

TO-45000 UAZ HUNTER

Repair instructions number
00504

Repair instructions name
TO-45000 UAZ Hunter

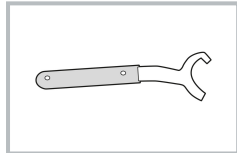
Applies to
2924000001200
...

Model
HUNTER

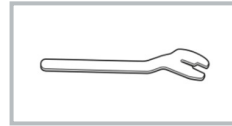
Production period
2019

Modification
Not selected

Special tools

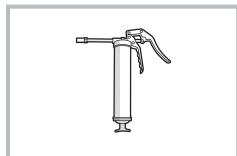


Wrench for holding the water pump shaft
005500000404900

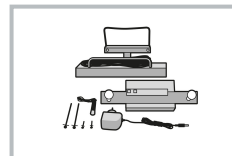


Fan viscous clutch removal key
005500000355600

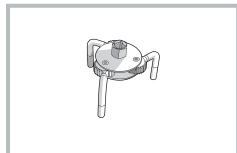
General equipment



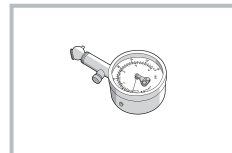
Grease gun



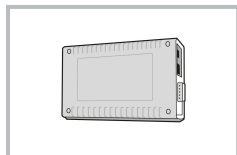
A device for measuring the total backlash of the steering



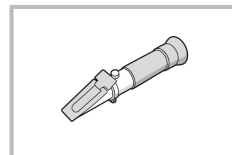
Oil filter remover



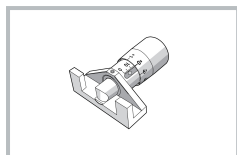
Tire pressure gauge



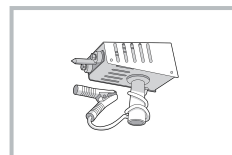
Diagnostic system UAZ



A device for measuring the density of a coolant (refractometer)



Universal belt tension tester



Load fork



Tool for pressing in cuffs

Materials



Sealant-gasket

1. Work outside the car:

IMAGE



Img 1



Img 2

OPERATION DESCRIPTION

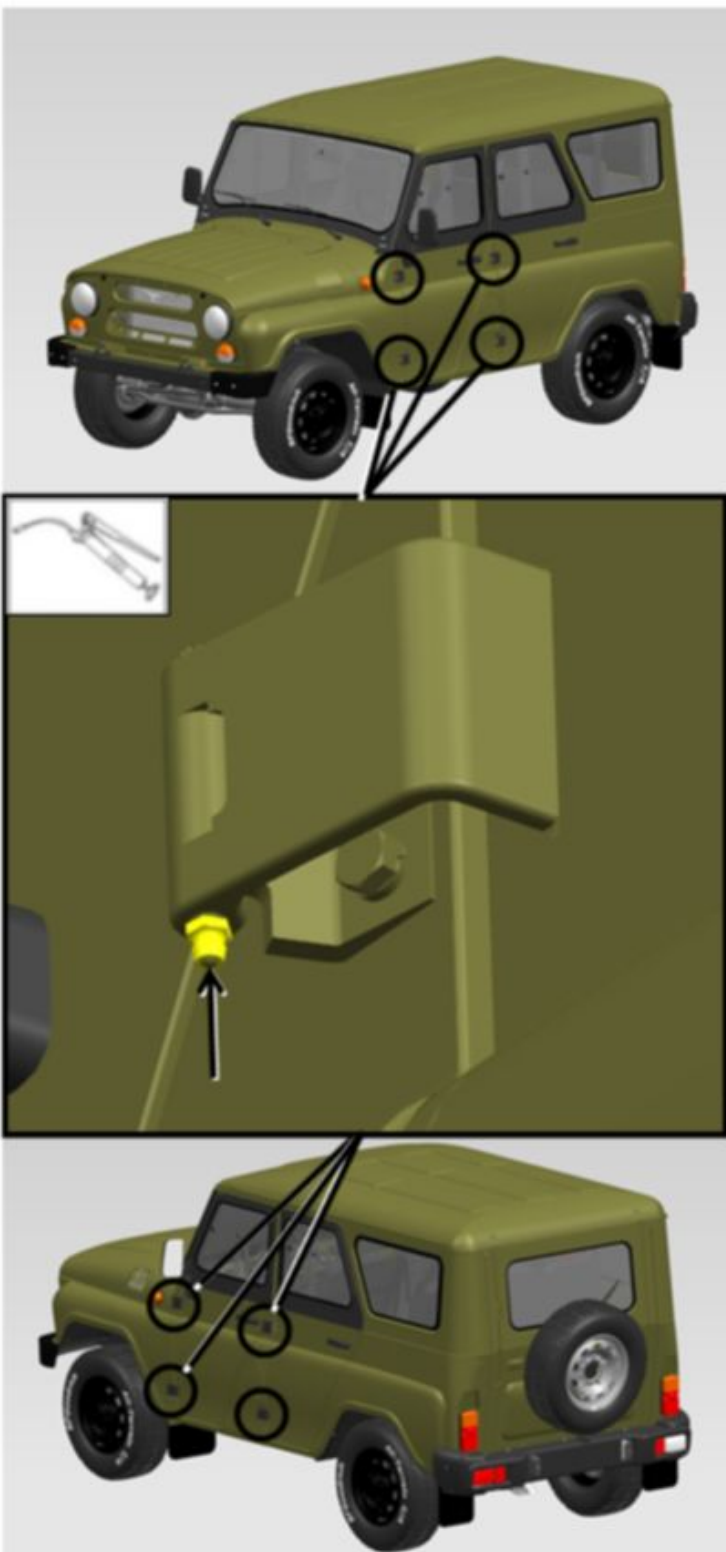
1. Check by inspection for chips, cracks and foci of corrosion of the body paintwork.

The presence of chips, cracks and centers of corrosion of the body paintwork is not allowed.

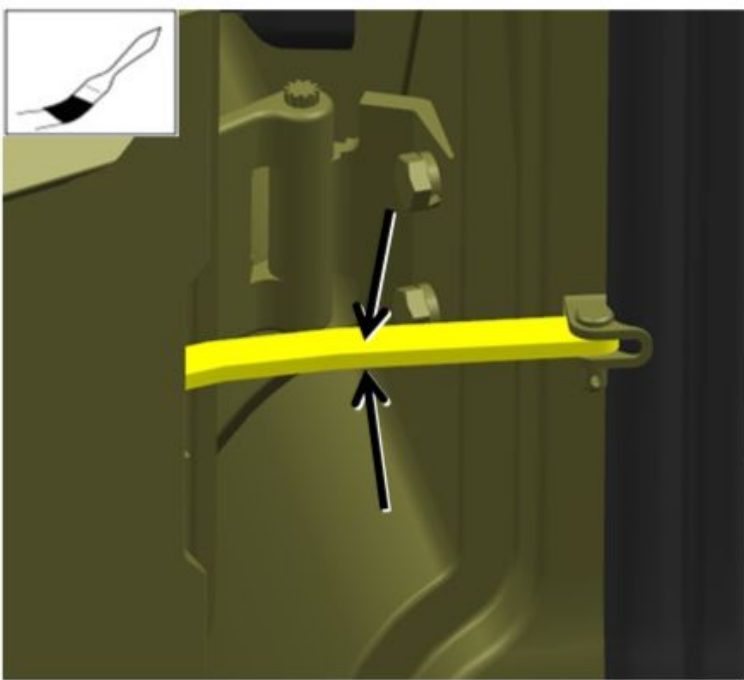
2. Check by inspection for chips, cracks on glass and rear-view mirrors, lighting devices and light alarms.

The presence of chips, cracks on glass and rear-view mirrors, lighting and light signaling devices is not allowed.

3. Apply grease to the door hinges.

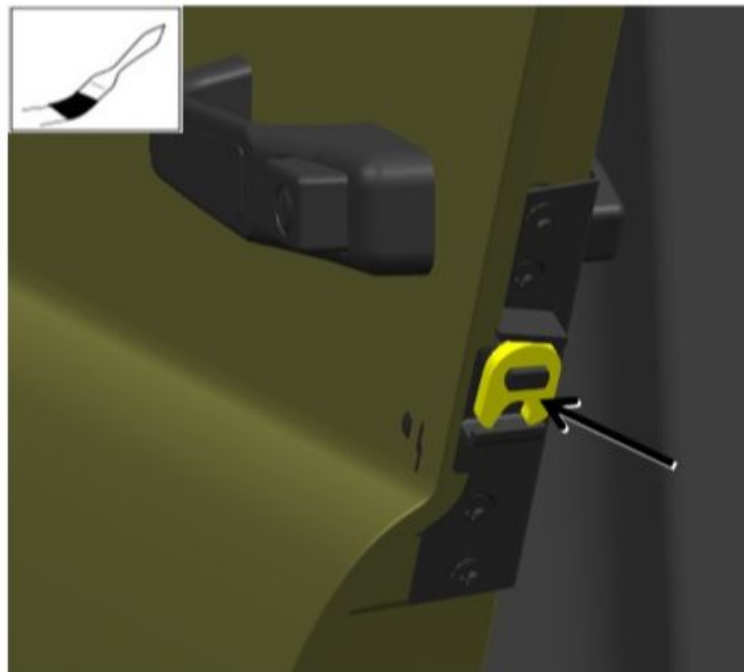


Img 3



4. Apply grease to the door stops.

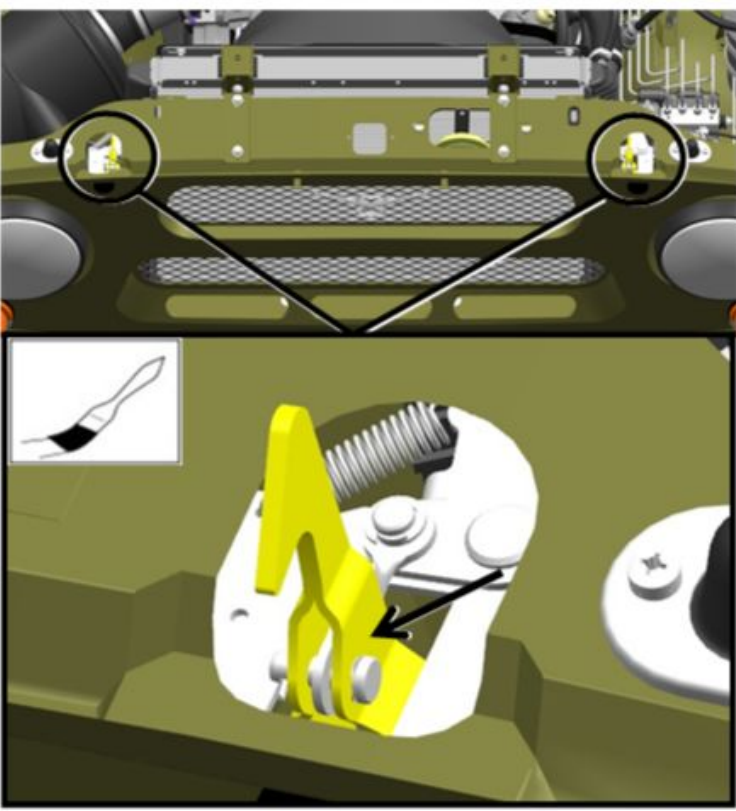
Img 4



5. Apply grease to the door locks.

Img 5

6. Apply grease to the hood lock and hook.



Img 6

2. Work inside the car:

IMAGE

OPERATION DESCRIPTION



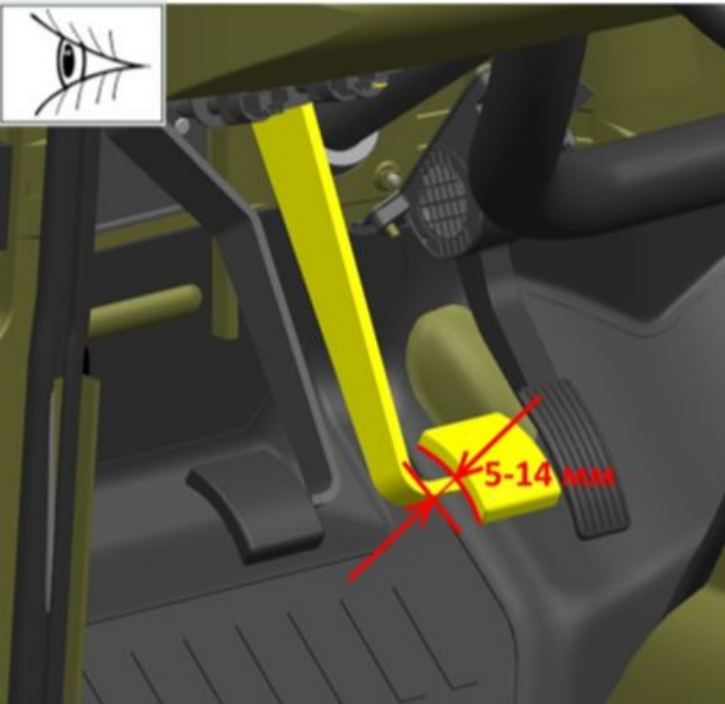
1. Install the parts of the device for measuring the total backlash of the steering on the steering wheel and on the left front wheel of the car.

2. Check the total backlash of the steering according to the operating instructions of the device.

The total backlash should not exceed 20 degrees.



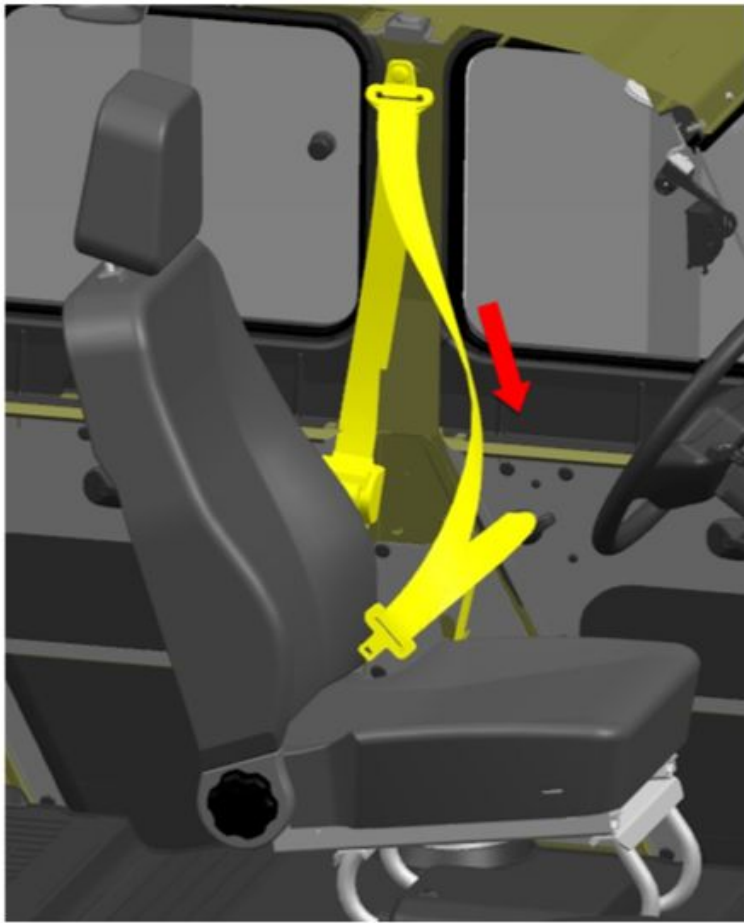
Img 1



Img 2

3. Check the free play of the brake pedal.

The amount of free travel of the brake pedal should be 5-14 mm.



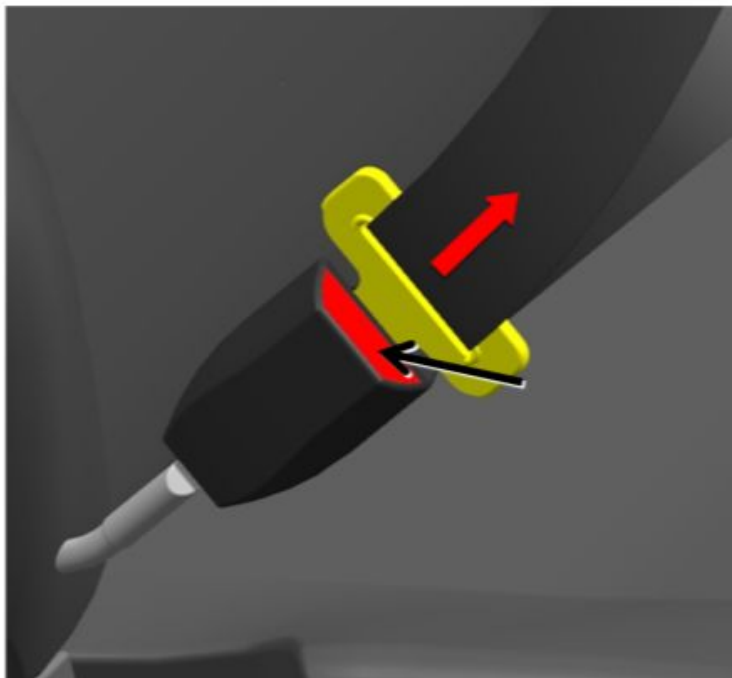
Img 3

4. Check the operation of the driver's belt retractor.

The device should wind the belt around the reel easily and without jamming.

5. Check the functionality of the inertia reel of seat belts.

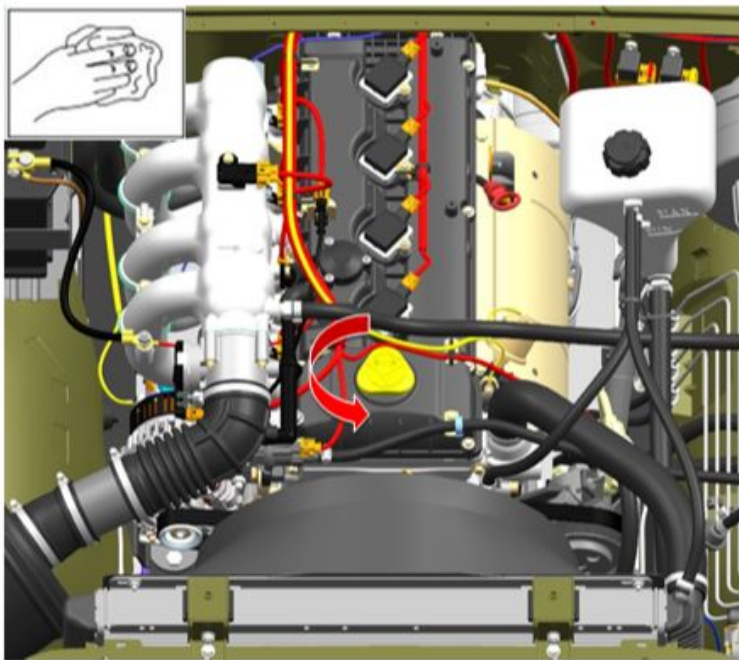
When pulling sharply at different lengths, the inertial coil should block the change in the length of the belt.



Img 4

6. Check the operation of the driver's belt locking device.

The belt buckle must fit securely in the device. When unlocking, the buckle must be thrown out of the locking device.

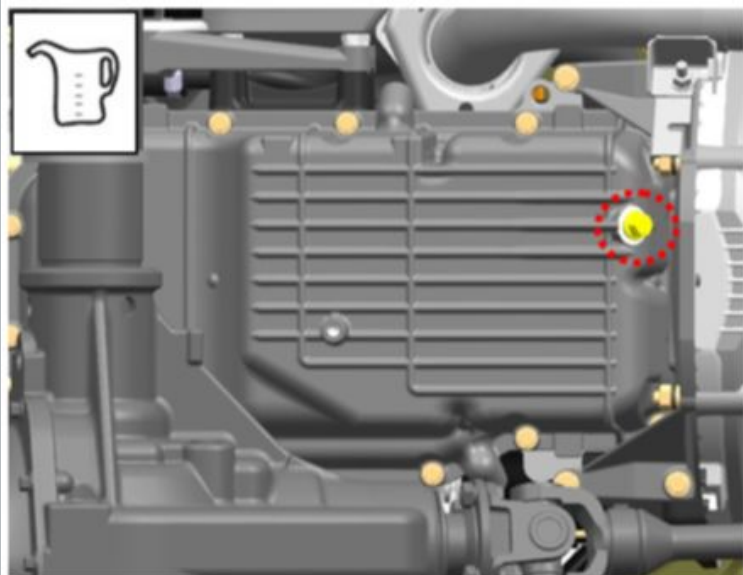


Img 5

7. Remove the engine oil filler cap.

3. Work under the car bottom:

IMAGE



Img 1

OPERATION DESCRIPTION

1. Place a container under the oil sump to drain the oil.

2. Unscrew the drain plug on the engine crankcase.

tightening torque- 28 N·m

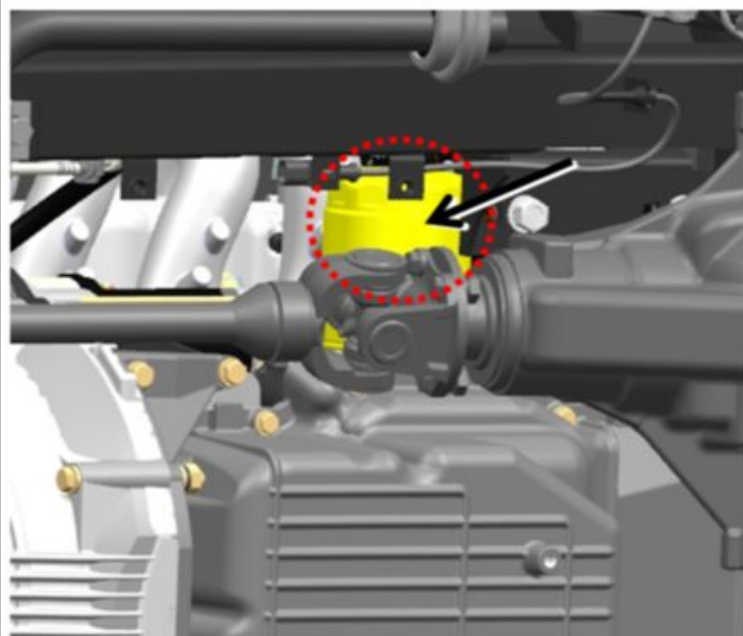
⚠ NOTIFICATION: Reuse of the drain plug O-ring is not permitted.

