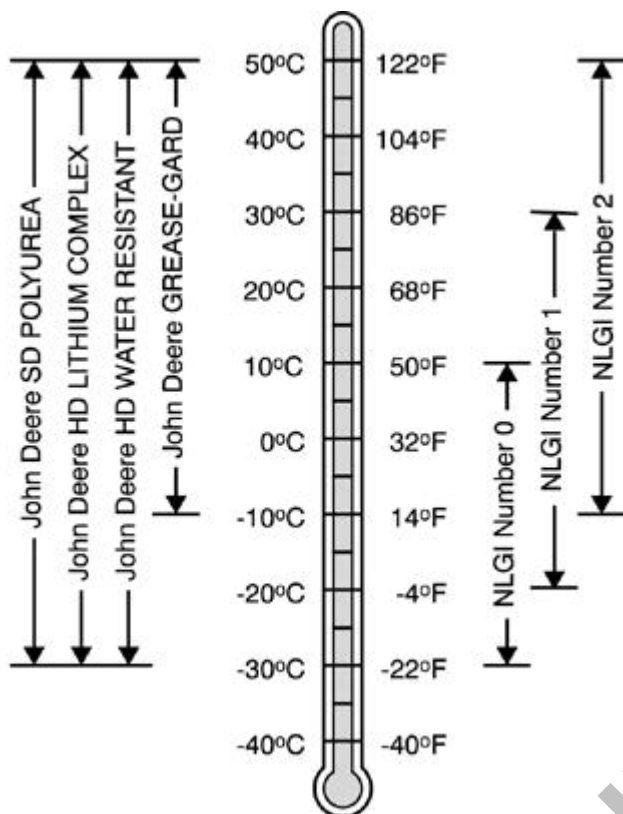


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Grease



Greases for Air Temperature Ranges

Use grease based on NLGI consistency numbers and the expected air temperature range during the service interval.

John Deere SD Polyurea Grease is preferred.

The following greases are also recommended:

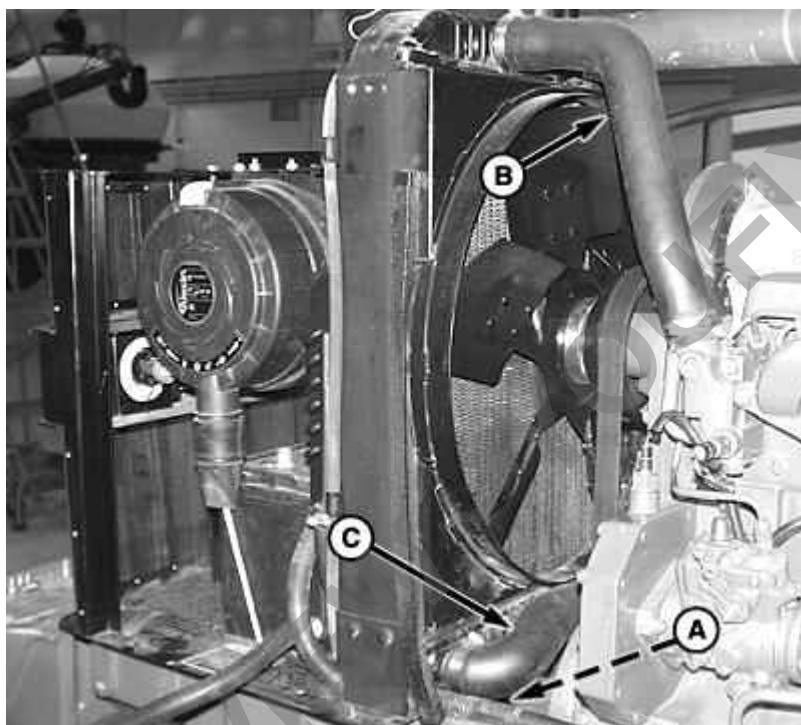
- John Deere HD Lithium Complex Grease
- John Deere HD Water Resistant Grease
- John Deere GREASE-GARD™

Other greases may be used if they meet the following:

- NLGI Performance Classification GC-LB

IMPORTANT:

Some types of grease thickeners are not compatible with others. Consult your grease supplier before mixing different types of grease.

**LEGEND:**

- A Petcock
- B Upper Radiator Hose
- C Lower Radiator Hose

Attach a 9.5 mm (3/8 in.) ID rubber hose to radiator petcock (A). Open petcock and drain coolant into approved container. Approximate capacity of radiator is 8.9 L (9.4 qt).

Item	Measurement	Specification
Radiator	Capacity	8.9 L (9.4 qt)

[5] - Disconnect hoses (B) and (C) from radiator.

