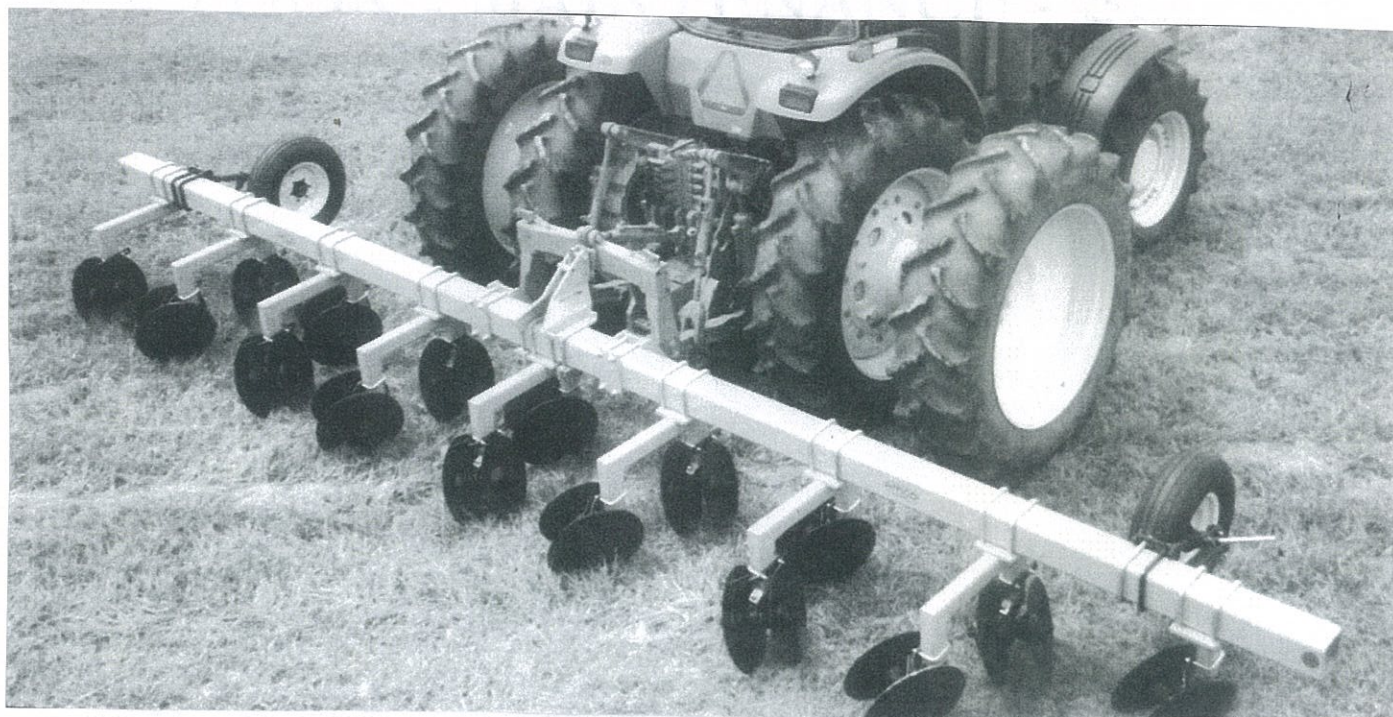




## **BEDDING HIPPER**

### **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 Bedding Hipper will greatly determine the satisfaction and service you will obtain from it. By observing the instructions and suggestions in this manual, your AMCO Bedding Hipper will serve you well for many years.

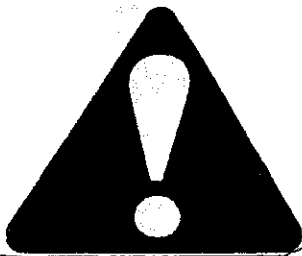
As an Authorized AMCO Dealer, we stock Genuine AMCO Parts, which are manufactured with the same precision and skill as the original equipment. For best performance and longer life, use only genuine AMCO replacement parts. Our factory-trained staff is kept fully informed of the most efficient methods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

When you sell your Bedding Hipper, 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 Hipper 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 Hipper in all correspondence or contacts. Remember, the right- and left-hand sides of the Hipper are determined by standing at the rear of the Hipper and facing the direction of travel.

**MODEL NUMBER**

**SERIAL NUMBER**

**REVISED 09/05/2008**

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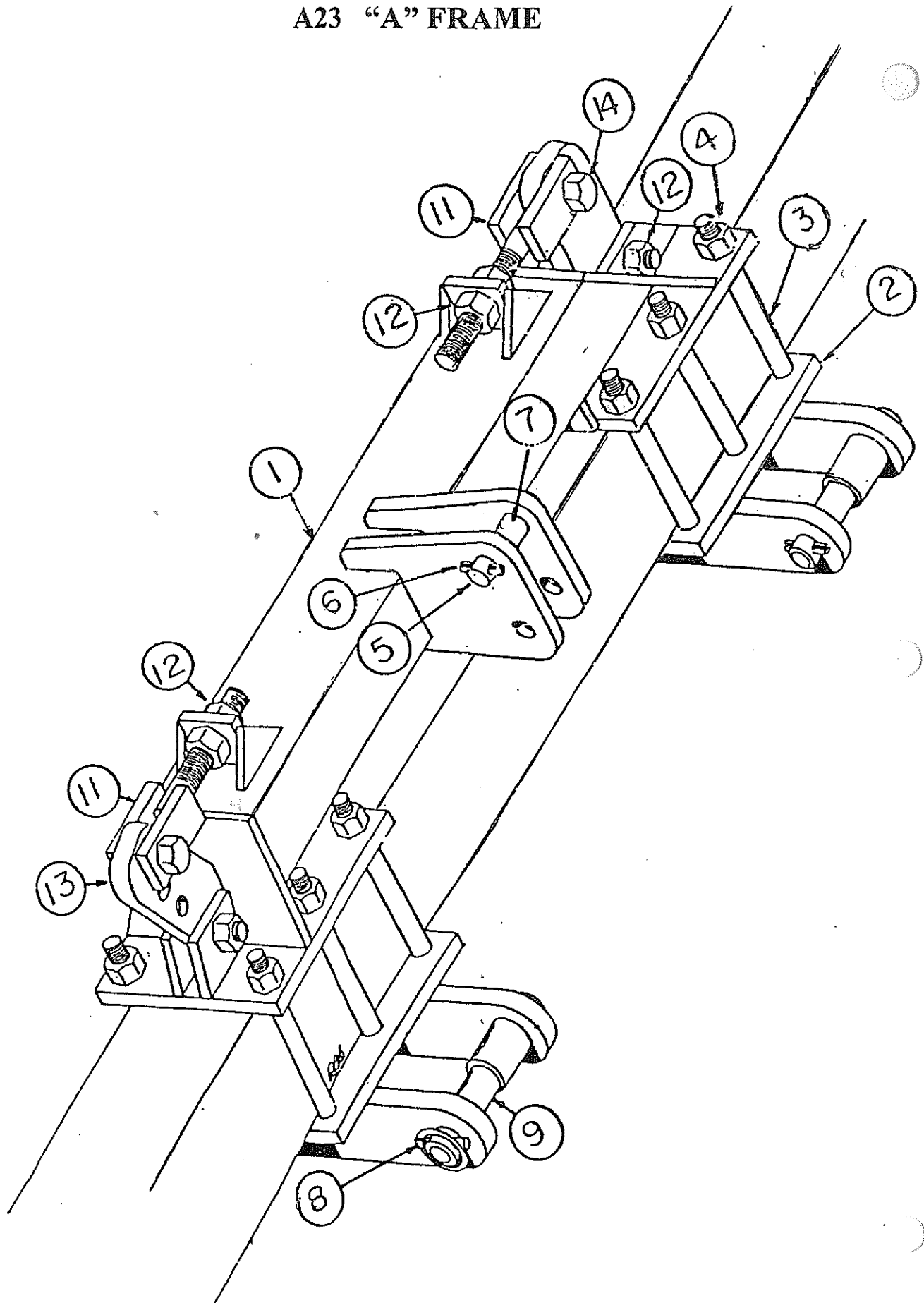
19



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# A23 "A" FRAME

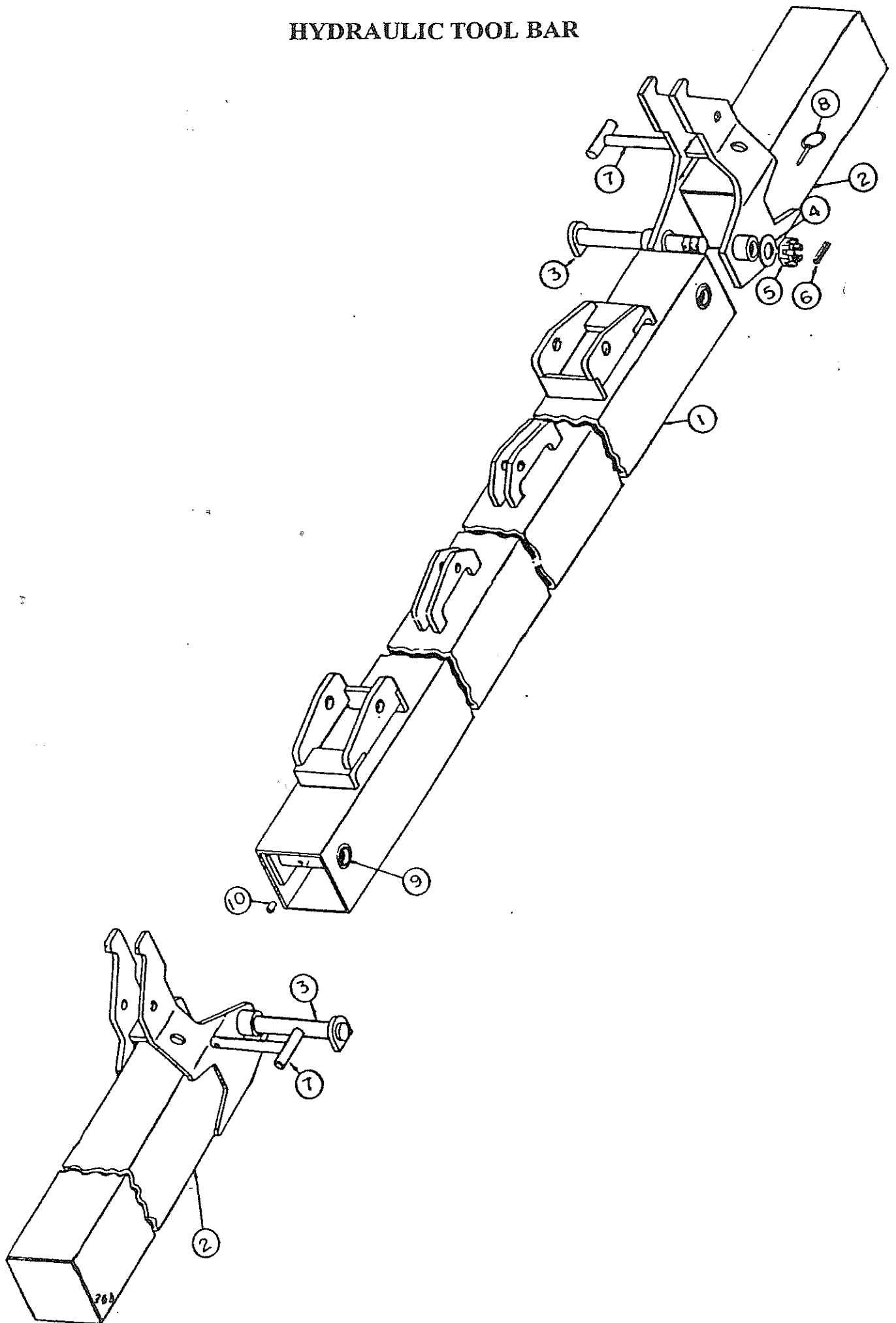


## AMCO A23 "A" FRAME

Standard equipment for 7 x 7 Hydraulic Fold Tool Bar. Fits ASAE Cat. II and Cat. III quick coupler and Cat. III standard 3-point hitch.

