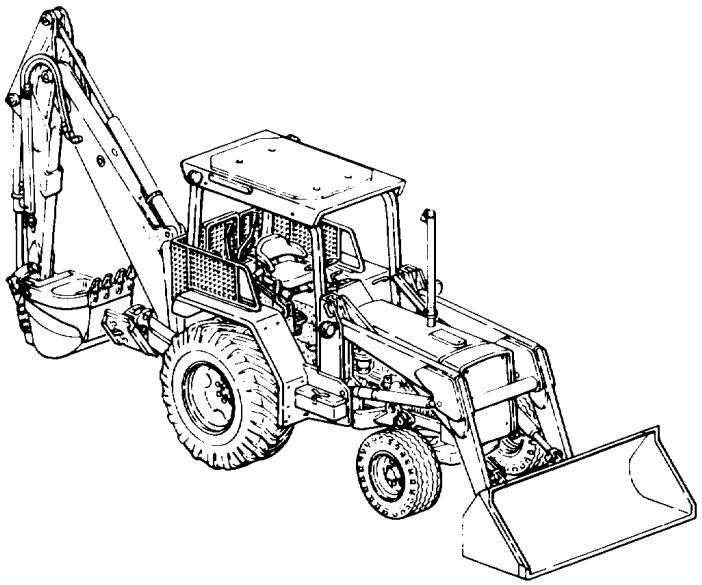
TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE MANUAL

VOLUME 3 OF 3



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TRACTOR, WHEELED (DED) LOADER BACKHOE W/HYDRAULIC IMPACT TOOL AND HYDRAULIC EARTH AUGER ATTACHMENT JOHN DEERE MODEL JD 410 (CCE) WITH BUCKET, IMPACTOR, AND EARTH DRILL (NSN 2420-00-567-1035)

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This copy is a reprint which includes current pages from Change 1.

Change 1 **1 SEPTEMBER 1987**

HEADQUARTERS, DEPARTMENT OF THE ARMY

TECHNICAL MANUAL

NO. 5-2420-222-20-3

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., *1 September 1987*

ORGANIZATIONAL MAINTENANCE MANUAL

TRACTOR, WHEELED, DED, LOADER BACKHOE: WITH HYDRAULIC IMPACT TOOL AND WITH HYDRAULIC EARTH AUGER ATTACHMENT JOHN DEERE MODEL JD410 (CCE) WITH BUCKET, IMPACTOR, AND EARTH DRILL (NSN 2420-00-567-0135)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 20282 located in the back of this manual direct to: Commander, US Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be sent to you.

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*This manual supersedes Organizational portion of TM 5-2420-222-14&P1 and TM 5-2420-222-14&P2 dated October 1982, including all changes.

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HYDRAULIC SYSTEM PRESSURE RELEASE

This task covers:

Hydraulic System Pressure Release (page 2-1191)

INITIAL SETUP

Personnel Required

One

LOCATION	ITEM	ACTION	**REMARKS**

HYDRAULIC SYSTEM PRESSURE RELEASE

NOTE

Hydraulic system pressure must be released before disconnecting hydraulic lines and fittings. A line or fitting disconnected under pressure will blow off with a lot of force and could cause injury to personnel.

