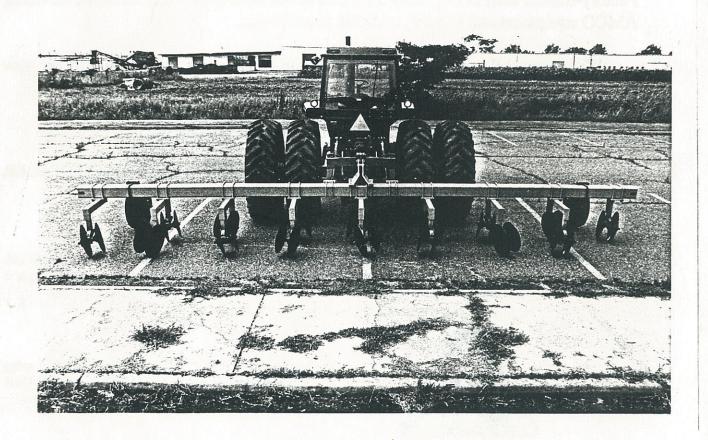


Porton Colonial Colon

BEDDING HIPPERS

PARTS CATALOG
OPERATION - MAINTENANCE - SET-UP
INSTRUCTIONS





AMCO MANUFACTURING, INC.

800 S. Industrial Parkway--P.O. Box 1107--(601)746-4464 Yazoo City, Mississippi 39194 U.S.A.

INDEX

HYDRAULIC HIPPER

PARTS LIST

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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

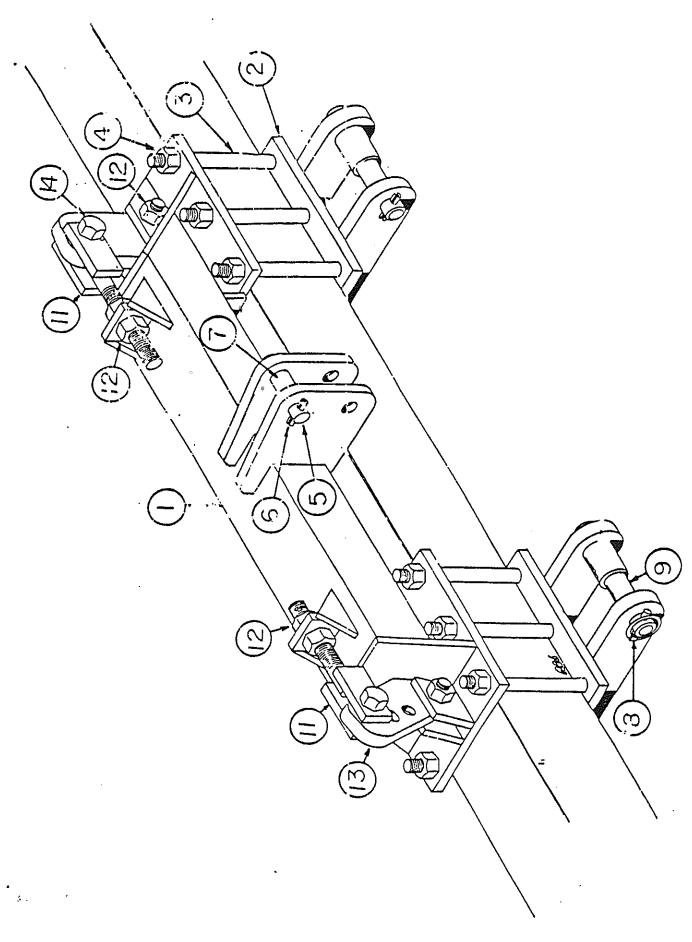
SERIAL NUMBER

AMCO A23 "A" FRAME

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

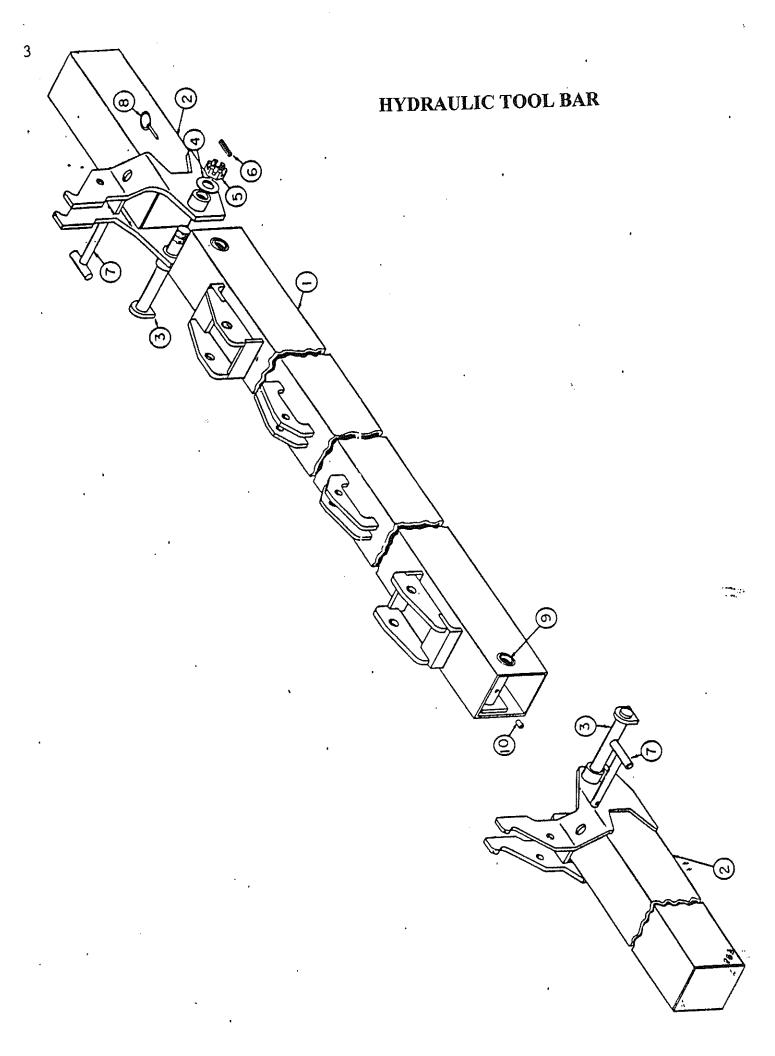
<u>Ref. #</u>	Part#	Description	# Required
1	0959	Assy. "A" Frame	1
2	20353	Assy Lower Pull Point LH	1
2	20354	Assy Lower Pull Point RH	1
3	11102	Hex Screw 7/8 x 10 NC, PL	. 12
4	10396	Lock Nut 7/8 NC, PL	12
5	6554	Hitch Pin - 1" Dia. 5" Long	1
6	10910	Roll Pin	1
7	6570	Bushing 1-1/4 O.D 2" Long	1
8	10317	Klik Pin	1
9	101739	Lower Hitch Pin 1-7/16 Dia 9" Long	2
11	20005	Assy. Adjusting Rod - 9-3/8"	2
11	20006	Assy. Adjusting Rod - 20-3/8"	2
11	20007	Assy. Adjusting Rod - 33-3/8"	2
12	10868	Lock Nut 1" NC, PL	8
13	102496	Cylinder Mount	
14	10373	Hex Screw - 1 x 3-1/2 NC, PL	4
15	11697	Klik Pin - 7/16" Dia. (Not Shown)	2

