




ASSEMBLY INSTRUCTIONS

WIL-RICH 957 DISK RIPPER

Printed in USA (74227) JM-75 1/07

 **WIL-RICH**
PO Box 1030
Wahpeton, ND 58074
PH (701) 642-2621
Fax (701) 642-3372

ASSEMBLY INFORMATION

Remove all wires and arrange the parts conveniently.

NOTE: Always wear safety glasses or goggles and be careful when cutting wires and steel bands as they are under tension and will spring back when cut.

Wherever the terms "left" and "right" are used, it must be understood to mean from a position behind and facing the machine.

Lubricate all bearings and moving parts as you proceed and make sure they work freely.

Loosely install all bolts connecting mating parts before final tightening.

When tightening bolts, they must be torqued to the proper number of foot-pounds as indicated in the table unless specified. It is important that all bolts be kept tight.

On new machines, all nuts and bolts must be rechecked after a few hours of operation.

When replacing a bolt, use only a bolt of the same grade or higher. Except in shear bolt applications, where you must use the same grade bolt.

Bolts with no markings are grade 2

Grade 5 bolts furnished with the machine are identified by three radial lines on the head.

Grade 8 bolts furnished with the machine are identified by six radial lines on the head.

All U-bolts are grade 5.



THIS SYMBOL USED TO CALL YOUR ATTENTION TO INSTRUCTIONS CONCERNING YOUR PERSONAL SAFETY. BE SURE TO OBSERVE AND FOLLOW THESE INSTRUCTIONS

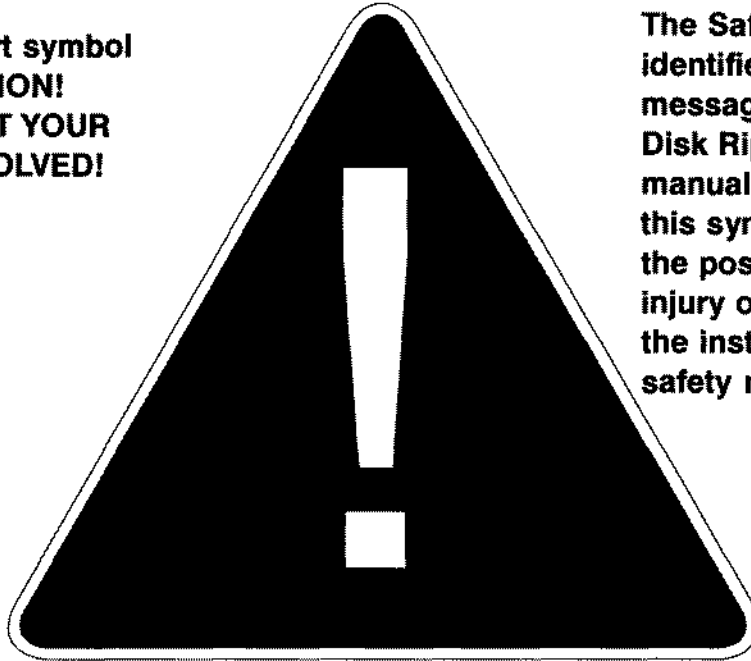
	GRADE 2		GRADE 5			GRADE 8	
TORQUE IN FOOT POUNDS							
BOLT DIA	3/8	1/2	5/8	3/4	7/8	1	
HEX HEAD	9/16	3/4	15/16	1-1/8	1-5/16	1-1/2	
UNC GR2	18	45	89	160	252	320	
UNC GR5	30	68	140	240	360	544	
UNC GR8	40	100	196	340	528	792	
UNF GR2	21	51	102	178	272	368	
UNF GR5	32	70	168	264	392	572	
UNF GR8	48	112	216	368	792	840	

TORQUE.EPS

PERSONAL SAFETY IS IMPORTANT!

ALL PERSONNEL INVOLVED WITH THE ASSEMBLY AND/OR OPERATION OF THIS EQUIPMENT MUST BE INFORMED OF PROPER SAFETY PROCEDURES. OPERATOR'S/ ASSEMBLY MANUALS PROVIDE THE NECESSARY INFORMATION. IF THE MANUAL IS LOST FOR A PARTICULAR IMPLEMENT, ORDER A REPLACEMENT AT ONCE. OPERATOR'S AND ASSEMBLY MANUALS ARE AVAILABLE AT NO CHARGE UPON REQUEST.

This Safety Alert symbol means **ATTENTION!**
BECOME ALERT YOUR SAFETY IS INVOLVED!



The Safety Alert symbol identifies important safety messages on the Wil-Rich Disk Ripper and in this manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Why is SAFETY important to you?

3 Big Reasons

Accidents Disable and Kill

Accidents Cost

Accidents Can Be Avoided

SIGNAL WORDS:

Note the use of the signal words **DANGER**, **WARNING** and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guidelines:

DANGER

An immediate and specific hazard which **WILL** result in severe personal injury or death if the proper precautions are not taken.

WARNING

A specific hazard or unsafe practice which **COULD** result in severe personal injury or death if the proper precautions are not taken

CAUTION

Unsafe practices which **COULD** result in personal injury if proper practices are not taken, or as a reminder of good safety practices.

ADDRESS INQUIRIES TO: WIL-RICH PO BOX 1030
WAHPETON, ND 58074
PH (701) 642-2621 FAX (701) 642-3372

SAFETY

YOU are responsible for SAFE operation and maintenance of your Wil-Rich Disk Ripper. You must ensure that you and anyone else who is going to operate, maintain or work around the Ripper be familiar with the operating and maintenance procedures and related safety information contained in this manual. This manual will take you step by step through your working day, alerts you to all good safety practices that should be adhered to while assembling this equipment.



Remember, YOU are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that EVERYONE operating this equipment is familiar with the recommended operating and maintenance procedures and follows all safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

The most important safety device on this equipment is a safe operator. It is the operator's responsibility to read and understand ALL Safety and Assembly instructions in the manual and to follow them. All accidents can be avoided.

A person who has not read and understood all safety instructions is not qualified to assemble the machine. An untrained operator exposes themselves and bystanders to possible serious injury or death.

Do not modify the equipment in any way. Unauthorized modifications may impair the function and/or safety and could affect the life of the equipment.

Think SAFETY! Work SAFELY!

General Safety

Read and understand the assembly instructions and all safety signs before operating, maintaining or adjusting the 957 Disk Ripper.

Have a first-aid kit available for use should the need arise and know how to use it.

Have a fire extinguisher available for use should the need arise and know how to use it.

Clear the area of people and remove foreign objects from the machine before starting and operating.

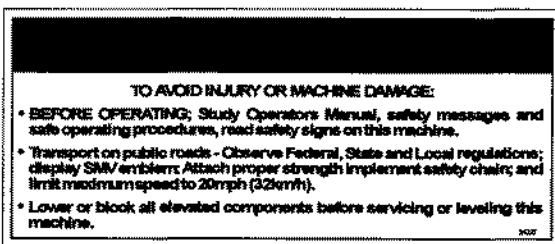
Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing and head.

Do not allow riders.

Wear suitable ear protection for prolonged exposure to excessive noise.

Stop tractor engine, place all controls in neutral, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging the implement.

Review safety related items with all operators annually



HYDRAULIC SAFETY

Always place all tractor hydraulic controls in neutral before dismounting.

Make sure that all components in the hydraulic system are kept in good condition and are clean.

Relieve pressure before working on hydraulic system.

Replace any worn, cut, abraded, flattened or crimped hoses and metal lines.




Do not attempt any makeshift repairs to the hydraulic lines, fittings or hoses by using tape, clamps or cements. The hydraulic system operates under extremely high-pressure. Such repairs will fail suddenly and create a hazardous and unsafe condition.

Wear proper hand and eye protection when searching for high pressure leaks. Use a piece of cardboard as a backstop instead of hands to isolate and identify a leak.

If injured by a concentrated high-pressure stream of hydraulic fluid, seek medical attention immediately. Serious infection or toxic reaction can develop from hydraulic fluid piercing the skin surface.

Before applying pressure to the system, make sure all components are tight and that lines, hoses and couplings are not damaged.

Think SAFETY! Work SAFELY!

HIGH PRESSURE FLUID HAZARD

To prevent serious injury or death:

- Relieve pressure on system before repairing or adjusting or disconnecting.
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
- Keep all components in good repair.

60711

TRANSPORT SAFETY

Read and understand ALL the information in the Operator's Manual regarding procedures and SAFETY when moving Disk Ripper in the field/yard or on the road.

Check with local authorities regarding transportation on public roads. Obey all applicable laws and regulations.

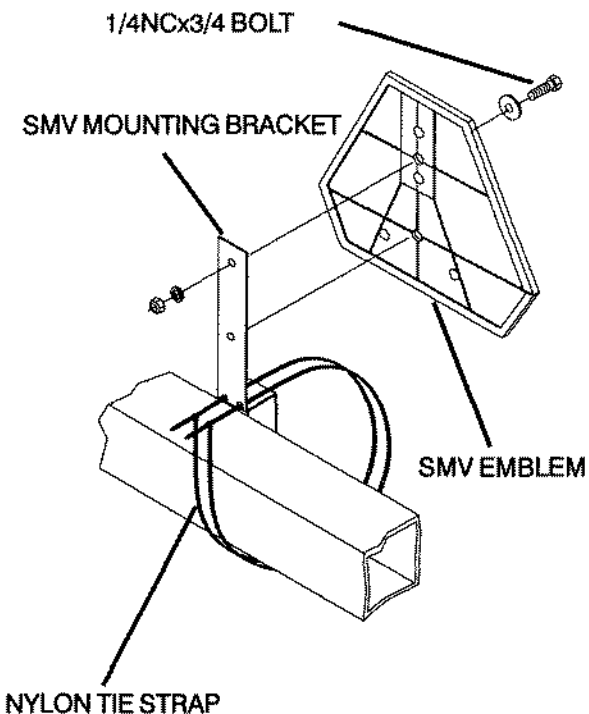
Always travel at a safe speed. Use caution when making corners or meeting traffic.

Make sure SMV (Slow Moving Vehicle) emblem and all lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic.

The SMV bracket is designed to mount to numerous frame sizes and can be orientated in numerous positions to avoid interference with implement components.

The SMV emblem is to be secured as near to the rear and centered, or as near to the left of center of implement as practical.

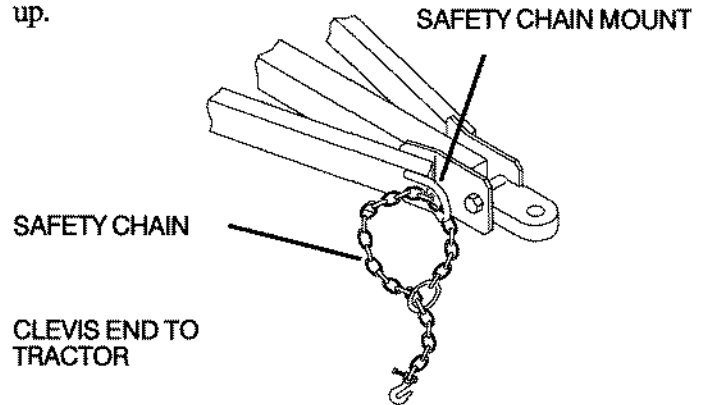
Emblem is to be 2 to 6 feet above the ground measured from the lower edge of the emblem.



Use a drawbar pin with provisions for a mechanical retainer.

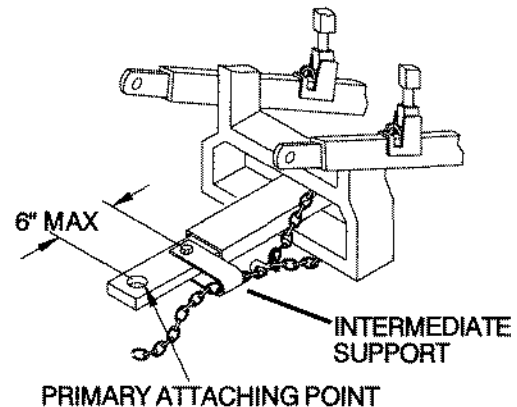
Attach a safety chain before moving.

The safety chain should be hooked long enough to permit full turns. Unnecessary slack should be taken up.



Intermediate support is to be used if there is more than 6" of unsupported chain on either side of the primary attaching point.

The intermediate support should not be mounted more than 6" from the primary attaching point.



The intermediate support is available from your Wil-Rich dealer

Keep to the right and yield the right-of-way to allow faster traffic to pass. Drive on the road shoulder, if permitted by law.

Always use hazard warning flashers on tractor when transporting unless prohibited by law.

Do not allow riders.

Do not exceed 20 mph during transport.

STORAGE SAFETY

Store unit in an area away from human activity.

Do not permit children to play around the stored unit.

Store in a dry, level area. Support the base with planks if required.

TIRE SAFETY

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death.

Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.

Have a qualified tire dealer or repair service perform required tire maintenance.

SAFETY DECALS

Keep safety decals and signs clean and legible at all times.

Replace safety decals and signs that are missing or have become illegible.

Replaced parts that displayed a safety sign should also display the current sign.

Safety decals or signs are available from your Dealer Parts Department.

How to install Safety Decals:

Be sure that the installation area is clean and dry.

Decide on the exact position before you remove the backing paper.

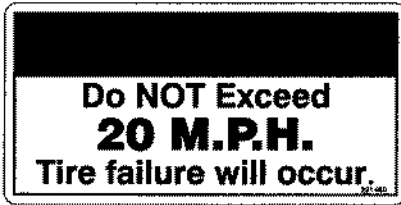
Remove the smallest portion of the split backing paper.

Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.

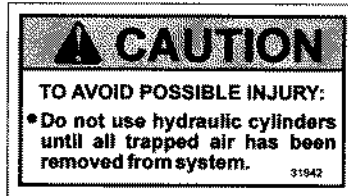
Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.

Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.

