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Check the Oil Sight-Glass (when the Tire Combination has been Changed)

IMPORTANT:

If a new pair of tires is selected, the Basic Control Unit (BCU) must be recalibrated; if the tractor has IVT, the User Interface Controller (UIC) must be recalibrated as well. See the following references: BCU - Calibration and Input Addresses (Basic Functions) , UIC - Calibration and Input Addresses .

If the new rear tires have a higher SRI (speed/radius index) than the previous ones, the tractor's electronics must be recalibrated.

In the relevant Operator's Manual, refer to the "Specifications" section for the SRI (speed/radius index) of the tires supplied with the tractor when it left the factory. Ascertain the indicator letter (A-G) of the existing oil sight-glass by referring to Table 1.

Ascertain the indicator letter of the required sight-glass by finding the SRI of the desired tire combination in Table 1. If a new glass is required, refer to Table 2 for the part number.

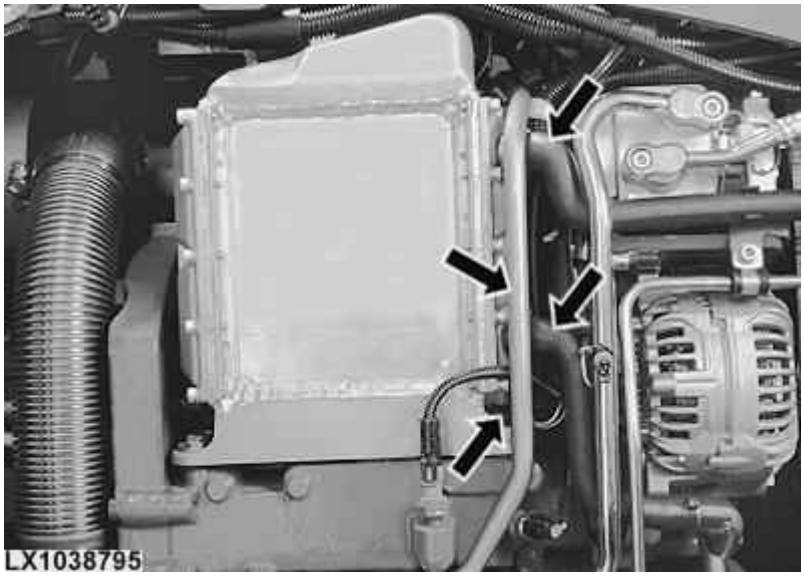
SRI of front tires	**SRI (speed/radius index) of rear tires**							
	700	725	730	750	775	800	825	875
550	C	C	C	B	A	F	G	—
575	D	C	C	C	B	A	F	G
600	D	D	D	C	C	B	A	G
625	E	D	D	D	C	C	B	F
650	—	E	E	D	D	C	C	A
675	—	—	—	E	D	D	C	B
750	—	—	—	—	—	—	E	D

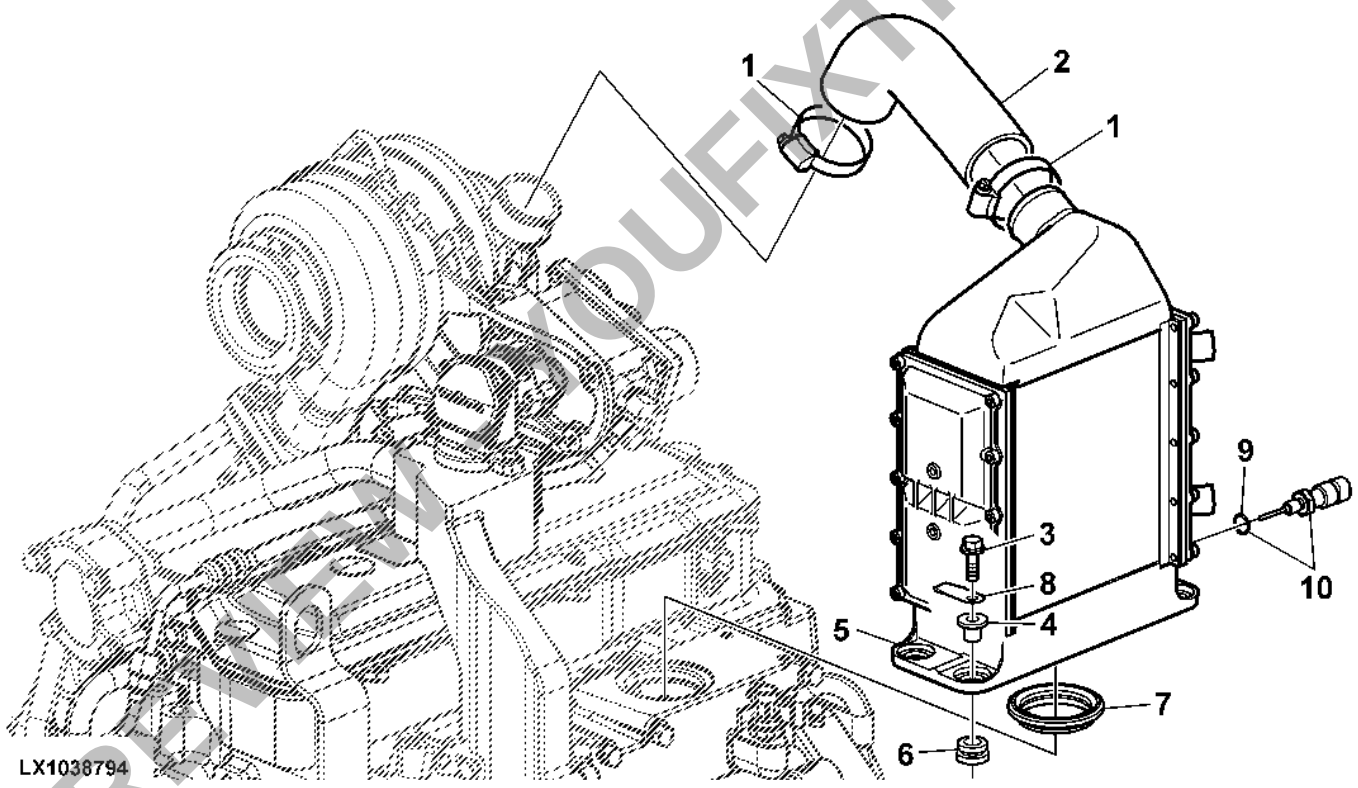
Non-IVT		**IVT**	
Identification Letter	**Part no.**	**Identification Letter**	**Part no.**
A	AL175219	A	AL176116
B	AL176110	B	AL176117
C	AL176111	C	AL176118
D	AL176112	D	AL176119
E	AL176113	E	AL176120
F	AL176114	F	AL176121
G	AL176115	G	AL176122

Run Engine until it is Warm and Check Engine

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Remove and Install the Charge Air Cooler





LEGEND:

1	Hose clamp (2 used)
2	Shaped hose
3	Screw (3 used) / 16 - 20 N˙m (12 - 15 lb-ft)
4	Bushing (3 used)
5	Charge air cooler
6	Rubber bushing (3 used)
7	Seal
8	Contact plate
9	O-ring
10	Temperature sensor (B160) / 16 - 20 N˙m (12 - 15 lb-ft)

Disconnect the inlet and return hoses (see arrows) from the charge air cooler.