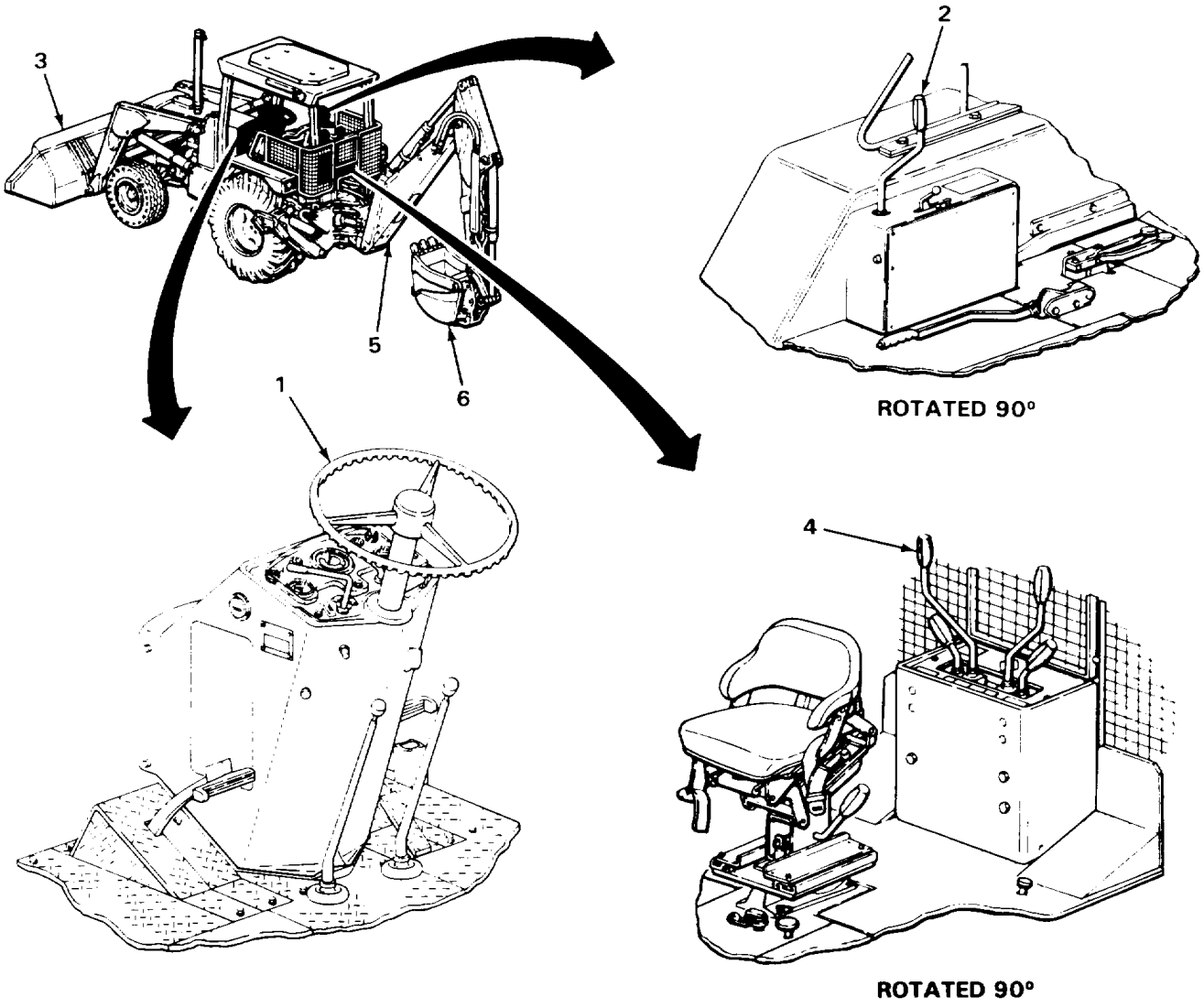
When engine is running, hydraulic system is under pressure. In order to release hydraulic system pressure, engine must be shut down.

There are three ways to release hydraulic system pressure. Perform any one of the following three steps to release hydraulic system pressure.

HYDRAULIC SYSTEM PRESSURE RELEASE - CONTINUED

LOCATION	ITEM	ACTION **REMARKS**
HYDRAULIC SYSTEM PRESSURE RELEASE - CONTINUED		
1. Operator's	Steering wheel (1) compartment	Turn from side to side until steering is hard.
	WARNING	
	When operating loader backhoe, make sure that all personnel are cleared from vehicle and work area. Failure to observe this precaution could cause injury to personnel.	
2.	Loader bucket control lever (2)	a. Pull back until loader bucket (3) stops raising. b. Push forward until loader bucket (3) rests on ground.
	WARNING	
	Do not operate backhoe controls unless you are in operator's seat facing backhoe. Backhoe boom cylinder may be accidentally bumped, causing backhoe boom to move suddenly. Failure to observe this precaution could cause serious injury.	
3.	Backhoe boom control lever (4)	a. Pull back until boom (5) stops raising. b. Push forward until backhoe bucket (6) rests on ground.

HYDRAULIC SYSTEM PRESSURE RELEASE - CONTINUED



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HYDRAULIC ACCUMULATOR CHARGING

This task covers:

Charging (page 2-1194)

INITIAL SETUP

Tools

Charging kit, accumulator, Nudie ND-925-0 (-W)
Connector, John Deere R40617
Hose, John Deere AR47753
Knife, pocket
Wrench, box, 5/8-inch

Materials/Parts

Nitrogen, technical (item 17, Appendix C)
Packing, plug

Personnel Required

One

LOCATION	ITEM	ACTION **REMARKS**

CHARGING

1	Accumulator (1)	Plug (2) with assembled packing (3)	Using 5/8-inch box wrench, unscrew and take out.
2	Plug (2)	Packing (3)	a Using pocket knife, take off. b Get rid of.

