

# **4440 Tractor**



**JOHN DEERE**

## **TECHNICAL MANUAL**

**4440  
Tractor**

**TM1182 (01SEP77)    English**

**TM1182 (01SEP77)**

**LITHO IN U.S.A.  
ENGLISH**

# 4440 TRACTOR TECHNICAL MANUAL TM-1182 (SEP-77)

## CONTENTS—REPAIR SECTIONS

### SECTION 10—GENERAL

- Group 00—Specifications and Special Tools
- Group 05—Predelivery, Delivery, and After-Sale Services
- Group 10—Tune-Up
- Group 15—Lubrication
- Group 20—Separation

### SECTION 20—ENGINE REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Cylinder Head, Valves, and Camshaft
- Group 10—Cylinder Block, Liners, Pistons, and Rods
- Group 15—Crankshaft, Main Bearings, and Flywheel
- Group 20—Lubricating System
- Group 25—Cooling System

### SECTION 30—FUEL AND AIR REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Air Intake System
- Group 10—Diesel Fuel System
- Group 15—Control Linkage

### SECTION 40—ELECTRICAL REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Harness Replacement
- Group 10—Charging Circuit
- Group 15—Starting Circuit
- Group 20—Lighting Circuits
- Group 25—Instrument and Accessory Circuits
- Group 30—Power Front-Wheel Drive

### SECTION 50—POWER TRAIN REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Perma-Clutch™
- Group 10—Quad-Range™ Planetary
- Group 15—Quad-Range Transmission
- Group 20—Power Shift Transmission
- Group 25—Power Take-Off
- Group 30—Differential
- Group 35—Final Drive
- Group 40—Power Front-Wheel Drive

### SECTION 60—STEERING/BRAKES REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Power Steering
- Group 10—Power Brakes

### SECTION 70—HYDRAULIC REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Miscellaneous Hydraulic Components
- Group 10—Hydraulic Pumps
- Group 15—Rockshaft and Implement Hitches
- Group 20—Selective Control Valve, and Remote Cylinder

### SECTION 80—MISCELLANEOUS

- Group 00—Specifications and Special Tools
- Group 05—Front Axles
- Group 10—Wheels

### SECTION 90—OPERATOR STATION REPAIR

- Group 00—Specifications and Special Tools
  - Group 05—Air Conditioning System
  - Group 10—Heating System
  - Group 15—Seat
  - Group 20—Miscellaneous Components
- (Continued on page 2)

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

---

## CONTENTS—OPERATION AND TESTS SECTIONS

### SECTION 220—ENGINE OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—System Operation
- Group 10—System Tests and Diagnosis

### SECTION 230—FUEL/AIR OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—Air Intake System
- Group 10—Diesel Fuel System
- Group 15—Control Linkage

### SECTION 240—ELECTRICAL OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—General Information and Diagrams
- Group 10—Charging Circuit
- Group 15—Starting Circuit
- Group 20—Lighting Circuits
- Group 25—Instrument and Accessory Circuits
- Group 30—Power Front-Wheel Drive
- Group 35—Electrical Remote Control and Outlet Socket

### SECTION 250—POWER TRAIN OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—Quad-Range System Operation
- Group 10—Quad-Range Tests and Diagnosis
- Group 15—Power Shift System Operation
- Group 20—Power Shift Tests and Diagnosis
- Group 25—Differential and Final Drive
- Group 30—Power Front-Wheel Drive

### SECTION 260—STEERING/BRAKES OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—Power Steering
- Group 10—Power Brakes

### SECTION 270—HYDRAULIC OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—Hydraulic System Operation
- Group 10—Hydraulic System Tests
- Group 15—Miscellaneous Hydraulic Components
- Group 20—Hydraulic Pumps
- Group 25—Rockshaft and Implement Hitches
- Group 30—Selective Control Valve and Remote Cylinder

### SECTION 290—OPERATOR STATION OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—Air Conditioning System
- Group 10—Heating System

## Section 10 GENERAL

### CONTENTS OF THIS SECTION

	Page		Page
<b>GROUP 00—SPECIFICATIONS</b>		<b>GROUP 15—LUBRICATION</b>	
General Tractor Specifications .....	10-00-1	Lubricants .....	10-15-1
Predelivery .....	10-00-4	Engine .....	10-15-2
Tune-Up .....	10-00-5	Transmission-Hydraulic System .....	10-15-3
Lubrication .....	10-00-5	Hi-Crop Final Drive Housings .....	10-15-5
Separation .....	10-00-6	Front Wheel Bearings .....	10-15-6
Special Tools .....	10-00-7	Grease Fittings .....	10-15-6
<b>GROUP 05—PREDELIVERY, DELIVERY, AND AFTER-SALE SERVICES</b>		<b>GROUP 20—SEPARATION</b>	
Dealer Predelivery Service .....	10-05-1	Removing Sound-Gard® Body without Control Support .....	10-20-1
Inspection Checks .....	10-05-11	Removing Sound-Gard Body with Control Support .....	10-20-5
Dealer Service .....	10-05-13	Separating Engine from Clutch Housing .....	10-20-10
After Sale Inspection .....	10-05-14	Removing Front End .....	10-20-14
<b>GROUP 10—TUNE-UP</b>		Removing Engine .....	10-20-18
Preliminary Engine Testing .....	10-10-1	Separating Clutch Housing from Power Shift Transmission Case .....	10-20-21
Engine Tune-Up .....	10-10-1	Separating Clutch Housing from Quad-Range Transmission Case .....	10-20-24
Operation .....	10-10-7	Removing Rear Axle Housing .....	10-20-26
General .....	10-10-7		

