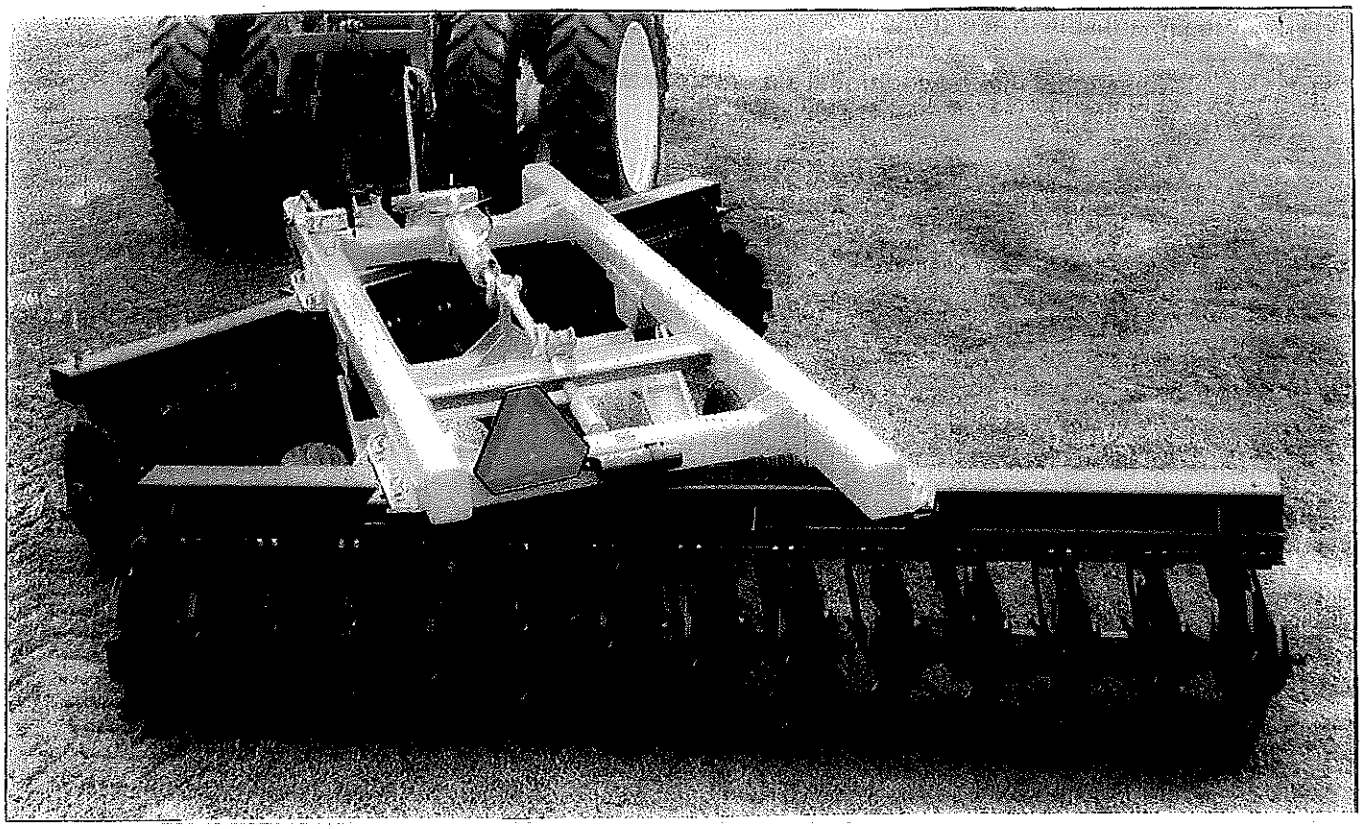
G2

PARTS ** MAINTENANCE ** SET-UP INSTUCTIONS



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

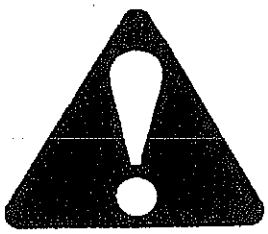
TO THE PURCHASER

The care you give your new AMCO G2 Offset Disk Harrow will greatly determine the satisfaction and service life you will obtain from it. By observing the instructions and suggestions in this manual, your AMCO G2 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. 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.

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

YOUR AUTHORIZED AMCO DEALER



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 Harrow in all correspondence or contacts. Remember, the right or left hand sides of the harrow are determined by standing at the rear of the harrow and facing the direction of travel.

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Revised 5/12	

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.*



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 components must be blocked to prevent accidental lowering or must be lowered to the ground when making adjustments or when the equipment is idle.*

GENERAL SPECIFICATIONS

MODEL "G2"

Model	Cutting Width	No. Of Disks	Disk Size & Type	Approximate D.B.H.P. Required	Approximate Weight Pounds
G2-2032-BG	10'4"	20	32" Cutout	100-120	9800
G2-2432-BG	12'4"	24	32" Cutout	110-130	10760
G2-2832-BG	14'4"	28	32" Cutout	120-150	11725
G2-3232-BG	16'4"	32	32" Cutout	150 up	12680
G2-3632-BG	18'4"	36	32" Cutout	175 up	13650

AXLES: 2-1/4" round, high carbon cold rolled steel

BLADES: 32" x 5/16" cutout with 14 x 7 Ga. back up blades

SCRAPERS: Extra heavy duty moldboard type with 5/8 x 3 shank

TONGUE: Adjustable, 92" long with tongue jack and reversible ductile iron clevis

GANG ANGLE: 20° to 27° front & rear

BEARINGS: Protect-O-Shield, 2-3/4" bore regreasable ball type Toggle mounted

SPACING: 12-1/2 Inches

WHEELS: Dual 15 x 10 with extra heavy duty 6 bolt hubs

WRENCH: 1 for gang bolt

WEIGHT: 379 to 502 lbs per blade
758 to 975 lbs per foot

TRANSPORT WIDTH: Width of cut plus 12 Inches

OPTIONAL EQUIPMENT

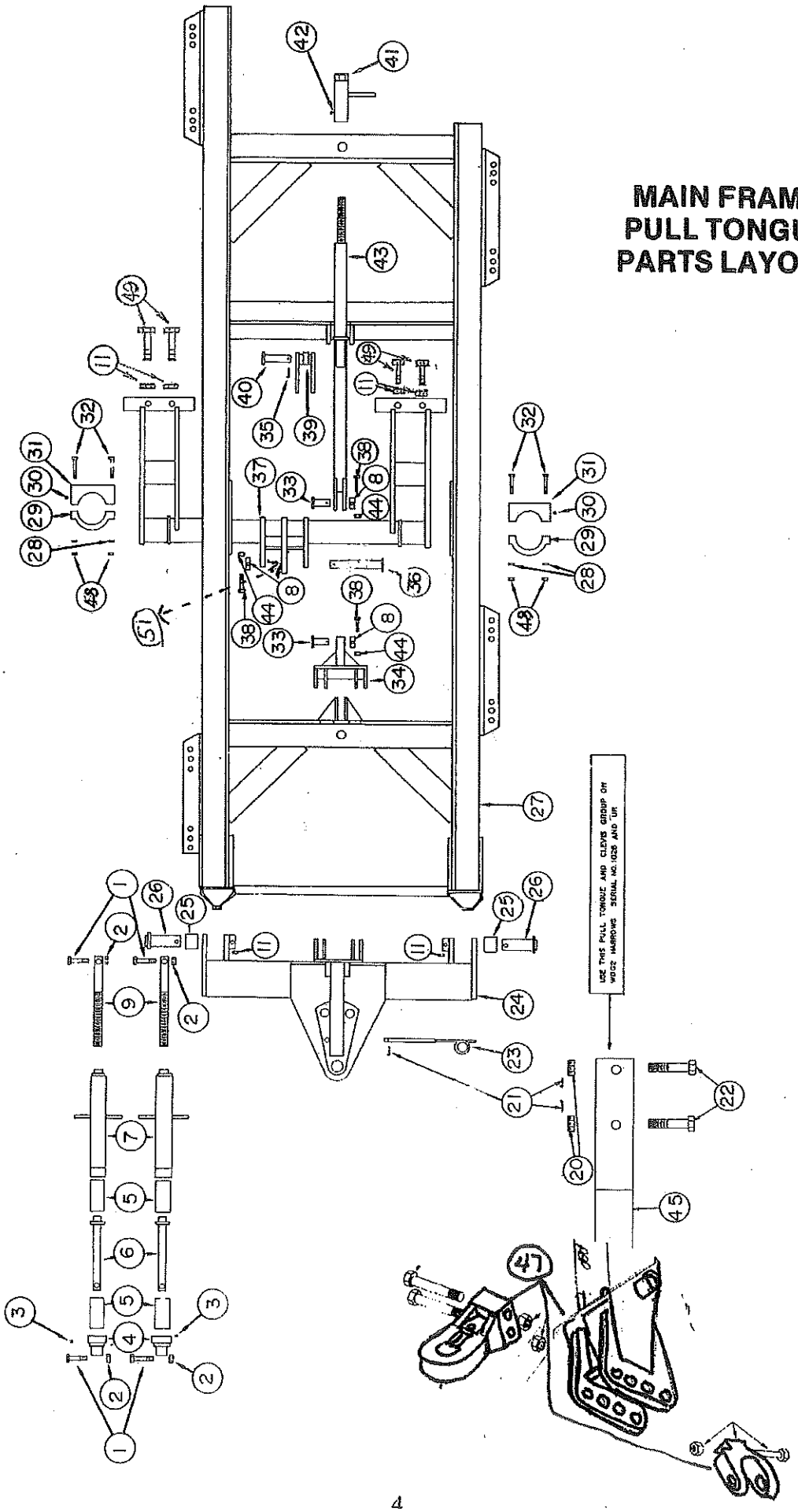
5" x 16" x 2-1/2" Hydraulic cylinder
Feathering Blade with scraper

