



CULTA-WEEDER

**1500 SERIES
ROD WEEDER**

Since 1923 . . . Constant Progress in Agricultural Machinery



PHONE (509) 928-7420

 **CALKINS** MANUFACTURING COMPANY

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



**CALKINS
3 SECTION
CULTA-WEEDER**

Available Sizes	Center Section	Wings	No. of Shanks (Standard)
26'	12'	7'	21
33'	12'	10½'	25
36'	12'	12'	27



**CALKINS
5-SECTION
CULTA-WEEDER**

Available Sizes	OUTER WING	INNER WING	CENTER SECTION	INNER WING	OUTER WING	NO. OF SHANKS (STANDARD)
47'	7'	10½'	12'	10½'	7'	34
50'	7'	12'	12'	12'	7'	37
54'	10½'	10½'	12'	10½'	10½'	41
57'	10½'	12'	12'	12'	10½'	43
60'	12'	12'	12'	12'	12'	45

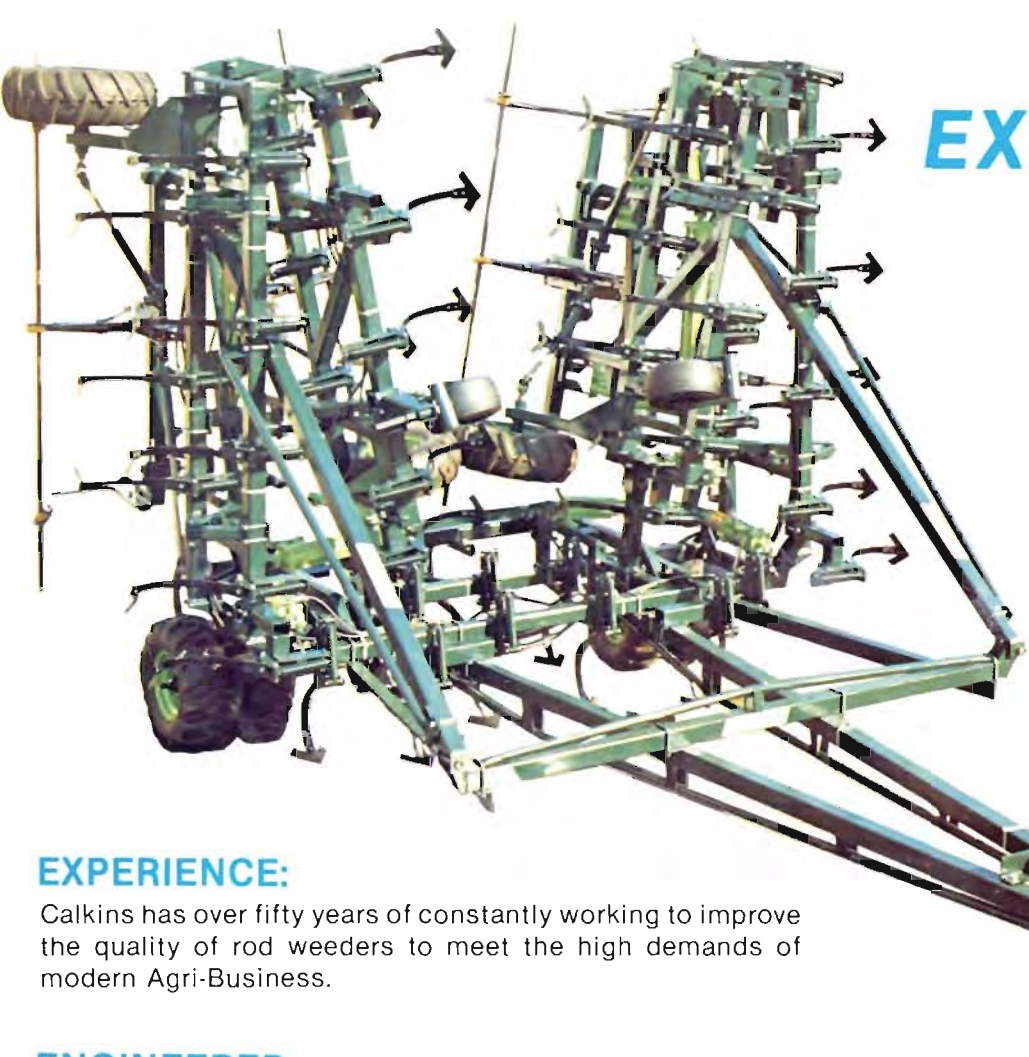


CALKINS MULTI-USE ROD WEEDER

Calkins Rod-Weeders are equipped with in line hydraulic lift cylinders allowing the same machine to be operated as a one, three or five section tool. By folding the outer wings and equipping the three center sections with shanks the machine may be used as a three section Culta-Weeder. For later Rod-Weeder operations rotate the shanks out of the ground and lower the outer wings for full five section use.

Easy wing fold for transport

1. A unique wing-lift design; weight is carried low for easy transport.
2. Folds into transport position from the tractor cab.
3. Can be raised or lowered in any position.
4. Center section dual wheels for stable safe transport.
5. Positive wing and frame transport locks.



EXPERIENCE .

Engineered for today's tractor power!

Ask your local Calkins dealer for a demonstration of the rod weeder that was engineered for today's farmer.

EXPERIENCE:

Calkins has over fifty years of constantly working to improve the quality of rod weeders to meet the high demands of modern Agri-Business.

ENGINEERED:

Field Engineered where the properly designed tool must have the strength to withstand the rugged conditions and speed encountered with today's big tractor power.



The Calkins Culta-Weeder is equipped with stiff lead arms and spring loaded backbones. With the lead arms bolted securely to the frame the weight of the machine can be utilized in hard ground conditions for superior penetration.



The 1500 Series Rod-Weeder is equipped with floating lead arms and spring loaded backbones. The floating lead arm allows the rod to follow the ground level over high spots and drop to weed the lower areas plus maintaining the proper depth in soft ground conditions.

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MANUFACTURING COMPANY

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FIELD POSITION



ROTATED POSITION

CALKINS **CULTA-WEEDER**

Standard equipment . . . Two rows of heavy duty, spring loaded, rotating shanks

SPECIFICATIONS

- Frame and Tongue — 4" x 4" Square Tube with ¼" Wall
- Weeding Rod — 1" Square, High Carbon
- Clearance — 26" Frame to Rod
- Goosenecks — High Carbon, Heat-Treated Steel
- U-Joints — 1¼" 20 H.P.
- Drive Lines — 1¼" Square
- Boot Drive Chain — Special Hard Roller
- Hubs, Spindles, and Bearings — Extra Heavy Duty
- Drive Boots — One Each Section
- 6 Bolt Hubs — Wheels
- Tire Size: 12.5L x 15 hi-cleat tire
- Weeder Section: Spring loaded 4" x 4" sq. tubing
- Shank: ½" x 1¾" Spring Steel
- Shank Clearance: 24" Frame to Point
- Weight: 202 per ft.
- Transport Height: 15' 2"

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Why you need a NEW CALKINS CULTA-WEEDER OR 1500 SERIES ROD WEEDER

- Stiff hitch
- Simple quick transport
- Precise hydraulic control of rod depth
- High trash clearance
- Flexibility
- 7' 10½' or 12' sections
- Outstanding rock machine characteristics
- Common wear parts
- Large servicing dealer organization
- A half century of advanced Calkins engineering

CALKINS CULTA-WEEDER

WITH STIFF LEAD ARMS AND SPRING LOADED BACK BONES, TWO ROWS OF CULTIVATOR SHANKS

STANDARD EQUIPMENT

4" x 4" Sq. Tube Frame and Tongue
Hyd. Wing Lift w/Hyd. Cyls.
12.5L x 15 Hi-Cleat Tires
In Line Series Hyd. Lift System
Two Rows Calkins Heavy Duty Rotating Shanks
with 3/16" x 9" Sweeps
Spring Loaded 4" x 4" Sq. Tube Weeder Sections
Dual Drive Boots
1" Sq. Weeder Rods
Hose Mast
Depth Stop Kit
Tongue Jack
Hose to Tractor

OPTIONAL EQUIPMENT

Point Reversible 3/8" x 1 3/4" x 12"
Sweep 1/4" x 9"
Sweep 1/4" x 9" Hard Surfaced
7/8" Rod (in lieu of 1")
Forward Mounted, Castoring, Wing Flotation Wheels
Boot Cover
High Chrome Wear Parts
Rock Boot Point and Gooseneck Shoes
Harrow Attaching Kits

1500 SERIES CALKINS ROD WEEDER

WITH FLOATING LEAD ARMS AND SPRING LOADED BACK BONES

STANDARD EQUIPMENT

4" x 4" Sq. Tube Frame and Tongue
Hyd. Wing Lift w/Hyd. Cyls.
12.5L x 15 Hi-Cleat Tires
In Line Series Hyd. Lift System
Spring Loaded 4" x 4" Sq. Tube Weeder Sections
Dual Drive Boots
1" Sq. Weeder Rods
Hose Mast
Depth Stop Kit
Tongue Jack
Hose to Tractor

OPTIONAL EQUIPMENT

Tiller Wheel Brackets
Pneumatic Tiller Wheels 570 x 8 4-ply
Pneumatic Tiller Wheels 18-950 x 8 4-ply
7/8" Rod (in lieu of 1")
Forward Mounted, Castoring, Wing Flotation Wheels
Boot Cover
High Chrome Wear Parts
Rock Boot Point and Gooseneck Shoes
Harrow Attaching Kits

CALKINS
MANUFACTURING COMPANY

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

**ASSEMBLY INSTRUCTIONS
and Operator's Manual**



**Calkins Culta - Weeder and
1500 Series Rodweeder**



3 Section

1988



CALKINS MANUFACTURING COMPANY

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

Phone (509) 928-7420

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

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Calkins Delivery Record

CULTA-WEEDER OR 1500 SERIES ROD WEEDER

THIS FORM MUST BE FILLED OUT, IN TRIPPLICATE, BY THE DEALER AND SIGNED BY THE CUSTOMER AT TIME UNIT IS DELIVERED.

DELIVERED TO _____ DEALER _____

R. R. No. _____ BOX No. _____ TOWN _____

TOWN _____ SERIAL No. _____

STATE _____ MODEL _____ SIZE _____

PHONE _____ SERVICED BY _____

EXPLAIN CARE, SAFE OPERATION AND ADJUSTMENTS OF ITEMS LISTED BELOW:

- | | |
|---|---|
| <input type="checkbox"/> TRACTOR HYDRAULIC SYSTEM | <input type="checkbox"/> FIELD ADJUSTMENTS |
| <input type="checkbox"/> LUBRICATION | <input type="checkbox"/> MAINTENANCE |
| <input type="checkbox"/> WHEEL BEARING ADJUSTMENT | <input type="checkbox"/> STORAGE |
| <input type="checkbox"/> TIRE PRESSURE | <input type="checkbox"/> OPERATORS SAFETY PRECAUTIONS |
| <input type="checkbox"/> BOLTS PROPERLY TIGHTENED | <input type="checkbox"/> |
| <input type="checkbox"/> TRANSPORTING PROCEDURE | <input type="checkbox"/> |
| <input type="checkbox"/> FIELD OPERATION | |

REMARKS: _____

YOUR ROD WEEDER HAS BEEN SET UP, LUBRICATED AND ALL POSSIBLE PRE-DELIVERY SERVICE HAS BEEN COMPLETED.

FURTHER OPERATIONAL ADJUSTMENTS CAN ONLY BE CORRECTLY MADE WHEN MACHINE IS PUT TO WORK IN THE FIELD.

YOU ARE REQUESTED TO ADVISE WHEN WEEDER WILL START TO WORK SO DEALER REPRESENTATIVE CAN BE ON HAND TO MAKE NECESSARY FIELD ADJUSTMENTS AND HELP YOU GET STARTED RIGHT.

THIS IMPLEMENT HAS BEEN DELIVERED TO ME IN GOOD CONDITION AND I HAVE BEEN INSTRUCTED IN ITS CARE, ADJUSTMENT AND SAFE OPERATING PRACTICES.

DELIVERED BY _____
Dealer

BY _____ OWNER
Date OPERATOR Signature



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| <input type="checkbox"/> BOLTS PROPERLY TIGHTENED | <input type="checkbox"/> |
| <input type="checkbox"/> TRANSPORTING PROCEDURE | <input type="checkbox"/> |
| <input type="checkbox"/> FIELD OPERATION | |

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DELIVERED BY _____
Dealer

BY _____ OWNER
Date OPERATOR Signature



Galkins Delivery Record

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DELIVERED TO _____ DEALER _____

R. R. No. _____ BOX No. _____ TOWN _____

TOWN _____ SERIAL No. _____

STATE _____ MODEL _____ SIZE _____

PHONE _____ SERVICED BY _____

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| <input type="checkbox"/> TIRE PRESSURE | <input type="checkbox"/> OPERATORS SAFETY PRECAUTIONS |
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DELIVERED BY _____
Dealer

BY _____ OWNER
Date OPERATOR Signature

Sheet1

The new 1500 series lead arms utilize the CW9-017 spring rods which allows for adjustable spring rates. This was accomplished by moving the angle bracket 2 3/4" forward. The most obvious difference is that the tube end is now capped off.

WAS	IS
410-056	410-183
410-057	410-184
410-070	410-185
410-071	410-186
410-136	410-187
410-137	410-188
410-150	410-189
410-151	410-190

Calkins Culta - Weeder and 1500 Series Rodweeder

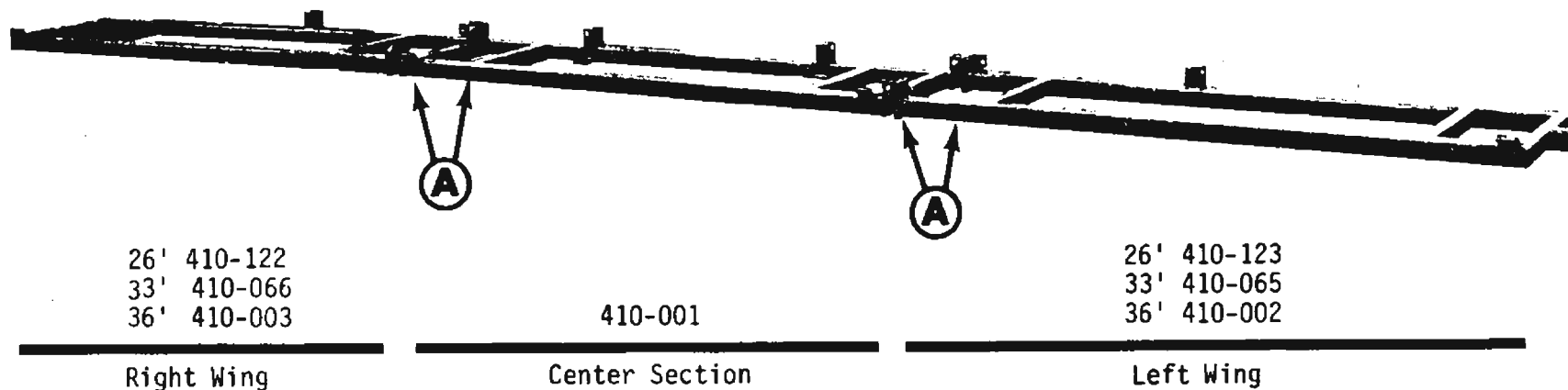
3 Section

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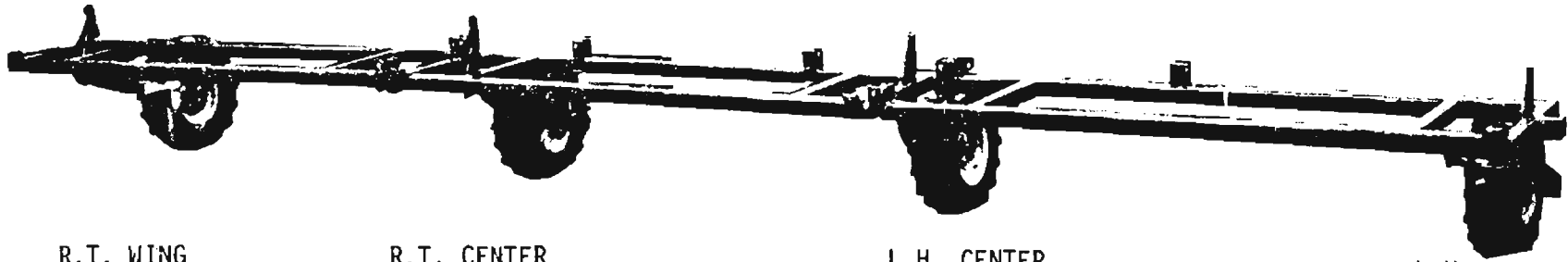
ASSEMBLY INSTRUCTIONS CULTA-WEEDER OR 1500 SERIES ROD WEEDER

The assembly of your new Calkins RODWEEDER is relatively simple. Some of the components have been preassembled to help speed your set up time. Following is the sequence that will make the final assembly easiest for you.

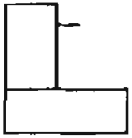


- 1) Suspend center frame and wings on mounts high enough that wheel legs can be lowered to down position.
- 2) Open frame and tongue bolt sack #410-500
- 3) A.) Attach wing to center section at hinge point with ; Bolt 1-1/4-12NF x 6-5/8 with slotted hex nut & cotter pin.

REAR

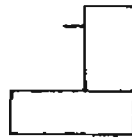


R.T. WING
Wheel Leg



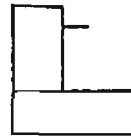
410-515

R.T. CENTER
Wheel Leg



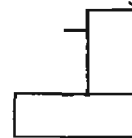
410-513

L.H. CENTER
Wheel Leg



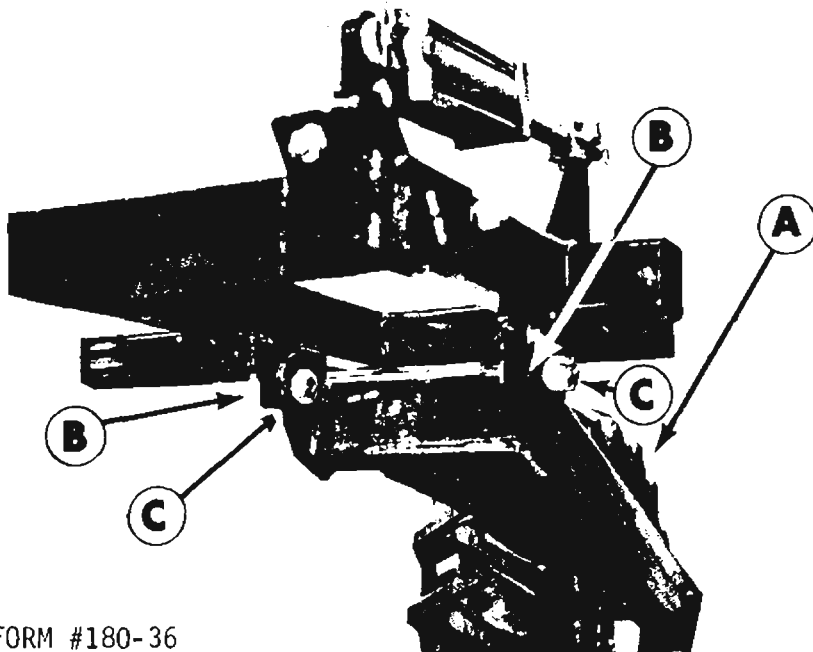
410-514

L.H. WING
Wheel Leg



410-516

- 4) Open wheel leg bolt sack #410-503
- 5) Install wheel legs and tires
When mounting tires to wheel legs, be sure to add drive basket to wing wheel legs with longer lug bolts which are provided in wheel hubs.



WARNING!

- A) When mounting tires be sure tire cleats are all headed in the same direction on all wheel leg assemblies as shown in photo. Valve stem should be on lug bolt side when mounting.

- B) Be sure to grease at time of assembly!
Advise customer to grease each wheel leg daily during normal field operations.

- C) 1 1/4" x 3 1/4" N.F. Bolt
1 1/4" x NF Light Slotted Nut
3/16" x 1 3/4" Cotter Pin
1 1/4" 10 Ga. Bushing
1 1/2" O.D. x 1 7/16" L x 1 9/32" I.D. Bushing



MFG. AB 1262
Calkins #5-818-056



MFG. AB 1256
Calkins #5-818-057



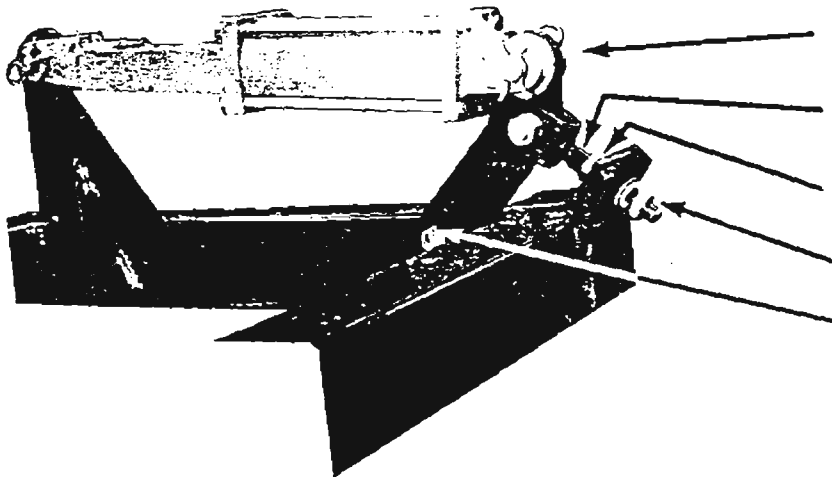
MFG. AB 1250
Calkins #5-818-058



MFG. AB 1268
Calkins #5-818-055
With Bushing

6) Install Hydraulic Cylinders.

- A. Do not add hoses or fittings to the cylinders until the shanks have been installed.
- B. This is an in-line hyd. system and hyd. cyls MUST be properly located.
- C. Be sure cylinder ports are on the top of the cylinder.
- D. Cylinder depth stops can be installed at this time in place of machine stands.



