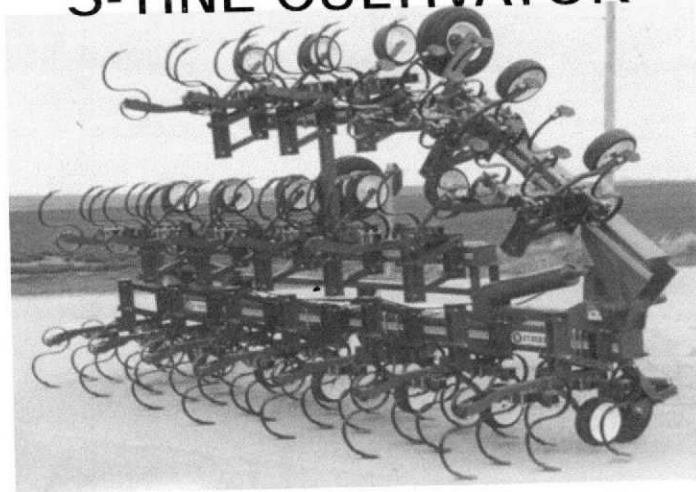
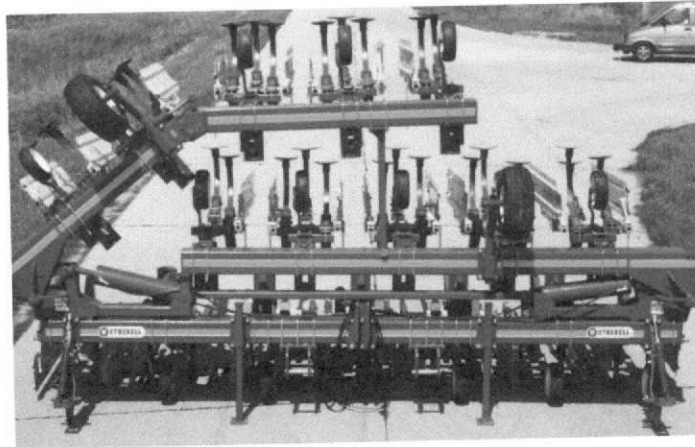




4 Thru 16 Row
S-TINE CULTIVATOR



4 Thru 16 Row
C-SHANK CULTIVATOR



Wetherell Mfg. Co.
407 W. Grace St.
Cleghorn, IA 51014

PH. (712) 436-2464 FAX: (712) 436-2672

Part Number 302-00064

01/03

INTRODUCTION

Congratulations, you are now the owner of a Wetherell Cultivator. In the following pages, we have pointed out WARRANTY, SAFETY RULES, TRACTOR PREPERATION, CULTIVATOR PREPERATION, PARTS BREAKDOWN AND GENERAL "Common Sense" suggestions for you to study carefully! We do feel that you will have the best results with your cultivator, if you will follow our instructions and suggestions.

Thank you for choosing a Wetherell Cultivator.

Ronald Wetherell

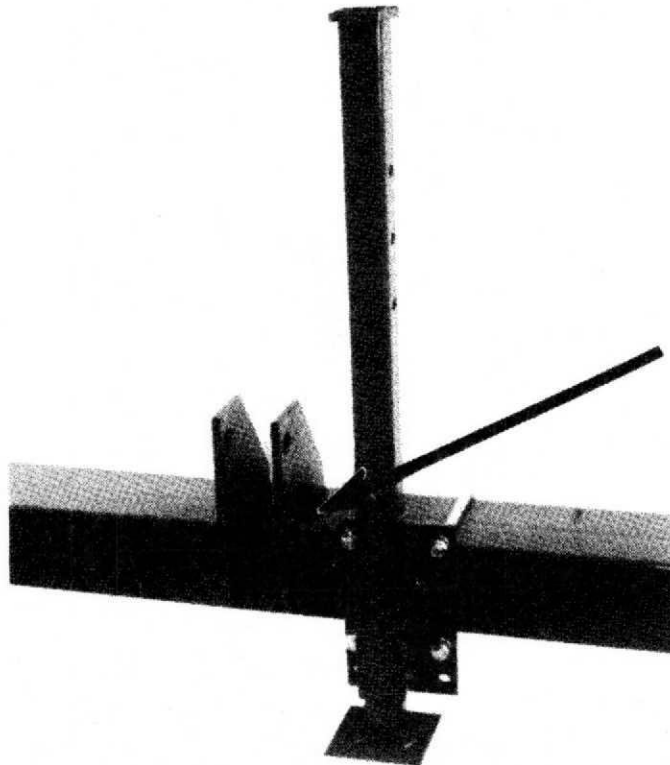
SERIAL NUMBER LOCATION

Always give your dealer the model number and serial number of the machine when ordering parts or requesting service information.

The serial number is located on the left side of the mast (shown below) and is stamped in the metal.

MODEL NUMBER : _____

SERIAL NUMBER: _____



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FOREWORD

Read this manual carefully to learn how to assemble, and service your Wetherell Cultivator properly. Failure to do so could result in personal injury or equipment damage.

This manual should be considered a permanent part of your Wetherell Cultivator and should remain with the machine when you sell it.

Measurements in this manual are U.S. customary units.

Right-hand and left-hand sides are determined by standing behind cultivator and facing the direction the Wetherell Cultivator will travel when going forward.

The front section of this manual contains safety assembly, operation and service instructions for Wetherell Cultivators. The rear section contains a list of parts available for service and repair.

Write product identification numbers in the Specifications section. An accurate record of all the numbers will help in tracing the machine, should it be stolen. Your dealer also needs these numbers when you order parts. If this manual is kept on the machine, also file a copy of the identification numbers in a secure place off the machine.

Warranty is provided as part of Wetherell Manufacturing Company's support program for customers who operate and maintain their equipment as described in this manual. All Wetherell Manufacturing Company parts and workmanship will be free of defect for the first crop season. All warranty claims must be processed by *December 31 of that season*. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void. Additionally, Wetherell Manufacturing Company's warranty does not cover labor or expense involved in removal of components from equipment or any transportation charges involved. This concludes any and all warranties implied in the manufacture, unless otherwise stated in writing.

All information, illustrations and specifications in this manual are based on the latest product information available at the time of publication. The right is reserved to make changes at any time without notice.

SAFETY

Recognize safety information. This is the safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.

Follow safety instruction. Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs.

Learn how to operate the machine and how to use the controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.



Understand signal words. A signal word--DANGER, WARNING or CAUTION--is used with the safety-alert symbol. DANGER identified the most serious hazards.

Safety signs with the signal words DANGER or WARNING are typically near specific hazards.

General precautions are listed on CAUTIONS safety signs. CAUTION also calls attention to safety messages in this manual.



DANGER



WARNING



CAUTION

SAFETY RULES

- * Although we make every effort to insure maximum safety when using a Wetherell Cultivator, a careful operator is always the best insurance against an accident.
- * When working under or around the cultivator always lower cultivator down on parking stands, if a hydraulic failure were to occur, unsupported equipment could suddenly lower causing serious personal injury or death.
- * Misuse or modification of this machine can cause a mechanical breakdown, property damage or personal injury or death.
- * Stop the engine as well as any other power source and set parking brake before making any adjustments, lubricating, cleaning or unclogging cultivator.
- * Before hitching a Wetherell Cultivator to the tractor 3-point hitch, check this manual for cultivator weight, and any other weight (attachments) to be carried by the tractor 3-point hitch for gross weight. Now refer to the tractor owners manual to determine if the tractor and 3-point hitch have enough capacity for the weight or will you need front end weights or a larger tractor.
- * Keep all persons clear of the cultivator when raising or lowering the wings.
- * Do not allow anyone to ride on the cultivator, rider is subject to injury and may obstruct the operators view.
- * Operate the cultivator from the tractor seat only.
- * No one other than the operator should ride on the tractor.
- * Hydraulic fluid escaping under pressure can have enough force to penetrate the skin. Hydraulic fluid can infect cuts or minor skin openings. Should you be injured by escaping hydraulic fluid seek medical attention immediately. Relieve all pressure before disconnecting hydraulic hoses or working on hydraulic cylinders.
- * Use extreme care when operating close to ditches, fences or on hillsides.
- * Shift tractor into a lower gear when transporting down hills and steep slopes.
- * Before unhitching cultivator from tractor make sure front parking stands are lowered and secured with lock pin.
- * Comply with all state, federal and local laws when transporting cultivator on highways or public roads.
- * Be sure a SMV emblem is visible from the rear when transporting the cultivator.
- * Always place the cultivator in the transport position when transporting.
- * Drive a reasonable speed to maintain complete control at all times.

PREPARING THE TRACTOR

TRACTOR STABILITY

IMPORTANT

* Refer to page 2.2 of this manual for the size and weight of the cultivator you are going to use. Also, consider the additional weight of stabilizer disc, tool bar gauge wheels, guide hitch, fertilizer attachments, herbicide and insecticide attachments, or any other devices that may be added to the gross cultivator weight to be raised by the tractor's 3-point hitch.

* Refer to the tractor owner's manual to determine if the tractor size is adequate for the weight of the cultivator and attachments you have selected. You may have to add front end ballast or lift assist wheels (possibly both) or perhaps the tractor is not large enough for the load. If you are having trouble determining the tractor's stability, consult your tractor dealer for assistance.

* Make sure all tractor tires are inflated to tire manufacturer's recommended pressure.

A TRACTOR WHEEL SPACING

Center to center of wheels should be the row width to be cultivated times 2. (Example: 38" rows x 2 = 76" centers)

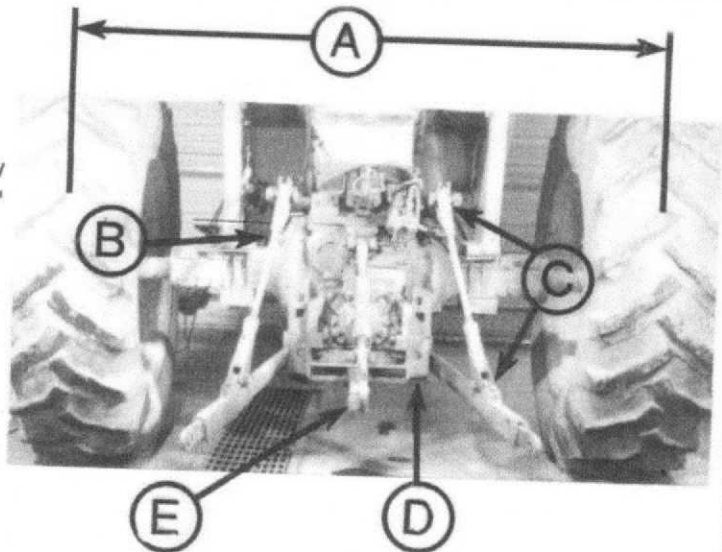
B ADJUST LIFT LINKS

To maximum length, tractor cab can be damaged if links are not adjusted properly.

C FOR CULTIVATORS WITH GAUGE WHEELS Set lift links to **free to float** position.
FOR CULTIVATORS WITHOUT GAUGE WHEELS Set lift links for **rigid** position.

D POSITION SWAY BLOCKS to wide setting (for least amount of clearance).

E SLIDE DRAWBAR to centered shortest position.



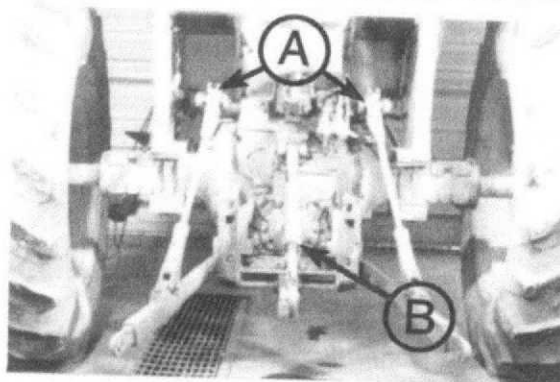
CULTIVATOR WEIGHTS W/SWEEPS -- ADD OPTIONS

TYPE AND SIZE CULTIVATOR	MODEL	WETHERELL ITEM #	WEIGHT
S-TINE CULTIVATORS W/5 TINE GANGS			
2 ROW WIDE S-TINE			670#
4 ROW WIDE S-TINE	CT2W	300-300100	1038#
6 ROW NARROW S-TINE	CT4W	300-300110	1375#
6 ROW WIDE S-TINE	CT6N	300-300120	1435#
8 ROW NARROW S-TINE	CT6W	300-300130	1508#
8 ROW WIDE S-TINE	CT8N	300-300140	1850#
	CT8W	300-300160	
8 ROW NARROW HYD FOLD S-TINE	CT8NHF	300-300150	1745#
8 ROW WIDE HYD FOLD S-TINE	CT8WHF	300-300170	2060#
12 ROW NARROW HYD FOLD S-TINE	CT12NHF	300-300180	2850#
12 ROW WIDE HYD FOLD BIFOLD S-TINE	CT12WHBF	300-300190	3680#
16 ROW NARROW HYD FOLD BIFOLD S-TINE	CT16NHF	300-300200	4508#
C-SHANK CULTIVATORS W/3 SHANK GANGS			
4 ROW WIDE C-SHANK	CS4W	300-600103	1337#
6 ROW NARROW C-SHANK	CS6N	300-600110	1776#
6 ROW WIDE C-SHANK	CS6W	300-600123	1925#
8 RWO NARROW C-SHANK	CS8N	300-600130	2370#
8 ROW WIDE C-SHANK	CS8W	300-600143	2483#
8 ROW NARROW HYD FOLD C-SHANK	CS8NHF	300-600150	2648#
8 ROW WIDE HYD FOLD C-SHANK	CS8WHF	300-600163	2761#
12 ROW NARROW HYD FOLD C-SHANK	CS12NHF	300-600170	3690#
16 ROW NARROW HYD FOLD C-SHANK	CS16NHF	300-600190	4759#
12 ROW WIDE HYD FOLD BIFOLD C-SHANK	CS16WHBF	300-600183	4480#
16 ROW NARROW HYD FOLD BIFOLD C-SHANK	CS16NHF	300-600195	5410#
C-SHANK CULTIVATORS W/5 SHANK GANGS			
4 ROW WIDE C-SHANK	CS4W	300-600100	1627#
6 ROW WIDE C-SHANK	CS6W	300-600120	2358#
8 ROW WIDE C-SHANK	CS8W	300-600140	3127#
8 ROW WIDE HYD FOLD C-SHANK	CS8WHF	300-600160	3439#
OPTIONS			
LARGE GAUGE WHEEL KIT W/TIRES (PR)	W2250	300-300220	152# PR
SMALL GAUGE WHEEL KIT W/TIRES (PR)	W2200	300-300210	152# PR
SPRING LOADED STABILIZER (EA)	W2260	300-300240	60# EA
60" LONG OPEN TOP GANG MOUNTED SHIELD		300-600750	65# PER ROW
LIFT ASSIST BUNDLE (cylinder, hoses & tires)		300-700175	410# EA

PREPARING THE CULTIVATOR

LEVELING CULTIVATOR FRAME

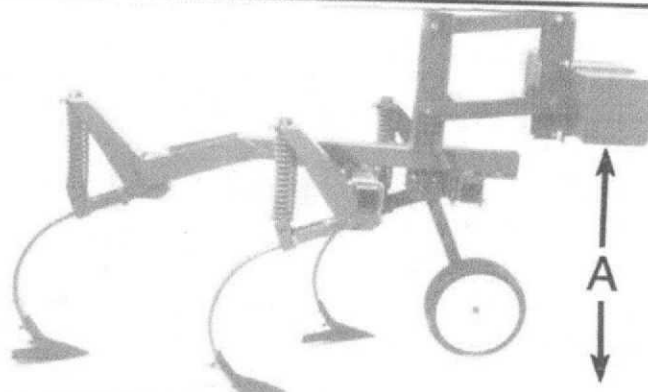
- 1 - Adjust lift links (A) to level cultivator frame.
- 2 - Adjust upper link (B) in or out until the front side of cultivator tool bar is perpendicular to the ground in field position.