SAFETY DECAL LOCATIONS



221480 TIRE SPEED DECAL



31942 CAUTION DECAL



22371 RED REFLECTOR



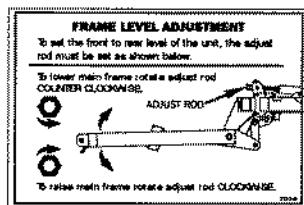
22372 AMBER REFLECTOR



22372 AMBER REFLECTOR



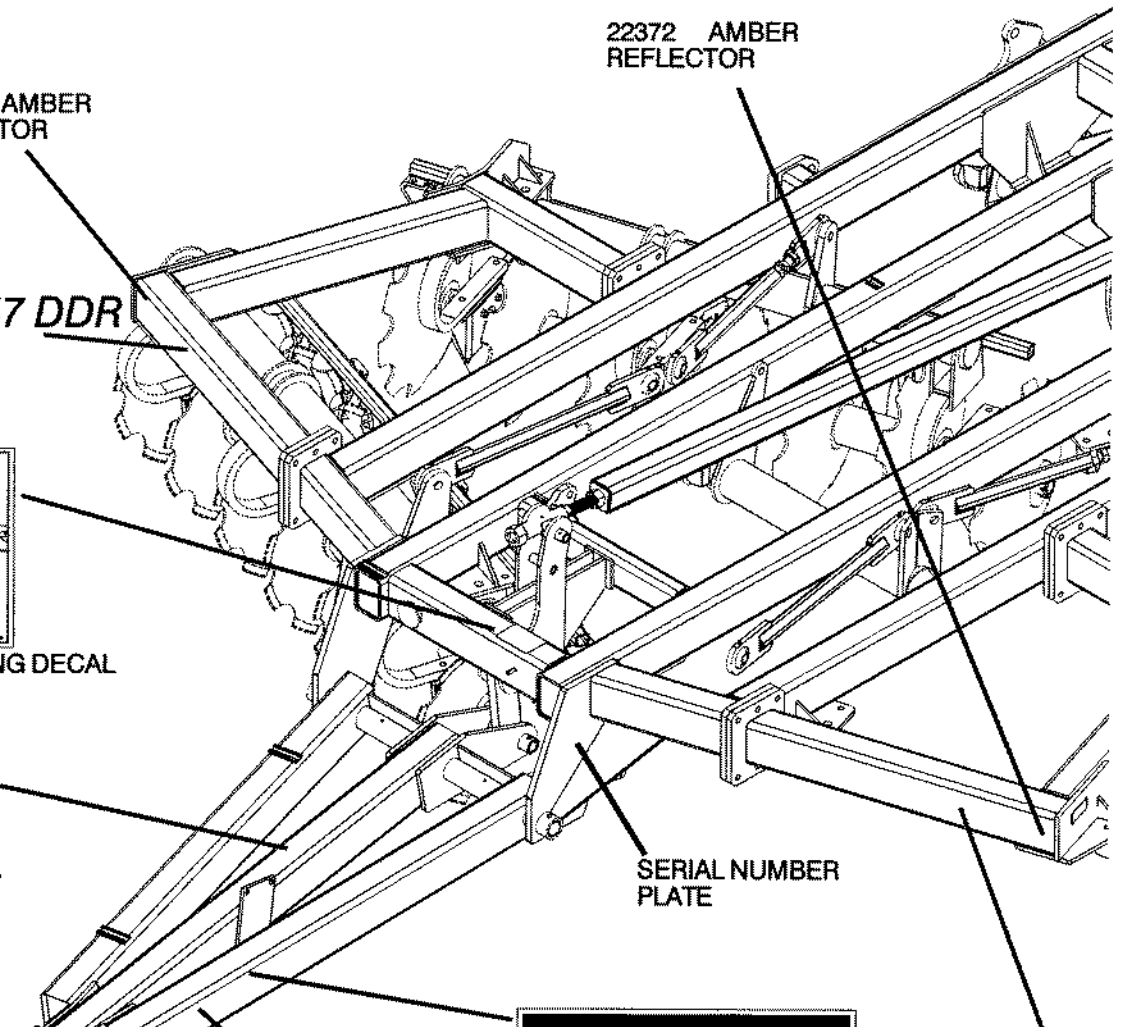
221228 - DECAL KIT



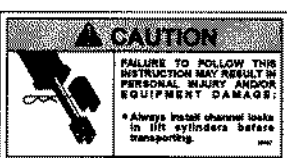
222248 FRAME LEVELING DECAL



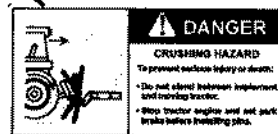
238397 GREASE DECAL



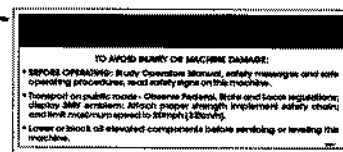
SERIAL NUMBER PLATE



69387 CHANNEL LOCK DECAL



222802 CRUSHING HAZARD




24227 SERVICE DECAL





41345 SMV KIT

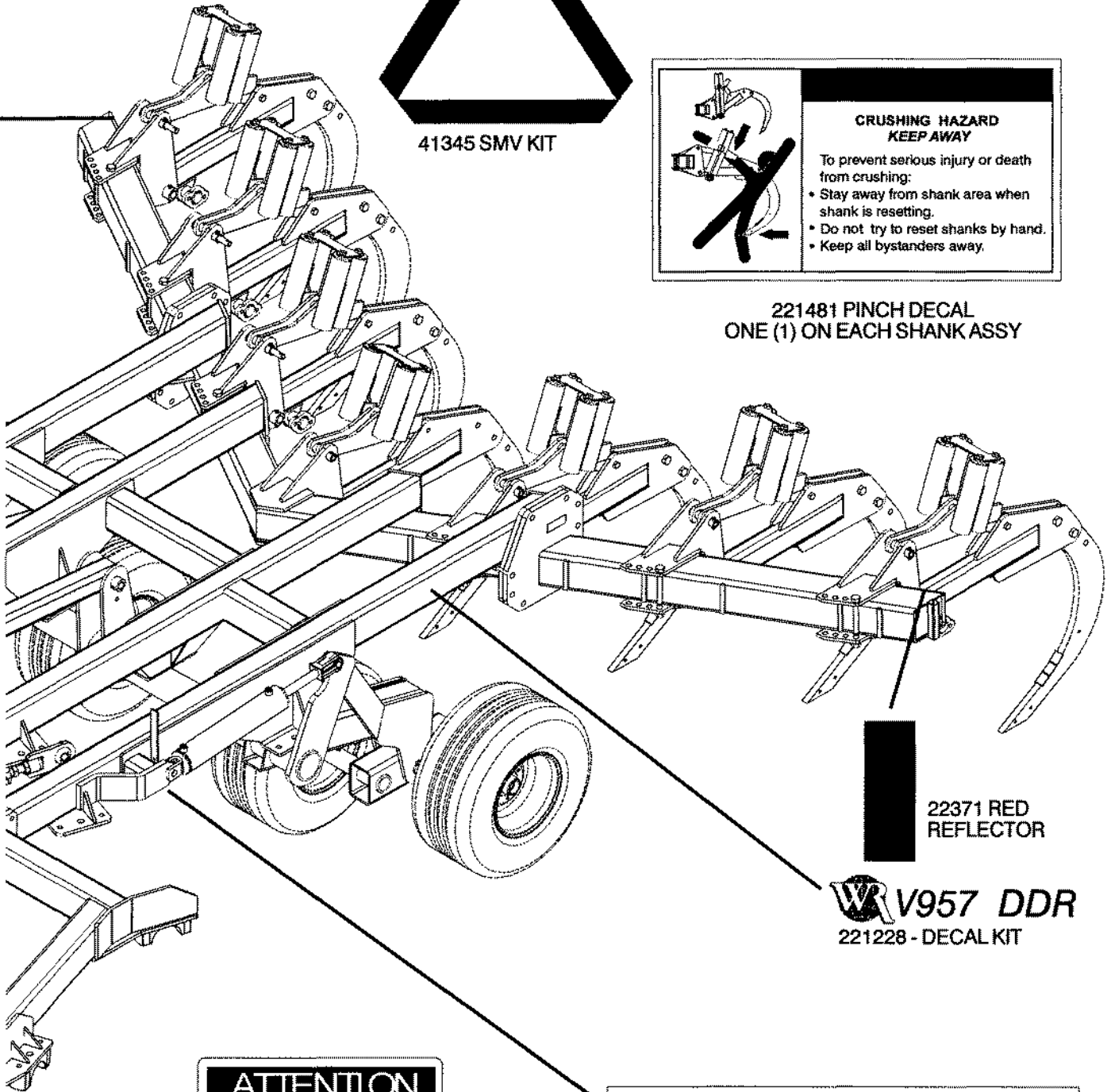


**CRUSHING HAZARD
KEEP AWAY**

To prevent serious injury or death from crushing:

- Stay away from shank area when shank is resetting.
- Do not try to reset shanks by hand.
- Keep all bystanders away.

221481 PINCH DECAL
ONE (1) ON EACH SHANK ASSY



22371 RED REFLECTOR

WR V957 DDR
221228 - DECAL KIT


ATTENTION

Grease Fittings

62357

62557 GREASE FITTING DECAL
(SEE LUBRICATION PAGE OPERATION)

CAUTION



FAILURE TO FOLLOW THIS INSTRUCTIONS MAY RESULT IN PERSONAL INJURY AND/OR EQUIPMENT DAMAGE:

- Always install transport locks on lift cylinders before transporting.

222000

222686 TRANSPORT LOCK DECAL

SAFETY LIGHTS



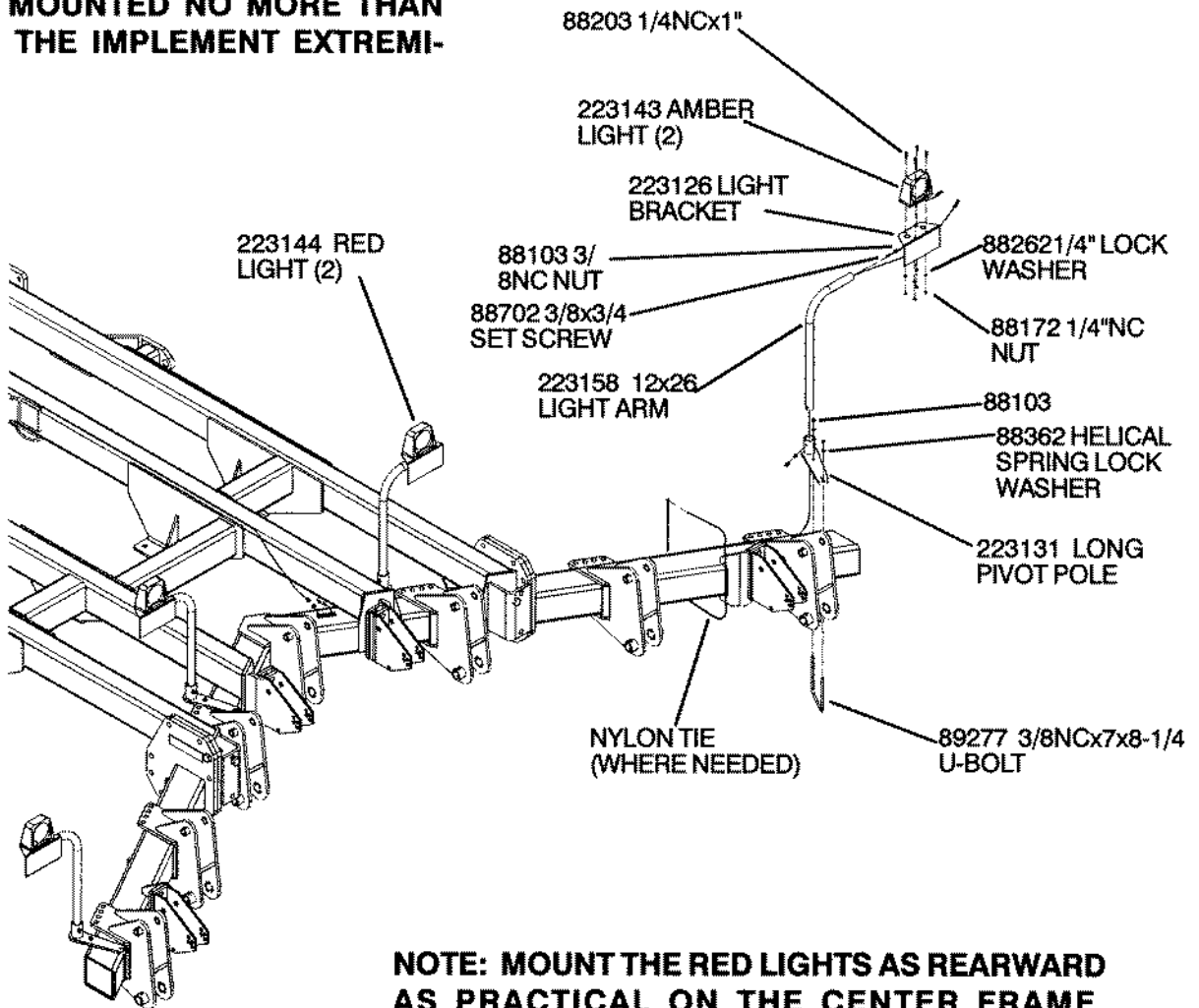
221141 CLEARANCE LIGHT PACKAGE

64597 30FT HARNESS

223145 AG MODULE

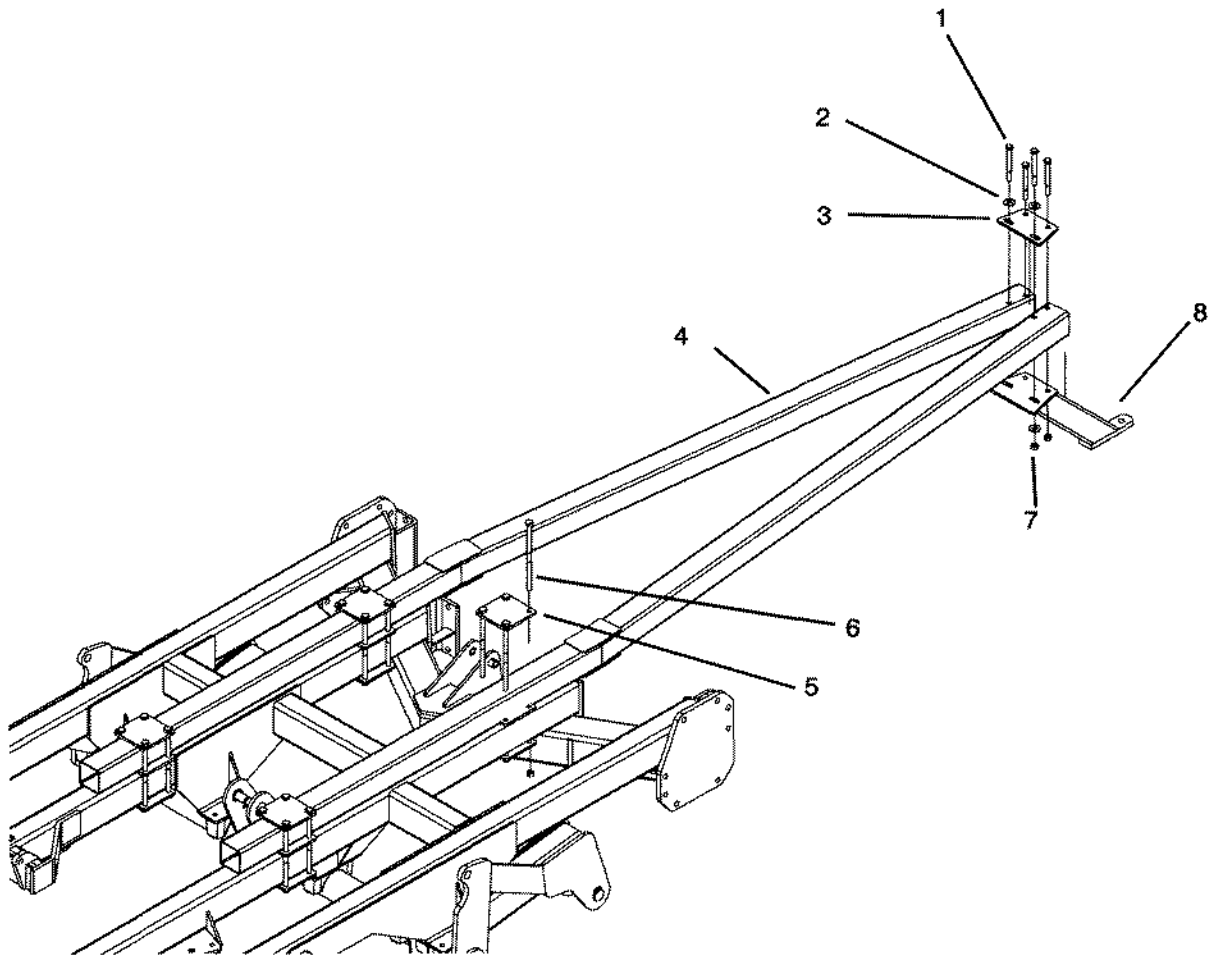
223146 WISH-BONE 4 LEAD

NOTE: MOUNT AMBER LIGHTS AS WIDE AS POSSIBLE. THE AMBER LIGHTS MUST BE MOUNTED NO MORE THAN 16" FROM THE IMPLEMENT EXTREMITIES.