## Group 00 SPECIFICATIONS AND AND SPECIAL TOOLS GENERAL TRACTOR SPECIFICATIONS

HORSEPOWER (Factory observed PTO  
horsepower at 2200 rpm)

130 hp (97 kW)

#### ENGINE:

Type	6-cylinder, in-line, valve-in head, diesel, turbocharged,
Slow idle speed	800 rpm
Working speed range	1500 to 2200 rpm
Bore and stroke	4.56 x 4.75 in. (116 x 121 mm)
Displacement	466 cu. in. (7.6 L)
Compression ratio	14.9 to 1
Firing order	1-5-3-6-2-4
Valve clearance	
Intake	0.018 in. (0.46 mm)
Exhaust	0.028 in. (0.71 mm)
Injection pump timing	TDC
Lubrication system	force-feed, pressurized with full-flow filter

**FUEL SYSTEM:**

Type	direct injection
Injection pump type	in-line
Air cleaner	dry type with safety element

**COOLING SYSTEM**

Type	dual-pressure with centrifugal pump
Temperature control	dual heavy duty thermostats

**CAPACITIES**

Fuel tank	65 U.S. gal. (245 L)
Cooling system	36 U.S. qt. (34 L)
Crankcase (with filter change)	16 U.S. qt. (15 L)
Transmission-hydraulic system (Drain and fill)	
Power Shift Transmission	11.0 U.S. gal. (49.2 L)
QUAD-RANGE Transmission	13.0 U.S. gal. (41.6 L)
Add for Power Front-Wheel Drive	4.0 U.S. gal. (15.1 L)

Transmission-hydraulic system (Dry, production fill)	
Power Shift Transmission	15.9 U.S. gal. (60.3 L)
QUAD-RANGE Transmission	15.9 U.S. gal. (60.3 L)
Add for Power Front-Wheel Drive	5.0 U.S. gal. (18.9 L)

**POWER SHIFT TRANSMISSION:**

Type	planetary gears, hydraulically actuated wet disk clutches and brakes
Gear selections	8 forward and 4 reverse
Shifting	hydraulic, on-the-go and under load

**QUAD-RANGE TRANSMISSION**

Type	2-speed, power-shifted planetary and 8-speed synchronized
Gear selections	16 forward and 6 reverse
Perma-Clutch	hydraulically-operated, multiple-disk wet clutch

**POWER TAKE-OFF:**

Type	fully independent
Speed (2200 engine rpm)	dual speed 540-1000 rpm
Size	1-3/8 in. (35 mm)
Clutch	hydraulically-operated, multiple-disk wet clutch

**POWER FRONT-WHEEL DRIVE:**

Type	hydraulic motor with planetary gear reduction, constant torque and variable speed
Controls	solenoid-operated valves, synchronized with trans- mission controls

**HYDRAULIC SYSTEM:**

Type	closed-center, constant-pressure
Standby pressure	2250 psi (155 bar) (155 kg/cm <sup>2</sup> )

**BRAKES:**

Type	hydraulically-operated wet disk
------	---------------------------------

**ELECTRICAL SYSTEM:**

Type	12-volt, negative ground
Batteries	two, 6-volt, 5D group, 800 amps cold cranking, 376 minutes reserve capacity
Alternator	72-amp with Sound-Gard body 61-amp without

**TIRES AND TREADS**

see page 05-6 in this section

**DIMENSIONS:**

Wheelbase	106.7 in. (2709 mm)
Overall length	158.6 in. (4028 mm)
Height to muffler cover*	128.7 in. (3268 mm)
Height to top of Sound-Gard Body*	117.3 in. (2979 mm)
Overall width (regular axle)	90 in. (2277 mm)
Width at fender	82 in. (2082 mm)
Width at roof	54.4 in. (1382 mm)
Turning radius	146 in. (3700 mm)

**SHIPPING WEIGHT\*\***

12,000 lbs. (5400 kg)

\*Tractor equipped with 20.8-38 R1 rear tires and 11.00-16 front tires.

\*\*Equipped for average field service, without fuel and ballast. Add approximately 1000 lbs. (450 kg) if equipped with power front-wheel drive.

**GROUND SPEEDS**

Approximate ground speeds are given in the following charts. Speeds are shown in miles per hour, with kilometers per hour in parentheses.

Speeds are for a Tractor with 18.4-38 tires.