TOOL BAR HEIGHT (C-SHANK CULTIVATOR)

When front side of cultivator tool bar is perpendicular to ground in field position, dimension (A) should be as follows.

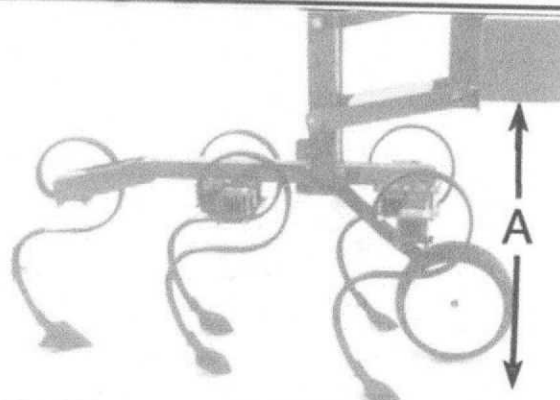
- 7 X 5 TOOL BAR - DIM. (A) 27"
- 7 X 7 TOOL BAR - DIM. (A) 26"



TOOL BAR HEIGHT (S-TINE CULTIVATOR)

When front side of cultivator tool bar is perpendicular to ground in field position, dimension (A) should be as follows.

- 7 X 5 TOOL BAR - DIM. (A) 26"
- 7 X 7 TOOL BAR - DIM. (A) 25"



TOOL BAR GAUGE WHEEL HEIGHT

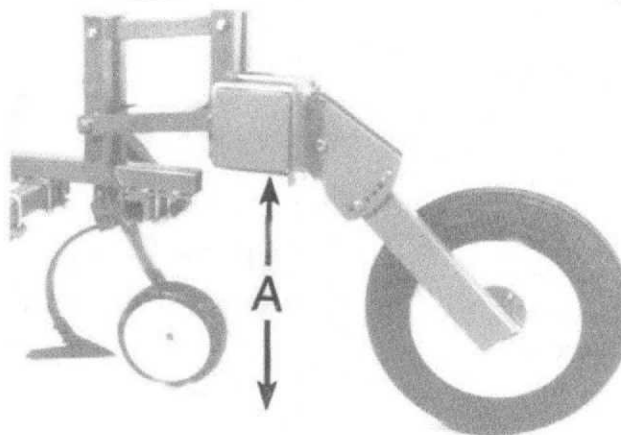
When front side of cultivator tool bar is perpendicular to ground in field position, dimension (A) should be as follows.

C-SHANK CULTIVATOR

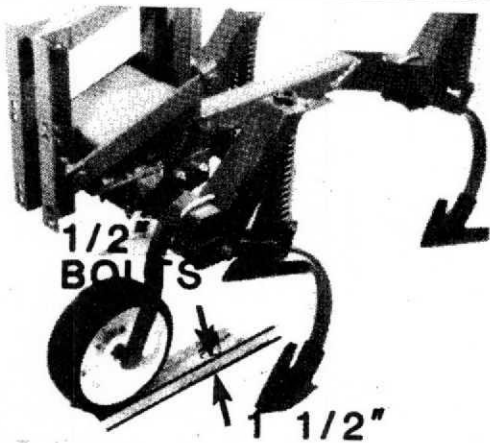
- 7 X 5 TOOL BAR - DIM. (A) 27"
- 7 X 7 TOOL BAR - DIM. (A) 26"

S-TINE CULTIVATOR

- 7 X 5 TOOL BAR - DIM. (A) 26"
- 7 X 7 TOOL BAR - DIM. (A) 25"

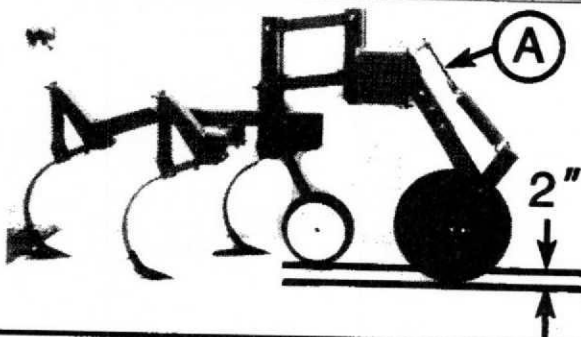


PREPARING THE CULTIVATOR



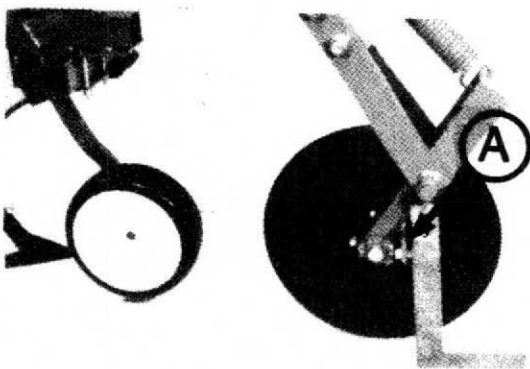
SET CULTIVATOR DEPTH

The depth of cultivator is set by the gang gauge wheel. Place a block of wood 1 1/2" thick under each gang gauge wheel, lower the gang gauge wheel onto the block and tighten the two 1/2" gauge wheel bolts. This setting is approximate and must be checked in the field.



STABILIZER DEPTH SETTING

Use eye bolt (A) to adjust depth of stabilizer. Recommended operating depth is 2" as shown in REF(B). Tool bar must be carried at proper height.



STABILIZER TRACKING ADJUSTMENT

When the tool bar height and stabilizer depth have been adjusted properly, the adjuster bolt mounting should be perpendicular to the ground REF (A). When operating the cultivator in the field the stabilizer blade **should not** build up with dirt on either side. If there is a build up of dirt on the adjuster side of the stabilizer, lengthen the adjuster bolt. If the build up of dirt is on the opposite side shorten the adjuster bolt.

SEE PAGE 8.17 FOR THE OPEN TOP SHIELD DIAGRAM

PREPARING CULTIVATOR 3-POINT

TYPE AND SIZE CULTIVATOR	MODEL NO.	REF.	PART NO.
2 ROW WIDE S-TINE	CT2W	A	302-10150
4 ROW WIDE S-TINE	CT4W	A	302-10150
6 ROW NARROW S-TINE	CT6N	A	302-10150
6 ROW WIDE S-TINE	CT6W	B	302-10153-1
8 ROW NARROW S-TINE	CT8N	B	302-10153-1
8 ROW WIDE S-TINE	CT8W	B	302-10153-1
8 ROW NARROW HYD FOLD S-TINE	CT8NHF	C	302-10153
8 ROW WIDE HYD FOLD S-TINE	CT8WHF	C	302-10153
12 ROW NARROW HYD FOLD S-TINE	CT12NHF	D	302-11900
12 ROW WIDE HYD FOLD BIFOLD S-TINE	CT12WHBF	D	302-11900
16 ROW NARROW HYD FOLD BIFOLD S-TINE	CT16WHBF	D	302-11900
4 ROW WIDE C-SHANK	CS4W	E	302-11847-2
6 ROW NARROW C-SHANK	CS6N	E	302-11847-2
6 ROW WIDE C-SHANK	CS6W	E	302-11847-2
8 ROW NARROW C-SHANK	CS8N	E	302-11847-2
8 ROW WIDE C-SHANK	CS8W	E	302-11847-2
8 ROW NARROW HYD FOLD C-SHANK	CS8NHF	F	302-11847-1
8 ROW WIDE HYD FOLD C-SHANK	CS8WHF	F	302-11847-1
12 ROW NARROW HYD FOLD C-SHANK	CS12NHF	D	302-11900
12 ROW WIDE HYD FOLD C-SHANK	CS12WHF	D	302-11900
16 ROW NARROW HYD FOLD C-SHANK	CS16WHF	D	302-11900
12 ROW WIDE HYD FOLD BIFOLD C-SHANK	CS12NHBF	D	302-11900
16 ROW NARROW HYD FOLD BIFOLD C-SHANK	CS16NHBF	D	302-11900



CAUTION -Before attaching cultivator to tractor, hitch pins and spacers must match your tractor hitch configuration.

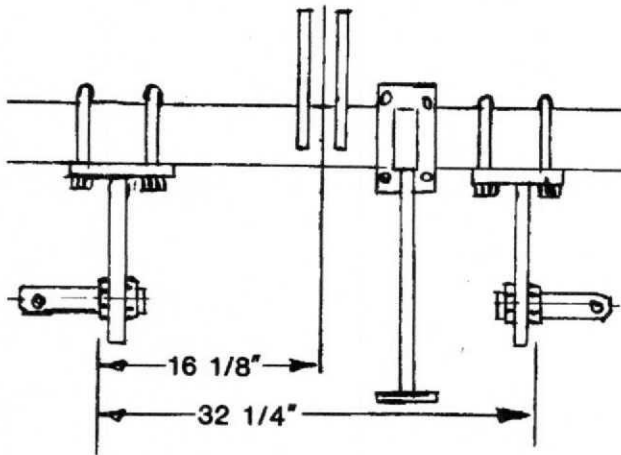
IMPORTANT - Tighten all hitch, mast bolts and U-bolts after 10 - 15 hours of operation to the following torque:

5/8" dia. bolts and U-bolts -- 170 foot pounds

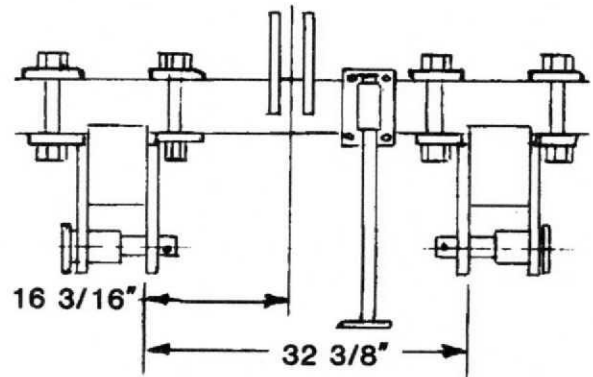
3/4" dia. bolts and U-bolts -- 300 foot pounds

PREPARING CULTIVATOR 3-POINT

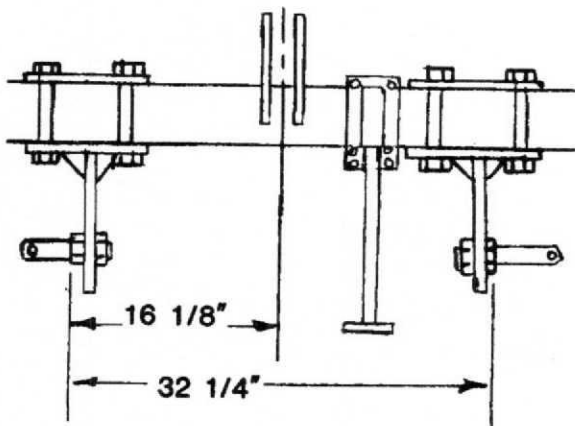
REF **A** 302-10150



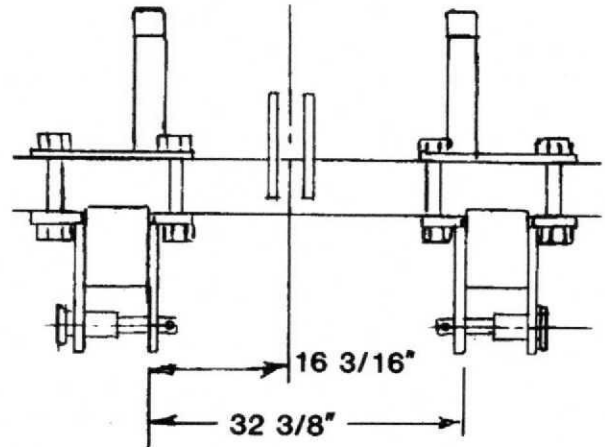
REF **E** 302-11847-2



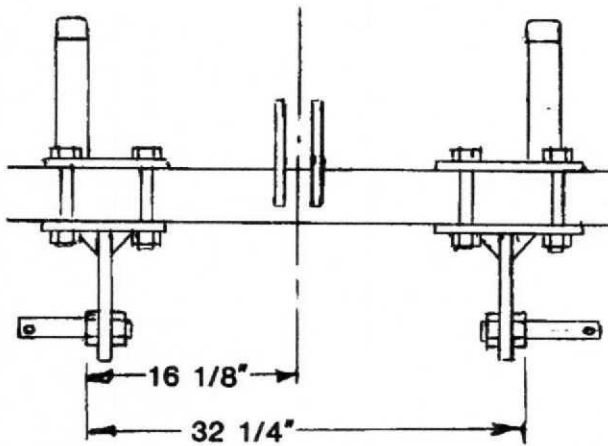
REF **B** 302-10153-1



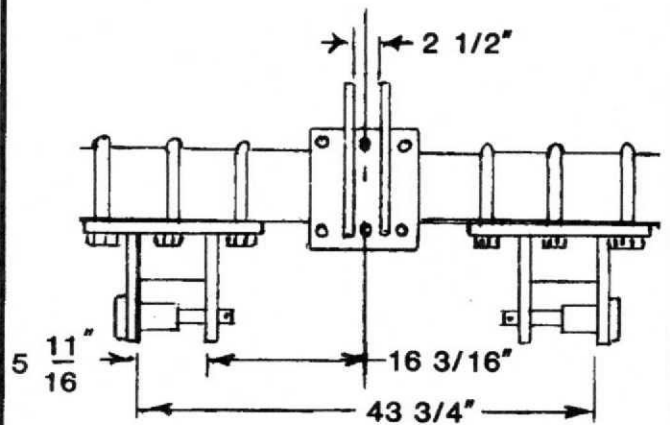
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REF **C** 302-10153



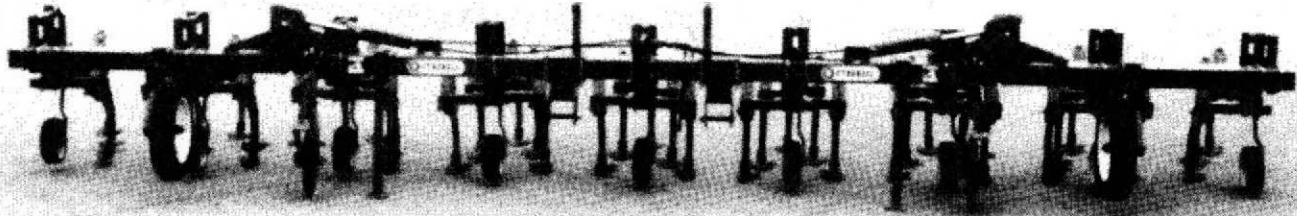
REF **D** 302-11900



TROUBLESHOOTING

<u>SYMPTOM</u>	<u>PROBLEM</u>	<u>SOLUTION</u>
Plugging	Cultivating to shallow in heavy trash.	Raise gang gauge wheel.
	Row shield set to close to row sweep	Set shield closer to row or install a full sweep and move standard away from row leaving more clearance between shield and standard
	Row shields not pivoting freely	Loosen bolts so shield can pivot freely.
Cultivator does not tow straight when operating	Cultivator bar not level.	Adjust tractor 3-point lift arms to level out cultivator tool bar.
	Gangs not spaced correctly	See gang spacing diagrams in this manual
	Stabilizer disc not set properly	See stabilizer setting diagram in this manual.
Sweeps do not penetrate	Cultivator bar not level.	Adjust tractor 3-point lift arms to level out cultivator tool bar.
	Shovels dull or worn out.	Replace sweeps
	Hard ground or adverse operating conditions.	Tilt tool bar forwards by shortening center link Add shim behind top of sweep bolt to give sweep more angle.
		Lower gang gauge wheel.
Slabbing	Gangs operating to deep	Maximum cultivating speed is 7 mph. Reduce speed
	Cultivating to fast for soil conditions.	
Cultivator "jumps" when cultivating.	Cultivator set to deep for soil conditions.	Maximum operating depth is 4 in.
	Cultivating to fast for soil conditions.	Maximum cultivating speed is 7 mph. Reduce speed.
	Cultivator gang not running level	Adjust center 3-point link until cultivator gangs are running level.

