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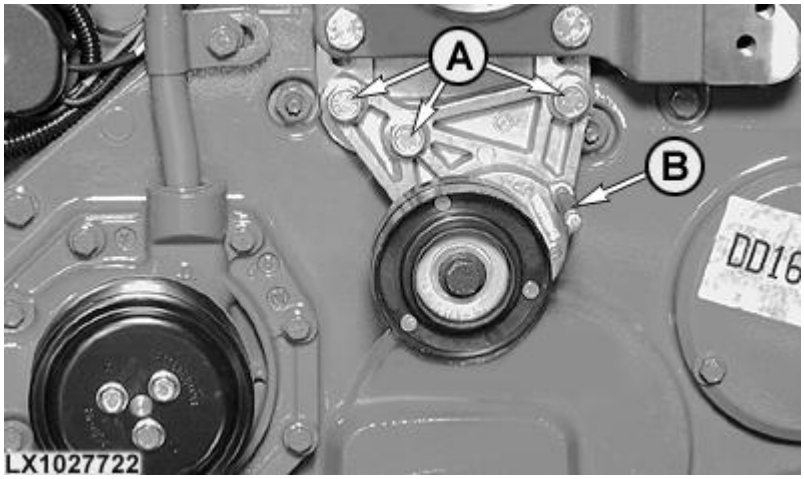
Section 20 - ENGINE

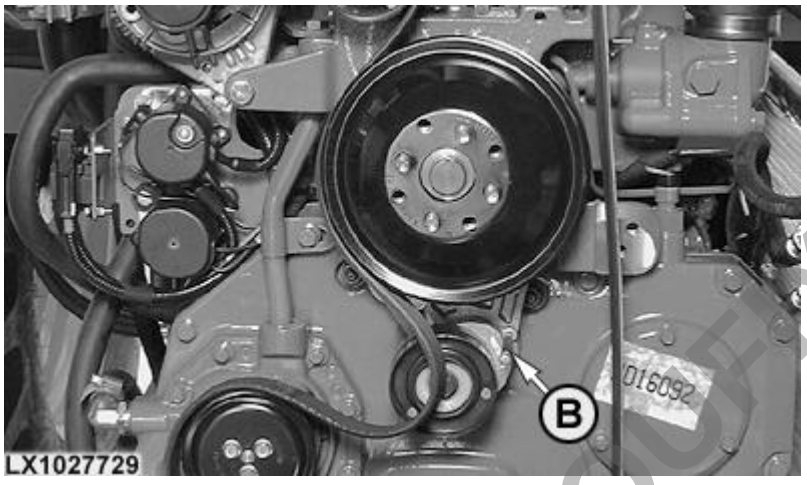
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Engine Mounting 25
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Slacken drive belt and remove the three cap screws (A).

When installing, tighten the three cap screws (A) to the following torque:

Item	Measurement	Specification
Drive belt tensioner, cap screws	Torque	50 N˙m
		37 lb-ft

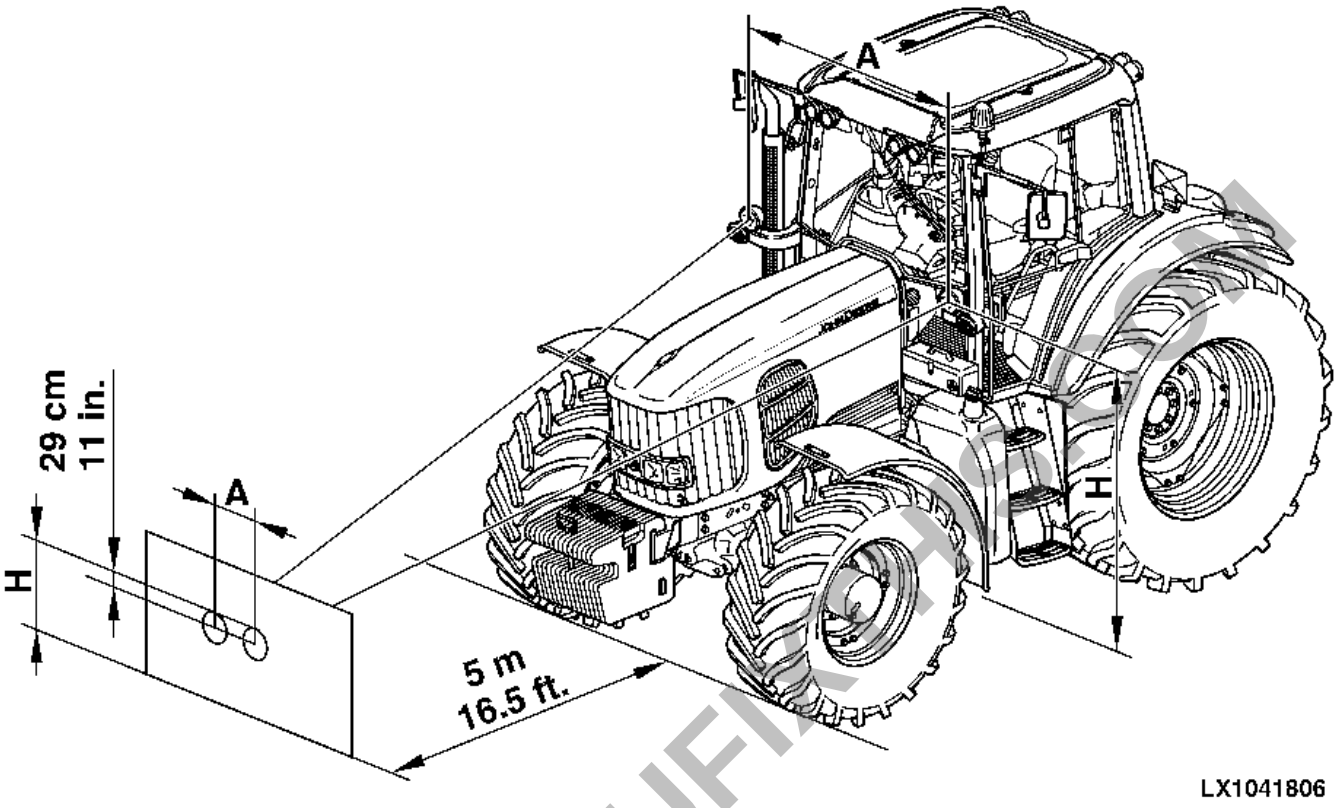
Re-install drive belt.

