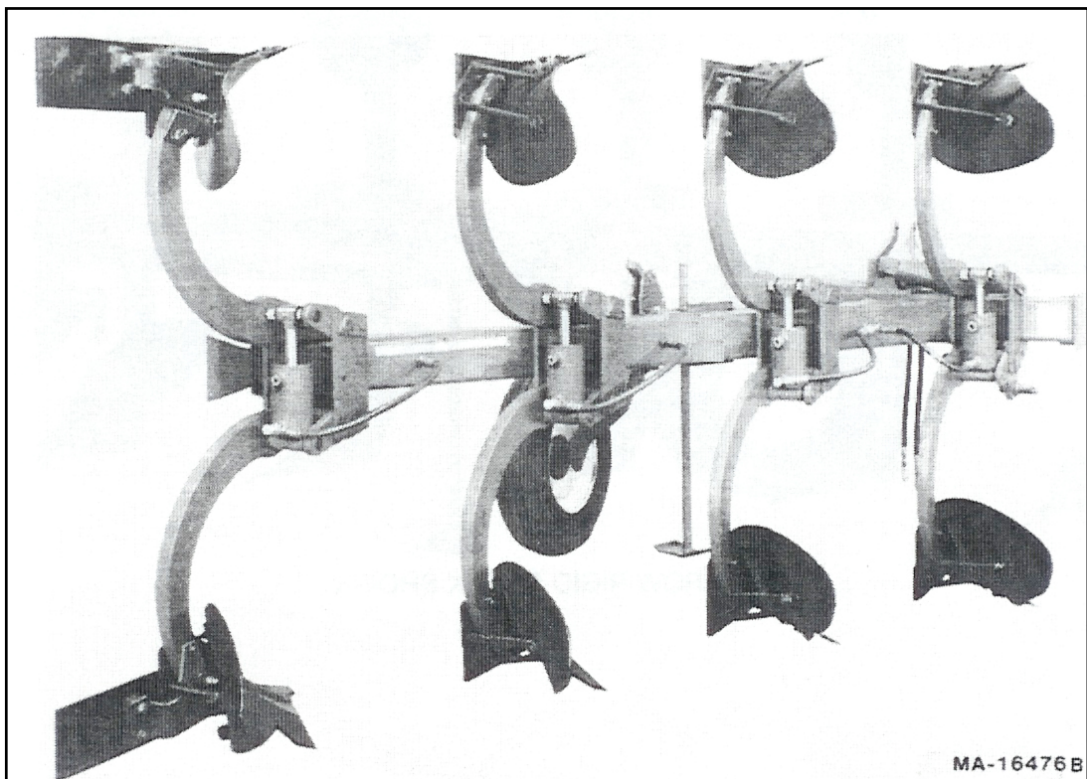




MA-16476B

Art's-Way Manufacturing Co., Inc.

Model 146
Moldboard Plow

Illustrated Parts Catalog
520290

Issued February 2004

ILLUSTRATED PARTS CATALOG



This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about your safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.

IF THIS MACHINE IS USED BY AN EMPLOYEE, IS LOANED, OR IS RENTED, MAKE SURE THAT THE OPERATOR UNDERSTANDS THE TWO INSTRUCTIONS BELOW

BEFORE THE OPERATOR STARTS THE ENGINE:

1. GIVE INSTRUCTIONS TO THE OPERATOR ON SAFE AND CORRECT USE OF THE MACHINE
2. MAKE SURE THE OPERATOR READS AND UNDERSTANDS THE OPERATOR'S MANUAL FOR THIS MACHINE.

WARNING

IMPROPER OPERATION OF THIS MACHINE CAN CAUSE INJURY OR DEATH.

BEFORE STARTING THE ENGINE, DO THE FOLLOWING:

1. READ THE OPERATOR'S MANUAL.
2. READ ALL SAFETY DECALS ON THE MACHINE.
3. CLEAR THE AREA OF OTHER PERSONS.

LEARN AND PRACTICE SAFE USE OF MACHINE CONTROLS IN A SAFE AND CLEAR AREA BEFORE YOU OPERATE THIS MACHINE ON A JOB SITE.

It is your responsibility to observe pertinent laws and regulations and to follow manufacturer's instructions on machine operation and maintenance.

See your Authorized Art's-Way Manufacturing Co., Inc. dealer or Art's-Way Manufacturing Co., Inc. for additional operator's manuals, illustrated parts catalogs, and service manuals.

TO THE OWNER

Congratulations on the purchase of your new Art's-Way 146 Moldboard Plow. You have selected a top quality machine that is designed and built with pride to ensure you have many years of efficient and reliable service.

Many people have worked on the design, production, and delivery of this harvester. The information in this Manual is based on the knowledge, study, and experience through years of specializing in the manufacturing of farm machinery. This Manual is designed to provide you with important information regarding safety, maintenance, and machine operation so you can and will get the best possible performance from your 146 Moldboard Plow.

Even if you are an experienced operator of this or similar equipment, we ask that you read this manual before operating this harvester. The way you operate, adjust, and maintain this unit will have much to do with its successful performance. Any further questions you may have about this product of Art's-Way equipment should be directed to your local Art's-Way dealer or to Art's-Way Manufacturing Co., Inc., Armstrong, Iowa, 50514, (712) 864-3131.

Specification And Design Are Subject To Change Without Notice

Art's-Way Manufacturing Co., Inc. is continually making product improvements. In doing so, we reserve the right to make changes and/or add improvements to our products without obligation for the equipment previously sold. Modifications to this 146 Moldboard Plow may effect the performance, function, and safety of its operation. Therefore, no modification are to be made without the written permission of Art's-Way Manufacturing Co., Inc. Any modification made without the written permission of Art's-Way Mfg. Co. shall void the warranty of this product. In the interest of continued safe operation of this 146 Moldboard Plow, pay particular attention to the safety alert symbol(s) throughout this Manual.

Art's-Way Manufacturing Co., Inc. Statement Of Product Liability

Art's-Way Manufacturing Co., Inc. recognizes its responsibility to provide customers with a safe and efficient product. Art's-Way Manufacturing Co., attempts to design and manufacture its products in accordance with all accepted engineering practices effective at the date of design. This statement should not be interpreted to mean that our products will protect against the user's own carelessness or failure to follow common safety practices nor will Art's-Way Manufacturing Co., be liable for any such act. In addition, Art's-Way Manufacturing Co., assumes no liability for any altered.

Important Warranty Information

The warranty for this 146 Moldboard Plow appears on page iii of this Manual. In order to establish proper warranty registration, the Warranty Registration and Dealer Pre-Delivery Checklist must be completed and returned to the factory. Failure to comply with this requirement may result in reduced warranty allowances.

Limitations Of This Manual

This Manual contains operating instructions for your 146 Moldboard Plow only. Any mention of other machinery in this manual other than the 146 Moldboard Plow is for reference only. This manual does not replace nor is it to be used for any machinery that may be attached to or used in conjunction with the 146 Moldboard Plow.

PARTS & SERVICE

As the new purchaser of your 146 Moldboard Plow, it is very important to consider the following factors:

- A. Original Quality
- B. Availability of Service Parts
- C. Availability of Adequate Service Facilities

Art's-Way Manufacturing Co., Inc. has an excellent dealership network ready to answer any questions you may have about your Moldboard Plow. Parts for your machine may be ordered through our dealers. When placing a parts order, please have the **model** and **serial number** ready. This will allow the dealer to fill your order as quickly as possible.

For your convenience, we have provided this space for you to record your model number, serial number, and the date of purchase, as well as your dealer's name and address.

Owner's Name: _____

Owner's Address: _____

Purchase Date: _____

Dealership Name: _____

Dealership Address: _____

Dealership Phone No.: _____

Machine Serial Number

Enter the serial number and model number of your 146 moldboard plow in the space provided above.

	
SERIAL NO.	
MODEL NO.	
Manufactured By Art's-Way Manufacturing Co., Inc. Armstrong, LA	

Limited Warranty

Art's-Way Manufacturing Co., Inc. warrants the products it sells to be free from defects in material and workmanship for a period of one (1) year after the date of delivery to the first (original) purchaser, subject to the following conditions:

- Art's-Way Manufacturing Co., Inc. obligation and liability under this warranty is to repair or replace (at the company's option) any parts that upon manufacture were defective in material or workmanship.
- All parts and repairs under this warranty shall be supplied at Art's-Way Manufacturing Co., Inc. or an authorized Art's-Way Manufacturing Co., Inc. dealer, at the option of Art's-Way Manufacturing Co., Inc.
- Art's-Way Manufacturing Co., Inc. warranty does not extend to parts and elements not manufactured by Art's-Way Manufacturing Co., Inc. and which carry the warranty of other manufacturers.
- Transportation or shipping to an authorized dealer for necessary repairs is at the expense of the purchaser.
- Art's-Way Manufacturing Co., Inc. makes no other warranty expressed or implied and makes no warranty of merchantability or fitness for any particular purpose beyond that expressly stated in this warranty. Art's-Way Manufacturing Co., Inc. liability is limited to the terms set forth in this warranty and does not include any liability for direct, indirect, incidental or consequential damages or expenses of delay and the Company's liability is limited to repair or replacement of defective parts as set forth herein.
- Any improper use and/or maintenance, including operation after discovery of defective or worn parts, operation beyond the rated capacity, substitution of parts not approved by Art's-Way Manufacturing Co., Inc., or any alternation or repair by other than an authorized Art's-Way Manufacturing Co., Inc. dealer which affects the product materially and adversely, shall void the warranty.
- No dealer, employee or representative is authorized to change this warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of Art's-Way Manufacturing Co., Inc.
- Some states do not allow limitations on how long an implied warranty lasts or exclusions of, or limitations on relief such as incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you the specific legal rights and you may have other rights that vary from state to state.

SAFETY FIRST

“A careful operator is the best insurance against an accident.”

(National Safety Council)

Most accidents can be prevented if the operator:

- Fully understands how the machine functions.
- Can anticipate situations which may produce problems.
- Can make necessary corrections before problems develop.



THIS SYMBOL MEANS ATTENTION!

BECOME ALERT!

YOUR SAFETY IS INVOLVED!

The American Society of Agricultural Engineers has adopted the ***Universal Safety Alert Symbol*** as a way to identify areas of potential danger if the equipment is not operated correctly. ***Please be alert whenever you see this symbol in the manuals or on your Moldboard Plow.***

Art's-Way Manufacturing Co., Inc. strives to make our equipment as safe as possible. The Art's-Way Moldboard Plow conforms to applicable safety standards at the time of manufacturing. A safety conscious equipment operator makes an effective accident-prevention program complete.

Safety features and instructions for the Moldboard Plow are detailed elsewhere in the Operator's Manual. It is the responsibility of the owner to ensure that all operators read and understand the manual before they are allowed to operate the Moldboard Plow. (***Occupational Safety and Health Administration (OSHA) regulations 1928.57.***)

Notices of Danger, Warning, and Caution

Signal Words: Note the use of signal words DANGER, WARNING and CAUTION on the Moldboard Plow and in this manual. The appropriate signal word for each has been selected using the following guidelines:



DANGER: Immediate and specific hazard *will* result in severe personal injury or death if proper precautions are not taken.



WARNING: Specific hazard or unsafe practice *could* result in severe personal injury or death if proper precautions are not taken.



CAUTION: A reminder of good safety practices. Personal injury *could* result if proper procedures are not followed.

146 Moldboard Plow Parts Catalog

520290

For replacement plow bottoms, shares, shins and landsides, refer to "Moldboard Plow Bottoms and Ripper Parts" catalog Bur 7-2230.



BP96H090

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GENERAL INFORMATION

Indexes

Section 1 of this catalog contains a parts and service, to the owner, limited warranty, and alphabetical index. An alphabetical index also appears at the beginning of each section. Section 10 is the Alpha/Numerical Index which lists all part numbers with their page location and reference number.

Illustrations

The arrangement of this parts catalog is for easy identification of parts. All parts are illustrated in "exploded views" in proper relation to each other. Reference numbers used in the illustrations refer to those on the text pages. The text pages list reference number, part number, part description and the quantity required.

Abbreviations

P.I.N. "Product Identification Number"

SN "Serial Number"

NSS "Not Serviced Separately" in the part number column indicates this part is not available for service.

REF "Reference" in the part number column indicates this part has special service information. The page where this information can be found is given in the part description column.

UAR "Use As Required" in the quantity required column indicates the number of parts used is determined by service needs.

Right-Hand and Left-Hand Identification

The reference to right-hand and left-hand in this catalog is identified by the operator standing at the rear of the basic unit (without rear attachment), looking toward the front of the machine (in normal forward travel). For pages covering any machine attachments, right-hand and left-hand are defined by the operator sitting in the position for proper operation of the attachment.

Catalog Revisions and Supplements

Changes to the product may make it necessary to revise or add pages to this catalog. A cover sheet will list all pages released in a revision or supplement. Each new or revised page will have a new issue date. All revised and new pages must be put into the parts catalog as soon as they are received.

Parts Orders

Orders must specify product model, all necessary serial numbers, correct part number, complete description, quantity required, method of shipment, and shipping address.

Text Format Explanation

An assembly may contain service items. The component parts of an assembly or subassembly are indented. The quantity required column lists the number of assemblies required for a completed machine, and the number of components required in a complete assembly or subassembly.

The example below illustrates the use of indents and other text page elements explained on this page.

HYDRAULIC FILTER

REF.	PART NO.	DESCRIPTION	REQ'D.
1	ID4356734	FILTER ASSEMBLY - hydraulic oil, P.I.N. 7534840 and after	1
	ID61903	HEAD ASSEMBLY - filter	1
2	NSS	HEAD - filter, order ID61903 head assembly	1
3	ID58199	VALVE - bypass	1
	ID43800	KIT - filter element, replaces ID35700 element kit.	1
4	NSS	ELEMENT - filter, order ID43800 element kit.	1
5	IA27994	O-RING - filter	1
6	ID61948	HOUSING -filter	1
7	REF	CANOPY - ROPS, order from Machinery Price List	1
8	I843065C1	HOSE - 132 inch (3353 mm) long, reservoir to pump	1
9	I113-323	BOLT - hex, 7/16 NC x 1-3/4 inch	2
10	I814-8030	BOLT - hex, 8 - 1.25 x 30 mm.	4

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T

Tie Bolt Hydraulic Cylinders 8-7,8-9

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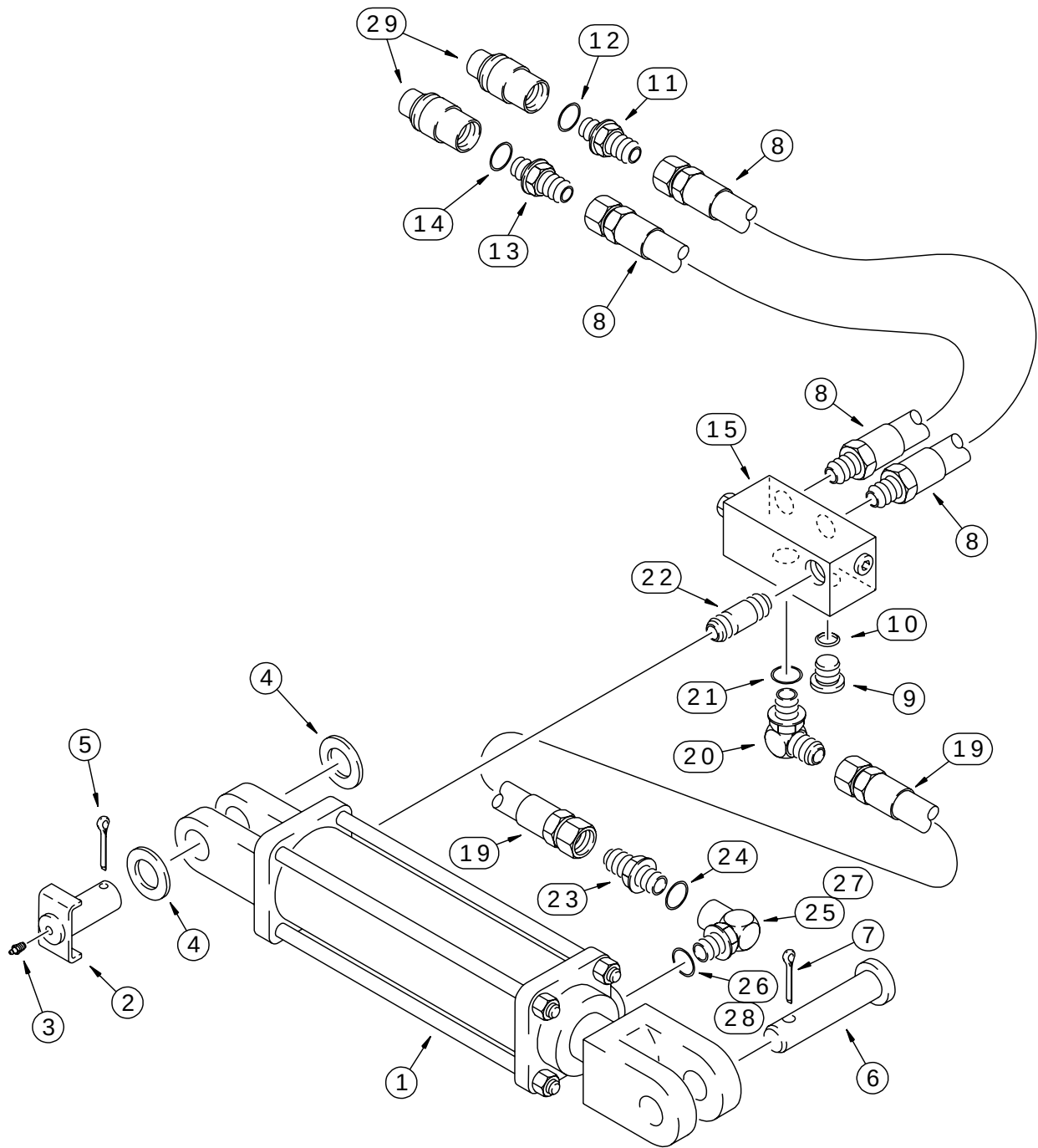
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 Wheel - gauge
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ALPHABETICAL INDEX