STORAGE



PREPARING CULTIVATOR FOR STORAGE

CAUTION - Implement may tip over and cause bodily injury if unhitched incorrectly.
Always lower parking stands, insert parking stand pin and secure with hair pin.

- 1 - Lower and secure parking stands.
- 2 - Clean up cultivator and store in dry place.
- 3 - Inspect for damaged parts and replace before next season.
- 4 - Repaint areas that have been scratched or chipped to prevent rusting.
- 5 - Coat sweeps and stabilizer disc with grease or oil. Also coat hydraulic cylinder rods with grease if exposed.
- 6 - Lubricate all grease zerks.

REMOVING CULTIVATOR FROM STORAGE

- 1 - Clean cultivator thoroughly.
- 2 - If cylinder rods were exposed, clean grease off exposed rods.
- 3 - Check all gang spacings to be sure they match your row widths.
- 4 - Check all bolts and u-bolts for proper tightness.
- 5 - Inflate tires to correct pressure. See proper pressure on tire sidewall.
- 6 - Lubricate all grease zerks and wheel bearings. Physically inspect all sealed bearings.

ASSEMBLY

GENERAL

Before assembling cultivator, remove shipping bands or wires and arrange all parts where they can be readily seen.

Whenever the terms **LEFT** and **RIGHT** side are used, it should be understood to mean from a position behind the cultivator and facing the direction of travel in field conditions.

During assembly, tighten bolts and u-bolts to the number of foot-pounds as indicated in the bolt torque chart on page 6.2.

3-POINT HITCH

1 - Measure the length of the tool bar and mark the center. Mount the 3-point hitch onto the tool bar, using the dimensions on page 3.4.

2 - Use a tractor, if available, to connect the tool bar to and let the 3-point hitch down on two stands about 27" high, not the cult. parking stands. If tractor is not available use stands only.

HYDRAULIC LINES (FOLDING WING CULTIVATORS)

1 - Hydraulic lines should be factory installed to the center of the tool bar. You must install two lines from the center of the tool bar to the tractor hydraulic remote outlets.

2 - Attach the hydraulic lines to the tractor with the proper hydraulic adaptor. Before folding the wings, check to see there is room above and beyond the tool bar allow the wings to fold over. **CAUTION** hydraulic cylinders may not be filled with oil. Extend and retract cylinders only 3" for the first four times to allow cylinders to fill with oil. If this procedure is not followed there could be damage to the cultivator.

GANG ASSEMBLY

1 - See Pages 8.6 and 8.8 for gang assembly diagrams.

2 - See page 6.2 for shank tube locations.

3 - See pages 7.1 - 7.4 for gang locations on tool bar.

STABILIZER ASSEMBLY

1 - See page 8.1 for stabilizer assembly diagram.

2 - See pages 7.1 - 7.4 for stabilizer location on tool bar.

TOOL BAR GAUGE WHEELS

1 - See page 8.2 for tool bar gauge wheel assembly diagram.

2 - See page 8.3 for small toolbar gauge wheel assembly diagram. *(used on 16 row bi-fold toolbars)*

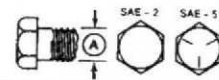
2 - See pages 7.1 - 7.4 for gauge wheel location on tool bar.

ASSEMBLING UNITS TO TOOL BAR

1 - Spacings for attaching gangs, stabilizers, tool bar gauge wheels and parking stands see pages 7.1 - 7.4.

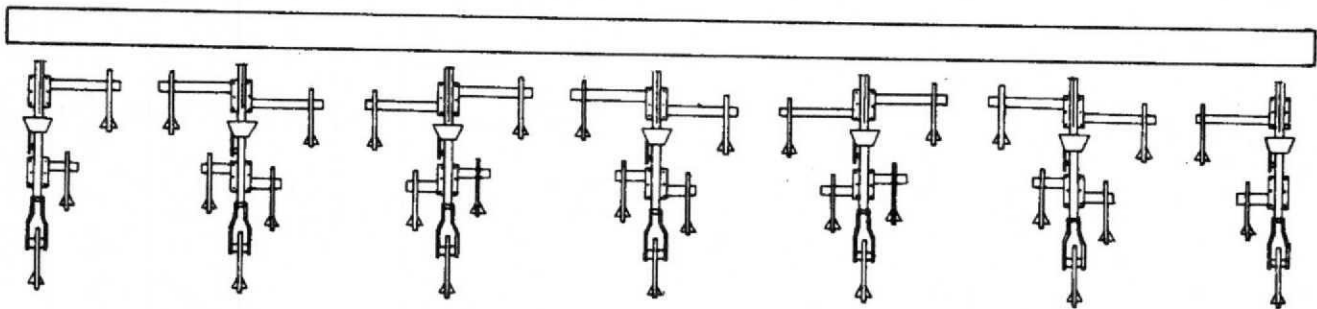
BOLT TORQUE CHART & SHANK BAR SPACING CHART

Tighten all bolts, U-bolts to the torques specified in the chart shown to the right. Also when replacing bolts, U-bolt and nuts, be sure that the replacements are the same size, type, and grade as the originals.

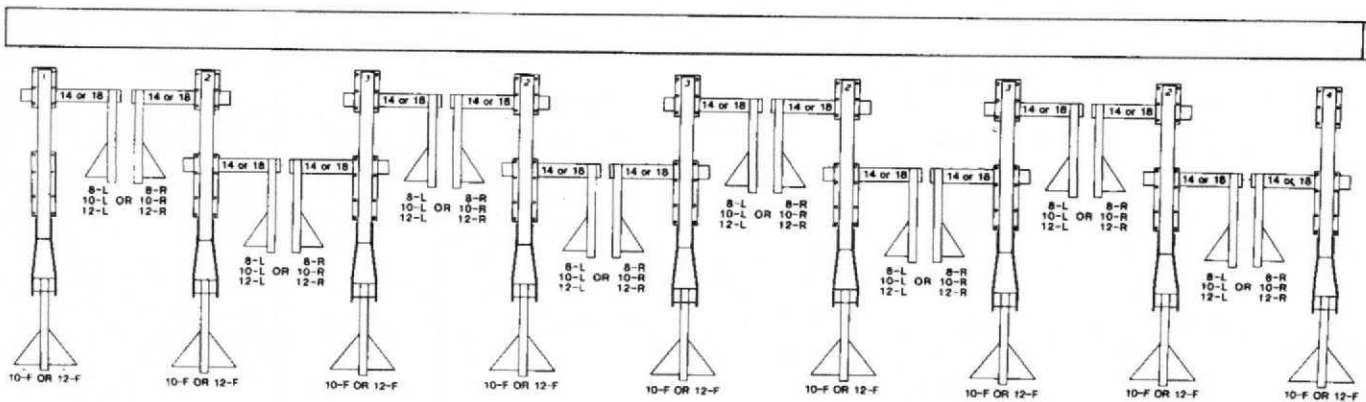


BOLT DIAMETER "A"	BOLT TORQUE CHART	
	MARKING ON HEAD	
	SAE 2 (lb-ft)	SAE 5 (lb-ft)
3/8"	18	30
7/16"	30	50
1/2"	45	75
9/16"	65	105
5/8"	90	145
3/4"	160	260
7/8"	165	415
1"	245	625
1 1/4"	490	1100

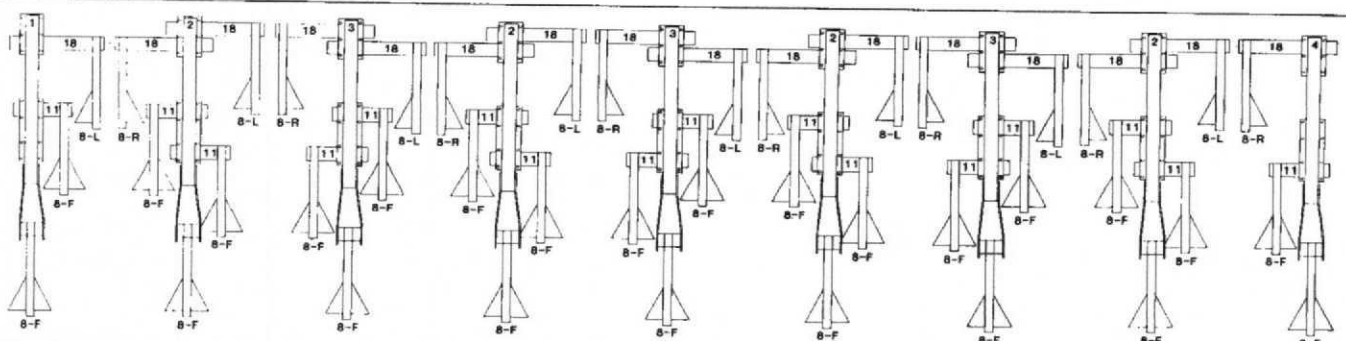
5-Tine Gang S-Tine Cultivator



3-Shank Gang C-Shank Cultivator

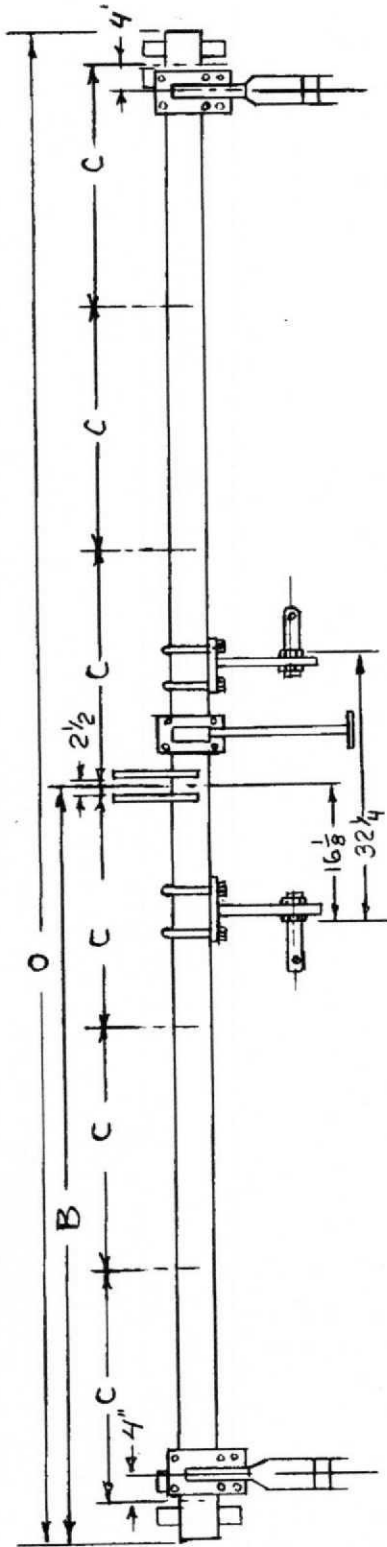


5-Shank Gang C-Shank Cultivator

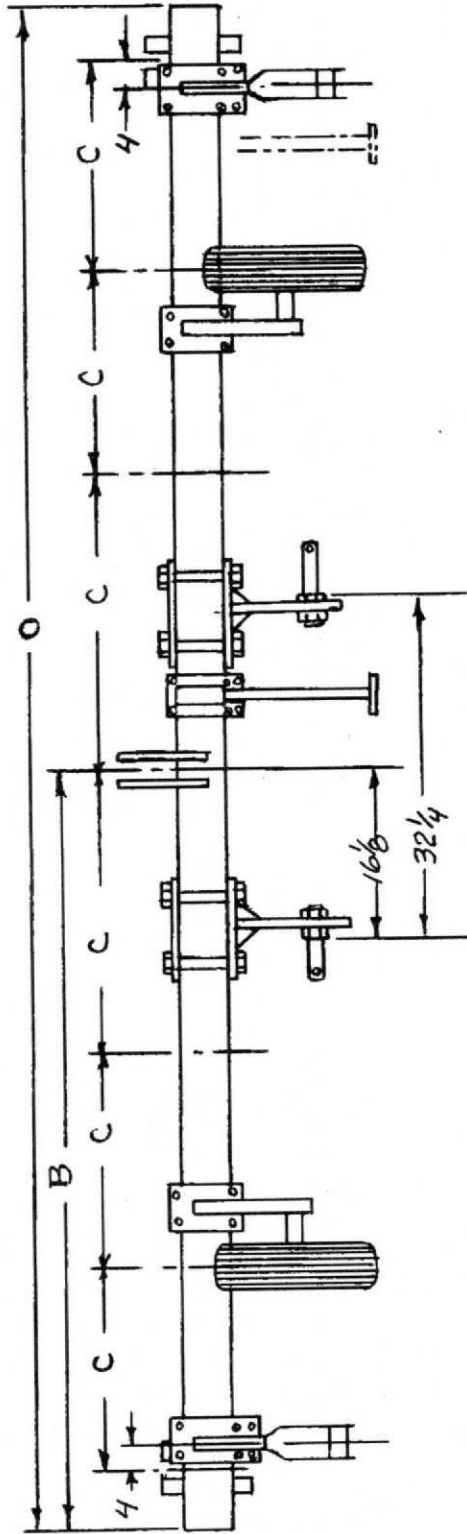


ROW SPACING CHART AND DIAGRAM

(FOR 4-6-8 row S-TINE)



