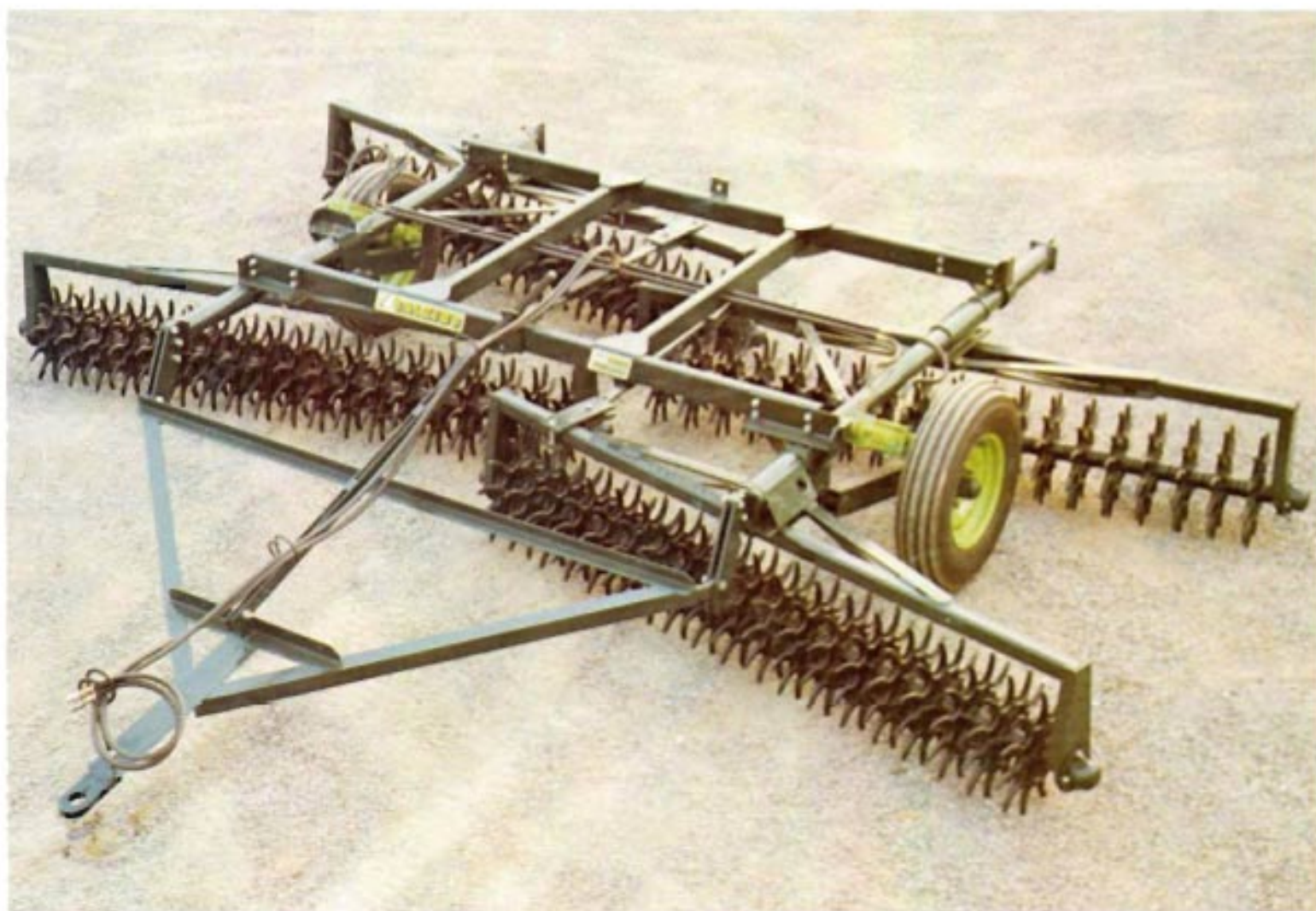




TANDEM SKEW TREADER

Since 1923

... Constant Progress in Agricultural Machinery



- Hitch either end for forward or reverse operation
- Flex gangs for level operation
- Easily adjusted in field
- Transportable with hydraulic lift
- 76-18" cast steel spider wheels

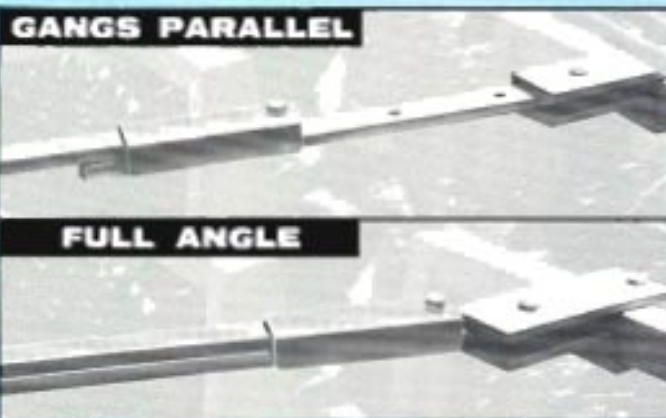


EASY ADJUSTABLE GANGS

Heavy torsion bar between gangs is easy to position — pick the hole for the desired angle — one bolt holds it.

Position one torsion bar on top of the other to get a uniform job of tillage.

When you reverse direction of pull, reverse the bars. It's that easy.



