOLT NUT 1-1/2" NF	1	1	1	1	1	1
33	10395	LOCK NUT 1/2 NC, PLT	1	1	1	1	1	1
34	10710	CARRIAGE BOLT 1/2 X 2" NC, PLT, GR5	1	1	1	1	1	1
35	100367	SCRAPER BAR 10 BLADE	1	1				
35	100534	SCRAPER BAR 11 BLADE			1	1		
35	100366	SCRAPER BAR 12 BLADE					1	1
38	0788	ASSEMBLY SCRAPER RH	9		10		11	
38A	0789	ASSEMBLY SCRAPER LH		9		10		11
A	100271	SCRAPER SHANK	1 ea.	1 ea.	1 ea.	1 ea.	1 ea.	1 ea.
C	100270	SCRAPER BLADE	1 ea.	1 ea.	1 ea.	1 ea.	1 ea.	1 ea.
D	10785	MACHINE BOLT (BLACK) 1/2 X 1-1/2 NC, PLT	2 ea.	2 ea.	2 ea.	2 ea.	2 ea.	2 ea.
E	10395	LOCK NUT 1/2 NC, PLT	2 ea.	2 ea.	2 ea.	2 ea.	2 ea.	2 ea.
40	10870	CARRIAGE BOLT 1/2 X 1-1/2 NC, PLT	9	9	10	10	11	11
41	9446	GANG BOLT	1	1				
41	9447	GANG BOLT			1	1		
41	9448	GANG BOLT					1	1
42	11646	FLANGE LOCK NUT 1/2 NC, PLT, GR5	9	9	10	10	11	11





# Amco

YAZOO CITY, MISS.

# LOF

Featuring Protect-O-Shield® Bearings



## WARNING

1. BEFORE OPERATING -- STUDY OPERATORS MANUAL SAFETY MESSAGES AND SAFE OPERATING PROCEDURES, READ SAFETY SIGNS ON THIS MACHINE.
2. TRANSPORT ON PUBLIC ROADS -- OBSERVE FEDERAL, STATE AND LOCAL REGULATIONS; DISPLAY SMV EMBLEM; ATTACH PROPER STRENGTH SAFETY CHAIN TO TOWED IMPLEMENT; AND LIMIT MAXIMUM SPEED TO 20 MPH (32 KM/H).
3. LOWER OR BLOCK ALL ELEVATED COMPONENTS BEFORE SERVICING OR LEAVING THIS MACHINE.

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### MAINTENANCE INSTRUCTIONS

1. Keep all bolts tight. Check after first 50 hours or one weeks operation. Visually inspect all bolts daily.
2. Keep wheel bearings properly adjusted. Clean and repack each season or every 300 hours. Replace all worn or damaged parts when repairing.
3. Keep gang bolts tight! Tighten after first day's operation. Do not run with loose disk blades. If gang bolts have been operated in a loose condition, retighten, then tighten again after 30 minutes use, again after 4 to 5 hours, and again after 8 to 10 hours.
4. Grease gang bearings daily with a hand grease gun and a good grade of clean, number 2, lithium soap base grease. Always wipe fittings clean before greasing. Apply grease until old or dirty grease is purged from bearings. Avoid high-pressure greasing.
5. Inspect for damaged or misaligned parts if gangs do not turn smoothly by hand. Bearings will fail prematurely if operated with misaligned or damaged gang parts. If a gang is operated for one or more hours following a bearing failure, replace all bearings on the gang.

Refer to operator's manual for other important maintenance instructions.