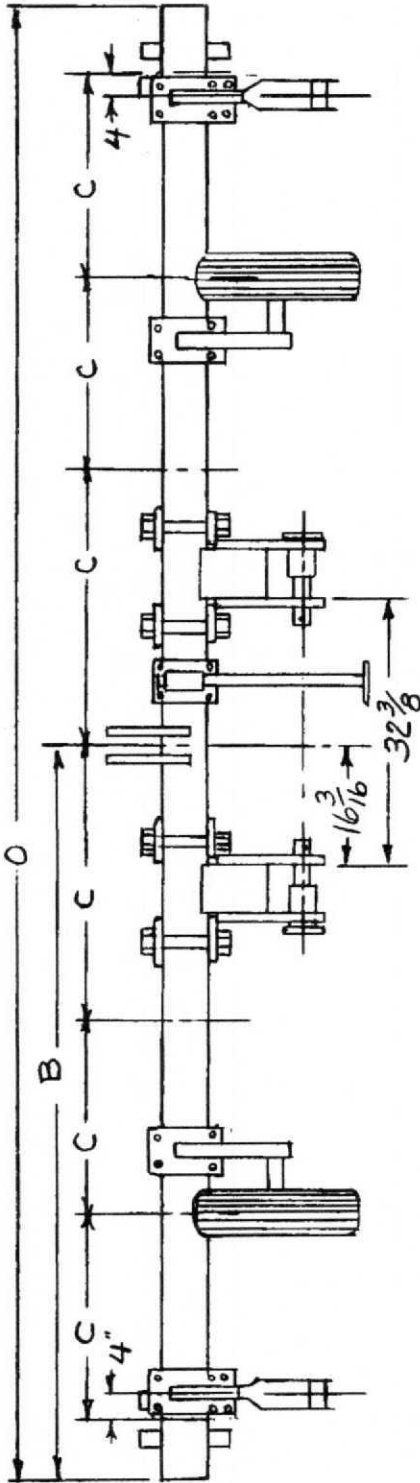
TOOL BAR NO.	CODE	NO./ROWS	C	B	O	TOOL BAR	GANG TYPE	NO. GANGS	NO. TINES	PARK STANDS	TOOL BAR CHARGE WHEELS	STABILIZERS	3-POINT HITCH
302-10230-1	CT4H	4	36-38-40	84	168	4 X 6	S-TINE	5	21	ONE 302-10205	NOT REQ.	300-300240	302-10150
302-10230-2	CT6H	6	30	94	188	4 X 6	S-TINE	7	31	ONE 302-10205	NOT REQ.	300-300240	302-10150



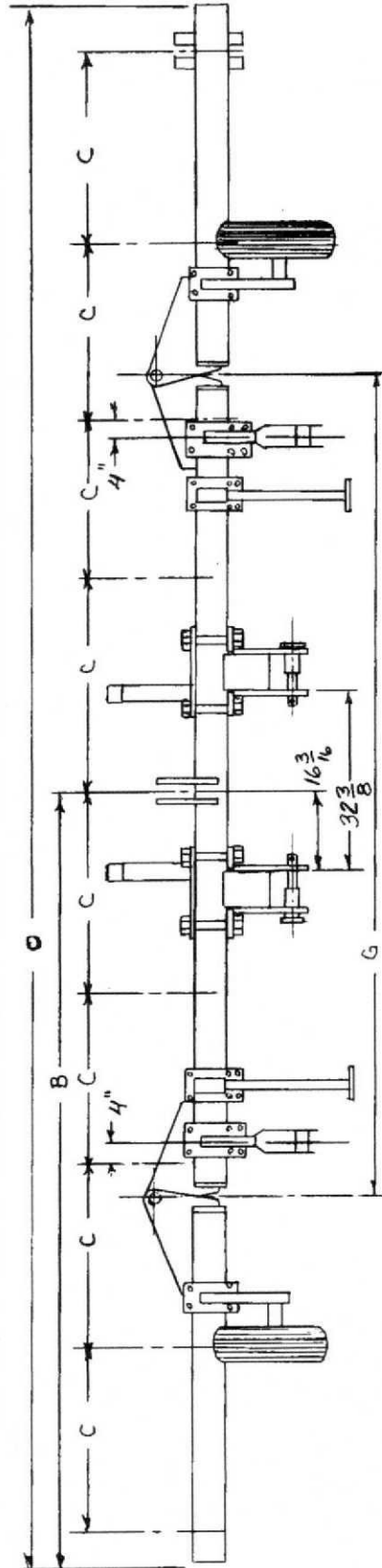
TOOL BAR NO.	CODE	NO./ROWS	C	B	O	TOOL BAR	GANG TYPE	NO. GANGS	NO. TINES	PARK STANDS	TOOL BAR CHARGE WHEELS	STABILIZER	3-POINT HITCH
302-10308-3	CT6H	6	36-38-40	124	248	5 X 7	S-TINE	7	31	TWO 302-11321	300-300220	300-300240	302-10153-1
302-10308-3	CT8H	8	30	124	248	5 X 7	S-TINE	9	41	TWO 302-11321	300-300220	300-300240	302-10153-1
302-11629	CT6H	8	36-38-40	164	328	5 X 7	S-TINE	9	41	TWO 302-11321	300-300220	300-300240	302-10153-1

ROW SPACING CHART AND DIAGRAM

(FOR 4-6-8 row C-SHANK)



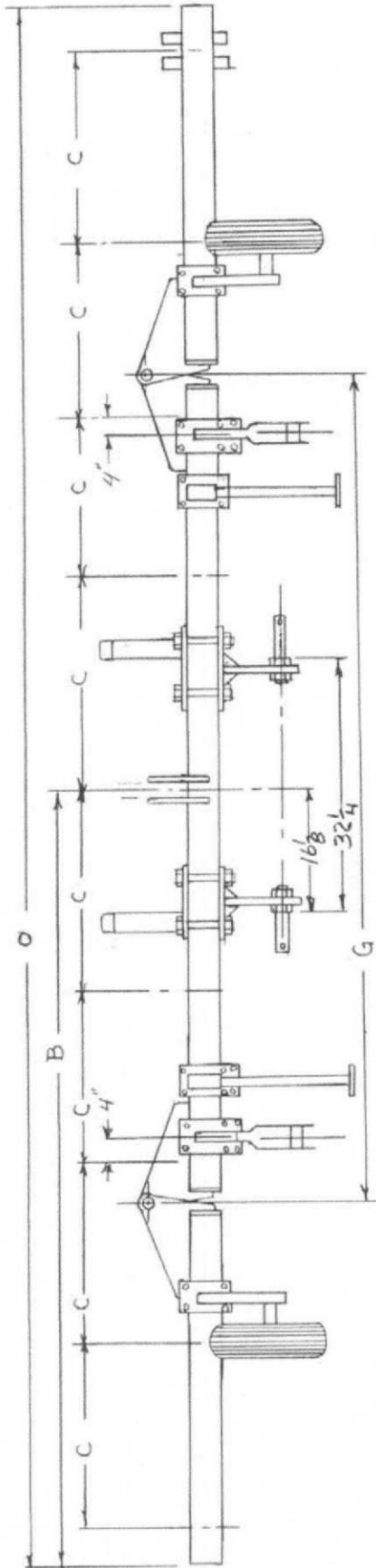
TOOL BAR NO.	CODE	NO./ROWS	C	B	O	TOOL BAR	GANG TYPE	NO. GANGS	NO. SHANKS	PARK STANDS	TOOL BAR GUAGE WHEELS	STABILIZERS	3-POINT HITCH
302-10308-1	CS4H	4	36-38-40	84	168	5 X 7	C-SHANK	5	13 OR 21	ONE 302-11321-1	NOT REQ.	300-300240	302-11847-2
302-10308-2	CS6H	6	30	94	188	5 X 7	C-SHANK	7	19	ONE 302-11321-1	NOT REQ.	300-300240	302-11847-2
302-10308-3	CS6H	6	36-38-40	124	248	5 X 7	C-SHANK	7	19 OR 31	TWO 302-11321-1	300-300220	300-300240	302-11847-2
302-10308-3	CS8H	8	30	124	248	5 X 7	C-SHANK	9	25	TWO 302-11321-1	300-300220	300-300240	302-11847-2
302-11629	CS8H	8	36-38-40	164	328	5 X 7	C-SHANK	9	25 OR 41	TWO 302-11321-1	300-300220	300-300240	302-11847-2



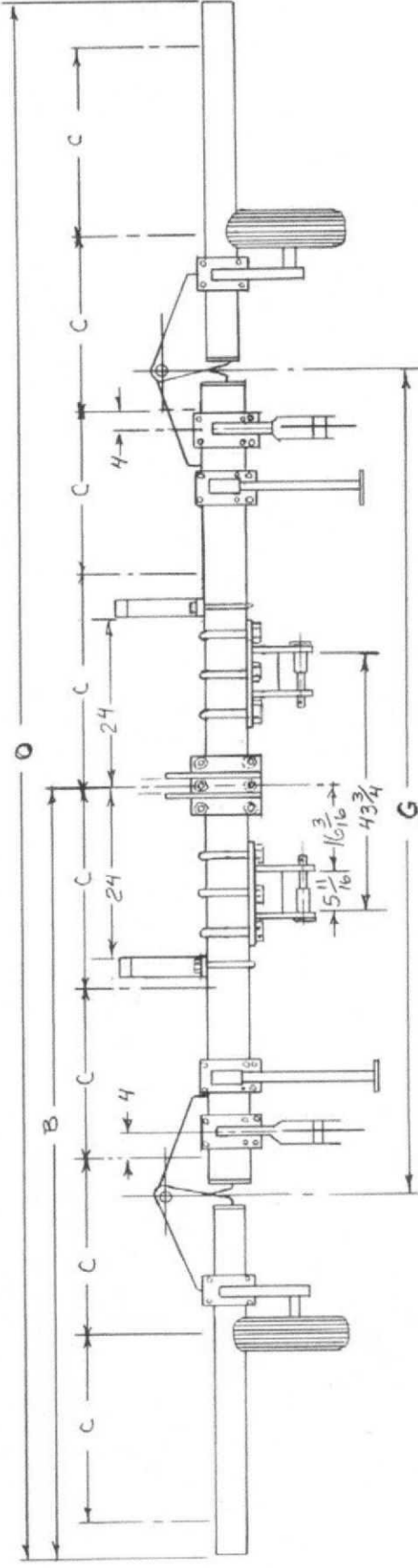
TOOL BAR NO.	CODE	NO./ROWS	C	B	O	TOOL BAR	GANG TYPE	NO. GANGS	NO. SHANKS	PARK STANDS	TOOL BAR GUAGE WHEELS	STABILIZERS	3-POINT HITCH	WING CYL.	HINGE ASSY.
302-10821	CS8HIF	8	30	123	246	5 X 7	C-SHANK	9	25	TWO 302-11321-1	300-300220	300-300240	302-11847-1	3 1/2 X 12	C
302-10800	CS8HIF	8	36-38-40	158	316	5 X 7	C-SHANK	9	25 OR 41	TWO 302-11321-1	300-300220	300-300240	302-11847-1	3 1/2 X 12	F

ROW SPACING CHART AND DIAGRAM

(FOR 8-12 row S-TINE, C-SHANK)



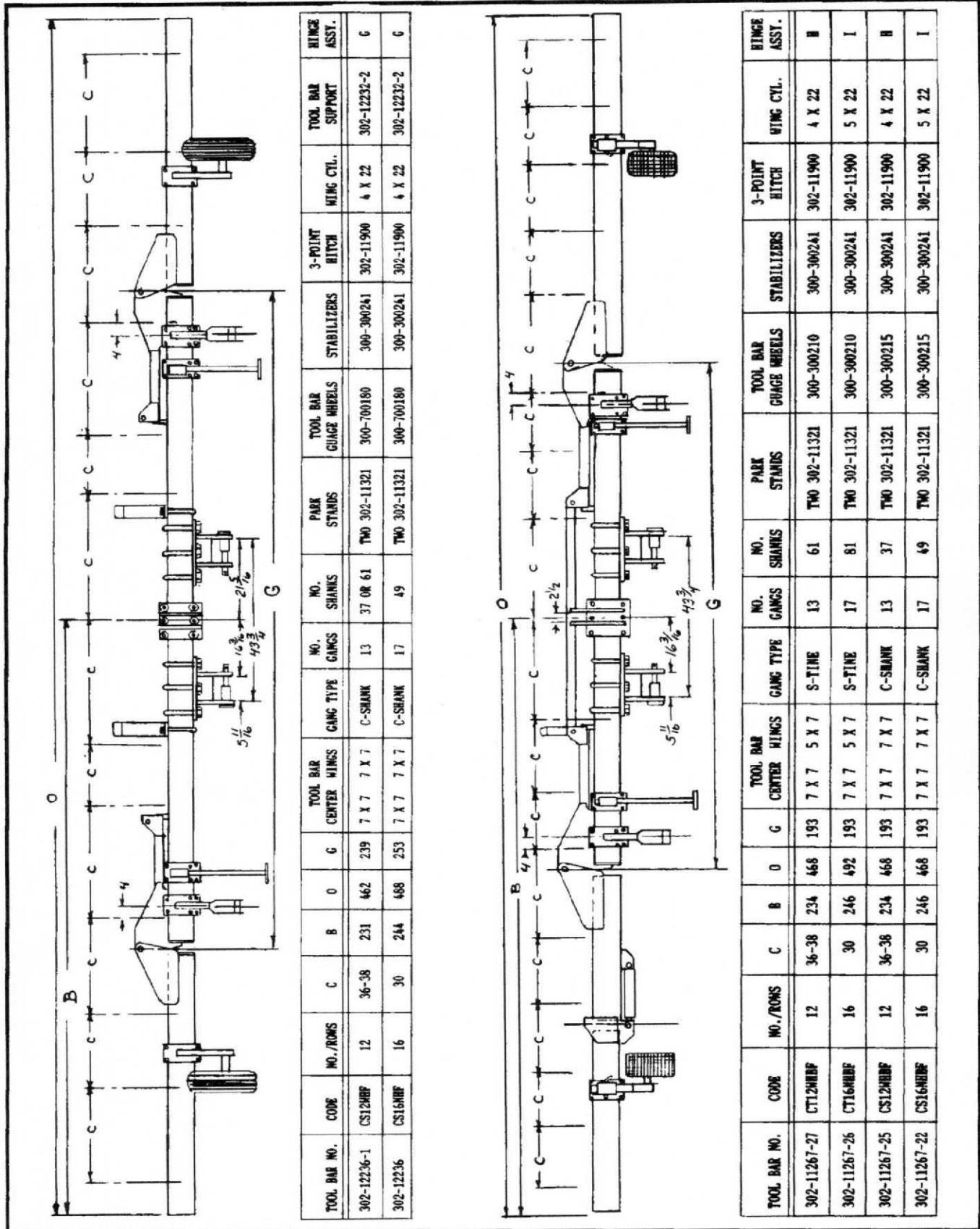
TOOL BAR NO.	CODE	NO./ROWS	C	B	O	G	TOOL BAR	GANG TYPE	NO. GANGS	NO. TINES	PARK STANDS	TOOL BAR	STABILIZERS	3-POINT HITCH	HINGE ASST.
302-10821	CTS1HF	8	30	123	246	131	5 X 7	S-TINE	9	41	TWO 302-11321-1	300-300220	300-300240	302-10153	3 1/2 X 12
302-10800	CTS1HF	8	36-38-40	158	316	173	5 X 7	S-TINE	9	41	TWO 302-11321-1	300-300220	300-300240	302-10153	3 1/2 X 12



TOOL BAR NO.	CODE	NO./ROWS	C	B	O	G	TOOL BAR	GANG TYPE	NO. GANGS	NO. SHANKS	PARK STANDS	TOOL BAR	STABILIZERS	3-POINT HITCH	TOOL BAR	HINGE ASST.
302-10966	CT12HF	12	30	184	368	193	7 X 7	S-TINE	9	61	TWO 302-11321	300-300220	300-300241	302-11900	302-12232-3	D
302-10966	CS12HF	12	30	184	368	193	7 X 7	C-SHANK	9	37	TWO 302-11321	300-300220	300-300241	302-11900	302-12232-3	D

ROW SPACING CHART AND DIAGRAM

(FOR 12 - 16 row S-TINE, C-SHANK)