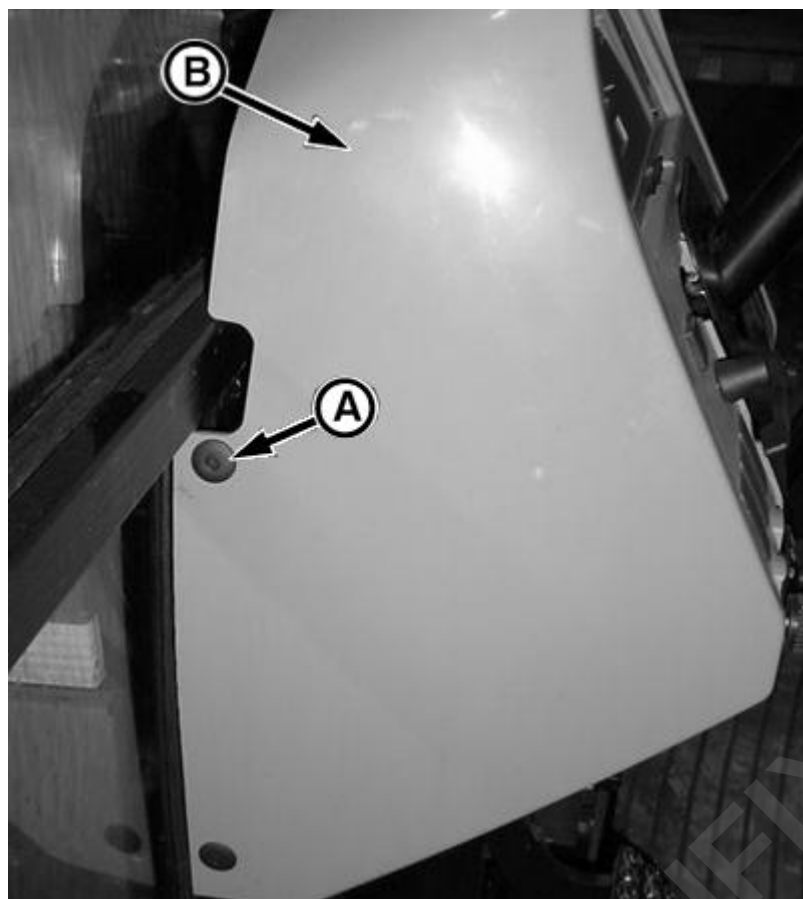
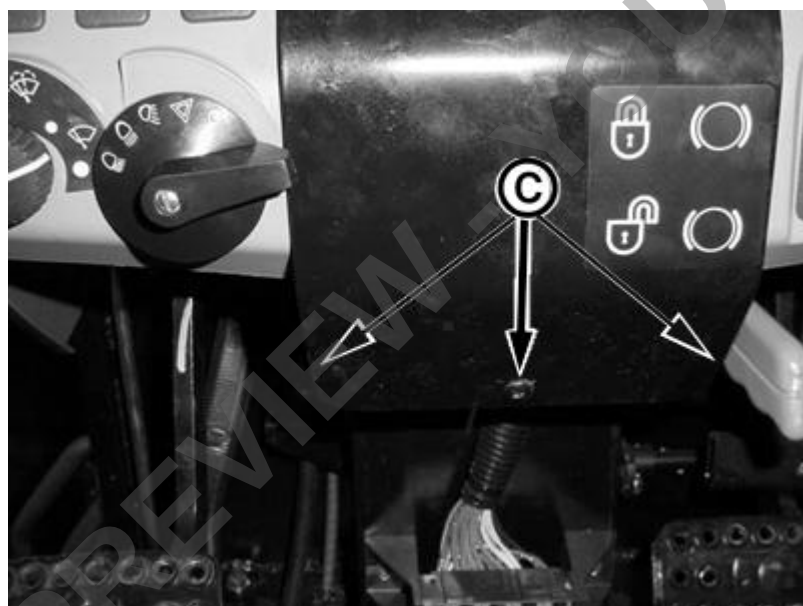
Connect positive (+) battery cable.

QUICKLY TAP ground strap to negative post. Arcing must not occur. If arcing occurs, DO NOT MAKE CONNECTION. Check to see if battery position is reversed.

If arcing still occurs, check again that all switches and accessories are off. Then check for shorts or other electrical loads.

Connect negative (-) battery ground cable.

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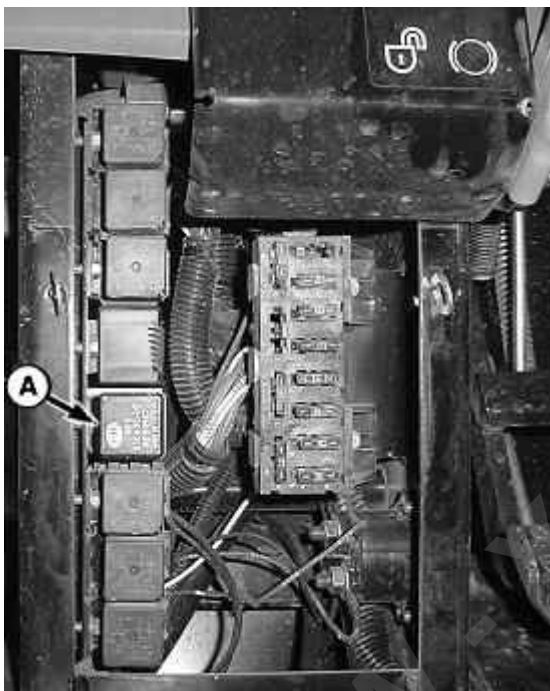
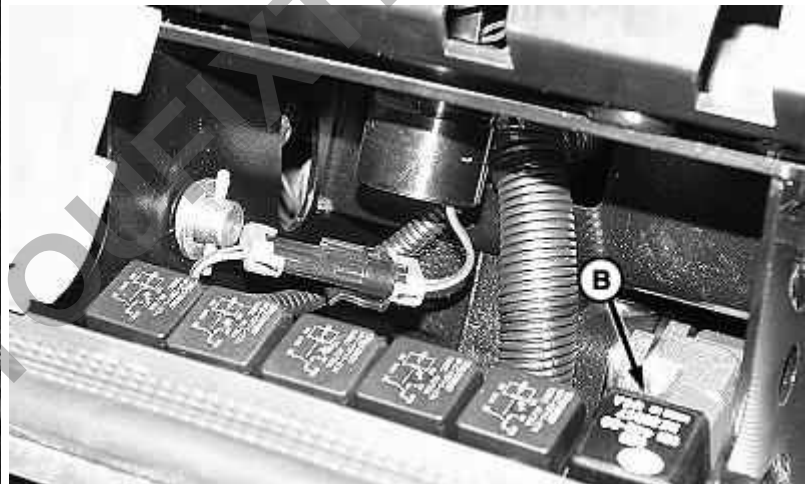
**LEGEND:**