3. Let the oil drain.

Waiting time is 3-5 minutes.

4. Close the drain plug.

tightening torque- 28 N·m



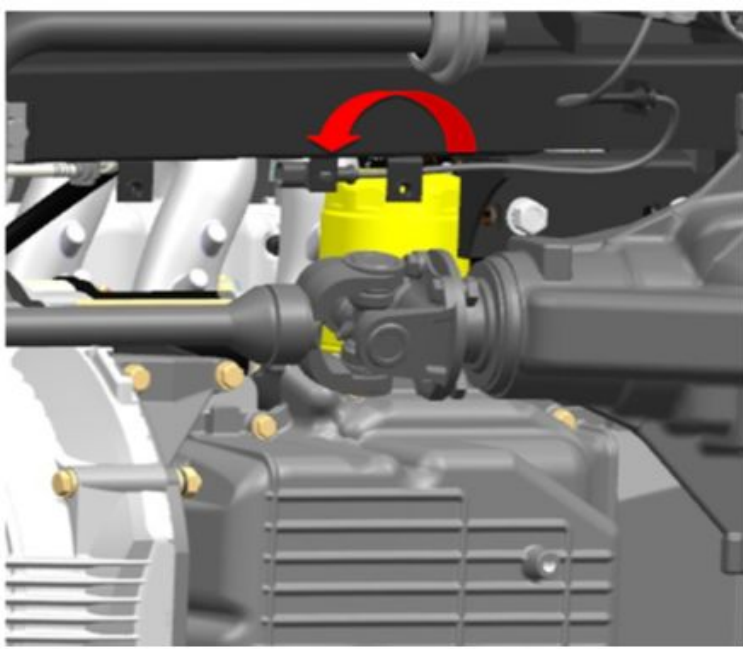
Img 2

5. Unscrew the oil filter.

tightening torque- 20 N·m

Make sure the filter O-ring is not left on the heat exchanger.

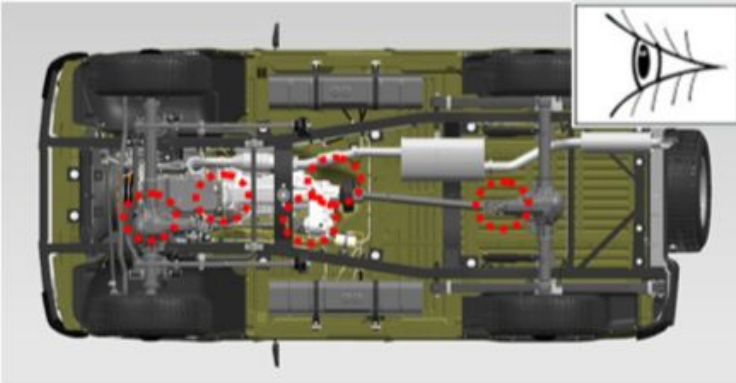
⚠ NOTIFICATION: Filter reuse is not allowed.



6. Screw on the filter.

Screw in the filter until the O-ring touches the plane on the heat exchanger, and then turn the filter 3/4 turn.

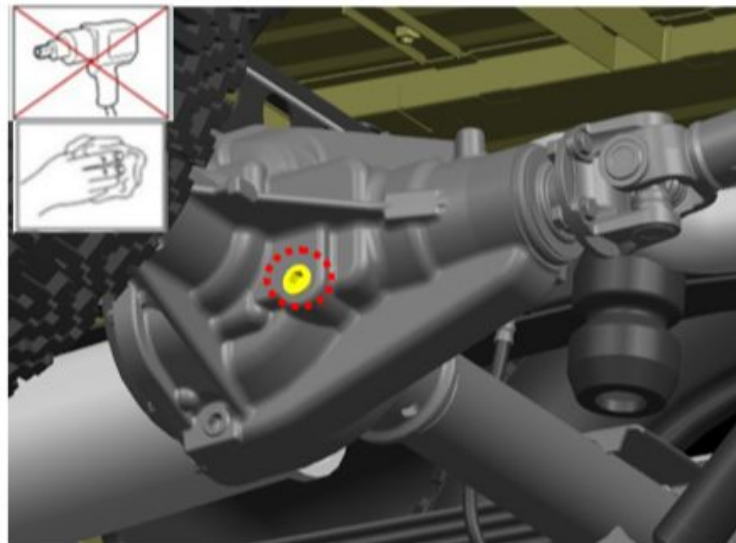
Img 3



7. Visually inspect the gaskets and oil seals of the engine, gearbox, transfer case, steering mechanism, front and rear axles.

Oil leakage and ejection are not allowed.

Img 4

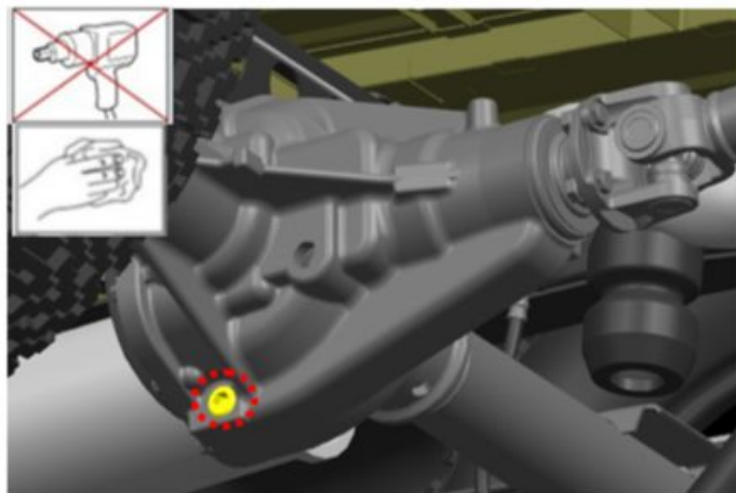


8. Unscrew the filler plugs of the front and rear axles.

SW=12

tightening torque- 80 N·m

Img 5



9. Unscrew the drain plugs of the front and rear axles.

SW=12

tightening torque- 80 N·m

10. Let the oil drain.

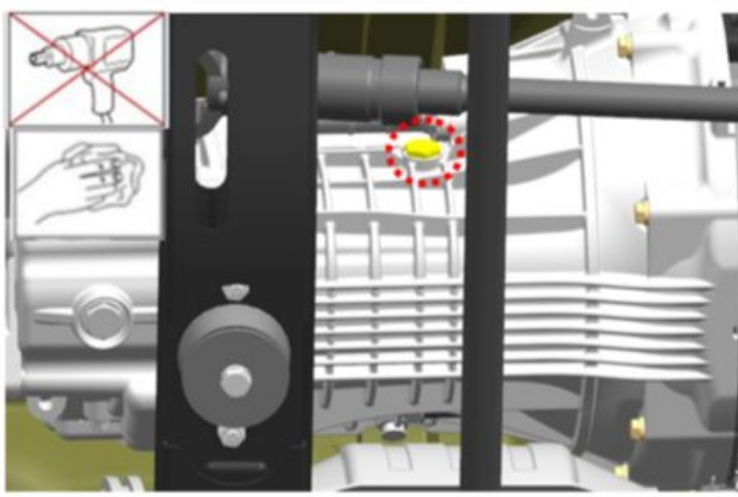
Waiting time is 3-5 minutes.

11. Screw on the drain plugs.

tightening torque- 80 N·m

Apply sealant to the plug threads before installation.

Img 6



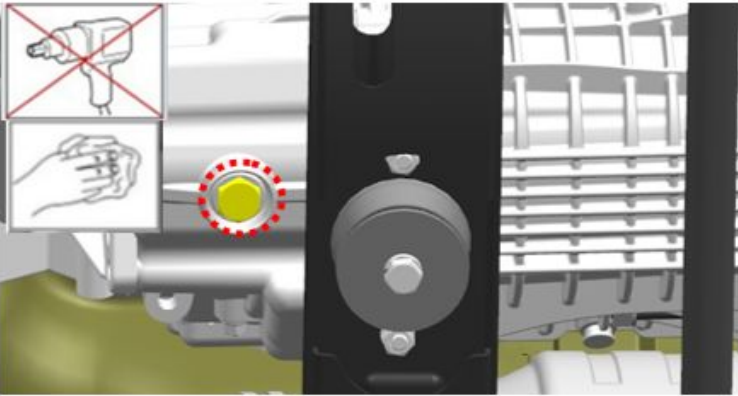
Img 7

12. Unscrew the transmission filler plug.

S=24

tightening torque- 60 N·m

⚠ NOTIFICATION: Reuse of the filler plug O-ring is not permitted.



Img 8

13. Remove the transmission drain plug.

S=24

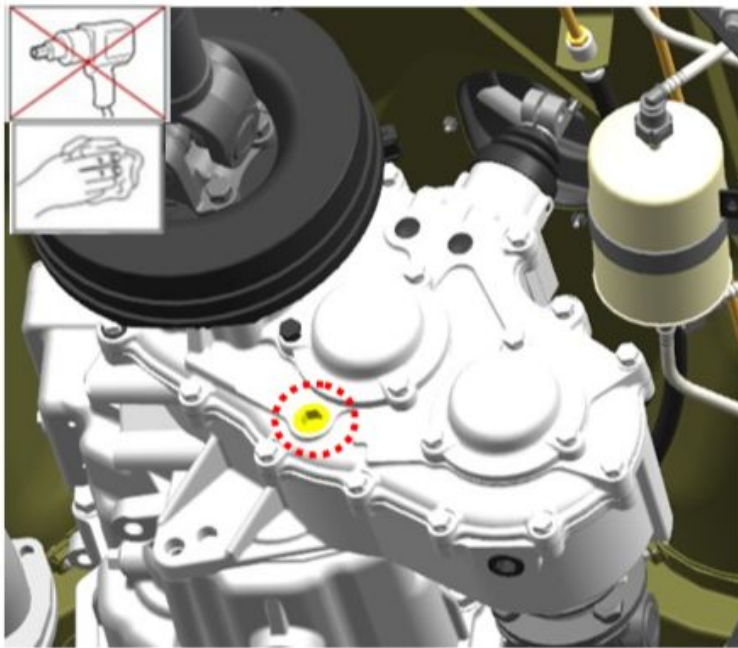
tightening torque- 60 N·m

Let the oil drain. Waiting time 3 - 5 minutes.

14. Close the drain plug.

tightening torque- 60 N·m

⚠ NOTIFICATION: Reuse of the drain plug O-ring is not permitted.

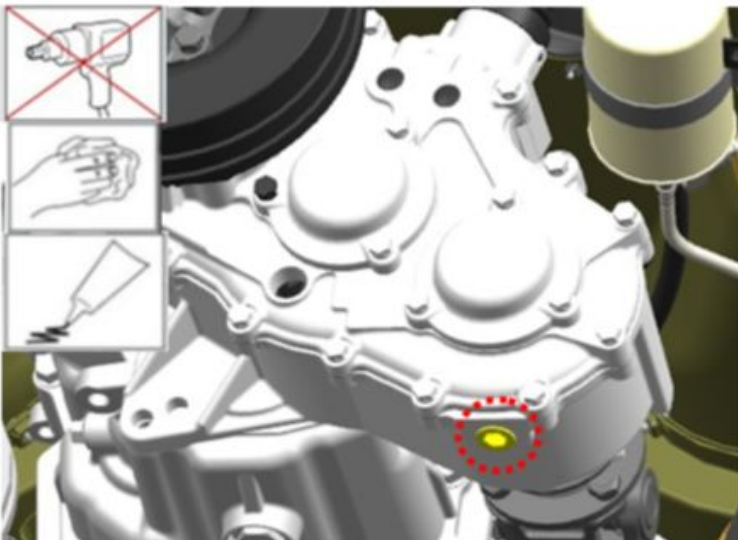


Img 9

15. Unscrew the transfer case filler plug.

SW=12

tightening torque- 60 N·m



16. Remove the transfer case drain plug.

SW=12

tightening torque- 60 N·m

Clean the plug from wear debris.

17. Let the oil drain.

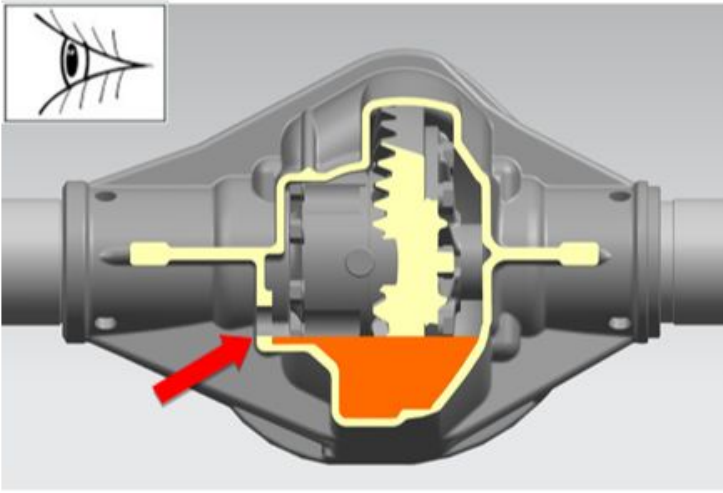
Waiting time is 3-5 minutes.

18. Close the drain plug.

tightening torque- 60 N·m

Apply sealant to the plug threads before installing.

Img 10



19. Bring the oil level in the front and rear axles to normal.

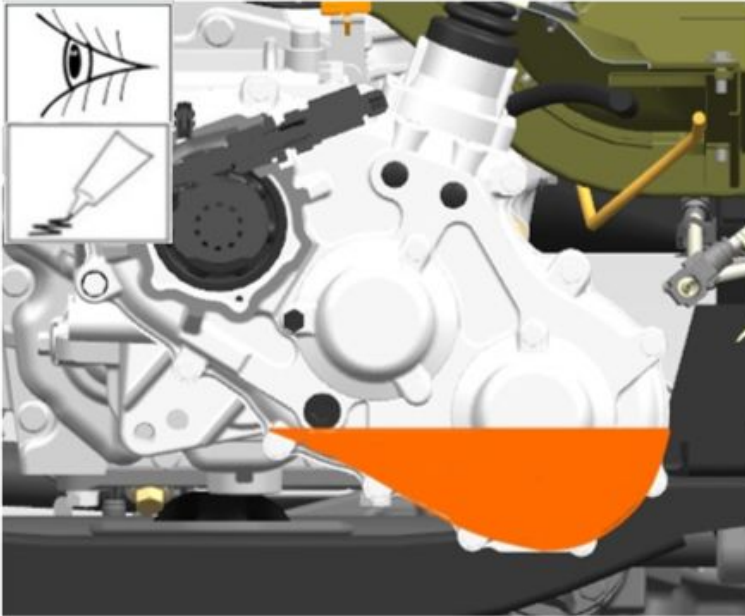
The oil level in the axle housing must be at the level of the lower edges of the filler holes.

20. Screw in the filler plugs of the front and rear axles.

tightening torque- 80 N·m

Apply sealant to the plug threads before installation.

Img 11



21. Bring the oil level in the transfer case to normal.

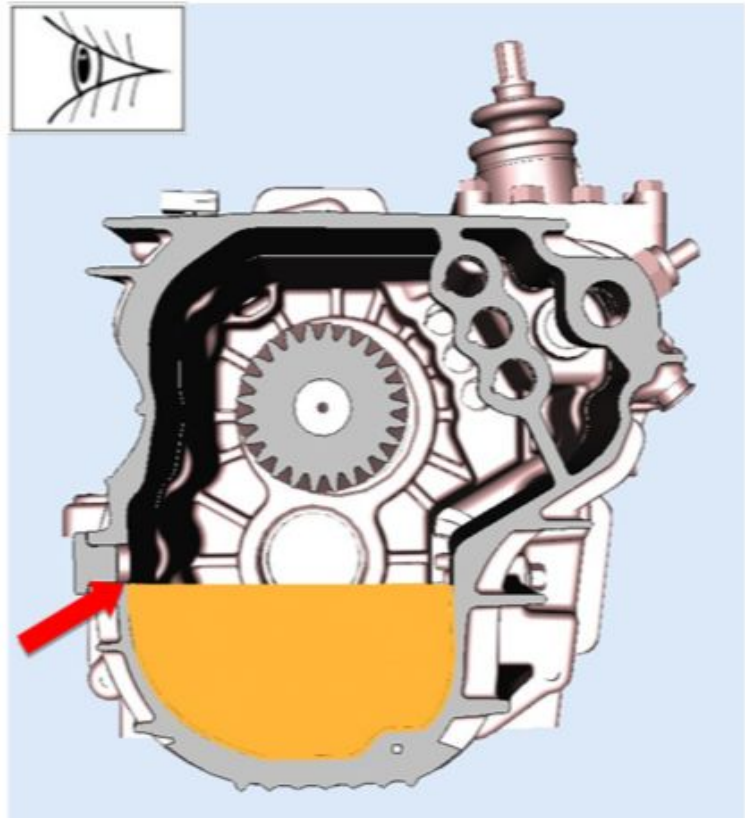
The oil level in the transfer case should be at the level of the lower edge of the filler hole.

22. Screw on the filler cap of the transfer case.

tightening torque- 60 N·m

Apply sealant to the plug threads before installation.

Img 12



23. Bring the oil level in the gearbox to normal.

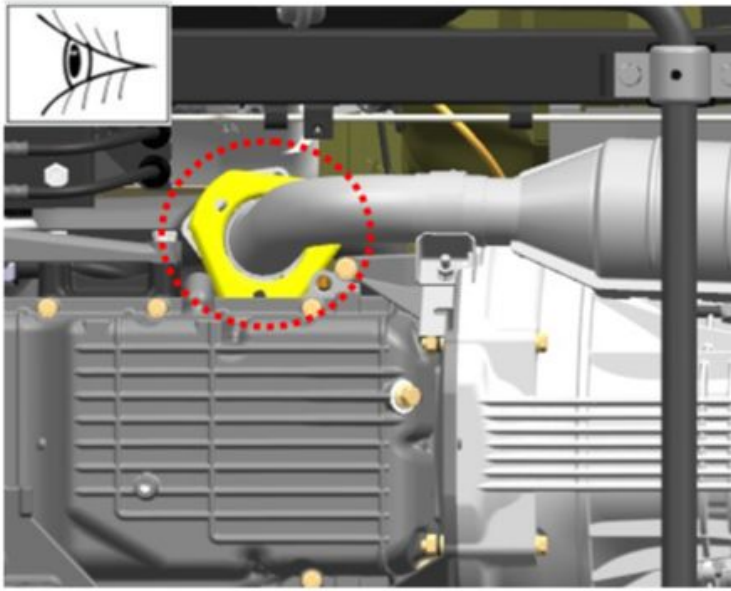
The oil level in the gearbox must be at the level of the lower edge of the filler hole.

24. Screw in the transmission filler plug.

tightening torque- 60 N·m

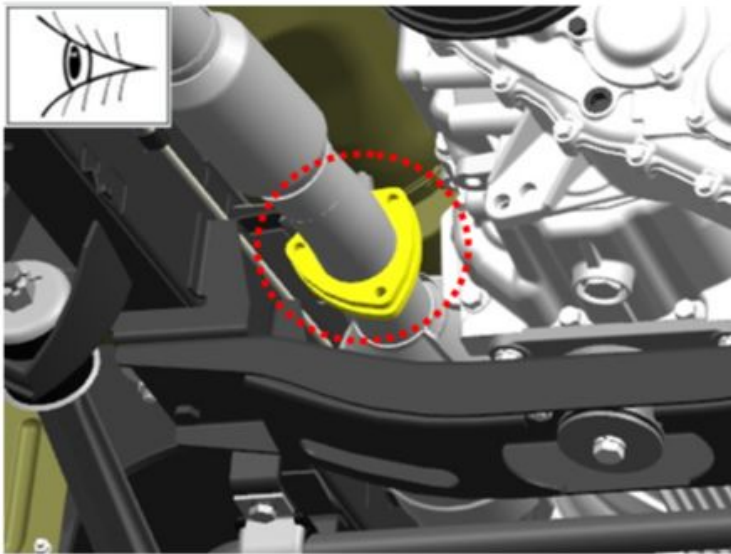
⚠ NOTIFICATION: Reuse of the filler plug O-ring is not permitted.