The tensioner roll is kept in released position by means of a metal pin with a dia. of 5 mm (0.2 in.). For tensioning, turn tensioner roll slightly to release metal pin and pull it from the bores. The drive belt tensioner returns to its tensioning position automatically.

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Alter the setting of the headlight by slackening off hex. nut (A).



Park tractor on a level surface 5 m (16.5 ft) from a vertical wall.

Adjust each light so that the bright/dark border forms a horizontal line 29 cm (11 in.) lower than the height (H) of the lights.

Switch to full beam. Align the lights sideways so that the distance between the center of the light beams on the wall is the same as the distance (A) between the lights.

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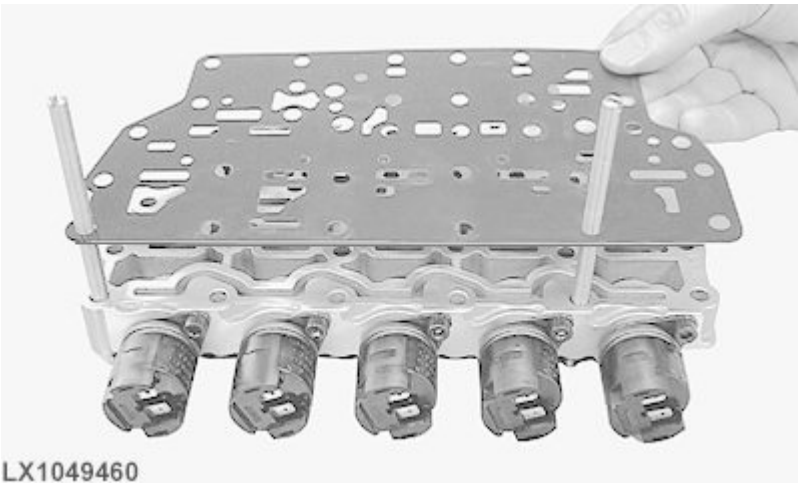
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Exploded view of speed control lever on tractors with CommandArm

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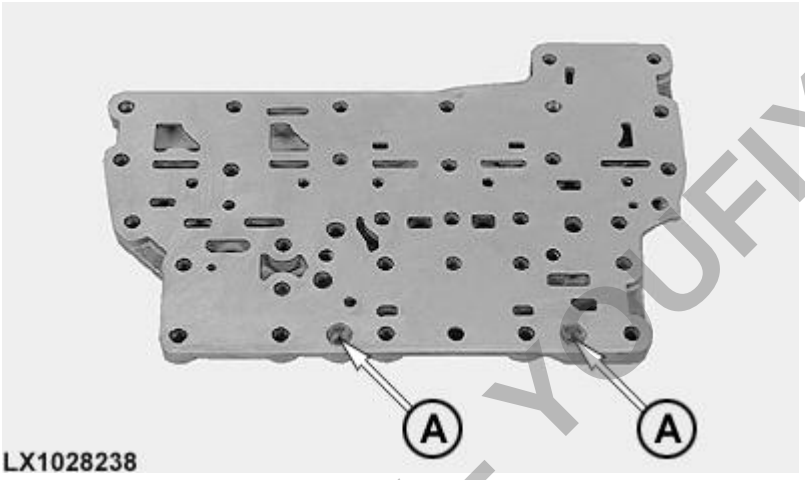
[11] -



LX1049460

Place gasket on control block.

[12] -



LX1028238

LEGEND:

A	Screens

Insert the two screens (A) in passage plate.

IMPORTANT:

The convex side of the screens must face downward.

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Install Idler Gear (Repair Level 2)

Preliminary work:

SeeImportant Information on Repair Level 2 of AutoPowr/IVT Transmissionin Section 53.

[1] -

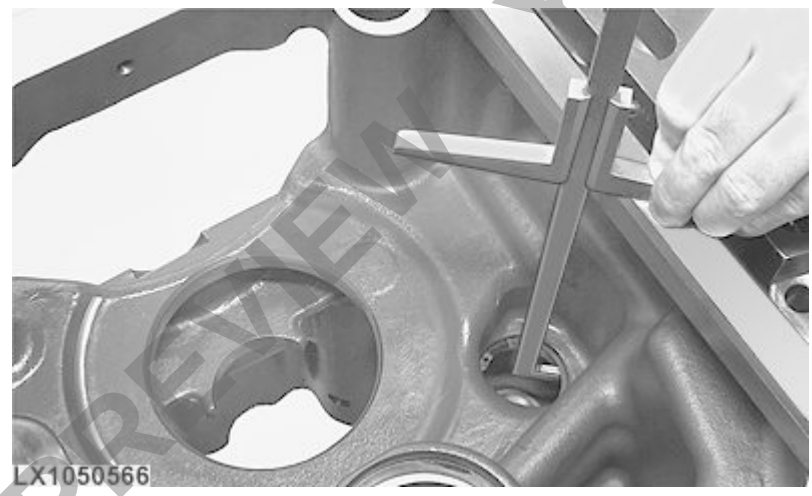


Insert the snap ring in the ring-shaped groove in the housing.

→NOTE:

Install snap ring in contact with upper groove face.

[2] -



Determine dimension (a) from the flange face of the output housing to the bottom edge of the snap ring.

→NOTE:

Always use aKJD10607measuring strap to do this measurement.

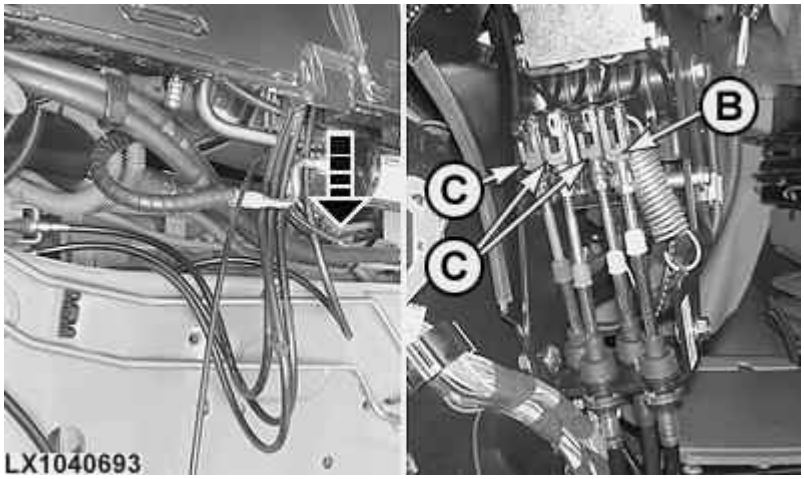
[3] - As an example, dimension (a) is 178.30 mm (7.02 in.)