- A Plastic Screws (4 used)
- B Dash Panel
- C Cap Screws (3 used)

Install dash panel (B) plastic screws (A) in both sides, and cap screws (C).

K5	Start Relay
K6	Flasher Relay
K7	Seat Switch Relay
K8	High/Low Beam Relay
K9	Flood Light Relay
K10	Enhanced Turn Relay 3
K11	Enhanced Turn Relay 2
K12	Hazard Light Relay
K13	Enhanced Turn Relay 4
K14	Enhanced Turn Relay 1

Diode Block Locations

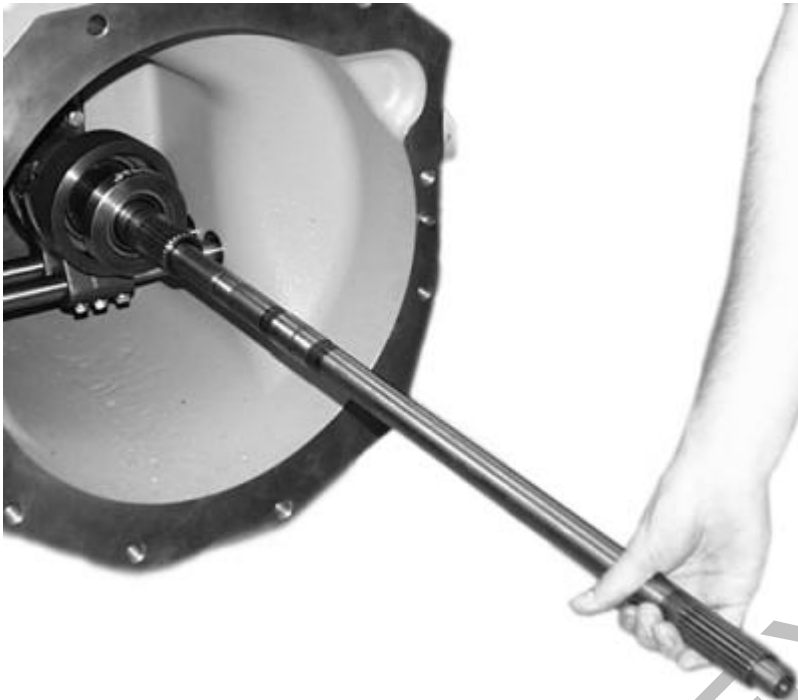


LEGEND:

- A Diode Block #1
- B Diode Block #2

Disassemble PTO Housing

[1] -



Separate clutch housing from engine. (See SEPARATE AND INSTALL ENGINE-TO-CLUTCH HOUSING in Group 15 of this section.)

[2] - Remove PTO input shaft from clutch housing.

IMPORTANT:

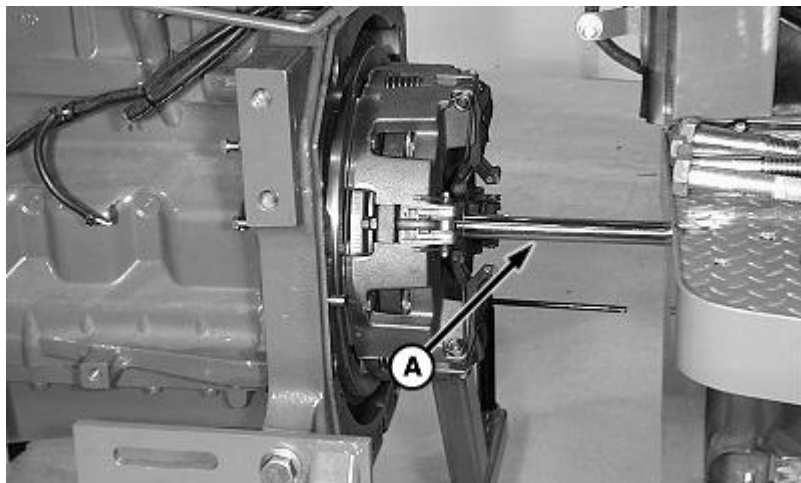
PTO input shaft should only be installed or removed from the front of the clutch housing. Failure to do so can cause seal damage.