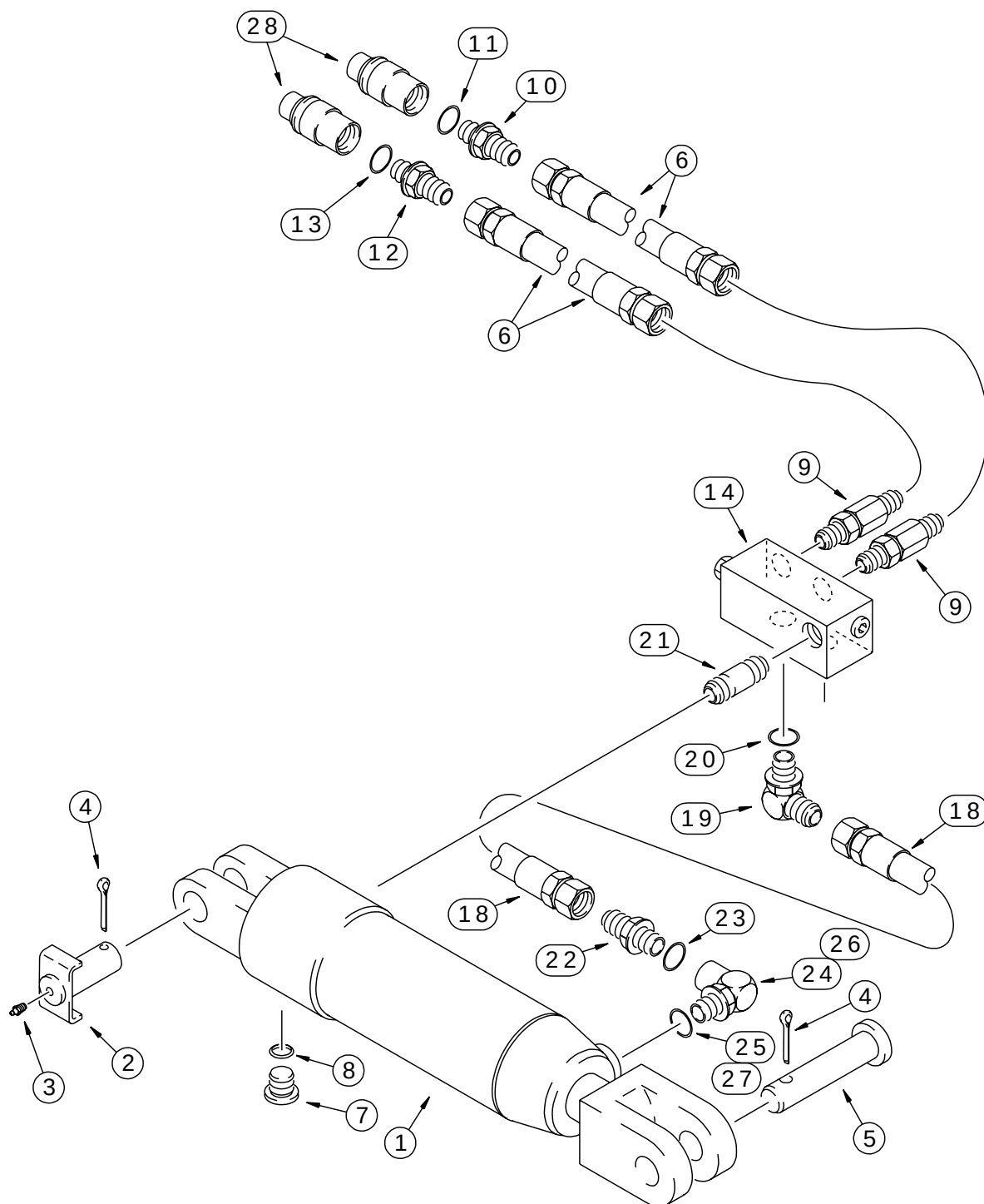
HYDRAULICS

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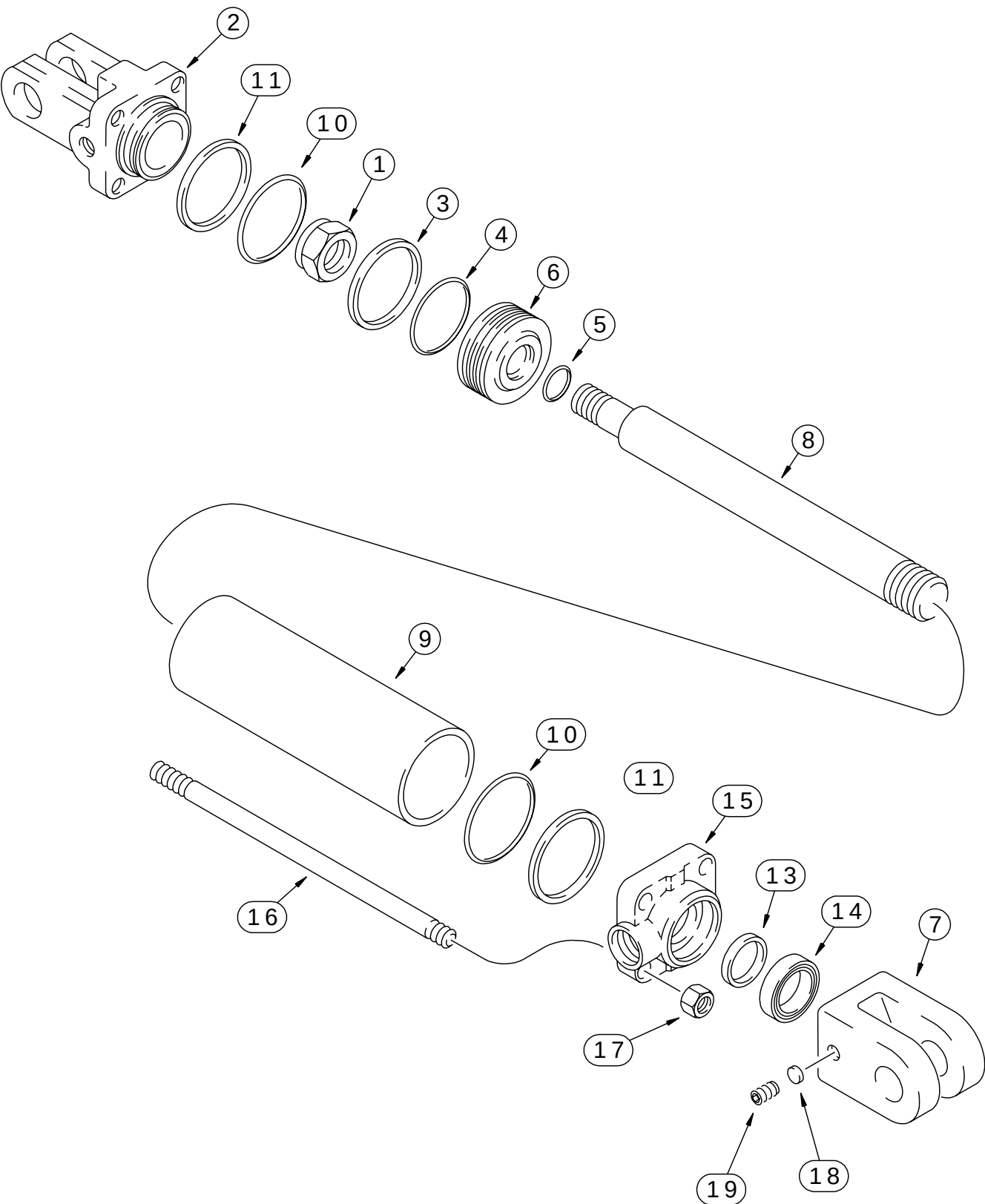
ROLL OVER CYLINDER HYDRAULICS AND CONNECTIONS**Plows With Tie Bolt Hydraulic Cylinder**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	REF	CYLINDER ASSEMBLY - 76 (3) ID x 203 mm (8 inch) stroke (See pages 8-7 and 8-9 for correct cylinder)	1
2	I128723C5	PIN - cylinder, locking	1
3	I219-87	FITTING - grease, straight, 1/4-28 self-tapping x 9/16 inch.	1
4	I495-81068	WASHER - flat, 1-1/32 x 1-1/2 x 1/32 inch	2
5	I432-2032	PIN - cotter, 5/16 x 2 inch	1
6	I810751C1	PIN - headed, 1 x 3-1/2 inch	1
7	I432-1624	PIN - cotter, 1/4 x 1-1/2 inch	1
8	I1333872C1	HOSE - 1270 mm (50 inch) long	2
9	I218-5157	PLUG - hex, 7/8-14 inch O-ring boss.	1
10	I237-6010	O-RING - 3/4 ID x 3/32 inch wide.	1
11	I218-5058	ADAPTER - straight, 9/16-18 flare x 3/4-16 inch O-ring boss	1
12	I237-6008	O-RING - 41/64 ID x 3/32 inch wide.	1
13	I1333873C1	ADAPTER - restrictor, special	1
14	I237-6008	O-RING - 41/64 ID x 3/32 inch wide.	1
	I1256876C93	KIT - cylinder check valve	1
15	I1285956C91	VALVE ASSEMBLY - cylinder check	1
16	I1286325C91	SPOOL - check valve, not shown	1
	I1286445C1	KIT - seal, check valve	1
17	I237-6004	O-RING - 23/64 ID x 5/64 inch wide, not shown	1
18	I237-6005	O-RING - 13/32 ID x 5/64 inch wide, not shown	1
19	I1978873C1	HOSE - 350 mm (13-3/4 inch) long, check valve to cylinder port.	1
20	I218-5107	ELBOW - 90 degree, 7/8-14 inch flare x adj O-ring boss	1
21	I237-6010	O-RING - 3/4 ID x 3/32 inch wide	1
22	I221-185	NIPPLE - straight, 1/2 PT x 1-1/8 inch	1
23	I55565C1	ADAPTER - restrictor, special	1
24	I237-6010	O-RING - 3/4 ID x 3/32 inch wide	1
25	I71357R91	ELBOW - 90 degree, special, used with I92889C91 cylinder with 7/8-14 NF rod end port.	1
26	I237-6010	O-RING - 3/4 ID x 3/32 inch wide	1
27	I113639A1	ELBOW - 90 degree, special, used with I113828A1 cylinder with 3/4-16 NF rod end port.	1
28	I237-6008	O-RING - 41/64 ID x 3/32 inch wide	1
29	I1272399C2	COUPLER - self sealing, male, 7/8 inch NF	UAR
29	I1341843C1	COUPLER - self-sealing male, 7/8-14 inch thread	UAR
29	I1285718C2	COUPLER - self-sealing male, 3/4-16 inch thread	UAR
30	I237-6010	O-RING - 3/4 ID x 3/32 inch wide, not shown	UAR
31	I237-6008	O-RING - 41/64 ID x 3/32 inch wide, not shown	UAR
32	I218-5261	ADAPTER - straight, 7/8-14 male O-ring boss x 3/4 inch female, not shown	UAR
33	I237-6010	O-RING - 3/4 ID x 3/32 inch wide, not shown	1
34	I1252129C1	ADAPTER - straight, 3/4-16 male O-ring boss x 7/8-14 inch female, not shown	UAR
35	I237-6008	O-RING - 41/64 ID x 3/32 inch wide, not shown	1
36	I1282459C1	KIT - coupler tag, not shown	UAR



ROLL OVER CYLINDER HYDRAULICS AND CONNECTIONS**Plows With Welded Body Hydraulic Cylinder**

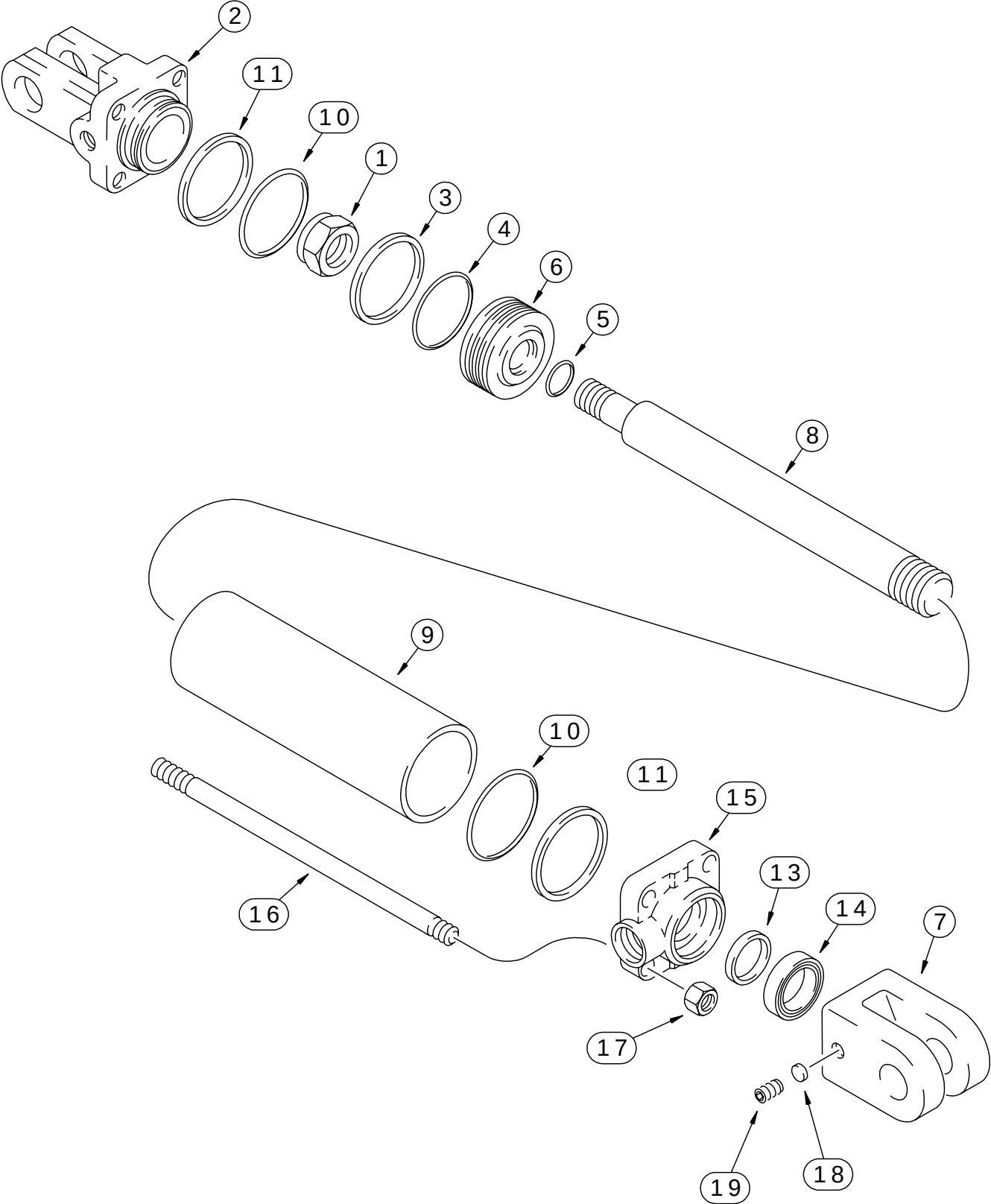
REF.	PART NO.	DESCRIPTION	REQ'D.
1	I145493C93	CYLINDER ASSEMBLY - 76 (3) ID x 203 mm (8 inch) stroke (See page 8-11)	1
2	I128723C5	PIN - cylinder, locking	1
3	I219-87	FITTING - grease, straight, 1/4-28 self-tapping x 9/16 inch.	1
4	I432-2028	PIN - cotter, 5/16 x 1-3/4 inch	2
5	I61571C2	PIN - headed, 1 x 3-1/4 inch	1
6	I114366C1	HOSE - 813 mm (32 inch) long	2
7	I218-5157	PLUG - hex, 7/8-14 inch O-ring boss.	1
8	I237-6010	O-RING - 3/4 ID x 3/32 inch wide.	1
9	I112815C1	ADAPTER - swivel, special	2
10	I218-5062	ADAPTER - straight, 7/8-14 inch flare x O-ring boss.	1
11	I237-6010	O-RING - 3/4 ID x 3/32 inch wide.	1
12	I397699R1	ADAPTER - restrictor, special	1
13	I237-6010	O-RING - 3/4 ID x 3/32 inch wide.	1
	I1256876C93	KIT - cylinder check valve	1
14	I1285956C91	VALVE ASSEMBLY - cylinder check	1
15	I1286325C91	SPOOL - check valve, not shown	1
	I1286445C1	KIT - seal, check valve	1
16	I237-6004	O-RING - 23/64 ID x 5/64 inch wide, not shown	1
17	I237-6005	O-RING - 13/32 ID x 5/64 inch wide, not shown	1
18	I1978873C1	HOSE - 350 mm (13-3/4 inch) long, check valve to cylinder port.	1
19	I218-5107	ELBOW - 90 degree, 7/8-14 inch flare x adj O-ring boss.	1
20	I237-6010	O-RING - 3/4 ID x 3/32 inch wide	1
21	I221-185	NIPPLE - straight, 1/2 PT x 1-1/8 inch	1
22	I55565C1	ADAPTER - restrictor, special, 7/8-14 NF inch flare	1
23	I237-6010	O-RING - 3/4 ID x 3/32 inch wide	1
24	I371357R91	ELBOW - 90 degree, special, with 7/8-14 NF thread (used with I145493C93 cylinder)	1
25	I237-6010	O-RING - 3/4 ID x 3/32 inch wide	1
26	I113639A1	ELBOW - 90 degree, special, with 3/4-16 NF thread (not required with I145493C93 cylinder)	1
27	I237-6010	O-RING - 3/4 ID x 3/32 inch wide (not required).	1
28	I1272399C2	COUPLER - self sealing, male, 7/8 inch NF	UAR
28	I1341843C1	COUPLER - self-sealing male, 7/8-14 inch thread	UAR
28	I1285718C2	COUPLER - self-sealing male, 3/4-16 inch thread	UAR
29	I237-6010	O-RING - 3/4 ID x 3/32 inch wide, not shown	UAR
30	I237-6008	O-RING - 41/64 ID x 3/32 inch wide, not shown	UAR
31	I218-5261	ADAPTER - straight, 7/8-14 male O-ring boss x 3/4 inch female, not shown	UAR
32	I237-6010	O-RING - 3/4 ID x 3/32 inch wide, not shown	1
33	I1252129C1	ADAPTER - straight, 3/4-16 male O-ring boss x 7/8-14 inch female, not shown	UAR
34	I237-6008	O-RING - 41/64 ID x 3/32 inch wide, not shown	1
35	I1282459C1	KIT - coupler tag, not shown	UAR



