



SHERP

SCHEDULED
MAINTENANCE
SHERP ARK XTX/XTZ

v 1.0

NOTE

Read this manual before you maintain your SHERP. It contains safe maintenance instructions and warns the user about potential hazards that can result in personal injury.

For ordering and determining necessary parts, please, check parts catalog on the following website:

<https://sherp.smartcrm.cloud/catalog>

Warnings are identified in the text by the following symbol:



The warning text warns the user about potential hazards that can result in personal injury or death.

Cautions are identified in the text by the following symbol:



Caution text contains cautions that can prevent damage to the vehicle.

This manual is based on the latest product information available at the time of printing. Quadro International LLC reserves the right to make changes at any time and without obligation.

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PREFACE

This manual describes scheduled maintenance procedures for **SHERP ARK XTX/XTZ** models from date of printing. Please take the time to read this manual carefully, for your safety and that of others. By following these instructions, you will ensure extended, trouble-free operation of your vehicle.

For maintenance and adjustment of the engine, refer to the engine manufacturer's operation and maintenance manual included in your vehicle's information package.

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No.	Description	Operating hours												
		50	100	250	500	750	1000	1500	1750	2000	2250	2500	2750	3000
12	Check the condition of the seat belts		X											
13	Check the operation of the main brake system, parking brake, engine and transmission		X											
14	Check manual transmission oil level	X				X		X			X			X
15	Check the oil level in the hydraulic reservoir			X			X	X		X		X		X
16	Change engine oil 2	X		X	X	Every 250 hours								
17	Replace the filter element of the oil filter in the engine lubrication system	X		X	X	Every 250 hours								
18	Check fuel lines and clamps; replace damaged ones	X			X		X	Every 500 hours						
19	Check pipelines, clamps and tap for switching exhaust gas flow in the tire inflation system	X			X		X	Every 500 hours						
20	Check battery wires and terminals batteries; lubricate the terminals	X			X		X	Every 500 hours						
21	Replace propeller shaft crosses					X		X			X		X	
22	Check radiator pipes, expansion cooling tank and other elements of the cooling system for reliability of fastening and tightness	X						X		X				X
23	Check/adjust the clutch pedal travel			X		X								
24	Replace air filter element of engine			X	Every 250 hours									
21	Replace propeller shaft crosses					X		X			X		X	

No.	Description	Operating hours												
		50	100	250	500	750	1000	1500	1750	2000	2250	2500	2750	3000
22	Check radiator pipes, expansion cooling tank and other elements of the cooling system for reliability of fastening and tightness	X					X			X				X
23	Check/adjust the clutch pedal travel			X		X								
24	Replace air filter element of engine			X	Every 250 hours									
25	Adjust the control of the main brake system and steering unit; lubricate the rotating and moving surfaces and, if necessary, replace brake pads			X	Every 250 hours									
26	Adjust the parking brake control			X	Every 250 hours									
27	Replace the fuel filter element of the secondary fuel filter and the primary filter	X		X	Every 250 hours									
28	Remove fuel sediment				X		X	Every 500 hours						
29	Replace engine drive belt					X	Every 750 hours							
30	Clean the outer surface of the radiator; make sure the radiator is securely attached				X		Every 500 hours							
31	Change the oil and filter in the hydraulic system					X	Every 750 hours							
32	Change gearbox oil					X	Every 750 hours							
33	Check/tighten the UTV external threaded connections			X	Every 250 hours									
34	Replace diesel particulate filter	After 3000 hours or 36 months, whichever comes first.												X
35	Check wiring for defects and loose connections	Every year												
36	Check/if necessary replace batteries	Every three years												

No.	Description	Operating hours											
		50	100	250	500	750	1000	1500	1750	2000	2250	2500	2750
37	Check of branch pipes, clamps of fastening tire inflation systems	Every two years											
38	Replace hydraulic fluid in clutch system												
39	Replace pipes, hoses, clamps and fastening engine cooling systems												
40	ScanTools control	For the first time with test maintenance at 50 hours, then every 250 hours											

WARNING

Before maintenance procedures make sure:

- 1. UTV parked on the plain ground without any incline.**
- 2. Tires fully flat**
- 3. The Parking brake is engaged**
- 4. Stop the engine and remove the key**
- 5. The master switch is in “OFF” position**
- 6. Remove terminals from both batteries**
- 7. Read all instructions before installation**

CABIN TRIM DISSASSEMBLY



1. Remove steering wheel column fabric cover.
 - a. Unzip a zipper in the upper part of column
 - b. Unclip fastex on the steering wheel and bend away the fabric cover
 - c. Untie a fixing lace
 - d. Carefully unclip and remove the lower part of the cover. It fixed with the help of Welcro



2. Remove left side fabric cover.

⚠ CAUTION

Don't pull excessively hard. You can damage the Welcro fixators.





3. Remove right side fabric cover. Unclip two fastex in the front of the cover.



4. Remove the central fabric cover. Untie laces on the parking brake lever and gear shift handle. Then pull cover up a little bit. Unclip the lower part of cover.





5. Pull the handle beneath the seat up and move the seats all the way back. Unscrew two front bolts with hex key 5 mm.



6. In the same way move the seat all the way to the front of UTV. Also tilt seats back to the front. Unscrew two rear bolts with hex key 5 mm.



7. Repeat the same actions with the second seat. Dismount both seats.



8. Dismount seat belts. To do this unscrew the bolts with 17 mm wrench. Location of the bolts are shown on the picture below.



9. Remove the fabric cover from the ROPS column and rear side of UTV.



10. Remove the fabric cover from opposite side in the same way

11. Remove the fabric cover and rear passenger seats by unclipping 4 fastex clips.



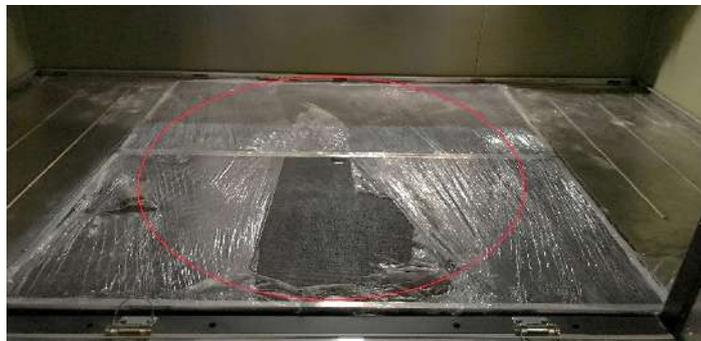
12. Remove rear seats' back. To do so grab the wire that situated behind the seats' back and pull it up.



13. Fold the seats' back in direction of UTVs front. Remove two axles and dismount the seats' back.



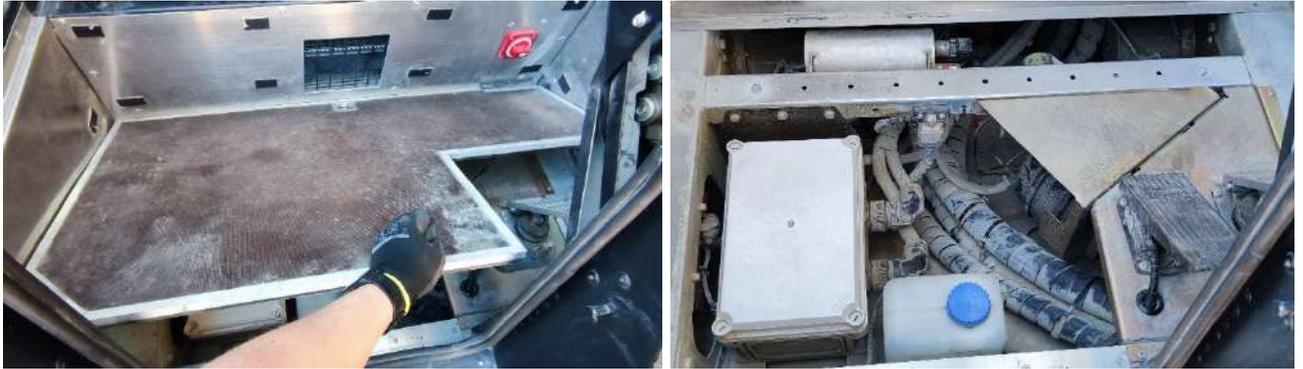
14. Remove rear compartment fabric cover.



15. Unscrew 8 screw with hex key and remove steering wheel cover.



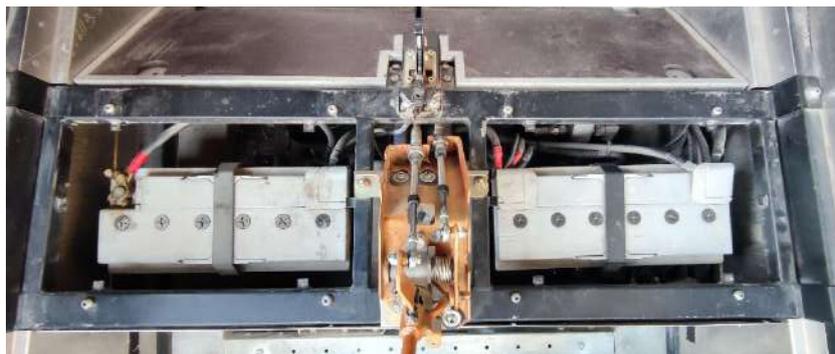
16. Remove the front floorboard



17. Unscrew and remove cover beneath front seats mounting place.

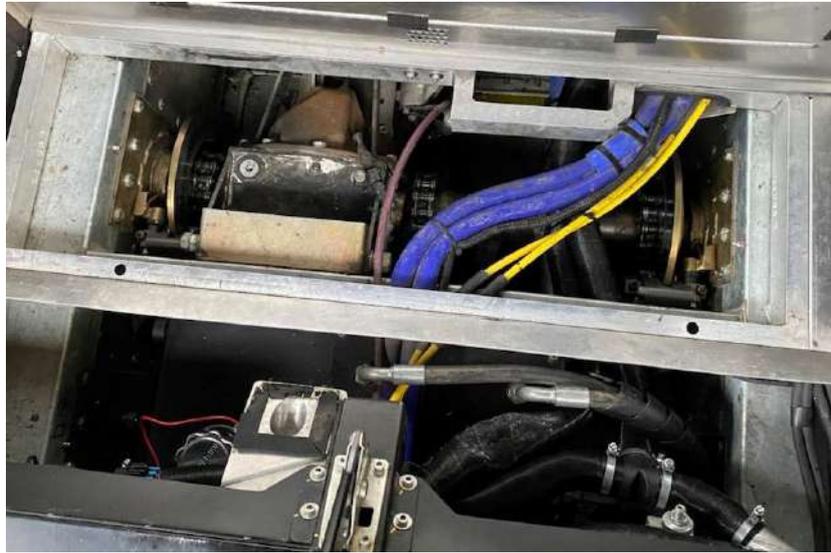


18. Remove the battery compartment covers.



19. Remove floorboards in the rear passenger compartment.

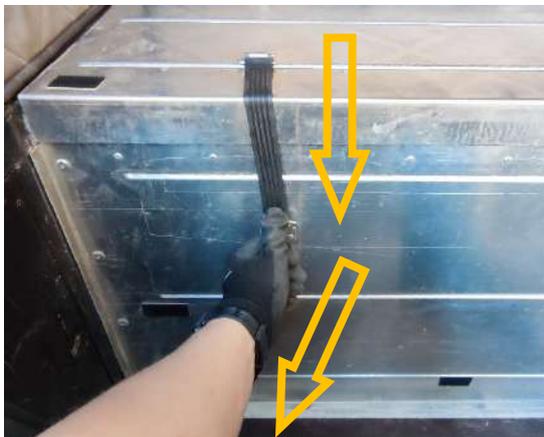




20. Unscrew and remove the cover on the left side of UTVs cabin.



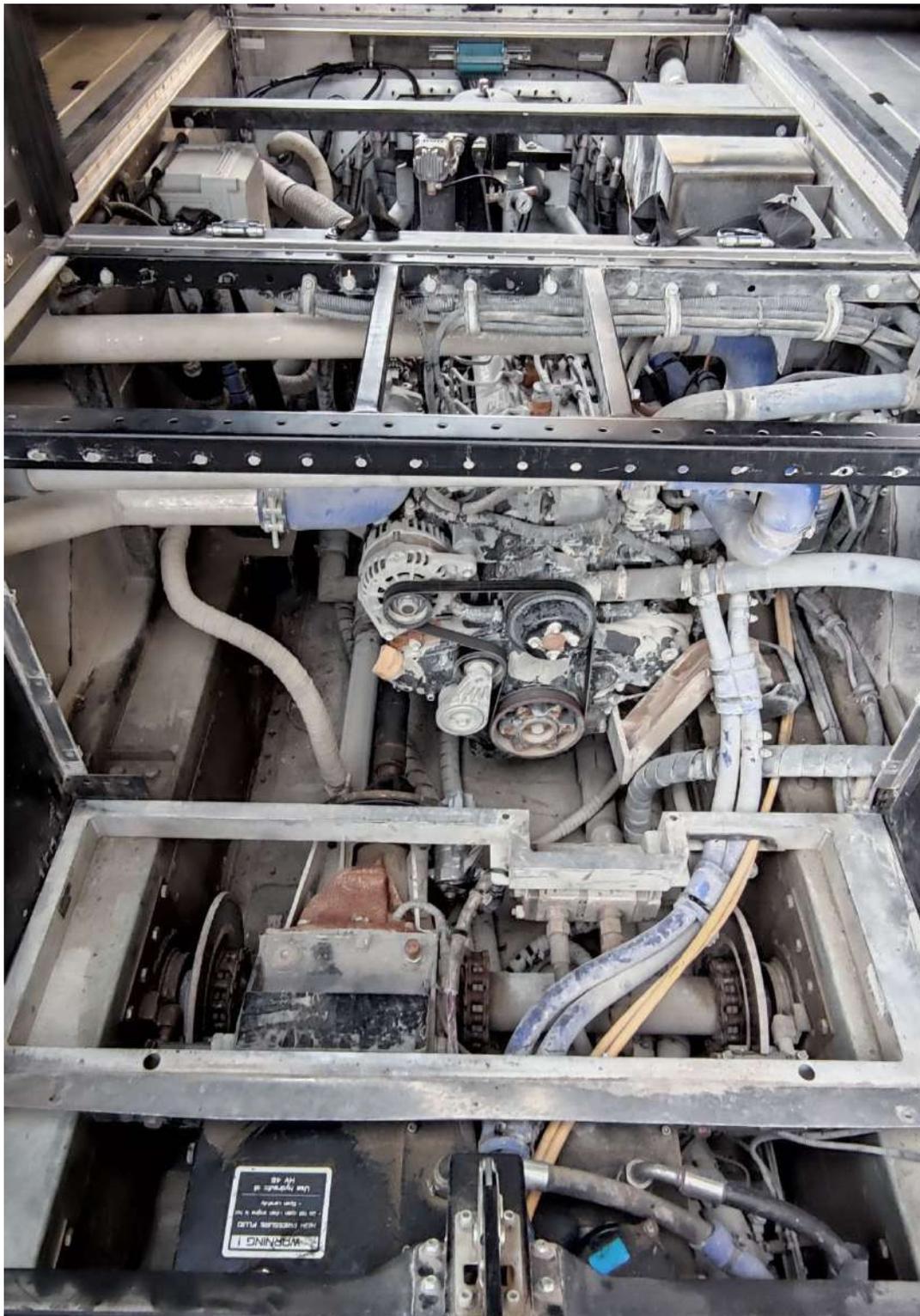
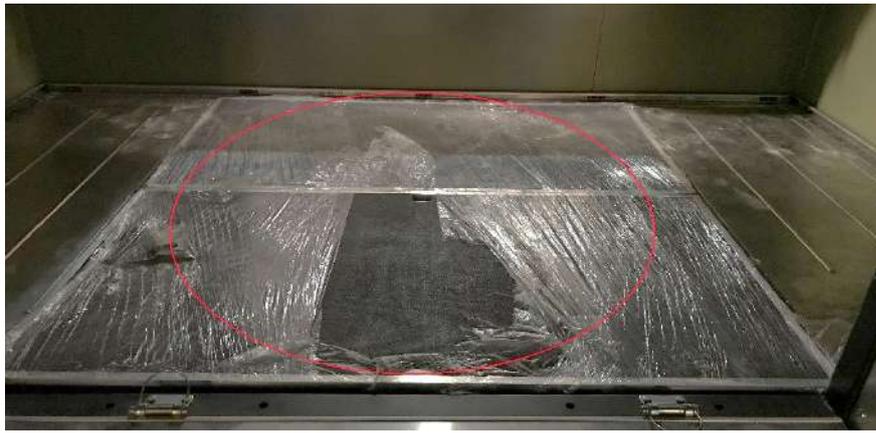
21. To remove the engine compartment hood, pull the fixing straps down and to yourself.



