

ASSEMBLY INSTRUCTIONS

WIL-RICH DRAWN & 3PT 6600 V-RIPPER

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HUTCHINSON WIL-RICH
MANUFACTURING COMPANY
P.O. BOX 1030 WAHPETON, ND 58074

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 AND ASSEMBLY MANUALS PROVIDE
THE NECESSARY INFORMATION.**

**IF A MANUAL IS LOST FOR A PARTICULAR IMPLEMENT,
A REPLACEMENT SHOULD BE ORDERED AT ONCE.**

**OPERATOR'S AND ASSEMBLY MANUALS ARE
AVAILABLE AT NO CHARGE UPON REQUEST**

ADDRESS INQUIRES TO:

HUTCHINSON WIL-RICH MANUFACTURING COMPANY

P.O. BOX 1030

WAHPETON, ND 58074

(701) 642-2621

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.

Whenever the terms "left" and "right" are used, it should 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 should 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 should 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 locations where the specified shear bolt (42359) must be used to prevent damage to the implement.

Bolts with no marking are grade 2.

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

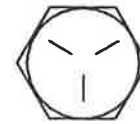
Grade 8 bolts furnished with the machine are identified by six radial lines on the head.

All U-Bolts are grade 5.

GRADE 8



GRADE 5



GRADE 2



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 GRADE	2	18	45	89	160	252
	5	30	68	140	240	360
	8	40	100	196	340	528
UNF GRADE	2	21	51	102	178	272
	5	32	70	168	264	392
	8	48	112	216	368	572

CI-75623



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

CI-77637

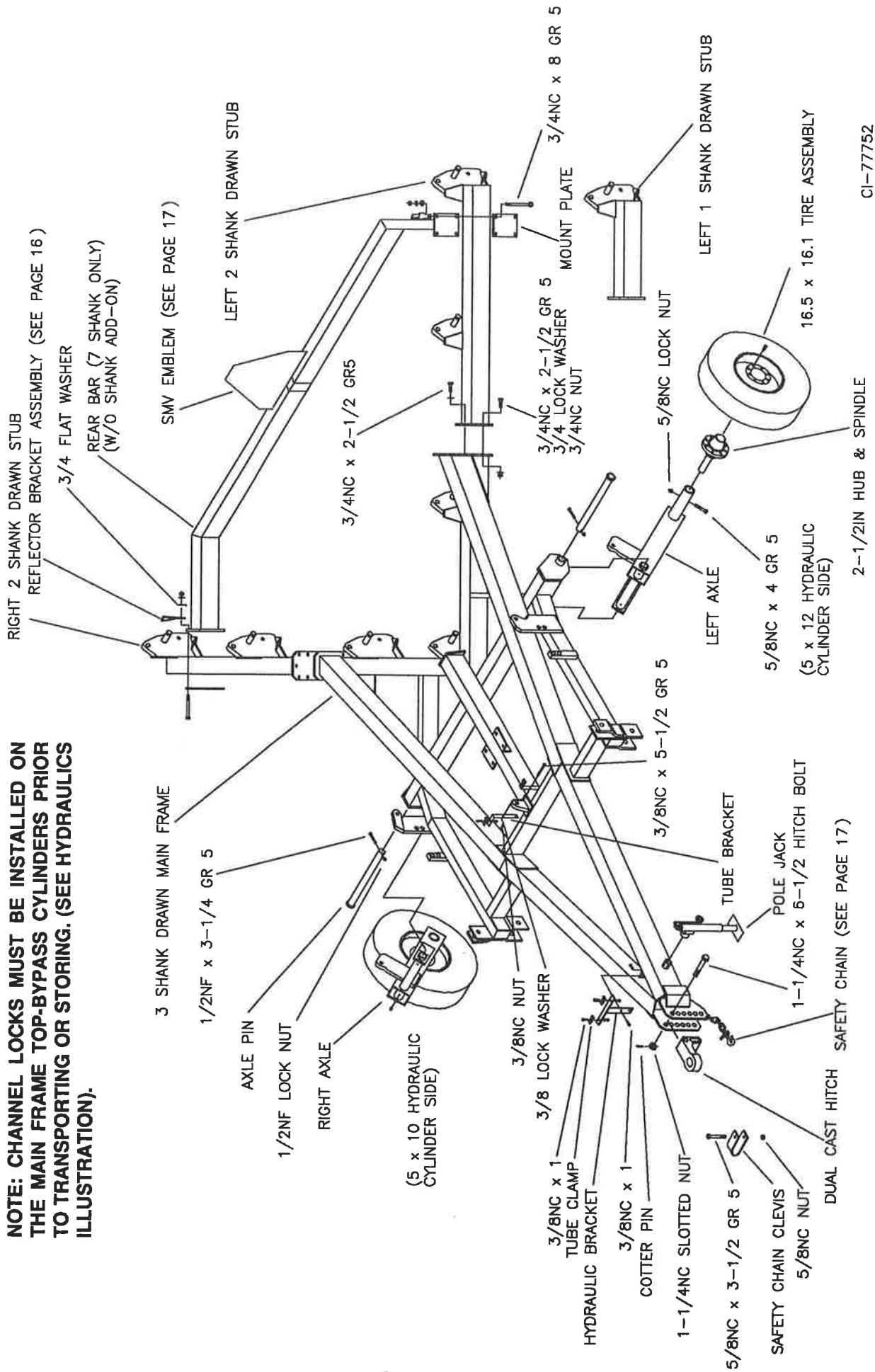


WARNING

1. BEFORE OPERATING – STUDY OPERATOR'S MANUAL, SAFETY MESSAGES AND SAFE OPERATING PROCEDURES, READ SAFETY SIGNS ON THIS MACHINE.
2. TRANSPORT ON PUBLIC ROADS – OBSERVE FEDERAL, STATE AND LOCAL REGULATIONS: DISPLAY SMV EMBLEM; ATTACH PROPER STRENGTH IMPLEMENT SAFETY CHAIN; AND LIMIT MAXIMUM SPEED TO 20MPH (32KM/H).
3. LOWER OR BLOCK ALL ELEVATED COMPONENTS BEFORE SERVICING OR LEAVING THIS MACHINE.

DRAWN MAIN FRAME ASSEMBLY (SPRING RESET TRIP-SHOWN)

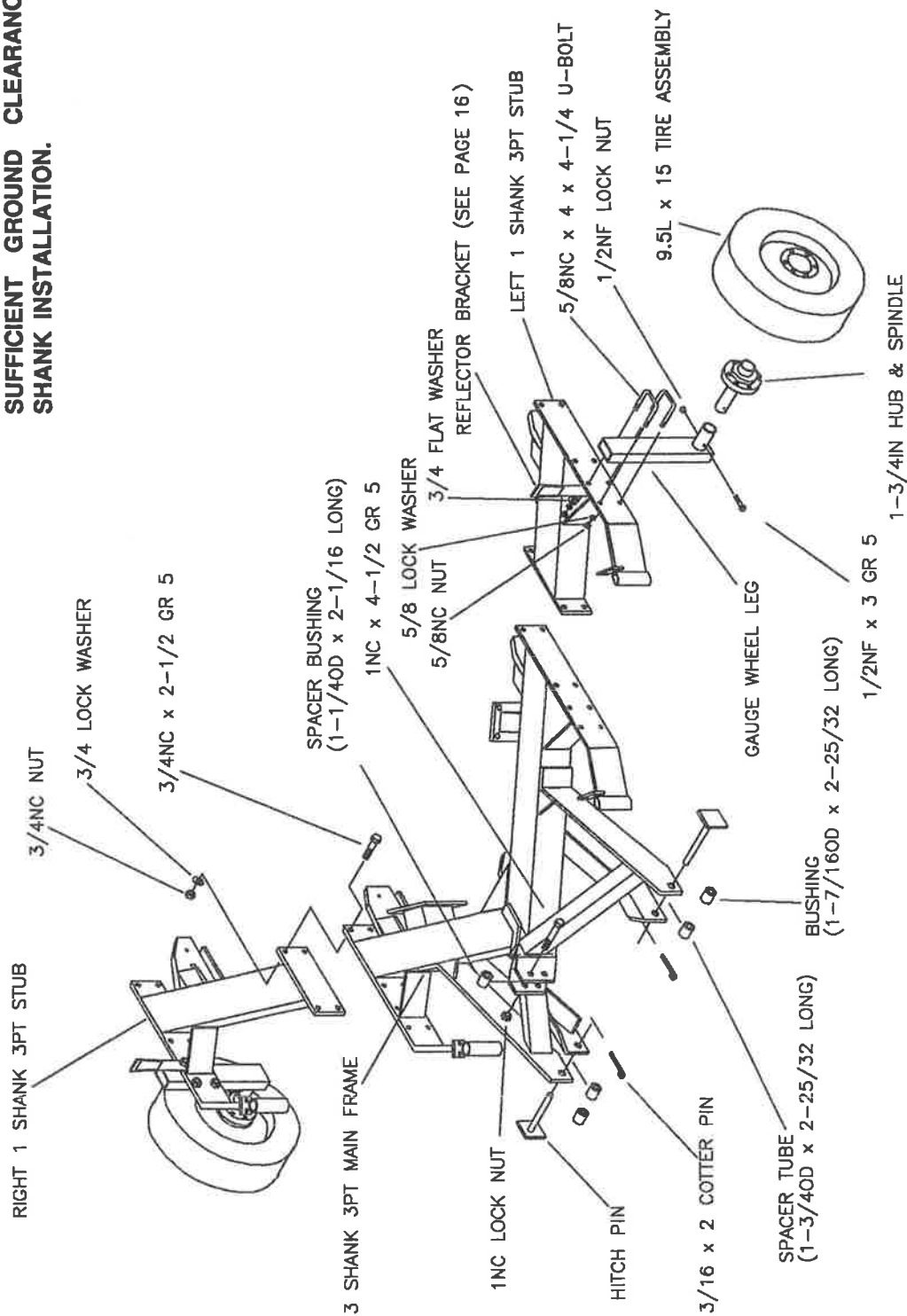
NOTE: CHANNEL LOCKS MUST BE INSTALLED ON THE MAIN FRAME TOP-BYPASS CYLINDERS PRIOR TO TRANSPORTING OR STORING. (SEE HYDRAULICS ILLUSTRATION).



3PT MAIN FRAME ASSEMBLY

(SHEAR BOLT TRIP - SHOWN)

NOTE: ADEQUATELY SUPPORT THE FRAME DURING ASSEMBLY. ALLOW SUFFICIENT GROUND CLEARANCE FOR SHANK INSTALLATION.