<u>Ref. No</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
1	0959	A-Frame	1
2	20353	Lower Pull Point - LH	1
2	20354	Lower Pull Point - RH	1
3	11102	Hex Screw 7/8" x 10" NC, PL	12
4	10396	Lock Nut 7/8" NC, PL	12
5	6554	Hitch Pin 1" Dia. 5" Long	1
6	10910	Roll Pin	1
7	6570	Bushing 1-1/4" O.D. 2" Long	1
8	10317	Klik Pin	1
9	101739	Lower Hitch Pin 1-7/16" Dia. 9" Long	2
11	20005	Assembly - Adjusting Rod 9-38"	2
11	20006	Assembly - Adjusting Rod 20-3/8"	2
11	20007	Assembly - Adjusting Rod 33-3/8"	2
12	10868	Lock Nut 1" NC, PL	8
13	102496	Cylinder Mount	2
14	10373	Hex Screw 1" x 3-12" NC, PL	4
15	11697	Klik Pin 7/16" Dia. (Not Shown)	2
<b>NOTE: DA-01-0096 - Complete "A" Frame Bundle</b>			

# HYDRAULIC TOOL BAR

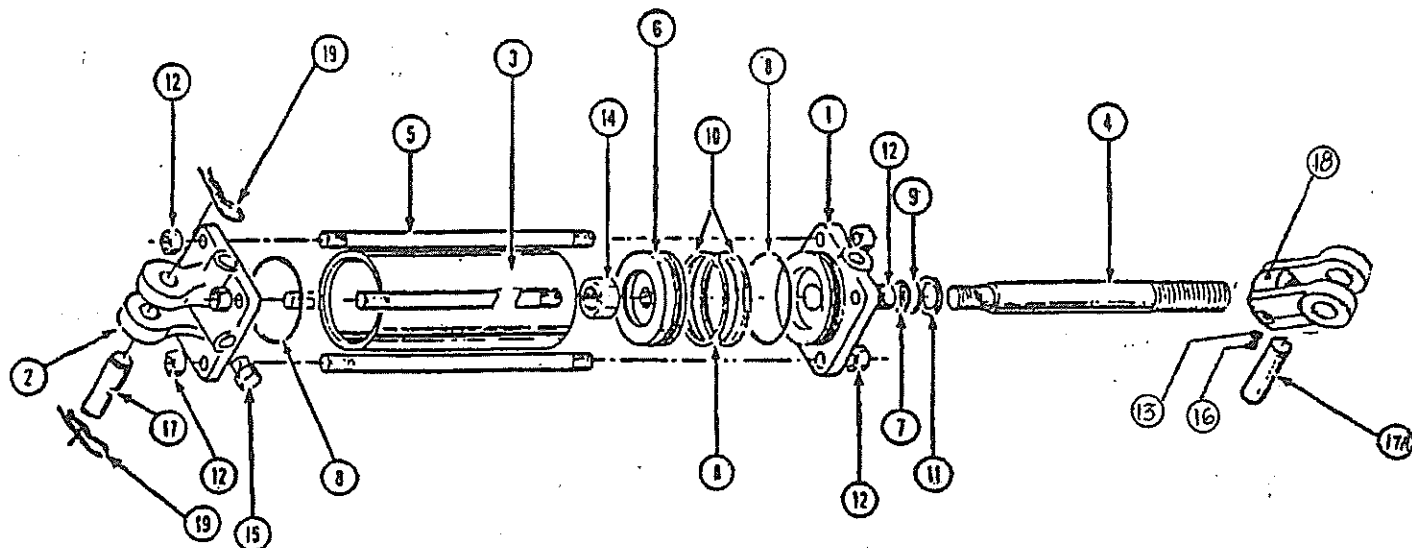




**AMCO  
HYDRAULIC TOOL BAR**

<u>Ref. No</u>	<u>Part No.</u>	<u>Description</u>	<u>No.</u>	<u>Req'd.</u>
			<b><u>FHB6-5</u></b>	<b><u>FHB8-6A</u></b>
1	0996	Tool Bar - Center Section 126"	1	0
1	20615	Tool Bar - Center Section 186 1/2"	0	1
2	20008	Wing Tool Bar 69"	2	0
2	20616	Wing Tool Bar 89-1/4"	0	2
3	0593	Wing Pivot Pin 1-1/2" x 12-11/16"	2	2
4	10872	Cut Washer 1-3/8" PL	2	2
5	10232	Hex Nut 1-1/2" NC, Slotted	2	2
6	10910	Roll Pin 5/16" x 2-1/4"	2	2
7	0618	Pivot Pin 1" x 8-1/4"	2	2
8	10317	Klik Pin 1/4"	2	2
9	11500	Bushing 1-3/4" O.D. x 1-1/2" I.D. x 2"	4	4
10	12384	Grease Fitting 1/8" NPT Straight	2	2
11	100578	Pin (Not Shown)	2	2
12	10910	Roll Pin (Not Shown)	4	4

# 3-1/2 x 16 HYDRAULIC CYLINDER (LION)



Ref #	Part #	Description	No. Required
	12179	Cylinder Complete	1
1	12296	Piston Head	1
2	12297	Butt	1
3	12298	Tube	1
4	12299	Piston Rod	1
5	12300	Tie Rod 5/8 x 16	4
6	12301	Piston	1
	12236	Seal Repair Kit	1
*7		O Ring	1
*8		O Ring	3
*9		Washer	1
*10		Washer	2
*11		Rod Wiper 1-1/4" Dia.	1
12	12248	Tie Rod Nut 5/8" UNF, GR5	8
13	12302	Nylon Thread Lock	1
14	12303	Lock Nut 1-1/4 NF, GR-B	1
15	12277	Plug 3/4" UNF, ORB	1
16	12288	Socket Set Screw 3/8" UNC x 1/2 KNUR	1
17	10956	Cylinder Pin	1
17A	100578	Pin	1
18	11296	Clevis	1
19	10957	Clip Pin	2
20	11492	Bushing (Not Shown)	4
21	10910	Roll Pin (Not Shown)	2
22	12165	90° Swivel Elbow 1/2 NPT Male to 1/4 NPT Female	2

\* Items 7,8,9,10 and 11 sold in repair kit only beginning with Serial #91110218.

## HYDRAULIC KITS

<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
-----------------	--------------------	-------------------

### For 126" Center Bar

12165	Swivel Elbow 90-degree 1/2" NPT Male to NPT Female	4
11126	Male Branch Tee 1/2" NPT Male to 1/4" NPT Frame	2
11157	Swivel Union 1/2" NPT to 1/2" NPT	2
11174	Hose 1/4" x 30" with 1/4" NPT Fittings	2
11166	Hose 1/4" x 48" with 1/4" NPT Fittings	2

### For 148" Center Bar

12165	Swivel Elbow 90-degree 1/2" NPT Male to 1/4" NPT Female	4
11126	Male Branch Tee 1/2" NPT Male to NPT Female	2
11157	Swivel Union 1/2" NPT to 1/2" NPT	2
11165	Hose 1/4" x 42" with 1/4" NPT Fittings	2
11167	Hose 1/4" x 60" with 1/4" NPT Fittings	2

### For 186" Center Bar

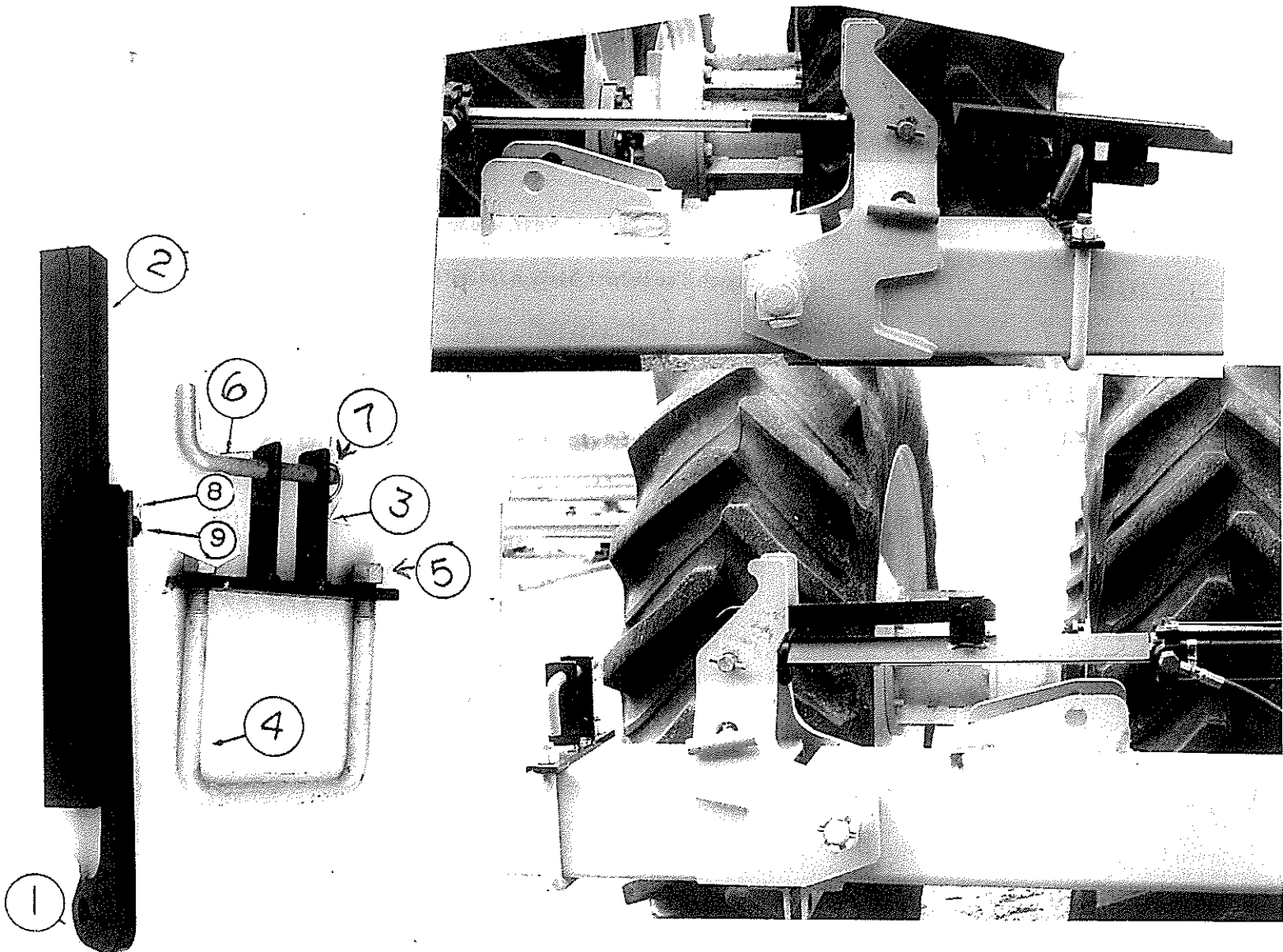
12165	Swivel Elbow 90-degree 1/2" NPT Male to 1/4" NPT Female	4
11126	Male Branch Tee 1/2" NPT Male to 1/4" NPT Female	2
11157	Swivel Union 1/2" NPT to 1/2" NPT	2
12446	Hose 1/4" x 58" with 1/4" NPT Fittings	2
12447	Hose 1/4" x 76" with 1/4" NPT Fittings	2

# **LOCK DOWN KIT** (Optional)

<u>Ref. #</u> <u>Required</u>	<u>Part #</u>	<u>Description</u>	<u>No.</u>
1	102506	Hold Down Bar .....	2
2	20575	Bracket .....	2
3	20576	Bracket .....	2
4	11399	U-Bolt .....	2
5	10396	Lock Nut .....	4
6	100683	Lock Pin .....	2
7	10317	Klik Pin .....	2
8	10587	1/2" x 2" NC, PLT. Hex Bolt .....	2
9	10395	1/2" NC, PLT. Lock Nut .....	2

DA-01-0110

Complete Bundle



## AMCO BEDDING HIPPER

### With TOOL BARS FOR 30" TO 32" AND 36" TO 42" ROWS HEAVY DUTY – 1-1/2" SQUARE GANGS With Protecto-Shield Washers

#### STANDARD SPECIFICATIONS

**GANGS:** 1-1/2" square gang bolt with dual Triple lip sealed ball bearing with Protecto-Shield Washers. One 18" x 3/16" plain blade and one 20" x 1/4" plain blade per gang. Three position angle adjustment.

**SHANKS:** Heavy duty fabricated shanks that Allow either staggered or opposed Gang setting.

**RIGID HITCH:** A-21M heavy duty yoke type. Fits Cat. II and III standard and quick coupler

#### HYDRAULIC EQUIPMENT

**HITCH:** A-23 heavy duty mast and And yoke type. Fits Cat. II and III standard and quick coupler.

**CYLINDERS:** Two 3-1/2" x 16" cylinders And all hoses for folding the Tool bar.

**NOTE:** Scrapers are optional equipment and must be ordered separately.

<u>MODEL NO.</u>	<u>DESCRIPTIONS</u>	<u>APROX. DRAWBAR HP REQUIRED</u>	<u>APPROX WEIGHT</u>
FB6-5A	6-Row 7" x 7" x 264" Tool Bar (3/8" wall)	100-135	2,569
FB8-5A	8-Row 7" x 7" x 344" Tool Bar (1/2" wall)	130-180	3,841
FSB6-5A	6-Row 7" x 7" x 344" Tool Bar, fits row spacing Of 38" to 40" and skip row Of 60" to 64" (1/2" wall)	100-135	3,349
FB8-7A	8-Row 7" x 7" x 280" Tool Bar. Fits row spacing 30" to 32". (3/8" wall)	130-180	3,384
FHB6-5A	6-Row 7" x 7" x 264" Tool Bar. Fits row spacing 38" to 40" (3/8" wall)	100-135	3,557
FHB8-6A	8-Row 7" x 7" x 364" (Hydraulic) 36", 40" & 42" transport width 20" (1/2" wall)	130-180	3,896



**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 Hipper when hitching unless all controls are in neutral and the brakes are locked.



**CAUTION!** Park or block the Hipper so it will not fall when disconnected from the tractor drawbar.



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



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



**CAUTION!** Never clean, adjust or lubricate a Hipper that is in motion.



**CAUTION!** Stay out from underneath wings when folding or unfolding.



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



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










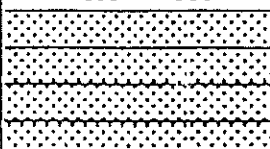
**CAUTION!** When transporting farm implements on public roads after dark, it is the responsibility of the operator to provide lighting and reflectors on the rear of the implement in accordance with your state law.