A23 "A" FRAME



AMCO HYDRAULIC TOOL BAR

Ref. #	Part#	Description	HB6-5 F	<u>No. 1</u> IB8-5 HE	Require 8-6 HB		<u>16</u>
1	0996	Assy. Tool Bar - Center Section - 126"	1	1	-	*	-
1	0997	Assy.Tool Bar - Center Section - 148"	-	-	-	-	1
1	0998	Assy. Tool Bar - Center Section - 174"	-	-	1	1	-
2	20008	Assy. Wing Tool Bar - 69"	2	-	-	•	-
2	20010	Assy. Wing Tool Bar - 109"	•	2	•	-	-
2	20009	Assy. Wing Tool Bar - 86"	•	-	2	-	2
2	20011	Assy. Wing Tool Bar - 126"	-	-	••	2	-
3	0593	Assy. Wing Pivot Pin1-1/2 Dia. x 12-11/16 Lg.	2	2	2	2	2
4	10872	Cut Washer - 1-3/8 PL	2	2	2	2	2
5	10232	Hex Nut1-1/2 - 6 NC Slotted	2	2	2	2	2
6	10910	Roll Pin - 5/16 x 2-1/4	2	2	2	2	2
7	0618	Assy. Pivot Pin - 1 x 8-1/4	2	2	2	2	2
8	10317	Klik Pin - 1/4"	2	2	2	2	2
9	11500	Bushing - 1-3/4 O.D. x 1-1/2 I.D 2" Long	4	4	4	4	4
10	10606	Grease Fitting - 1/8 NPT Straight	2	2	2	2	2
11	100578	Pin (Not Shown)	2	2	2	2	2
12	10910	Roll Pin (Not Shown)	4	4	4	4	4
13	100465	Spacer Plate (Not Shown)	2	2	2	2	2



INSERT

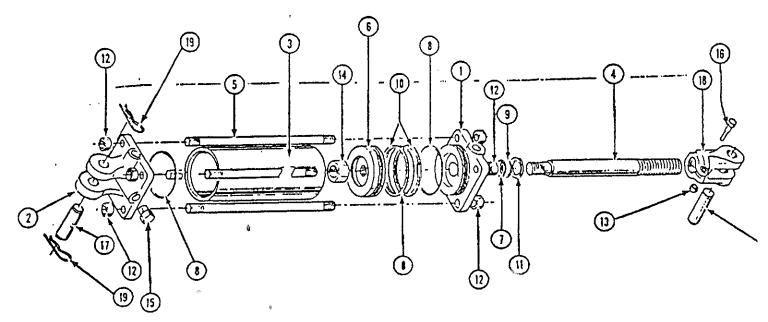
NOTE: Engineering Changes

Beginning with Serial No. 94080260, order Hydro-Line Cylinder Part No. 12157 3-1/2 x 16 IIydraulic Cylinder. Also, state on your parts order: "Spare Parts for 3-1/2 x 16 IIydro-Line Cylinder". Repair seal kit will be Part No. 12158.

Specify Brand of Hydraulic Cylinder when ordering parts.

Lion Hydraulic Cylinder 3-1/2 x 16 - Part No. 12173 - 3000 PSI - now used on current models.

AMCO 3 x 16 HYDRAULIC CYLINDER



Ref. <u>No.</u>	Part <u>Number</u>	Description	No. Req'
1 2 3 4 5 6 *7 *8	12089 12118 12119 12120 12121 12122 12123 12132	Cylinder Complete Head-Piston Butt Tube Piston Rod Tie Rod Piston Seal Repair Kit O Ring O Ring	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
*9 *10 *11 12 13 14 15 16 17 17A 18 19 20 21	12124 12125 12126 12127 12128 10956 100578 12130 10957 11492 10910	Washer Washer Rod Wiper 1-1/4 Dia. Nut - Tie Rod 1/2-20 Nut - 3/8-16 Hex Lock Nut 3/4-16 Plug Bolt 3/8-16 X 1-3/4 Cylinder Pin Pin Clevis Clip Pin Bushing (Not Shown) Roll Pins (Not Shown)	2 1 2 1 8 1 1 1 1 1 1 1 1 2 4

NOTE: Item 7, 8, 9, 10 and 11 sold in repair kit only. Beginning with Serial #91110218

HYDRAULIC KITS

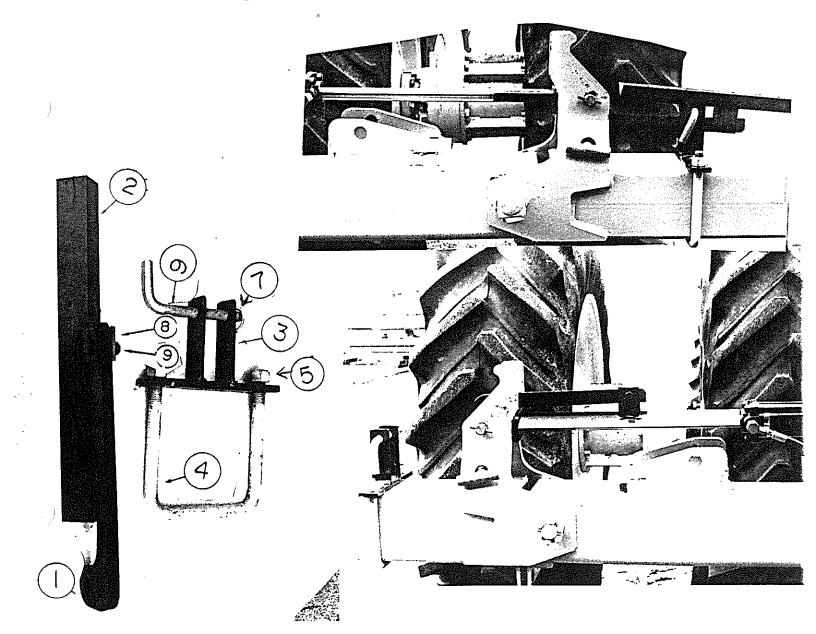
For 126" Center Bar

Part No.	Description	No. Required
12165	Swivel Elbow 90-degree ½ NPT Male to NPT Female	4
11126	Male Branch Tee ½ NPT Male to 1/4 NPT Female	2
11157	Swivel Union ½ NPT to ½ 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
11128	Hose Tie	6
For 148" Center Ba	<u>ır</u>	
12165	Swivel Elbow 90-degree ½ NPT Male to 1/4 NPT Female	4
11126	Male Branch Tee ½ NPT Male to 1/4 NPT Female	2
11157	Swivel Union ½ NPT to ½ 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
11128	Hose Tie	6
For 174" Center Ba	<u>ur</u>	
12165	Swivel Elbow 90-degree ½ NPT Male to 1/4 NPT Female	4
11126	Male Branch Tee ½ NPT Male to 1/4 NPT Female	2
11157	Swivel Union ½ NPT to ½ NPT	2
11120	Hose 1/4 x 54 with 1/4 NPT Fittings	2
11121	Hose 1/4 x 72 with 1/4 NPT Fittings	2
11128	Hose Tie	6