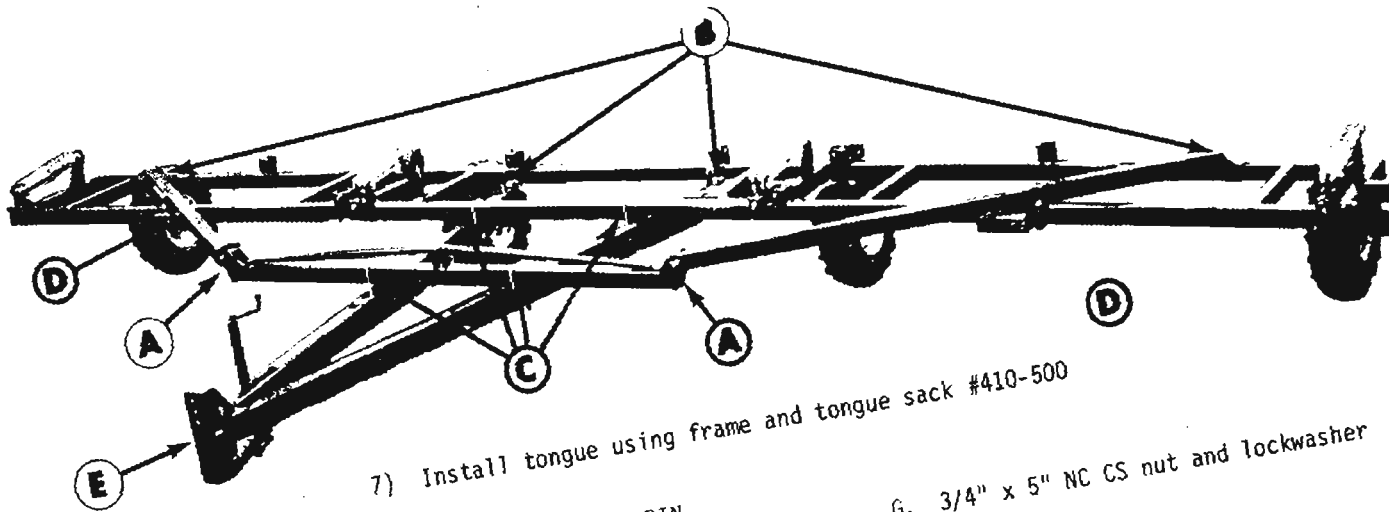
1" Cut Washers are used to reduce space
in Cylinder Base Mount

Always install 410-581 adjustable linkage so the bushing is up
tight against the clevis as in photo

1 - 7/8" Full N.C. Nut

2 - 7/8" Jam Nut

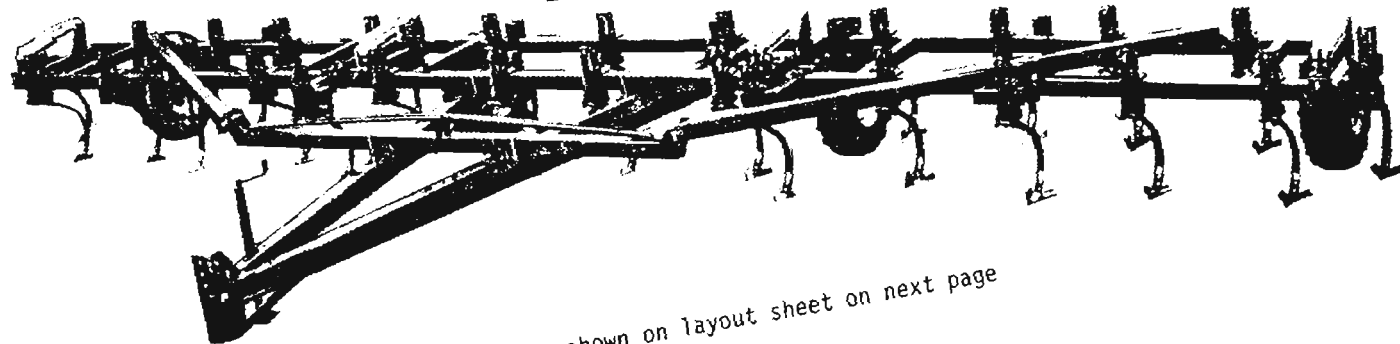
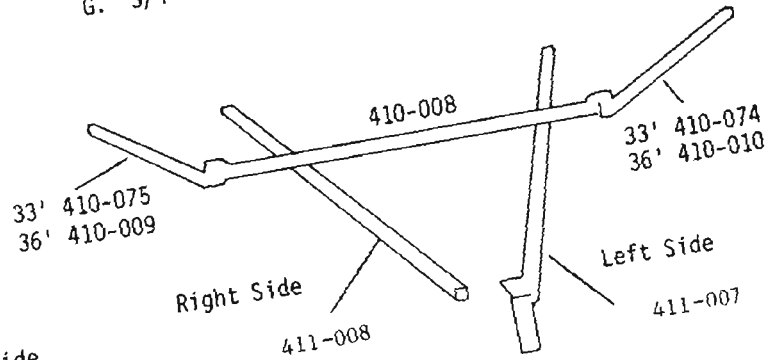
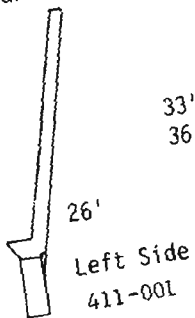
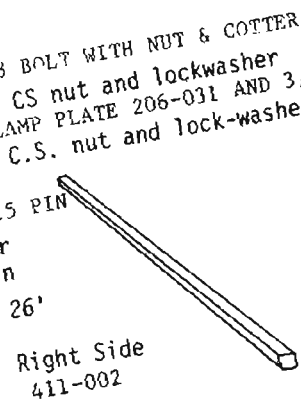
3/4" x 5" NC CS, Nut and Lockwasher



7) Install tongue using frame and tongue sack #410-500

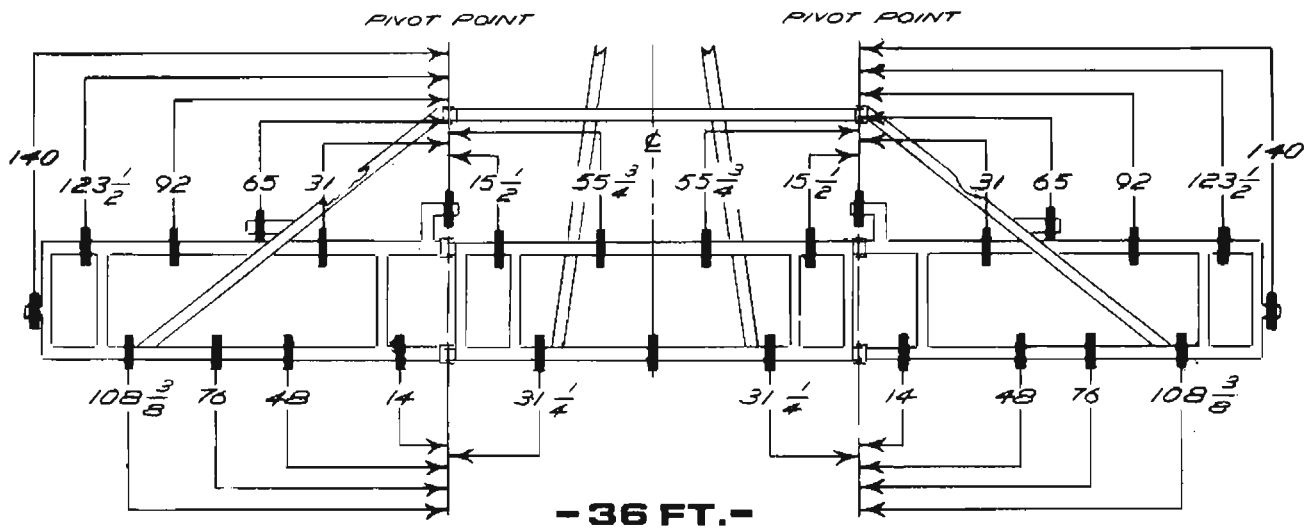
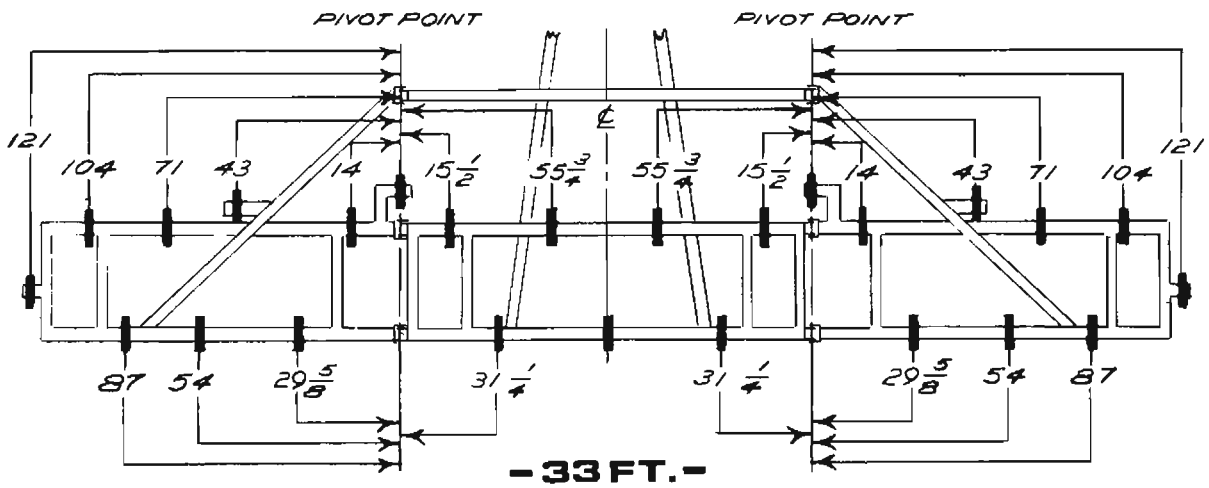
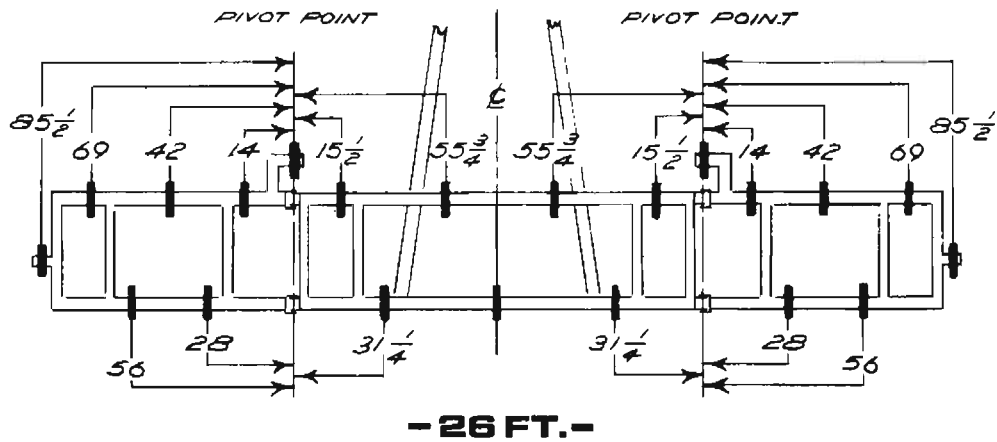
- A. 1-1/4NF x 6-5/8 BOLT WITH NUT & COTTER PIN
- B. 1" x 2 1/2" NC CS nut and lockwasher
- C. REPLACED BY CLAMP PLATE 206-031 AND 3/4NC x 6 CS plate
- D. 3/4" x 6" N.C. C.S. nut and lock-washer and 216-058
- E. 1-1/2 x 5-13/15 PIN

G. 3/4" x 5" NC CS nut and lockwasher



8) Install shanks as shown on layout sheet on next page

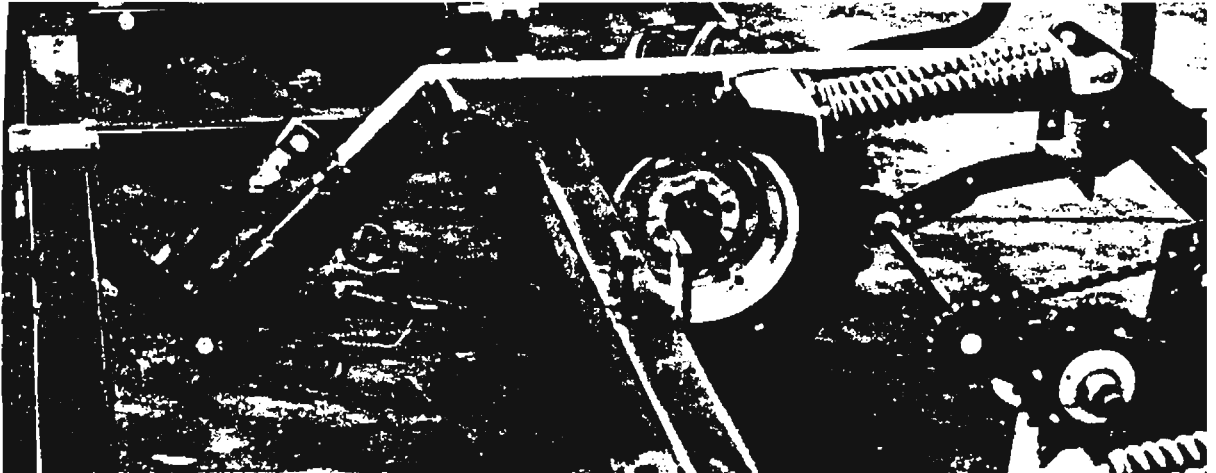
SHANK LAYOUT



CULTA-WEEDER
1500 SERIES
ROD WEEDER

Bypass this step if setting up a stiff lead arm weeder

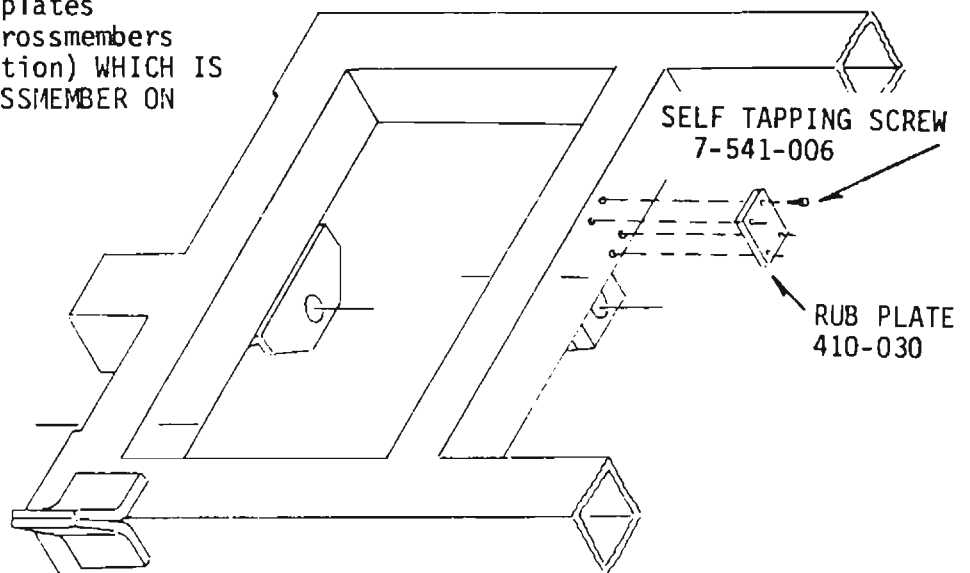
9)



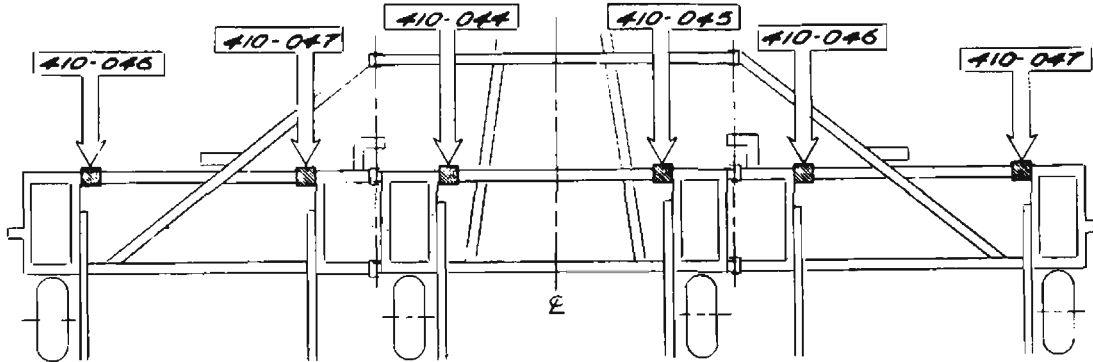
- A. 3/4" x 5" N.C. C.S., Nut and lockwasher
- B. 1/2" x 5 1/2" N.C. C.S., nut and lockwasher
- C. 201-855 Mount Plate
- D. 3/4" x 5" NC CS, Lock Nut

9a) OPEN WEAR PLATE SACK #410-534

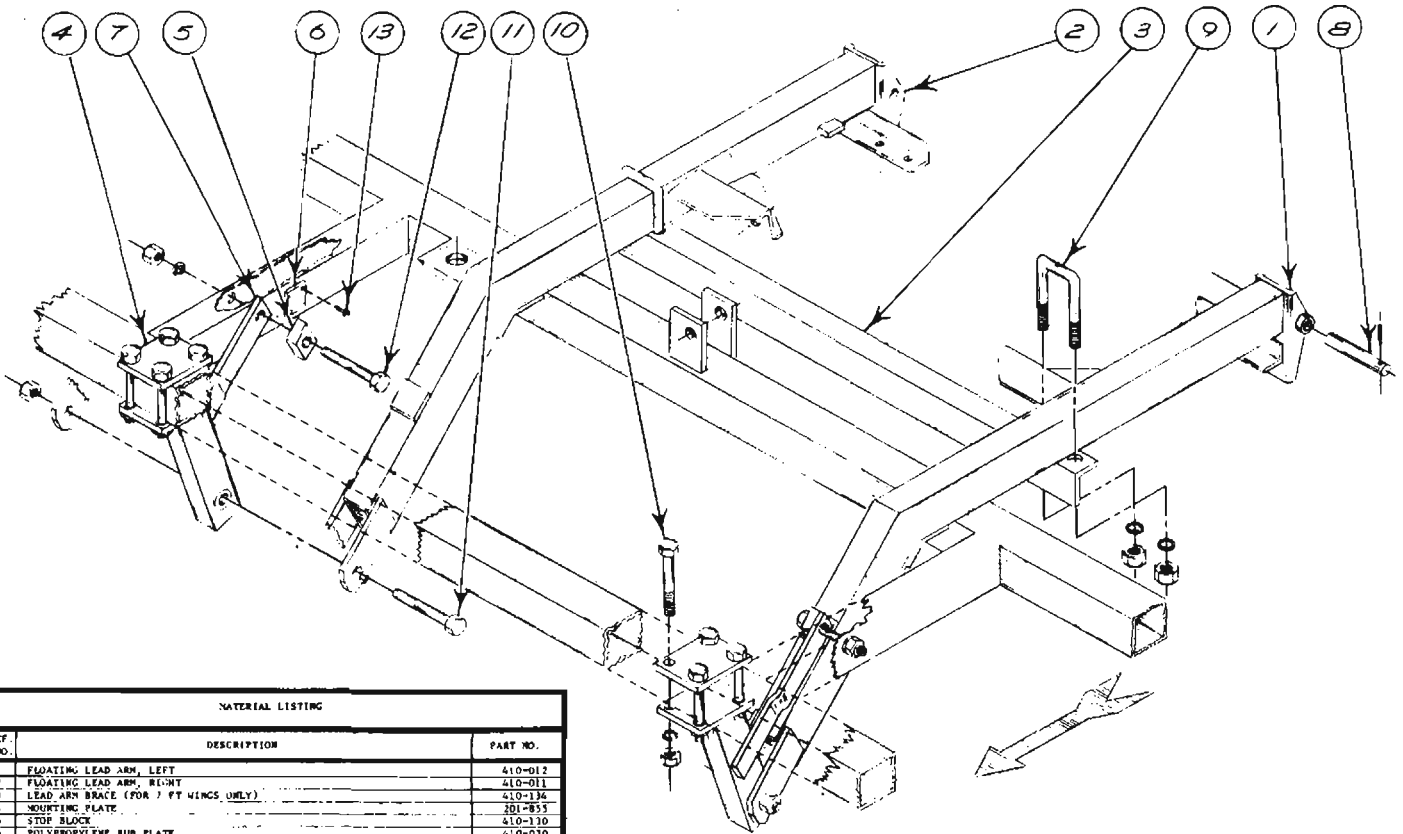
Install polypropylene plates to Lead Arm Side of crossmembers as shown. (2 per section) WHICH IS THE INNER SIDE OF CROSSMEMBER ON EACH FRAME



FLOATING LEADARM & MOUNT INSTALLATION



FLOATING LEADARM MOUNT LOCATION

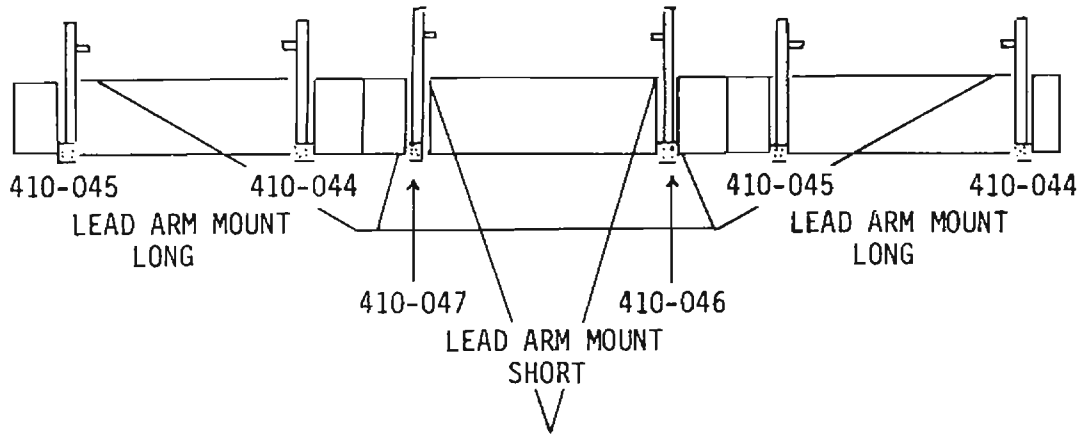


MATERIAL LISTING

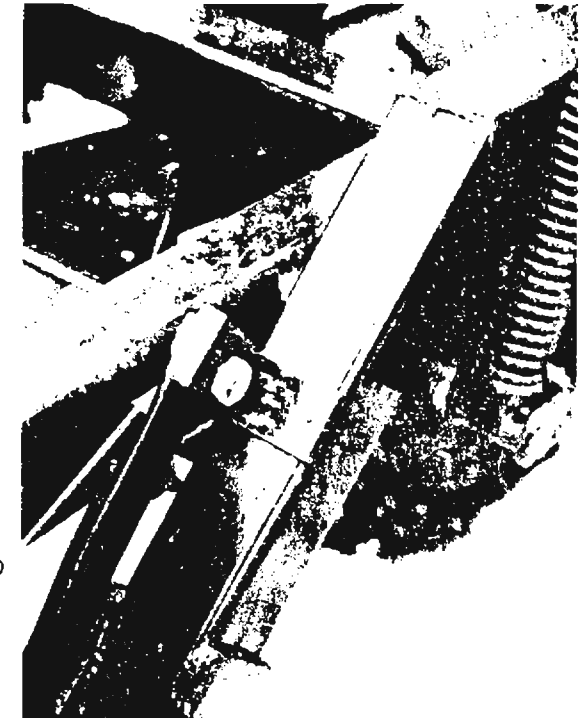
REF. NO.	DESCRIPTION	PART NO.
1	FLOATING LEAD ARM, LEFT	410-012
2	FLOATING LEAD ARM, RIGHT	410-011
3	LEAD ARM BRACE (FOR 7 FT WINGS ONLY)	410-134
4	MOUNTING PLATE	201-855
5	STOP BUSH	410-130
6	POLYPROPYLENE RUB PLATE	410-030
7	LEAD ARM MOUNTS (SEE LAYOUT ABOVE FOR PART NUMBERS)	
8	PIN, LEAD ARM (1/2 x 3-1/2) WITH ROLL PIN 3/8 x 2 7-027-005	8-026-093
9	U-BOLT, 1/2-13NC x 5	5-213-004
	NUT, HEX, 1/2-13NC	7-863-015
	NUT, HEX, 1/2-13NC	7-723-015
10	CAPSCREW, 1/2-13NC x 6	7-113-135
	NUT, HEX, 1/2-13NC	7-863-015
	NUT, HEX, 1/2-13NC	7-723-015
11	CAPSCREW, 3/4-10NC x 5	7-113-050
	NUT, CONELOCK, 3/4-10NC	7-725-121
12	CAPSCREW, 1/4-10NC x 3-1/2	7-115-015
	NUT, HEX, 3/4-10NC	7-863-020
	NUT, HEX, 3/4-10NC	7-725-001
13	SELF TAPPING SCREW NO. 10 (7/8 IN)	7-561-006



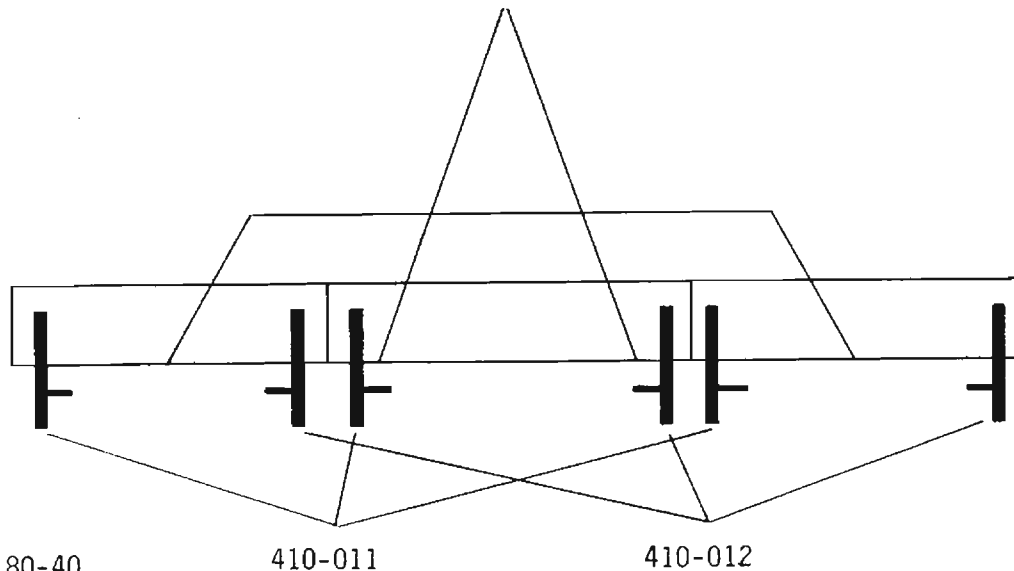
**CULTA-WEEDER
1600 SERIES
ROD WEEDER**



9b) Open bolt sack #410-539 26ft. or #410-600 33ft. and 36ft. weeders. Install lead arm mounting brackets as in drawing above using $\frac{1}{2}$ " x $5\frac{1}{2}$ " NC bolts, lockwashers and nuts.