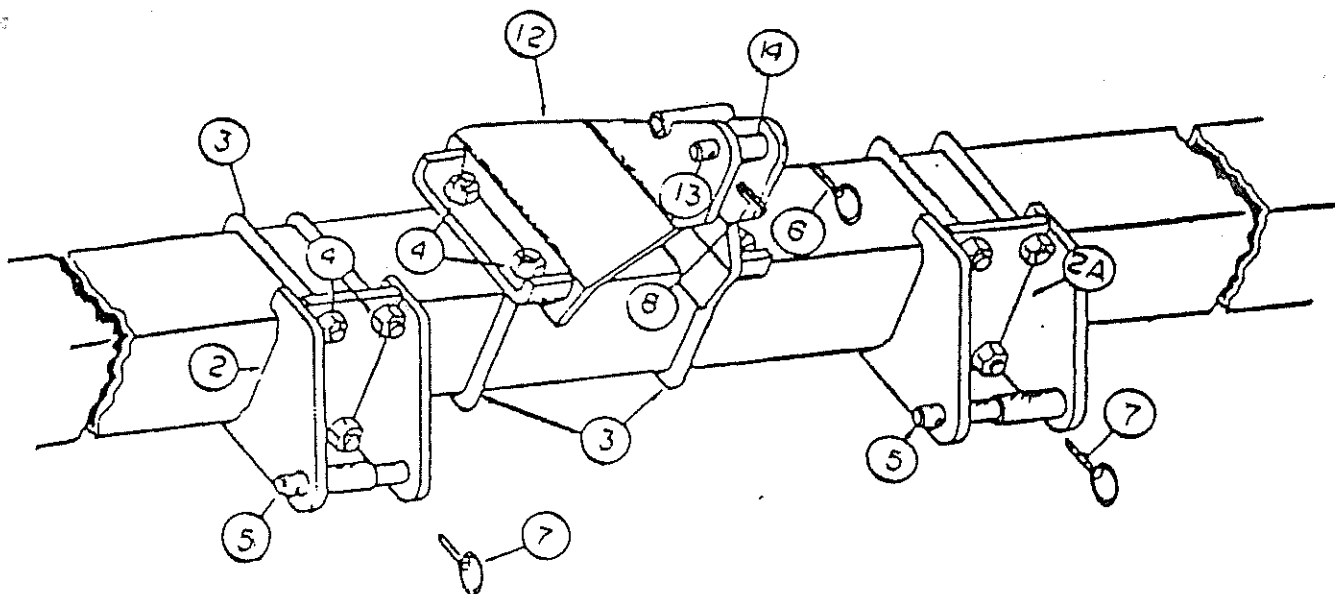
**CAUTION!** All hydraulically or mechanically elevated operating components must be blocked to prevent accidental lowering or must be lowered to the ground when making adjustments or when the equipment is idle.

## 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					

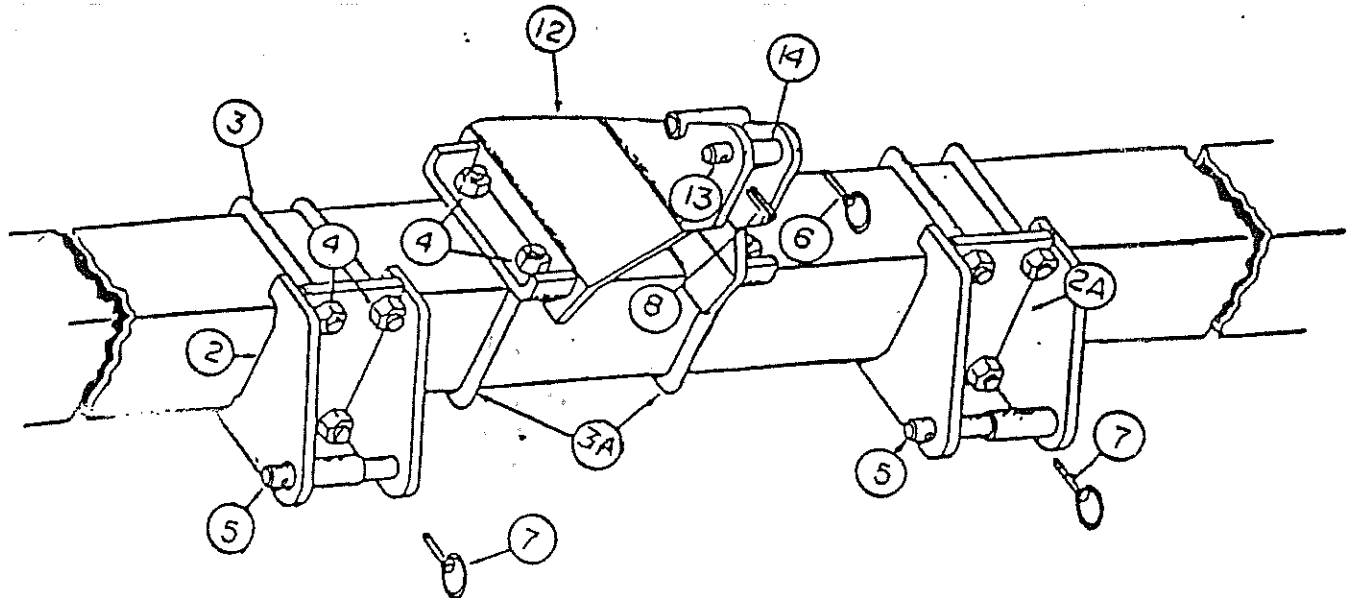
AMCO BEDDING HIPPER A21M "A" FRAME 7 x 7			
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
2	20376	Bottom Hitch - RH	1
2A	20375	Bottom Hitch - LH	1
3	11399	U-Bolt 7/8" Dia.	6
4	10396	Lock Nut 7/8" NC, PLT, Gr. B	12
5	101739	Lower Hitch Pin	2
6	10317	Klik Pin - 1/4"	1
7	11697	Klik Pin - 7/16"	2
8	10910	Roll Pin - 5/16" x 2-1/4"	1
12	20320	Top Hitch	1
13	101333	Hitch Pin - 1" Dia.	1
14	6570	Buxhing - 1-1/4" Dia. - 2" Long	1



Use these Parts before Serial # 94120512.



AMCO BEDDING HIPPER A24M "A" FRAME 7 x 7			
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
2	20376	Bottom Hitch - RH	1
2A	20375	Bottom Hitch - LH	1
3	101984	3" x 3" 1/2" Angle	2
4	10396	Lock Nut 7/8" NC, PLT, Gr. B	12
5	101739	Lower Hitch Pin	2
6	10317	Klik Pin - 1/4"	1
7	11697	Klik Pin - 7/16"	2
8	10910	Roll Pin - 5/16" x 2-1/4"	1
12	20320	Top Hitch	1
13	101333	Hitch Pin - 1" Dia.	1
14	6570	Buxhing - 1-1/4" Dia. - 2" Long	1
15	101886	Top Plate - 5/8" x 6" x 10-1/8" Long	2
16	12160	Hex Bolt 7/8" x 9-1/2" NC, PLT, Gr. 8 (Not Shown)	12
NOTE: Beginning with Serial # 94120512 - order above Parts.			
NOTE: DE-01-0020 - Complete A Frame Bundle.			

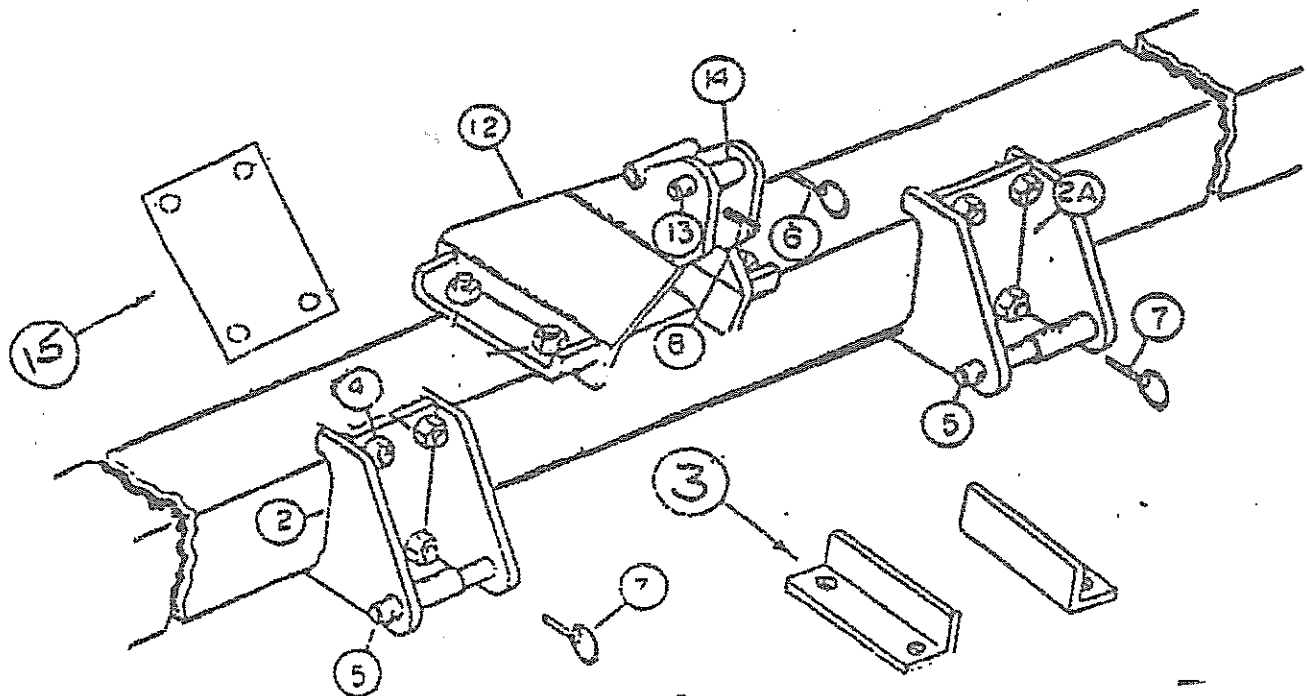


**AMCO BEDDING HIPPER**  
**A24M "A" FRAME**  
**7 x 7**

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
2	20376	Bottom Hitch - RH	1
2A	20375	Bottom Hitch - LH	1
3	101984	3" x 3" 1/2" Angle	2
4	10396	Lock Nut 7/8" NC, PLT, Gr. B	12
5	101739	Lower Hitch Pin	2
6	10317	Klik Pin - 1/4"	1
7	11697	Klik Pin - 7/16"	2
8	10910	Roll Pin - 5/16" x 2-1/4"	1
12	20320	Top Hitch	1
13	101333	Hitch Pin - 1" Dia.	1
14	6570	Buxhing - 1-1/4" Dia. - 2" Long	1
15	101886	Top Plate - 5/8" x 6" x 10-1/8" Long	2
16	12160	Hex Bolt 7/8" x 9-1/2" NC, PLT, Gr. 8 (Not Shown)	12

**NOTE:** Beginning with Serial # 94120512 - order above Parts.

**NOTE:** DE-01-0020 - Complete A Frame Bundle.

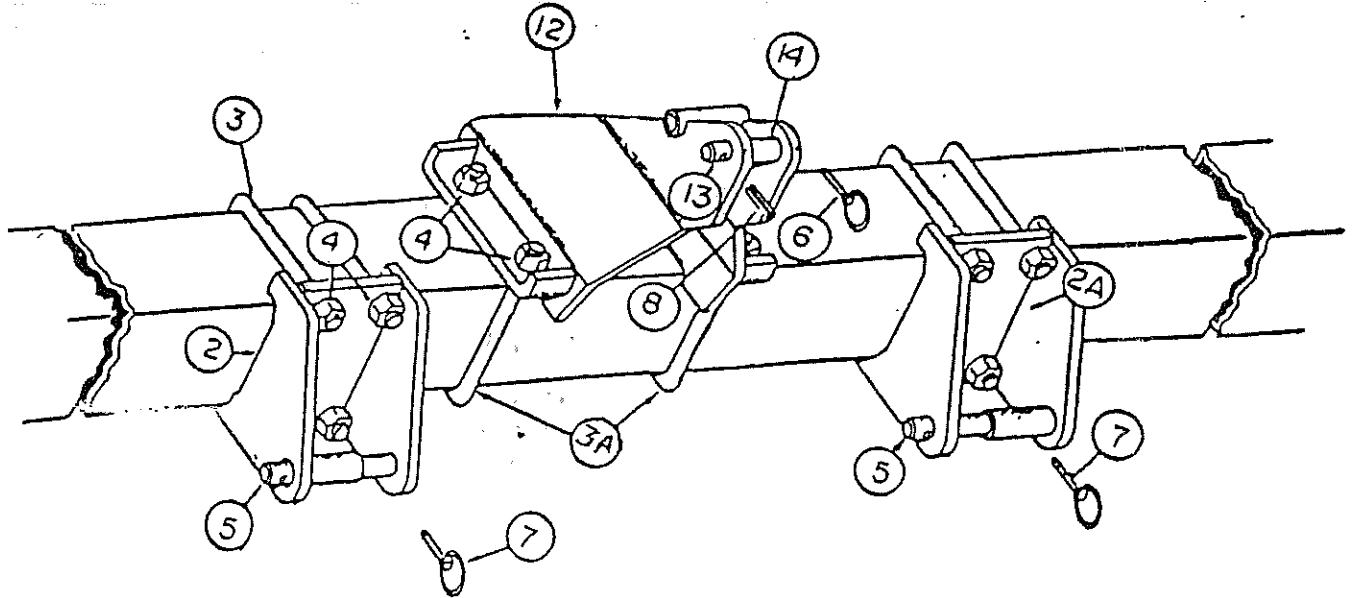


**AMCO BEDDING HIPPER**  
**A24M "A" FRAME**  
**7 x 7**

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
2	20376	Bottom Hitch - RH	1
2A	20375	Bottom Hitch - LH	1
3	101984	3" x 3" 1/2" Angle	2
4	10396	Lock Nut 7/8" NC, PLT, Gr. B	12
5	101739	Lower Hitch Pin	2
6	10317	Klik Pin - 1/4"	1
7	11697	Klik Pin - 7/16"	2
8	10910	Roll Pin - 5/16" x 2-1/4"	1
12	20320	Top Hitch	1
13	101333	Hitch Pin - 1" Dia.	1
14	6570	Buxhing - 1-1/4" Dia. - 2" Long	1
15	101886	Top Plate - 5/8" x 6" x 10-1/8" Long	2
16	12160	Hex Bolt 7/8" x 9-1/2" NC, PLT, Gr. 8 (Not Shown)	12