LOCK DOWN KIT (Optional)

	Part No.	Description	No. Required
1. 2. 3. 4. 5. 6. 7. 8.	102506 20575 20576 11399 10396 100683 10317 10587 10395	Hold Down Bar Bracket Bracket U Bolt Lock Nut Lock Pin Klik Pin 1/2 X 2 NC PLT. H.B. 1/2" NC PLT. Lock Nut	2 2 2 2 4 2 2 2 2

DA-01-0110 Complete Bundle



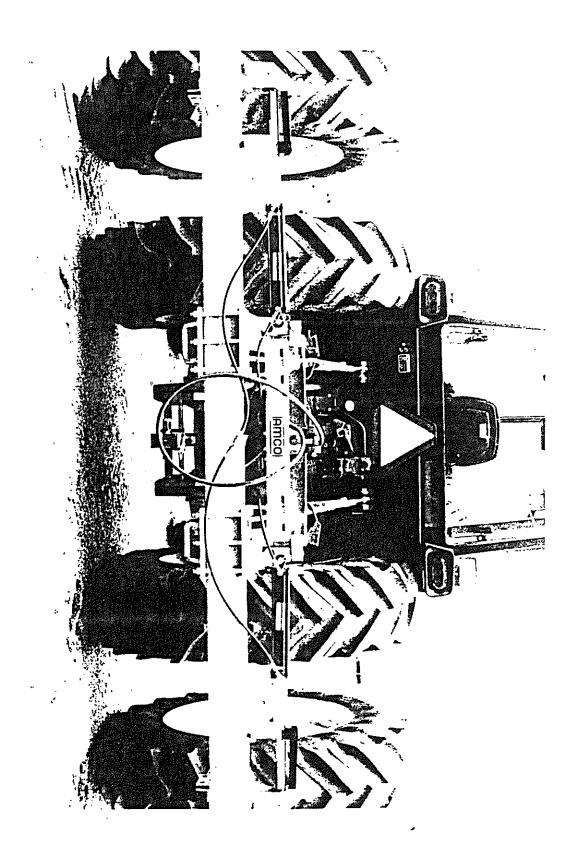


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AMCO BEDDING HIPPERS

With

RIGID TOOL BARS FOR 30" TO 32" ROWS

GENERAL SPECIFICATIONS

GANGS: 1-1/8" square axles with dual sealed ball bearings. One 16" & one 18" blade per gang. Three position angle adjustment.

HITCH: Heavy duty mast & yoke type. Fits Cat. II and Cat. III standard and quick coupler.

SHANKS: Heavy duty fabricated shanks that allow either staggered or opposed gang setting.

7 X 7 Tool Bar uses A21M 'A' Frame

NOTE: Gauge wheels, scrapers, and row markers are optional equipment and must be ordered separately. The optional sweep attachment consists of a 1" X 3-1/2" shank, tool bar clamps and sweep mount brackets for each row. Does not include sweeps.

			Approx.	
		Transport	Drawbar	Approx.
Model No.	7 X 7 Tool Bar Description	Width	HP Req'd	Weight
B6-7	6-Row 7" X 7" X 204" Rigid Tool Bar DA-14-0032 Sweep Attachment		85-110	1,893 396
B8-7	8-Row 7" X 7" X 280" Rigid Tool Bar DA-14-0033 Sweep Attachment		115-140	2,475 528
B10-7	10-Row 7" X 7" X 344" Rigid Tool Bar DA-14-0034 Sweep Attachement		130-190	3,326 660
B12-7	12-Row 7" X 7" X 424" Rigid Tool Bar DA-14-0035 Sweep Attachment		170-220	3,983 792

OPTIONAL EQUIPMENT

Depth gauge wheels include turnbuckle adjustment and 15 X 6 wheels.

DW-10	Pair Depth Gauge Wheels for 7" X 7" Tool Bar	204
DA-01-0036	Scrapers (set of 4 for 2 Rows)	14
	For 18" and 20" plain blades, Add per row For 20" and 22" plain blades, Add per row	14 27

NOTE: Use of disk on tractors with higher than recommended Drawbar Horsepower will cause excessive maintenance cost & may void your warranty.

AMCO BEDDING HIPPERS

With

RIGID TOOL BARS FOR 36" to 40" ROWS

GENERAL SPECIFICATIONS

GANGS: 1-1/8" square axles with dual sealed ball bearings. One 16" & one 18" blade per gang. Three position angle adjustment.

HITCH: Heavy duty mast & yoke type. Fits Cat. II and Cat. III standard and quick coupler.

SHANKS: Heavy duty fabricated shanks that allow either staggered or opposed gang setting.

4 X 7 Tool Bar uses A24 'A' Frame

7 X 7 Tool Bar uses A21M 'A' Frame

NOTE: Gauge wheels, scrapers, and row markers are optional equipment and must be ordered separately. The optional sweep attachment consists of a 1" X 3-1/2" shank, tool bar clamps and sweep mount brackets for each row. Does not include sweeps.

	-	Approx.	A
	Description	Drawbar HP Required	Approx. Weight
Model No.	Description		
	4" X 7" Tool Bar		
B4-6	4-Row 4" X 7" X 184" Tool Bar	50-70	1,320 252
	DA-14-0028 Sweep Attachment		272
в6-6	6-Row 4" X 7" X 264" Tool Bar	85-110	2,039
	DA-14-0029 Sweep Attachment		378
	7" X 7" Tool Bar		
B6-5	6-Row 7" X 7" X 264" Tool Bar	90-125	2,005
	DA-14-0032 Sweep Attachment		396
B8-5	8-Row 7" X 7" X 344" Tool Bar	120-170	2,886
	DA-14-0033 Sweep Attachment		528
	NARROW SKIP		
SB6-5	6-Row 7" X 7" X 344" Tool Bar, fits row spacing		
	of 38" to 40" and skip row of 60 " to 64 "		2,514 396
	DA-14-0032 Sweep Attachment		390
	OPTIONAL EQUIPMENT		
	Depth gauge wheels include turnbuckle		
DW-11	adjustment and 15 X 6 wheels Pair Depth Gauge Wheels for 4" X 7" Tool Bar		202
DW-10	Pair Depth Gauge Wheels for 7" X 7" Tool Bar		204
DA-01-0036	Scrapers (Set of 4 for 2 Rows)		14
,	For 18" and 20" Plain Blades, Add per row For 20" and 22" Plain Blades, Add per row		14 27

NOTE: Use of disk on tractor with higher than recommended Drawbar Horsepower will cause excessive maintenance cost & may void your warranty.