1100 SERIES 36' HITCH

For multiple hitching three 16' skew treaders



- Stiff hitch
- Castering, wheels with 7.60 x 15 tires
- Folds to 8' width for transporting
- Pull points and jockey bar kit for hitching three skew treaders

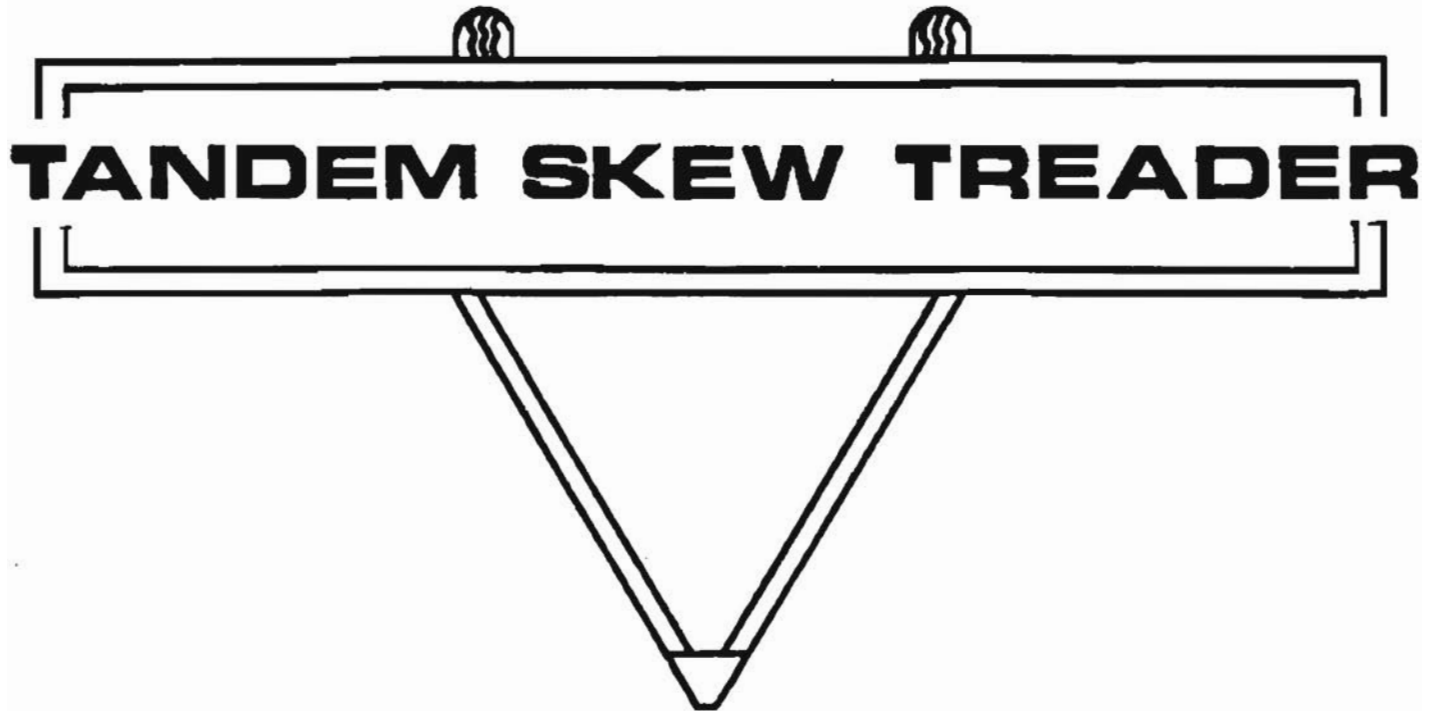
1101 SERIES 16' HITCH

For multiple hitching two 16' skew treaders



- 9.50 x 8 hi flotation wheels and tires. Steel tubular construction ...
- Stiff hitch or optional hydraulic hillside control ...
- Stiff hitch unit convertible to hydraulic as field installation ...
- All caster wheels rotate 360° ...
- Pull points and jockey bar kit for hitching two skew treaders ...

**ASSEMBLY INSTRUCTIONS
and Operator's Manual**



1991



CALKINS MANUFACTURING COMPANY

**ALL NEW CALKINS PRODUCTS ARE SOLD
SUBJECT TO THE FOLLOWING WARRANTY**

LIMITED WARRANTY

The Calkins Manufacturing Company, hereafter called Company, warrants new Calkins products to the original purchaser for one season's use after the date of purchase.

Normal procedure for a warranty request will be for the item in question to be returned to the Company freight prepaid. If determined defective by the Company, it will be repaired or replaced and returned freight collect.

It is understood that this type program may not always be practical from the standpoint of distance and/or time. At the Company's option, if workmanship and/or material is determined to be defective, the Company will arrange for the dealer to make repairs at the dealer's business location. (It is understood that the purchaser will pay dealer for travel and expenses if purchaser chooses to have dealer repair said product at another location.)

This warranty shall not apply to any part of said product which in the judgment of the Company has been subjected to misuse, negligence, alteration, or accident, or which has served its normal wear life. In no event shall the Company be liable for consequential damage of any kind or nature. The Company makes no warranty whatsoever with respect to tires and tubes, and trade accessories not manufactured by the Company, although these items may be warranted by their respective manufacturers.

The placing upon any Calkins product of any attachment or equipment not manufactured and sold by the Company, or authorized by it, shall operate to void and waive any warranty whatsoever by the Company. This warranty is in lieu of all other warranties and conditions, express, implied, or statutory, and all other obligations or liabilities on the part of the Dealer and Company. No representative of the Company has authority to change the terms of this warranty in any manner whatsoever and no assistance to Purchaser by the Company in the repair or operation of the product shall constitute a waiver of the conditions of this warranty, nor shall such assistance extend or revive it. This warranty does not apply to used or second-hand machines.

Except as set forth above, Calkins shall not be liable for injuries or damages of any kind or nature, direct, consequential, or contingent, to person or property. Warranty does not apply to loss of crop, or loss of time, rental, substitute machinery, or for any other reason.