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<b><u>AMCO</u></b>		
<b><u>LOF - 20 - 24</u></b>		
<b><u>DECALS</u></b>		
<b><u>Part No.</u></b>	<b><u>Description</u></b>	<b><u>No. Req'd.</u></b>
11465	L OF Decal	4
11465	AMCO Decal	4
11716	Maintanance Decal	1
11741	Warning Decal	1
12540	Reflector (Orange)	2
12541	Reflector (Red)	2

## SAFETY SUGGESTIONS



*THIS SAFETY ALERT SYMBOL INDICATES IMPORTANT SAFETY MESSAGES IN THIS MANUAL. WHEN YOU SEE THIS SYMBOL, CAREFULLY READ THE MESSAGE THAT FOLLOWS AND BE ALERT TO THE POSSIBILITY OF PERSONAL INJURY.*



*CAUTION Never stand between tractor and disk harrow when hitching unless all controls are in neutral and the brakes are locked.*



*CAUTION Park or block the disk harrow so it will not roll when disconnected from the tractor drawbar.*



*CAUTION When working on disk harrows, care should be exercised in handling or tightening bolts near disk blades to avoid injury.*



*CAUTION Always secure for transport by using the lock pin and wing lock pins.*



*CAUTION Never clean, adjust or lubricate a disk harrow that is in motion.*



*CAUTION When transporting machinery over public roads, comply with your local and state laws regarding length, width and lighting.*



*CAUTION When trailing the harrow over public roads, the SMV Emblem must be used, for protection of tractor and motor vehicle operators.*



*CAUTION When transporting farm implements on public roads after dusk it is the responsibility of the operator to provide lighting and reflectors on the rear of the implement in accordance with your state law.*



*CAUTION All hydraulically or mechanically elevated operating components must be blocked to prevent accidental lowering or must be lowered to the ground when making adjustments or when the equipment is idle.*

## MOST OFTEN ENCOUNTERED DISK BLADE FAILURES

Most disk blade failures can be prevented by selecting the correct blade size for individual conditions when buying a disk. Reduction of speed in areas containing rocks and stumps will greatly lengthen the blade life. Keeping gang bolts properly torqued and raising the harrow while turning will also reduce disk blade breakage.

FIGURE 1 — Laminated Disc—defective steel. Eligible for warranty consideration.

SURFACE VIEW

EDGE VIEW

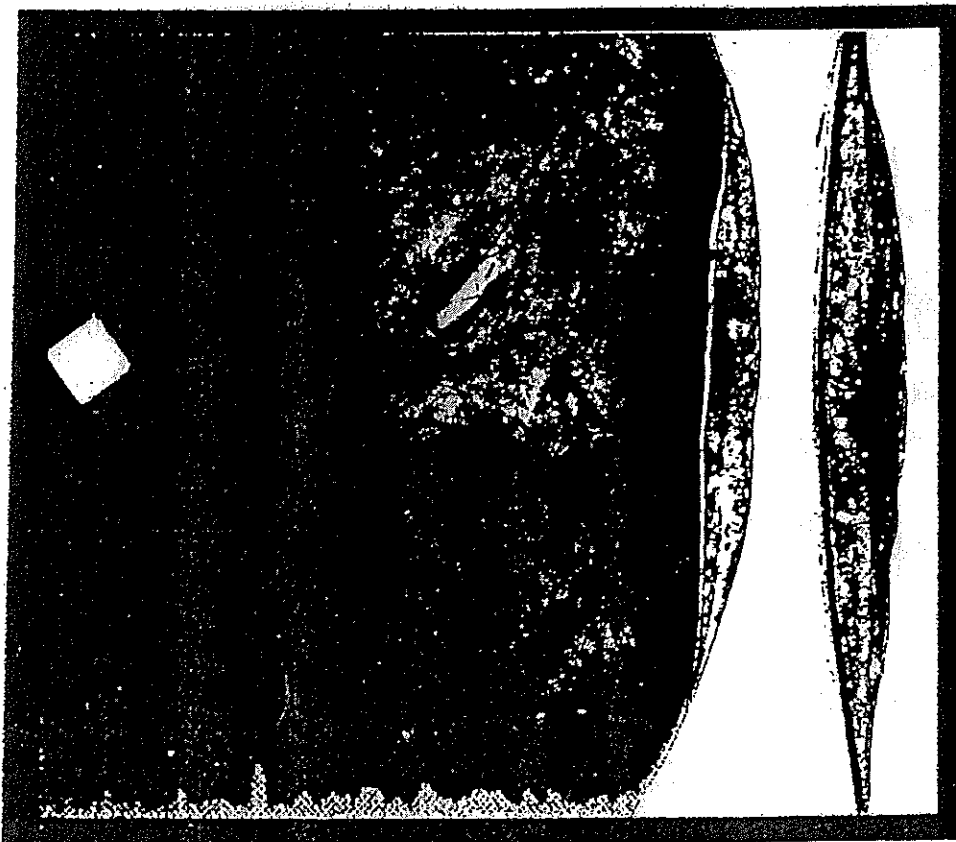


FIGURE 2 — Straight directional break caused by defective steel. Eligible for warranty consideration.