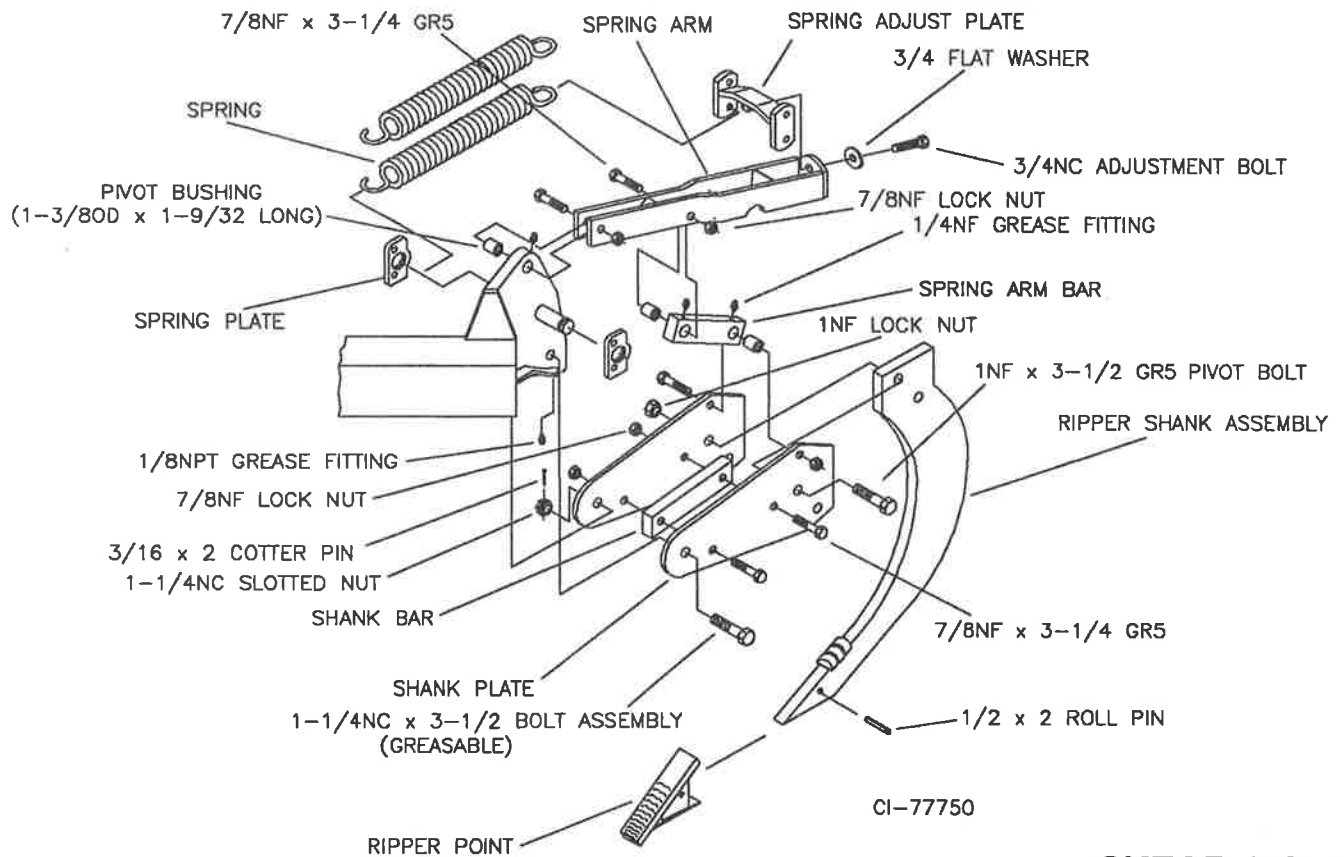


CI-77613

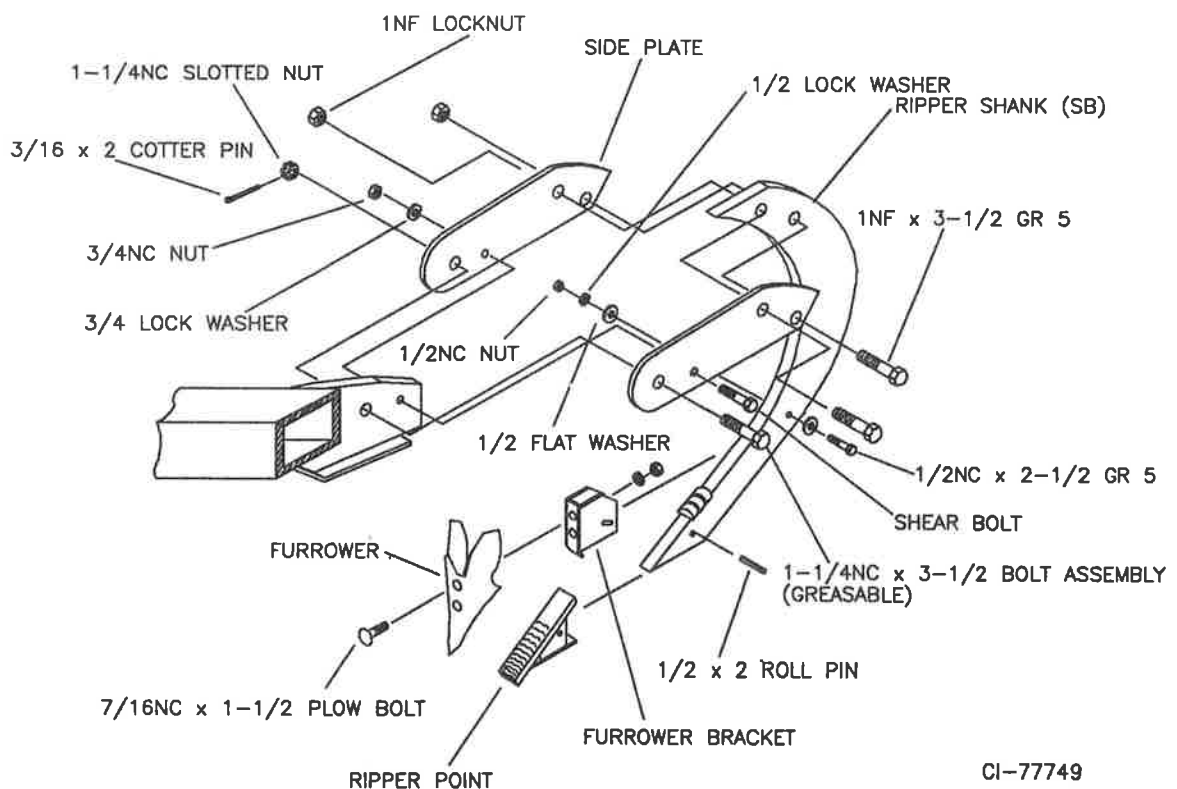
CATEGORY III QUICKHITCH SET-UP SHOWN
(SEE PAGE 13 FOR ADDITIONAL HITCHING ARRANGEMENTS).

