Group 05 - Safety Measures

General Information - Safety - Summary of References

- General Information - Safety - Summary of References
- Recognize Safety Information
- Understand Signal Words
- Follow Safety Instructions
- Prevent Machine Runaway
- Operating the Tractor Safely
- Operating the Loader Tractor Safely
- Passenger Seat
- Use Safety Lights And Devices
- Towing Trailers/Implements Safely (Mass)
- Use Caution on Slopes and Uneven Terrain
- Freeing a Mired Machine
- Avoid Backover Accidents
- Handle Fuel Safely—Avoid Fires
- Handling Batteries Safely
- Prepare for Emergencies
- Avoid High-Pressure Fluids
- Service Cooling System Safely
- Remove Paint Before Welding or Heating
- Avoid Heating Near Pressurized Fluid Lines
- Work In Ventilated Area
- Avoid Contact with Agricultural Chemicals
- Handle Agricultural Chemicals Safely
- Stay Clear of Rotating Drivelines
- Wear Protective Clothing
- Protect Against Noise
- Practice Safe Maintenance
- Stay Away from the Hot Exhaust System
- Exhaust Filter Cleaning
- Clean Exhaust Filter Safely
- Read Operator Manuals for ISOBUS Devices
- Use Seat Belt Properly
- Park Machine Safely
- Use Proper Lifting Equipment
- Construct Dealer-Made Tools Safely
- Support Machine Properly
- Work in Clean Area
- Illuminate Work Area Safely
- Service Machines Safely
- Service Accumulator Systems Safely

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Group 05 - General Information - Specifications

Specifications - Summary of References

- Specifications - Summary of References
- Engine Specifications
- PTO Power Output
- Capacities
- Air Intake System
- Electrical System
- Hydraulic System
- Clutch
- PowrQuad™ PLUS Transmission
- Differential
- Differential Lock
- Final Drives
- Front-Wheel Drive
- Front-Wheel Drive Axle with TLS™
- Cab Suspension
- Hydraulic Brakes
- Secondary Brake
- Park Lock
- Hitch
- Immobilizer
- Front Hitch
- Travel Speeds
- Front and Rear Wheels
- Dimensions and Weights
- Handling and Storing Diesel Fuel
- Diesel Fuel
- Reducing the Effects of Cold Weather on Diesel Engines
- Biodiesel
- Lubricity of Diesel Fuel
- Diesel Engine Break-In Oil
- John Deere Break-In™ Plus Engine Oil
- Transmission and Hydraulic Oil
- Front-Wheel Drive Axle Oil
- Coolant for High-Performance Diesel Engines
- Coolant Additives
- Lubricants
- Oil Filter
- Mixing Lubricants
- Lubricant Storage
- Operating in Warm Temperature Climates
- Alternative and Synthetic Lubricants
- Unified Inch Bolt and Cap Screw Torque Values

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Group 00 - Engine – Removal and Installation of Components

Engine - Removal and Installation of Components, Summary of References

Engine - Removal and Installation of Components, Summary of References

Engine - Removal and Installation of Components, Special Tools

Engine - Removal and Installation of Components, Specifications

Remove the Engine, Preliminary Work

Remove the Engine

Install the Engine

Install the Engine, Additional Work

Engine Mounting

Replace the Engine Mountings, Preliminary Work

Replace the Front Engine Mountings

Replace the Rear Engine Mounting

Replace the Engine Mountings, Further Work

Engine - Removal and Installation of Components, Special Tools

Special Tools (Available as Spare Parts)

D01042AA- Load-positioning sling

JDG19- Lifting eye

JT05725- Support stand

KJD10604- Manually operated hydraulic pump with hydraulic hose and quick coupler

KJD10639- Hydraulic puller set

KJD10646- Bushing for removal and installation of engine mountings

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Group 05 - Electrical System - Connectors

Electrical System -Connector, Summary of References

Electrical System -Connector, Summary of References

- Special or Essential Tools
- General Information
- Using High-Pressure Washers
- Stripping Wire Ends
- Installing Electrical Terminals
- WEATHER PACK Plug
- METRI PACK Plug with Terminal Lock at the Rear
- METRI PACK Plugs with Terminal Lock at the Front
- METRI PACK Connectors
- Connectors for Electronic Control Units
- Connectors
- CRIMP SNAP IN Plugs
- KOSTAL Plugs
- DEUTSCH Plugs
- Individual Terminals