[4] - Remove snap ring again afterwards.

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[3] - Disengage all the transmission control bowden cables (C) at the levers and counter-bearings.



LEGEND:

B	Bowden cable, park lock
C	Transmission control bowden cable

→NOTE:

Mark the bowden cables to facilitate re-installation and make sure they do not get caught during removal.

→NOTE:

There may be differences here depending on how the tractor is equipped.

Disengage park lock bowden cable (B) at the lever and counter-bearing.

Pull all bowden cables downward out of the operator´s cab.

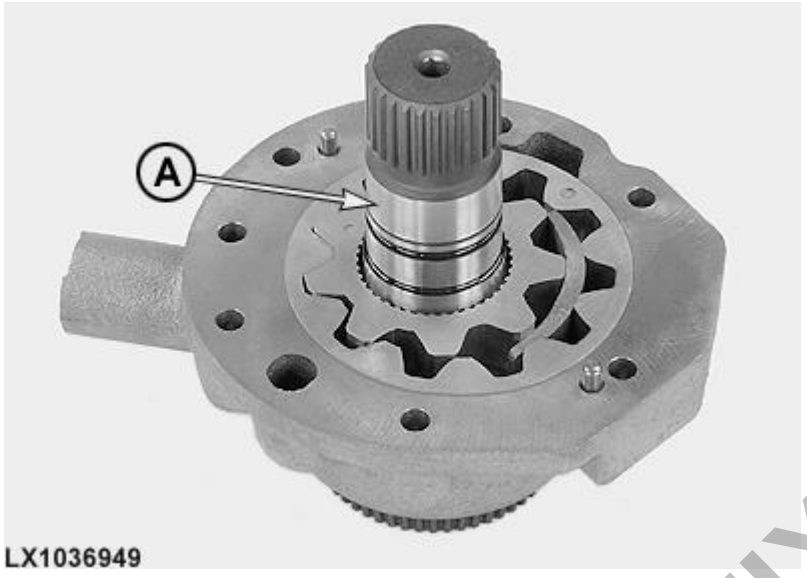
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R Snap ring

Disassembling the transmission oil pump

[1] -



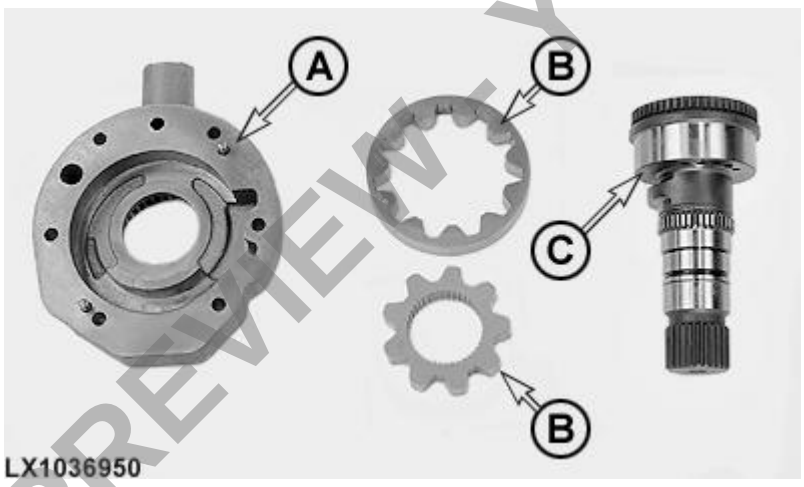
LX1036949

LEGEND:

A Input shaft

Pull input shaft (A) out of the pump.

[2] -



LX1036950

LEGEND:

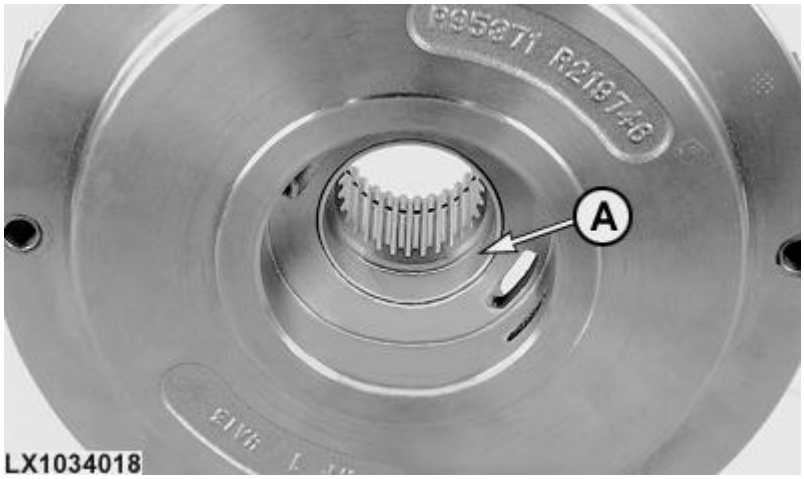
A Pump housing
B Pump gears
C Input shaft

Take the components out of the pump housing and check them for signs of wear. Replace, if necessary.

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[4] - Assembling the forward clutch

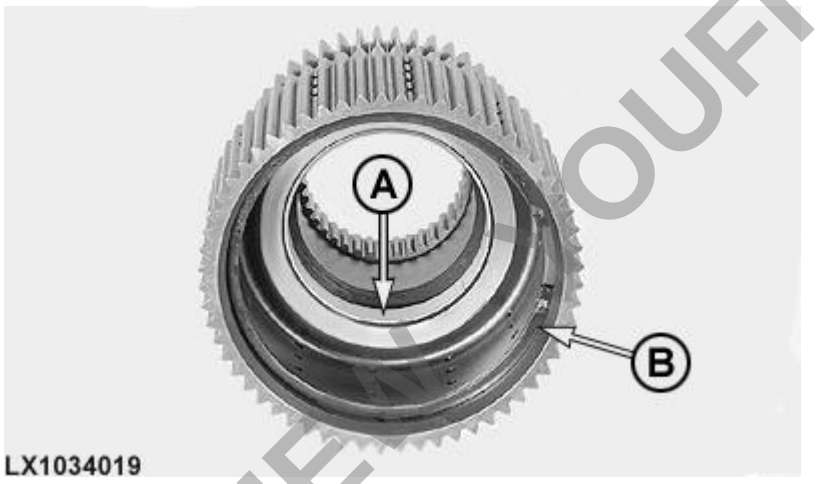


LEGEND:

A	Bushing

Install bushing (A) in the clutch drum; make sure it is flush. Use the D01045AA driver set for bushings, bearings, and seal rings.

