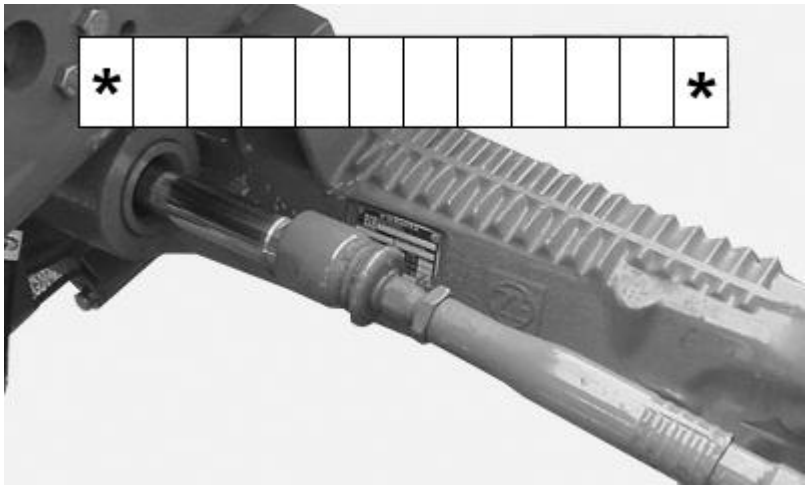
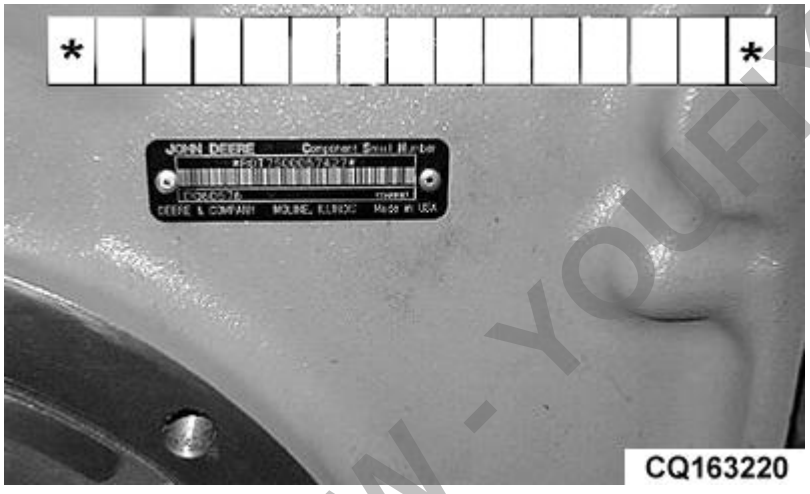
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This serial number plate is located on the rear right-hand side of the front axle.

Differential Serial Number (POWRQUAD ™)

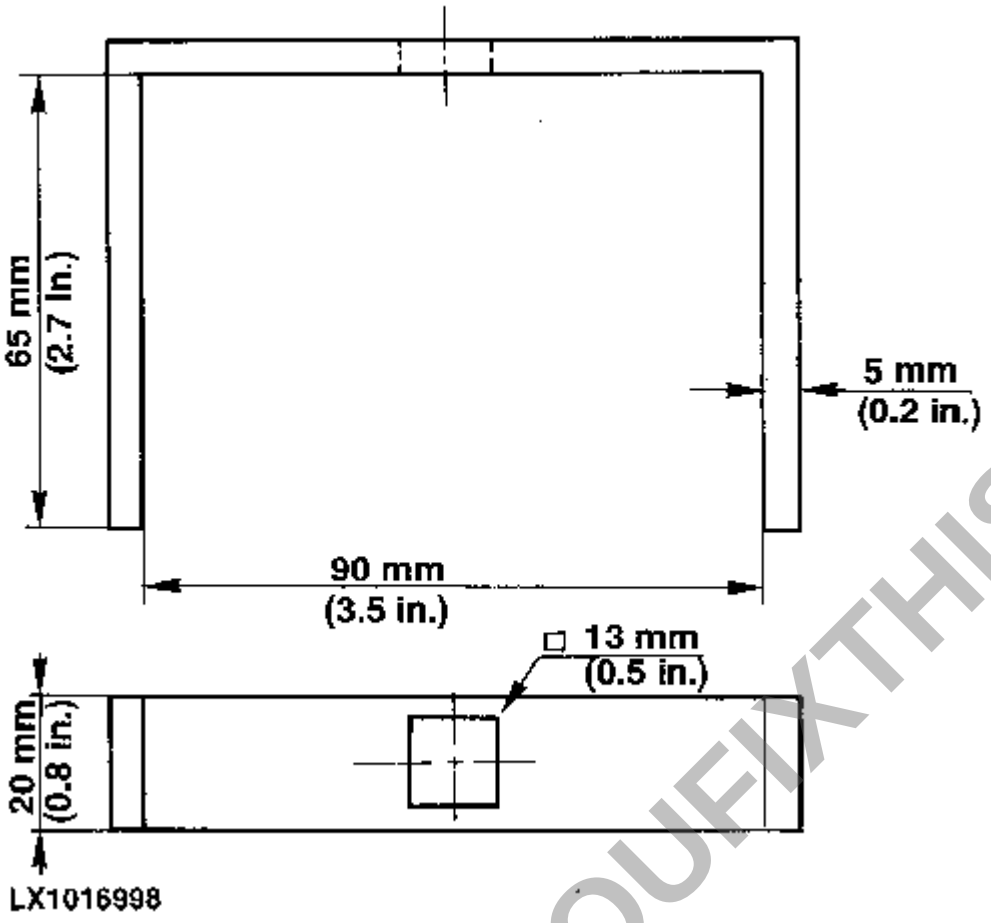


The plate with the differential serial number is located on the rear left side of the differential housing, above the rear final drives.

Serial Number of Rear Final Drives (SYNCROPLUS ™)

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Removing and installing the fuel gauge sending unit (with screw connection)

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→NOTE:

KLM10019-1 special pliers are included in FKM10461 wiring harness repair kit.

Wiring harness repair kit

FKM10461



Repairing wiring harnesses.

.

Deinsulate a wire length of 6 mm (0.24 in.).

Place male or female terminal in mating recess of crimping pliers.

Position deinsulated wire end in recess, in male or female terminal and press pliers until snapped in.

To open pliers, pull release lever.