CALKINS MANUFACTURING COMPANY

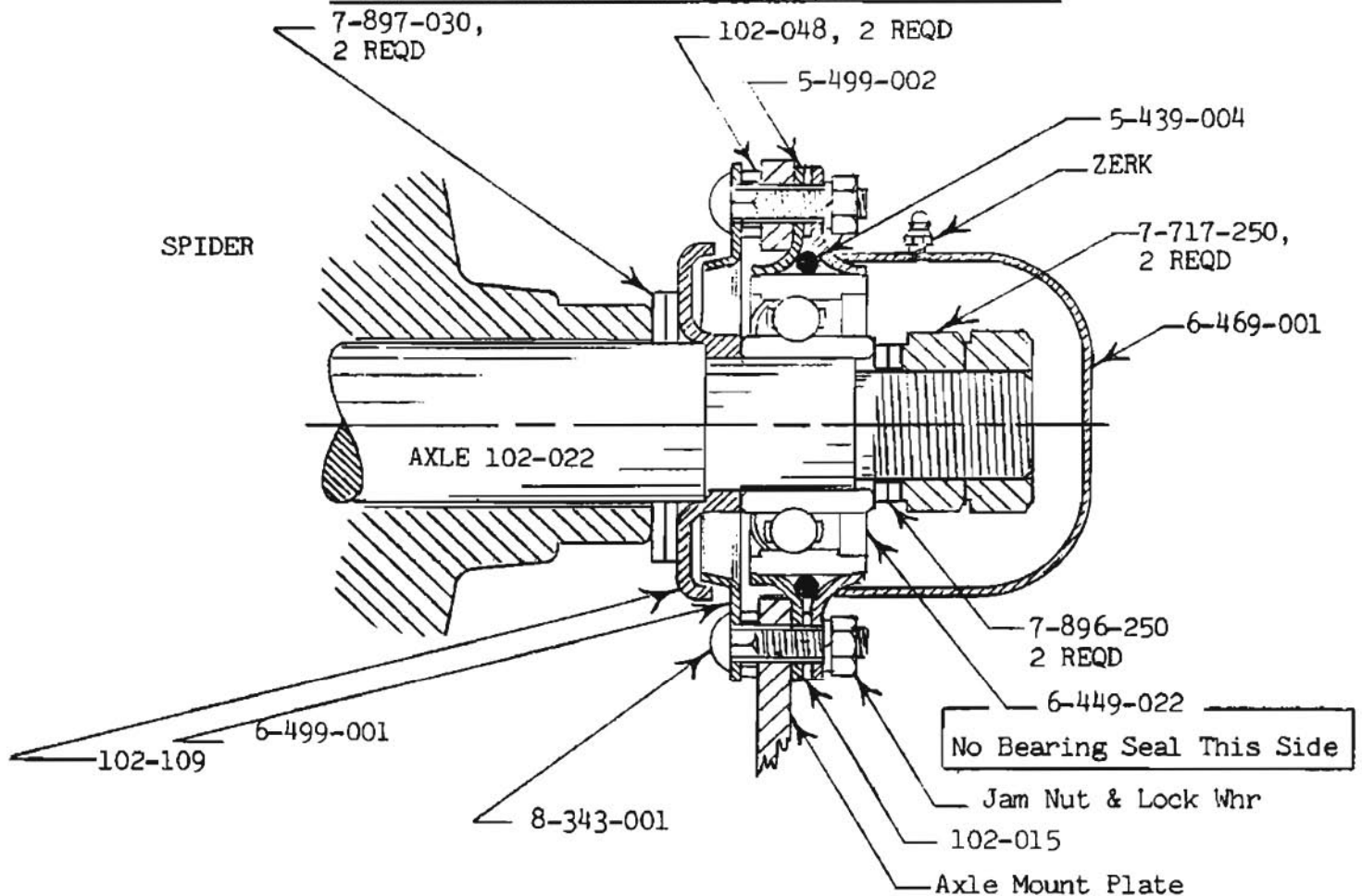
SPOKANE INDUSTRIAL PARK, BLDG. 15, SPOKANE, WA 99214

Phone (509) 928-7420

SKEW TREADER

MODEL 1102-716

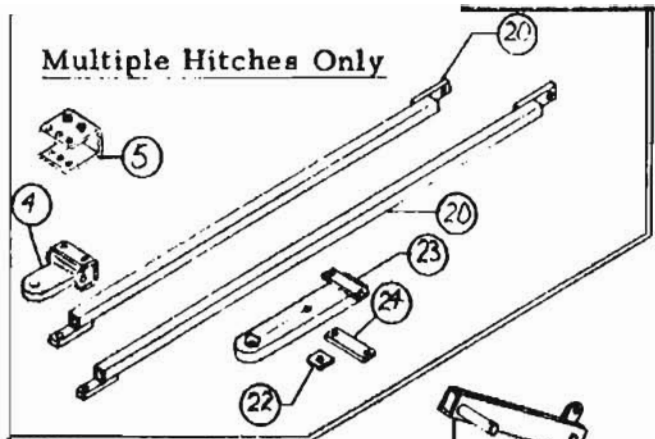
New Departure Bearing Assembly Parts Sheet



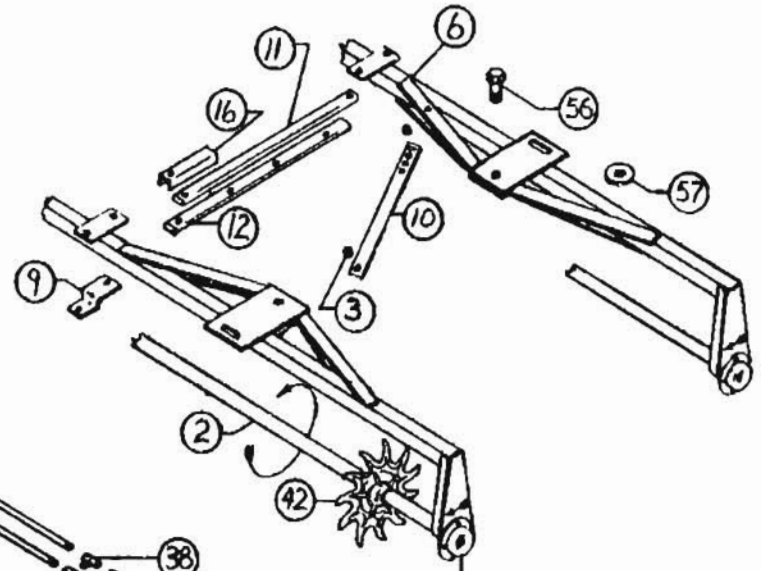
102-015	Shim, between bearing flanges
102-048	Spacer Bushing for 6-499-001
102-109	Mechanical Seal axle side
5-439-004	O-ring
5-449-022	Bearing, NEW DEPARTURE
5-499-002	Flange, bearing
6-469-001	Hub Cap
6-499-001	Mechanical Seal, bearing side
7-724-100	1/2" Jam nut,
7-896-250	Machine bushing, 1-7/8" 10fa NRMB
8-343-001	Special carriage bolt, 1/2 x 1 1/2"
7-843-015	1/2 Lock Washer

