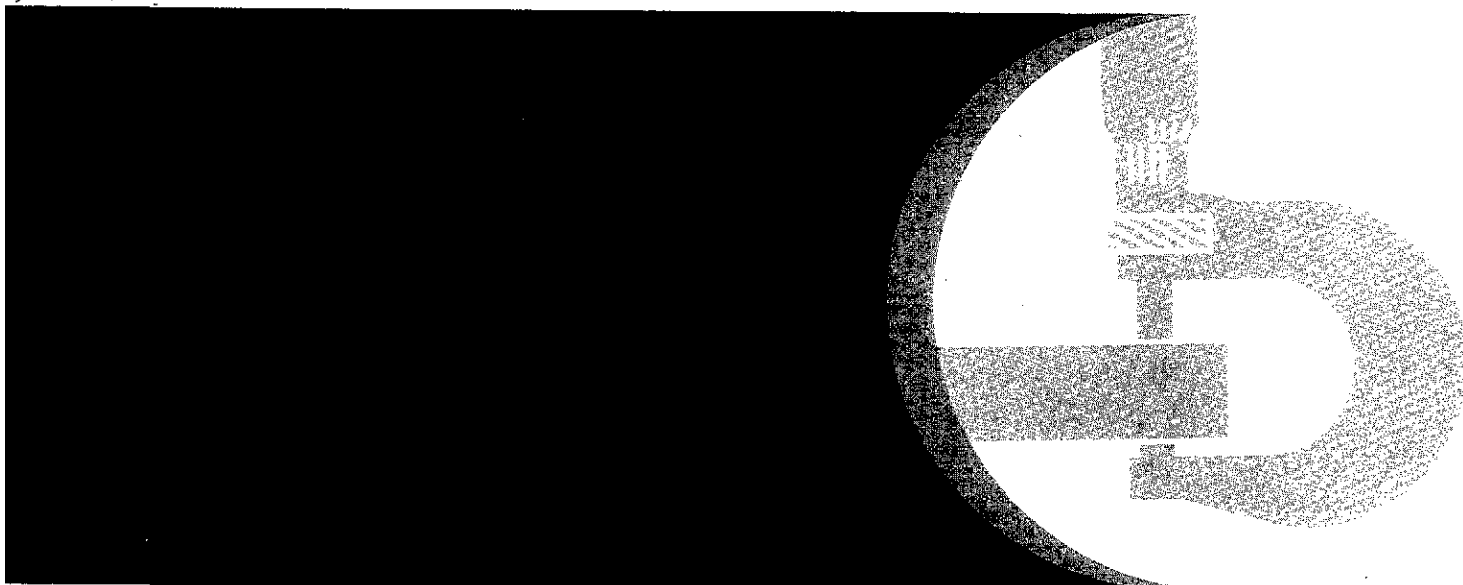


4040 & 4240 Tractors



4040 AND 4240 TRACTORS TECHNICAL MANUAL TM-1181 (SEP-77)

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Group 00

SPECIFICATIONS AND SPECIAL TOOLS GENERAL TRACTOR SPECIFICATIONS

	4040	4240
HORSEPOWER (Factory observed PTO horsepower at 2200 rpm)	90 hp (67 kW)	110 hp (82 kW)
ENGINE:		
Type	6-cylinder, in-line, valve-in-head, diesel	6-cylinder, in-line, valve-in-head, diesel
Slow idle speed	800 rpm	800 rpm
Working speed range	1500 to 2200 rpm	1500 to 2200 rpm
Bore and stroke	4.25 x 4.75 in. (108 x 121 mm)	4.56 x 4.75 in. (116 x 121 mm)
Displacement	404 cu. in. (6.6 L)	466 cu. in. (7.6 L)
Compression ratio	16.7 to 1	17.0 to 1
Firing order	1-5-3-6-2-4	1-5-3-6-2-4
Valve clearance		
Intake	0.018 in. (0.46 mm)	0.018 in. (0.46 mm)
Exhaust	0.028 in. (0.71 mm)	0.028 in. (0.71 mm)
Injection pump timing	TDC	TDC
Lubrication system	force-feed, pressurized with full-flow filter	force-feed, pressurized with full-flow filter