Img 13

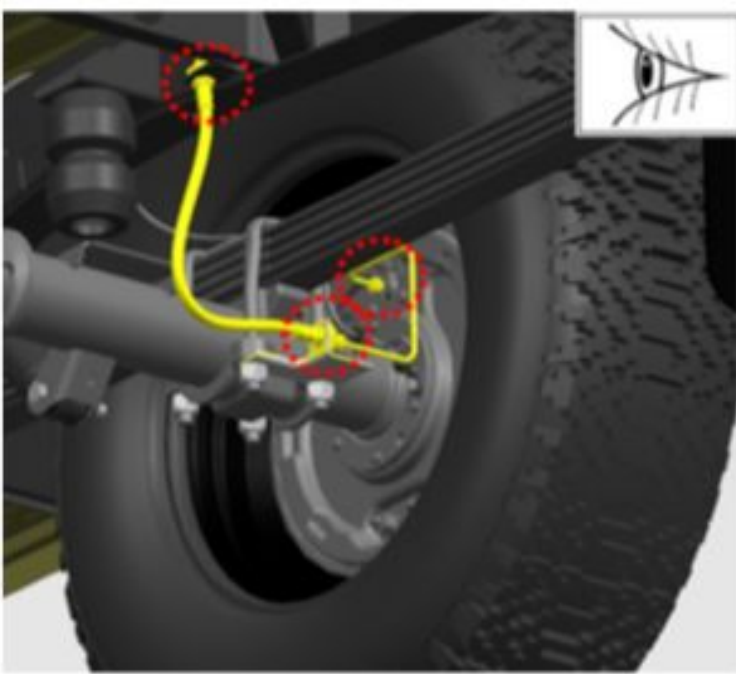


25. Visually check the connections of the exhaust system for leaks.

Leakage of connections is not allowed.

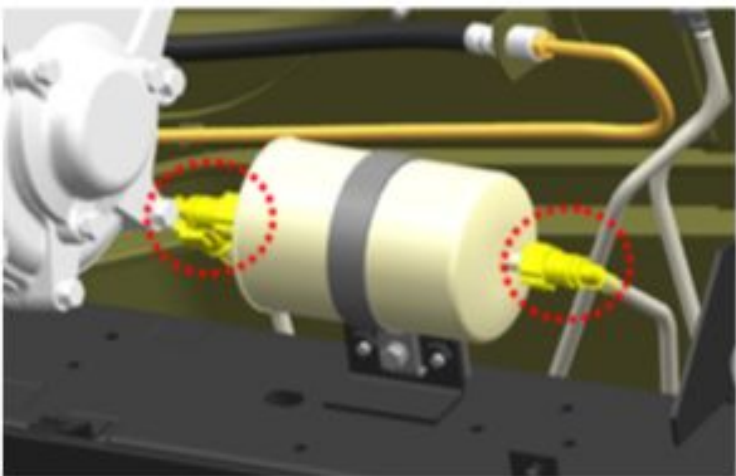
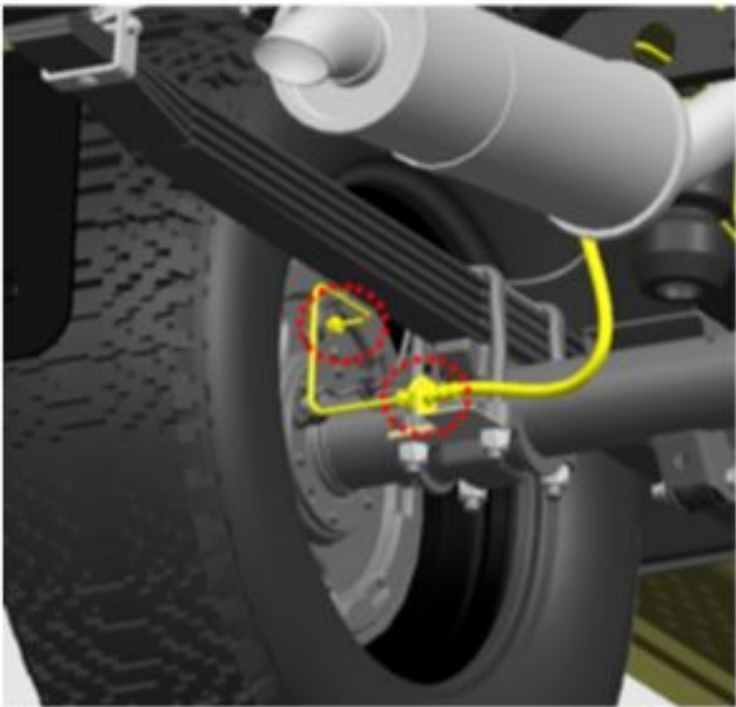


Img 14

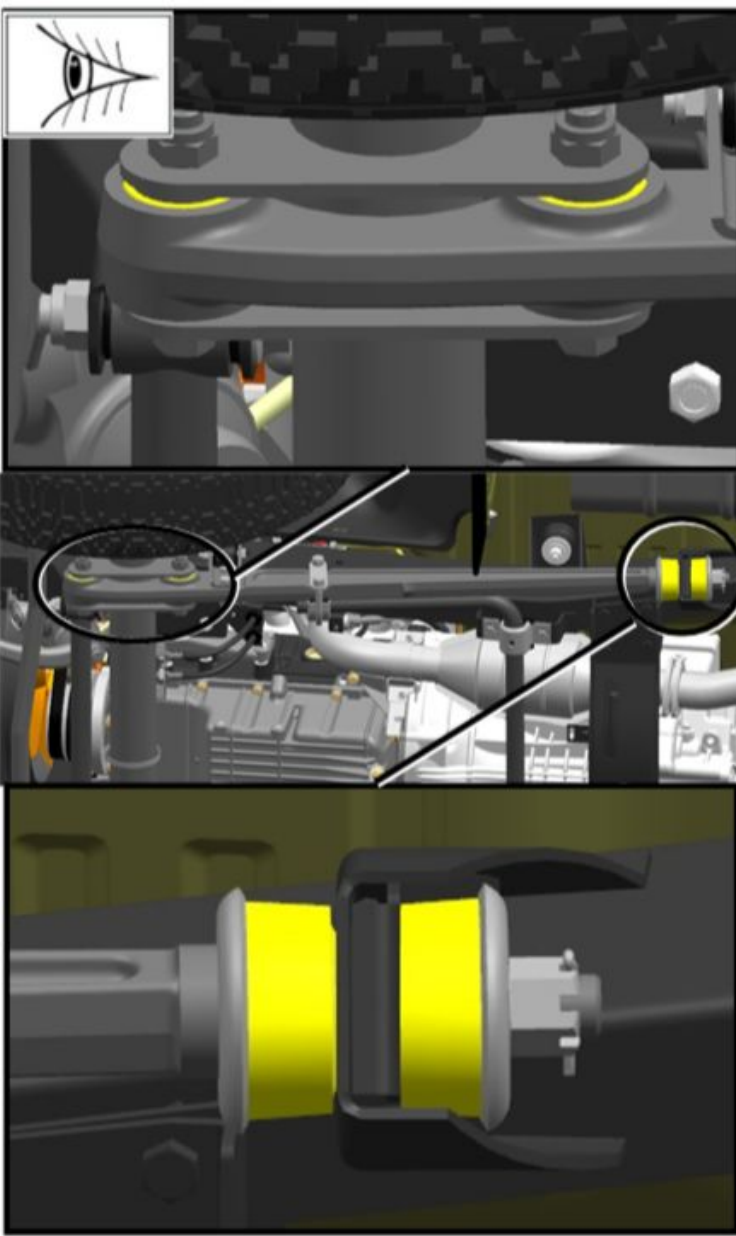


26. Visually check the connections of the pipelines of the cooling systems, heating, power supply, hydraulic drive of brakes and clutches, the vacuum take-off system from the vacuum brake booster, the condition of the pipes and hoses.

Leakage of coolant, fuel, brake fluid, leaks in the vacuum hose (vacuum booster) are not allowed. Operation of deformed pipes of the hydraulic drive of brakes, parts of the vacuum take-off system is not allowed.



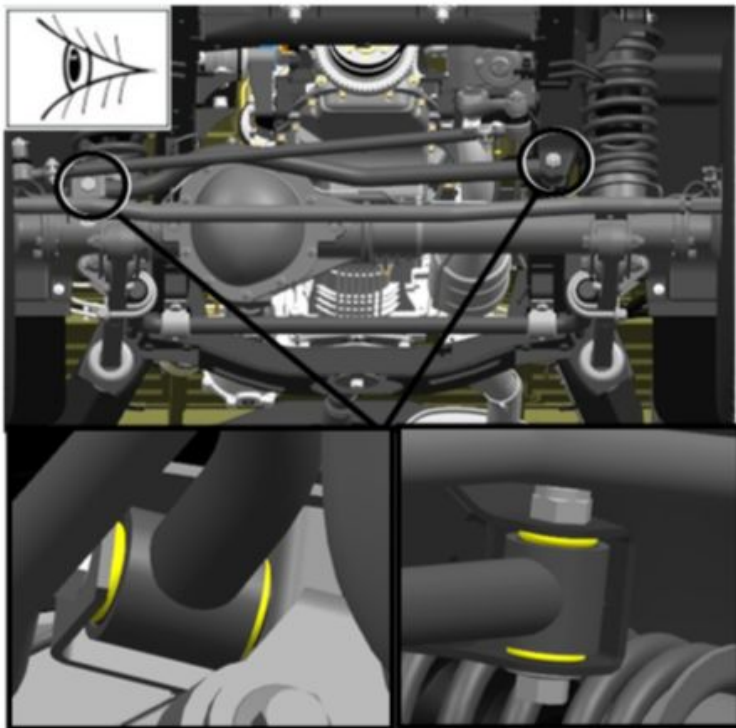
Img 15



Img 16

27. Inspect the longitudinal rod joints.

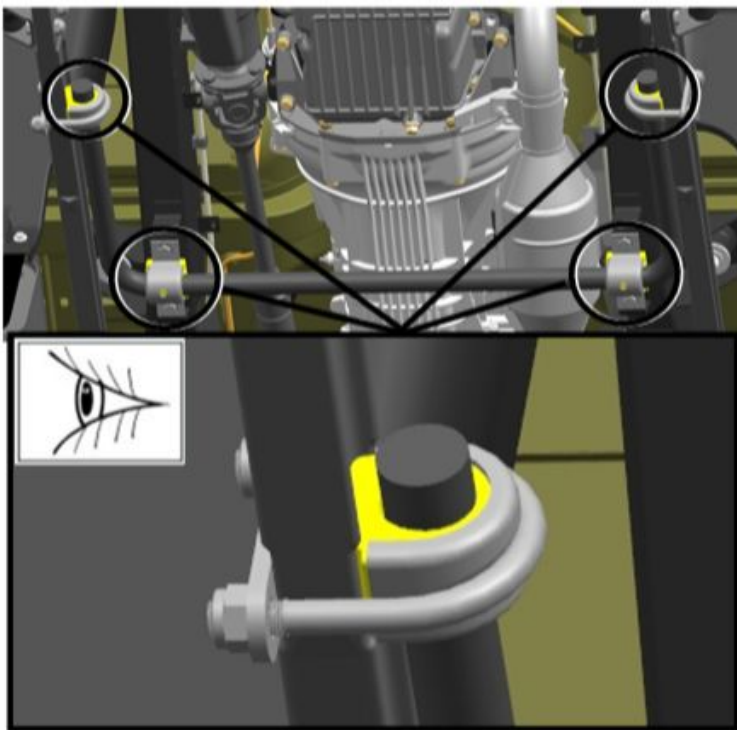
The hinges should not have cracks, breaks, undercutting and wear of rubber along the outer end of the hinge.



Img 17

28. Inspect the transverse link joints.

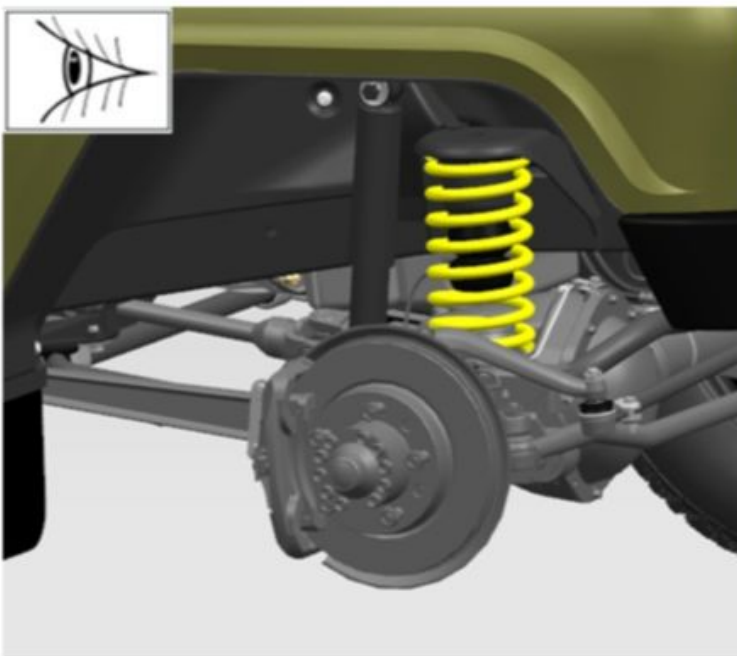
The hinges should not have cracks, breaks, undercutting and wear of rubber along the outer end of the hinge.



29. Inspect the front anti-roll bar joints.

The hinges should not have cracks, breaks, undercutting and wear of rubber along the outer end of the hinge.

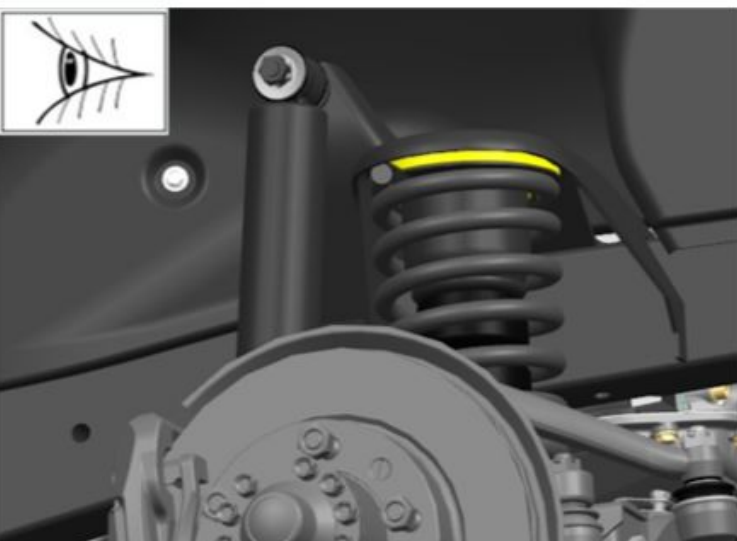
Img 18



30. Inspect the springs.

The springs should not have mechanical damage and deformation of the coils.

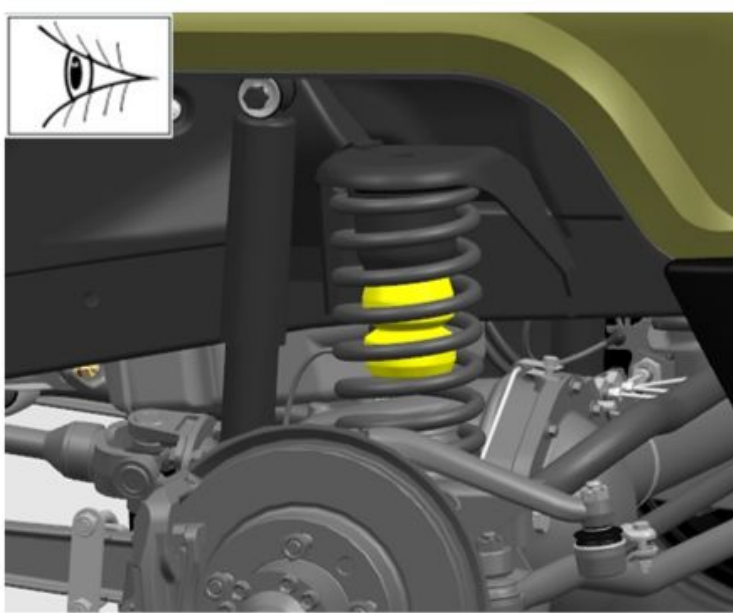
Img 19



31. Inspect the rubber spring seals.

The gaskets should not have mechanical damage and deformation.

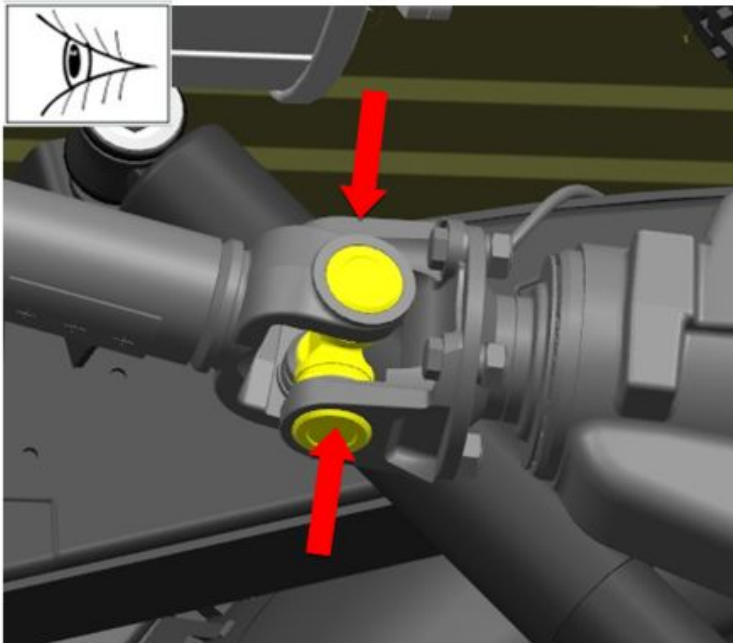
Img 20



Img 21

32. Inspect the spring buffers.

Spring buffers should be free from cracks, breaks and deformations.



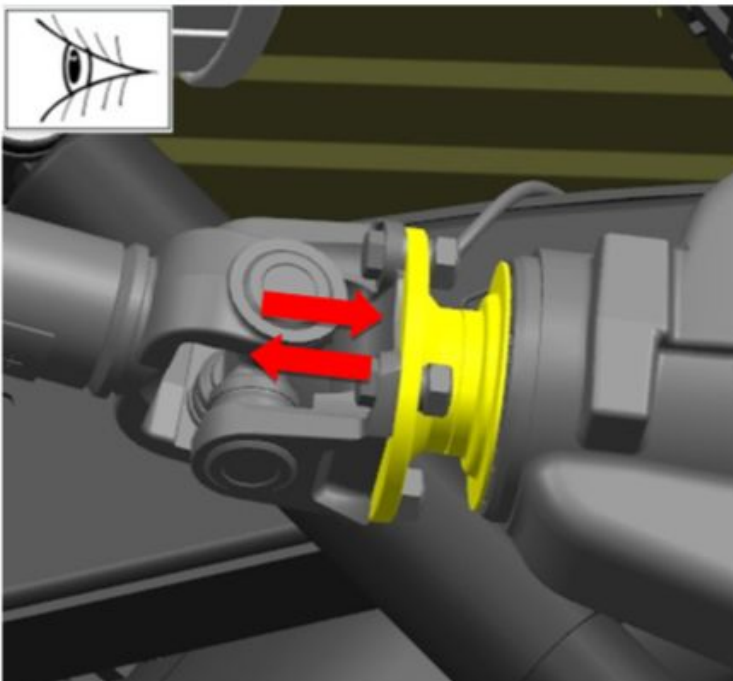
Img 22

33. Check the backlash in the crosspieces of the cardan shafts by applying an alternating hand force along the axes of the crosspieces.

Backlash in the crosspieces is not allowed.

34. Rotate the crosspiece 90 degrees and recheck.

Backlash in the crosspieces is not allowed.



Img 23

35. Check the presence of axial play in the bearings by moving the drive gear for the propeller shaft flange.



36. Check the play in the wheel hub bearings by swinging the wheels in a vertical plane.

No play in the hub bearings is allowed.

Img 24



37. Check the smoothness of the wheel rotation.

Rolling of the hub bearings and wheel wedging during rotation is not allowed.