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Group 00 - Drive Train (without Transmission) - Removal and Installation of Components

Drive train (without transmission) - Removal and installation of components, Summary of references

Drive train (without transmission) - Removal and installation of components, Summary of references

Drive train (without transmission) - Special tools

Drive train (without transmission) - Repair specifications

Draining transmission/hydraulic oil

Filling transmission/hydraulic oil

Removing final drives

Installing the final drives

Removing the rear PTO

Installing the rear PTO

Removing the front PTO

Installing the front PTO

Drive train (without transmission) - Special tools

Special tools (available as spare parts)

JT07211- Support stand

KJD10559- Support stand for front axle and final drives

KJD10592- Lifting sling

KJD10604- Manually operated hydraulic pump with hydraulic hose and quick coupler

KJD10639- Hydraulic puller set

KJD10662- Cab support

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Group 00 - PowrQuad™ Transmission - Removal and Installation of Components

PowrQuad™ transmission - Removal and installation of components, Summary of references

PowrQuad™ transmission - Removal and installation of components, Summary of references

PowrQuad™ transmission - Removal and installation of components, Repair specifications

PowrQuad™ Plus transmission, Removal and installation

AutoQuad™ Plus transmission, Removal and installation

Removing the PowrQuad™ transmission - Preliminary work

Removing the PowrQuad™ transmission

Installing the PowrQuad™ transmission

Removing the range transmission

Installing the range transmission

PowrQuad™ transmission - Installation and removal of components, Special tools

Special tools (available as spare parts)

JDG19- Lifting eyes

JDG1655A- Lifting device

PowrQuad™ transmission - Removal and installation of components, Repair specifications

Item	Measurement	Specification
PowrQuad™ transmission to range transmission, cap screws	Torque	70 N˙m
		50 lb.-ft.
Suction line to PowrQuad™ module, cap screw	Torque	18 N˙m
		13.3 lb.-ft.
Brace on main frame, cap screws	Torque	600 N·m
		440 lb.-ft.

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Group 10 - Steering - Hydrostatic Steering

Steering - Hydrostatic Steering, Summary of References

Steering - Hydrostatic Steering, Summary of References

- Hydrostatic Steering - Special Tools
- Hydrostatic Steering - Specifications
- Hydrostatic Steering - Disconnect/Connect Steering or Brake Hoses
- Hydrostatic Steering - Exploded View of Steering Column
- Hydrostatic Steering - Exploded View of Steering Unit

Hydrostatic Steering - Special Tools

→NOTE:

Order tools according to information given in the U.S. SERVICEGARD ™ Catalog or European Microfiche Tool Catalog (MTC).

- KJD10501- Disconnecting Tools (Kit)

Hydrostatic Steering - Specifications

Item	Measurement	Specification
Elbow Fitting in Steering Valve	Torque	33 N·m
		24 lb.-ft.
Fitting in Steering Valve	Torque	50 N·m
		37 lb.-ft.
Elbow Fitting in Fitting	Torque	50 N·m
		37 lb.-ft.
Elbow Fitting in Steering Valve	Torque	50 N·m
		37 lb.-ft.
Steering Valve to Housing, Screws	Torque	55 ± 5 N·m
		40 ± 4 lb.-ft.
Steering Column to Console, Screws	Torque	55 N·m
		40 lb.-ft.

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Group 05 - Hydraulic System - General Information

Hydraulic System - General Information, Summary of References

Hydraulic System - General Information, Summary of References

Hydraulic System - General Safety and Repair Information

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Group 00 - Machine-Specific Systems - Removal and Installation of Components

Machine-specific systems - Removal and installation of components, Summary of references

Machine-specific systems - Removal and installation of components, Summary of references