**POWER SHIFT TRANSMISSION GROUND SPEEDS**

Gear	1500 Engine RPM	2200 Engine RPM
1st	1.2 (1.9)	1.8 (2.7)
2nd	1.7 (2.7)	2.5 (4.0)
3rd	2.6 (4.2)	3.8 (6.1)
4th	3.4 (5.5)	4.9 (8.0)
5th	4.4 (7.1)	6.4 (10.5)
6th	5.8 (9.3)	8.2 (13.7)
7th	7.4 (11.9)	11.0 (17.5)
8th	12.6 (20.3)	18.6 (29.8)
1st rev.	1.4 (2.3)	2.2 (3.6)
2nd rev.	2.0 (3.2)	3.0 (5.1)
3rd rev.	3.2 (5.1)	4.6 (7.6)
4th rev.	4.2 (6.8)	5.9 (9.8)

**QUAD-RANGE TRANSMISSION GROUND SPEEDS**

Range	Speed	1500 Engine RPM	2200 Engine RPM
A	1	1.3 (2.1)	1.9 (3.1)
	2	1.7 (2.7)	2.4 (3.9)
	3	2.2 (3.5)	3.2 (5.1)
	4	2.8 (4.4)	4.0 (6.5)
	1R	2.1 (3.4)	3.1 (5.0)
	2R	2.7 (4.3)	3.9 (6.3)
B	1	3.0 (4.9)	4.4 (7.1)
	2	3.8 (6.2)	5.6 (9.0)
	3	5.0 (8.0)	7.3 (11.8)
	4	6.3 (10.2)	9.3 (15.0)
	1R	4.8 (7.8)	7.1 (11.4)
	2R	6.1 (9.9)	9.0 (14.5)
C	1	3.6 (5.8)	5.2 (8.5)
	2	4.5 (7.3)	6.7 (10.7)
	3	5.9 (9.5)	8.7 (14.0)
	4	7.5 (12.1)	11.0 (17.7)
	1R	5.7 (9.2)	8.4 (13.5)
	2R	7.3 (11.7)	10.7 (17.2)
D	1	5.5 (8.8)	8.1 (13.0)
	2	7.0 (11.2)	10.2 (16.5)
	3	9.1 (14.6)	13.3 (21.4)
	4	11.5 (18.5)	16.9 (27.2)

(Specifications and design subject to change without notice.)

## PREDELIVERY, DELIVERY, AND AFTER-SALE SERVICES

Item	Specification
Toe-in .....	1/8 to 3/8 inch (3 to 9 mm)
Injection pump timing .....	TDC
Engine speeds	
Slow idle .....	780 to 820 rpm
Fast idle .....	2325 to 2425 rpm
Rated speed at full load .....	2200 rpm

Torque	ft-lbs	N·m	kgm
SOUND-GARD® body or Four-Post ROLL-GARD® mounting bolts .....	150	200	20
Front axle-to-knee bolts:			
All except Hi-Crop .....	370	500	50
Hi-Crop .....	445	600	60
Front wheel-to-hub bolts .....	100	135	14
Special bolts on rear hubs .....	300	410	41
Steel wheel-to-hub bolts .....	240	325	33
Rim clamp-to-wheel bolts .....	170	230	23
Rockshaft lift arm retaining bolts .....	300	410	41
Other nuts and cap screws:			

Bolt Diameter	Plain Head*			Three Radial Dashes*			Six Radial Dashes*		
	ft-lbs	N·m	kgm	ft-lbs	N·m	kgm	ft-lbs	N·m	kgm
1/4 in. (6.35 mm)	6	8	0.8	10	14	1.4	14	19	1.9
5/16 in. (7.93 mm)	13	18	1.8	20	27	2.7	30	41	4.1
3/8 in. (9.53 mm)	23	31	3.1	35	47	4.7	50	70	7.0
7/16 in. (11.11 mm)	35	47	4.7	55	75	7.5	80	110	11
1/2 in. (12.70 mm)	55	75	7.5	85	115	12	120	160	16
9/16 in. (14.29 mm)	75	100	10	130	175	18	175	240	24
5/8 in. (15.88 mm)	105	140	14	170	230	23	240	325	33
3/4 in. (19.05 mm)	185	250	25	300	410	41	425	575	58
7/8 in. (22.23 mm)	160	220	22**	445	600	60	685	930	93
1 in. (25.40 mm)	250	340	34**	670	900	90	1030	1400	140

\*The types of bolts and cap screws are identified by head markings as follows:

Plain Head: regular machine bolts and cap screws.

3-Dash Head: tempered steel high-strength bolts and cap screws.

6-Dash Head: tempered steel extra high-strength bolts and cap screws.

\*\*Machine bolts and cap screws 7/8-inch and larger are sometimes formed hot rather than cold, which accounts for the lower torque.

**TUNE-UP**

Item	Specification
PTO horsepower .....	130 hp (97 kW)
Compression .....	330 to 370 psi (22.5 to 25.5 bar)
Vacuum (full speed, full load, clean air filters) .....	10.5 to 11.5 in. (26 to 29 mbar)
Air cleaner indicator switch closing vacuum .....	24 to 26 in. (60 to 65 mbar)
Manifold pressure (full speed, full load, clean air filters) .....	14 to 16 psi (0.96 to 0.97 bar)
Thermostat opening temperature .....	160 to 180°F (71 to 82°C)
Radiator cap pressure release	
Low pressure cap .....	6.25 to 7.50 psi (0.4 to 0.5 bar)
High pressure cap .....	14 to 17 psi (0.9 to 1.2 bar)
Engine speeds	
Slow idle .....	780 to 820 rpm
Fast idle .....	2325 to 2425 rpm
Rated speed at full load .....	2200 rpm