Calkins

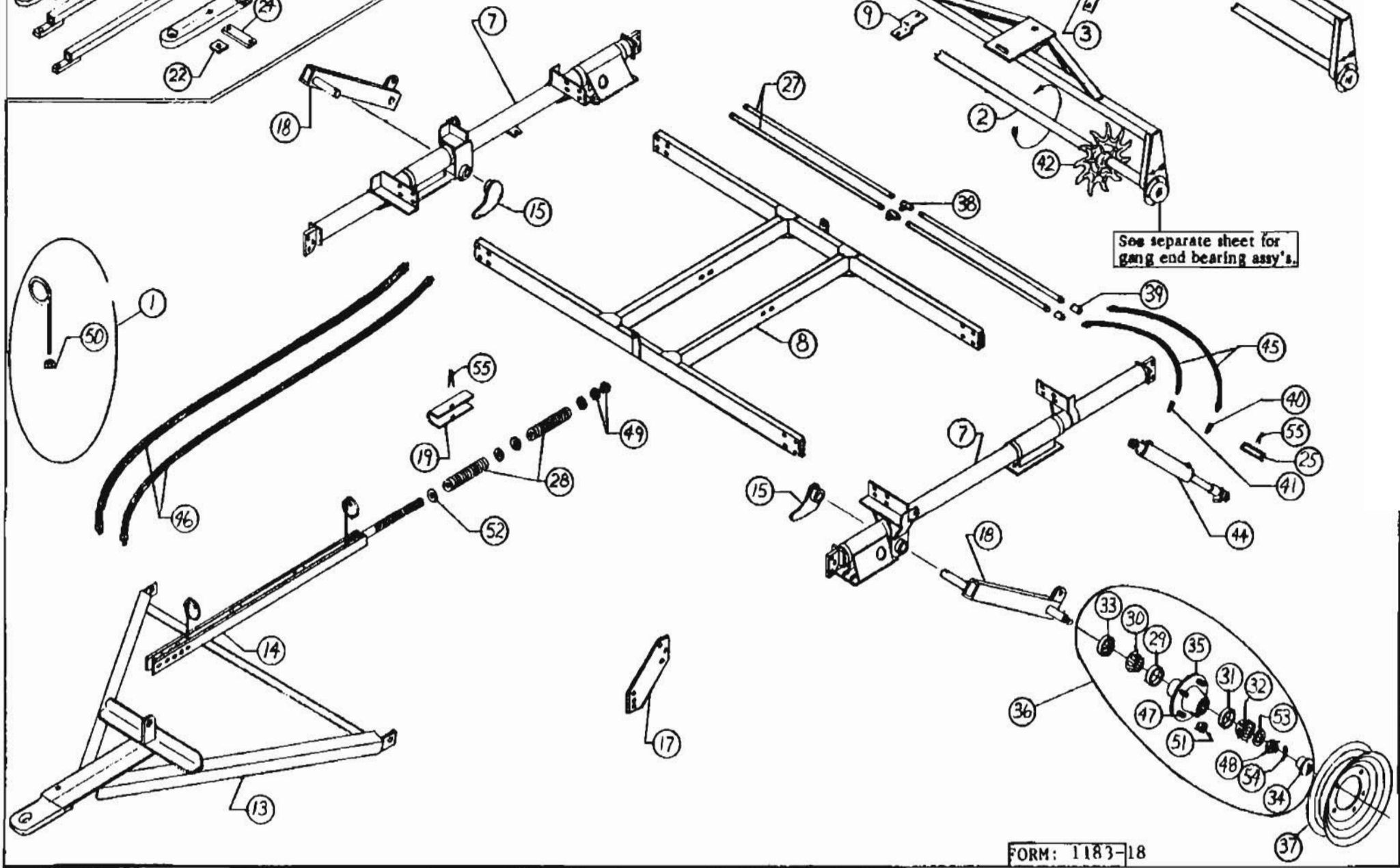
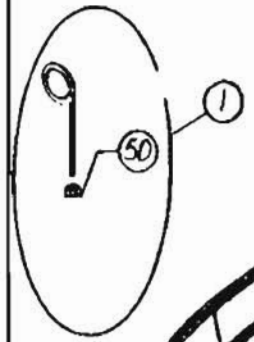
Multiple Hitches Only



SKEW TREADER
Model - 1102 - 71b



See separate sheet for gang end bearing assy's.