Lime Color Up



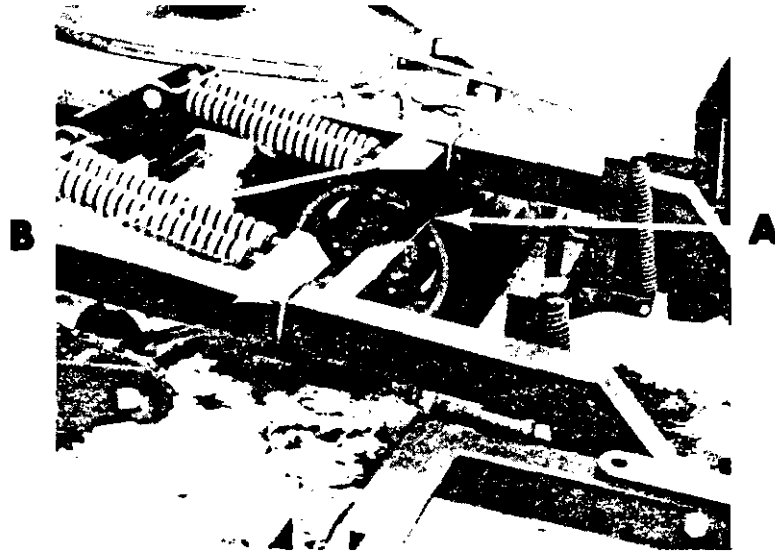
9c) Install stop block with lime color up on all sections by turning eccentric stop block to another color of paint will change the amount of lead arm float.

9d) Install floating lead arms using bolt sack #410-539 26ft. or #410-600 33ft. and 36ft. weeders. Follow drawing at left for proper location.

Bypass this step if setting up stiff lead arm 26 ft. Rod Weeder. Use on 26 ft. Floating lead arm machine only.

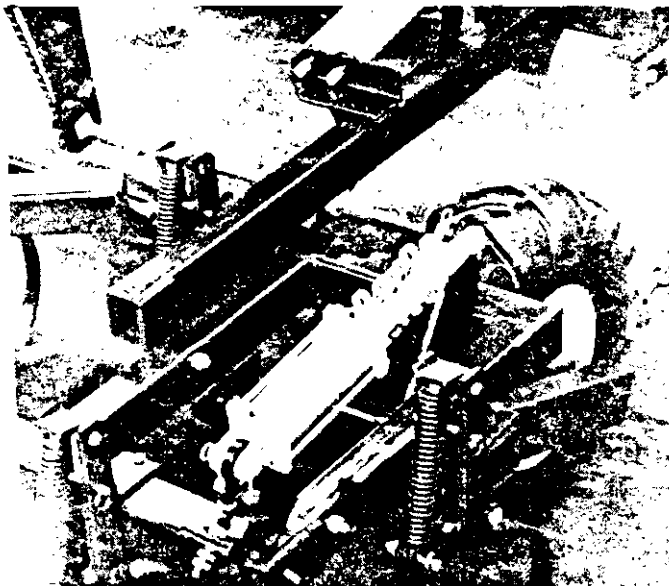
9e) Install lead arm stiffener as shown. Install floating lead arms using bolt sack #410-539.

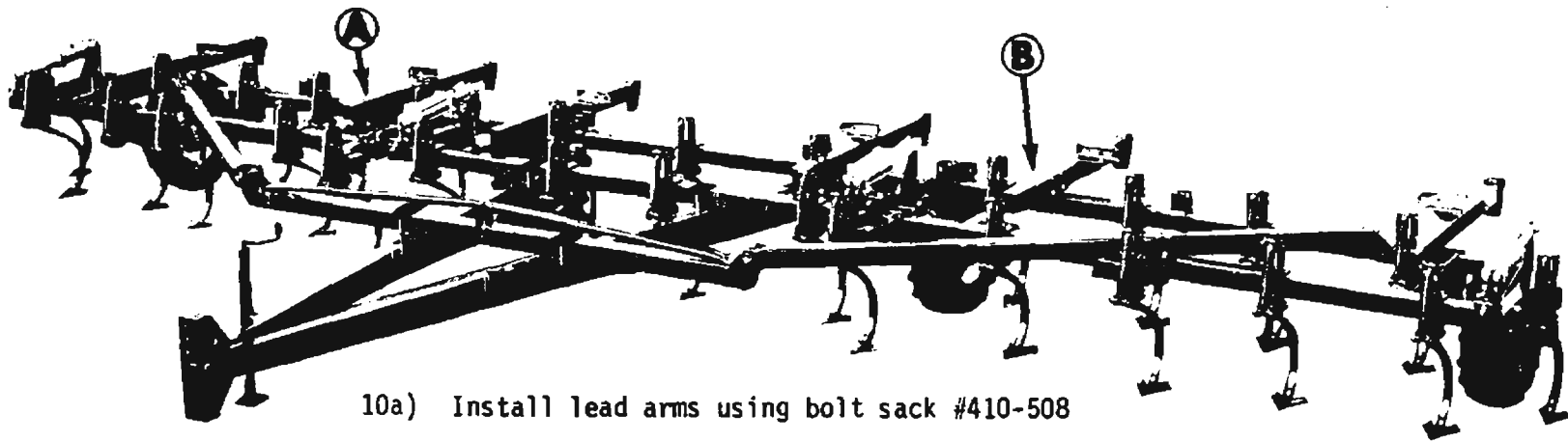
- A. 410-134 Stiffener
- B. 1/2" x 4" U bolt w/lockwasher and nuts



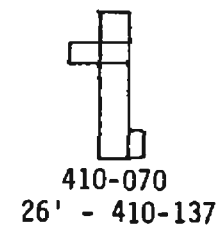
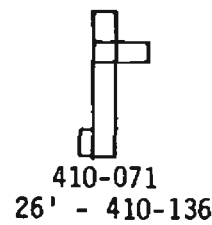
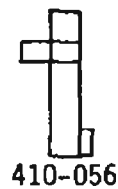
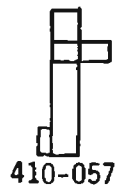
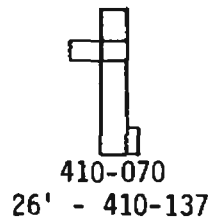
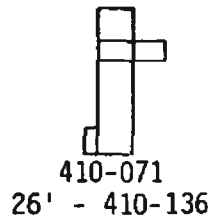
By pass this step if setting up a floating lead arm Rod Weeder.

10) Culta-weeder stiff lead arm mounted to left hand wing frame

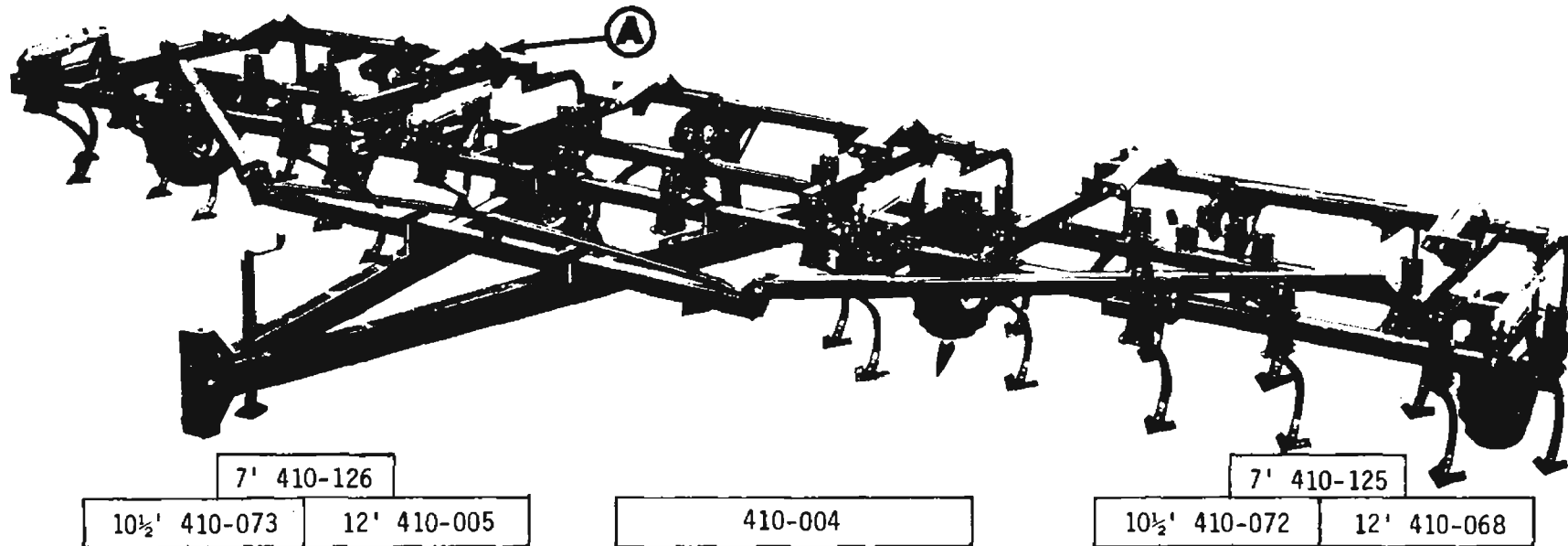




10a) Install lead arms using bolt sack #410-508



- A. Attach front end of lead arm to main frame using 3/4" x 4 1/2" N.C. C.S. nut and lockwasher.
- B. Then secure lead arm to main frame with 5/8" x 5 1/4" U-bolt nuts and lock-washers.



7' 410-126

10½' 410-073

12' 410-005

410-004

7' 410-125

10½' 410-072

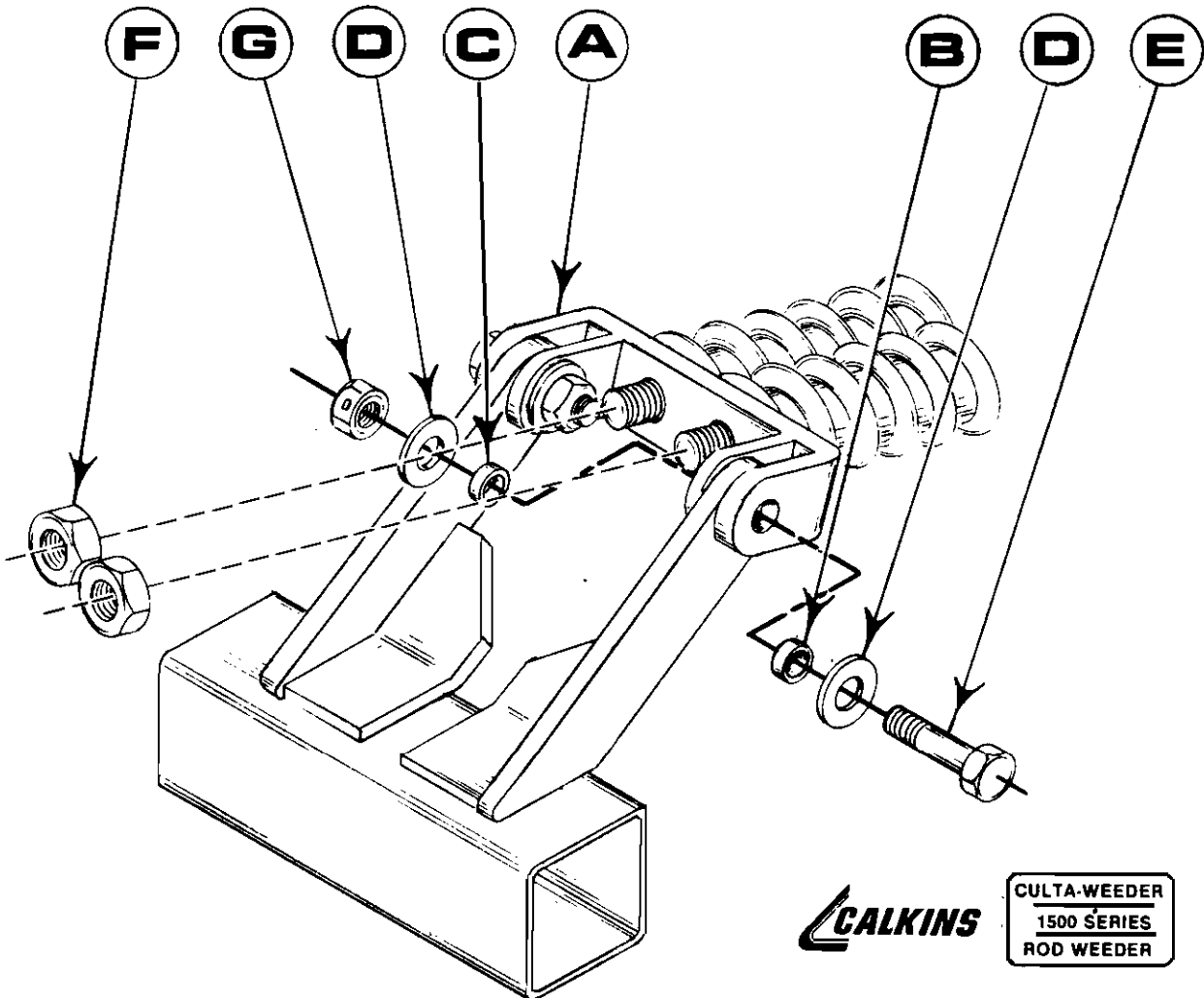
12' 410-068

- 11) Install back-bones using bolt sack #410-508.
- A.) Use 1" x 5 1/2" Pin and 3/8" x 2" roll pin.

FORM 0482-13

WARNING- GREASE BACK-BONE PIVOT PINS DAILY. BE SURE TO ADVISE CUSTOMERS AT TIME OF DELIVERY.

SPRING CUSHION ASSEMBLY

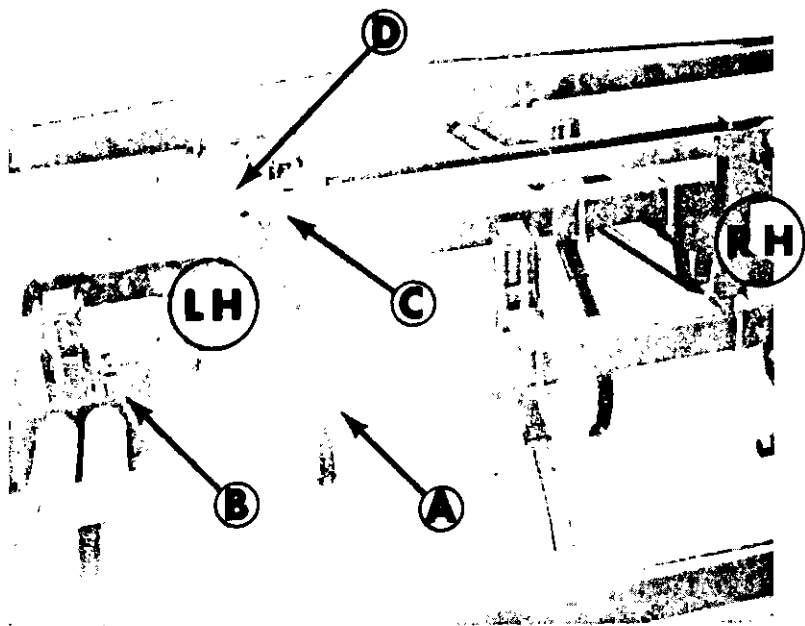


(A)	SPRING GUIDE	410-040
(B)	BUSHING 1" OD x 41/64 ID x 9/16	6-143-007
(C)	BUSHING 1" OD x 41/64 ID x 3/8	6-144-001
(D)	WASHER 5/8 IN	7-814-015
(E)	CAPSCREW PLATED GRADE 8 5/8-11NC x 2-1/4	7-714-111
(F)	JAM NUT 1-9NC	7-726-015
(G)	NUT CENTER LOCK 5/8-11NC	7-723-119

INSTALLATION OF SPRING CUSHION ASSEMBLY

- A. WITH ASSEMBLY LAYING FLAT AND UNDER WEEDER BACKBONE EARS, SLIDE THE ASSEMBLY RODS THROUGH LEAD ARM HOLDS
- B. LIFT REAR OF ASSEMBLY TO ALLOW FOR ACCESS OF FASTENER INSTALLATION.
- C. INSERT FOUR (4) BUSHINGS (B) & (C) INTO THEIR BRACKETS OF THE SPRING GUIDE (A)
 - (B) 1" x 9/16 OUTER BRACKETS
 - (C) 1" x 3/8 INNER BRACKETS
- D. PLACE ONE (1) FLATWASHER (D) ON EACH CAPSCREW (NOTE BOTH CAPSCREWS MUST BE SCREWED THROUGH THE BRACKETS SIMULTANEOUSLY). SCREW CAPSCREWS THROUGH OUTER BRACKETS, MOUNTING EARS OF BACKBONE UNTIL CAPSCREW BECOMES FLUSH WITH INNER MOST SURFACE OF INNER BRACKET ON SPRING GUIDE (A).
- E. REMOVE JAM NUTS (F) FROM SPRING CUSHION ASSEMBLY RODS TO SET MACHINE SPRING TENSION.
- F. CONTINUE SCREWING CAPSCREWS UNTIL FULLY SEATED, PLACE ON ADDITIONAL FLAT WASHERS (D) AND CENTER LOCK NUTS (G).

11

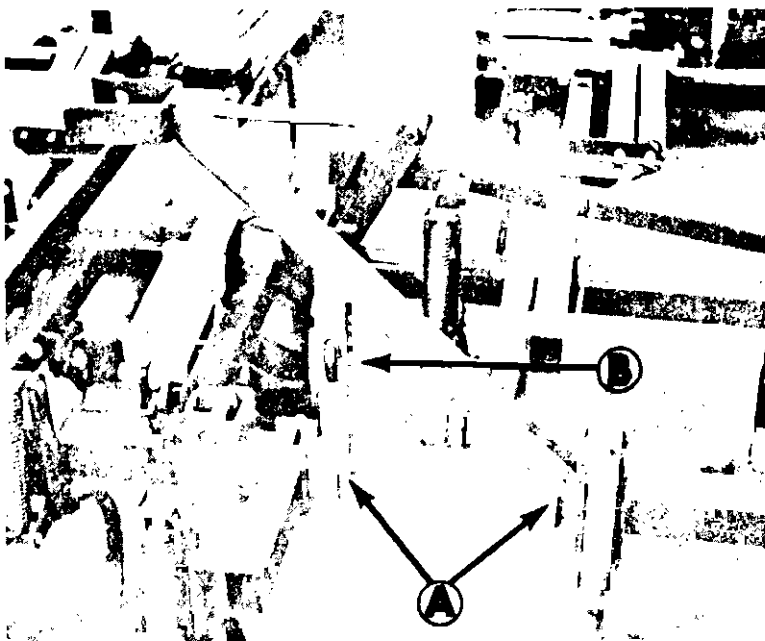


13) Install Cylinder Base Mount Support Open Bolt
Sack #410-502

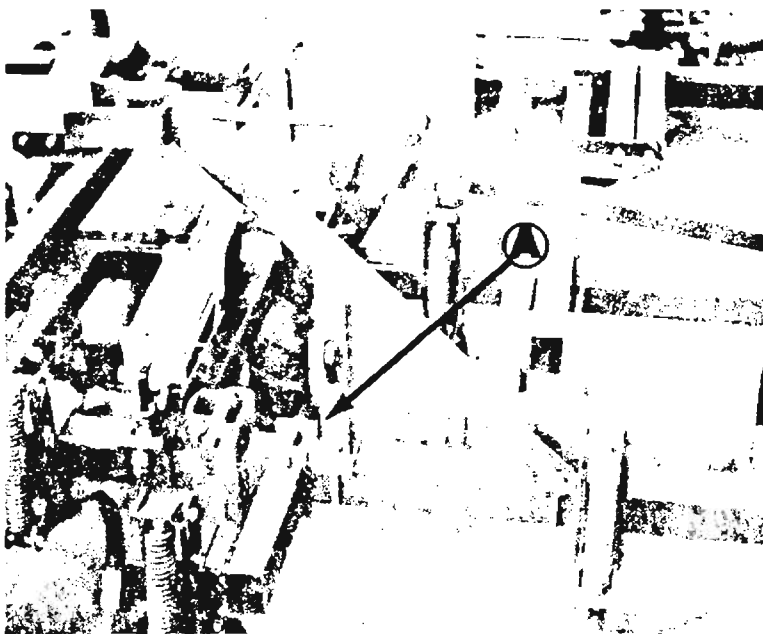
- A. Attach support mount brackets 410-033 Lefthand and 410-034 Righthand with $5/8$ " x $5\ 1/4$ " U-Bolt.
- B. 1 " x 5 " N.F. Bolt with 1 " NF light slotted nut and $3/16$ " x $1\ 1/2$ " cotterpin.
- C. Attach the 410-043 support bars and wing lift cylinder with 1 " x 5 " NF CS, 1 " NF light slotted nut and $3/16$ " x $1\ 1/2$ " cotterpin.
- D. Be sure cylinder ports point to the rear of machine.



- 14) Install Wing Lift Arm
Use Bolt Sack #410-502
- A. 1" x 6" N.F. bolt, 1" N.F. light slotted nut and 3/16" x 1½" cotter pin.
 - B. 1" x 5" N.F. C.S., 1" N.F. light slotted nut and 3/16" x 1½" cotter pin.
 - C. 1" x 5½" N.F. C.S., 1" light slotted nut and 3/16" x 1½" cotter pin.
 - D. Attach wing lift assy. (26 ft. 410-429 or 33 ft. and 36 ft. 410-510)
 - E. Toggle mount 410-032



- 15) Wing Lift Transport Lock
Use Bolt Sack #410-501
- A. Attach transport lock 410-082 to wing frame with 5/8" x 5½" U-bolts. Do not tighten until weeder wings are raised and transport lock is positioned properly. Then tighten.
 - B. 1" x 5½" L-pin and #8 hitchpin.



16) Forward Shank Mount

Open Shank attachment and extension Bolt Sack #410-408 26 ft., 410-522 33 ft., and 410-511 36 ft.

- A. Use 5/8" x 5½" N.C. C.S., 5/8 nut, and 5/8 lockwasher also 410-079 base plates.



17) Assemble Goosenecks and Gooseneck Shoes.

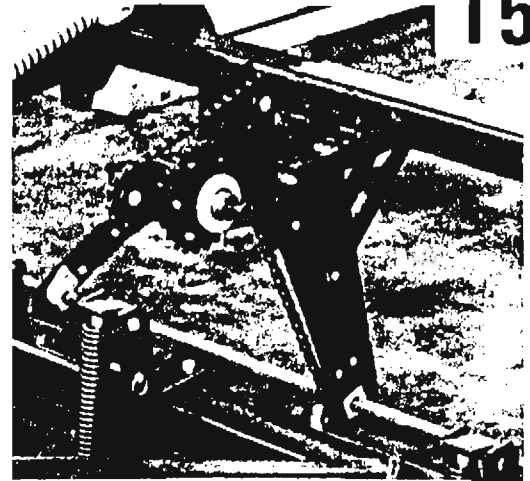
Open shoe and Gooseneck bolt sack #410-546 26 ft. standard, 410-571 26 ft. high chrome, 410-523 33 ft. standard, 410-583 high chrome, 410-507 36 ft. standard, or 410-566 36 ft. high chrome.

- A. 5/8" x 2½" N.C. C.S., nut and lockwasher
- B. 7/16" x 2" N.C. C.S. nut and lockwasher
- C. Be sure to mount the gooseneck shoes so that the short side of the shoe point is toward the ground.

18) Attach Boot Body to Weeder Back-bone

Open boot and drive line sack #410-584
 26 ft., 33 ft., 36 ft. single drive,
 #410-556 26 ft. dual drive line or,
 #410-504 33 ft. and 36 ft. dual drive line.

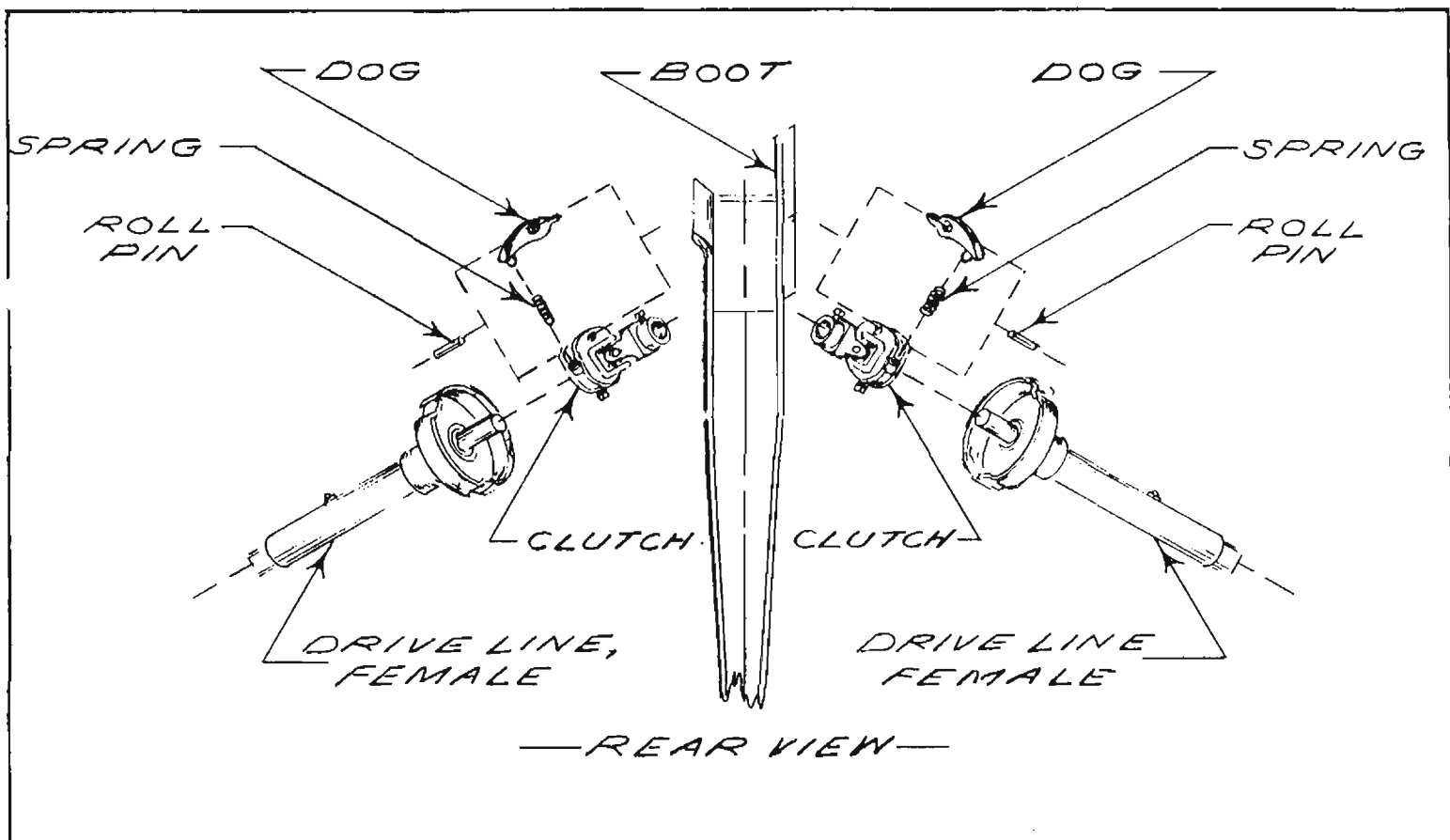
- A. 5/8" x 5" N.C. C.S., 5/8" nut and lockwasher
- B. Attach boot braces 412-202 to boot body with 1/2" x 3 1/2" N.C. C.S. and 1/2" jam nut.
- C. Attach boot braces to weeder back-bone with 5/8" x 1 3/4" N.C. C.S., nut and lockwasher. Place boot braces between the angle iron on back-bone.