	4040	4240
FUEL SYSTEM		
Type	direct injection	direct injection
Injection pump type	distributor	distributor
Air cleaner	dry type with safety element	dry type with safety element
COOLING SYSTEM		
Type	dual-pressure with centrifugal pump	dual pressure with centrifugal pump
Temperature control	dual heavy duty thermostats	dual heavy duty thermostats
CAPACITIES		
Fuel tank	37 U.S. gal. (140 L)	46 U.S. gal. (176 L)
Cooling system	24 U.S. qts. (23 L)	30 U.S. qts. (28 L)
Crankcase (with filter change)	17 U.S. qts. (16 L)	17 U.S. qts. (16 L)
Transmission-hydraulic system (Drain and fill):		
Power Shift Transmission	11.0 U.S. gal. (41.6 L)	11.0 U.S. gal. (41.6 L)
QUAD-RANGE or Syncro-Range Transmission		
Add for power front-wheel drive	13.0 U.S. gal. (49.2 L)	13.0 U.S. gal. (49.2 L)
Transmission-hydraulic system (Dry, production fill):		
Power Shift Transmission	15.9 U.S. gallons (60.3 L)	15.9 U.S. gallons (60.3 L)
QUAD-RANGE or Syncro-Range Transmission		
Add for power front-wheel drive	5.0 U.S. gallons (18.9 L)	5.0 U.S. gal. (18.9 L)
POWER SHIFT TRANSMISSION:		
Type	planetary gears, hydraulically actuated wet disk clutches and brakes	planetary gears, hydraulically actuated wet disk clutches and brakes
Gear selections	8 forward and 4 reverse	8 forward and 4 reverse
Shifting	hydraulic, on-the-go and under load	hydraulic, on-the-go and under load
QUAD-RANGE TRANSMISSION		
Type	2-speed, power-shifted planetary and 8-speed synchronized 16 forward and 6 reverse	2-speed, power-shifted planetary and 8-speed synchronized 16 forward and 6 reverse
Gear selections	hydraulically-operated, multiple-disk wet clutch	hydraulically-operated, multiple-disk wet clutch
Perma-Clutch		
SYNCRO-RANGE TRANSMISSION		
Type	synchronized, constant mesh	synchronized, constant mesh
Gear selections	8 forward and 2 reverse	8 forward and 2 reverse
Shifting	4 stations; synchronized forward speed shifting within stations	4 stations; synchronized forward speed shifting within stations
CREEPER TRANSMISSION		
Type	8-speed Syncro-Range plus 2-speed collar-shifted planetary	8-speed Syncro-Range plus 2-speed collar-shifted planetary
Gear selections	13 forward and 4 reverse	13 forward and 4 reverse
Shifting	same as Syncro-Range plus collar shift between ranges	same as Syncro-Range plus collar shift between ranges
POWER TAKE-OFF:		
Type	fully independent, dual-speed	fully independent, dual-speed
Speeds (2200 engine rpm)	1000 rpm or independent 540 and 1000 rpm	1000 rpm or independent 540 and 1000 rpm
Size	1-3/8 in. (35 mm)	1-3/8 in. (35 mm)
Clutch	hydraulically-operated, multiple-disk wet clutch	hydraulically-operated, multiple-disk wet clutch
POWER FRONT-WHEEL DRIVE:		
Type	hydraulic motor with planetary gear reduction, constant torque and variable speed	hydraulic motor with planetary gear reduction, constant torque and variable speed
Controls	solenoid-operated valves, synchronized with transmission controls	solenoid-operated valves, synchronized with transmission controls

	4040	4240
HYDRAULIC SYSTEM:		
Type	closed-center, constant-pressure	closed-center, constant-pressure
Standby pressure	2250 psi (155 bar) (155 kg/cm ²)	2250 psi (155 bar) (155 kg/cm ²)
BRAKES:		
Type	hydraulically-operated wet disk	hydraulically-operated wet disk
ELECTRICAL SYSTEM:		
Type	12-volt, negative ground	12-volt, negative ground
Batteries	two, 6-volt, 5D group, 800 amps cold cranking, 376 minutes reserve capacity	two, 6-volt, 5D group, 800 amps cold cranking, 376 minutes reserve capacity
Alternator	72-amp with SOUND-GARD body, 61-amp without	72-amp with SOUND-GARD body, 61-amp without
TIRES AND THREADS:		
	see page 05-6 in this section	see page 05-6 in this section
DIMENSIONS:		
Wheelbase	104.0 in. (2 642 mm)	105.7 in. (2 709 mm)
Overall length	153.2 in. (3 892 mm)	156.6 in. (3 977 mm)
Height to muffler cover*		
Tractors with SOUND-GARD body	119.8 in. (3 040 mm)	123.0 in. (3 122 mm)
Tractors without SOUND-GARD body	111.8 in. (2 837 mm)	115.0 in. (2 918 mm)
Height to top of SOUND-GARD Body*	109.3 in. (2 775 mm)	114.1 in. (2 895 mm)
Overall width (regular axle)	90 in. (2 277 mm)	90 in. (2 277 mm)
Width at fender	82 in. (2 082 mm)	82 in. (2 082 mm)
Width at roof	54.4 in. (1 382 mm)	54.4 in. (1 382 mm)
Turning radius	134 in. (3 400 mm)	146 in. (3 700 mm)
SHIPPING WEIGHT**	9630 lbs. (4370 kg)	10,900 lbs. (4975 kg)

*4040 Tractor equipped with 18.4-34 rear tires and 9.5L-15 front tires. 4240 Tractor equipped with 18.4-38 rear tires and 10.00-16 front tires.

**Equipped for average field service, without fuel and ballast. Add approximately 1000 lbs. (450 kg) if equipped with power front-wheel drive. Subtract 900 lbs. (400 kg) if not equipped with SOUND-GARD Body.

GROUND SPEEDS

Speeds in the following charts are in miles per hour, with kilometers per hour in parenthesis. Speeds are for a 4040 Tractor with 18.4-34 tires or a 4240 Tractor with 18.4-38 tires.