SHANK ASSEMBLY

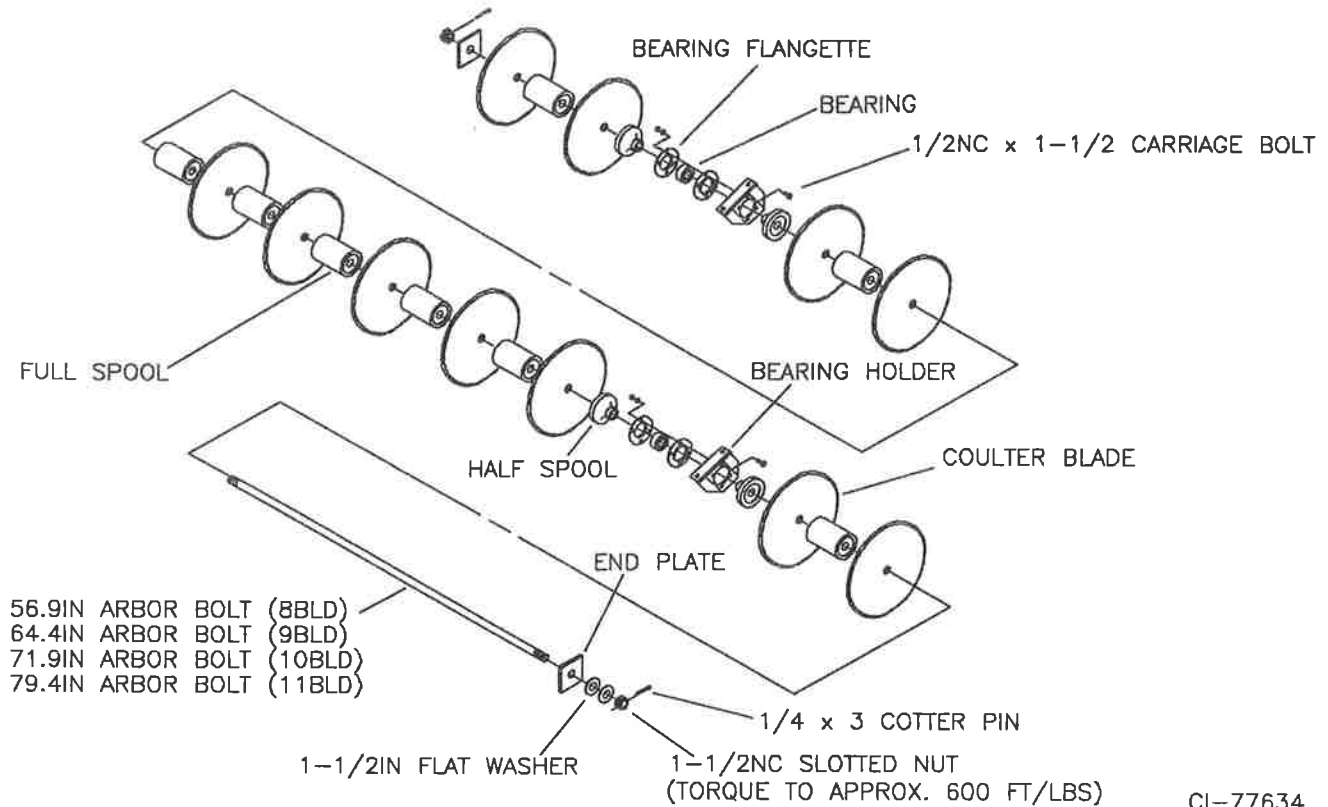
SPRING RESET



SHEAR BOLT



GANG ASSEMBLY

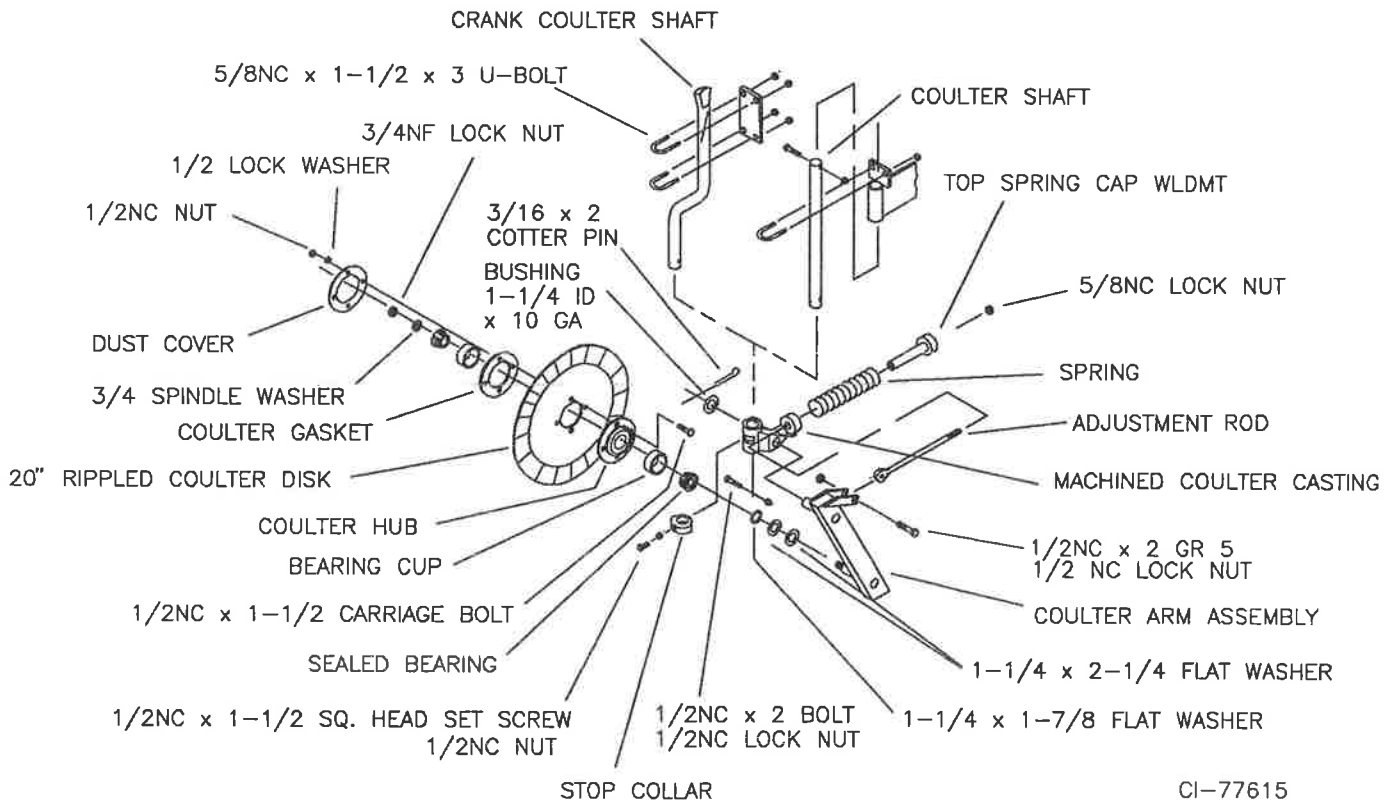


CI-77634



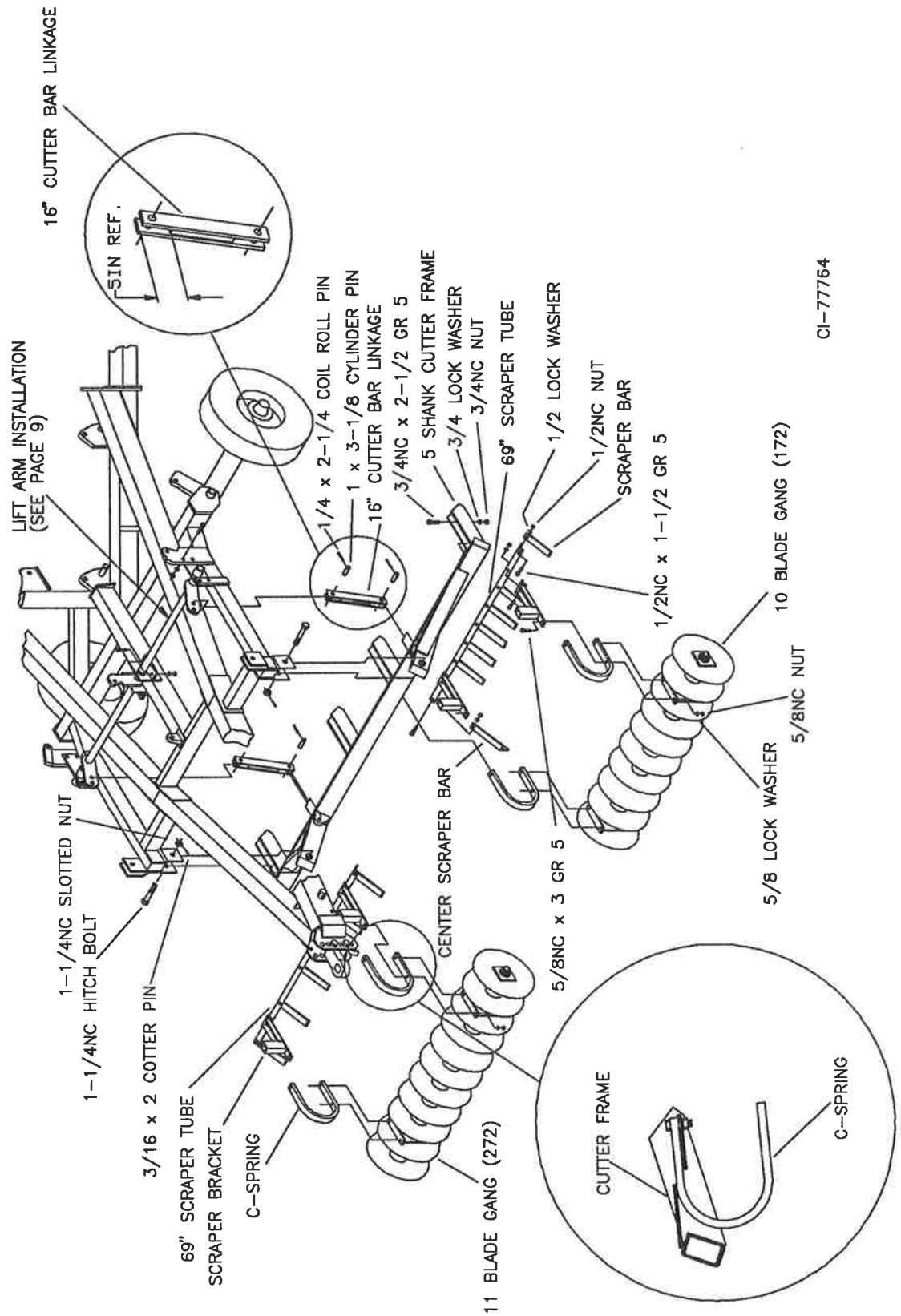
NOTE: CONTACT WITH THE BLADES MAY CAUSE SEVERE INJURY. EXERCISE CAUTION WHEN HANDLING OR SERVICING THE ASSEMBLIES.