19) Boot Drive Lines

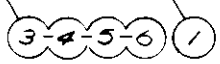
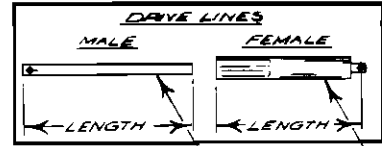
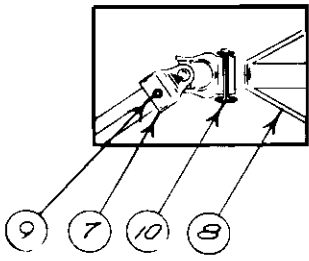
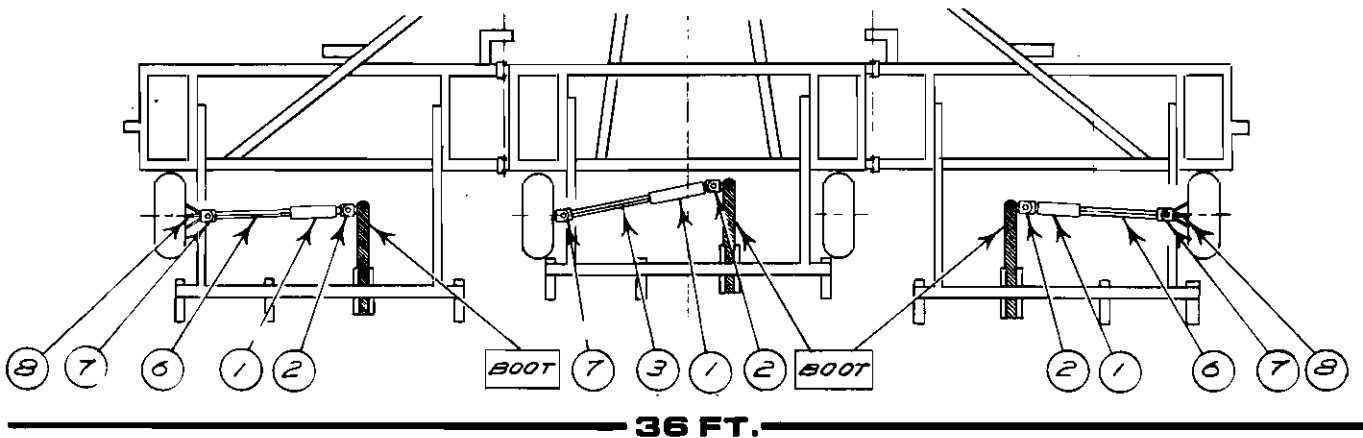
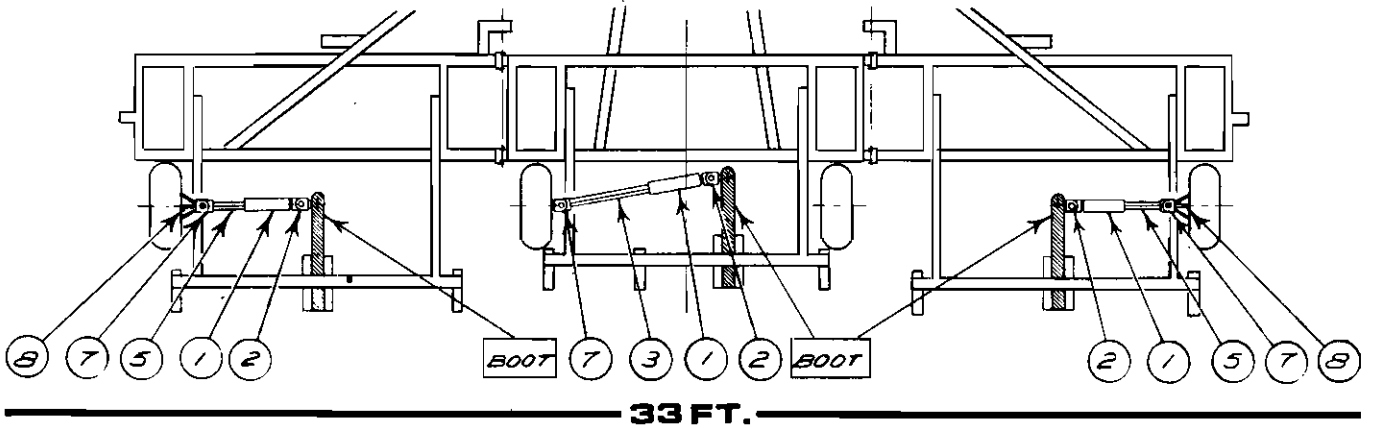
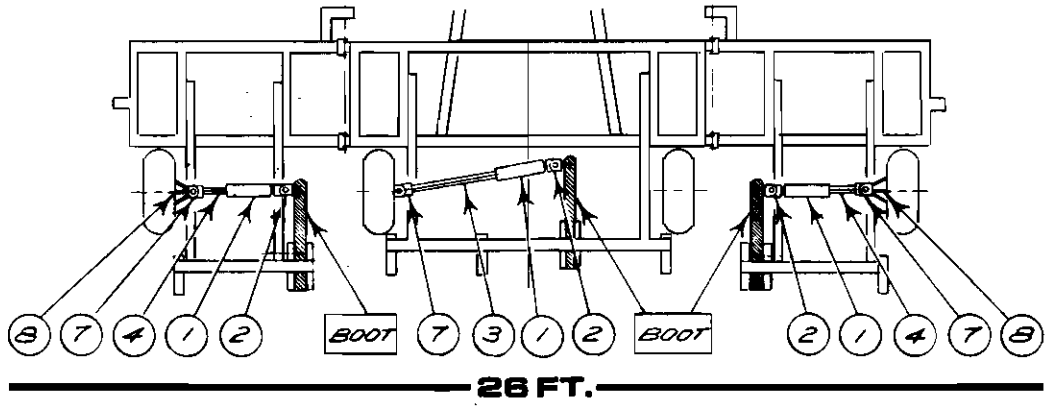
Use bolt sack same as above

IMPORTANT! When placing drive lines on boot body be sure to follow number closely as there are right and left drive lines.
 Do not hammer on the drive line U-joint.



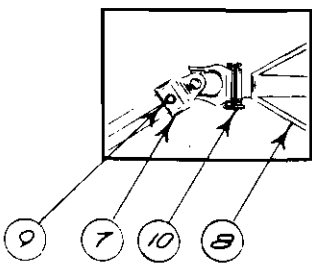
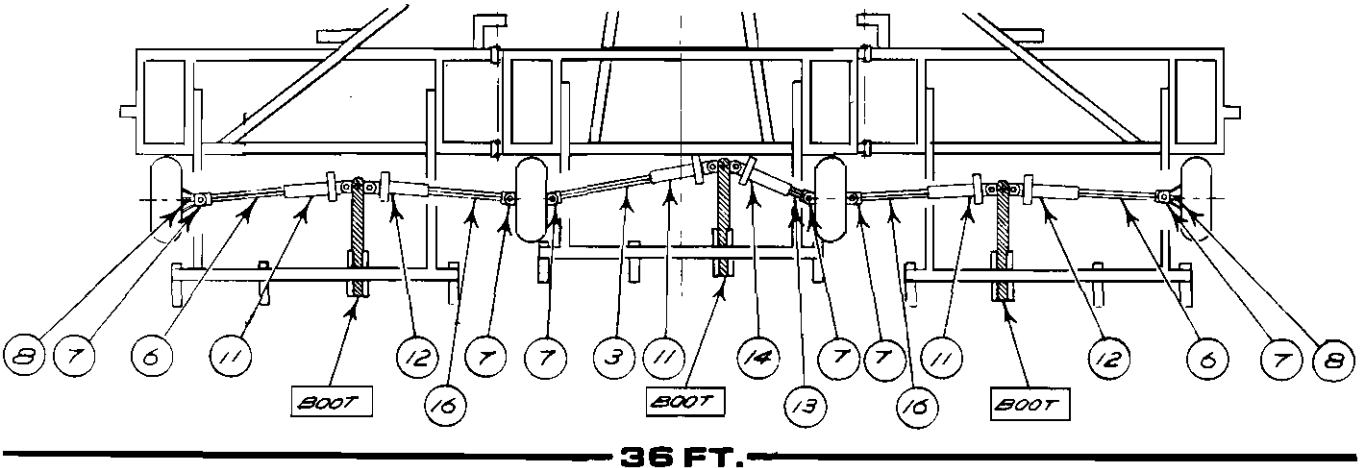
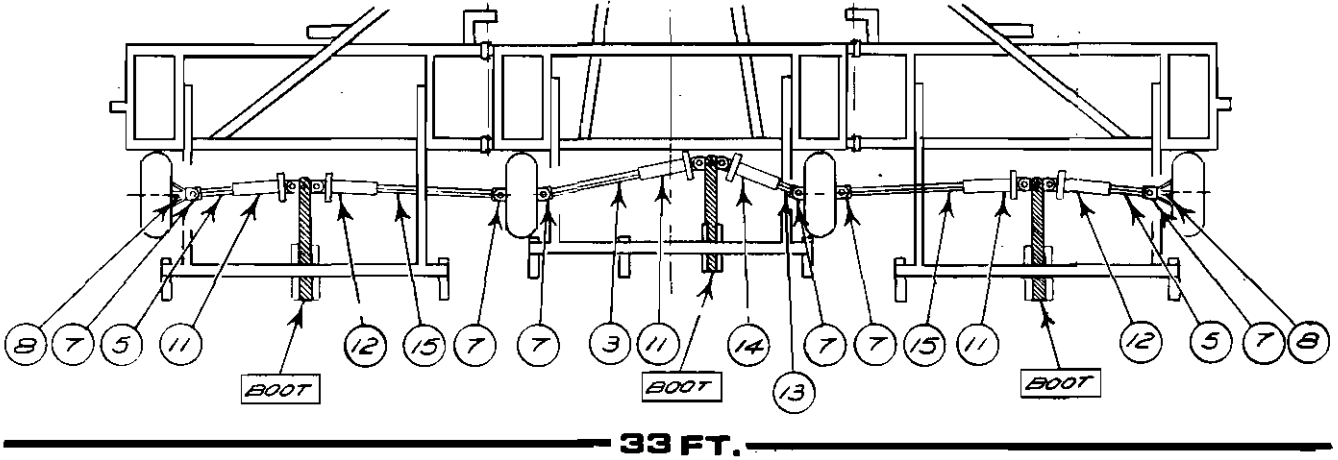
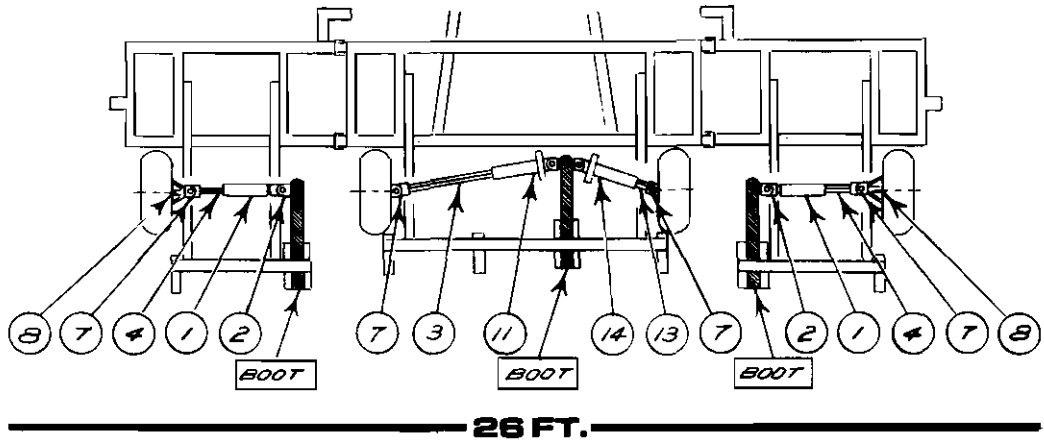
- A. Install female drive lines as per drawing with spring and tip of dog facing you from rear of weeder. Tighten set screws and set with hammer then retighten.
- B. Install male drive lines as per drawing using clip pins where shown.
- C. Please note and follow layout drawings for single or dual drive shafts for proper locations on next pages.

SINGLE ORIVELINE LAYOUT

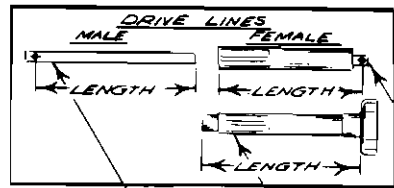


**CULTA-WEEDER
1500 SERIES
ROD WEEDER**

DUAL DRIVELINE LAYOUT



**CULTA-WEEDER
1500 SERIES
ROD WEEDER**



- 3
- 4
- 5
- 6
- 13
- 15
- 16
- 11
- 12
- 14
- 1

MATERIAL LIST

SINGLE AND DUAL
DRIVE LINE LAYOUTS
3 SECTION
CULTA-WEEDER AND ROD WEEDER

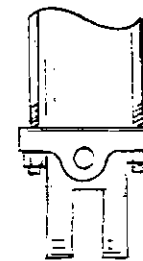
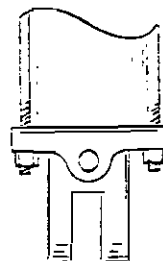
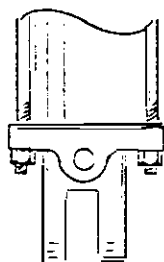
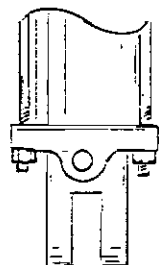
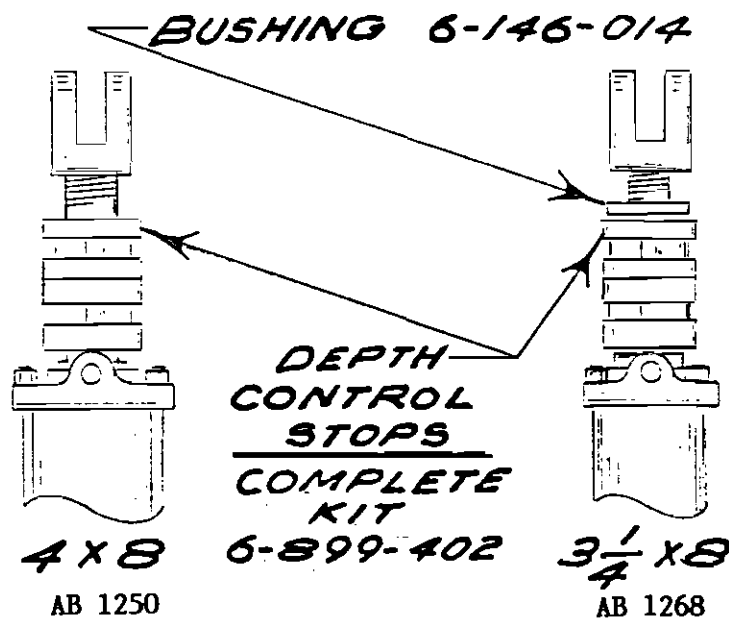
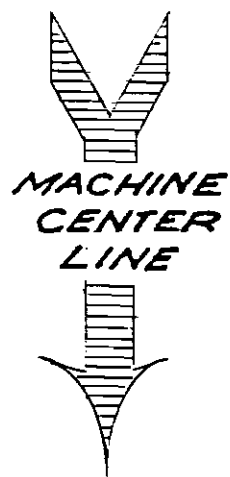
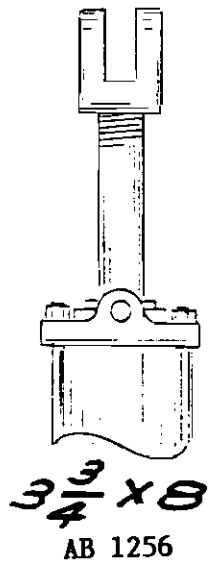
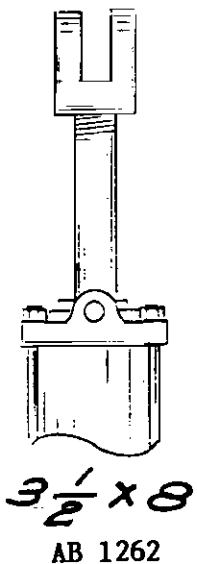
REF.		26 FT	33 FT	36 FT	DRIVE
1	DRIVE LINE ASSEMBLY FEMALE 21-1/8 IN.		206.037		SINGLE & DUAL
2	U-JOINT 1-7/16 IN RD TO 1-1/4 SQ		5-546-006		SINGLE & DUAL
3	MALE DRIVE LINE 44 IN. CENTER SECTION		6-566-088		SINGLE & DUAL
4	MALE DRIVE LINE 30 1/2 IN 7 FT WING SHAFT ONLY	6-566-033	N/A		SINGLE & DUAL
5	MALE DRIVE LINE 20-1/4 IN 10-1/2 FT WING SHAFT ONLY	N/A	206-047	N/A	SINGLE & DUAL
6	MALE DRIVE LINE 45 IN 12 FT WING SHAFT ONLY		N/A	6-566-050	SINGLE & DUAL
7	U-JOINT FOR MALE DRIVE LINE SHAFTS 1-1/4 SQ TO 1-1/4 SQ		5-546-005		SINGLE & DUAL
8	DRIVE BASKET		207-121		SINGLE & DUAL
9	BOLT 5/16 - 18NC x 2-3/4		7-111-030		SINGLE & DUAL
	LOCKWASHER 5/16 MED		7-841-015		SINGLE & DUAL
	NUT, HEX 5/16-18NC		7-721-005		SINGLE & DUAL
10	DRIVELINE LOCK PIN		7-920-010		SINGLE & DUAL
11	DRIVE LINE ASSEMBLY, FEMALE LH (18-1/4") WITH CLUTCH & UNIVERSAL JOINT		410-492		DUAL ONLY
12	DRIVE LINE ASSEMBLY, FEMALE RH (18-1/4")	N/A	410-493		DUAL ONLY
13	DRIVE LINE, MALE, CENTER RIGHT 12 FT CENTER SHAFT ONLY (16-1/2")		6-566-080		DUAL ONLY
14	DRIVE LINE ASSEMBLY, FEMALE RH (16-1/2) WITH CLUTCH & UNIVERSAL JOINT		410-578		DUAL ONLY
15	DRIVE LINE, MALE, WINGS INBOARD 10-1/2 FT WINGS, SHAFT ONLY (46-1/2")	N/A	6-566-089	N/A	DUAL ONLY
16	DRIVE LINE MALE, WINGS INBOARD 12 FT WING, SHAFT ONLY (41 3/4")		N/A	6-566-090	DUAL ONLY
<p>NOTE: REF NO. 11 & 12 FEMALE DRIVE LINE ONLY W/O CLUTCH ASSY PART NO. 410-156</p> <p>REF NO. 14 FEMALE DRIVE LINE ONLY W/O CLUTCH ASSY PART NO. 410-078</p>					

- 20) Attach Hoses, fittings, and fill hydraulic system.
- A. Note the hydraulic schematic for proper location
 - B. Add hydraulic couplers to hose ends and connect to tractor.
 - C. Be sure to purge wing lift cylinder before wings are raised.
 - D. To charge an in-line circuit for the first time the following steps are necessary:

<p>NOTE: WHEN CHARGING CIRCUIT RUN TRACTOR OR HYDRAULIC UNIT AT FAST IDLE TO SUPPLY OIL VOLUME AND PRESSURE REQUIRED TO PROPERLY CHARGE CIRCUIT.</p>

- 1. Plumb the circuit per Hydraulic Layout.
- 2. Leave the rod mountings free to extend without interference.
- 3. Operate the valve to extend the cylinders.
NOTE: They will extend erratically which is the reason for leaving them free to extend without interference.
- 4. Keep the valve open until all cylinders in the circuit are fully extended. Allow oil to flow through the circuit for a minimum of 3 minutes (3 section tools) 5 minutes (5 section tools) to purge the air from the circuit.
- 5. Retract the cylinders fully. (be sure all depth stops are removed from cylinders)
- 6. Repeat the above cycle to be certain that all cylinders extend evenly and in phase with each other.
- 7. Connect rod end mountings.

The system is now ready to operate. Should any cylinder get "out-of-phase", merely extend the cylinders fully to bring the out-of-phase cylinder into phase. If any cylinder gets out-of-phase with frequency or regularity, check the hose, connections and fittings. Any oil leak in system will allow cylinders to get out of phase.



DEPTH CONTROL STOPS COLOR CODE & SIZE	
1 "	WHITE
1 1/4 "	DARK GREEN
1 1/2 "	LIME
1 3/4 "	RUSSET
2 "	YELLOW

**DEPTH CONTROL
STOPS**

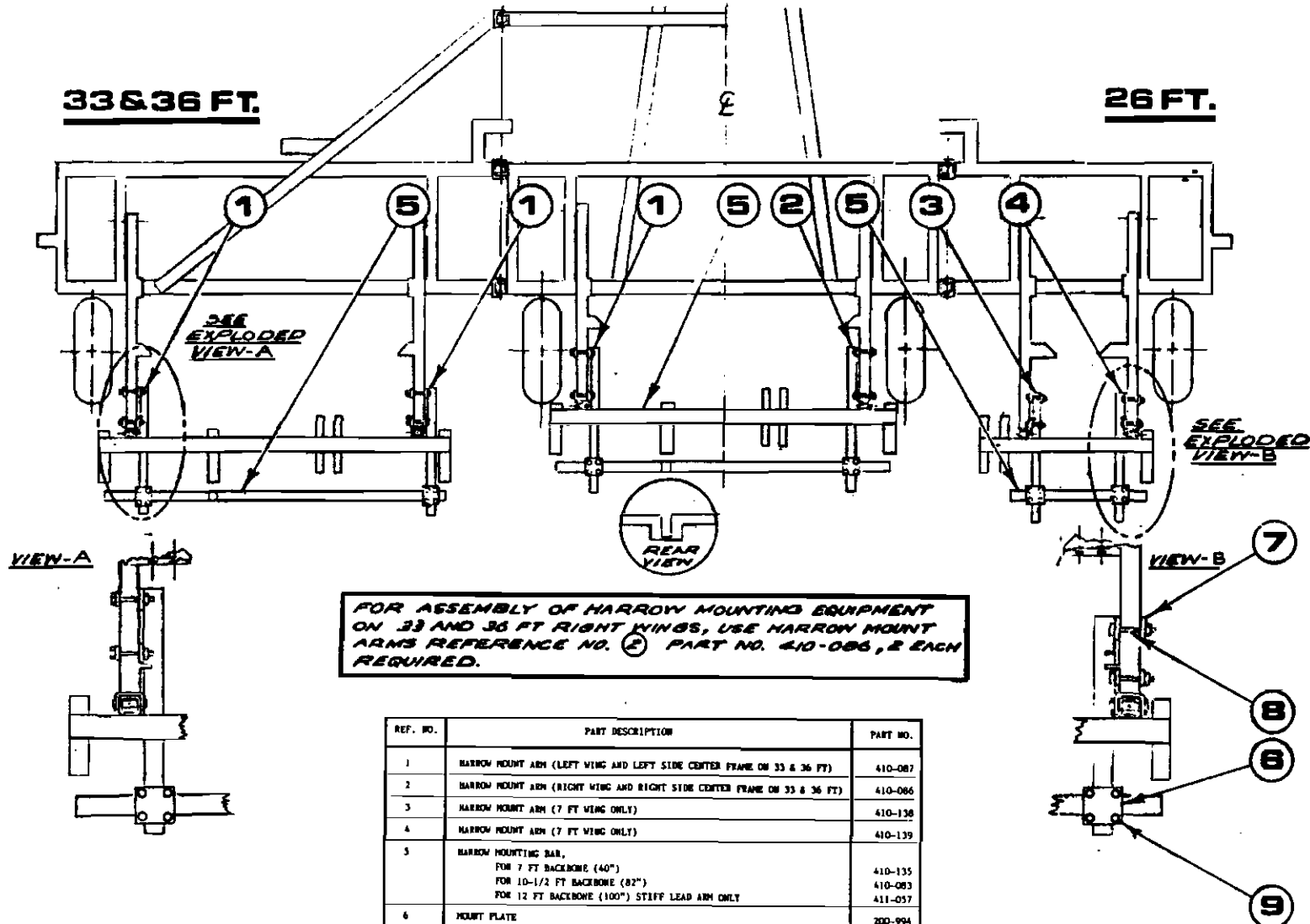
**MAIN LIFT SYSTEM
3 SECTION**



**CULTA-WEEDER
1500 SERIES
ROD WEEDER**

FORM 1088-07

HARROW MOUNTING EQUIPMENT



FOR ASSEMBLY OF HARROW MOUNTING EQUIPMENT ON 33 AND 36 FT RIGHT WINGS, USE HARROW MOUNT ARMS REFERENCE NO. 2 PART NO. 410-086, 2 EACH REQUIRED.