ROLL OVER HYDRAULIC CYLINDER

With Tie Bolts

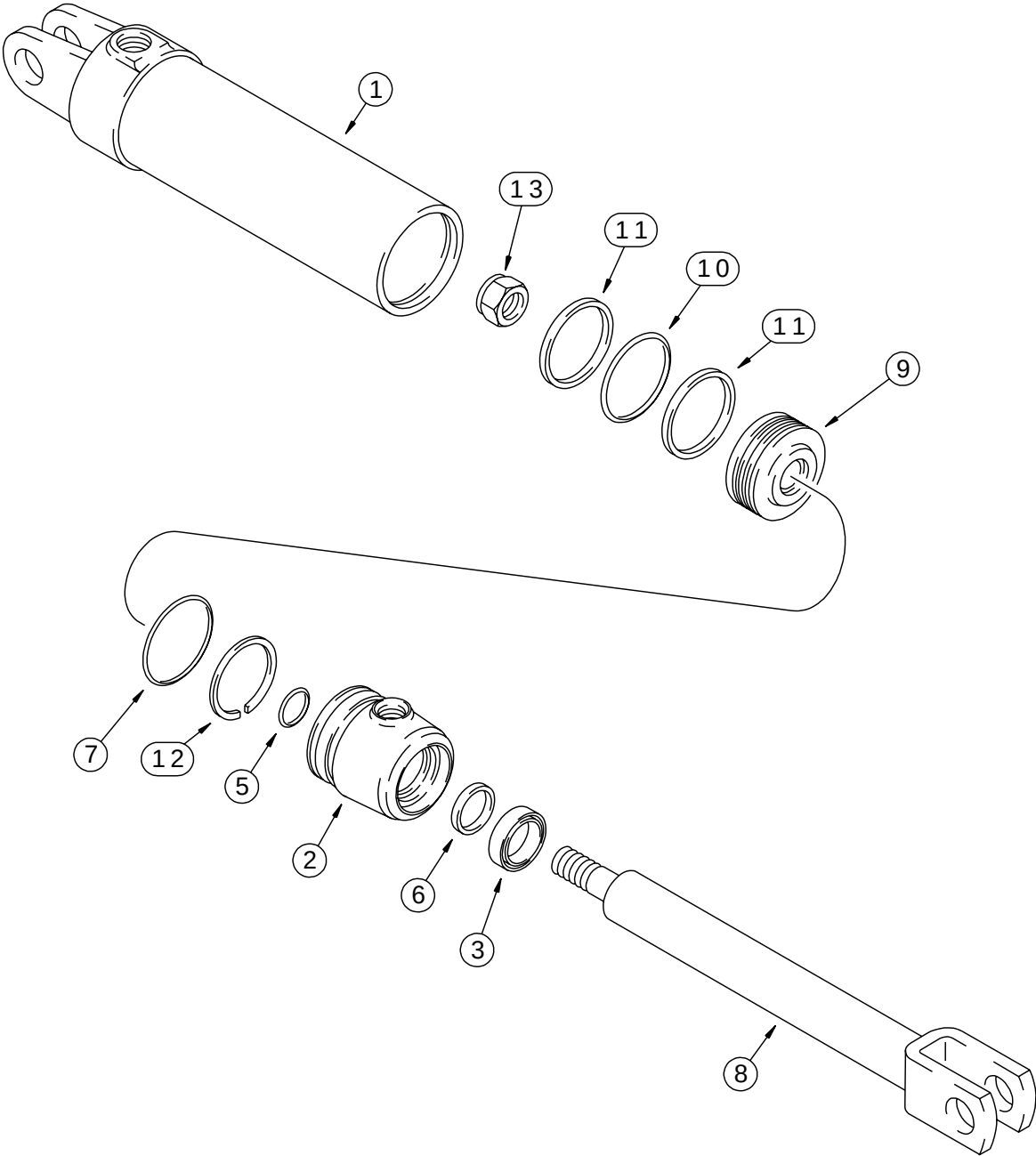
REF.	PART NO.	DESCRIPTION	REQ'D.
	I92889C91	CYLINDER ASSEMBLY - 76 (3) ID x 203 mm (8 inch) stroke, roll over, no longer available, order 113528A1 cylinder, page 8-9 and I113639A1 special 90 degree elbow, item 27 on page 8-3 when replacing complete cylinder.	1
1	I232-46314	NUT - hex, self-locking, 7/8 inch NF.	1
2	I93222C1	HEAD - cylinder, rear	1
3	I387373R1	SEAL - piston	1
4	I238-5145	O-RING - 2-9/16 ID x 3/32 inch wide	1
5	I238-6018	O-RING - 3/4 ID x 1/16 inch wide.	1
6	I145225C2	PISTON - cylinder	1
7	I1282366C1	CLEVIS - piston rod	1
8	I1272813C1	ROD - piston.	1
9	NSS	BODY - cylinder (Order I92889C91 complete cylinder)	1
10	I238-6232	O-RING - 2-3/4 ID x 1/8 inch wide	2
11	I1272763C1	RING - backup	2
13	I119203C1	SEAL - piston rod	1
14	I403460R1	WIPER - seal, piston rod	1
15	I93223C1	HEAD - cylinder, front, no longer available, order I113529A1 head and 113639A1 special 90 degree elbow	1
16	I93225C1	BOLT - cylinder retaining	4
17	I425-107	NUT - hex, 7/16 inch NC	4
18	I145453C1	PAD - insert	1
19	I483-1386	SCREW - set, hex socket headless, 3/8 NC x 3/8 inch, cup point.	1



ROLL OVER HYDRAULIC CYLINDER

With Tie Bolts

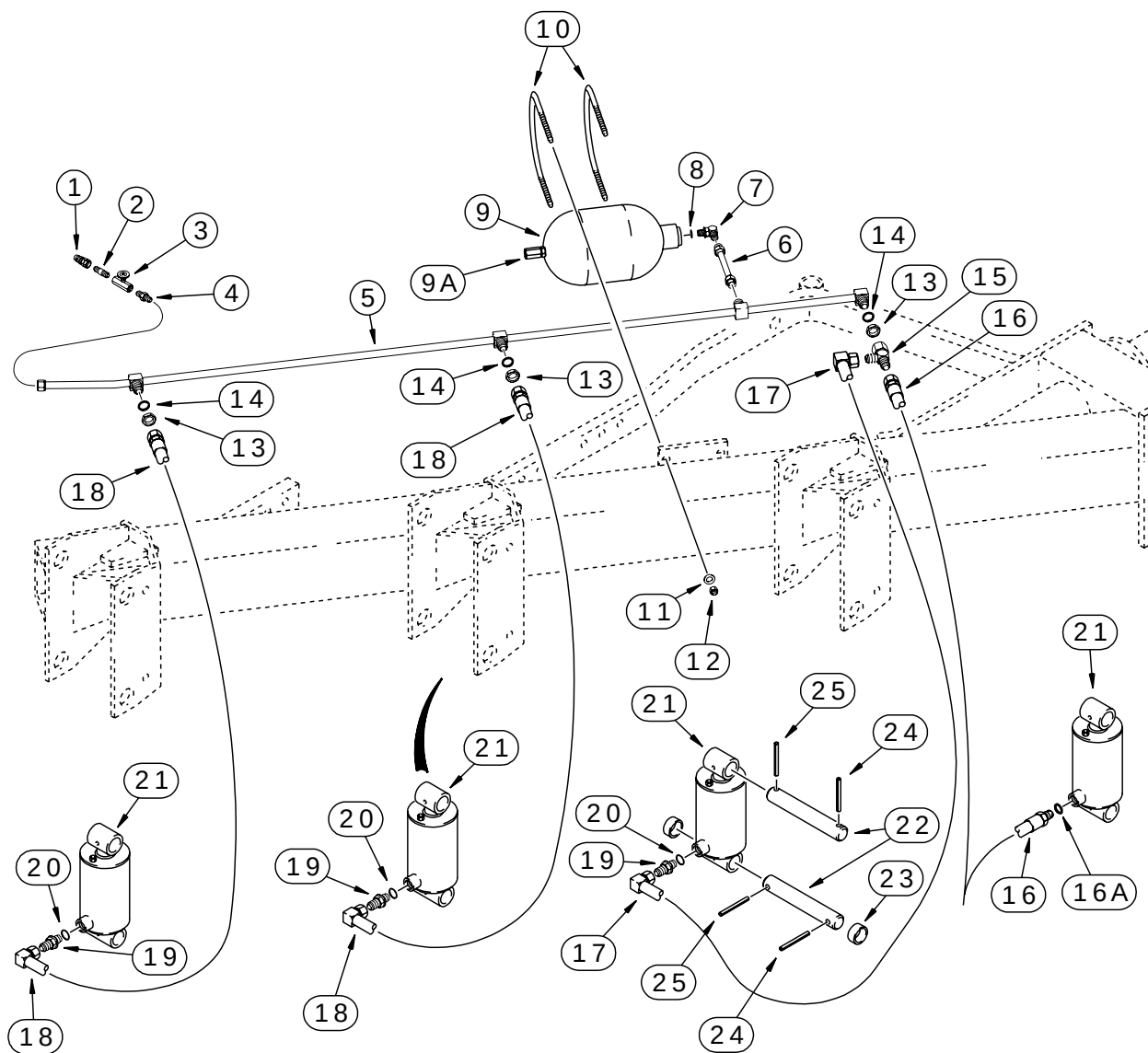
REF.	PART NO.	DESCRIPTION	REQ'D.
	I113528A1	CYLINDER ASSEMBLY - 76 (3) ID x 203 mm (8 inch) stroke, roll over	1
1	I232-46314	NUT - hex, self-locking, 7/8 inch NF.	1
2	I93222C1	HEAD - cylinder, rear	1
3	I387373R1	SEAL - piston	1
4	I238-5145	O-RING - 2-9/16 ID x 3/32 inch wide	1
5	I238-6018	O-RING - 3/4 ID x 1/16 inch wide.	1
6	I145225C2	PISTON - cylinder	1
7	I1282366C1	CLEVIS - piston rod	1
8	I1272813C1	ROD - piston.	1
9	NSS	BODY - cylinder (Order I113528A1 complete cylinder)	1
10	I238-6232	O-RING - 2-3/4 ID x 1/8 inch wide	2
11	I1272763C1	RING - backup	2
13	I119203C1	SEAL - piston rod	1
14	I403460R1	WIPER - seal, piston rod	1
15	I113529A1	HEAD - cylinder, front.	1
16	I93225C1	BOLT - cylinder retaining	4
17	I425-107	NUT - hex, 7/16 inch NC	4
18	I145453C1	PAD - insert	1
19	I483-1386	SCREW - set, hex socket headless, 3/8 NC x 3/8 inch, cup point.	1



146 Moldboard Plow
ROLL OVER HYDRAULIC CYLINDER
With Welded Body

8-11

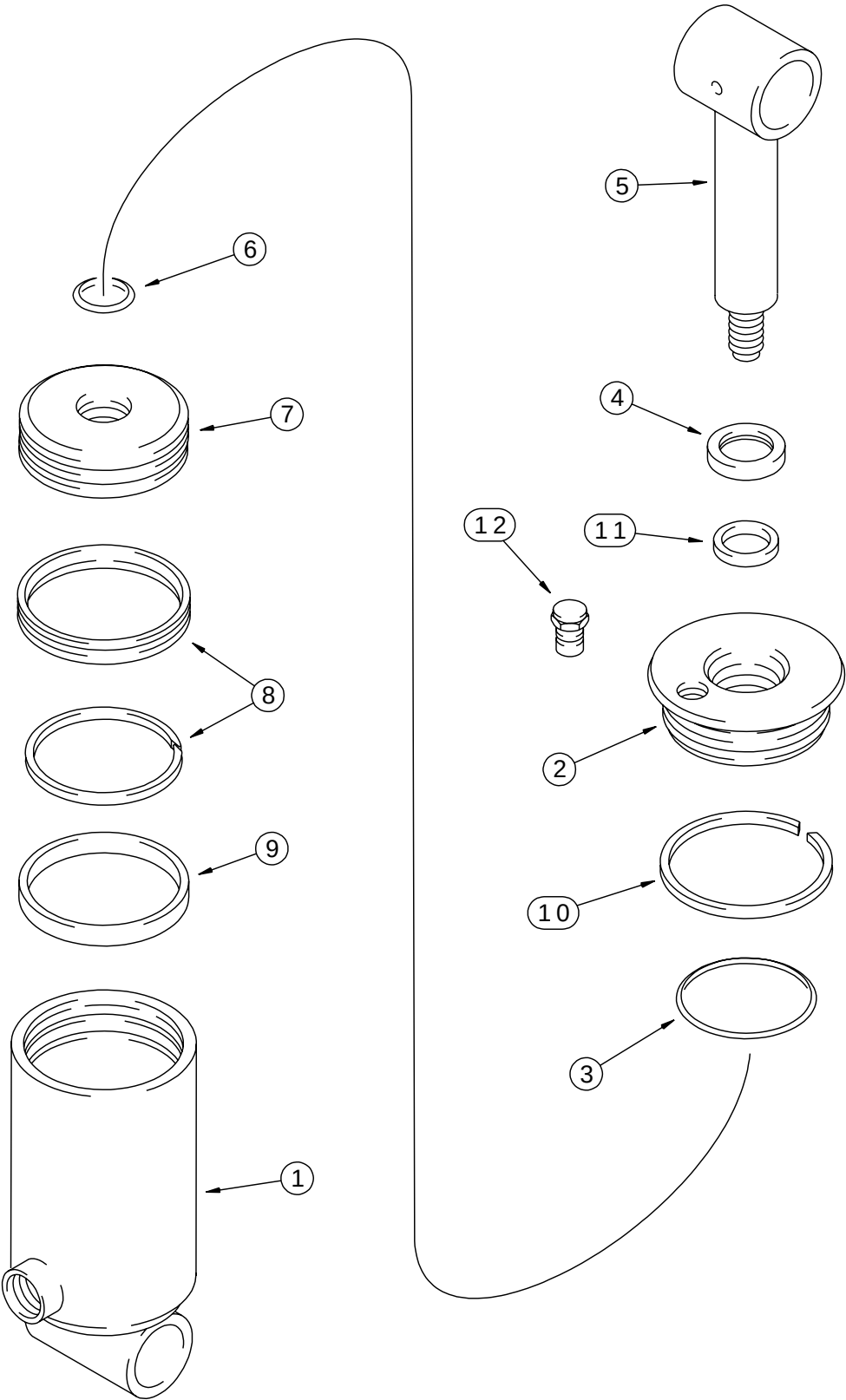
REF.	PART NO.	DESCRIPTION	REQ'D.
	I145493C93	CYLINDER ASSEMBLY - 76 (3) ID x 203 mm (8 inch) stroke, roll over, no longer available, order I113528A1 cylinder assembly on page 8-9, 113639A1 elbow , item 27 on page 8-3, I128723C5 pin, item 2 on page 8-3 and I810751C1 pin, item 6 on page 8-3	1
1	NSS	BODY - cylinder (Order I145493C93)	1
2	I145494C3	HEAD - cylinder, front.	1
3	* I403460R1	WIPER - seal, piston rod (Replaces seal and seal retainer)	1
5	* I238-6325	O-RING - 1-1/2 ID x 3/16 inch wide, small, rod to piston	1
6	* I403622R1	RING - backup	1
7	* I238-6232	O-RING - 2-3/4 ID x 1/8 inch wide, cylinder head	1
8	I145495C1	ROD - piston.	1
9	I145497C1	PISTON - cylinder	1
10	* I238-6334	O-RING - 2-5/8 ID x 3/16 inch wide, piston	1
11	* I381872R1	RING - backup, piston	2
12	* I381873R1	RING - retaining, head to cylinder, order I140600C1 retainer and cut to 9-1/4 inch length.	1
13	I232-46314	NUT - hex, self-locking, 7/8 inch NF.	1
	* I145656C2	KIT - seal, cylinder repair, includes all items with an asterisk, no longer available, order components	1