**LUBRICATION**

Engine crankcase oil capacity .....	16 U.S. qt. (15 L)
Transmission-hydraulic system oil capacity	
(Drain and fill)	
Power Shift Transmission .....	11.0 U.S. gallons (49.2 L)
QUAD-RANGE Transmission .....	13.0 U.S. gal. (41.6 L)
Add for Power Front-Wheel Drive .....	4.0 U.S. gal. (15.1 L)
Transmission-hydraulic system	
(Dry, production fill)	
Power Shift Transmission .....	15.9 U.S. gal. (60.3 L)
QUAD-RANGE Transmission .....	15.9 U.S. gal. (60.3 L)
Add for Power Front-Wheel Drive .....	5.0 U.S. gal. (18.9 L)
Service intervals	
Check engine oil level .....	Every 10 hours
Change engine oil .....	Every 100 hours
Replace engine oil filter .....	Every 200 hours
Clean crankcase breather filter .....	Every 200 hours
Check transmission-hydraulic system oil level .....	Every 200 hours
Replace transmission-hydraulic system oil filter (QUAD-RANGE) ..	Every 200 hours
Replace transmission-hydraulic system oil filters (Power Shift) ...	Every 600 hours
Change transmission-hydraulic oil .....	Every 1200 hours
Clean main hydraulic pump screen .....	Every 1200 hours
Clean and repack front wheel bearings .....	Every 1200 hours
Lubricate grease fittings	
Front axle pivot pins, steering spindles, tie rods (10 fittings) ...	Every 10 hours
Wide-swing drawbar rollers (if equipped) .....	Every 10 hours
Front wheel bearings (only in extremely wet conditions) .....	Every 10 hours
3-point hitch .....	Every 200 hours
Load control shaft bushings .....	Every 200 hours
Rear axle bearings .....	Every 600 hours



**SEPARATION**

ITEM	SPECIFICATION
Fan belt tension	<b>New Belt</b>
Single belt .....	130-140 lbs. (572-622 N)
Dual belt .....	95-104 lbs. (423-467 N)
	<b>After Run In</b>
All belts .....	85-94 lbs. (378-423 N)

ITEM	TORQUE
SOUND-GARD body retaining cap screws .....	150 ft-lbs (203 N·m) (20.3 kgm)
ROLL-GARD (4-post) mounting cap screws .....	150 ft-lbs (203 N·m) (20.3 kgm)
Engine-to-clutch housing cap screws .....	1/2 in.—85 ft-lbs (115 N·m) (11.5 kgm)
	3/4 in.—300 ft-lbs (406 N·m) (40.6 kgm)
Clutch housing-to-engine cap screws .....	300 ft-lbs (406 N·m) (40.6 kgm)
Hydraulic pump support-to-engine cap screws .....	85 ft-lbs (115 N·m) (11.5 kgm)
Hydraulic pump coupler lock nuts .....	30 ft-lbs (41 N·m) (4.1 kgm)
Hydraulic pump drive coupling .....	35 ft-lbs (47 N·m) (4.7 kgm)
Side frames-to-engine .....	5/8 in.—275 ft-lbs (373 N·m) (37.3 kgm)
	3/4 in.—425 ft-lbs (578 N·m) (57.8 kgm)
Clutch housing-to-transmission case cap screws .....	5/8 in.—170 ft-lbs (230 N·m) (23 kgm)
	3/4 in.—300 ft-lbs (406 N·m) (40.6 kgm)
Oil filter inlet pipe elbow cap screws .....	45 ft-lbs (61 N·m) (6.1 kgm)
Axle housing-to-transmission case cap screws .....	170 ft-lbs (230 N·m) (23 kgm)
Hi-Crop drive shaft housing-to-final drive gear housing .....	275 ft-lbs (373 N·m) (37.3 kgm)
Radiator hose clamps (clean and dry) .....	36 in-lbs (4 N·m) (0.4 kgm)
Transmission pump elbow-to-clutch housing cap screws .....	45 ft-lbs (61 N·m) (6.1 kgm)
Oil pan-to-clutch housing cap screws .....	85 ft-lbs (115 N·m) (11.5 kgm)
Hose clamps .....	30 in-lbs (3.4 N·m) (0.3 kgm)

**SPECIAL TOOLS****Predelivery, Delivery, and After-Sale Services****TOOL****USE**

JDG-18 Snap Ring Tool

Remove and install snap rings on ends of rear axles

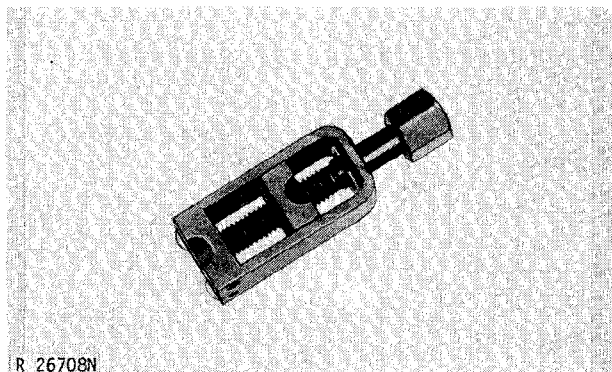
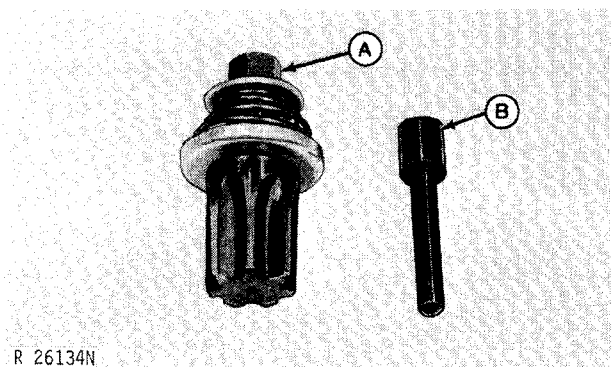