32" x 3/8" plain blades in lieu of Std. 32"

RECOMMENDED TIRE SIZE

4 — 12.5L x 15 Tires, 12 Ply

MAIN FRAME PULL TONGUE PARTS LAYOUT

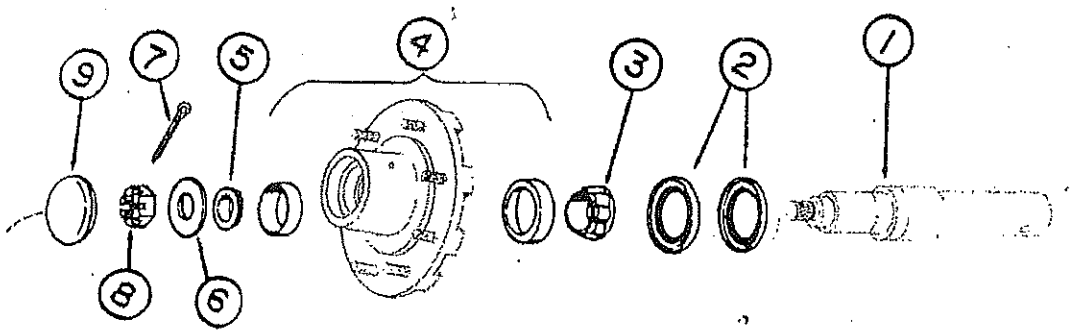


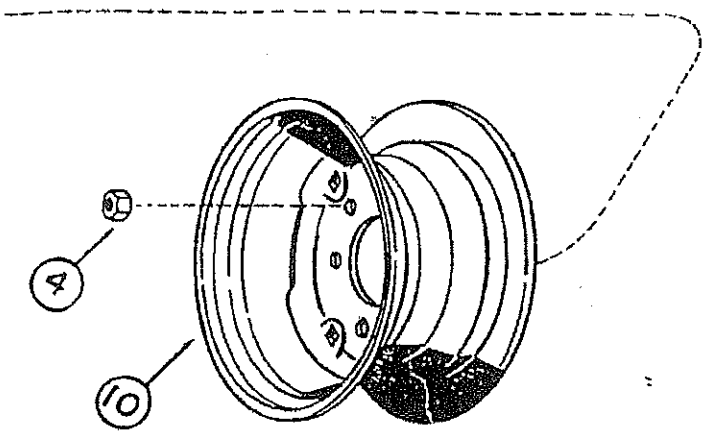
AMCO
G and G2 Series Disk Harrow
Main Frame

Ref. No.	Part No.	Description	No. Req'd. G	No. Req'd. G2
1	10113	Machine Bolt 3/4 x 4 NC, PL,Gr. 5	4	4
2	10300	Lock Nut 3/4 NC, PL	4	4
3	11081	Grease Fitting 5/16 Straight Drive-In	2	3
4	1166	Assy. Cap	2	2
5	10460C	Srping 3" OD x 6-7/8 Long x 5/8 Wire Dia.	4	4
6	1167	Assy. Piston Rod	2	2
7	1479	Assy. Spring Housing	2	2
8	100178	Collar Retainer 2-1/2 OD x 3/8 WT - 1-1/4 Long	3	3
9	100062	Rod-Stud Threaded 1-1/2 Dia. X 20 Long	2	2
11	10395	Lock Nut 1/2 NC, PL	3	6
19	0312A	Pull Tongue	1	
20	10758	Slotted Hex Nut 2" NC	2	2
21	10617	Cotter Pin 1/4 x 3	3	3
22	0198	Machine Bolt 2" Dia. X 8-5/8 Long	2	2
23	0207	Hose Holder	1	1
24	0714	Cross Tongue	1	1
25	8552	Bushing 2-1/2 OD x 7/32 WT x 2-7/8 Long	2	2
26	0711	Assy. Pin 2" Dia. X 6-1/2 Long	2	2
27	20656	Main Frame	1	1
28	10192	Lock Washer 1-1/4	4	4
29	3431	Pillow Block Cap	2	2
30	10606	Grease Fitting 1/8 NPT Straight	2	2
31	3430	Pillow Block Base	2	2
32	11037	Machine Bolt 1-1/4 x 8 NC	4	4
33	092A	Retainer Pin 1-3/4 Dia. X 6 Long	1	4
34	0713	Assy. Rear Cylinder Mount	1	1
35	10029	Cotter Pin 3/8 x 3	4	1
36	092A	Retainer Pin 1-3/4 Dia. X 6 Long	1	
37	0740A	Rockshaft	1	1
38	10871	Machine Bolt 3/8 x 3 NC, PL, Gr. 5	3	3
39	0102	Latch-Transport	1	1
40	0103A	Retainer Pin 6-3/8 Long	1	1
41	0104	Depth Adjusting Nut	1	1
42	11081	Grease Fitting 5/16 Drive-In	1	
43	0100A	Transport Bar	1	1
44	10509	Lock Nut 3/8 NC, PL	3	3
45	0312B	Pull Tongue		1
47	12459	Clevis		
47	12456	Yoke Clevis		1
47	10304	1 x 6-1/2 HB, NC, PLT, Gr. 5		2
47	10868	1" Lock Nut NC, PLT		2
48	10397	Lock Nut 1-1/4 NC, PL	4	4
49	10834	1/2 x 4 NC, PLT, Gr. 5, HR		4
50	12070	Tonge Jack (Not Shown)		1
51	11933	Cylinder Mount Bushing	1	1

Note: To replace #0740 by #0740A you must use on #092A Retainer Pin in place of #099. AMCO G2 Harrows beginning with serial # 1157 and up will have the new rockshaft #0740A.

		AMCO	
		INSERT	
Ref. No	Part No.	Description	No. Req'd.
1	12164	Spindle	4
2	12191	Seal	4
3	12187	Cone-Outer	4
4	12186-1	Hub with 2 Cups, Grease Fitting & Press-In	4
		Studs with Nuts	
4	12189	Cup - Inner	4
4	12190	Cup - Outer	4
4	12192	Hub Bolt	32
4	12193	Hub Nut 3/4 - 16NF	32
5	12188	Cone - Inner	4
6	12195	Washer - Spindle	4
7	12197	Cotter Pin - Spindle	4
8	12196	Nut - Spindle	4
9	12198	Hub Cap	4
10	12185	Wheel - 15 x 10 x 8 - Hole (Heavy Duty)	4
11	10606	Grease Fitting (Not Shown)	
Note: Part #BC-05-0331 - Sub-Bundle Spindle & Hub Complete			