REF. NO.	PART DESCRIPTION	PART NO.
1	HARROW MOUNT ARM (LEFT WING AND LEFT SIDE CENTER FRAME ON 33 & 36 FT)	410-087
2	HARROW MOUNT ARM (RIGHT WING AND RIGHT SIDE CENTER FRAME ON 33 & 36 FT)	410-086
3	HARROW MOUNT ARM (7 FT WING ONLY)	410-138
4	HARROW MOUNT ARM (7 FT WING ONLY)	410-139
5	HARROW MOUNTING BAR, FOR 7 FT BACKBONE (40") FOR 10-1/2 FT BACKBONE (82") FOR 12 FT BACKBONE (100") STIFF LEAD ARM ONLY	410-135 410-083 411-057
6	MOUNT PLATE	200-994
7	MOUNT PLATE	410-058
8	CAPSCREW, 1/2-13 NC x 5" LOCKWASHER, 1/2" MED NUT, HEX 1/2-13 NC	7-113-127 7-843-015 7-723-015
9	CAPSCREW, 1/2-13 NC x 2" LOCKWASHER, 1/2" MED NUT, HEX 1/2-13 NC	7-113-141 7-843-015 7-723-015

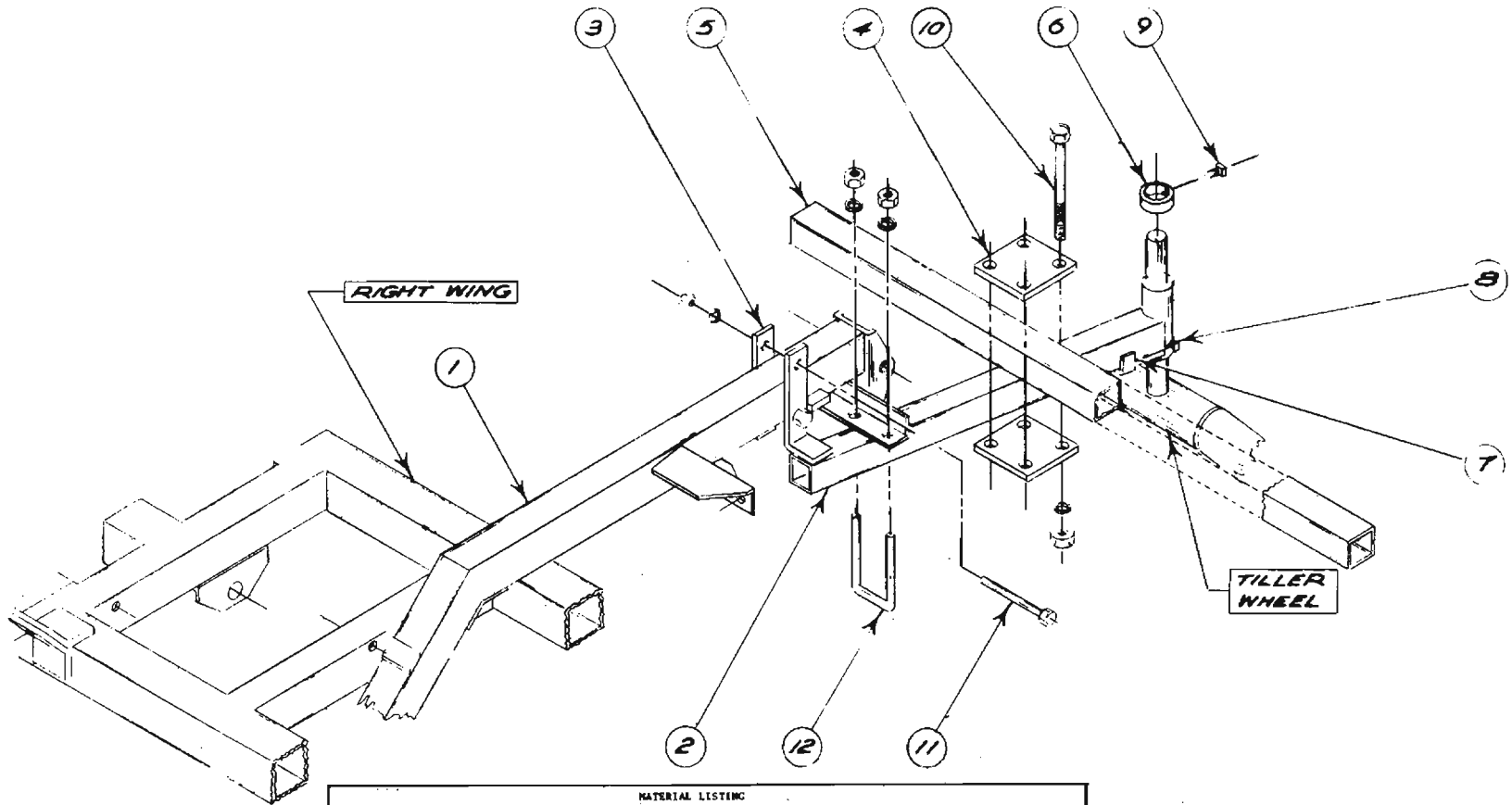
By pass this step if setting up a floating lead arm weeder
21) Install harrow mount kit as in drawing open bolt sack #410-562



By pass this step if setting up a stiff lead arm weeder

- 22) Install tiller wheel brackets, tiller wheel and harrow mount kit as in drawing below if options are to be installed on weeder. Open bolt sacks #410-528 tiller wheel brackets, #410-529 harrow kit.

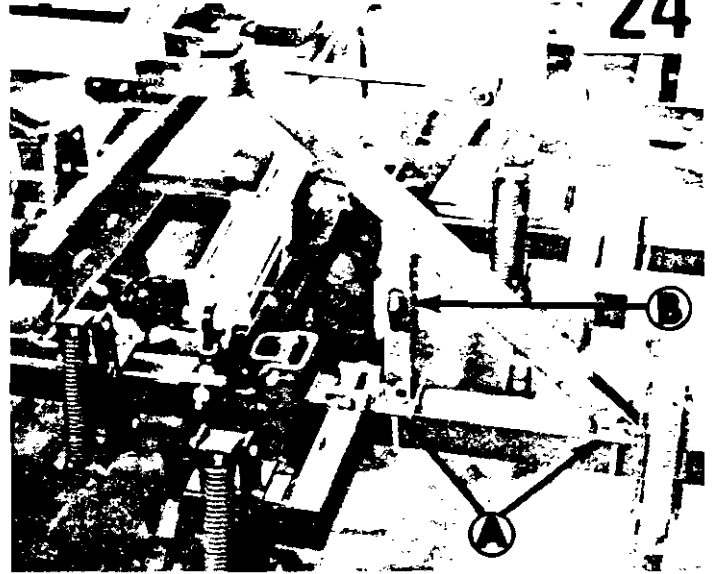
TILLER WHEEL & HARROW MOUNTING EQUIPMENT



MATERIAL LISTING					
REF. NO.	DESCRIPTION	PART NO.	REF. NO.	DESCRIPTION	PART NO.
1	FLOATING LEAD ARMS LT	410-012	8	MACHINE BUSHING, 1 5/8 HAR RIM 11 GA.	7-897-015
	RT	410-011		9	SET SCREW 3/8 x 1
2	TILLER WHEEL ARM LT	410-032	10		CAPSCREW, 5/16 x 7
	RT	410-031		LOCKWASHER, 1/2" MEDIUM	7-843-015
3	MOUNT PLATE	410-058	11	MUT, HEX, 1/2 -13NC	7-723-015
4	MOUNT PLATE	200-494		CAPSCREW, 5/16 x 5	7-113-127
5	HARROW MOUNTING BAR	410-135	12	LOCKWASHER, 1/2" MEDIUM	7-843-015
	FOR 7 FT. BACKBONE			MUT, HEX, 1/2 -13NC	7-723-015
	10 1/2 FT. BACKBONE			410-083	U-BOLT 1/2 -13NC x 3
	12 FT. BACKBONE	410-084	7	LOCKWASHER, 1/2" MEDIUM	7-843-015
6	SET COLLER	6-487-001		MUT, HEX 1/2 -13NC	7-723-015
7	LIMIT	410-085			

- 23) Raise weeder wings to transport position and adjust #410-082 transport latches. This should be done to allow easy removal of transport lock pins and to insure wing lift cylinders fully close.

- A. Adjusting U Bolts
- B. Transport lock pins



- 24) Paint any bad spots with touch up paint provided in set up box. Install decal set using instructions provided.

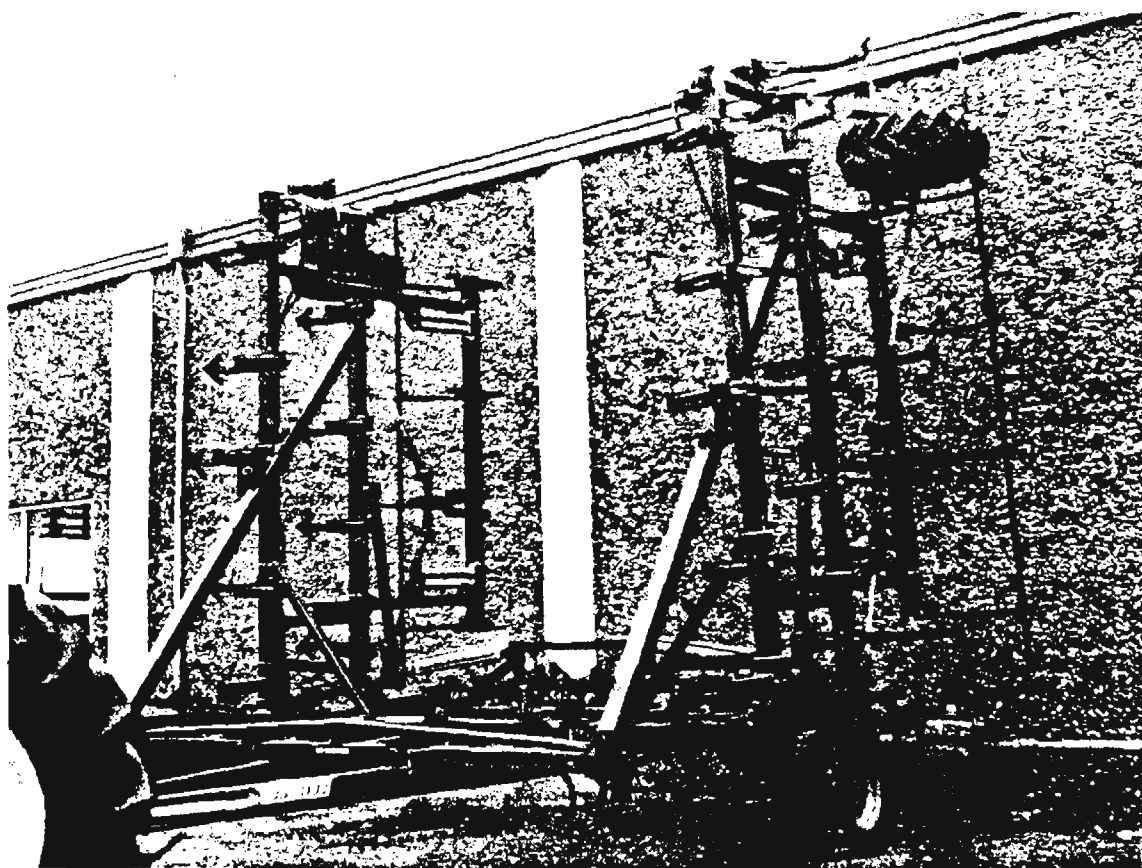
CUSTOMER DELIVERY - CHECK LIST

- _____ Show your customer the proper machines settings. Cylinder adjustments, how to level machine from front to rear, side to side.

- _____ Show the farmer proper grease points and when to grease.

- _____ The delivery and warranty form should be gone over with farmer. Then have the farmer sign proper forms, return dealership form and Calkins form.

- _____ Also show customer proper transporting procedures. Make note of the transport main cylinder locks and wing transport lock-ups.



Calkins Mfg. Co. appreciates your confidence in Calkins Farm Equipment and thanks you for your continued patronage

WATCH FOR THIS SYMBOL!!



***THIS SYMBOL WILL DIRECT YOUR ATTENTION
TO INFORMATION THAT INVOLVES YOUR SAFETY.***

READ AND UNDERSTAND ALL OPERATING INSTRUCTIONS AND
PRECAUTIONS BEFORE ATTEMPTING TO OPERATE MACHINE.

PRE-WORK CHECKLIST

The following checklist was prepared so a dealership may check a machine before it is delivered to customer. The checklist should be used before each working season and from time to time during the working season.

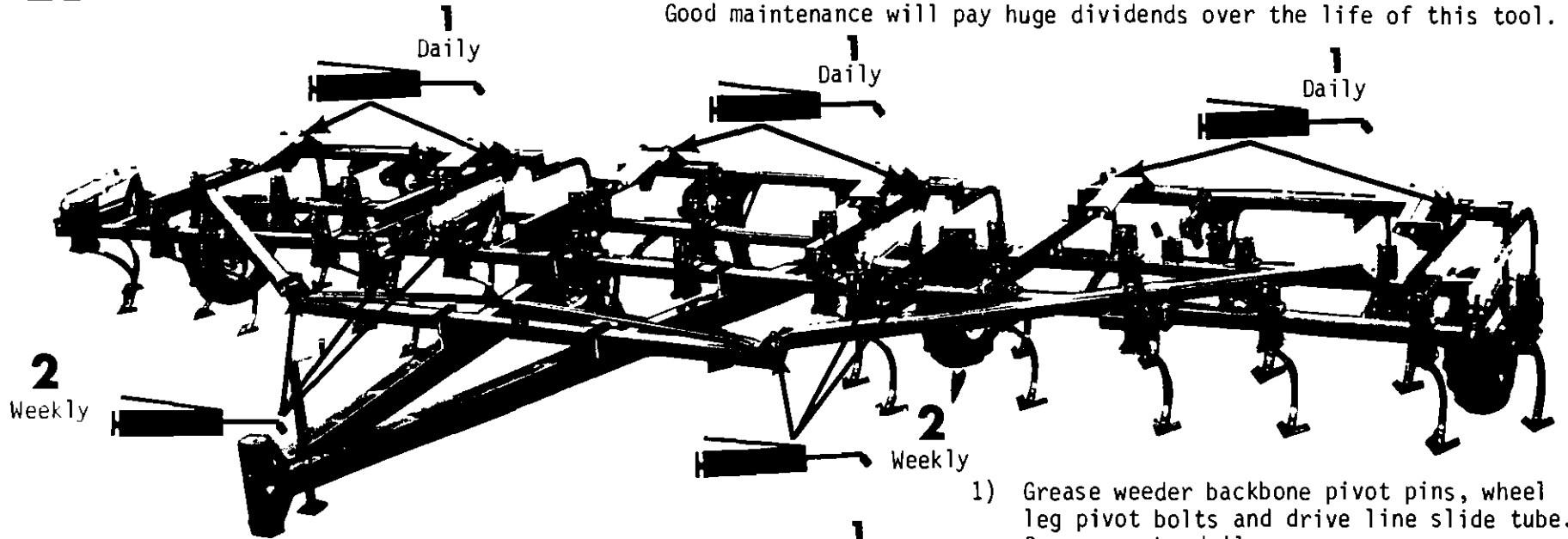
PRE-WORK CHECKS

- Check all bolts and nuts for tightness.
- Check hydraulic connections and hoses for leaks.
- Check wheels and hubs for tightness.
- Inflate all tires to 35-40 lbs. pressure.
- Inspect all lubricating points.

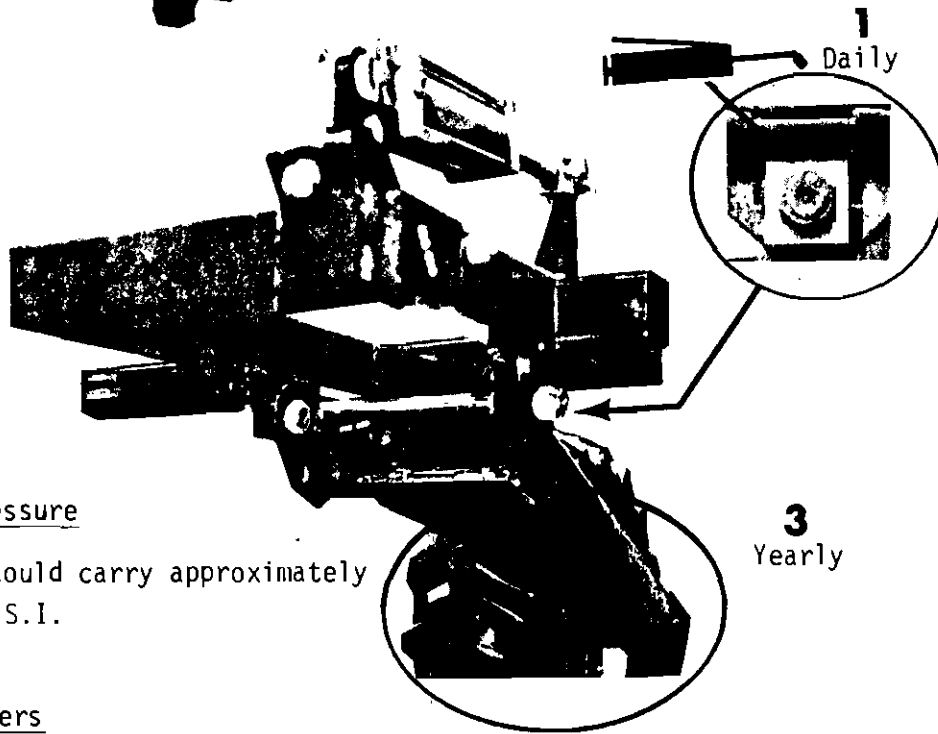
LUBRICATION

Grease is your cheapest hired hand

Good maintenance will pay huge dividends over the life of this tool.



- 1) Grease weeder backbone pivot pins, wheel leg pivot bolts and drive line slide tube. Grease zerks daily.
- 2) Grease frame hinge points weekly
- 3) Hand pack wheel bearings yearly and adjust bearing tension
- 4) Grease weeder ujoint one shot every three days

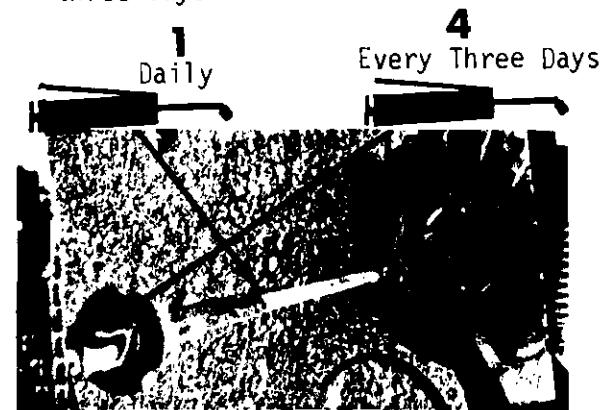


Tire Pressure

Tires should carry approximately 35-40 P.S.I.

Fasteners

Prior to operation, check all bolts, nuts, cotter pins and groove pins for proper installation. During the first day of operation check lug bolts, wheel bearings for proper tightness. When servicing culta-weeder always check for loose or missing parts.

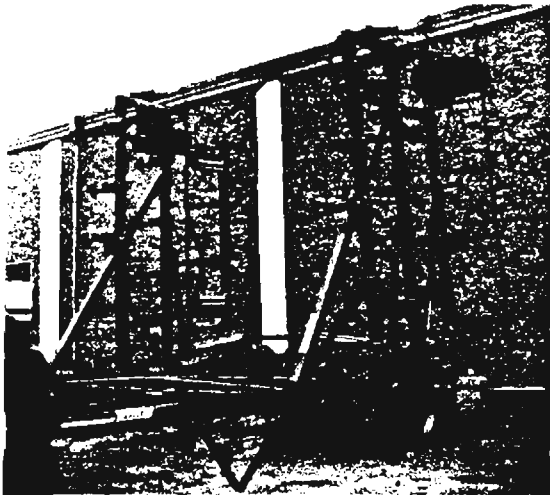


SAFETY PRECAUTIONS

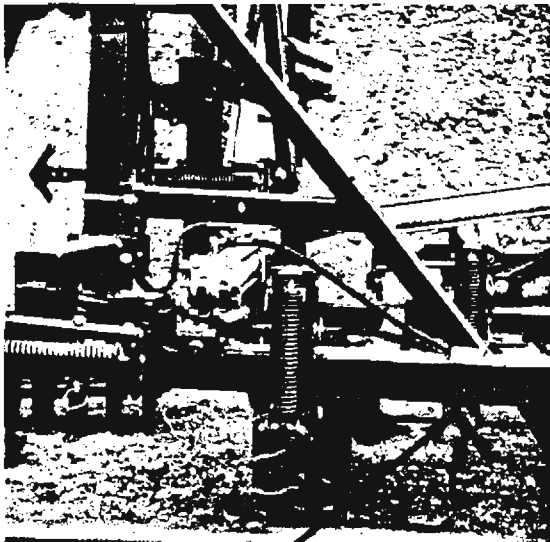
Be "safety minded"! Help yourself and those around you by explaining to them the importance of safe thinking and behavior when around farm machinery.

DANGER

WARNING: Be sure wing cylinders have been completely filled with oil before they are used to lift the wings. If an air pocket exists in the cylinder or hose, the wings could suddenly drop.



Remove transport lock pins before lowering wings



Transport lock pin

DANGER

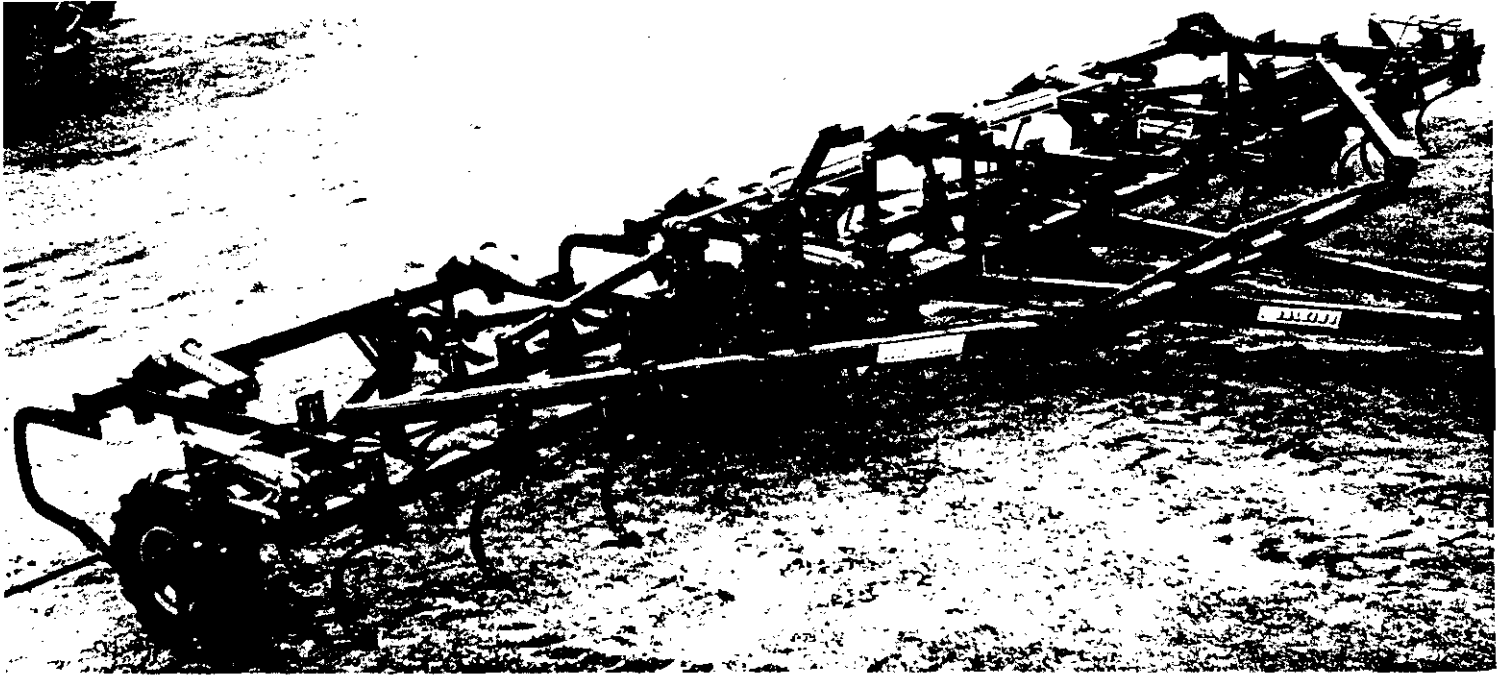
Use extreme caution when raising or lowering wing sections. Keep all personnel away from tool while wings are being raised or lowered. Never work or climb on tool with wings in a raised position.