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CAUTION:

Disconnect negative (-) cable from battery.

IMPORTANT:

Always relieve tension on drive belt before removing the pulley.

Take the drive belt off the pulley.

Remove pulley using tools (A), (B), (C), (D) and (E).

Tightening torque for installation:

Item	Measurement	Specification
Pulley on alternator shaft	Torque	80 N˙m
		60 lb-ft

Engine Wiring Harnesses

For removal and installation of the wiring harnesses, see the following references in Section 240 of the relevant Technical Manual.

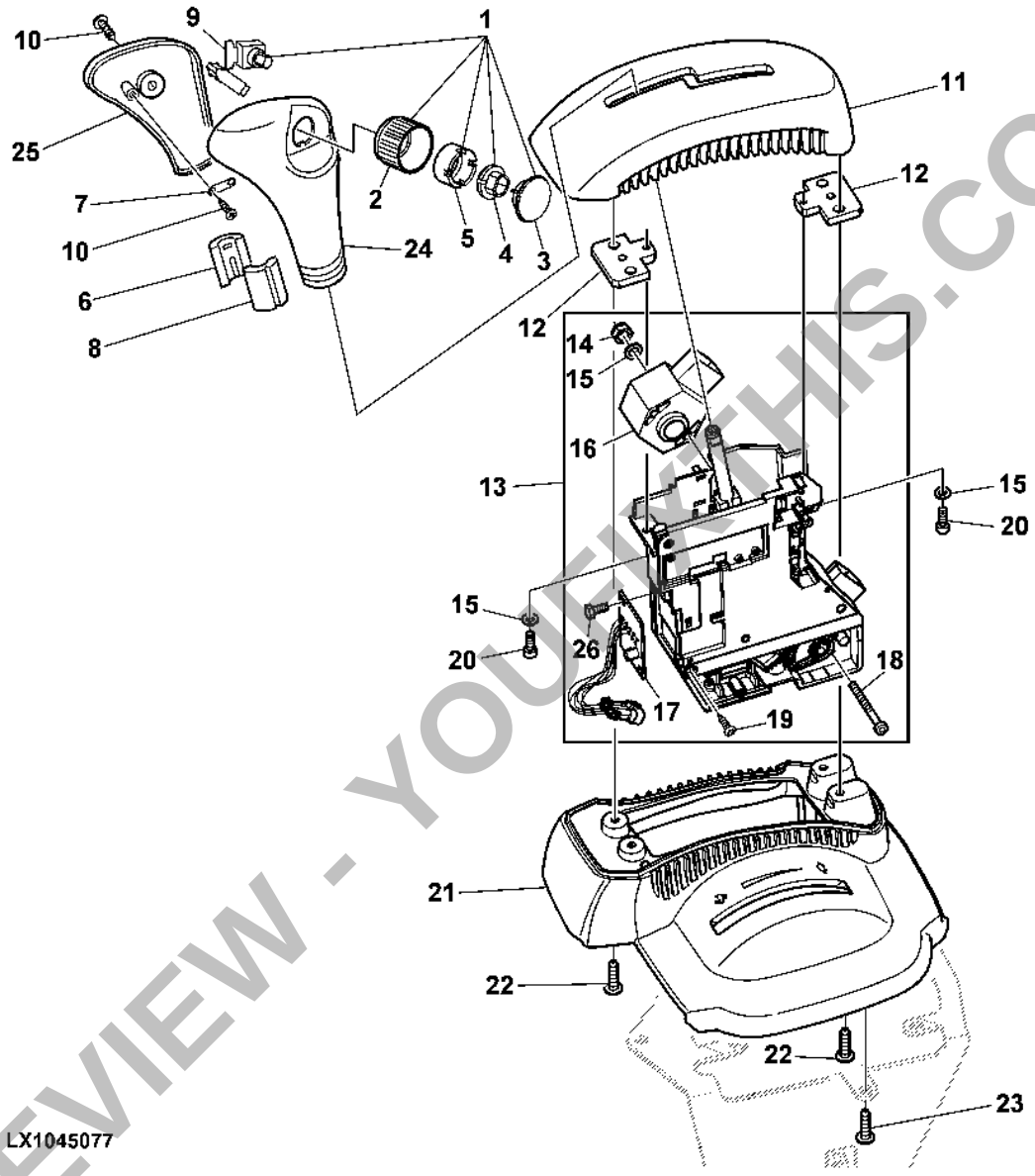
- W51/1: Wiring Harness for 4-Cylinder Engine (4V-HPCR, Level 14)
- W51/3: Wiring Harness for 4-Cylinder Engine (2V-HPCR, Level 16)
- W52/1: Wiring Harness for 4-Cylinder Engine (Sensors for 4V-HPCR, Level 14)

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Recondition the Speed Control Lever

Exploded view of speed control lever on tractors without CommandArm



LEGEND:

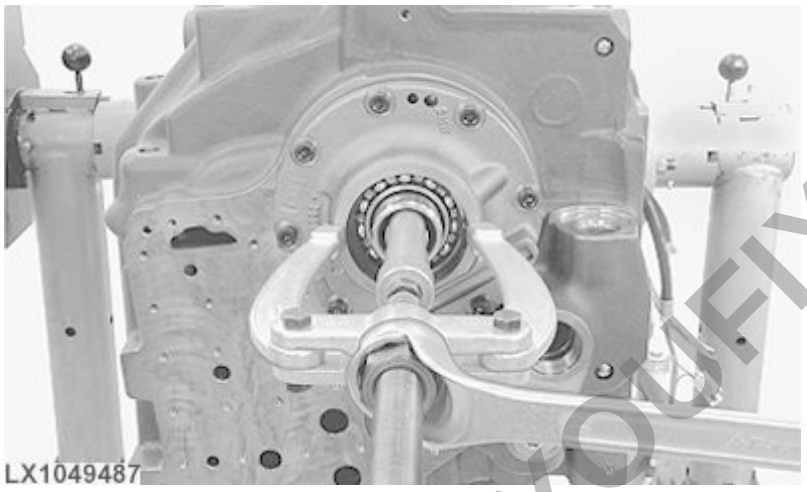
1	Potentiometer Assembly with Adjusting Mechanism
2	Speed Wheel
3	Cover
4	Bearing
5	Special Nut
6	Right Half of Clamp
7	Tab
8	Left Half of Clamp
9	Potentiometer
10	Screw
11	Gate
12	Tab

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[8] -


LX1049488


LX1049487

Install the snap ring.