22. Unscrew and remove the front engine compartment cover.

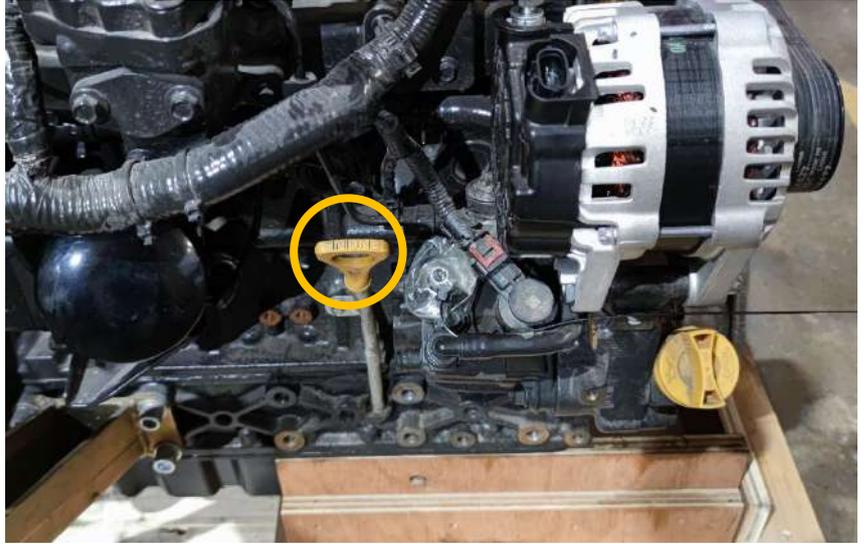


23. Remove the floorboards above the engine compartment.

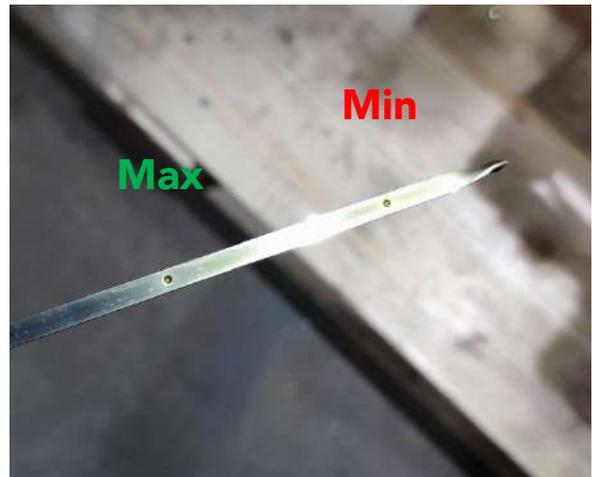
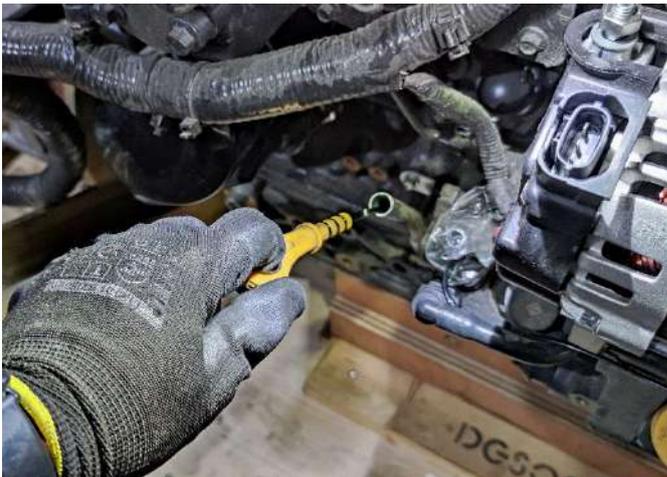


CHECK ENGINE OIL LEVEL

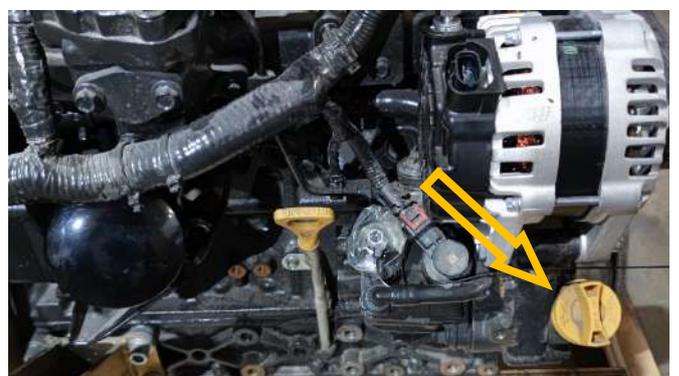
1. Locate the engine oil dipstick. If you facing the engine from the side of main drive belt it will be on its left side.



2. Measure the engine oil level with the help of the dipstick.



3. If necessary top up the oil level through one of two filling necks.



4. Use 10W30 type of engine oil for example YUKO Mega JDX. Recommended volume of oil 6.5 litres.

CHECK COOLANT LEVEL

1. To check coolant level you need to remove fabric and metall covers on the left side of UTVs cabin.

⚠WARNING

For safety measures don't check the level of coolant immediately after the engine stopped. The engine coolant and radiator are hot and you need approximately from 1 to 2 hours to wait.



2. Open the radiator cap and determine the coolant level. If the level of coolant is proper the surface of the liquid will be above internal radiator cells.
3. If necessary top up with **YUKO -40 G12** coolant or analog. Coolant total volume **11 litres**.

REMOVE DEBRIS FROM THE INTAKE GRILL, AND ENGINE COMPARTMENT

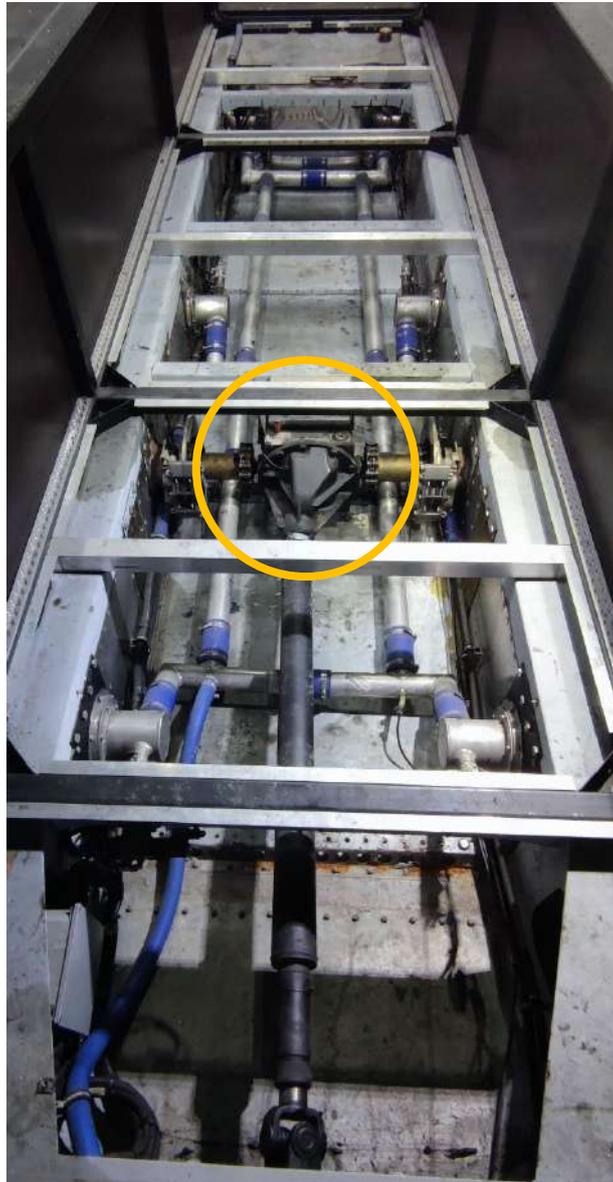
Use the any suitable equipment to make clean intake grills and its internal space.



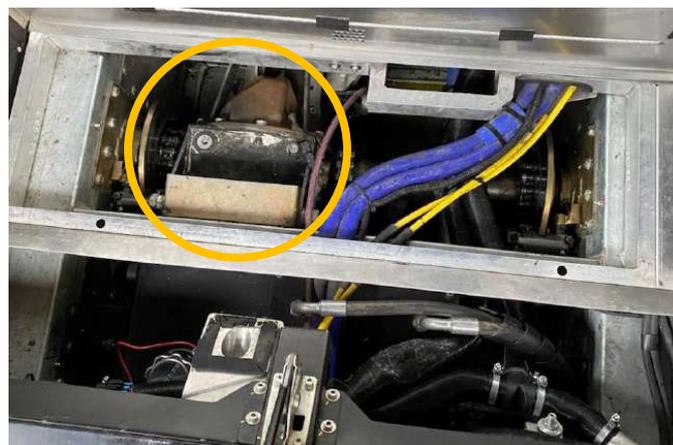
CHECK REDUCTION GEARBOXES OIL LEVEL

Inside SHERP Ark are two reduction gearboxes that situated in different sections of UTV. They both are the same design.

The gearbox inside the rear section is situated almost in the middle of the section.



The gearbox inside the front section of UTV is situated under floorboards for rear row of passengers.

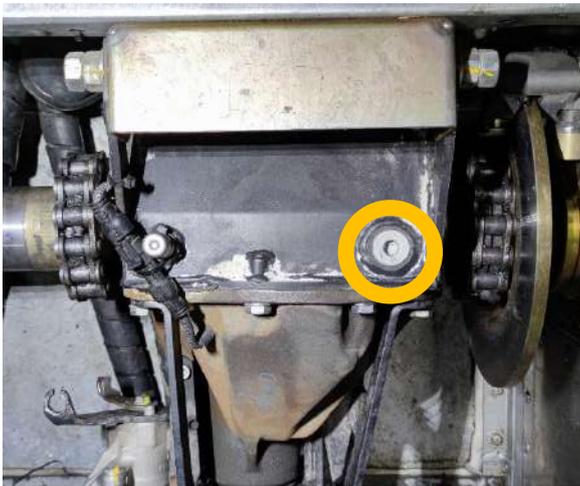


First, check the space around each of the reduction gearboxes. If there is some oil spillage try to investigate is this oil from this gearbox.

To check the oil level in the gearboxes you need to unscrew plug that situated on right side (shown in the picture below) of gearbox body with 10 mm hex key. if through the checking plug start leak the oil it means that level inside is normal.



If there is no leak, you need to open the filling plug on top of the gearbox with 10 mm hex key. Pour the oil inside till the oil starts to leak through the checking plug filling plug and look for the leaks in the gearboxes. You should use **85W140 GL5**. Recommended volume of oil in reduction gearboxes **2,5 litres**.

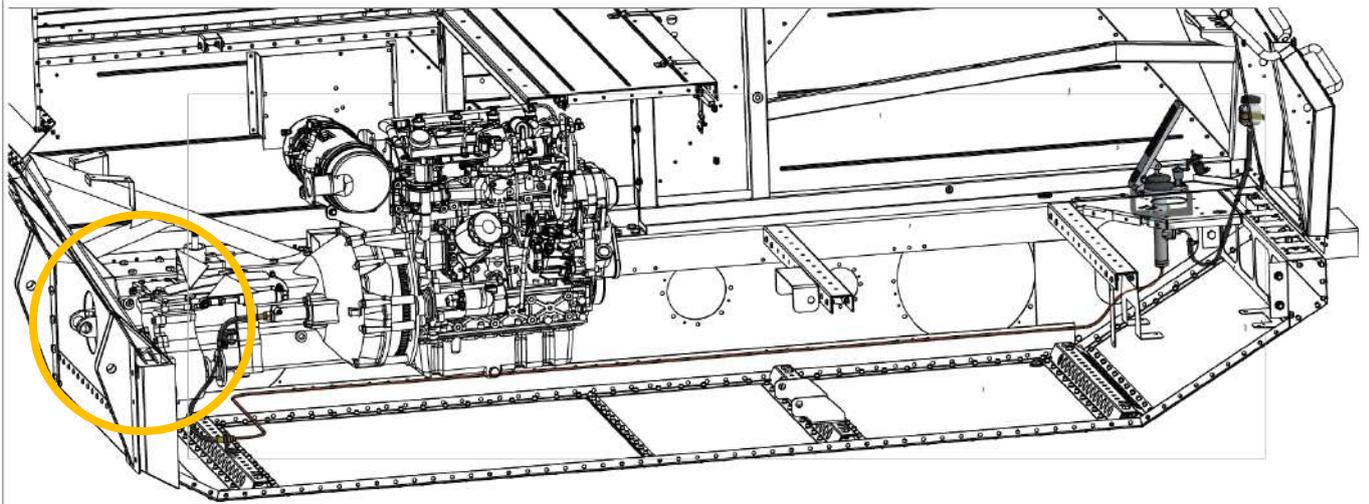


⚠ WARNING

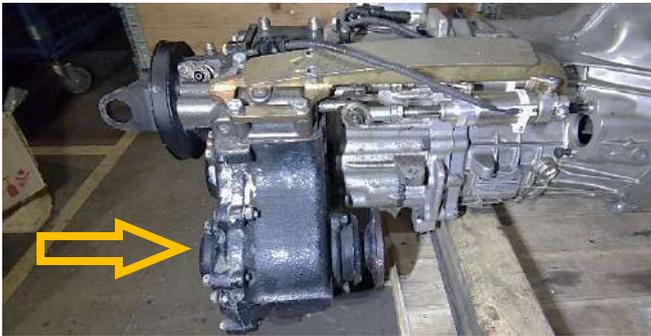
For safety measures after checking or adding oil, clean all the oil stains or spillages on the gearbox body. Clean the surfaces around the gearboxes.

CHECK TRANSFER CASE OIL LEVEL

1. Transfer case of the transmission is situated in the rear part of the engine compartment.



2. Location of check plug is shown in pictures below



3. To check the oil level screw out slowly the check plug with 12 mm hex key till oil starts to leak.



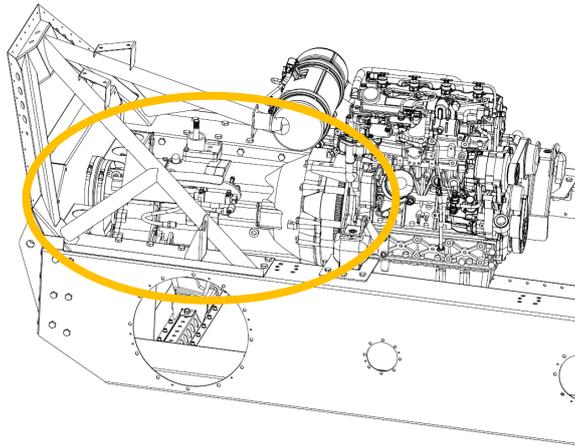
4. If oil did not start to leak, screw the check plug fully out. Add oil till it starts to leak back out. Use **75W85 GL4** oil. Recommended oil volume – 0.8 - 1 liter.

