



INSTALLATION INSTRUCTIONS

POLARIS
RANGER 900 XP

SAFETY INSTRUCTIONS

Warning: Failure to heed all safety and operating instructions and warnings regarding use of this product can result in serious bodily injury.

READ PROPERLY COMPLETE ASSEMBLY INSTRUCTIONS BEFORE STARTING OF ASSEMBLY

Install all parts indicated in assembly instructions. Failure to fully assemble product before use could result in personal injury.

Assembly of product requires use of hand or power tools. If you are not experienced in using these types of tools, have product dealer do the install for you.

Some parts contain sharp edges, wear protective gloves if necessary.

Always keep your assembly area clean, uncluttered and well lit.

Keep visitors and children a safe distance away from the assembly area. Visitors should wear the same safety equipment described under.

Never operate your UTV with the cab doors open. Failure to properly latch the doors before moving the vehicle could result in serious injury.

Dress for safety. DO NOT wear loose clothing, gloves, neckties or jewelry if using power tools to assemble this product.

Insert all nut covers after you finish installation.

Never drive your UTV with the cab front window in open position. Failure to properly latch/lock front window before driving the vehicle could result in serious injury.

Please be careful to not break the plastic washers. When tightening screws with plastic washers use maximum power 3.7 foot-pound force (5 Nm)!!!

WARNING: For safety purposes, if the HardCab cab doors are removed, it is mandatory that the OEM manufactured Half Doors or Nets are **REINSTALLED** before operating the vehicle.

MAINTENANCE AND CLEANING

To clean polycarbonate surface use soapy water solution or other subtle means.

Wash away Dirt and Dust with a gentle water stream and wipe only with wet or damp soft cloth in the direction of top to bottom.

The recommended frequency of cleaning of polycarbonate part is about 1 time per month or according to the actual degree of dirtiness.

*Do not use detergents that could scratch the surface plates.
(abrasives, harsh fabrics, etc.)*

*Do not use solvents or alkaline detergents or cleaners with ammonia
(ammonium hydroxide).*

Do not remove the impurities from the surface of the razor blades or other sharp items.

Do not clean cabin, when the polycarbonate plates are heated by the sun.

Do not use the squeegee, it could scratch the surface plates.

Do not pressure wash at a strength greater than 50 bar (WAP)

The manufacturer is not responsible for scratching the surface in case of failure to comply with the above instructions.

All bolted connections of cab must be checked and tightened by user at regular intervals .

TOOLS NEEDED

Not included

		
<p>Ratchet handle</p>	<p>Socket beg 17 mm (0,67 in)</p>	<p>Socket beg 13 mm (0,51 in)</p>
		
<p><i>For tightening straps</i></p>	<p>Metric wrench 13mm, 17mm</p>	<p>Utility knife</p>
		
<p>Hex key 5mm, 6 mm and 8mm</p>	<p>Hole saw 56 mm (2,2 in)</p>	<p>Hole saw 76 mm (3 in)</p>

		
Drill ϕ 2,5-4mm (0,1- 0,16 in)	Drill ϕ 8mm (0,31-0,33 in)	Drill ϕ 12 mm (0,5 in)
		
Drill ϕ 21mm (0,83 in)		

PREPARATION FOR INSTALLATION:

Uninstall all additional systems from the roller cages (work lights, rear mirrors, drink holders etc.)



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ELECTROINSTALLATION-WIPER+WASHER step 1.

Parts needed

Included

Washer tube



Switch wiper/washer/off



Harness and washer tank



Wiper harness



Washer tank has been placed under the front dashboard cover.

Uninstall the upper dashboard cover from the UTV carefully.



Take out the front dashboard cover and uninstall original screw (in red circle) from the UTV's plastic front wall and install the washer tank holder.



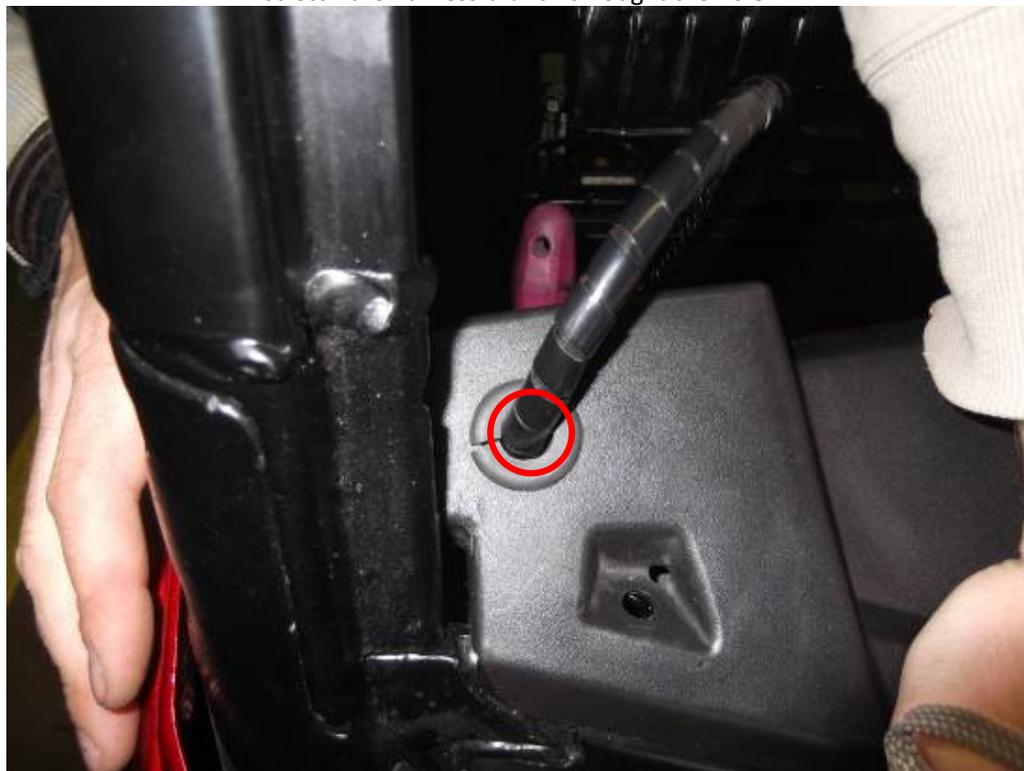
Connect the harness branch No.: 3 with washer motor and slide the washer tank onto the washer tank holder. Lead harness (red arrow) from the washer through the hole to the inner place in the dashboard.



Lead the harness branch No.: 1 (red arrow) to the right front roller cage.



Drill hole (red circle) \varnothing 21mm (0,83in) into the unmounted dashboard cover near the right roller cage and stretch the harness branch through the hole.

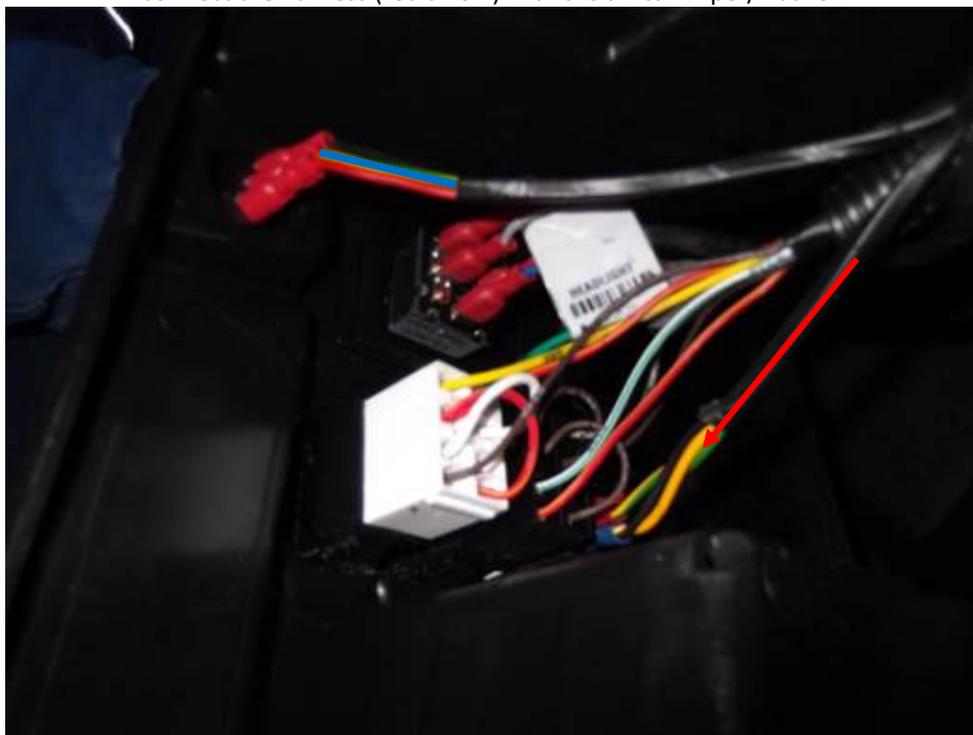


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Uninstall the central panel from the dashboard and lead the harness branch.: 2 from the harness to the central panel.



Take out the switch blind from the central panel. Pull the harness branch No.: 2 through the hole and connect the harness (red arrow) with the switch wiper/washer.



SEE NEXT PAGE

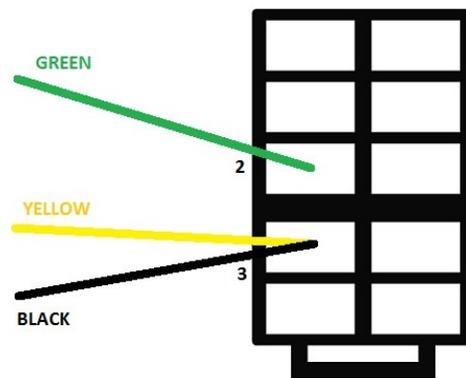
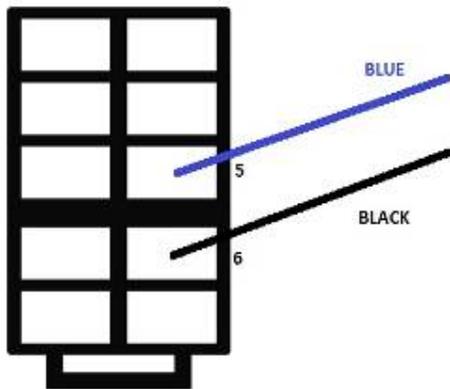
Connect the wiper and washer harness branch with the switch. Detailed view.



Washer harness

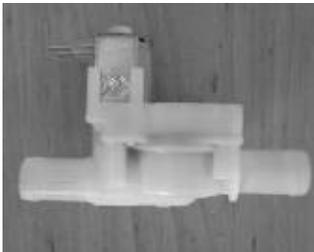


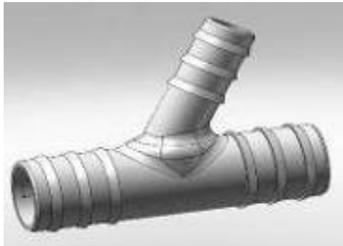
Wiper harness



Fill the washer liquide to the washer tank before first usage.

ELECTROINSTALLATION – HEATER
Parts needed (included)

		
<p><i>Heater with cover</i></p>	<p><i>Bleeding valve</i></p>	<p><i>Electric vent</i></p>
		
<p><i>Tightening straps</i> <i>Smaller, bigger and large</i></p>	<p><i>Air vent smaller</i></p>	<p><i>Air vent bigger</i></p>
		
<p><i>Hot air hose</i></p>	<p><i>AL tape</i></p>	<p><i>Y coupling</i></p>



Y coupling



El. Vent switch



**Heater switch
assembly**



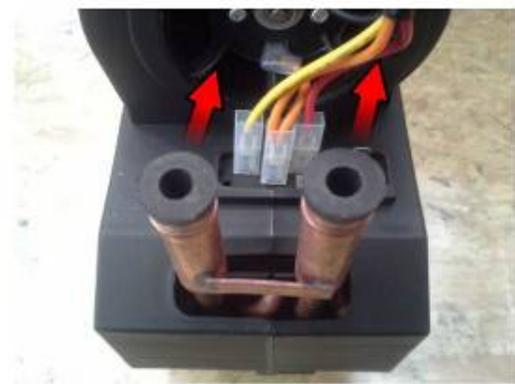
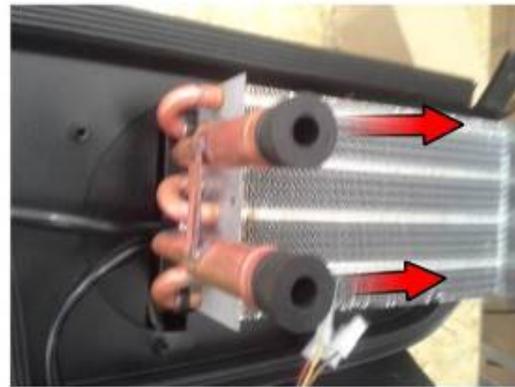
Heater harness



Hot water hose

IMPORTANT

IT IS ABSOLUTELY NECESSARY TO TAKE OUT THE RUBBER PLUGS FROM THE HEATER TUBES!!!



The heater has been installed in the middle inner place under dashboard.



Uninstall the central tunnel cover from UTV's floor.



Secure original hot water hose (with red line) by pliers or clamps.



Cut the hose between pliers and insert tightening straps at loose ends. Install the small “Y” coupling into the original hose and into the heater hose (included). Tighten all (3) straps hard and lead the water hose from the engine to the central floor tunnel. It is necessary to keep the heater hose (red arrow) in direction of down and forward. **Side view.**



Lead the water hose (red arrow) through the floor tunnel.