COULTER ASSEMBLY



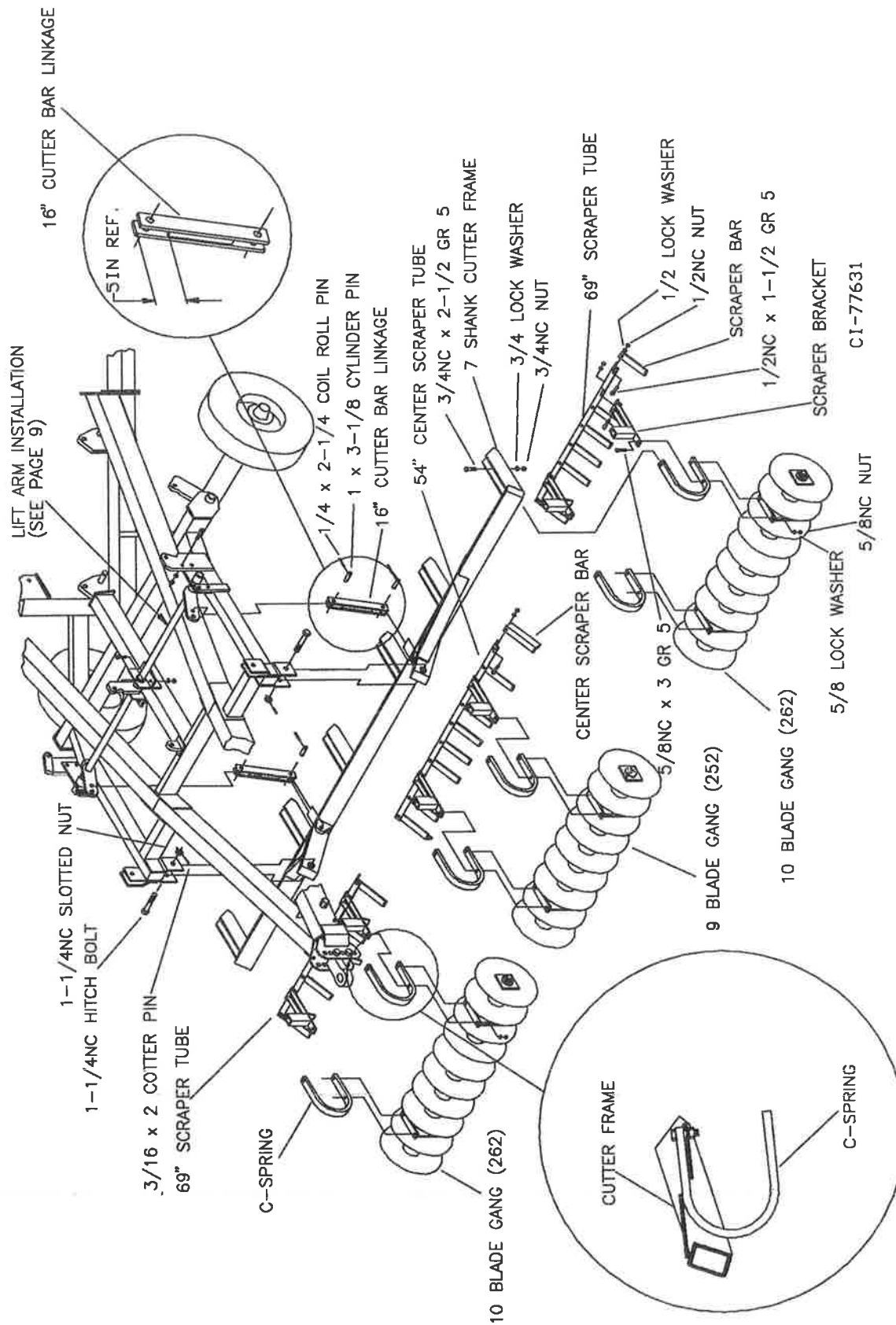
CI-77615

5 SHANK CUTTER GANG INSTALLATION

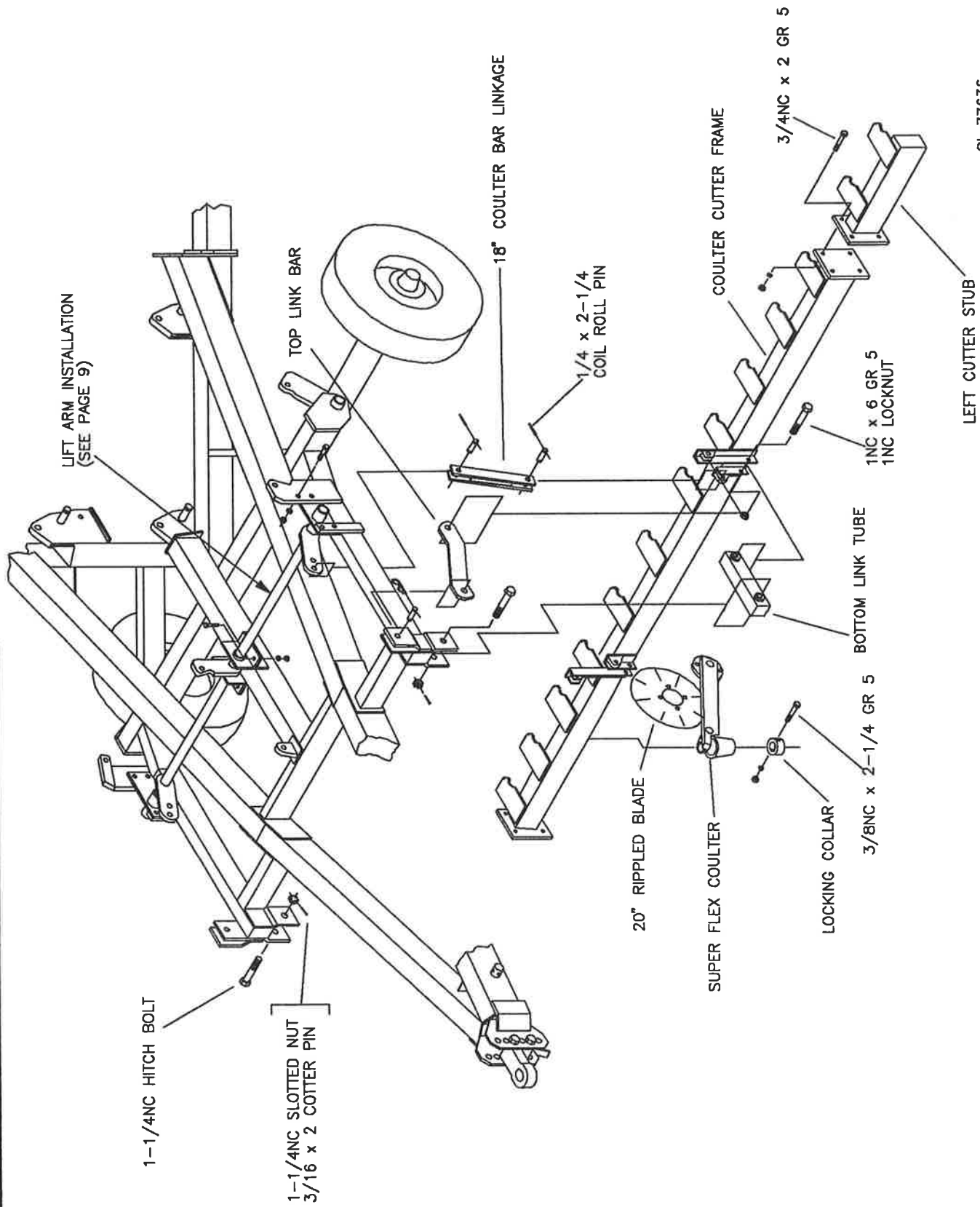


CI-77764

7 SHANK CUTTER GANG INSTALLATION

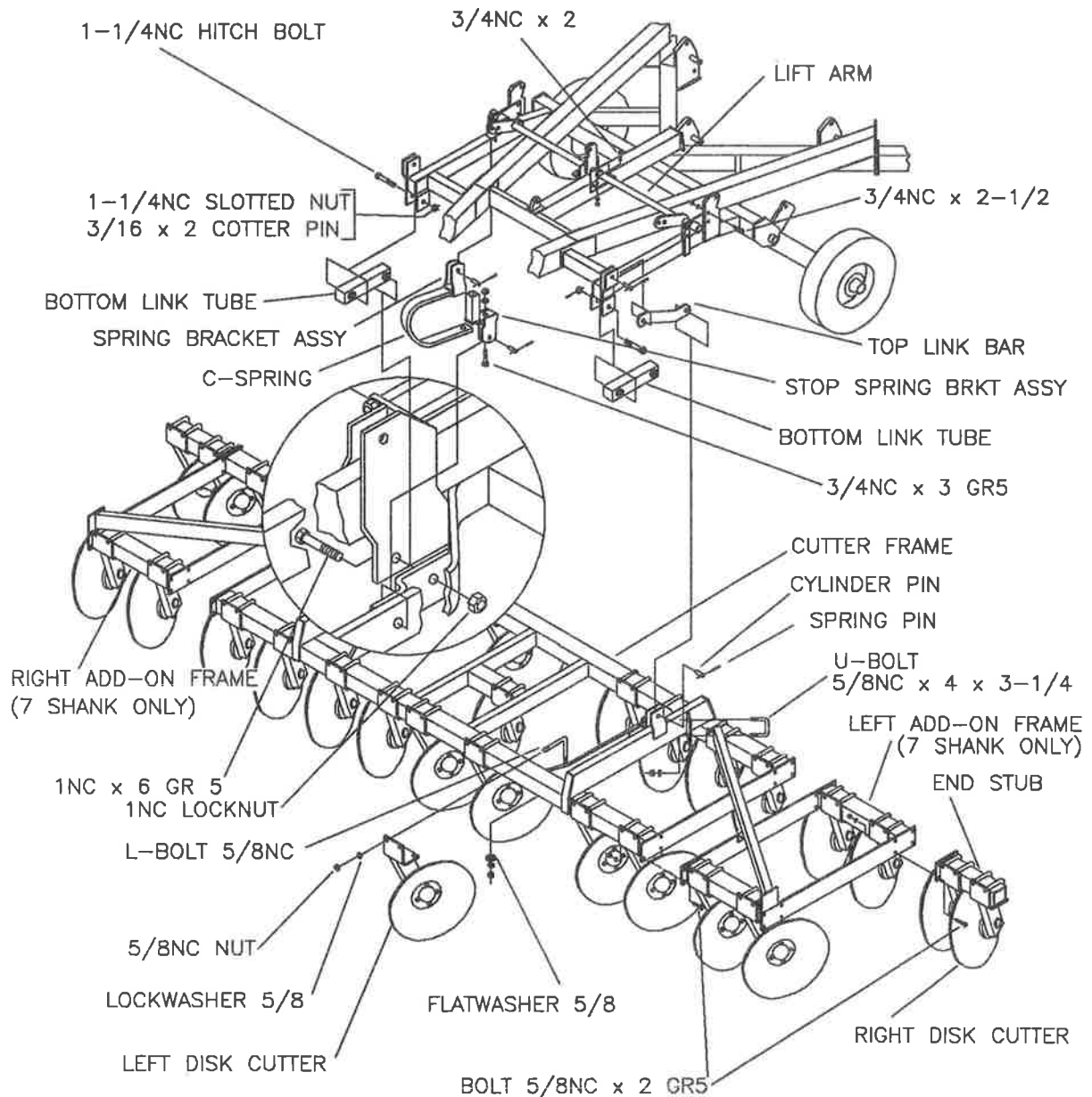


COULTER GANG INSTALLATION



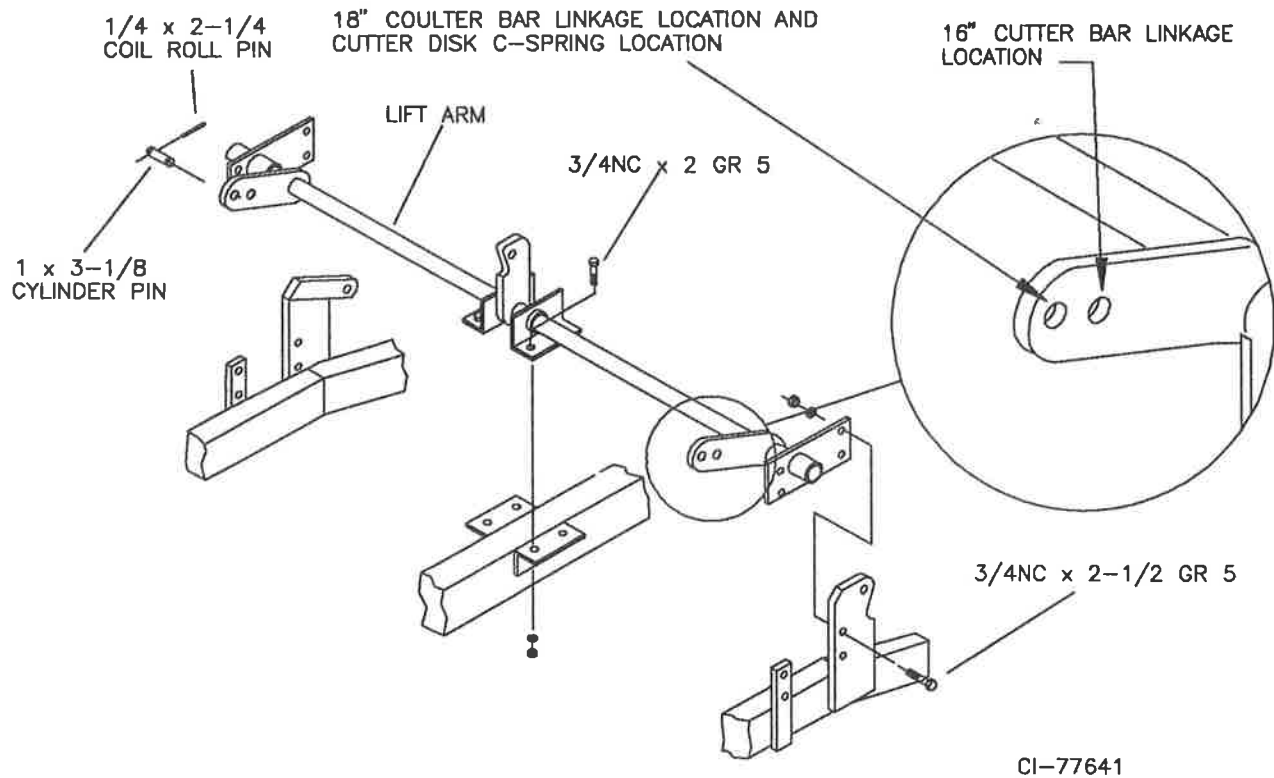
CI-77636

CUTTER DISK INSTALLATION



NOTE: THE SPACING BETWEEN THE CUTTERS ON EITHER BAR CAN BE VARIED TO SUIT TRASH CONDITIONS, BUT THE SPACING SHOULD BE BETWEEN 14 TO 16". THE REAR BAR HAS THE SAME SPACING BUT SHOULD BE OFFSET APPROXIMATELY 1/2 THE USED SPACING. CUTTERS CAN BE SHIFTED AROUND TO HANDLE TIGHT POSITIONS AND IMPROVE TRASH FLOW. SEE DISK PLACEMENTS ON PAGE 19.