POWER SHIFT TRANSMISSION

Gear	1500 rpm		2200 rpm	
	1500 rpm	2200 rpm	1500 rpm	2200 rpm
1	1.1 (1.8)	1.7 (2.7)	1.2 (1.9)	1.8 (2.9)
2	1.6 (2.6)	2.4 (3.9)	1.7 (2.7)	2.5 (4.0)
3	2.5 (4.0)	3.7 (6.0)	2.6 (4.2)	3.8 (6.2)
4	3.2 (5.2)	4.7 (7.6)	3.4 (4.9)	4.9 (7.9)
5	4.2 (6.8)	6.1 (9.8)	4.4 (7.1)	6.5 (10.5)
6	5.4 (8.7)	7.9 (12.7)	5.7 (9.2)	8.3 (13.4)
7	7.1 (11.4)	10.5 (16.9)	7.6 (12.2)	11.2 (18.0)
8	11.9 (19.2)	17.5 (28.2)	12.9 (20.7)	18.9 (30.4)
1R	1.3 (2.1)	1.9 (3.1)	1.5 (2.4)	2.2 (3.5)
2R	1.9 (3.1)	2.8 (4.5)	2.1 (3.4)	3.1 (5.0)
3R	2.9 (4.7)	4.3 (6.9)	3.2 (5.1)	4.7 (7.6)
4R	3.8 (6.1)	5.5 (8.9)	4.1 (6.6)	6.0 (9.7)

GROUND SPEEDS—Continued

QUAD-RANGE TRANSMISSION

Gear	4040		4240	
	1500 rpm	2200 rpm	1500 rpm	2200 rpm
A 1	1.3 (2.1)	1.9 (3.1)	1.4 (2.2)	2.0 (3.2)
2	1.6 (2.6)	2.4 (3.7)	1.8 (2.9)	2.6 (4.2)
3	2.1 (3.4)	3.1 (5.0)	2.3 (3.7)	3.4 (5.4)
4	2.7 (4.3)	4.0 (6.4)	2.9 (4.7)	4.3 (6.9)
1R	2.1 (3.4)	3.0 (4.8)	2.2 (3.5)	3.2 (5.2)
2R	2.6 (4.2)	3.9 (6.3)	2.8 (4.5)	4.1 (6.6)
B 1	3.0 (4.8)	4.4 (7.1)	3.2 (5.1)	4.7 (7.6)
2	3.8 (6.1)	5.6 (9.0)	4.0 (6.5)	5.9 (9.5)
3	4.9 (7.9)	7.2 (11.6)	5.3 (8.5)	7.7 (12.4)
4	6.3 (10.1)	9.2 (14.8)	6.7 (10.8)	9.8 (15.8)
1R	4.8 (7.7)	7.0 (11.3)	5.1 (8.2)	7.5 (11.9)
2R	6.1 (9.8)	8.9 (14.3)	6.5 (10.5)	9.5 (15.3)
C 1	3.5 (5.6)	5.2 (8.4)	3.8 (6.1)	5.5 (8.9)
2	4.5 (7.2)	6.6 (10.6)	4.8 (7.7)	7.0 (11.3)
3	5.8 (9.3)	8.6 (13.8)	6.2 (10.0)	9.2 (14.7)
4	7.4 (11.9)	10.9 (17.5)	7.9 (12.7)	11.6 (18.6)
1R	5.6 (9.0)	8.3 (13.4)	6.0 (9.7)	8.9 (14.2)
2R	7.2 (11.6)	10.5 (16.9)	7.7 (12.4)	11.2 (18.0)
D 1	5.4 (8.7)	8.0 (12.9)	5.8 (9.3)	8.5 (13.7)
2	6.9 (11.1)	10.1 (16.3)	7.3 (11.7)	10.8 (17.4)
3	9.0 (14.4)	13.2 (21.2)	9.6 (15.4)	14.0 (22.6)
4	11.4 (18.3)	16.7 (26.9)	12.2 (19.6)	17.8 (28.7)

SYNCRO-RANGE TRANSMISSION

1	1.3 (2.1)	1.9 (3.1)	1.4 (2.2)	2.0 (3.2)
2	2.1 (3.4)	3.0 (4.8)	2.2 (3.5)	3.2 (5.2)
3	2.7 (4.3)	4.0 (6.4)	2.9 (4.7)	4.2 (6.8)
4	3.5 (5.6)	5.1 (8.2)	3.7 (6.0)	5.4 (8.7)
5	4.3 (7.0)	6.3 (10.2)	4.6 (7.4)	6.8 (10.9)
6	5.7 (9.1)	8.3 (13.4)	6.1 (9.8)	8.9 (14.3)
7	7.3 (11.8)	10.7 (17.3)	7.8 (12.5)	11.5 (18.5)
8	11.9 (19.2)	17.5 (28.2)	12.8 (20.6)	18.8 (30.3)
1R	2.6 (4.2)	3.8 (6.3)	2.8 (4.5)	4.1 (6.6)
2R	4.2 (6.8)	6.2 (10.0)	4.5 (7.2)	6.6 (10.6)
With optional Creeper engaged				
1	0.3 (0.5)	0.4 (0.7)	0.3 (0.4)	0.4 (0.6)
2	0.4 (0.7)	0.6 (1.0)	0.4 (0.7)	0.6 (1.0)
3	0.5 (0.9)	0.8 (1.3)	0.5 (1.0)	0.8 (1.4)
4	0.8 (1.2)	1.1 (1.8)	0.8 (1.2)	1.1 (1.8)
5	0.9 (1.4)	1.3 (2.1)	1.0 (1.6)	1.3 (2.2)
1R	0.5 (0.9)	0.8 (1.3)	0.5 (0.8)	0.8 (1.2)
2R	0.9 (1.4)	1.3 (2.1)	0.9 (1.5)	1.3 (2.2)