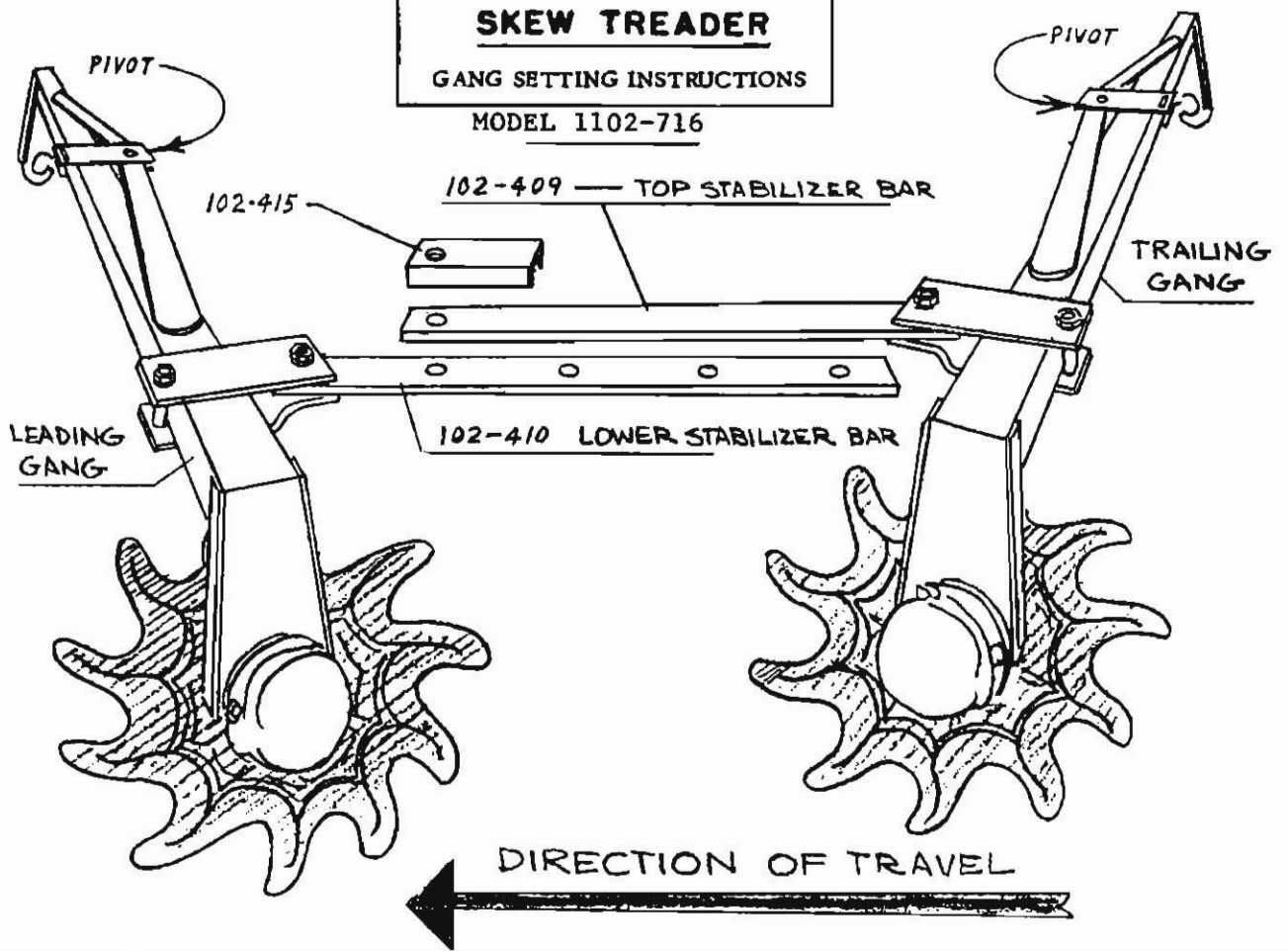
REF.	DESCRIPTION	PART NO.	REF.	DESCRIPTION	PART NO.	REF.	DESCRIPTION	PART NO.
1	HOSE MAST ASS'Y.	101-037				54	COTTER PIN, 1/8" x 1-1/2"	7-910-150
2	AXLE	4 Req'd. 102-022	27	HYD. PIPE, FRAME	4 Req'd. 106-424	55	HITCH PIN, #8	2 Req'd. 7-920-002
3	BUSHING	4 Req'd. 102-026	28	SPRING	5-119-001	56	CAPSCREW, 3/4" x 2-3/4 NF Drilled	8-115-007
4	HITCH CONNECTOR, 2-1/2" Sq. HITCH CONNECTOR ASS'Y., 4" Sq. (Includes two 102-111 Spacer Plates)	102-057 102-107	29	CUP	5-419-141	57	WASHER	8-834-002
5	CLAMP, HITCH CONNECTOR 2-1/2" Sq. PLATE, (2 Req'd.) 4" Sq.	102-058 102-110	30	CONE	5-419-142			
6	FRAME, GANG	Right Rear 102-400 Right Front 102-401 Left Front 102-402 Left Rear 102-403	31	CUP	5-419-112			
7	SIDEMEMBER	Right 102-404 Left 102-405	32	CONE	5-419-113			
8	FRAME	102-406	33	SEAL	5-439-141			
9	CLAMP	4 Req'd. 102-407	34	CAP	5-469-006			
10	STABILIZER BAR	2 Req'd. 102-408	35	HUB	5-619-022			
11	SPRING STRAP	2 Req'd. 102-409	36	HUB ASS'Y.	5-619-021			
12	SPRING STRAP	2 Req'd. 102-410	37	RIM, 15" x 6", 6 BOLT	5-639-501			
13	HITCH	102-411	38	PIPE TEE, 1/2" x 1/2"	2 Req'd. 5-833-100			
14	STIFF HITCH (ASSY 102-540)	102-412	39	COUPLING, 1/2"	2 Req'd. 5-843-100			
15	GANG--LOCK BRKT.	Right 102-413 Left 102-414	40	ST. UNION, 1/2"	5-843-400			
16	CLAMP, SPRING	2 Req'd. 102-415	41	RESTRICTOR UNION	5-843-455			
17	HITCH MOUNT EXT.	4 Req'd. 102-416	42	SPIDER WHEEL, 18" 76 Req'd.	5-919-510			
18	WHEEL LEG, LEFT (ASSY 102-605) RIGHT (ASSY 102-600)	102-141 102-140	43		6-671-100			
19	TRANSPORT BLOCK SPRING	2 Req'd. 102-425	44	HYD. CYL. w/SCREW STOP (3-1/2" x 8")	6-818-002			
20	JOCKEY BAR	Short 102-427 Long 102-428 Extra Long 102-433	45	HYD. HOSE, 3/8" x 28-1/2 MM	6-822-228			
22	SPACER, HITCH EXT.	102-429	46	HYD. HOSE, 3/8" x 13'-1/2" MM	6-822-356			
23	PULL, HITCH EXT. Long Extra Long	102-430 102-432	47	LUG BOLT, WHEEL	6 Req'd. 7-333-001			
24	BRACKET, HITCH EXT.	102-431	48	NUT, 3/4" NF, SLOTTED HEX	7-715-850			
25	BLOCK, TRANSPORT, HYD. CYL.	106-093	49	NUT, JAM 3/4" N.G.	7-725-105			
			50	HIGH NUT, 1/2" 2 REQUIRED	7-723-015			
			51	LUG NUT, WHEEL	6 Req'd. 7-733-001			
			52	WASHER, 3/4" SAE	4 Req'd. 7-815-020			
			53	WASHER	7-815-025			