Img 25



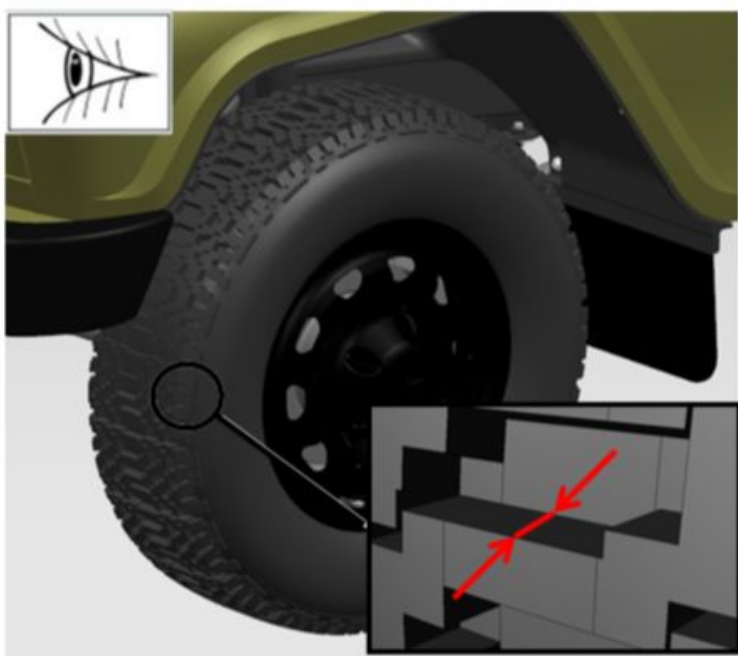
38. Inspect the tires of the wheels.

39. Inspect the wheel rims.

40. Check the value of the pressure in the tires of the wheels.

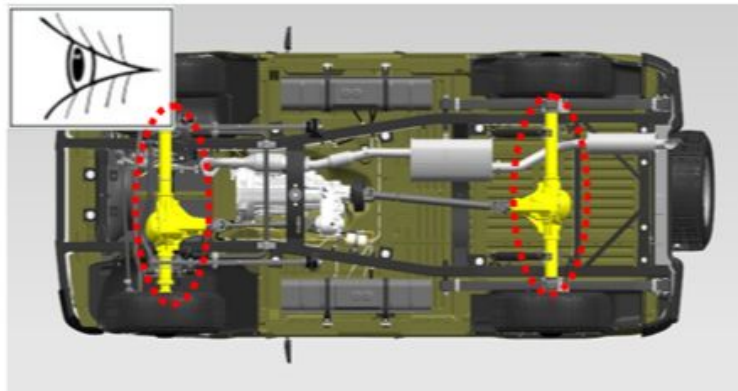
Tire pressures must comply with the values in Table 1.

Img 26



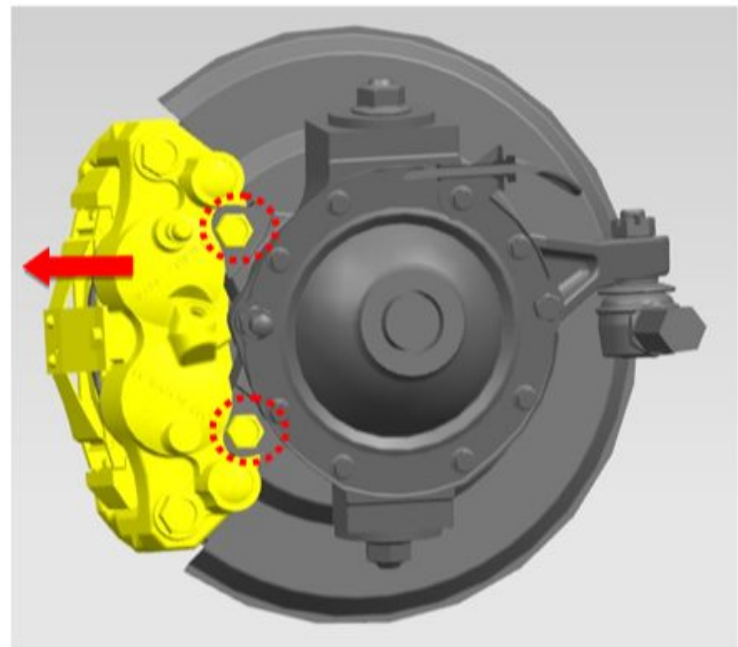
Img 27

41. Measure the residual depth of the tread pattern.
The residual tread depth must be more than 1.6 mm.



Img 28

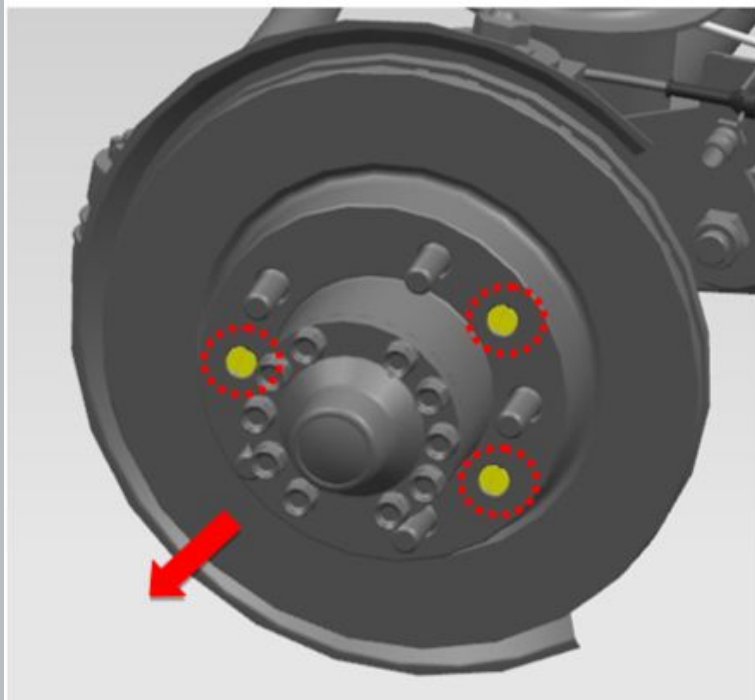
42. Inspect the bridges.
Bridges should be free of visible damage, cracks and leaks.



Img 29

43. Remove the brake mounting bolts.
S=18
tightening torque- 150 N·m

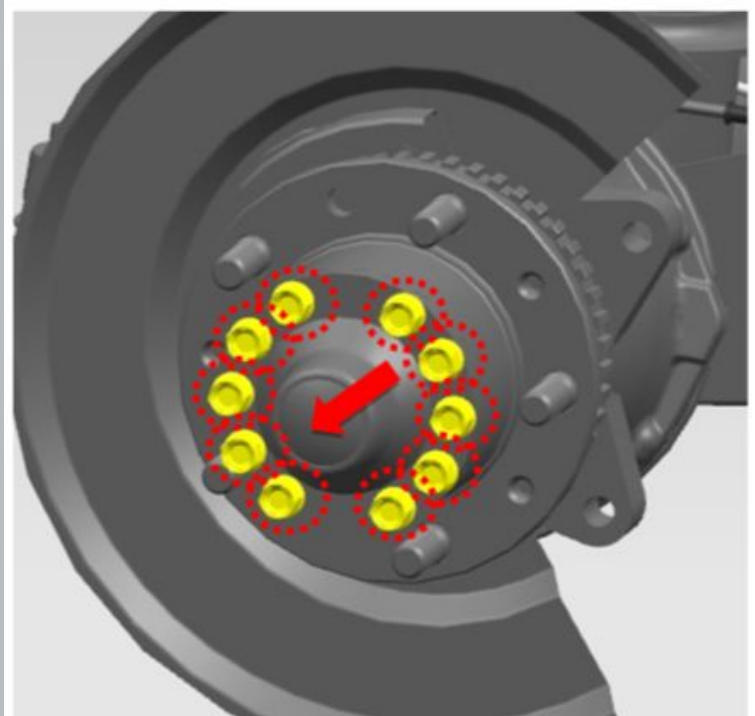
44. Take the front brake assembly to the side.
Hose tension is not allowed.



45. Remove the screws securing the brake disc.
tightening torque- 16 N·m

46. Remove the disc.

Img 30



47. Remove the flange mounting bolts.

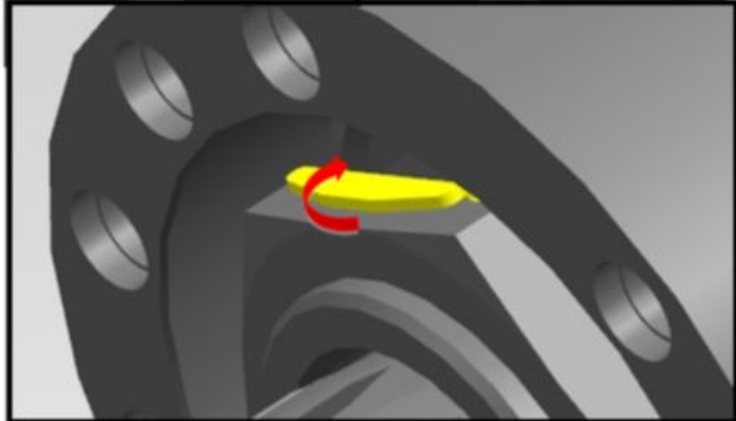
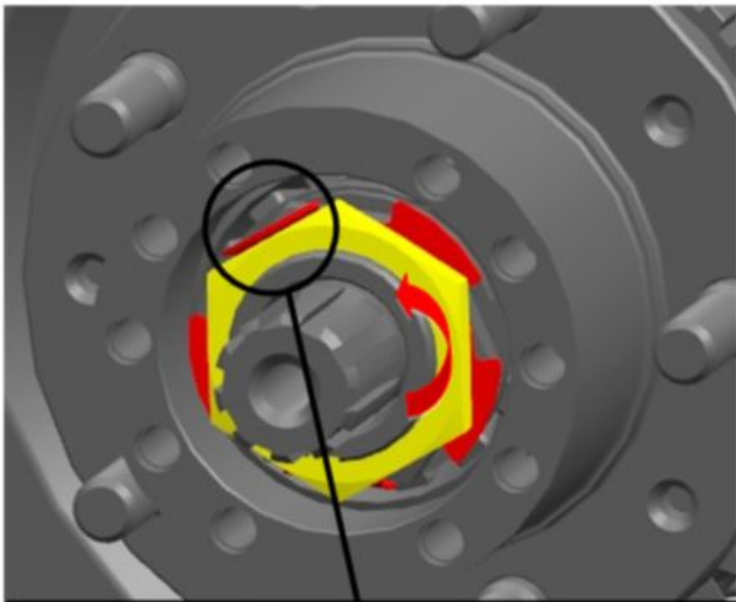
S=14

tightening torque- 65 N·m

48. Remove the leading flange together with the gasket.

⚠ NOTIFICATION: Re-use of the spacer is not permitted.

Img 31

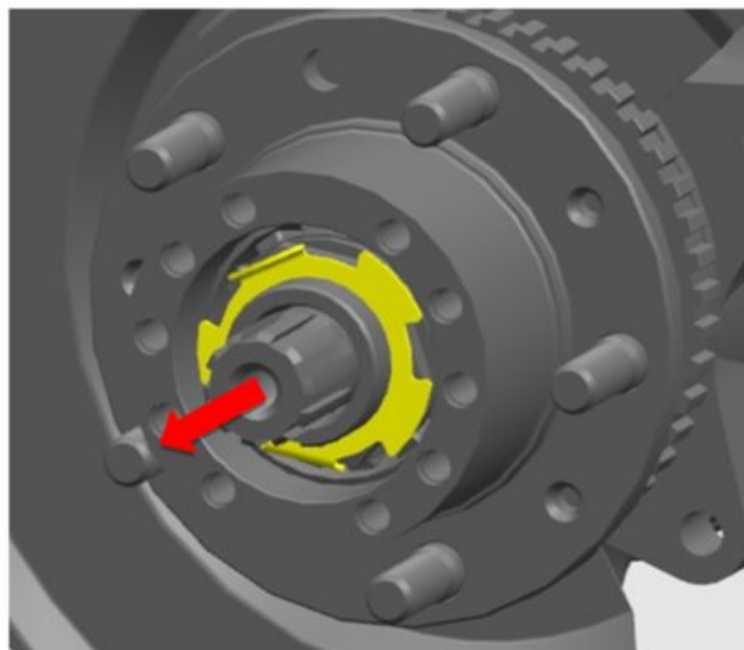


Img 32

49. Bend the tab of the lock washer.

50. Unscrew the lock nut.

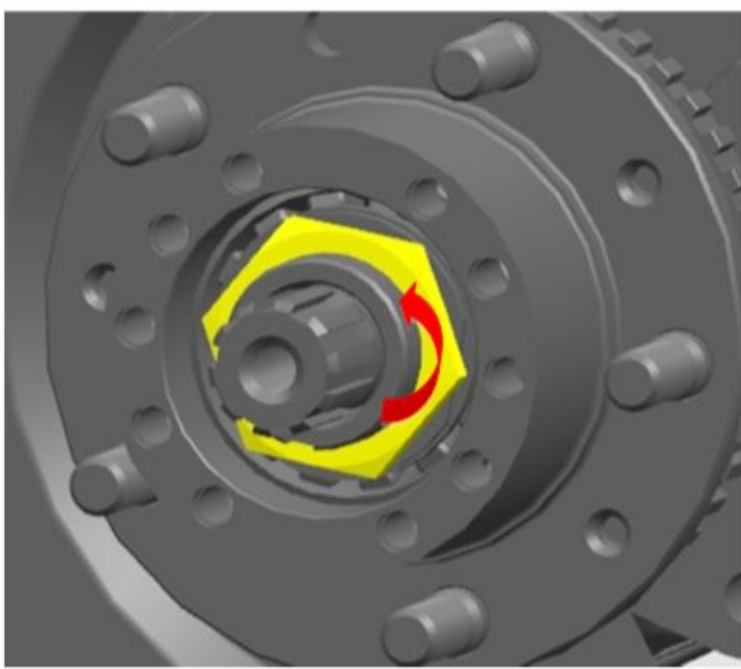
tightening torque- 25 N·m



Img 33

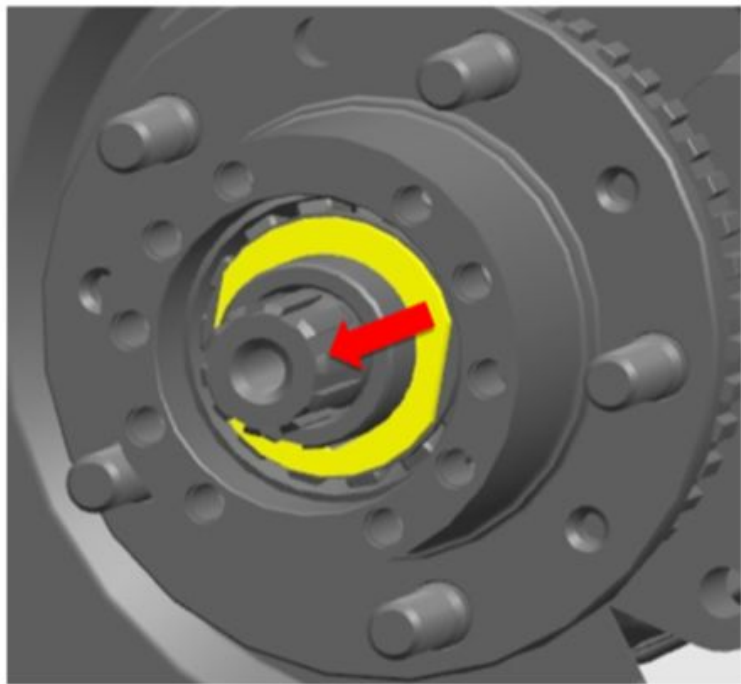
51. Remove the lock washer.

⚠ NOTIFICATION: Re-use of the washer is not permitted.



52. Unscrew the bearing adjustment nut.

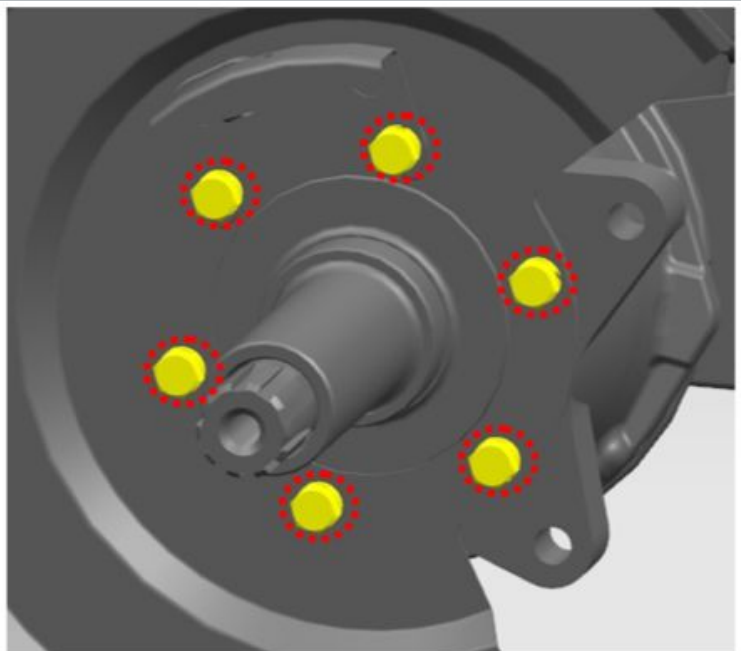
Img 34



53. Remove the lock washer.

54. Remove the hub.

Img 35

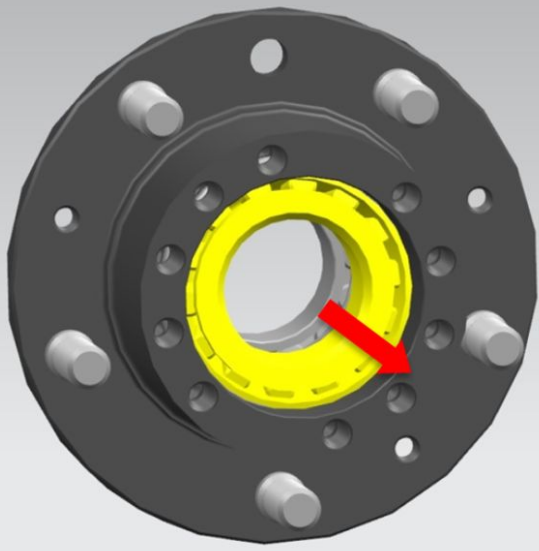


55. Tighten the bolts securing the front axle trunnions.

S=14

tightening torque- 40 N·m

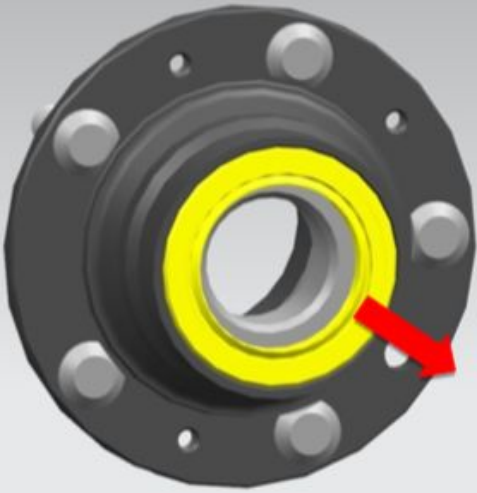
Img 36



Img 37

56. Remove the cage with the rollers of the outer bearing of the hub.

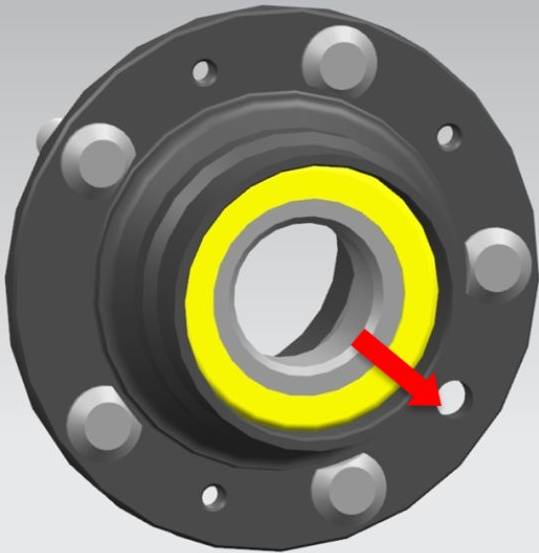
57. Wash the bearing race.



Img 38

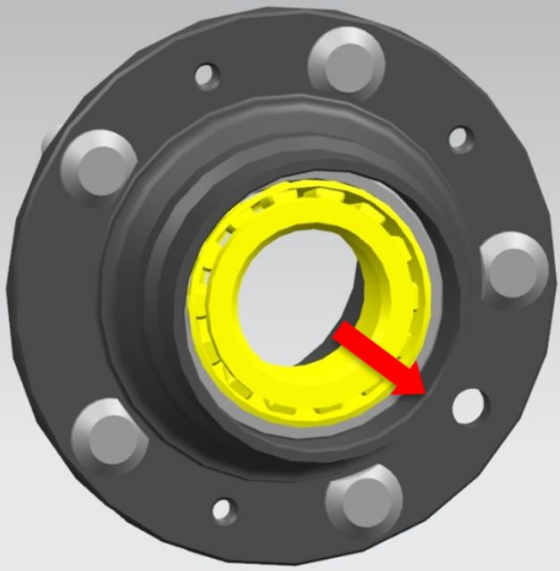
58. Remove the wheel hub seal.