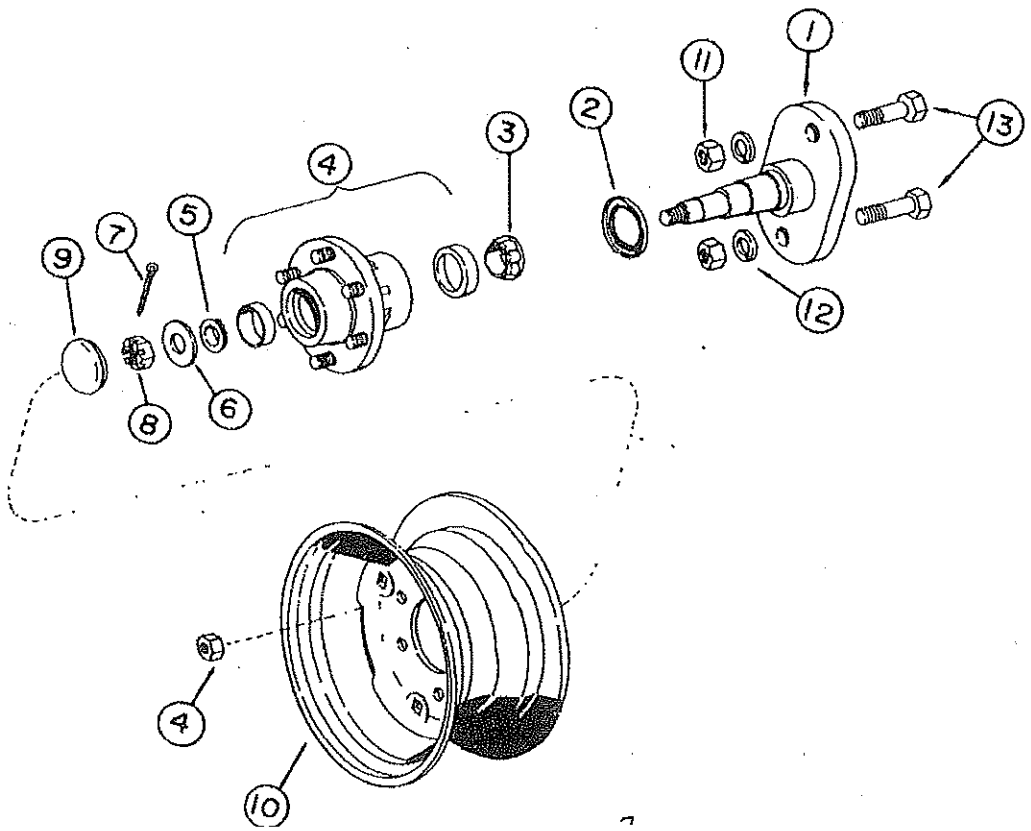


WHEEL - 8-HOLE
8-HOLE SPINDLE &
HUB ASSY. – G2
STANDARD EQUIPMENT
BEGIN W/SERIAL #98010057

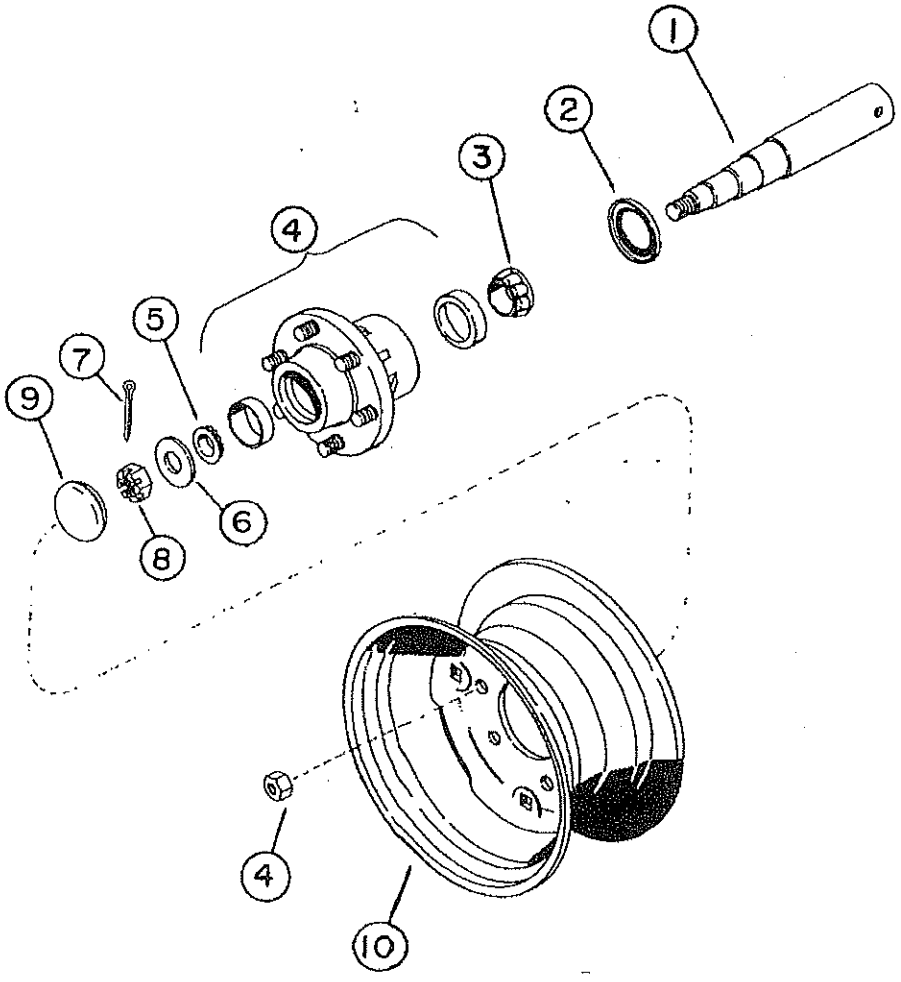
AMCO
G HUB AND SPINDLE
Used on Serial No. 518 to 550

Ref. No	Part No.	Description	No. Req'd.
1	1287	Wheel Support	4
2	10467	Seal	4
3	10469	Cone - Inner Timken #25590	4
4	10463-1	Hub with 2 Cups and 6 Hub Bolts	4
4	10472	Cup- Outer Imken #25821	4
4	10471	Hub Nut 9/16	24
5	10468	Cup - Inner Timken #25520	4
5	10470	Hub Bolt 9/16 NF	24
5	10473	Cone - Outer Timken #25877	4
6	10263	Washer 7/8	4
7	10291	Cotter Pin 5/32 x 1-1/4	4
8	10264	Nut 7/8 NF Slotted	4
9	10474	Hub Cap	4
10	10936	Wheel 15 x 8 - 6 Bolt	4
11	11026	Hex Nut 1 NC	8
12	11027	Lock Washer 1	8
13	11025	Machine Bolt 1 x 3 NC	8

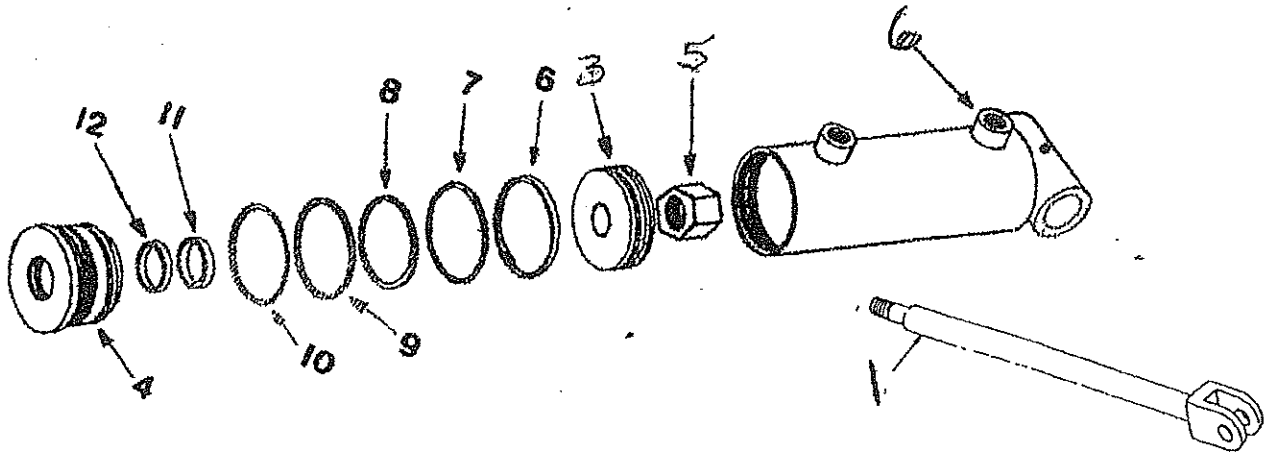
Note: Use with #098 Rockshaft.