BEDDING HIPPERS

WITH

TOOL BARS FOR 36" to 40" ROWS HEAVY DUTY — 1-1/2" SQUARE GANGS

STANDARD SPECIFICATIONS

GANGS: 1-1/2" square gang bolt with dual

triple lip sealed ball bearings. 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 mast and yoke type.

Fits Cat. II and III standard and quick

coupler.

HYDRAULIC EQUIPMENT

HITCH:

A-23 heavy duty mast and yoke type.

Fits II and III standard and quick

coupler.

CYLINDERS:

Two 3-1/2" x 16" cylinders and all hoses

for folding the tool bar.

NOTE: Gauge wheels, scrapers, and row markers are optional equipment and must be ordered separately.

MODEL NO.	[®] DESCRIPTION	Approx. Drawbar HP Required	Approx. Weight
FB6-5	6-Row 7'' x 7'' x 264'' Tool Bar (1/4 wall)	90 - 125	2,365
} FB8-5	8-Row 7" x 7" x 344" Tool Bar (3/8 wall)	120 - 170	3,366
FSB6-5	6-Row 7'' x 7'' x 344'' Tool Bar, fits row spacing of 38'' to 40'' and skip row of 60'' to 64'' (3/8 wall)	90 - 125	2,874
FHB8-5	8-Row 7'' x 7'' x 344'' Tool Bar (Hydraulic) 38'' to 40'' rows. Transport width 16'0''	120 - 170	3,733
	For 20'' and 22'' Plain (1/4'' blades) add per row		Add 35
	·		

AMCO PL Effective January 1, 1992

F.O.B Yazoo City, Mississippi

SPECIFICATIONS AND PRICES SUBJECT TO CHANGE WITHOUT NOTICE



AMCO MANUFACTURING, INC.

800 S. Industrial Parkway -- P.O. Box 1107-- (601)746-4464





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 othe tractor drawbar.



CAUTION When working on Hippers, 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 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 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.

GENERAL TORQUE SPECIFICATION TABLE

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

GENERAL TORQUE SPECIFICATION TABLE

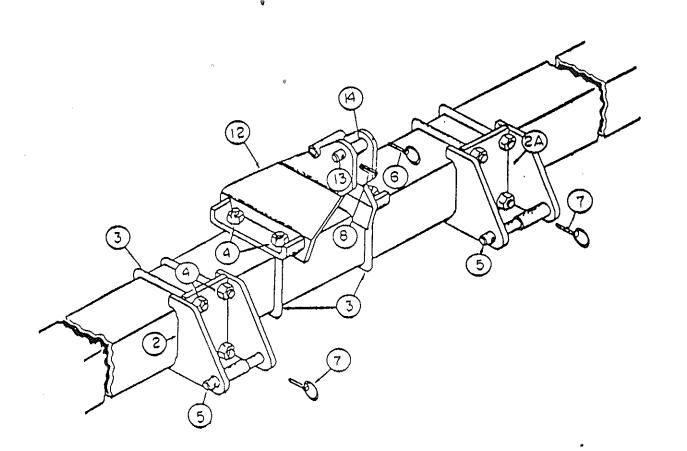
USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

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.	<u>-</u>	2			^{سر} 5			8 *		
Bolt head identification marks as per grade NOTE: Manufacturing		de .					3	\wedge \otimes \odot		<u>}</u>	
Marks W		1	orque		То	rque			Torqu	e	
Во	lt Size	Foot	Pounas	į	Foot	Pounds		F	oot Po	unds	
Inches	Millimeters	Min	Max		Min	Max		Mi	in I	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		1	10	132	
9/16	14 29	65	75		110	132		10	60	192	
5./8	15 88	95	105		150	180		2:	20	264	
3/4	19 05	150	185		270	324		3	80	456	
7/8	22.23	160	200		400	480	1	6	00	720	
1	25 40	250	300		580	696		90	00 1	080	
1.1/8	25.58				800	880		12	80 1	1440	
1.1/4	31 75				1120	1240		18:	20 2	2000	
1-3/8	34 93				1460	1680		23	80 2	720	
1.1/2	38 10				1940	2200		310	60 3	3560	

A21M "A" Frame 7×7

Ref No.	Part No.	Description	No.	Req'd.
2 2A 3 4 5 6 7 8 12 13	20376 20375 11399 10396 101739 10317 11697 10910 20320 101333 6570	Assy. Bottom Hitch - Rh Assy. Bottom Hitch -LH "U" Bolt 7/8 Dia Lock Nut 7/8 NC, PLT, GRB Lower Hitch Pin Klick Pin 1/4 Klick Pin 7/16 Dia Roll Pin 5/16 x 2-1/4 Assy. Top Hitch Hitch Pin 1" Dia Bushing 1-1/4 Dia. 2" Lg	• • • • • • • • • • • • • • • • • • • •	1 6 12 2 1 2 1 1 1

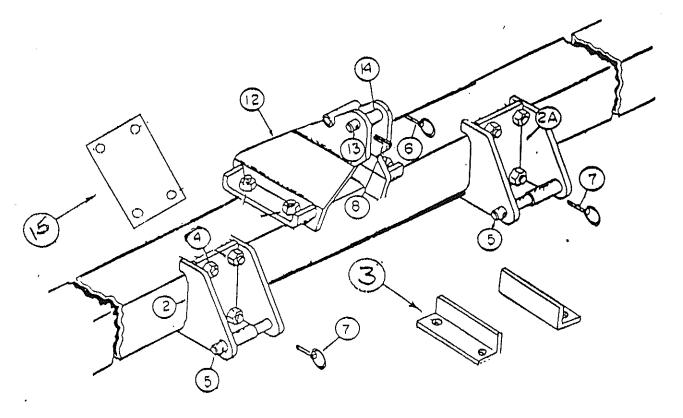


Use these Parts before Serial # 94120512.