⚠ NOTIFICATION: Re-use of the cuff is not permitted.



Img 39

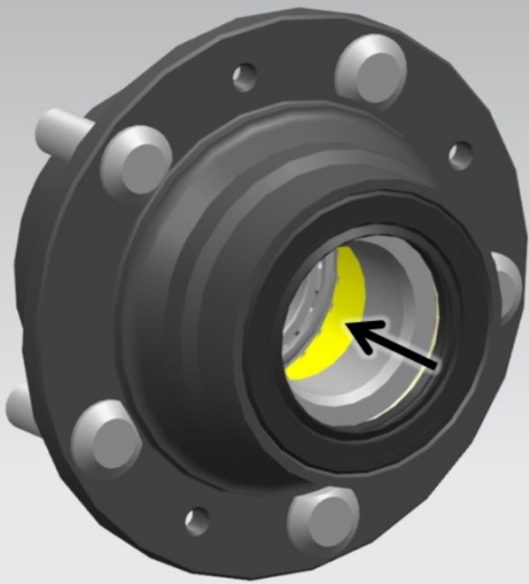
59. Remove the thrust washer of the hub seal.



Img 40

60. Remove the cage with the rollers of the inner bearing of the hub.

61. Wash the bearing race.



Img 41

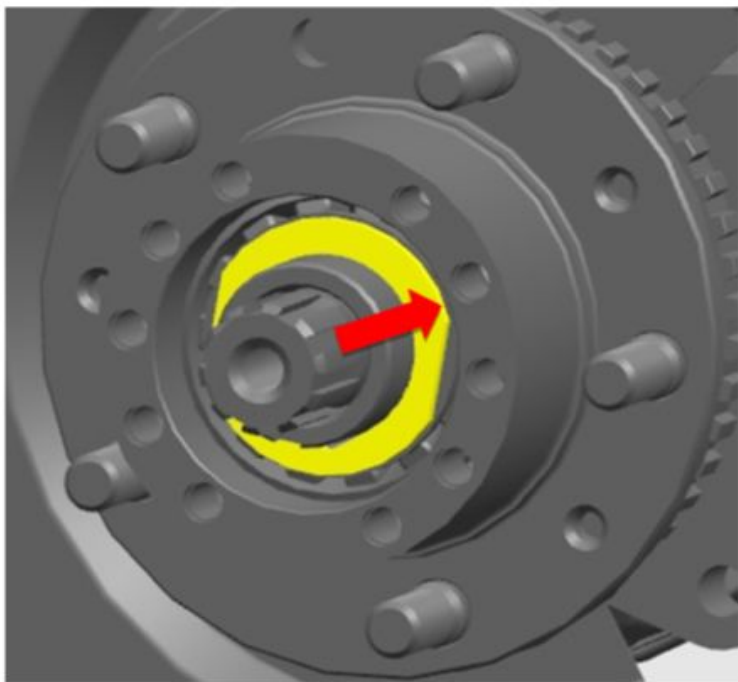
62. Install the bearing cages with rollers.

63. Install the thrust washer of the hub seal.

64. Install the wheel hub seal.

65. Place a layer of grease 10-15mm thick between the bearings.

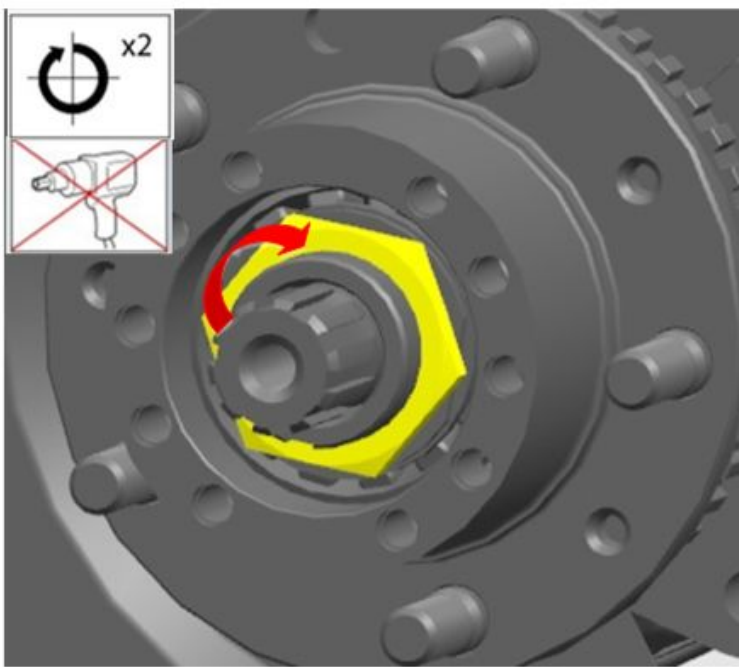
⚠ NOTIFICATION: ATTENTION: Do not put more than 200 grams of grease in the hub to avoid it getting into the wheel brakes.



Img 42

66. Install the hub onto the journal.

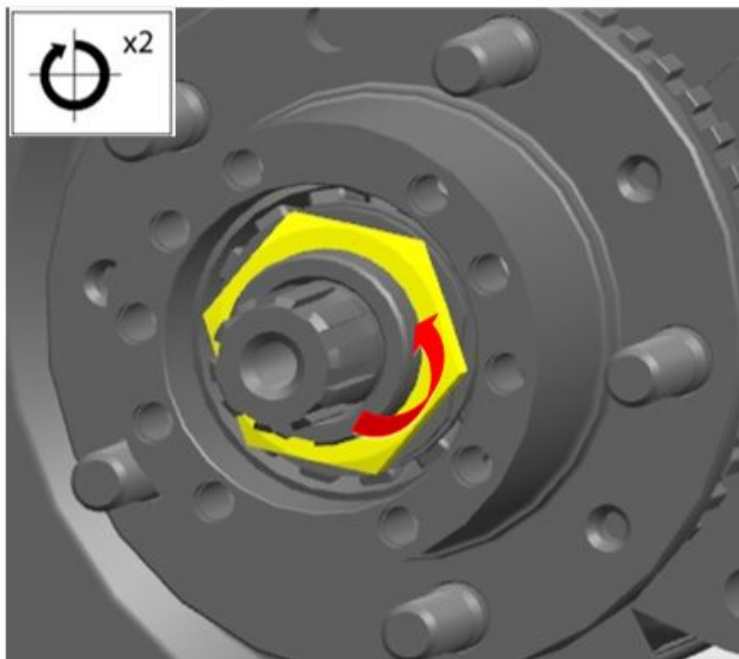
67. Install the lock washer.



Img 43

68. Screw on the adjusting nut by hand.

69. Tighten the adjusting nut while turning the wheel by hand.
tightening torque- 140 N·m

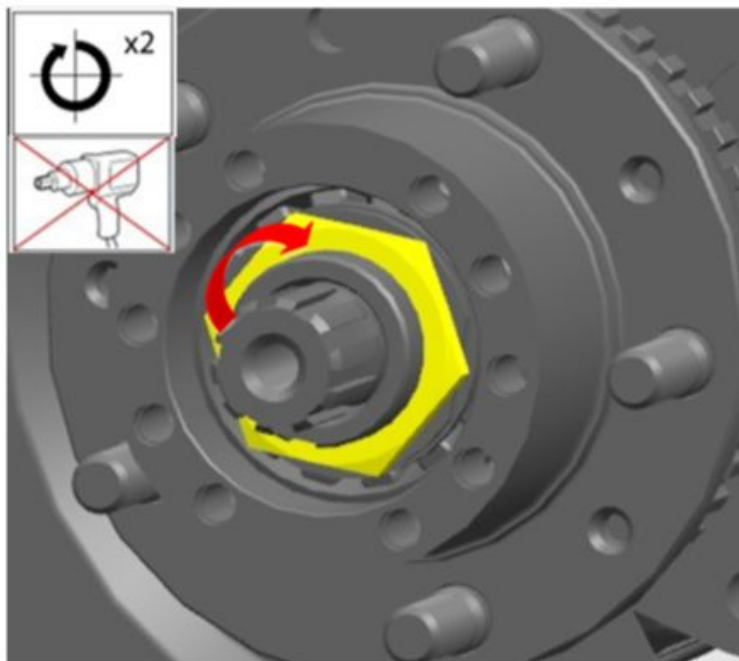


Img 44

70. Unscrew the adjusting nut 1/6 - 1/3 turn.

S=55

71. Turn the wheel 1-2 turns.



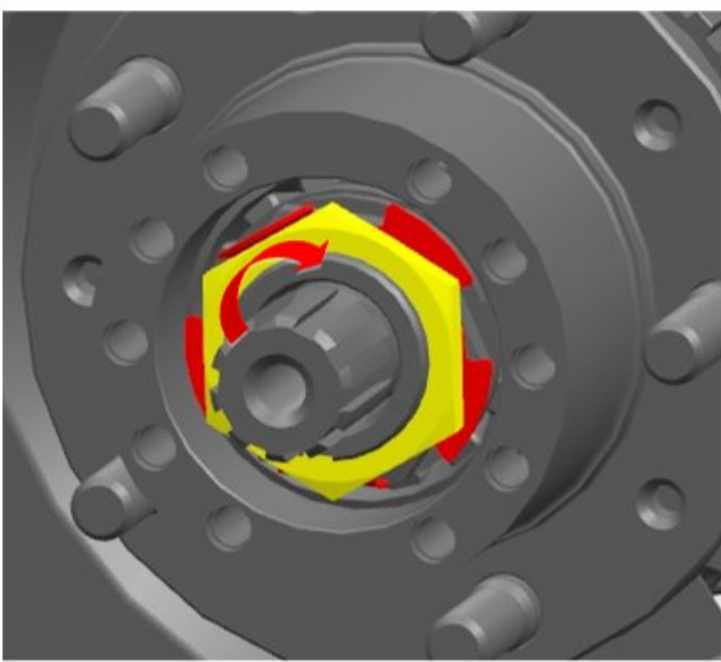
Img 45

72. Tighten the adjusting nut.

S=55

tightening torque- 30 N·m

When tightening the nut, press the key knob smoothly, without jerks, while turning the wheel to correctly position the rollers on the raceways of the bearing rings.



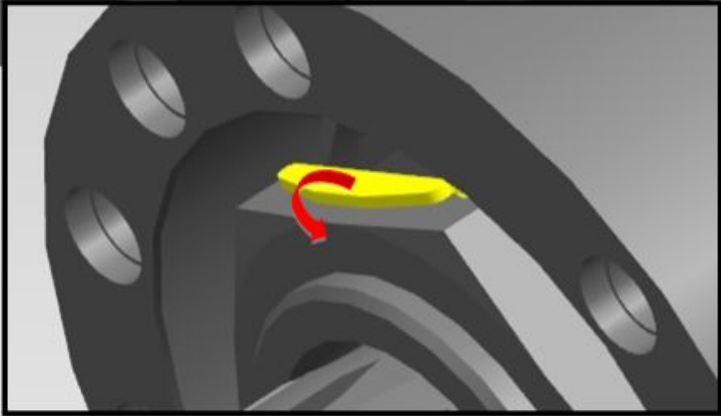
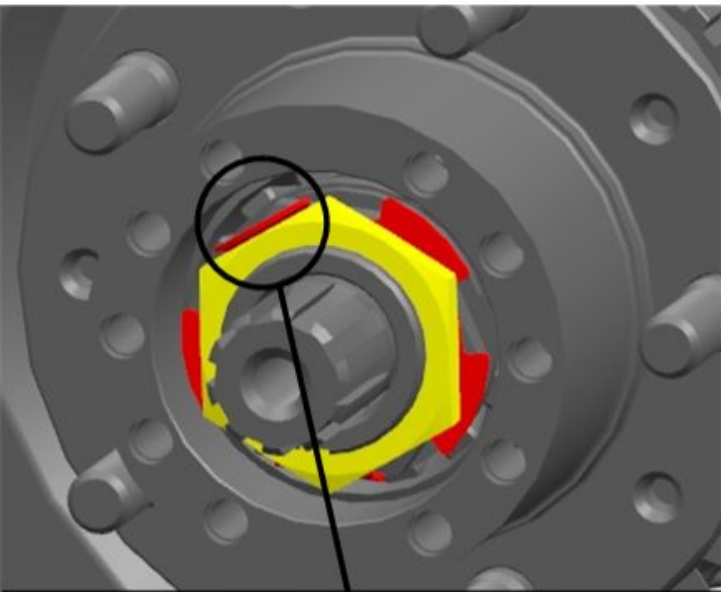
Img 46

73. Install the lock washer.

74. Tighten the lock nut.

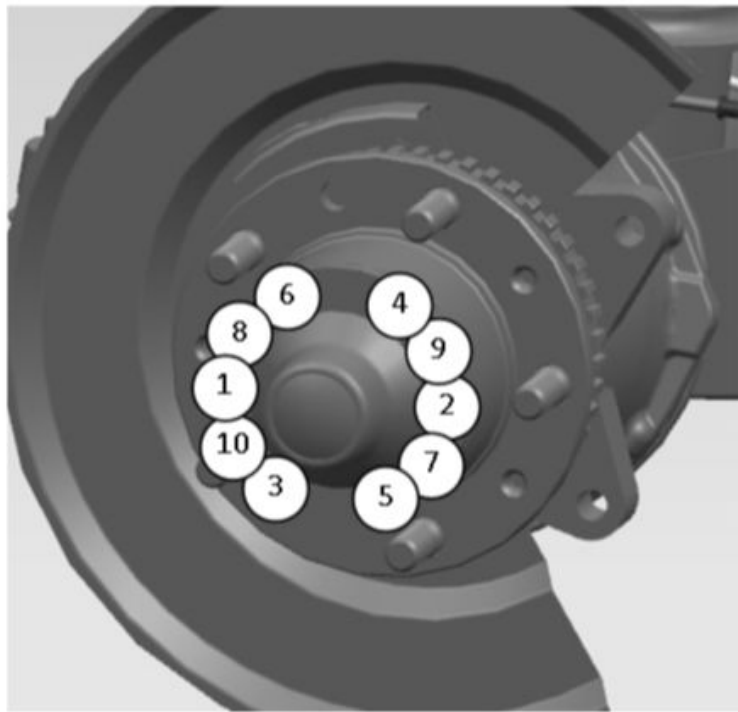
tightening torque- 25 N·m

When properly adjusted, the wheel should rotate freely without binding, noticeable axial play or wobbling.



Img 47

75. Bend the tabs of the lock washer onto the adjusting nut and locknut.



Img 48

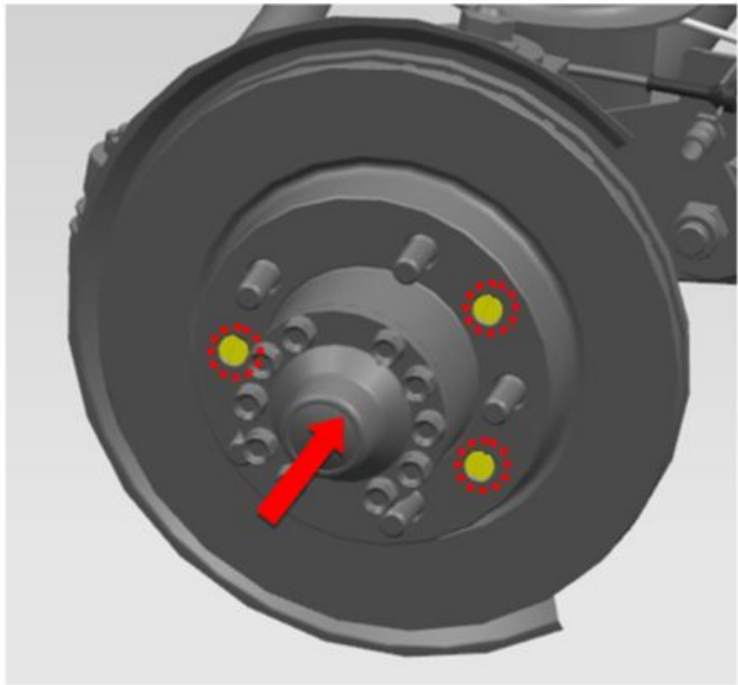
76. Install the leading flange together with the gasket.

77. Tighten the flange mounting bolts.

tightening torque- 10 N·m

78. Complete the final tightening of the bolts.

tightening torque- 65 N·m

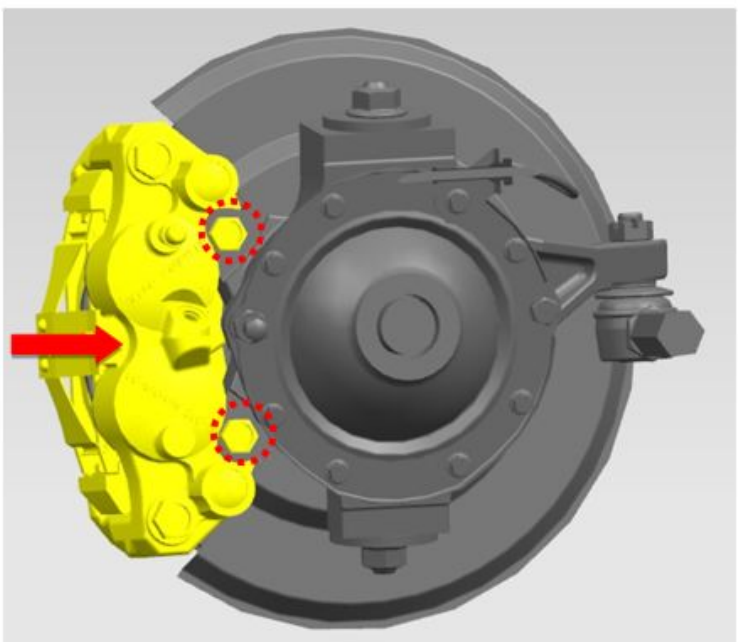


Img 49

79. Install the brake disc.

80. Tighten the screws that secure the brake disc.

tightening torque- 16 N·m



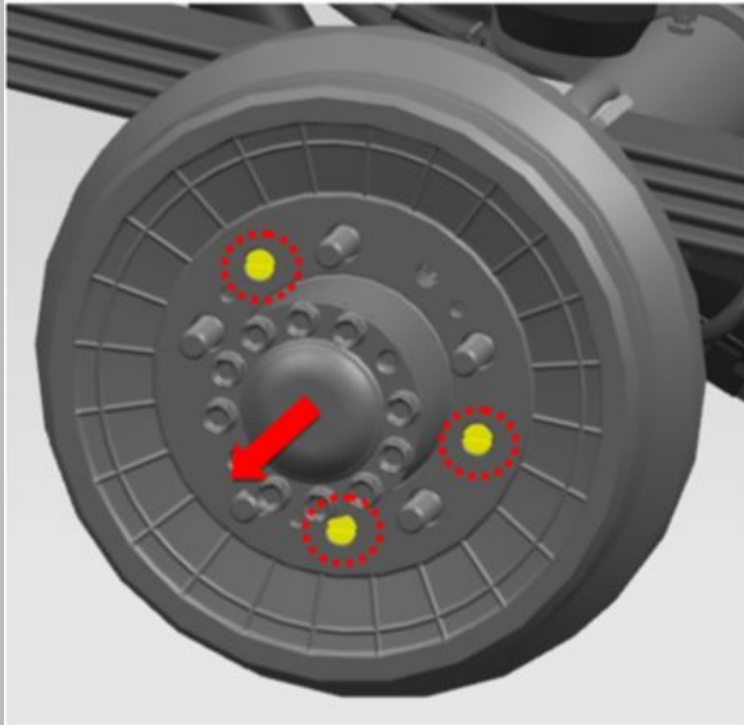
Img 50

81. Install the front brake.

82. Tighten the brake mounting bolts.

tightening torque- 150 N·m

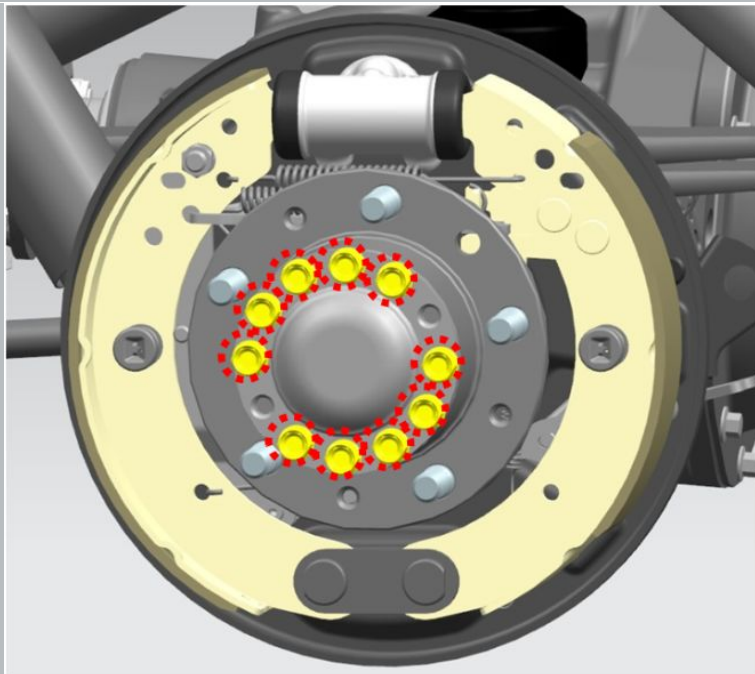
83. Perform steps 43 - 82 for the other front wheel hub.