⚠️ WARNING

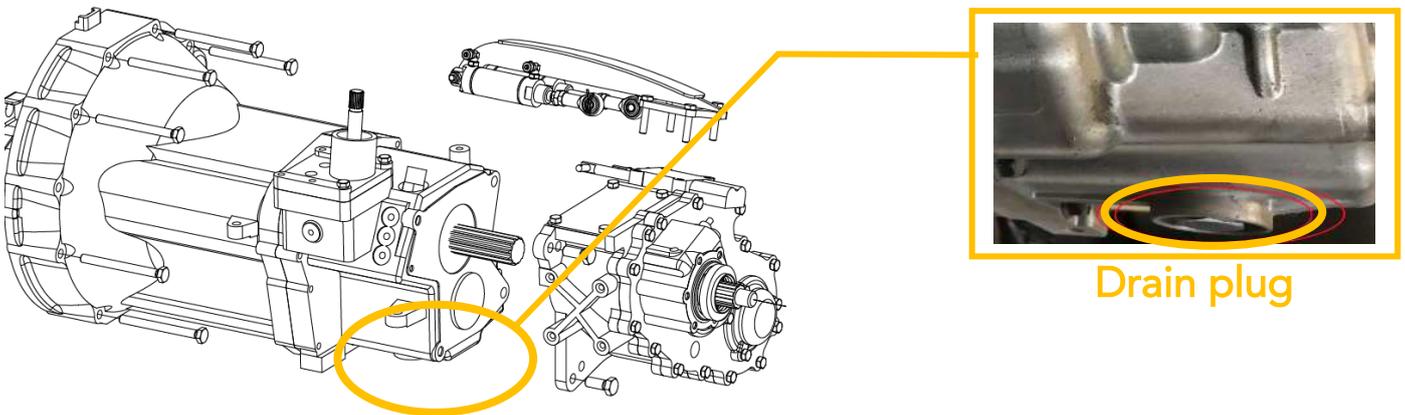
For safety measures after checking or adding oil, clean all the oil stains or spillages on the transfer case body. Clean the surfaces around the transfer case.

REPLACE TRANSMISSION OIL

1. Transmission is situated in the rear part of the engine compartment.

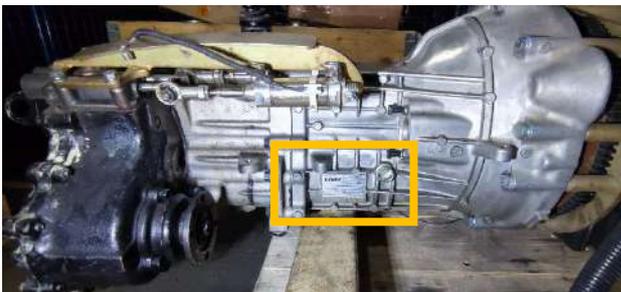


2. Prepare and install container for waste oil (at least 5 L volume) beneath transmission drain plug. The location of the drain plug is shown in the picture below. Use 23 mm socket to unscrew the drain plug and remove old oil. Screw in and tighten the plug back when waste oil will be removed.

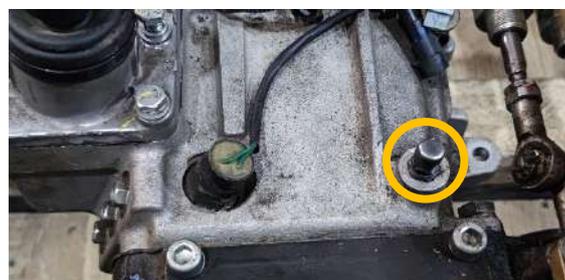
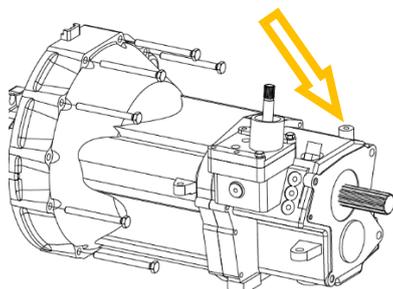


3. To fill the new oil you have several options
 - a. Use a 23 mm socket head to unscrew the check plug. Location of the check plug is shown in the pictures below.

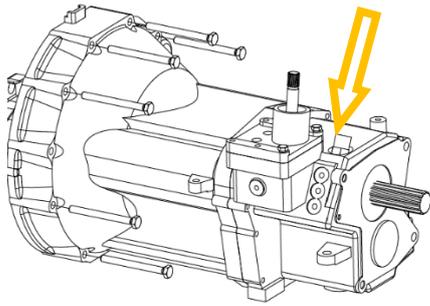
Check plug location



- b. Unscrew the transmission breather and use its opening for adding the oil (location shown on the picture below)



c. Unscrew gear sensor and add the oil (location shown on the picture below)



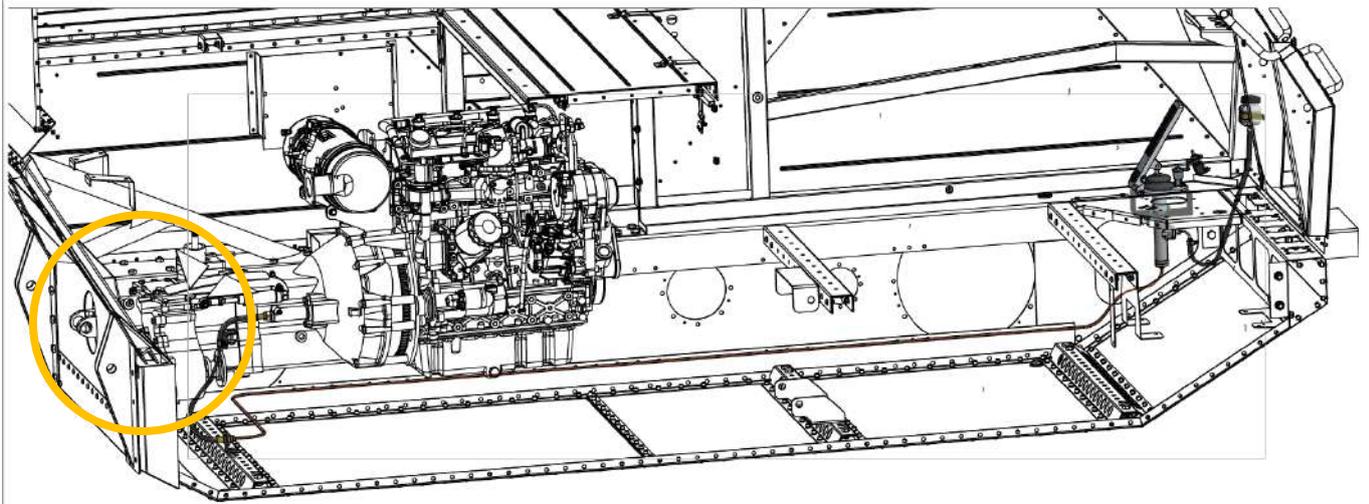
4. When the old oil is extracted, add 5 litres of **75W85 GL4** oil. Screw-in the filling plug and tighten it.
5. Check the level of the oil inside the transmission every **50 hours**.

⚠ WARNING

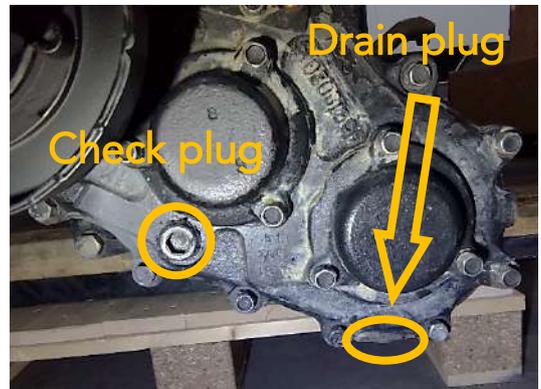
For safety measures after checking or adding oil, clean all the oil stains or spillages on the transmission body. Clean the surfaces around the transmission.

REPLACE TRANSFER CASE OIL

1. Transfer case of the transmission is situated in the rear part of the engine compartment.



2. Location of check plug and draining plug are shown in pictures below



3. Prepare and install the container for waste oil beneath transfer case drain plug. Using 12 mm hex key unscrew drain plug and let the waste oil to leak out. After waste oil extraction screw in the drain plug and tighten it.



4. Because of the confined space it is difficult to use the check plug as the filling spot. Remove the top cover (location shown in the pictures below) by unscrewing 4 hex bolts. Add 0.8 - 1 liter of 75W85 GL4 oil.



5. Check the level of the oil inside the transmission every 50 hours.

WARNING

For safety measures after checking or adding oil, clean all the oil stains or spillages on the transfer case body. Clean the surfaces around the transfer case.

CHECK THE SOUNDNESS AND TIGHTNESS OF THE TIRES

1. Following the instructions from the Operators manual start the engine and inflate the tires of both UTV's sections. The tire pressure should be **100-120 mm Hg**. Stop the engine and leave the UTV for 4-5 hours. After check the pressure on the UTV's pressure gauge. If the pressure remains the same you don't have the damages in the tires. If pressure dropped seriously you need to make inspection of the wheels and tires.



2. Increase the tire pressure up to the 150-160 mm Hg. Stop the engine, make inspection of wheels and tires for both sections.



Look for the holes, untightness, deep cuts. Air leaks can be indicated by the by ear. Eliminate located damages of the tires or wheel rims.

Some cuts and hole in tires can be repaired with the instruments from the travel repair kit that supplied with UTV.



For repair more serious damage, we recommend to contacting the truck tire service.

CHECK THE OPERATING STATUS OF THE CONTROLS, MEASURING METERS AND LIGHT INDICATORS

1. Start the engine of UTV and make operation testing of the controls, gauges and light indicators.



2. Switch ON and OFF the inflation system valves to inflate the tires. Check the proper work of switchers, light indicators, pressure gauges and inflation system in overall.



3. Check the work of the switchers for the different UTVs systems.



4. Simultaneously with switcher check confirm proper work of the following light indicators.



5. Fold the UTV as shown below and check the work of the rear section inclinometer.



6. Engage the parking brake while engine is running to check the work of the parking brake indicator and sound signal.



7. Check the work of gauges on the display.



CHECK THE TIGHTENING TORQUES OF THE THREADED JOINTS OF THE WHEELS TO THE HUBS

1. Using torque wrench, wrench extensioner and 27 mm socket head check tightening torque of the nuts. Tightening torque should be 250 – 280 Nm.



2. Using torque wrench 17 mm socket head check tightening torque of the beadlock bolts. Tightening torque should be 20 – 25 Nm.

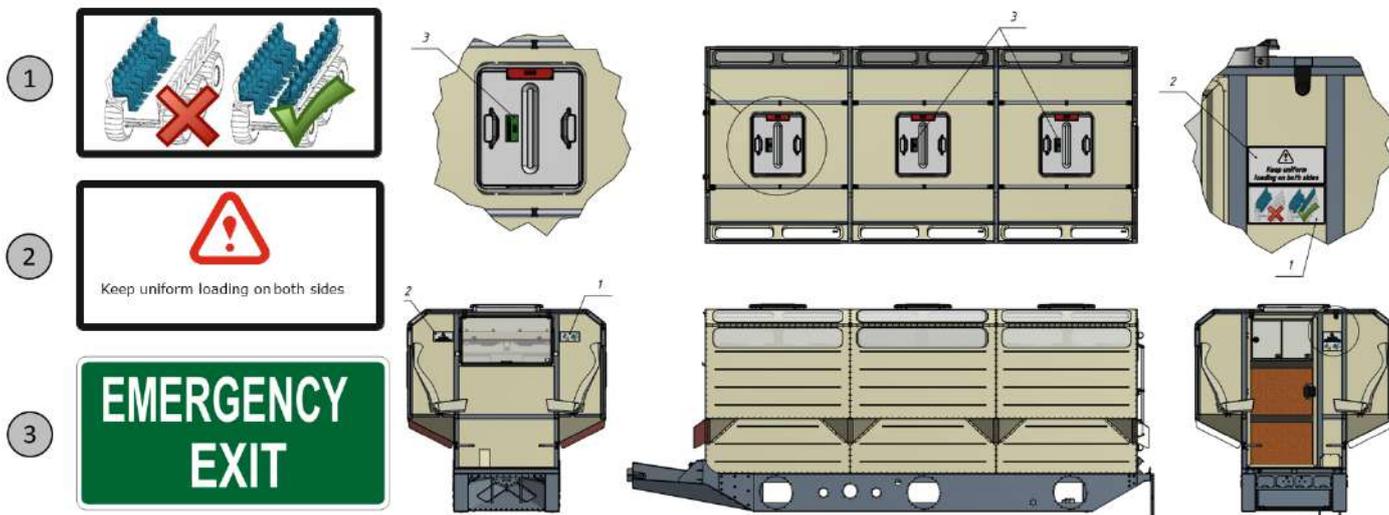


ENSURE THAT THERE ARE NO DAMAGED WARNING LABELS; REPLACE WORN OR DAMAGED LABELS

1. Check the condition of important warning labels inside the cabin, replace if necessary



2. If this is SHERP ARK XTZ (People mover) check the condition of important warning labels inside the rear section of UTV, replace if necessary



CHECK THE CONDITION OF THE SEAT BELTS

1. Check the condition of 4 seat belts in the cabin. Belts shouldn't be worn out one or have cuts. Check the work of the seat belts locks. There shouldn't be single jam of the lock. Replace all locks that jamming or don't work properly.



2. If this is SHERP ARK XTZ (People mover) check the condition of each seat belt and lock in the rear section of UTV.



⚠️ WARNING

Remember to check your seat belts regularly. A seat belt will save someone's life and health!!!

CHECK THE OPERATION OF THE MAIN BRAKE SYSTEM, PARKING BRAKE, ENGINE AND TRANSMISSION

1. For the brake system, parking brake, engine and transmission checks make test-drive.

⚠️WARNING

To avoid any accidents make test drive on the locations without people.

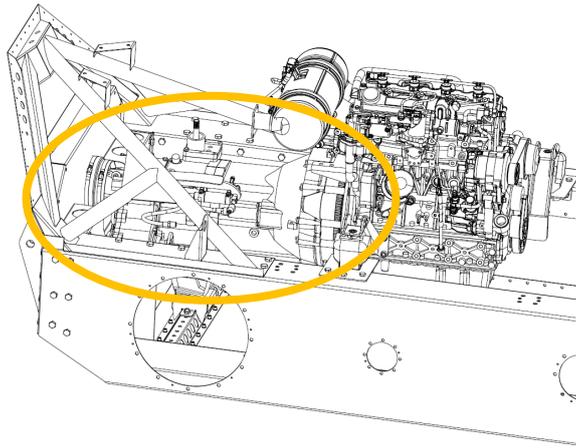
There should be enough space without any obstacles for maneuvers of UTV.

Do not get distracted while driving. Always fasten your seat belt. First aid kit and extinguisher should be available in the UTV.



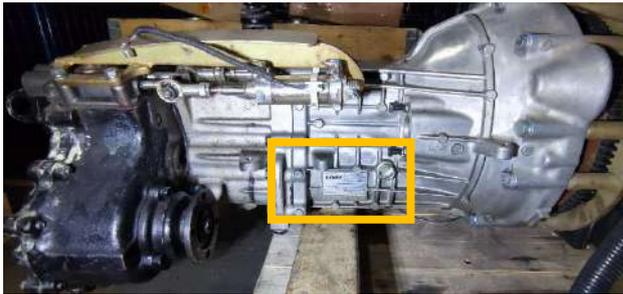
CHECK TRANSMISSION OIL LEVEL

1. Transmission is situated in the rear part of the engine compartment (front section of UTV).



2. Prepare and install small container for oil (beneath transmission check plug). The location of the check plug is shown in the pictures below. Use 23 mm socket for unscrewing the check plug till oil will not start to leak out. Screw in and tighten the plug back when oil start leak out. It means that oil level is normal. If oil didn't start to leak it means that level of oil is low and it is necessary to add the oil. Oil adding procedure described in the REPLACE TRANSMISSION OIL part.

Check plug location



⚠️ WARNING

For safety measures after checking or adding oil, clean all the oil stains or spillages on the transmission body. Clean the surfaces around the transmission.

CHECK THE OIL LEVEL IN THE HYDRAULIC RESERVOIR

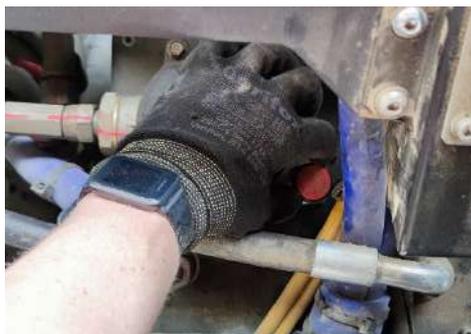
1. Main hydraulic fluid tank situated in the middle of UTVs front section. Beneath the floorboards on the second seat row.