Machine-specific systems - Special tools

Machine-specific systems - Repair specifications

Removing suspended front-wheel drive axle, Preliminary work

Removing suspended front-wheel drive axle

Installing suspended front-wheel drive axle

Removing the front-wheel drive axle

Installing the front-wheel drive axle

Removing the front axle

Installing the front axle

Removing the front hitch

Installing the front hitch

Removing the front axle support, Preliminary work

Removing front axle support with suspended front-wheel drive axle

Removing front axle support with front-wheel drive axle

Removing front axle support with front axle

Installing front axle support with suspended front-wheel drive axle

Installing front axle support with front-wheel drive axle

Installing front axle support with front axle

Installing the front axle support, Additional work

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Group 10 - Suspension Systems - Suspended Front-Wheel Drive Axle

Suspension Systems - Suspended Front-Wheel Drive Axle, Summary of References

Suspension Systems - Suspended Front-Wheel Drive Axle, Summary of References

- Special Tools
- Repair Specifications
- Relieving Hydraulic System Pressure
- Removing/Installing the Oscillation Limiter
- Removing the Panhard Link
- Installing the Panhard Link
- Removing and Installing Linkage
- Removing Position Sensor of Suspended Front-Wheel Drive Axle
- Reconditioning Position Sensor of Suspended Front-Wheel Drive Axle
- Installing Position Sensor of Suspended Front-Wheel Drive Axle
- Removing the Hydraulic Cylinder
- Reconditioning the Hydraulic Cylinder
- Installing the Hydraulic Cylinder
- Removing the Control Block
- Reconditioning the Valves in the Control Block
- Installing the Control Block
- Removing and Installing the Accumulator
- Reconditioning the Accumulator
- Removing and Reconditioning the Bearing Support
- Installing the Bearing Support

Special Tools

→NOTE:

Order tools according to information given in the U.S. SERVICEGARD™ Catalog or in the European Microfiche Tool Catalog (MTC).

D01210AA- Puller

JT07211- Support stand

KJD10539- Adapter for support stand JT07211

KJD10559- Mobile support stand for front axle and final drives

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Group 00 - Removal and Installation of Components

Operator´s Cab - Removal and Installation of Components, Summary of References

Operator´s Cab - Removal and Installation of Components, Summary of References

Tilting the Operator´s Cab Upward

Tilting the Operator´s Cab Downward

Removing the Operator’s Cab

Installing the Operator´s Cab

Removing the operator´s platform

Installing the operator´s platform

Testing and Adjusting Shift Units

Special Tools

Special Tools (Dealer-Fabricated), Section 99, Group 05

DFLX5- Lifting eye for cab

Special tools (available as a spare part), Section 99, Group 10

JDG23- Lifting sling

JT02043- Support stand

JT02044- Support stand

KJD10557- Cab Tilting Device

Repair specifications

Item	Measurement	Specification
Operator´s platform		
Cap screws, front mountings of the operator´s platform	Torque	140 N˙m 95 lb-ft
Cap screws, ROPS posts to final drive housing	Torque	400 N˙m 300 lb-ft

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Group 05 - General Information

Special Tools - General Information

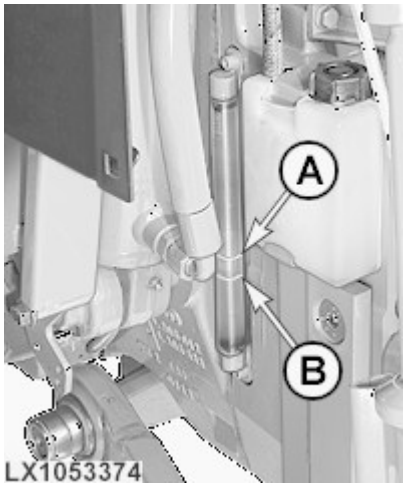
For specific information on special tools, see CTM**Special Tools for 6 Series Tractors** .