SKEW TREADER
Model 1102-716

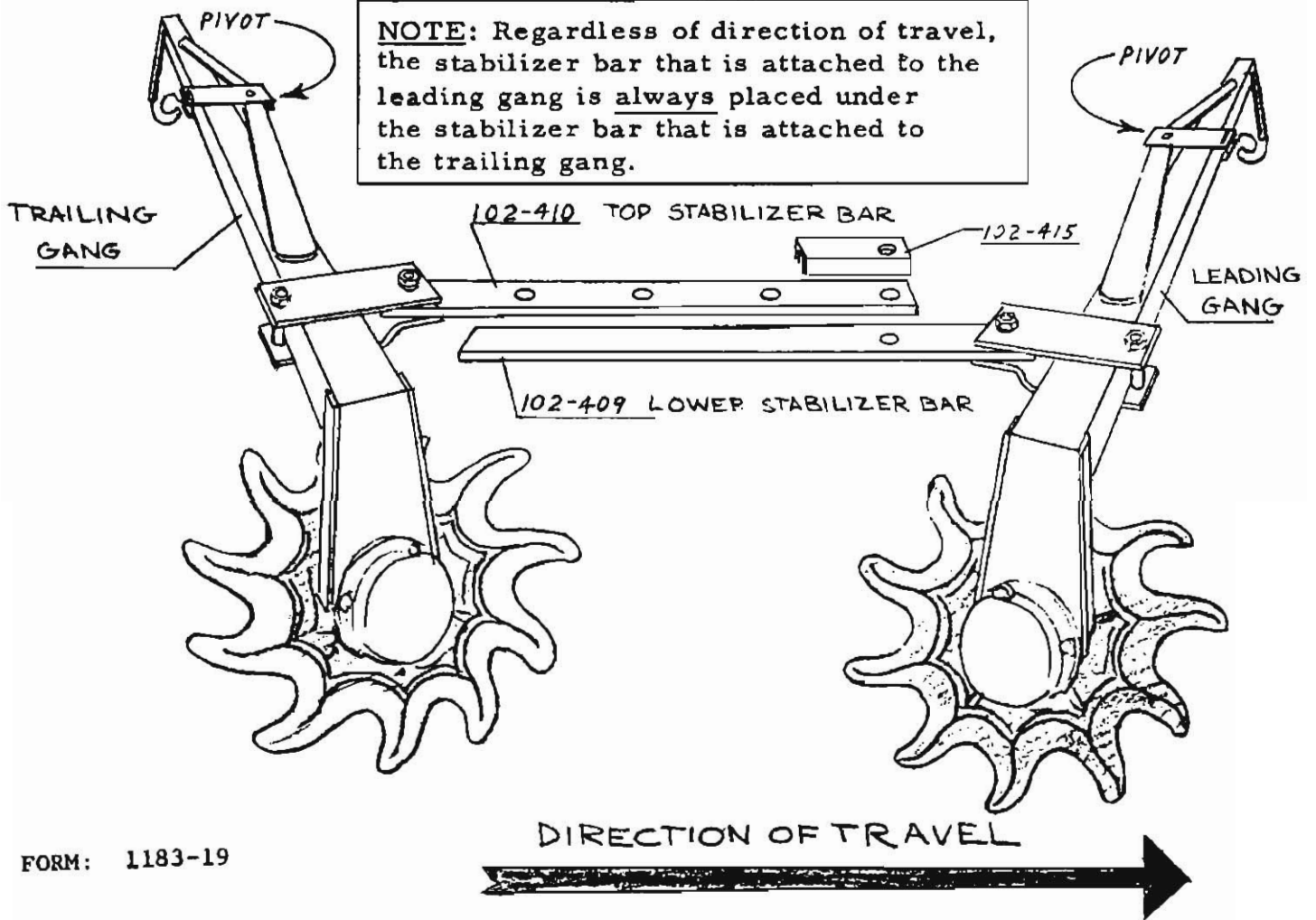
SKEW TREADER

GANG SETTING INSTRUCTIONS

MODEL 1102-716



NOTE: Regardless of direction of travel, the stabilizer bar that is attached to the leading gang is always placed under the stabilizer bar that is attached to the trailing gang.