AUTOMATIC TRIP BEAM HYDRAULICS

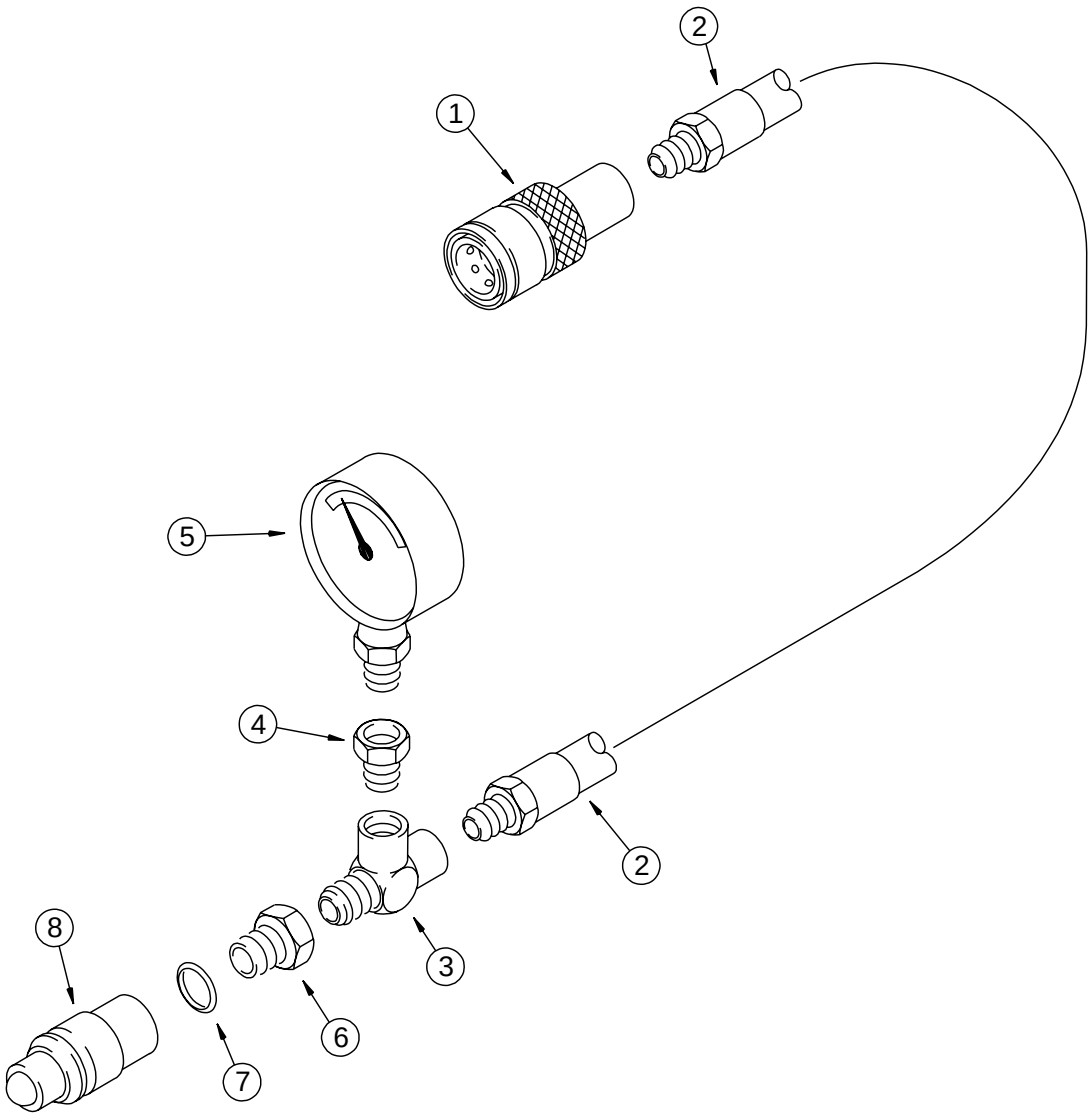
REF.	PART NO.	DESCRIPTION	REQ'D.
1	I1272770C2	COUPLING - quick disconnect, male	1
2	I1256878C1	NIPPLE - special, coupler to valve	1
3	I122825C1	VALVE - flow control	1
4	I218-445	ADAPTER - straight, 7/8-14 flare x 1/2 inch PT.	1
5	I131684C1	TUBE - manifold (used with 4 furrow plows)	1
5A	I131790C1	TUBE - manifold (used with 3 furrow plows)	1
6	I122813C1	TUBE - manifold to accumulator	1
7	I218-5117	ELBOW - 90 degree, 7/8-14 flare x 3/4-16 inch adj O-ring boss	1
8	I237-6008	O-RING - 41/64 ID x 3/32 inch wide	1
9	* I195418A1	TANK - accumulator (used on plows 1995 and after)	1
9A	* IT38368	VALVE - filler, accumulator tank.	1
10	* I194968A1	U-BOLT - accumulator mounting (used on plows 1995 and after)	2
11	* I495-81114	WASHER - flat, 11/32 x 3/4 x 3/64 inch	4
12	* I231-4215	NUT - hex, self-locking, 5/16 inch NC	4
13	I218-1251	NUT - hex, lock, bulkhead, 7/8 inch NF	2-3
14	I495-81051	WASHER - flat, 29/32 x 1-1/4 x 1/16 inch	2-3
15	I218-5220	TEE - swivel, 7/8-14 inch flare branch x flare x swivel.	1
16	I122808C1	HOSE - 762 mm (30 inch) long	1
16A	I237-6010	O-RING - 3/4 ID x 3/32 inch wide	1
17	I122902C1	HOSE - 686 mm (27 inch) long	1
18	I131685C2	HOSE - 737 mm (29 inch) long	1-2
19	I218-5062	ADAPTER - straight, 7/8-14 inch flare x O-ring boss.	2-3
20	I237-6010	O-RING - 3/4 ID x 3/32 inch wide	1
21	I1272225C91	CYLINDER ASSEMBLY - 102 (4) ID x 114 mm (4-1/2 inch) stroke (See page 8-15)	3-4
22	I122625C1	PIN - cylinder mounting	6-8
23	I1263418C1	SPACER - mounting pin	6-8
24	I438-31432	PIN - roll, 7/32 x 2 inch	12-16
25	I438-12432	PIN - roll, 3/8 x 2 inch	12-16

* **NOTE:** When replacing accumulator tank on plows built prior to 1995, order I195963A1 accumulator service kit. It includes all items with an asterisk and one (1) I122826C2 mounting plate which is not available except as a component of I195963A1 kit.



AUTOMATIC TRIP BEAM HYDRAULIC CYLINDER **4 ID x 4-1/2 Inch Stroke**

REF.	PART NO.	DESCRIPTION	REQ'D.
	I1272225C91	CYLINDER ASSEMBLY - 102 (4) ID x 114 mm (4-1/2 inch) stroke, automatic trip beam	1
1	NSS	BODY - cylinder (Order I1272225C91 complete cylinder)	1
2	I133389C2	GLAND - cylinder, front	1
3	* I238-5240	O-RING - 3-3/4 ID x 1/8 inch wide, gland seal	1
4	* I403460R1	WIPER - seal, piston rod	1
5	I133381C1	ROD - piston.	1
6	* I237-6012	O-RING - 59/64 ID x 7/64 inch wide, piston rod to piston	1
7	I1272224C1	PISTON - cylinder	1
8	* I1272226C1	SEAL - piston, with extrusion ring	1
9	* I383006R1	RING - wear, piston	1
10	* I140600C1	WIRE - retaining, bulk, 12-1/2 inch (319 mm) long, cut to length as required	1
11	* I119203C1	SEAL - piston rod	1
12	* I106671	VALVE - pressure relief	1
	* I1272507C91	KIT - seal, cylinder repair, includes all items with an asterisk, no longer available, order components	1



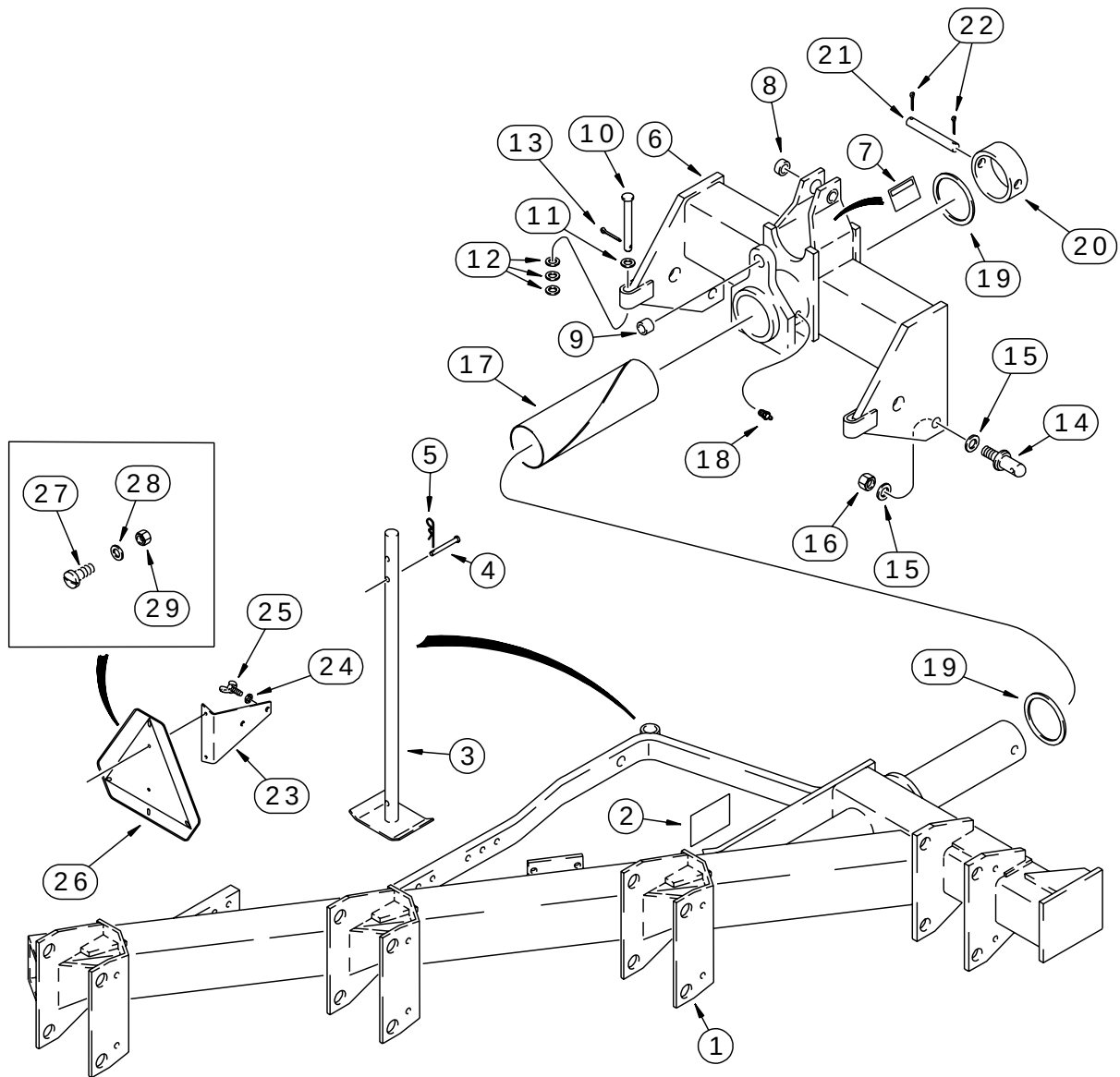
HYDRAULIC CHARGING HOSE ATTACHMENT

REF.	PART NO.	DESCRIPTION	REQ'D.
1	I1994568C1	COUPLER - self sealing, female	1
2	I643226R91	HOSE - 3657 mm (144 inch) long, pressure gauge.	1
3	I122810C1	TEE - special, coupler to gauge.	1
4	I221-88	REDUCER - pipe, 1/2 male x 1/4 inch female.	1
5	I122809C1	GAUGE - oil pressure	1
6	I218-465	ADAPTER - straight, 7/8-14 flare x 1/2 inch female PT.	1
7	I237-6010	O-RING - 3/4 ID x 3/32 inch wide	1
8	I1272399C2	COUPLER - self sealing, male, 7/8 inch NF	UAR
8	I1341843C1	COUPLER - self-sealing male, 7/8-14 inch thread	UAR
8	I1285718C2	COUPLER - self-sealing male, 3/4-16 inch thread	UAR
9	I237-6010	O-RING - 3/4 ID x 3/32 inch wide, not shown	UAR
10	I237-6008	O-RING - 41/64 ID x 3/32 inch wide, not shown	UAR
11	I218-5261	ADAPTER - straight, 7/8-14 male O-ring boss x 3/4 inch female, not shown	UAR
12	I237-6010	O-RING - 3/4 ID x 3/32 inch wide, not shown	1
13	I1252129C1	ADAPTER - straight, 3/4-16 male O-ring boss x 7/8-14 inch female, not shown	UAR
14	I237-6008	O-RING - 41/64 ID x 3/32 inch wide, not shown	1
15	I1282459C1	KIT - coupler tag, not shown	UAR

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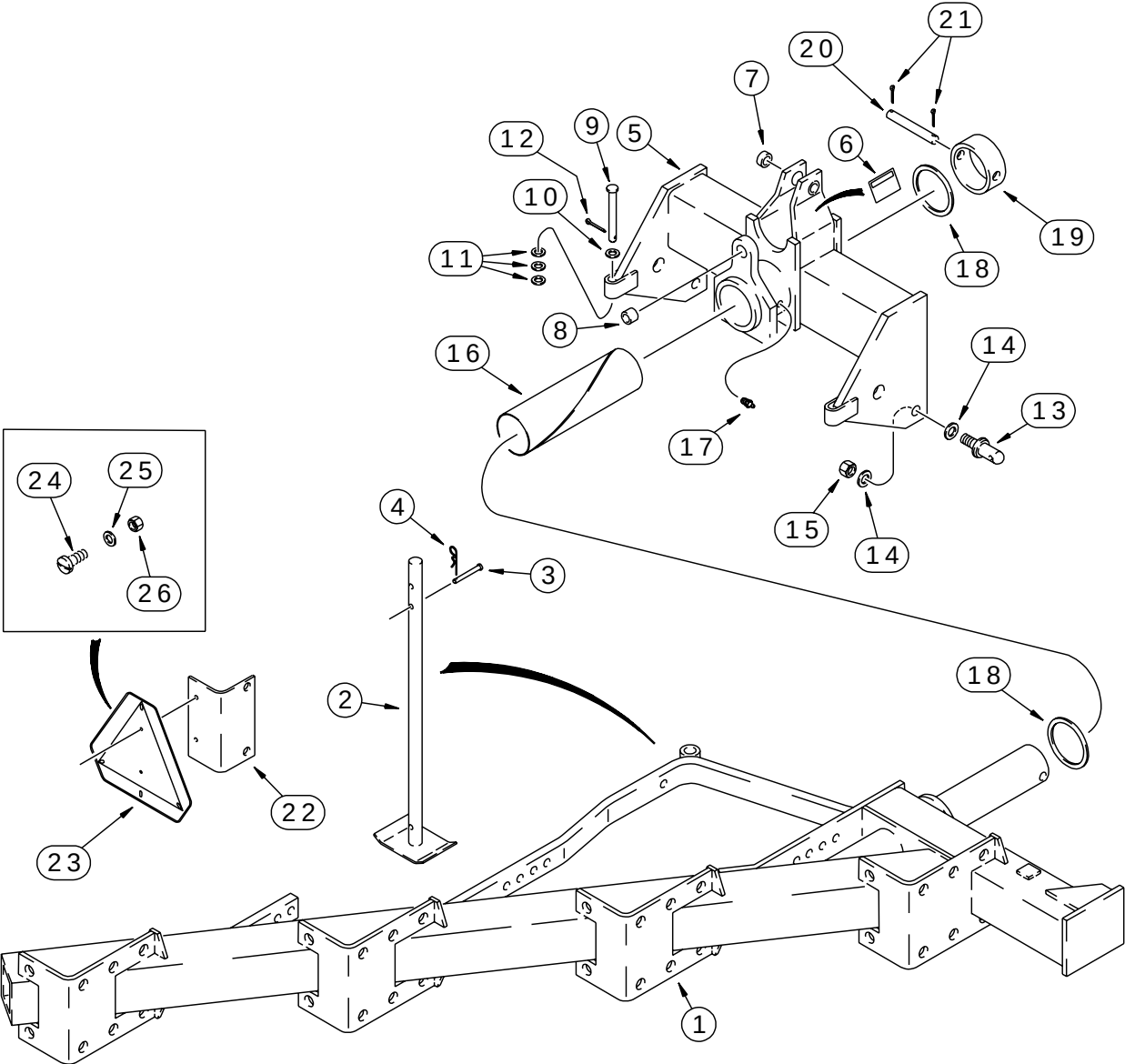
ALPHABETICAL INDEX CHASSIS/MOUNTED EQUIPMENT