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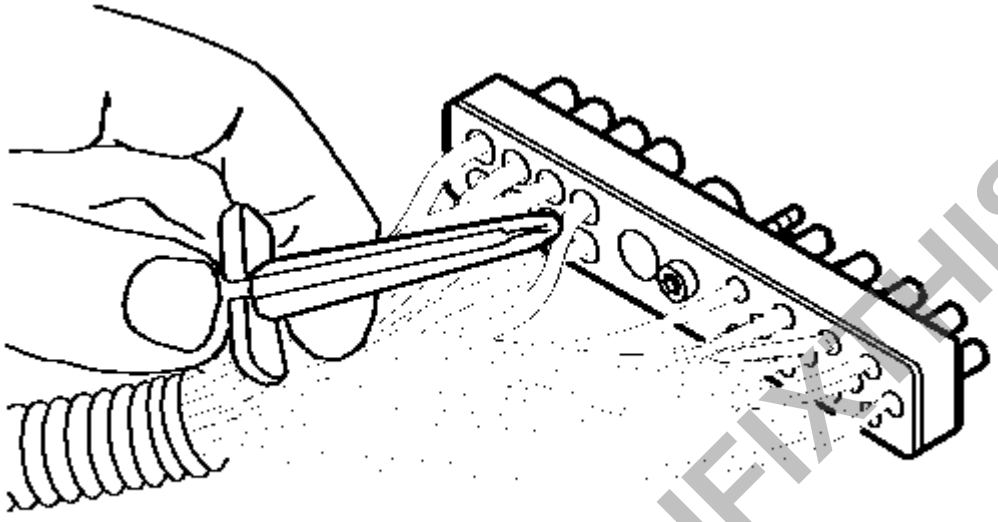
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DEUTSCH Connectors

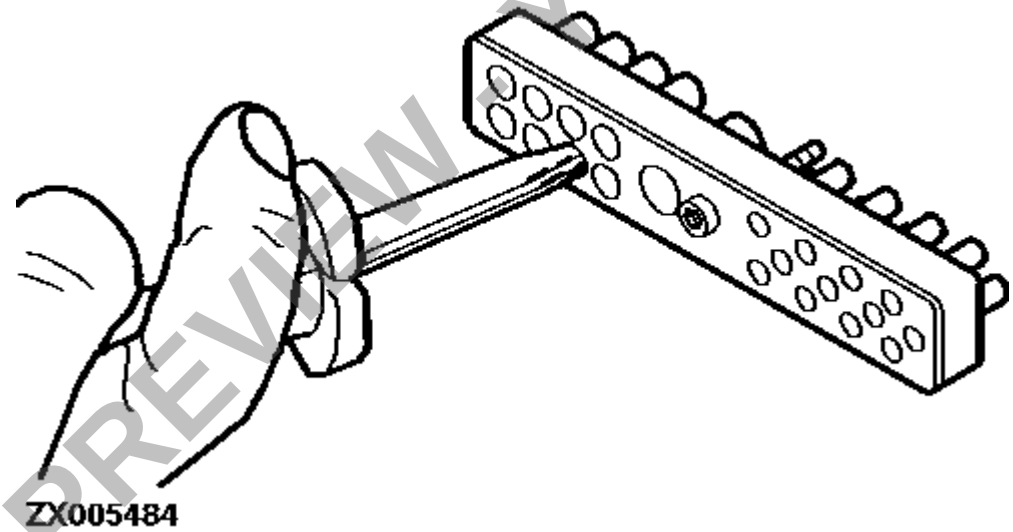
→NOTE:

DEUTSCH ™ connectors.

[1] - Extracting a male or female terminal



ZX005483



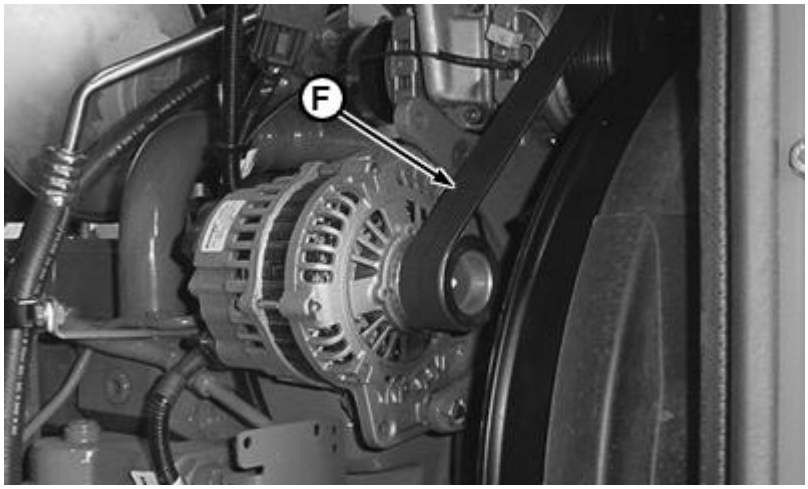
ZX005484

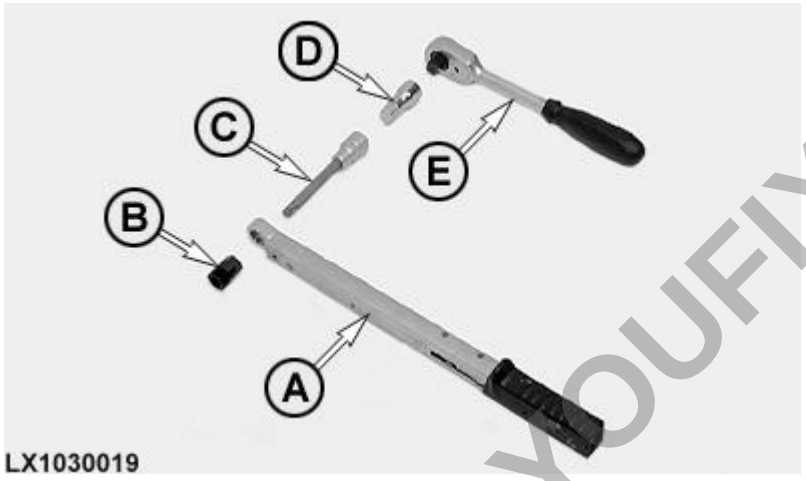
Position JDG362 extraction tool against wire as shown in picture.

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Removing/Installing Alternator Pulley





LEGEND:

A	Torque wrench [Commercially available tool]
B	KJD10227 Special Tool
C	KJD10228 Special Tool
D	Extension 50 mm (2 in.) [Commercially available tool]
E	Wrench 1/2 in. [Commercially available tool]

Raise the hood.

CAUTION:

Disconnect negative (-) battery cable.

IMPORTANT:

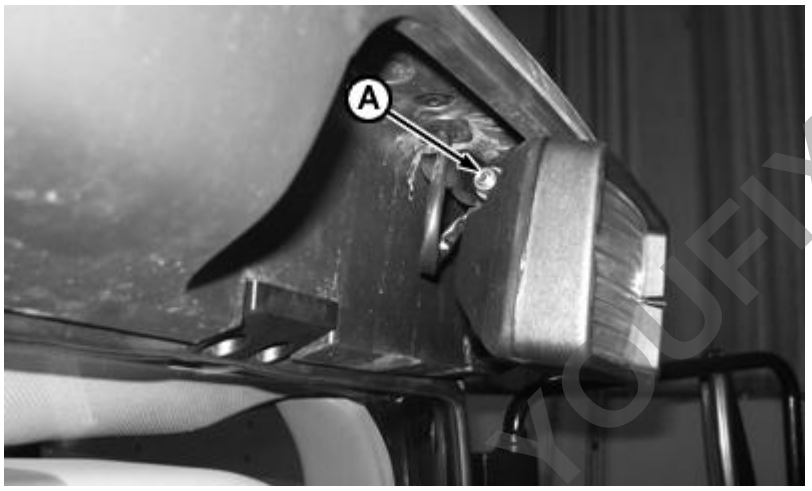
Always release tension of drive belt before removing pulley.