CAUTION

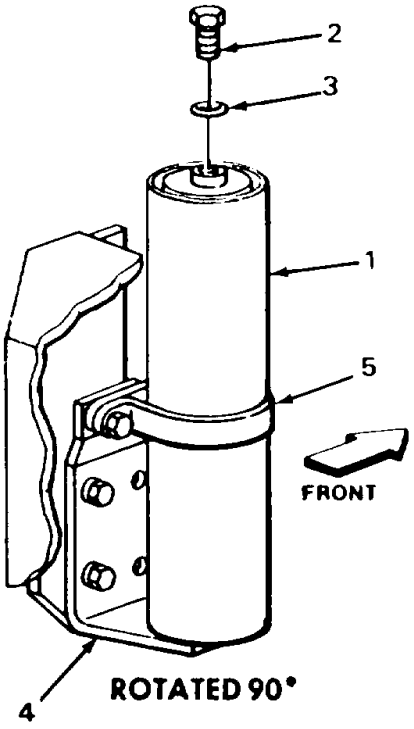
Use only dry nitrogen to charge hydraulic accumulator. Using air or any combustible gas may cause damage to internal parts.

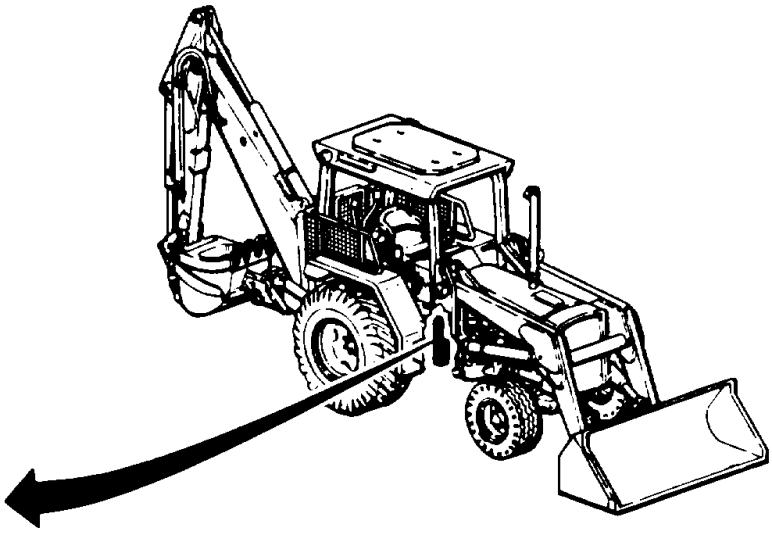
When charging accumulator, be careful not to exceed specified pressure or damage to internal parts may occur.

3	Bracket (4) and clamp (5)	Accumulator (1)	a Using Nuday ND925-0 (-W) accumulator charging kit, John Deere R40617 connector, and John Deere AR47753 hose connected to charging port, charge. **Accumulator is charged when gage on charging kit reads 475 to 525 psi (3275 to 3620 kPa).** b. If overcharged, use Nuday ND925-0 (-W) accumulator charging kit with gage and valve disconnected from technical nitrogen tank to bleed off any excess pressure.

HYDRAULIC ACCUMULATOR CHARGING - CONTINUED

LOCATION	ITEM	ACTION **REMARKS**
		c Disconnect Nuday ND925-0 (-W) accumulator charging kit, John Deere R40617 connector, and John Deer AR47753 hose.
4 Plug (2)	New packing (3)	Place in position.
5 Accumulator (1)	Plug (2) with assembled packing (3)	Screw in and tighten using 5/8-inch box wrench.





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PUMP STROKE CONTROL VALVE FILTER ELEMENT

This task covers:

a. Removal (page 2-1196)
b. Cleaning (page 2-1197)
c. Inspection/Replacement (page 2-1198)
d. Installation (page 2-1198)

INITIAL SETUP

Tools

Knife, pocket
Pan, drain
Screwdriver, flat-tip, 1/8-inch
Wrench, box and open-end, combination, 1 1/4 - inch

Materials/Parts

Filter element
Packing, filter element (two required
Packing, filter plug

Materials/Parts - Continued

Rags, wiping (item 21, Appendix C)
Solvent, drycleaning (item 28, Appendix C)

Personnel Required

Two

Equipment Condition

1. Hydraulic system pressure released (page 2-1191)
2. Right side grille removed (TM 5-2420-222-10)

LOCATION	ITEM	ACTION	REMARKS

REMOVAL

WARNING

Do not attempt to disconnect hydraulic lines and fittings while engine is running or before hydraulic system pressure has been released. When engine is running, hydraulic system is under pressure. Hydraulic system pressure should be 0 psi (0 kPa) before lines are disconnected. A line or fitting disconnected under pressure will blow off with a lot of force and could cause serious injury to personnel.

Be careful when draining hot fluids. Wear gloves to protect your hands from hot parts and fluids or severe burns could result.

LOCATION	ITEM	ACTION	REMARKS
1. Housing (1)	Plug (2) with assembled packing (3)	a. Place drain pan underneath to catch draining fluid. b. Using 1 1/4-inch combination box and open-end wrench, unscrew and take out.	