Cut the water hose (with red line) to correct length, be carefull to not cut that hose too short.



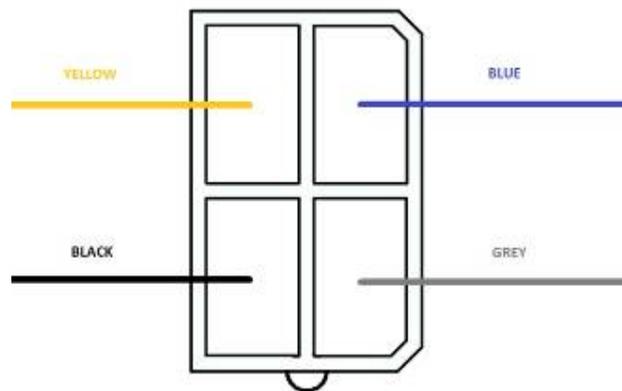
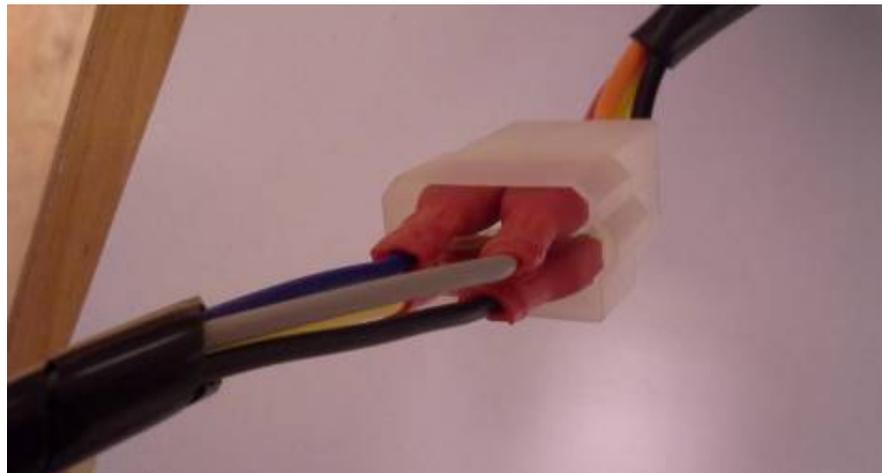
Install the short hose and remain of the hose to the heater tubes. Fix these hoses with the heater tubes by tightening straps and tighten these straps very hard. Insert the tightening strap onto the shorter hose and install electromagnet vent in same orientation like in picture. Tighten that strap very hard.



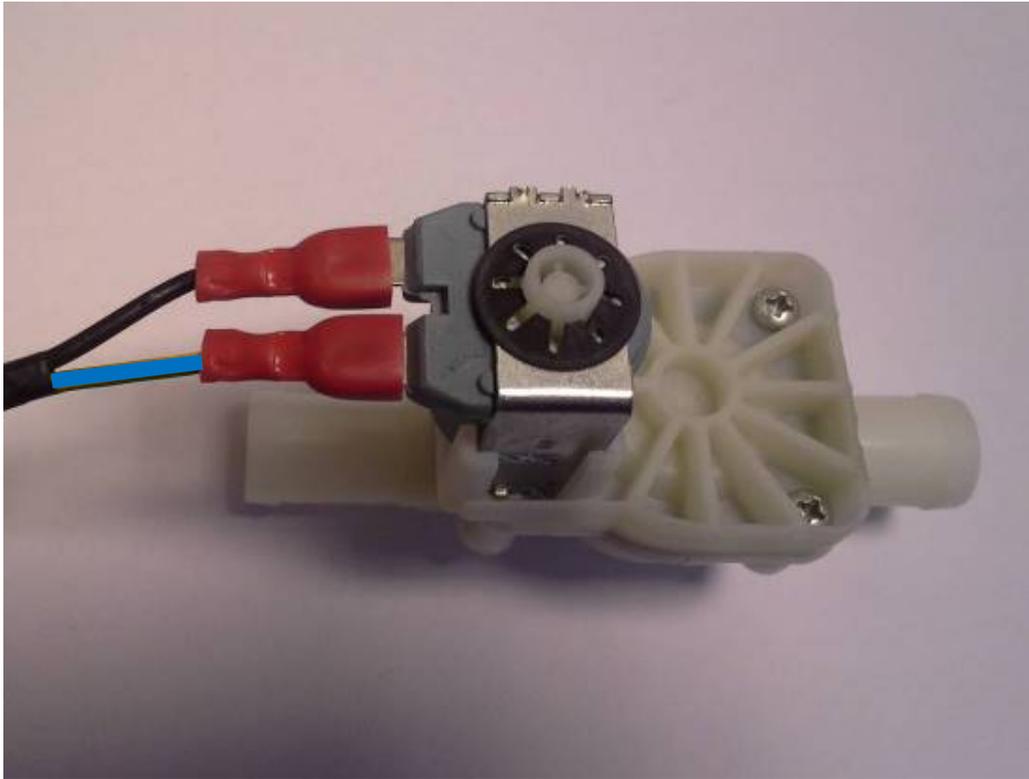
Uninstall original screws from UTV's plastic wall.



Connect harness branch No.: 3 with the heater connector. Detail view.



Connect the harness branch No.: 4 with the electromagnetic vent. Detail view.



Place the heater with holder onto the UTV inner wall and adjust to correct position.



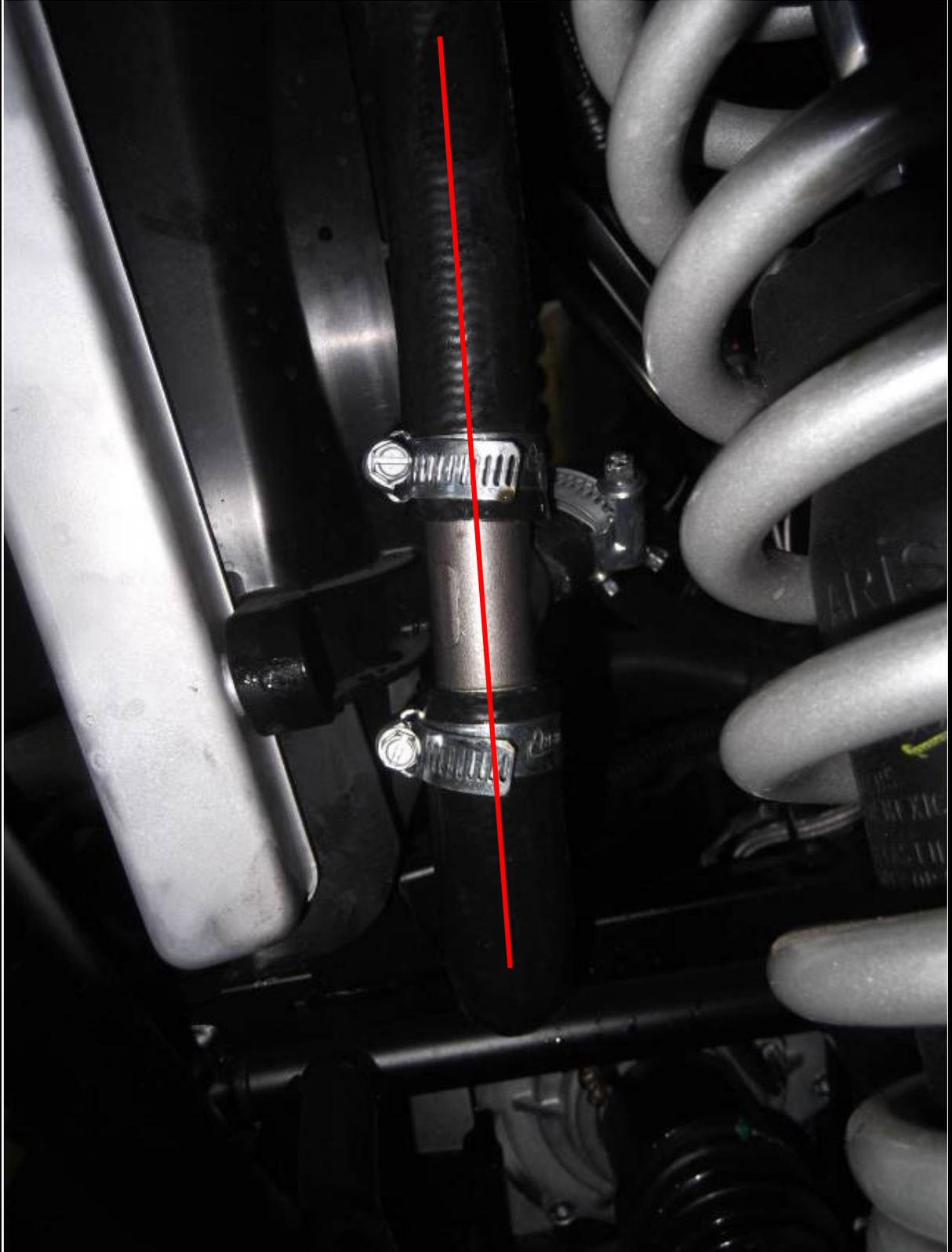
Fix the heater holder with the UTV wall by included screws M6x30 and washers (red circles).



Insert the tightening strap onto the hose from engine (red arrow) and connect that hose with electromagnetic vent. Tighten strap very hard. Lead the water hose (violet arrows) from heater to the front left wheel.



Secure vertical original hot water hose (with red line) near the left wheel by pliers or clamps from page No.: 12. Cut the vertical hose between the pliers and insert the tightening straps onto the hose.



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Insert the "Y" couple into the original hole. Insert the tightening strap onto the hose from heater and insert that hose onto the "Y" couple. Tighten all straps very hard and take out the pliers.



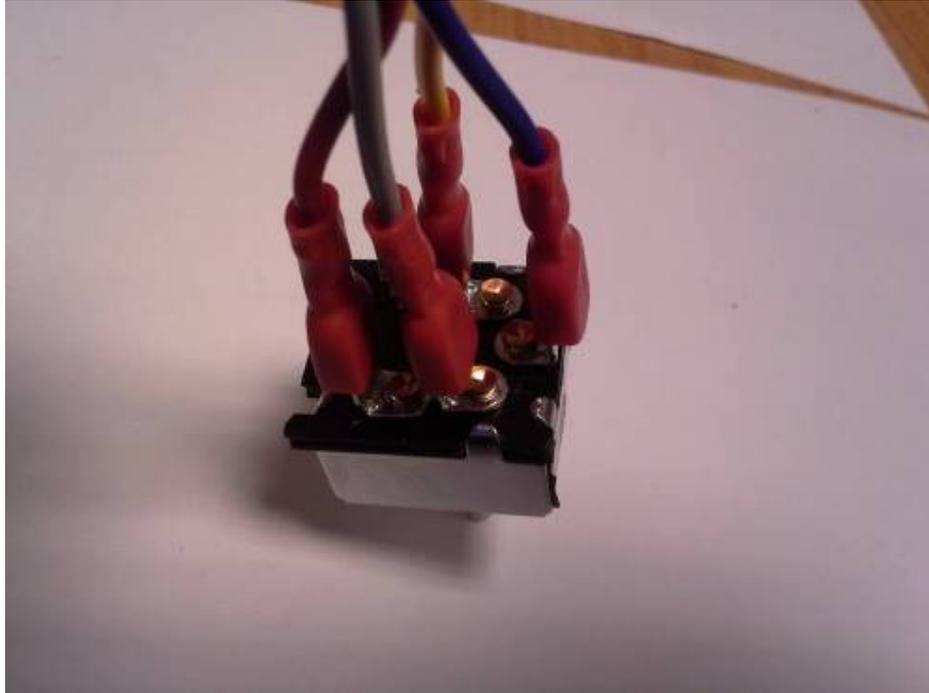
Cut the heater hose near "Y" coupling from previous page and insert the tightening straps. Install the air vent valve into the hose and fix these by straps. Tighten straps very hard.



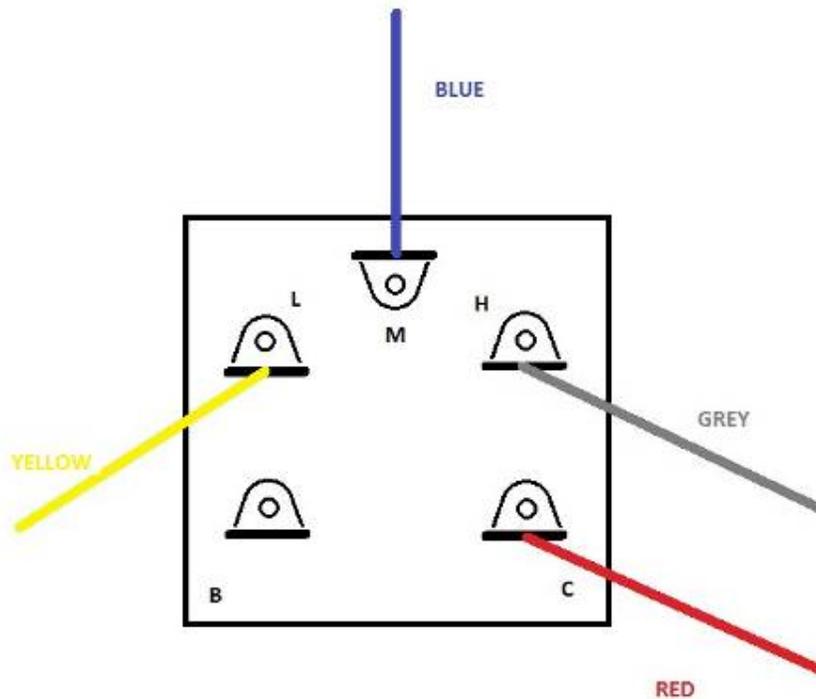
Drill 1 hole \varnothing 11,5-14mm (0,45-0,55 in) and 2 holes \varnothing 2,5-4 mm (0,1- 0,16 in) into the dashboard in accordance with the ventilator switch base.