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Adjusting Cab Frame Lights





To adjust headlight, loosen nut (A) and incline light as necessary.

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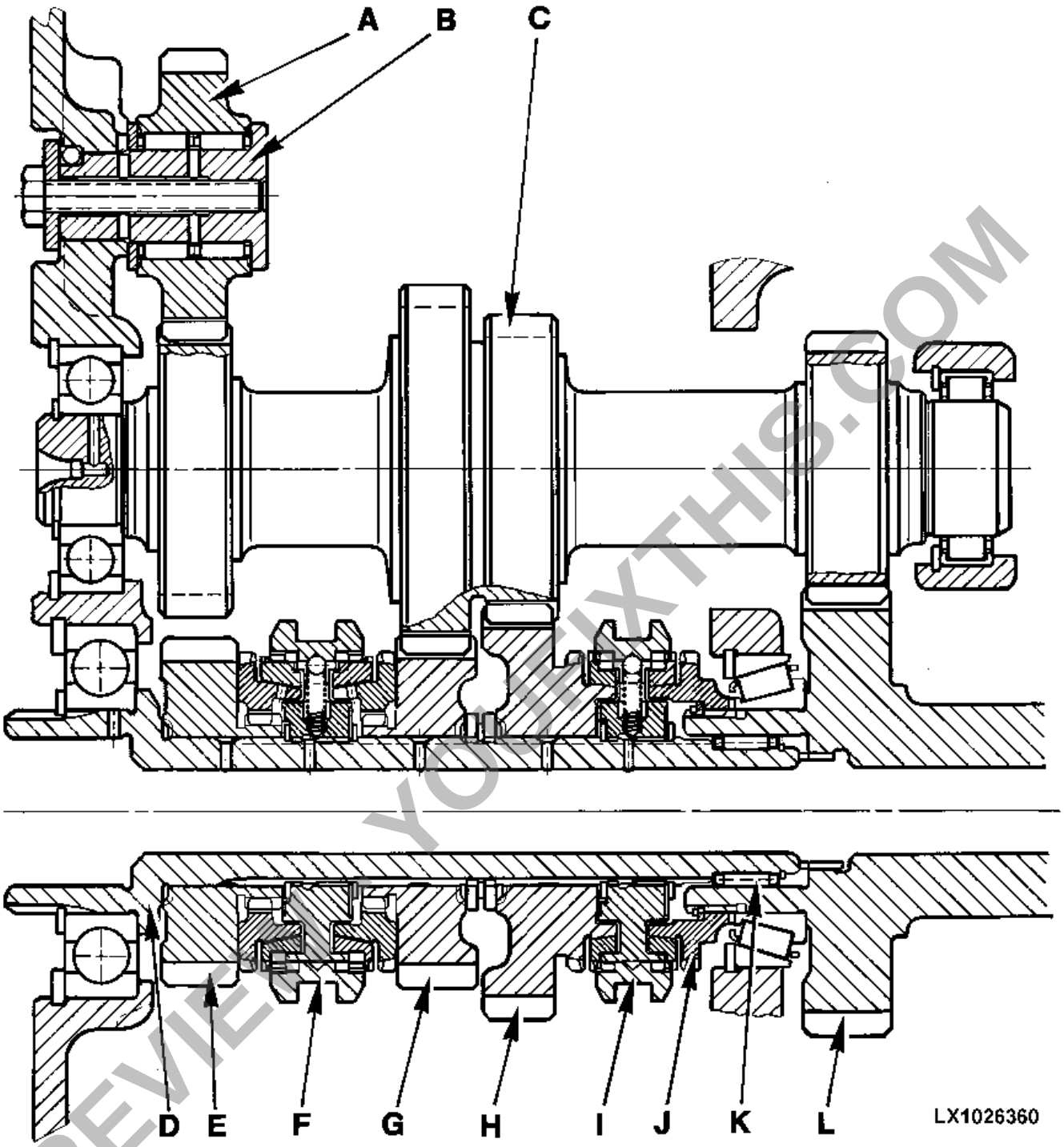
Item	Measurement	Specification
		1.97 in.
	Test length	40 mm at 170 to 210 N
		1.57 in. at 38 to 47 lb
Springs on clutch pedal valve	Spring length, thin spring	61.9 mm
		2.4 in.
	Test length	58.6 mm at 21 to 27 N
		2.2 in. at 5 to 6 lb
	Spring length, thick spring	57.6 mm
		2.2 in.
	Test length	55.5 mm at 21 to 27 N
		2.2 in. at 5 to 6 lb
Cap screws, front cover and filter housing to clutch housing	Torque	11 N˙m
		8 lb-ft
Temp. sending unit, oil temperature warning light	Torque	4 to 7 N˙m
		3 to 5 lb-ft
Temp. sending unit, oil filter warning light	Torque	4 to 7 N˙m
		3 to 5 lb-ft
Press. sending unit, system pressure indicator light	Torque	4 to 7 N˙m
		3 to 5 lb-ft
Press. sending unit, oil filter restrict. warning light	Torque	4 to 7 N˙m
		3 to 5 lb-ft
Plug, test ports	Torque	8 to 14 N˙m
		6 to 10 lb-ft

Removing Clutch

Preliminary work: See Removing Clutch Housing.

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LEGEND:

A	Idler gear
B	Intermediate shaft
C	Countershaft
D	Drive shaft
E	Reverse
F	Synchronizer ring, reverse and 1st gear
G	Gear, 1st gear
H	Gear, 2nd gear
I	Synchronizer ring, 2nd and 3rd gears
J	Blocker ring, 3rd
K	Needle bearing
L	Drive shaft of range or creeper transmission

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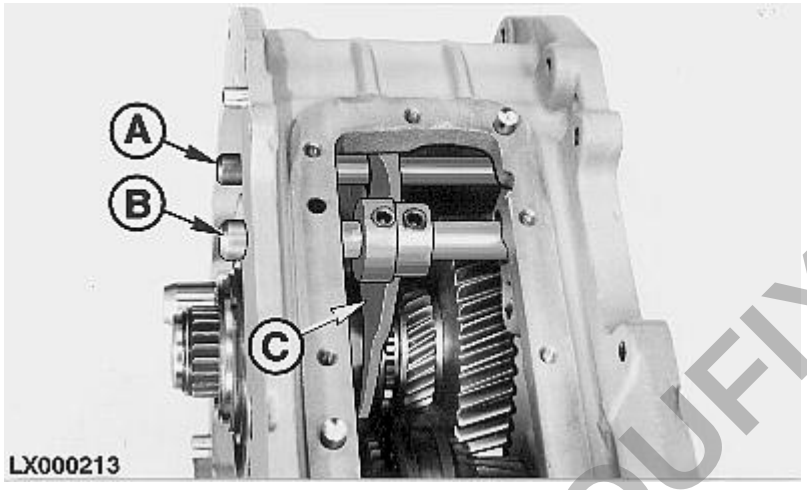
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→NOTE:

Race (F) is part of range box. It goes partially into creeper transmission if installed.