IMPORTANT:

If the snap ring does not engage, the through-drive shaft must be pulled out a little. Before pulling out the through-drive shaft, remove the O-ring (otherwise it may be damaged).

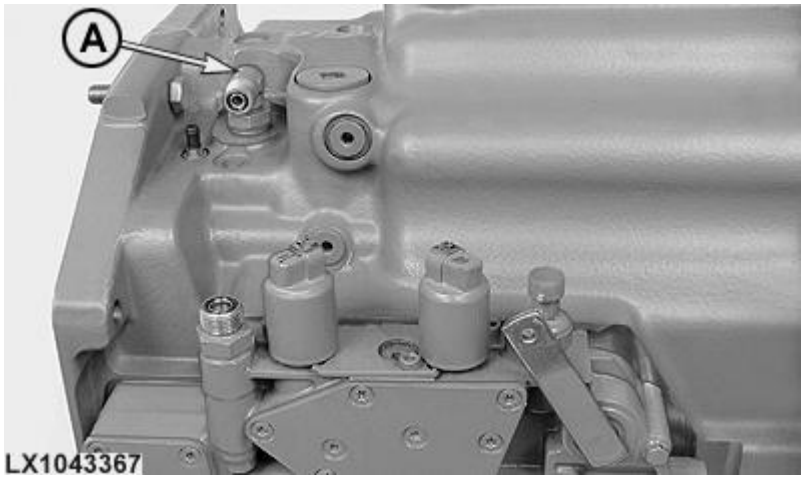
Use aKJD10601internal puller and aKJD10602support to pull the through-drive shaft out a short distance. Once the snap ring has been installed, put the O-ring back on the through-drive shaft.

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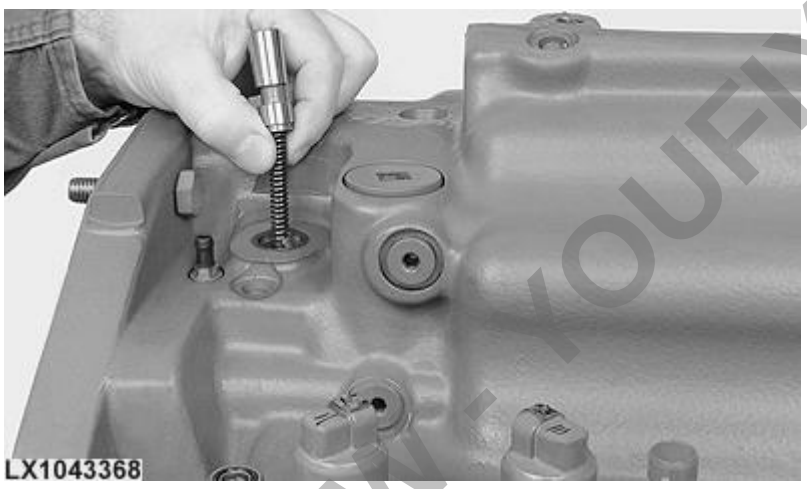
Replace Bleed Valve

[1] -



Remove the elbow fitting.

[2] -



Remove piston and spring from the housing. Check components for wear. Replace, if necessary.

[3] - First insert the spring and then the piston of the bleed valve into the bore of the housing.

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Section 55 - POWRQUAD TRANSMISSION

Table of contents

Group 00 - Removal and Installation of Components 1
PowrQuad Transmission - Removal and Installation of Components, Summary of References 1
Special Tools 1
Specifications 1
PowrQuad Plus Transmission, Removal and Installation 2
AutoQuad Plus Transmission, Removal and Installation 2
Remove PowrQuad Transmission 3
Install PowrQuad Transmission 7
Remove Creeper or Option Transmissions 10
Install Creeper or Option Transmissions 14
Remove Range Transmission 18
Installing the Range Transmission 21
Group 05 - Transmission Shift Unit 25
PowrQuad Transmission - Transmission Shift Controls, Summary of References 25
PowrQuad Transmission - Check and Adjust the Shift Mechanism/Linkage and the Park Lock 26
PowrQuad Transmission - Remove the Shift Unit 32
PowrQuad Transmission - Recondition the Shift Unit 38
PowrQuad Transmission - Install the Shift Unit 51
PowrQuad Transmission - Recondition the Clutch Actuation Mechanism 57
Group 10 - PowrQuad Module 72
PowrQuad Module, Summary of References 72
Special Tools, Summary of References 72
Repair Specifications 74
Transmission Sub-Assemblies 75
Replace the Temperature Sensor and Pressure Switches 77
Remove and Install the Oil Filter Housing 79
Replace the Oil Filter 80
Remove and Install the Front Valve Housing 82
Remove and Install Valves in the Front Valve Housing 85
Remove and Install the Front Transmission Cover 88
Remove and Install the Valves in the Front Transmission Cover 91
Remove and Install the Shift Valve Housing 95
Remove and Install the Valves in the Shift Valve Housing 97
Remove the Transmission Oil Pump 101
Recondition the Transmission Oil Pump 103
Install the Transmission Oil Pump 111
Remove the Gear-Shift Planetary Drive 113
Recondition the Gear-Shift Planetary Drive 115
Install the Gear-Shift Planetary Drive 122
Remove the B1 Brake Housing 126
Recondition the B1 Brake 130
Install the B1 Brake Housing 136
Remove the B2-B3 Brake Housing 139
Recondition the B2 Brake 141

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[2] -



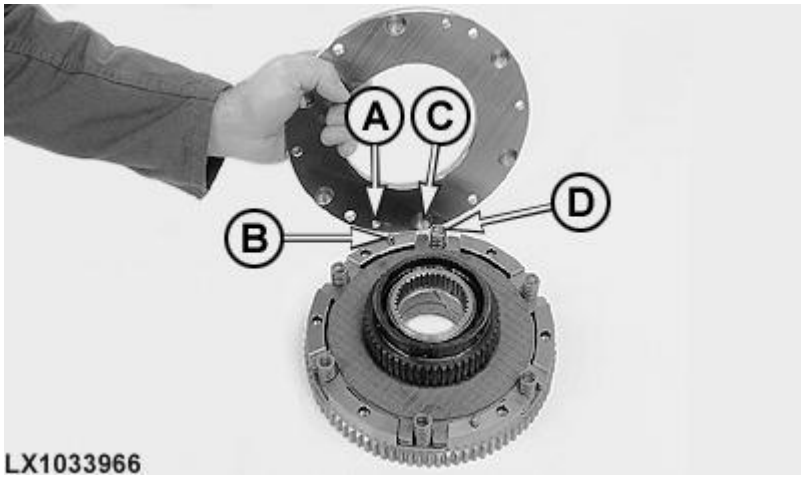
Tighten the transmission oil filter to the specified torque value.