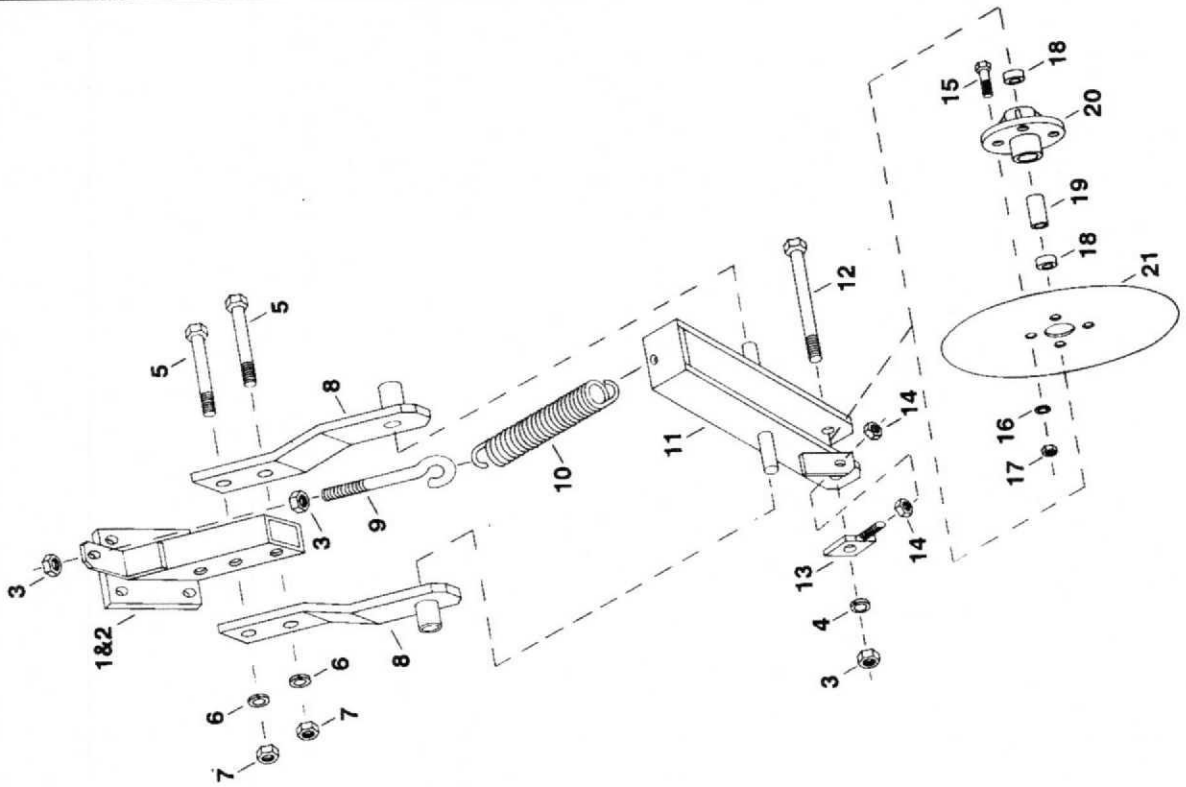


TOOL BAR NO.	CODE	NO./ROWS	C	B	O	G	TOOL BAR CENTER HINGS	GANG TYPE	NO. GANGS	NO. SHANKS	PARK STANDS	TOOL BAR GAUGE WHEELS	STABILIZERS	3-POINT HITCH	HING CYL.	TOOL BAR SUPPORT	HINGE ASST.
302-12236-1	CS12HRF	12	36-38	231	462	239	7 X 7 7 X 7	C-SHANK	13	37 OR 61	TWO 302-11321	300-700180	300-300241	302-11900	4 X 22	302-12232-2	G
302-12236	CS16HRF	16	30	244	488	253	7 X 7 7 X 7	C-SHANK	17	49	TWO 302-11321	300-700180	300-300241	302-11900	4 X 22	302-12232-2	G

TOOL BAR NO.	CODE	NO./ROWS	C	B	O	G	TOOL BAR CENTER HINGS	GANG TYPE	NO. GANGS	NO. SHANKS	PARK STANDS	TOOL BAR GAUGE WHEELS	STABILIZERS	3-POINT HITCH	HING CYL.	HINGE ASST.
302-11267-27	CT12HRF	12	36-38	234	468	193	7 X 7 5 X 7	S-TINE	13	61	TWO 302-11321	300-300210	300-300241	302-11900	4 X 22	H
302-11267-26	CT16HRF	16	30	246	492	193	7 X 7 5 X 7	S-TINE	17	81	TWO 302-11321	300-300210	300-300241	302-11900	5 X 22	I
302-11267-25	CS12HRF	12	36-38	234	468	193	7 X 7 7 X 7	C-SHANK	13	37	TWO 302-11321	300-300215	300-300241	302-11900	4 X 22	H
302-11267-22	CS16HRF	16	30	246	468	193	7 X 7 7 X 7	C-SHANK	17	49	TWO 302-11321	300-300215	300-300241	302-11900	5 X 22	I

STABILIZER ASSEMBLY

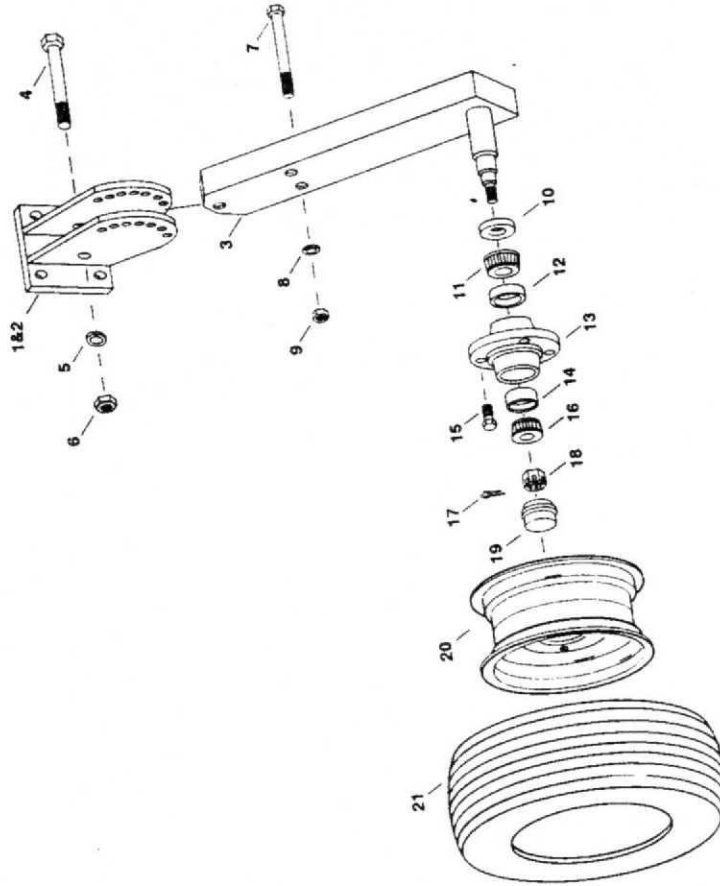
300-300240 4 X 6 / 5 X 7 BAR (Complete Stabilizer)
 300-300241 7 X 7 BAR (Complete Stabilizer)



ITEM	PART NO.	DESCRIPTION	QTY
1	302-10163-1	STABILIZER MOUNT 7x7BAR	1
2	302-10163-2	STABILIZER MOUNT 4x6 & 5x7 BAR	1
3	017-116236	5/8" N.C. HEX NUT	3
4	020-11625	5/8" LOCKWASHER	1
5	016-186456	3/4" N.C. x 4 HEX BOLT GR. 5	2
6	020-11750	3/4" LOCKWASHER	2
7	017-116242	3/4" N.C. HEXNUT	2
8	302-10163-3	SIDE ARM	2
9	302-11350	5/8" N.C. EYE BOLT	1
10	302-11159	EXTENSION SPRING	1
11	302-10163-5	FORK, COULTER	1
12	016-176390	5/8" N.C x 5 1/2" HEX BOLT	1
13	302-10163-4	ADJUSTER	1
14	017-116224	1/2" N.C. HEX NUT	2
15	016-146151	3/8" N.C. x 1 1/4" HEX BOLT GR.5	4
16	020-11375	3/8" LOCKWASHER	4
17	017-116212	3/8" N.C. HEX NUT	4
18	044-204203	5/8" SEALED BEARING	2
19	302-10166	BEARING SPACER	1
20	302-10165	4 - BOLT HUB (less bearings)	1
21	302-10164	18" COULTER	1

GAUGE WHEEL ASSEMBLY

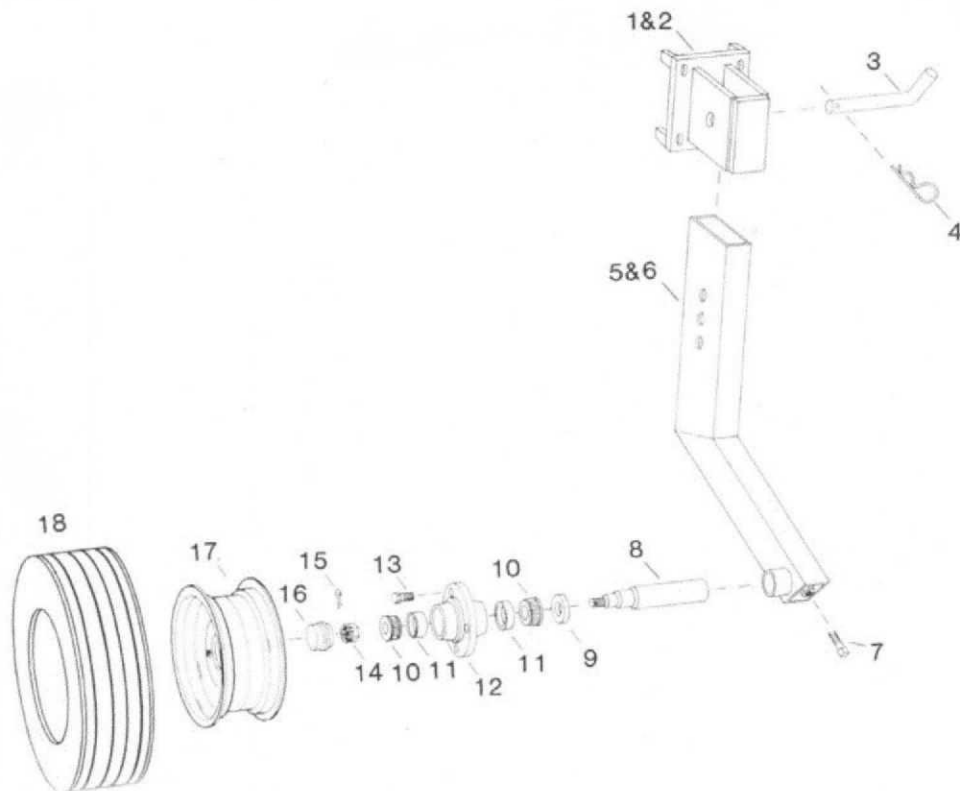
300-300220 5x7 (Complete Gauge Wheel pr.)
 300-700180 7x7 (Complete Gauge Wheel pr.)



ITEM	PART NO.	DESCRIPTION	QTY
1	302-10161-1	5X7 MOUNTING BRACKET	1
2	302-11341-2	7X7 MOUNTING BRACKET	1
3	302-11341-2	LEG, GAUGE WHEEL	1
4	016-176366	5/8" N.C. HEXBOLT X 3 1/2"	1
5	020-11625	5/8" LOCKWASHER	1
6	017-116236	5/8" N.C. HEXNUT	1
7	016-166306	1/2" N.C. HEXBOLT X 3 1/2"	1
8	020-11500	1/2" LOCKWASHER	1
9	017-116224	1/2" HEXNUT	1
10	050-41111	SEAL	1
11	019-1-LM67048	INNER BEARING	1
12	019-LM67010	CUP, INNER	1
13	050-41100	4-BOLT HUB W/ CUPS	1
14	019-LM11910	CUP, OUTER	1
15	050-41150	1/2" N.F. X 1 1/4" WHEEL BOLT	4
16	019-LM11949	OUTER BEARING	1
17	032-424302	1/8" X 2 COTTER PIN	1
18	017-170190	3/4" - 16 SLOTTED NUT	1
19	050-41160	DUST CAP	1
20	050-15041	15" 4-BOLT RIM	1
21	300-300230	15" TIRE (OPTIONAL)	1

SMALL GAUGE WHEEL ASSEMBLY

300-300210 5 x 7 BAR (Complete Gauge Wheel Kit w/20.8 X 10 Tires)
 300-300215 7 X 7 BAR (Complete Gauge Wheel Kit w/20.8 X 10 Tires)



SMALL GAUGE WHEEL ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY.
1.	302-10519	5 x 7 MOUNTING BRACKET	1
2.	302-10519-1	7 x 7 MOUNTING BRACKET	1
3.	302-10813	PIN	1
4.	049-202356	HAIR PIN	1
5.	302-10812-1	L.H. LEG WELDMENT	1
6.	302-10812-2	R.H. LEG WELDMENT	1
7.	047-402186	3/8 N.C. x 1 SQ. HD. SETSCREW	1
8.	302-12136	SPINDLE	1
9.	050-286700	GREASE SEAL	1
10.	019-L44643	BEARING	2
11.	019-L44610	CUP	2
12.	050-2817030	HUB W/CUPS	1
13.	050-41150	WHEEL BOLT 1/2 N.F. x 1 1/4" LG.	4
14.	017-170190	3/4-16 SLOTTED NUT	1
15.	032-424302	1/8 x 2 COTTER PIN	1
16.	050-909900	DUST CAP	1
17.	050-15847	10" 4" BOLT RIM	1
18.	300-300235	20.8 x 10 TIRE	1

S-TINE GANG ASSEMBLY

(Gang Gauge Wheel Assembly)