NOTE: MOUNT THE RED LIGHTS AS REARWARD AS PRACTICAL ON THE CENTER FRAME. SPACE EVENLY 2' TO 5' FROM THE MACHINE CENTER.

REAR HITCH ASSEMBLY



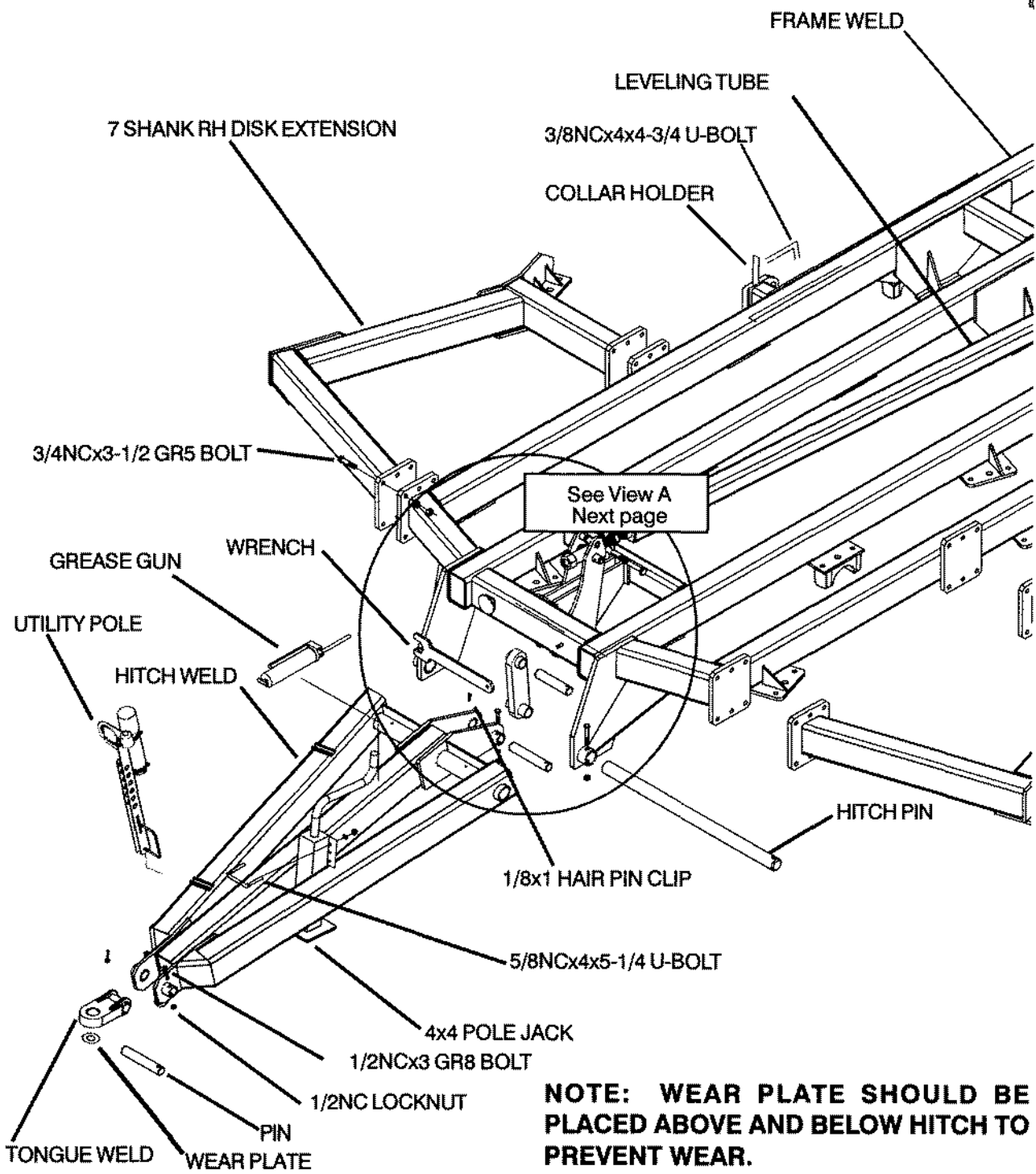
700161

ITEM	PART NO.	DESCRIPTION
1	88335	BLT HEX 3/4-10NCX7 5Z
2	88131	WSHR FLAT 3/4(13/16X2ACT) Z
3	240828	HITCH PLATE
4	240849	TUBE WELD
5	240670	PLATE
6	89356	BLT HEX 3/4-10NC X 14 5Z
7	88356	NUT 2POSLK 3/4-10NC 5Z
8	240851	HITCH WELD

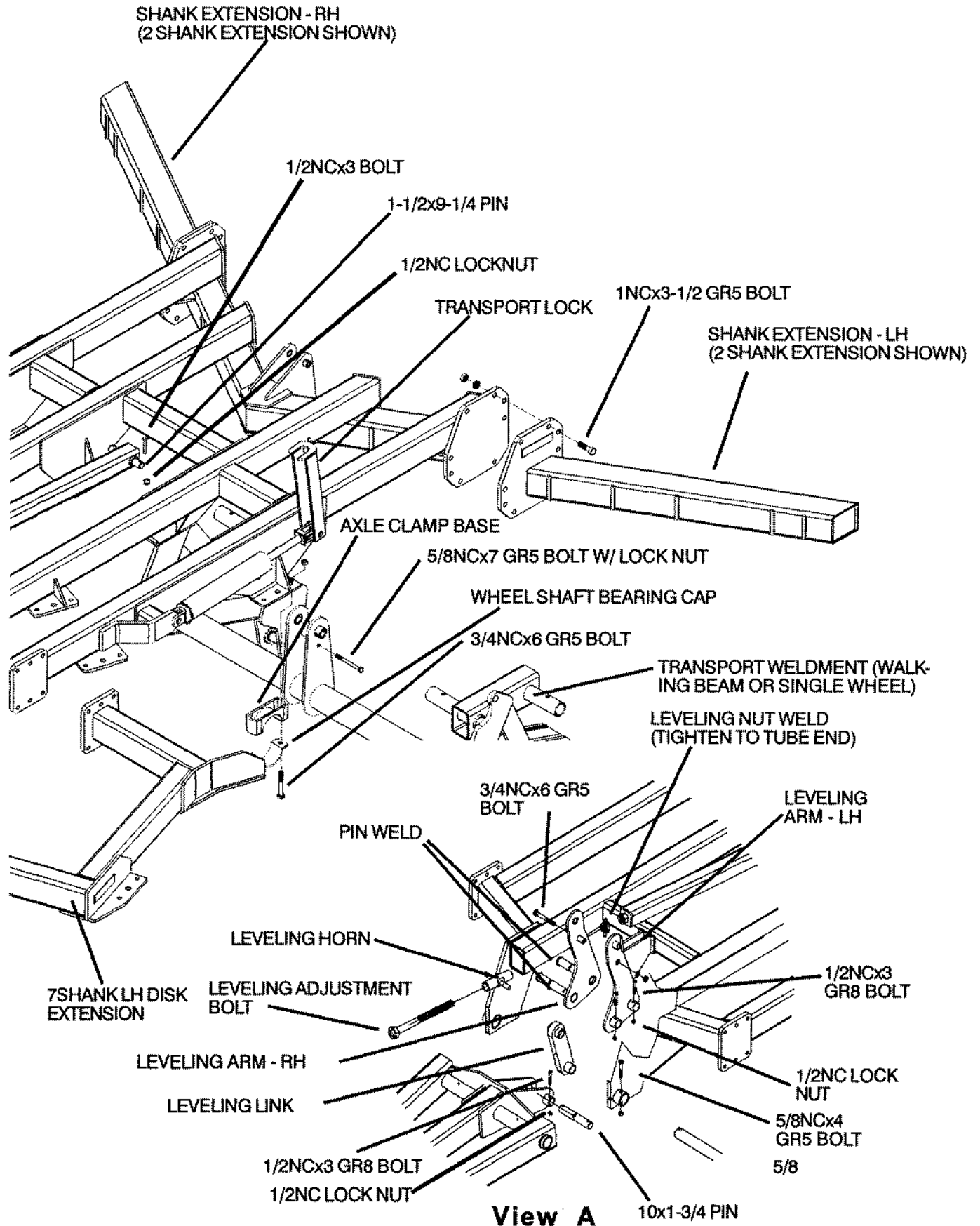
MAIN FRAME ASSEMBLY

Note: Adequately support the frame during assembly. Allow sufficient ground clearance for shank installation.

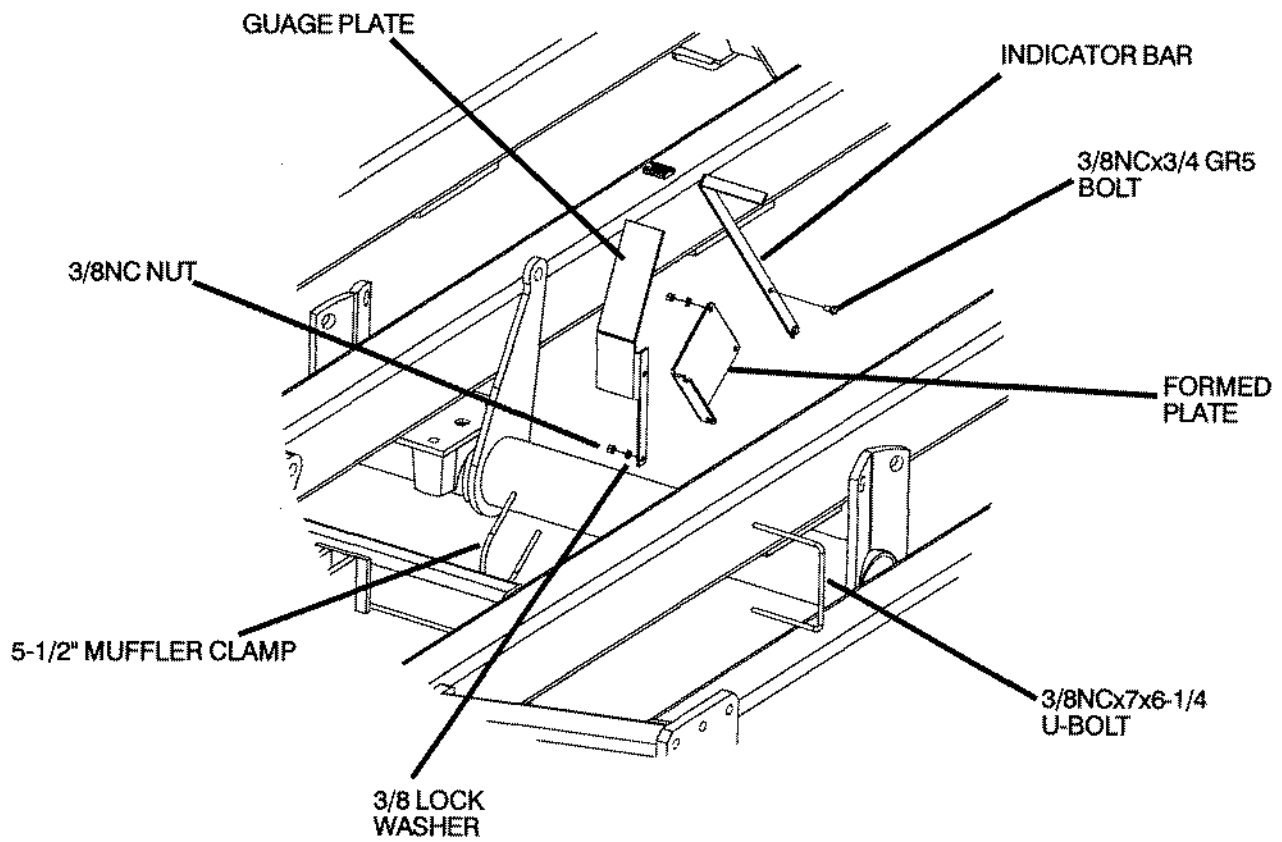
Note: Channel locks must be installed on the main frame cylinders prior to transporting or storing.



NOTE: WEAR PLATE SHOULD BE PLACED ABOVE AND BELOW HITCH TO PREVENT WEAR.