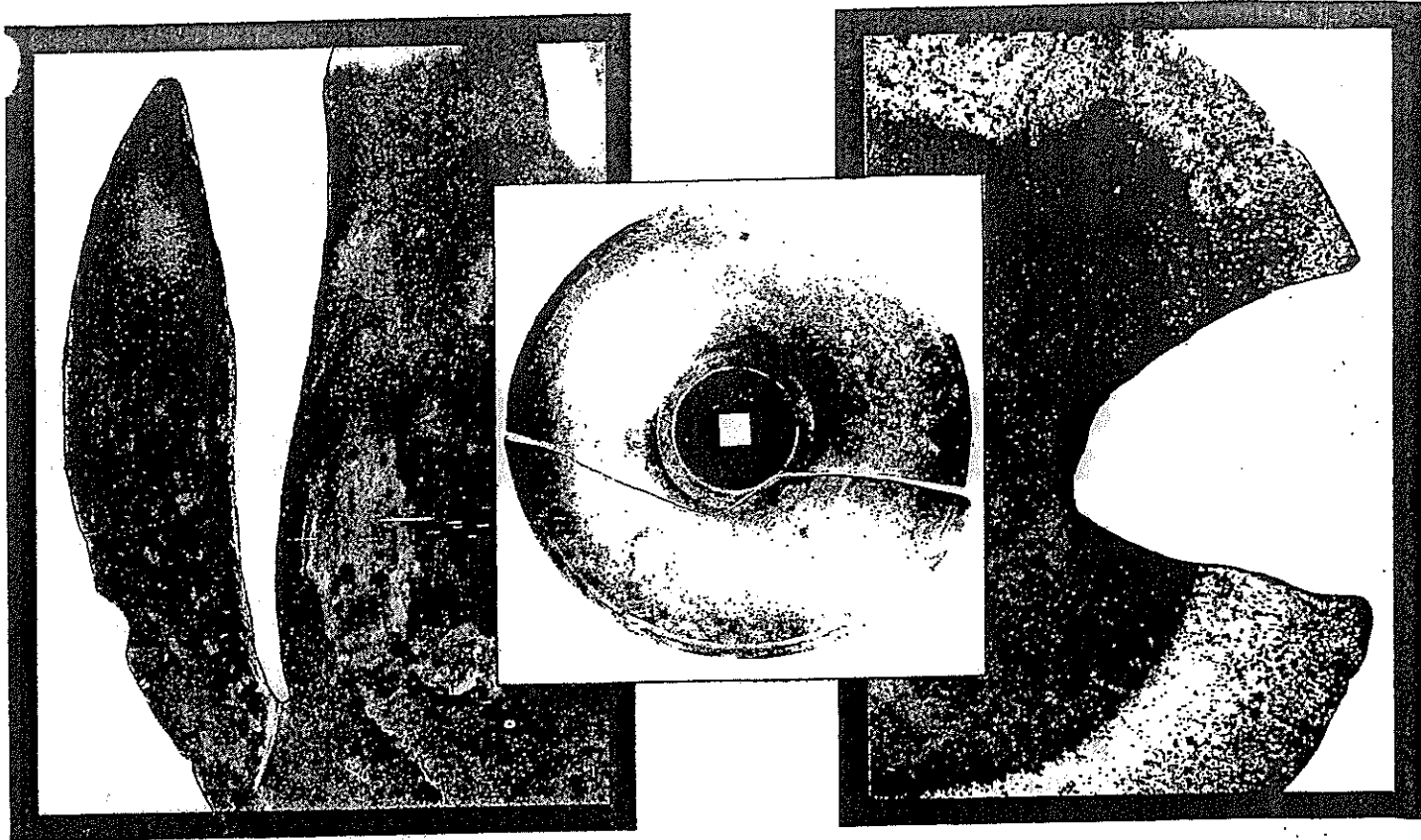


FIGURE 3, 4, 5 — Irregular breaks caused by contact against rocks or stumps. Not covered by warranty.