WARNING

Before applying pressure to hydraulic system make sure all fittings are tight and that hose lines have not been damaged. Cycle the hydraulic system several times to eliminate air. If air is present in system, a sudden movement in the cylinders may occur. Always use a piece of wood rather than hand to search for hydraulic leaks. Hydraulic oil under extreme pressure can result in serious injuries.

WARNING

Always use extreme care when transporting the folded rod weeder beneath overhead telephone or electrical wires. CONTACTING THE WIRES WITH THE WINGS CAN RESULT IN EXRREME PERSONAL INJURY OR DEATH, AS WELL AS DAMAGE TO THE WIRES.

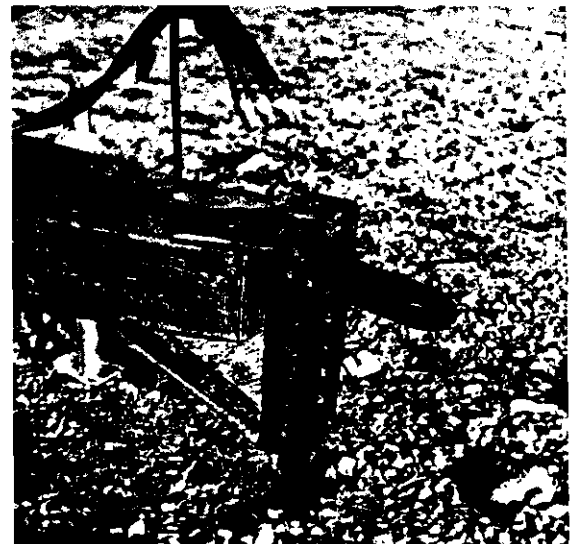


INTRODUCTION: It is important for a customer to be familiar with the proper machine settings and to obtain proper instruction as to how a machine is to be set for field use.

1. HYDRAULIC ATTACHMENT PREPARATION:

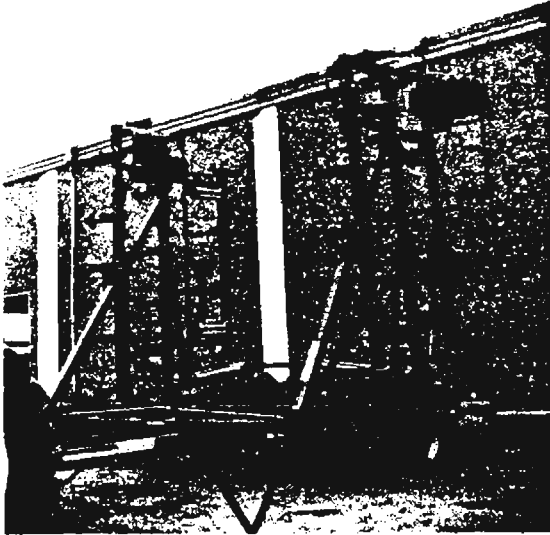
A) A tractor must obtain at least 1800 psi hydraulic pressure to meet the recommended hydraulic pressures for the Calkins in-line cylinder lift main system. Any system which attains pressure exceeding 2500 or less than 1800 can result in improper cylinder movements or the slow raising and lowering of the Rod Weeder.

B) Be sure to couple hydraulic hoses to the proper tractor hydraulic valve. Be sure to use hose end fittings which are compatible with tractor hydraulic fittings.

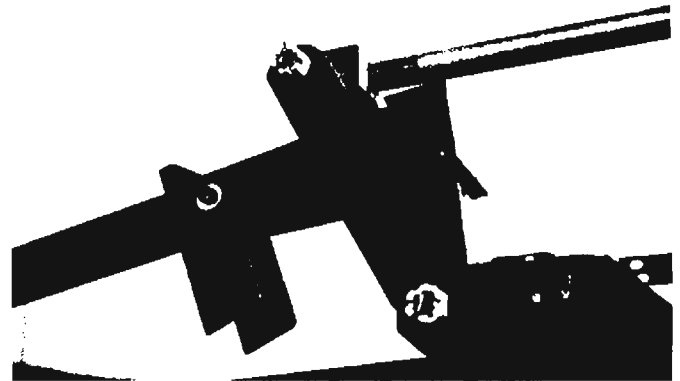


2. OPERATING ROD WEEDER HYDRAULIC WING LIFT SYSTEM

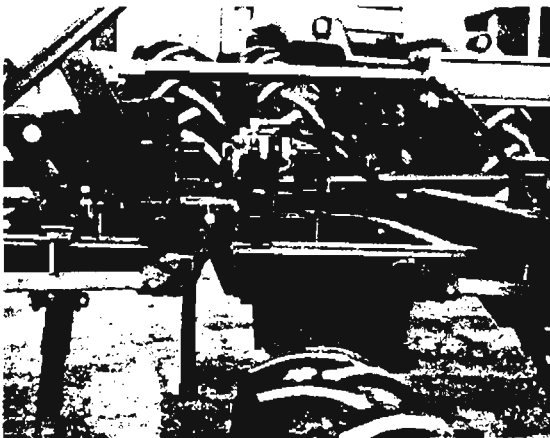
- A) Removing Rod Weeder from transport position.
- 1) Tractor must be hitched to Rod Weeder when lowering or raising wings.
 - 2) Remove L pin from wing transport latch lock assembly. Reinstall L pin in hole provided on transport latch.
 - 3) Tractor engine R.P.M. should be at fast idle.
 - 4) Lower Rod Weeder wings with constant hydraulic pressure on wing lift cylinders.
 - 5) Be sure wing lift cylinders are extended completely or wings will not work properly when Rod Weeder is working in field conditions (As in picture below)



Transport wing lock pins
Remove before lowering wings



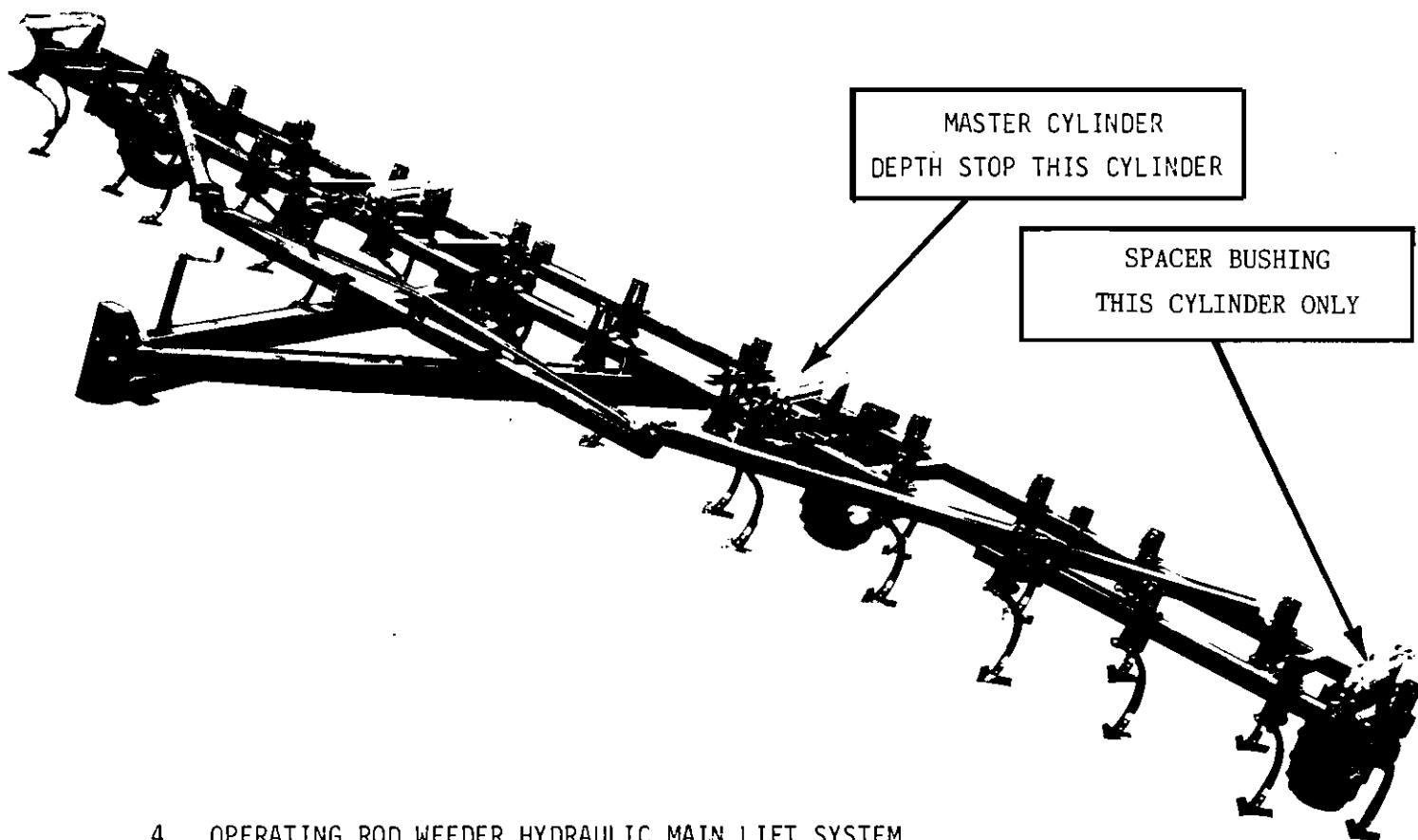
- B) Raising Rod Weeder to transport position
- 1) Tractor must be hitched to Rod Weeder when raising or lowering wings.
 - 2) Disconnect wing drive lines at wing hinge points. (Weeders equipped with dual drive only)
 - 3) Tractor engine R.P.M. should be at fast idle.
 - 4) Raise Rod Weeder wings with constant hydraulic pressure on wing lift cylinders until wing lift cylinders are completely closed.
 - 5) Pin transport latches with L pins.
 - 6) If Rod Weeder is to be moved on public road or highway, be sure to place transport stops on both center section main lift cylinders.



WARNING

3. TRANSPORTING ROD WEEDER

- A) Check state and local law requirements on over width or height machinery on public roads.
- B) Disconnect center section weeder drive line before long moves or if weeder is going to be moved over 8 M.P.H.
- C) Use extreme care in transporting Rod Weeder under overhead telephone or electrical wires. If Rod Weeder wings contacted overhead wires personal injury or death could result as well as damage to wires themselves.
- D) Care should be taken when on narrow roads or crossing narrow bridges.



4. OPERATING ROD WEEDER HYDRAULIC MAIN LIFT SYSTEM

A) Remove transport stops off both center section main lift cylinders. Place stops on welded ears of transport latches for field position. These stops must be reused any time field cultivator is to be transported on public roads.

B) Synchronizing of main lift cylinders (Calkins in-line lift system)

1) Remove all depth stops off master cylinder.

2) Tractor R.P.M. fast idle

3) Operate tractor hydraulic lever to raise Rod Weeder so all cylinders are fully extended and full of oil, continue holding lever until oil can return to tractor. (About one half minute) These cylinders are special cylinders having manual poppet valves that will only open when hydraulic cylinders are fully extended. Therefore letting oil return to tractor which in turn will remove any air in system.

4) Lower and raise the Rod Weeder a few times to make sure all four cylinders are synchronized and fully extend or retract at the same time. If any of the main lift cylinders do not operate properly, check assembly instructions for proper location of cylinders, hoses in proper location, or any leak in system.

C) Place depth stops on master cylinder for desired field operating depth. (Stops only needed on master cylinder) Center section left hand side cylinder (left & right hand side determined from standing behind Rod Weeder looking ahead towards tractor)

FIELD ADJUSTMENTS



A) Adjust the level of the frame by raising or lowering the tongue pull in a different hole provided in the hitch box. Lowering of the tongue pull will raise the front shanks while lowering the Weeder Rod. Raising the tongue pull will produce the opposite effect.

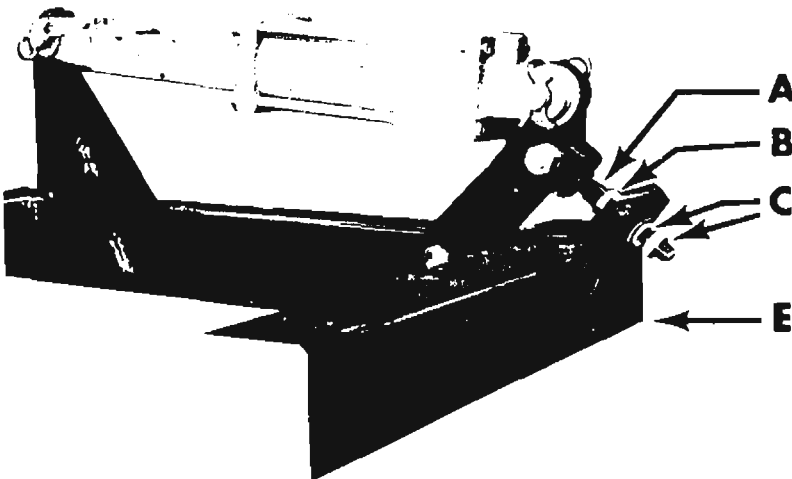
1) When added trash clearance is needed on a shank Rod Weeder. Always run the tongue on hole high. One hole on the tongue pull should be sufficient to attain added trash clearance.

B) Leveling main frame and wings. This adjustment is to prevent side draft and maintain equal depth of penetration across the complete width of the Rod Weeder.

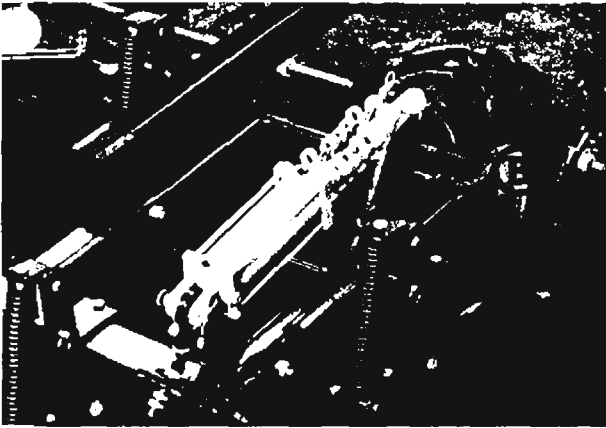
1) Locate the Rod working shallow on the Rod Weeder. Make sure adjustable link bushing is up tight against the cylinder base clevis, as in photo (A). If bushing isn't tight screw full nut (B) towards bushing lowering frame of Rod Weeder and relock jam nuts (C) as in photo. If bushing was tight against cylinder base clevis proceed to next step.

2) Raise cylinder base mounts at remaining wheel legs where Rods are too deep. This will level all frame sections with the shallow frame section. This adjustment is accomplished by loosening both jam nuts (C) and "Screwing full nut (B) to raise cylinder base mount (D) off main frame (E).

3) After main frame and wing frames are level and total Rod Weeder is working to shall or deep. Readjust master cylinder depth stops to put rods at depth needed.



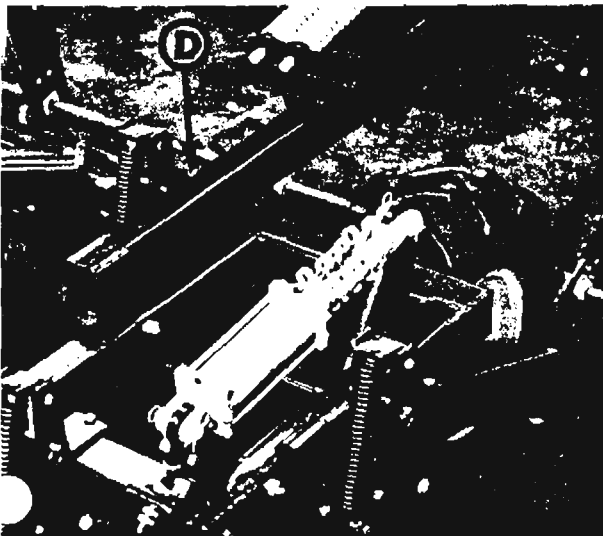
FIELD ADJUSTMENTS



- C) Shank spring tension adjustment in some ground conditions you may find need to readjust shank spring tension. The less tension used on the spring the more shank action you will have, which will increase trash clearance while losing ground penetration of the shanks
- 1) Loosen lock nut on top of spring casting. (A)
 - 2) Tighten or loosen spring tension bolt on top of shank to desired action of shank then relock nut of spring casting. (B)
 - 3) Check shank pressure by applying pressure with your foot on shank point. All shanks should have the same amount of pressure on them.

When shanks are needed:

- 1) Use shanks when ground conditions are extremely hard and when weeder rod is not penetrating properly.
- 2) In extremely rocky ground where the shanks may be able to loosen rocks ahead of the weeder rod.
- 3) Shanks may be used ahead of boots only to help keep the boots in soft ground. This may help keep small rocks out of the boot chain or give longer chain life.
- 4) Shanks may be used behind tractor tracks to work the track out so the rod leaves the ground level.
- 5) Shanks are needed when stubble is at rod depth.



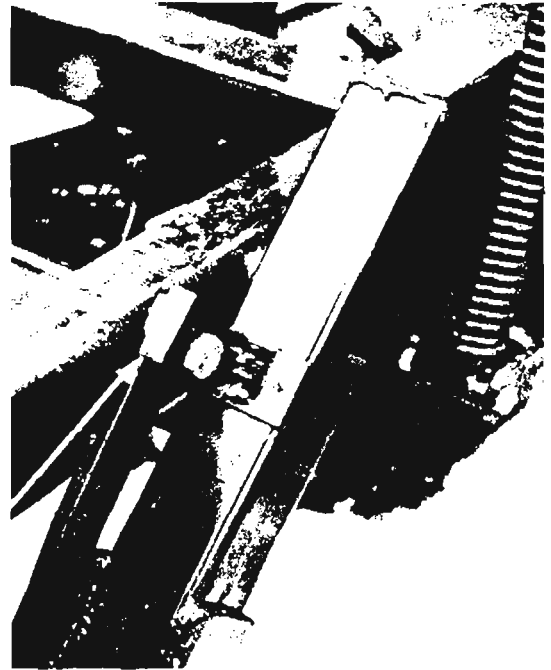
D) ADJUSTMENT OF STIFF LEAD ARM

The standard setting for shanks is one inch deeper than the rod. This adjustment may be changed by placing a shim under the lead arm and the frame then retighten the u bolt. ($\frac{1}{2}$ " shim will equal 1" at rod)

FIELD ADJUSTMENTS

1500 - RODWEEDERS WITH FLOATING LEAD ARM ONLY

- E) Floating lead arm weeder only. Amount of rod float may be changed by turning the eccentric stop block to another color of paint. Always keep the same color of paint up. Maximum amount of float is about 4½" on the weeder rod.



Eccentric stop
Lime Color Up



F) Tiller Wheels

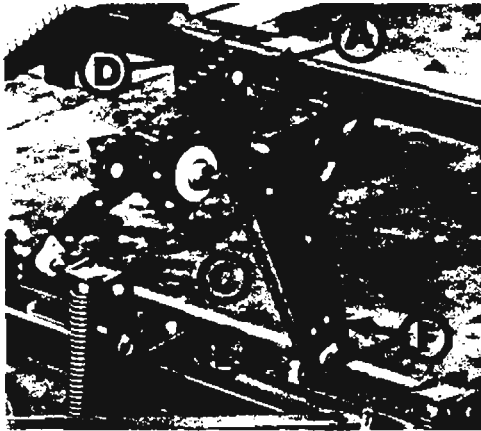
Tiller wheels are recommended when ground conditions vary from soft to hard ground. When a precise rod depth is needed or when harrow is installed. Tiller wheels may also be used to control the rod depth while controlling the shank. Depth with the hydraulic cylinders.

Adjustment of tiller wheels

- 1) Raise hydraulic cylinders until the tiller wheels come off the ground.
- 2) Loosen set collars, slide yoke up or down to achieve desired rod depth and reset collars.

When adjusting tiller wheels, be sure and maintain clearance on eccentric stop.

MAINTENANCE



A-Tightner Sprocket
B-Cleaner Sprocket
C-Drive Sprocket
D-Ear on Boot Body
E-Boot Point
F-Boot Bolts

Boot

Chain alignment and tightness should be maintained at all times.

- 1) Check tightner sprocket (A) for alignment with drive sprocket (C). Shims may be placed between boot body and tightner sprocket (A). Boot body ear (D) may be bent to also align tightner sprocket with drive sprocket (C).
- 2) Adjust chain tightness with weeder rod inground and tension on rod, adjust chain to have one inch of free movement.

- 3) When weeding in wet ground, when cleaner sprocket (B) cannot keep wet dirt from building upon the back side of boot, install boot covers. The other problem is dirt packing in around cleaner sprocket stopping sprocket from turning, therefore cutting teeth off sprocket. Again install boot covers.
- 4) Calkins offers several kinds of boot points. STANDARD POINT good for hard ground penetration. STANDARD ROCK POINT good for rocky ground. HEAVY DUTY ROCK POINT penetration not as good but will protect weeder boot side plates and keep small rocks from being picked up in weeder chain.
- 5) Check weeder boot bottom bolts frequently as they may work loose in hard ground.



Gooseneck shoes

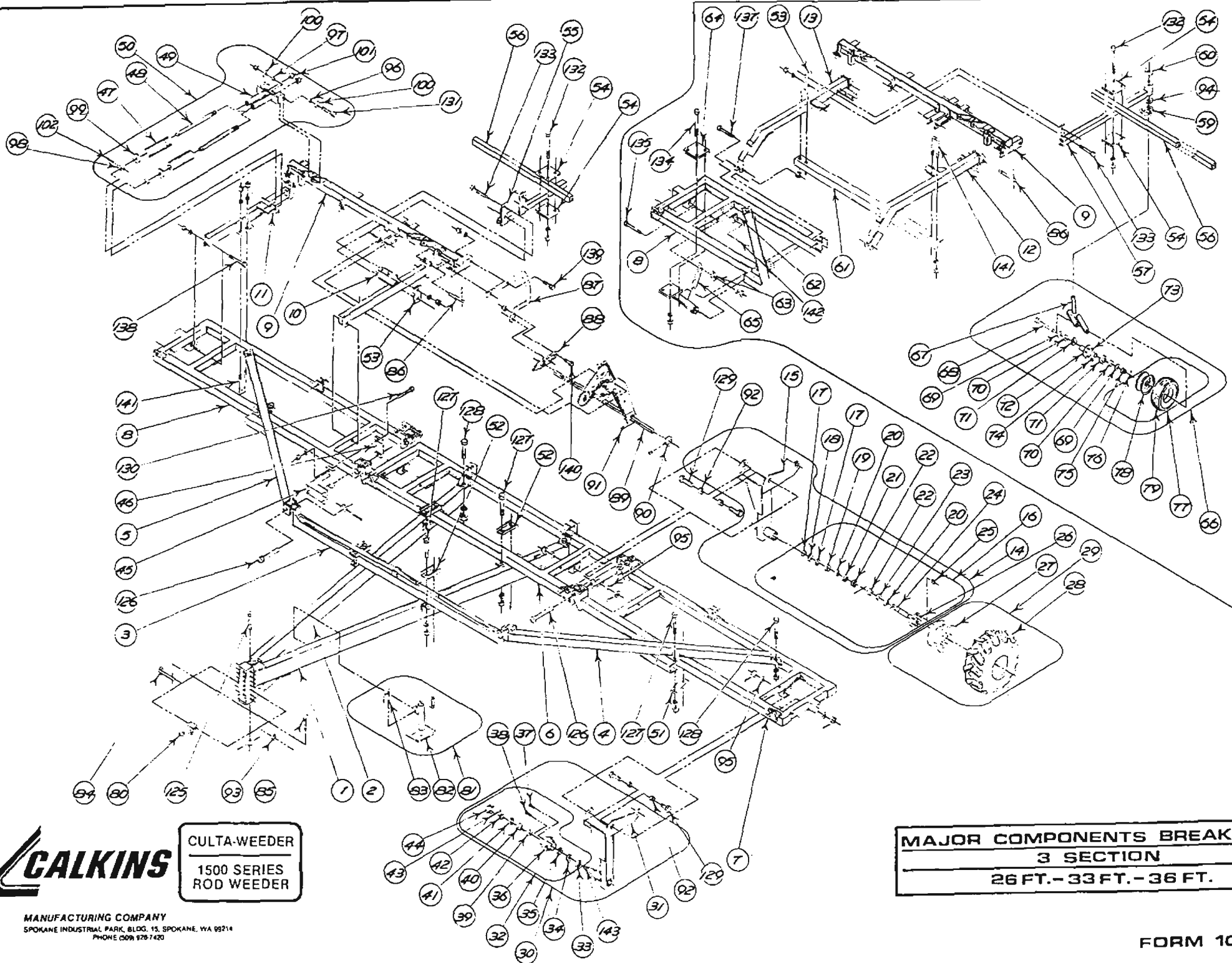
Always install gooseneck shoes as in picture with bolt in these holes (B). Gooseneck shoe will parallel gooseneck (A) when shoe is installed properly. If gooseneck shoe is installed upside down the weeder rod will run in a bow, causing boot to turn harder.