S-TINE GANG ASSEMBLY

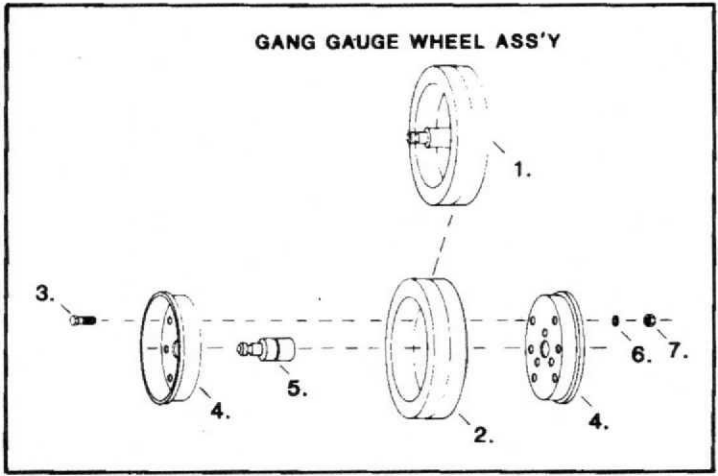
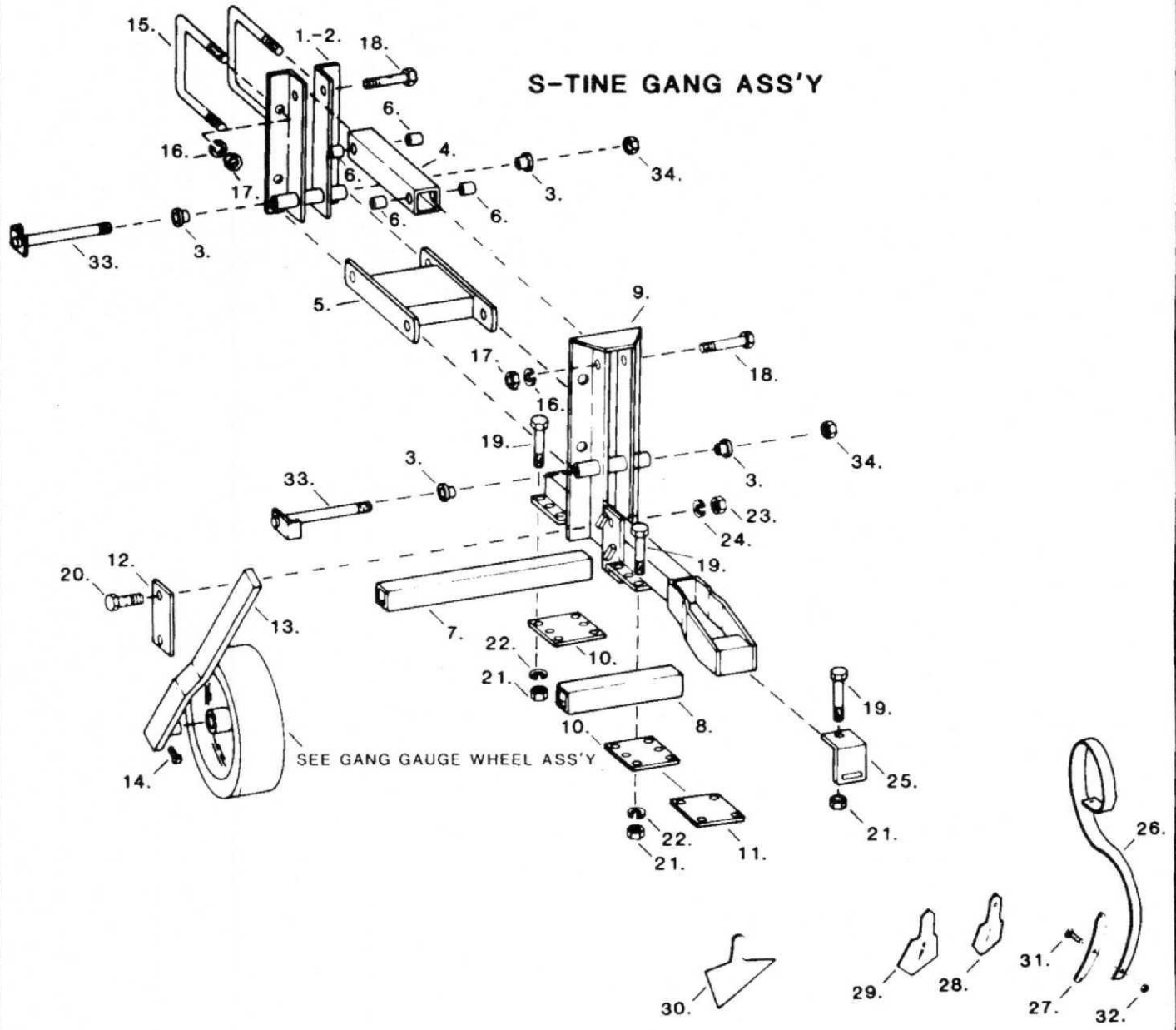
ITEM	PART NO.	DESCRIPTION	REQ PER GANG
1.	302-10167	FRONT MOUNT WELD'T (4x6&5x7TOOLBAR)	1
2.	302-10972	FRONT MOUNT WELD'T (7x7 TOOLBAR)	1
3.	302-10168	BUSHING, LOWER LINK	4
4.	302-10169	LINK WELD'T, UPPER	1
5.	302-10170	LINK WELD'T LOWER	1
6.	302-10171	BUSHING, UPPER LINK	4
7.	302-10172-1	18" TINE TUBE	X
	302-10172-2	14" TINE TUBE	X
	302-10172-5	11 3/4" TINE TUBE	X
8.	302-10172-3	10" TINE TUBE	X
	302-10172-4	9" TINE TUBE	X
	302-10172-6	7 3/4" TINE TUBE	X
9.	302-12045	GANG MAINFRAME WELD'T (STANDARD)	1
	302-12045-1	GANG MAINFRAME WELD'T (SPECIAL)	1
10.	302-10173	6-HOLE CLAMP PLATE	X
11.	302-10174	4-HOLE CLAMP PLATE	X
12.	302-10175	GANG GAUGE WHEEL CLAMP PLATE	1
13.	302-10176	GANG GAUGE WHEEL ARM	1
14.	047-402178	3/8" N.C. SQ. HD. SET SCREW x 3/4" LG.	1
15.	302-10204	5/8-11 x 4 x 6 U-BOLT (4 x 6 TOOLBAR)	2
	302-10177	5/8-11 x 5 x 7 U-BOLT (5 x 7 TOOLBAR)	2
	302-10970	5/8-11 x 7 x 7 U-BOLT (7 x 7 TOOLBAR)	2
16.	020-11625	5/8" LOCK WASHER	5
17.	017-116236	5/8" N.C. HEXNUT	5
18.	016-176366	5/8" N.C. HEXBOLT x 3 1/2" LG. GR. 5	2
19.	016-156234	7/16" N.C. HEXBOLT x 3 1/2" LG. GR. 5	X
20.	016-166288	1/2" N.C. HEXBOLT x 2" LG. GR. 5	2
21.	017-116218	7/16" N.C. HEXNUT	X
22.	020-11437	7/16" LOCKWASHER	X
23.	017-116224	1/2" N.C. HEXNUT	2
24.	020-11500	1/2" LOCKWASHER	2
25.	302-10178	TINE CLAMP	X
26.	300-300270	S-TINE	X
27.	300-300290	1 3/8" REVERSIBLE POINT	X
28.	300-300300	2 1/2" SWEEP	X
29.	300-300310	4" SWEEP	X
30.	300-300320	7" SWEEP	X
31.	059-20020	3/8" N.C. CURVE HD. PLOW BOLT x 1 1/2"	X
32.	017-116212	3/8" N.C. HEXNUT	X
33.	302-10181	PIN, LOWER LINK	2
34.	017-166391	3/4" N.F. LOCKNUT	2

GANG GAUGE WHEEL ASSEMBLY

ITEM	PART NO.	DESCRIPTION	REQ. PER GANG
1.	302-12044	ASS'Y GANG GAUGE WHEEL	1
2.	302-12044-3	TIRE, 4 x 12 SEMI PNEUMATIC	1
3.	016-136072	5/16" N.C. HEXBOLT x 3/4" LG. GR. 5	9
4.	302-12044-1	SPLIT RIM	2
5.	302-12044-2	BEARING W/SHAFT	1
6.	020-11315	5/16" LOCK WASHER	9
7.	017-116206	5/16" N.C. HEXNUT	9

S-TINE GANG ASSEMBLY

(Gang Gauge Wheel Assembly)



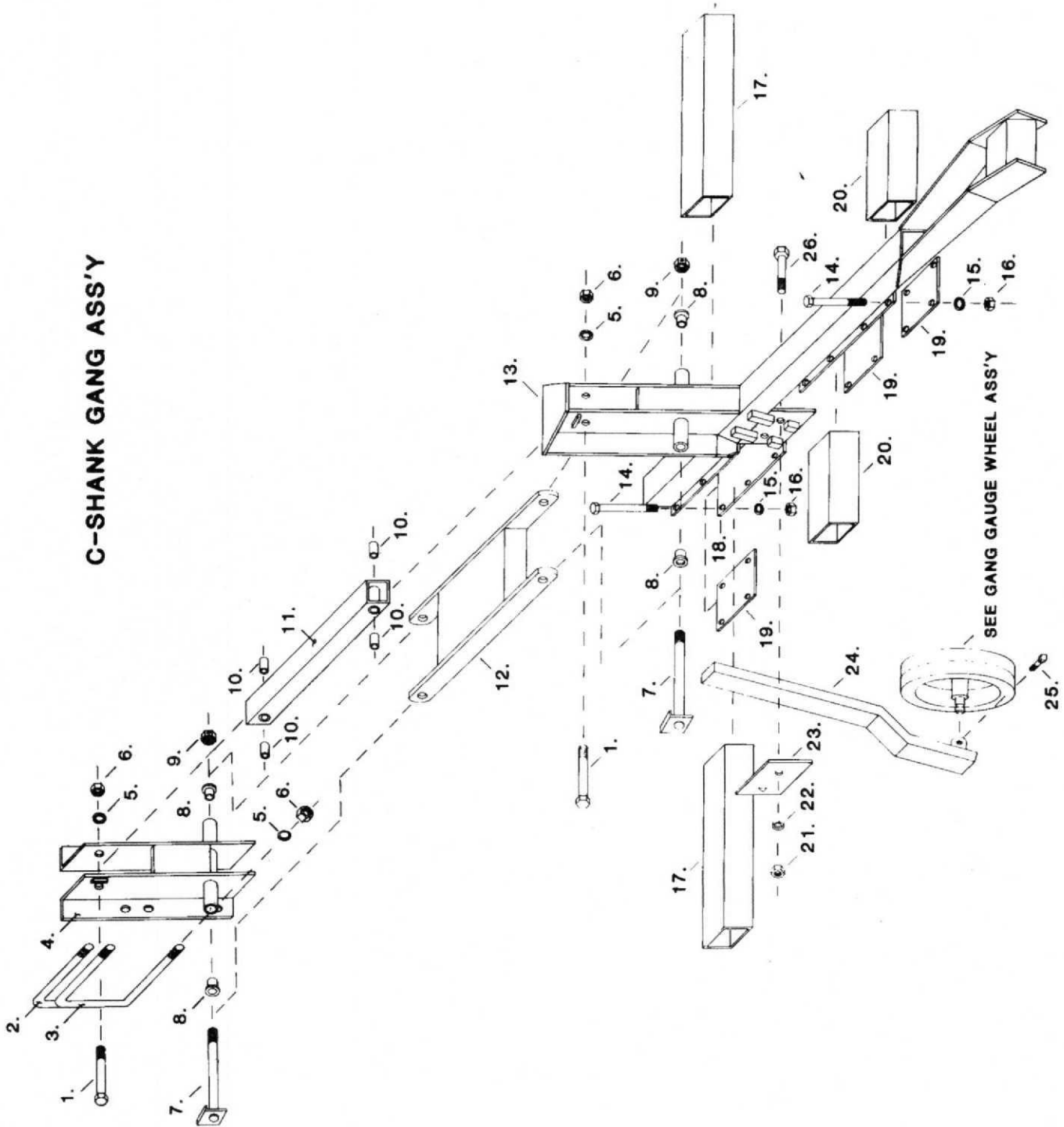
C-SHANK GANG ASSEMBLY

C-SHANK GANG ASSEMBLY

ITEM	PART NO.	DESCRIPTION	PER GANG REQ.	5-SHANK GANG	3-SHANK GANG	END GANG 3-SHANK	END GANG 2-SHANK
1.	016-176366	5/8" HEXBOLT x 3 1/2 LG. GR. 5	2				
2.	060-100220	5/8" N.C. x 7 x 7 U-BOLT, 7 x 7 TOOLBAR	2				
3.	060-100100	5/8" N.C. x 5 x 7 U-BOLT, 5 x 7 TOOLBAR	2				
4.	302-11839	FRONT ANGLE WELD'T, 5 x 7 TOOLBAR	1				
	302-11839-1	FRONT ANGLE WELD'T, 7 x 7 TOOLBAR	1				
5.	020-11625	5/8" LOCK WASHER	6				
6.	017-116236	5/8" N.C. HEXNUT	6				
7.	302-10181	PIN, LOWER LINK	2				
8.	302-10168	BUSHING, LOWER LINK	4				
9.	017-166391	3/4" N.F. LOCKNUT	2				
10.	302-10171	BUSHING, UPPER LINK	4				
11.	302-10169	LINK WELD'T UPPER	1				
12.	302-10170	LINK WELD'T LOWER	1				
13.	302-11837	GANG MAINFRAME WELD'T	1				
14.	016-156240	7/16" N.C. HEXBOLT x 3 1/2 LG. GR. 5		14	8	8	4
15.	020-11437	7/16" LOCKWASHER		14	8	8	4
16.	017-116218	7/16" N.C. HEXNUT		14	8	8	4
17.	302-11841-1	18" TINE BAR TUBE, WIDE		2	2	1	1
	302-11841-4	14" TINE BAR TUBE, NARROW			2		1
18.	302-11857	6-HOLE CLAMP PLATE		1			
19.	302-11838	4-HOLE CLAMP PLATE		2	2	2	1
20.	302-11841-2	11" TINE BAR TUBE		2			
21.	017-116224	1/2" N.C. HEXNUT					
22.	020-11500	1/2" LOCK WASHER					
23.	302-11973	GANG GAUGE WHEEL CLAMP	1				
24.	302-10176	GANG GAUGE WHEEL ARM	1				
25.	047-402178	3/8" N.C. SQ. HD. SET SCREW x 3/4 LG.	1				
26.	016-166288	1/2" N.C. HEXBOLT x 2 LG. GR. 5	2				

C-SHANK GANG ASSEMBLY

C-SHANK GANG ASS'Y



C-SPRING SHANK ASSEMBLY

(Gang Gauge Wheel Assembly)