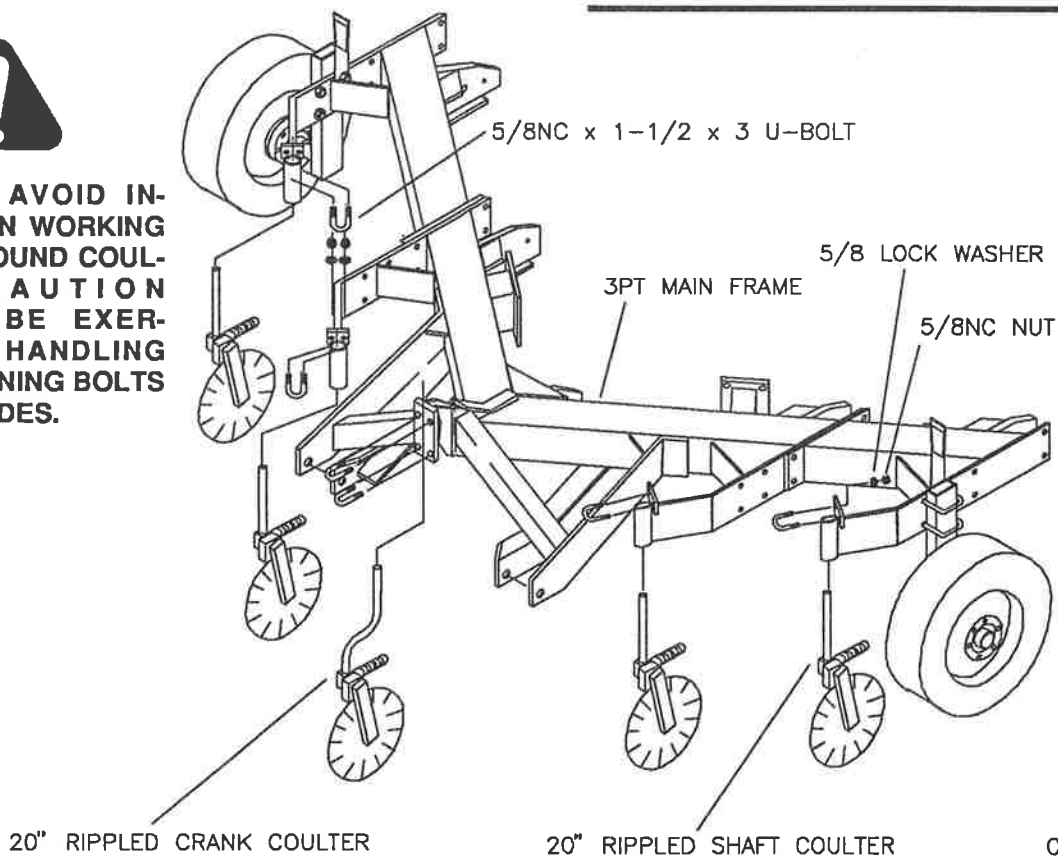
LIFT ARM INSTALLATION



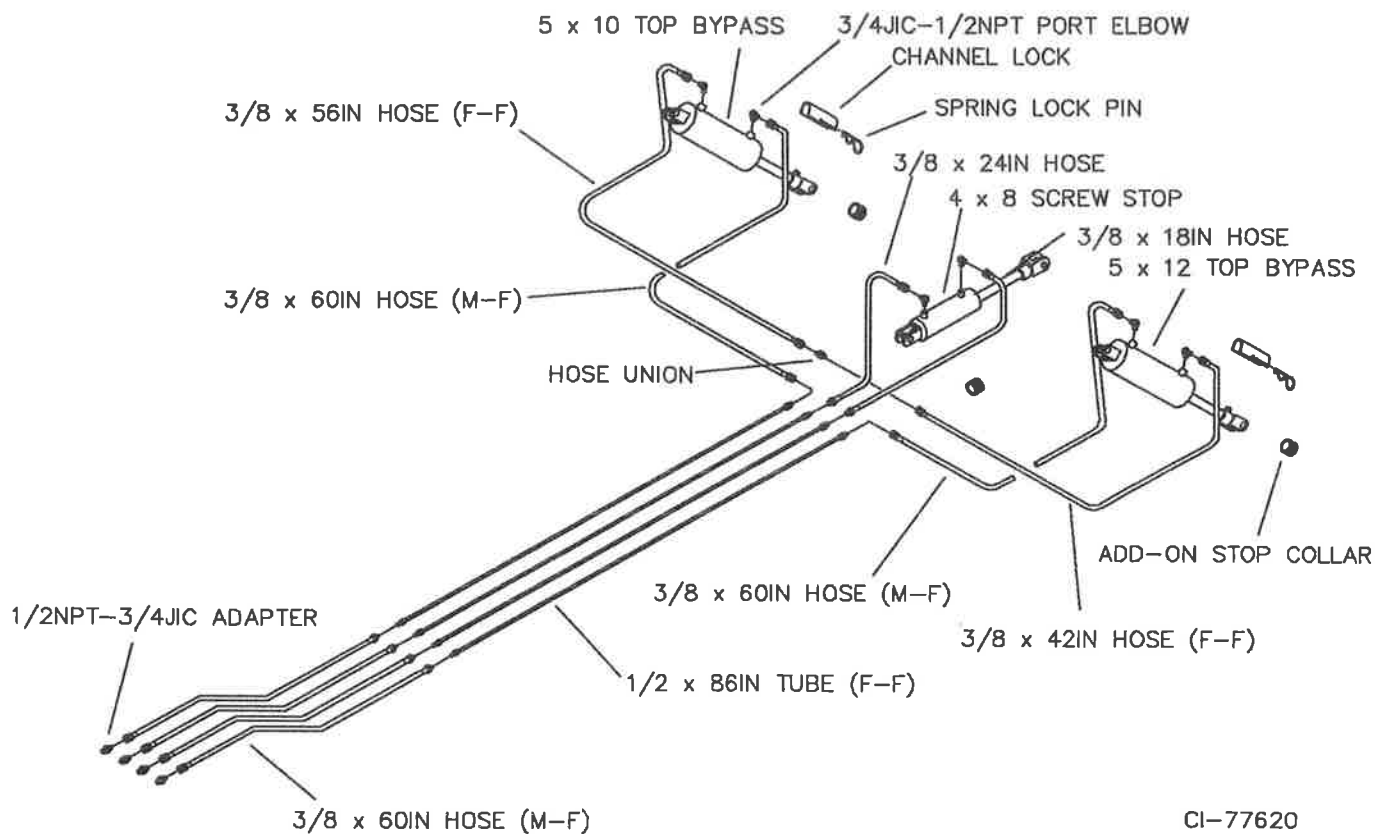
COULTER INSTALLATION



NOTE: TO AVOID INJURY WHEN WORKING ON OR AROUND COULTERS, CAUTION SHOULD BE EXERCISED IN HANDLING OR TIGHTENING BOLTS NEAR BLADES.



HYDRAULICS



CI-77620



NOTE: HYDRAULIC PIPE COMPOUND SHOULD BE USED TO PREVENT LEAKAGE ON ALL PIPE THREADS (CYLINDER PORTS ONLY).

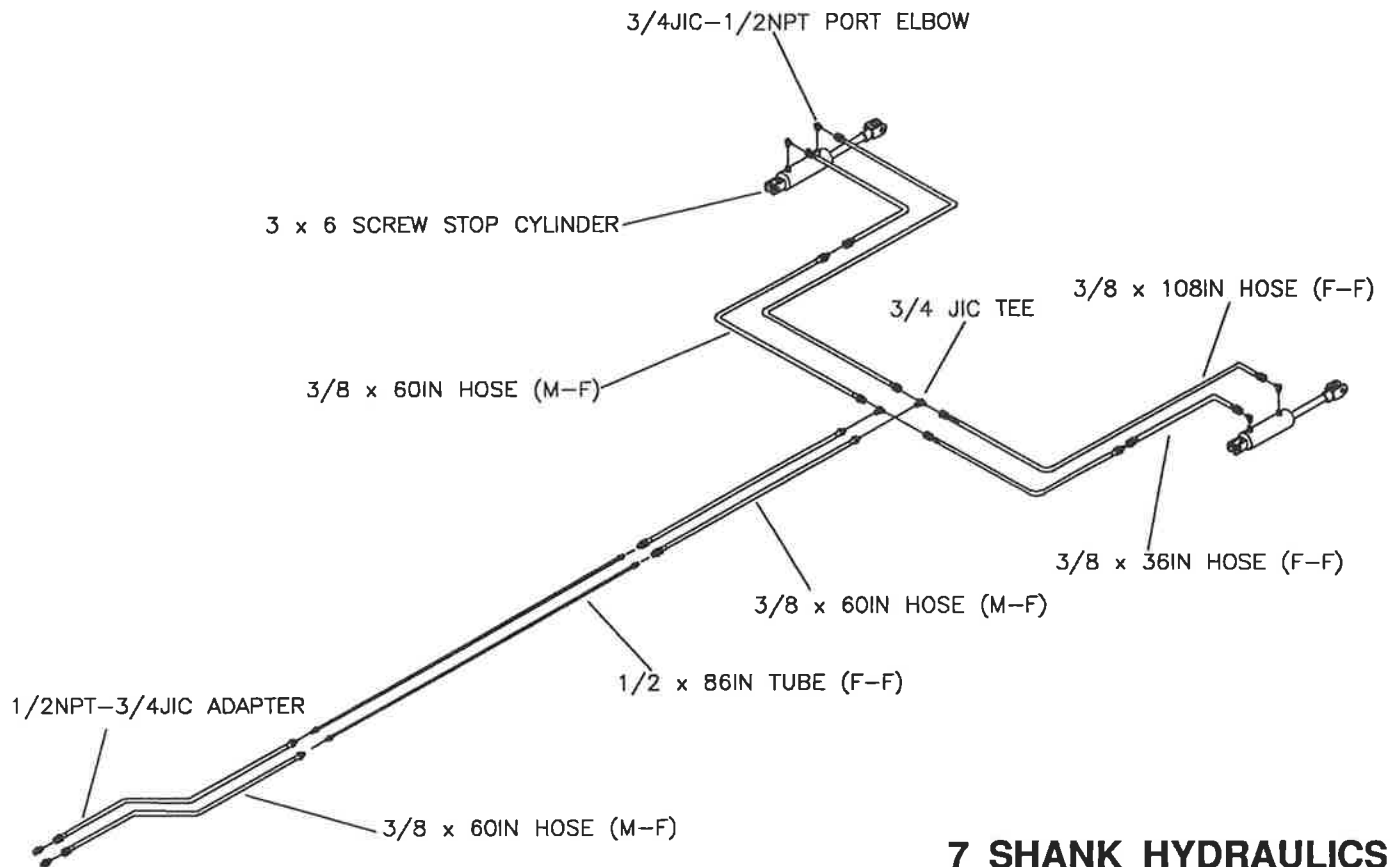
NOTE: TORQUE ALL 37 DEGREE FLARE END FITTINGS AND HOSES TO 20-40 FOOT POUNDS. DO NOT OVERTIGHTEN. FLARES DO THE SEALING, NOT THREAD DEFORMATION.