Fig. 1-JDG-18 Snap Ring Tool\*

JDE-81-1 Engine Rotation Tool and JDE-81-4 Timing Pin

Turn engine to TDC to check injection pump timing



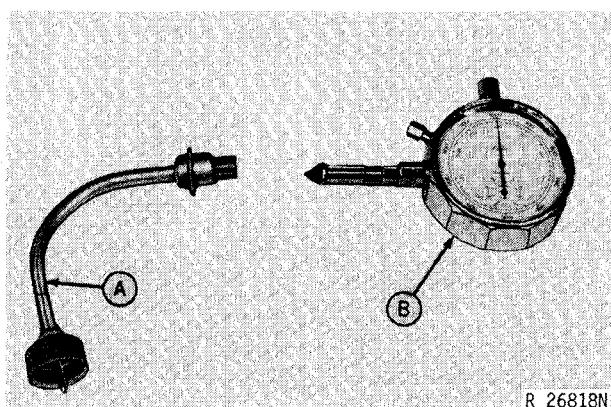
A—JDE-81-1 Engine Rotation Tool\*

B—JDE-81-4 Timing Pin\*

Fig. 2-Tools Required for Checking Timing

JDE-28 Adapter and Hand Tachometer

Check engine speeds



A—JDE-28 Adapter\*

B—Hand Tachometer

Fig. 3-Tools Required for Checking Engine Speeds

Tune-Up

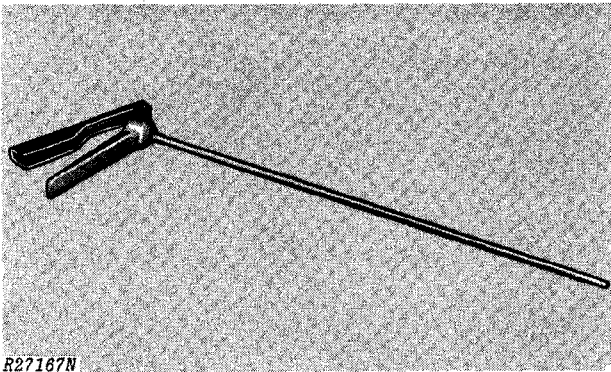


Fig. 4-AR62377 Dry Element Cleaning Gun

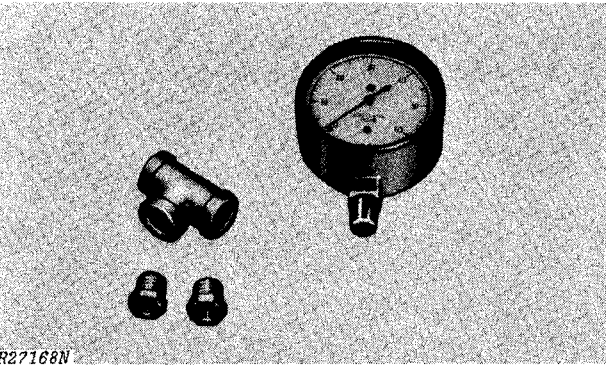


Fig. 5-D-05022ST Water Vacuum Gauge\*  
(Formerly JDST-11)

TOOL	USE
JDE-81-1 Engine Rotation Tool and JDE-81-4 Timing Pin	Turn engine to TDC to check injection pump timing
JDE-28 Adapter and Hand Tachometer	Check engine speeds
AR62377 Dry Element Cleaning Gun	Clean primary element of air cleaner
D-05022ST Water Vacuum Gauge	Measure air intake vacuum

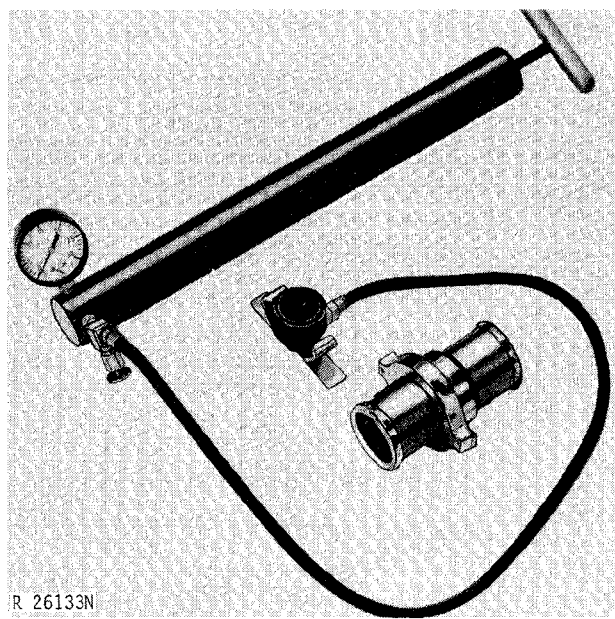
TOOL	NUMBER	USE
	BT-11-52 Radiator Tester	Pressure test cooling system and radiator caps