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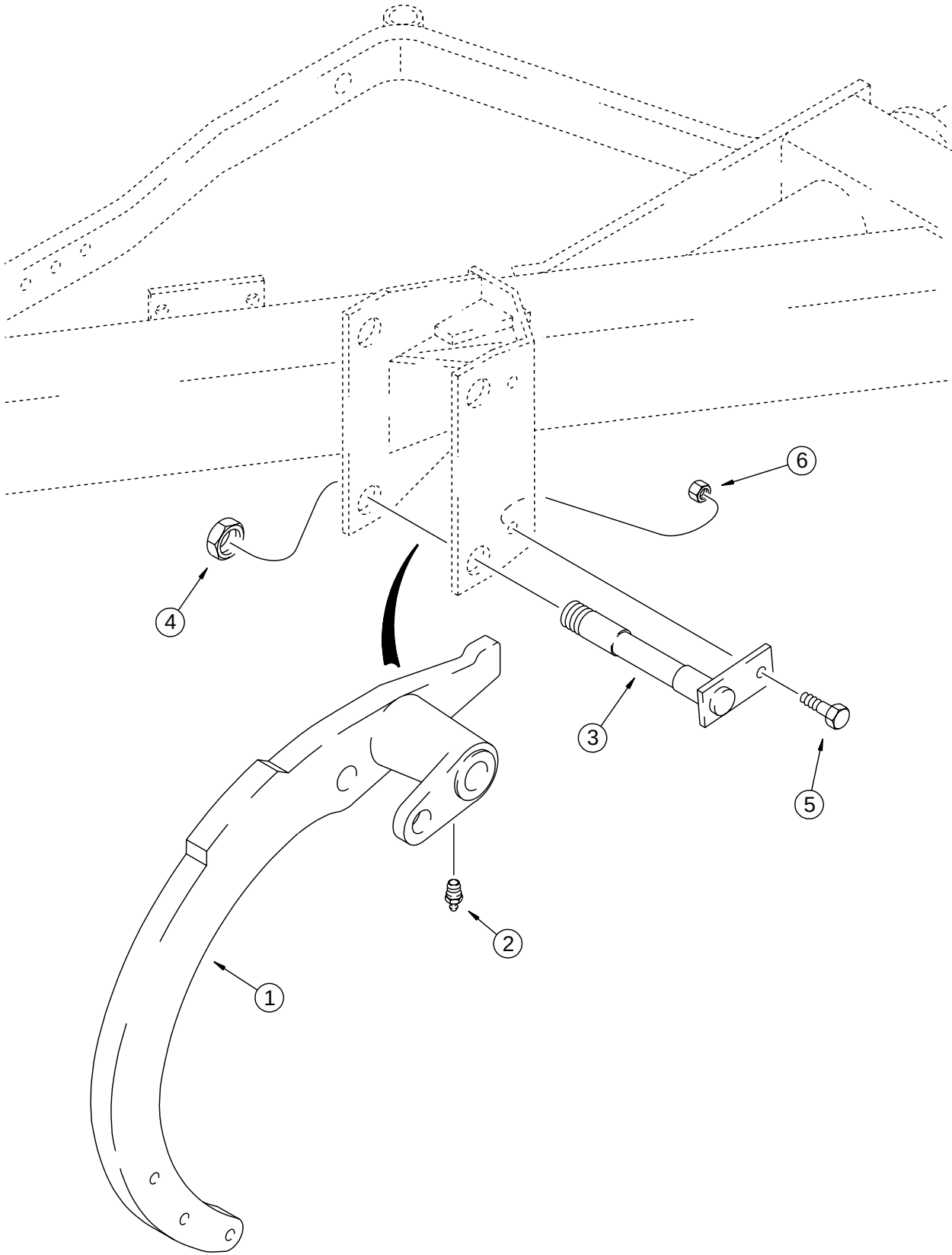
MAIN FRAME**3 and 4 Furrow Automatic Trip Beam Plows**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	I97614C91	FRAME ASSEMBLY - main, rear, 18 inch, 4 furrow	1
1	I97616C91	FRAME ASSEMBLY - main, rear, 18 inch, 3 furrow (not shown)	1
2	I122878C1	DECAL - Caution, stand clear of automatic plow trip at all times.	1
3	I122804C1	STAND - support	1
4	I439-5844	PIN - headed, 1/2 x 2-3/4 inch	1
5	I1980543C1	PIN - cotter, hair, 5/32 inch diameter	1
6	I97615C91	FRAME ASSEMBLY - main, front	1
7	I543301R1	DECAL - Caution, lift links must be at maximum length.	1
8	I112718C1	BUSHING - 1-17/64 x 1-5/8 x 23/32 inch, upper link mounting	2
9	I112885C1	BUSHING - cylinder pivot.	1
10	I439-11488	PIN - headed, 7/8 x 5-1/2 inch, grade 2.	2
11	I496-21094	WASHER - flat, 15/16 x 1-3/4 x 3/16 inch, hardened	2
12	I651239R1	WASHER - flat, 29/32 x 1-1/2 x 1/4 inch	16
13	I432-1620	PIN - cotter, 1/4 x 1-1/4 inch	2
14	I483659R1	PIN - hitch	2
15	I496-11119	WASHER - flat, 1-3/16 x 2-1/4 x 9/64 inch, hardened	4
16	I329-1118	NUT - hex, 1-1/8 inch NF, grade 8.	2
17	I122802C1	BEARING - frame pivot	1
18	I219-87	FITTING - grease, straight, 1/4-28 self-tapping x 9/16 inch.	2
19	I122622C1	WASHER - frame pivot tube	UAR
20	I122623C1	RETAINER - frame pivot tube	1
21	I131866C1	PIN - retainer	1
22	I432-1624	PIN - cotter, 1/4 x 1-1/2 inch	2
23	I131696C1	BRACKET - mounting, SMV emblem	1
24	I495-81136	WASHER - flat, 13/32 x 1 x 7/64 inch	2
25	I164603C1	SCREW - wing.	2
26	I202013C2	EMBLEM - slow moving vehicle, includes decal	1
27	I340-1108	SCREW - machine, pan Phillips, No. 10 NC x 1/2 inch.	2
28	I195-513	WASHER - flat, 7/32 x 1/2 x 3/64 inch.	2
29	I225-14110	NUT - hex, No. 10 NC	2



MAIN FRAME**Rigid and Spring Trip Beam Plows**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	I122996C2	FRAME - main, rear, 18 inch, 4 furrow, rigid and spring trip beam	1
1	I131900C2	FRAME - main, rear, 16 inch, 4 furrow, rigid beam (not shown)	1
1	I131692C2	FRAME - main, rear, 18 inch, 3 furrow, rigid and spring trip beam (not shown)	1
1	I131926C92	FRAME - main, rear, 16 inch, 5 furrow, rigid beam (not shown)	1
2	I122804C1	STAND - support	1
3	I439-5844	PIN - headed, 1/2 x 2-3/4 inch	1
4	I1980543C1	PIN - cotter, hair, 5/32 inch diameter	1
5	I97615C91	FRAME ASSEMBLY - main, front, 3 and 4 furrow	1
5	I97617C91	FRAME ASSEMBLY - main, front, 5 furrow (not shown)	1
6	I543301R1	DECAL - Caution, lift links must be at maximum length	1
7	I112718C1	BUSHING - 1-17/64 x 1-5/8 x 23/32 inch, upper link mounting	2
8	I112885C1	BUSHING - cylinder pivot	1
9	I439-11488	PIN - headed, 7/8 x 5-1/2 inch, grade 2	2
10	I496-21094	WASHER - flat, 15/16 x 1-3/4 x 3/16 inch, hardened	2
11	I651239R1	WASHER - flat, 29/32 x 1-1/2 x 1/4 inch	16
12	I432-1620	PIN - cotter, 1/4 x 1-1/4 inch	2
13	I483659R1	PIN - hitch	2
14	I496-11119	WASHER - flat, 1-3/16 x 2-1/4 x 9/64 inch, hardened	4
15	I329-1118	NUT - hex, 1-1/8 inch NF, grade 8	2
16	I122802C1	BEARING - frame pivot	1
17	I219-87	FITTING - grease, straight, 1/4-28 self-tapping x 9/16 inch	2
18	I122622C1	WASHER - frame pivot tube	UAR
19	I122623C1	RETAINER - frame pivot tube	1
20	I131866C1	PIN - retainer	1
21	I432-1624	PIN - cotter, 1/4 x 1-1/2 inch	2
22	I543924R1	BRACKET - mounting, SMV emblem and reflector	1
23	I202013C2	EMBLEM - slow moving vehicle, includes decal	1
24	I340-1108	SCREW - machine, pan Phillips, No. 10 NC x 1/2 inch	2
25	I195-513	WASHER - flat, 7/32 x 1/2 x 3/64 inch	2
26	I225-14110	NUT - hex, No. 10 NC	2

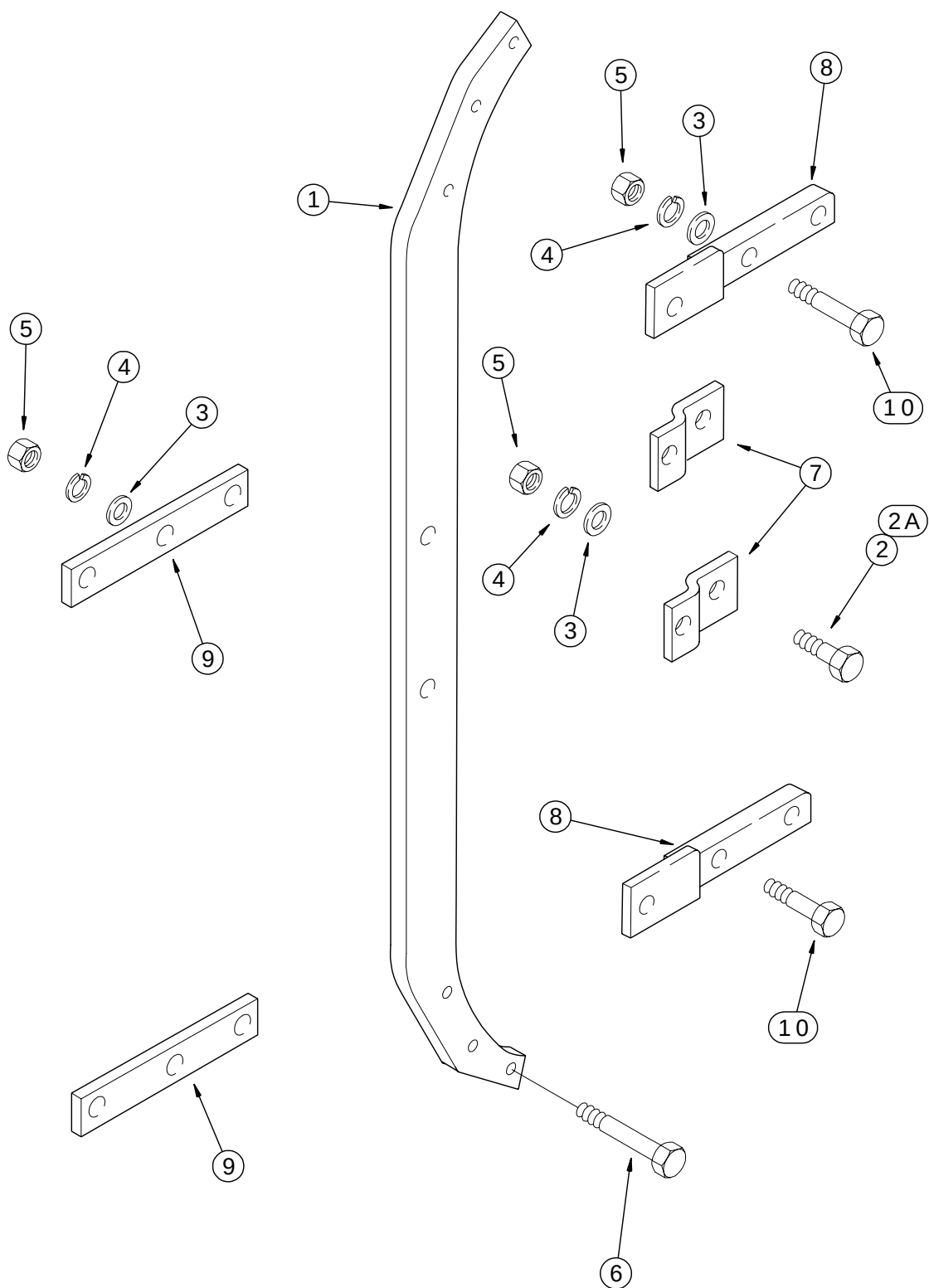


146 Moldboard Plow
AUTOMATIC TRIP BEAM

9-7

REF.	PART NO.	DESCRIPTION	REQ'D.
1	I122581C3	BEAM - plow, automatic trip, right-hand	1
1A	I122582C3	BEAM - plow, automatic trip, left-hand (not shown).	1
2	I219-87	FITTING - grease, straight, 1/4-28 self-tapping x 9/16 inch.	2
3	I131553C2	SHAFT - pivot, plow beam.	2
4	I131-42	NUT - thin hex, self-locking, 1-3/8-12 inch.	2
5	I413-824	BOLT - hex, 1/2 NC x 1-1/2 inch	2
6	I231-4218	NUT - hex, self-locking, 1/2 inch NC	2

NOTE: Quantity listed is per furrow.

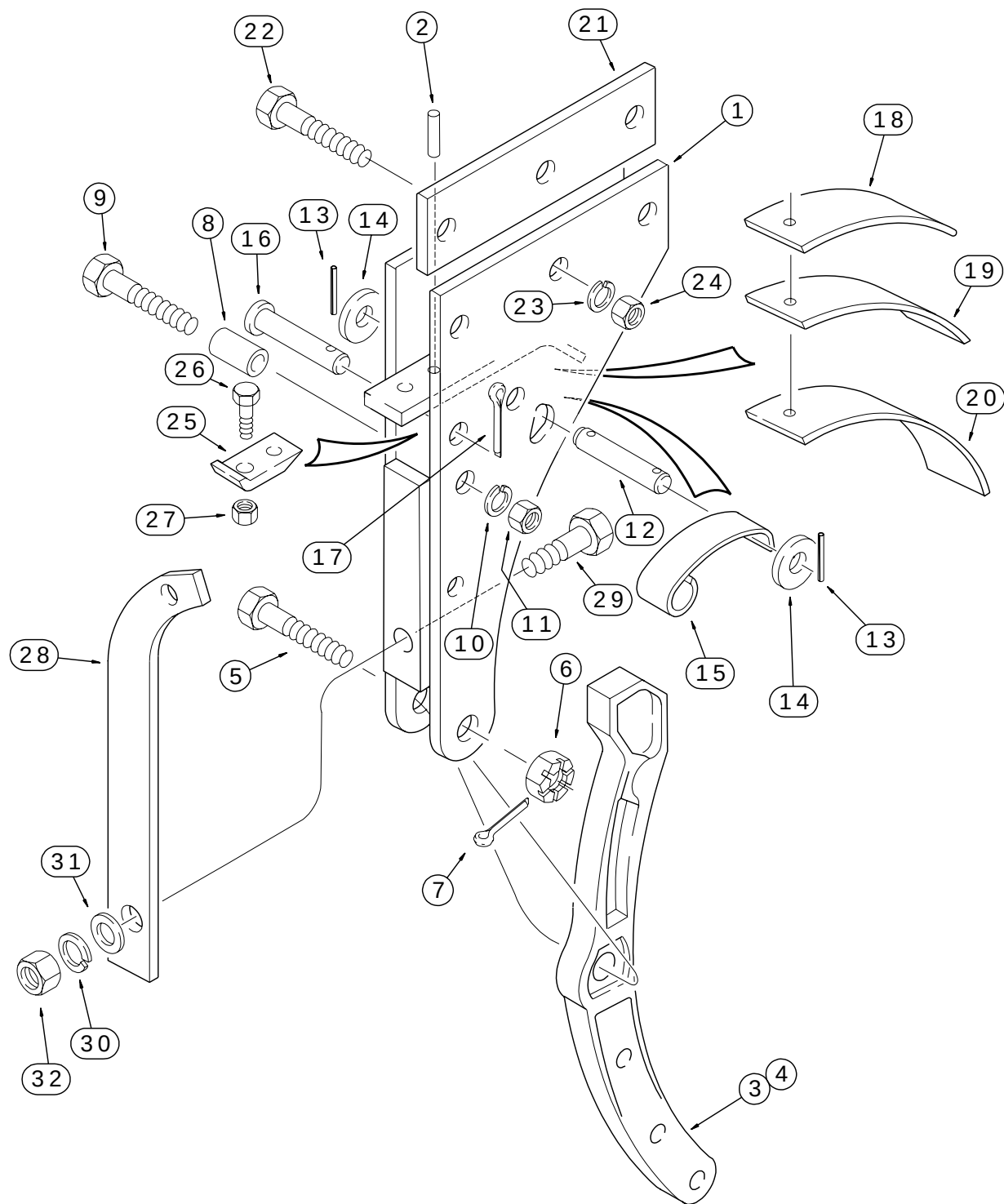


RIGID BEAM

REF.	PART NO.	DESCRIPTION	REQ'D.
1	* I490848R1	BEAM - rigid.	1
2	I413-1436	BOLT - hex, 7/8 NC x 2-1/4 inch	UAR
2A	I426-1456	BOLT - hex, 7/8 NC x 3-1/2 inch, grade 8	UAR
3	I496-21094	WASHER - flat, 15/16 x 1-3/4 x 3/16 inch, hardened	UAR
4	I492-11088	WASHER - lock, 7/8 inch.	UAR
5	I429-1014	NUT - hex, 7/8 inch NC, grade 8	UAR
6	I426-1048	BOLT - hex, 5/8 NC x 3 inch, grade 8	2
7	I490849R1	STRAP - hammer	2
8	I224101C1	BAR - beam mounting, with block	2
9	I224104C1	BAR - beam mounting, without block.	2
10	I326-1464	BOLT - hex, 7/8 NC x 4 inch, grade 8	2

NOTE: Quantity listed is per furrow

* **NOTE:** For replacement plow bottoms, shares, shins, and landsides, refer to "Moldboard Plow Bottoms and Ripper Parts" catalog Bur 7-2230.