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!**

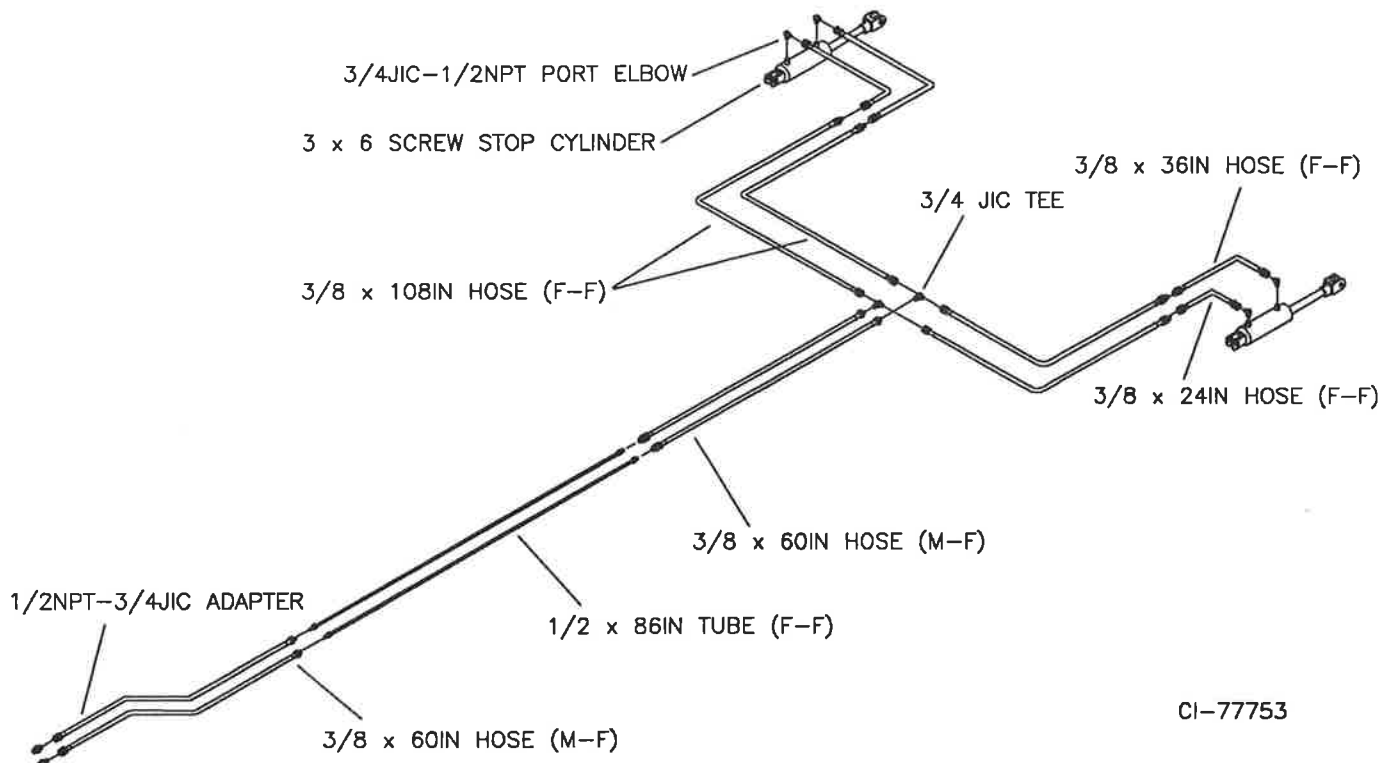
Hydraulic fluid escaping under pressure can have enough force to penetrate the skin. Hydraulic fluid may also infect a small cut or break in the skin. A serious infection or reaction can result if medical treatment is not given immediately.

CHISEL PLOW SHANK ADD-ON FRAME HYDRAULICS

5 SHANK HYDRAULICS



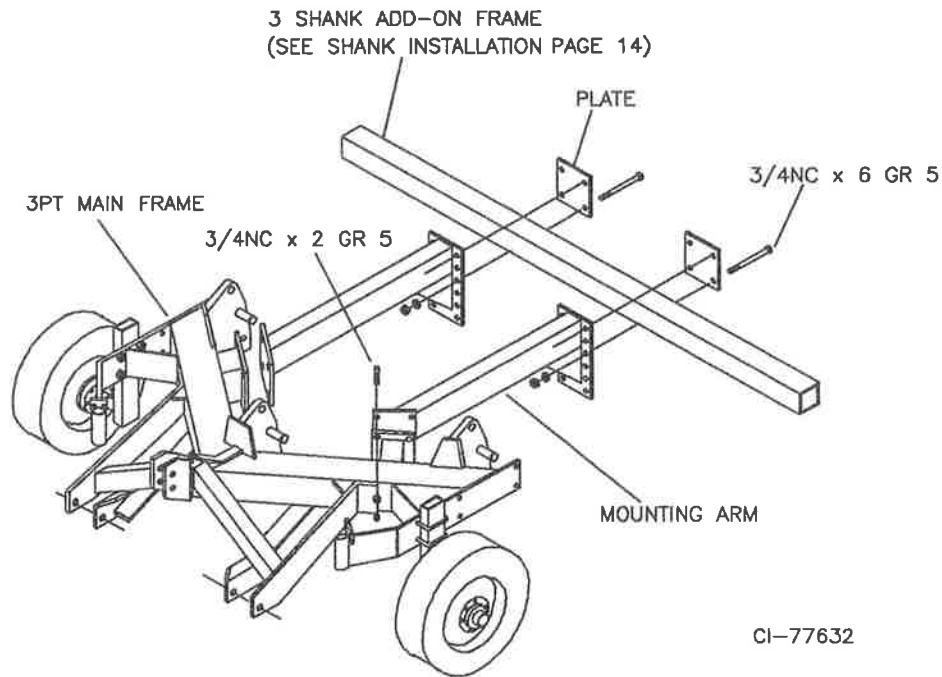
7 SHANK HYDRAULICS



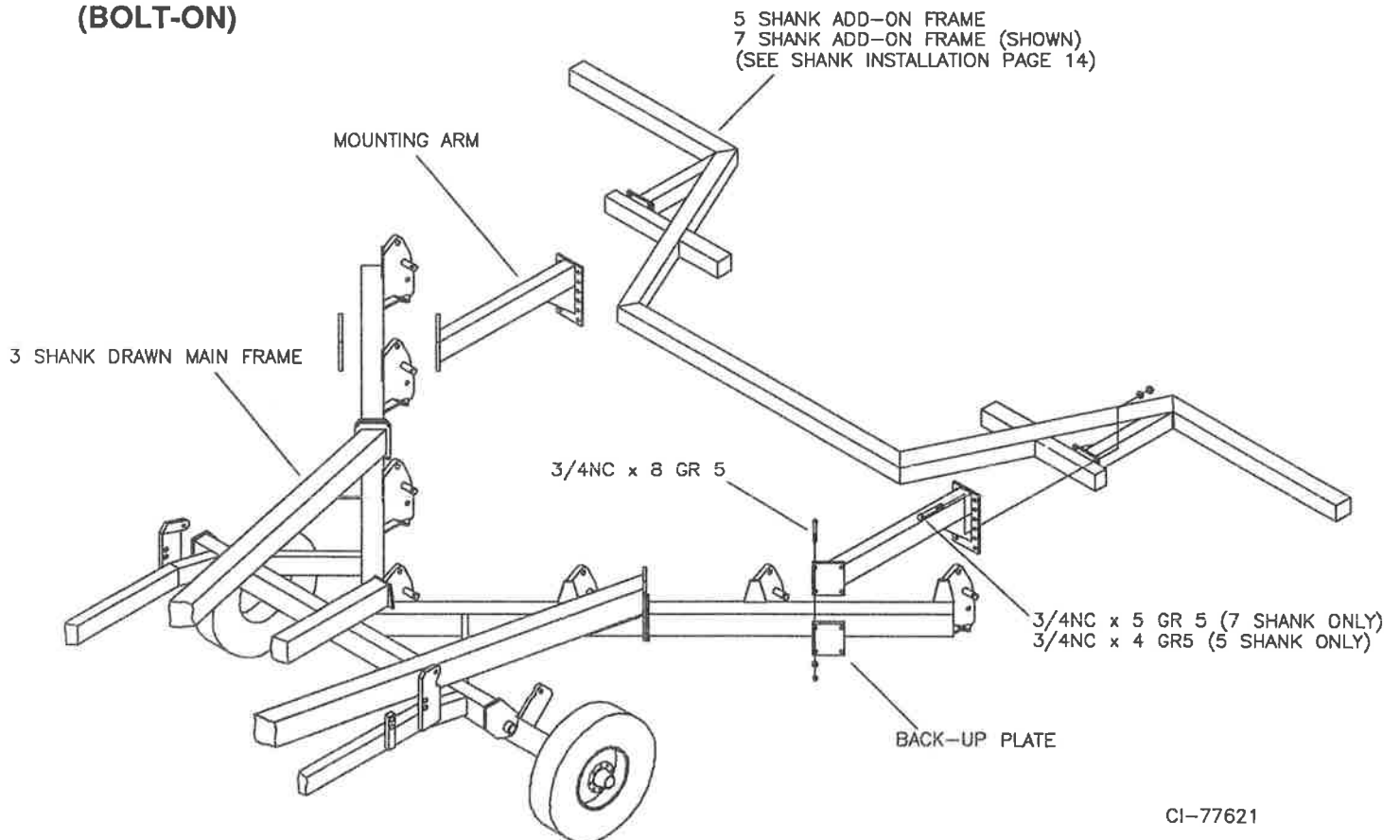
CI-77753

CHISEL PLOW SHANK ADD-ON FRAME

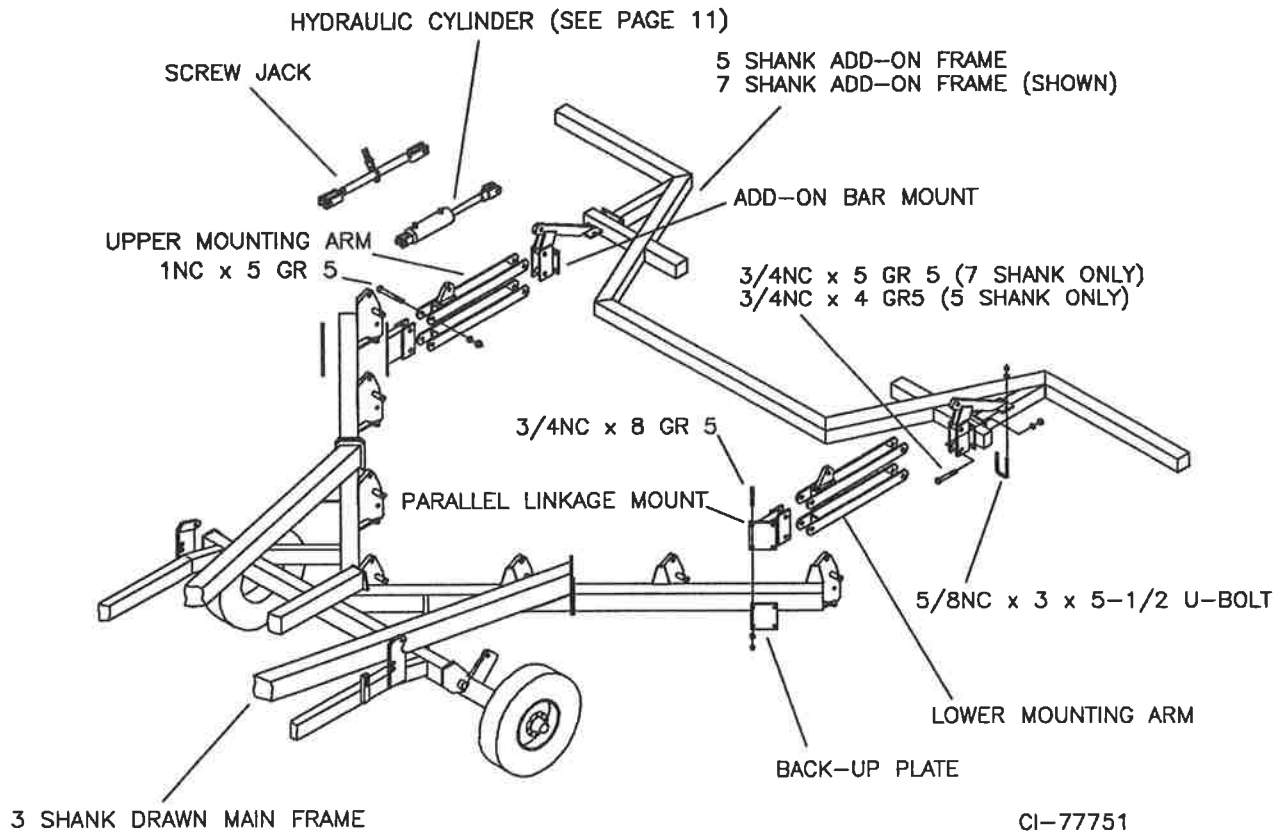
3 SHANK V-RIPPER (BOLT-ON)