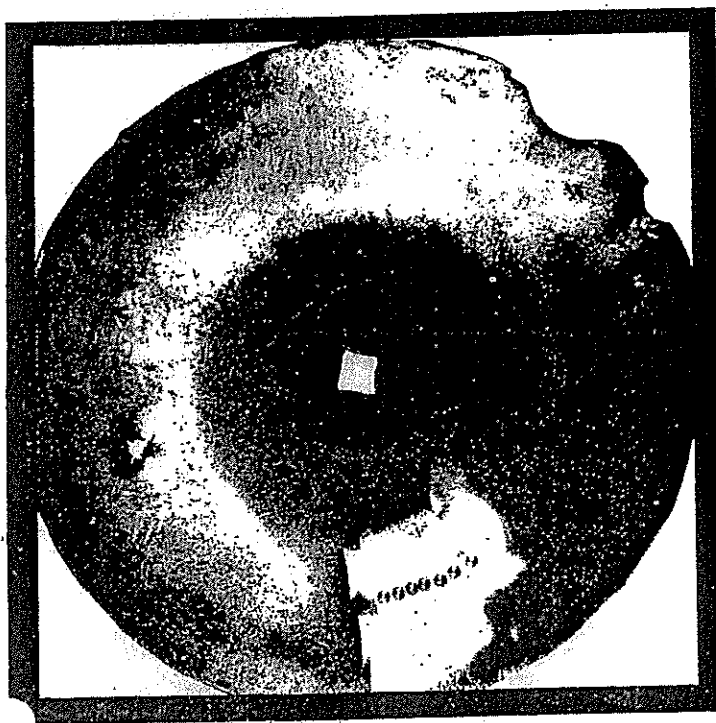


FIGURE 6 — Chipped or dented edges resulting from use in areas containing rocks or stumps. Not covered by warranty.



FIGURE 7 — Center broken out—Experience has shown that this is usually caused by loose bolts, excessive flexing, or by contact with rocks and stumps. Not covered by warranty.

## ASSEMBLY INSTRUCTIONS - AMCO LOF HARROW

The AMCO LOF Harrow is shipped from the factory with maximum pre-assembly. The following bundles are required for a complete harrow.

- A. Main Frame ( w/set plate and fasteners)
- B. Back post bar ( assembly)
- C. Front gang and frame, complete with scrapers
- D. Rear gang and frame, complete with scrapers



**CAUTION** *Use sturdy stands to prevent frame from falling.*

- Step 1: Select a clean, level area to assemble the harrow.
- Step 2: Place the main frame ( right side up) on sturdy stands at least 33" high.
- Step 3: Attach A-Frame to main frame.
- Step 4: Attach back-post bar to top hitch ( top hole) and main frame.
- Step 5: Attach front and rear gangs under main frame, ( set gang angle location reference on last page of manual.) Tighten all nuts and secure pins with klik pins.



**CAUTION** *When working on disk harrows, care should be exercised in handling or tightening bolts near disk blades to avoid injury.*

### GANG BEARING LUBRICATION

The AMCO LOF Harrow gangs are equipped with regreasable Protect-o-Shield® ball bearings. The grease fitting is located on the rear of each bearing housing. They should be greased every 50 hours of operation with a good grade of lithium soap base chassis grease, preferably with a low volume, low pressure, hand operated grease gun. All bearings should be greased at the beginning and end of each disking season. To protect the seals from the elements, raise the harrow on its wheels and slowly spin the gangs so the grease wraps around the seals.

More frequent greasing is recommended when working in very sandy or wet conditions.



**CAUTION** *When transporting farm implements on public roads after dusk it is the responsibility of the operator to provide lighting and reflectors on the rear of the implement in accordance with your state law.*

Model # LOF-2424

NOTE: Measurement "A" is equal to 26"