[5] -



LEGEND:

A	Bushing
B	Snap ring

Install bushing (A) in the clutch drum; make sure it is flush. Use the D01045AA driver set for bushings, bearings, and seal rings.

[6] - Insert snap ring (B) into the ring groove in the hub.

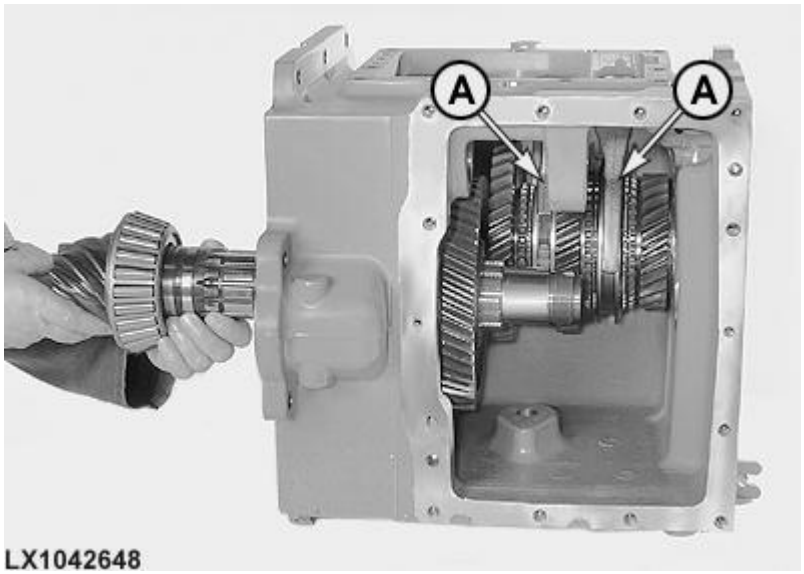
→NOTE:

The snap ring is only used on the forward clutch with five disks.

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[15] -

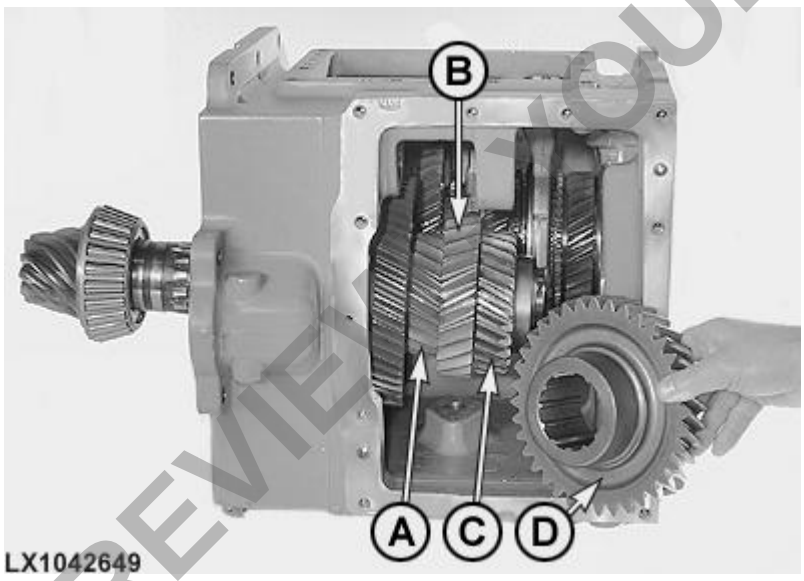


LEGEND:

A	Shifter Forks

Raise shifter forks (A). Slowly insert the differential drive shaft through the components that have been placed inside the housing.

[16] -



LEGEND:

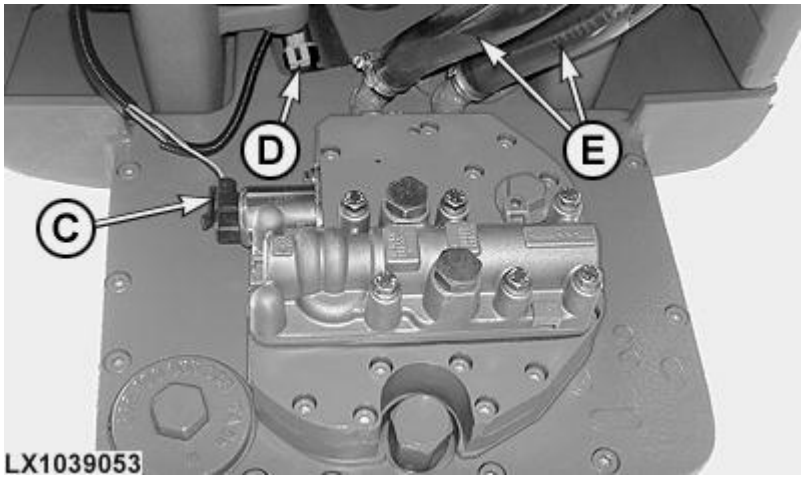
A	Gear, Range E
B	Front-Wheel Drive Gear
C	Gear, Range D
D	Gear, Range C

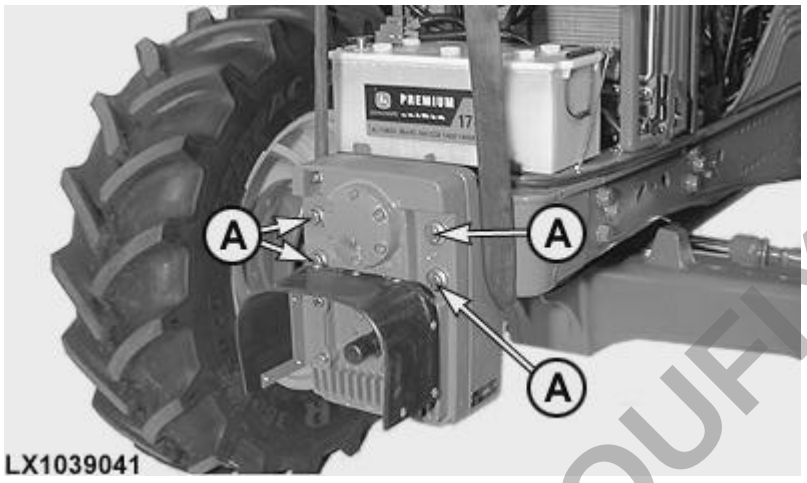
Slowly slide the differential drive shaft further into the housing and install components A-D.