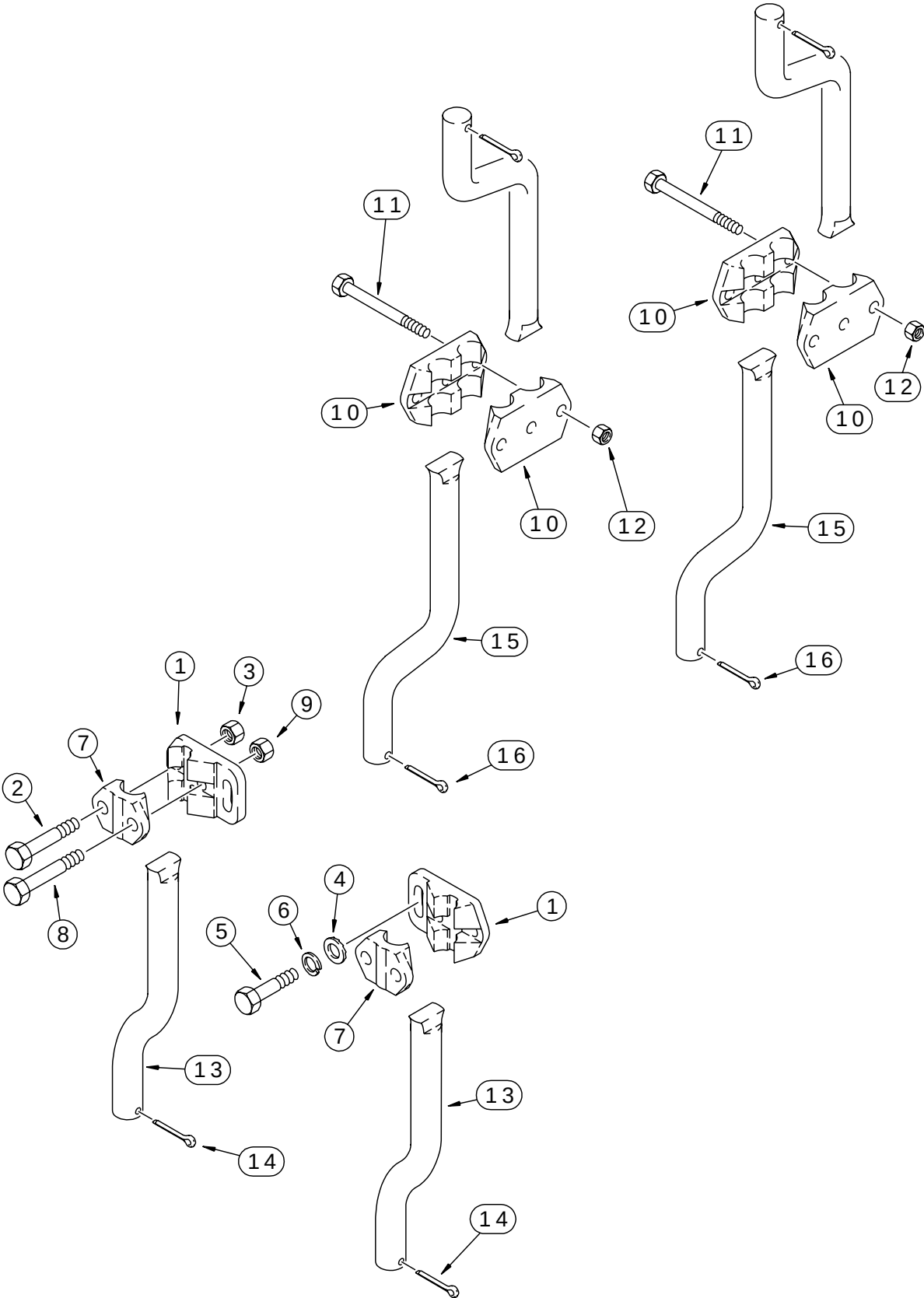
146 Moldboard Plow SPRING TRIP BEAM

9-11

REF.	PART NO.	DESCRIPTION	REQ'D.
1	I541417R2	BRACKET - mounting, beam.	2
2	I438-33224	PIN - roll, 1/2 x 1-1/2 inch	2
3	* I465800R2	BEAM - trip, right-hand	1
4	I541422R1	BEAM - trip, left-hand (not shown).	1
5	I465799R2	BOLT - hex, special	2
6	I425-1316	NUT - hex, slotted, 1 inch NS	2
7	I432-1232	PIN - cotter, 3/16 x 2 inch	2
8	I522432R2	SPACER - beam, stop.	2
9	I413-1052	BOLT - hex, 5/8 NC x 3-1/4 inch	2
10	I492-11062	WASHER - lock, 5/8 inch.	2
11	I425-1010	NUT - hex, 5/8 inch NC	2
12	I465801R1	ROLLER - trip spring	2
13	I438-31624	PIN - roll, 1/4 x 1-1/2 inch	4
14	I522473R1	WASHER - flat, 49/64 x 1-3/4 x 1/8 inch	4
15	I465868R1	SPRING - trip.	2
16	I439-11247	PIN - headed, 3/4 x 2-15/16 inch, grade 2.	2
17	I432-1624	PIN - cotter, 1/4 x 1-1/2 inch	2
18	I524452R1	SPRING - tension, upper.	2
19	I524453R1	SPRING - tension, middle	2
20	I524454R1	SPRING - tension, lower	2
21	I1337611C1	SPACER - spring trip beam.	4
22	I413-1456	BOLT - hex, 7/8 NC x 3-1/2 inch	6
23	I492-11088	WASHER - lock, 7/8 inch.	6
24	I425-1014	NUT - hex, 7/8 inch NC	6
25	I468847R1	CLIP - tension spring, adjusting.	2
26	I413-836	BOLT - hex, 1/2 NC x 2-1/4 inch	2
27	I131-208	NUT - heavy hex, self-locking, 1/2 inch NC.	2
28	I541384R2	BRACE - trip unit, 5/8 inch thick, if used	1
28	I122916C1	BRACE - trip unit, 3/4 inch thick, if used	1
29	I413-1448	BOLT - hex, 7/8 NC x 3 inch	4
30	I492-11088	WASHER - lock, 7/8 inch.	4
31	I496-21094	WASHER - flat, 15/16 x 1-3/4 x 3/16 inch, hardened	4
32	I425-1014	NUT - hex, 7/8 inch NC	4

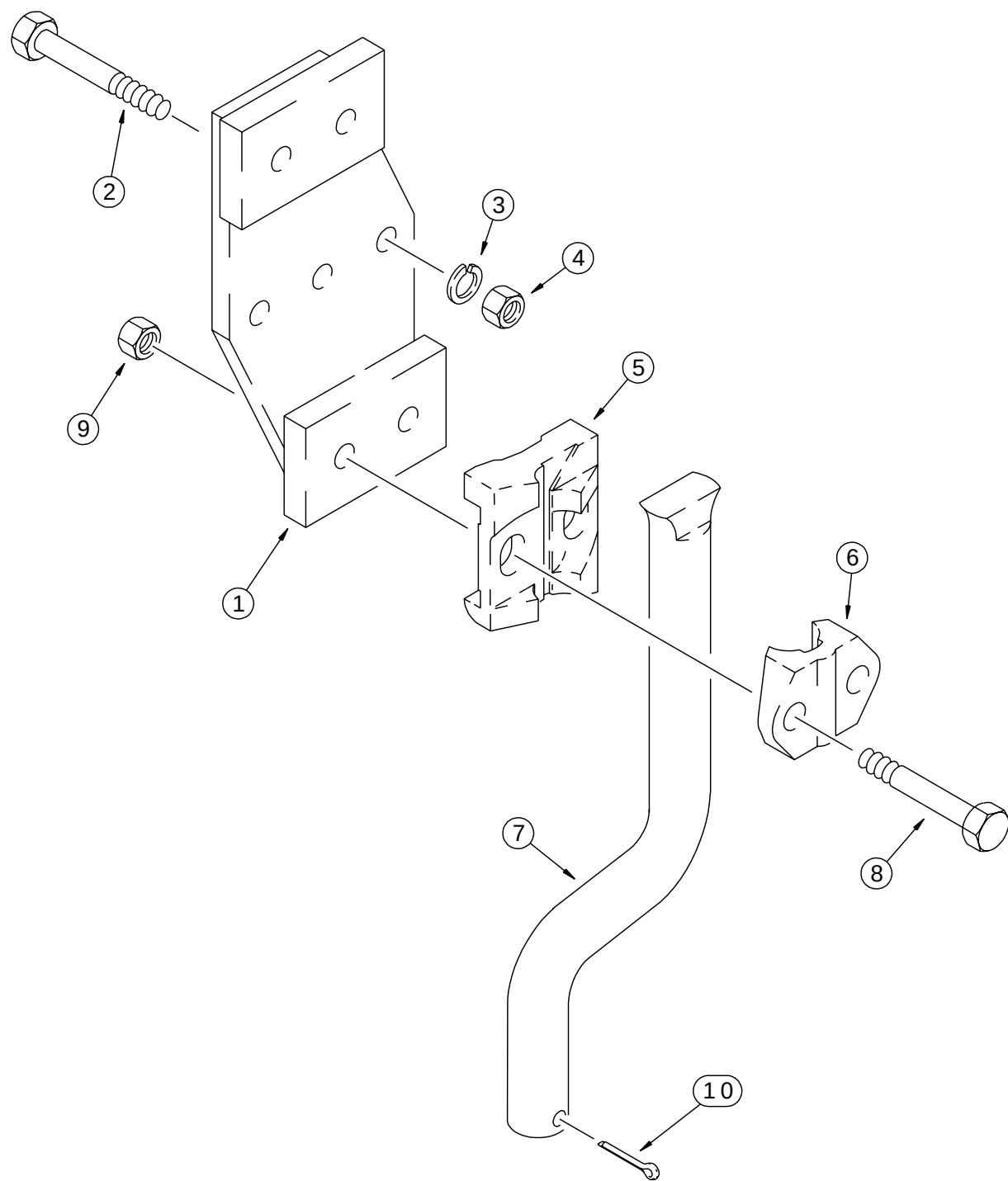
NOTE: Quantity listed is per furrow.

* **NOTE:** For replacement plow bottoms, shares, shins, and landsides, refer to "Moldboard Plow Bottoms and Ripper Parts" catalog Bur 7-2230.



COULTER SHANKS AND CLAMPS**Rigid and Spring Trip Beam Plows**

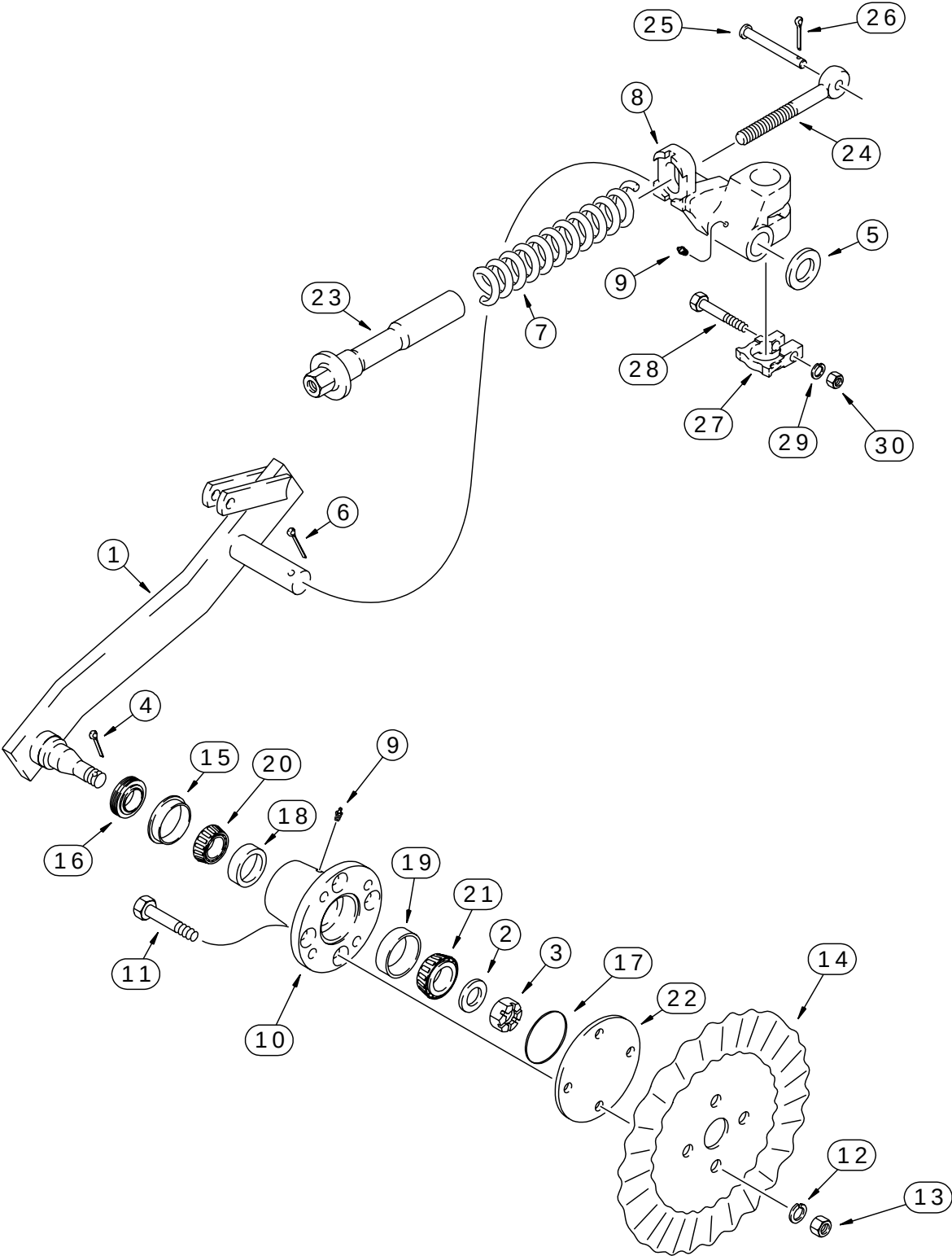
REF.	PART NO.	DESCRIPTION	REQ'D.
1	I462684R1	CLAMP - front coulter	2
2	I413-1052	BOLT - hex, 5/8 NC x 3-1/4 inch	2
3	I425-1010	NUT - hex, 5/8 inch NC	2
4	I523011R1	WASHER - special, coulter clamp	2
5	I413-1040	BOLT - hex, 5/8 NC x 2-1/2 inch	2
6	I492-11062	WASHER - lock, 5/8 inch	2
7	I524492R1	CAP - coulter clamp, one shank	2
8	I413-1060	BOLT - hex, 5/8 NC x 3-3/4 inch	2
9	I425-1010	NUT - hex, 5/8 inch NC	2
10	I462687R1	CLAMP - coulter cap, two shank	2-4
11	I414-1072	BOLT - hex, 5/8 NF x 4-1/2 inch	3-6
12	I425-1110	NUT - hex, 5/8 inch NF	3-6
13	I466944R1	SHANK - coulter, front	2
14	I432-2040	PIN - cotter, 5/16 x 2-1/2 inch	2
15	I488792R1	SHANK - coulter	2-4
16	I432-2040	PIN - cotter, 5/16 x 2-1/2 inch	2-4