C-SPRING SHANK ASS'Y

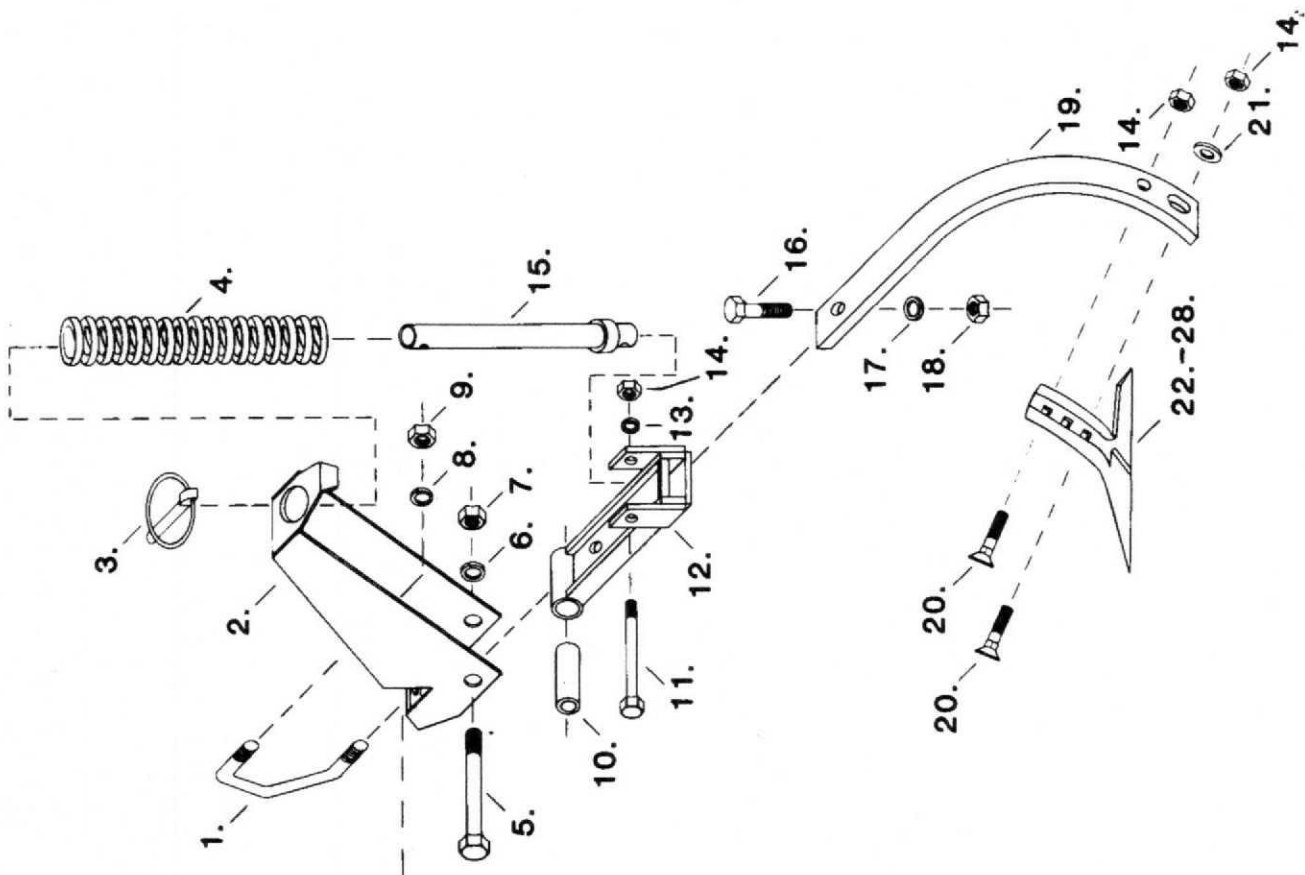
ITEM	PART NO.	DESCRIPTION	PER GANG REQ.	5-SHANK GANG	3-SHANK GANG	END GANG 3-SHANK	END GANG 2-SHANK
1.	302-11817	9/16" N.C. VEE BOLT		5	3	3	2
2.	302-11815	C-SHANK MOUNT		5	3	3	2
3.	037-218324	7/16" LYNCH PIN		5	3	3	2
4.	302-11818	COMPRESSION SPRING		5	3	3	2
5.	016-176372	5/8" N.C. HEXBOLT x 4 LG. GR. 5	1	5	3	3	2
6.	020-11625	5/8" LOCK WASHER					
7.	017-116236	5/8" N.C. HEXNUT	1				
8.	020-11562	9/16" LOCK WASHER		10	6	6	4
9.	017-116230	9/16" N.C. HEXNUT		10	6	6	4
10.	302-11811	PIVOT BUSHING		5	3	3	2
11.	016-156243	7/16" N.C. HEXBOLT x 3 3/4 LG. GR. 5		5	3	3	2
12.	302-11809	C-SHANJ HINGE		5	3	3	2
13.	020-11437	7/16" LOCK WASHER	1				
14.	017-116218	7/16" N.C. HEXNUT	3				
15.	302-11812	SPRING GUIDE		5	3	3	2
16.	016-166282	1/2" N.C. HEXBOLT x 1 1/2 LG. GR. 5		5	3	3	2
17.	020-11500	1/2" LOCK WASHER		5	3	3	2
18.	017-116224	1/2" N.C. HEXNUT		5	3	3	2
19.	302-11819	C-SHANK		5	3	3	2
20.	059-20030	7/16" N.C. NO. 3 PLOW BOLT x 1 3/4 LG.		10	6	6	4
21.	020-21500	7/16" FLAT WASHER		5	3	3	2
22.	300-600300	3/16" x 8" SWEEP (full)		3/W		2/W	
23.	300-600305	3/16" x 8" SWEEP (left)		1/W	1/N	1/W	
24.	300-600310	3/16" x 8" SWEEP (right)		1/W	1/N	1/W	
25.	300-600315	3/16" x 10" SWEEP (full)			1/N		
26.	300-600320	3/16" x 10" SWEEP (left)			1/W		
27.	300-600325	3/16" x 10" SWEEP (right)			1/W		
28.	300-600330	3/16" x 12" SWEEP (full)			1/W		

GANG GAUGE WHEEL ASSEMBLY

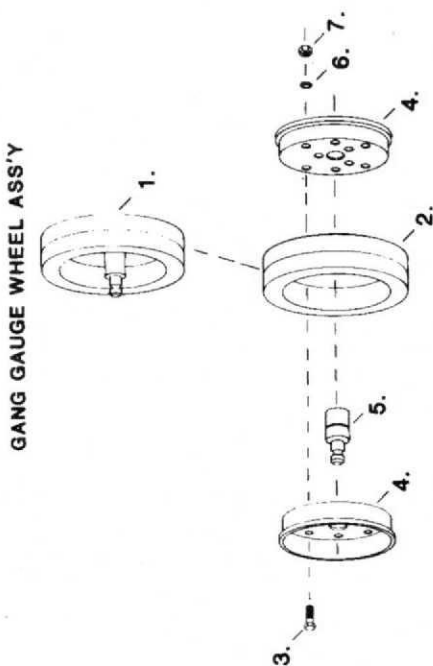
ITEM	PART NO.	DESCRIPTION	REQ. PER GANG
1.	302-12044	ASS'Y GANG GAUGE WHEEL	1
2.	302-12044-3	TIRE, 4 x 12 SEMI PNEUMATIC	1
3.	016-136072	5/16" N.C. HEXBOLT x 3/4" LG. GR. 5	9
4.	302-12044-1	SPLIT RIM	2
5.	302-12044-2	BEARING W/SHAFT	1
6.	020-11315	5/16" LOCK WASHER	9
7.	017-116206	5/16" N.C. HEXNUT	9

C-SPRING SHANK ASSEMBLY (Gang Gauge Wheel Assembly)

C-SPRING SHANK ASS'Y



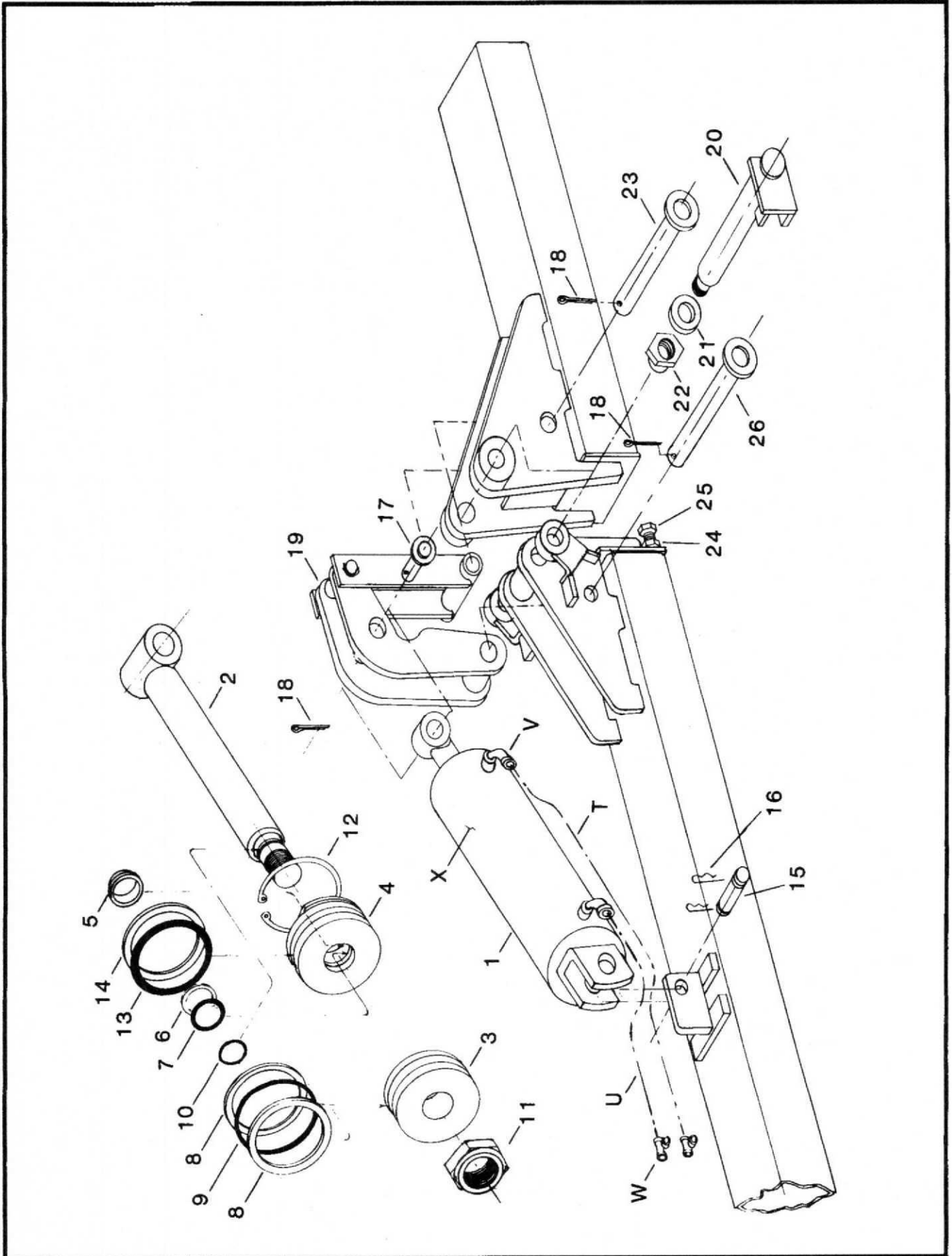
GANG GAUGE WHEEL ASS'Y



HYDRAULIC FOLD HINGE ASSEMBLY

REF	DESCRIPTION	ASSEMBLY (C) 8 ROW NARROW HYD FLAT FOLD	ASSEMBLY (F) 8 ROW WIDE HYD FLAT FOLD	ASSEMBLY (D) 12 ROW NARROW HYD FLAT FOLD
T	HOSE ASSEMBLY (LONG)	302-400023	302-400004	302-400013
U	HOSE ASSEMBLY (SHORT)	302-400021	302-400002	302-400011
V	3/8" 90 DEGREE SWIVEL	071-1501-6-6	071-1501-6-6	071-1501-6-6
W	3/8" STEEL TEE	071-5605-6-6	071-5605-6-6	071-5605-6-6
X	CYLINDER ASSEMBLY	400-10960	400-10960	400-10183
1	CASE WELDMENT	401-10188-22	401-10188-22	401-10188-29
2	ROD WELDMENT	401-10189-1	401-10189-1	401-10189-1
3	PISTON	401-P-3500	401-P-3500	401-P-4000
4	HEAD	401-H-3500	401-H-3500	401-H-4000
5	WIPER	067-1807-1500	067-1807-1500	067-1807-1500
6	BACKUP RING, ROD GLAND	066-1750-222	066-1750-222	066-1750-222
7	O-RING, GLAND	065-2-222-70	065-2-222-70	065-2-222-70
8	BACKUP RING, PISTON	066-1750-338	066-1750-338	066-1750-342
9	O-RING, PISTON	065-2-338-70	065-2-338-70	065-2-342-70
10	O-RING TURNDOWN	065-2-020-70	065-2-020-70	065-2-020-70
11	LOCK NUT	401-12278	401-12278	401-12278
12	SNAP RING	401-SR3500	401-SR3500	401-SR4000
13	O-RING HEAD	065-2-236-70	065-2-236-70	065-2-240-70
14	BACKUP RING, HEAD	066-1750-236	066-1750-236	066-1750-240
	SEAL KIT 6,7,8,9,10,13,14	401-10629-1	401-10629-1	401-10630-1
15	CYLINDER PIN	401-10027	401-10027	401-10027
16	HAIR PIN	049-202356	049-202356	049-202356
17	CYLINDER PIN, ROD END	302-11846-1	302-11846-1	302-11846-1
18	COTTER PIN	032-424374	032-424374	032-424374
19	LINK ASSEMBLY	302-10192	302-10192	302-10192
20	PIN, HINGE	302-11845	302-11845	302-11845
21	MACHINERY BUSHING	020-4200	020-4200	020-4200
22	LOCKNUT	401-12278	401-12278	401-12278
23	PIN, LINK TO WING	302-11846-3	302-11846-3	302-11846-3
24	HEX NUT 5/8"	017-116239	017-116239	017-116239
25	HEX BOLT 5/8" X 2	016-176348	016-176348	016-176348
26	PIN, LINK PIVOT	302-11846-2	302-11846-2	302-11846-2