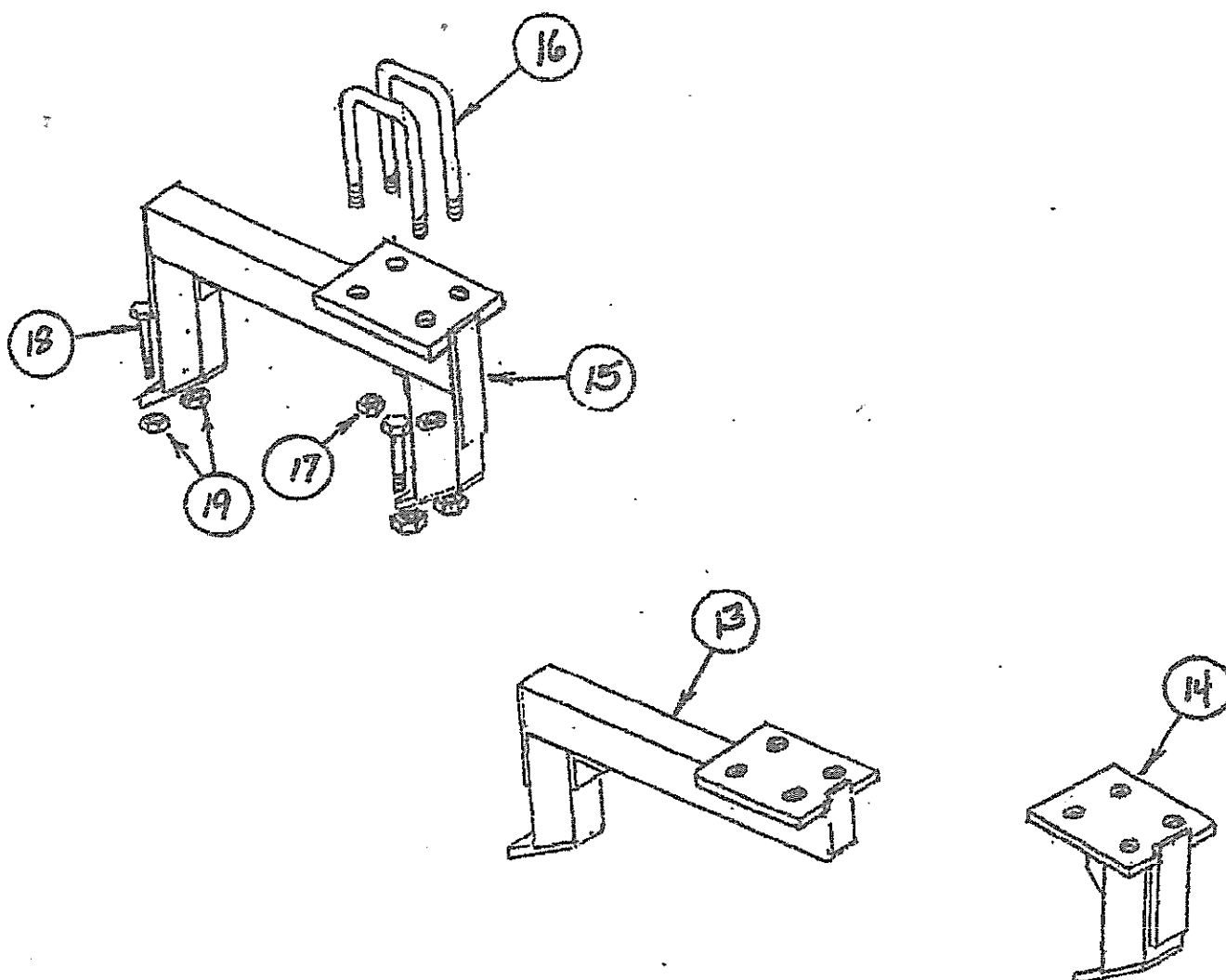
**NOTE:** Beginning with Serial # 94120512 - order above Parts.

**NOTE:** DE-01-0020 - Complete A Frame Bundle.

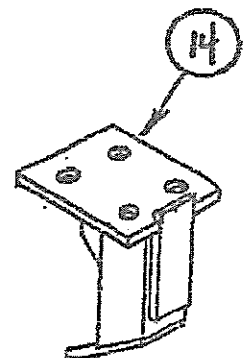
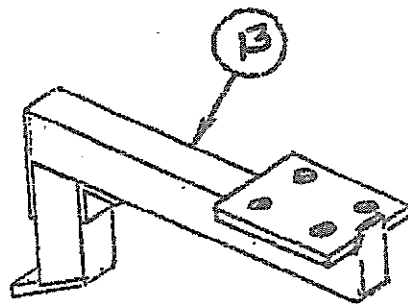
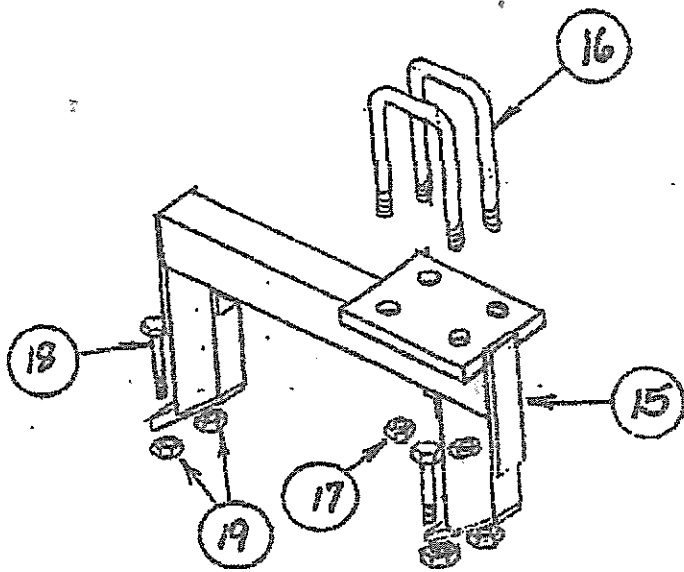


AMCO BEDDING HIPPER GANGS & HIPPER SHANKS			
Ref. No.	Part No.	Description	No. Req'd.
13	DA-01-0053	Gang Frame -Long w/ 5/8" Holes	1
14	DA-01-0052	Gang Frame - Short w/ 5/8" Holes	1
15	DA-01-0051	Gang Frame - Dual w/ 5/8" Holes	1
16	9560	U-bolt 7/8" Dia. - 7 x 4 Bar	2
16	11399	U-Bolt 7/8" Dia. - 7 x 7 Bar (Not Shown)	2
17	11691	Flange Lock Nut 7/8" NC, PL	4
18	12076	Hex Bolt 5/8" x 2-3/4" Gr. 8	2
19	10299	Lock Nut 5/8" NC, PL	2

**NOTE:** Use these parts before Serial No. **08080436**.



AMCO BEDDING HIPPER GANGS & HIPPER SHANKS			
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
13	DA-01-0057	Gang Frame -Long w/ 3/4" Holes	1
14	DA-01-0056	Gang Frame - Short w/ 3/4" Holes	1
15	DA-01-0055	Gang Frame - Dual w/ 3/4" Holes	1
16	9560	U-bolt 7/8" Dia. - 7 x 4 Bar	2
16	11399	U-Bolt 7/8" Dia. - 7 x 7 Bar (Not Shown)	2
17	11691	Flange Lock Nut 7/8" NC, PL	4
18	12460	Hex Bolt 3/4" x 2-3/4" Gr. 8 (Replaces #12076)	2
19	10300	Lock Nut 3/4" NC, PL (Replaces # 10299)	2
NOTE: Use these parts before Serial No. 08080436.			

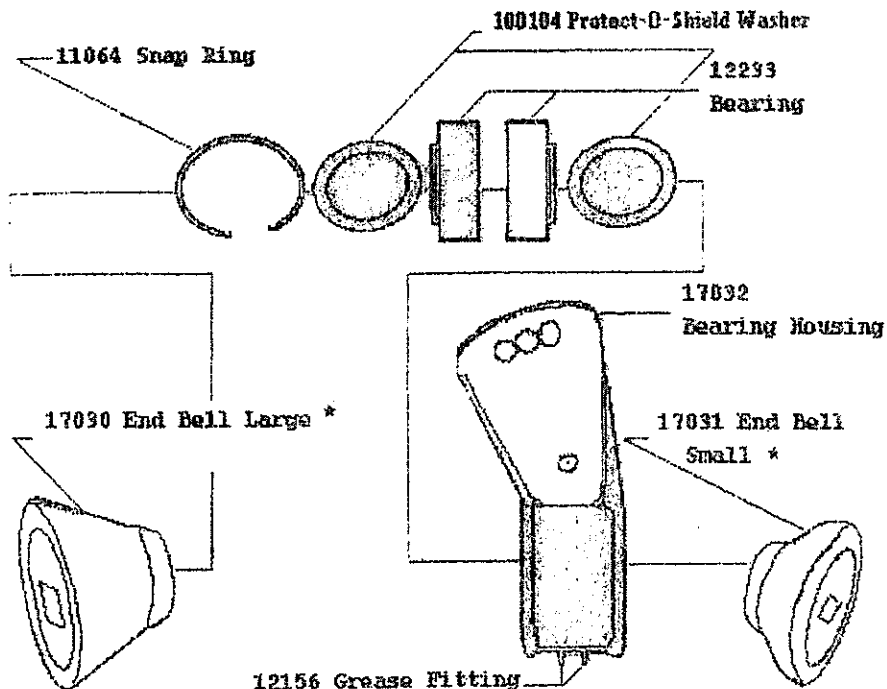




**AMCO BEDDING HIPPER  
GANGS -- 1-1/2" SQUARE  
HEAVY DUTY -- WITH PROTECTO SHIELD WASHERS**

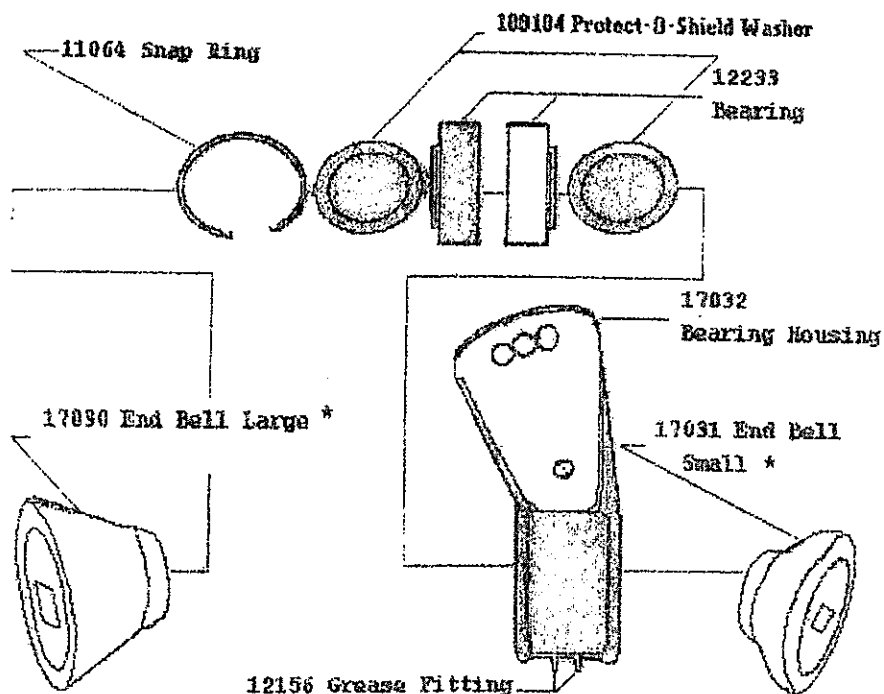
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
1	20561	Axle	1
2	17031	End Bell - Small	1
3	17030	End Bell - Large	1
4	FB-09-0025	Bearing and Housing Assembly	1
5	17032A	Bearing Housing with 3/4" Holes	1
6	12233	Bearing	2
7	11064	Snap Ring	1
8	1222A	End Gang Washer	1
9	5622A	Lock Plate	1
	100098	Bearing Plate (Not Shown)	1
	100099	Spacer Plate (Not Shown)	1
	10710	Carriage Bolt 1/2" x 2" Gr. 5 (Not Shown)	1
	10395	Lock Nut 1/2" NC (Not Shown)	1
10	10489	Hex Nut 1-1/2" NF	1
11	9482	18" x 1/4" Plain Blade (Standard)	1
12	11588	20" x 1/4" Plain Blade (Standard)	1
	11589	20" x 1/4" Cut Out Blade (Optional)	1
	3275	22" x 1/4" Cut Out Blade (Optional)	1
	3276	22" x 1/4" Plain Blade (Optional)	1
	3255	24" x 1/4" Plain Blade (Optional)	1
	3250	24" x 1/4" Cut Out Blade (Optional)	1
18	12076	Hex Bolt 5/8" x 2-3/4" Gr. 8	2
19	10299	Lock Nut 5/8" NC, PL	2
20	12156	1/4" (28 Threads) Self-Tapping Grease Fitting (Not Shown)	2
21	100104	Protect-O-Shield Washers	2