[3] -

→NOTE:

Install guide pins (C) to aid in removal of PTO housing.

[18] -

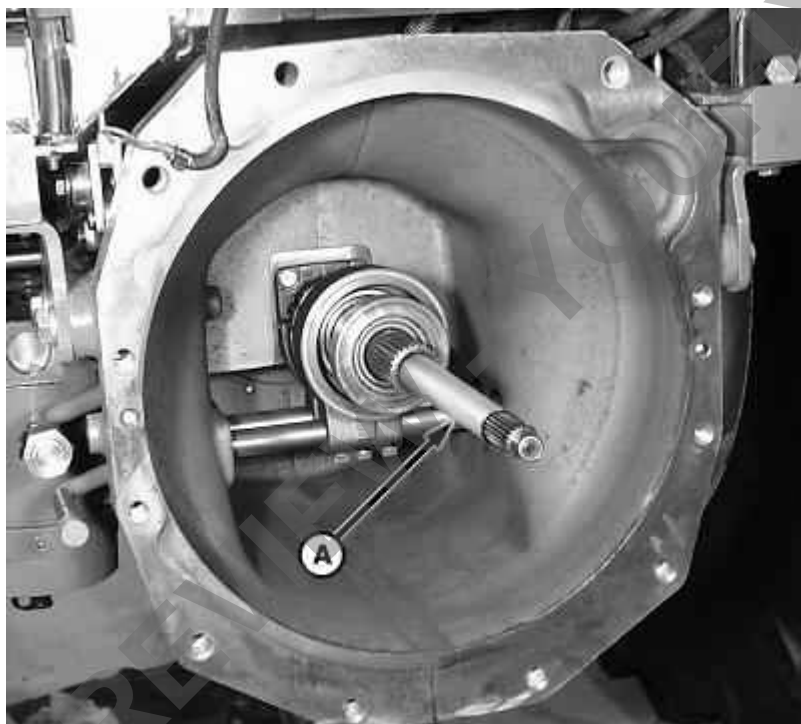
**LEGEND:**

A

Shaft

Pull PTO input shaft (A) from pilot bearing in flywheel if it did not separate initially.

[19] -

**LEGEND:**

A

PTO Shaft

Install engine in reverse order using the following special instructions:

- Coat entire shaft with petroleum jelly; then insert through clutch housing and transmission.

Number	Name	Use
	Petroleum Jelly	Lubricate PTO Shaft

[6] -

**LEGEND:**

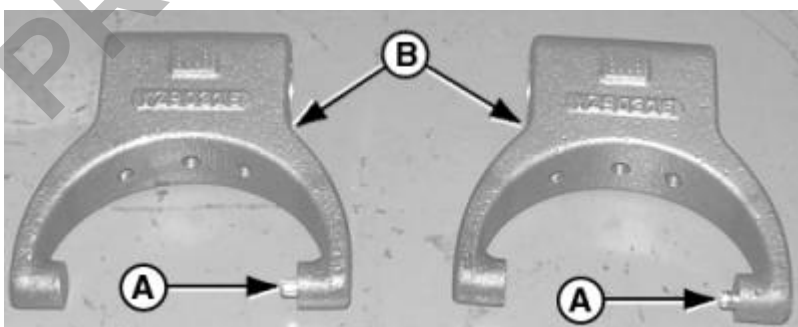
- A Master Clutch Bearing and Retainer
- B Master Clutch Engagement Sleeve

Press master clutch bearing and retainer (A) onto master clutch engagement sleeve (B).

[7] -

→NOTE:

Pin should be flush on outside.

**LEGEND:**

- A Spring Pin (2 used)
- B Clutch Fork (2 used)

Install Clutch Housing to Transaxle

[1] -



Apply TY6304 Flexible Form-in-Place Gasket to the bearing mounting plate on transaxle housing. (HOW TO DISPENSE/APPLY/ASSEMBLE GASKET SEALANT in Section 10 of this manual.)

Number	Name	Use
<ul style="list-style-type: none">• TY6304 (us)• TY9484 (canadian)• 515 LOCTITE™ (loctite)	Flexible Form-In-Place Gasket	To seal jointed surfaces.

[2] -



CAUTION:

Use proper lifting equipment when removing clutch housing. Figure shows proper eyebolt locations (A) for proper balancing of housing.