Item	Measurement	Specification
Transmission oil filter to filter housing	Torque	30 N˙m
		22 lb-ft

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[18] -



Install clutch cover (3 disks)

LEGEND:

A	Bore
B	Dowel pin
C	Blind hole
D	Spring

Install the clutch cover.

→NOTE:

Clutch covers for clutches with three disks and clutches with four disks are different.

[19] - Position the clutch cover (3 disks) so that the bores (A) for the dowel pins (B) and the blind holes (C) for the springs (D) are aligned.

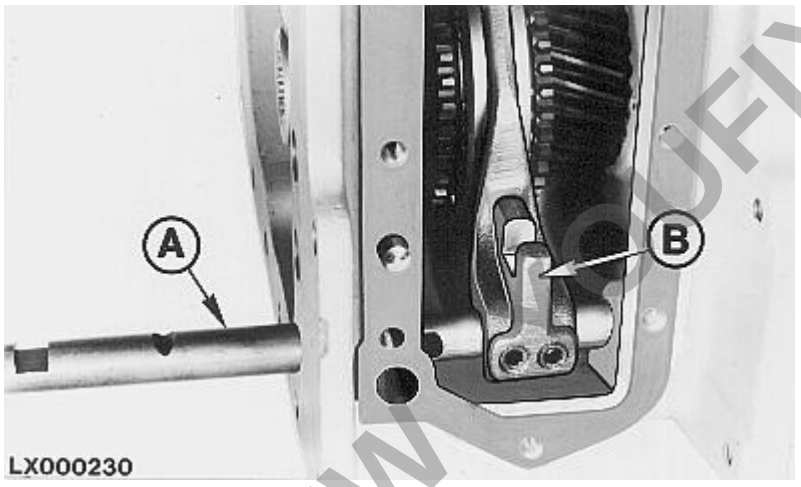
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C Countershaft of gear transmission
[Not with PowrQuad transmission]
D Connecting ring
E Shift collar
F Needle bearing
G Pin
H Axial bearing
I Drive shaft of range transmission
J Needle bearing
K Differential drive shaft (range transmission)
L Gear
M Gear
N Countershaft of option transmission
O Gear transmission drive shaft
[Not with PowrQuad transmission]

Disassembling the option transmission

[1] -



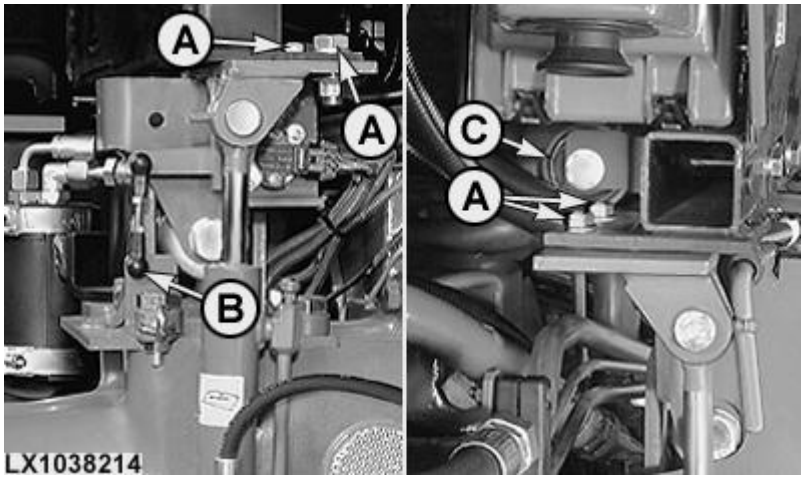
LEGEND:

A Shifter shaft
B Shifter fork

Remove shifter shaft (A) and shifter fork (B).

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LEGEND:

A	Cap screws
B	Linkage
C	Cap screws
H	Shield

a. Remove shield (H) on both sides.

b. Take cap screw (C) out of the Panhard link attachment on both sides.

c. Disengage position sensor linkage (B) and then take out cap screws (A) on both sides of the cab.

[21] - To make the following jobs easier, the cab can now be raised at the rear by several centimeters.

IMPORTANT:

When raising the operator´s cab, watch out for lines and hoses, plus all the bowden cables. There is a risk of them getting caught on other components. The same applies to wiring harnesses.

Pay attention to cable binders and other items that may have been retrofitted to harnesses or components of the cab.

When doing this, make sure that none of the tractor´s components become strained.

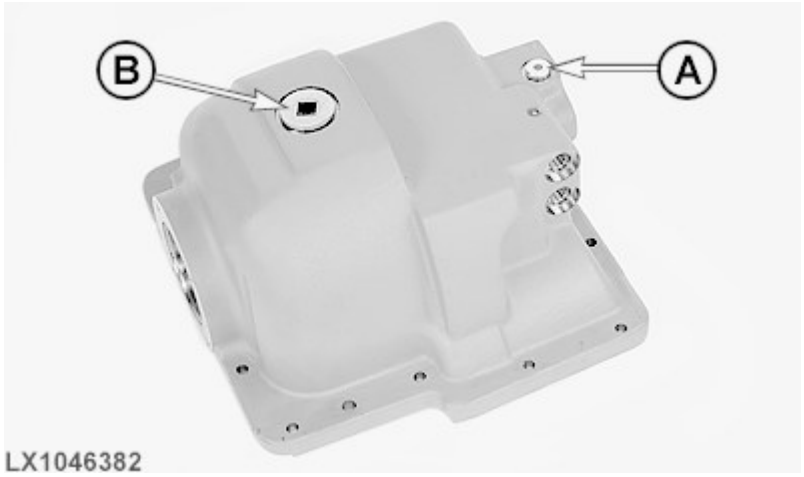
[22] - On tractors with PowrQuad transmission, disconnect the transmission control bowden cables.

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Assemble Front-Wheel Drive Clutch

[1] -



LEGEND:

A	Plug
B	Oil drain screw

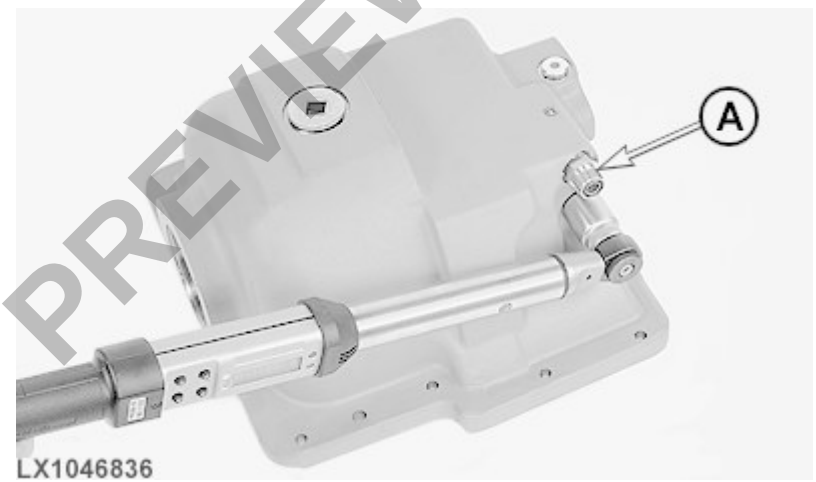
Install a new O-ring on plug (A) and tighten the plug to the specified torque.