Img 51

84. Remove the screws securing the brake drum.
tightening torque- 16 N·m

85. Remove the drum.

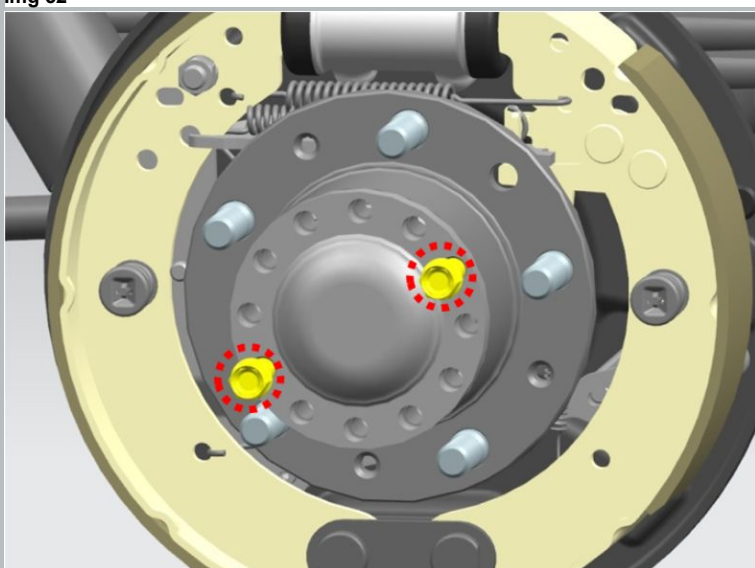


Img 52

86. Unfasten the rear axle shaft securing bolts.

S=14

tightening torque- 65 N·m



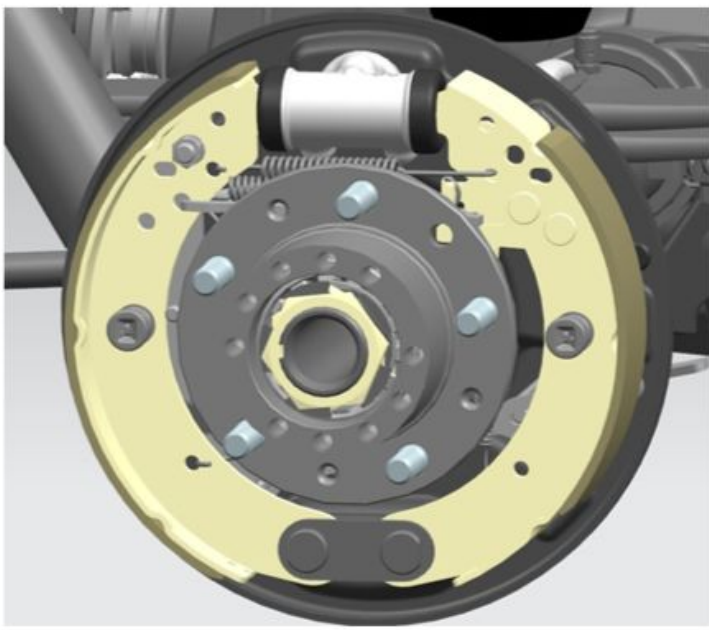
Img 53

87. Screw two bolts into the threaded holes of the axle shaft flange to press out the axle shaft.

S=14

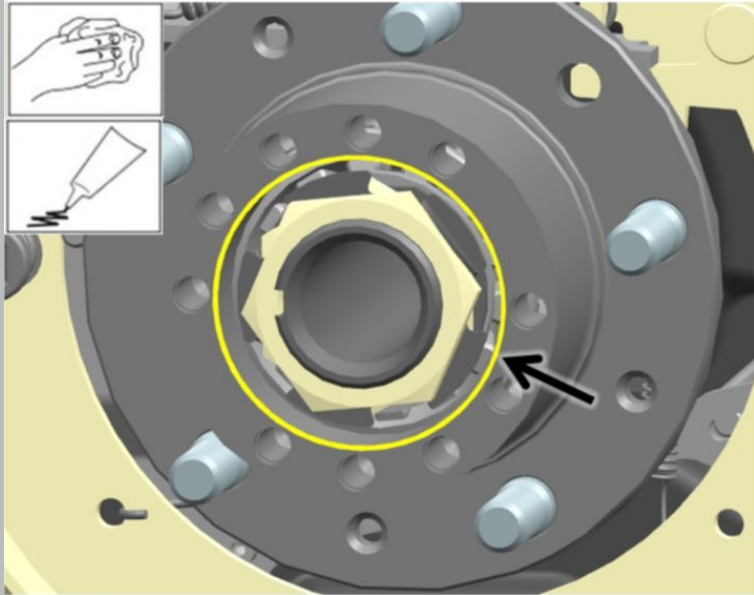
Tighten the bolts alternately (1/4 of a turn), not allowing the axle shaft flange to be skewed.

88. Press out the axle shaft.



89. Perform steps 49 - 75 for the rear wheel hubs.

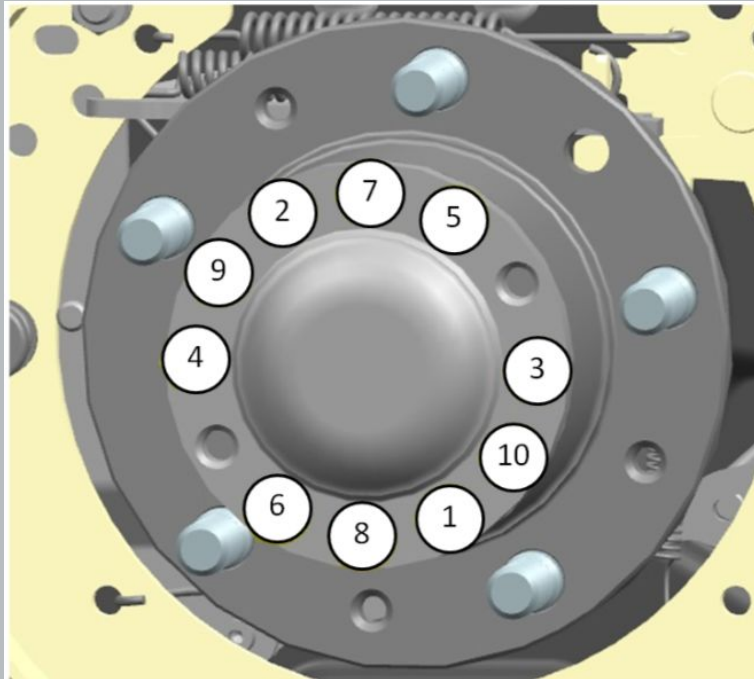
Img 54



90. Apply sealant to the inner surface of the hub.

The width of the sealant bead is at least 2 mm, the layer thickness is at least 1 mm. The area where the sealant is applied must be clean and free of grease.

Img 55



91. Install the axle shaft.

When installing, align the splines of the axle shaft with the splines of the differential gear.

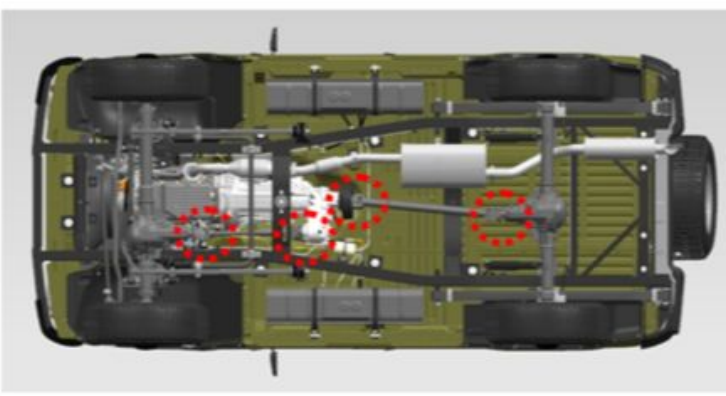
92. Tighten the axle shaft securing bolts.

tightening torque- 10 N·m

93. Complete the final tightening of the bolts.

tightening torque- 65 N·m

Img 56



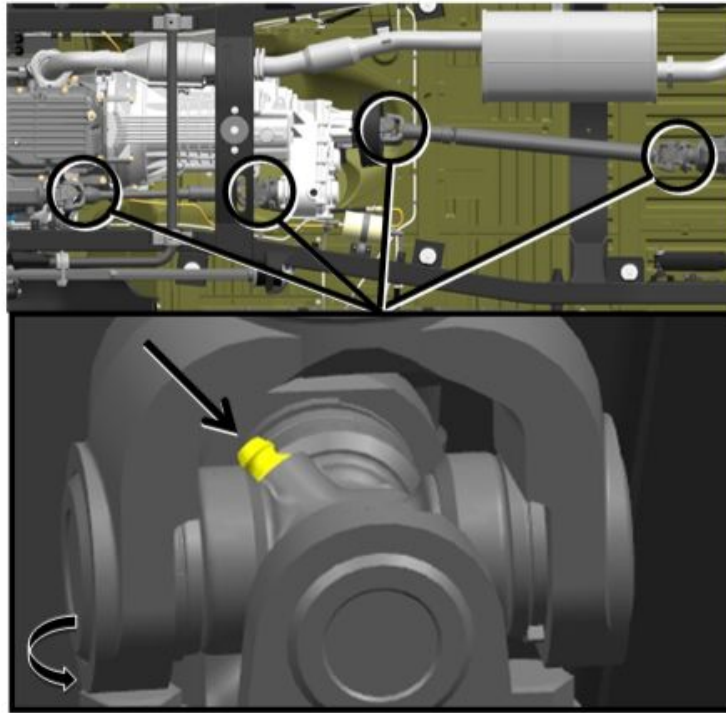
Img 57

94. Tighten the fasteners of the propeller shaft flanges.

S=17

S=14

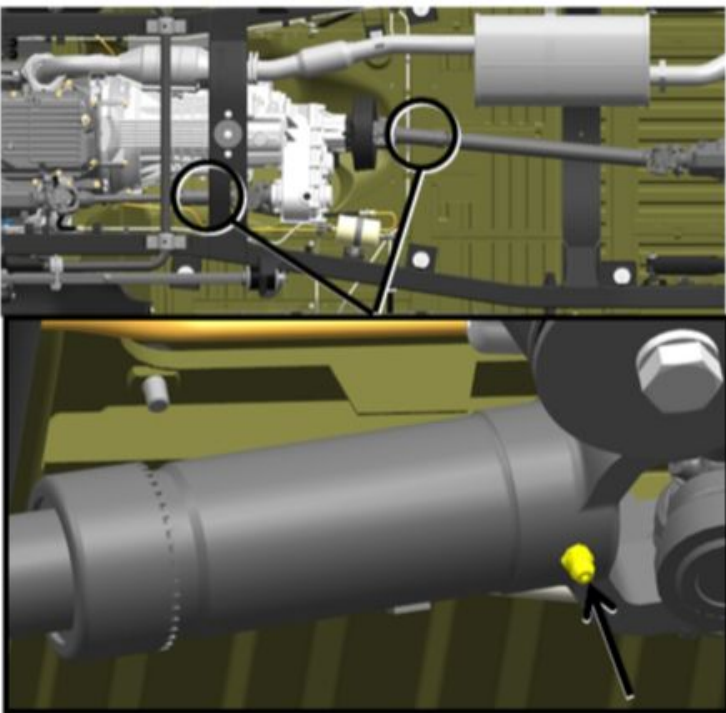
tightening torque- 50 N·m



Img 58

95. Lubricate the joints of the front and rear propeller shafts.

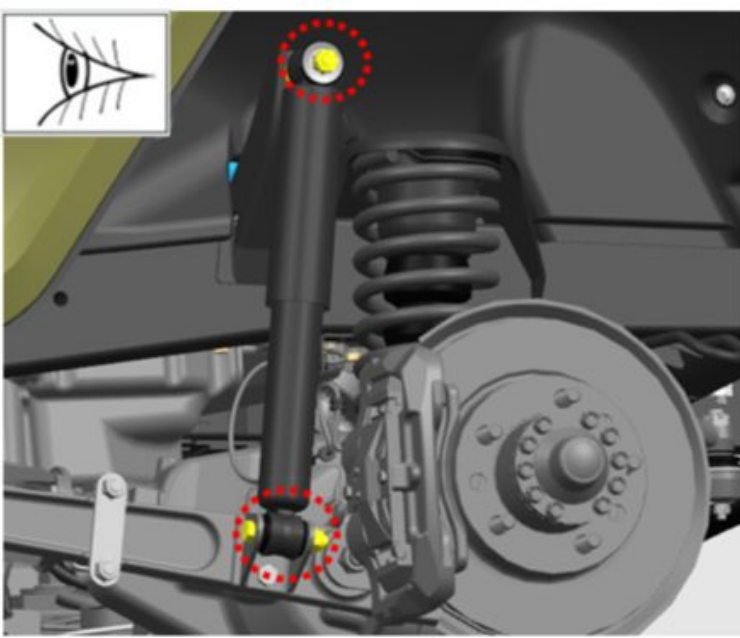
Lubricate until it comes out from under the working edges of the crosspiece cuffs.



Img 59

96. Lubricate the splines of the front and rear propeller shafts.

Make 3-5 strokes without waiting for the lubricant to come out.



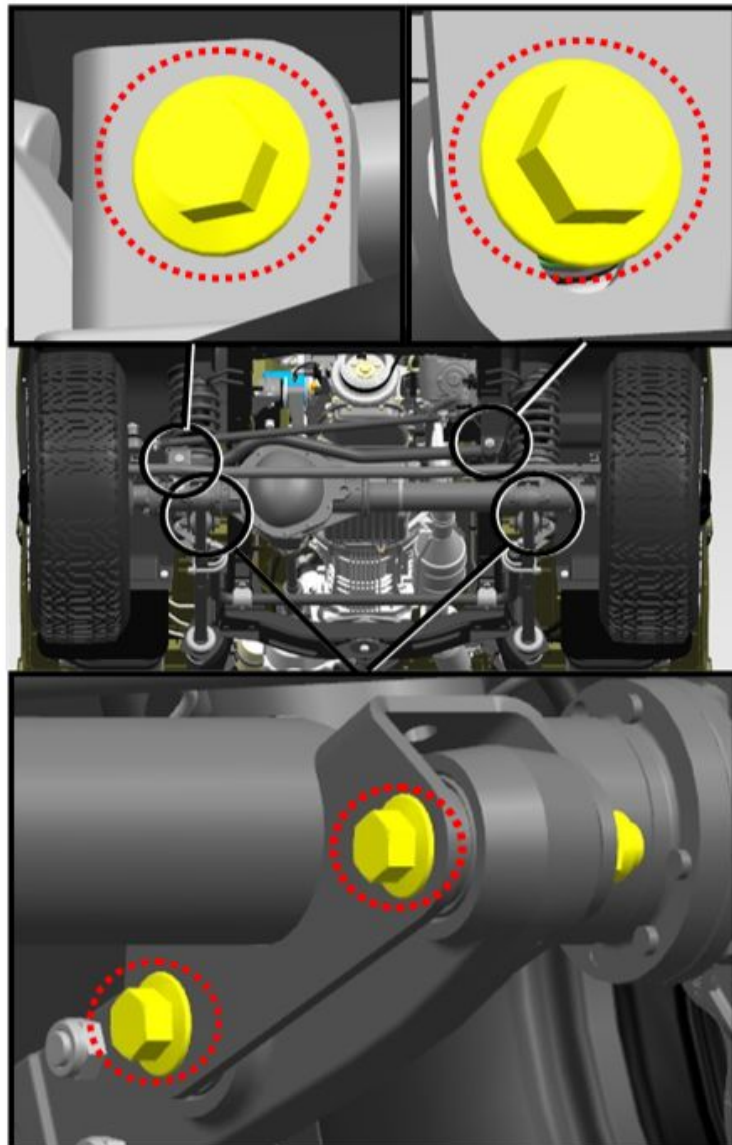
97. Inspect the front suspension shock absorbers.

Oil fogging of the shock absorber does not indicate a malfunction and is acceptable. The appearance of drips on the shock absorber body, indicating a loss of tightness, is not allowed.

98. Tighten the front suspension shock absorbers.

tightening torque- 60 N·m

Img 60



99. Tighten the nuts securing the longitudinal rods and lateral rods of the front suspension.

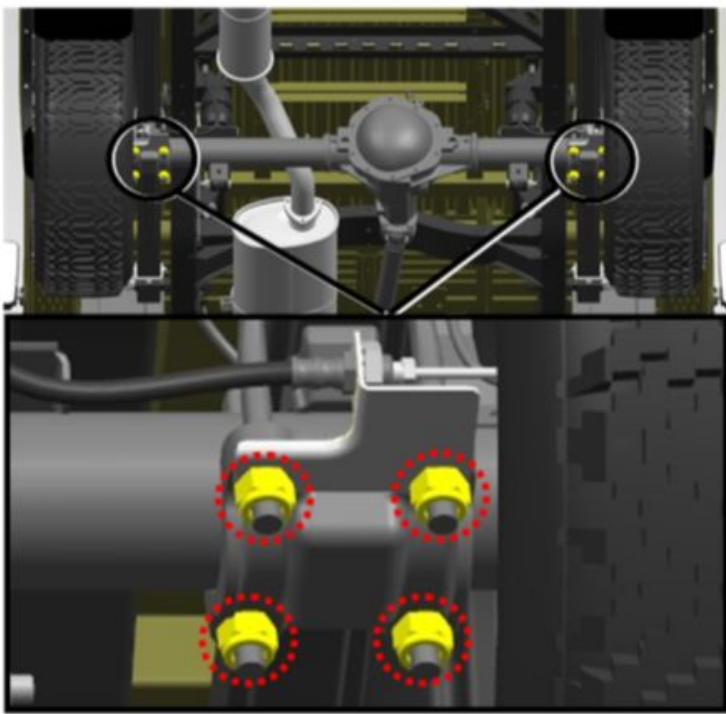
S=24

S=21

S=22

tightening torque- 150 N·m

Img 61

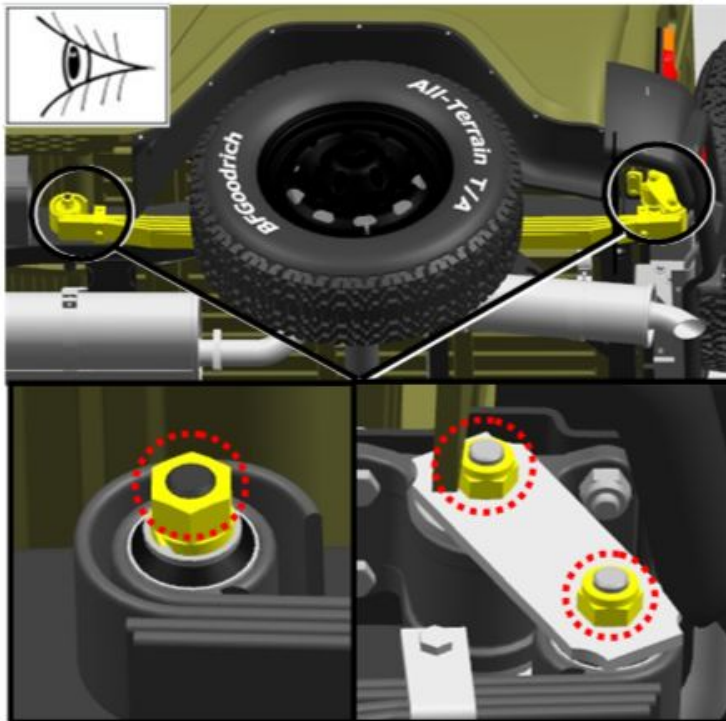


Img 62

100. Tighten the fastening of the spring ladder nuts.

S=24

tightening torque- 95 N·m



Img 63

101. Inspect the springs.

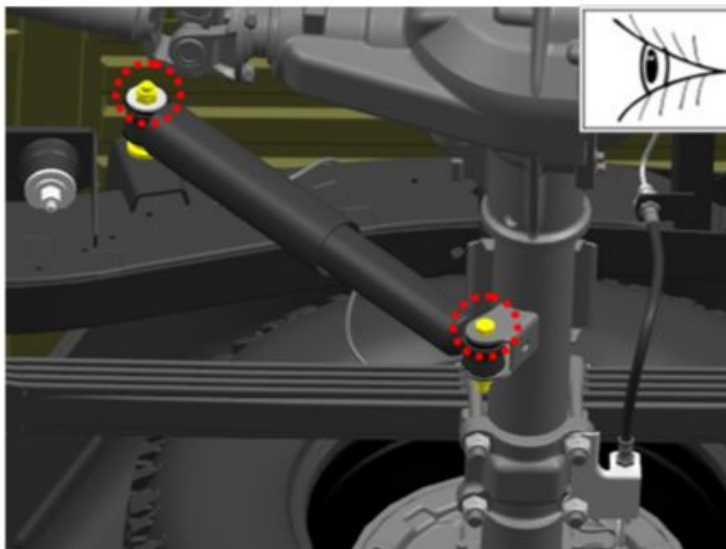
The springs should not have sheet cracks, their longitudinal or transverse displacement.