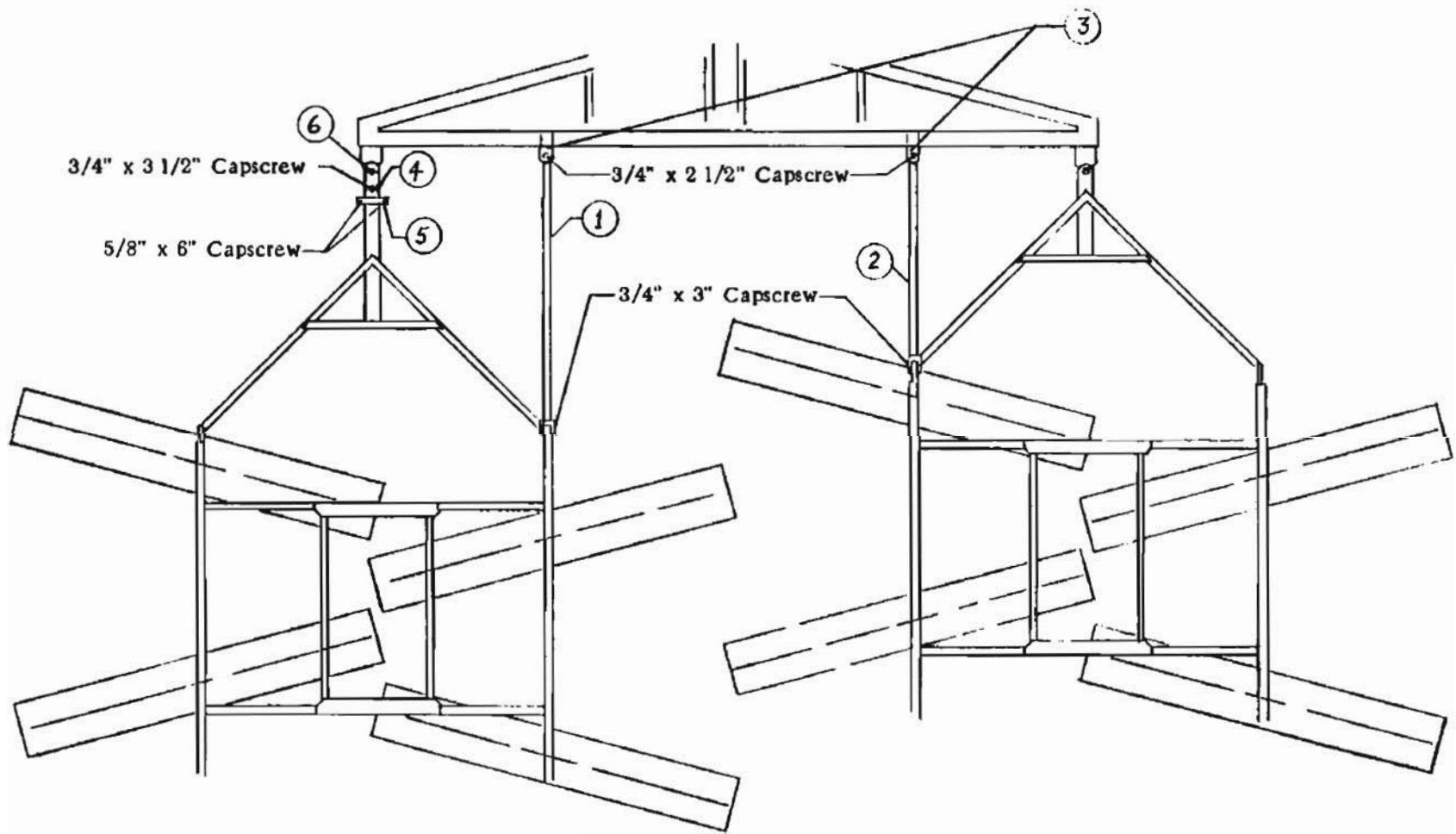


**TONGUE EXTENSION
AND
JOCKEY BAR KIT**

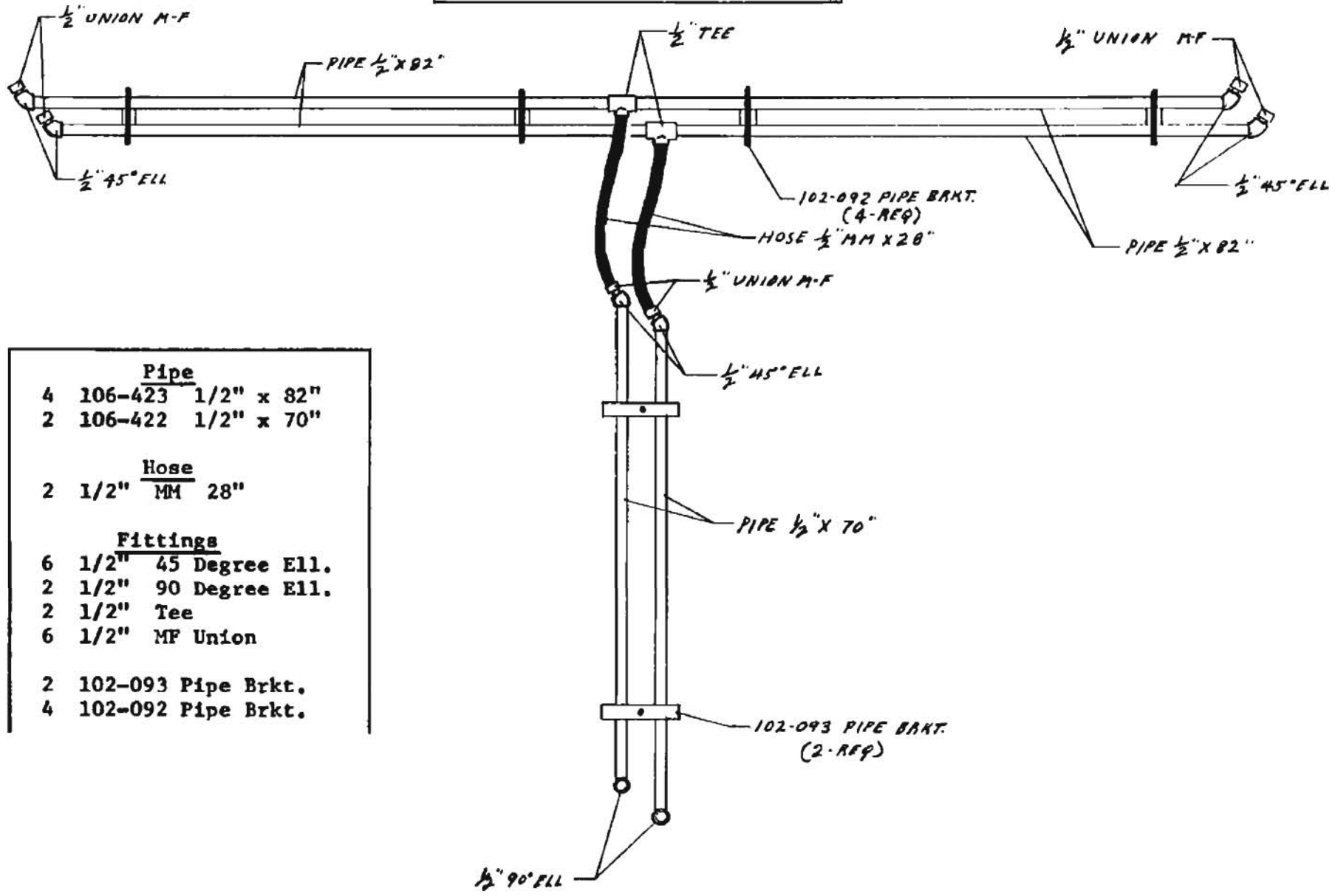
For

Two 1102-716skew Treaders

<u>REF.</u>	<u>DESCRIPTION</u>	<u>PART NO</u>
1	JOCKEY BAR Long	102-428
2	JOCKEY BAR Short	102-427
3	HITCH CONNECTOR	102-057
	CLAMP Hitch Connector	102-058
4	WASHER	102-429
5	BRACKET Hitch Extension	102-431
6	HITCH EXTENSION	102-430