Item	Measurement	Specification
Front-wheel drive clutch, plug	Torque	20 N˙m
		15 lb-ft

[2] - Install a new O-ring on oil drain screw (B) and tighten the screw to the specified torque.

Item	Measurement	Specification
Front-wheel drive clutch, oil drain screw	Torque	50 N˙m
		35 lb-ft

[3] -



LEGEND:

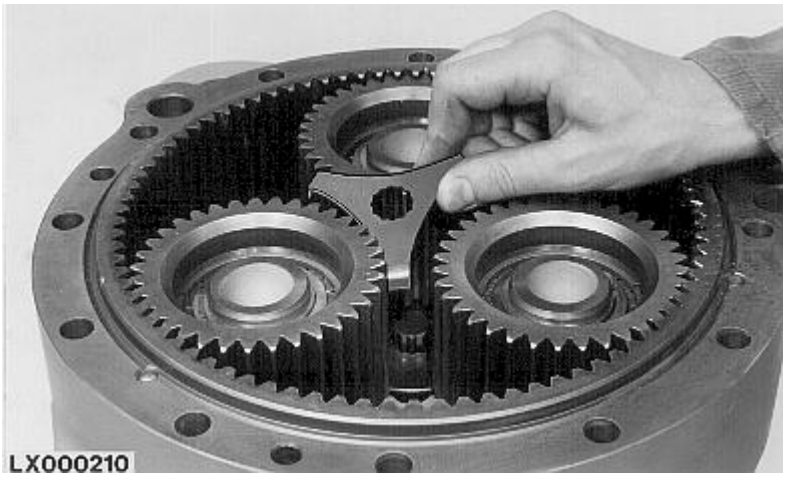
A	Fitting

Put new O-rings on fittings (A), and install.

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[5] -



Insert the locking plate.

Next step:

See Install the Final Drives in Section 56.

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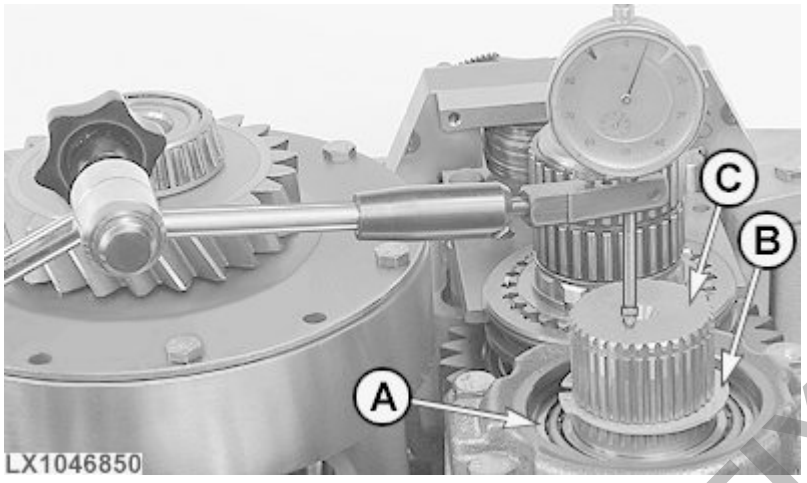
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Adjust the Tapered Roller Bearing of the Countershaft

[1] -

→NOTE:

Bearing preload is preferable.



LEGEND:

A	Snap ring
B	Snap ring
C	Countershaft

After assembling, select a snap ring (A) with a thickness to provide proper bearing preload or bearing play.

Item	Measurement	Specification
Countershaft	Preload	0.07 mm
		0.0028 in.
	Play	0.08 mm
		0.0031 in.

[2] - Install lower snap ring (B) on countershaft (C).

[3] -

→NOTE:

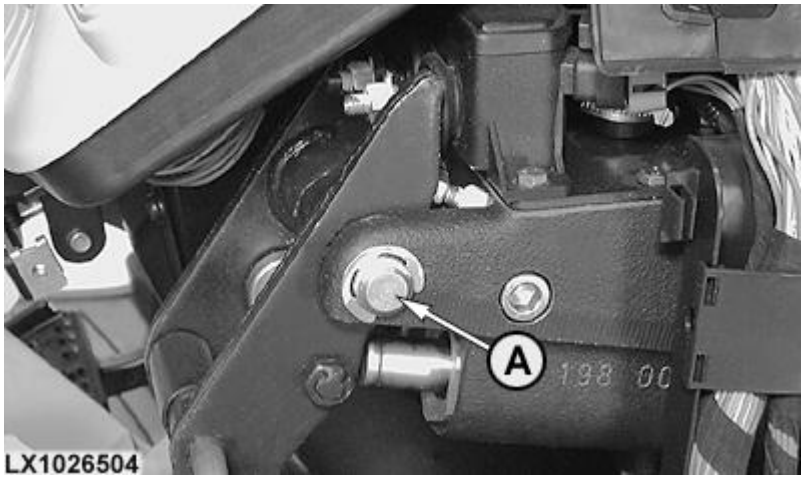
If the snap ring cannot be installed, loosen the screws on the bearing housing, insert the snap ring and tighten the screws to the specified torque.

Item	Measurement	Specification
Countershaft bearing housing to PTO housing, screw	Torque	40 N˙m
		30 lb-ft

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[5] -



LEGEND:

A	Pin

Secure the brake pedals with pin (A).

Next step:

SeeTests and Adjustments - Adjust Brake Pedals and Brake Switchin Section 260 of the relevant Diagnostic Manual.

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LEGEND:

A	Fitting (LS oil pressure to priority 2 control block)
B	Protective cap
C	Test port (steering, LS oil pressure)
D	O-ring
E	Housing
F	Seal ring
G	Back-up ring
H	Seal ring
I	LS pressure-limiting valve without adjusting screw (steering, LS oil pressure)
J	Seal ring
K	Back-up ring
L	Priority 1 valve (steering)
M	Seal ring
N	O-ring
O	Fitting (LS pressure from steering valve)
P	O-ring
Q	O-ring
R	Fitting (oil pressure to steering valve)
S	Restrictor plug

[1] -

CAUTION:

Comply with repair instructions. See Hydraulic System - General Instructions on Safety and Repair in this Group.

IMPORTANT:

The valves may only be loosened or tightened by hand using a torque wrench, never use power tools (e.g. pneumatic impact wrench).

→NOTE:

Control blocks (priority 1 - 3) and individual parts are designed to work together and may only be replaced with the same versions.