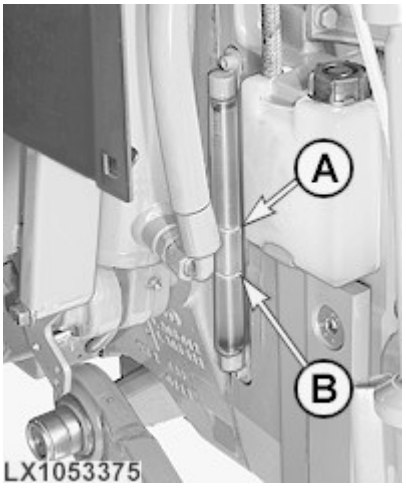
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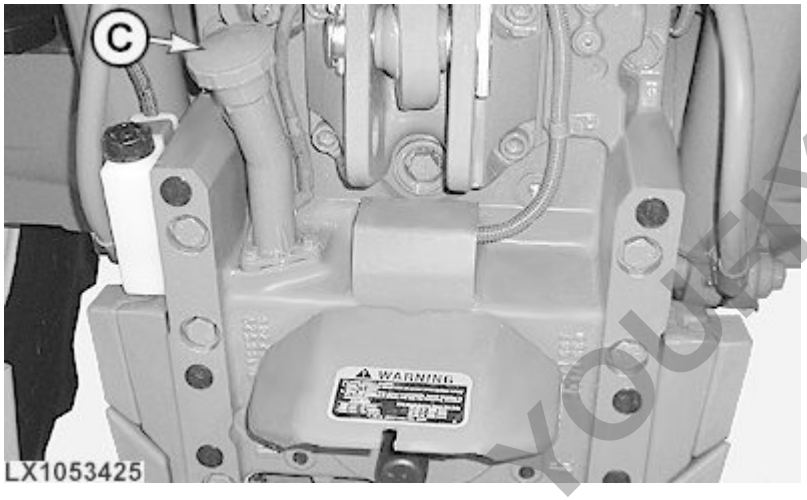
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Check Transmission/Hydraulic System Oil Level







LEGEND:

A	Max. Mark
B	Min. Mark
C	Filler Neck

IMPORTANT:

Check oil level when oil is cold. If possible, check the oil level in the morning after the tractor has been standing overnight.

[1] - Park tractor so that it is level.

[2] - Engage the park lock.

[3] - Lower draft links, front loader, front implements and other implements that draw oil from the transmission.

[4] - Oil level should be between marks (A and B) on the sight-glass. If it is not, add more oil at filler neck (C).

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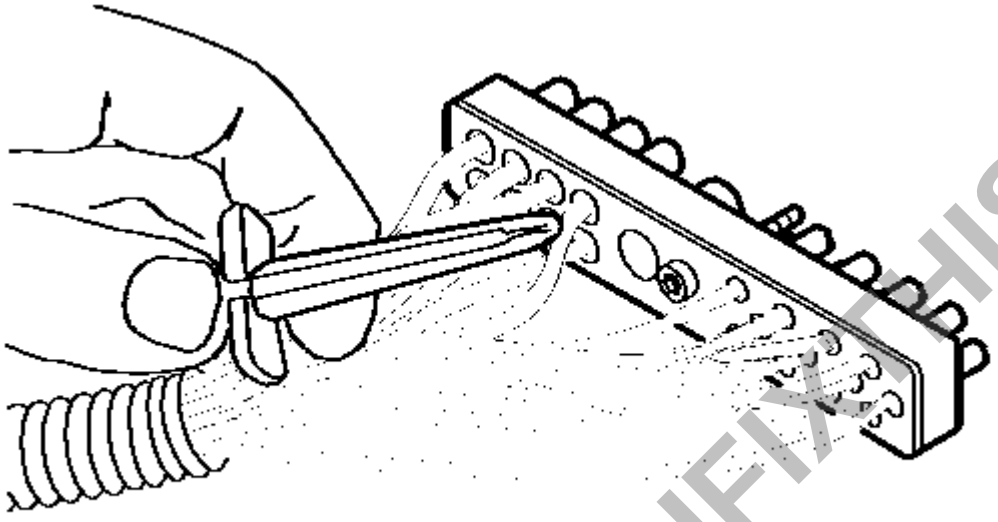
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DEUTSCH Connectors