⚠️WARNING

For safety measures check the level of the hydraulic fluid before UTVs operation starts because hydraulic can heat up to high temperatures and any occasional oil drop can make burns.



2. Screw out the dipstick and check the hydraulic fluid level. Oil should reach the level of 2 centimeter lower than dipstick starts.

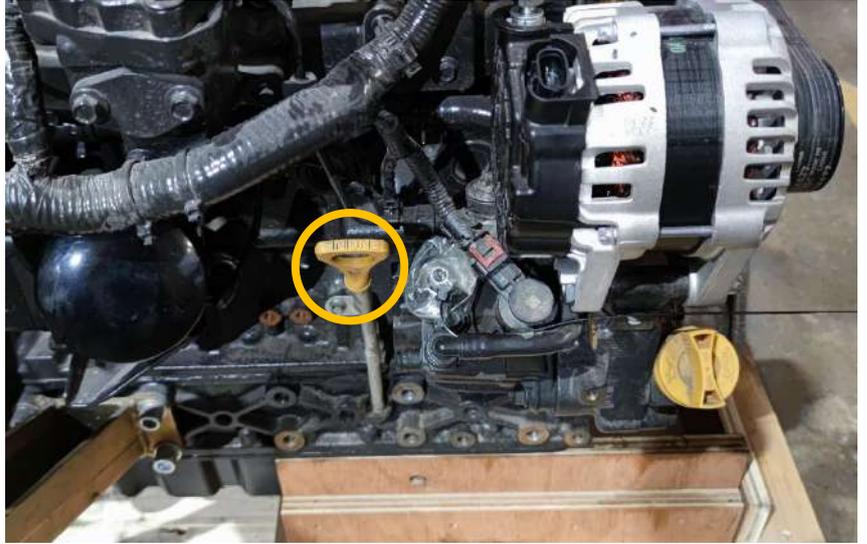


3. Try to maintain permanently high level of hydraulic fluid. If necessary add hydraulic oil **PETRONAS HYDRAULIC HV 46**. Volume of hydraulic fluid in the system 50 liters.

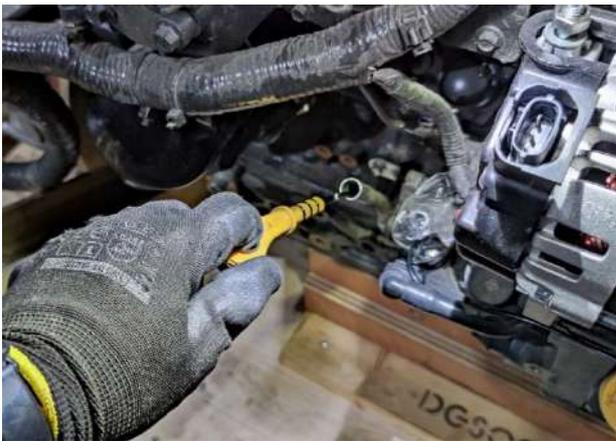


CHANGE ENGINE OIL

1. Locate the engine oil dipstick. If you facing the engine from the side of main drive belt it will be on its left side.



2. Pull out the oil dipstick.



3. Use a waste oil extractor and remove the old engine oil through the dipstick opening.



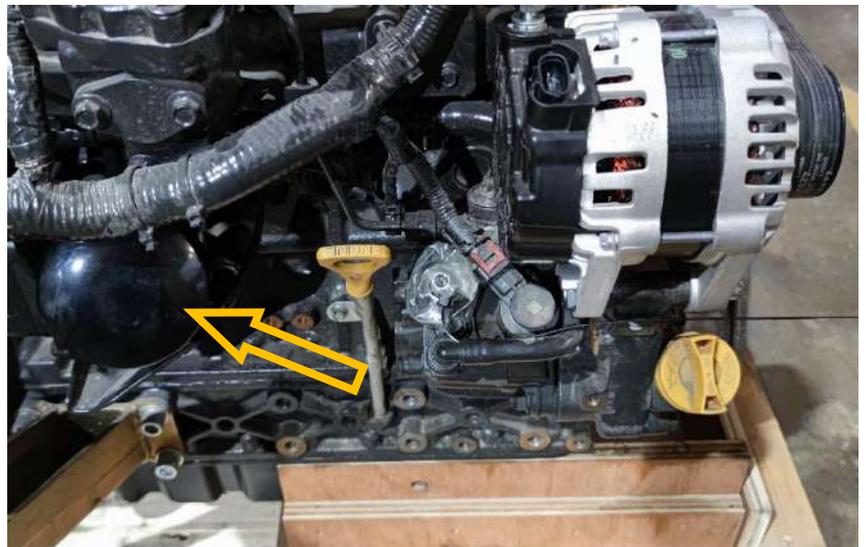
4. After waste oil extraction add new oil through one of two filling openings.



5. Use 10W30 type of engine oil for example YUKO Mega JDX. Recommended volume of oil 6.5 litres.

REPLACE ENGINE OIL FILTER

1. Locate the engine oil filter. If you facing the engine from the side of main drive belt it will be on its left side.



2. Use the oil filter removing tool to unscrew the old filter.



3. Take the new filter and apply a little bit of new oil on its surface.



4. Install the new oil filter. Tighten the filter with torque 18 – 20 Nm



5. Use paper tissue remove any oil in the filter connection place.

⚠ CAUTION

Be careful not to let foreign substances flow into the engine when replenishing engine oil.

⚠ WARNING

For safety measures after checking or adding oil, clean all the oil stains or spillages on the engine body. Clean the surfaces around the engine.

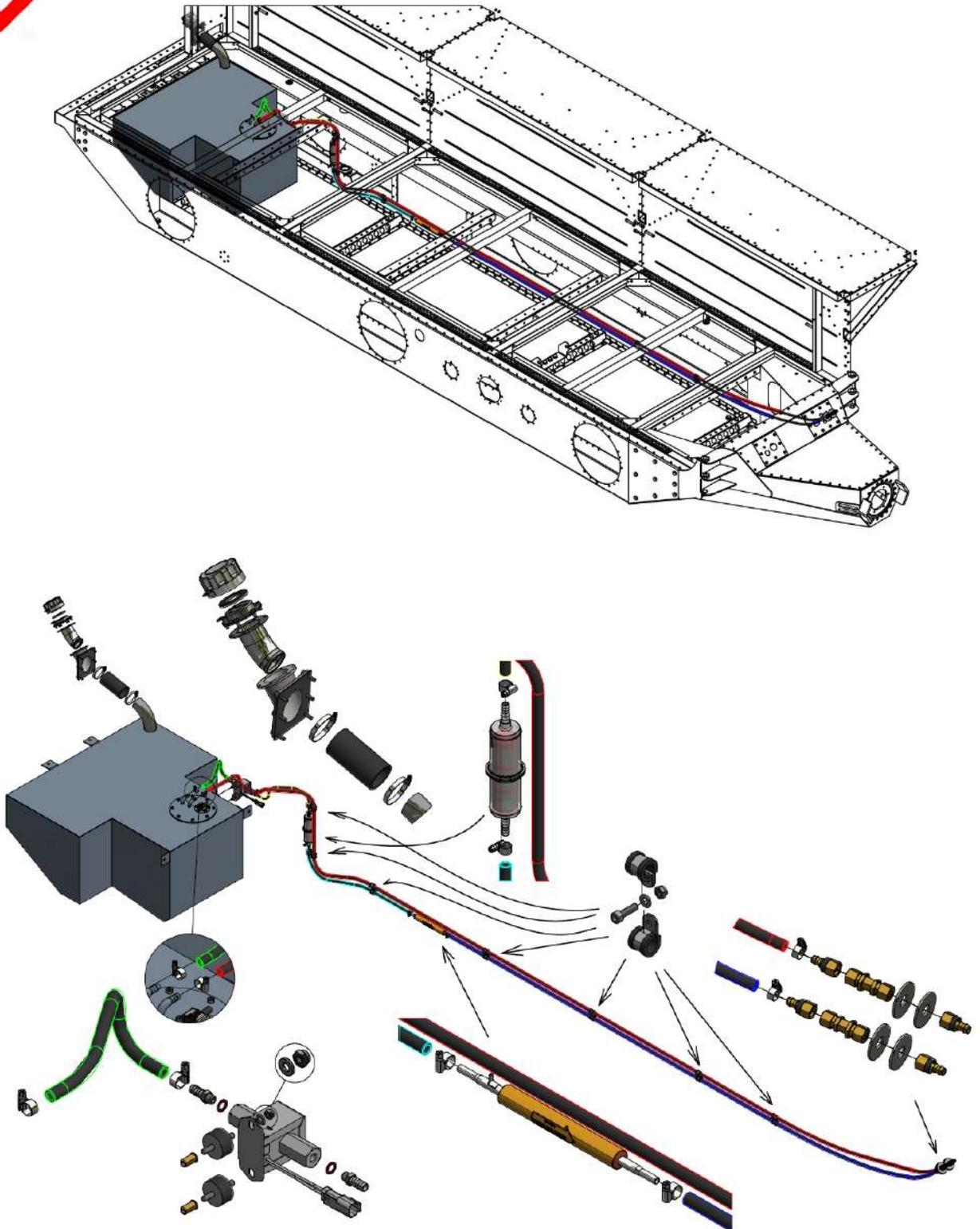
CHECK FUEL LINES AND CLAMPS; REPLACE DAMAGED ONES

1. UTVs fuel system is divided into two big parts. In the rear section is situated the main fuel tank with a fuel pump and one primary filter. Remove the floorboards, bilge boxes and inspect the fuel system from the main tank to the connection point of the line to the front section line. Look for leaks, damaged clamps. Replace or repair faulty parts of the system.

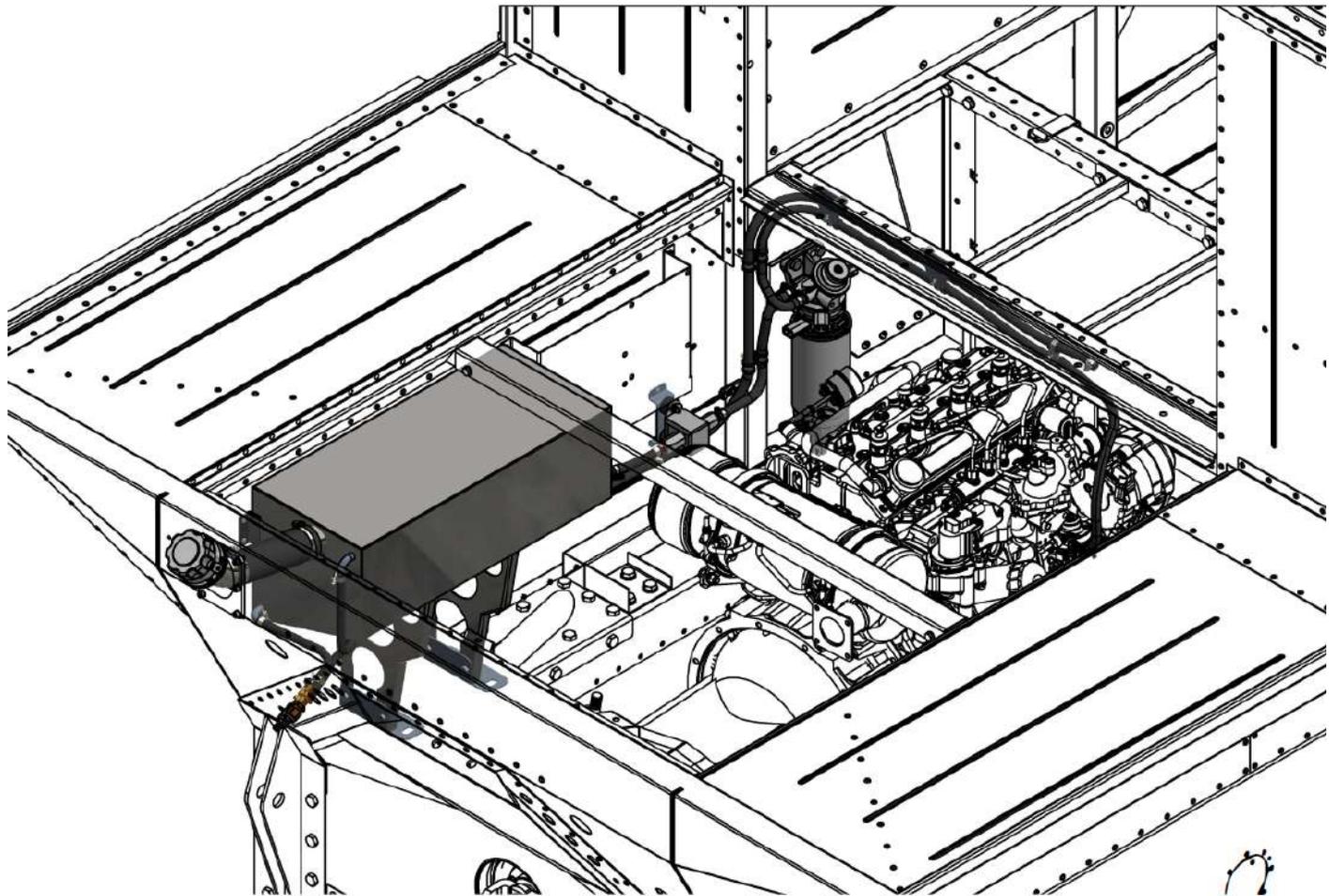


!WARNING

Work with flammable liquids requires extra caution. Please, follow all safety procedures.



2. Check the front section fuel system for leaks, damaged clamps, and fittings.

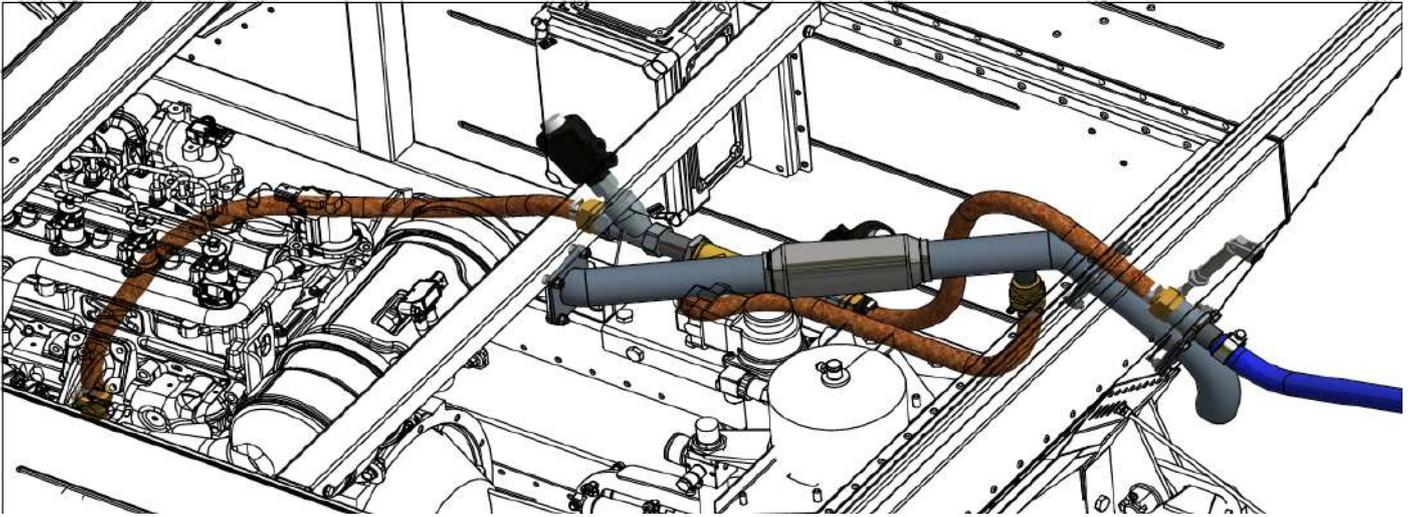


⚠ WARNING

Remove any fuel or flammable liquids spillage inside UTV. It will decrease the risk.