**NOTE:** Use these parts beginning Serial No. 08080436.



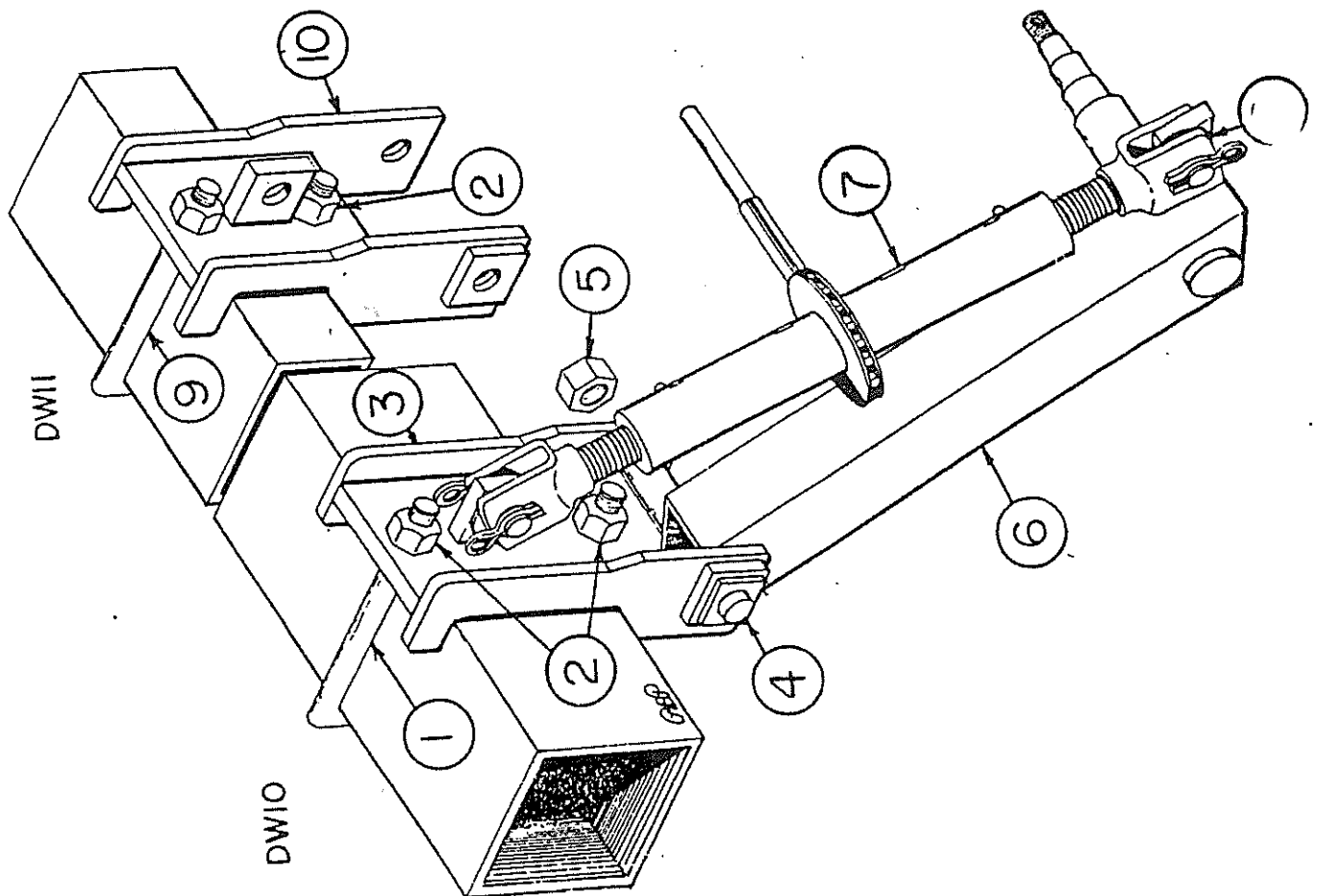
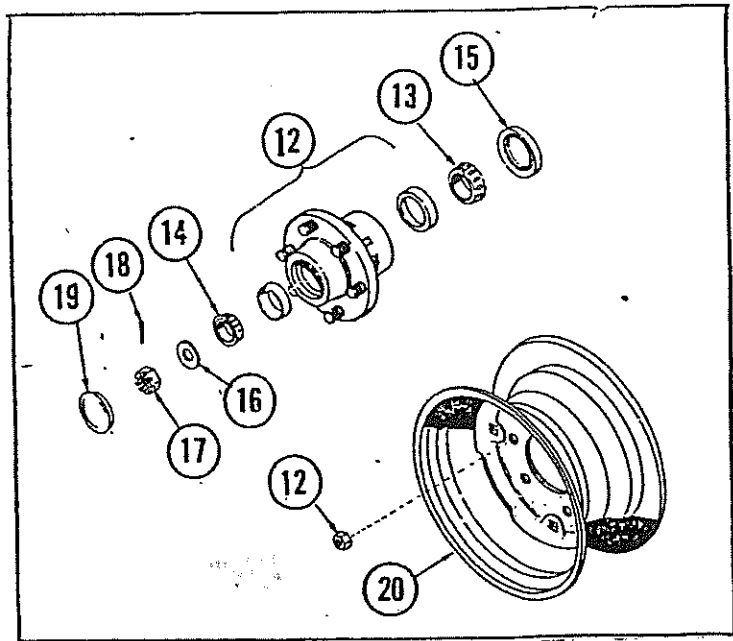
AMCO BEDDING HIPPER GANGS -- 1-1/2" SQUARE HEAVY DUTY -- WITH PROTECTO SHEILD WASHERS			
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
1	20561	Axle	1
2	17031	End Bell - Small	1
3	17030	End Bell - Large	1
4	FB-09-0025	Bearing and Housing Assembly	1
5	17032	Bearing Housing with 5/8" Holes	1
6	12233	Bearing	2
7	11064	Snap Ring	1
8	1222A	End Gang Washer	1
9	5622A	Lock Plate	1
	100098	Bearing Plate (Not Shown)	1
	100099	Spacer Plate (Not Shown)	1
	10710	Carriage Bolt 1/2" x 2" Gr. 5 (Not Shown)	1
	10395	Lock Nut 1/2" NC (Not Shown)	1
10	10489	Hex Nut 1-1/2" NF	1
11	9482	18" x 1/4" Plain Blade (Standard)	1
12	11588	20" x 1/4" Plain Blade (Standard)	1
	11589	20" x 1/4" Cut Out Blade (Optional)	1
	3275	22" x 1/4" Cut Out Blade (Optional)	1
	3276	22" x 1/4" Plain Blade (Optional)	1
	3255	24" x 1/4" Plain Blade (Optional)	1
	3250	24" x 1/4" Cut Out Blade (Optional)	1
18	12076	Hex Bolt 5/8" x 2-3/4" Gr. 8	2
19	10299	Lock Nut 5/8" NC, PL	2
20	12156	1/4" (28 Threads) Self-Tapping Grease Fittiing (Not Shown)	2
21	100104	Protect-O-Shield Washers	2

**NOTE:** Use these parts before Serial No. 08080436.





# DEPTH GAUGE WHEELS

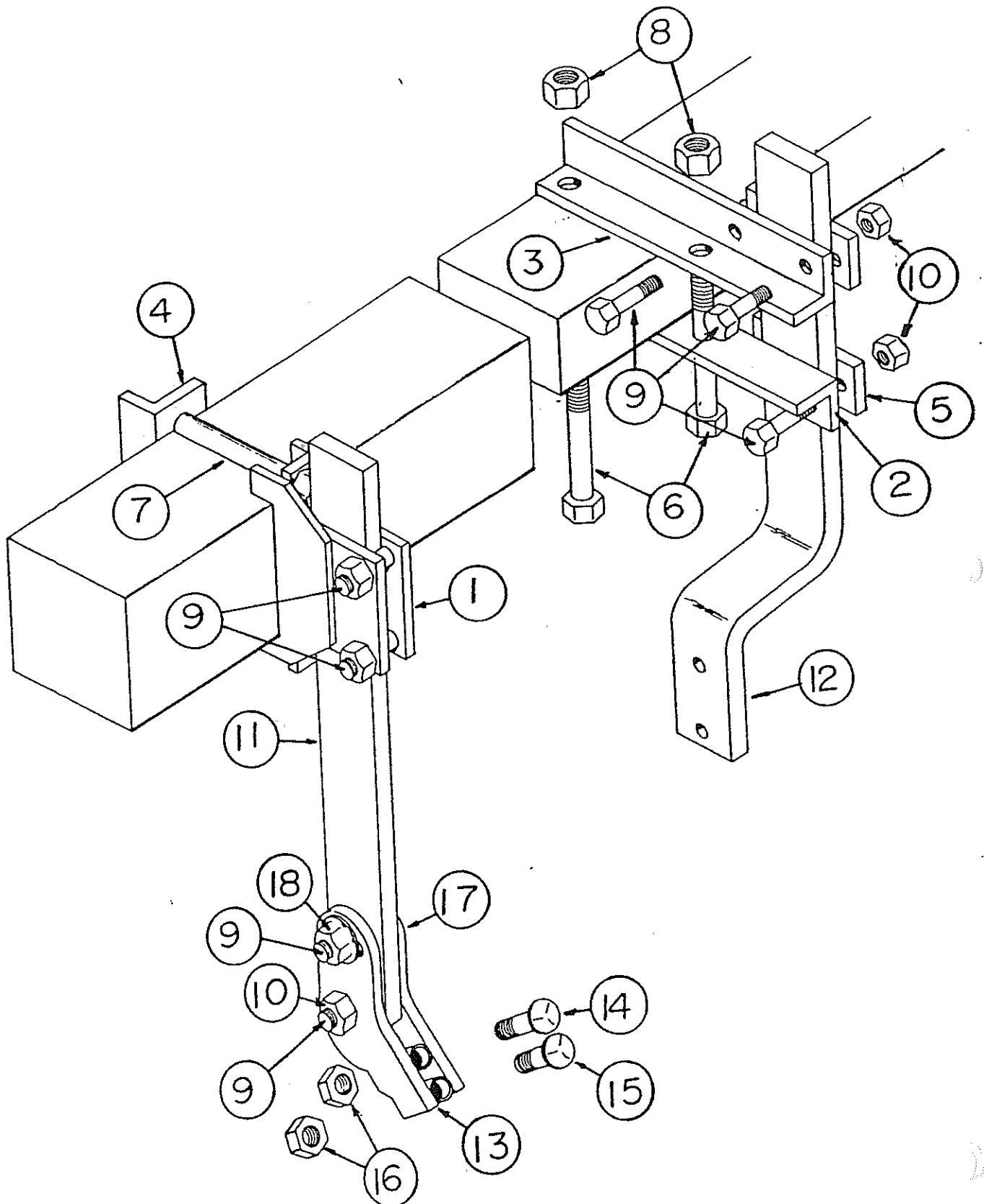


**AMCO BEDDING HIPPER  
DEPTH GAUGE WHEELS  
(OPTIONAL)**

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
1	11399	U-Bolt 7/8" Dia. - 7" x 7" Bar	2
2	10396	Lock Nut 7/8" NC, PL	4
3	0973	Bottom Bracket - 7" x 7" Bar	1
4	20123	Pivot Pin	1
5	10868	Lock Nut 1" NC, PL	1
6	20124	Depth Gauge Leg- RH or LH	1
7	11494	Ratcheting Jack	1
8	10879	Flat Washer 1" USS, PL	4
9	11495	U-Bolt 7/8" Dia. 4" x 7" Bar	1
10	0993	Bottom Bracket - 4" x 7" Bar	1
11	11396	Pin 1" Dia. X 2-7/8" (with 2 Hair Pin Clips)	2
12	11644	Hub - (F & H # 106675) with Cups, Lug Bolts and Nuts	1
13	10353	Cone - Inner (Timken # LM48548)	1
14	10295	Cone - Outer (Timken # LM67048)	1
15	11017	Grease Seal (C/R # 17618)	1
16	10263	Spindle Washer 7/8"	1
17	10264	Spindle Nut 7/8" NF	1
18	10291	Cotter Pin 5/32" x 1-1/4"	1
19	10356	Hub Cap	1
20	10265	Wheel 15" x 6" - 6 Hole Wheel	1

**NOTE:** Parts list above compose one (1) Depth Gauge.

# SWEEP ATTACHMENTS

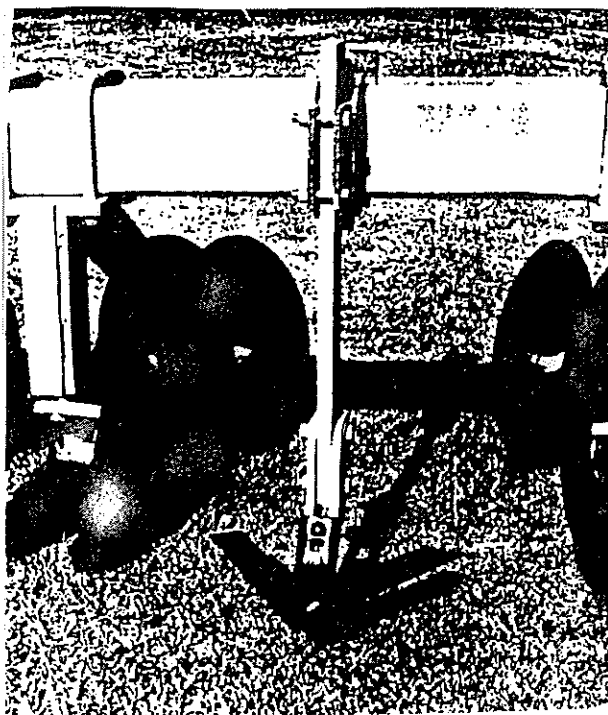


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**AMCO Bedding Hippers  
SWEEP ATTACHEMNTS  
(OPTIONAL)**