Just 59010TH

AMCO BEDDING HIPPER A21M2 "A" FRAME 7 x 7

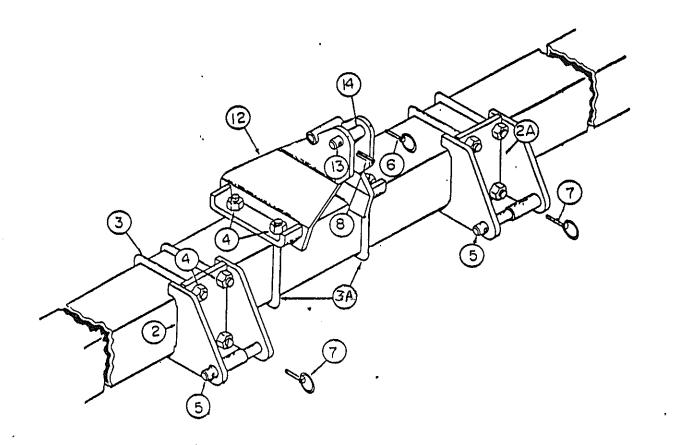
<u>Ref. #</u>	Part#	Description	# Required
2 .	20376	Assy. Bottom Hitch - RH	1
2A	20375	Assy. Bottom Hitch - LH	1
3	101984	3 x 3 x 1/2 Angle	2
4	10396	* Lock Nut 7/8 NC, PLT, GRB	12
5	101739	Lower Hitch Pin	2
6	10317	Klik Pin - 1/4"	1
7	11697	Klik Pin - 7/16" Dia.	2
8	10910	Rôll Pin - 5/16 x 2-1/4	1
12	20320	Assy. Top Hitch	1
13	101333	Hitch Pin - 1" Dia.	1
14	6570	Bushing - 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 Show	/n) 12 🐰



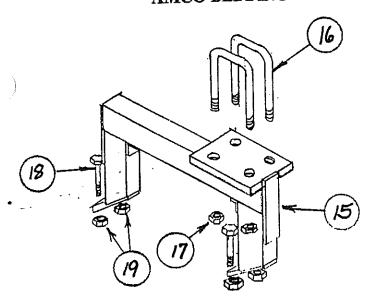
AMCO BEDDING HIPPER

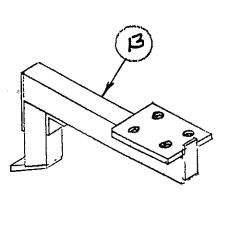
A24M 'A' Frame 4 X 7

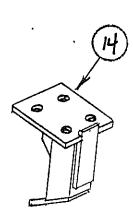
Ref No.	Part No.	Description	No.	Req'd
2 2 A	20540 · · · · · · · · · · · · · · · · · · ·	Assy. Bottom Hitch - RH Assy. Bottom Hitch - LH		1 1
3	11495	"U" Bolt 7/8 Dia		4
3A	9560	"U" Bolt 7/8 Dia	•	2
4	10396	Lock Nut 7/8 NC, PLT, GRB	•	12
5	101739	Lower Hitch pin	•	2
6	10317	Klik Pin 1/4	•	1
7	11697	Klik Pin 7/16 Dia	•	2
8	10910	Roll Pin 5/16 X 2 1/4	•	1
12	20541	Assy. Top Hitch	•	1
13	101333	Hitch Pin l" Dia	•	1
14	6570 🕻 🐧	Bushing 1-1/4 Dia. 2" Long		1



AMCO BEDDING HIPPER GANG & HIPPER SHANKS







AMCO Bedding Hipper Shanks

Ref.	Part No.	Description	No. <u>Req'd</u>
13	20537	Assy. Gang Frame - Long	1
14	20538	Assy. Gang Frame - Short	1
15	20536	Assy. Gang Frame - (Dual)	
16	9560	"U" Bolt 7/8 Dia 4 X 7 Bar	
16	11399	"U" Bolt 7/8 Dia 7 X 7 Bar (Shown)	
17	11691	Flange Lock Nut 7/8 NC, PL	
18	12076	5/8 X 2-3/4 NC PLT - Grade 8	
19	10299	Lock Nut 5/8 NC, PL	2

AMCO Bedding Hipper Gangs 1-1/8" Square

Ref.	Part No.	Description	No. <u>Req'd</u>
1 2	0705 3180	Assy. Axle End Bell - Small	-
3	3181	End Bell - Large	_
4	FB-09-0020	Sub Assy. Bearing	. 1
5	3416	Bearing Housing	. 1
6	11078	Bearing	. 2
7	11005	Snap Ring	. 1
8	2030	End Gang Washer	. 1
9	2116	Lock Plate	. 1
10	11035	Nut Gang Bolt 1-1/8 NC, Hvy	. 1
11	3267	Blade 16" X 7 Ga. Plain (standard)	
12	3268	Blade 18" X 3/16 Ga. Plain (Standard)	
	3196	Blade 18" X 3/16 Ga. C.O. (Optional)	
	3254		
	3262	Blade 20" X 3/16 Ga. Plain (Optional)	. 1
	3254	Blade 20" X 3/16 Ga. C.O. (Optional)	. 1

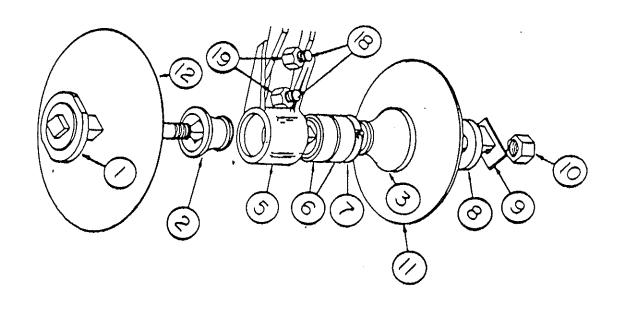
AMCO Bedding Hipper Shanks

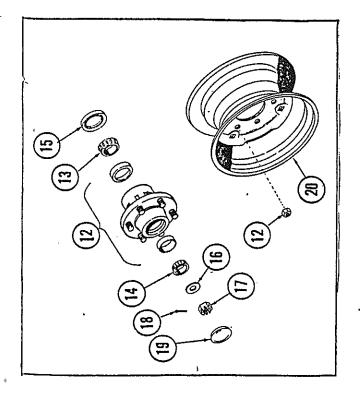
Ref. No.	Part <u>No.</u>	Description	No. <u>Req'd</u>
13	20537	Assy. Gang Frame - Long	1
14	20538	Assy. Gang Frame - Short	1
15	20536	Assy. Gang Frame - (Dual)	1
16	9560	"U" Bolt 7/8 Dia 4 X 7 Bar	2
16	11399	"U" Bolt 7/8 Dia 7 X 7 Bar (Shown)	2
17	11691	Flange Lock Nut 7/8 NC, PL	4
18	12076	5/8 X 2-3/4 NC PLT - Grade 8	2
19	10299	Lock Nut 5/8 NC, PL	2