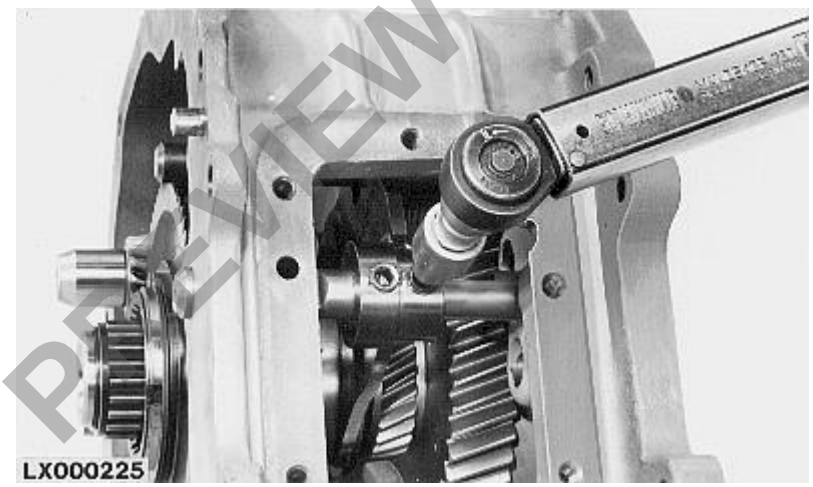
When installing creeper transmission it is necessary to install locking slide (D) to be able to slide gearbox over race (F).

Installing Gear Shift Elements



Install shaft (B) with fork (C).

Install shaft (A).



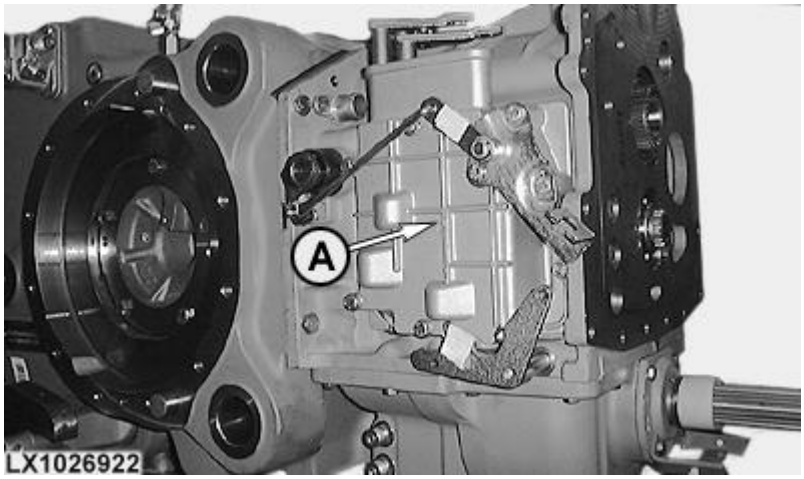
Tighten adjusting screws to 40 N.m (4 kg.m; 30 lb.ft).

Repairing Creeper Transmission Gearbox Cover

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[1] -



Install gear shift cover (A).

[2] - Tighten bolts.

Item	Measurement	Specification
Bolts, range box cover-to-transmission housing	Torque	25 N˙m
		8,62 kg-ft

[3] - Additional work depends on tractor equipment, see below.

Installing Differential "

Installing Final Drive"

Installing PTO

Installing Creeper Transmission

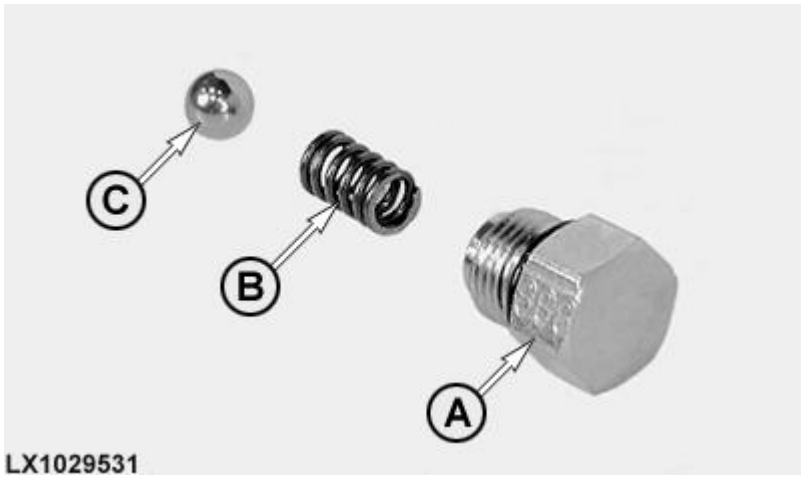
For PowrQuad transmissions, see Installing PowrQuad Housing.

For SyncroPlus transmission, see Installing Transmission and Installing Clutch Housing.

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[16] -

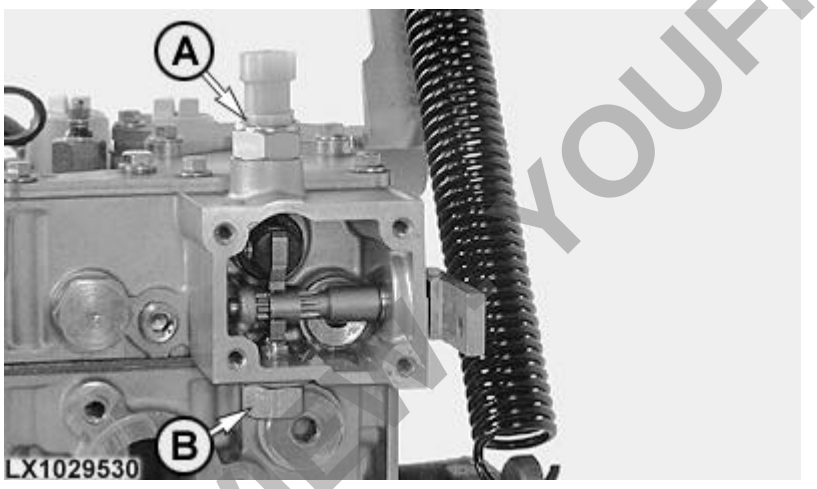


LEGEND:

A	Plug
B	Spring
C	Ball

Install various parts of retainer.

[17] -



Tighten retaining screw (B).

Item	Measurement	Specification
Plug, retaining	Torque	20 N˙m
		15 lb–ft

[18] - Install and tighten neutral start switch (A).