(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	Nm	kgm
SOUND-GARD Body or Four-Post ROLL-GARD® mounting bolts	150	200	20
Front axle-to-knee bolts:			
Narrow front axle	320	435	44
Regular or wide front axle	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	Nm	kgm	ft-lbs	Nm	kgm	ft-lbs	Nm	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	
4040	90 hp (67 kW)
4240	110 hp (82 kW)
Compression	370 to 400 psi (25.5 to 27.6 bar)
Air cleaner indicator switch closing vacuum	24 to 26 in. (60 to 65 mbar)
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	17 U.S. quarts (16 L)
Transmission-hydraulic system	
(Drain and fill):	
Power Shift Transmission	11.0 U.S. gal. (41.6 L)
QUAD-RANGE or Syncro-Range Transmission	13.0 U.S. gal. (49.2 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 or Syncro-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
Vacuum (full speed, full load, clean air filters)	
4040	7.5 to 8.5 in. (19 to 21 mbar)
4240	9 to 10 in. (22 to 25 mbar)

SEPARATION

ITEM	SPECIFICATION
Fan belt tension	New Belt
Single belt	130-140 lbs. (578-622 N)
Dual belt	95-104 lbs. (423-467 N)
	After Run In
All belts	85-94 lbs. (378-423 N)
ITEM	TORQUE
Sound-Gard Body retaining cap screws	150 ft-lbs (203 Nm) (20.3 kgm)
Roll-Gard® (4-post) mounting cap screws	150 ft-lbs (203 Nm) (20.3 kgm)
Engine-to-clutch housing cap screws	1/2 in.—85 ft-lbs (115 Nm) (11.5 kgm)
	3/4 in.—300 ft-lbs (406 Nm) (40.6 kgm)
Clutch housing-to-engine cap screws	300 ft-lbs (406 Nm) (40.6 kgm)
Hydraulic pump support-to-engine cap screws	85 ft-lbs (115 Nm) (11.5 kgm)
Hydraulic pump coupler lock nuts	30 ft-lbs (41 Nm) (4.1 kgm)
Hydraulic pump drive coupling	35 ft-lbs (47 Nm) (4.7 kgm)
Side frames-to-engine	5/8 in.—275 ft-lbs (373 Nm) (37.3 kgm)
	3/4 in.—425 ft-lbs (578 Nm) (57.8 kgm)
Clutch housing-to-transmission case cap screws	5/8 in.—170 ft-lbs (230 Nm) (23 kgm)
	3/4 in.—300 ft-lbs (406 Nm) (40.6 kgm)
Oil filter inlet pipe elbow cap screws	45 ft-lbs (61 Nm) (6.1 kgm)
Axle housing-to-transmission case cap screws	170 ft-lbs (230 Nm) (23 kgm)
Hi-Crop drive shaft housing-to-final drive gear housing	275 ft-lbs (373 Nm) (37.3 kgm)
Radiator hose clamps (clean and dry)	36 in-lbs (4 Nm) (0.4 kgm)
Transmission pump elbow-to-clutch housing cap screws	45 ft-lbs (61 Nm) (6.1 kgm)
Oil pan-to-clutch housing cap screws	85 ft-lbs (115 Nm) (11.5 kgm)
Hose clamps	30 in-lbs (3.4 Nm) (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

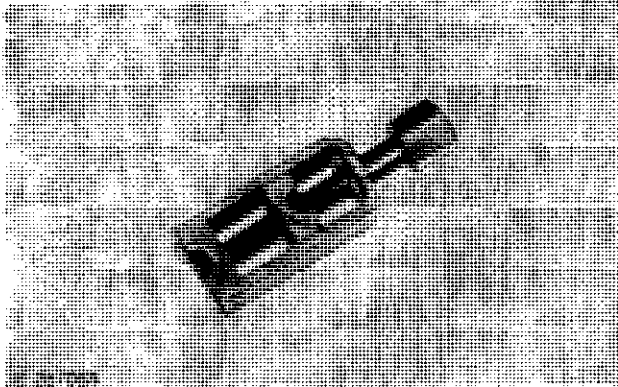
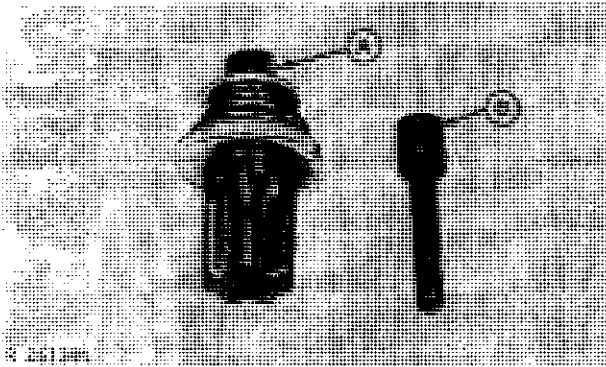