Lead the harness branches No.:1 and 2 from the heater to the UTV switch panel.
Connect the heater switch body with the harness branch No.:1. Detail view.



Detailed scheme of connection



Insert the switch body with the harness and with the serrated-lock washer into the prepared hole from page No.: 20(upper picture) from inside. Place the switch base onto the dashboard and onto the pin of the switch body.



Fix the switch with the switch base to dashboard by nut.



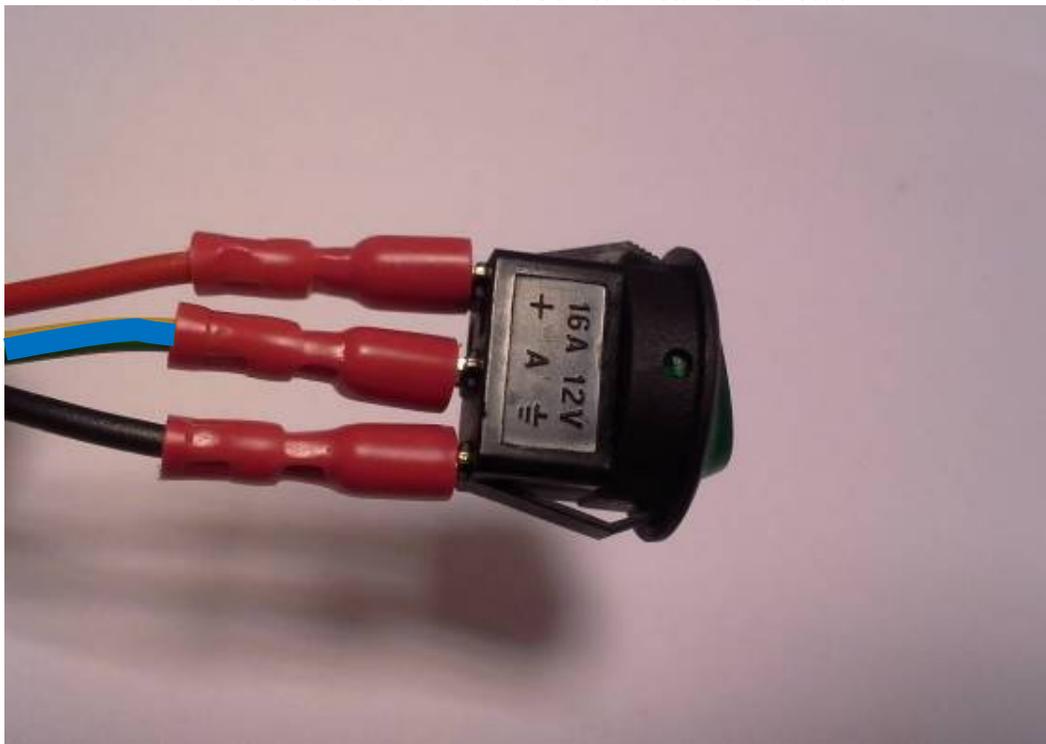
And place the plastic had onto the switch pin.
View onto installed heater switch.



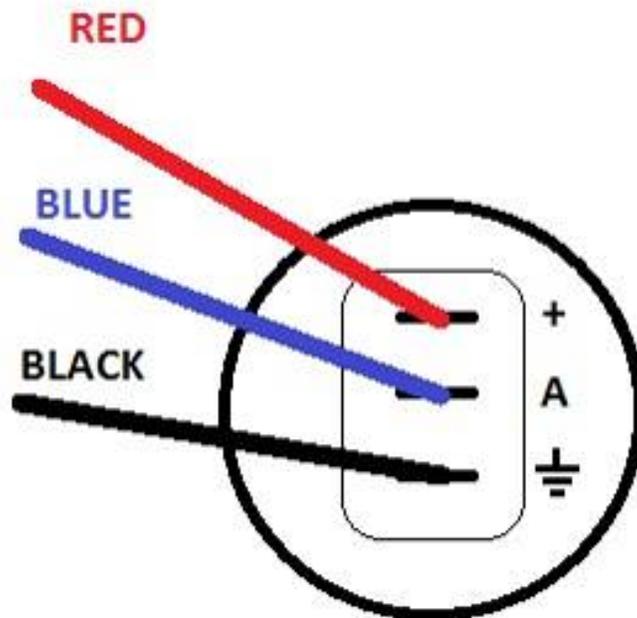
Drill hole \varnothing 21 mm (red circle) for electromagnetic vent switch.



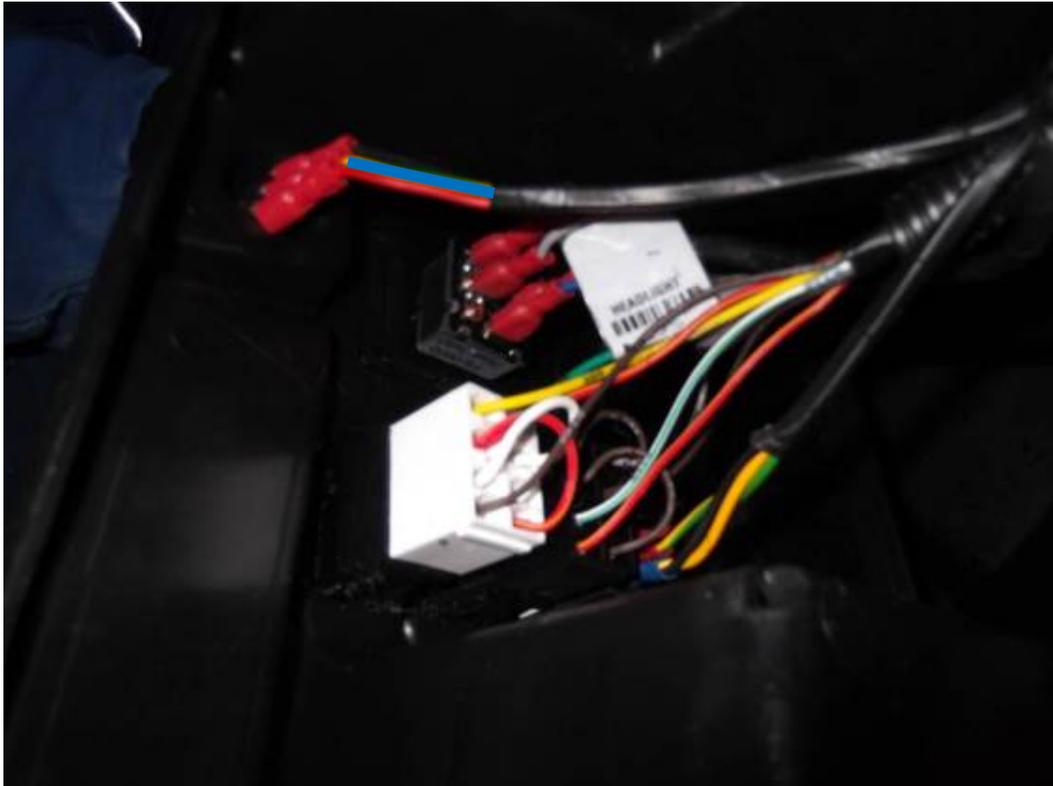
Pull the harness branch No.: 2 through the hole from previous page (bottom picture) and connect the branch with the switch. Detail of connection.



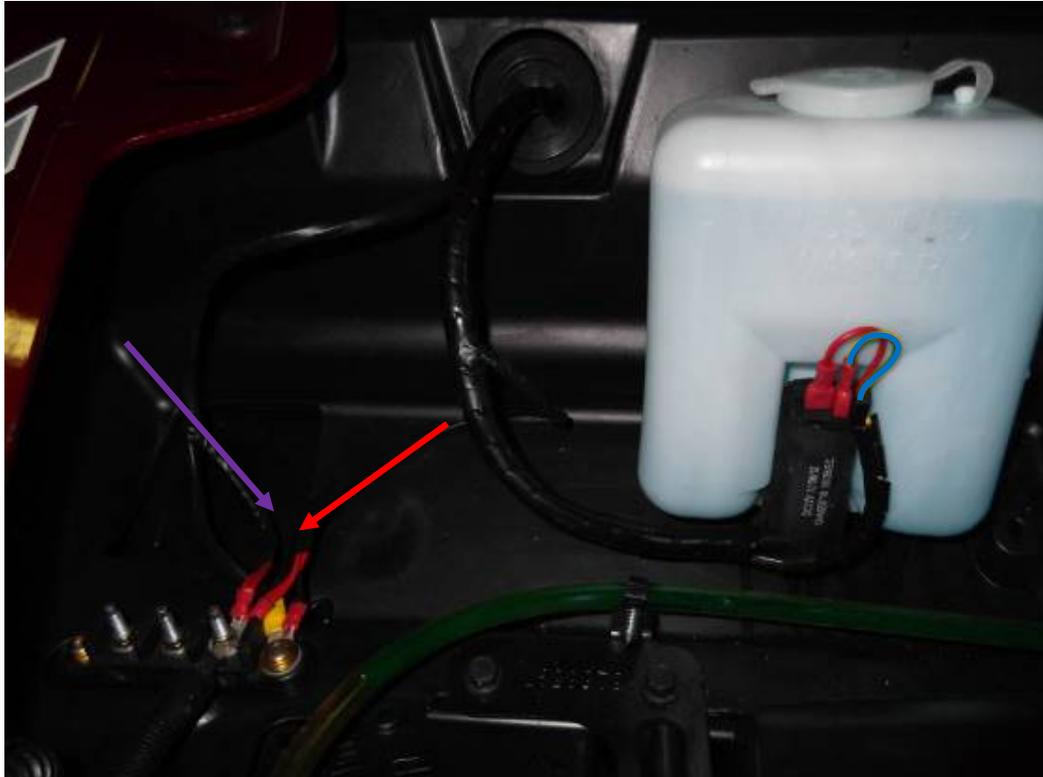
Detailed scheme of connection



Inner view onto connected swithes.



Lead the harness branch No.: 5 heater and No.: 4 wiper washer from harness to the front space.



Connect the branches with the UTV' electroinstallation. Detail of connections.



Make marks onto the dashboard and drill hole $\varnothing 8$ mm (0,31-0,33 in) into the marks center.



Cut the holes $\varnothing 56\text{mm}$ (2,2 in) into the dashboard, use hole from previous step like pivot.



Cut the edge carefully from inner side. Repeat these steps on right dashboard side. Insert the air hose into the heater air tube and fix by included "AL" self glued tape.



Lead air hoses to the roller cage. Insert air vent smaller into the hole. Insert tightening strap onto the air hose and insert the air hose onto the air vent smaller. Tighten strap hard.



Place the template onto the dashboard and adjust to best position.

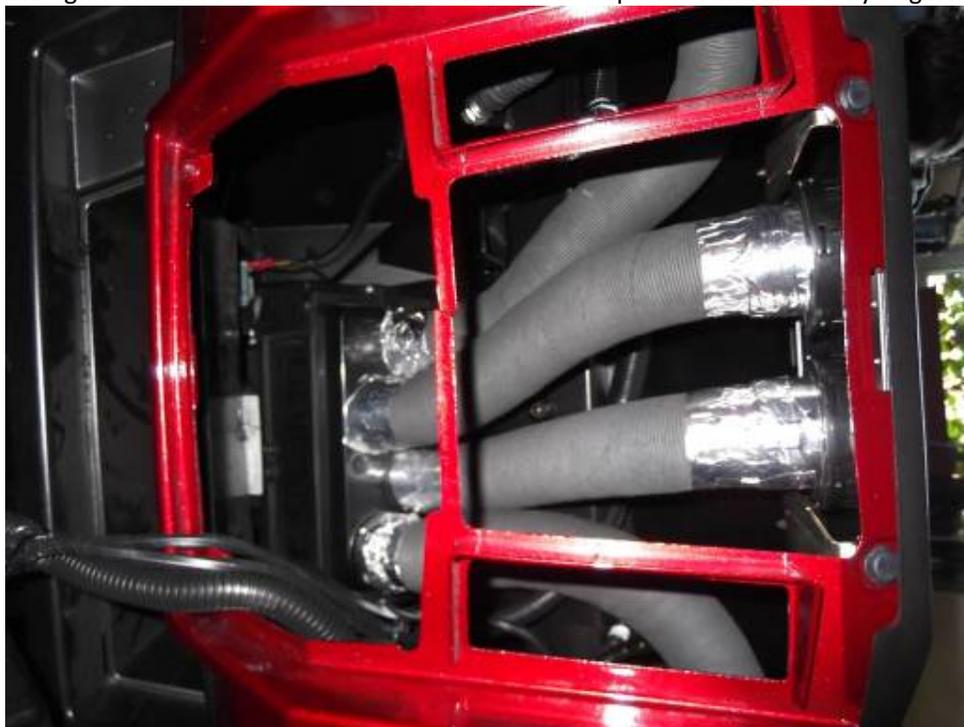


Make marks in accordance with the template and and cut the holes $\varnothing 76\text{mm}$ (3 in) into the mark's centers.



Cut the hole's edges from inner side.

Insert the air hoses into the heater air tube and fix by AL selfglued tape. Insert air vent straight into the holes from previous page and insert the air hose onto the air vent. Fix the hose with the vents by tightening straps and tighten hard. Place the dashboard cover to correct position and fix that by original screws.



Stick the seal (black hide line) onto the UTV switch panel from inner side to upper edges and install panel back to position.



Cut the hole for hose into the central floor tunnel cover and instal cover back to position.