V 1st Stage Shaft

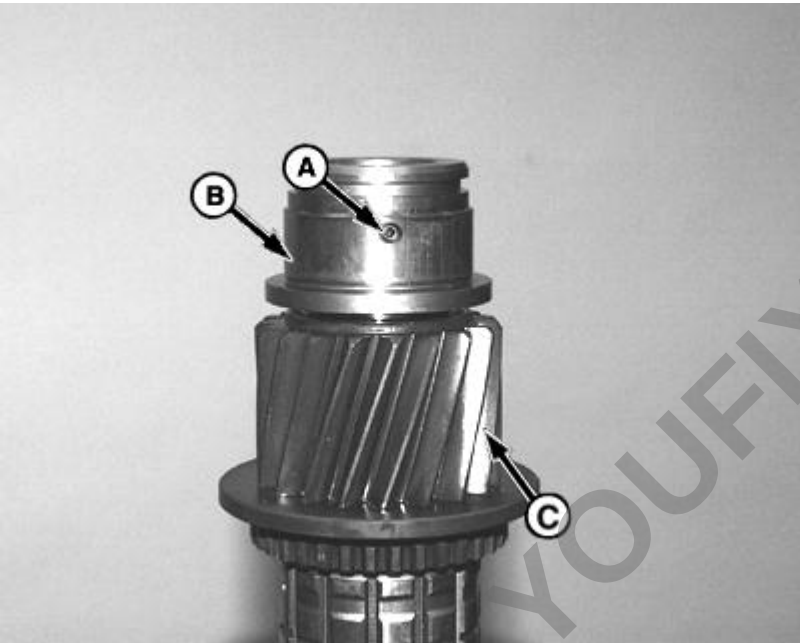
[1] -

IMPORTANT:

Coat all parts using assembly lube. (See TRANSAXLE—ASSEMBLY LUBRICATION in Section 10 for proper mixing instructions.)

IMPORTANT:

Presoak synchronizer rings in J20D or J20C Hy-GARD oil for a minimum of 30 minutes before assembly.



LEGEND:

- A Set Screw (2 Used)
- B Bearing Support Sleeve
- C Reverse Gear

Install reverse gear (C).

[2] - Press bearing support sleeve (B) until shoulder bottoms out against end of shaft using suitable driver.

[3] - Apply T43512 thread lock and sealer (medium strength) to set screws (A).

[4] - Install and tighten set screws.

Item	Measurement	Specification
Set Screws	Torque	5.6-8.4 N·m
		4.13-6.20 lb-ft

**LEGEND:**

- | | |
|---|----------------|
| A | Shaft Assembly |
| B | C-Range Sleeve |
| C | C-Range Gear |

Install 2nd stage shaft assembly (A) in transaxle housing.

[58] - Install C-Range sleeve (B) on spiral bevel pinion shaft.

[59] - Install C-Range gear (C) over sleeve, with splines down.

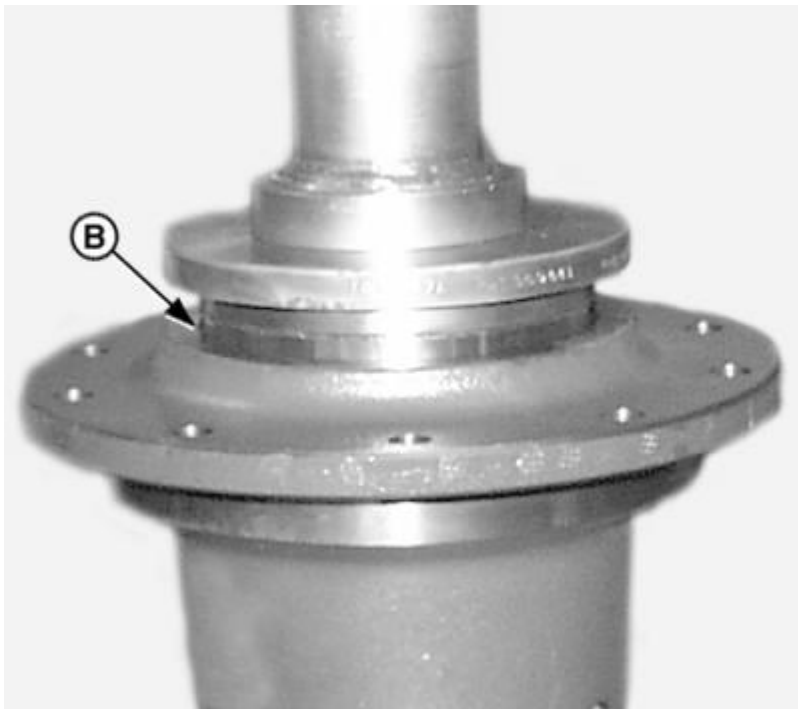
[60] -

⚠ CAUTION:

Wear proper protective gloves while handling hot bearing sleeve.

→NOTE:

This is a transition fit (light press fit) bearing sleeve. To aid in its installation, heat the sleeve to 150° C (300° F) or lightly tap it in place.

**LEGEND:**

A	Lube Cover
B	Bearing Cup

Position differential lube cover (A), concave up, into carrier housing.

[22] -

→NOTE:

The lube cover will press at the same time. The cup determines the lube cover depth.

Press bearing cup (B), until seated against shoulder in housing, using DFYZ24 Bearing Cup Driver.

Bearing Cup Driver

DFYZ24

[Fabricated tool, dealer made. (See Section 99 for instructions to make tool.)]

To install bearing cup in lube cover.

[23] - Turn differential housing so that differential lock engagement teeth face upward.

Axle Housing Install (LH and RH)

[1] - Apply TY6304 Flexible Form-In-Place Gasket to mounting surface of final drive housing.
(See HOW TO DISPENSE/APPLY/ASSEMBLE GASKET SEALANTS in Section 10.)