102. Tighten the fastening of the axle nuts of the front end of the spring.

tightening torque- 170 N·m

103. Tighten the spring shackle pins.

tightening torque- 90 N·m



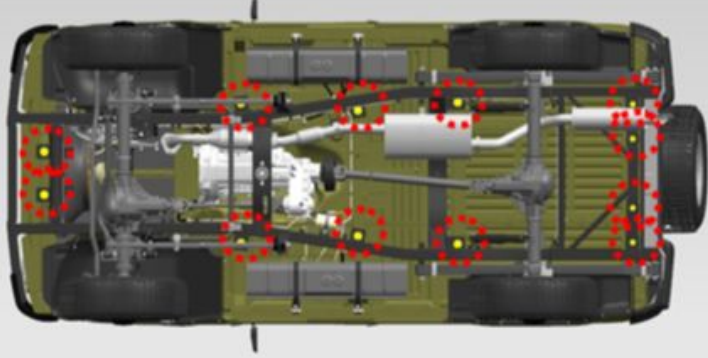
Img 64

104. Inspect the rear suspension shock absorbers.

Oil fogging of the shock absorber does not indicate a malfunction and is acceptable. The appearance of drips on the shock absorber body, indicating a loss of tightness, is not allowed.

105. Tighten the rear suspension shock absorbers.

tightening torque- 57 N·m

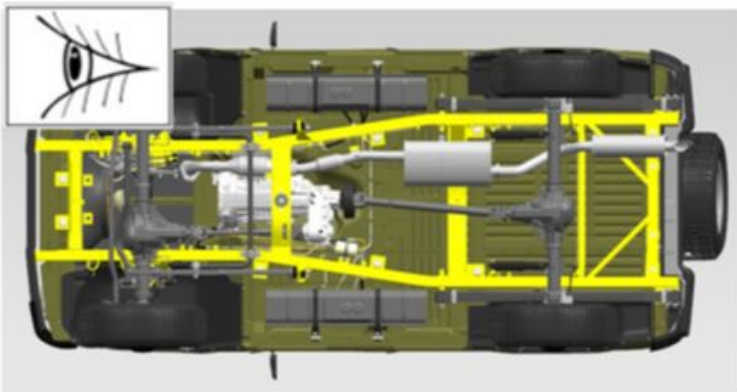


Img 65

106. Tighten the nuts of the body-to-frame bolts.

S=17

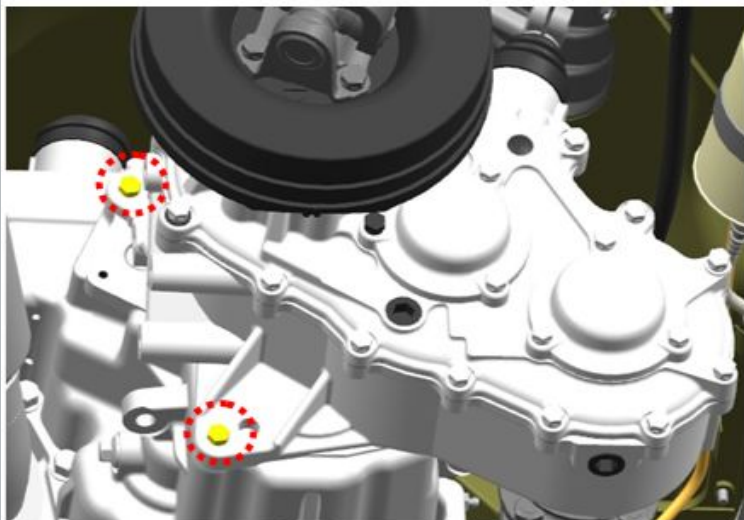
tightening torque- 35 N·m



Img 66

107. Check the presence of chips, cracks and foci of corrosion of the paintwork of the frame by inspection.

The presence of chips, cracks and foci of corrosion of the paintwork of the frame is not allowed.

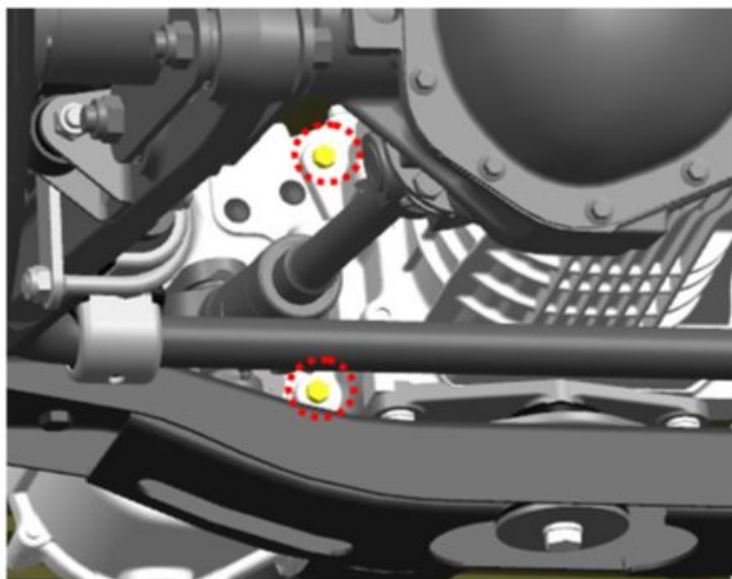


Img 67

108. Tighten the fasteners from the transfer case side.

S=17

tightening torque- 50 N·m



Img 68

109. Tighten the fasteners from the gearbox side.

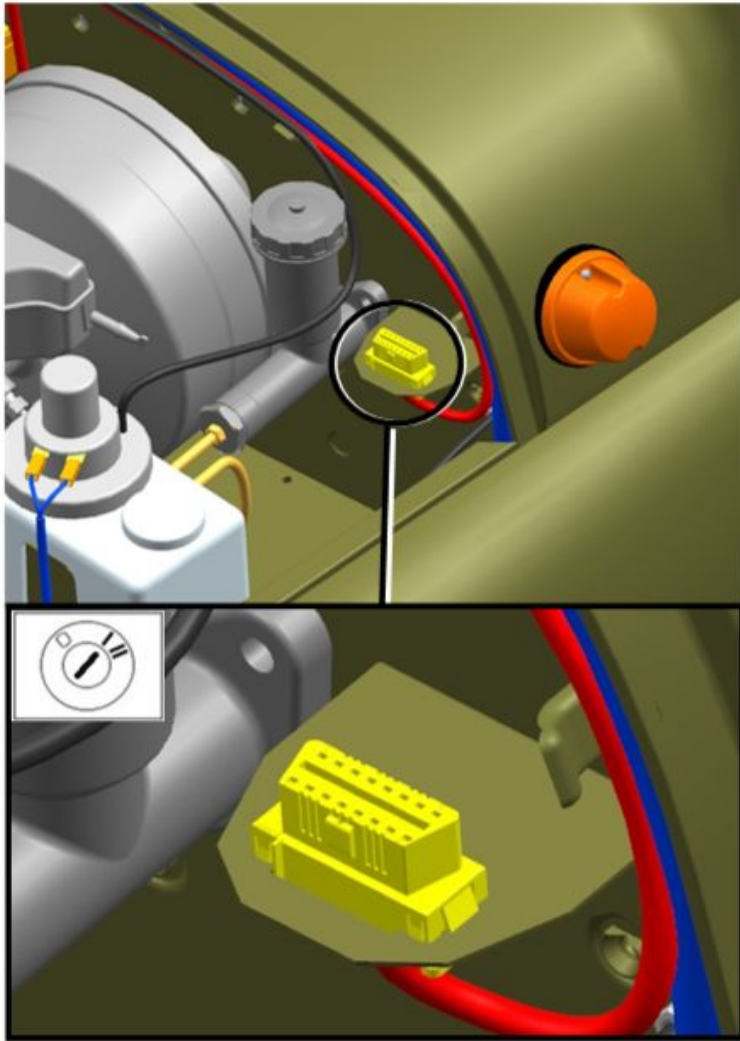
S=17

tightening torque- 50 N·m

Lower the car down on a lift.

4. Work in the engine compartment:

IMAGE



Img 1

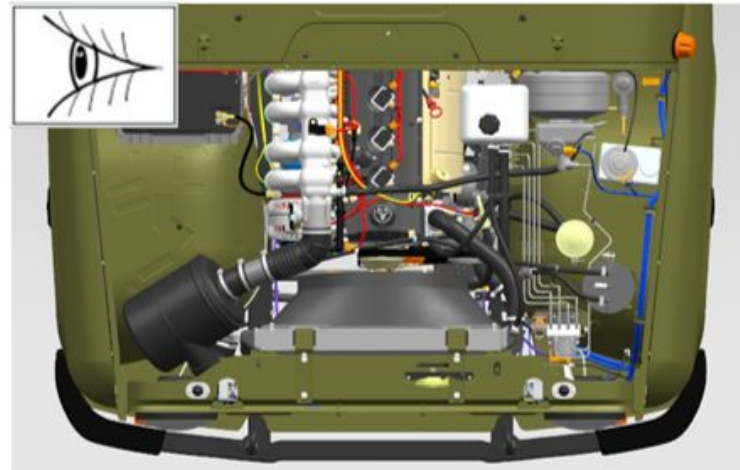
OPERATION DESCRIPTION

1. Connect the UAZ diagnostic system to the OBD-II connector.

2. Switch on the ignition.

3. Check for DTCs in the ECM.

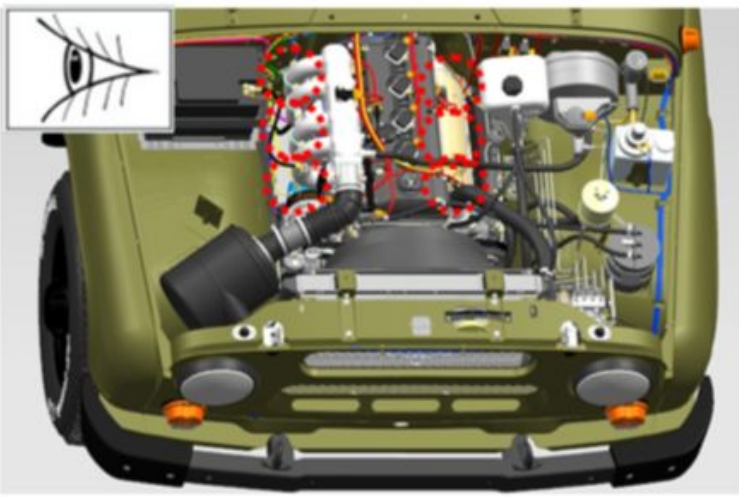
4. Check for fault codes in the ABS control unit.



Img 2

5. Carry out an external inspection of hoses, branch pipes, pipes, engine wires.

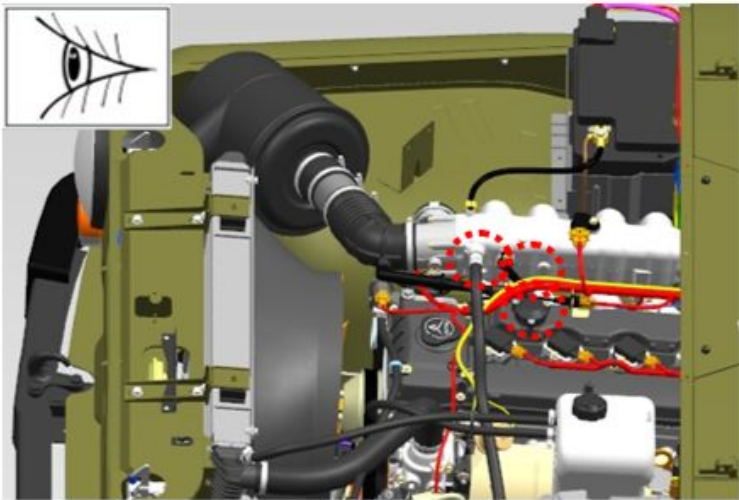
If there are traces of contact on the parts of the car, change their position relative to the engine. Scuffs and wear on hoses, branch pipes, pipes, wires are not allowed.



Img 3

6. Visually check the connections of the intake and exhaust systems for leaks.

Leakage of connections is not allowed.

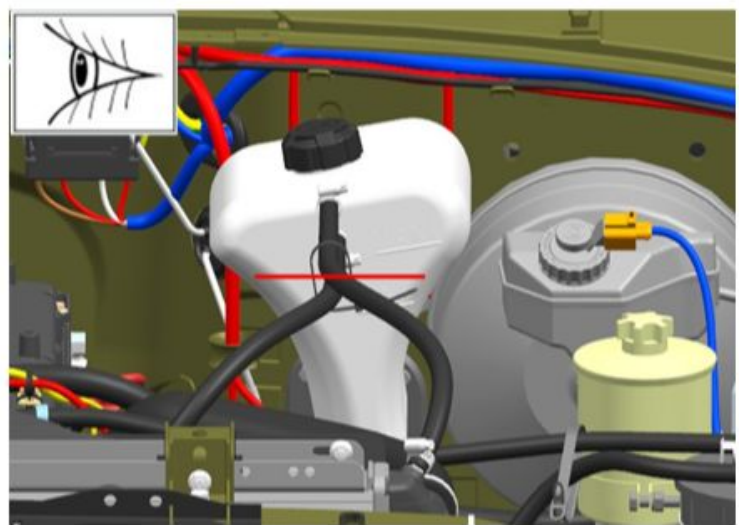


Img 4

7. Visually check the connections of hoses, branch pipes, pipes of the crankcase ventilation system for leaks.

8. Carry out a visual inspection of the hoses for damage.

Leakage of connections and damage to hoses are not allowed.



Img 5

9. Visually check the coolant level in the expansion tank.

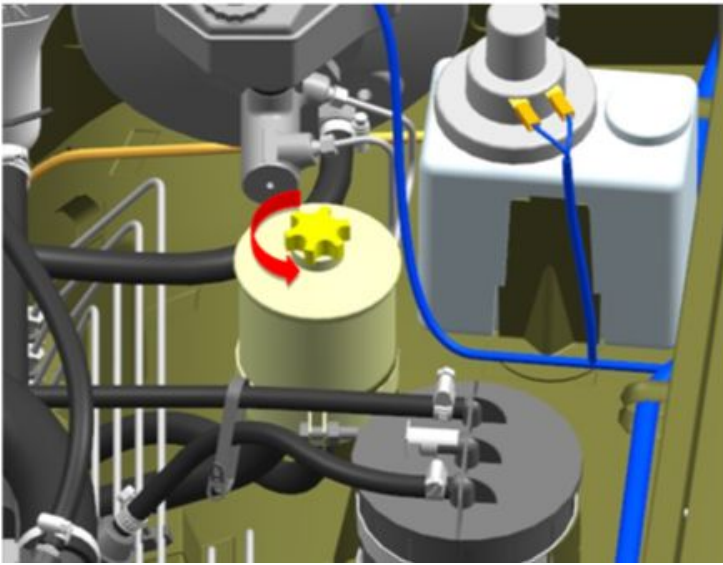
Check the coolant level only on a cold engine. The liquid level in the expansion tank should be 3-4 cm above the "min" mark.



10. Check the freezing point of the coolant with a refractometer.

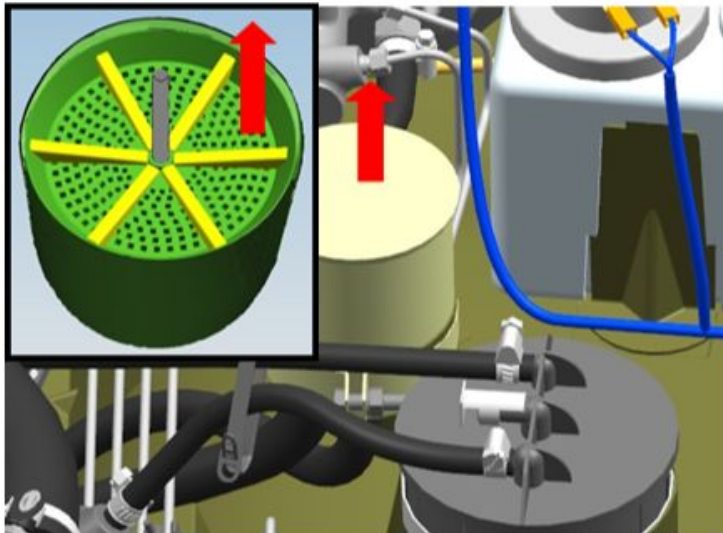
The freezing temperature of the coolant should be as follows: - for regions with a temperate climate: -40-45 ° C - for regions of the Far North: -60-65 ° C

Img 6



11. Unscrew the oil tank cap.

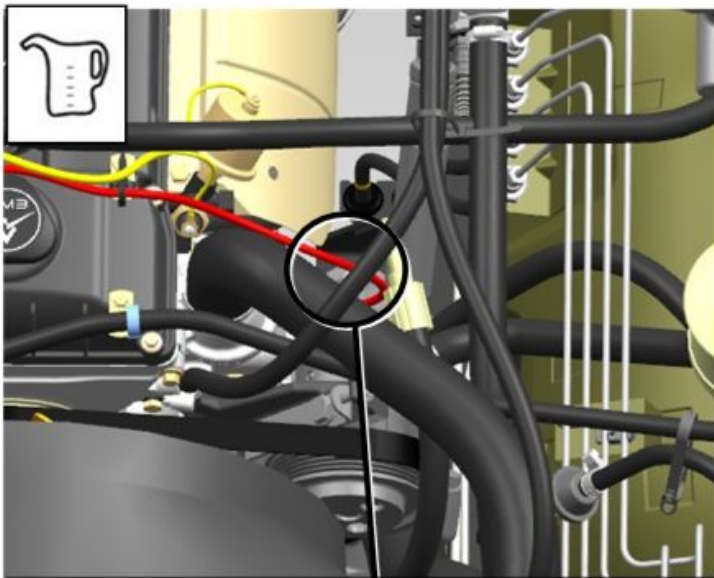
Img 7



12. Remove the oil tank cap.

13. Remove the strainer.

Img 8



14. Loosen the drain hose clamp.

S=7

tightening torque- 5 N·m

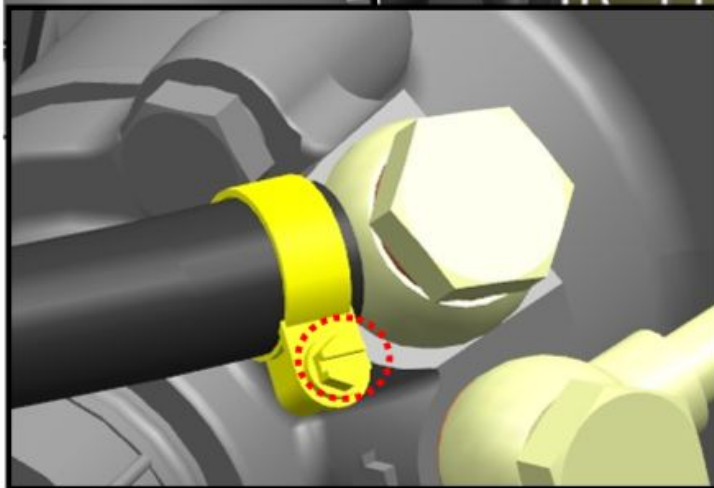
15. Disconnect the hose.

16. Drain the oil from the oil tank into a container for draining the oil.

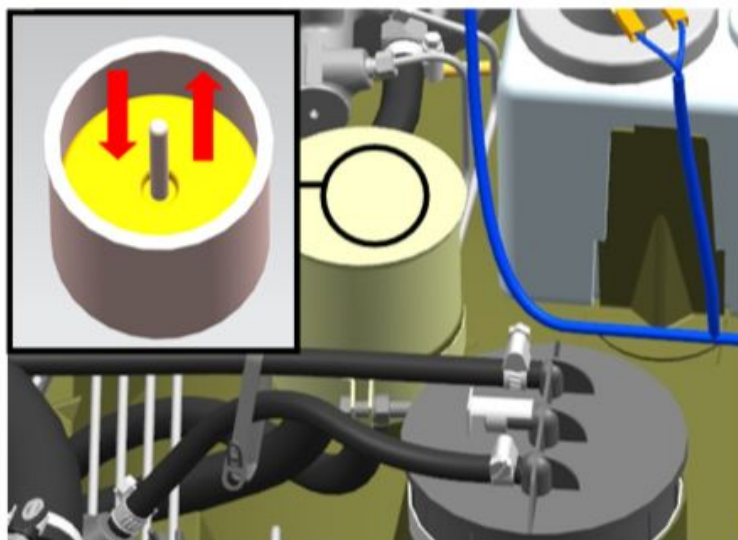
17. Install the hose.