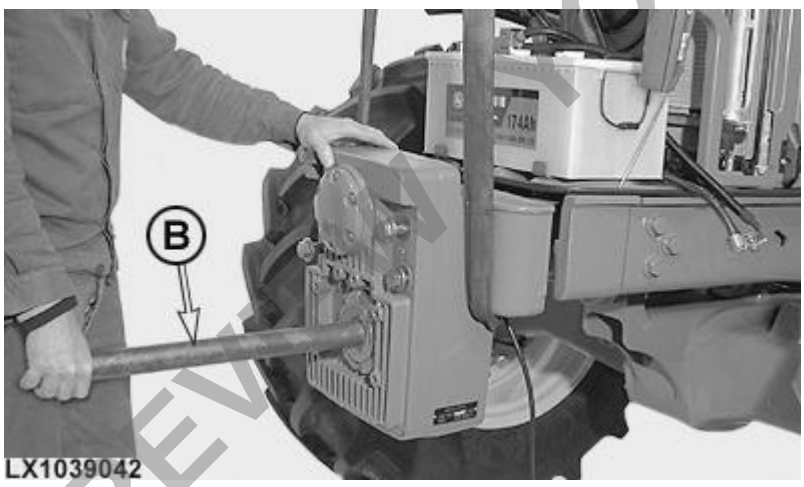
Next step: Adjust the End Play of the Differential Drive Shaft , see Section 55.

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LEGEND:

A	Cap screws
B	Tube
C	Connector
D	Connector
E	Hoses

IMPORTANT:

Trap oil as it emerges. Seal the open ends so that no dust can penetrate.

Attach front PTO to hoist as shown.

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Remove and Disassemble Pump Drive Gear

Preliminary work:

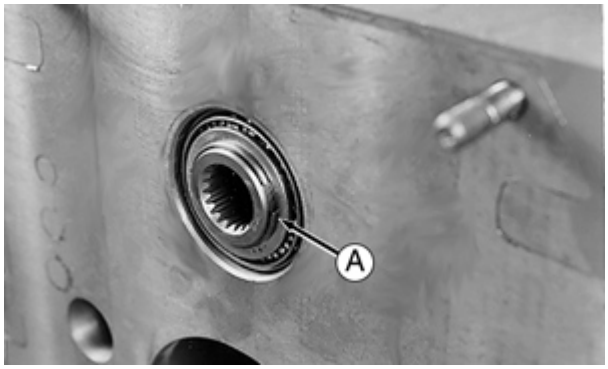
See Remove the Differential in Section 56.

See Remove the Range Transmission in Section 55.

See Remove the AutoPowr/IVT Transmission in Section 53.

See Remove and Disassemble the Pump Drive Pinion in Section 56.

[1] -



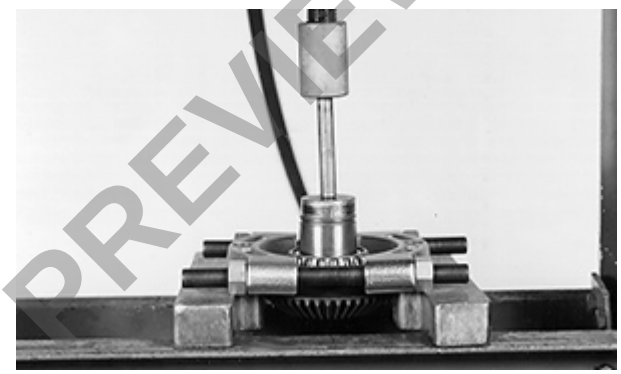
LEGEND:

A	Snap ring

Remove snap ring (A) from the drive gear shaft.

[2] - Remove the drive gear from the differential case and front bearing using a 44.5 mm (1-3/4 in.) driver disk, a 25.4 mm (1 in.) pilot disk, and a handle.

[3] -



Remove the bearing spacer. Install a knife-edge puller under the rear bearing and remove the shaft from the bearing using a 44.5 mm (1-3/4 in.) disk.

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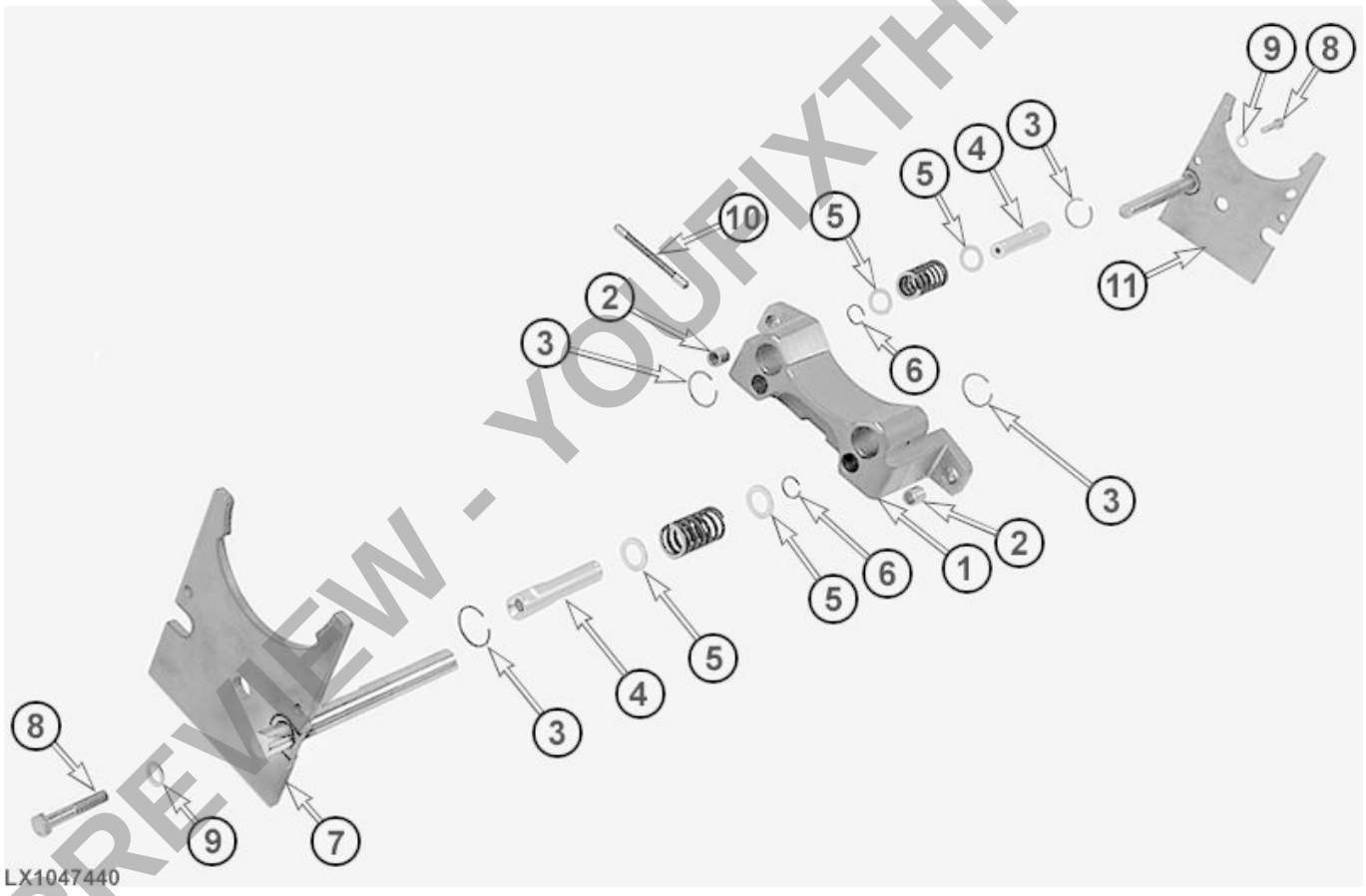
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[9] -