Fig. 1—JDG-18 Snap Ring Tool*

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

Turn engine to TDC to check injection pump timing

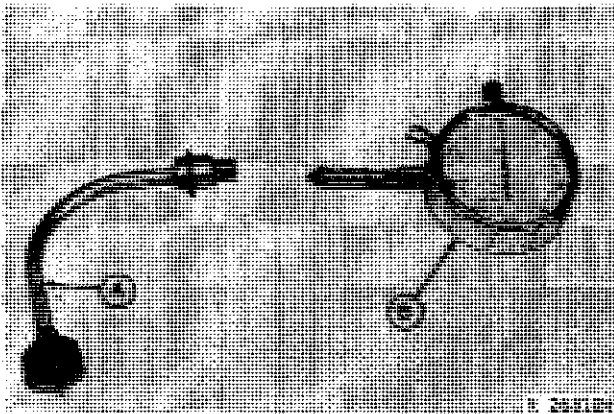


A—JDE-81-1 Engine Rotation Tool*
B—JDE-81-4 Timing Pin*

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

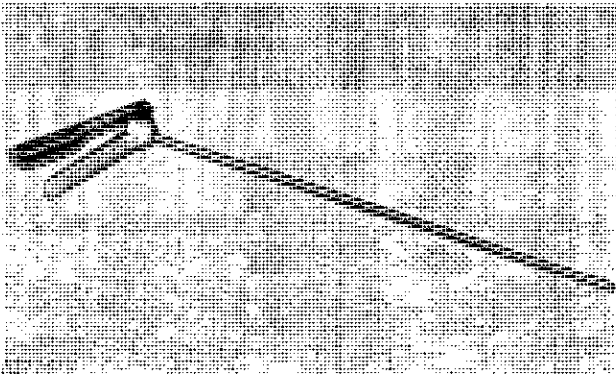


Fig. 4-AR62377 Dry Element Cleaning Gun

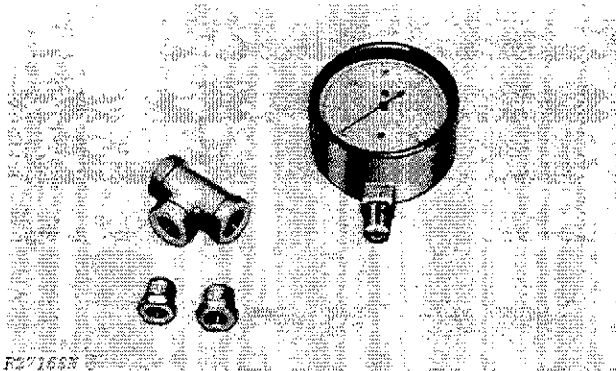


Fig. 5-D-05022ST Water Vacuum Gauge*
(Formerly JDST-11)

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

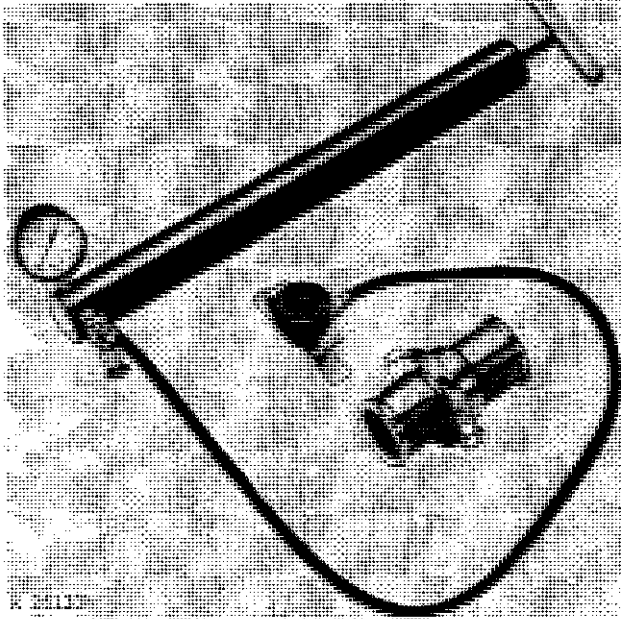


Fig. 6-BT-11-52 Radiator Tester*

Separation

Brown Body Lift

To remove Sound-Gard Body.