→NOTE:

Remove and install control block; see Removal and Installation of the Priority 1 Control Block in this Group.

Remove the various parts as required, clean them, inspect them for wear or damage and replace as necessary.

[2] - Observe the following during assembly:

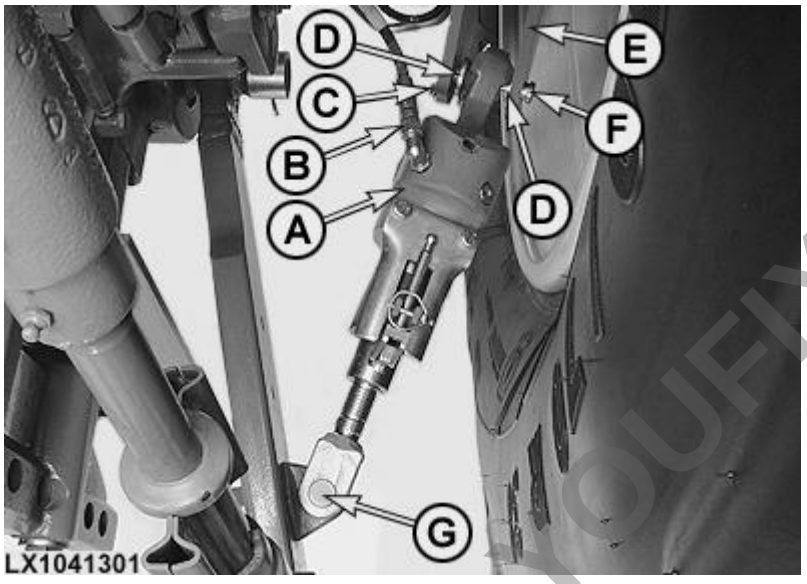
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Hydraulic Draft Link Stabilizer Bars (HSB) - Remove and Install

⚠ CAUTION:

Comply with repair instructions. See "Hydraulic System - General Instructions on Safety and Repair" in Section 70, Group 15.



LEGEND:

A	Hydraulic Stabilizer Bar (HSB)
B	Oil line
C	Snap ring
D	Washer
E	Support
F	Pin
G	Pin

Removing the stabilizer bars

[1] - Use the CommandCenter (DTI) to move the stabilizer bars to their float position.

[2] - Relieve the pressure in the hydraulic system.

[3] - Fully lower the rockshaft.

[4] -

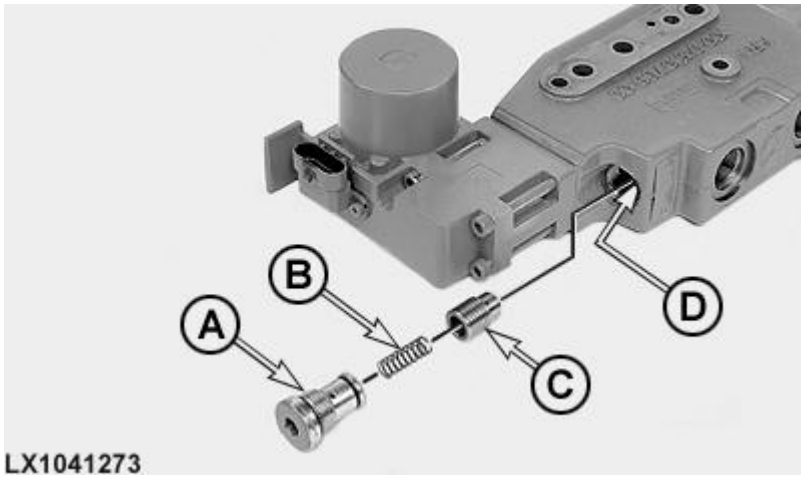
→NOTE:

Use a suitable container to trap any hydraulic oil that escapes.

Remove oil line (B) carefully, as there may be oil under pressure trapped in it.

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LX1041273

LEGEND:

A	Plug
B	Spring
C	Seat valve
D	Valve seat

[1] - Remove plug (A).

[2] - Take out spring (B) and seat valve (C).

[3] - Clean all parts, inspect them for wear or damage and replace as necessary.

Item	Measurement	Specification
Check valve, spring	Free length	24.8 mm
		1.0 in.

[4] - Check valve seat (D).

[5] - Apply clean hydraulic oil to seat valve (C) and spring (B) and install. Seat valve (C) should slide into the housing without binding.

[6] - Put a new O-ring on plug (A), and install.

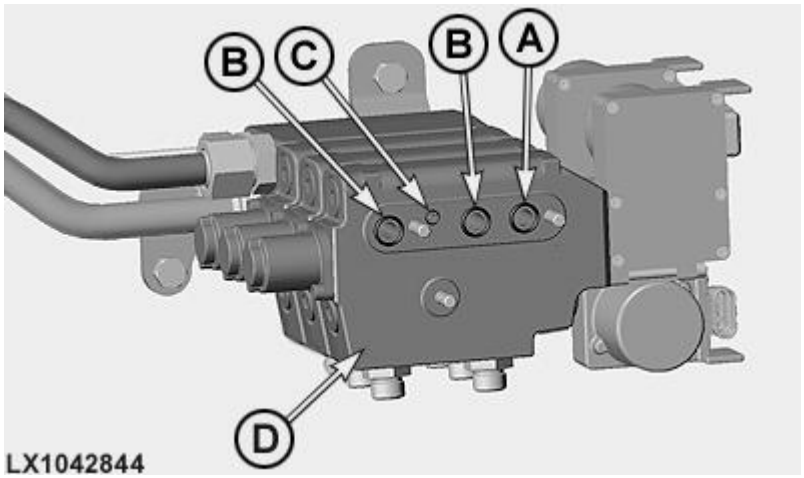
Item	Measurement	Specification
Plug	Torque	55 N˙m
		41 lb-ft

Checking the spool

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[7] -



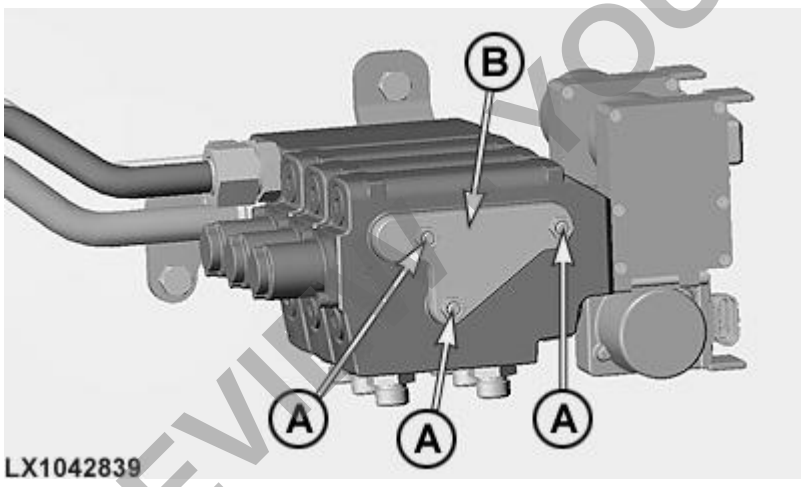
LEGEND:

A	O-ring (pressure passage)
B	O-ring (return passage)
C	O-ring (LS pressure passage)
D	Control valve 3

Align control valve (D) with the connector on the stepper motor facing up and install it.