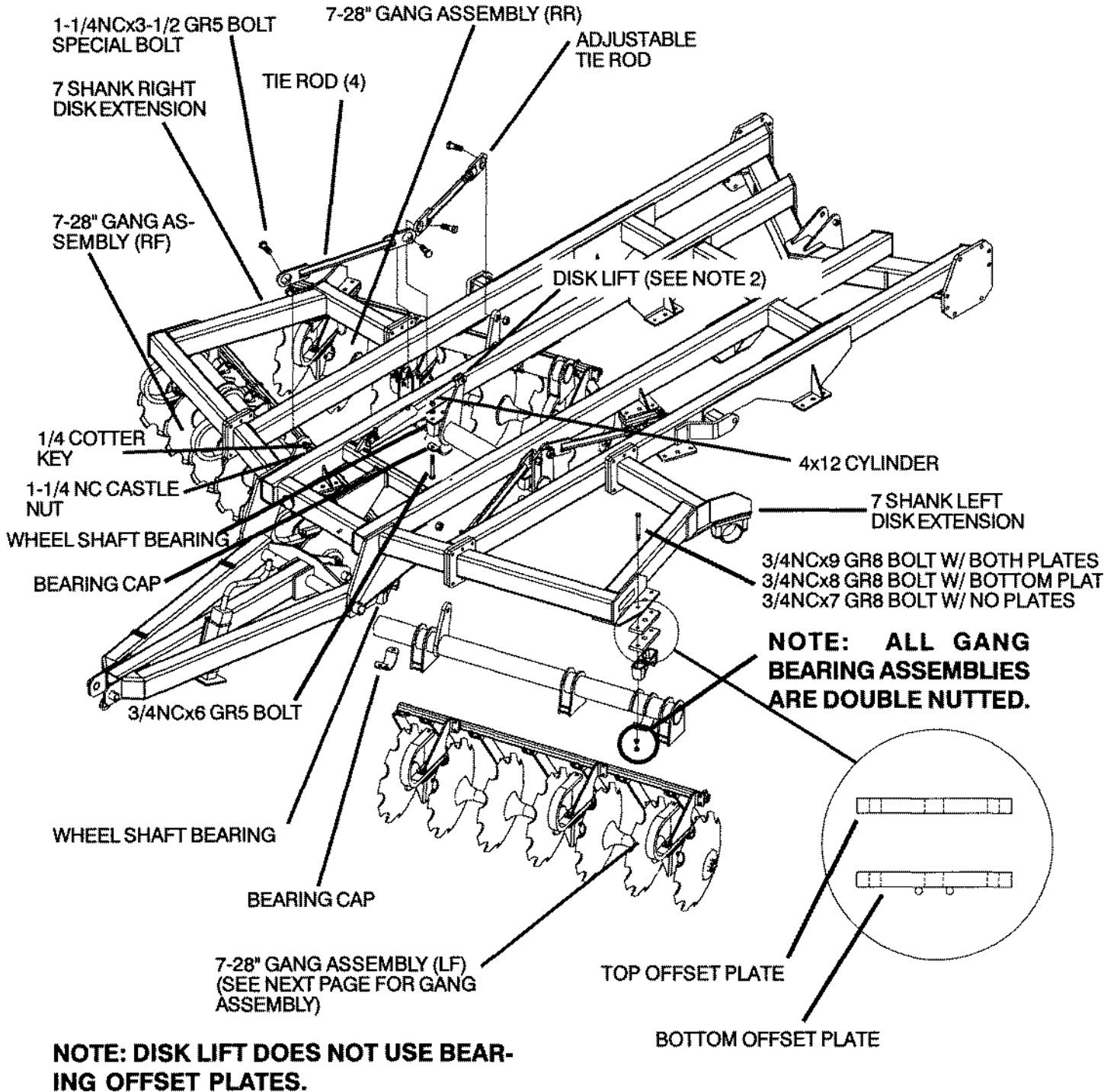
GANG DEPTH INDICATOR



DISK ASSEMBLY



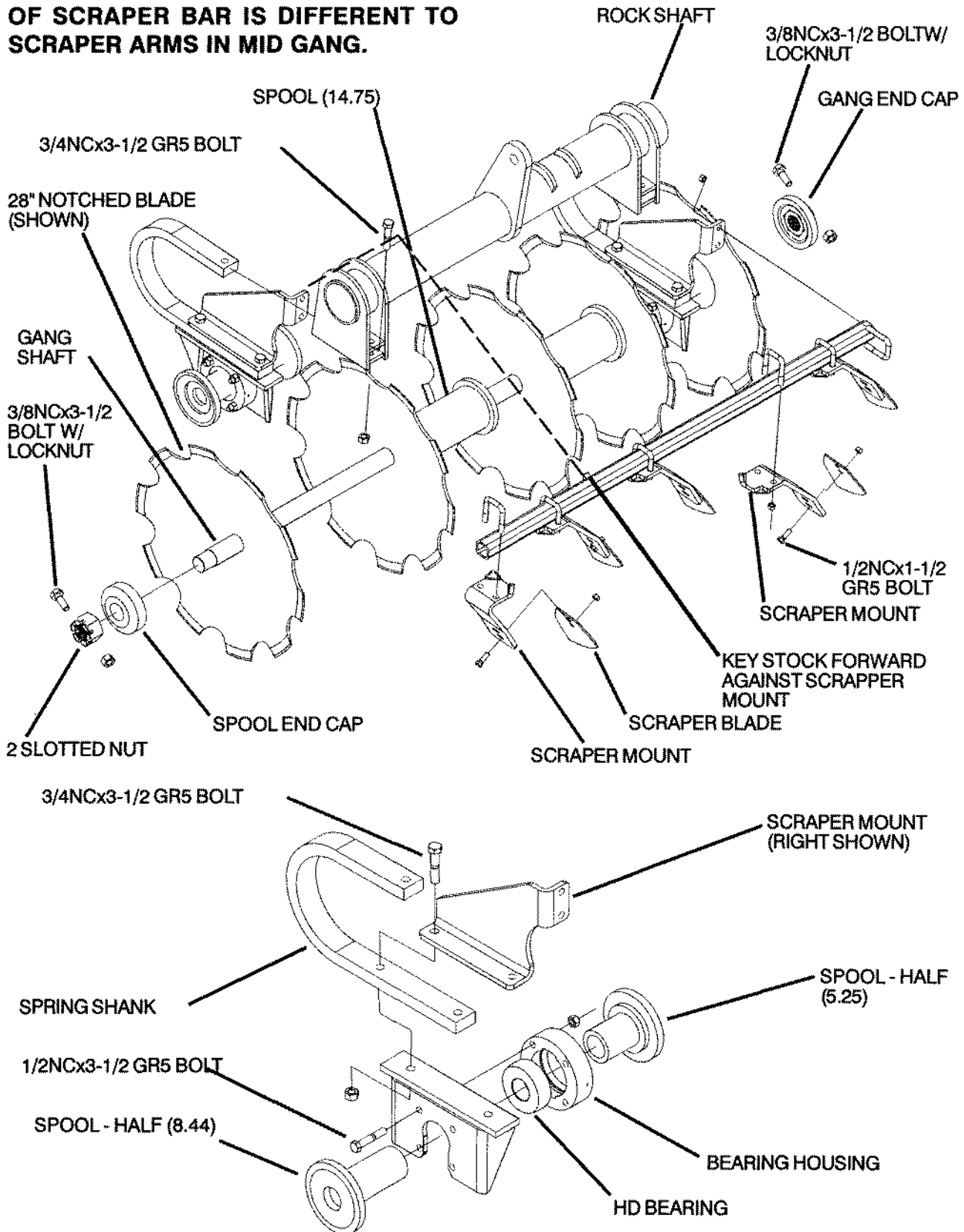
Note: Contact with disk blades may cause severe injury. Caution must be exercised in handling or tightening bolts near blades.



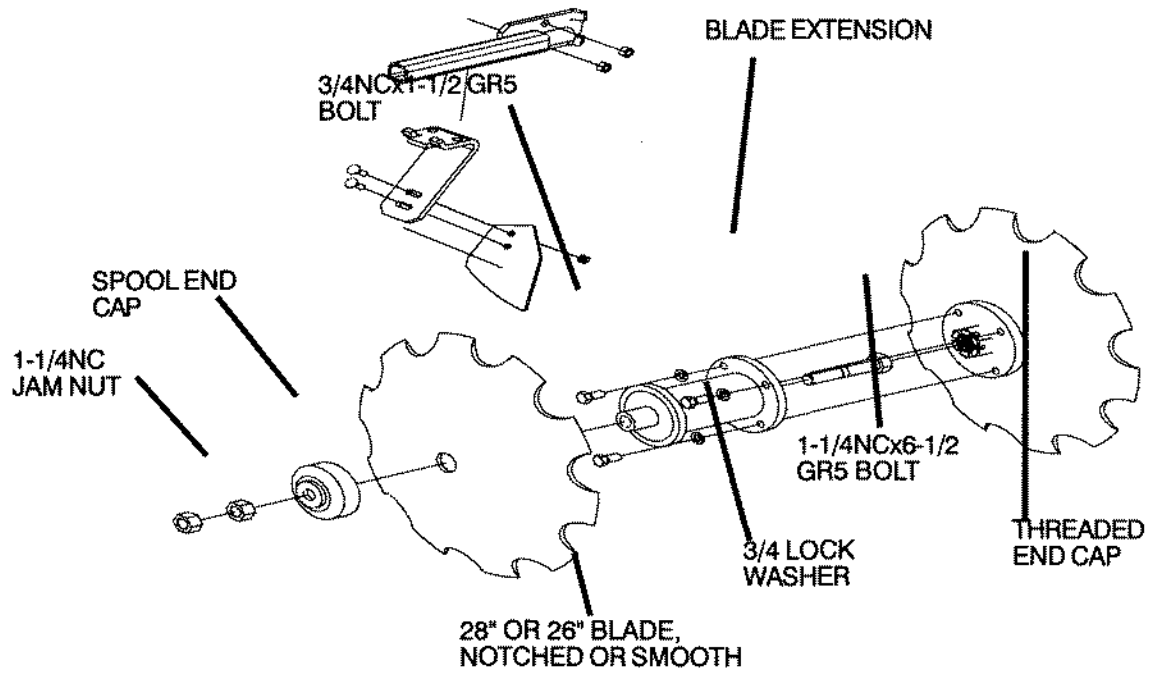
DISK GANG ASSEMBLY

5- 28" GANG ASSY - RIGHT FRONT (SHOWN)

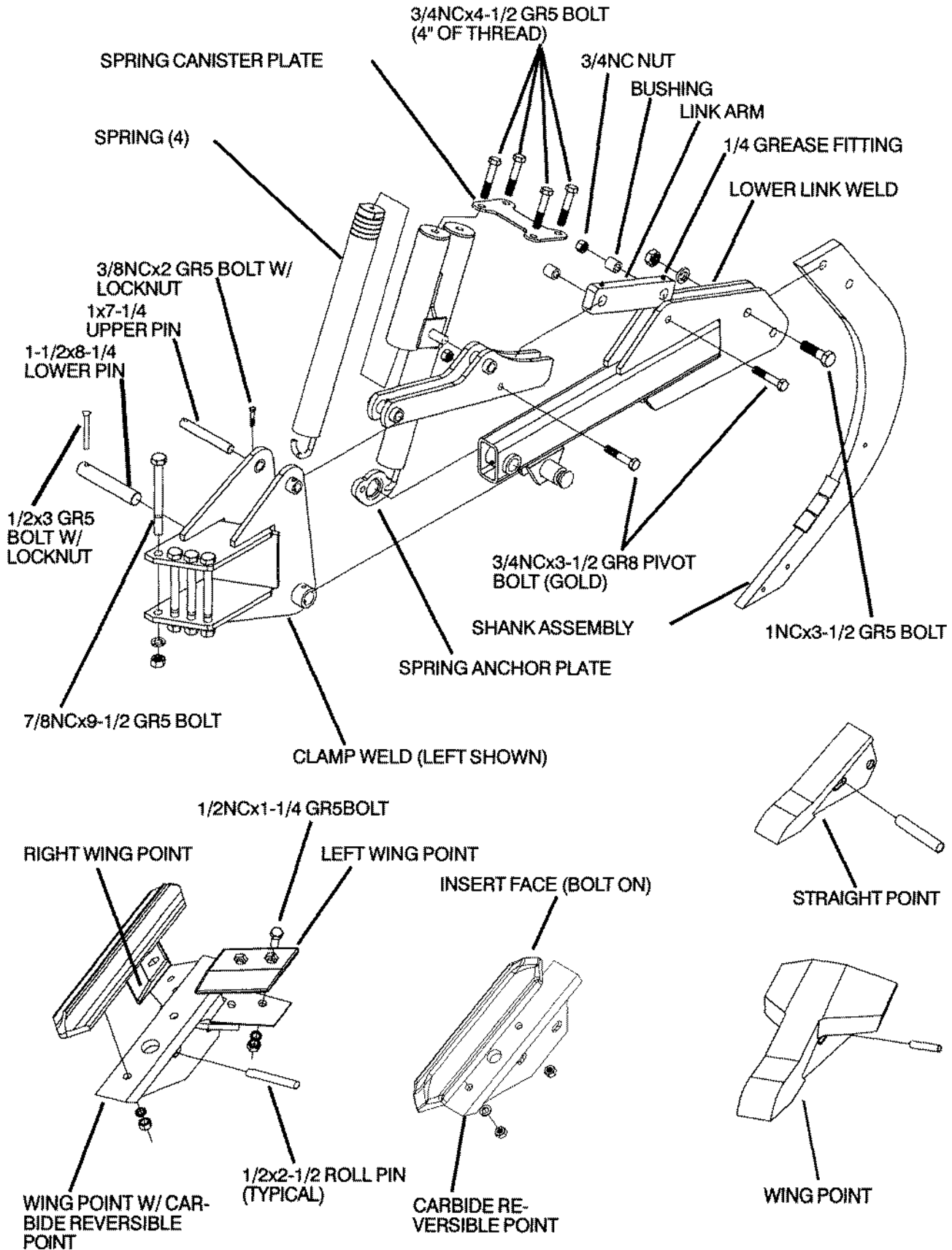
NOTE: SCRAPER ARM SHAPE AT END OF SCRAPER BAR IS DIFFERENT TO SCRAPER ARMS IN MID GANG.