Fig. 6-BT-11-52 Radiator Tester\*

Separation

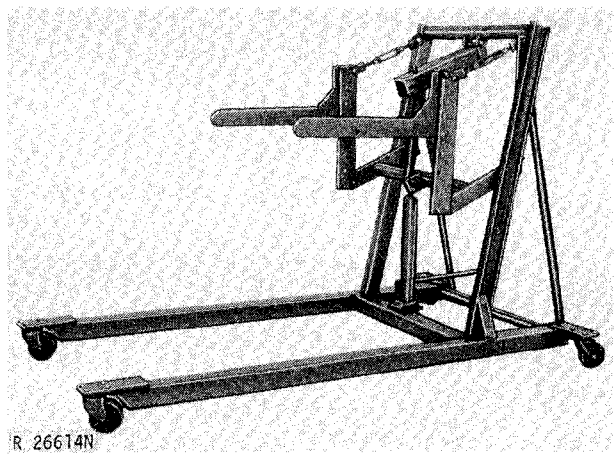
	Brown Body Lift	To remove Sound-Gard Body.
---	-----------------	----------------------------

Fig. 7-Brown Body Lift

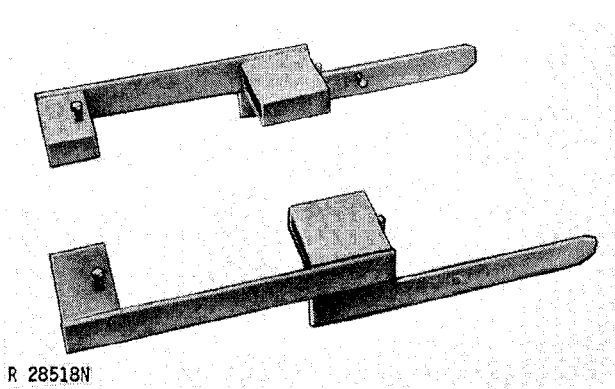
	JDG-21 Fork Lift Adapters	To remove Sound-Gard Body
---	---------------------------	---------------------------

Fig. 8-Fork Lift Adapters

## Separation—Continued

## TOOL

## NUMBER

## USE

JDG-10-2

To support Sound-Gard Body after removal.

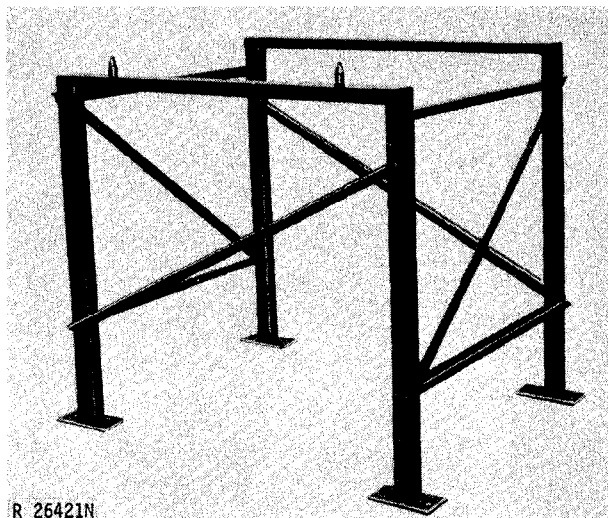


Fig. 9-Sound-Gard Body Stand\*

A-D-05007ST  
Splitting Stand

To support tractor in various separations.

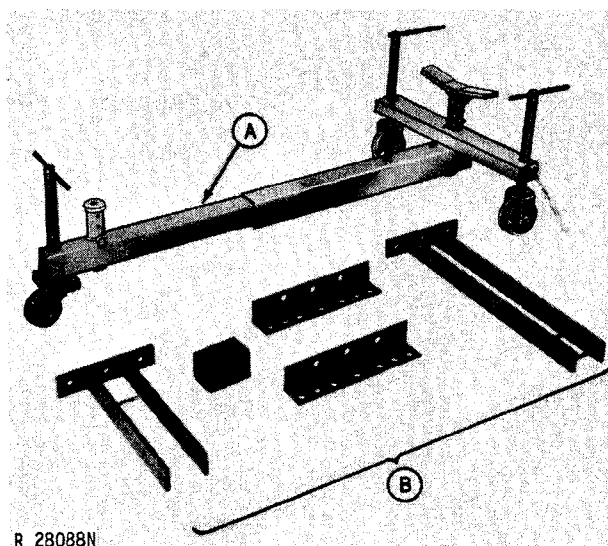
B-D-05149ST  
Attachments

Fig. 10-Splitting Stand\*

JDG-12-1  
Splitting Stand

To support front end of tractor.