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No.</u>	<u>Req'd.</u>
			<u>4 X 7 BAR</u>	<u>7 X 7 BAR</u>
1	20071	Anchor Bar	0	1
2	101068	Clamp Bar- RH	1	0
3	101069	Clamp Bar - LH	1	0
4	9007	Clamp Strap	0	1
5	101067	Clamp Strap	2	0
6	10591	Hex Screw 7/8" x 6" NC, PL, Gr. 5	2	0
7	11102	Hex Screw 7/8" x 10" NC, PL	0	2
8	10396	Lock Nut 7/8" NC, PL	2	2
9	10201	Hex Screw 5/8" x 3" NC, PL, Gr. 5	6	4
10	10299	Lock Nut 5/8" NC, PL	5	3
11	100912	Shank - Straight	1	1
12	100913	Shank - Offset	1	1
13	20022	Sweep Mount	1	1
14	11653	Plow Bolt 1/2" x 3" NC, PL, Gr. 5	1	1
15	10420	Plow Bolt 1/2" x 2-1/4" NC, PL, Gr. 5	1	1
16	10395	Lock Nut 1/2" NC, PL	1	1
17	10059	Flat Washer 5/8" PL (Not Shown)	1	1
18	11647	Flange Lock Nut 5/8" NC, PL	1	1

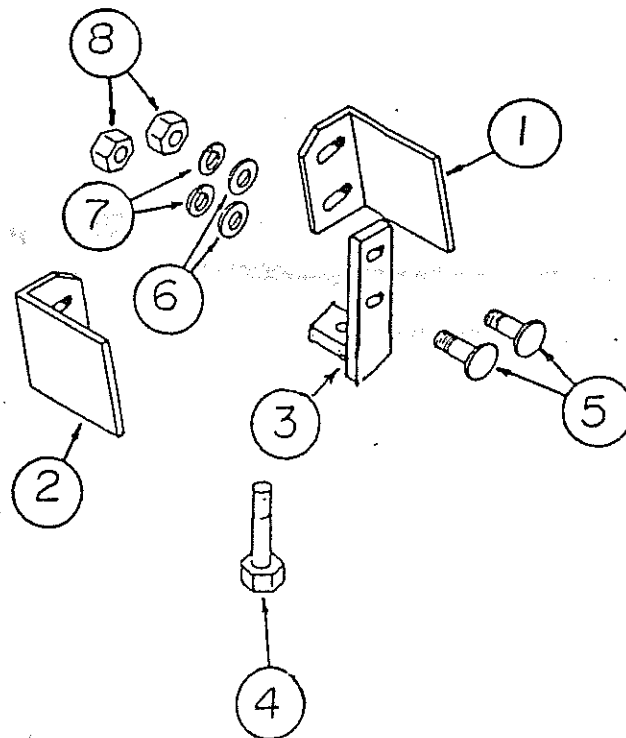
**NOTE:** Sweep attachments do not include sweeps.



## AMCO Bedding Hippers SCRAPERS

(before serial # 97010031 order  
the following parts)

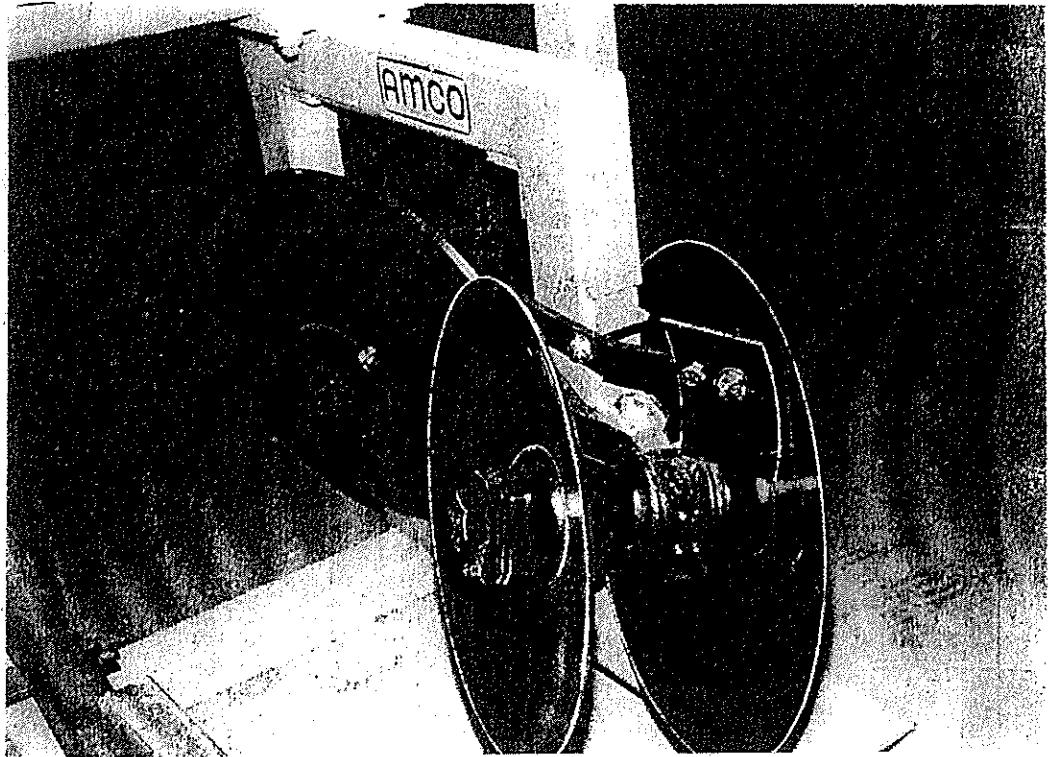
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
1	7025	Scraper Blade - RH	1
2	7026	Scraper Blade - LH	1
3	20528	Scraper Leg	2
4	12178	Hex Screw - 5/8" x 3-1/4" NC, PLT, Gr. 5	2
5	10068	Carriage Screw - 7/16" x 1-1/2" NC, PL	4
6	10013	Flat Washer - 7/16" PL	4
7	10619	Lock Washer - 7/16" PL	4
8	10618	Hex Nut - 7/16" NC, PL	4



OK

## AMCO BEDDING HIPPER SCRAPERS

<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
20585	Scraper - RH	2
20586	Scraper - LH	2
12213	U-Bolt - 1/2" x 6" x 4-1/8"	4
10395	Lock Nut - 1-2" NC, PLT, Gr. B	8
10832	Cut Washer - 1/2" PLT	8
<b>Replacement Parts also available:</b>		
102532	Scraper Leg (for 20585 & 20586)	1
102533	Scraper Blade (for 20585 & 2086)	1



OK

**AMCO BEDDING HIPPER  
WEAR GUARD FOR HIPPER HOUSING (2-ROWS)**

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
1	102526	Wear Guard - LH (Fits Assy. With 5/8" Holes)	2
2	102527	Wear Guard - LH (Fits Assy. With 5/8" Holes)	2
3	12178	Hex Bolt 5/8" x 3-1/4" NC, PL, Gr. 8	4
4	12076	Hex Bolt 5/8" x 2-3/4" NC, PL, Gr. 8	4
5	10299	Lock Nut 5/8" NC, PL, Gr. 8	8

**NOTE:** Use these parts before Serial # 08080436

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
1	102786	Wear Guard - LH (Fits Assy. With 3/4" Holes)	2
2	102787	Wear Guard - LH (Fits Assy. With 3/4" Holes)	2
3	12461	Hex Bolt 3/4" x 3-1/4" NC, PL, Gr. 8	4
4	12460	Hex Bolt 3/4" x 2-3/4" NC, PL, Gr. 8	4
5	10300	Lock Nut 3/4" NC, PL, Gr. 8	8

**NOTE:** Use these parts beginning with Serial # 08080436

## AMCO BEDDING HIPPER DECALS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>No. Req'd.</u>
1	11465	Decal "AMCO" (7 x 7 Tool Bar)	2
2	12240	Decal "Lubrications"	1
3	11741	Decal "Warning"	1
	12541	Reflector Tape - Red (Rear)	2
	12540	Reflector Tape - Orange (Front)	1



## **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 20mph (32 km/h).**
3. **LOWER OR BLOCK ALL ELEVATED COMPONENTS BEFORE SERVICING OR LEAVING THIS MACHINE.**

11741 321-6625



## **LUBRICATION**

- 1) Grease each fitting (2) on each gang until grease appears at the Protect-O-Shield<sup>®</sup> Washer. Grease each gang every 25 hours of operation and at the start and end of each season.
- 2) Grease pivot pins until grease appears.
- 3) Grease fitting on ratcheting jack on gauge wheels.



## ASSEMBLY INSTRUCTIONS

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

- A. A-Frame
- B. Tool Bar - Rigid or Hydraulic Folding
- C. Gang Frames - Short, Long and Dual
- D. Gangs
- E. Gauge Wheels

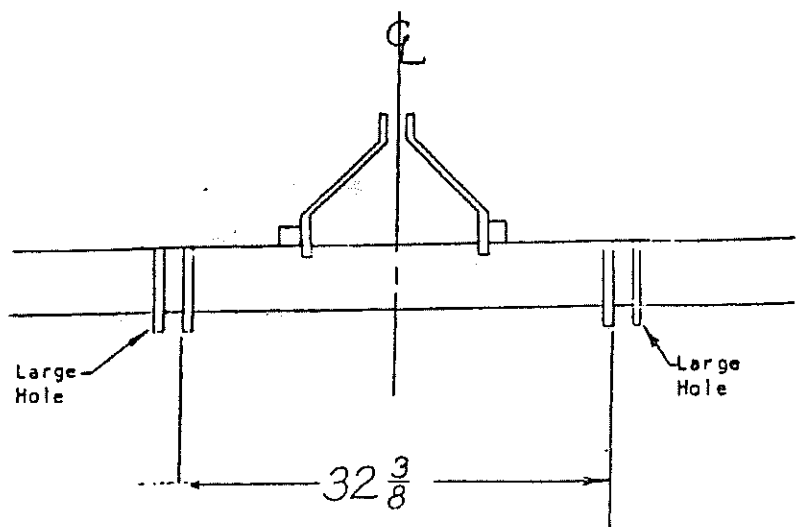
Place all bundles where they will be convenient. Arrange loose parts so they may be readily seen when needed. To insure good alignment of the units and parts, always insert all screws leaving the nuts loose. Tighten the nuts evenly to prevent misalignment, distortion, or binding. Be sure all screws are tight, all cotter pins properly spread and all pins properly inserted.

1. Select a clean level area for assembly. Place Tool Bar on sturdy stands at least 32" high.



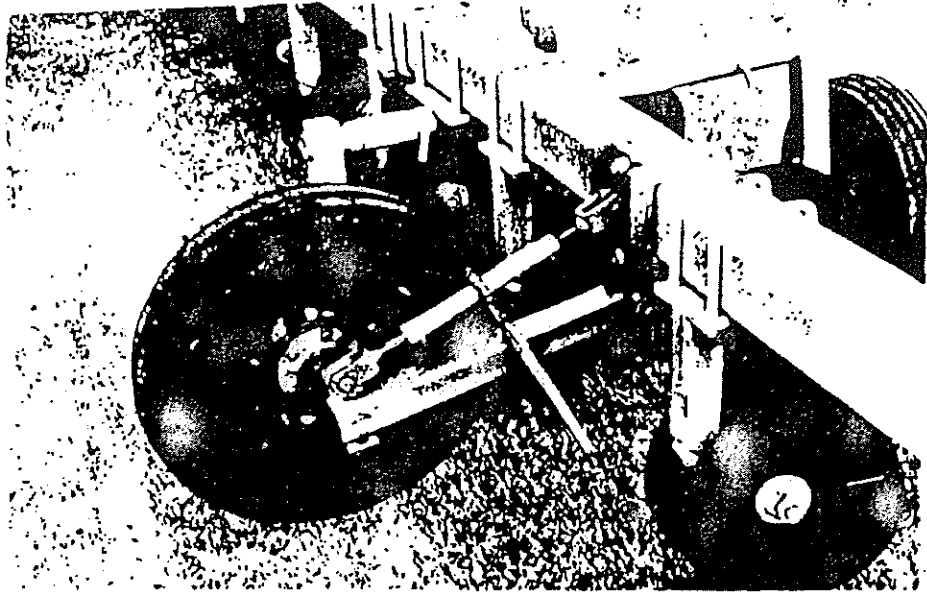
**CAUTION!** Use sturdy stands to prevent frame from falling.

2. Locate the center of the tool bar and mark with chalk.
3. Position A21M A-Frame exactly on center of hipper and attach with 7/8" U-Bolts. SEE DIAGRAM for locating bottom hitches. **IMPORTANT:** Position right hand and left hand bottom hitches so that the large holes are to the outside.



Step 3 Diagram

4. Attach gauge wheels to tool bar with 7/8" "U" Bolts to run in desired furrow. Mount 9.5L x 15 tires. Inflate to 40 - 50 PSI.