[8] - Coat O-rings (A) through (C) with grease, and install on control valve (D).

[9] -



LEGEND:

A	Hex. nut
B	Endplate

Position endplate (B) and install hex. nuts (A) so that they are in full contact with the endplate.

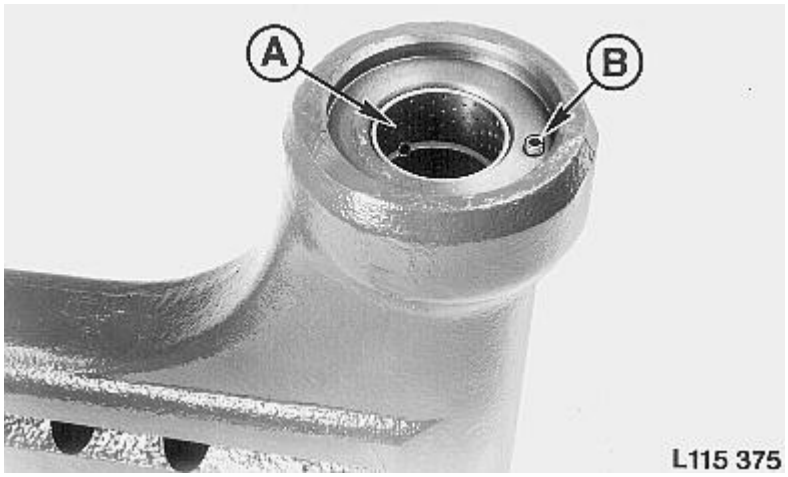
[10] - Tighten hex. nuts (A) evenly in the following sequence: top left, top right and bottom.

Item	Measurement	Specification
Endplate, hex. nuts	Torque	19 + 5 N˙m
		14 + 4 lb-ft

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[2] -

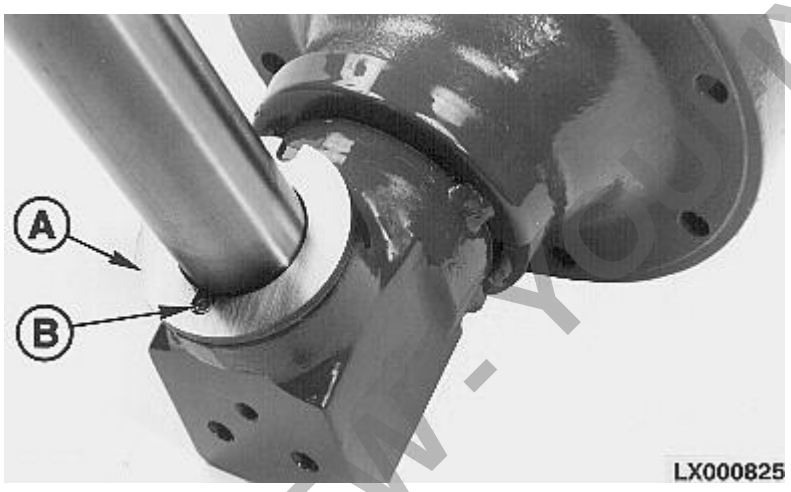


Bottom bushing and spring pin

Press bushing (A) in until it is flush with the base of the chamfer in the axle knee.

[3] - Force in spring pin (B) until it touches the bottom of the hole.

[4] -

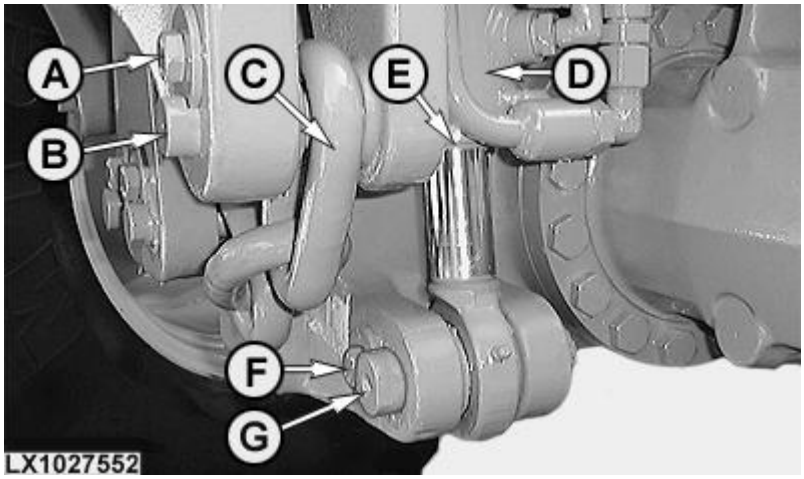


Apply grease to thrust washer (A) and install it on the knuckle and spindle assembly so that it is held firm by spring pin (B) and cannot turn.

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[1] -



LEGEND:

A	Screw
B	Pin
C	Oscillation Limiter
D	Cylinder Barrel
E	Guide
F	Screw
G	Pin

Install the piston rod and guide (E). Make the thread on the guide free of grease, then coat it with extra-strong Loctite ™ 270 and install the guide on cylinder barrel (D).

[2] - Put the bearing eye into position. Make sure the grease fitting is on the outside.

[3] - Install pin (G).

[4] - Install screw (F) with washer and tighten.

Item	Measurement	Specification
Retaining pin, M12 screw	Torque	95 N·m 70 lb.-ft.

[5] - Tighten guide (E) by means of a pin-type face wrench.

Item	Measurement	Specification
Guide in hydraulic cylinder	Torque	200 N·m 147 lb.-ft.

[6] - Install oscillation limiter (C) and pin (B).

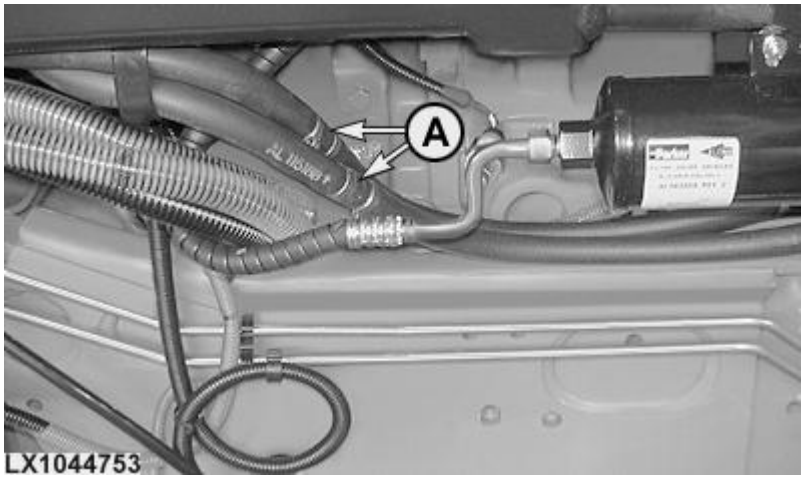
[7] - Install screw (A) with washer and tighten.