Number	Name	Use
<ul style="list-style-type: none"> • TY6304 (us) • TY9484 (canadian) • 515 LOCTITE™ (loctite) 	Flexible Form-In-Place Gasket	To seal mating surfaces of final drive housing and transaxle housing.

[2] -

→**NOTE:**

Use alignment pin to aid in installation.



CAUTION:

Housing is heavy. Use proper lifting equipment.

→**NOTE:**

Gently rotate axle while positioning final drive pinion into planet gears.



LEGEND:

A

Grease Fitting

Install final drive assembly onto transaxle housing.

Item

Axle Housing Assembly (Housing, Final Drive Assembly)

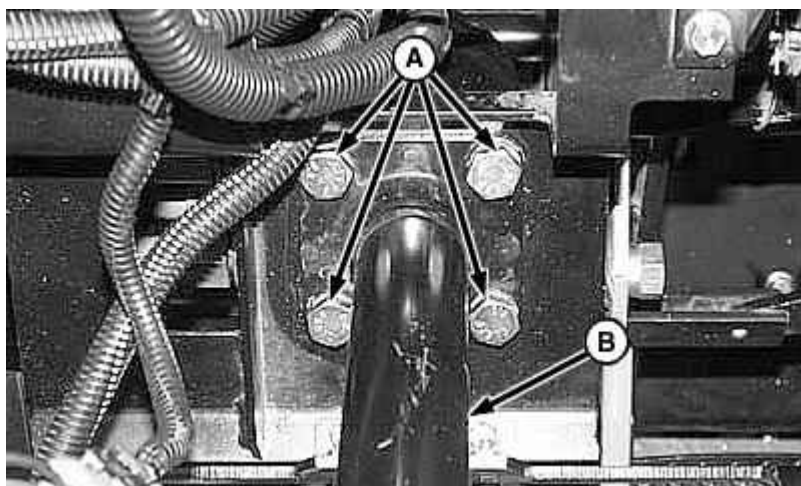
Measurement

Weight (Approximate)

Specification

137 kg

(302 lb)

**LEGEND:**

- A Cap Screw (4 used)
B Steering Column

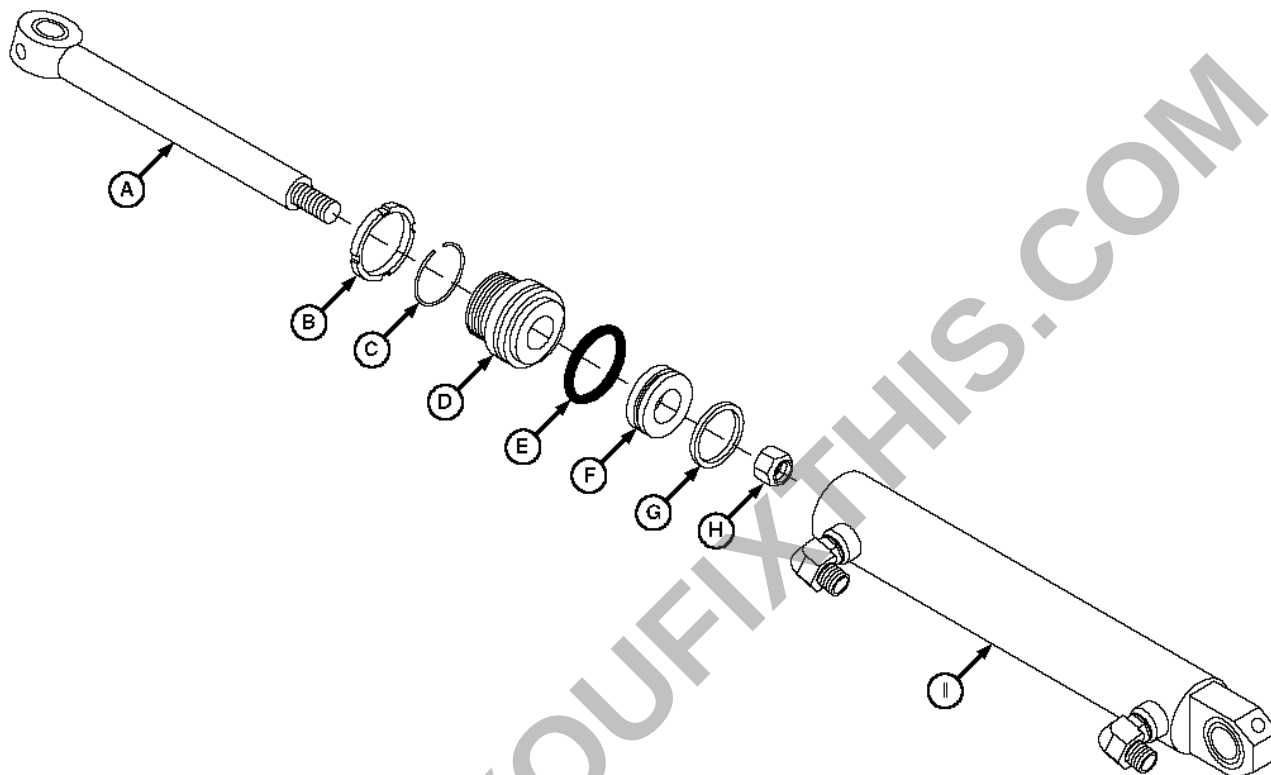
Remove cap screws (A) and steering column (B) if required.