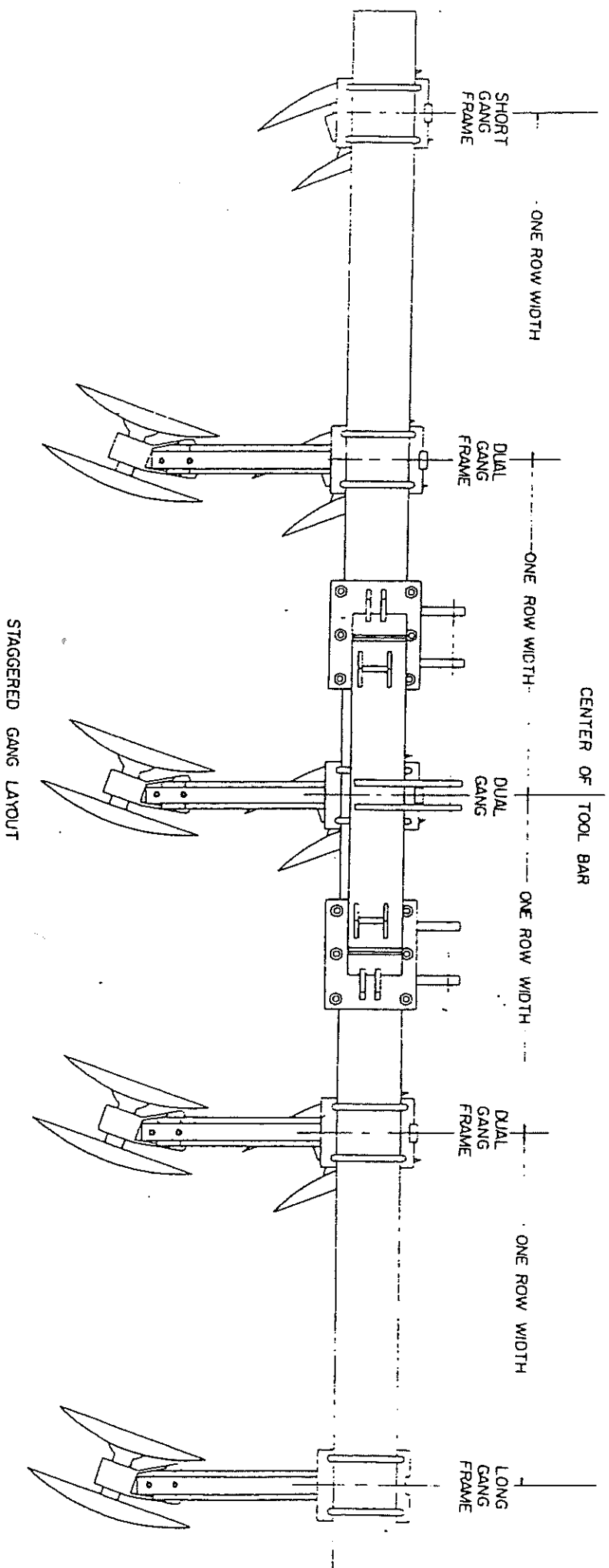
5. Measure from the center of the tool bar for row spacing desired and mark the hipper gang location for each row with chalk. Refer to diagrams on page 19 for gang layout of conventional row spacing.
6. Hipper model SB6-5A is designed to produce beds for a wide-bed cultural system consisting of two rows, 38 to 40 inches apart, alternating with a 60 to 64 inch skip. This row pattern is similar to 2 x 1 skip row, except that the skip is narrower than one row width. Hence, the system is referred to as a narrow skip- row pattern. The gang layout diagram for a narrow skip- row pattern, 6-row bedder with spacing combinations of 38/60, 38/62, 38/64, 40/60, 40/62, and 40/64 is shown on page 21.
7. On Narrow Skip Row models, mount the gang frames to the tool bar as shown in the gang layout diagram on page 21 with 7/8" "U" Bolts. Mount all gangs on the center of the row spacing mark with the legs of the gang frame pointed rearward.
8. On conventional row spacing models, mount the short gang frame with 7/8" "U" Bolts in the outside row on the left-hand side of the bar when facing the direction of travel. Mount all gangs on the center of the row spacing mark with the legs of the gang frame pointed rearward.
9. Mount the long gang frame with 7/8" "U" Bolts on the right outside row spacing.
10. Mount the dual gang frames with 7/8" "U" Bolts on the remaining row locations. Tighten all bolts.

11. The gangs may be mounted on the gang frames in an opposed or in a staggered configuration.

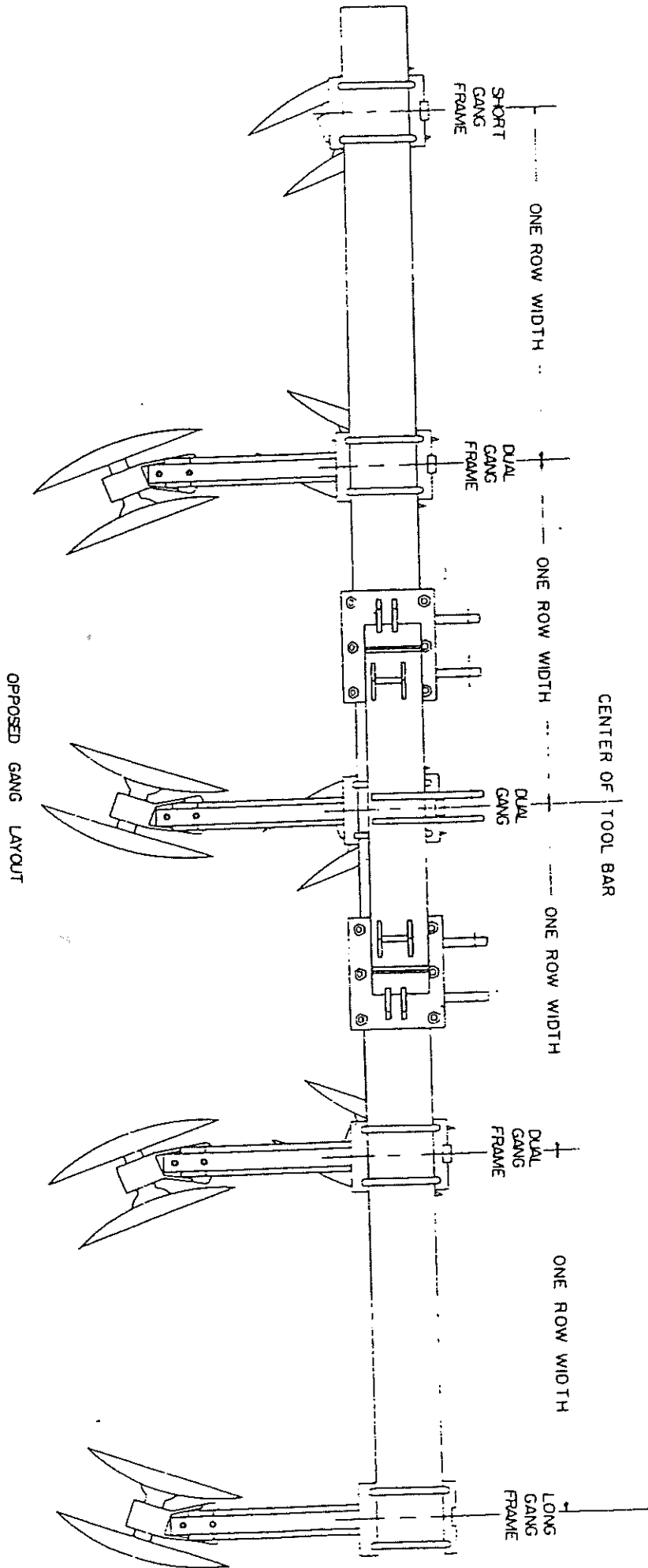
Staggered gangs are recommended to prevent clogging in heavy, moist soils and trashy conditions. Staggered gangs layer the soil into a smooth, somewhat rounded bed. Opposed gangs are recommended in light soils and clean, dry conditions. Opposed gangs tend to make higher, pointed beds and generally operate well at high speeds.

The gangs may also be mounted to the gang frame at three pitches. The variable pitch allows a wide variety of bed shapes. Generally, large pitch angles build high beds. Shallow pitch angles build shallow beds.

12. On conventional row spacing models with opposed gangs, mount the gangs to the gang frame as illustrated in the diagram on page 20 with 5/8" x 2-1/2" hex screws.
13. For staggered gangs, mount the gangs as illustrated in the diagram on page 19.
14. On narrow skip row models with opposed gangs, mount the gangs to the gang frame as illustrated in the diagram on page 21.
15. For staggered gangs on narrow skip row models, mount all gangs on the front row of gang frames facing right. Mount all gangs on the rear facing left. Refer to the conventional row spacing staggered gang layout on page 19 for example.
16. Set the gang pitch in the center position for normal conditions. Tighten all bolts.
17. If optional scrapers are used, attach them as shown on the diagram.

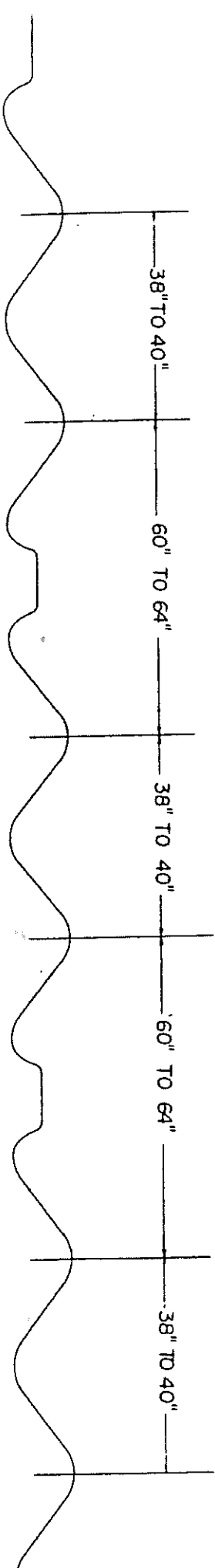
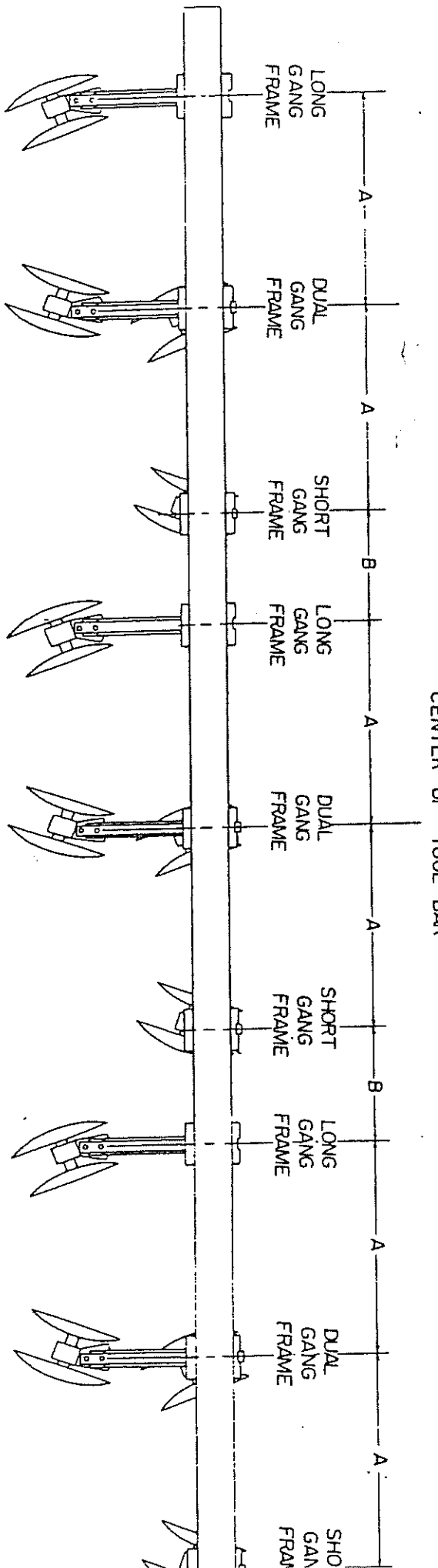


STAGGERED GANG LAYOUT



OPPOSED GANG LAYOUT

# CENTER OF TOOL BAR



BED PROFILE FOR NARROW SKIP ROW

DIMENSION	R O W   S P A C I N G					
	38/60	38/62	38/64	40/60	40/62	40/64
A	38	38	38	40	40	40
B	20	22	24	20	22	24

## **FINAL CHECK**

- A. Check all bolts for proper torque.
- B. Check scraper adjustment. Scrapers should be adjusted to run 1/16" to 1/8" from disk blades.
- C. **Lubrication**  
Raise plow to transport position. Use a good grade of clean Lithium soap-base grease to grease the entire plow. This is very important if the plow will be kept in inventory for several weeks before being placed in service.  
Grease as follows: (1) Grease pivot pins until grease appears.  
(2) Grease fitting on ratcheting jack on gauge wheels.  
(3) Grease each fitting (2 on each gang) until grease appears at the Protecto-Shield washer. Grease each gang every 25 hours of operation.
- D. Check decals to be certain they are in place and in good condition. Touch-up paint as required before delivery. Place operators manual in heavy plastic shipping bag. Tape bag to tool bar so that the operator's manual will be delivered to your customer along with the plow.
- E. Review all steps of the assembly to be certain the plow is properly assembled. Check all bolts to be sure they are properly torqued. Visually inspect the plow for any missing, damaged or defective parts. Repaint any areas that need improvements.
- F. Complete Warranty Registration at retail sell to register the unit. **This is required to insure warranty claims.**

## **LUBRICATION**

Careful and regular attention to lubrication will greatly increase the life of the hipper. For economical and efficient operation, proper lubrication of the pivot bracket pins, ratchet jack on gauge wheels, and gangs is necessary.

Be sure the grease fittings are free of dirt or paint before using the grease gun. Replace any damaged or missing fittings. Use a good grade No. 2 grease (lithium base). Never use greases which contain metallic additives. Always make sure that grease is clean and not contaminated with dirt or other foreign matter.

The gangs are equipped with ball bearings. These bearings utilize the AMCO Protecto-Shield Washer system. Lubricate each fitting (2 per gang) every 25 hours of operation. Also grease at the start of each season and at the end of each season.

Grease wing pivot pins each week or fifty (50) hours of operation. These wing pivot pins should also be greased at the start of each season and at the end of each season.

Grease ratchet jack each week or fifty (50) hours of operation.

**Hydraulic Fold Tool Bars:** When Hipper is stored for any length of time, be sure to lubricate the cylinder ram to protect from rust and corrosion.

## ***STORAGE***

Proper storage will add to the life of your Bedding Hipper and assure its being in good condition for the next season. The following procedure is recommended.

Clean off all foreign matter, and thoroughly lubricate the Hipper. (See LUBRICATION INSTRUCTIONS)

Tighten loose bolts and replace any damaged or missing parts.

Repaint the hipper where the original paint has worn off.

Coat the disc blades and hydraulic cylinder rod with a good rust preventative.

Store in a dry place, with the gangs resting on boards.