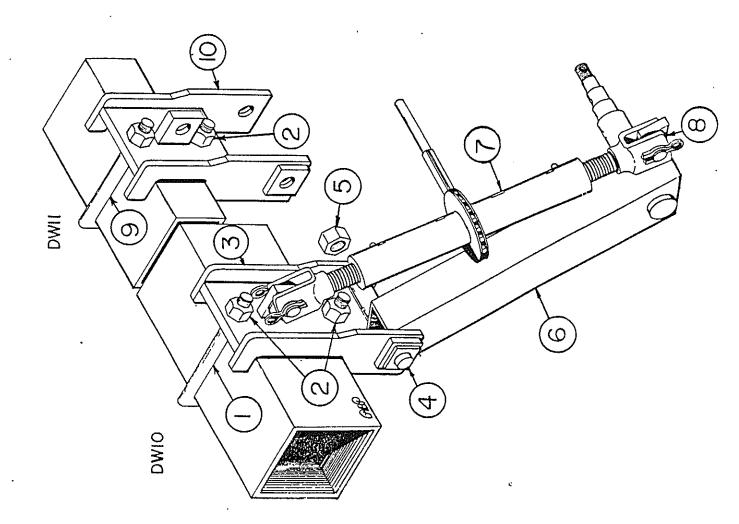
Beginning W/Serial No. 90010019

BEDDING HIPPER GANGS - 1-1/2" Square HEAVY DUTY

Ref.	Part No.	Description	No. <u>Req'd</u>
1 2 3 4 5 6 7 8	20561 17027 17029 FB-09-0024 17028 G11071 11064 1222A 5622A 100098 100099	Assy. Axle	1 1 1 1 2 1 1 1 1
10 11 12	10710 10395 10489 9482 11588 11589 3275 3276 3255	Carr. Bolt 1/2 x 2 Gr5 (Not Shown)	1 1 1 1 1 1 1 1
18 19 20	3250 12076 10299 12156	5/8 X 2-3/4 NC Plt. Grade 8 Lock Nut 5/8 NC Pl 1/4"-28 Thds Self Tapping Grease Fitting (Not Shown)	2 2



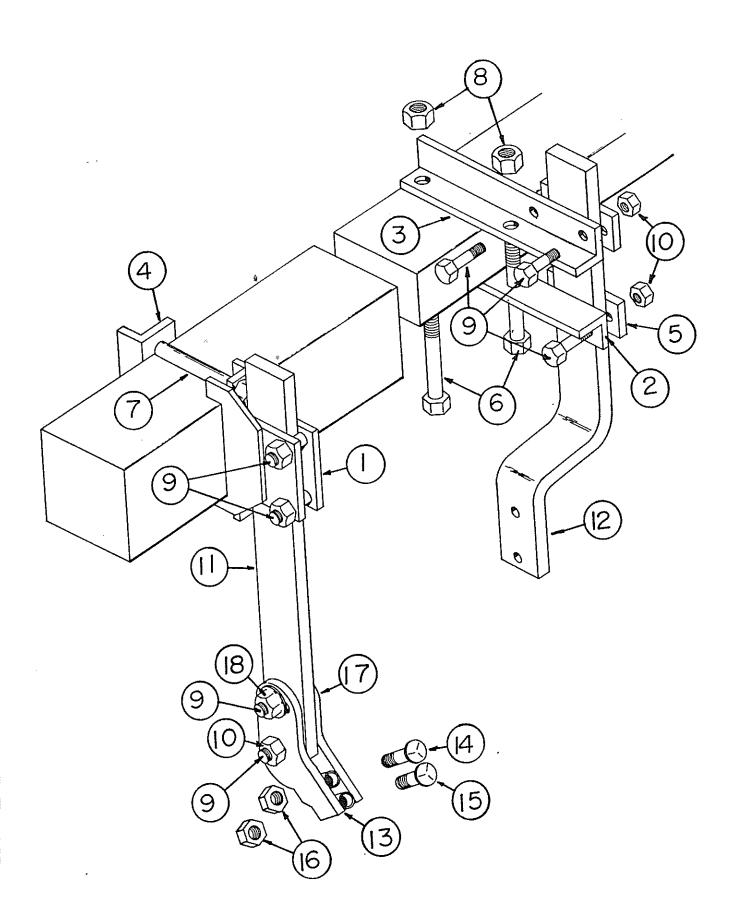




AMCO Depth Gauge Wheels (Optional)

Ref. No.	Part No.	Description	No. Req'd
1	11399	''U'' Bolt 7/8 Dia 7'' x 7'' Bar	2
2	10396	Lock Nut 7/8 NC, PL	H
3	0973	Assy. Bottom Bracket - 7" x 7" Bar	1
4	20123	Assy. Pivot Pin	1
5	10868	Lock Nut 1" NC, PL	1
6	20124	Assy. Depth Gauge Leg Right Hand or Left Hand	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	Assy. Bottom Bracket - 4" x 7" Bar	1
11	11396	Pin Assy. 1" Dia. x 2 7/8" (w/2 Hair Pin Clips)	2
12	11644	Hub* - (F ε Η #106675)	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 EWC #0411141	1

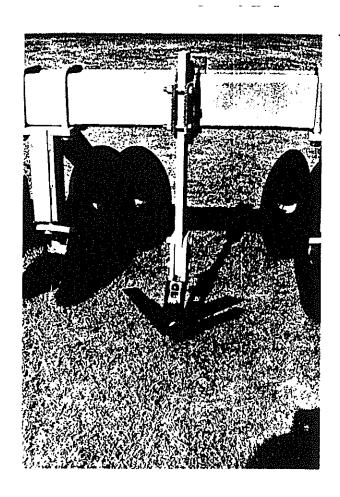
NOTE: Parts listed above compose one (1) depth gauge.



AMCO Sweep Attachments (Optional)

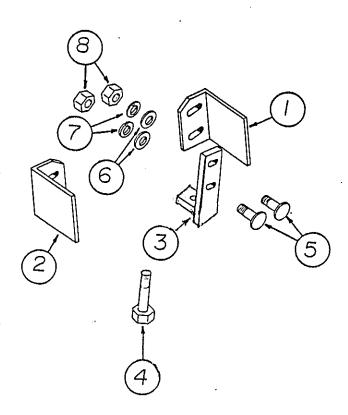
			No.	Req'd
Ref. No.	<u>Part No.</u>	Description	4x7 Bar	7x7 Bar
1	20071	Assy. Anchor Bar		1
2	101068	Clamp Bar - R.H		-
3	101069	Clamp Bar - L.H		-
4	9007	Clamp Strap		1
5	101067	Clamp Strap		-
6	10591	Hex Screw 7/8 x 6 NC, PL, GR5		-
7	11102	Hex Screw 7/8 x 10 NC, PL		2
8	10396	Lock Nut 7/8 NC, PL		2 .
9	10201	Hex Screw 5/8 x 3 NC, PL, GR5		4
10	10299	Lock Nut 5/8 NC, PL		3
11	100912	Shank - Straight		1
12	100913	Shank - Offset		1
13	20022	Assy. Sweep Mount		1
14	11653	Plow Bolt 1/2 x 3 NC, PL, GR5		1
15	10420	Plow Bolt 1/2 x 2 1/4 NC, PL, GR5		1
16	10395	Lock Nut 1/2 NC, PL		1
17 ·	10059	Flat Washer 5/8 PL (Not Shown)	. 1	1
18	11647	Flange Lock Nut 5/8 NC, PL		1

NOTE: Sweep Attachments do not include sweeps.