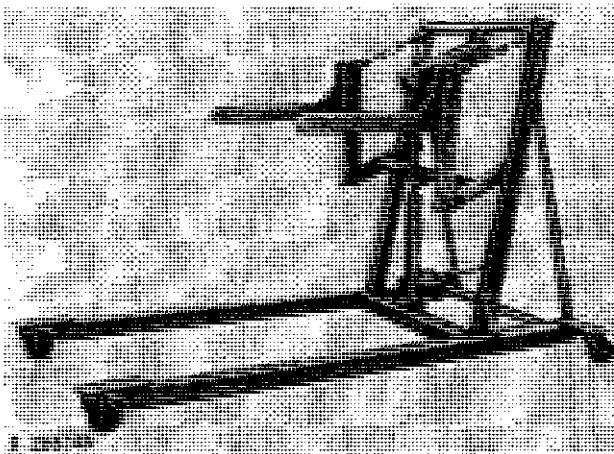


Fig. 7-Brown Body Lift

JDG-21 Fork Lift Adapters

To remove Sound-Gard Body

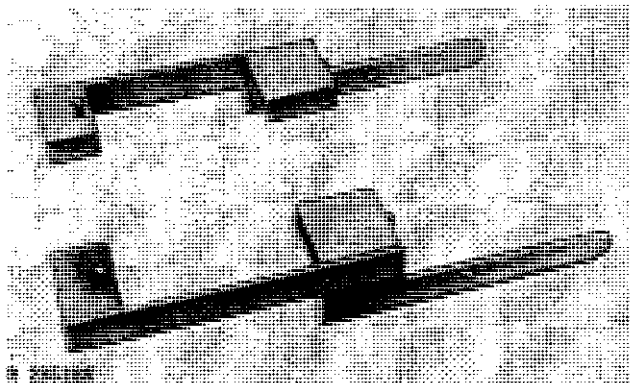


Fig. 8-Fork Lift Adapters

Separation—Continued

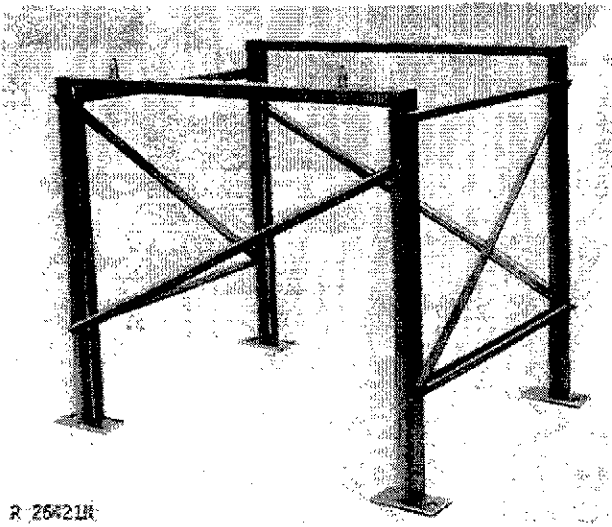
TOOL

NUMBER

USE

JDG-10-2

To support Sound-Gard Body after removal.



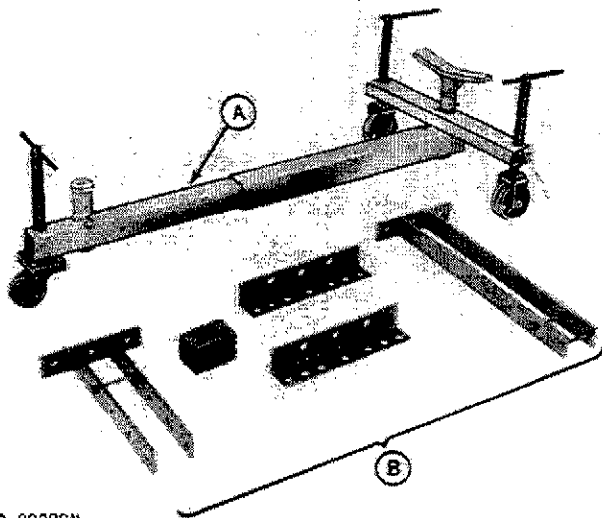
R 26421R

Fig. 9-Sound-Gard Body Stand*

A-D-05007ST
Splitting Stand

To support tractor in various separations.

B-D-05149ST
Attachments

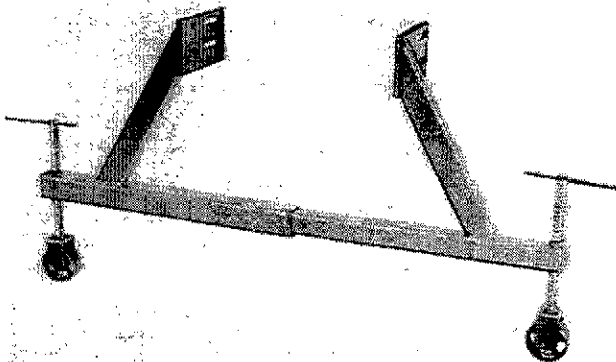


R 28088N

Fig. 10-Splitting Stand*

JDG-12-1
Splitting Stand

To support front end of tractor.



R 26619N

Fig. 11-Splitting Stand*

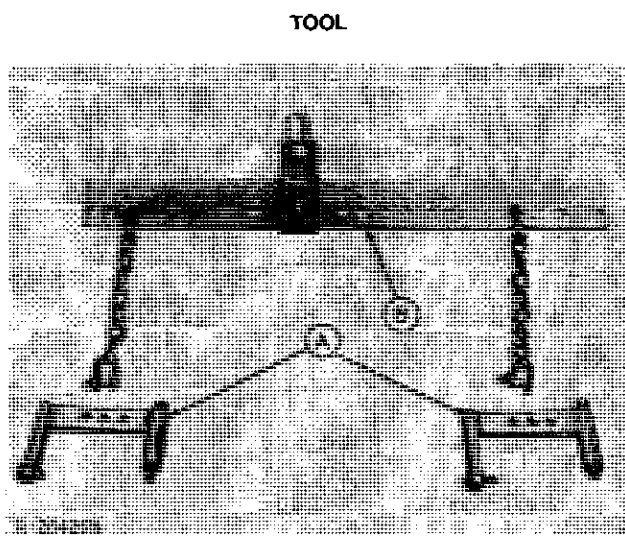


Fig. 12-Engine Removal Tools*

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

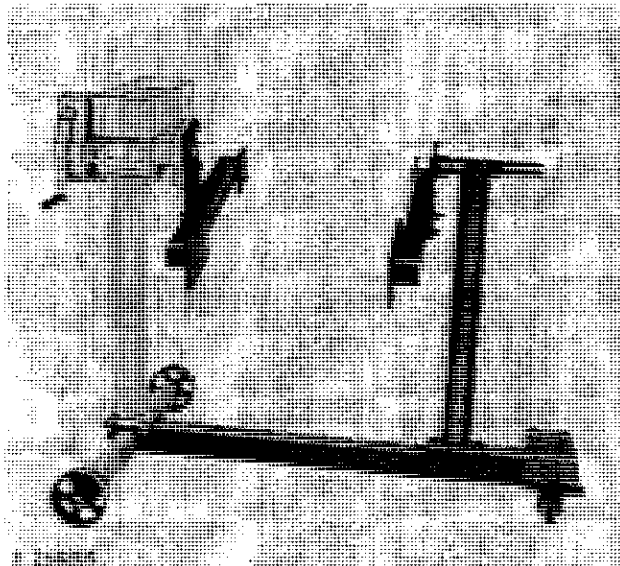


Fig. 13-Engine Repair Stand*

	D-05001ST Repair Stand	To support engine during repair.
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*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 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 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).