[9] - Install steering column (B) using cap screws (A). Tighten to specification.

Item	Measurement	Specification
Steering Column Mounting Cap Screws	Torque	71 N·m (52 lb-ft)

Disassemble, Inspect and Assemble Steering Cylinder—2WD

[1] -



LEGEND:

A	Rod
B	Rod Guide
C	Snap Ring
D	Piston
E	Piston Seal
F	Plunger
G	Plunger Seal
H	Lock Nut
I	Cylinder Barrel

Remove 2WD steering cylinder. (See procedure in this group.)

[2] -

→NOTE:

Place steering cylinder assembly in a soft-jawed vise to aid during disassembly and assembly.

Fully extend rod (A) out of cylinder barrel (I) by pulling outward on rod.

[3] - Unscrew rod guide (B) from cylinder barrel and push rod (A) halfway back into cylinder barrel.

[8] -



Oil all differential components.

→NOTE:

Do no more change the stacking and thickness of the disc pack

[9] -



Mount complete differential spider

→NOTE:

Pay attention to the installation of the thrust washers

[6] -

Install rod wiper and O-ring into annular groove of the internal piston guide.

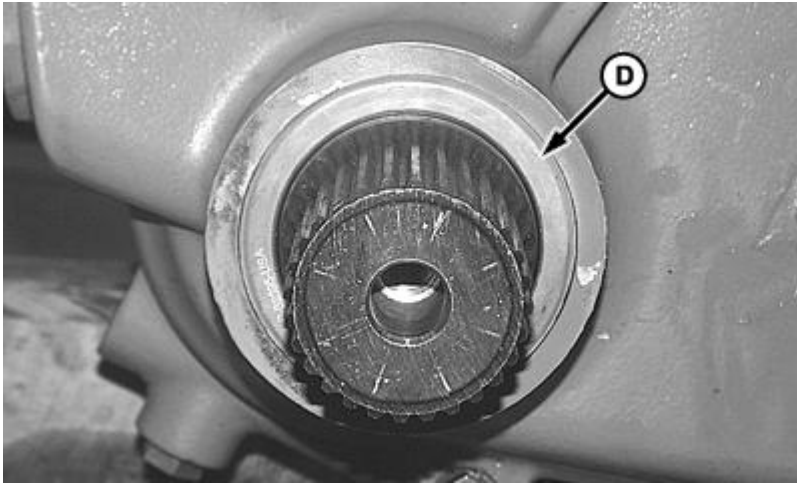
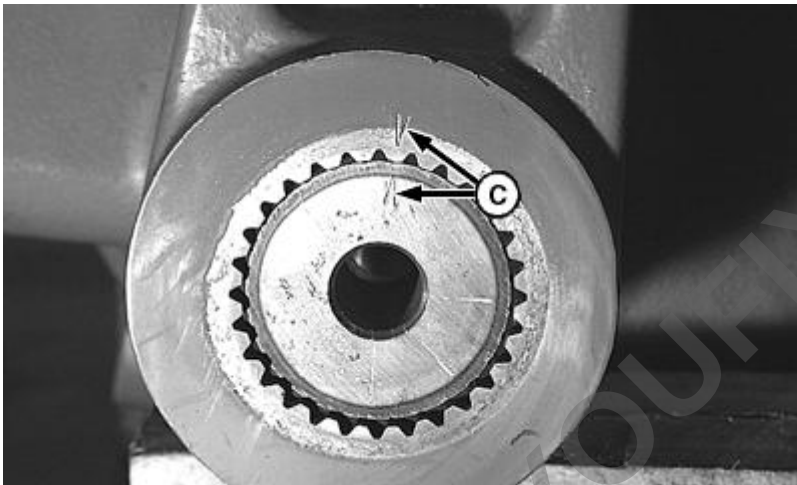
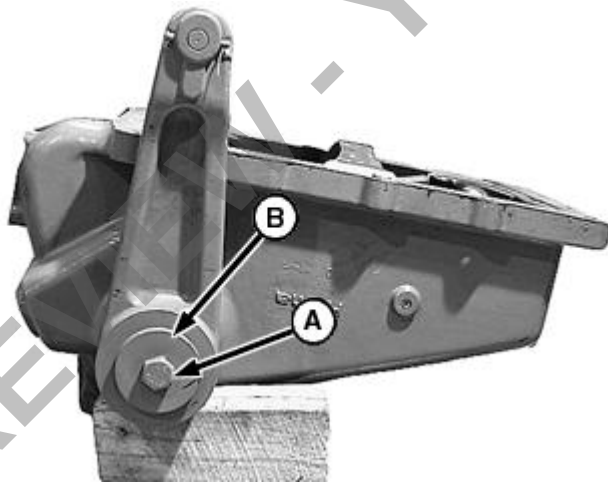
[7] -

Install rod wiper and O-ring into annular groove of the external piston guide.
Grease O-ring and insert it into the internal piston guide groove.