REAR BEAM COULTER SHANKS AND CLAMPS**Automatic Trip Beam Plow**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	I122895C1	PLATE - coulter mounting	1
2	I413-1044	BOLT - hex, 5/8 NC x 2-3/4 inch	3
3	I492-11062	WASHER - lock, 5/8 inch	3
4	I425-1010	NUT - hex, 5/8 inch NC	3
5	I524456R3	CLAMP - coulter	2
6	I524492R1	CAP - coulter clamp, one shank	2
7	I488792R1	SHANK - coulter	2
8	I413-1072	BOLT - hex, 5/8 NC x 4-1/2 inch	4
9	I425-1010	NUT - hex, 5/8 inch NC	4
10	I432-2036	PIN - cotter, 5/16 x 2-1/4 inch	2

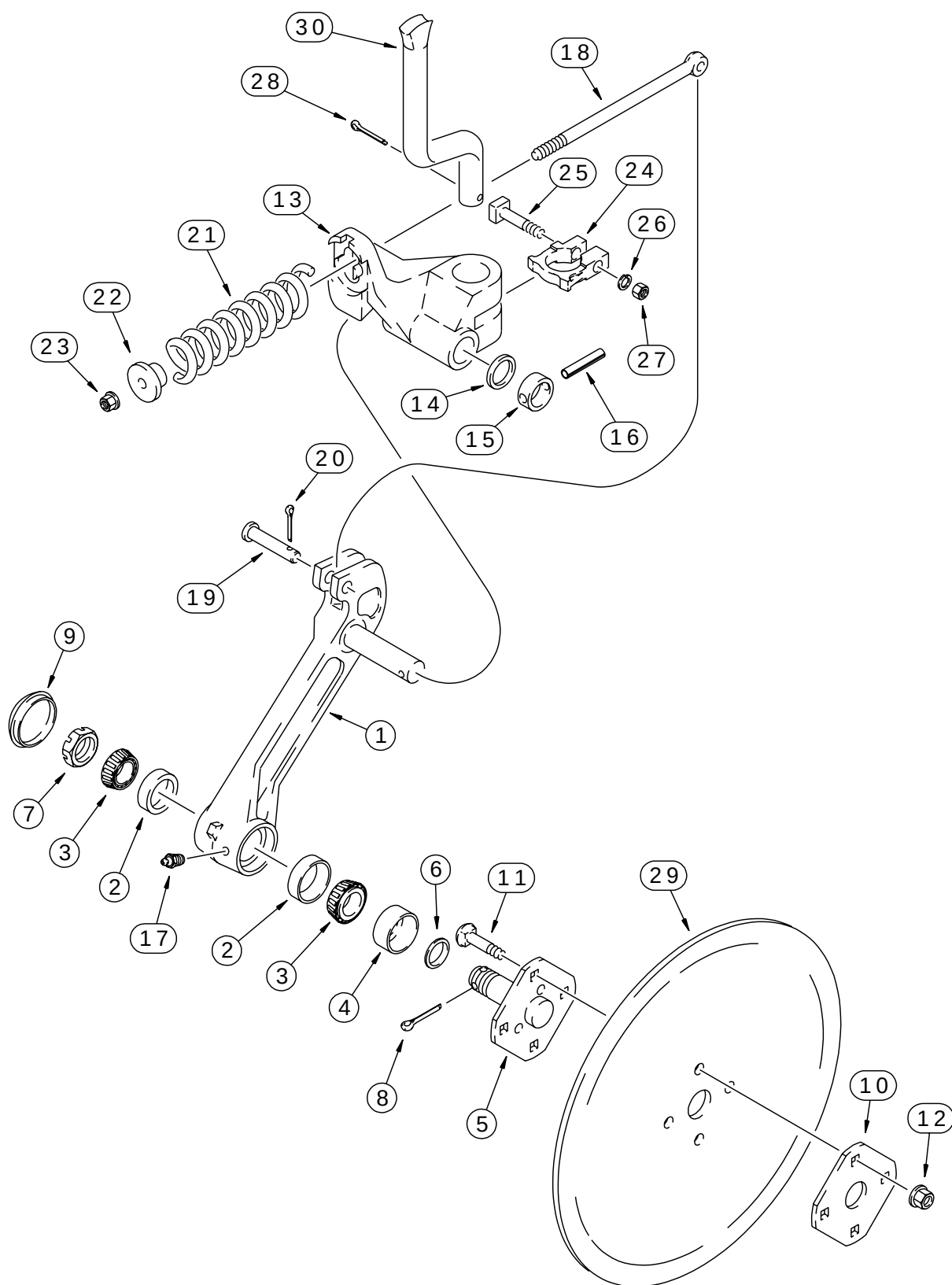
NOTE: Quantity listed is per furrow.



ROLLING COULTER**High Lift Spring Cushion Type
With Welded Mounting Arm**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	I112535C1	ARM - coultter mounting, right-hand, welded	1
1A	I122640C1	ARM - coultter mounting, left-hand, welded (not shown)	1
2	I369857R1	WASHER - flat, special, 25/32 x 1/4 x 1/8 inch	2
3	I69442D	NUT - hex, slotted, 3/4 inch NF	2
4	I432-1020	PIN - cotter, 5/32 x 1-1/4 inch	2
5	I495-81203	WASHER - flat, 1-9/32 x 2 x 1/8 inch.	2
6	I432-1628	PIN - cotter, 1/4 x 1-3/4 inch	2
7	I112536C1	SPRING - cushion	2
8	I122520C1	SUPPORT - coultter mounting, right-hand, see pages 9-13 and 9-15 for coultter shanks and clamps for mounting to main frame	1
8A	I122583C1	SUPPORT - coultter mounting, left-hand (not shown)	1
9	I219-20	FITTING - grease, straight, 1/4-28 special threads x 1/2 inch.	4
10	I122711C1	HUB - wheel.	2
11	I413-828	BOLT - hex, 1/2 NC x 1-3/4 inch	8
12	I492-11050	WASHER - lock, 1/2 inch.	8
13	I425-108	NUT - hex, 1/2 inch NC	8
14	I28341R1	DISK - coultter, rippled edge, 20 inch.	UAR
14	I122567C1	DISK - coultter, 22 inch rippled edge	UAR
15	I472222R1	SLEEVE - oil seal	2
16	I472221R91	SEAL - oil.	2
17	I41-3044	PLUG - expansion, 2-3/4 inch diameter.	2
18	I651817R1	CUP - tapered roller bearing, inner	2
19	I651814R1	CUP - tapered roller bearing, outer	2
20	I651818R91	CONE - tapered roller bearing, inner.	2
21	I651815R91	CONE - tapered roller bearing, outer.	2
22	I112524C1	COVER - reinforcing plate.	2
23	I109058C1	TUBE - spring adjusting.	2
24	I131669C1	BOLT - eye	2
25	I439-1828	PIN - headed, 1/2 x 1-3/4 inch, grade 2.	2
26	I432-1216	PIN - cotter, 3/16 x 1 inch	2
27	I112844C1	CLAMP -	2
28	I113-319	BOLT - hex, 7/16 NC x 2-1/2 inch	2
29	I492-11044	WASHER - lock, 7/16 inch.	2
30	I425-107	NUT - hex, 7/16 inch NC	2

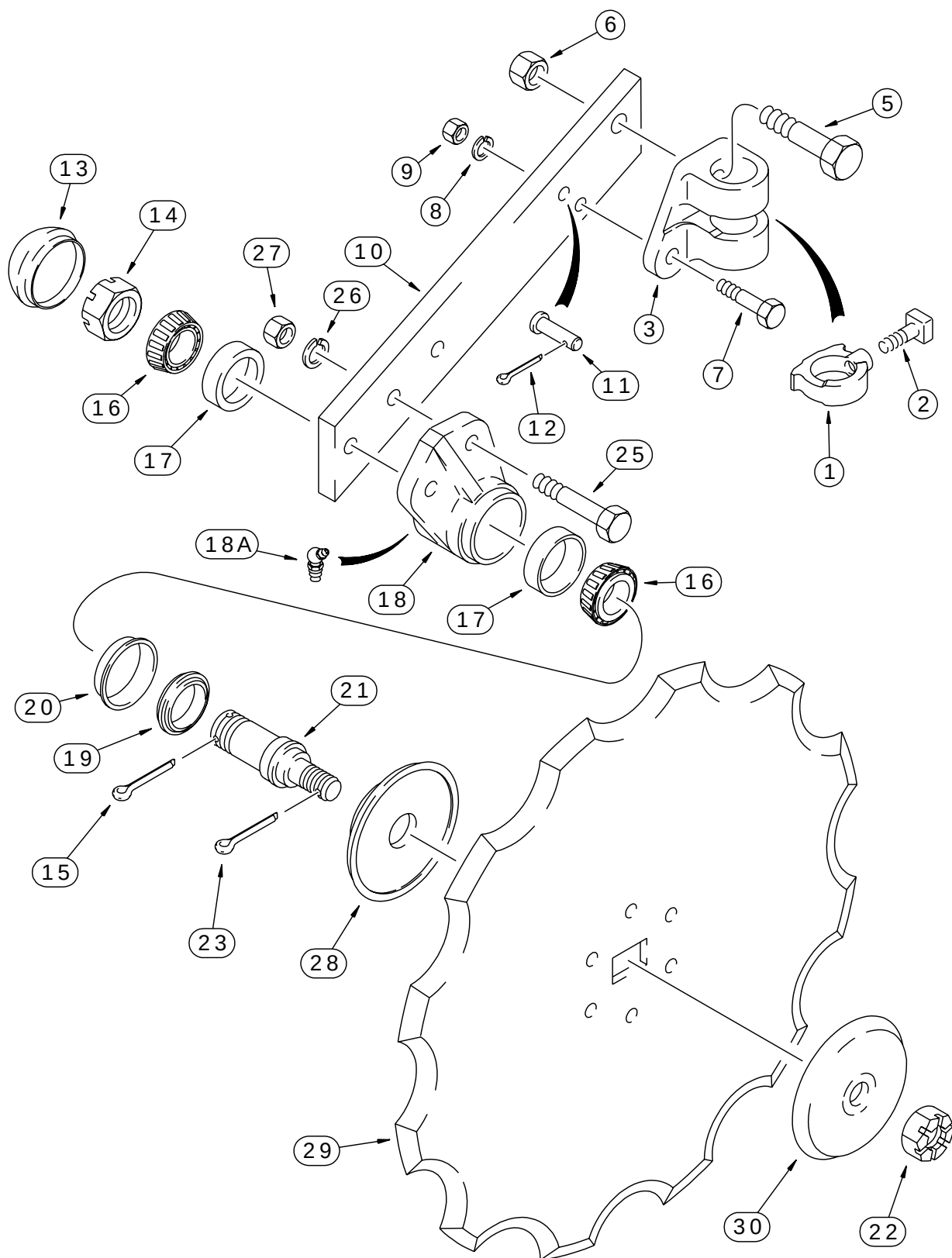
NOTE: Quantity listed is per furrow.



ROLLING COULTER**Heavy Duty Spring Cushion Type
With Cast Mounting Arm**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	I224274C1	ARM - coultter mounting, right-hand, cast	1
1A	I224293C1	ARM - coultter mounting, left-hand, cast (not shown).	1
2	I651817R1	CUP - tapered roller bearing	2
3	I651818R91	CONE - tapered roller bearing	2
4	I472633R1	SLEEVE - wear	1
5	I224063C1	SPINDLE - coultter	1
6	I472221R91	SEAL - oil.	1
7	I519250R1	NUT - hex, slotted, 1-1/4 inch NF	1
8	I432-832	PIN - cotter, 1/8 x 2 inch	1
9	I224066C1	CAP - wheel hub	1
10	I224067C1	SUPPORT - disk, outer	1
11	I434-820	BOLT - carriage, 1/2 NC x 1-1/4 inch	4
12	I231-5348	NUT - hex flange, self-locking, 1/2 inch NC.	4
13	I224068C1	SUPPORT - coultter, right-hand	1
13A	I224299C1	SUPPORT - coultter, left-hand (not shown)	1
14	I495-81202	WASHER - flat, 1-9/32 x 1-3/4 x 1/16 inch	1
15	I61570C1	COLLAR - coultter arm	1
16	I438-32032	PIN - roll, 5/16 x 2 inch	1
17	I219-87	FITTING - grease, straight, 1/4-28 self-tapping x 9/16 inch.	2
18	I480344R1	EYEBOLT - 5/8 inch NC	1
19	I439-1834	PIN - headed, 1/2 x 2-1/8 inch, grade 2.	1
20	I432-1216	PIN - cotter, 3/16 x 1 inch	1
21	I487698R1	SPRING - cushion, 13-1/2 coils.	1
22	I487697R1	RETAINER - spring	1
23	I231-41110	NUT - hex, self-locking, 5/8 inch NC	1
24	I112844C1	CLAMP - stop collar.	1
25	I18929R1	BOLT - square head, 7/16 NC x 2-1/2 inch	1
26	I492-11044	WASHER - lock, 7/16 inch.	1
27	I425-107	NUT - hex, 7/16 inch NC	1
28	I432-2036	PIN - cotter, 5/16 x 2-1/4 inch	1
29	I28341R1	DISK - coultter, rippled edge, 20 inch.	1
29	I122567C1	DISK - coultter, 22 inch rippled edge	1
30	REF	SHANK - coultter, see pages 9-13 and 9-15 for coultter shanks and clamps for mounting to main frame	1

NOTE: Quantity listed is per furrow.