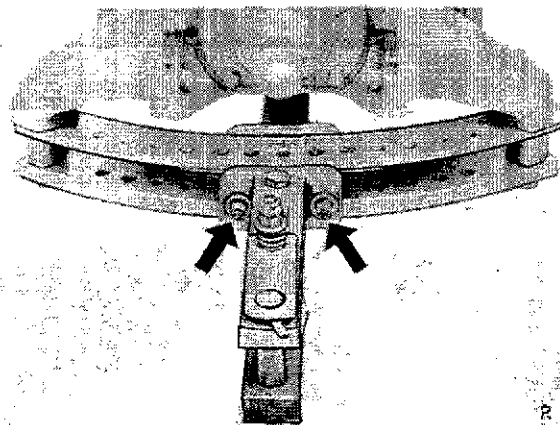


Fig. 2-Wide Swing Drawbar Grease Fittings

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.

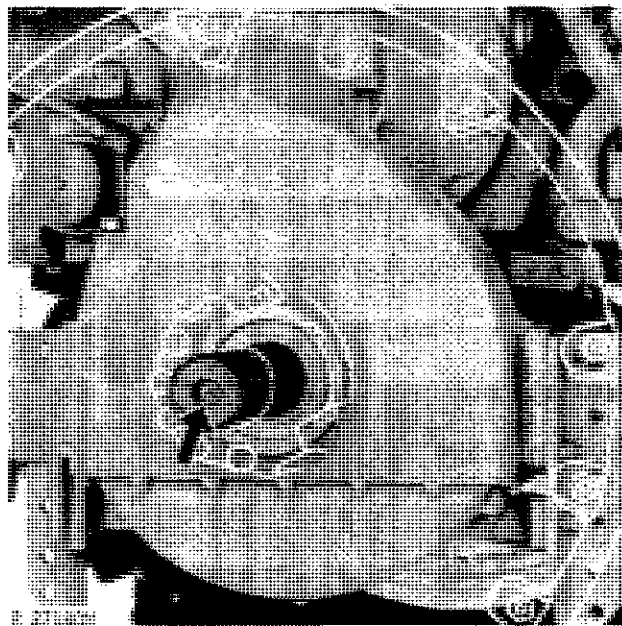


Fig. 3-Hi-Crop Rear Axle Grease Fitting

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

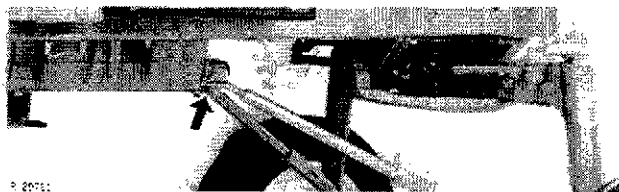


Fig. 4-Radius Rod Pivot Grease Fitting

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

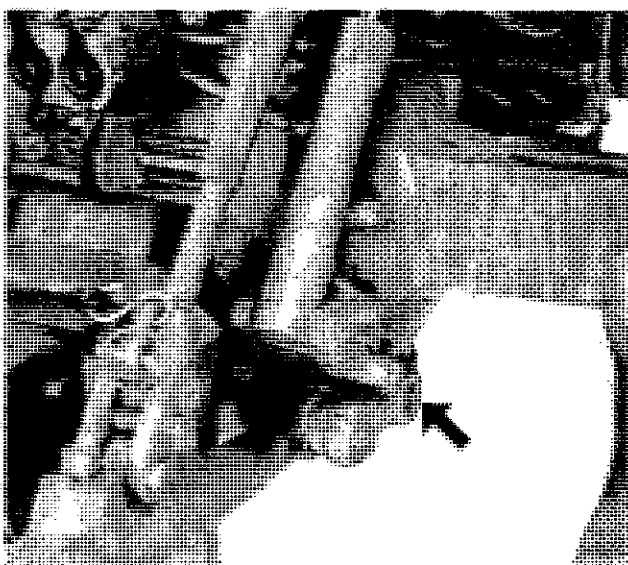


Fig. 5-Load Control Shaft Bushing Grease Fitting

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

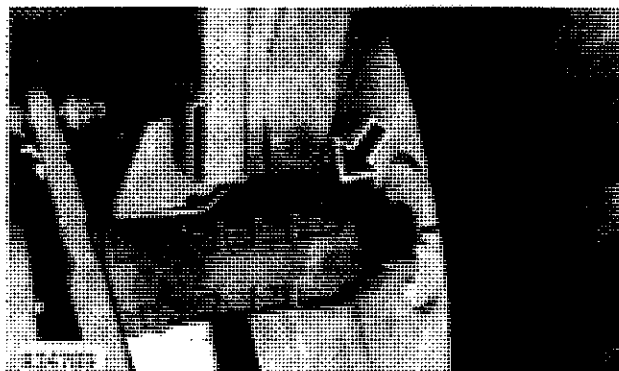


Fig. 6-Rear Axle Grease Plug

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)