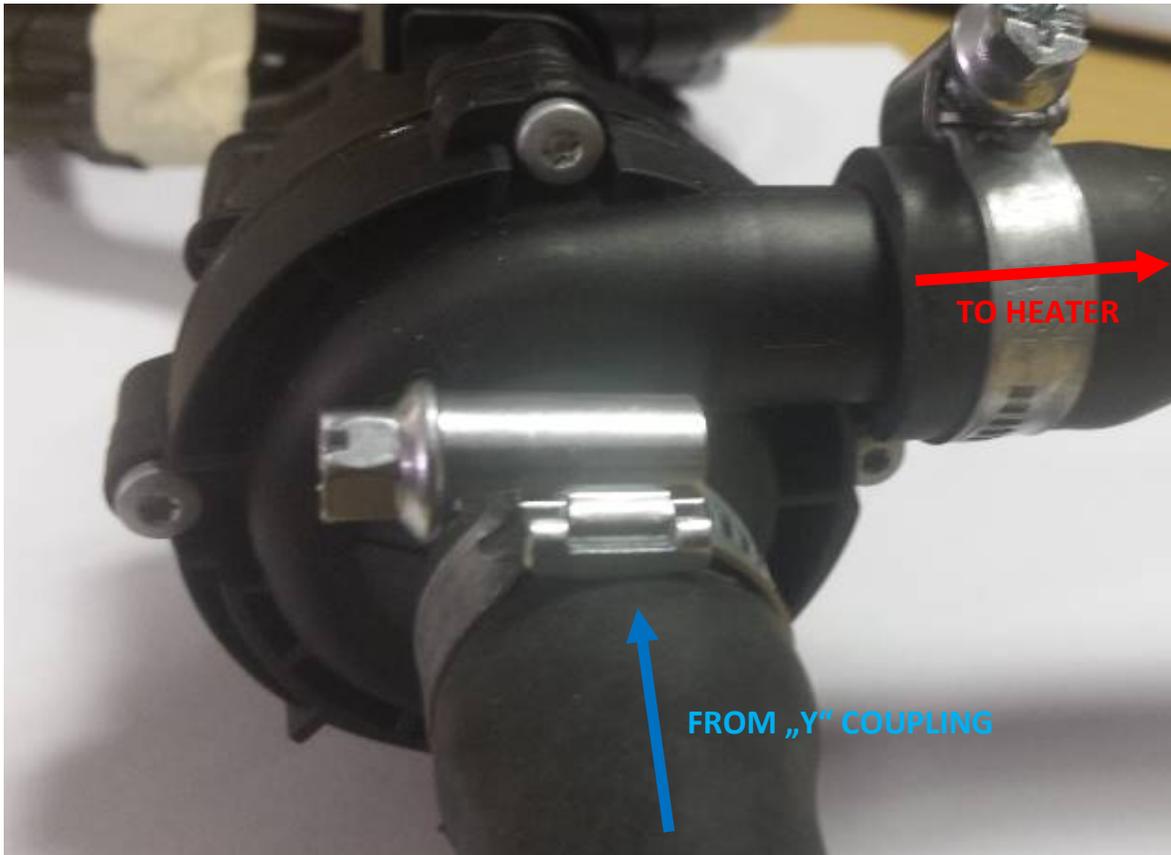
HEATER PUMP

Install the water pump onto the hot water hose to the heater with el. Valve. (see next page).

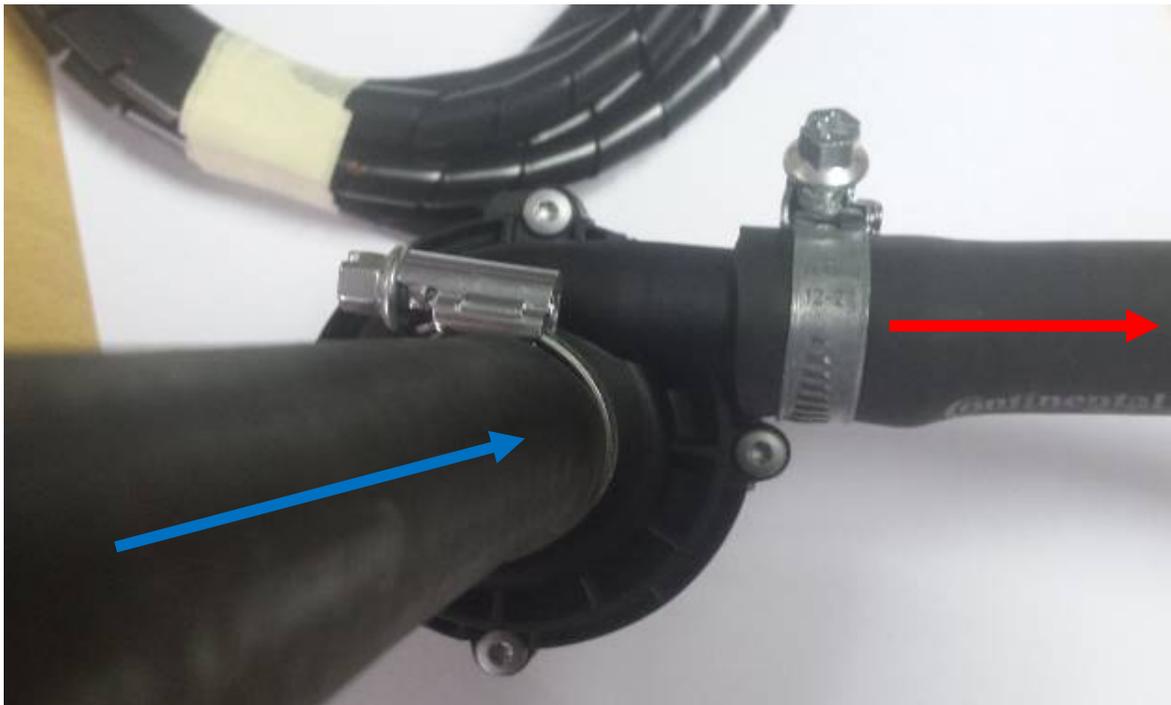


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DETAIL VIEW



OTHER SIDE VIEW



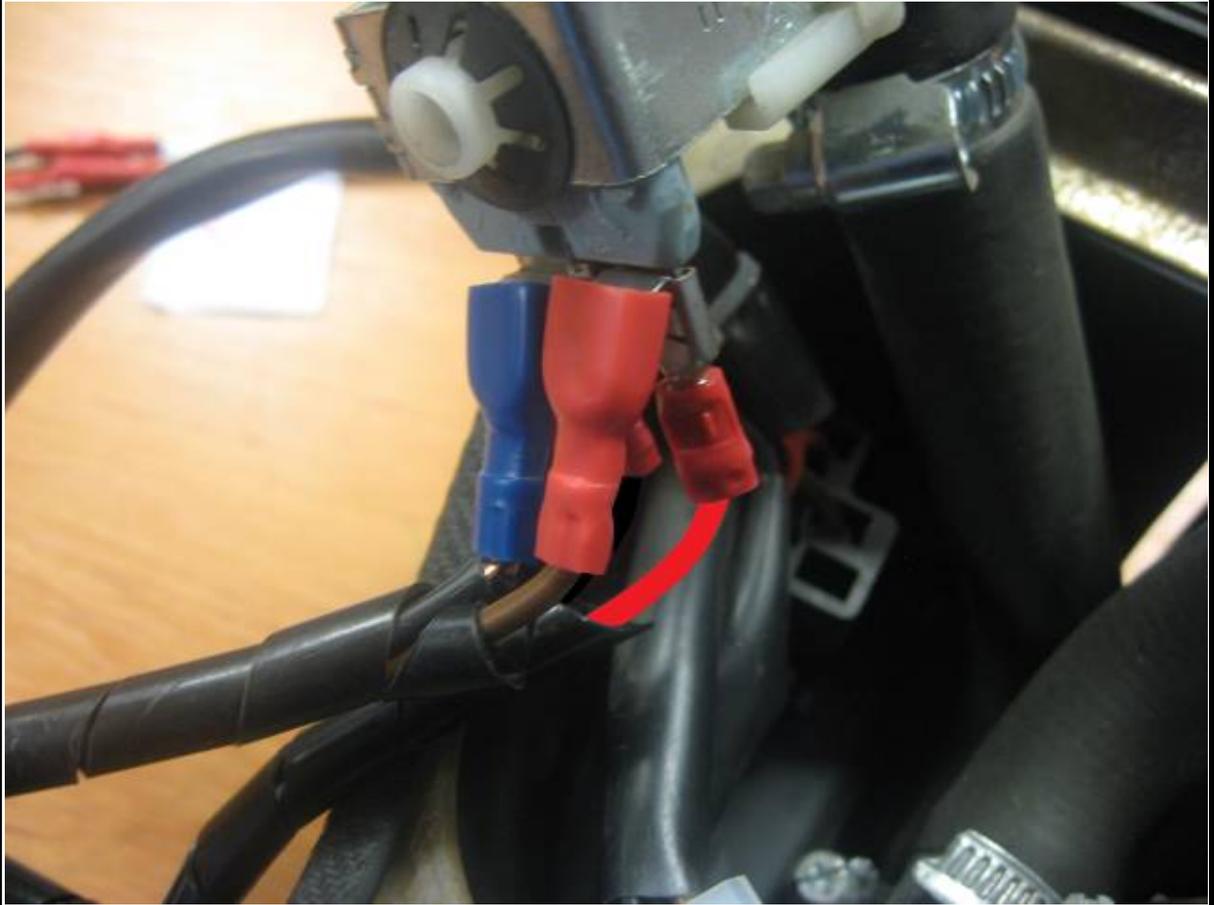
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Run the water pump harness from the water pump to the el. Valve near the water hose.



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Connect the water pump harness onto the el. Valve.



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It is absolutely necessary to bleed the air out of the UTV's engine cooling system. Incomplete bleeding of cooling system can result in engine damage. If you don't have sufficient experience with this process, we strongly recommend professional service technician assistance. We are not responsible for damages when cooling system bled incompletely. Please note that additional heater system will absorb more than 2 liters of coolant fluid.

- 1. Important: After the heater system installed check the system for leaks. Turn on the electric vent switch and confirm that the engine is cold. Start the engine, open bleeding valve and wait until engine warms up. Important: Always check engine temperature – if it overheats turn of engine.***

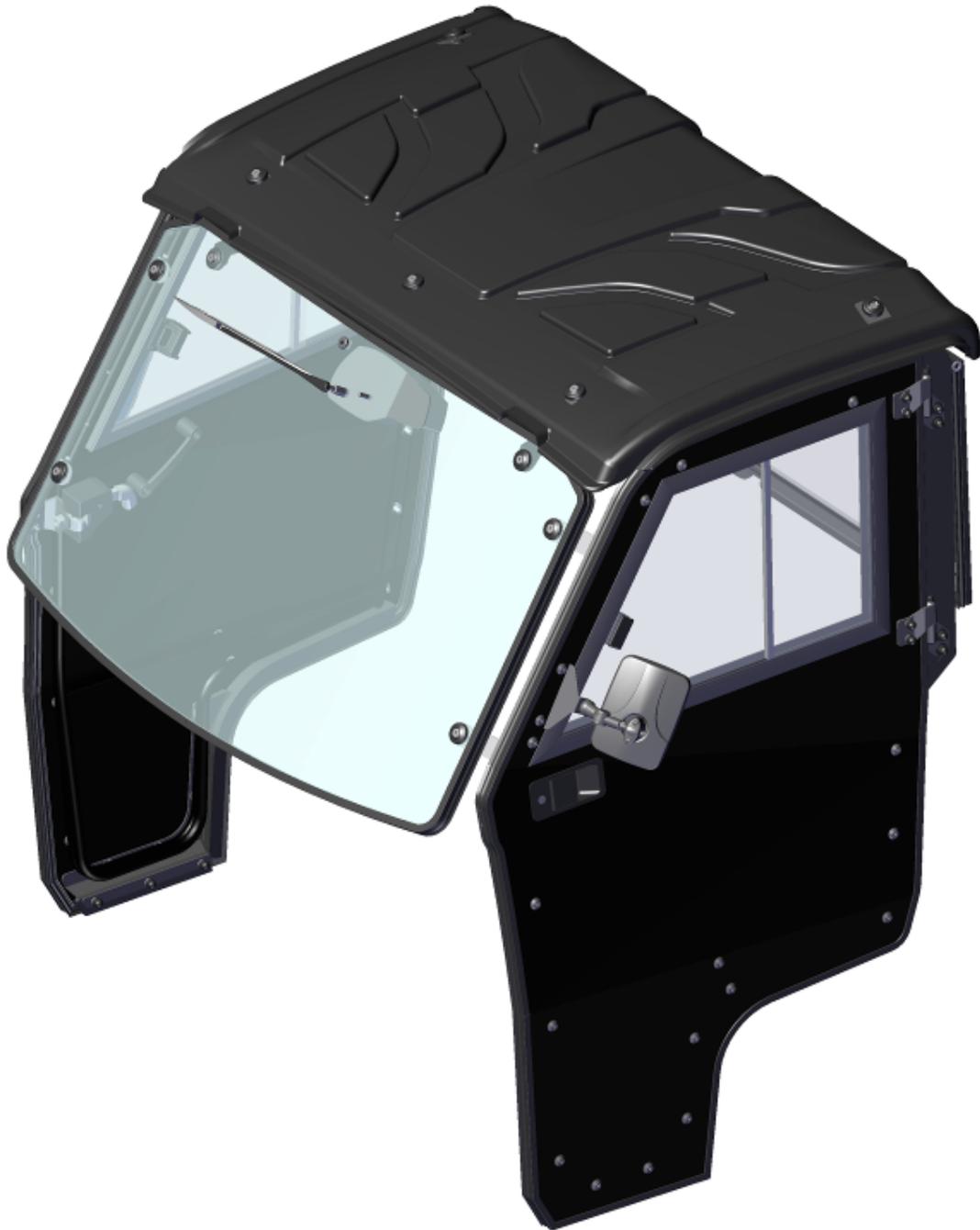


- 2. To achieve engine operating temperature depress the accelerator to increase The engine RPM. This will increase the pressure and flow of the water pump forcing more coolant through the heater. After operating temperature ceache turn of engine and open it. Trapped air should come out from heater system throughout bleeding valve.***

Repeat this procedure until heater/cooling system is completely bled out. The DFK Cab heater, like the heater in a car, generates heat from the vehicle's engine. In nearly all cases, the heater should generate enough heat from your UTV, side by side, or tractor engine that you may need to turn the heater off periodically otherwise the air in the cabin may be too hot.