TROUBLE SHOOTING

TROUBLE	PROBABLE CAUSE	REMEDY
In-line lift cylinders not working properly	Cylinders out of phase	Recycle system
	Depth control cylinder leaks	Repair or replace cylinder
	Oil leak	Check hoses, fittings and cylinders
	Not enough hydraulic pressure	Check tractor for pressure (1800 PSI)
Main frame operates deeper than wing sections	Improper adjustment on cylinder base mounts	Readjust cylinder base mounts to level wings with center section
	Wing lift cylinders not fully extended	Operate wing lift lever and extend cylinders
Excessive side draft when pulling the cultivator	Tire pressure low or high on one side	Check tire pressure
	Cylinder creeps down	Check for leak or bad cylinder
	Improper adjustment on cylinder base mounts	Readjust cylinder base mount
Shanks do not penetrate the ground sufficiently	Extremely hard ground	Use reversible points
	Spring pressure	Tighten spring tension
	Wrong degree of sweep on shank	Use Calkins sweeps

TROUBLE SHOOTING

TROUBLE	PROBABLE CAUSE	REMEDY
Weeder Rod not penetrating the ground	Extremely hard ground	Use your shanks
	Nuts not removed off spring cushions	Remove nuts
	Weeder fore and aft adjustment wrong	Readjust fore and aft adjustment
	Weeder rod running in stubble mat	Lower shanks to clean area for rod to run
Breaking ujoints or clutch dogs	Clutch dog in backwards	Change direction of dog
	Not disconnecting drivelines before raising to transport position	Disconnect drivelines before raising wings
	Raising wings partially and moving weeder	Always remove drivelines before raising wings
	Moving weeder at high speed without disconnecting drivelines	Disconnect drivelines before transporting
	Foreign object in boot chain	Remove object and turn rod by hand checking chain & boot
Mud building up in boot	Boot covers not installed	Install boot covers
Cleaner sprocket cutting teeth off		
Straw or weed build up on boot	Boot covers installed	Remove boot covers
Chain and sprocket wear	Sprockets out of alignment	Align sprockets
	Chain to tight	Loosen chain tension
Sprocket wear	Using bad chain	Replace with Calkins hard roller chain



CULTA-WEEDER
1500 SERIES
ROD WEEDER

MANUFACTURING COMPANY
 SPOKANE INDUSTRIAL PARK, BLDG. 15, SPOKANE, WA 99214
 PHONE (509) 928-7420

MAJOR COMPONENTS BREAKDOWN
3 SECTION
26 FT. - 33 FT. - 36 FT.

FORM 1083-05

MAJOR COMPONENTS
BREAKDOWN
CULTA-WEEDER
ROD WEEDER

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MATERIAL LISTING

PAGE 1 OF 5

REF. NO.	NOMENCLATURE	26' 3. SECTION 12' CTR SECTION 7' WINGS 26' WORKING WDTH	33' 3 SECTION 12' CTR SECTION 10-1/2' WINGS 33' WORKING WDTH	36' 3 SECTION 12' CTR SECTION 12' WINGS 36' WORKING WDTH
1	TONGUE, LT	411-001	411-007	
2	TONGUE, RT	411-002	411-008	
3	CROSS TONGUE	N/A	410-008	
4	WING PULL, LT	N/A	410-074	410-010
5	WING PULL, RT	N/A	410-075	410-009
6	FRAME, CENTER	410-001		
7	WING FRAME LT	410-123	410-065	410-002
8	WING FRAME, RT	410-122	410-066	410-003
9	BACKTONE, CENTER	410-004		
	BACKBONE, LEFT	410-125	410-072	410-068
	BACKBONE, RIGHT	410-126	410-073	410-005
10	STIFF LEAD ARM, SHORT, LT (CNTR FRAME)	410-056		
	STIFF LEAD ARM, LONG, LT (WING FRAME)	410-136	410-070	
11	STIFF LEAD ARM, SHORT, RT (CNTR FRAME)	410-057		
	STIFF LEAD ARM, LONG, RT (WING FRAME)	410-137	410-071	
12	FLOATING LEAD ARM, LT	410-012		
13	FLOATING LEAD ARM, RT	410-011		
14	WHEEL LEG ASSEMBLY, CENTER FRAME (COMPLETE WITH LIVE AXLE)	LT	410-514	
		RT	410-513	
15	WHEEL LEG ONLY, CENTER FRAME	LT	410-014	
		RT	410-013	
16	LIVE AXLE ASSEMBLY	410-574		
17	LOCKNUT, SPECIAL	7-701-001		
18	LOCKWASHER, SPECIAL	7-807-001		
19	SPACER, RING	6-137-012		
20	SEAL	5-439-020		
21	CONE BEARING	5-419-127		
22	CUP	5-419-125		
23	CONE BEARING	5-419-126		
24	AXLE WITH STUDS	6-577-024		
25	LUG NUT, 1/2-20NF	7-732-001		
26	STUD, 1/2-20NF x 1-3/4	7-733-001		
27	RIM, 15 x 8	5-639-421		
28	TIRE, 12.5L-15 HIGH CLEAT TUBELESS	6 PLY	5-649-057	
		8 PLY	5-649-058	
29	RIM & TIRE MOUNTED, 12.5L 15 HIGH CLEAT	6 PLY LT	5-639-030	
		6 PLY RT	5-639-031	
		8 PLY LT	5-639-033	
		8 PLY RT	5-639-032	
30	WHEEL LEG ASSEMBLY, WING FRAME COMPLETE WITH HUB	LT	410-516	
		RT	410-515	
31	WHEEL LEG ONLY, WING FRAME (WITH REPLACEABLE SPINDLE PART #5-629-001)	LT	410-357	
		RT	410-356	

MAJOR COMPONENTS
BREAKDOWN
CULTA-WEEDER
ROD WEEDER

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MATERIAL LISTING

PAGE 2 OF 5

REF. NO.	NOMENCLATURE	26' 3 SECTION 12' CTR SECTION 7' WINGS 26' WORKING WDTH	33' 3 SECTION 12' CTR SECTION 10-1/2" WINGS 33' WORKING WDTH	36' 3 SECTION 12' CTR SECTION 12' WINGS 36' WORKING WDTH
32	HUB ASSEMBLY		5-619-021	
33	SEAL, FELT		5-439-141	
34	CONE BEARING		5-419-142	
35	CUP		5-419-141	
36	HUB		5-619-022	
37	LUG BOLT, BEVEL HEAD, 1/2-20NF x 1		7-333-006	
38	LUG BOLT, 1/2-20NF x 1-3/4 FULL THREAD CAPSCREW		7-113-107	
39	CUP		5-419-112	
40	CONE BEARING		5-419-113	
41	WASHER, FLAT 7/8 IN		7-815-035	
42	NUT, HEX, LIGHT SLOTTED, 7/8-16NF		7-715-880	
43	COTTER PIN, 1/8 x 1-3/4		7-910-155	
44	DUST CAP		5-469-006	
45	SHANK MOUNT		410-069	
46	BASE PLATE/SHANK MOUNT		410-079	
47	SPRING		5-114-001	
48	SPRING ROD		410-041	
49	SPRING GUIDE		410-040	
50	SPRING CUSHION ASSEMBLY		410-525	
51	MOUNTING PLATE, WING PULL		216-058	
52	CLAMP PLATE		206-031	
53	MOUNTING PLATE		410-058	
54	MOUNTING PLATE		200-994	
55	HARROW MOUNT ARM	LT 410-138 RT 410-139		410-087 410-086
56	HARROW MOUNTING BAR			
	40 IN. FOR 7 FT BACKBONES	410-135		N/A
	82 IN. FOR 10-1/2 FT BACKBONES	N/A	410-083	N/A
	100 IN. FOR 12 FT BACKBONES		410-084	
57	TILLER WHEEL ARM	LT 410-032 RT 410-031		
59	LIMIT PLATE		410-085	
60	COLLAR, SET STEEL (1-5/8 IN RD) WITH SET SCREW (7-532-004, 3/8-16NC x 1/2)		6-487-001	
61	LEAD ARM BRACE (7 FT WING ONLY)	410-134		N/A
62	RUB PLATE		410-030	
63	STOP BLOCK (COLOR CODED)		410-130	
64	MOUNTING PLATE		201-855	
65	LEAD ARM MOUNTS	LT 410-044 LT 410-046 RT 410-045 RT 410-047		
66	TILLER WHEEL ASSEMBLY (18.950 x 8)		202-541	
67	TILLER WHEEL FORK		106-041	
68	AXLE, TILLER FORK		8-115-003	
69	CUPPED WASHER,		8-885-001	
70	BUSHING (3/4 ID x 1-1/8 OD x 1/2)		5-135-001	FORM: 1083-3

MAJOR COMPONENTS
BREAKDOWN
CULTA-WEEDER
ROD WEEDER

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MATERIAL LISTING

PAGE 3 OF 5

REF. NO.	NOMENCLATURE	26' 3 SECTION 12' CTR SECTION 7' WINGS 26' WORKING WIDTH	33' 3 SECTION 12' CTR SECTION 10-1/2' WINGS 33' WORKING WIDTH	36' 3 SECTION 12' CTR SECTION 12' WINGS 36' WORKING WIDTH
71	SEALED BALL BEARING		5-449-012	
72	HUB ONLY		5-619-010	
73	LUG BOLT, 1/2-20 NF <i>STUD</i>		7-732-001	
74	LUG NUT, 1/2-20 NF		7-733-001	
75	NUT, CASTLE, 3/4-16 NF		7-715-850	
76	COTTER PIN 1/8 x 1-1/2		7-910-150	
77	RIM & TIRE MOUNTED, 18.950 x 8		5-639-117	
78	RIM, 18.950 x 8		5-639-007	
79	TIRE, 18.950 x 8, 4 PLY		5-649-015	
80	PULL EYE		5-919-900	
81	TONGUE JACK ASSEMBLY		410-512	
82	TONGUE JACK		5-329-051	
83	PIN, TONGUE JACK W/CHAIN 5/8 x 3-9/16		7-036-010	
84	PIN, PULL EYE		8-036-025	
85	KICK PIN, PULL EYE BOLT		7-920-006	
86	PIN, LEAD ARM (1/2 x 5-1/2) WITH ROLLER PIN 3/8 x 2 7-022-005		8-026-033	
87	GOOSENECK		202-078	
83	SHOE ASSEMBLY WITH 1 IN LOCKING SPOOL HIGH CHROME 1 IN HIGH CHROME ROCK 1 IN		105-101 105-103	
	WITH 7/8 IN LOCKING SPOOL HIGH CHROME 7/8 IN HIGH CHROME ROCK 7/8 IN		105-102 105-105	
	STANDARD 7/8 IN		105-064	
	STANDARD 1 IN		105-096	
	ROCK POINT 7/8 IN		105-094	
	ROCK POINT 1 IN		105-095	
	HIGH CHROME 7/8 IN		105-097	
	HIGH CHROME 1 IN		105-098	
	HIGH CHROME ROCK 7/8 IN		105-099	
	HIGH CHROME ROCK 1 IN		105-100	
89	WEEDER ROD			
	7/8 IN x 7 FT LONG	5-965-107		N/A
	1 IN x 7 FT LONG	5-966-107		N/A
	7/8 IN x 10-1/2 FT LONG	N/A	5-965-110	N/A
	1 IN x 10-1/2 FT LONG	N/A	5-966-110	N/A
	7/8 IN x 12 FT LONG		5-965-112	
	1 IN x 12 FT LONG		5-966-112	
90	SET COLLAR WITH SET SCREW 7-532-004, 3/8-16NC x 1/2 7/8 IN 1 IN		6-485-001 6-486-002	
91	BOOT DRIVE ASSEMBLY, COMPLETE (FOR COMPLETE BREAKDOWN SEE COMMON DRIVE PARTS SHEET)			
	STANDARD 7/8 IN		202-579	
	STANDARD 1 IN		410-474	

MAJOR COMPONENTS
BREAKDOWN
CULTA-WEEDER
ROD WEEDER

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MATERIAL LISTING

PAGE 4 OF 5

REF. NO.	NOMENCLATURE	26' 3 SECTION 12' GTR SECTION 7' WINGS 26' WORKING WIDTH	33' 3 SECTION 12' CTR SECTION 10-1/2' WINGS 33' WORKING WIDTH	36' 3 SECTION 12' CTR SECTION 12' WINGS 36' WORKING WIDTH
91	CONT ROCK POINT 1 IN		410-476	
	HIGH CHROME 7/8 IN		202-554	
	HIGH CHROME 1 IN		410-524	
	HIGH CHROME ROCK 7/8 IN		202-555	
	HIGH CHROME ROCK 1"		410-545	
92	BUSHING, WHEEL LEG BOLT (1-9/32 ID x 1-1/2 OD x 1-7/16)		6-132-627	
93	MACHINE BUSHING, 1-1/2 IN, 10 GA NAR.RIM		7-896-500	
94	MACHINE BUSHING, 1-5/8 IN, 10 GA NAR.RIM		7-897-015	
95	MACHINE BUSHING, 1-1/4 IN, 10 GA NAR.RIM		7-896-250	
96	BUSHING (1" OD x 41/64 ID x 9/16)		6-143-007	
97	BUSHING (1" OD x 41/64 ID x 3/8)		6-144-001	
98	STOP, SPRING GUIDE		410-042	
99	WASHER, SPRING RETAINER		8-816-001	
100	5/8 IN CUT WASHER, PLTD		7-814-015	
101	JAM NUT, 1-9NC		7-726-015	
102	ROLL PIN 3/8 x 2		7-022-005	
125	BOLT 1-1/4-12NFX 8-1/2" (26 FT ONLY) 1-1/4-12NFX 10-1/8 (33 & 36 FT)	8-116-040		8-116-006
	NUT, HEX, SLOTTED, 1-1/4-12NF		7-717-240	
	COTTER PIN 3/16 x 1-3/4		7-910-175	
126	BOLT, 1-1/4-12NF x 6-5/8 (CROSSTONGUE & HINGE POINTS)		8-116-032	
	NUT, HEX, SLOTTED, 1-1/4-12NF		7-717-240	
	COTTER PIN, 3/16 x 1-1/4		7-910-175	
127	CAPSCREW, 3/4-10NC x 6		7-115-076	
	LOCKWASHER, 3/4 MED		7-845-020	
	NUT, HEX, 3/4-10NC		7-725-001	
128	CAPSCREW, 1-8NC x 3		7-116-030	
	LOCKWASHER, 1 IN MED		7-846-020	
	NUT, HEX, 1-8NC		7-726-005	
129	BOLT, WHEEL LEG, 1-1/4-12NF x 3-1/4		8-116-802	
	NUT, LIGHT SLOTTED, 1-1/4-12NF		7-717-240	
	COTTER PIN 3/16 x 2		7-910-180	
130	CAPSCREW, 5/8-11NC x 5-1/2		7-114-055	
	LOCKWASHER, 5/8 MED		7-844-020	
	NUT, HEX, 5/8-11NC		7-724-005	
131	CAPSCREW, PLTD GRADE 8, 5/8-11NC x 2-1/4		7-714-111	
	NUT, CENTER LOCK, 5/8-11NC		7-723-119	
132	CAPSCREW, 1/2-13NC x 7		7-113-141	
	MED. LOCK WASHER, 1/2 IN		7-843-015	
	NUT, HEX, 1/2-13NC		7-723-015	
133	CAPSCREW, 1/2-13NC x 5		7-113-127	
	MED. LOCKWASHER, 1/2 IN		7-843-015	
	NUT, HEX, 1/2-13NC		7-723-015	
4	CAPSCREW, 1/2-13NC x 6		7-113-135	
	MED. LOCKWASHER, 1/2 IN		7-843-015	
	NUT, HEX, 1/2-13NC		7-723-015	

MAJOR COMPONENTS
BREAKDOWN
CULTA-WEEDER
ROD WEEDER

FORM 0482-11

45

MATERIAL LISTING

PAGE 5 OF 5

REF. NO.	NOMENCLATURE	26' 3 SECTION	33' 3 SECTION	36' 3 SECTION
		12' CTR SECTION 7' WINGS 26' WORKING WIDTH	12' CTR SECTION 10-1/2' WINGS 33' WORKING WIDTH	12' CTR SECTION 12' WINGS 36' WORKING WIDTH
135	CAPSCREW, 3/4-10NC x 5-1/2		7-115-015	
	MED. LOCKWASHER, 3/4 IN		7-845-020	
	NUT, HEX, 3/4-10NC		7-725-001	
137	CAPSCREW, 3/4-10NC x 5		7-115-050	
	NUT, CONELOCK, 3/4-10NC		7-725-121	
138	CAPSCREW, 3/4-10NC x 4-1/2		7-115-065	
	MED. LOCKWASHER 3/4 IN		7-845-020	
	NUT, HEX, 3/4-10NC		7-725-001	
139	CAPSCREW, 5/8-11NC x 2-1/2		7-114-115	
	MED. LOCKWASHER 5/8 IN		7-844-020	
	NUT, HEX, 5/8-11NC		7-724-005	
140	CAPSCREW, 7/16-14NC		7-112-014	
	NUT, HEX, 7/16-14NC		7-722-015	
141	U-BOLT, 1/2-13NC x .5		5-213-004	
	MED. LOCKWASHER		7-843-015	
	NUT, HEX, 1/2-13NC		7-723-015	
142	SELF TAPPING SCREW NO. 10 (3/4 IN)		7-541-006	
143	REPLACEABLE SPINDLE, ATTACHED TO WHEEL LEG WITH 5/8 X 4 NCCS BOLT, LOCKWASHER AND NUT.		5-629-001	

NOTE: STANDARD PLUMBING ARRANGEMENT

1/2" HOSE TO ROD
END OF WING LIFT
CIRCUIT (HIGH PRESSURE
CIRCUIT)

1/2" HOSE TO BASE
END OF WING LIFT
CIRCUIT (LOW PRESS
CIRCUIT)

PAINTED PORT

MOUNTS TO TONGUE
OF TOOL.