Item	Measurement	Specification
Neutral start switch-to-valve housing	Torque	18 – 20 N˙m
		13 to 16 lb–ft

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[4] -





LEGEND:

A	Snap ring

Install upper spiral retaining ring (A)

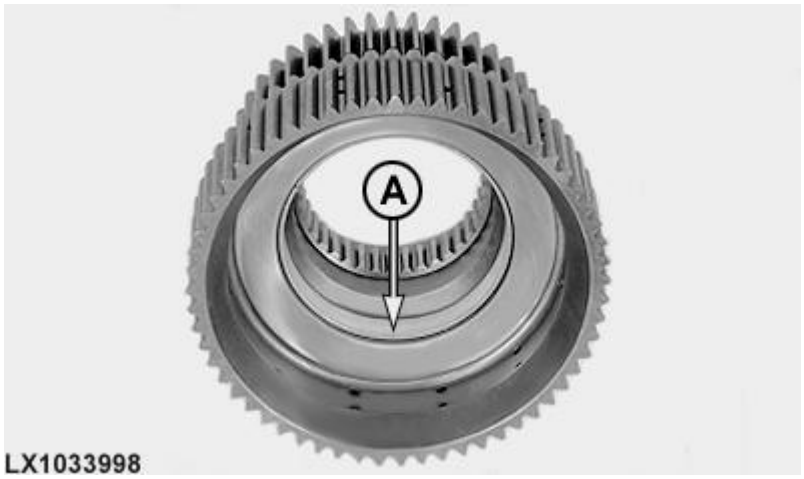
[On gear replacement rings were no longer mounted.]

so that ends (A) of upper and lower spiral retaining ring are at opposite positions.

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[5] -



LEGEND:

A	Bushing

Install bushing (A) to drum, making sure it is level with surface. To do so, use a driver and a 74.6 mm (2-15/16″) diameter washer.

Bushing, bearing and retainer installation kit.

D01045AA

Installing bushings, bearings and retainers

[6] -



LEGEND:

A	Overspeed relief valves

Inspect clutch piston and overspeed relief valves (A).

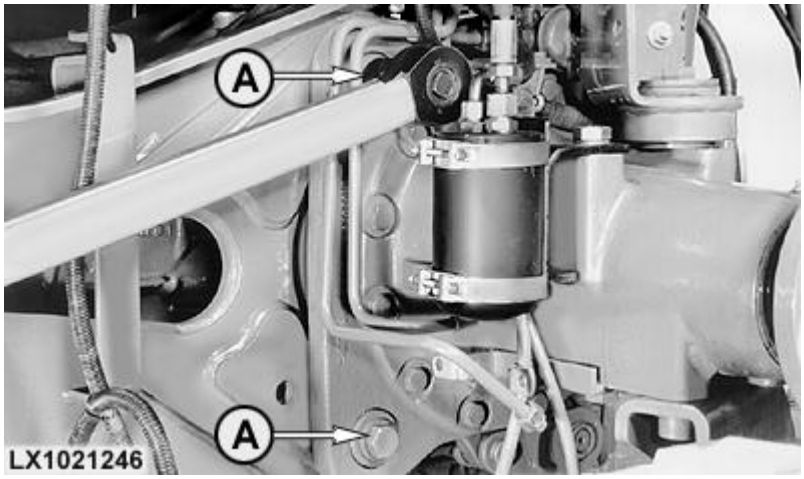
→NOTE:

Overspeed relief valve is composed of a ball, spring and retainer. Valve ball must not bind, it should move freely against spring.

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[5] -



Coat dowel pins with oil, insert them into main chassis and differential housing and tighten bolts (A) to specification.

Item	Measurement	Specification
Bolts-to-differential housing.	Torque	500 N˙m
		365 lb-ft

IMPORTANT:

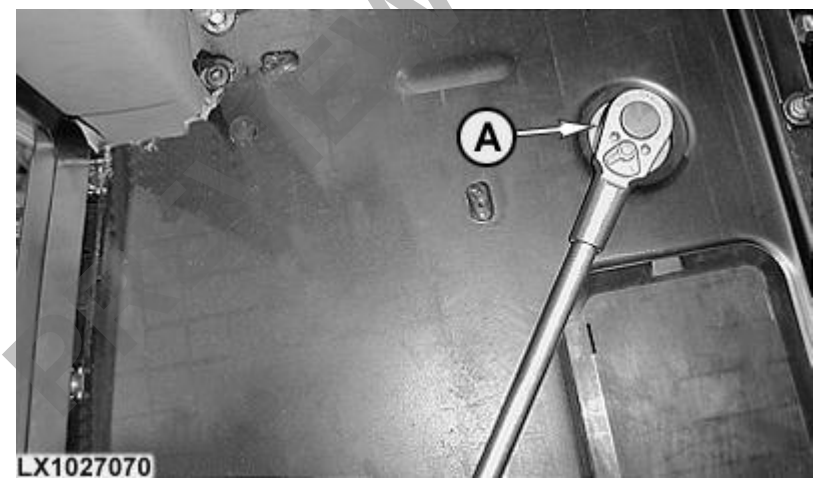
Use plastic, aluminum or copper tools to insert dowel pins.

→NOTE:

For easier installation, cool down dowel pins to a temperature of -20 °C (-4 °F).

[6] - Invert procedure of removal to install Bowden cables, brake lines and hydraulic hoses.

[7] - Reinstall operator′s cab or platform and secure.

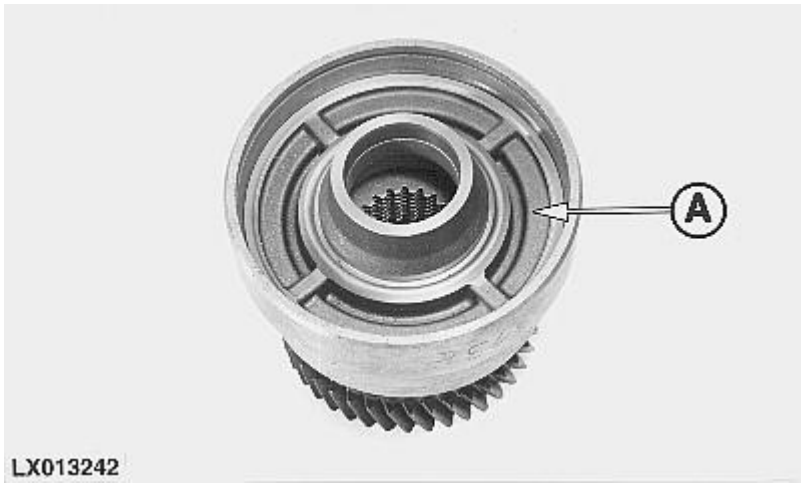


Operator′s cab Tighten front cab attaching bolts (A) to specification.

Item	Measurement	Specification
Front part of cab, attaching bolt	Torque	220 N˙m
		160 lb-ft

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[12] -



Install piston.

[13] -



Install disk springs (B) and ring (A).