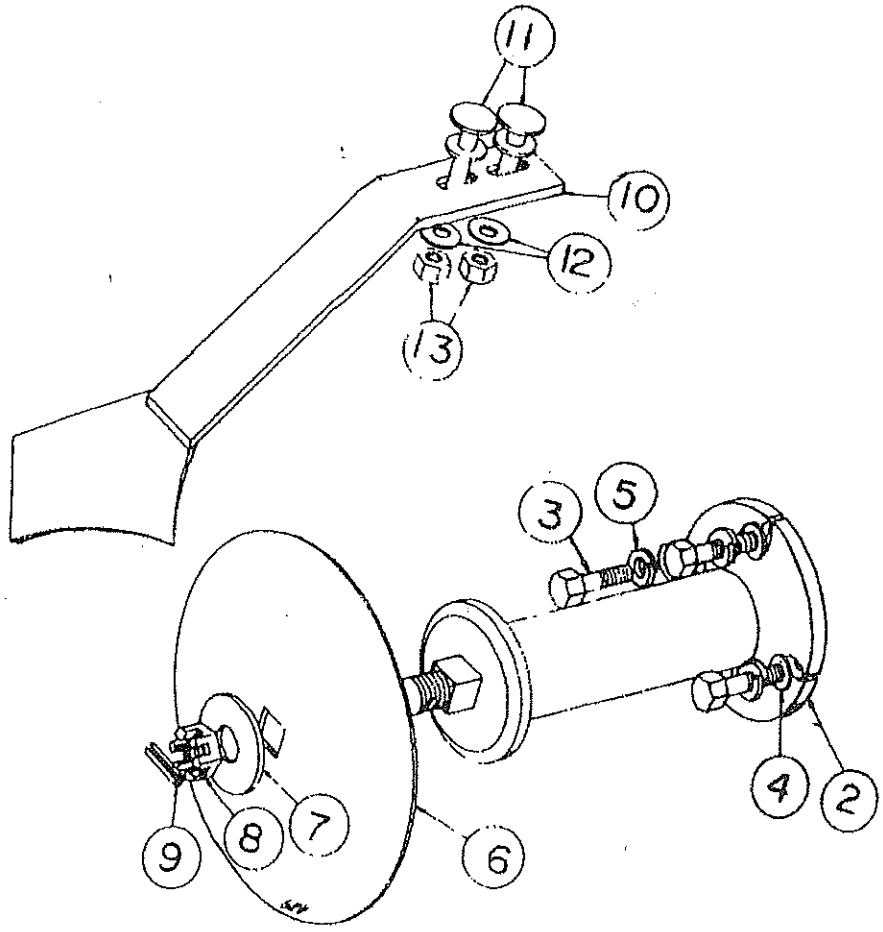
		AMCO	
		G2 HUB AND SPINDLE	
Ref. No	**Part No.**	**Description**	**No. Req'd.**
1	10922	Spindle 2-7/32 Dia.	4
2	10467	Seal	4
3	10469	Cone - Inner Timken #25590	4
4	10463-1	Hub with 2 Cups - 6 Hub Bolts and Nuts	4
4	10468	Cup - Inner Timken #25520	4
4	10472	Cup - Outer Timken #25821	4
4	10470	Hub Bolt	24
1	10471	Hub Nut	24
5	10473	Cone - Outer Timken #25877	4
6	10263	Washer 7/8	4
7	10291	Cotter Pin 5/32 x 1-1/4	4
8	10264	Nut 7/8 NF Slotted	4
9	10474	Hub Cap	4
10	11236	Wheel 15 x 10 - 6 Bolt	4
Note: Use with #0740A Rockshaft.			



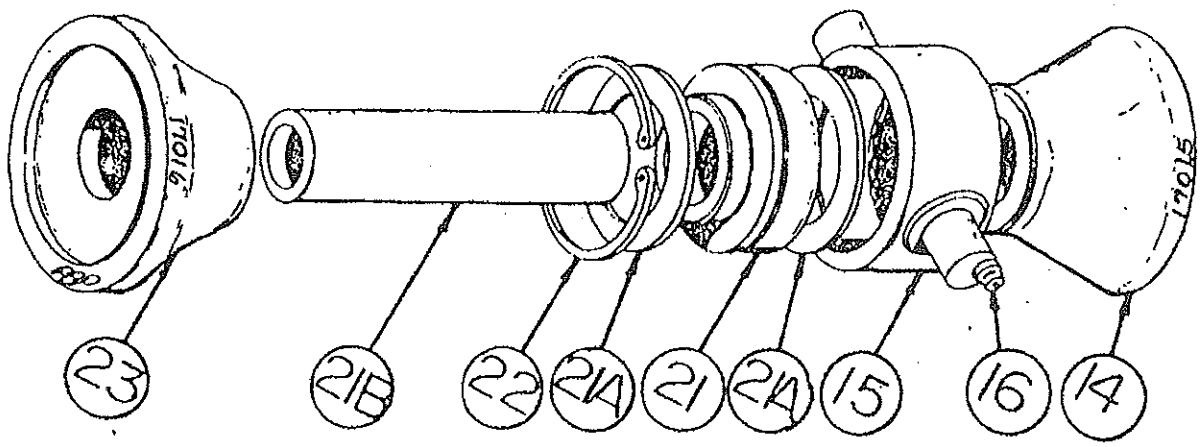
		AMCO	
		5 x 16 HYDRAULIC CYLINDER	
		CRABTREE MFG. 2500 PSI	
Ref. No	**Part No.**	**Description**	**No. Req'd.**
	12269	Hydraulic Cylinder 5 x 16 (complete)	1
1	12270	Rod Assembly	1
3	12272	Piston	1
4	12273	Cylinder Head	1
5	12274	Lock Nut, Self Locking	1
6	12275	Barrel Assembly	1
	12276	Seal Repair Kit	1
6		Wear Guard	1
7		Piston Seal	1
8		O-Ring	1
9		O-Ring	1
10		Back -up Washer	1
11		Rod Seal	1
12		Rod Wiper	1
Note: Items 6-12 are sold in repair kit #12276 only.			
Beginning with Serial #98020107 use these parts.			



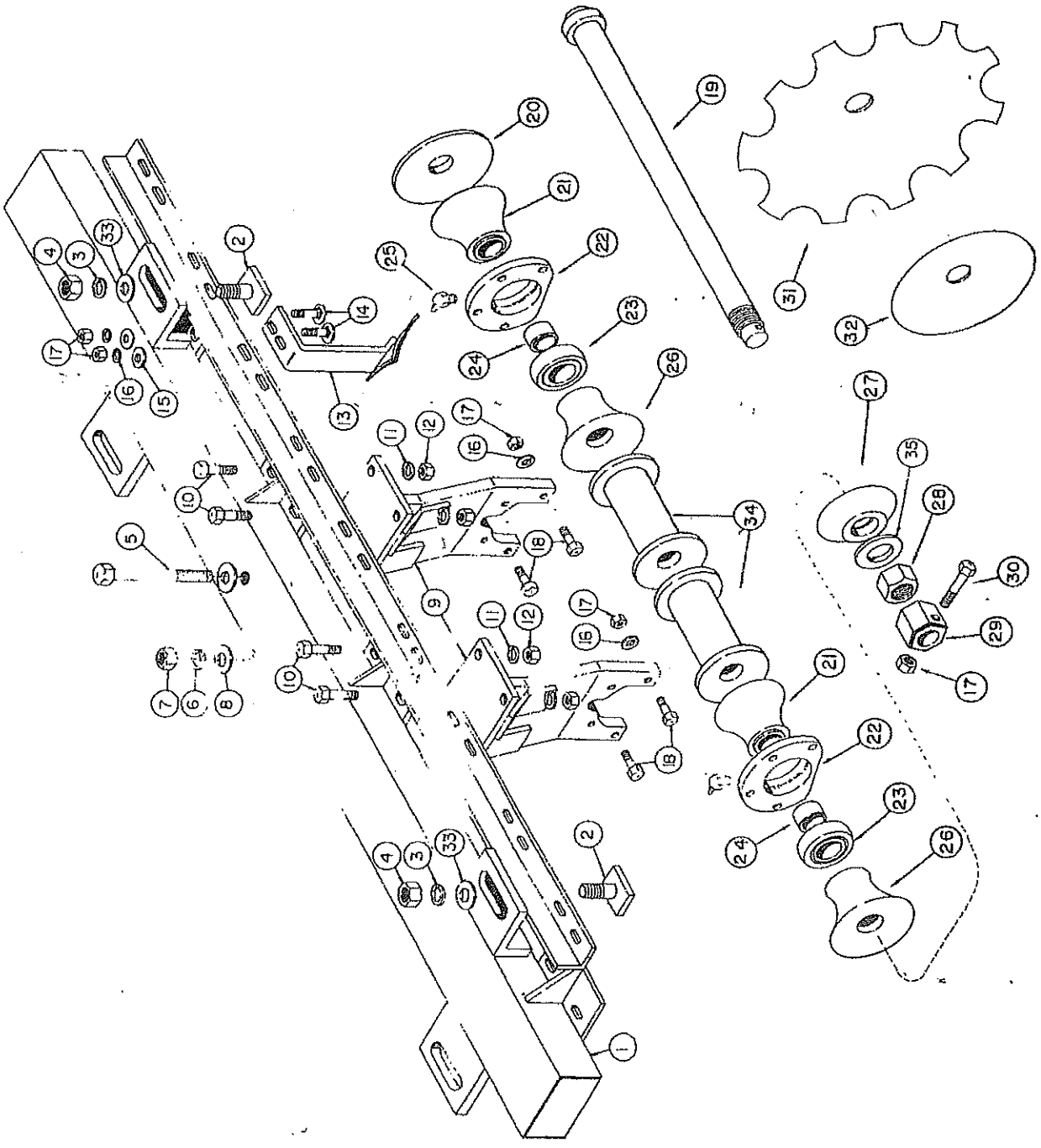
		AMCO	
	G2 SERIES FEATHERING BLADE		
		OPTIONAL	
Ref. No	**Part No.**	**Description**	**No. Req'd.**
1	16023	Bumper Washer (not shown)	1
2	20180	Feathering Blade Extension	1
3	10678	Machine Bolt 3/4 x 2-1/2 NC, PL, Gr.5	4
4	10866	Cut Washer 3/4	4
5	10061	Lock Washer 3/4	4
6	2456	Blade 26 x 1/4 Cut Out	1
7	10872	Cut Washer 1-3/8 ID, PL	1
8	10226	Slotted Nut 1-1/2 NF	1
9	10910	Roll Pin 5/16 x 2-1/4	1
10	20181	Feathering Blade Scraper - LH	1
11	10201	Machine Bolt 5/8 x 3 NC, PL, Gr. 5	2
12	10059	Cut Washer 5/8 PL	4
13	10299	10299 Lock Nut 5/8 NC, PL	2