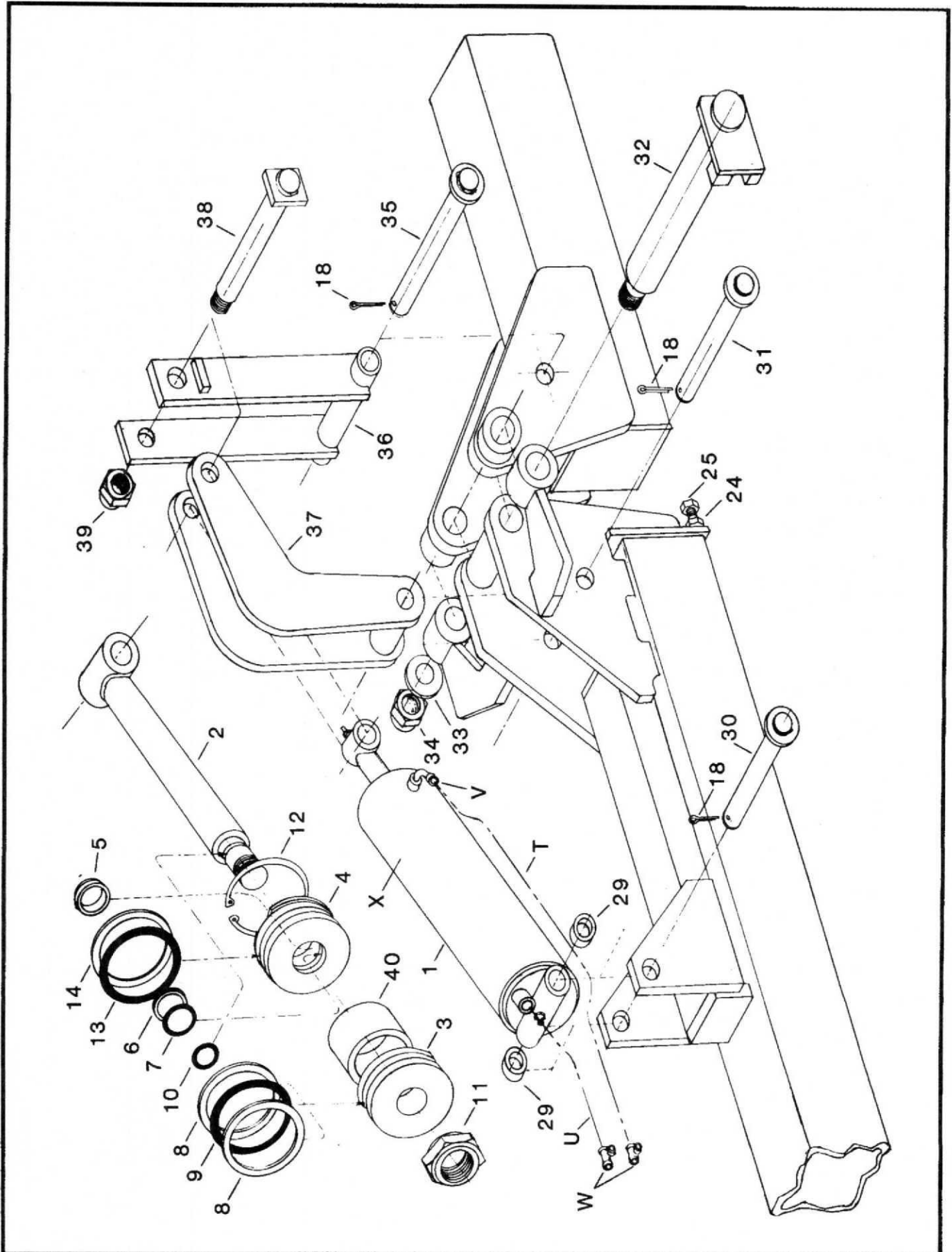
HYDRAULIC FOLD HINGE ASSEMBLY



HYDRAULIC FOLD HINGE ASSEMBLY

REF	DESCRIPTION	ASSEMBLY (G) 12 ROW WIDE HYD FLAT FOLD	ASSEMBLY (G) 16 ROW NAR. HYD FLAT FOLD	ASSEMBLY (H) 12 ROW WIDE HYD BI- FOLD	ASSEMBLY (I) 16 ROW NAR. HYD BI-FOLD
T	HOSE ASSEMBLY (LONG)	302-400063	302-400063	302-400072	302-400072
U	HOSE ASSEMBLY (SHORT)	302-400061	302-400061	302-400070	302-400070
V	3/8" 90 DEGREE SWIVEL	071-1501-6-6	071-1501-6-6	071-1501-6-6	071-1501-6-6
W	3/8" STEEL TEE	071-5605-6-6	071-5605-6-6	NOT REQ.	NOT REQ.
X	LEFT HAND WING CYLINDER	400-10359-3	400-10359-3	400-10359-3	400-10328-3
Y	RIGHT HAND WING CYLINDER	400-10359-3	400-10359-3	400-10359-3R	400-10328-3R
1	CASE WELDMENT	401-12240	401-12240	401-12240	401-12241
2	ROD WELDMENT	401-12238	401-12238	401-12238	401-10994-1
3	PISTON	401-P-4000	401-P-4000	401-P-4000	401-P-5000
4	HEAD	401-H-4000	401-H-4000	401-H-4000	401-H-5000
5	WIPER	067-1807-1500	067-1807-1500	067-1807-1500	067-1807-1750
6	BACKUP RING, ROD GLAND	066-1750-222	066-1750-222	066-1750-222	066-1750-325
7	O-RING, GLAND	065-2-222-70	065-2-222-70	065-2-222-70	065-2-325-70
8	BACKUP RING, PISTON	066-1750-342	066-1750-342	066-1750-342	066-1750-425
9	O-RING PISTON	065-2-342-70	065-2-342-70	065-2-342-70	065-2-425-70
10	O-RING, TURNDOWN	065-2-020-70	065-2-020-70	065-2-020-70	065-2-024-70
11	LOCK NUT	401-12278	401-12278	401-12278	401-12286
12	SNAP RING	401-SR-4000	401-SR-4000	401-SR-4000	401-SR-5000
13	O-RING, HEAD	065-2-240-70	065-2-240-70	065-2-240-70	065-2-248-70
14	BACKUP RING, HEAD	066-1750-240	066-1750-240	066-1750-240	066-1750-248
	SEAL KIT 6,7,8,9,10,13,14	401-10630-1	401-10630-1	401-10630-1	401-10631-1
29	SPACER (12 ROW BI-FOLD)	NOT REQ.	NOT REQ.	302-12239	NOT REQ.
30	PIN, CYLINDER MTG.	302-11918	302-11918	302-11919	302-11919
31	PIN, LINK PIVOT	302-11920	302-11920	302-11920	302-11920
32	PIN, HINGE	302-11907	302-11907	302-11906	302-11906
33	MACHINERY BUSHING	020-42000	020-42000	020-42000	020-42000
34	LOCK NUT	401-12278	401-12278	401-12278	401-12278
35	PIN, LINK TO WING	302-10915	302-10915	302-10915	302-10915
36	LINK	302-10338	302-10338	302-10338	302-10338
37	BELLCRANK	302-10336	302-10336	302-10336	302-10336
38	PIN, LINK TO WING	302-11914	302-11914	302-11914	302-11914
39	LOCK NUT	401-12286	401-12286	401-12286	401-12286
40	SPACER, PISTON	NOT REQ.	NOT REQ.	401-10359-32	401-10328-32

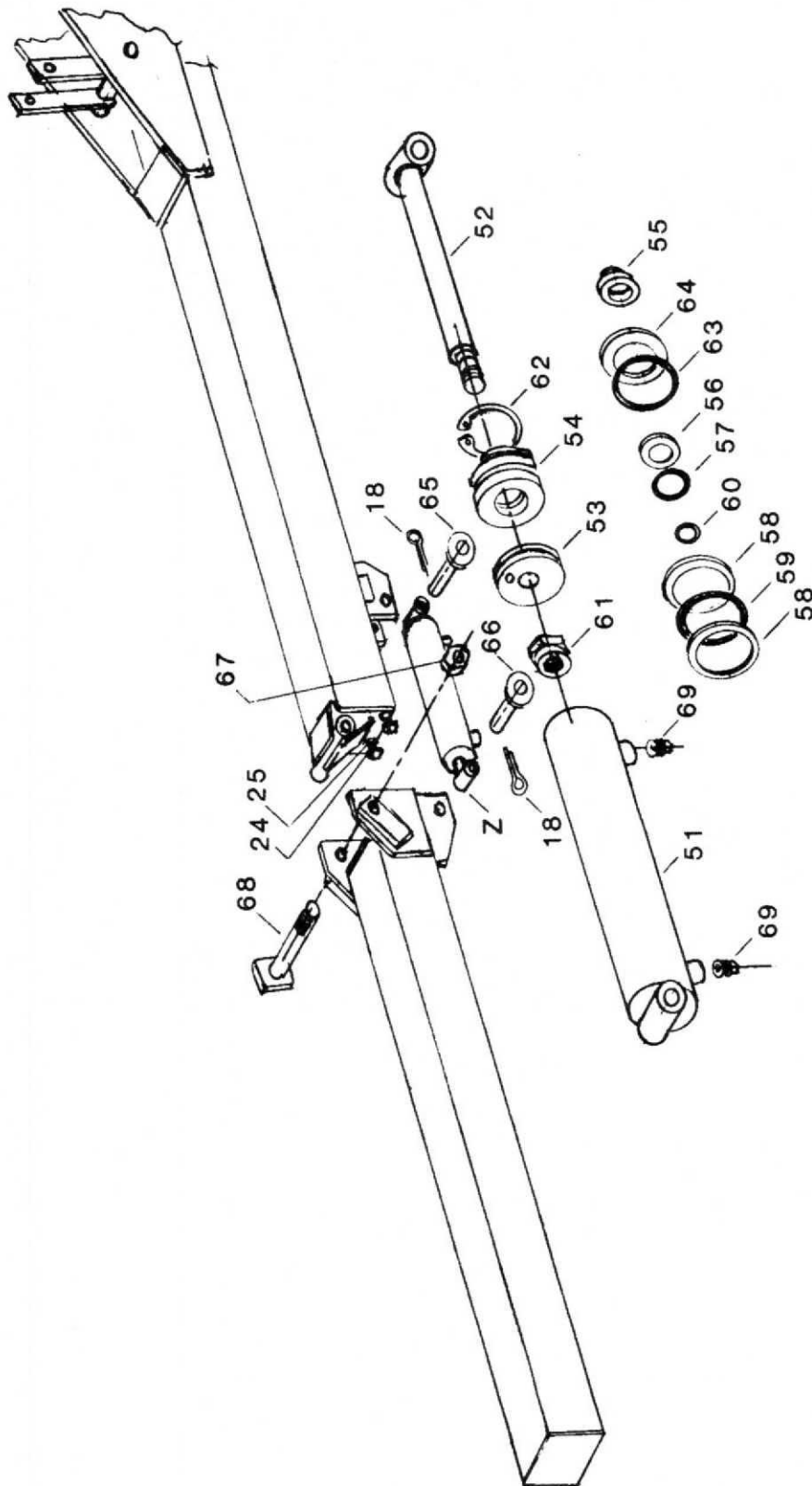
HYDRAULIC FOLD HINGE ASSEMBLY



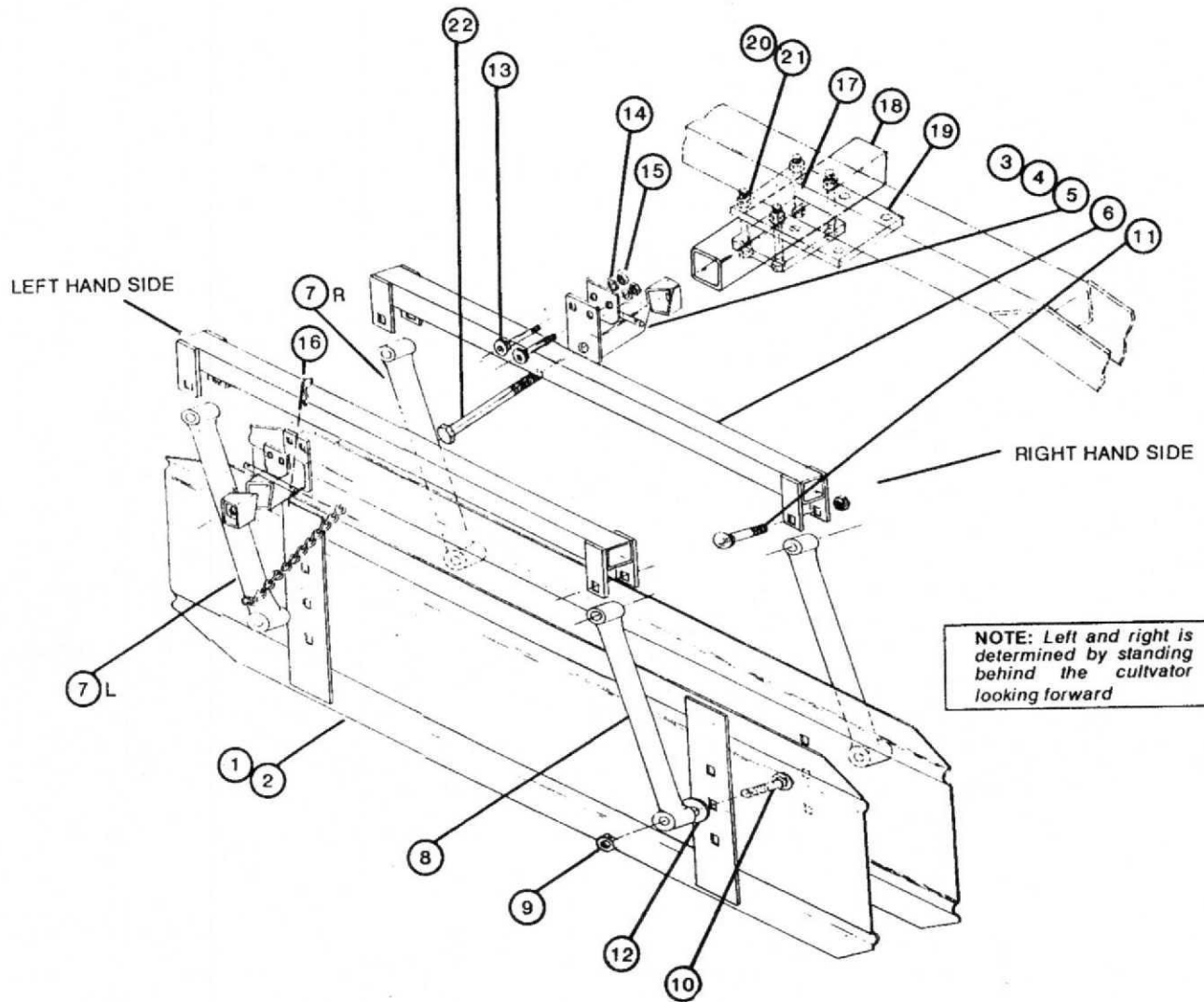
BI- FOLD SNUBBER CYLINDER, HINGE ASSEMBLY

REF	DESCRIPTION	12 ROW WIDE HYD BI-FOLD	16 ROW NARROW HYD BI-FOLD
Z	BI-FOLD SNUBBER CYLINDER	400-10231	400-10231
51	CASE WELDMENT	401-10232	401-10232
52	ROD WELDMENT	401-10234-1	401-10234-1
53	PISTON	401-10202	401-10202
54	HEAD	401-H-2500	401-H-2500
55	WIPER	067-1807-1000	067-1807-1000
56	BACKUP RING, ROD GLAND	066-1750-214	066-1750-214
57	O-RING, GLAND	065-2-214-70	065-2-214-70
58	BACKUP RING, PISTON	066-1750-330	066-1750-330
59	O-RING, PISTON	065-2-330-70	065-2-330-70
60	O-RING, TURNDOWN	065-2-020-70	065-2-020-70
61	LOCKNUT	401-12261	401-12261
62	SNAPRING	401-SR-2500	401-SR-2500
63	O-RING, HEAD	066-1750-228	066-1750-228
64	BACKUP RING, HEAD	065-2-228-70	065-2-228-70
	SEAL KIT 56,57,58,59,60,63,64	401-10627-1	401-10627-1
65	CYLINDER PIN, ROD END	302-11917	302-11917
66	CYLINDER PIN, BUTT END	302-11916	302-11916
67	LOCKNUT	401-12286	401-12286
68	PIN, HINGE	302-10996-2	302-10996-2
	PIN, HINGE (1982-1990)	302-10996-1	302-10996-1
69	PIPE PLUG 3/8"	011-253275	011-253275

BI-FOLD SNUBBER CYLINDER, HINGE ASSEMBLY



OPEN TOP SHIELD ASSEMBLY



OPEN TOP SHIELD ASSEMBLY

1.	300-600700	2.	60" SHIELD
2.	300-600701	2.	48" SHIELD
3.	300-600710 *	2.	1 1/2" WEDGE TYPE MOUNTING
4.	300-600711 *	2.	2" WEDGE TYPE MOUNTING
5.	300-600712 *	2.	2 1/2" WEDGE TYPE MOUNTING
6.	302-12256	2.	SQ. TUBE WELDMENT
7-L.	302-12251-1	1.	LEFT-HAND LINK WITH CHAIN
7-R.	302-12251-2	1.	RIGHT-HAND LINK WITH CHAIN
8.	302-12251	2.	LINK WITHOUT CHAIN
9.	017-166523	8.	7/16 N.C. LOCKNUT
10.	013-330688	4.	7/16 N.C. x 2 CARRIAGE BOLT
11.	013-330696	4.	7/16 N.C. x 2 1/2 CARRIAGE BOLT
12.	020-21437	4.	7/16 " FLATWASHER
13.	013-330403	4.	5/16 N.C. x 2 1/4 HEXHEAD BOLT
14.	020-11315	4.	5/16 LOCKWASHER
15.	017-116206	4.	5/16 N.C. HEXNUT
16.	049-202348	2.	HAIR PIN
17.	019-156246	4.	7/16 N.C. HEXBOLT x 4 Gr. 5
18.	302-12255	1.	CROSS-TUBE (Standard 2 1/2")
19.	302-12262	as req.	UNIVERSAL CLAMP PLATE
20.	017-116218	4.	7/16 N.C. HEXNUT
21.	020-11437	4.	7/16 LOCKWASHER
22.	016-176420	2.	5/8 N.C. HEXBOLT x 10 Gr. 2

*NOTE: (Wedge Type Mounting includes bolts and hair pin)