LX1047436

Clean all components and assemble the special pin.



LX1047440

Exploded view of shift mechanism

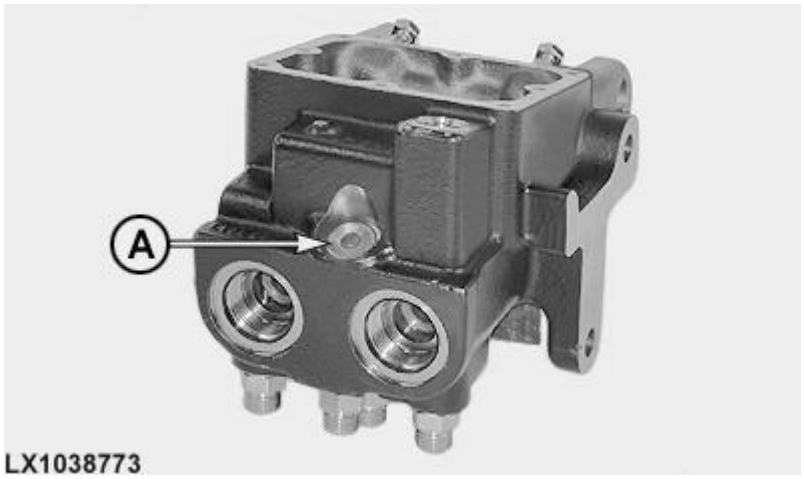
LEGEND:

1	Support for shifter fork
2	Guide sleeve
3	Snap ring
4	Special pin
5	Washer
6	Snap ring
7	Shifter fork

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[14] -

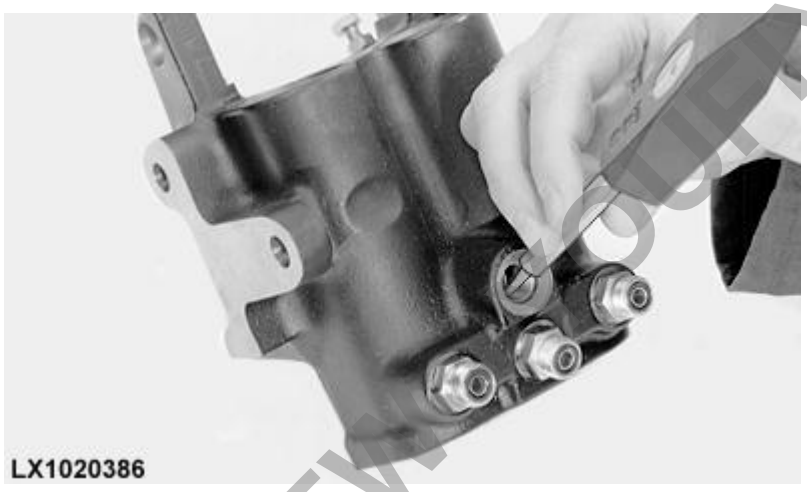


LEGEND:

A	Plug

Remove plug (A).

[15] -

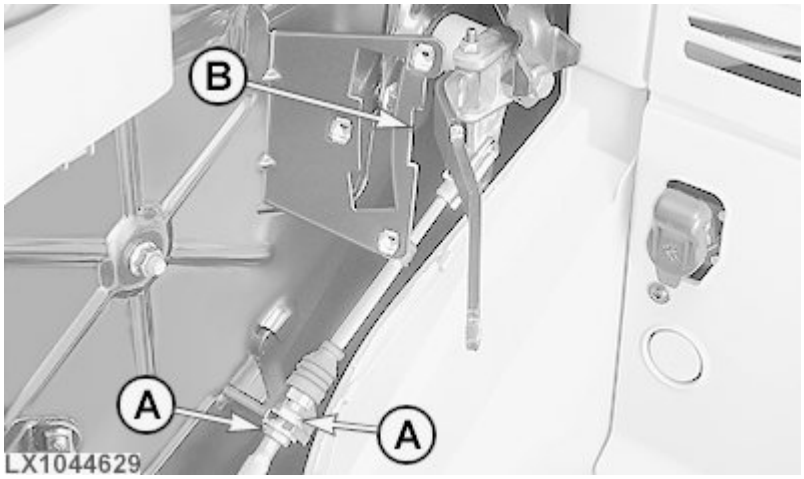


Drive out the LS check valve.

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[3] -



LEGEND:

A	Adjusting nut
B	Cut-out

Bowden cable for M-SCV at pos. 4.

a. Adjust the control lever with adjusting nuts (A) so that it fits in cut-out (B).
b. Counterlock adjusting nuts (A).
c. Install the shift gate without the side panel.
d. Check the adjustment.
e. Remove the shift gate again.

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[1] -

CAUTION:

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

IMPORTANT:

The valves must 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 Control Block with or without Priority 2 in this Group.