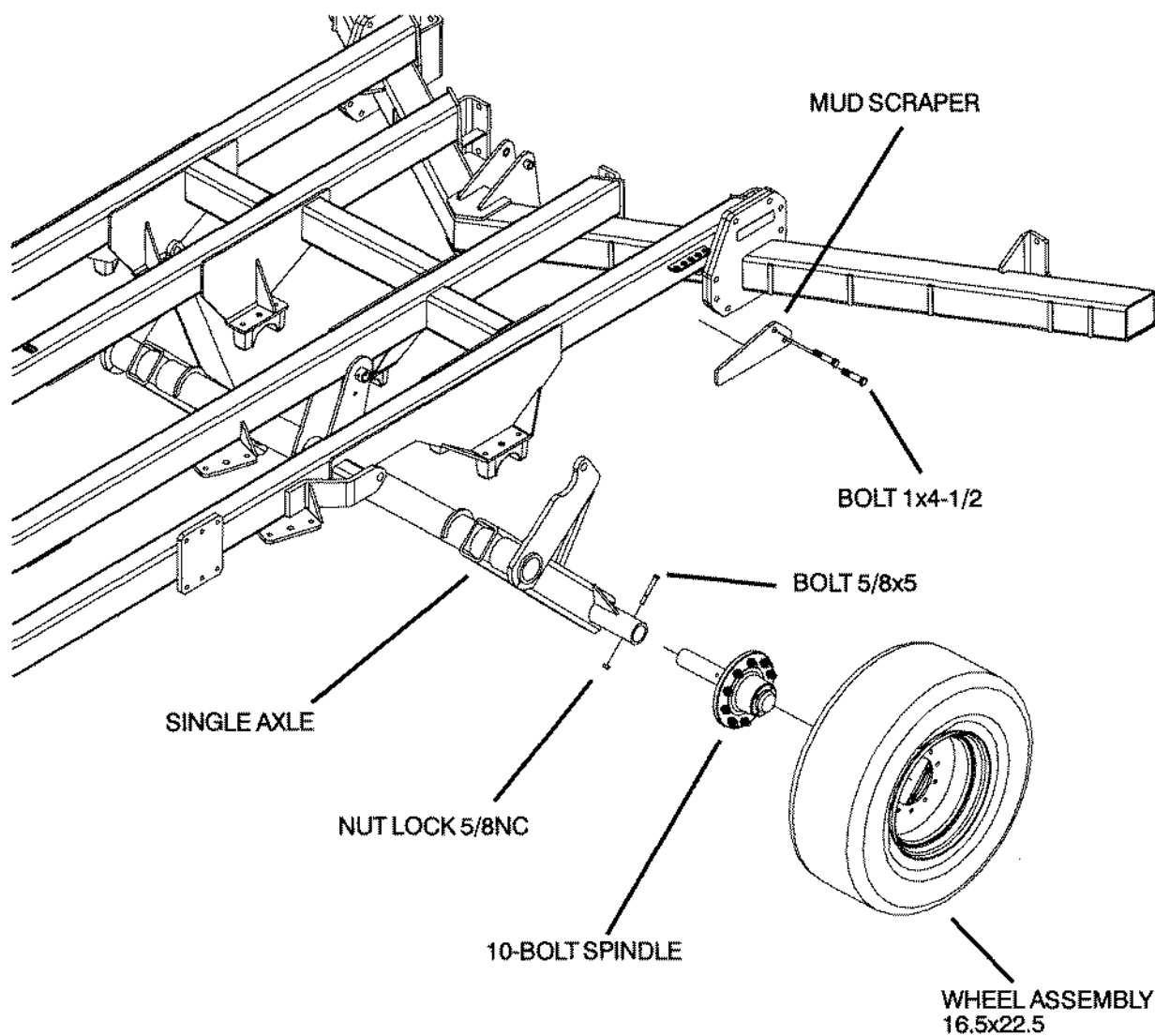
SINGLE BLADE ADD ON



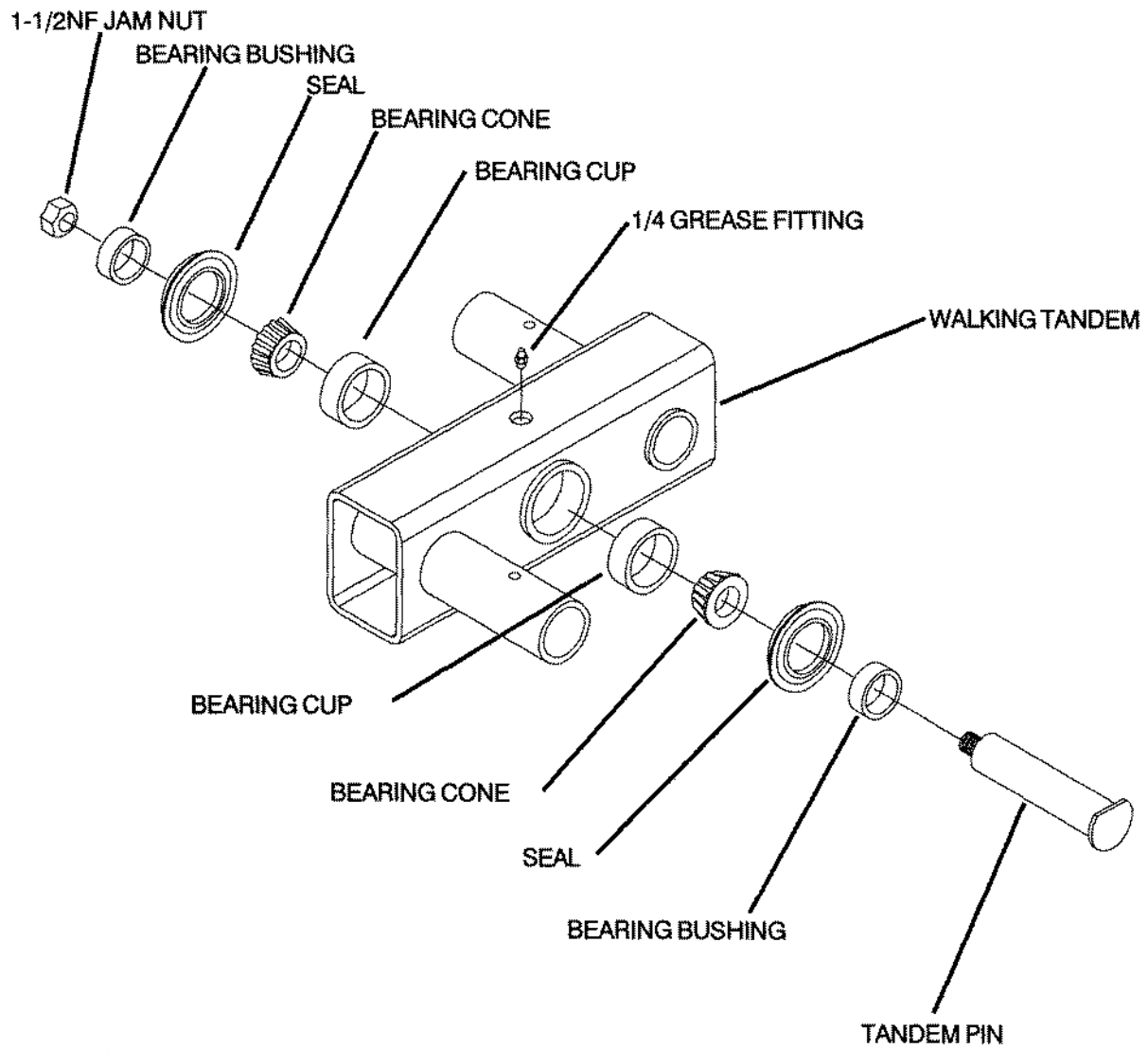
RIPPER SHANK ASSEMBLY



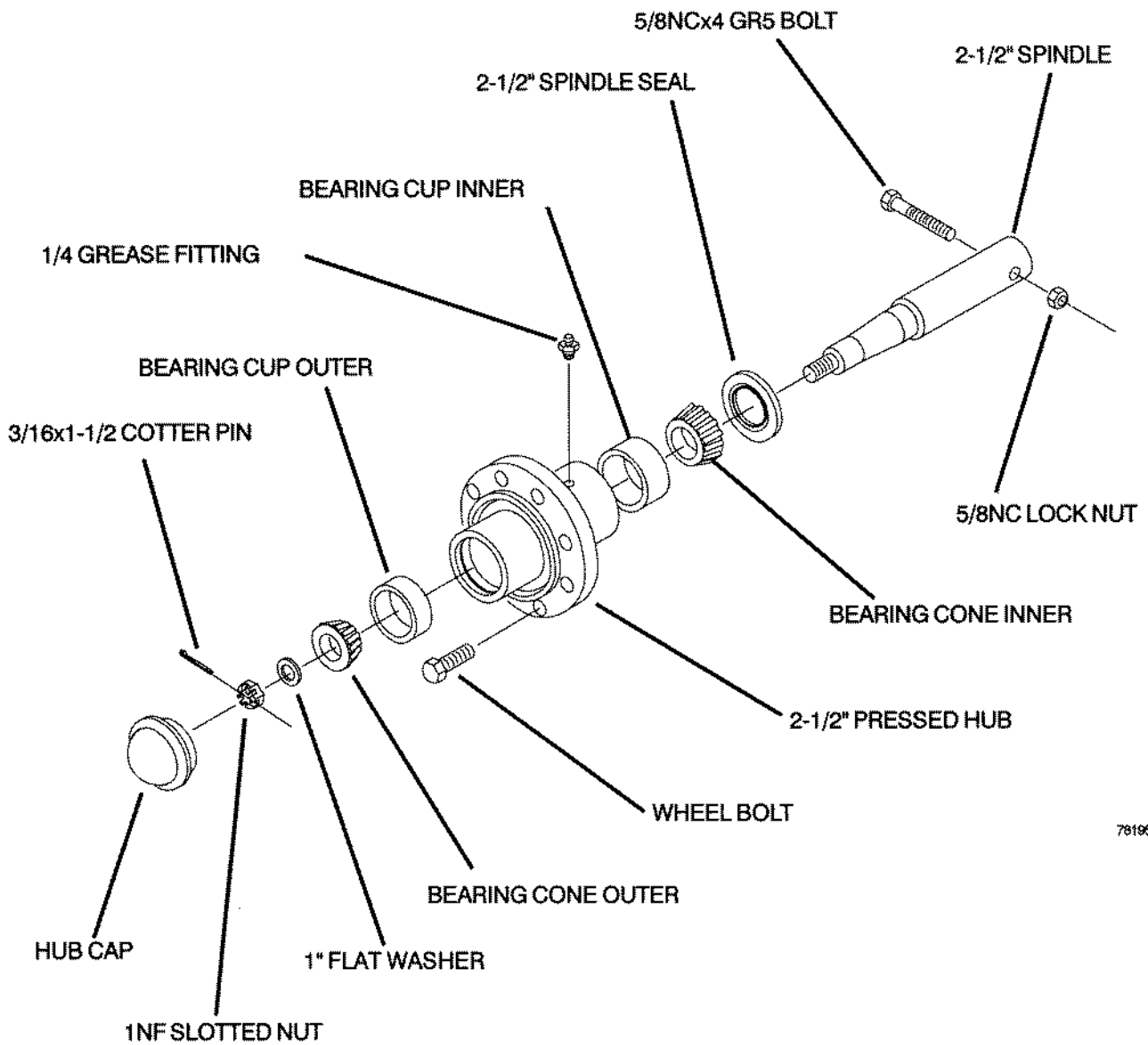
SINGLE AXLE ASSEMBLY



WALKING TANDEM

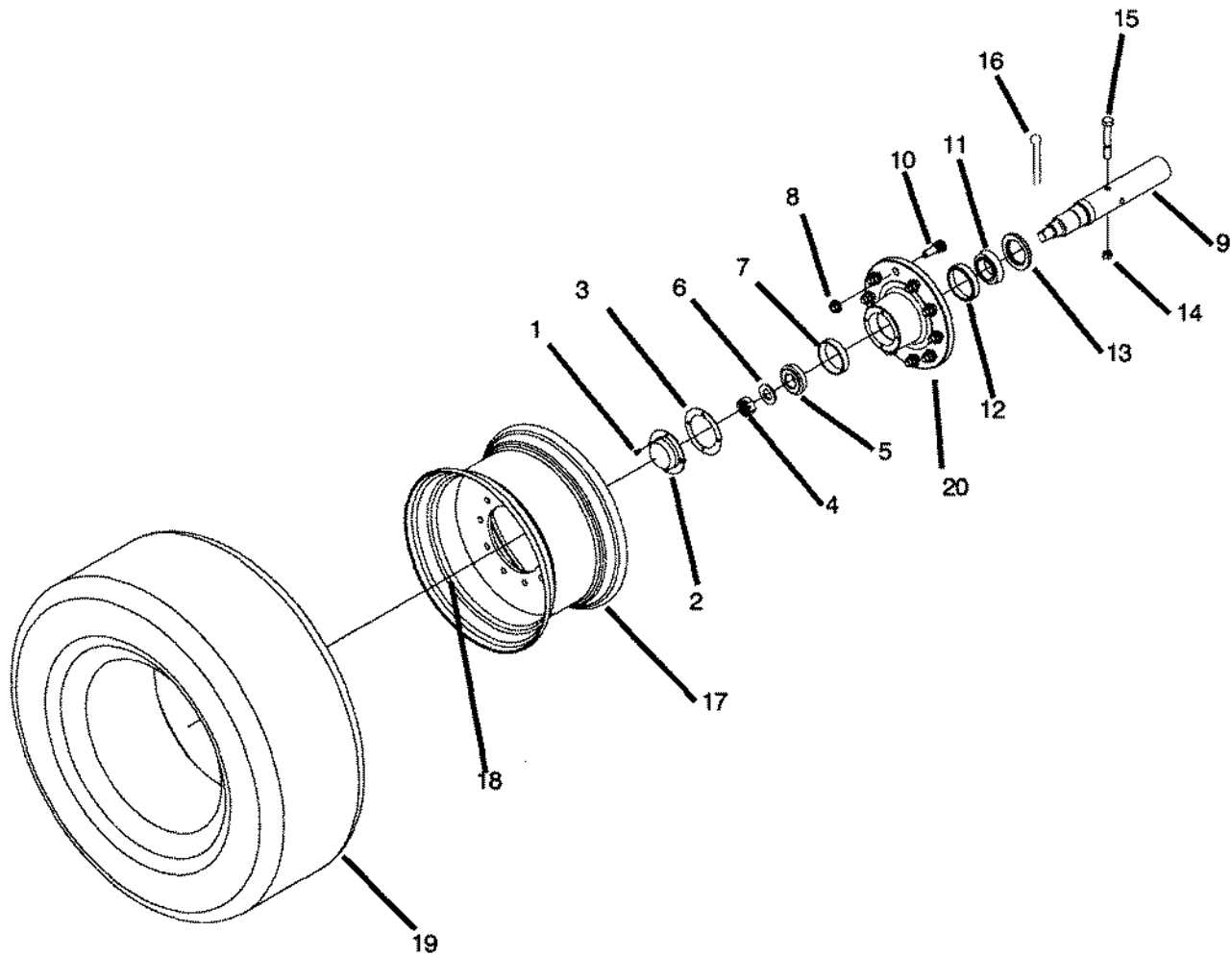


2-1/2" HUB AND SPINDLE



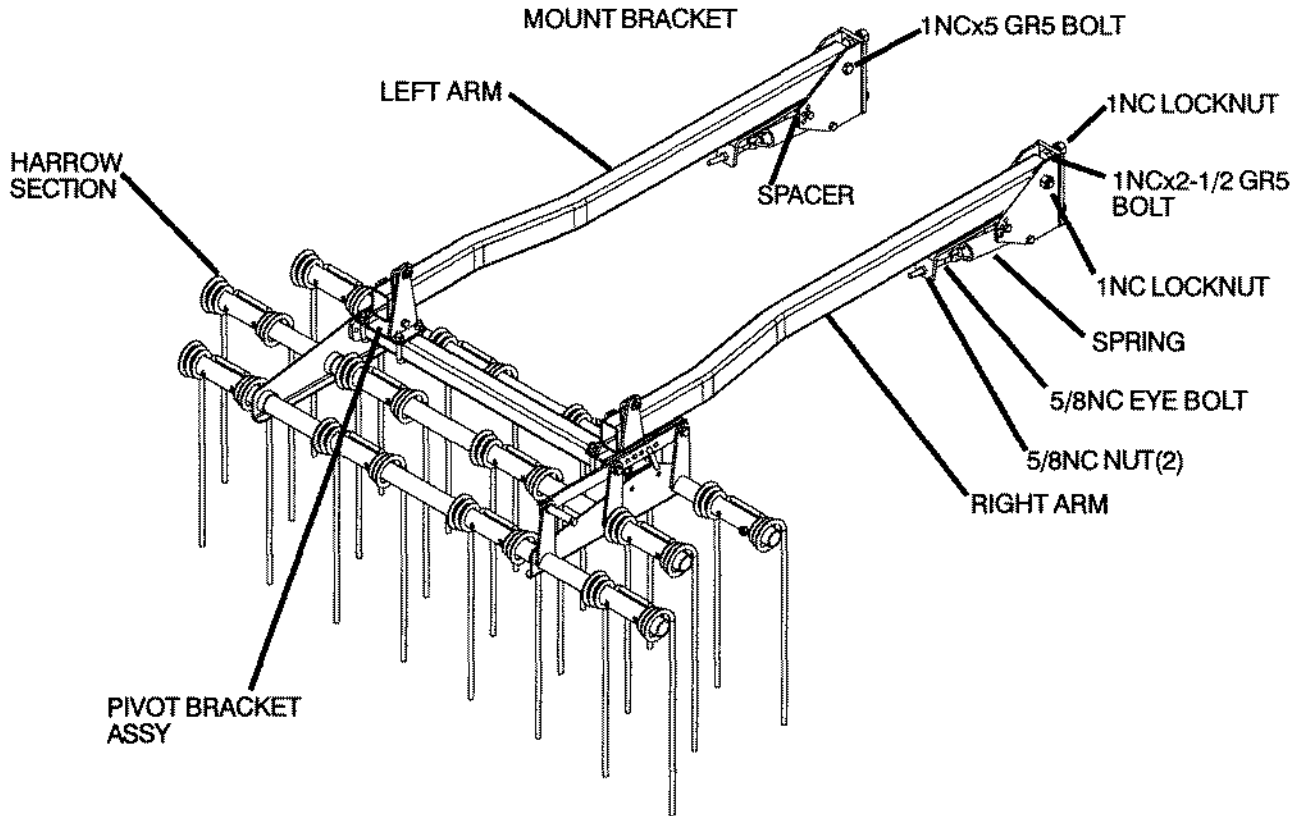
78195

10 BOLT HUB & 3" SPINDLE

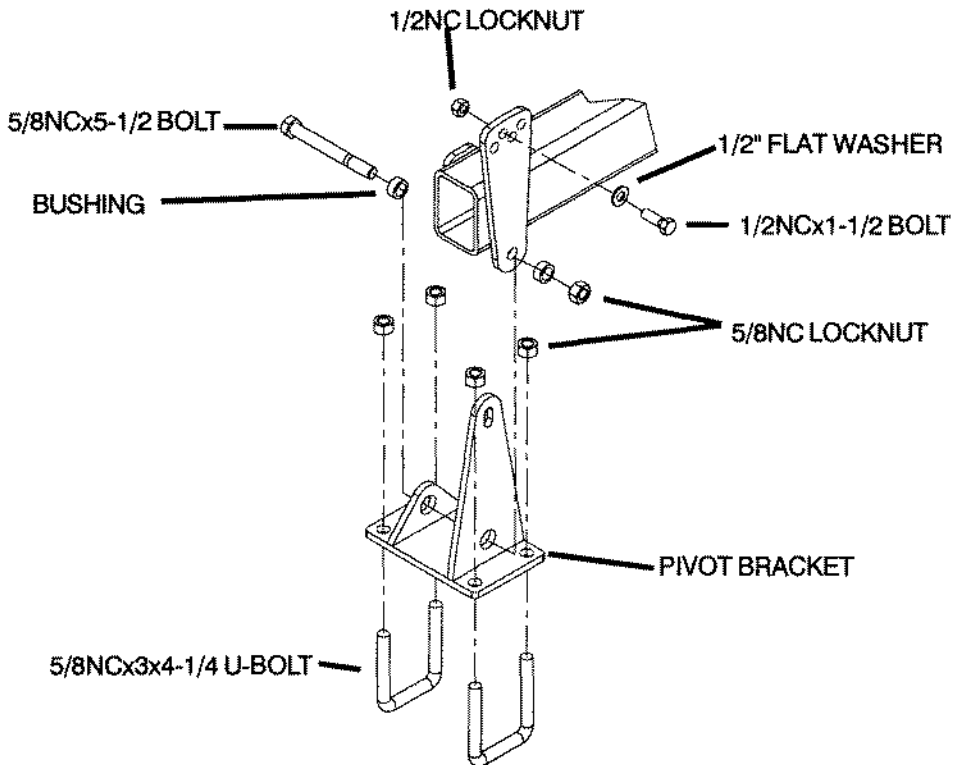


ITEM	PART NO.	DESCRIPTION
1	88539	BOLT 5/16NCx1/2
2	58381	DUST CAP
3	221424	DUST CAP SEAL
4	221427	SPINDLE NUT
5	58378	BEARING CUP 4.125 (453A)
6	221423	2.5ODx1.312IDx.25 WASHER
7	58380	BEARING CONE 1-3/4ID (460)
8	221425	3/4NF FLANGE NUT
9	58375	3 IN SPINDLE
10	58382	WHEEL BOLT
11	58379	BEARING CONE 2-1/2ID (39585)
12	58377	BEARING CUP 4.438OD (39520)