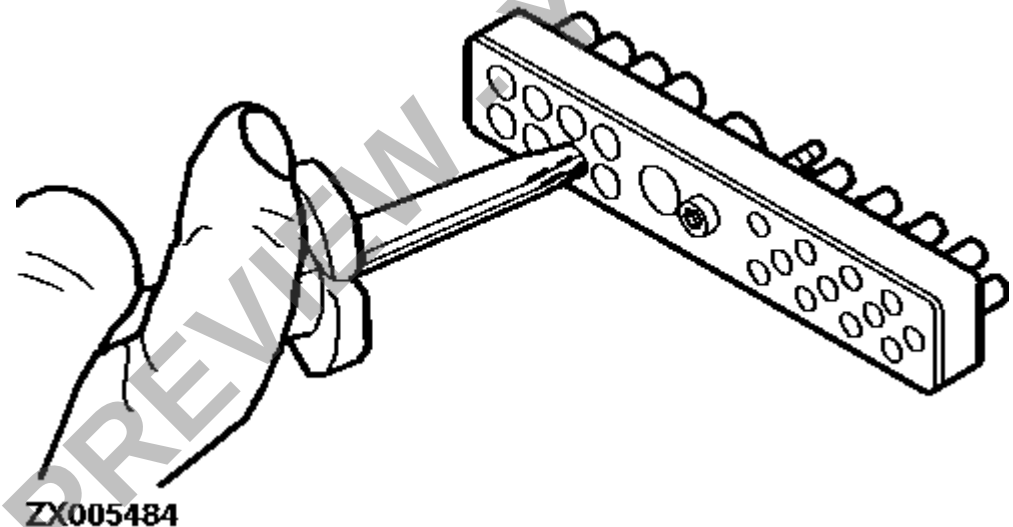
→NOTE:

DEUTSCH ™ connectors

[1] - Extract male or female terminals



ZX005483



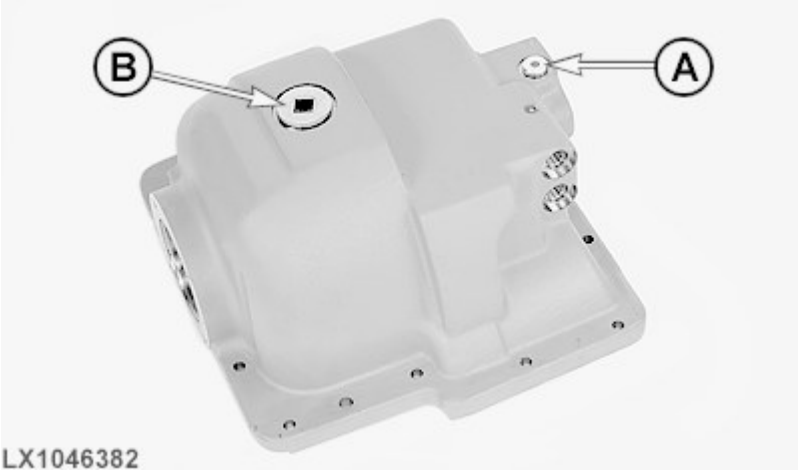
ZX005484

Position extraction toolJDG362against wire as shown in the illustration.

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[9] -



LEGEND:

A	Expander plug
B	Oil drain screw

Remove plug (A) and oil drain screw (B).

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Output driveshaft (540 rpm)

LEGEND:

A	Gear with cover
B	Bearing support
C	Output driveshaft
D	Housing

Rear PTO (540/1000 rpm, reversible)

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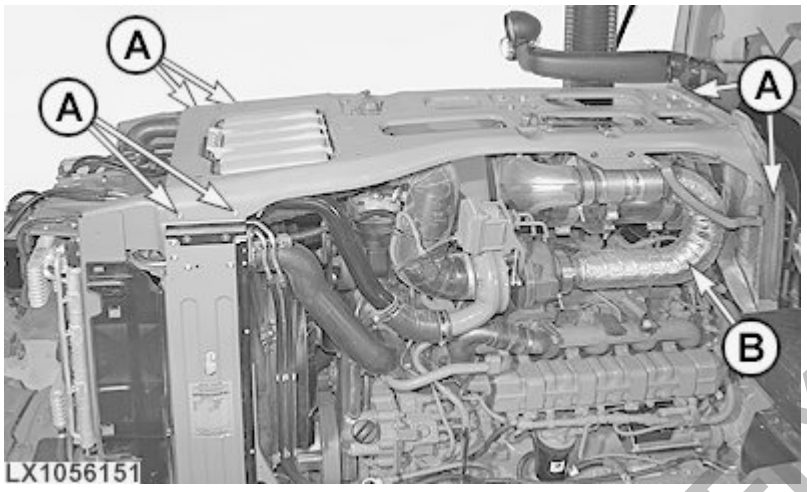
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Removing the front implement drive

Preliminary work:

Remove the front PTO. SeeDrive train (without transmission) - Removal and installation of components, Summary of referencesin Section 50A.