CHECK PIPELINES, CLAMPS AND VALVE FOR SWITCHING EXHAUST GAS FLOW IN THE TIRE INFLATION SYSTEM

1. Main control valves of the tire inflation system are situated in the rear part of the engine compartment. Check inflation system piping, eliminate any leaks and untightnesses.



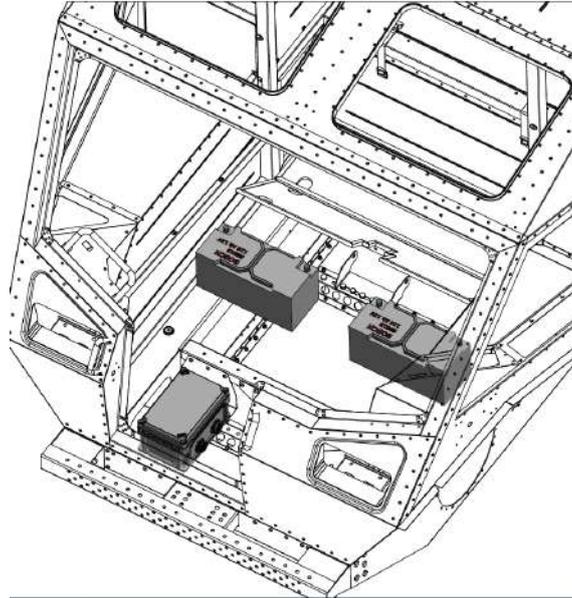
2. Check and fix if necessary the work of two cutoffs valves and the butterfly valve.



CHECK BATTERY WIRES AND TERMINALS BATTERIES;
LUBRICATE THE TERMINALS

⚠ WARNING

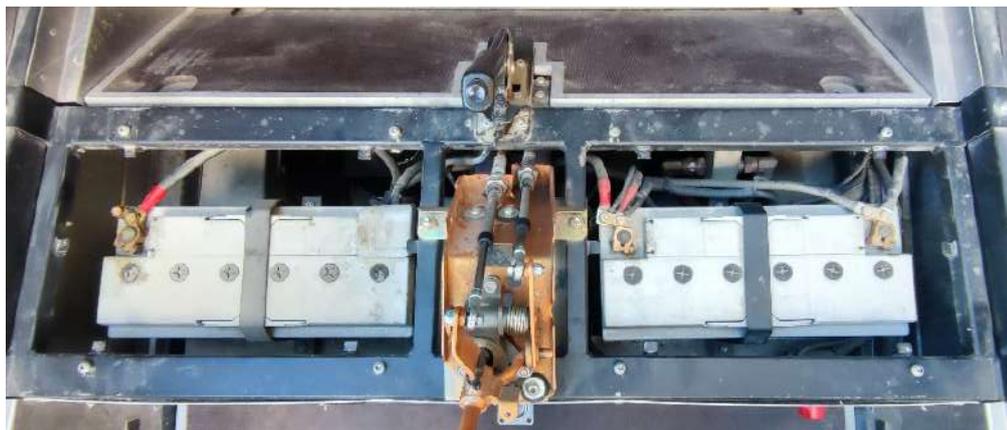
For safety measures before the batteries check turn the master switch in the "OFF" position.



1. Remove central fabric cover and unmount driver and passenger seats inside the cabin. For instructions how to unmount seats refer to the **INTERIOR DISASSEMBLY** part.



2. Remove battery compartment covers.



3. Check the condition of wires and terminals on both batteries.

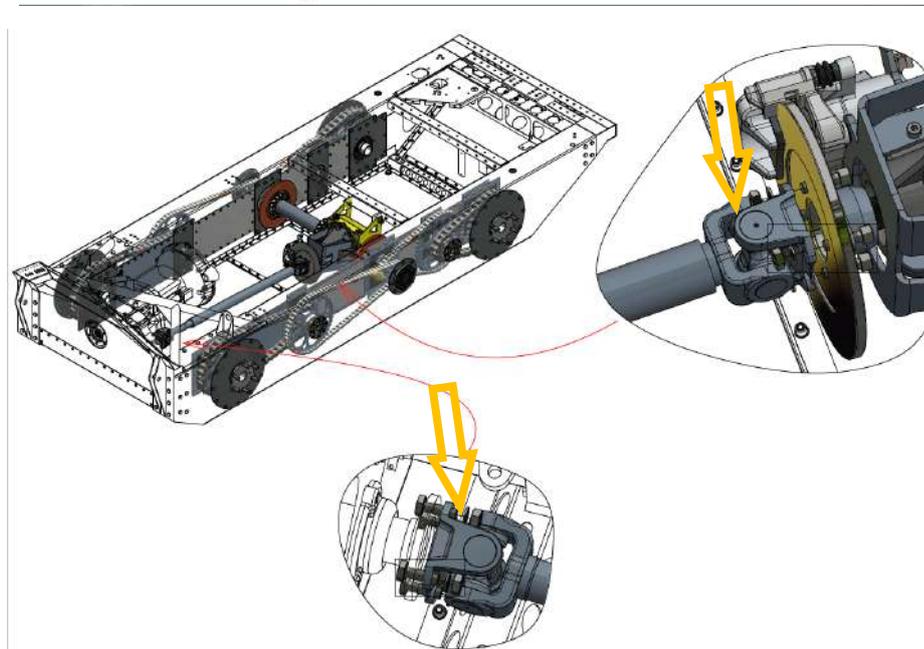
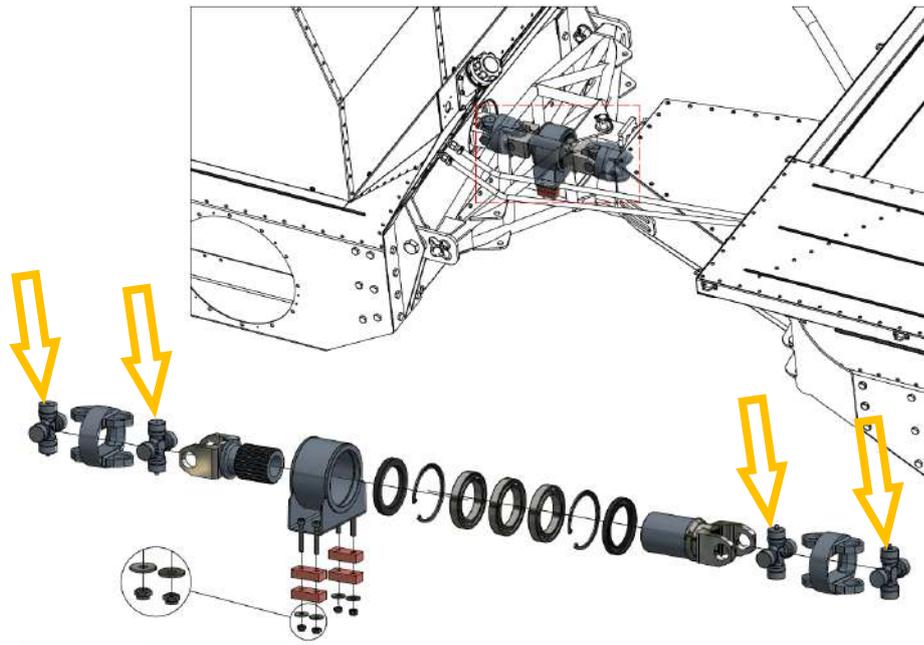
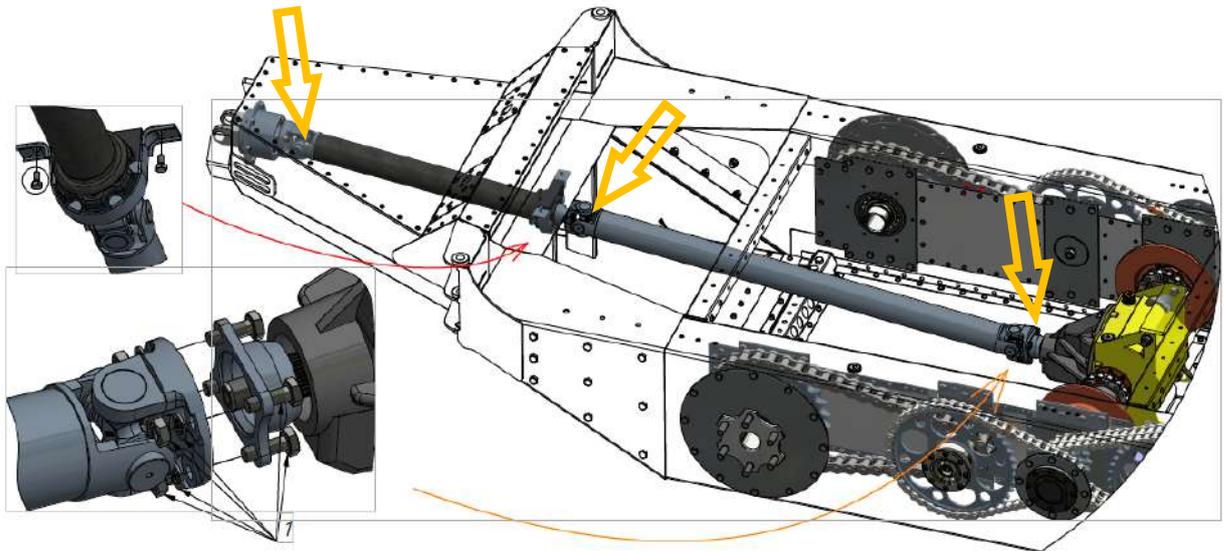


4. Lubricate the terminals and contacts with CIATIM 221.



REPLACE PROPELLER SHAFT CROSSES

1. Sherp Ark has complicate transmission system. Replace propeller shaft crosses shown in the images below.



CHECK RADIATOR PIPES, EXPANSION COOLING TANK AND OTHER ELEMENTS OF THE COOLING SYSTEM FOR RELIABILITY OF FASTENING AND TIGHTNESS

1. Check the upper radiator fixing brackets



2. Check the expansion tank piping



3. Check the inlet and outlet piping of the radiator



CHECK / ADJUST THE CLUTCH PEDAL TRAVELSPACE

1. To adjust the travelpace of the clutch pedal you need to unscrew a bolt behind the pedal.



2. Fix the desire travelpace of the clutch pedal be screwing in the lock nut.

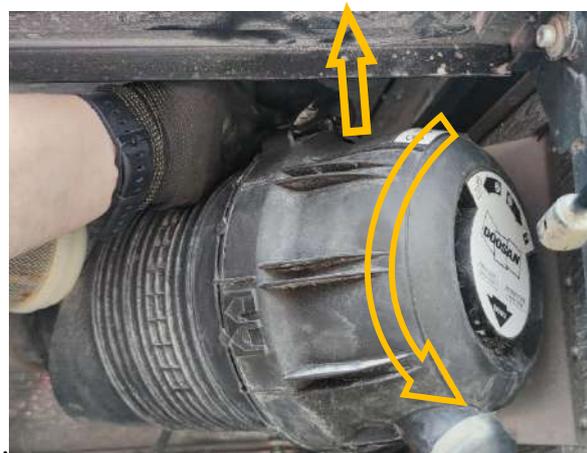


REPLACE AIR FILTER ELEMENT OF ENGINE

1. Open the grill on the left side of UTV



2. Find and push up the fixing clip on the air intake filter simultaneously turn in the counterclockwise direction



3. Remove the filter cap. Remove both air filters (primary and secondary).

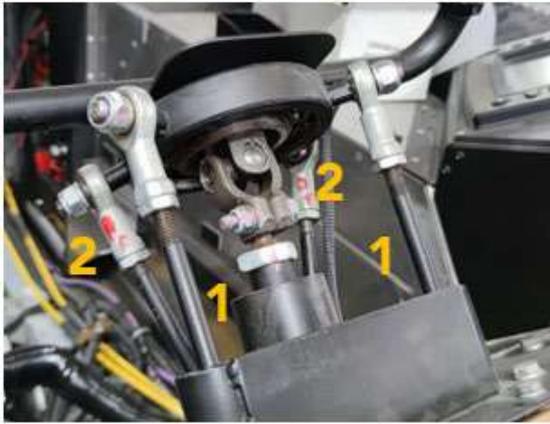


4. Clean or replace both filters with new one and assemble the air intake in reverse order.



ADJUSTMENT OF STEERING WHEEL. REPLACEMENT OF BRAKING PADS.

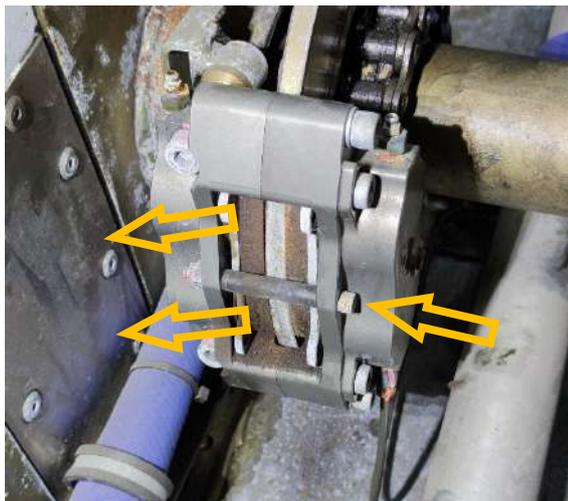
1. After some time the steering wheel can start backlash in two axles of movement. Make adjustments to the steering wheel by tensioning the actuating rods doing it in pairs. Your goal is to maintain an equal position on both axes without backlash.



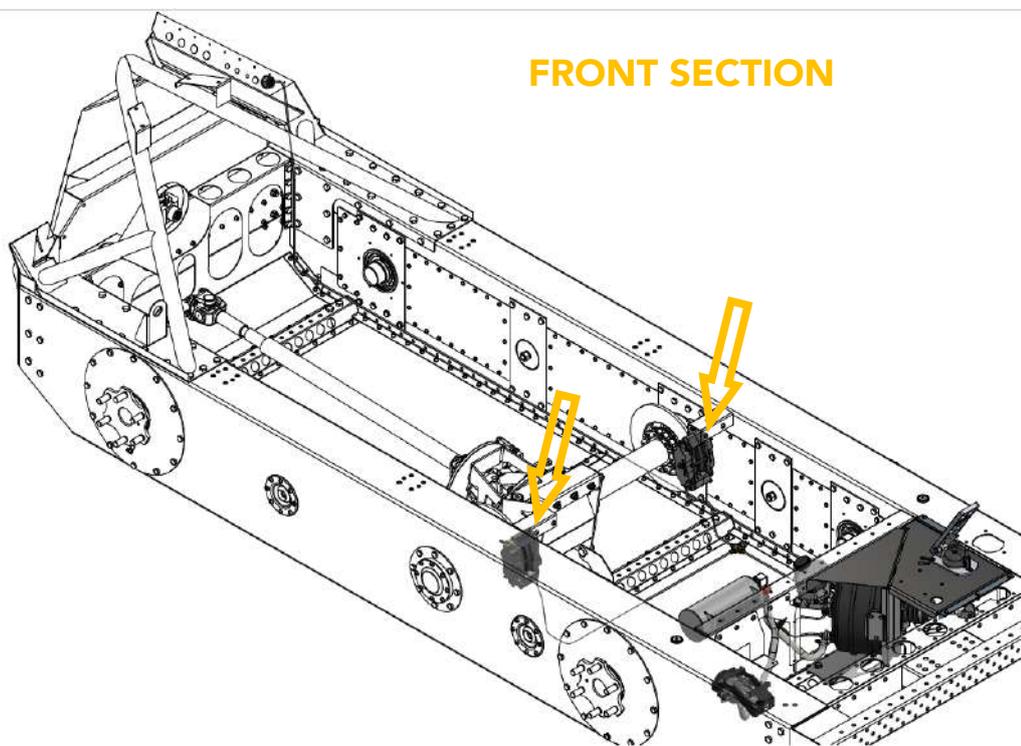
2. To ensure effective steering in the off-road conditions, replace old braking pads with new ones as per scheduled maintenance intervals in both UTVs sections.