13	58383	GREASE SEAL
14	88369	NUT 5/8NC LOCK
15	88395	BOLT 5/8NCx5
16	88133	COTTER PIN 3/16x2
17	237512	16.5R22.5 RIM
18	57908	VALVE ASSY
19	237513	10-11.25-8.71 10B TIRE
20	58376	HUB 10 BOLT FOR 3" SPINDLE (INCLUDES ITEMS 1-8 & 10-13)

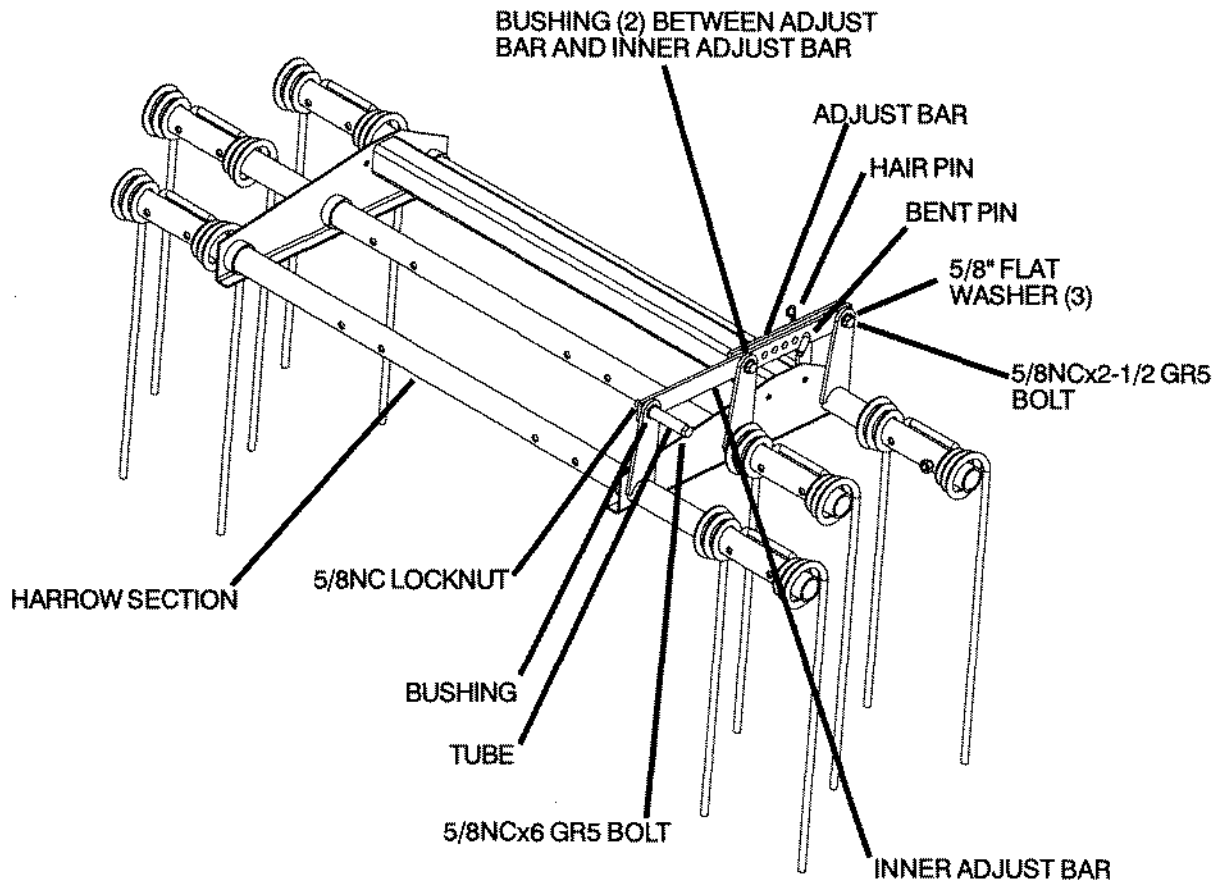
HARROW ASSEMBLY



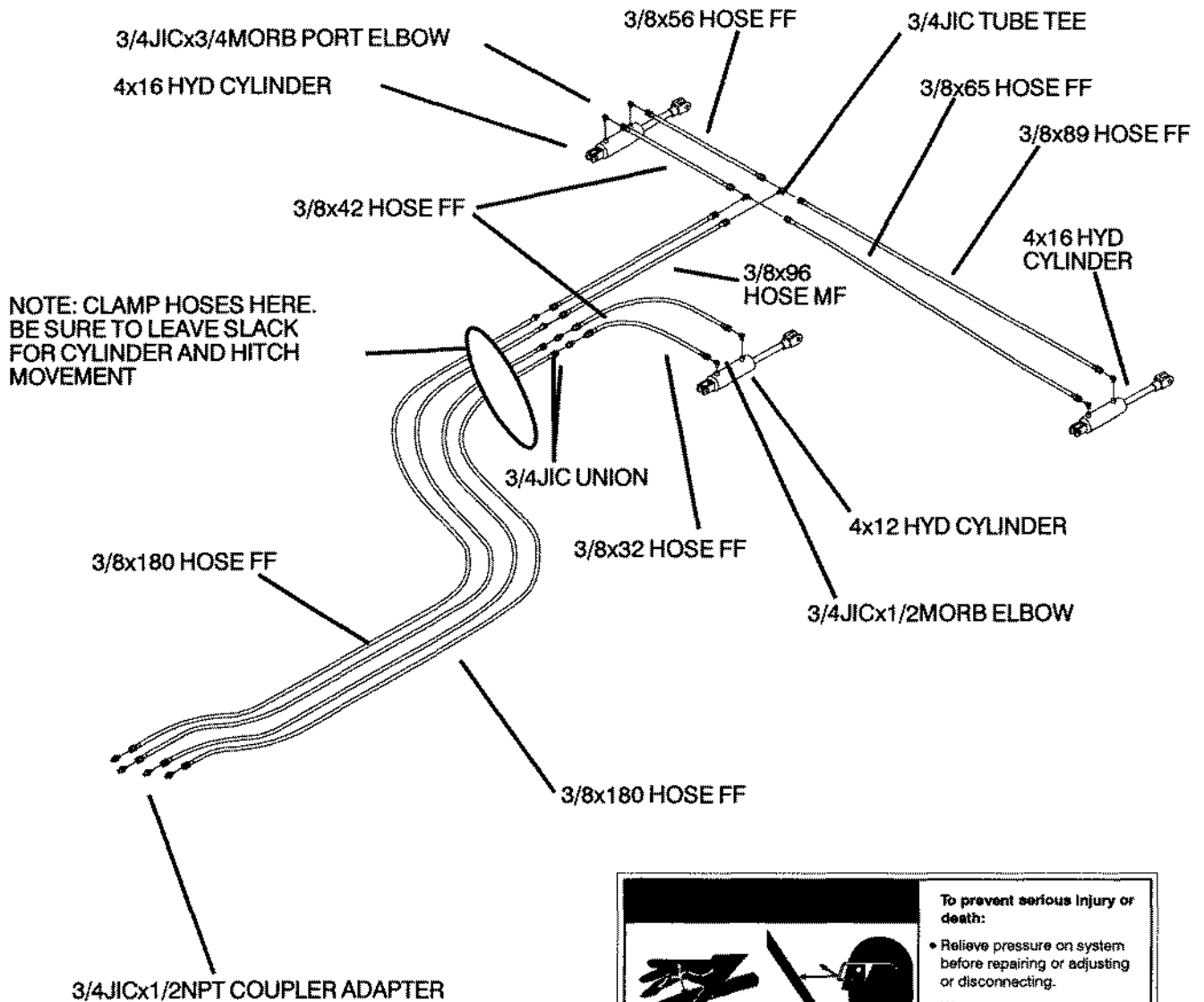
PIVOT BRACKET ASSEMBLY



HARROW SECTION ASSEMBLY



HYDRAULICS



NOTE: CLAMP HOSES HERE. BE SURE TO LEAVE SLACK FOR CYLINDER AND HITCH MOVEMENT



Note: On cylinders fitted with ORB ports, pipe compound should not be used. ORB fittings should be threaded into the ports until the O-ring contacts the port and the fitting is facing the proper direction. Then the nut on the fitting should be tightened to the port.