[1] -

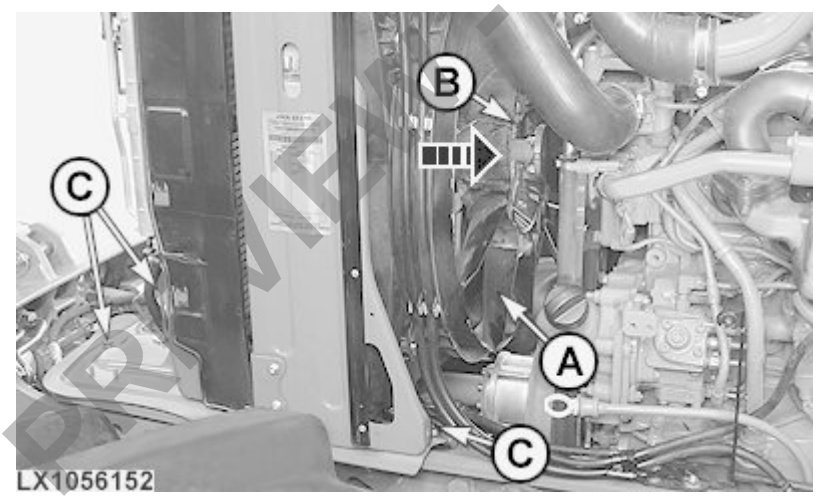


LEGEND:

A	Screws
B	Exhaust pipe

Remove screws (A) and exhaust pipe (B).

[2] -



LEGEND:

A	Screws
B	Fan
C	Screws

Remove screws (B) and push fan (A) towards the engine.

[3] - Remove screws (C).

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PowrQuad™ Transmission - Removing and Installing the Front Transmission Cover

Preliminary work:

SeePowrQuad™ Transmission - Removing and Installing the Front Valve Housingin Section 50C.

[1] -



LEGEND:

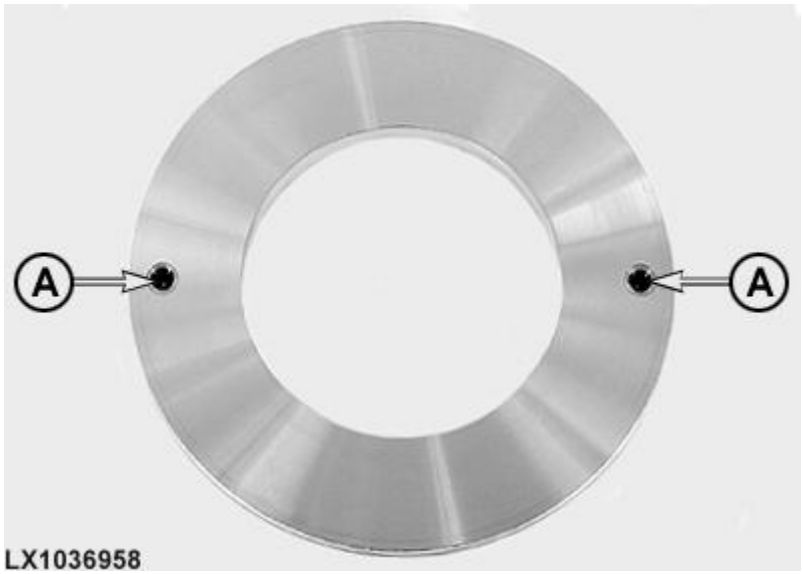
A	Screws

Remove screws (A) of the front transmission cover.

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[6] -



LX1036958


LX1036956

LEGEND:

A	Overspeed relief valves

Check the clutch piston and the overspeed relief valves (A).