[14] -

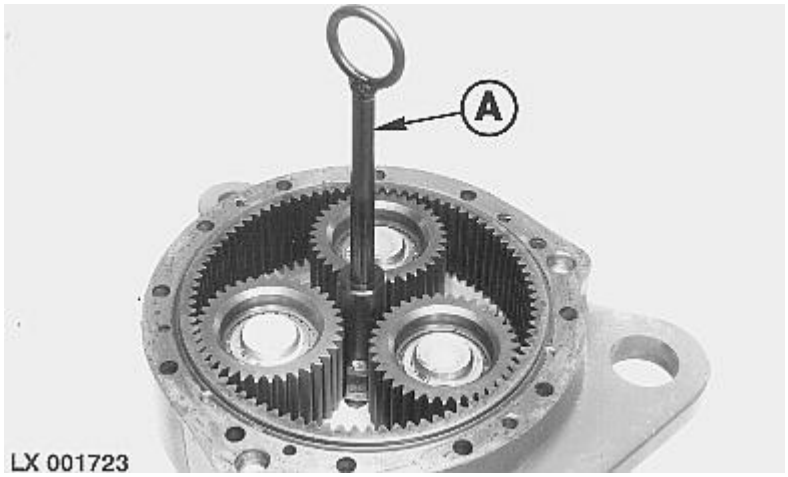


Use clutch shaft (A) for alignment of disks with inner spline.

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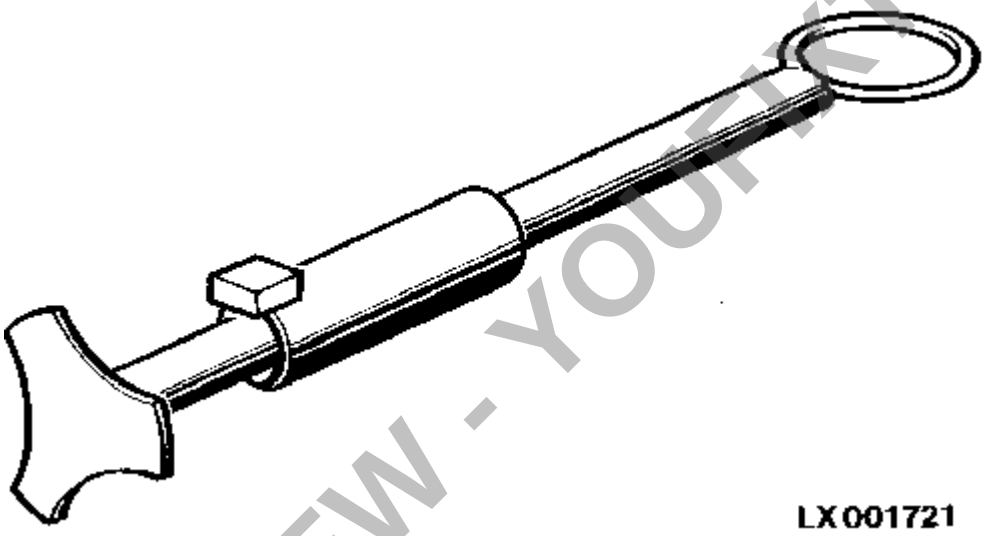
[3] -



Connect KJD10172 lifting tool (A).

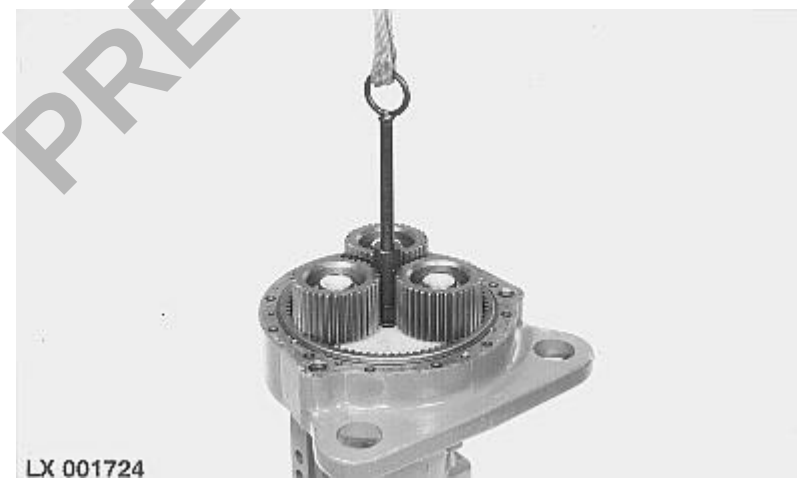
Lifting tool

KJD10172



Removing and installing planetary carrier

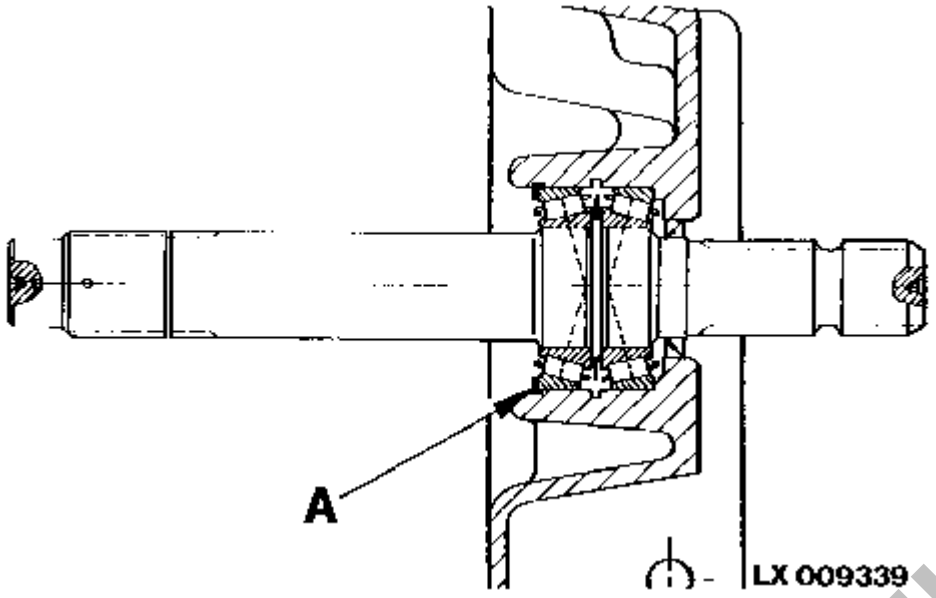
[4] -



Suspend planetary carrier

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After installing input shaft, select a snap ring (A) with adequate thickness to provide proper bearing adjustment (pre-load or play).

Item	Measurement	Specification
Output shaft	Pre-load	0.07 mm
		0.0028 in.
	Play	0.08 mm
		0.0031 in.