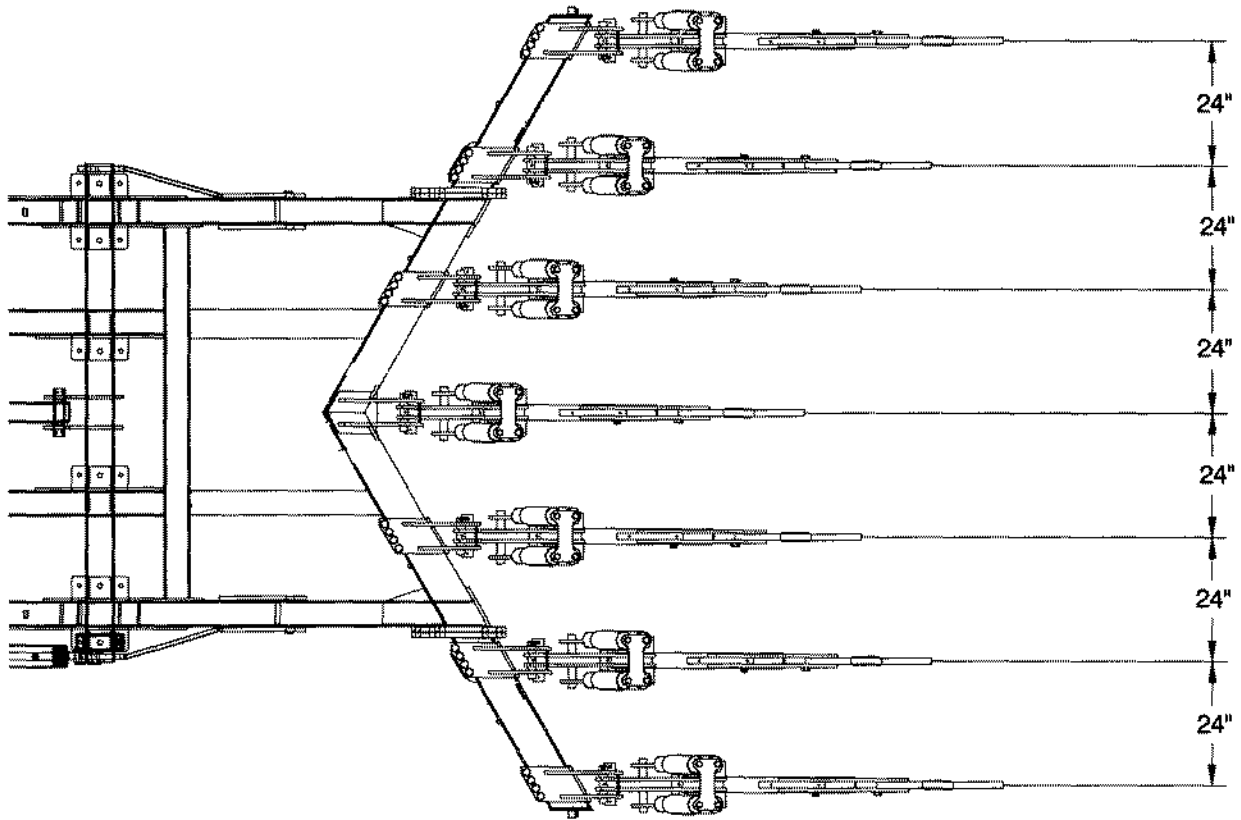
	<p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Relieve pressure on system before repairing or adjusting or disconnecting. • Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands. • Keep all components in good repair.
	<p>HIGH PRESSURE FLUID HAZARD</p>

Make sure all connections are tight and that all hoses and lines are in good condition before applying pressure to the system. Relieve pressure before disconnecting line or performing work on the hydraulic system. To find a leak under pressure, use a small piece of cardboard or wood; **NEVER USE YOUR HANDS!**

Hydraulic fluid escaping under pressure can have enough force to penetrate the skin. Hydraulic fluid may also infect a small cut or break in skin. A serious infection or reaction can result if medical treatment is not given immediately.