5 & 7 SHANK V-RIPPER (BOLT-ON)

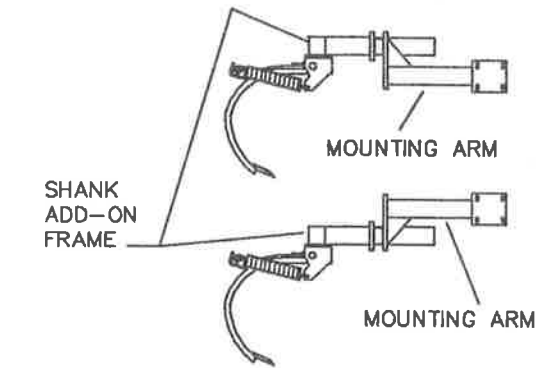


5 & 7 SHANK V-RIPPER (HYDRAULIC & TURN BUCKLE)



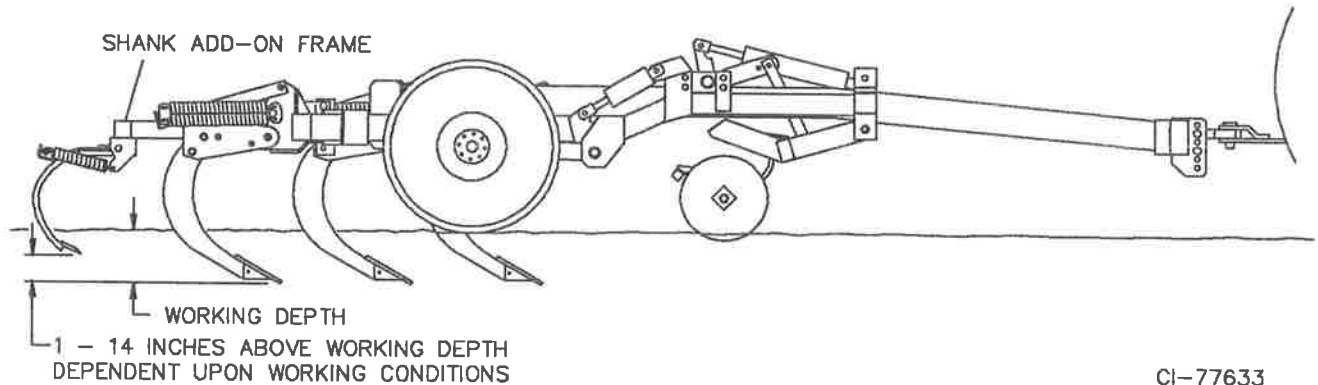
SHANK INSTALLATION

SHANK TUBE SETTINGS

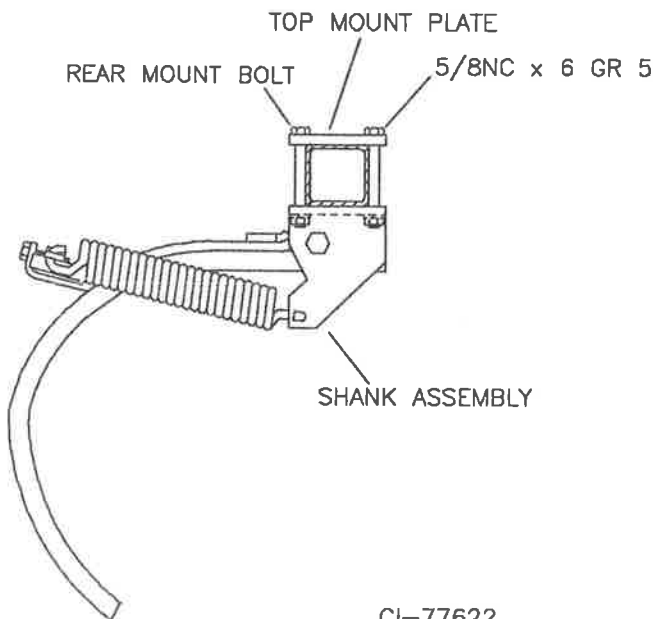


Mounting arm in upper position sets the chisel point range to 8-14 inches above the ripper points for deep ripping.

Mounting arm in lower position sets the chisel point range to 1-7 inches above the ripper points. **IMPORTANT:** Use this setting for shallow ripping only. Chisel plow shank damage will occur if set to penetrate in excess of 10 inches.



CI-77633



CI-77622

1.) For ease of installation loosely assemble the top mounting plate to the shank assembly with the two rear bolts.

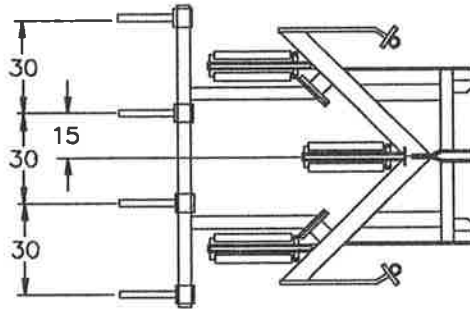
2.) Slide the entire assembly onto the frame, then install the front two mounting bolts. (Shank should then hang by its self.)

3.) To allow for tripping, the shank assembly must have a minimum of five inches side clearance, measured from the center of the shank assembly.

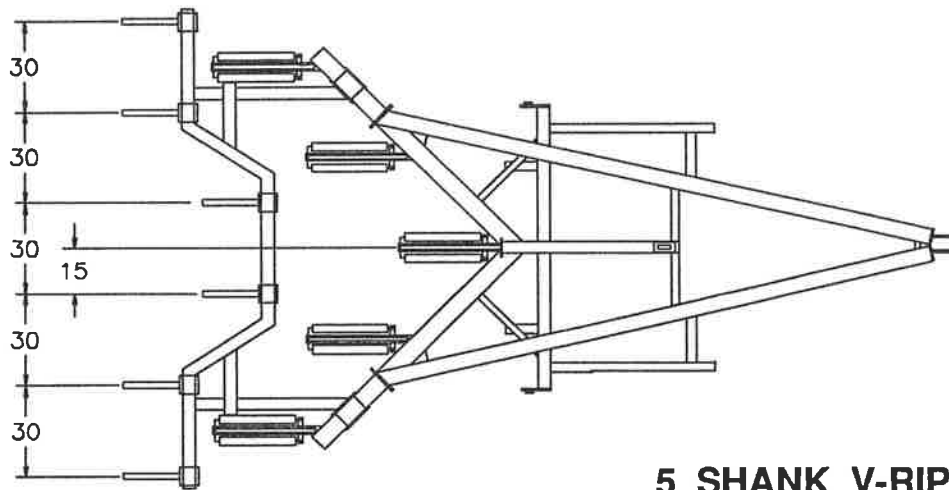
4.) When proper location of the shank assembly is reached, tighten all four mounting bolts securely. (Torque to 100 foot pounds.)

NOTE: IF ACCESS TO AN AIR OR IMPACT WRENCH IS NOT AVAILABLE, FOR EASE OF TIGHTENING IT IS SUGGESTED THAT THE FOUR MOUNTING BOLTS BE INSTALLED WITH NUTS ON TOP.

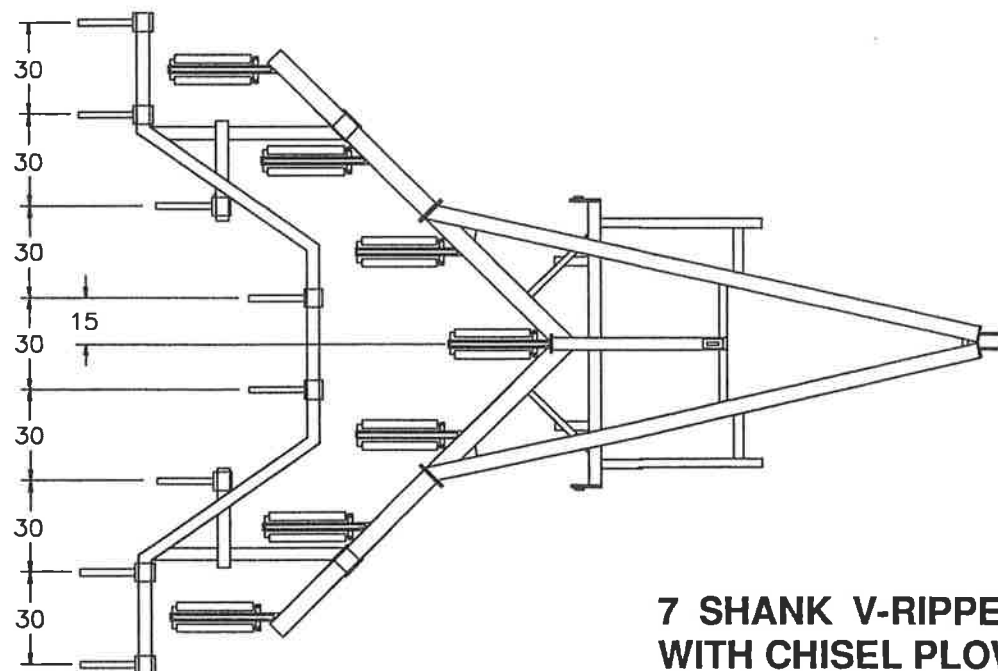
SHANK PLACEMENTS



**3 SHANK V-RIPPER
WITH CHISEL PLOW ADD-ON**



**5 SHANK V-RIPPER
WITH CHISEL PLOW ADD-ON**



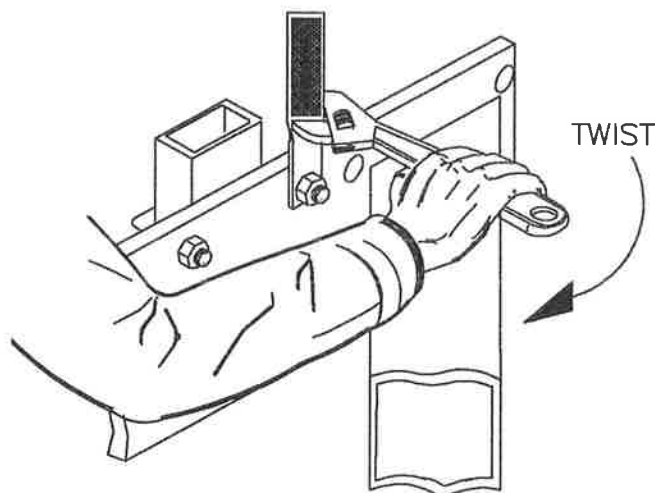
**7 SHANK V-RIPPER
WITH CHISEL PLOW ADD-ON**

CI-77623

REFLECTOR BRACKET

Fasten reflector bracket to designated area, making sure red reflector will be facing towards the back of the machine after twisting.

Fasten wrench to bracket just below reflector, twist amber reflector forward and red reflector to the rear. (Twist 3PT 90 degrees and twist Drawn 45 degrees.)