It is important to check the coolant level regularly at least 4-5 times during the first several days of operation and fill as necessary until the coolant level has stabilized. The heater will draw and retain coolant, sometimes at the expense of coolant to the engine. This can cause engine overheating if not managed properly.

CAB PREVIEW



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LEFT DOOR + RIGHT DOOR

Remove the original screws (in blue circles) from the roller cage, and save these carefully



Place the left door base onto the roller cage and adjust that onto the best position.



Fix the door base with the roller cage by original screws from page No.: 36.



Fix the door base with the roller cage by original screw from page No.: 36.

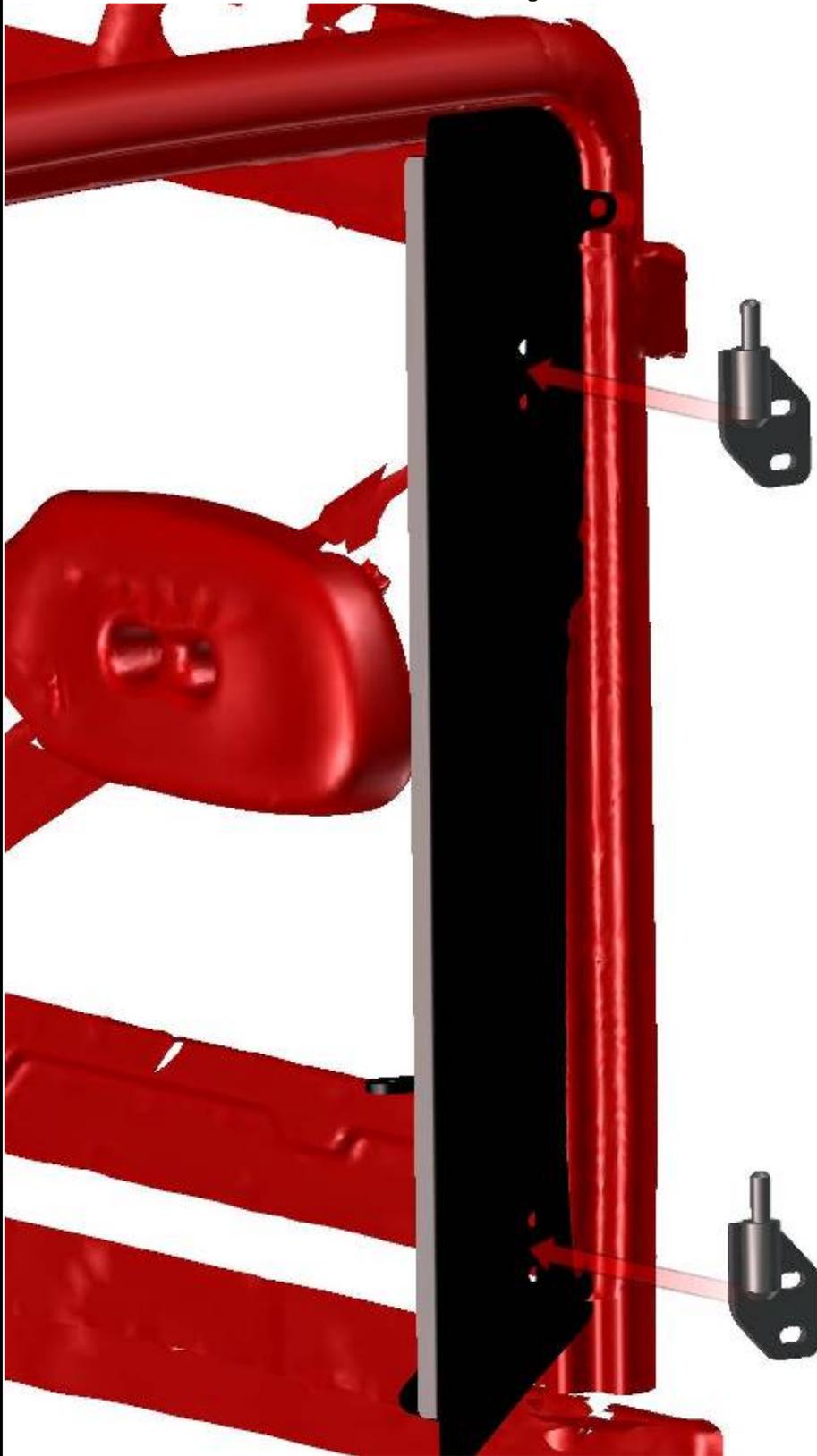


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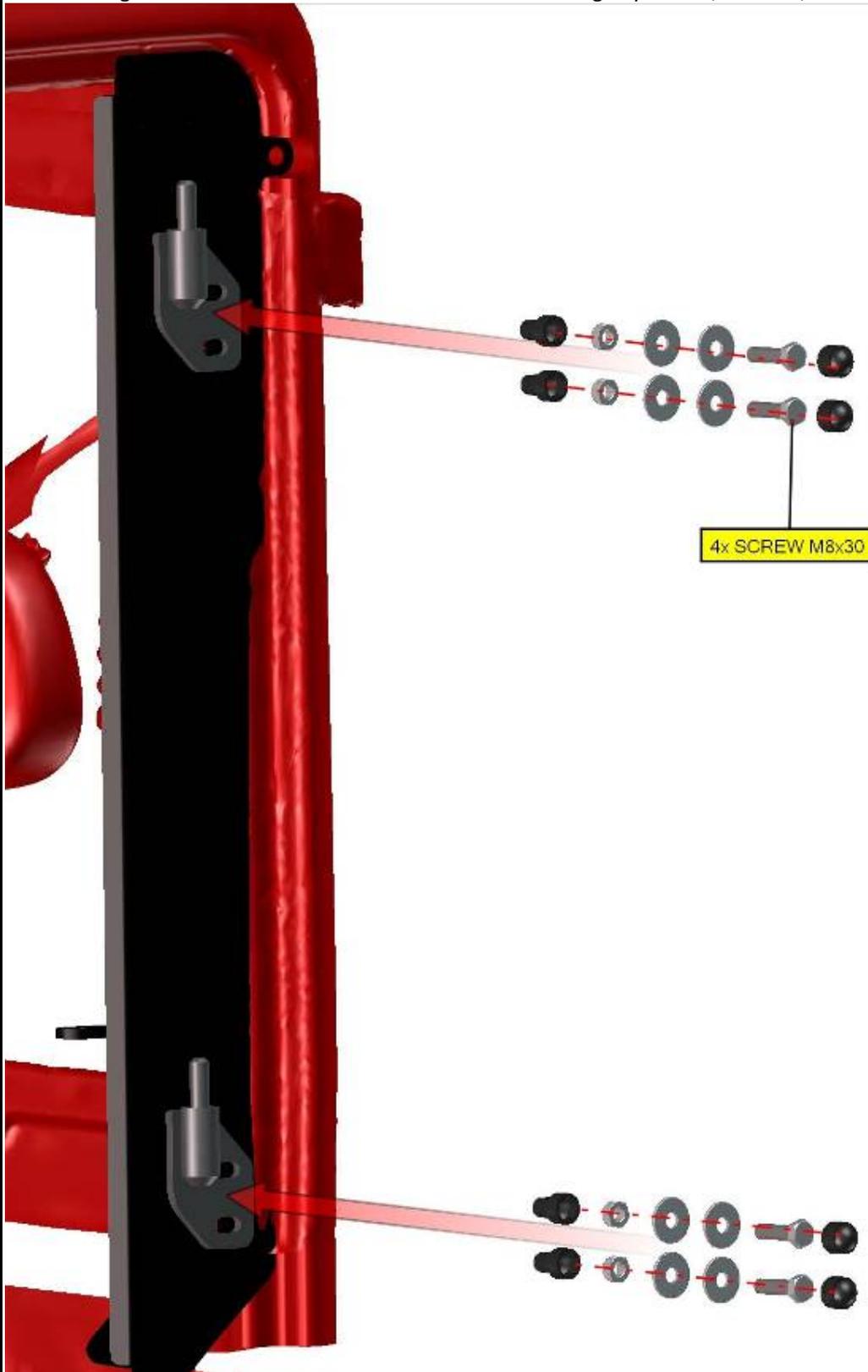
Place the door base ledge onto the door base and onto the roller cage.



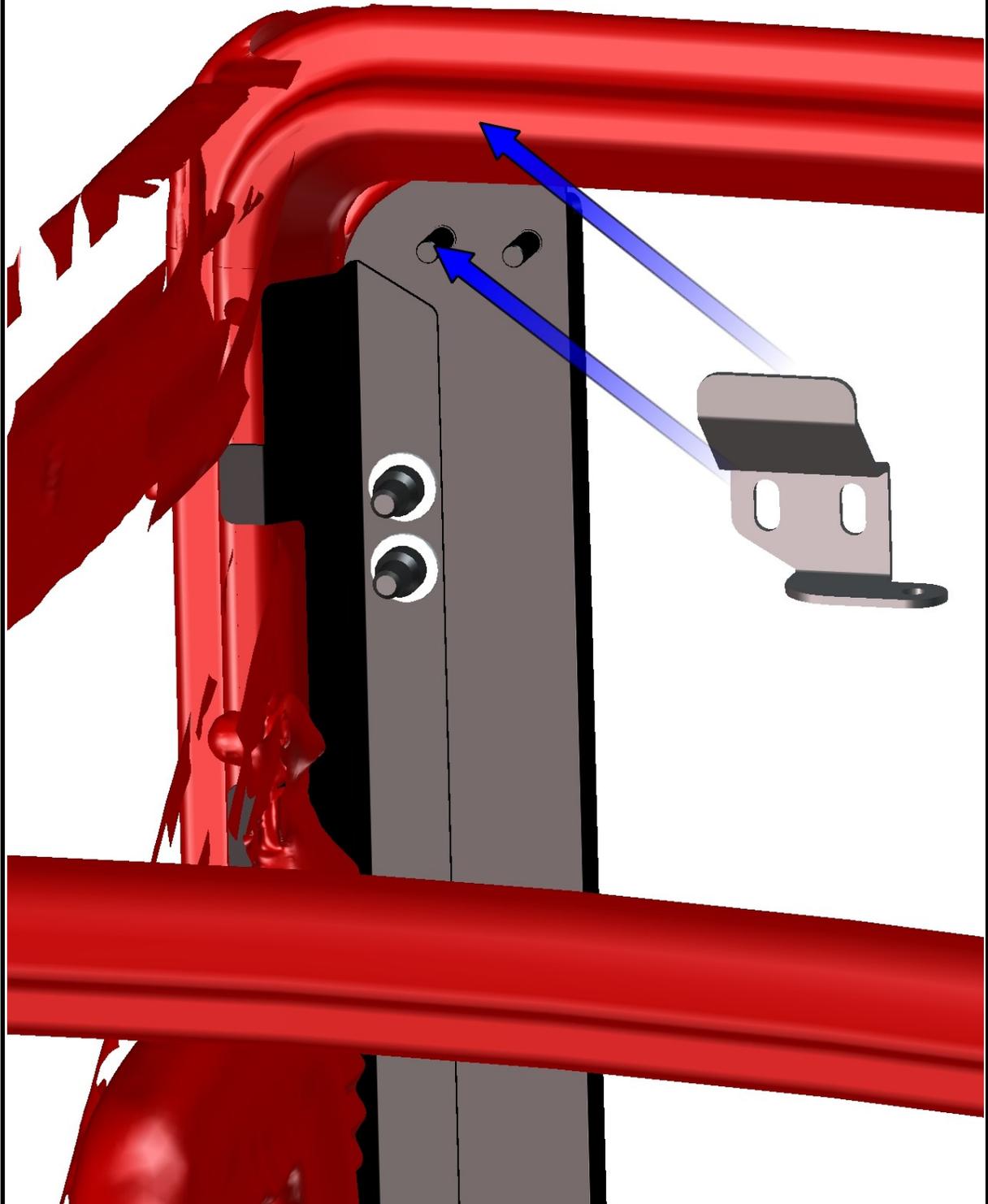
Place the correct hinges onto the door base.



Fix the hinges with the door base and with the door base ledge by screws, washers, nuts and nut covers.