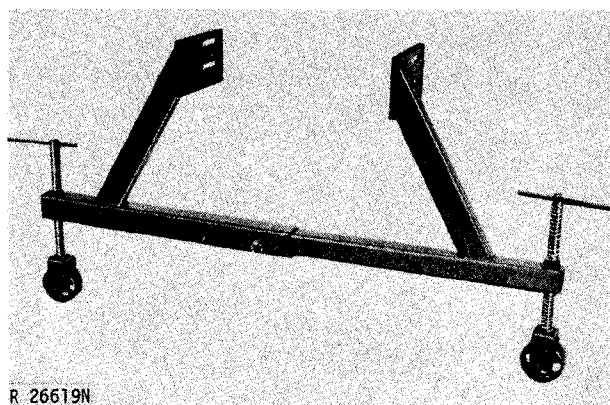
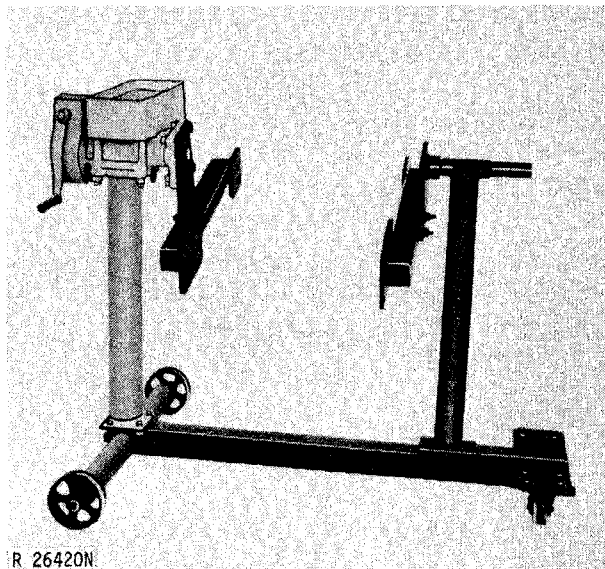


Fig. 11-Splitting Stand\*

TOOL	NUMBER	USE
 R 26426N	A-JDE-63 Engine Lift Brackets	To remove engine
	B-JDG-23 Engine Lift Sling	

*Fig. 12-Engine Removal Tools\***Fig. 13-Engine Repair Stand\**

D-05001ST  
Repair Stand

To support engine during re-  
pair.

\*Tools marked with an asterisk can be ordered from  
Service Tools, Box 314, Owatonna MN 55060.



## Group 05

# PREDELIVERY, DELIVERY, AND AFTER-SALE SERVICES

The John Deere delivery receipt, when properly filled out and signed by the dealer and customer, verifies that predelivery and delivery services were satisfactorily performed. When delivering the tractor, give the customer his copy of the delivery receipt and operators manual. Be sure to explain their purpose to him.

Because of the shipping factors involved, plus extra finishing touches necessary to promote customer satisfaction, there are certain predelivery services that must be performed by the dealer. These services are listed in the first of two sections on the predelivery form, which is attached to the tractor. The second section is a list of factory inspections that must be verified by the dealer.

Fill the form in completely and sign it. Send a copy to the factory and file the original with the shop order for the job. This will certify that the proper predelivery service has been completed.

### DEALER PREDELIVERY SERVICE

Using the first part of the predelivery form along with the following illustrated procedures, perform all services listed and check each job off as it is completed.

#### Lubricate Grease Fittings

Grease all fittings with John Deere AT30408 High Temperature Grease (1 lb. [0.45 kg] can) or its equivalent. TY6281 Lubricant is the same John Deere High Temperature Grease in a 14 oz. (0.39 kg) cartridge. Lubricant must be an extreme-pressure grease with non-soap base and NGLI No. 2 consistency, and must meet John Deere JDM J13 E4 specifications.

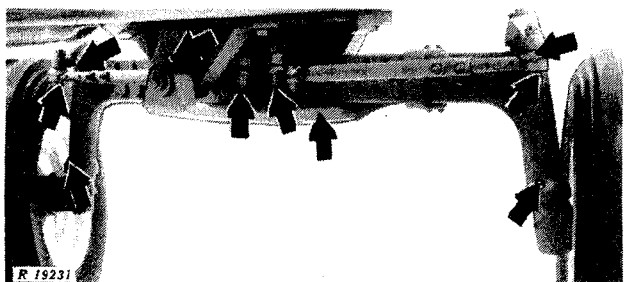
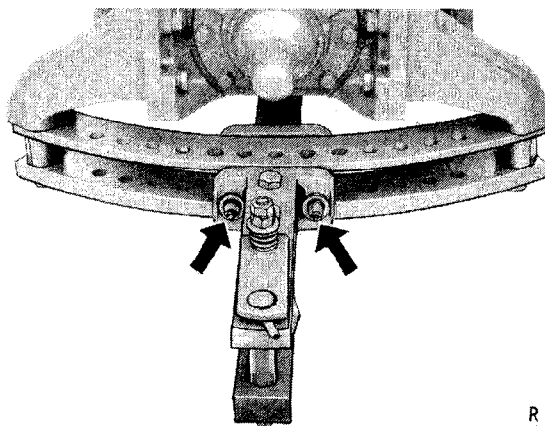


Fig. 1-Grease Fittings

1. Apply several shots of grease to tie rods, pivot pins, and the steering spindles (10 fittings).



R 29779

Fig. 2-Wide Swing Drawbar Grease Fittings

2. If tractor is equipped with a wide-swing drawbar (Fig. 2), apply several shots of John Deere High Temperature Grease or its equivalent to drawbar rollers.