4Z0008

CUSHION VALVE

PAINTED PORT

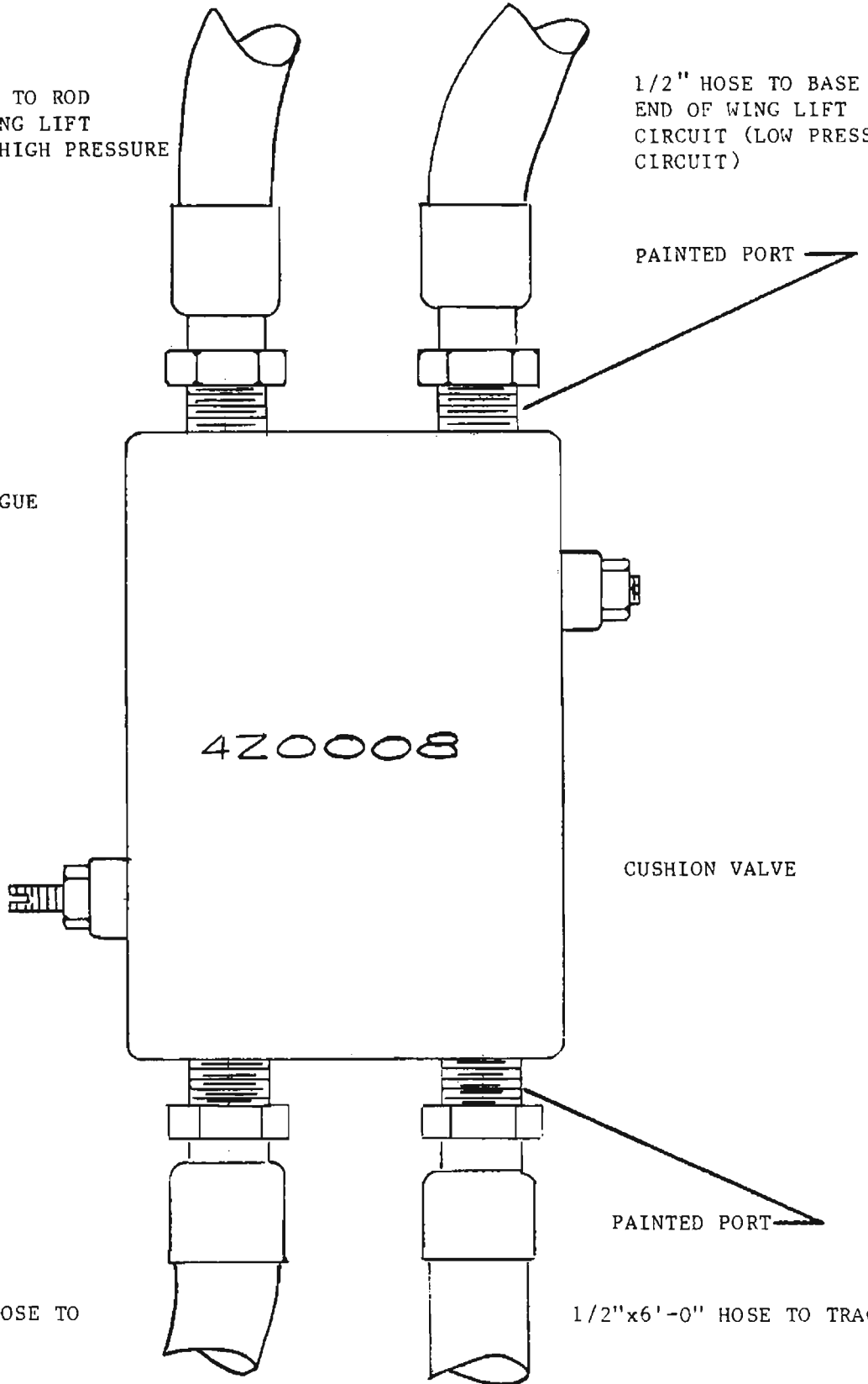
1/2"x6'-0" HOSE TO
TRACTOR

1/2"x6'-0" HOSE TO TRACTOR

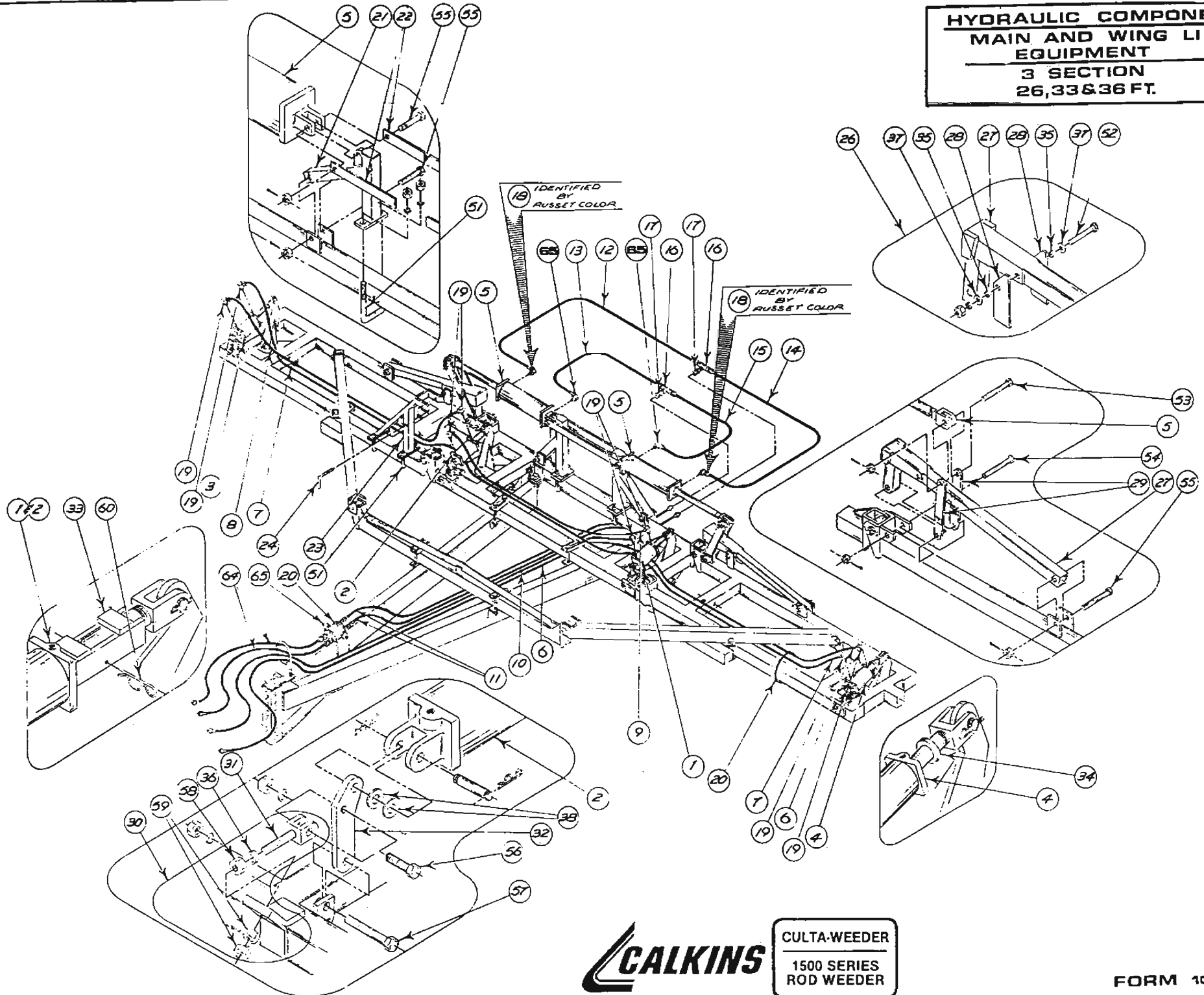
TOP VIEW

46A

FORM: 1083-14



**HYDRAULIC COMPONENTS
MAIN AND WING LIFT
EQUIPMENT
3 SECTION
26, 33 & 36 FT.**



CULTA-WEEDER
1500 SERIES
ROD WEEDER

46_B

FORM 1088-20

HYDRAULIC COMPONENTS
MAIN AND WING LIFT
EQUIPMENT

MATERIAL LIST

PAGE 1 OF 2

REF NO.	NOMENCLATURE	26' 3-SECTION 12' CTR SECTION 7' WINGS	33' 3-SECTION 12' CTR SECTION 10-1/2' WINGS	36' 3-SECTION 12' CTR SEC. 12' WINGS
	CYLINDERS (MAIN LIFT SYSTEM) 3 - SECTION KIT		5-818-449	
1	4 x 8 AB 1250 LT CNTR		5-818-058	
2	3-3/4 x 8 AB 1256 RT CNTR		5-818-057	
3	3-1/2 x 8 AB 1262 RT WING		5-818-056	
4	3-1/4 x 8 * AB 1268 LT WING		5-818-055	
	*BUSHING		6-146-014	
	CYLINDERS (WING LIFT SYSTEM)			
5	4 x 24 S-509 WITH 36-1/4 RC		5-818-481	
	HOSE (MAIN LIFT SYSTEM)			
6	3/8 x 24 FT 1/2 IN MM	6-822-478		N/A
	3/8 x 30 FT 1/2 IN MM	N/A	6-822-560	N/A
	3/8 x 31 FT 6 IN, 1/2 IN MM		N/A	6-822-578
7	3/8 x 27 FT 1/2 IN MM	6-822-529		N/A
	3/8 x 33 FT 1/2 IN MM		6-822-633	
	3/8 x 36 FT 1/2 IN MM		N/A	6-822-632
8	3/8 x 8 FT 2 IN, 1/2 IN MM	6-822-284		N/A
	3/8 x 11 FT 2 IN, 1/2 IN MM	N/A	6-822-342	N/A
	3/8 x 12 FT 8 IN, 1/2 IN MM		N/A	6-822-352
9	3/8 x 11 FT 9 IN, 1/2 IN MM		6-822-343	
10	3/8 x 17 FT 1/2 IN MM	6-822-404		N/A
	3/8 x 20 FT 1/2 IN MM	N/A	6-822-440	N/A
	HOSE (WING LIFT SYSTEM)*SEE SUPPLEMENT 46A			
11	3/8 x 8 FT 11 IN, 1/2 IN MM	6-822-286		N/A
	3/8 x 11 FT 9 IN, 1/2 IN MM	N/A		6-822-343
12	3/8 x 90 IN 1/2 IN MM		6-822-290	
13	3/8 x 66 IN 1/2 IN MM		6-822-266	
14	3/8 x 32 IN 1/2 IN MM		6-822-232	
15	3/8 x 26 IN 1/2 IN MM		6-822-226	
16	TEE 1/2 x 1/2 IN (WING LIFT SYSTEM)		5-833-100	
17	UNION, ST. 1/2 IN (WING LIFT SYSTEM)		5-843-100	
18	90 DEG RESTRICTOR UNION, 1/2 IN (1/16 ORFICE) (WING LIFT SYSTEM)		5-843-469	
19	1/2" - 90 DEGREE O-RING SWIVEL UNION		5-846-095	
20	TIE STRAP, NYLON		5-229-006	
21	CENTER SUPPORT MOUNT LEFT		410-033	
	RIGHT		410-034	
22	CENTER SUPPORT BAR		410-043	
23	TRANSPORT LATCH		410-082	
24	1" x 5 1/2" L-PIN		8-036-006	
25	HOSE MAST		101-037	
26	WING LIFT ASSEMBLY (CONSISTS OF WING LIFT & STOP ASSEMBLY)	410-429		410-510
27	WING LIFT	410-124		400-020

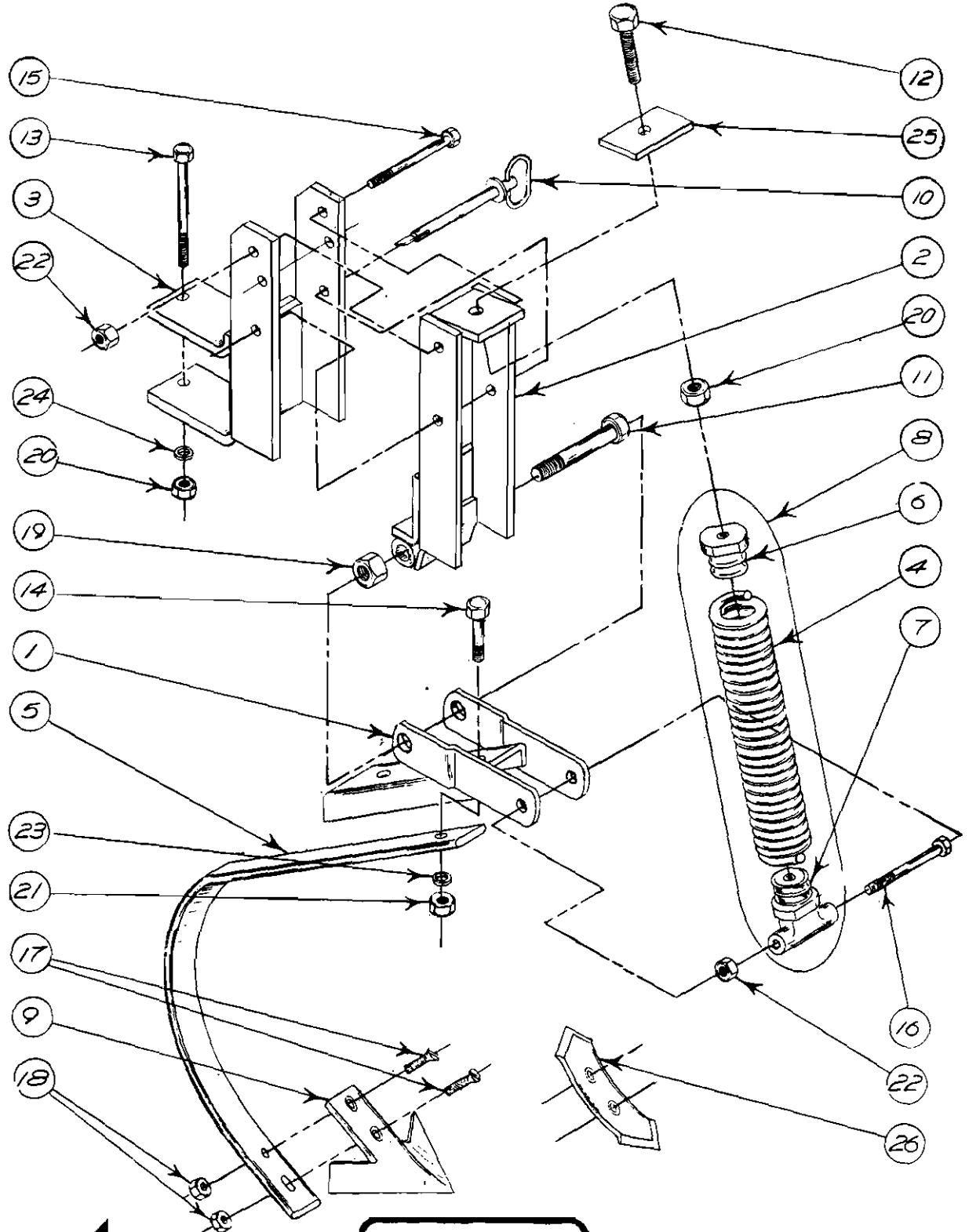
HYDRAULIC COMPONENTS
MAIN AND WING LIFT
EQUIPMENT

MATERIAL LIST

PAGE 2 OF 2

REF NO	NOMENCLATURE	26' 3-SECTION	33' 3-SECTION	36' 3-SECTION
		12' CTR SECTION 7' WINGS	12' CTR SECTION 10-1/2' WINGS	12' CTR SEC. 12' WINGS
28	STOP, WING LIFT		410-106	
29	TOGGLE, WING LIFT		400-032	
30	ADJUSTABLE LINK ASSEMBLY		410-581	
31	ADJUSTABLE LINK		410-121	
32	PIVOT ARM		400-025	
33	CYLINDER LOCK		410-077	
34	BUSHING (1-9/32 ID x 2 OD x 5/8)		6-146-014	
35	BUSHING, WING LIFT STOP (0.510 ID x 3/4 OD x 7/16)		6-133-007	
36	BUSHING, ADJUSTABLE LINK (1" ID x 1.315 OD x 9/16)		6-146-002	
37	WASHER, WING LIFT STOP, 1/2 IN		7-813-015	
38	WASHER, 1 IN CUT		7-816-020	
51	U-BOLT, 5/8-11NC (4-3/4 x 6)		5-214-002	
	LOCKWASHER, 5/8 MED		7-844-020	
	NUT, HEX, 5/8-11NC		7-724-005	
52	CAPSCREW, 1/2-13NC x 5		7-113-127	
	LOCKWASHER, 1/2 MED		7-843-015	
	NUT, HEX, 1/2-13NC		7-723-015	
53	BOLT, 1-14NF x 5-1/2		8-115-601	
	NUT, 1-14NF SLOTTED		7-716-850	
	COTTER PIN, 3/16 x 1-1/2		7-910-170	
54	BOLT, 1-14 NF x 6		8-116-003	
	NUT, 1-14 NF SLOTTED		7-716-850	
	COTTER PIN, 3/16 x 1-1/2		7-910-170	
55	BOLT, 1-14NF x 5		8-116-018	
	NUT, 1-14NF SLOTTED		7-716-850	
	COTTER PIN, 3/16 x 1-1/2		7-910-170	
56	CAPSCREW, 3/4-10NC x 2-1/2		7-115-025	
	LOCKWASHER, 3/4 MED		7-845-020	
	NUT, HEX, 3/4-10NC		7-725-001	
57	CAPSCREW, 3/4-10NC x 5		7-115-050	
	LOCKWASHER, 3/4 MED		7-845-020	
	NUT, HEX, 3/4-10NC		7-725-001	
58	NUT, 7/8-9NC HEX		7-715-871	
59	NUT, 7/8-9NC HEX JAM		7-725-138	
60	HITCH PIN #8		7-920-002	
64	3/8" x 6' x 1/2" MM		6-822-272	
65	1/2" 90 DEGREE SWIVEL UNION		5-843-460	

ROTATING SHANK ASSEMBLY

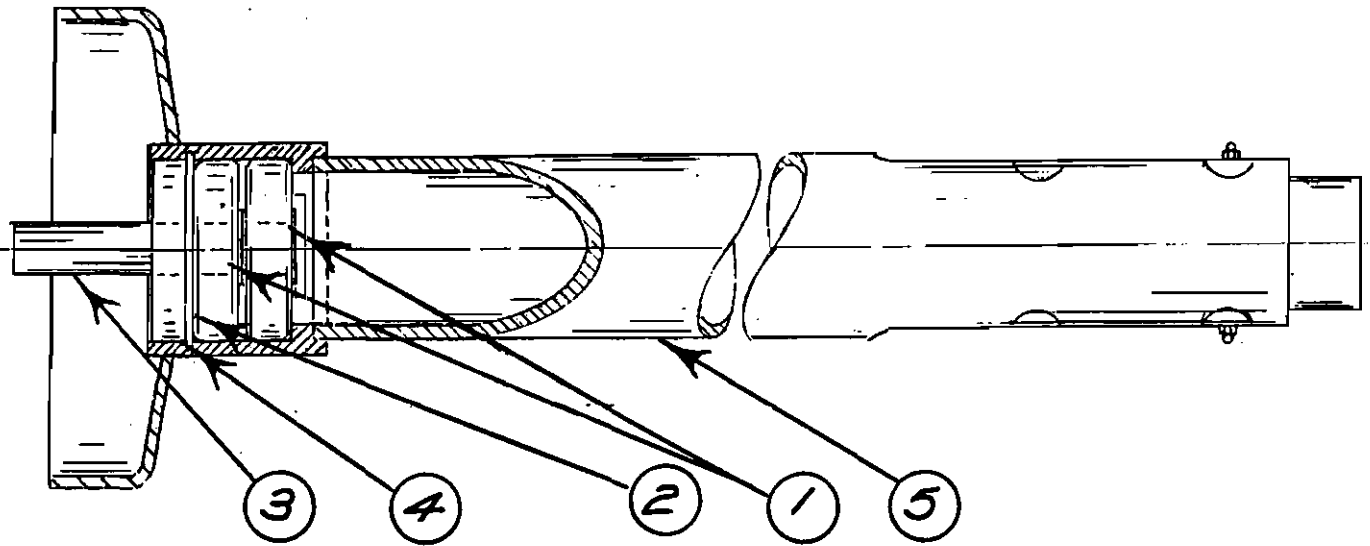


CULTA-WEEDER
1500 SERIES
ROD WEEDER

MATERIAL LISTING
ROTATING SHANK ASSEMBLY

REF. NO.	ITEM DESCRIPTION	PART NO.
1	SHANK MOUNT	201-062
2	SPRING MOUNT	410-055
3	ROTATION MOUNT	410-054
4	SPRING	5-123-002
5	SHANK	5-939-003
6	INSERT, TOP	6-919-050
7	INSERT, BOTTOM	6-919-051
8	SPRING WITH INSERTS	6-123-002
9	SWEEP BLADE	
	1/4 x 9	5-952-616
	1/4 x 9 HARD SURFACED	5-952-618
10	LOCK PIN	7-920-012
11	3/4-16 NF x 4-3/4", CS, MECH PL	7-115-067
12	1/2-13 NC x 3", CS, FULL THRD	7-113-136
13	1/2-13 NC x 5-1/2", CS	7-113-129
14	5/8-11 NC x 1-3/4", CS	7-114-006
15	1/2-13 NC x 4-1/2", CS	7-113-124
16	1/2-13 NC x 3-3/4", CS	7-113-121
17	7/16 NC x 1-1/2" NO. 3 PLOW BOLT (USED ON REVERSIBLE POINT AND 1/4" SWEEPS)	7-272-058
18	7/16 NC, HEX NUT	7-722-015
19	3/4-16 NF, TOP LOCK NUT PL	7-725-122
20	1/2-13 NC, HEX NUT	7-723-015
21	5/8-11 NC, HEX NUT	7-724-005
22	1/2-13 NC, CONE LOCK NUT	7-723-100
23	5/8 MED LOCK WASHER	7-844-020
24	1/2 MED LOCK WASHER	7-843-015
25	ROTATION STOP PLATE	410-133
26	REVERSIBLE BOLT ON POINT	5-949-012
	SHANK LOWERING BRACKET	410-164

DUAL DRIVE LINE, SEALED



REF.	PART NO.	DESCRIPTION
1	5-449-032	BEARINGS (2 REQ.)
2	5-459-003	SNAP-RING
3	6-449-024	SHAFT WITH BEARINGS,
	6-566-095	SHAFT ONLY
4	5-439-025	SEAL
5	410-156	DRIVELINE 18-1/4"
	410-493	FEMALE DRIVELINE ASSY. (RIGHT) 18-1/4"
	410-492	FEMALE DRIVELINE ASSY. (LEFT) 18-1/4"
	410-078	DRIVELINE 16-3/4"
	410-578	FEMALE DRIVELINE ASSY. (RIGHT) 16-3/4"



CULTA-WEEDER
1500 SERIES
ROD WEEDER

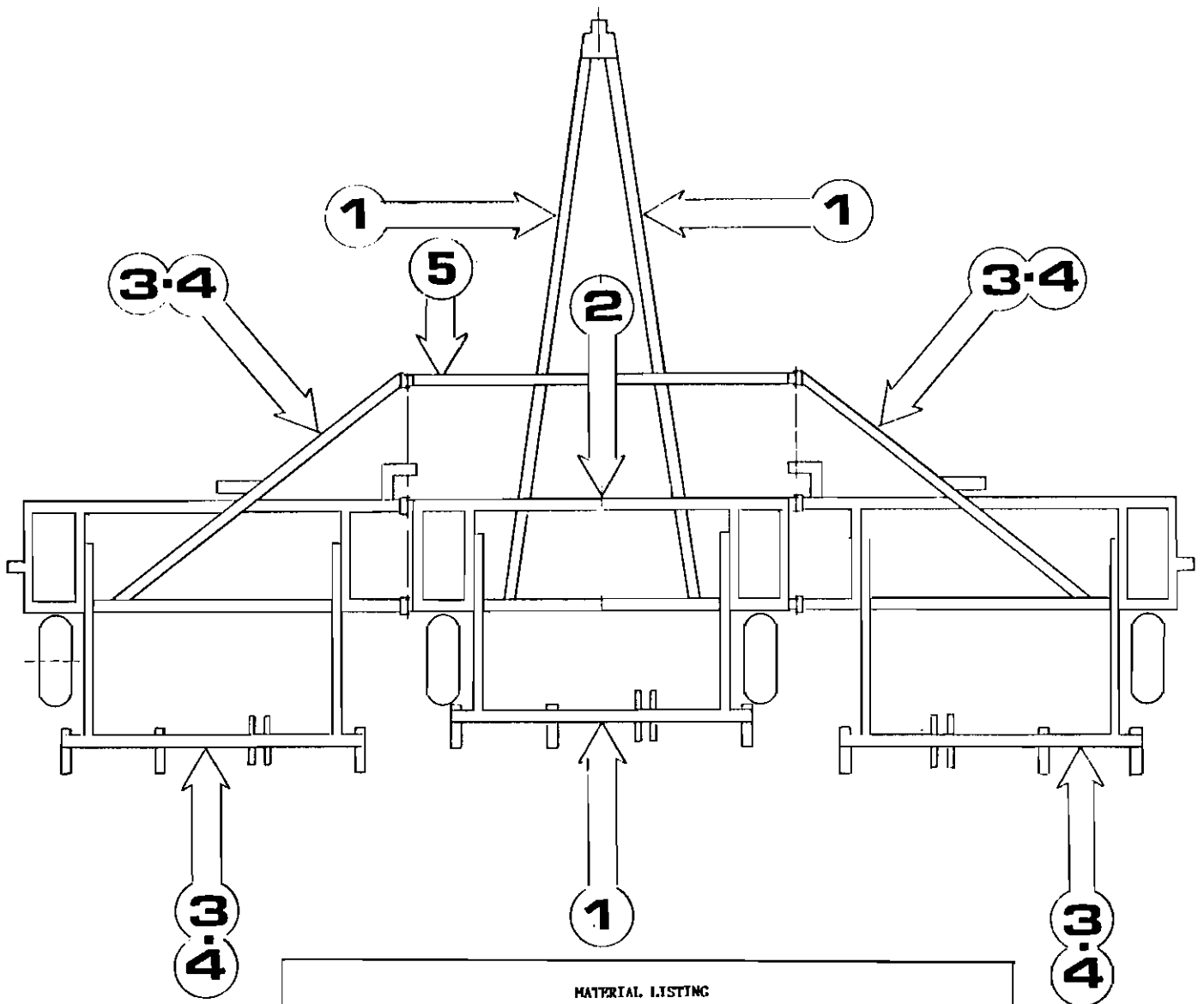
REF. NO.	DESCRIPTION	PART NO.
1	IDLER SPROCKET ASSY	6-449-002
2	1/2" x 2 1/2" NC CS	7-113-111
3	1/2" FLATWASHERS	7-813-015
4	SNAP RING	5-489-002
5	IDLER SPROCKET	6-919-184
6	BEARING	5-449-020
7	BUSHING	6-133-030
8	3/8" x 1 1/2" WOODRUFF KEY	7-932-115
9	1/2" LOCKWASHER	7-843-015
10	1/2" HEX NUT N.C.	7-723-015
11	BOOT SHELL	410-181
12	CHAIN ASSY 84 LINKS	6-019-001
13	1/2" x 2" NC CS	7-113-110
14	BOOT BRACE	412-202
15	KICKER SPROCKET ASSY	6-919-684
16	BEARING & BUSHING ASSY	412-080
17	ECCENTRIC LOCK	5-489-001
18	3/8" NC HEX NUT	7-722-010
19	3/8" MED. LOCKWASHER	7-842-010
20	BEARING FLANGE	5-499-002
21	BEARING, BOOT HUB	5-449-019
22	3/8" x 1" NC CS	7-112-050
23	BOOT HUB	106-185
24	SPLIT SPROCKET STD HIGH CHROME	6-919-198 5-919-698
25	FEMALE DRIVELINE ASSY	
	RH 18 1/2"	410-493
	LH 18 1/2"	410-492
	RH 16 3/4"	410-578
26	1/2" x 1 3/4" ROLL PIN	7-023-001
27	U-JOINT WITH WELDED DOG ASSY LESS SPRING, PAWL & PIN	6-596-002
	U-JOINT WITH WELDED DOG ASSY WITH PAWL, SPRING & PIN, LH	6-546-001
	RH	6-546-002
	JOURNAL REPAIR KIT	5-549-003
	REPAIR - YOKE	5-546-009
	REPAIR - RATCHET	6-596-001
28	PAWL LEVER	6-919-146
29	SPRING	5-110-001
30	FEMALE DRIVELINE 18 1/2" 16 3/4"	410-081 410-078
31	KICKER SPROCKET	6-919-484
32	1/2" CENTERLOCK NUT N.C.	7-723-101
34	BEARING ASSY (WITH SEAL, BRG., & SHAFT)	6-449-024
	BEARING	5-449-032
	SEAL	5-439-025
	SNAP RING	5-459-003
	SHAFT	6-566-095

REF. NO.	DESCRIPTION	PART NO.
35	BOOT POINTS: NI-HARD STD	5-919-222
	NI-HARD ROCK	5-919-221
	HI-CHROME STD	5-919-622
	HI-CHROME ROCK	5-919-621
36	BOOT BOTTOM ASSY	
	1" NI-HARD STD	412-342
	1" NI-HARD ROCK	412-344
	1" HI-CHROME STD	103-509
	1" HI-CHROME ROCK	103-510
37	5/8 x 2 NC CS	7-114-109
38	5/8 NC CENTERLOCK NUT	7-723-111
40	BOOT BOTTOM, SIDE PLATE	412-201
41	BOOT BLOCK, NI-HARD	5-919-209
	HI-CHROME	5-919-609
42	1" BOOT SPROCKET 11+ NI-HARD HI-CHROME	5-919-379 5-919-679
43	CHAIN GUARD	412-074
46	SHOE ASSY, STD NI-HARD 1" ROCK NI-HARD 1"	105-096 105-095
47	SHOE STD	105-062
	ROCK	105-078
48	SHOE ASSY, STD HI-CHROME 1" ROCK HI-CHROME 1"	105-098 105-100
	LOCKING STD HI-CHROME 1"	105-103
	LOCKING ROCK HI-CHROME 1"	105-101
49	SPOOLS 1" NI-HARD	5-919-217
	HI-CHROME	5-919-617
	LOCKING HI-CHROME	6-919-355
50	SHOE BLOCK NI-HARD HI-CHROME	5-919-212 5-919-612

COMMON DRIVE PARTS

53

DECAL LOCATIONS



MATERIAL LISTING		
REF. NO.	DESCRIPTION	PART. NO.
1	CALKINS DECAL	5-359-415
2	NO RIDER DECAL	5-359-411
3	CULTAWEEDER DECAL	5-359-410
4	1500 SERIES RODWEEDER DECAL	5-359-412
5	WARNING DECAL - YELLOW	5-359-423
	TRANSPORT DECAL	5-359-422