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

[2] - Attach fitting (A).

Item	Measurement	Specification
Fitting	Torque	33 N·m
		24.3 lb-ft

[3] - Install shuttle valve (I).

Item	Measurement	Specification
Shuttle valve	Torque	40 N˙m
		29 lb-ft

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Selective Control Valves (SCVs) - Reconditioning the Couplers

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A	Hex. socket screws
B	Stepper motor

Position stepper motor (B) using a new O-ring and align the connector housing towards the teeth of the rack.

[16] - Install hex. socket screws (A) and tighten them evenly.

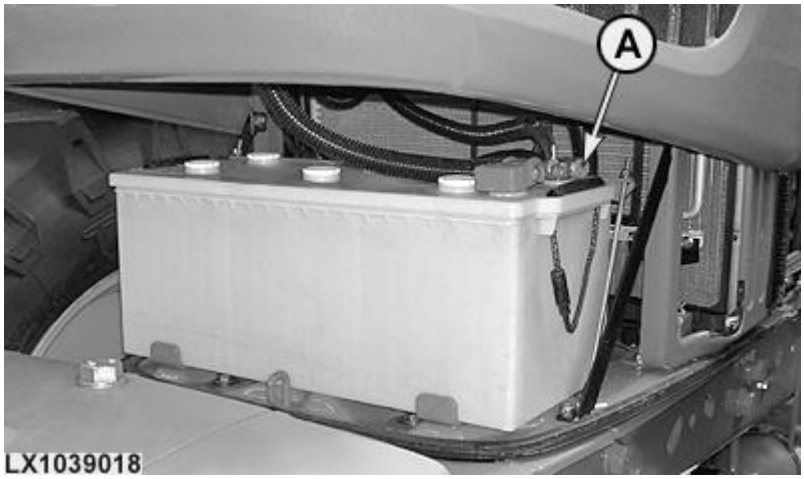
Item	Measurement	Specification
Stepper motor, hex. socket screws	Torque	10 N˙m
		7.4 lb-ft

[17] - Install the E-SCV, see Removal and Installation of the Selective Control Valves (SCV) in this group.

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[3] -



LEGEND:

A	Negative terminal (—)

Open the hood. Disconnect the negative terminal (—) on the battery. The version shown here has a negative terminal at the marked location (A).

CAUTION:

Always be careful to observe the correct battery terminals.

Comply with safety instructions on how to handle batteries (see Section 05).

[4] - If the following components are equipped, remove them:

- Remove front weights.
- Remove front loader.
- "Remove Front PTO", see Section 56, Group 00.

[5] - Preliminary work on the left main frame:

→NOTE:

The main frame consists of two halves, which can be removed separately without previous removal of any tractor components.

→NOTE:

There may be differences here depending on how the tractor is equipped.

a. Remove rear wheel and securely support the tractor at the wheel flange using support stand JT02043 or JT02044 , whichever is more suitable in relation to the height of the tractor. See " Remove the Front and Rear Wheels " in Section 80.

b. " Remove Fuel Tank ", see Section 30, Group 10.

c. On tractors with front loader, remove mounting brackets.

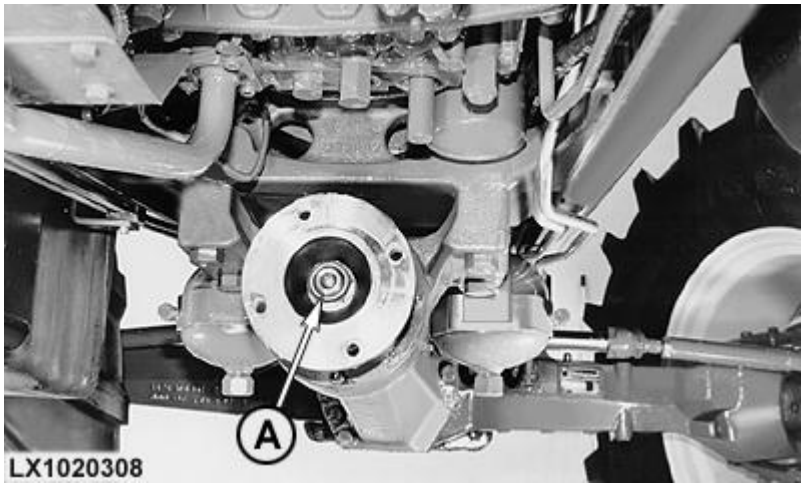
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Item	Measurement	Specification
Trailer Hitch and Receiver	Play	max. 3.0 mm max. 0.12 in.

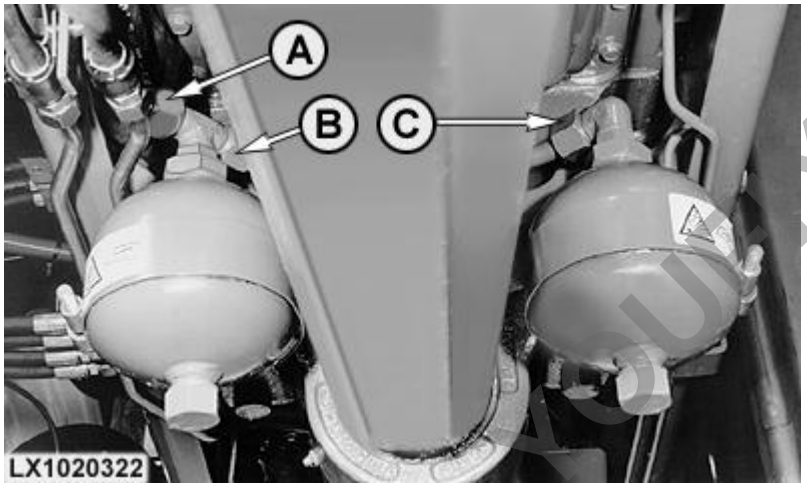
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Loosen retaining nut (A),**but do NOT remove it.**

[2] -



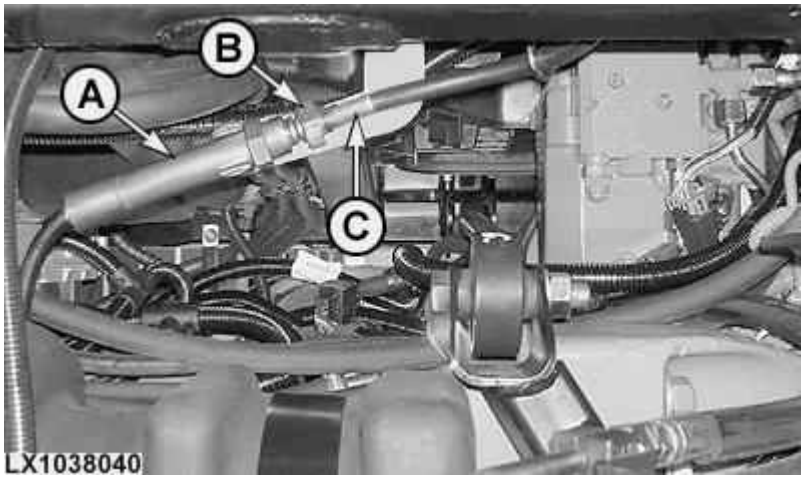
Remove collar nuts (A), (B) and (C).