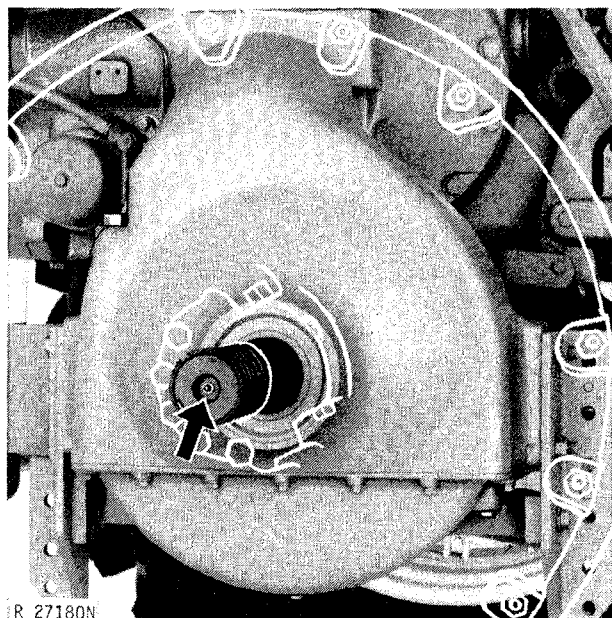


Fig. 3-Hi-Crop Rear Axle Grease Fitting

3. On Hi-Crop tractors, apply several shots of John Deere High Temperature Grease or its equivalent to grease fittings on ends of rear axles.



## Lubricate Grease Fittings—Continued

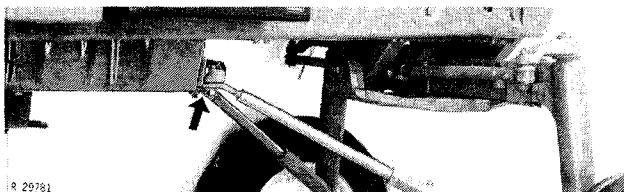


Fig. 4-Radius Rod Pivot Grease Fitting

4. On Hi-Crop tractors, apply several shots of John Deere High Temperature Grease or its equivalent to grease fittings.

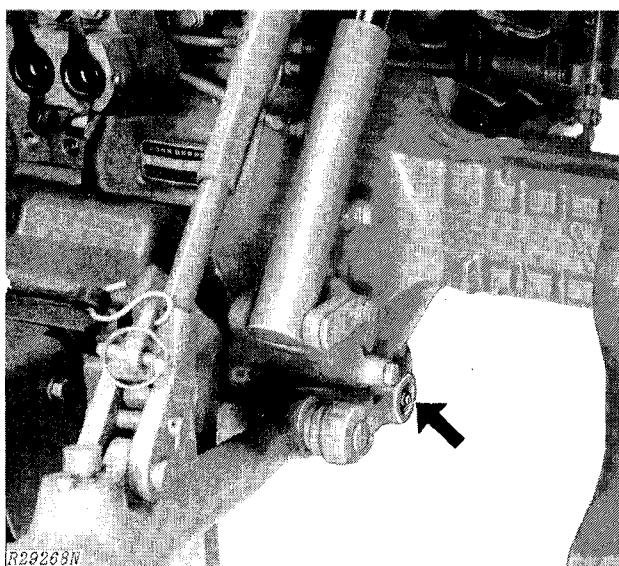


Fig. 5-Load Control Shaft Bushing Grease Fitting

5. Apply several shots of John Deere High Temperature Grease or its equivalent to each load control shaft bushing.

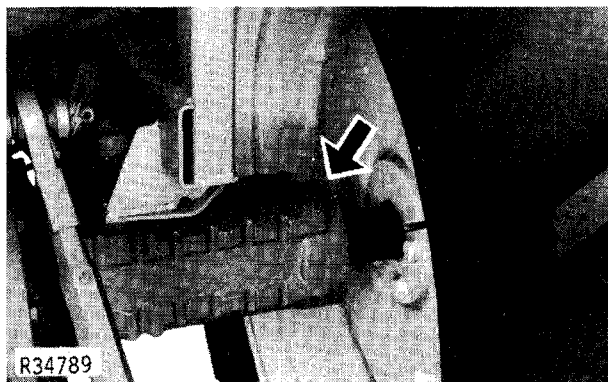


Fig. 6-Rear Axle Grease Plug

6. Grease the rear axle bearings by removing the pipe plug on each end of the axle housing, installing a grease fitting and applying John Deere High Temperature Grease or its equivalent at each fitting. Apply grease until grease appears at seals, or a maximum of 25 shots.

## Install Ether Aid Solenoid Wiring (if equipped)

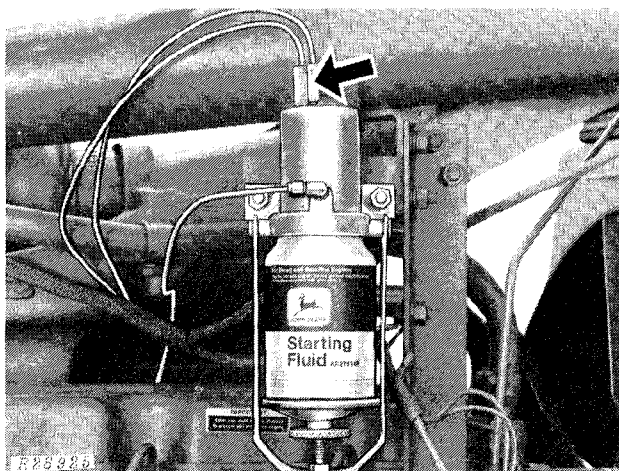


Fig. 7-Electric Starting Aid Connector

Connect starting aid wiring to starting aid solenoid (if equipped).

**BUY NOW**

**Then Instant Download  
the Complete Manual  
Thank you very much!**