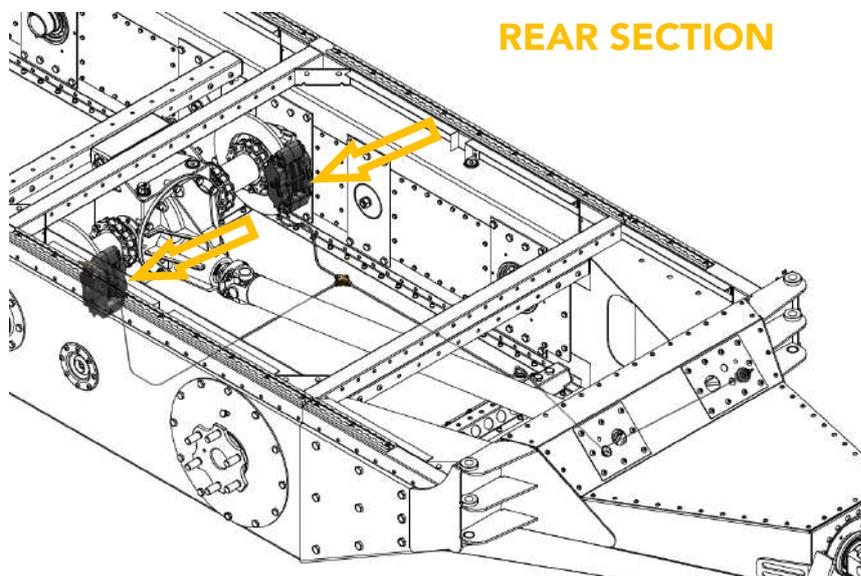
To change the braking pads in the calipers, use hex key and unscrew central bolt. Then with the help of the pliers pull out both old braking pads and insert new ones.



FRONT SECTION



REAR SECTION

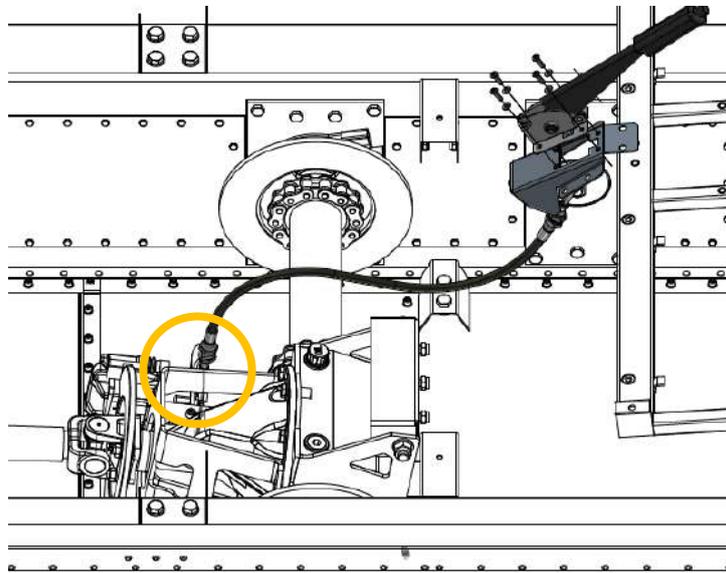


ADJUSTING THE PARKING BREAK

If the parking brake has wide angle of movement you need to adjust it. For adjusting the parking brake put the brake lever in the low position.



In the bilge of UTV you will see the braking disc and braking caliper of the hand brake and the fixation nut on the end of the wire.



For adjustment of the parking brake tighten the nut to eliminate backlash.



⚠️ WARNING

Make sure that after tightening the braking disc can move freely without friction otherwise, it can cause heating up of braking pads and spontaneous jamming of braking disc.

After the abovementioned actions, the angle of the movement of the hand brake will decrease..



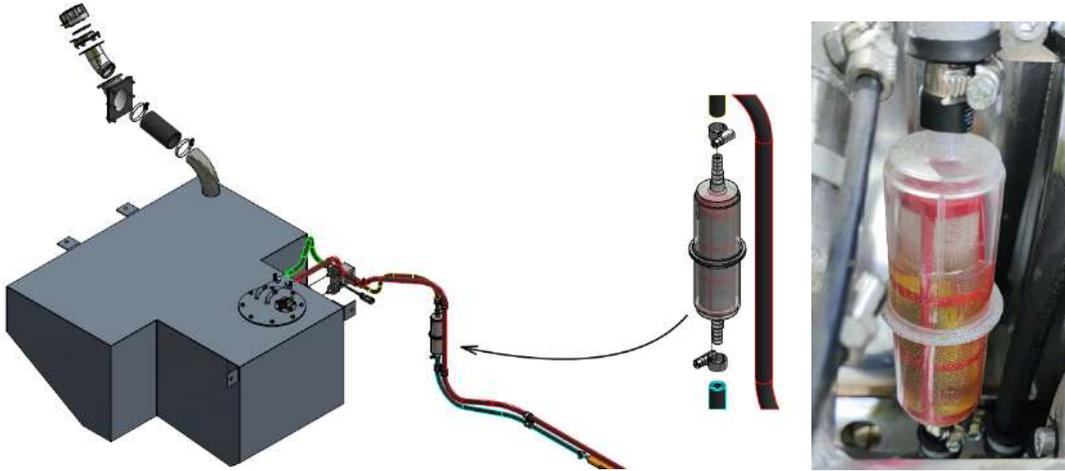
PRIMARY AND SECONDARY FUEL FILTERS REPLACEMENT



!WARNING

Work with flammable liquids requires extra caution. Please, follow all safety procedures.

In the SHERP ARK are two primary and one secondary fuel filter. First, replace the filter from the main fuel tank that is located in the rear section of UTV.

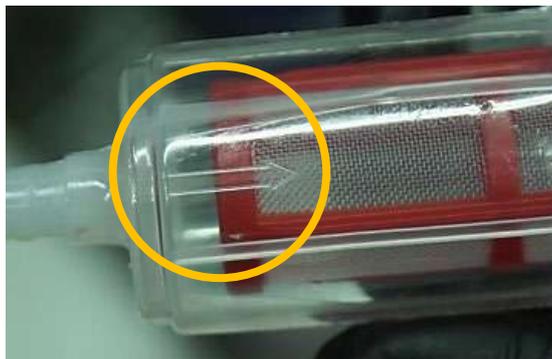


The procedure of replacement of fuel filter:

1. Loose one clamp.
2. Disconnect first fuel filter fitting
3. Empty remaining fuel in prepared container.
4. Loose the second clamp from opposite side
5. Disconnect second fitting of filter.
6. Connect the new fuel filter in the reverse order.

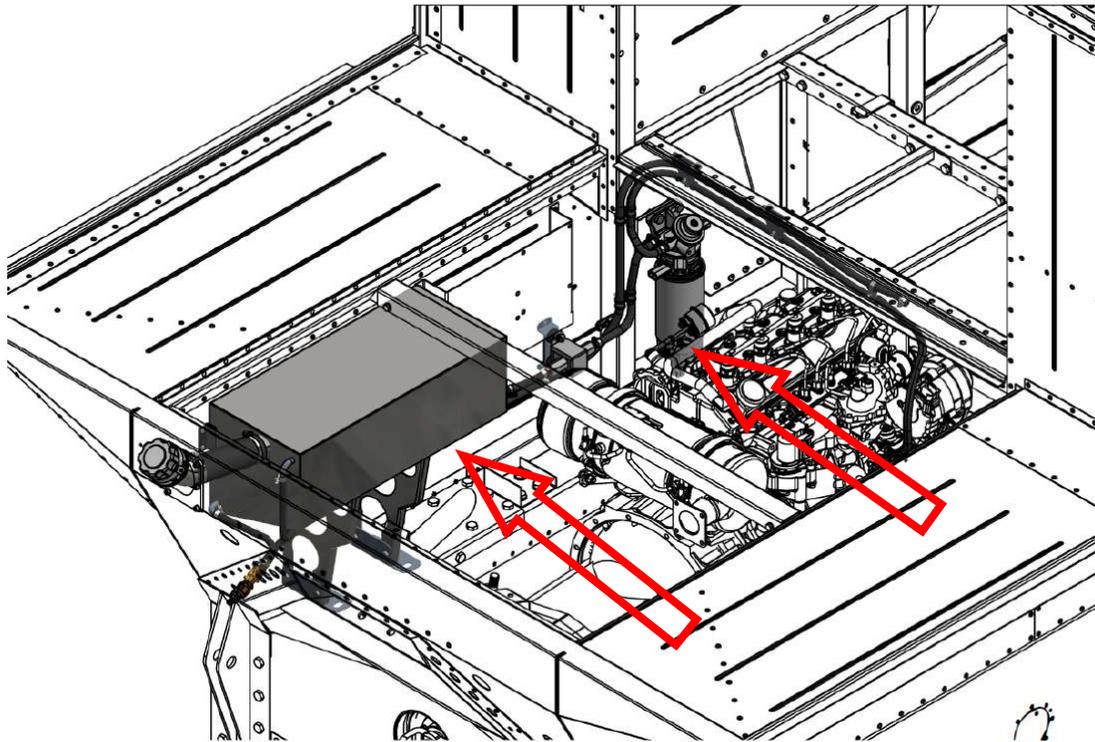
!CAUTION

Take attention to the marking on the filter that shows direction of the fuel flow. Install filter in proper position.



The second primary filter is situated on the left side UTVs front section. It is located in the rear part of the engine compartment. The procedure of the filter replacement is the same.

The location of the primary and secondary fuel filters in the front section is shown below.



For the secondary fuel filter replacement procedure differs.

- 1) Remove the water sensor from the bottom of the filter.



2) Using the oil filter wrench unscrew the filter



3) After removing the old fuel filter, unscrew the socket for the water sensor and install it in the new filter.



4) Apply some diesel fuel on the rubber ring on the new filter, screw it back.



After installation of this filter air bleeding of circuit should be done. Open the air bleed valve shown in the picture.



Pump with the pump handle (B) until fuel is discharged through the air discharge valve (A). Fasten the air discharging valve.

CHECK/TIGHTEN THE UTV EXTERNAL THREADED CONNECTIONS

1. All treaded external connections are situated in the joint of two sections of UTV.



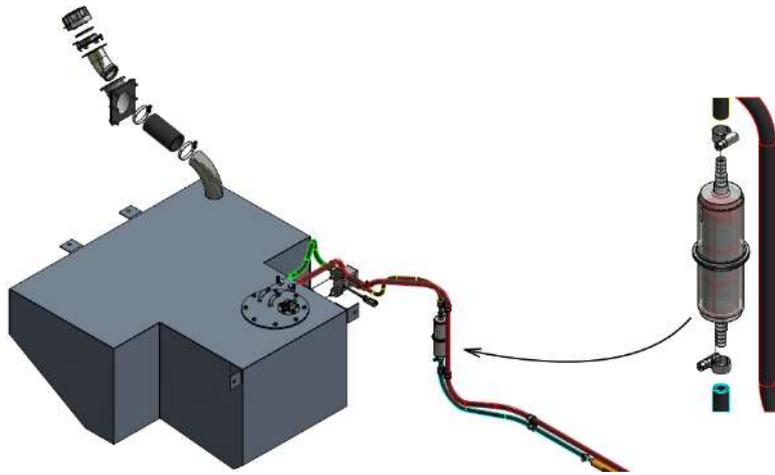
2. Check all the nuts and tighten them. Check and replace damaged fixing splints.



REMOVE FUEL SEDIMENT

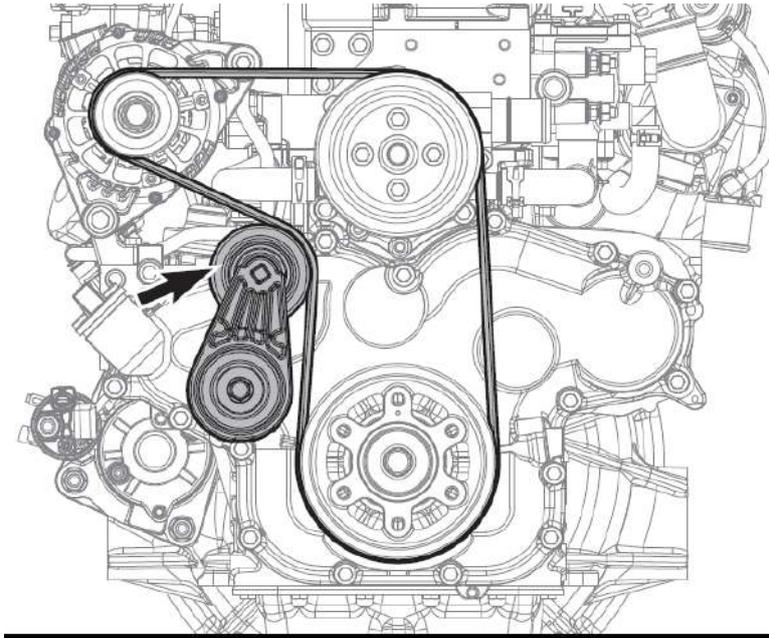
⚠️ WARNING

Work with flammable liquids requires extra caution. Please, follow all safety procedures.



1. Drain fuel tank into an approved container
2. Clean rust and debris from the top of the tank
3. Remove the fuel pump
4. Swirl gas tank— Pour out remaining gas and debris
5. Clean the tank interior with a low-suds soap and water mixture*
6. Swirl cleaning solution inside the tank
7. Drain tank and dry with compressed air and/or a lint-free cloth
8. Visually inspect the fuel tank and replace the tank if damaged
9. Confirm tank is completely dry (may take approximately 30 minutes)
10. Replace the fuel with fresh fuel

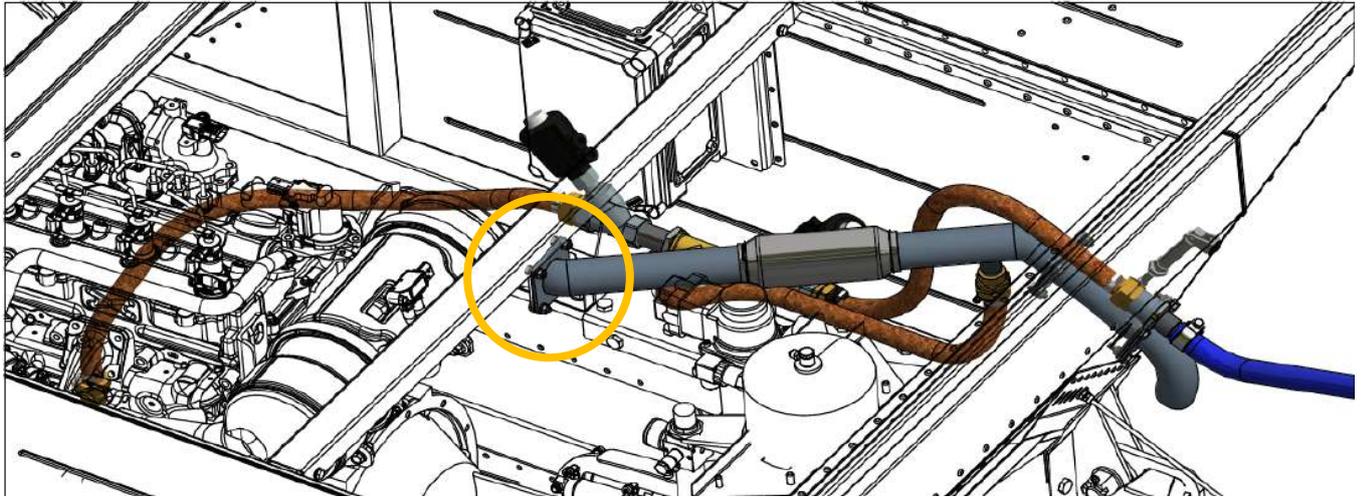
REPLACE ENGINE DRIVE BELT



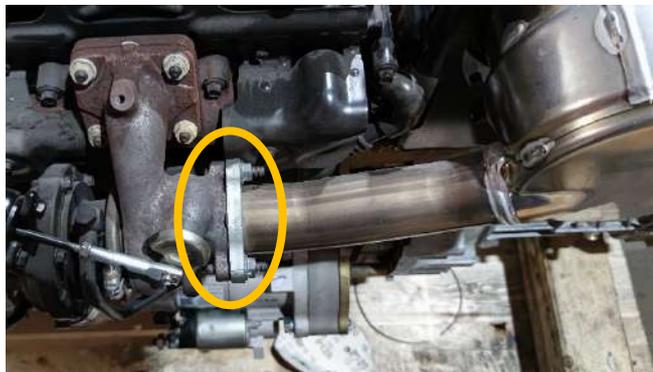
1. Turn the auto tensioner counterclockwise by using a quadrangular groove at the top of the auto tensioner pulley (Use a 10 mm x 10 mm quadrangular tool).
2. Remove the belt wound around the auto tensioner pulley by using a space generated by the rotation of the auto tensioner.
3. Detach the alternator

REPLACE DIESEL PARTICULATE FILTER (DPF)

1. Unscrew the connection with the exhaust pipe.



2. Unscrew the connection DPF from turbine connection with the exhaust pipe.



3. Unscrew 4 mounting bolts shown in the picture below.



4. Install new DPF in the reverse order.

CHECK WIRING FOR DEFECTS AND LOOSE CONNECTIONS

1. Check the connections of wire harnesses of the main electric fuse box that is situated under floorboards in the front of the cabin.