Item	Measurement	Specification
Retaining pin, M12 screw	Torque	95 N·m 70 lb.-ft.

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[8] -



Disconnect heater hoses (A).

IMPORTANT:

It is essential to mark the heater hoses before disconnecting, as they must not be mixed up.

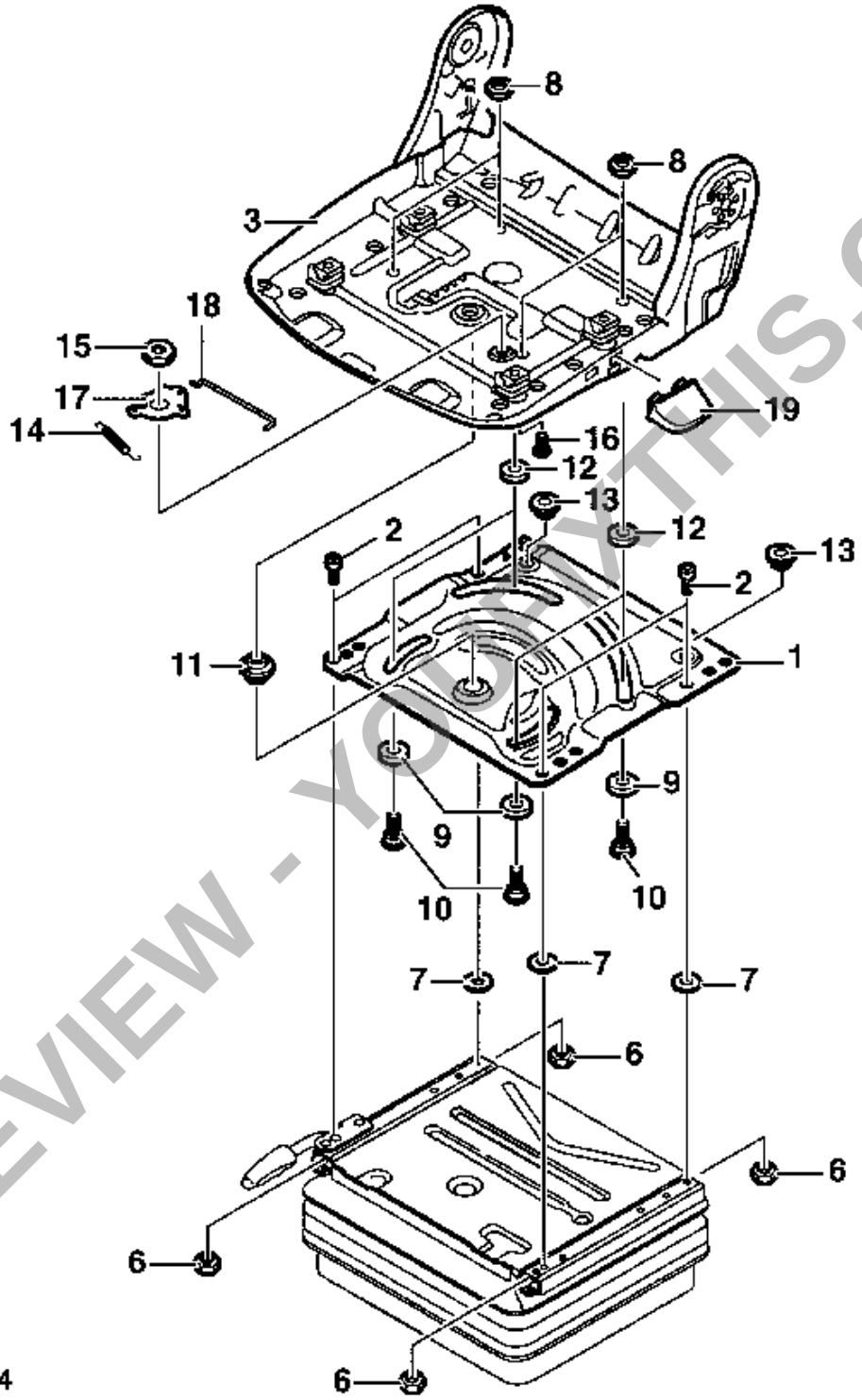
→NOTE:

Drain escaping coolant into a suitable container.

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Comfort Seat MSG85 - Remove and Install the Integral Turntable and Baseplate



Remove upholstery from seat and backrest.

Remove backrest (only necessary if the baseplate is to be replaced).

Turn integral turntable (1) together with baseplate (3) to one side, and take out screws (2).

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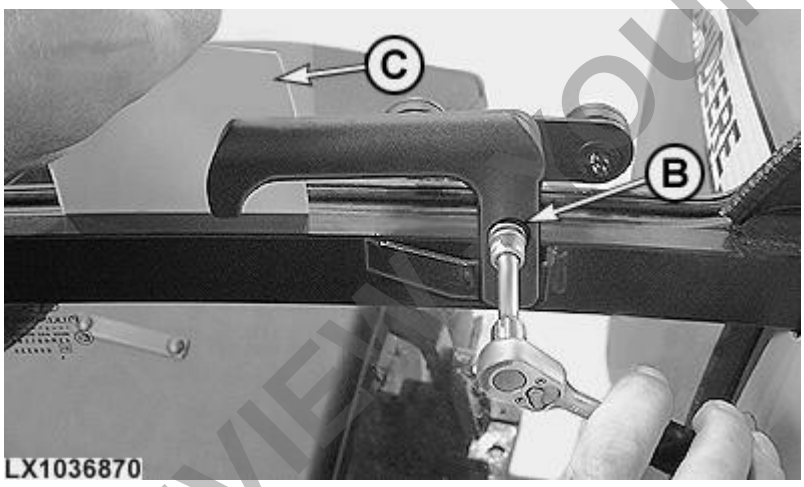
O	Spacer

Loosen door lock pin (A) and adjust cab door tension by moving shield (B) until some effort is needed to pull out paper strips placed between cab frame and seal.

Adjust Windshield and Rear Window Contact Pressure



LX1036869



LX1036870

LEGEND:

A	Cover
B	Hex. nut
C	Piece of paper

Remove cover (A).

Adjust hex. nut (B) until windshield or rear window contact pressure makes it difficult to pull out pieces of paper caught between the cab frame and the seal.

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