		AMCO INSERT	
Ref. No	**Part No.**	**Description**	**No. Req'd.**
14	17015	End Bell - Small	1 per bearing riser
	FB-09-0018	Sub. Assy. Bearing and Housing	
15	16004	Bearing Housing	1 per bearing riser
16	12384	Grease Fitting	1 per bearing housing
21	11504	Bearing 125mm DC214TTR3	1 per bearing housing
21A	100105	Washer 125mm	2 per bearing housing
22	11072	Retainer Ring	1 per bearing housing
21B	101337	Sleeve	1 per bearing
23	17016	End Bell - Large	1 per bearing riser
Note: Replacement Bearing and End Bells for all G2 Harrows with serial # 1174 and up			



G GANG AND FRAME — FRONT AND REAR



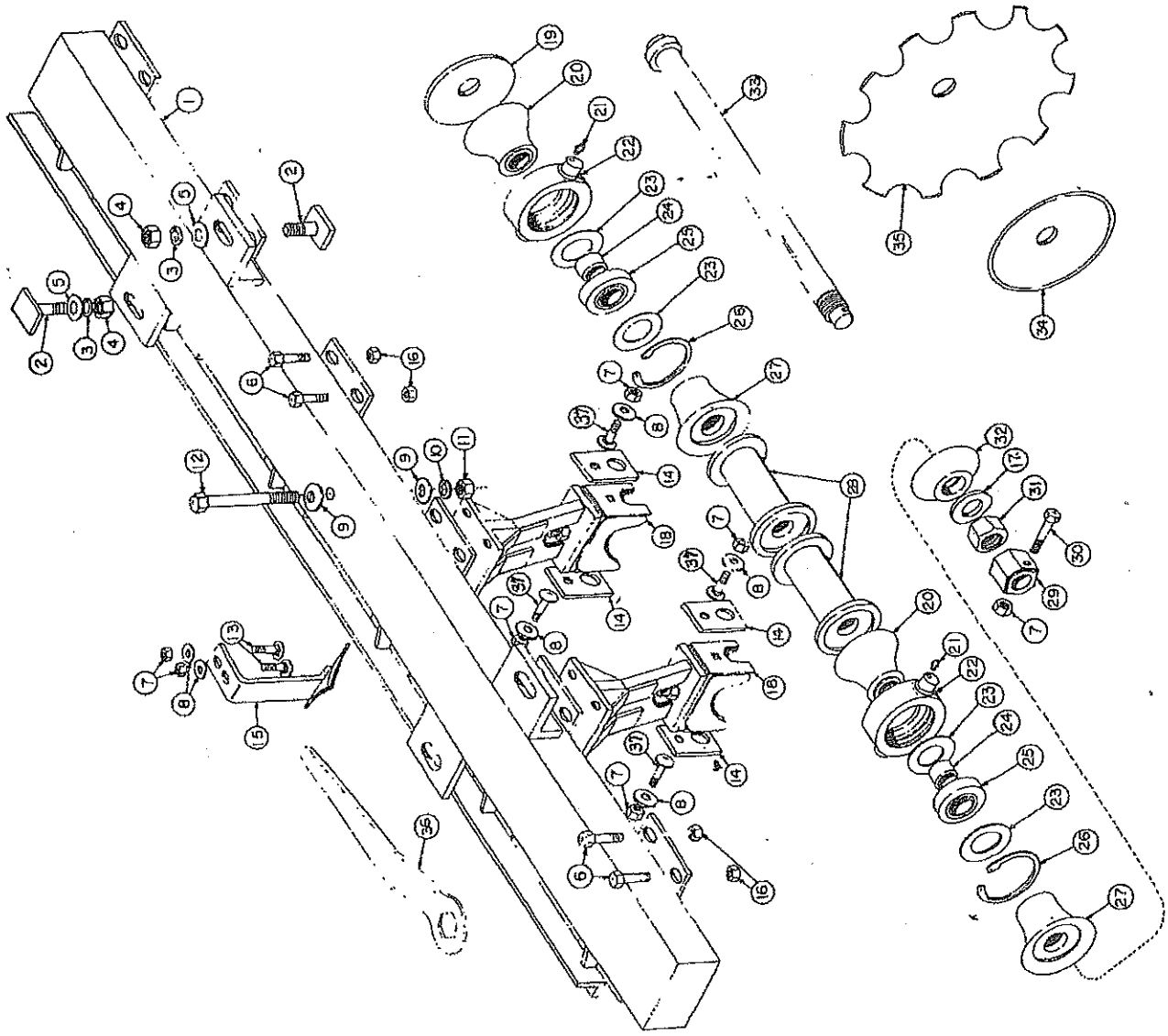
AMCO
G2 GANG AND FRAME
FRONT AND REAR

Ref. No.	Part No.	Description	No. Req'd. 20	24	28	32
1	0606	Gang Frame - Front	N/A			
1	0602	Gang Frame - Front		N/A		
1	0218	Gang Frame - Front			N/A	
1	0220	Gang Frame - Front				N/A
1	0607	Gang Frame - Rear (shown)	N/A			
1	0601	Gang Front - Rear (shown)		N/A		
1	0219	Gang Frame - Rear (shown)			N/A	
1	0221	Gang Frame - Rear (shown)				N/A
2	094A	Angle Lock Bolt - 1-3/8 Dia.	8	8	8	8
3	10673	Lock Washer 1-3/8	8	8	8	8
4	10873	Hex Nut 1-3/8 NC	8	8	8	8
5	0787	Bolt - Connecting 1-1/4 x 13	2	2	2	2
6	10192	Lock Washer 1-1/4	2	2	2	2
7	10149	Hex Nut 1-1/4 NC	2	2	2	2
8	10077	Cut Washer 1-1/4	4	4	4	4
9	1826	Bearing Riser	N/A	N/A	N/A	N/A
10	11025	Machine Bolt 1 x 3 NC, PLT, Gr. 5	32	48	48	64
11	11027	Lock Washer 1	32	48	48	64
12	11026	Hex Nut 1 NC	32	48	48	64
13	1829	Scraper - Front	9	11	13	15
13	1830	Scraper - Rear	9	11	13	15
14	10665	Carriage Bolt 5/8 x 2 NC, PL, Gr. 5	36	44	52	60
15	10059	Cut Washer 5/8	36	44	52	60
16	10010	Lock Washer 5/8	72	98	106	132
17	10299	Hex Nut 5/8 NC	72	98	106	132
18	10201	Cap Screw 5/8 x 3 PLT, Gr. 5	32	48	48	64
19	1846	Gang Bolt - 4 Blade		6	2	8
19	1833	Gang Bolt - 5 Blade	4		4	
20	73564	Bumper Washer	4	6	6	8
21	7216	End Bell - Small	8	12	12	16
22	G7215	Bearing Housing	8	12	12	16
23	10732	Bearing (GW214PPB2)	N/A	N/A	N/A	N/A
24	7597	Bushing 2-3/4 OD x 1-1/2 Long	8	12	12	16
25	10011	Grease Fitting	N/A	N/A	N/A	N/A
26	7217	End Bell - Large	8	12	12	16
27	7357	End Gang Washer	4	6	6	8
28	16019	Hex Nut 2-1/4 NF	4	6	6	8
29	17012A	Lock Nut	4	6	6	8
30	10666	Machine Bolt 5/8 x 5 NC, PLT, Gr. 5	4	6	6	8
32	6847	Blade - 14" Plain 3/16	20	24	28	32
33	10872	Cut Washer 1-3/8 PL	24	24	24	24
34	1832	Spacer Spool	8	6	14	14
35	100272	Spacer 1/2 Thick x 4-1/4 Dia. (As Required)				