2. Check condition of fuses and relays.

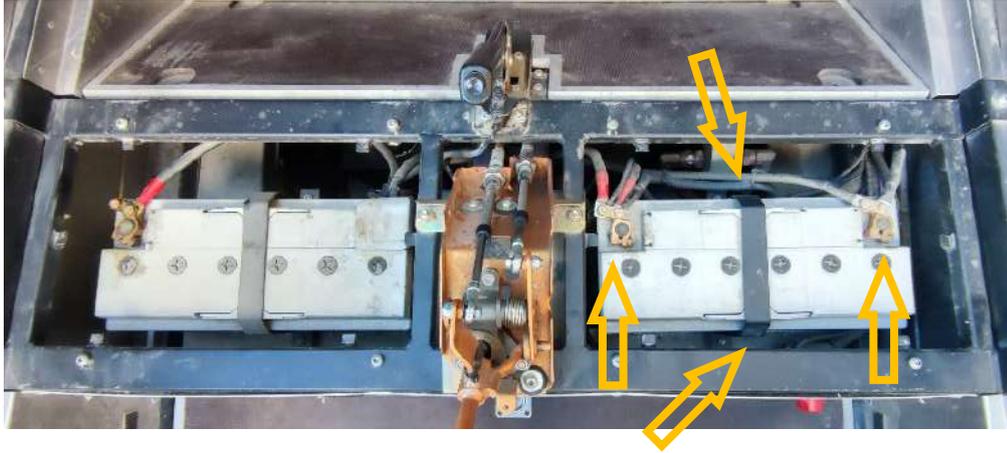


3. Open the main power fuses box that situated on UTVs left side. Check the connections of fuses and condition of relays. UTV.



CHECK\ IF NECESSARY REPLACE BATTERIES

1. If the battery has serious physical damage or don't work properly you should replace it. Remove the terminals and unscrew the fixing bracket, than pull out the battery.
Mount the new battery in sam

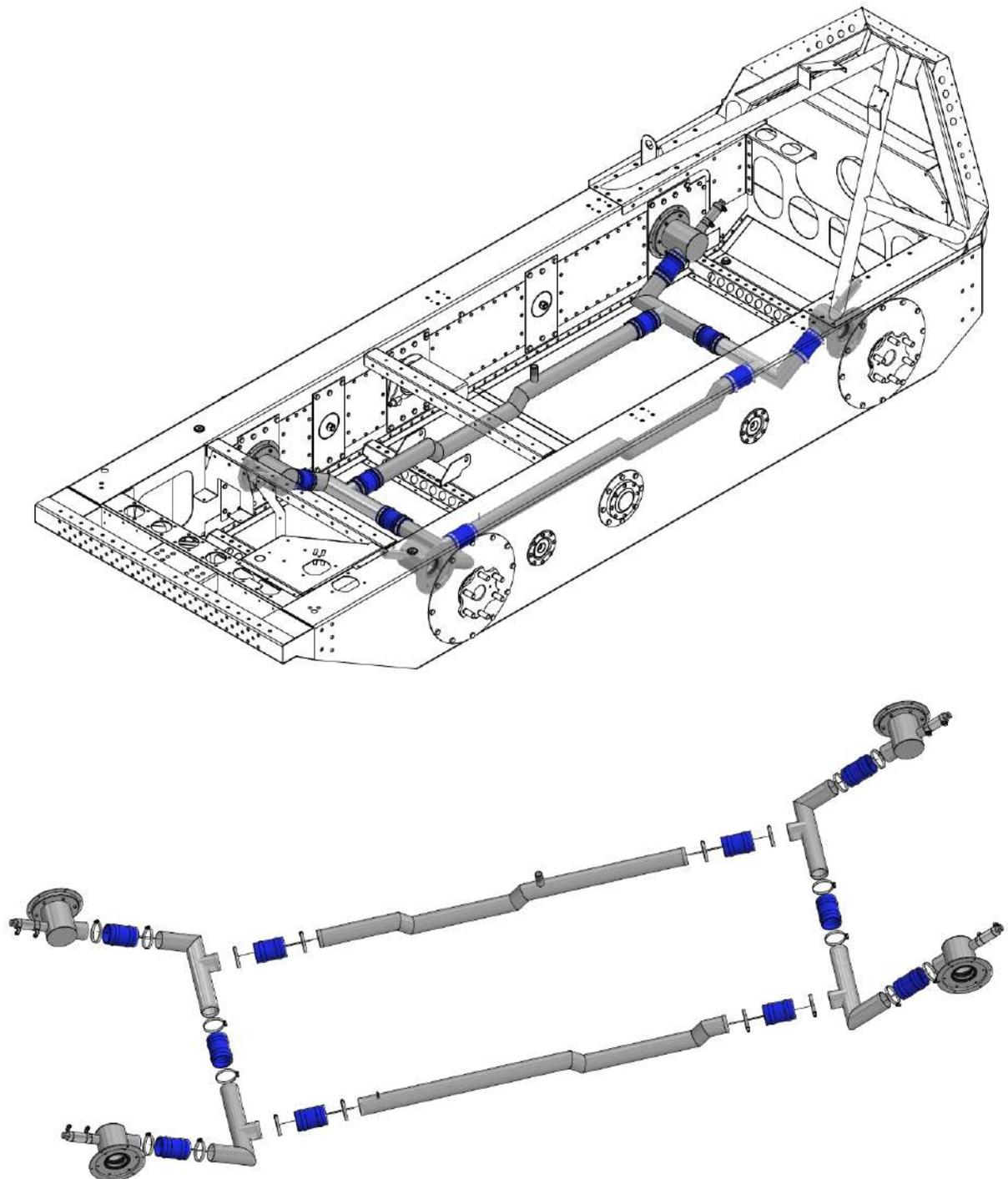


CHECK OF BRANCH PIPES, CLAMPS OF TIRE INFLATION SYSTEM

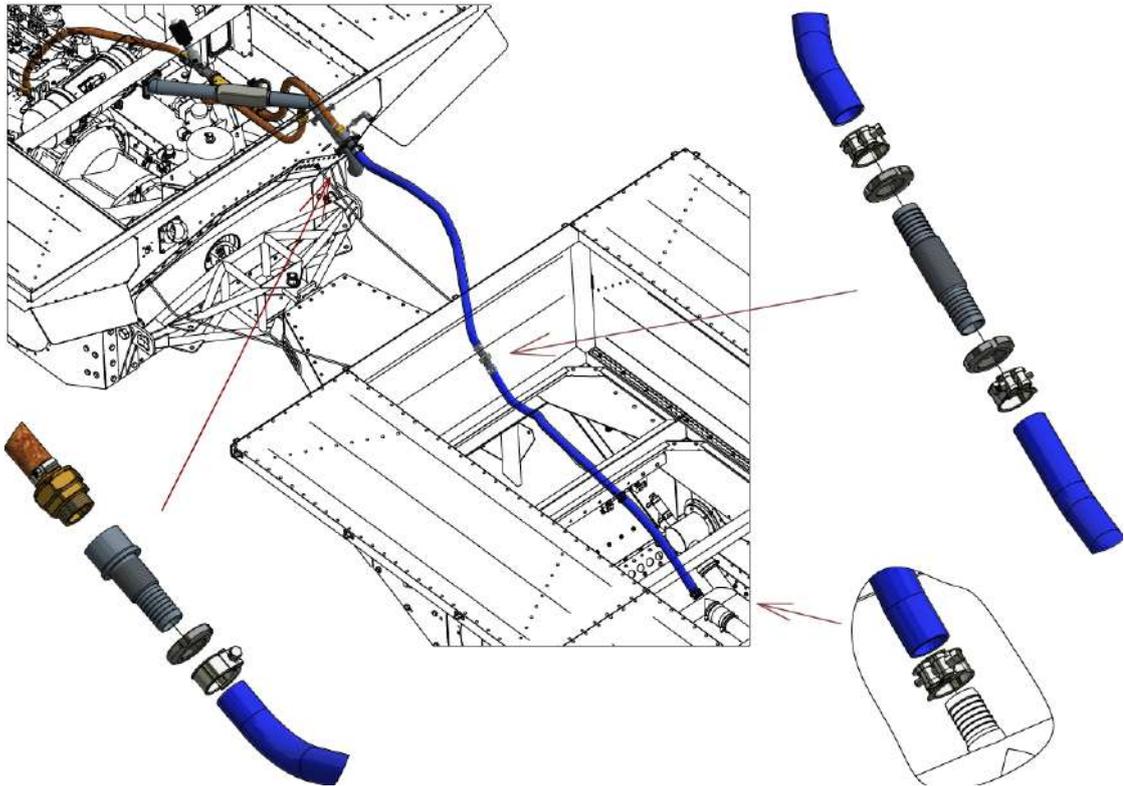
⚠ WARNING

For safety measures don't inspect the system when tires were recently inflated by hot exhaust gases

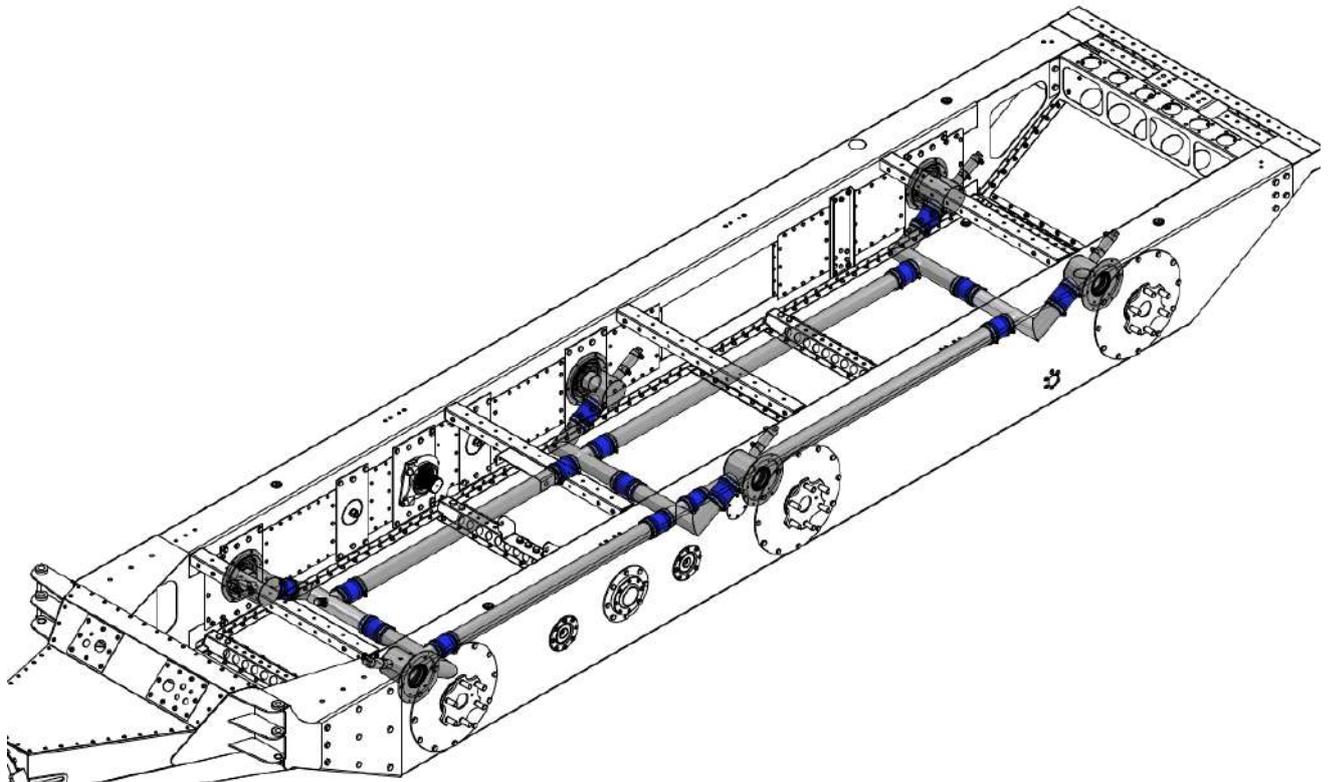
1. Inflate the tires and switch off UTVs engine.
2. Wait 2-3 hours (depending on the ambient temperature) so the exhaust gases inside the tires and engine parts cool down.
3. Check the inflation system of the front section of UTV. Look for damaged hoses, loose clamps or untightness.



4. Check the connection of the inflation system between two sections of UTV. Look for hose damage, loose clamps, or untightness.



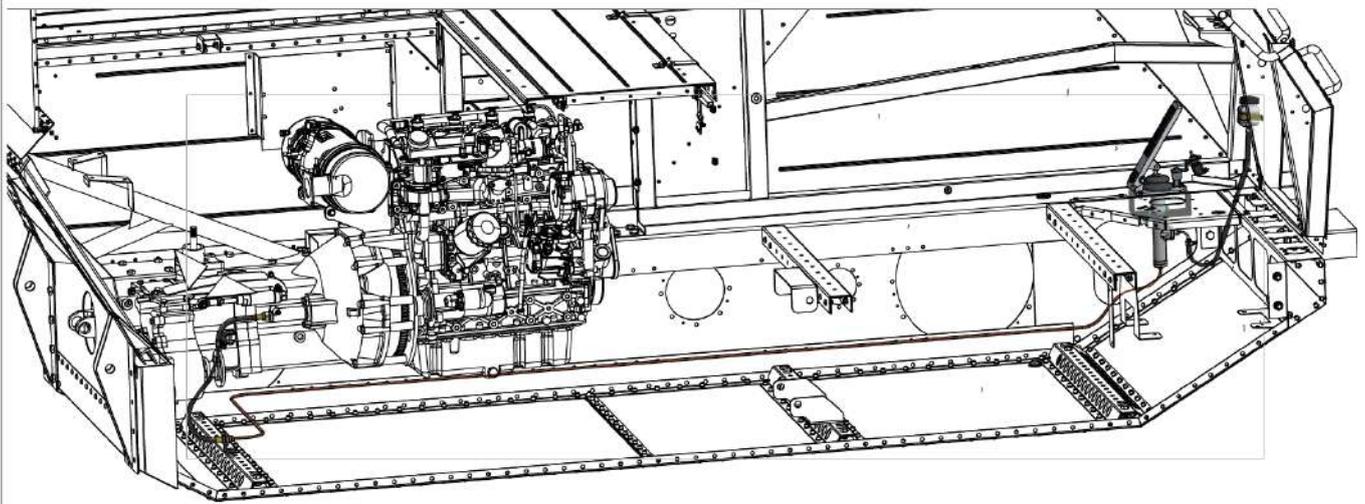
5. Check the inflation system of the rear section of UTV. Look for damaged hoses, loose clamps or untightness.



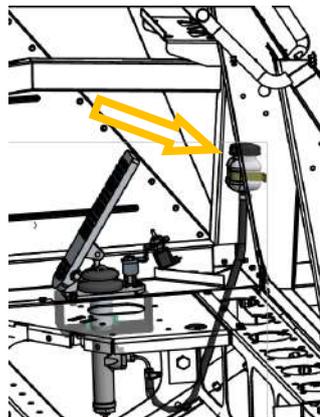
6. Replace the damaged hoses or broken clamps.
7. Make the tightness test by inflating the tires and leave UTV for a couple of hours.