[3] - Seal the open lines with plugs.

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[10] -



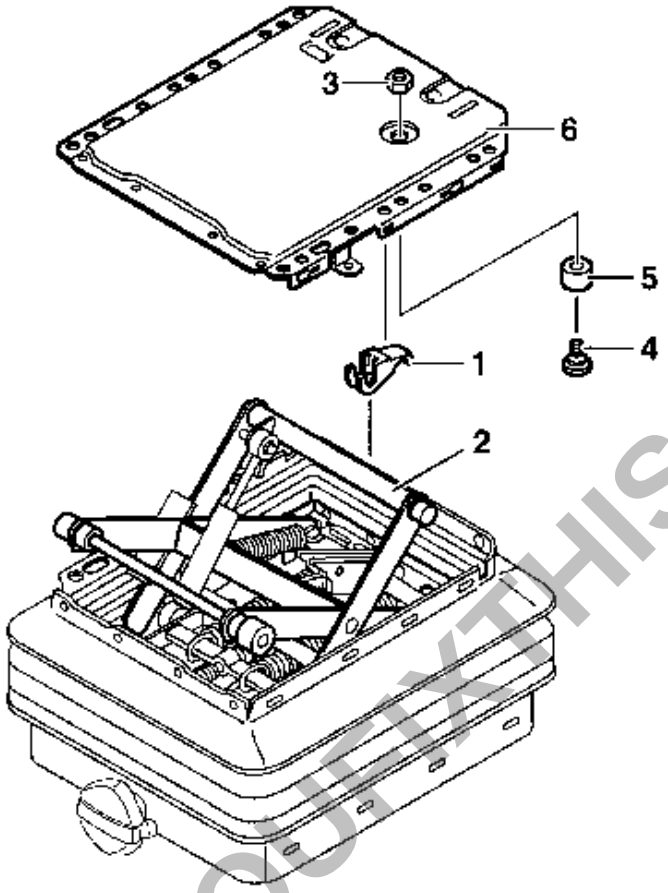
LEGEND:

A	Threaded sleeve
B	Locknut
C	Bowden cable

Hold bowden cable (C) so it does not turn and loosen locknut (B). Disconnect threaded sleeve (A) from bowden cable (C).

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LX1021407

Remove upper part of seat.

Remove horizontal shock absorber.

Disengage clip (1) at rocker (2).

Take off hex. nut (3), and remove screw (4) and stop (5).

Push upper section of spring assembly (6) to the rear and turn it to take it off the rocker (2).

Remove the horizontal spring assembly and linkage.

Install in reverse order.

→NOTE:

Apply grease to the slides.

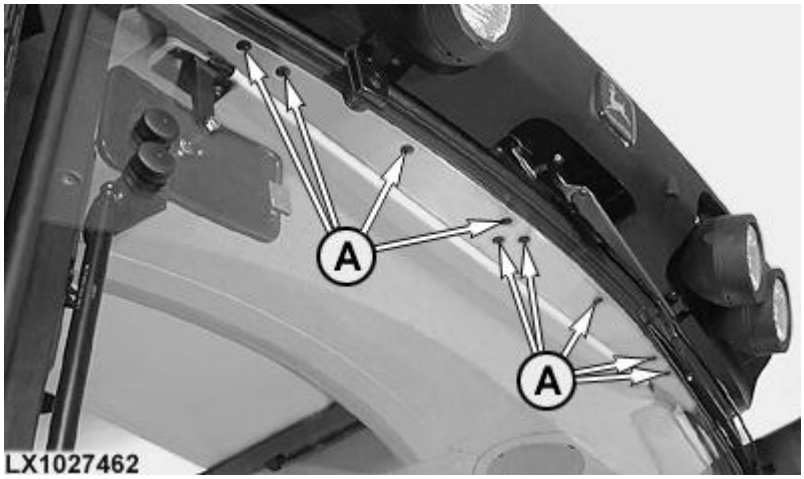
Comfort Seat MSG85 - Remove and Install the

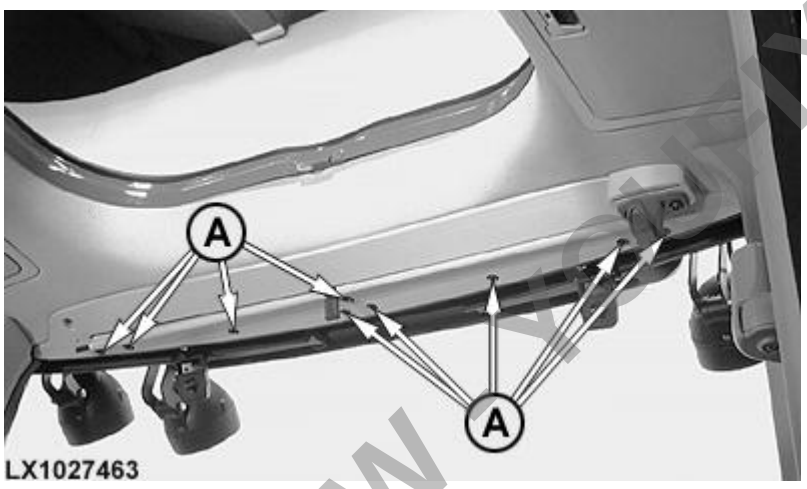
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For further installation, follow removal procedure in reverse order; see "Remove and Install the Panorama Door" and "Install the Door Lock" in Section 90, Group 30.

Remove and Install the Roller Sun-Visors





Rear roller sun-visor

Remove Phillips-head screws (A) and carefully take out roller sun-visor.

Installation of roller sun-visor

For installation, follow removal procedure in reverse order.

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