Note: N/A = Not Available

sj 7/9/15

G2 GANG AND FRAME — FRONT AND REAR



		AMCO					
		G2 GANG FRAME					
				No.	Req'd.		
Ref. No.	Part No.	Description	20	24	28	32	36
1	20014	Gang Frame - Front	1				
1	0970	Gang Frame - Rear (shown)	1				
1	20015	Gang Frame - Front		1			
1	0971	Gang Frame - Rear (shown)		1			
1	0981	Gang Frame - Front			1		
1	0982	Gang Frame - Rear (shown)			1		
1	0983	Gang Frame - Front				1	
1	0984	Gang Frame - Rear (shown)				1	
1	0985	Gang Frame - Front					1
1	0986	Gang Frame - Rear (shown)					1
2	094A	Angle Lock Bolt - 1-3/8 Dia	8	8	8	8	8
3	10673	Lock Washer 1-3/8	8	8	8	8	8
4	10873	Hex Nut 1-3/8 NC	8	8	8	8	8
5	10872	Cut Washer 1-3/8 PL	16	16	16	16	16
6	11025	Machine Bolt 1 x 3 NC, PL, Gr.5	32	48	48	64	64
7	10299	Lock Nut 5/8 NC, PL	56	74	82	100	108
8	10059	Cut Washer 5/8 PL	52	68	76	92	100
9	10077	Cut Washer 1-1/4	2	2	2	2	2
10	10192	Lock Washer1-1/4"	2	2	2	2	2
11	10149	Hex Nut 1-1/4 NC	2	2	2	2	2
12	0787	Bolt - Connecting 1-1/4 x 13	2	2	2	2	2
13	10665	Carriage Bolt 5/8 x2 NC, PL, Gr. 5	44	56	64	76	84
14	20649	Clamp Trunion 3/8 x 2-1/2 x 4-1/24 (replaces 100132)	4	12	12	16	16
14A	102723	Wear Guard (replaces 100132)	8	12	12	16	16
15	1829	Scraper - Front	9	11	13	15	17
15	1830	Scraper - Rear	9	11	13	15	17
16	10868	Lock Nut 1 NC, PL	32	48	48	64	64
17	100272	Spacer 1/2 Thick x 4-1/4 Dia.					
18	0739	Bearing Riser	8	12	12	16	16
19	16023	Drilled and Tapped Bumper Washer					
		(for rear gang only)					
19	7356A	Bumper Washer					
*20	7216	End Bell - Small	8	12	12	16	16
21	12384	Grease Fitting	8	12	12	16	16
22	16004	Bearing Housing	8	12	12	16	16
23	100105	Washer - 125mm	16	24	24	32	32
*24	7597	Bushing 2-3/4 OD x 1-1/2 Long	8	12	12	16	16
*25	G10218	Bearing (GW214PP2)	8	12	12	16	16
26	11072	Retainer Ring	8	12	12	16	16
*27	7217	End Bell - Large	8	12	12	16	16
28	1832	Spacer Spool	8	6	10	8	12
29	17012A	Lock Nut	4	6	6	8	8
30	10666	Machine Bolt 5/8 x 5 NC, PL, Gr.5	4	6	6	8	8
31	16019	Hex Nut 2-1/4 NF	4	6	6	8	8
32	7357	End Gang Washer	4	6	6	8	8
33	1833	Gang Bolt - 5 Blade	4		4		4
33	1846	Gang Bolt - 4 Blade		6	2	8	4
34	6847	Blade - 14" x 3/16 Plain	20	24	28	32	36
35	11562	Blade - 32" x 3/8 CO	20	24	28	32	36
36	100135	Nut - Wrench	1	1	1	1	1
37	10135	Carriage Bolt 5/8 x 1-3/4 NC, PL, Gr.5	8	12	12	16	16
*Note: Use these parts before Serial #1174							

		AMCO							
		G2 GANG FRAME							
				No.	Req'd.				
Ref. No.	Part No.	Description	16	20	24	28	32	36	40
1	20589	Gang Frame - Front	1						
1	20590	Gang Frame - Rear	1						
1	20014	Gang Frame - Front		1					
1	0970	Gang Frame - Rear (shown)		1					
1	20015	Gang Frame - Front			1				
1	0971	Gang Frame - Rear (shown)			1				
1	0981	Gang Frame - Front				1			
1	0982	Gang Frame - Rear (shown)				1			
1	0983	Gang Frame - Front					1		
1	0984	Gang Frame - Rear (shown)					1		
1	0985	Gang Frame - Front						1	
1	0986	Gang Frame - Rear (shown)						1	
1	20667	Gang Frame- Front							1
1	20668	Gang Frame - Rear							1
2	094A	Angle Lock Bolt - 1-3/8 Dia.	8	8	8	8	8	8	8
3	10673	Lock Washer 1-3/8	8	8	8	8	8	8	8
4	10873	Hex Nut 1-3/8 NC	8	8	8	8	8	8	8
5	10872	Cut Washer 1-3/8 PL	16	16	16	16	16	16	16
6	11025	Machine Bolt 1 x 3 NC, pL	32	32	48	48	64	64	64
7	10299	Lock Nut 5/8 NC, PL	38	56	74	82	100	108	108
8	10059	Cut Washer 5/8 PL	38	52	68	76	92	100	100
9	10077	Cut Washer 1-1/4	2	2	2	2	2	2	2
10	10192	Lock Washer 1-1/4	2	2	2	2	2	2	2
11	10149	Hex Nut 1-1/4 NC	2	2	2	2	2	2	2
12	0787	Bolt - Connecting 1-1/4 x 13	2	2	2	2	2	2	2
13	10665	Carriage Bolt 5/8 x 2 NC, PL, Gr.5	32	44	56	64	76	84	92
14	20649	Grease Guard		8	12	12	16	16	16
14A	102723	Wear Guard		8	12	12	16	16	16
15	1829	Scraper - Front	7	9	11	13	15	17	19
15	1830	Scraper - Rear	7	9	11	13	15	17	19
16	10868	Lock Nut 1 NC, PL	32	32	48	48	64	64	64
17	100272	Spacer 1/2 Thick x 4-1/4 Dia.							
18	0739	Bearing Riser		12	12	16	16	16	16
19	16023	Drilled and Tapped Bumper Washer	1	1	1	1	1	1	1
		(for rear gang only)							
19	7356A	Bumper Washer	3	3	5	5	7	7	7
*20	17015	End Bell - Small	8	8	12	12	16	16	16
21	12384	Grease Fitting	8	8	12	12	16	16	16
22	16004	Bearing Housing	8	8	12	12	16	16	16
23	100105	Washer 125mm	16	16	24	24	32	32	32
*24	101337	Sleeve 11-3/4 Long	8	8	12	12	16	16	16
*25	11504	Bearing (DC214TTr3)	8	8	12	12	16	16	16
26	11072	Retainer Ring	8	8	12	12	16	16	16
*27	17016	End Bell - Large	8	8	12	12	16	16	16
28	1832	Spacer Spool	8	8	6	10	8	12	
29	17012	Nut Lock	4	4	6	6	8	8	8
30	10666	Machine Bolt 5/8 x 5 NC, PL, Gr.5	4	4	6	6	8	8	8
31	16019	Hex Nut 2-1/4 NF	4	4	6	6	8	8	8
32	7357	End Gang Washer	4	4	6	6	8	8	8
33	1833	Gang Bolt - 5 Blade		4		4		4	8
33	1846	Gang Bolt - 4 Blade	4		6	2	8	4	
34	6847	Blade - 14" x 7 GA	16	20	24	28	32	36	40
35	11566	Blade - 32 x 3/8 PL	16	20	24	28	32	36	40
36	100135	Nut - Wrench	1	1	1	1	1	1	1
37	10135	Carriage Bolt 5/8 x 1-3/4 NC, PL, Gr.5	8	8	12	12	16	16	16

*Note: Replacement bearing & end bells for all G2 Harrows with Serial # 1174 and up.

DECALS

(1)

AMCO

(2)

WARNING

LOWER OR BLOCK ELEVATED COMPONENTS BEFORE SERVICING OR WHEN LEAVING THE MACHINE.
ELEVATED COMPONENTS CAN FALL AND CAUSE SERIOUS INJURY.

11233

(3)

MAINTENANCE INSTRUCTIONS

1. KEEP ALL BOLTS TIGHT.
   A. VISUALLY INSPECT ALL BOLTS DAILY.
   B. CHECK AFTER FIRST 50 HOURS OR ONE WEEK'S OPERATION.
2. KEEP WHEEL BEARINGS PROPERLY ADJUSTED.
   A. CLEAN & REPACK EACH SEASON OR EVERY 300 HRS.
   B. REPLACE ALL WORN OR DAMAGED PARTS WHEN REPAIRING.
3. DO NOT RUN WITH LOOSE DISK BLADES. KEEP GANG BOLTS TIGHT! TIGHTEN AFTER FIRST DAY'S OPERATION.
4. KEEP SCRAPERS PROPERLY ADJUSTED 1/16" - 1/8" FROM BLADES.
5. GREASE GANG BEARINGS EVERY TWO WEEKS OR 50 HOURS, AT THE START OF EACH SEASON, AND AT THE END OF EACH SEASON. APPLY WITH LOW PRESSURE, LOW VOLUME HAND GREASE GUN. USE A GOOD, CLEAN LITHIUM BASE GREASE - SHELL ALVANIA NO. 3 OR EQUAL. ROTATE GANGS WHILE GREASING FOR BEST RESULTS.