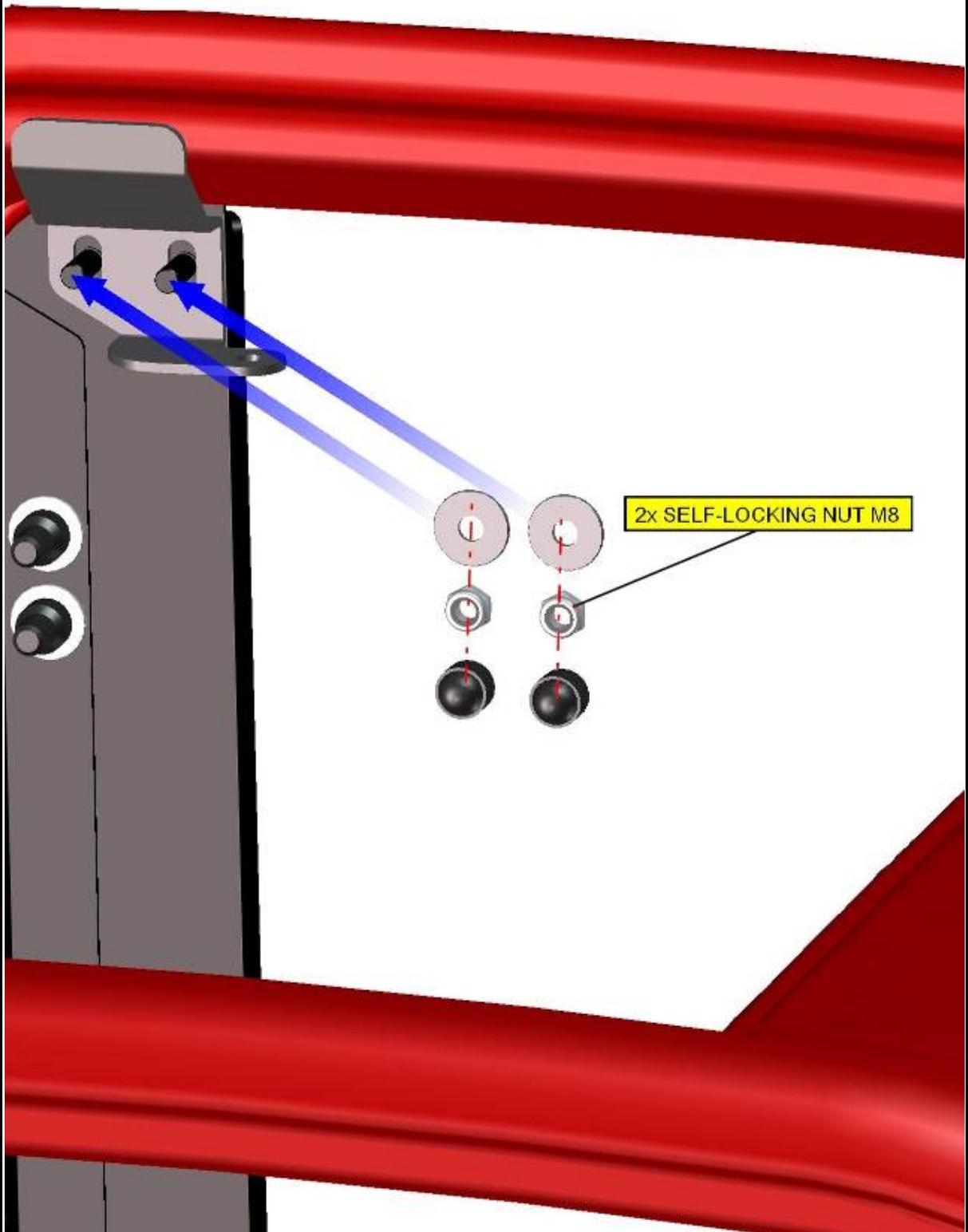


Place the door base holder onto the door base and onto the roller cage.



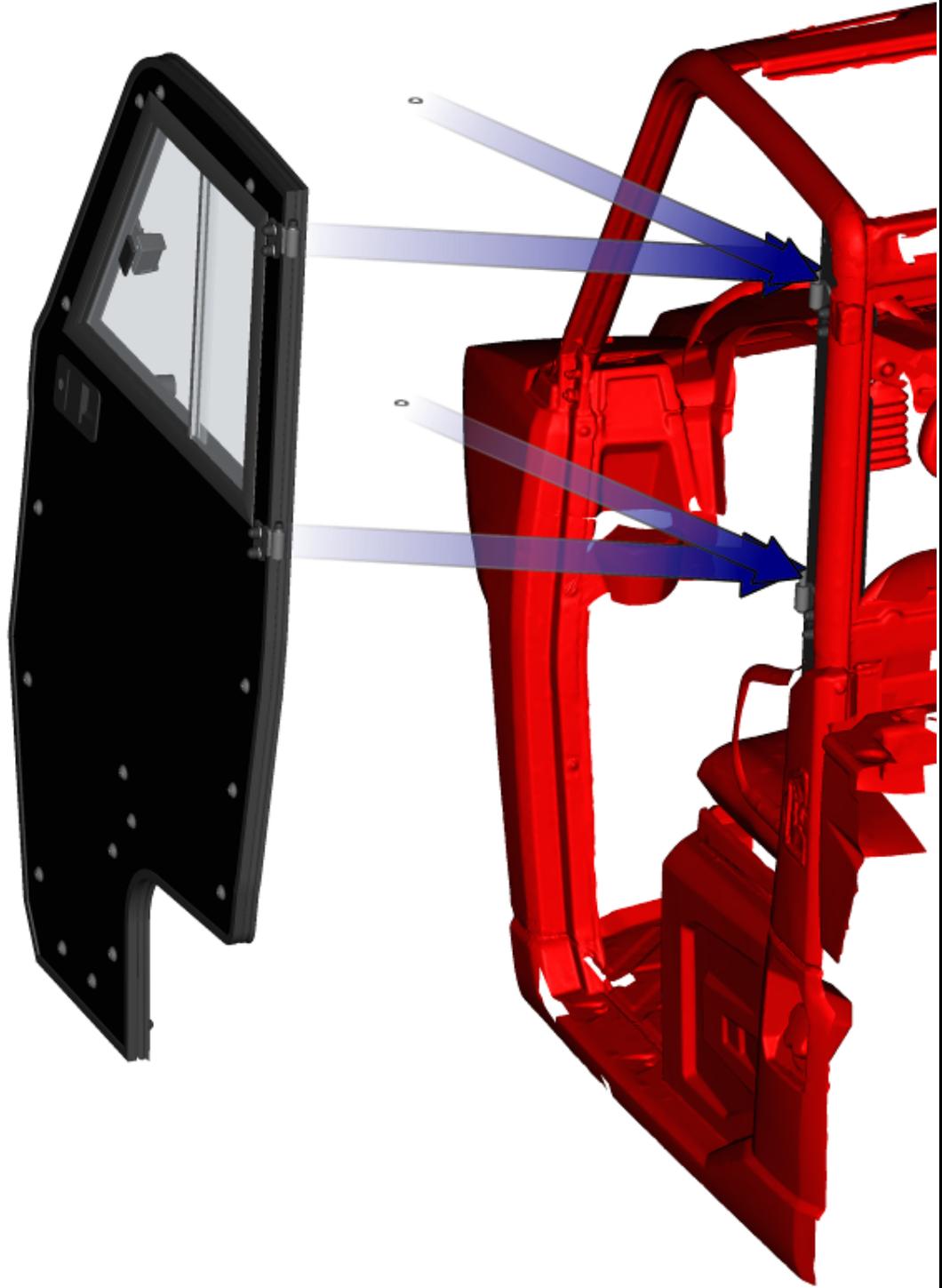
49

Fix the door base holder with the door base to the roller cage by nuts, washers and nut covers.



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Lubricate the hinge's pins and insert washer 10 onto the pins. Place the door onto the hinges pins.



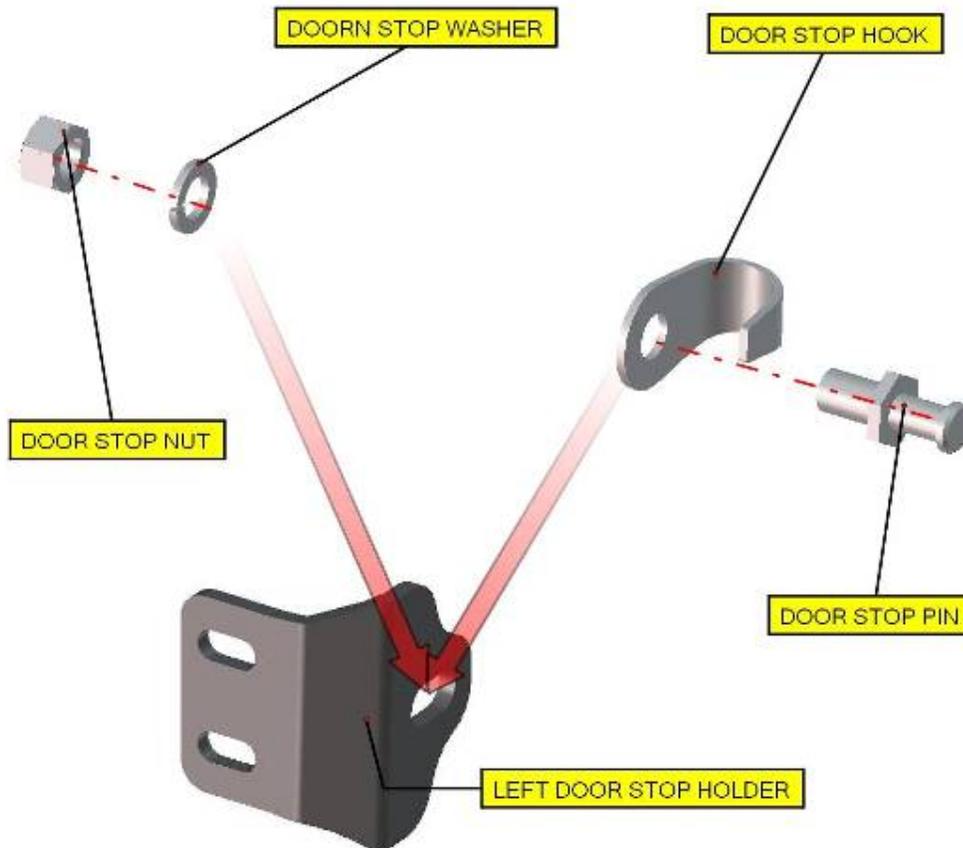
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Adjust the door to best position by the hinges and tighten the hinge's screws and nuts hard.



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Install door stop assembly into the door stop holder.
Left and right door stop holders is different don't mistaken.



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Uninstall original screws (in green circles) from roller cage and place the door stop holder onto the roller cage.



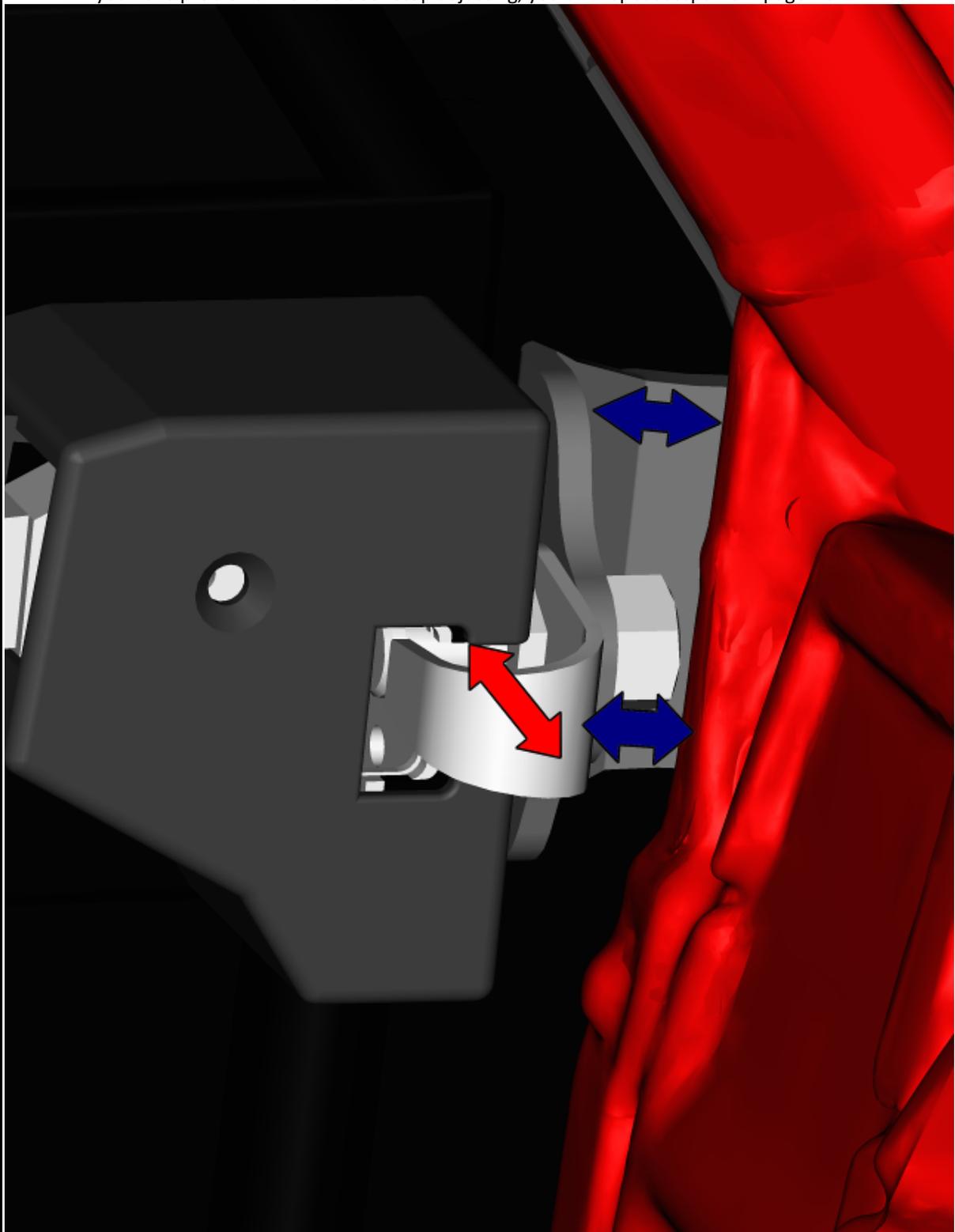
54

Fix the door stop holder with the roller cage by screws and washers.