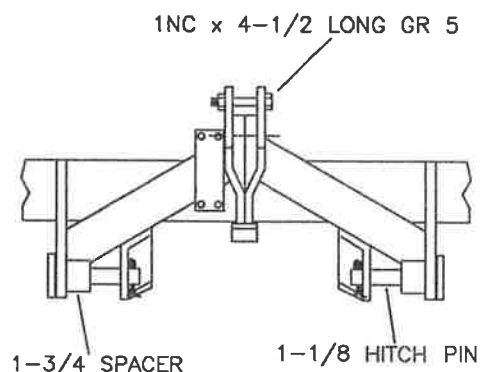
CI-77639

3PT HITCHING CATEGORIES

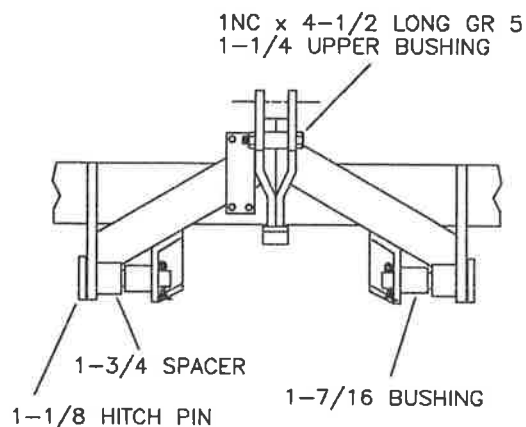
Wil-Rich 3-Point V-Ripper will hitch to a Category II or III Quickhitch or 3-Point by using the following combination of the hitch pin, spacers and bushings.

Refer to your tractor's operator's manual for exact hitching procedures.

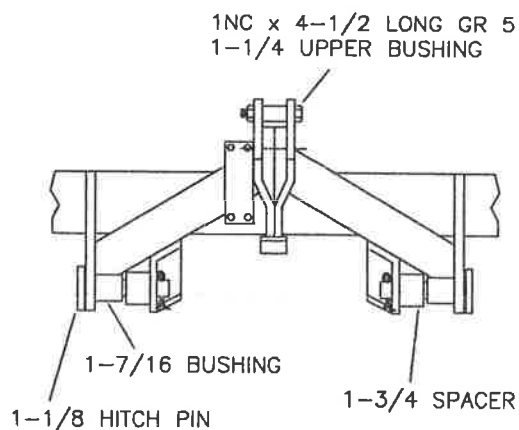
CATEGORY II FREE-LINK



CATEGORY II QUICKHITCH



CATEGORY III QUICKHITCH

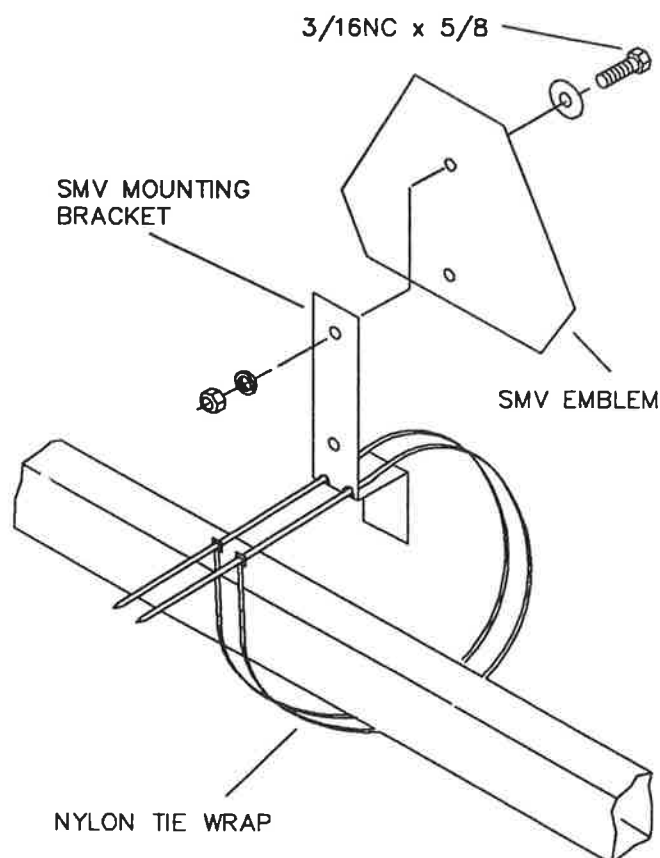


CI-75659

SAFETY

The purpose of the safety chain is to provide an auxiliary attaching system to retain the connection between towing and towed machine in the event of separation of the primary attaching system.

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



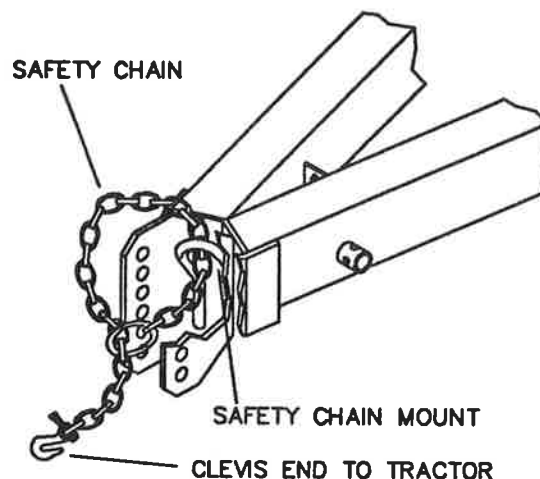
CI-77643

The bracket provided is designed to mount to numerous frame sizes and 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 the implement as practicable.

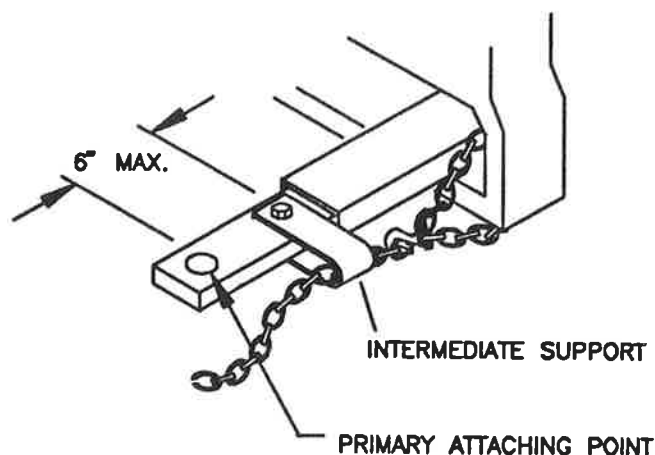
Emblem is to be 2 to 6 feet above the ground measured from the lower edge of the emblem.

Keep safety decals clean. Replace any safety decals that are damaged, destroyed, missing, painted over or can no longer be read. Replacement safety decals are available through your dealer.



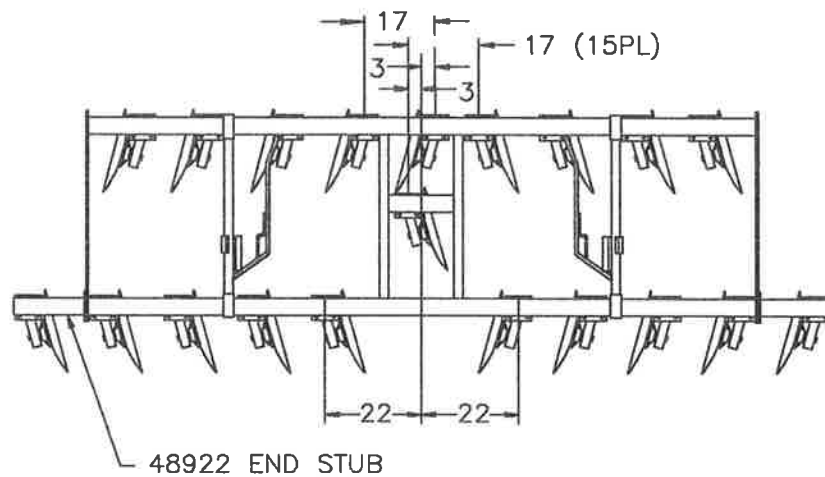
The intermediate support is to be used if there is more than 6" of unsupported chain on either side of the primary attaching point.

The intermediate support should not be mounted more than 6" from the primary attaching point. (See figure below).

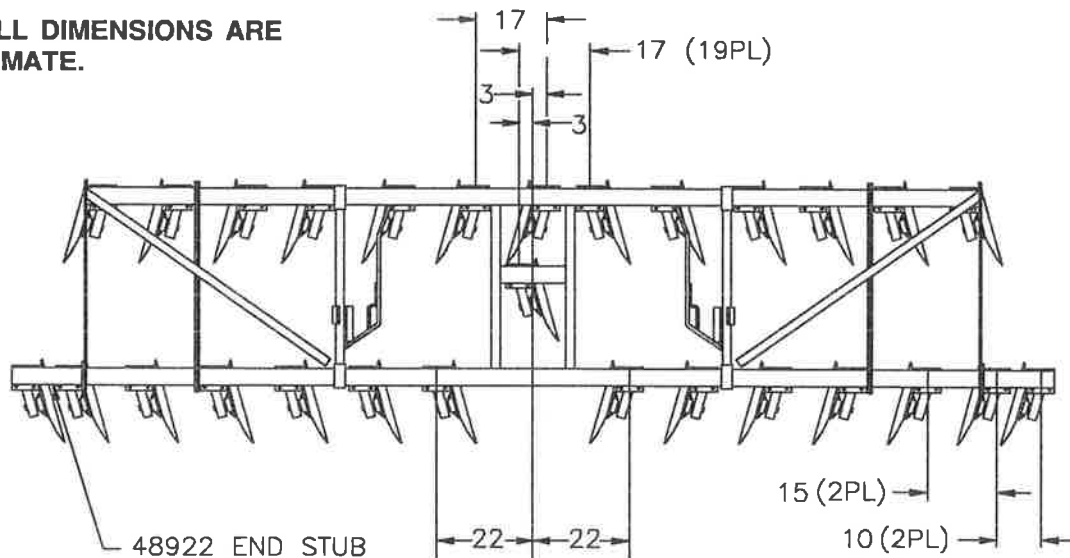


CI-77642

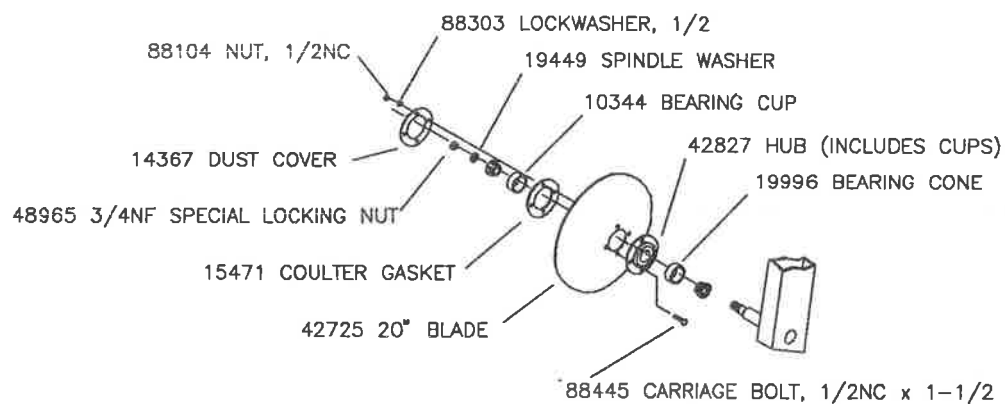
DISK CUTTER PLACEMENT



NOTE: ALL DIMENSIONS ARE APPROXIMATE.



CI-77916A



CI-77916B