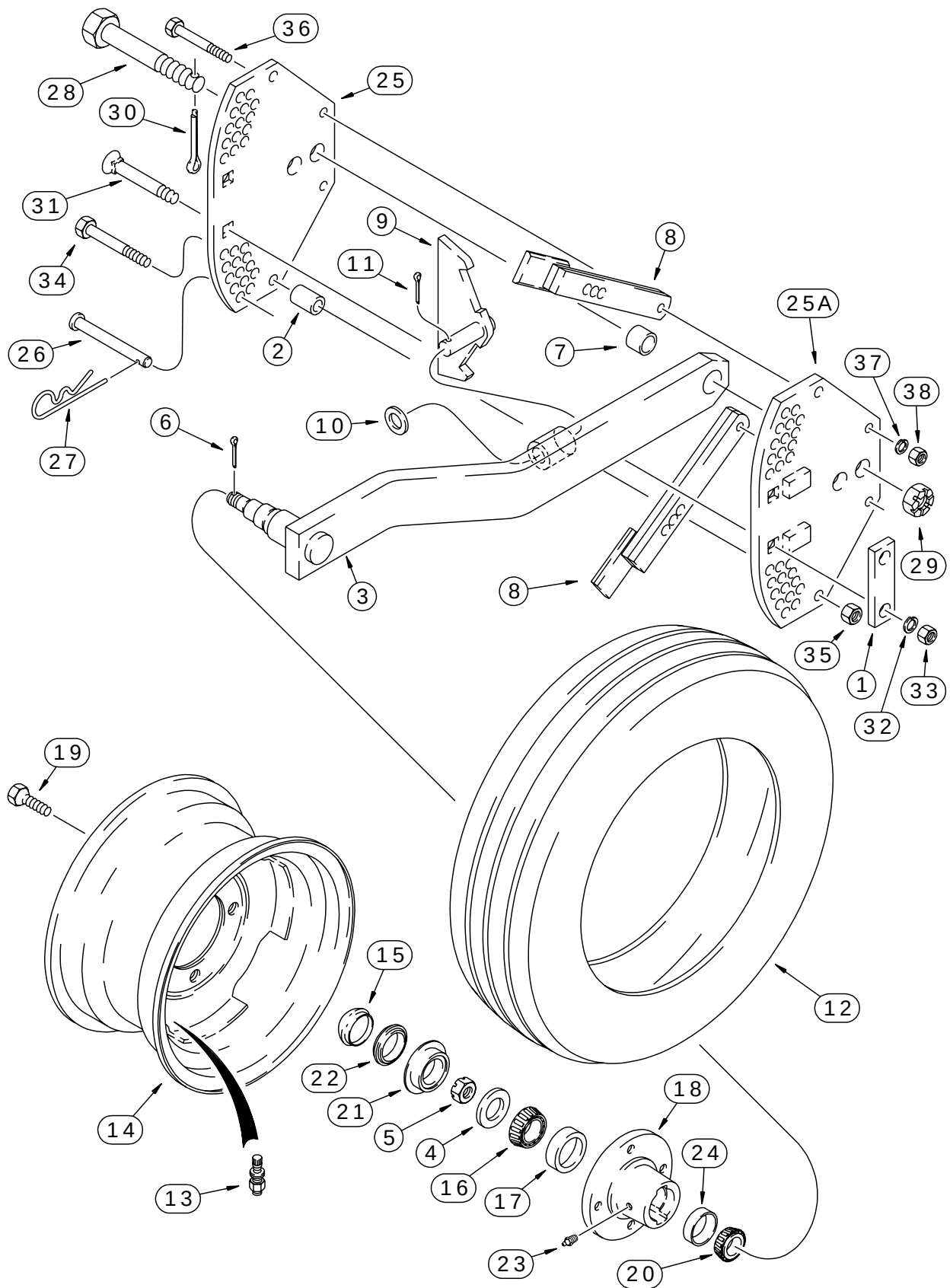


SIDE ARM ROLLING COULTERS**Shear Bolt Type With 17 Inch Disk**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	I523345R21	COLLAR ASSEMBLY - stop	2
2	I485-15020	SCREW - set, square head, 1/2 NC x 1-1/4 inch, cup point.	1
3	* I462273R3	BEARING - coultter arm, right-hand	1
4	I462272R3	BEARING - coultter arm, left-hand, not shown.	1
5	I413-1028	BOLT - hex, 5/8 NC x 1-3/4 inch	2
6	I232-41110	NUT - hex, self-locking, 5/8 inch NC	2
7	I414-728	BOLT - hex, 7/16 NF x 1-3/4 inch	2
8	I492-11044	WASHER - lock, 7/16 inch.	2
9	I425-117	NUT - hex, 7/16 inch NF	2
10	I131517C92	ARM ASSEMBLY - coultter	2
11	I439-1718	PIN - headed, 7/16 x 1-1/8 inch, grade 2	1
12	I432-1216	PIN - cotter, 3/16 x 1 inch.	1
	NSS	SPINDLE ASSEMBLY - coultter, left-hand, not serviced as an assembly, order items 13 through 17, item 18A, items 19 through 23 and item 24	1
	I549827R92	SPINDLE ASSEMBLY - coultter, right-hand.	1
13	I518842R1	CAP - hub.	1
14	I519250R1	NUT - hex, slotted, 1-1/4 inch NF.	1
15	I432-832	PIN - cotter, 1/8 x 2 inch.	1
16	I651818R91	CONE - tapered roller bearing, spindle housing.	2
17	I651817R1	CUP - tapered roller bearing, spindle housing	2
18	I541482R1	HOUSING - bearing, right-hand	1
18A	I219-90	FITTING - grease, 45 degree, 1/4-28 special taper x 13/16 inch.	1
19	I472221R91	SEAL - oil	1
20	I472222R1	SLEEVE - oil seal.	1
21	I541480R1	SPINDLE - coultter	1
22	I429-1314	NUT - hex, slotted, 7/8 inch NF, grade 8	1
23	I432-1224	PIN - cotter, 3/16 x 1-1/2 inch.	1
24	I541481R1	HOUSING - bearing, left-hand, not shown	1
25	I413-836	BOLT - hex, 1/2 NC x 2-1/4 inch	4
26	I492-11050	WASHER - lock, 1/2 inch.	4
27	I425-108	NUT - hex, 1/2 inch NC	4
28	I523020R3	SUPPORT - disk, inside	2
29	I469191R3	DISK - coultter, rippled edge, 17 inch.	2
30	I523021R2	SUPPORT - disk, outside	2

*** NOTE:** See pages 9-13 and 9-15 for coultter shanks and clamps for mounting to main frame.

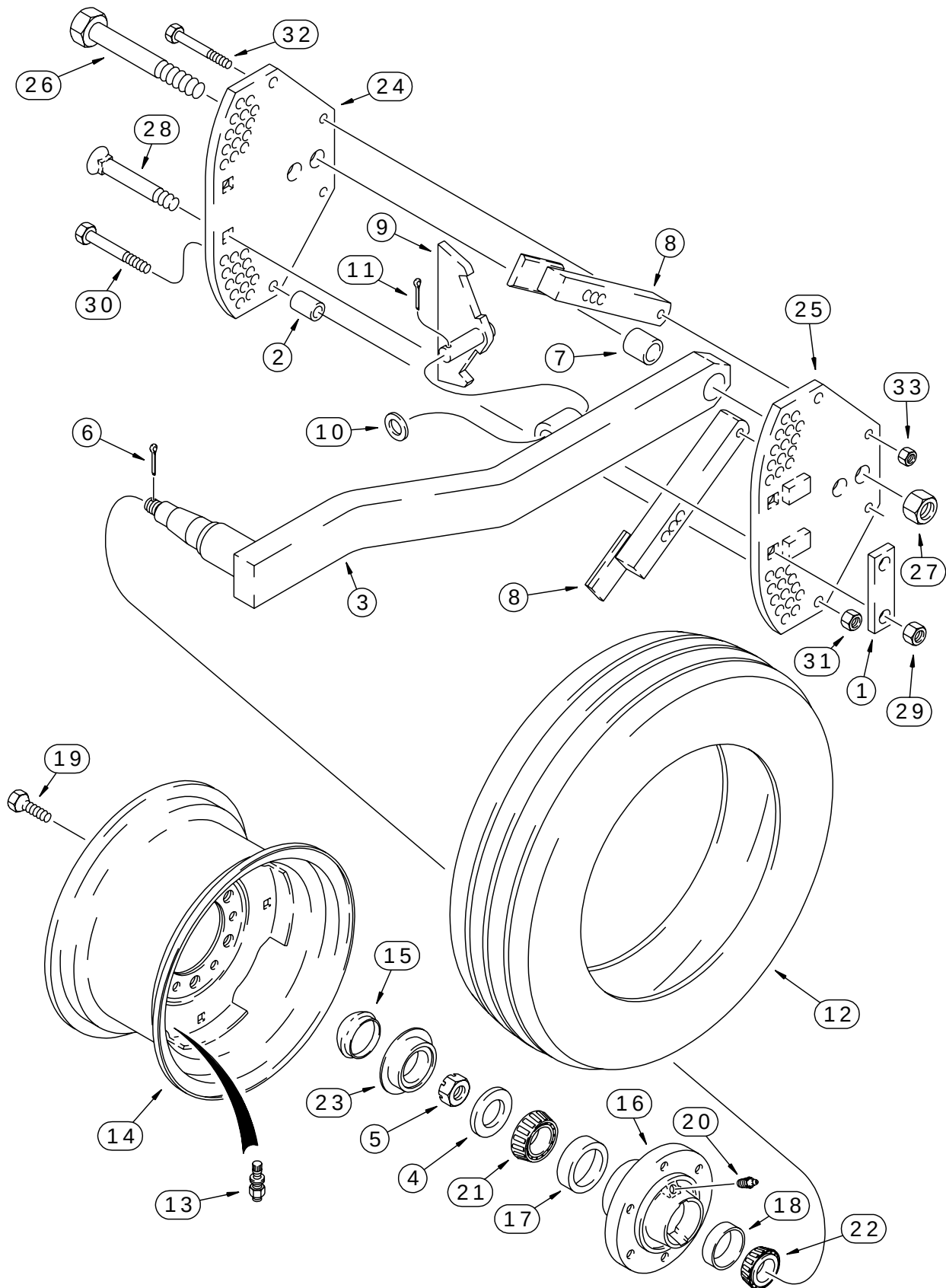
NOTE: Quantity listed is per furrow.



GAUGE WHEEL

**3 and 4 Furrow Rigid and Spring Trip Plows
Automatic Trip Plows Built Prior To 1979
With Four Bolt Wheel Hubs**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	I463070R1	RETAINER - mounting plate	1
2	I463069R1	SPACER - mounting plate	2
3	I467497R93	ARM - gauge wheel	1
4	I369857R1	WASHER - flat, special, 25/32 x 1/4 x 1/8 inch	1
5	I425-1312	NUT - hex, slotted, 3/4 inch NF	1
6	I432-824	PIN - cotter, 1/8 x 1-1/2 inch	1
7	I463063R1	BUSHING - gauge wheel arm	1
8	I477908R92	BAR - latch.	2
9	I463072R12	LATCH - gauge wheel arm	1
10	I495-81057	WASHER - flat, 29/32 x 1-1/2 x 7/64 inch	1
11	I432-1624	PIN - cotter, 1/4 x 1-1/2 inch	1
12	REF	TIRE - 9.5L x 14 High Flotation tubeless.	1
13	I810768C1	VALVE - inflation	1
14	I455169R92	WHEEL - 15 x 4-1/2 inch, if used.	1
14	IT25852	WHEEL - 14 x 5 inch, if used.	1
15	I651194R1	CAP - wheel hub	1
16	I651815R91	CONE - tapered roller bearing, outer.	1
17	I651814R1	CUP - tapered roller bearing, outer	1
18	I472220R2	HUB - wheel, four bolt mount.	1
19	I351079R1	BOLT - hex conical, 1/2 NF x 15/16 inch.	4
20	I651818R91	CONE - tapered roller bearing, inner.	1
21	I472222R1	SLEEVE - oil seal	1
22	I472221R91	SEAL - oil.	1
23	I219-87	FITTING - grease, straight, 1/4-28 self-tapping x 9/16 inch.	1
24	I651817R1	CUP - tapered roller bearing, inner	1
25	I477910R2	PLATE - gauge wheel attaching, without stops	1
25A	I131762C1	PLATE - gauge wheel attaching, with stops	1
26	I543124R1	PIN - 1/2 x 2-3/4 inch.	2
27	I1970957C1	PIN - cotter, hair, 3/16 inch	2
28	I463154R2	BOLT - special.	1
29	I425-1316	NUT - hex, slotted, 1 inch NS	1
30	I432-1228	PIN - cotter, 3/16 x 1-3/4 inch	1
31	I633661R1	BOLT - flat head square neck, 5/8 NC x 3 inch.	2
32	I492-11062	WASHER - lock, 5/8 inch.	2
33	I425-1010	NUT - hex, 5/8 inch NC	2
34	I413-1044	BOLT - hex, 5/8 NC x 2-3/4 inch	2
35	I232-41110	NUT - hex, self-locking, 5/8 inch NC	2
36	I24-844	BOLT - hex, 1/2 NC x 2-3/4 inch	2
37	I492-11050	WASHER - lock, 1/2 inch.	2
38	425-108	NUT - hex, 1/2 inch NC	2



GAUGE WHEEL**5 Furrow Rigid Plows****Automatic Trip Plows Built 1979 and After
With Six Bolt Wheel Hubs**

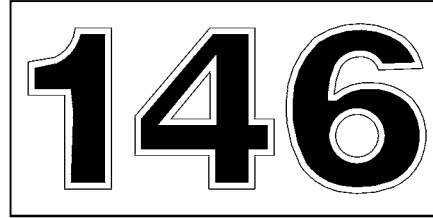
REF.	PART NO.	DESCRIPTION	REQ'D.
1	I490855R1	RETAINER - mounting plate	1
2	I490862R1	SPACER - mounting plate	2
3	I1337969C1	ARM - gauge wheel	1
4	I469873R1	WASHER - flat, special, hardened.	1
5	I70120D	NUT - hex, slotted, special, 7/8 inch NC	1
6	I432-832	PIN - cotter, 1/8 x 2 inch	1
7	I490858R1	BUSHING - gauge wheel arm	1
8	I131718C1	BAR - latch.	2
9	I463072R12	LATCH - gauge wheel arm	1
10	I495-81057	WASHER - flat, 29/32 x 1-1/2 x 7/64 inch	1
11	I432-1624	PIN - cotter, 1/4 x 1-1/2 inch	1
12	REF	TIRE - 9.5L x 14 High Flotation tubeless.	1
13	I810768C1	VALVE - inflation	1
14	I481344R91	WHEEL - 14 (356) x 8 inch (203 mm)	1
15	I224066C1	CAP - wheel hub	1
16	I606468R21	HUB ASSEMBLY - wheel, 6 bolt	1
17	* I651817R1	CUP - tapered roller bearing, outer	1
18	* I663558R1	CUP - tapered roller bearing, 2-57/64 inch OD, inner	1
19	I549962R1	BOLT - hex conical, 1/2 NF x 1-5/32 inch	6
20	I219-87	FITTING - grease, straight, 1/4-28 self-tapping x 9/16 inch.	1
21	* I651818R91	CONE - tapered roller bearing, outer.	1
22	* I663557R91	CONE - tapered roller bearing, 1-5/8 inch ID, inner.	1
23	* I606556R91	SEAL - oil, with sleeve	1
24	I131763C1	PLATE - gauge wheel attaching, without stops	1
25	I131762C1	PLATE - gauge wheel attaching, with stops	1
26	I413-1680	BOLT - hex, 1 NC x 5 inch.	1
27	I231-41116	NUT - hex, self-locking, 1 inch NC.	1
28	I419-31256	BOLT - plow, 3/4 NC x 3-1/2 inch	2
29	I231-42112	NUT - hex, self-locking, 3/4 inch NC	2
30	I413-1056	BOLT - hex, 5/8 NC x 3-1/2 inch	4
31	I231-41110	NUT - hex, self-locking, 5/8 inch NC	4
32	I426-856	BOLT - hex, 1/2 NC x 3-1/2 inch, grade 8	2
33	I231-42118	NUT - hex, self-locking, 1/2 inch NC	2

* **NOTE:** Items shown with an asterisk are components of 123096A2 heavy duty wheel bearing kit.

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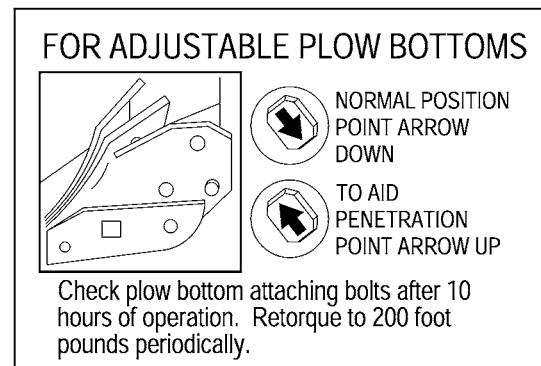
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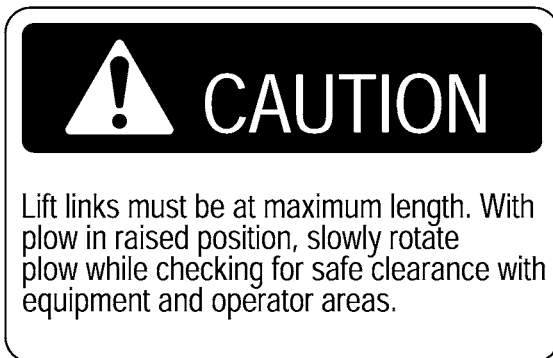
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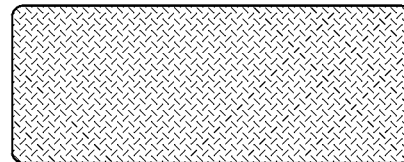
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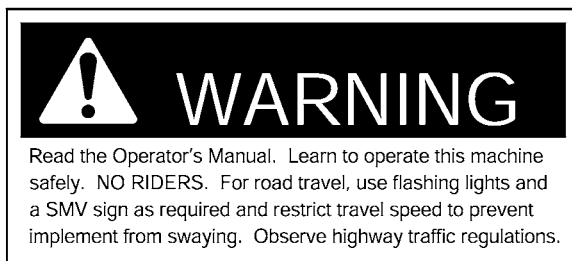
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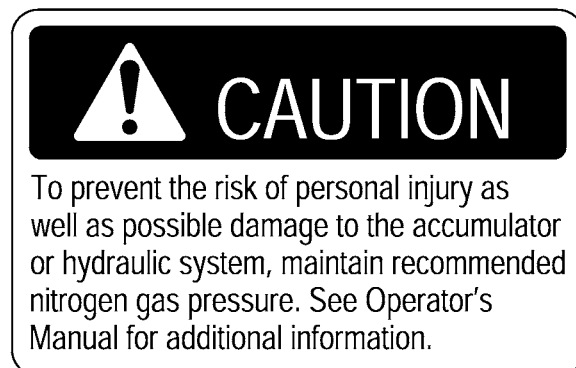
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146 Moldboard Plow
DECALS

9-27

REF.	PART NO.	DESCRIPTION	REQ'D.
1	519500	DECAL - Art's-Way Manufacturing Co. Inc., Logo, 4 x 7 inch	1
2	519510	DECAL - 146 Plow	1
3	I122878C1	DECAL - Warning - Auto Trip Plow	1
4	I2753186R2	DECAL - Bottom Instructions	1
5	I543301R1	DECAL - Caution - Lift Links	1
6	I1284374C1	DECAL - Red Reflector	1
7	I220321A1	DECAL - Warning - General	2
8	I131702C1	DECAL - Caution - Revent Injury	2

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ART'S-WAY MANUFACTURING CO., INC. TECHNICAL MANUALS

Manuals are available from your local dealer or Art's-Way Manufacturing Co., Inc. for the operation, service and repair of your machine. For prompt convenient service, contact your local dealer for assistance in obtaining the manuals for your machine.

Your local dealer can expedite your order for operator manuals, illustrated parts catalogs, service manuals, and maintenance records.

Always give the Machine Name, Model and Serial Number so your local dealer can provide the correct manuals for your machine.

CALIFORNIA Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

NOTE: Art's-Way Manufacturing Co., Inc. reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

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