AMCO , YAZOO CITY, MISS. USA

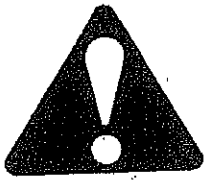
		AMCO	
	G & G2 SERIES DISK HARROW		
		DECALS	
Ref. No.	**Part No.**	**Description**	**No. Req'd.**
1	11465	Decal - AMCO	2
2	11741	Decal - Warning	1
3	11716	Decal - Maintenance	1
4	12540	Reflector - Orange (not shown)	2
5	12541	Reflector - Red (not shown)	2

SET UP INSTRUCTIONS

The harrow is shipped from the factory with maximum pre-assembly in the following bundles:

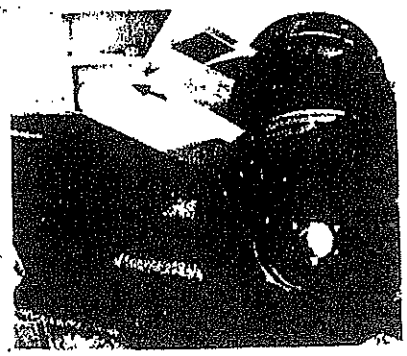
A. MAIN FRAME
B. HITCH TONGUE AND CROSS TONGUE
C. ROCKSHAFT
D. FRONT GANG AND FRAME
E. REAR GANG AND FRAME
F. FOUR 15X10— 6 HOLE WHEELS
G. 5"X 16"HYDRAULIC CYLINDER
H. TONGUE JACK

1. Place all bundles where they will be convenient. Arrange loose parts so they may be readily seen when needed. The necessary installation bolts are ordinarily located in the holes in which they are to be used. Do not remove any bolts until part involved is ready to be assembled. To insure good alignment of the units and parts, always insert all bolts leaving the nuts loose. Tighten the nuts evenly to prevent misalignment, distortion or binding. Be sure all bolts are tight, all cotter keys properly spread and all pins properly inserted.
2. Select clean level area for assembly. Place main frame on sturdy stands at least 44" high. Place on front and sides to clear gang frames.



CAUTION! Use sturdy stands to prevent frame from falling!

3. Bolt front and rear gang frames to main frame. Use four special 1 3/8" dia. bolts to attach gang frame to main frame. Install 1¼ dia. center pivot bolt.
4. Attach rockshaft to main frame using four 7/8" dia. bolts.



5. Attach hitch tongue and cross tongue to main frame using two 2" dia. bolts and bushings. Secure 2" dia. bolts with 3/8" cap screws.
6. Install hose support, stabilizer, and tongue jack. NOTE: Store tongue jack on special main frame bracket when harrow is attached to tractor.
7. Install hydraulic cylinder and hoses.
8. Mount four (4) 12.5L X 15 tires and tubes on the four 15X10wheels. Consult tire manufacturer for proper tire inflation pressure. (12-Ply Tires & Tubes)
9. Remove hub nuts. Bolt wheels to hubs, tighten bolts evenly to assure proper alignment of wheels.
10. Attach harrow to tractor and raise and lower harrow three or four times. Remove stands from under main frame. Check the harrow to be sure all bolts are tight, cotter pins spread, pins in place and that the gangs rotate freely. Check scraper adjustment. Scrapers should be 1/8" from disk blades. Gangs should rotate freely.

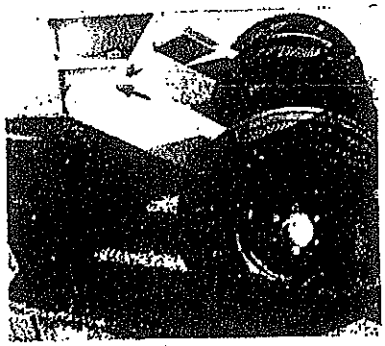
LUBRICATION

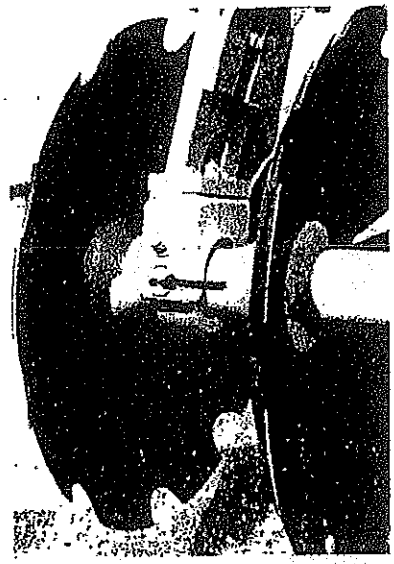
Careful and regular attention to lubrication will greatly increase the life of the Harrow. For economical and efficient operation, the proper lubrication of the frame fittings, gang bearings, and wheel bearings is essential.

Be sure the pressure fittings are free of dirt before using the pressure gun. Replace missing or damaged fittings. Use a good No. 2 gun grease (Lithium Base). Never use a grease which contains metallic additives.

GANG BEARINGS — The AMCO G2 offset harrow is equipped with triple lip seal regreasable ball bearings. These bearings are packed and greased at the factory. They should be regreased every week or after each 50 hours of operation. Grease the bearings at the end of each season and at the start of each season. Then raise the harrow and spin the gangs slowly so that grease wraps around the bearing seals. This will protect the seals against the elements while the harrow is not in use.

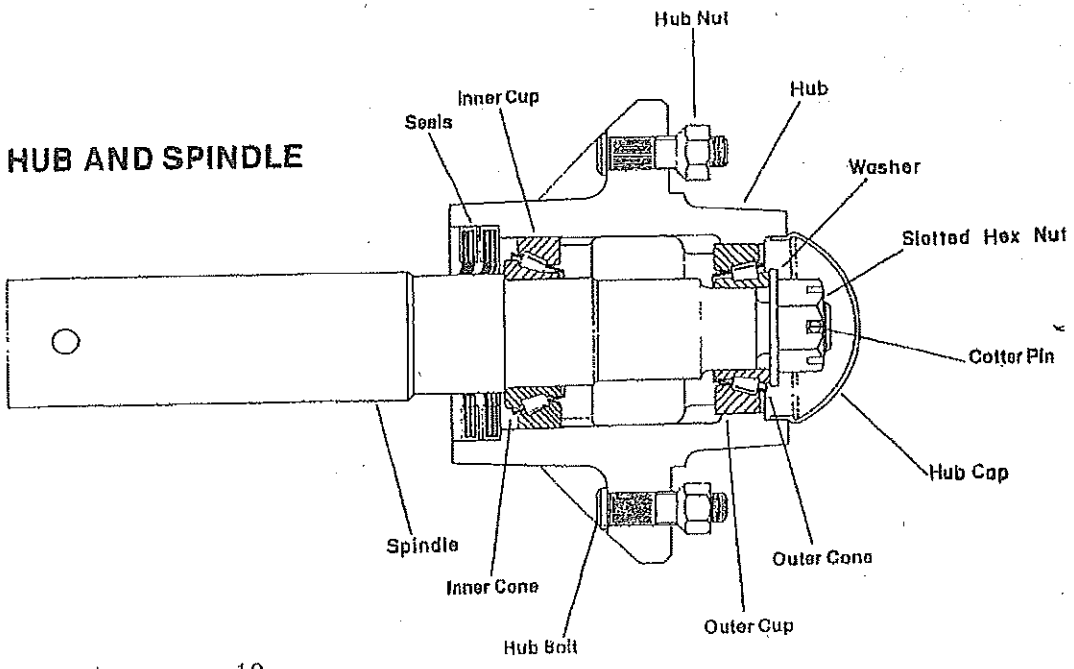
ROCKSHAFT BEARINGS — The two rockshaft-bearings should be greased every week or every 50 hours of operation.





SPRING LOADED STABLIZER — Grease every week or every 50 hours of operation.

HUB AND SPINDLE



OPERATING INSTRUCTIONS

Your new AMCO C2 Series Offset Disk Harrow has been set-up, inspected, and adjusted by your dealer before delivery. However, before using the new harrow, or one that has been stored, check to make certain that all nuts and bolts are tight, cotter pins spread and that the harrow has been lubricated.

This instruction manual should be carefully read to enable the operator to care for and properly operate the harrow.

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.

TRACTOR DRAWBAR — It is suggested that the tractor drawbar be set so it is free to swing when disking. This will prevent side draft, making operation of the harrow easier. The tractor drawbar will pull somewhat to the left side during operation. This is normal with an offset harrow.