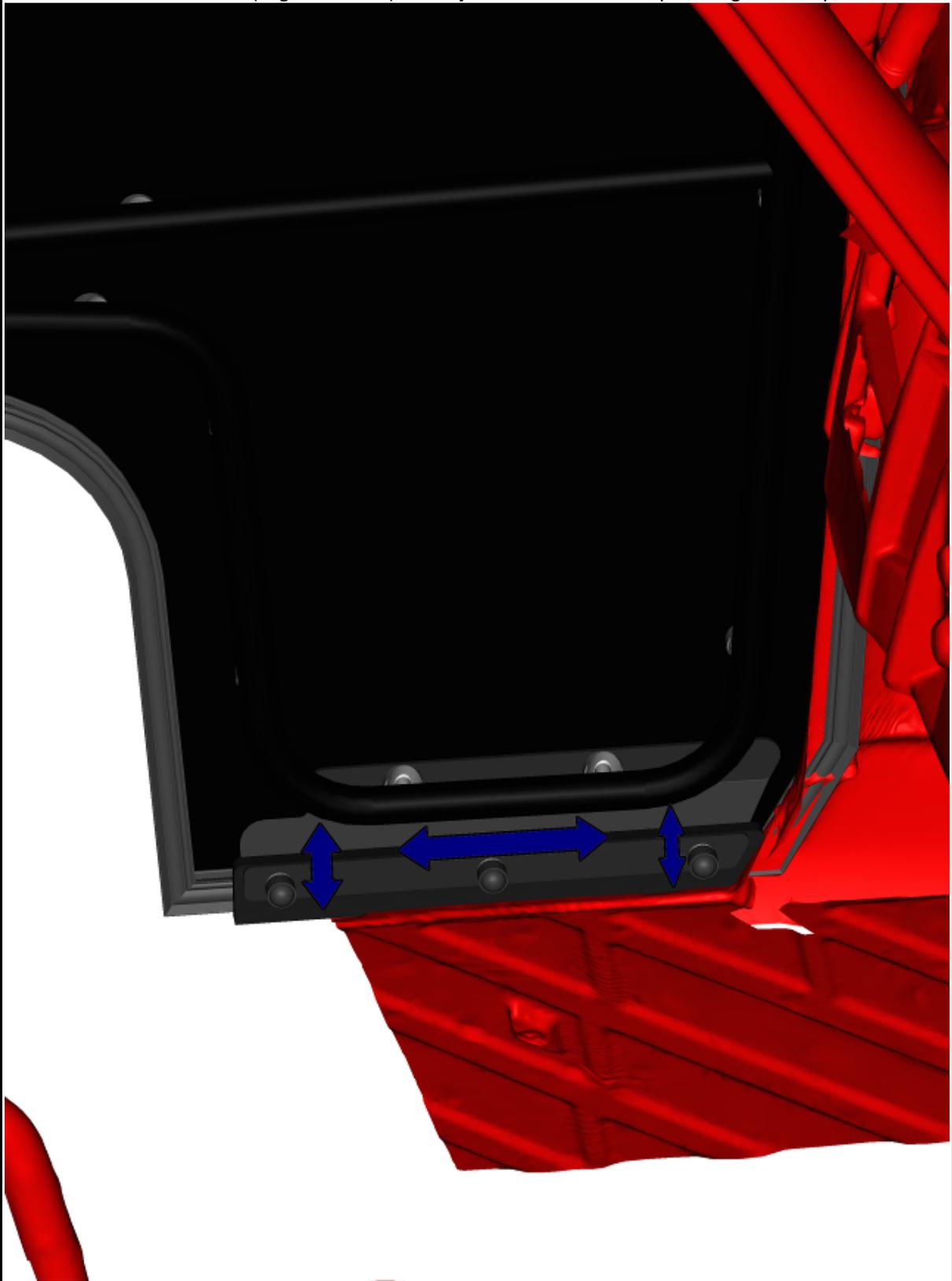
55

Close the door and adjust the door stop to best position in accordance with the door lock inner mechanism.
If you adjust the door stop correctly and close door slowly, you can hear two clear metallic click.
If you have problems with the door stop adjusting, you can repeat steps from page No.: 42.



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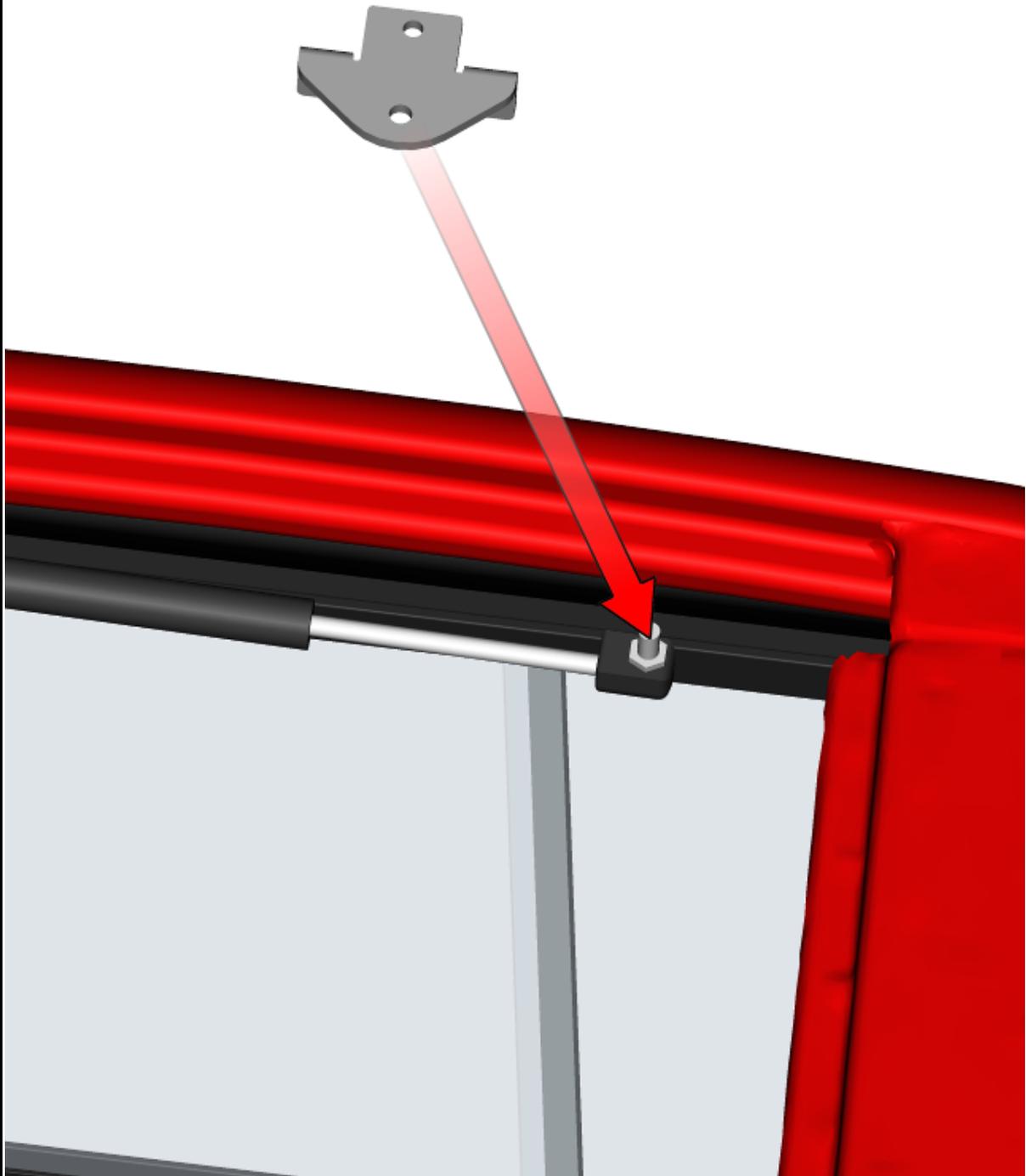
Loosen the door's nut (in green circles) and adjust the door bottom epdm ledge to best position.



Install the gas spring into the gas spring holder (blue part in picture for better orientation).
Fix the gas spring with the holder by nut, washer and nut cover.



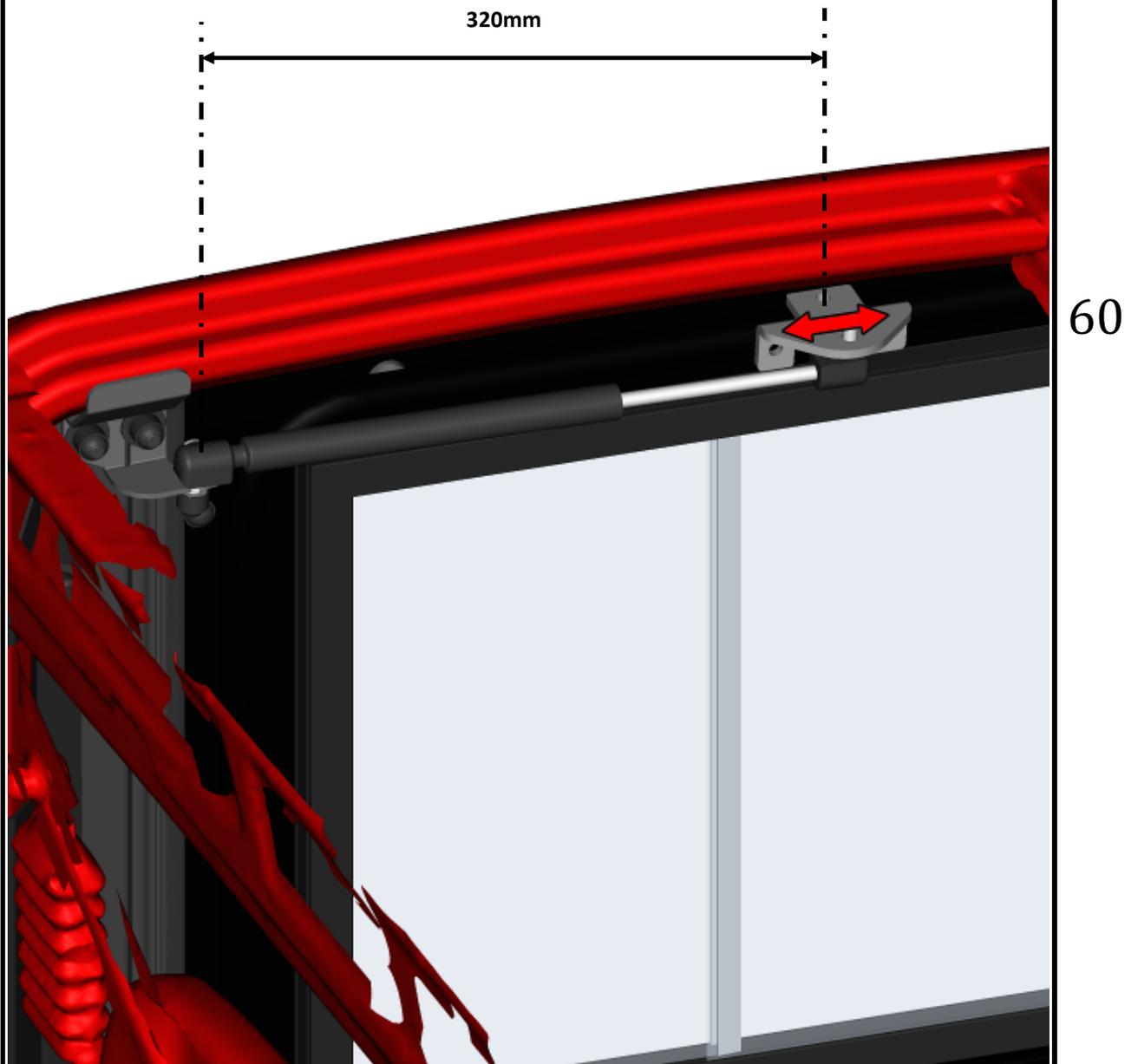
Install the gas spring holder onto the gas spring pin.