AMCO SCRAPERS FOR BEDDING HIPPERS (Optional)

Ref. #	Part#		Description	# Required
1	7025		Scraper Blade - RH	1
2	7026	ģ	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



INSERT

SCRAPERS (FOR BEDDING HIPPER)

Beginning With Serial #97010031, order the following parts:

DA-01-0136 BUNDLE OF SCRAPERS (2-ROWS)

Qty.	Part No.	<u>Description</u>
2	20585	Scraper - R.H.
2	20586	Scraper - L.H.
4	12213	U-Bolt -1/2 x 6 x 4-1/8
8	10395	Lock Nut - 1/2 NC, PLT, GR-B
8	10832	Cut Washer - 1/2 PLT

DECALS

Ref No	Part No.	Description No	. Req'd
Ref. No.	11465	Decal "AMCO" (7 x 7 Tool Bar)	2
3	11741	Decal Warning	1
	11117 11118	Reflector Tape - Red (Rear)	2 2





3

A 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

assembly instructions

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

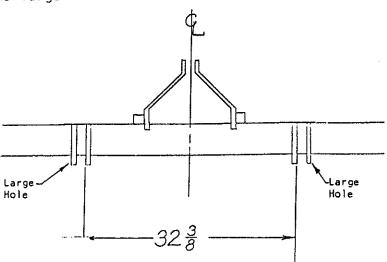
- A. A-Frame
- B. Tool Bar Rigid or Hydraulic Folding
- C. Gang Frames Short, Long and Dual
- D. Gangs
- E. Gauge Wheels

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.

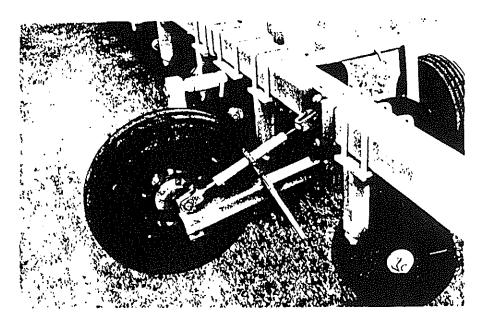
CAUTION Use sturdy stands to prevent frame from falling.

- 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. Attach hub to axle. Mount 9.5L x 15 tires. Inflate to 40-50 PSI.

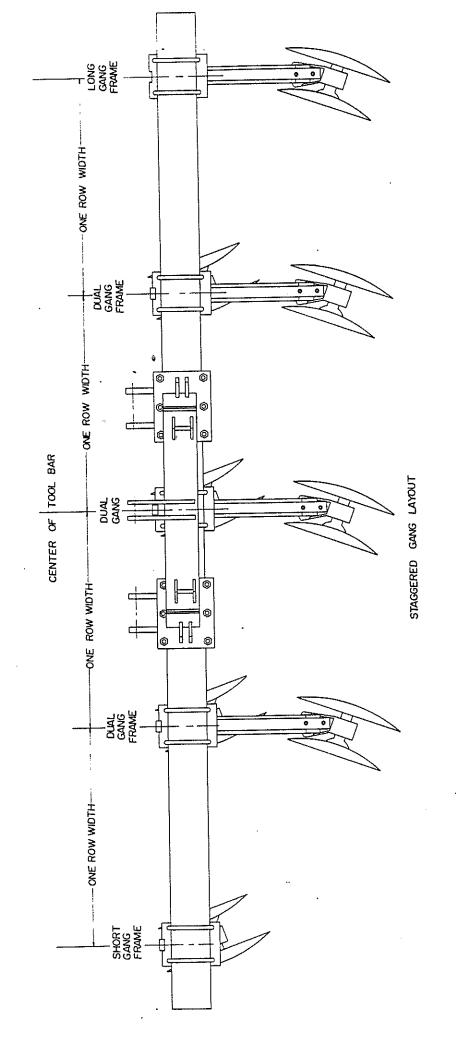


- 5. Measure from the center of the tool bar for row spacing desired and mark the hipper gang location for each row with chalk. Refer to diagrams on page 19 for gang layout of conventional row spacing.
- 6. Hipper model SB6-5 is designed to produce beds for a widebed cultural system consisting of two rows, 38 to 40 inches apart, alternating with a 60 to 64 inch skip. This row pattern is similiar 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, 6 row bedder with spacing combinations of 38/60, 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 $7/8^{\prime\prime}$ "U" bolts on the right outside row spacing.
- 10. Mount the dual gang frames with $7/8^{\prime\prime\prime}$ "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 redommended in light soils and clean, dry conditions. Opposed gangs tend to make higher, pointed beds and generally operate will at high speeds.

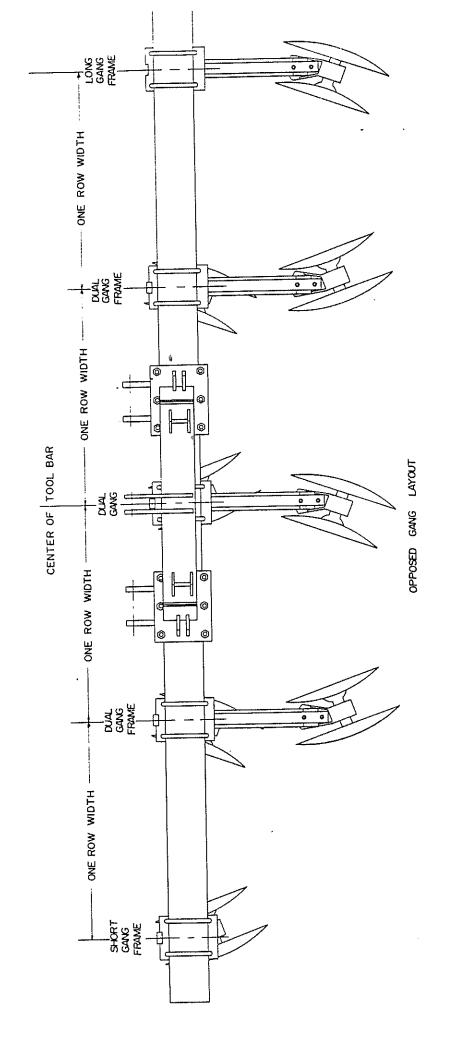
The gangs may also be mounted to the gang frame at three pitches. The variable pitch allows a wide variety of bed shapes. Generally, large pitch angles build high beds. Shallow pitch angles build shallow beds.