18. Tighten the clamp.

tightening torque- 5 N·m

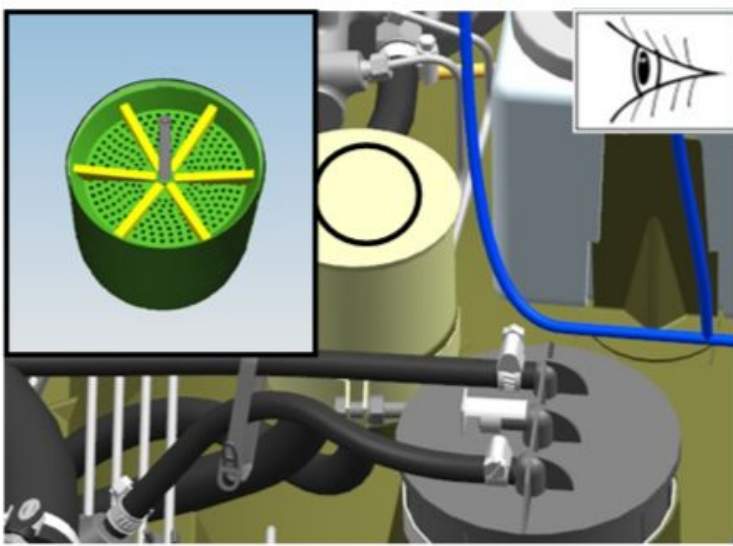


Img 9



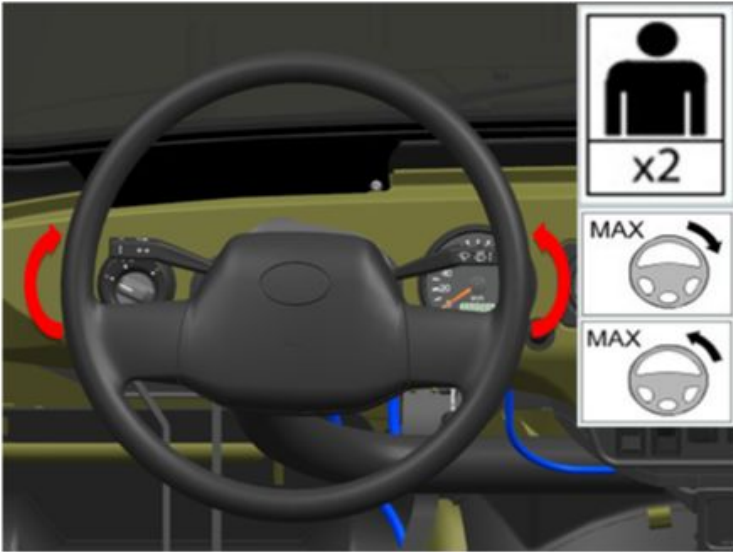
Img 10

19. Replace the oil tank filter element.



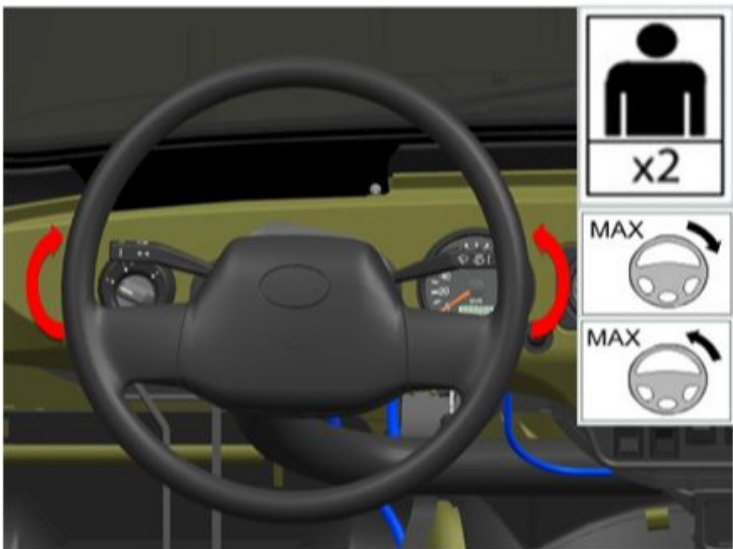
Img 11

20. Bring the oil level in the power steering reservoir to the level of the grid.
Fill in oil until it appears above the strainer (no more than 5 mm).



Img 12

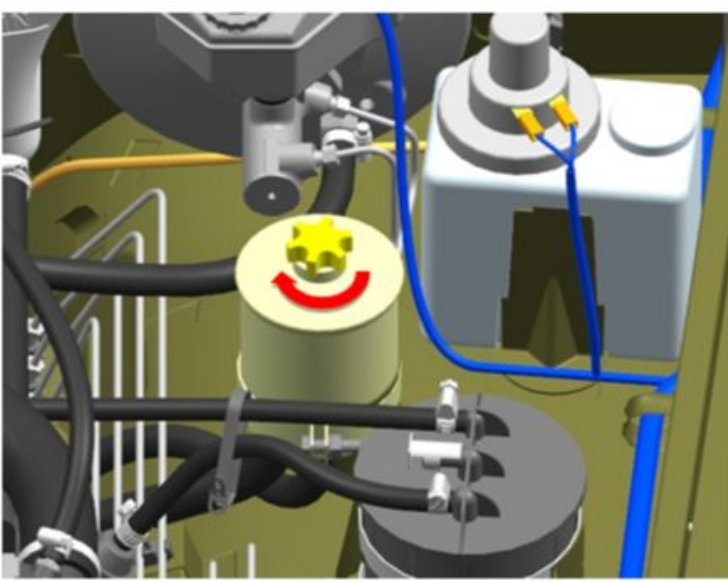
21. Turn the steering wheel from lock to lock until air bubbles exit from the oil in the reservoir.
The operation should be performed with the engine off and the front wheels suspended.



Img 13

22. Start the engine while adding oil.
Stop the engine if the oil foams profusely. Let the oil stand for 20 minutes (until air bubbles emerge). Start the engine.

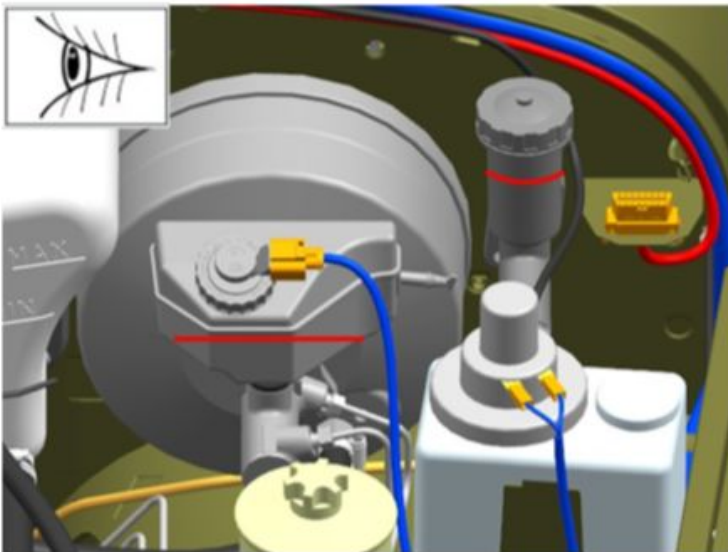
23. Bleed the power steering system by turning the steering wheel from lock to lock, without holding it in the extreme positions, 3 times in each direction.
The operation should be performed with the engine running and the front wheels suspended. During the operation, add oil to the hydraulic booster tank, preventing its level from dropping below the level of the grid.



Img 14

24. Install the oil tank cover with a gasket.

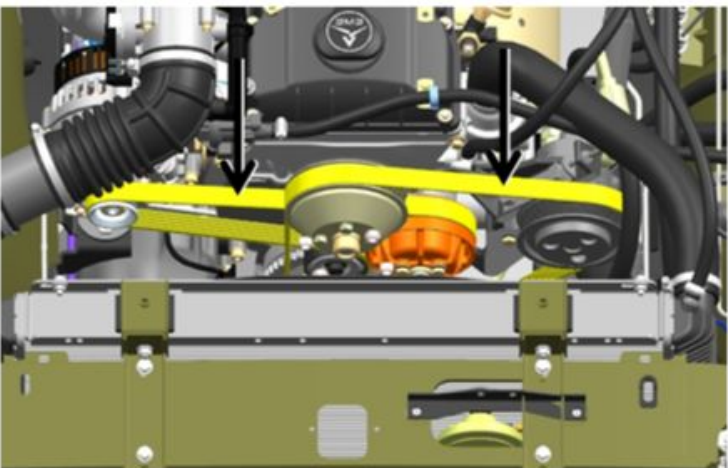
25. Tighten the nut with the O-ring of the oil tank cover.



Img 15

26. Check the fluid level in the reservoir of the clutch master cylinder.
The liquid level should be 15-20 mm below the upper edge of the tank.

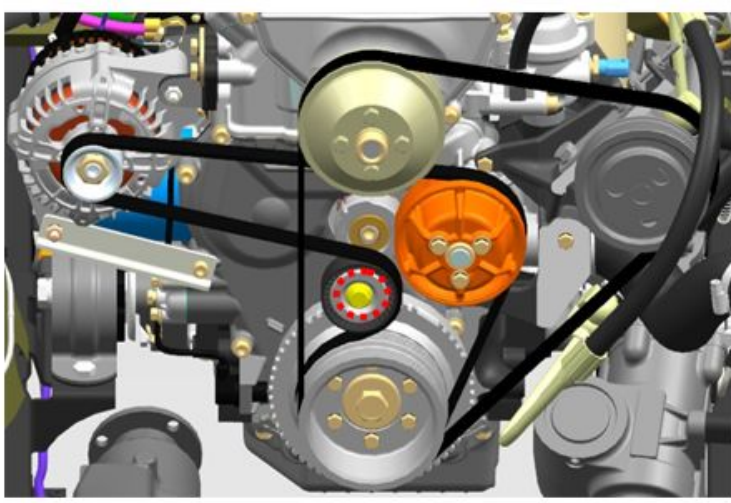
27. Check the fluid level in the reservoir of the master cylinder of the hydraulic brake.
The brake fluid level should be at the "MAX" mark.



Img 16

28. Check the tension of the accessory and fan drive belts.

The deflection of the accessory drive belt should be 6-8 mm with a load of 40 N. The deflection of the fan drive belt should be 10-15 mm with a load of 40 N. Damage or excessive stretching of the belts is not allowed.



Img 17

29. Tighten the accessory drive belt tensioner pulley bolt.

S=16

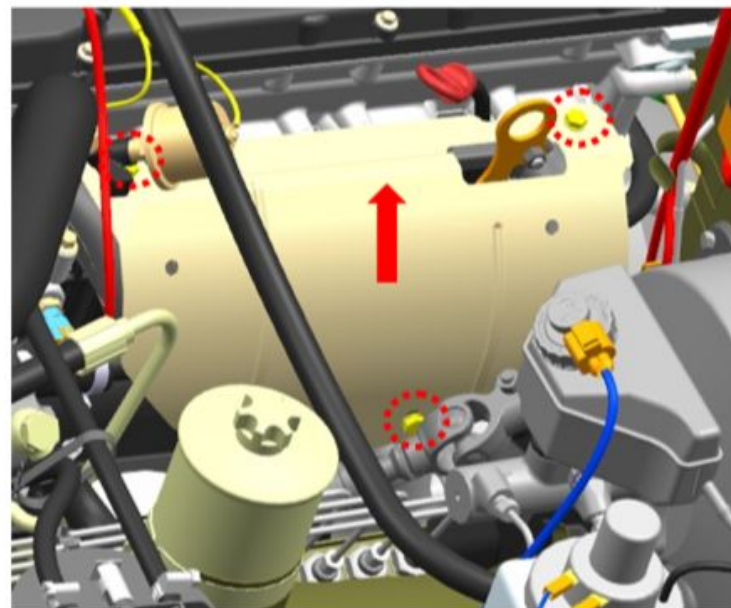
tightening torque- 15 N·m



Img 18

30. Tighten the fan clutch mount.

tightening torque- 55 N·m



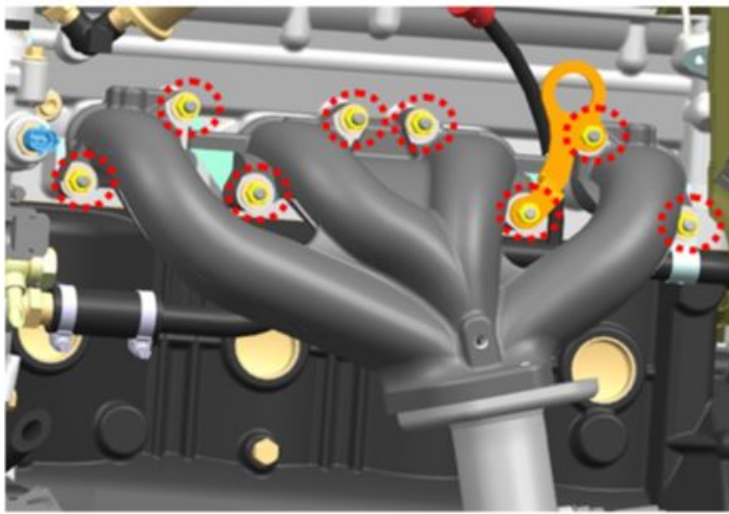
Img 19

31. Remove the bolts with washers that secure the exhaust manifold shield.

S=12

tightening torque- 12 N·m

32. Remove the exhaust manifold shield.

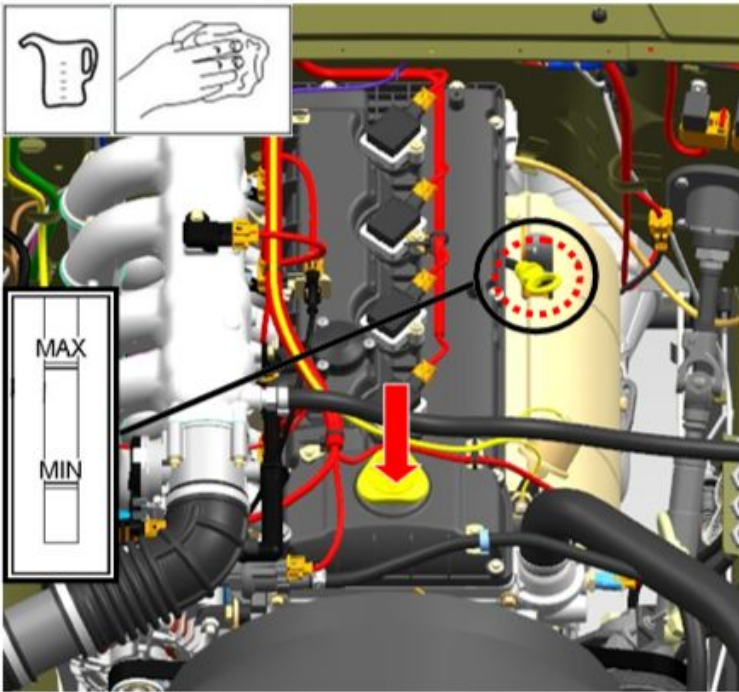


Img 20

33. Tighten the exhaust manifold retaining nuts and washers.

S=12

tightening torque- 23 N·m



Img 21

34. Fill the engine with oil up to the upper mark on the oil level indicator.

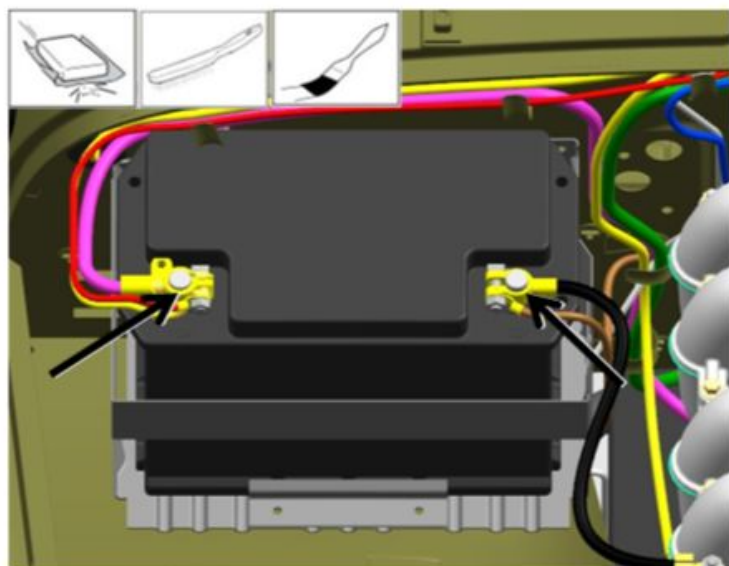
35. Start the engine.

The engine should be idling for 10 minutes. without increasing the load.

36. Stop the engine.

37. Check the oil level.

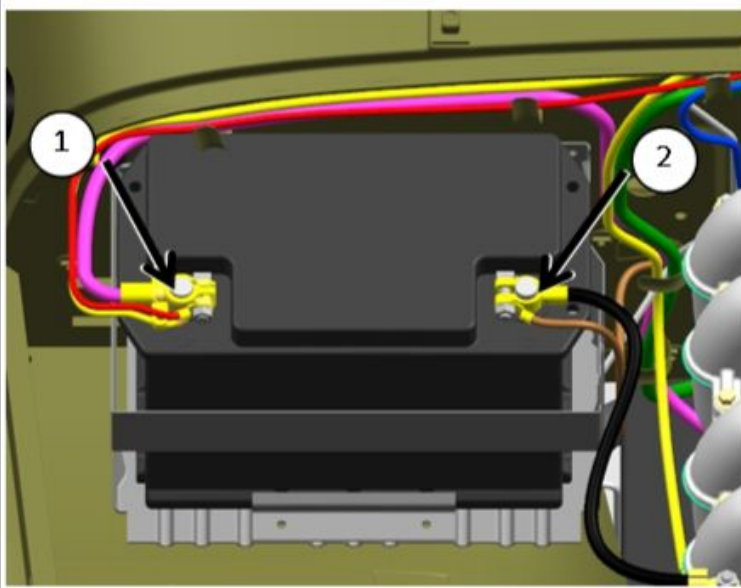
Check the oil level after 2 - 3 minutes. after stopping a warm engine. If necessary, add oil to the upper mark.



Img 22

38. Clean the leads and wire tips from oxides.

39. Treat leads and wire ends with a means to protect electrical contacts.



Img 23

40. Connect the terminal of the load plug with "plus" to the similar terminal of the battery.

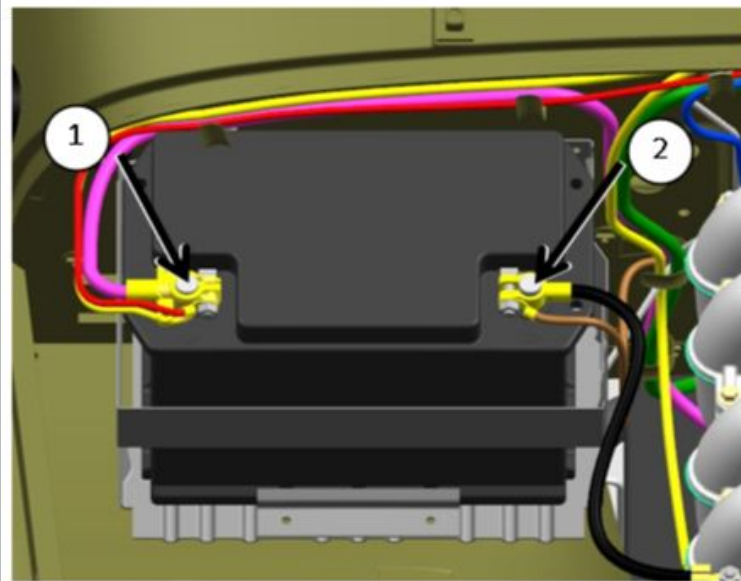
Make the connection without turning on the load coil.

41. Touch the negative pin on the case of the load plug to the negative terminal of the battery.

Record voltmeter readings.

42. Compare the obtained data with the value in Table 2.

If the battery is more than 75% charged, measure under load. If the battery is less than 75% charged, it must be charged.



Img 24

43. Switch on the load coil in the load plug, connect its terminal with "plus" to the same terminal of the battery.

44. Touch the negative pin on the body of the load plug to the negative terminal of the battery, and fix the voltmeter readings at the 5th second.

⚠ NOTIFICATION: DO NOT measure for more than 5 seconds.

45. Compare the obtained data with the value in Table 2 and take the recommended actions.



Img 25

46. Fill in the TO-45000 Card for UAZ Hunter vehicles, see Table 3.