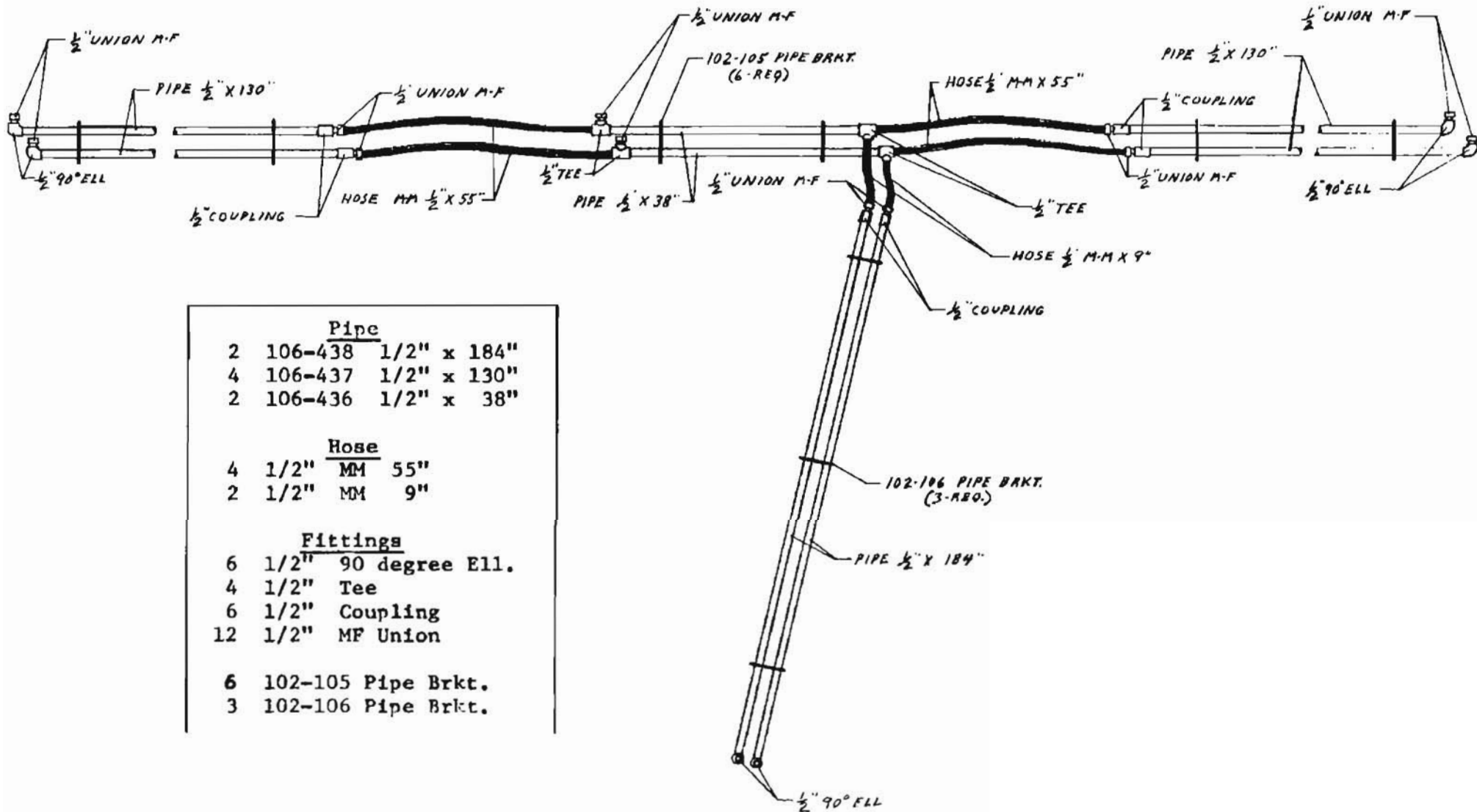


HYDRAULIC SCHEMATIC
FOR HITCHING TWO 1102-716 READERS
TO
1101-116 HITCH



<u>Pipe</u>	
4	106-423 1/2" x 82"
2	106-422 1/2" x 70"
<u>Hose</u>	
2	1/2" MM 28"
<u>Fittings</u>	
6	1/2" 45 Degree Ell.
2	1/2" 90 Degree Ell.
2	1/2" Tee
6	1/2" MF Union
2	102-093 Pipe Brkt.
4	102-092 Pipe Brkt.

HYDRAULIC SCHEMATIC
FOR HITCHING THREE 1102-716 TREADERS
TO
1100-136 HITCH



Pipe	
2	106-438 1/2" x 184"
4	106-437 1/2" x 130"
2	106-436 1/2" x 38"

Hose	
4	1/2" MM 55"
2	1/2" MM 9"

Fittings	
6	1/2" 90 degree Ell.
4	1/2" Tee
6	1/2" Coupling
12	1/2" MF Union

6	102-105 Pipe Brkt.
3	102-106 Pipe Brkt.

TONGUE EXTENSION
AND
JOCKEY BAR KIT

For

Three Skew Treaders

Calkins

**TONGUE EXTENSION
AND
JOCKEY BAR KIT**

For

Three 1102-618 Skew Treaders

REF.	DESCRIPTION	PART NO.
1	JOCKEY BAR, Short	102-421
2	JOCKEY BAR, Long	102-428
3	JOCKEY BAR, Xtra Long	102-433
4	HITCH CONNECTOR Ass'y (Includes two 102-111 Spacer Plates) PLATE, Two Req.	102-107 102-110
5	BRACKET, Hitch Extension	102-431
6	WASHER	102-429
7	HITCH EXTENSION, Long	102-430
8	HITCH EXTENSION, Xtra Long	102-432
9	FULL POINT ASS Y	102-600