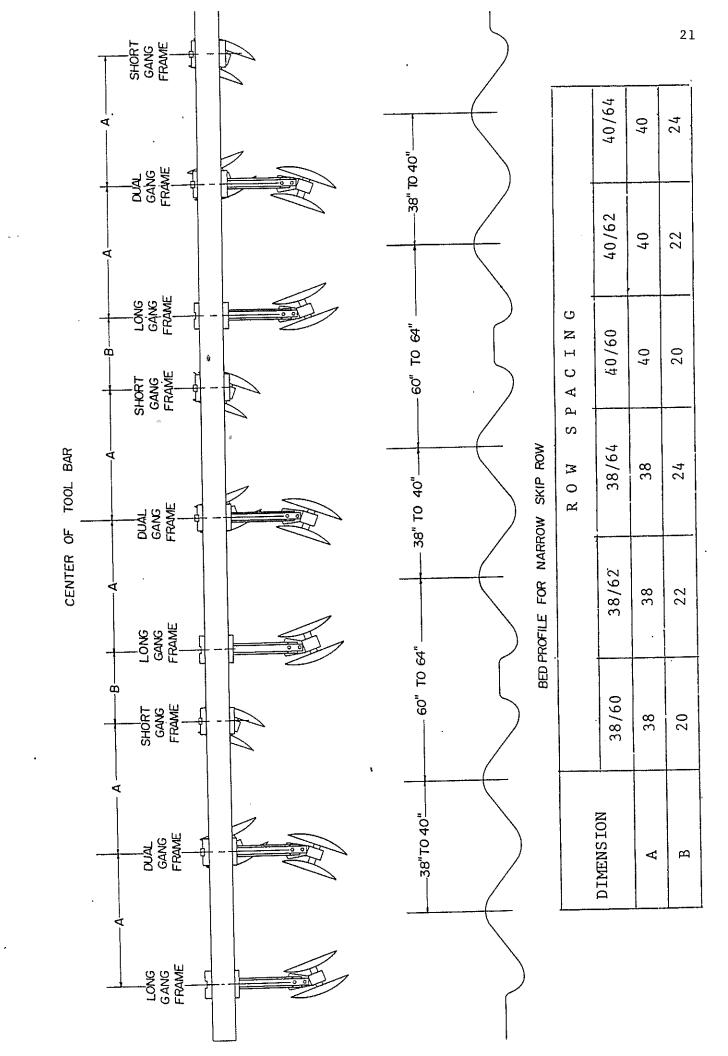
- 12. On conventional row spacing models with opposed gangs, mount the gangs to the gang frame as illustrated in the diagram on page 20 with $5/8^{\prime\prime}$ x 2 $1/2^{\prime\prime}$ hex screws.
- 13. For staggered gangs, mount the gangs as illustrated in the diagram on page $19. \,$
- $14.\ \,$ 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 marrow 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.



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- A. Check all boits for proper torque.
- B. Check scraper adjustment. Scrapers should be adjusted to run 1/16" to 1 1/8" from disk blades.

C. <u>Lubrication</u>

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 racheting jack on gauge wheels.
- D. Check decals to be certain they are in place and in good condition. Touchup 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.

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, and ratchet jack on gauge wheels 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 permenantly lubricated ball bearings. No further lubrication is necessary.

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.

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 disk 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 disk 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 fait 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 overturned forward or backward accidently.

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 depths settings pushes the soil and may cause bulldozing in front of the gangs. Vary the gang angle to suite 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 mar 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.
- 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.
- Never allow unsafe conditions or operating practices. Your safety is of prime importance.
- Reduce operating speed in areas containing stumps or rocks to reduce blade breakage.
- 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.
- Do not run with loose disk 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.
- 4. Disk 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.
 - 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 replace.
 - G. Carefully check all end bells. The large end musticontact the disk 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.
 - 1. 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. Rotate the bearing in the housing after it is pressed in to be sure it turns freely. Install the snap ring in the housing.
 - M. 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 disk blade. The 1 1/8" gang bolt nut should be torqued to 800 ft./lbs. The axle nut should be locked in place with the lock strap.
 - N. 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.

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

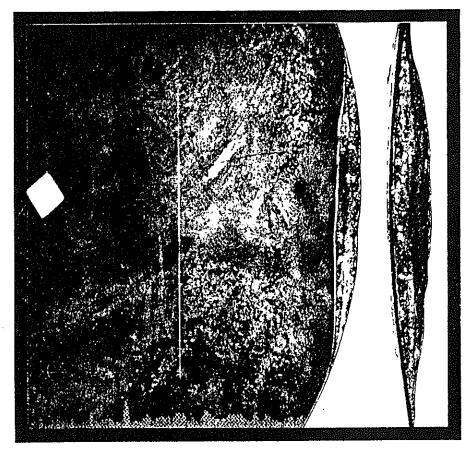
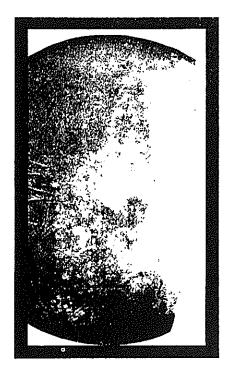


FIGURE 2 — Straight directional break caused by defective steel. Eligible for warranty consideration.



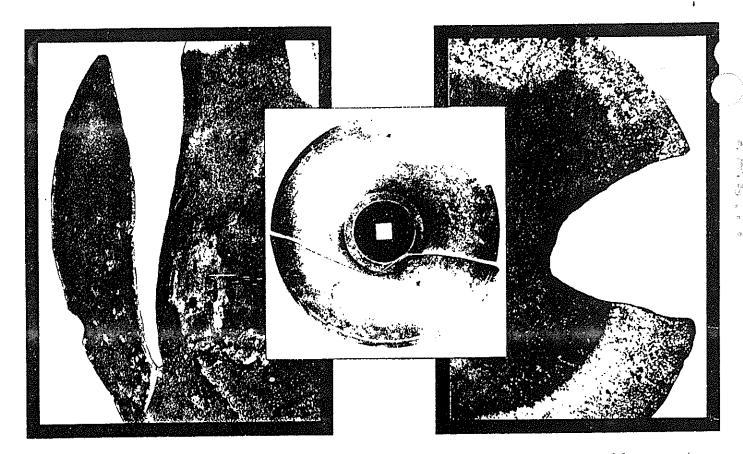


FIGURE 3, 4, 5 — Irregular breaks caused by contact against rocks or stumps. Not covered by warranty.



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 show that this is usually caused by loose bolts, excessive flexi or by contact with rocks and stumps. Not covered by warranty.