Carefully rotate each gang and check for worn or damaged blades, bent gang shafts, worn scrapers, damaged bearings and other parts which may need repairing.

Whenever disc blades or bearings are replaced, the gang shaft nuts must be torqued to 800 foot pounds.



**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.



**CAUTION!** Hydraulic systems are highly pressurized. Escaping hydraulic oil, even an invisible pinhole leak, can penetrate body tissues causing serious injury. Use a piece of wood or cardboard when looking for leaks--**NEVER** use the hands or other parts of the body.

Relieve hydraulic pressure before disconnecting circuits. When reassembling, make absolutely certain that all connections are tight.

If injured by hydraulic oil escaping under pressure, see a doctor immediately. Serious infection or reaction may occur if medical attention is not given at once.



## **OPERATING INSTRUCTIONS**

Your new AMCO bedding hipper has been set up, inspected, and adjusted by your dealer before delivery. However, before using your new bedder, or one that has been stored, make certain that all nuts and bolts are tight, all cotter pins spread and that the plow has been lubricated.

This instruction manual should be carefully and thoroughly read to enable the operator to care for and operate the Hipper properly. The right and left sides of the Hipper as used in these instructions are determined by facing the direction the bedder will travel while in operation.

Refer to your tractor operator's manual for complete tractor operating instructions.

**HITCH:** AMCO tool bars and bedding hippers are designed to hitch to ASAE Standard three point hitches and ASAE Standard Quick Couplers. Models with 4" x 7" tool bars will fit Category II and III Standard three-point hitch and quick coupler. Four- and six-row models mounted on 7" x 7" tool bars will accept Category II and III standard three-point hitch and quick coupler. Eight- and ten-row models will accept Category II quick coupler and Category III standard three-point hitch and quick coupler, but will not fit Category II standard three-point hitch. The lower hole in the top mast is used on Category II hitches and the upper hole is used on Category III hitches. Bushings are supplied for Category III upper and lower hitch pins on all models.

**PARKING:** The Hipper should be parked on level ground to prevent the possibility of a tipover.



**CAUTION!** After parking any Hipper, always check to make sure that it cannot be accidentally overturned forward or backward.

**GANG ANGLE ADJUSTMENT:** The gangs may be set at cutting angles of 10, 20 or 30 degrees. Larger gang angles will throw more soil.

To change the gang angle, loosen the bolts holding each gang to the gang frame, and replace the bolt in the hole corresponding to the desired gang angle.

**DEPTH CONTROL:** The working depth of the bedder is controlled by the tractor three-point hitch system or by the bedder gauge wheels. The adjustable stops on the three-point hitch control lever can be used to lower the bedder to a pre-set depth. When the bedder is equipped with gauge wheels, the ratchet jack on each gauge wheel should be adjusted to vary the working depth of the bedder.

**LEVELING:** Adjust the center link of the tractor's three-point hitch to level the bedder fore-and-aft so that all beds have the same height.

**BED CONSTRUCTION:** Operate the bedder at 5 to 8 mph. to throw up beds. Do not run the bedder any deeper than necessary. High speeds and shallow depths throw up uniform beds. Low speeds and deep depth settings push the soil and may cause bulldozing in front of the gangs. Vary the gang angle to suit your ground conditions. Staggered gangs work well in most soil conditions and layer soil into smooth, somewhat rounded beds. Opposed gangs make higher, pointed beds and generally operate well at high speeds, but clog more easily in heavy, moist soil or trashy 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.

## ***OPERATING TIPS***

### **OPERATING TIPS FOR LONG LIFE AND SATISFACTORY PERFORMANCE**

1. Match the hipper with the proper size tractor. Too much horsepower and speed will result in excessive maintenance cost.
2. Lubricate with clean grease at the recommended intervals.
3. Use good quality tires, hoses, and hydraulic cylinders.
4. Wash corrosive materials such as fertilizer and herbicides from the hipper when it is not in use.
5. Insist on genuine AMCO replacement parts. Items such as bearings and blades look alike but are not as reliable as original equipment.
6. Never allow unsafe conditions or operating practices. Your safety is of prime importance.
7. Reduce operating speed in areas containing stumps or rocks to reduce blade breakage.
8. Do not operate hipper with wings folded. Operating hipper with wings folded will cause excessive blade breakage, bent axles and undue strain on related parts.

## **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. Do not run with loose disc blades. Keep gang bolts tight! Tighten gang bolts to 800 ft. lbs. of torque.
3. Grease pivot pins and ratchet jack every week or 50 hours, at the start of each season and at the end of each season. Grease gangs every 25 hours of operation, at the start of each season, and at the end of each season.
4. **Disc Blade, Bearing and End Bell Replacement**
  - A. Remove the bearing housing from the gang frame.
  - B. Remove the gang nut lock plate.
  - C. Remove the gang hex nut from the end of the shaft. NOTE: Clean visible threads and apply penetrating fluid to aid in removal of nut without damaging axle threads.
  - D. Slide off the bearing, end bells, and blades.
  - E. Avoid thread damage.
  - F. Tear the entire gang down and clean off all parts. Check disk axle for straightness. Bowed, bent or worn axles must be replaced.
  - G. Carefully check all end bells. The large end must contact the disc blade around the entire circumference of the end bell. The small end must be smooth and perpendicular to the axle. The end bells must be replaced if they are cracked or worn on the surface adjacent to the bearing.
  - H. Check all the bearings. Running a Hipper for one hour or more after bearing failure will seriously damage other parts on the gang.
  - I. To replace the bearing, the snap ring must be removed. The old bearing should be pressed out of the housing. Clean and wash out old grease and carefully check the housing. Replace the housing if it is damaged. Press the new bearings straight into the housing. Always press against the outer race of the bearing. **NEVER** press against the seal or inner race of the bearing. Press the outer edges of the Protecto-Shield washer to remove and replace bearings from the housing. Rotate the bearing in the housing after it is pressed in to be sure it turns freely. Install the snap ring in the housing.

J. After cleaning, checking and replacing all damaged parts, the gang should be assembled. Be sure the snap ring in the bearing housing is turned toward the convex (back) side of the disc blade. The gang bolt nut should be torqued to 800 ft./lbs. The axle nut should be locked in place with the locking plate parts (9).

K. After the gang is assembled, it should be attached to the Hipper. The gang should be rotated 4 or 5 complete revolutions to be sure that all parts are aligned and the gang turns freely.

L. Grease both fittings until grease is visible at the Protecto-Shield Washer.

It is essential that gang bolts be kept tight to prevent axle bending, blade breakage, end bell breakage and damage to other gang parts. Gang parts tend to wear on a bevel when the plow is operated with a loose gang bolt. This reduces the area of contact between mating gang parts. Therefore, it is often difficult to keep a gang bolt tight if it has been operated in a loose condition. After such a gang bolt has been properly torqued, it should be retorqued after about 30 minutes of operation, again after 4 or 5 hours of operation and again after 8 to 10 hours of use. This will assure that proper gang bolt tension is maintained while the mating components are reseating. If the gang bolt will not stay tight, the gang should be completely disassembled and all parts carefully inspected. All damaged parts should be replaced before reassembling the gang.

**5. Scraper Repair:** Bent scraper blades or legs should be replaced or straightened if possible. The blades can be replaced when they wear to the extent they are not performing properly. Keep the blades adjusted from 1/16" to 1/8" from the disk blades. The scrapers can be adjusted by loosening the mount bolt and sliding the scraper to the proper position, then tightening the mount bolt. Do not allow the scraper blades to run on the end bells as immediate damage to end bell will occur.

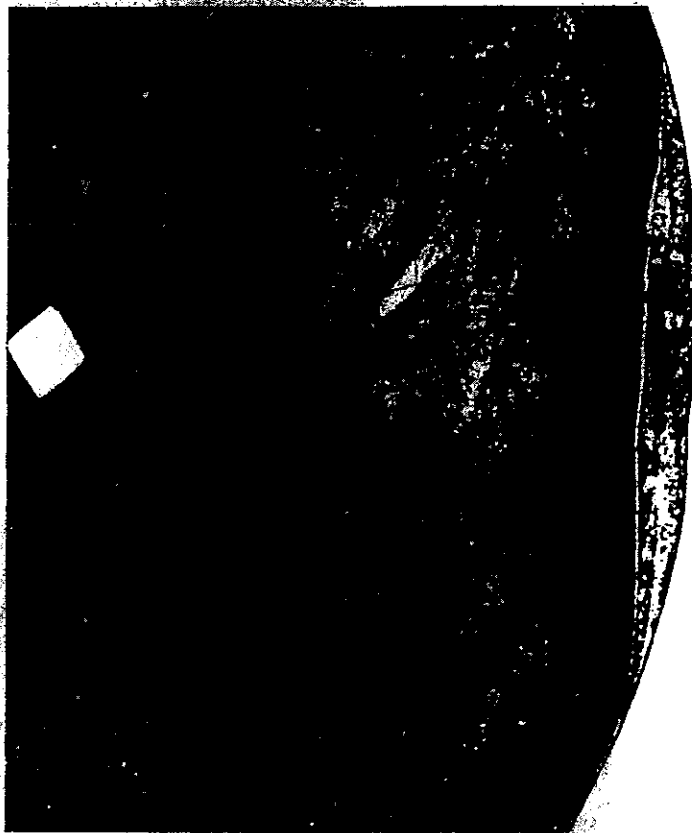
## MOST OFTEN ENCOUNTERED BLADE FAILURES

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

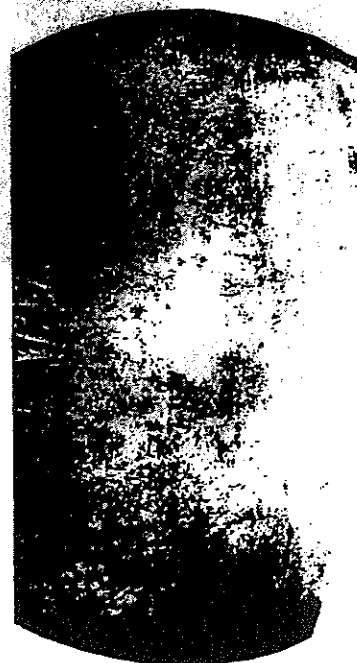
**FIGURE 1 -- Laminated Disc -- defective steel.**  
Eligible for warranty consideration.

**SURFACE VIEW**

**EDGE VIEW**



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



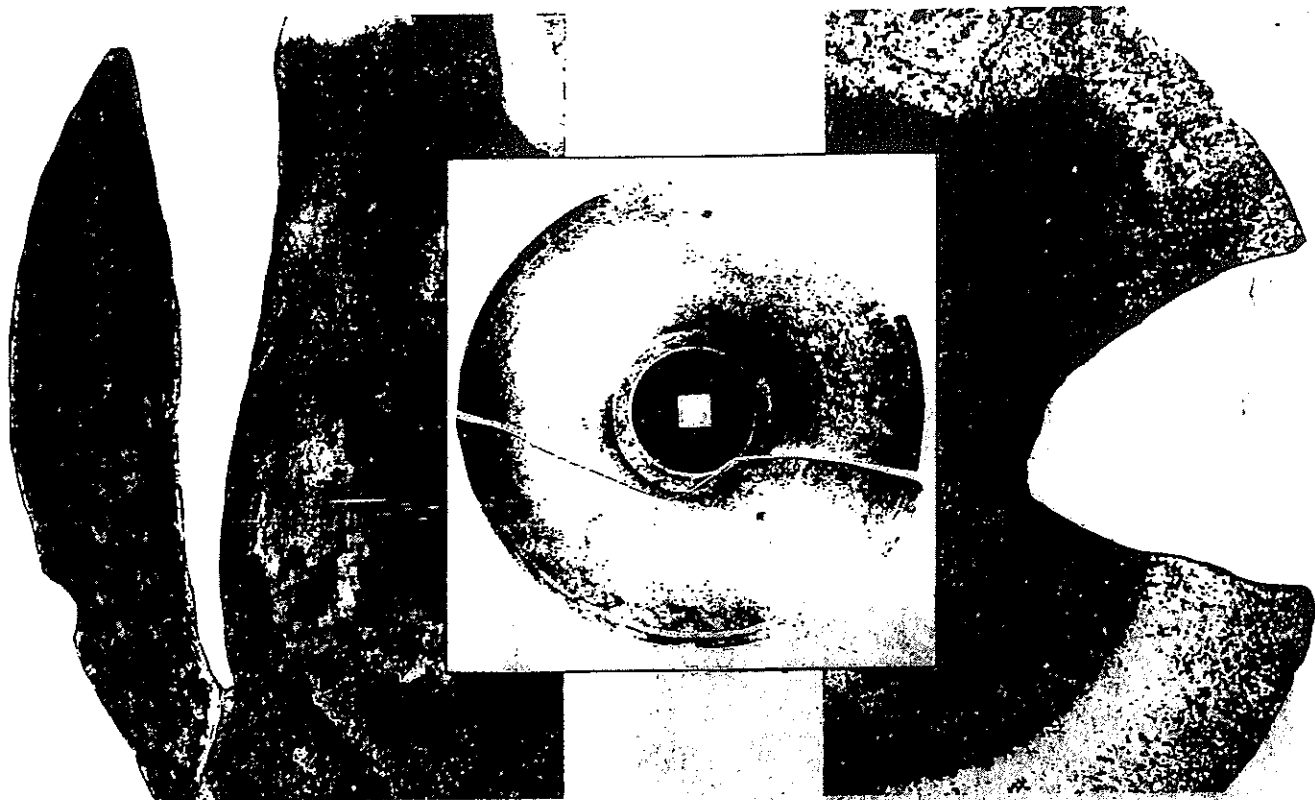


FIGURE 3, 4, 5 -- Irregular breaks caused by contact against rocks or stumps. Not covered by



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.



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