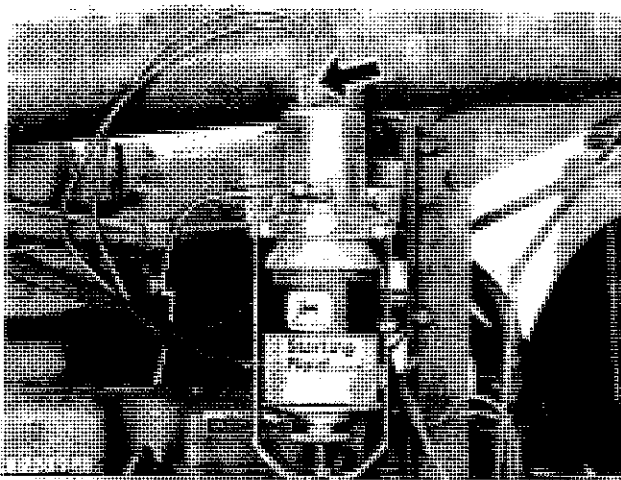


Fig. 7-Electric Starting Aid Connector

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

Align Muffler and Air Stack

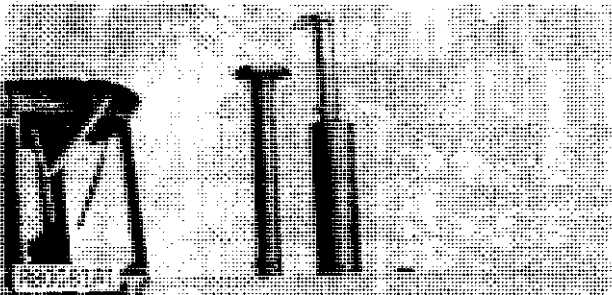


Fig. 8-Muffler and Air Stack

If necessary, align muffler and air stack so they are perpendicular to tractor hood.

Adjust All Lamps

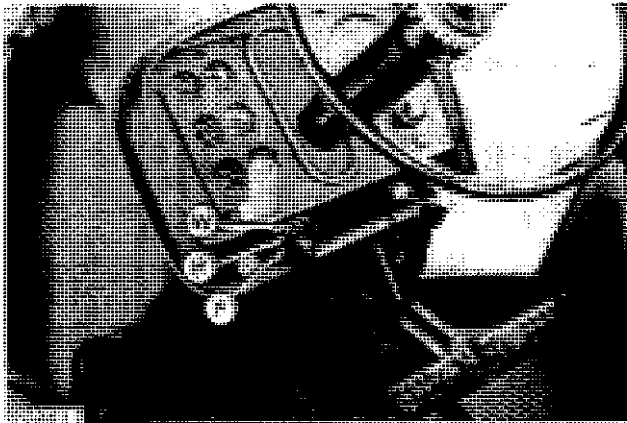
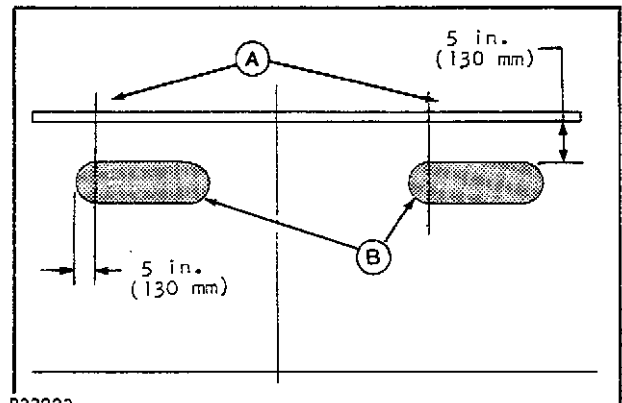


Fig. 9-Light Switch

Make sure lights work properly in the following positions:

- OFF - To turn off lights.
- W - To turn on the warning lamps.
- H - To turn on the dual-beam head lamps, warning lamps, and red tail lamps.
- F - To turn on the dual-beam head lamps and flood lamps.

Head Lamps



R33823

A—Points Directly in Front of Lamps
B—Small Zones of Bright Light

Fig. 10-Checking Head Lamp Positions

1. Park tractor on level ground, 25 feet (8 m) from a wall.
2. Measure height of lamps above ground, and place a strip of masking tape on wall at same height.
3. Sight across steering wheel and hood ornament to locate tractor centerline. Mark this spot, and measure out one foot (300 mm) in each direction. This locates a spot directly in front of each lamp.
4. Turn light switch to "H" and dimmer switch to low beam.
5. Locate small zone of bright light projected by each lamp. Top of bright zone should be five inches (130 mm) lower than lamp, and left edge of zone should be five inches (130 mm) to left of lamp. Cover other lamp if necessary.

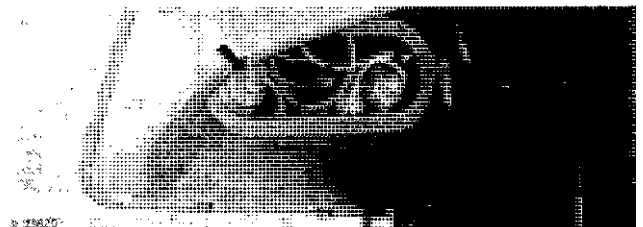


Fig. 11-Head Lamp Adjusting Nut

6. To readjust a bulb, loosen nut behind bulb. Hold lamp in correct position, and tighten securely.