[20] - Bleed hydraulic system. (See START-UP PROCEDURE AFTER HYDRAULIC SYSTEM REPAIRS in this group.)

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[12] -



LEGEND:

- | | |
|---|--------------------|
| A | Timing Marks |
| B | Washer (2 used) |
| C | Cap Screw (2 used) |
| D | Seal (2 used) |

Install new seal (D) on both sides.

[13] - Align timing marks and install lift arms to rockshaft. Install washer (B) and cap screw (A) on both sides.

Specifications

Item	Measurement	Specification
Draft Link Support Pin Cap Screw	Torque	100 N·m (89 lb-ft)
Pivot Shaft Cap Screw	Torque	350 N·m (258 lb-ft)
Draft Link Pivot Cap Screw	Torque	100 N·m (74 lb-ft)
Front Wheel Bolts (2WD)	Torque	115 N·m (155 lb-ft)
Front Wheel Nuts (MFWD)	Torque	300 N·m (220 lb-ft)
Rear Wheel Bolts	Torque	500 N·m (370 lb-ft)
Front Wheel Rim to Steel Disk (MFWD)	Torque	250 N·m (185 lb-ft)
Rear Wheel Rim to Steel Disk	Torque	310 N·m (230 lb-ft)
Rear Wheel Weight Retaining Cap Screw and Nut	Torque	230 N·m (170 lb-ft)

[1] -



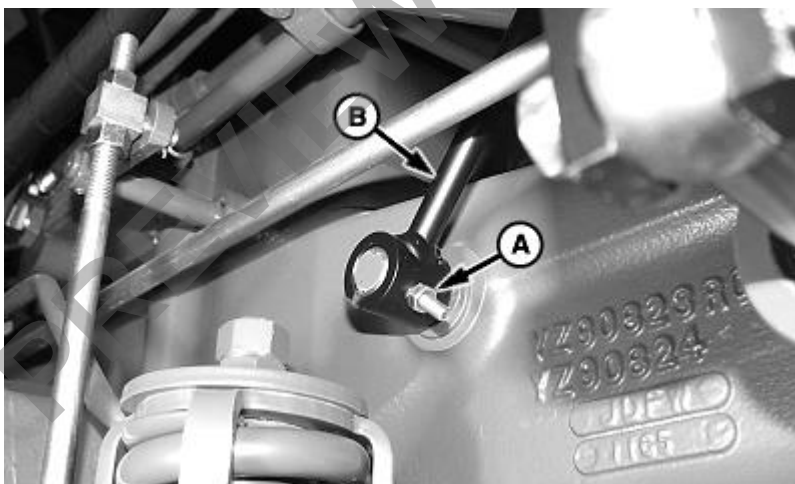
LEGEND:

- | | |
|---|-----------------|
| A | Cap Screw |
| B | Cap Screw |
| C | Spacer (2 used) |
| D | Shift Lever |

Remove cap screw (A), spacer and nut.

[2] - Remove cap screw (B), spacers (C) and shift lever (D).

[3] -



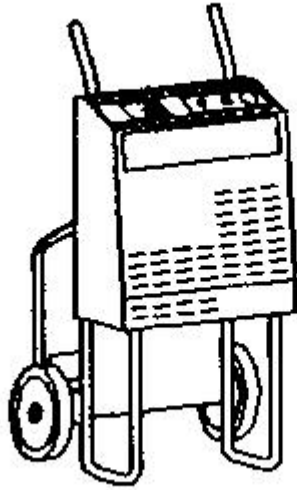
LEGEND:

- | | |
|---|-------------------------|
| A | Nut and Cap Screw |
| B | Differential Lock Lever |

Remove nut and cap screw (A) and differential lock lever (B).

Remove and Install Side Windows

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Recovery and Recycling Station

JT02050

[Used with JT02046 HFC134a Charging Station. R134a Refrigerant Recovery, Recycling, and Charging Station can be substituted for JT02046 and JT02050.]

Servises air conditioning system using R134a refrigerant.

Air Conditioning Flushing Unit

JT02075



Flushes air conditioning system.

Flushing Attachment Kit

JT02078

[2] -

→NOTE:

A JT02047 R134a Refrigerant Recovery, Recycling, and Charging Station can be substituted for the JT02046.

R134a Refrigerant Recovery, Recycling, and Charging Station
JT02047

Services air conditioning system using R134a refrigerant.

Pump must be capable of pulling at least 72.6 cm Hg (28.6 in. Hg) vacuum at sea level. Deduct 2.54 cm Hg (1 in. Hg) from 75.9 cm Hg (29.9 in. Hg) for each 300 m (1000 ft) elevation above sea level.

Connect low-side hose (blue) from charging station to suction fitting (A) on compressor. Connect high-side hose (red) to discharge fitting (B) on compressor.

[3] -

IMPORTANT:

Do not operate compressor during evacuation.

Follow manufacturer's instructions and evacuate system. Evacuate system for 15 minutes if ambient temperature is below 30°C (85°F) to remove nitrogen and air.

Evacuate system for 30 minutes if ambient temperature is above 30°C (85°F).

[4] - Charge system. (See Charge Air Conditioning System in this group.)

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