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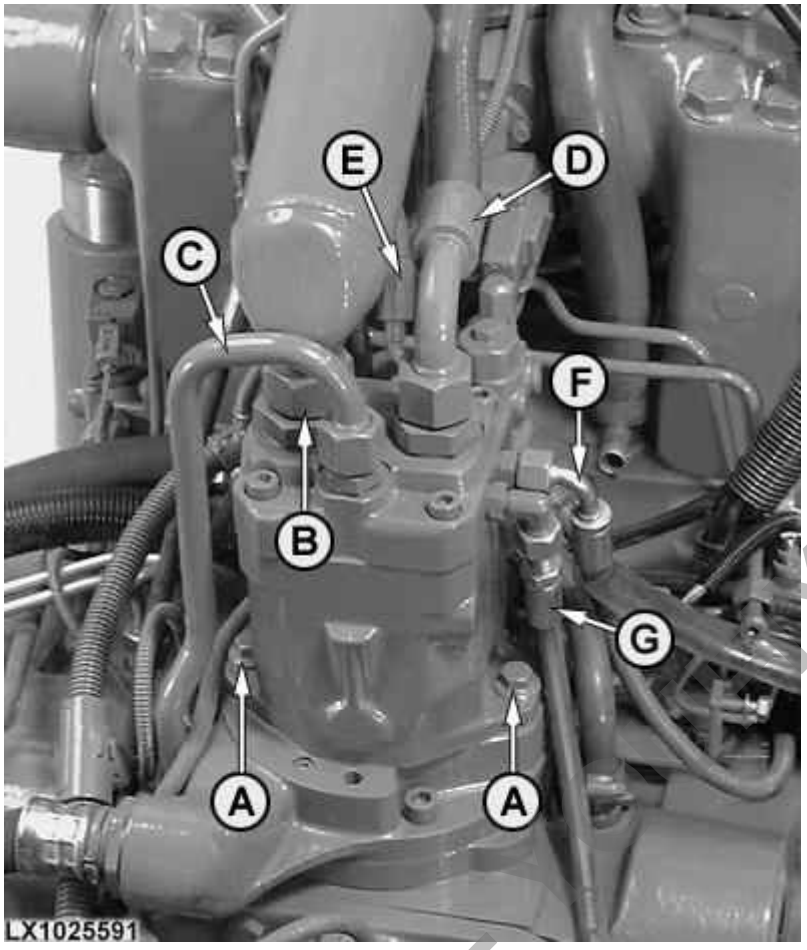
F	Gas cylinder
G	Bushing
H	Allen Bolts
I	Snap ring
J	Washer
K	Steering column
L	Pin
M	Shaft (Replace as complete assembly)

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Removing and Installing Hydraulic Pump

Removing hydraulic pump



LEGEND:

A	Bolts
B	Suction port (oil reservoir)
C	Oil return line
D	Pressure line, to hydraulic valve block
E	LS Pressure line
F	Pressure line via vibration damper to power brake valve [If installed]
G	Pressure line, to front-wheel drive TLS axle [If installed]

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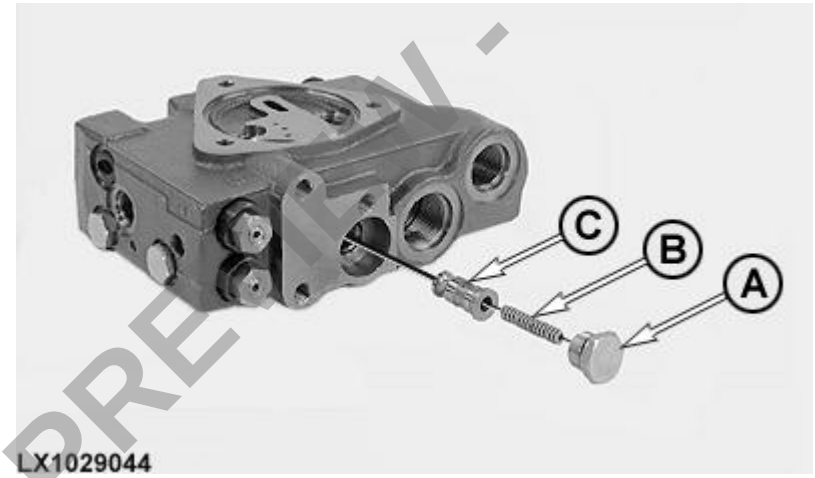
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I	Fine screen
J	Threaded pin with calibrated bore
K	Threaded pin without calibrated bore [Only with 3rd or 4th 301 Series SCV, independent SCV, or end cover with extra ports]
L	Fitting with calibrated bore [Only with 3rd or 4th 301 Series SCV, independent SCV, or end cover with extra ports]
M	Fitting to LS pressure line, steering valve
N	Adapter (hydraulic trailer brake) [If installed]
O	Shuttle valve (hydraulic trailer brake)
P	Test port (system pressure)
Q	Test port (LS pressure)
R	Test port (steering pressure)
S	Washer
T	Retaining clip
U	Seat, fine screen
V	O-Ring
W	Test port [Alternative for pos. (Q), 101 or 201 series. SCV only] (LS pressure)
X	Fitting to pressure line, steering valve
Y	Fitting to pressure line, hydraulic pump
Z	Quick coupler, hydraulic oil filter return line

[1] -

→NOTE:

Remove priority valve. See Removing Priority Valve (PC Hydraulic System), in this group.



LX1029044

LEGEND:

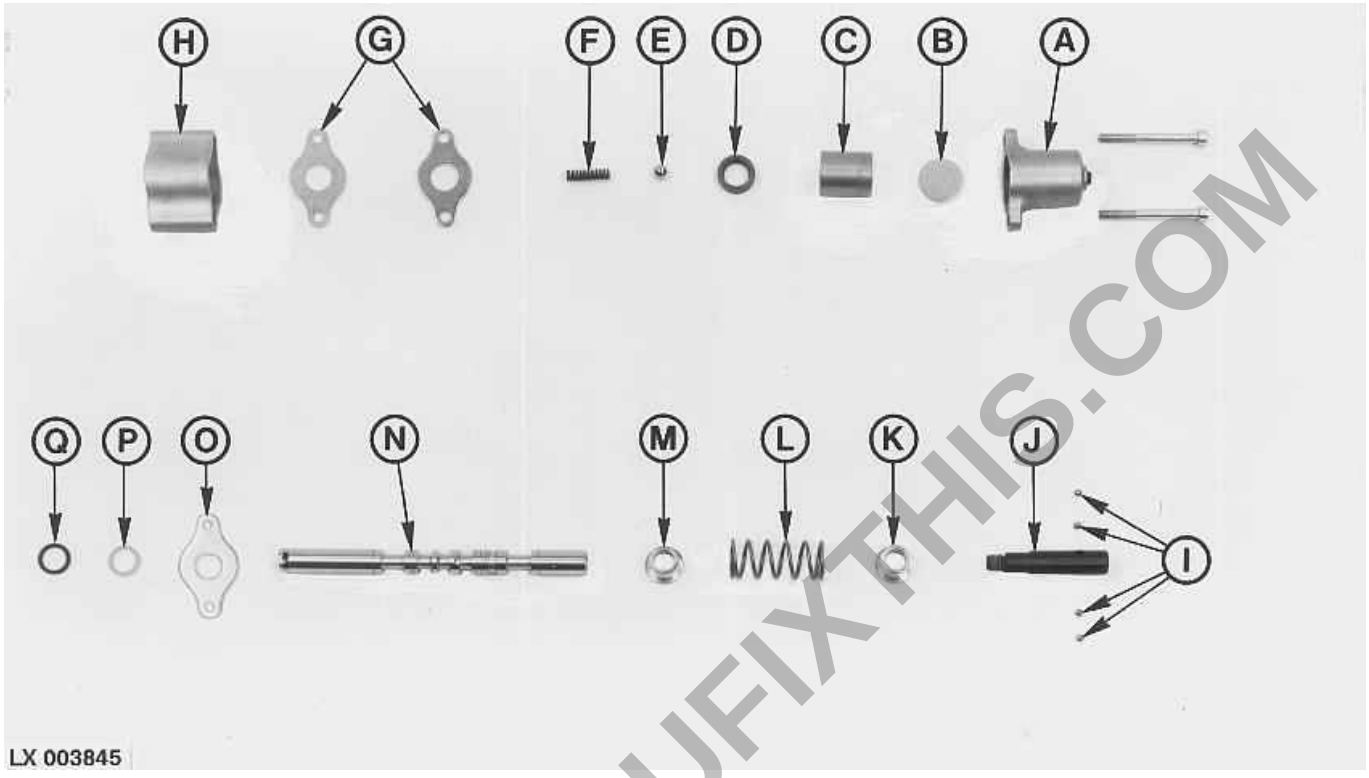
A	Plug and O-Ring
B	Spring
C	Valve body

Remove priority valve bracket.

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Disassembling, Inspecting and Assembling 101 Series Selective Control Valve



LEGEND:

A	Cover
B	Plate
C	Sleeve
D	Retaining ring
E	Ball
F	Spring
G	Sealing plate
H	Spacer
I	Balls (4)
J	Control valve
K	Spring seat
L	Spring
M	Spring seat
N	Spool
O	Sealing plate
P	Wiper ring
Q	O-Ring

IMPORTANT:

To avoid any failure of selective control valve (SCV), remove any sealant from thread of control valve (J) at inner side of spool (N).

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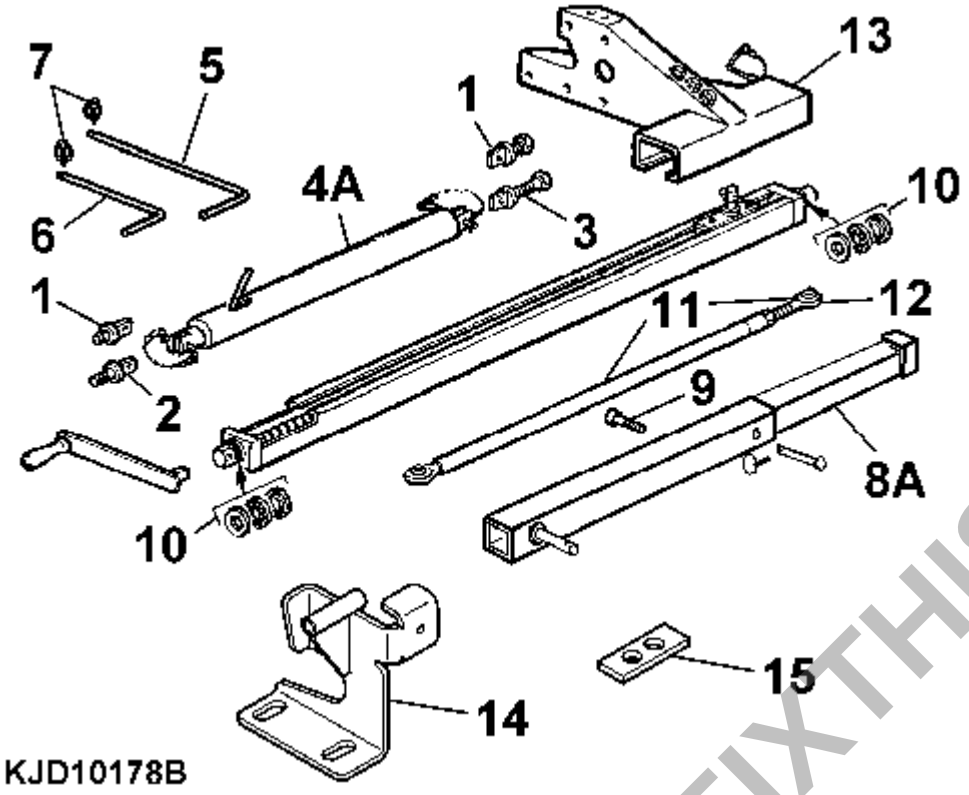
Group 05 - Main Chassis

Specifications

Item	Measurement	Specification
Main frame to differential housing, attaching screws	Torque	500 N˙m
		365 lb-ft
Main frame to cross-member, attaching screw	Torque	550 N˙m
		405 lb-ft
Main frame to front axle support, attaching screws	Torque	550 N˙m
		405 lb-ft
Basic weight to main frame, attaching screw	Torque	600 N˙m
		445 lb-ft

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LEGEND:

1	KJD10178-1 Axle joint bolt M16x60 (2 used)
2	KJD10178-2 Axle joint bolt M20x80
3	KJD10178-3 Axle joint bolt M20x120
4	KJD10178-4A Support rod
5	KJD10178-5 Hinge pin
6	KJD10178-6 Hinge pin
7	KJD10178-7 Quick-lock pin (2 used)
8	KJD10178-8C Square tube
9	KJD10178-9 M10x65 Allen bolt
10	KJD10178-10 Thrust bearing (2 used)
11	KJD10178-11 Rod (incl. 12)
12	Spool (available only with rod)
13	KJD10178-13 Clamp
14	KJD10178-14 Rear inclination clamp (with raised cab)
15	KJD10178-15 Plate (for SE tractors with low-profile cab)

Swinging operator´s cab up or down (replace inclining devices KJD10178, KJD10178A and KJD10178B). For conversion of old inclination devices, all parts can be ordered separately.

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difference in levels on graduated scale of charging cylinder and controlled by closing high pressure valve of charging cylinder.Example:
Value indicated on scale — 2000 gr.
Necessary quantity of refrigerant — 1300 gr.
Difference: 2000 — 1300 = 700 gr.

6. Close low pressure valve on gauge set (red);
7. Switch on tractor and leave in slow idle for approximately 3 minutes (to allow oil to circulate in compressor) with thermostat and fan on maximum setting (leave heater switched off). Then increase engine speed to 2000 rpm and maintain this speed. At this speed wait until high and low pressure gauges stabilize and then take a reading, checking to see if reading value is within range of values indicated in pressure chart. After taking the reading maintain tractor in slow idle.

T. environment	**High pressure**	**Low pressure**
°C	**PSI**	**PSI**
11 to 15	80 to 100	3 to 9
16 to 21	80 to 130	6 to 15
22 to 26	100 to 170	9 to 18
27 to 32	120 to 190	12 to 23
33 to 38	130 to 210	15 to 29
39 to 43	190 to 260	18 to 30
44 to 49	215 to 305	25 to 35

8. Disconnect high pressure hose (red) from tractor air conditioning system. Open both (high and low pressure) valves on gauges. Observe low and high pressure gauges until there is a reduction in pressure readings, then close both valves on gauge set.

   →NOTE: Pressure reduction occurs because the system causes remaining R134a gas to be sucked out of blue, red and yellow hoses through blue hose.

9. To finish off, disconnect blue hose from air conditioning system.

Leak Test

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