→NOTE:

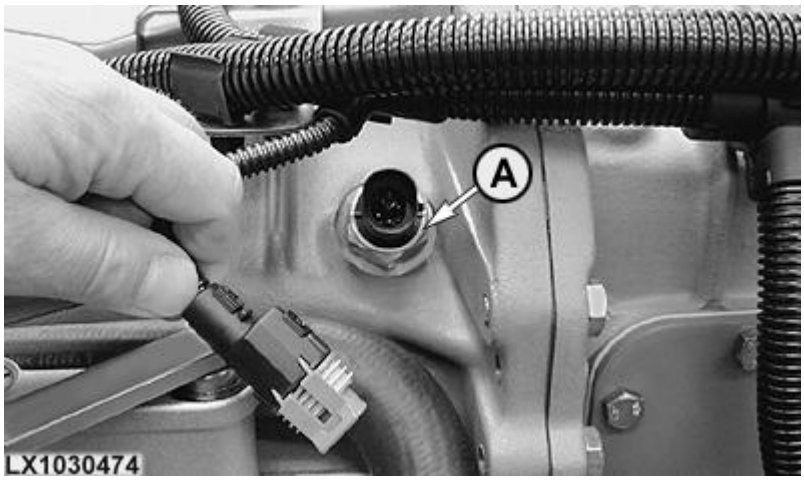
The overspeed relief valve consists of a ball, spring and retainer. The valve ball must not be jammed; it must move freely against the spring.

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PowrQuad™ Transmission - B104 - Replacing the Transmission Output Speed Sensor

[1] -

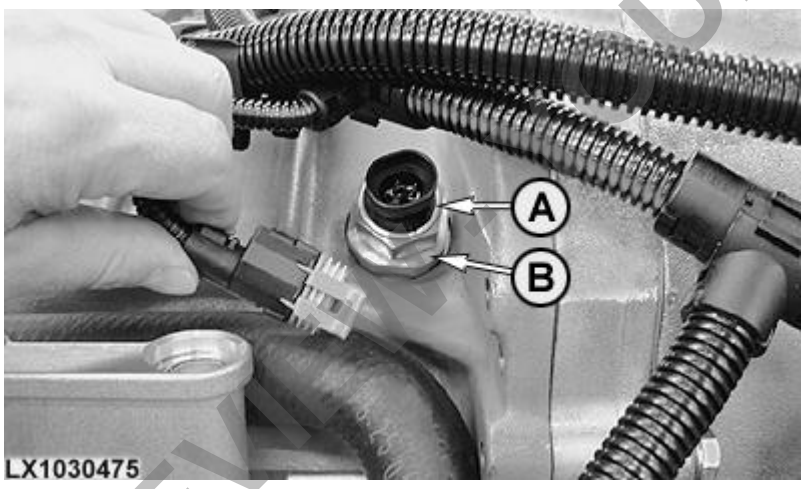


LEGEND:

A	Sensor

Unplug sensor (A), and remove.

[2] -



LEGEND:

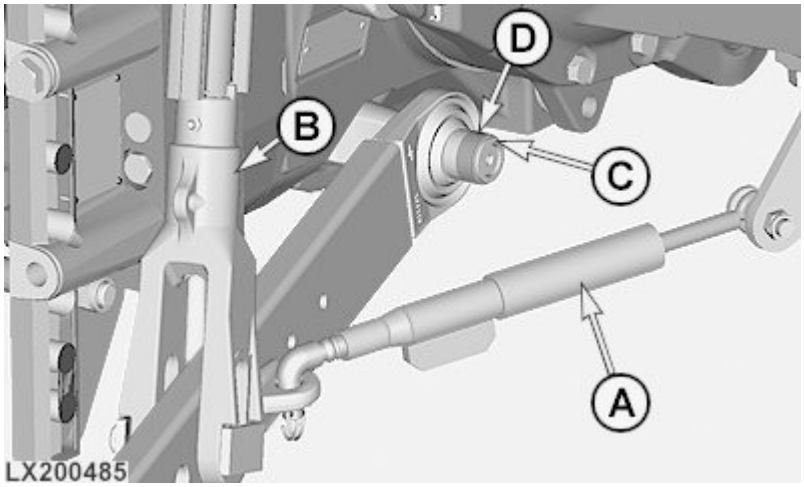
A	Sensor
B	Spacer

On tractors with 30 km/h (18.5 mph) transmission, speed sensor (A) is installed with a spacer (B).