HARROW HITCH — The harrow pull tongue can be offset to the right or left by using the set of holes in the cross tongue plates to obtain the desired offset.



SPRING LOADED STABILIZER — Penetration of front and rear gangs may vary. The spring loaded stabilizers may be adjusted to level the harrow front to rear. In extremely hard ground it may be necessary to shorten the stabilizers to force the front, or penetrating gang into the ground. In normal conditions, the stabilizers should be adjusted so that the disk harrow is level, front to rear, while disking.

The type of work to be done by the harrow will determine the type of adjustments to be made.

Observe the harrow while it is working and check if the dead furrow is being filled and the ground left level. If not, an adjustment will have to be made.

DISK GANG ANGLE — Changing the angle between the gangs will effect the penetration of the harrow. The wider the angle, the deeper the harrow will cut.

There are many factors which affect the way in which the soil will flow. Some factors are: moisture content of the soil, type of soil, speed of the tractor, depth of penetration, and the working angle between the gangs. If any one of the conditions change, there will be a change in the resulting disking job.

Always change the angle one hole at a time when making an adjustment.

To check the quality of disking being done, make one complete round and pass the point where the initial observation was made.

The gangs may be set at various cutting angles depending on soil conditions and the job to be done. When conditions are near normal, a setting somewhere between the two extremes is advisable for best operation. Use the gang angle set holes on the side of the main frame to select desired angles. Increasing the gang angle will increase the penetration, pulverizing action and horsepower requirements. Decreasing the gang angle will reduce penetration, pulverizing action and horsepower requirements.

OPERATING INSTRUCTIONS

OFFSETTING THE HARROW — The harrow pull toungue may be adjusted so the left tractor wheel can be run in the furrow,if that is desirable, or the left hand tractor wheel may be operated to the right of this furrow on uncut ground, by making a compensating adjustment on the harrow pull tongue. An offset harrow is normally turned to the left. However, the fields may be laid out so right turns are made by lifting the harrow out of the ground before making the turn.

When the harrow is adjusted so it disks in an extreme left offset position, the front gang will assume a much greater angle (with respect to forward travel) than the rear gang. The rear gang will have a relatively small angle with respect to forward travel..

The small angle of the rear gang makes it more difficult to fill the dead furrow, but the condition can be corrected by increasing the rear gang cutting angle.

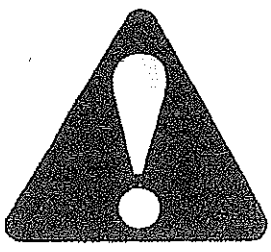
In general, when making a left offset, attempt to keep the amount of offset as small as possible.

The following points are important to remember when offsetting the harrow:

Offsetting to the left increases the angle of the front gang and decreases the angle of the rear gang.
Offsetting to the right decreases the angle of the front gang and increases the agle of the rear gang.

SCRAPER ADJUSTMENT — Adjust the scrapers to run approximately 1/8" from the disk blades by the use of the slotted holes in the scraper bars.

TRANSPORT LOCK — When transporting the disk harrow, always lock it in transport position. If the hydraulic cylinder is to be removed from the disk harrow, the transport lock should be installed before attempting to remove the cylinder.



CAUTION: When transporting machinery over public roads, comply with your local and state regulations regarding length, width, and lighting. Your AMCO dealer has accessory lights and devices available which can be used to warn operators of other vehicles. The use of the proper warning devices can help save lives — *if* you use them.

Do not transport the disk harrow over 20 miles per hour on a smooth surface road. Reduce speed when traveling over rough ground. Always pin the tractor drawbar when transporting on road or highway.

MAINTENANCE

1. Keep all bolts tight.
   A. Check before placing in service.
   B. Visually inspect all bolts daily.
   C. Check after first 50 hours or one week's operation.
   D. Check each season.

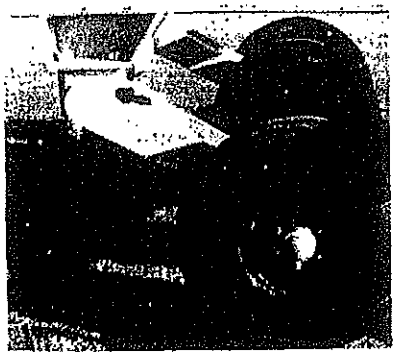
2. Keep wheel bearings properly adjusted.
   A. Check often.
   B. Clean and repack each season or every 300 hours.
   C. Replace worn or damaged parts.
   D. In dis-assembling and re-assembling the wheel hub assemblies, care must be taken to not damage the grease seal lips. In re-assembly, to seat the bearings, carefully tighten the hex nut until the hub drags. Rotate hub to help seat the bearing cups and cones. Re-tighten the hex nut until the hub drags, then back off the hex nut to the nearest slot and secure with cotter pin.

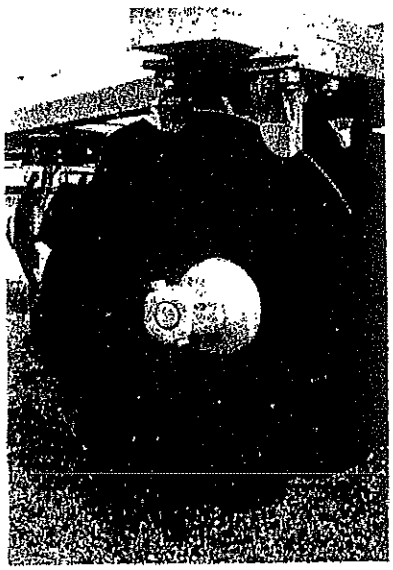
3. Do not run with loose disk blades. Keep gang bolts tight! Tighten to 1200 - 1500 Ft-Lbs Torque.

4. Keep scrapers properly adjusted 1/8" from blades.

5. Grease gang bearings every week or 50 hours, at the start of each season, and at the end of each season. Apply with low pressure, low volume hand grease gun. Use a good No. 2 gun grease (Lithium Base).

6. Disk Blade, Bearing, and Spool Replacement.
   A. Remove the nuts that hold the gang bearing housing trunnion clamps
   B. Remove clamps.
   C. Raise the harrow and roll the disk gang away from the frame.
   D. Remove the gang nut lock cap.
   E. Remove the gang hex nut from the end of the axle shaft.
   F. Slide off the bearing spools, spacers, and blades.
   G. Avoid thread damage.
   H. Install new blades.
   I. To replace bearing, remove snap ring from housing.
   J. Press out bearing and both dust shield washers.
   K. Clean and wash out all dirt and grease.
   L. Inspect dust shield washers. Replace if damaged or worn. Press new bearing into housing. Install snap ring. Check location of grease hole in outer ring of bearing. This hole must aline with grease groove in housing.







M. Re-install bearing spools, spacers, and blades.
N. Be sure bearing housing grease fitting faces to the rear.
O. Be sure snap ring is toward convex (back) side of blade.
P. Install gang shaft hex nut. **IMPORTANT: Tighten nut to 1200 - 1500 ft.-lbs. Torque.**
Q. Install gang nut lock cap.
R. Re-install gang to standards with hanger trunnion clamps.
S. Lubricate bearings (see lubrication section).
T. Rotate gang to be sure it turns freely. The bearings must be in proper alignment to prevent unnecessary wear. Bearing risers must be properly spaced to prevent bearing pre-load and premature bearing failure.

7. Proper storage will add life to your disk harrow. To prepare for storage:
   A. Clean and lubricate the machine.
   B. Inspect and note excessively worn or broken parts so that repair or replacement can be made promptly.
   C. Repaint where necessary and protect all unpainted surfaces with rust-preventative grease or oil.
   D. Tighten loose bolts.
   E. **IMPORTANT:** Whenever the disk blades or bearings are replaced, the gang bolt nut must be torqued to 1200 - 1500 ft-lbs.
   F. The hydraulic cylinder rod should be fully retracted or coated with a rust preventitive to prevent rusting. All exposed threaded rods should be coated with grease or a rust preventitive to prevent rusting.

8. Hydraulic Cylinder Repair:
   A. Remove hoses and fittings from cylinder.
   B. Remove cylinder from harrow.
   C. Dis-assemble cylinder by rotating gland on rod end of cylinder.
   D. Pull on cylinder rod to slip rod, gland and piston out of barrel.
   E. Remove nut on end of rod then slip piston and gland off rod.
   F. Carefully clean and inspect all parts for wear or damage. Small nicks, scratches or blemishes on rod and inside of barrel should be smoothed with fine steel wool or emery cloth.
   G. Remove all O'Rings, "U" cups and wear rings from piston and gland. Replace all seals with new parts.
   H. Assemble cylinder using care to prevent damage to O'Rings and "U" cups.
   I. Replace cylinder on harrow and attach hoses. Check cylinder for leaks.

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							
Bolt Size		Torque Foot Pounds		Torque Foot Pounds		Torque 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	3660

* Thick nuts must be used with Grade 8 bolts