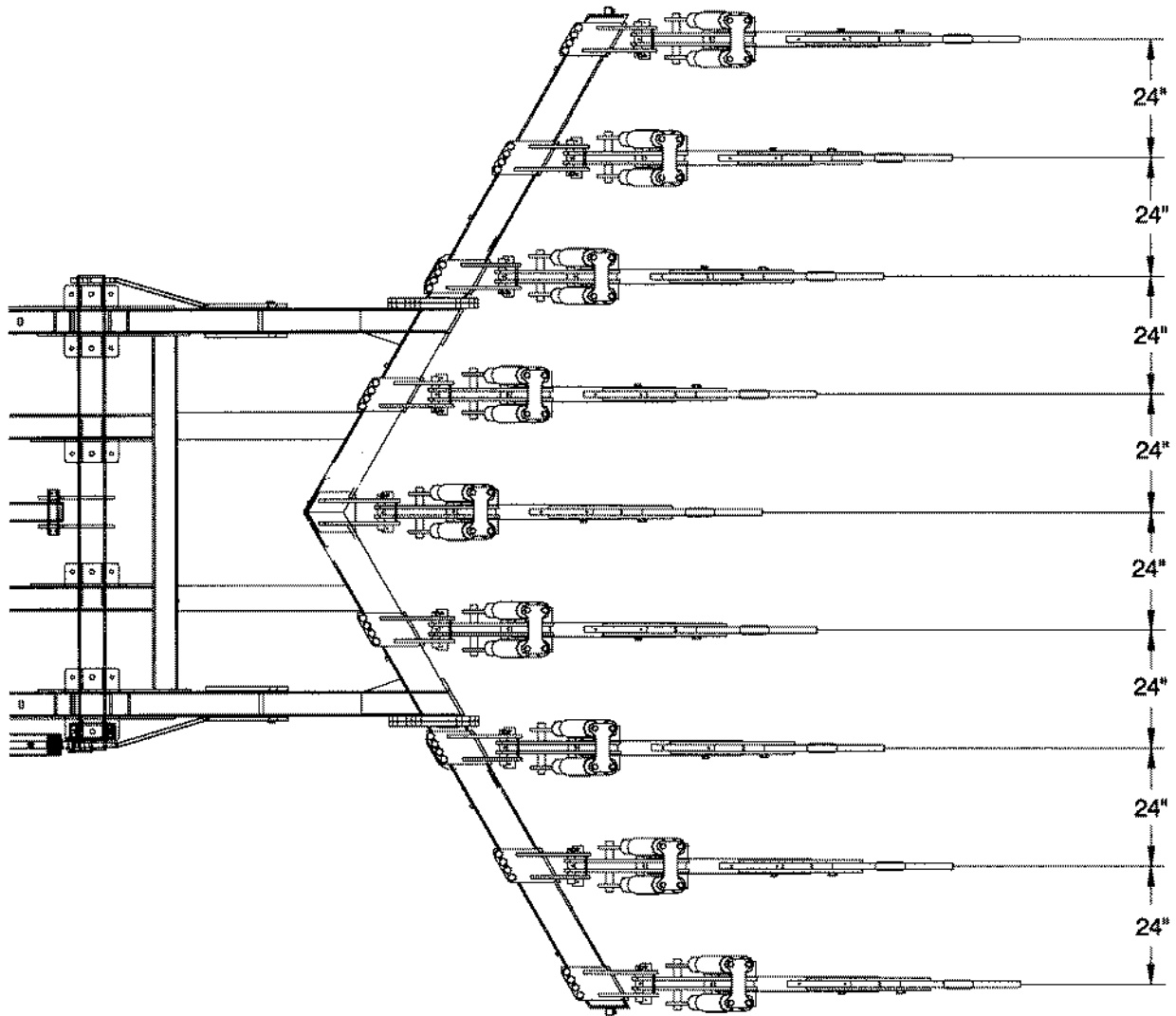
SHANK PLACEMENTS

7 SHANK - 24" SPACING



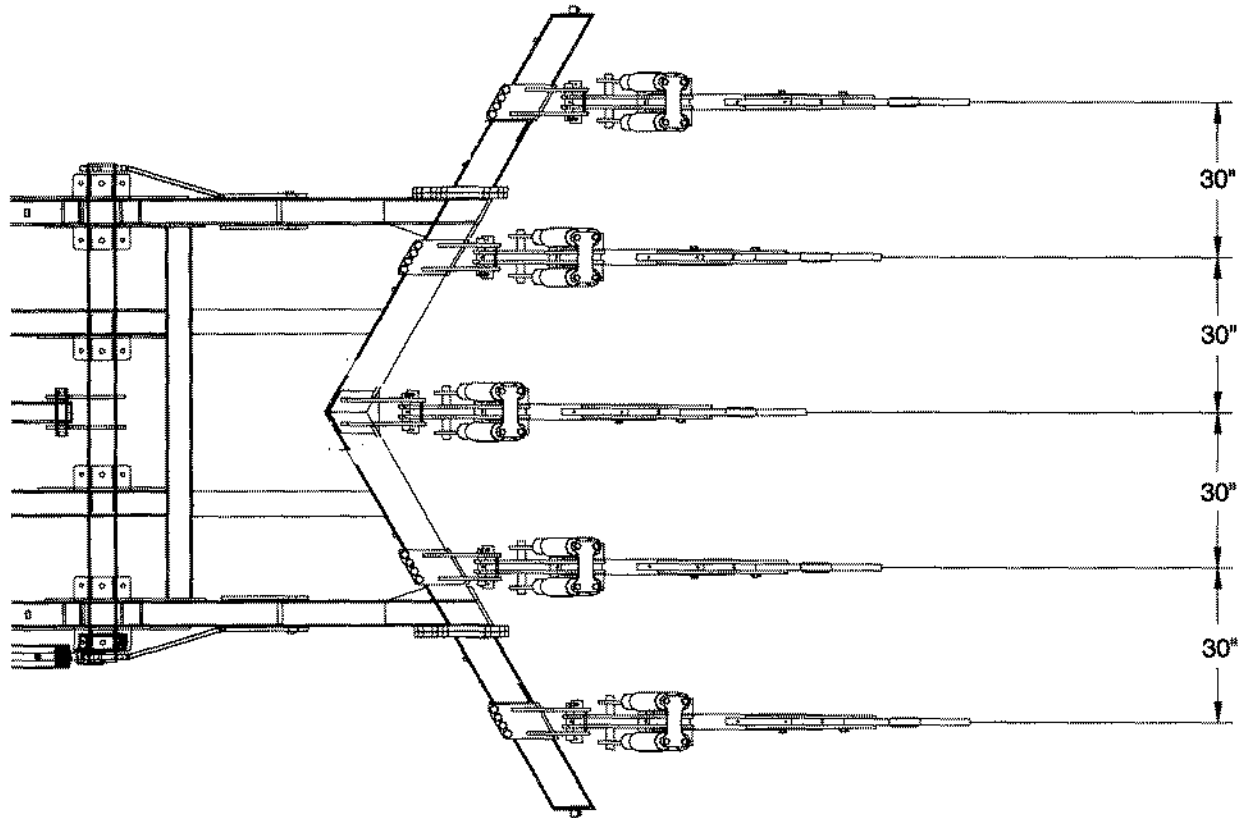
SHANK PLACEMENTS

9 SHANK - 24" SPACING



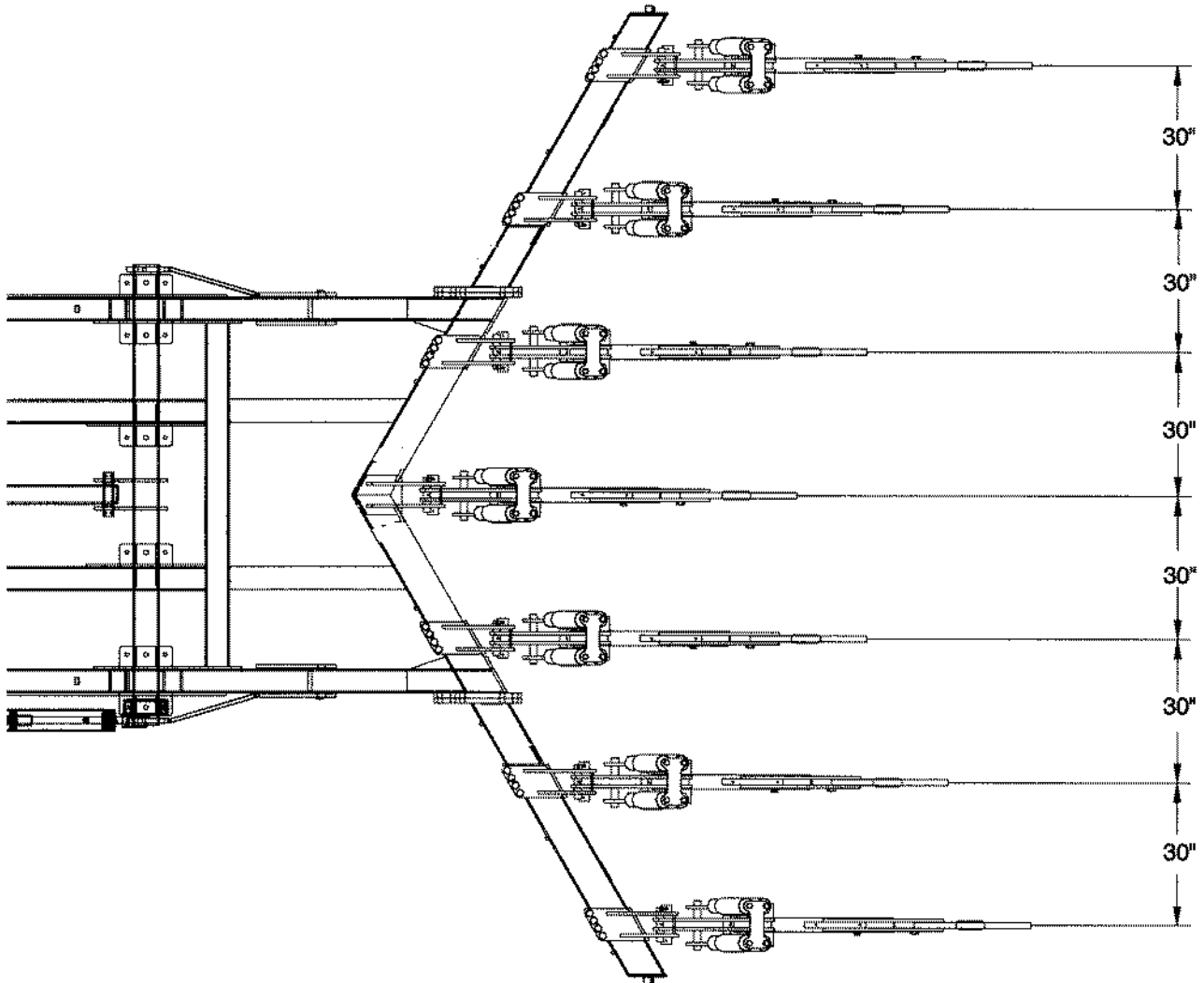
SHANK PLACEMENTS

5 SHANK - 30" SPACING



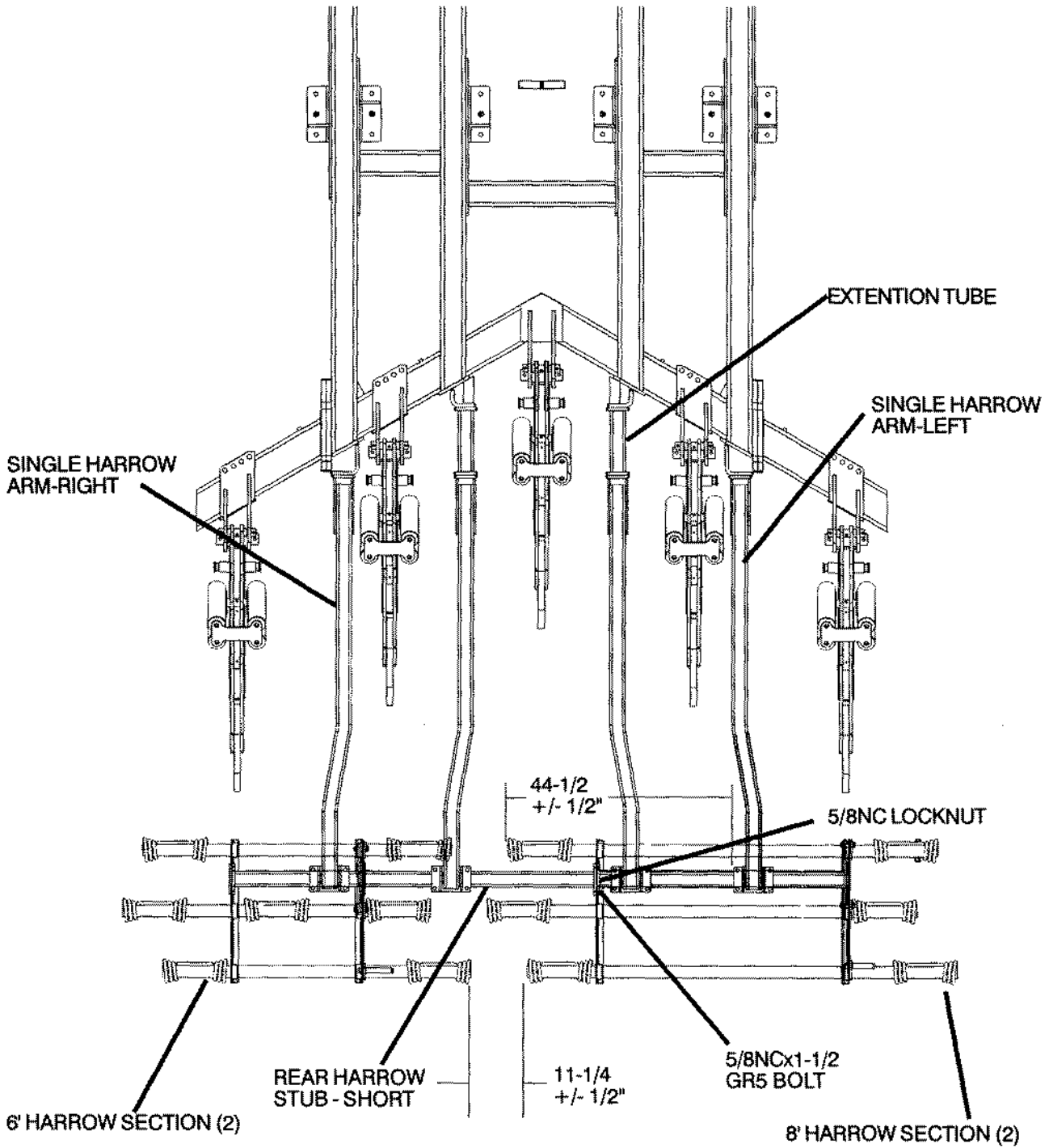
SHANK PLACEMENTS

7 SHANK - 30" SPACING



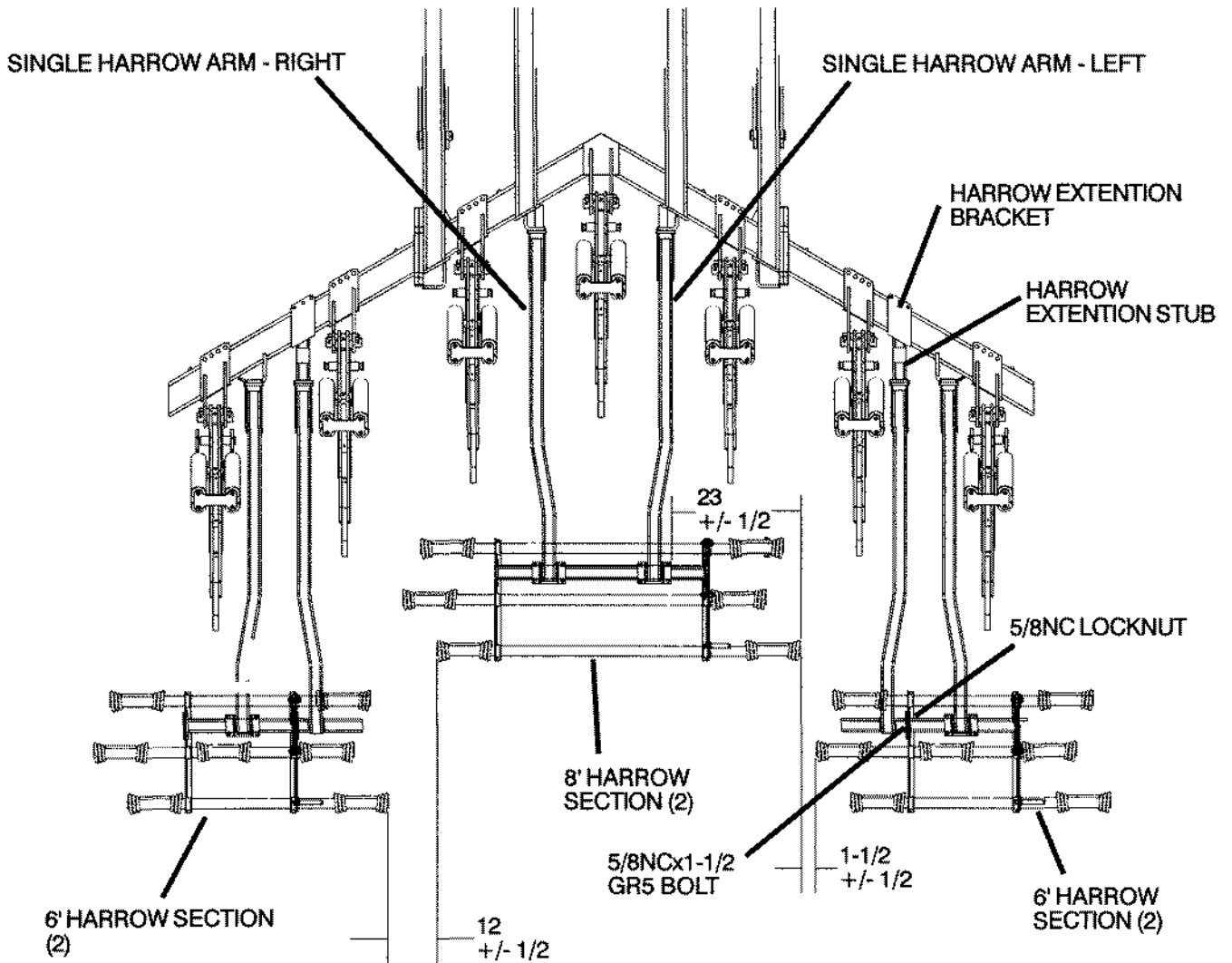
HARROW PLACEMENTS

5 SHANK - 30" SPACING



HARROW PLACEMENTS

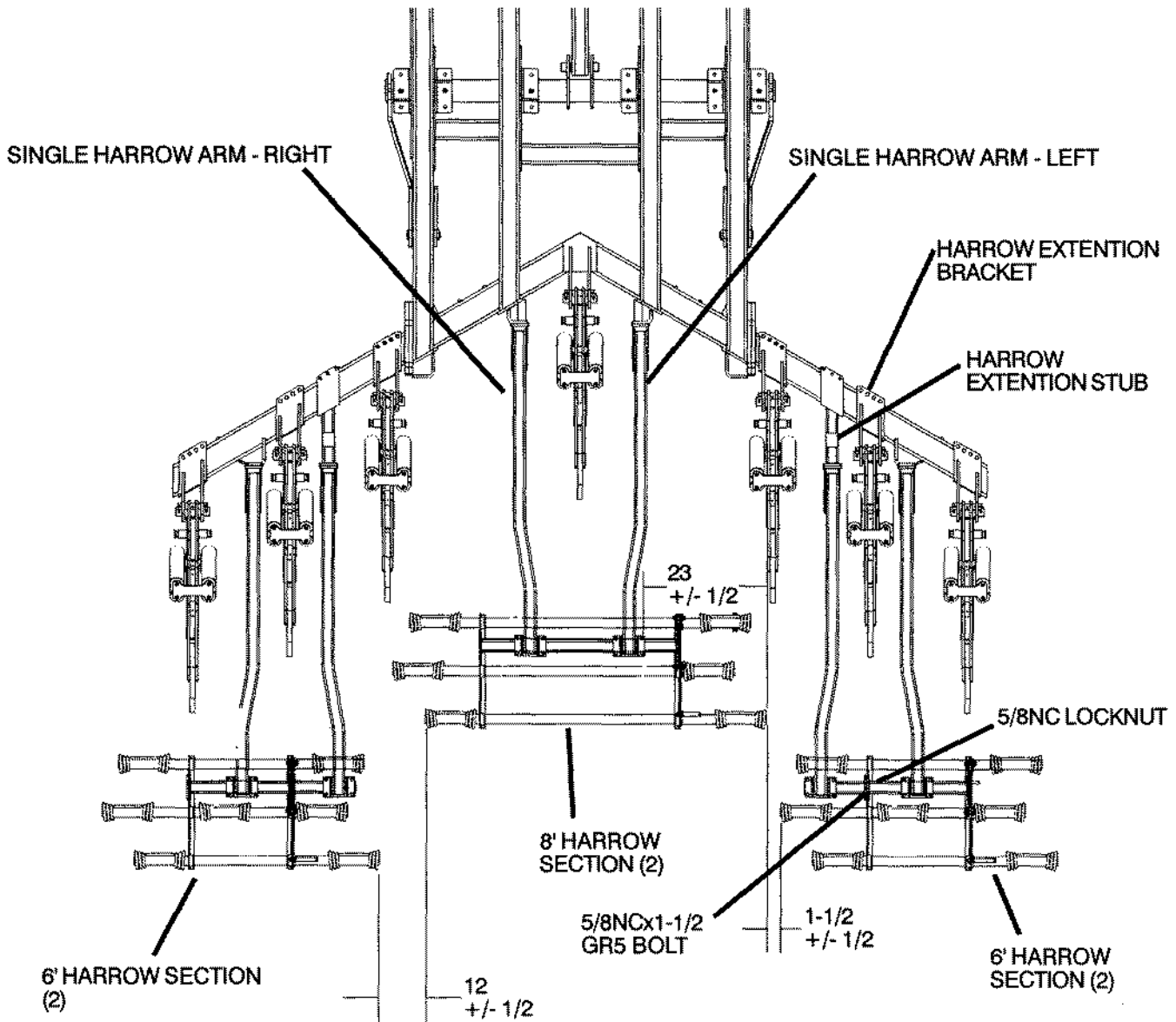
7 SHANK - 30" SPACING



NOTE: HARROW EXTENSION BRACKETS AND STUBS SHOULD BE IN THE SHORT POSITION.

HARROW PLACEMENTS

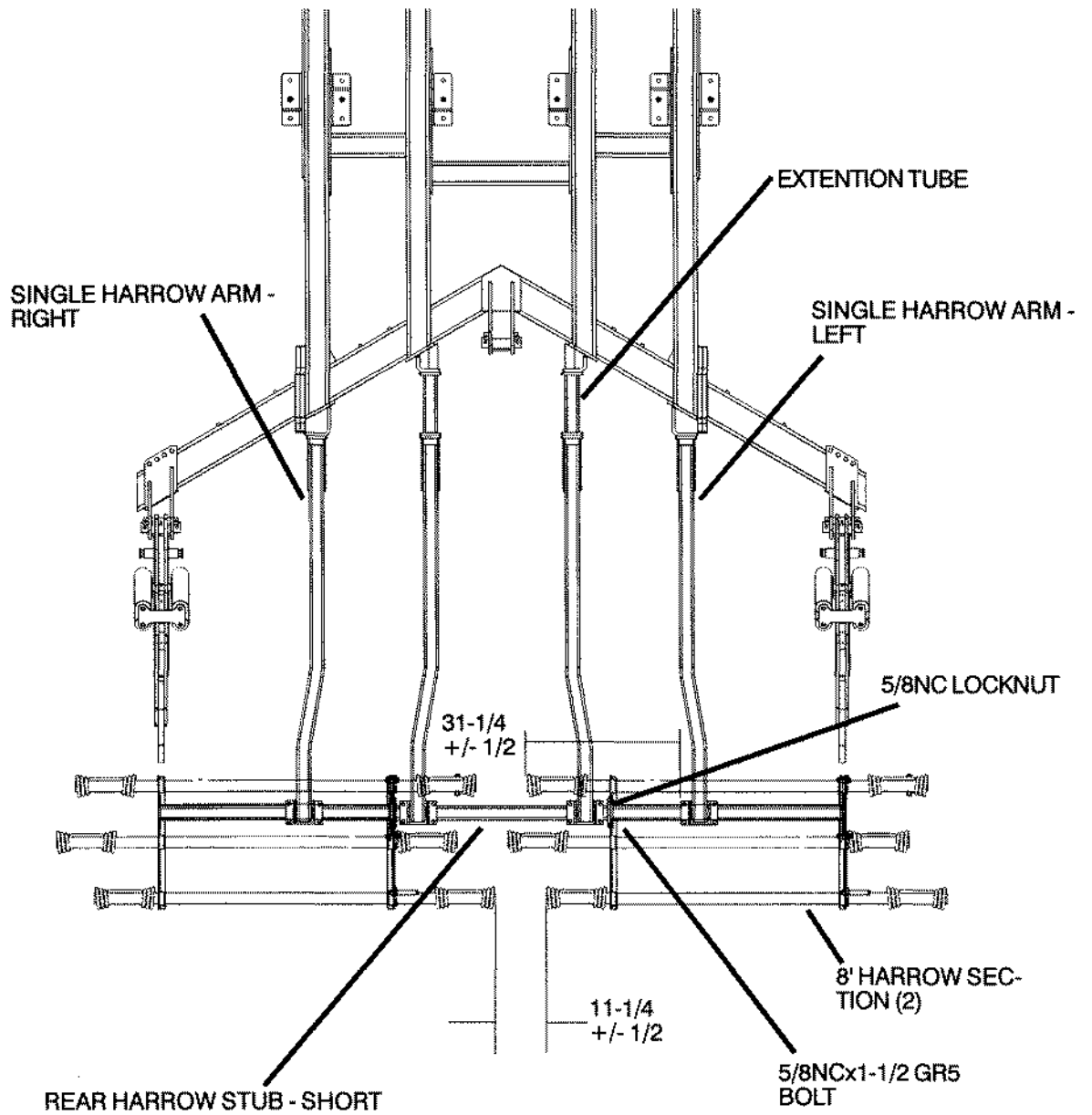
9 SHANK - 24" SPACING



NOTE: HARROW EXTENSION BRACKET AND STUB SHOULD BE IN THE LONG POSITION.

HARROW PLACEMENTS

7 SHANK - 24" SPACING



WEDGE (238922) SHOULD BE INSTALLED AS SHOWN. THE WEDGE MAY BE LOOSE INITIALLY, BUT AFTER TIGHTING THE BOLTS THE TOP AND BOTTOM PLATES SHOULD BEND CAUSING THE WEDGE TO GRIP THE TUBE. EACH MOUNT SHOULD USE 4 WEDGES AS SHOWN IN THE DRAWING.