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[4] -



LEGEND:

A	Stabilizer Bar
B	Lift Link
C	Snap Ring
D	Bushing

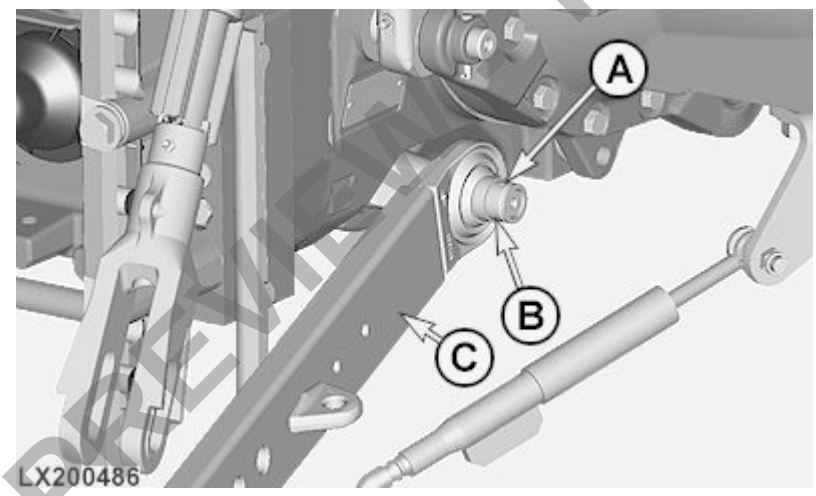
Remove the draft links.

[5] - Remove stabilizer bar (A) and lift link (B) on the draft link.

[6] - Remove snap ring (C).

[7] - Remove bushing (D).

[8] -



LEGEND:

A	Retaining Pin
B	Bushing
C	Draft Link

Remove retaining pin (A) and bushing (B).

[9] - Remove draft link (C) from bearing pin.

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Group 15 - Machine-Specific Systems - Fenders, Front Wheels and Rear Wheels

Machine-specific systems - Front wheels, rear wheels, and fender, Summary of references

Machine-specific systems - Front wheels, rear wheels, and fender, Summary of references

- Front wheels, rear wheels, and fenders - Special tools
- Front wheels, rear wheels, and fenders - Repair specifications
- Front wheels, rear wheels, and fenders - Pivoting front fender
- Front wheels, rear wheels, and fenders - Removing a front wheel
- Front wheels, rear wheels, and fenders - Reconditioning a front rim
- Front wheels, rear wheels, and fenders - Installing a front wheel
- Front wheels, rear wheels, and fenders - Removing the rear wheels (with flanged axle)
- Front wheels, rear wheels, and fenders - Reconditioning the rear rim (with flanged axle)
- Front wheels, rear wheels, and fenders - Installing the rear wheels (with flanged axle)
- Front wheels, rear wheels, and fenders - Removing the rear wheels (with rack-and-pinion axle)
- Front wheels, rear wheels, and fenders - Reconditioning the rear rim (with rack-and-pinion axle)
- Front wheels, rear wheels, and fenders - Installing the rear wheels (with rack-and-pinion axle)
- Front wheels, rear wheels, and fenders - Installing the reinforced rear wheel

Front wheels, rear wheels, and fenders - Special tools

→NOTE:

Order tools according to information given in the U.S. SERVICEGARD ™ Catalog or European Microfiche Tool Catalog (MTC).

- JDG983- Snap ring tool
- JT02043- Support stand
- JT02044- Support stand
- JT05725- Universal support stand
- KJD10581- Wheel exchange cart

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[3] - Install parts as shown in the illustration.

→NOTE:

When fully assembled, shaft (E) must turn freely.

[4] - Install the sensor. SeeInstalling Position Sensor of Suspended Front-Wheel Drive Axlein this group.

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Air Conditioning System - Observing AC Hose Torques

Fitting	Width across flats	Torque
5/8“	19 mm (3/4”)	17 N·m 13 lb.-ft.
3/4“	22 mm (7/8”)	35 N·m 26 lb.-ft.
7/8“	27 mm (1-1/16”)	40 N·m 29 lb.-ft.

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