REPLACE HYDRAULIC FLUID IN CLUTCH AND BRAKE SYSTEMS

CLUTCH SYSTEM



1. In the cabin behind the pedals, beneath the steering wheel situated tank for clutches hydraulic fluid.



2. Remove the cap and pump out old hydraulic fluid from the tank.
3. Fill the tank with **BOSCH DOT 4** fluid.

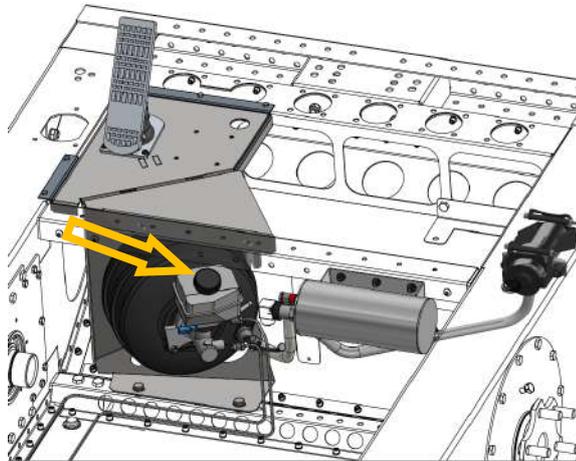


4. Locate the bleeding nipple on the manual gearbox.
5. Put on the hose on the nipple and put the hose in a container.
6. Press the clutch pedal a couple of times, then hold it in the lower position.
7. Loose the bleeding nipple on the gearbox so oil or air can be released from the system.
8. Repeat until 500-600 grams (more is better) of the fluid will be in the container. It will ensure that system was flushed and there is no old fluid. Don't forget to add fluid to the tank during the flushing.

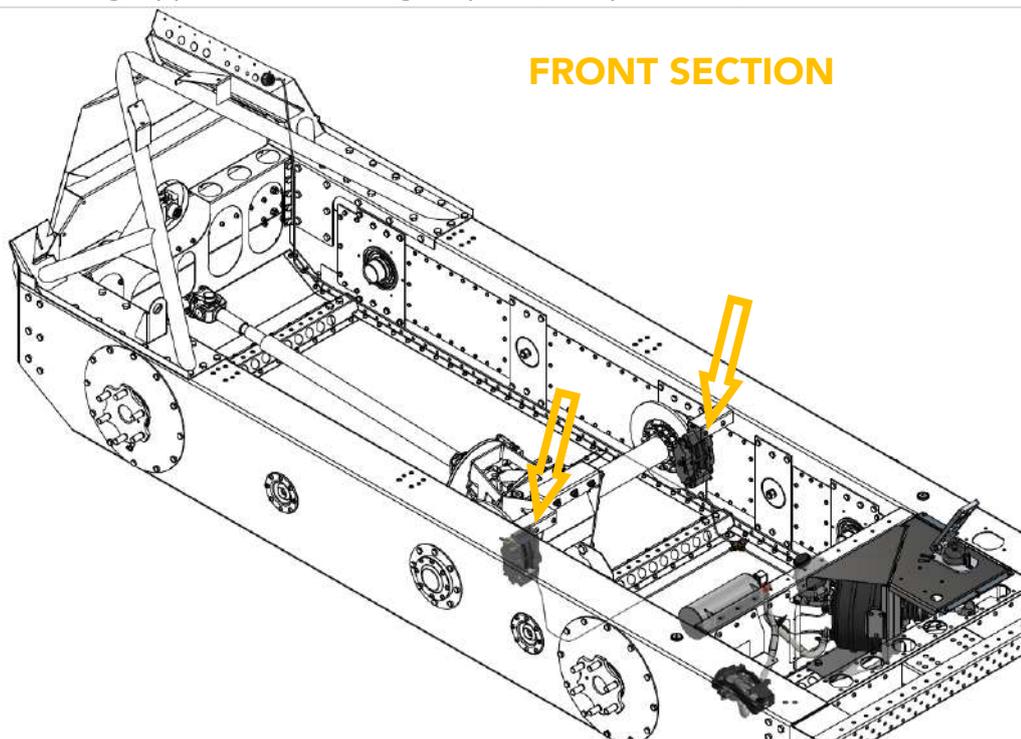
9. Tighten the bleeding nipple and put back the cap of the fluid tank.
10. Remove any hydraulic fluid stains if there was spillage.

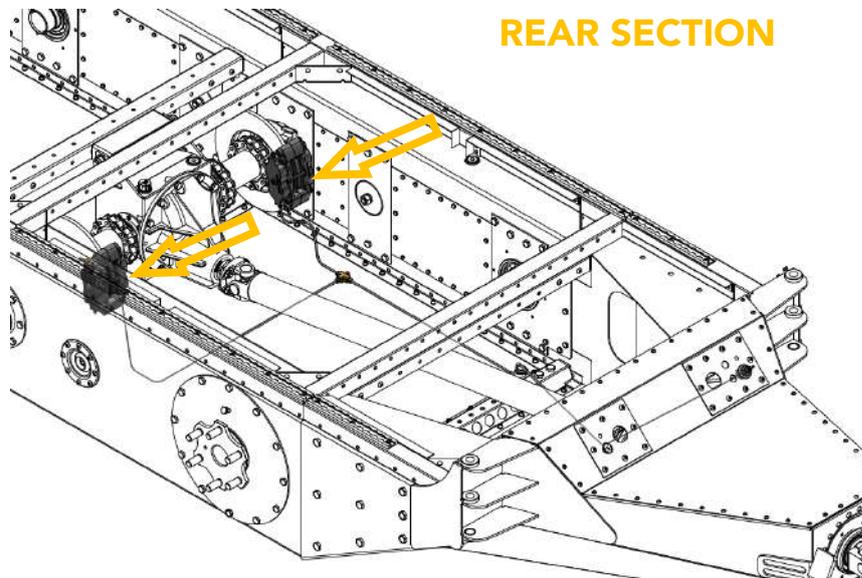
BRAKE SYSTEM

1. Remove the cabin floorboard. The position of the brake fluid tank is shown in the picture below.



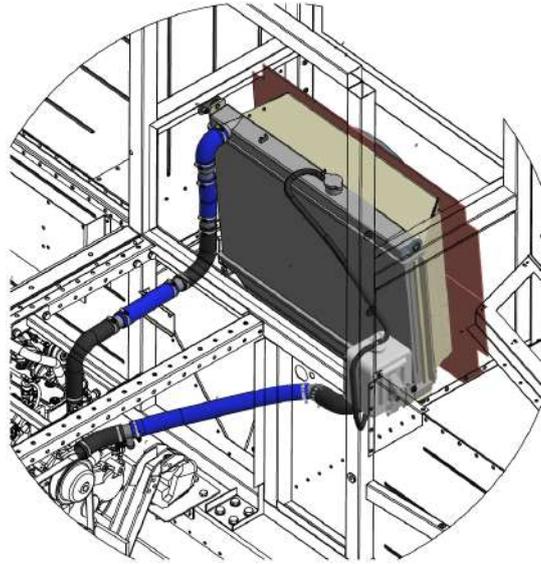
2. Remove the cap and pump out old hydraulic fluid from the tank.
3. Fill the tank with **BOSCH DOT 4** fluid.
4. Locate the bleeding nipples on all braking calipers (4 calipers total)





5. Put on the hoses on the nipples and put each hose in a container for fluid.
6. Arrange the constant feed of new BOSH DOT 4 liquid to the tank.
7. Loose the bleeding nipples on the calipers in front section and rear section
8. Press the braking pedal a couple of times, then hold it in the lower position.
9. Repeat until 500-600 grams (more is better) of the fluid will be in the each container of calipers of the front section. It will ensure that this part of the system was flushed and there is no old fluid.
10. Tighten the calipers nipples of the front section.
11. Continue to press the pedal until 1 000-1200 grams (more is better) of the fluid will be in the each-container of calipers of the front section. It will ensure that this part of the system was flushed and there is no old fluid.
12. Tighten the bleeding nipple and put back the cap of the fluid tank.
13. Remove any hydraulic fluid stains if there was spillage.

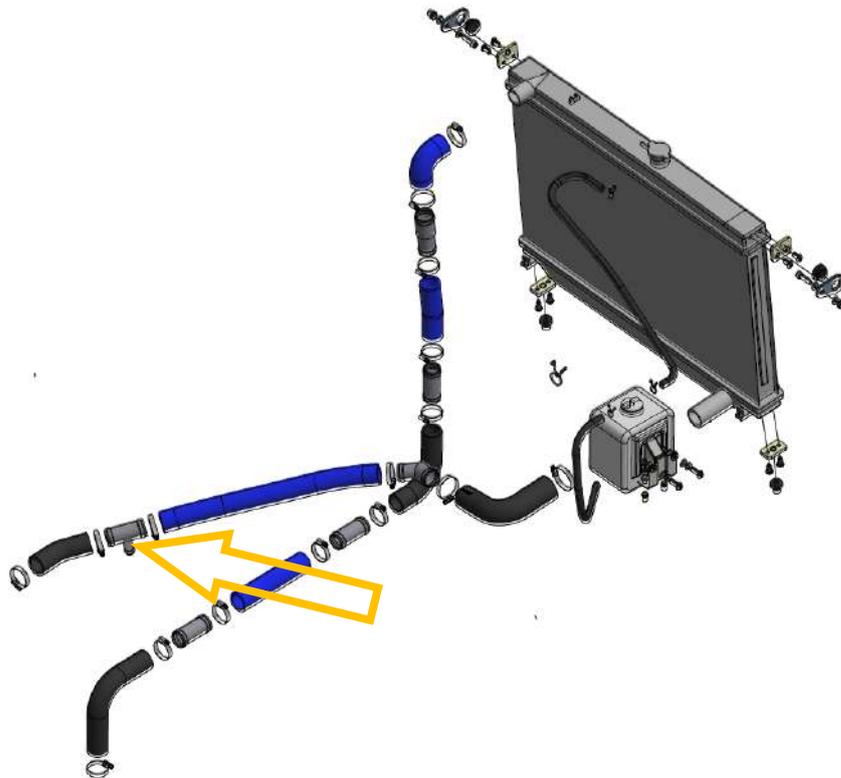
REPLACE PIPES, HOSES, CLAMPS AND FASTENING ENGINE COOLING SYSTEM



⚠ WARNING

For safety measures don't start the procedure of replacing when the engine and radiator are hot.
UTV should be shutted down at least for 2-3 hours.

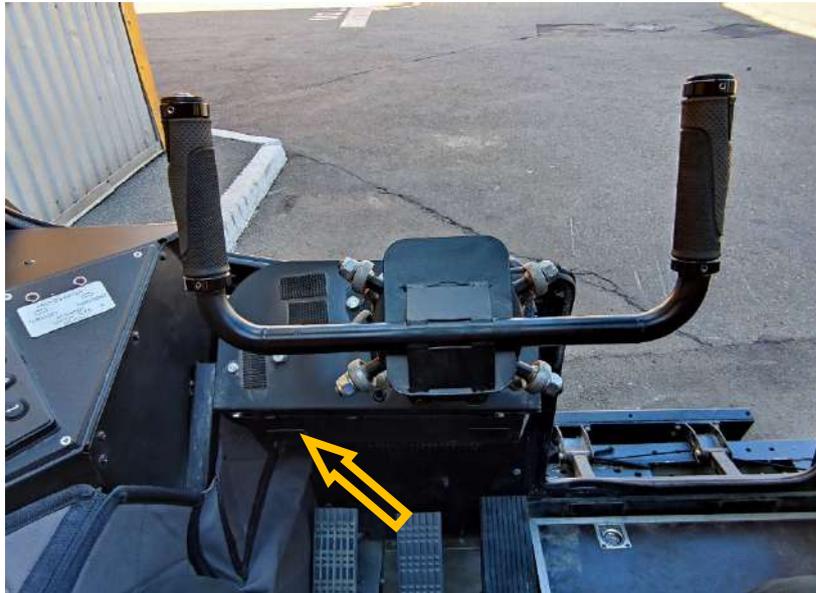
1. Remove the coolant from the system. Prepare a big container for the coolant. After that disconnect the hose of the cabin heater from TEE connector (shown below).



2. Wait till all coolant will drain.
3. Replace all hoses, sleeves, fittings, clamps with new one.
4. Fill the system with the coolant. Recommended coolant **YUKO -40 G12 (red)** – 11 liters.
5. Check the system for leaks.

CHECK ENGINE ECU ERROR LOG

1. Remove the fabric cover from the steering wheel and left side of of the UTVs cabin. For instructions how to remove the fabric cover refer to the **INTERIOR DISASSEMBLY** part.
2. To the left beneath the steering wheel situated the opening where wiring harnesses located.



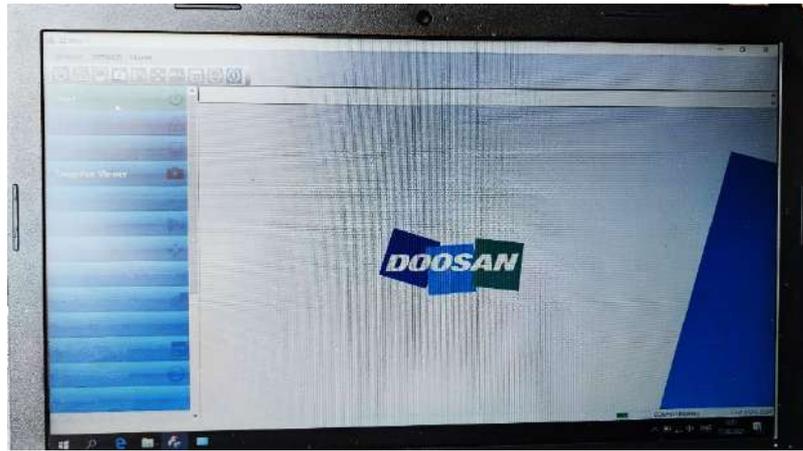
3. Locate the plugged 6-pin Deutsch connector (female type).



4. Connect a scanning tool to this connector. Use a USB to connect the scanning tool to the laptop.



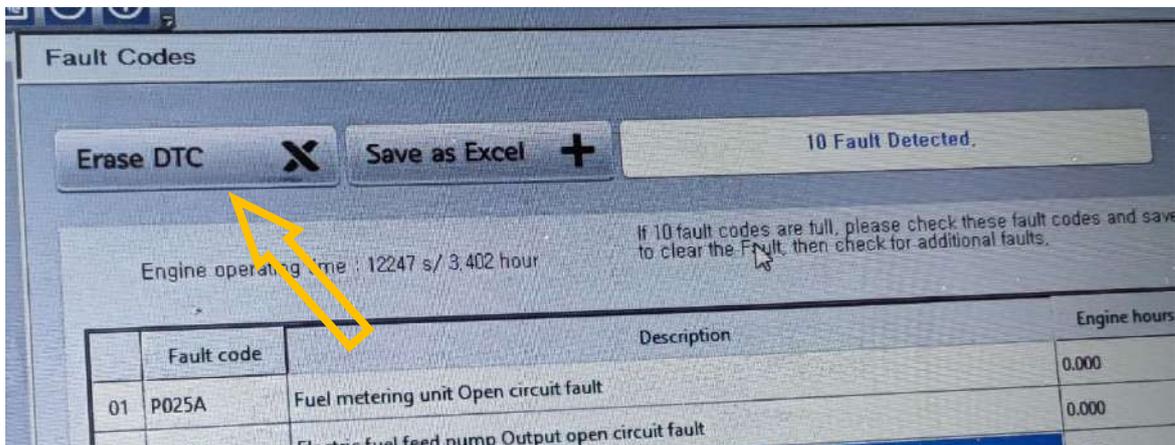
5. Switch the ignition and run DOOSAN scan utility on the laptop.



6. In the menu on left side of the screen choose "Fault Codes" category.



7. Check the error log. Export the log to Excel (if necessary) than erase the errors by clicking "Erase DTC" button.



8. Repeat this procedure every 250 hours.