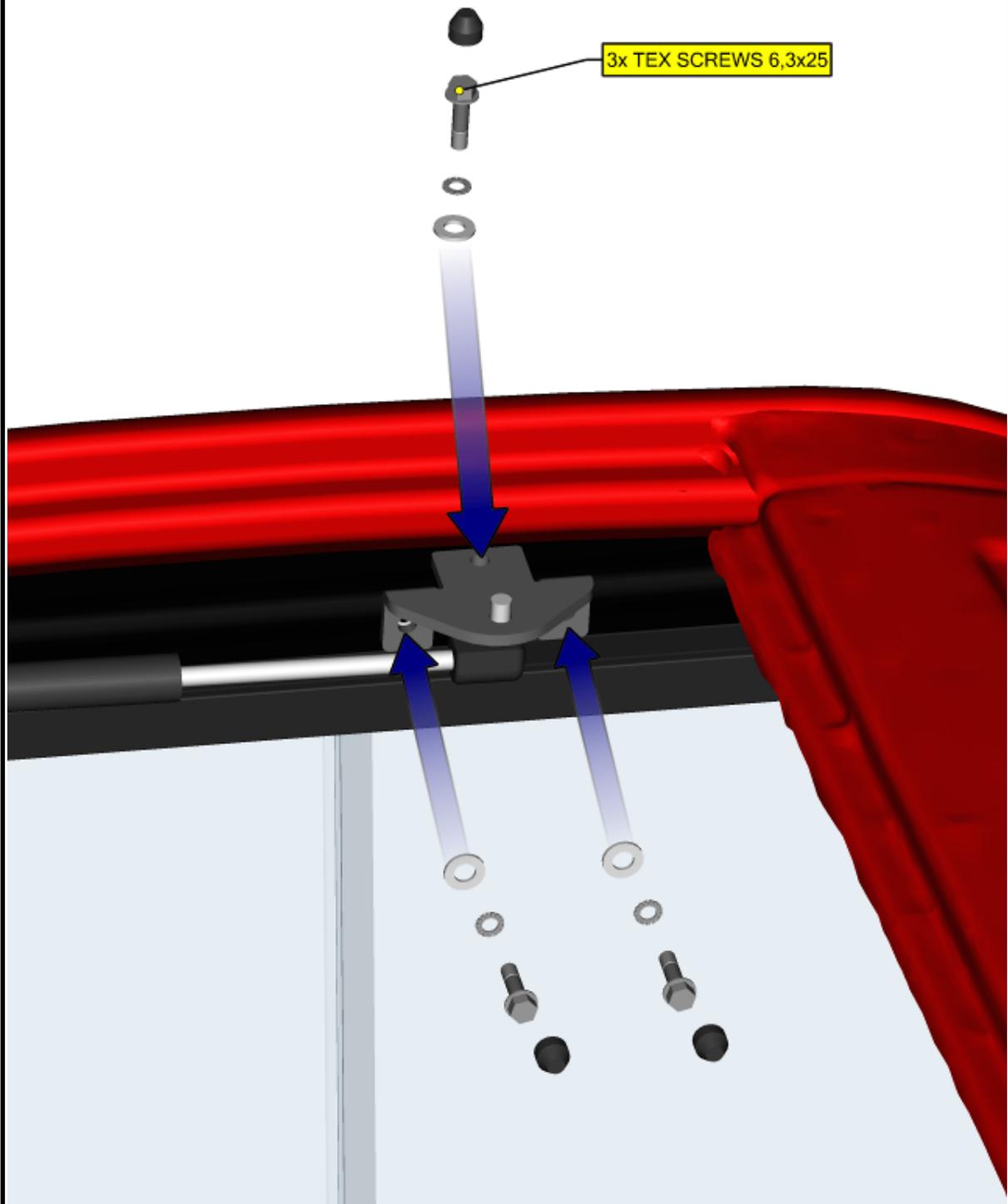
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Adjust the gas spring holder to best position.

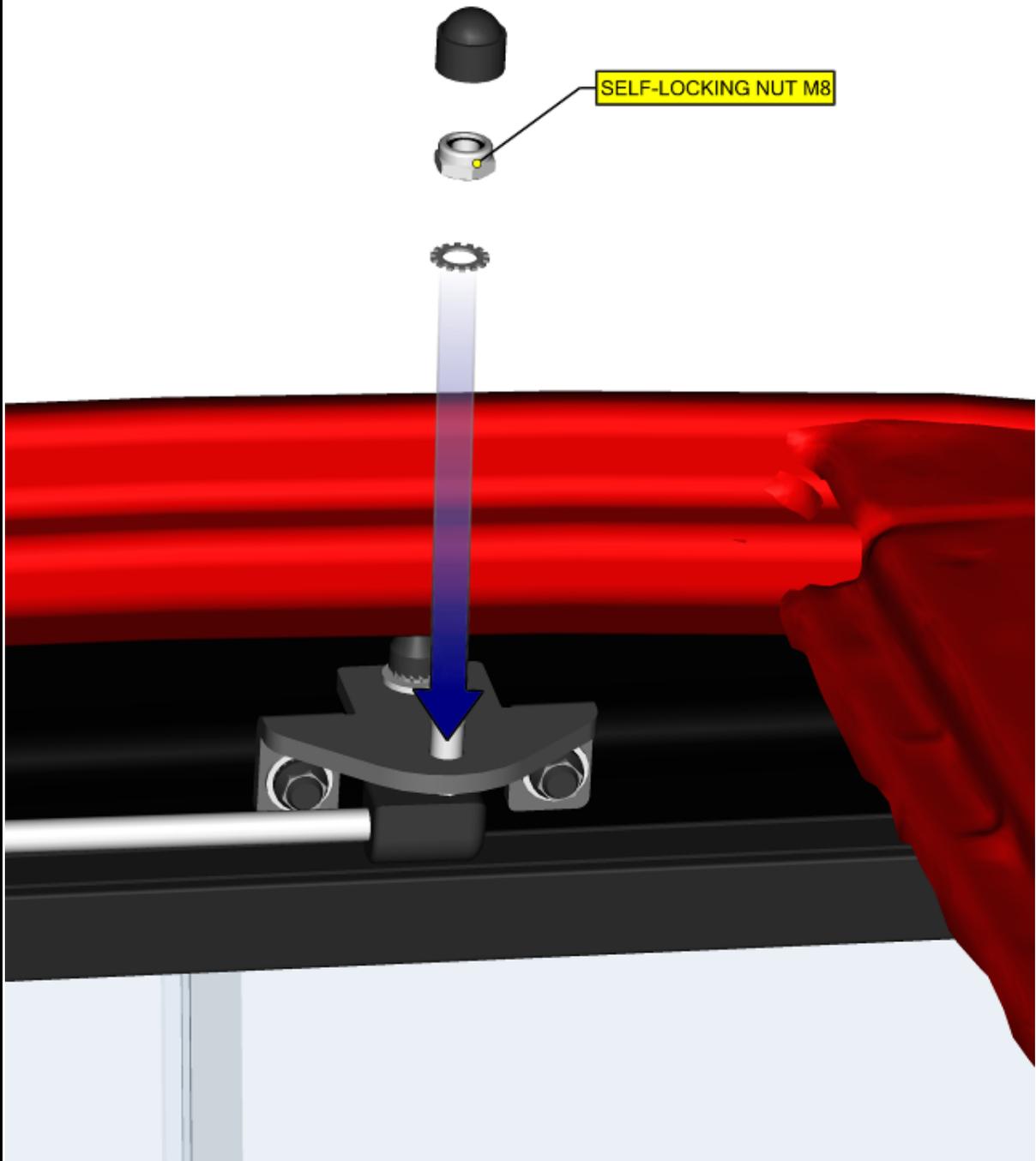
IT IS IMPORTANT TO INSTALL GAS SPRING IN SAME ORIENTATION LIKE IN PICTURE
(If you adjust holder more to rear side, door is open to bigger angel.)



Fix the gas spring holder with the door frame by TEX screws, washers and TEX covers.
(You can take out the gas spring for easier fixation, and after that, place gas spring back to holder.)

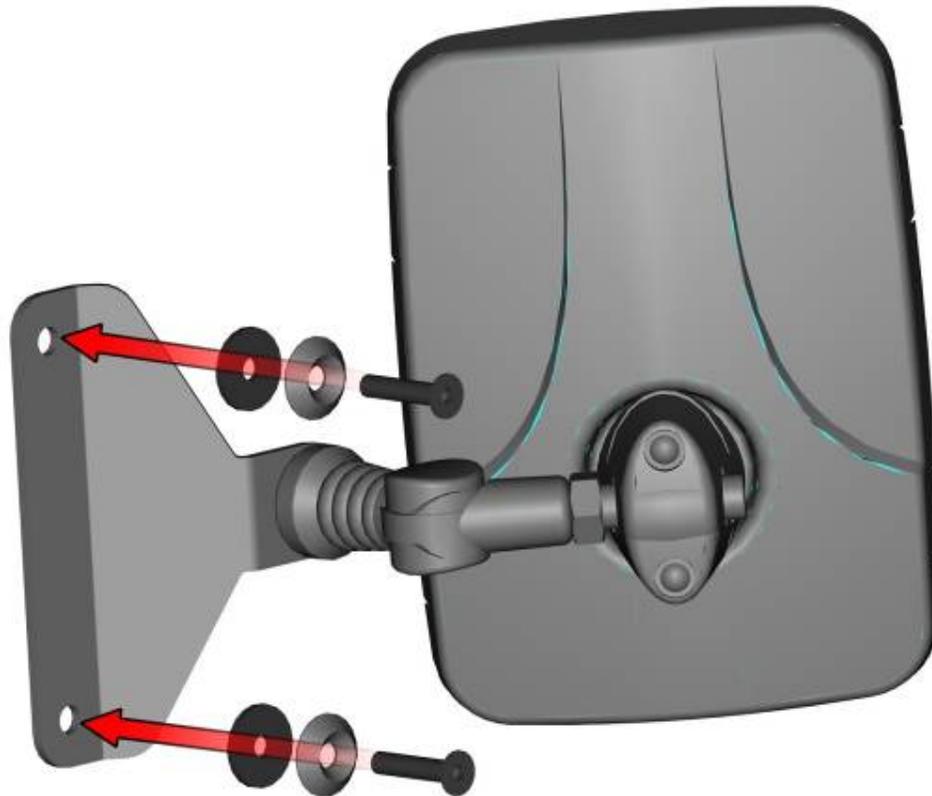


Fix the gas spring with the holder by nut, washer and nut cover.



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Uninstall these screws from the door. Place the rear mirror and the mirror washer onto the door panel.
Fix the mirror and the washer with the door by screws from previous step.



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The right door installation is similar.

ELECTROINSTALLATION – WIPER SET

View onto the wiper motor with the cover and with the middle ledge.



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Place the washer onto the wiper longer pin.



Place the washer onto shorter wiper pin.



View onto installed washers.



Place the wiper assembly onto the front glass from inner side.
Insert these washers onto the wiper's pins and onto the glass from outer side.

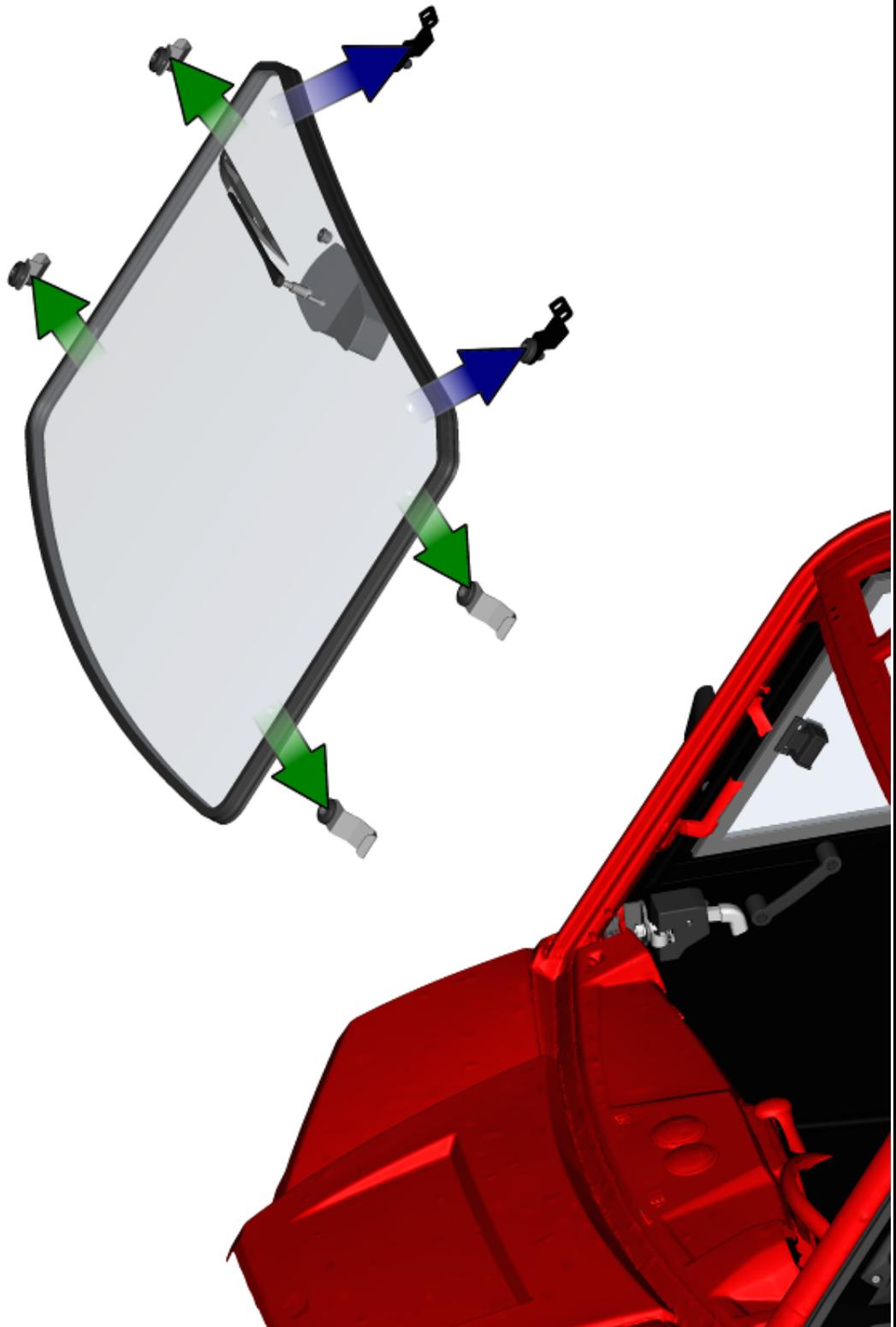


Fix the wiper motor with the front glass by included nuts and tighten these correctly.



FRONT PANEL

Uninstall the front holder assemblies from the window and safe assemblies for next usage.

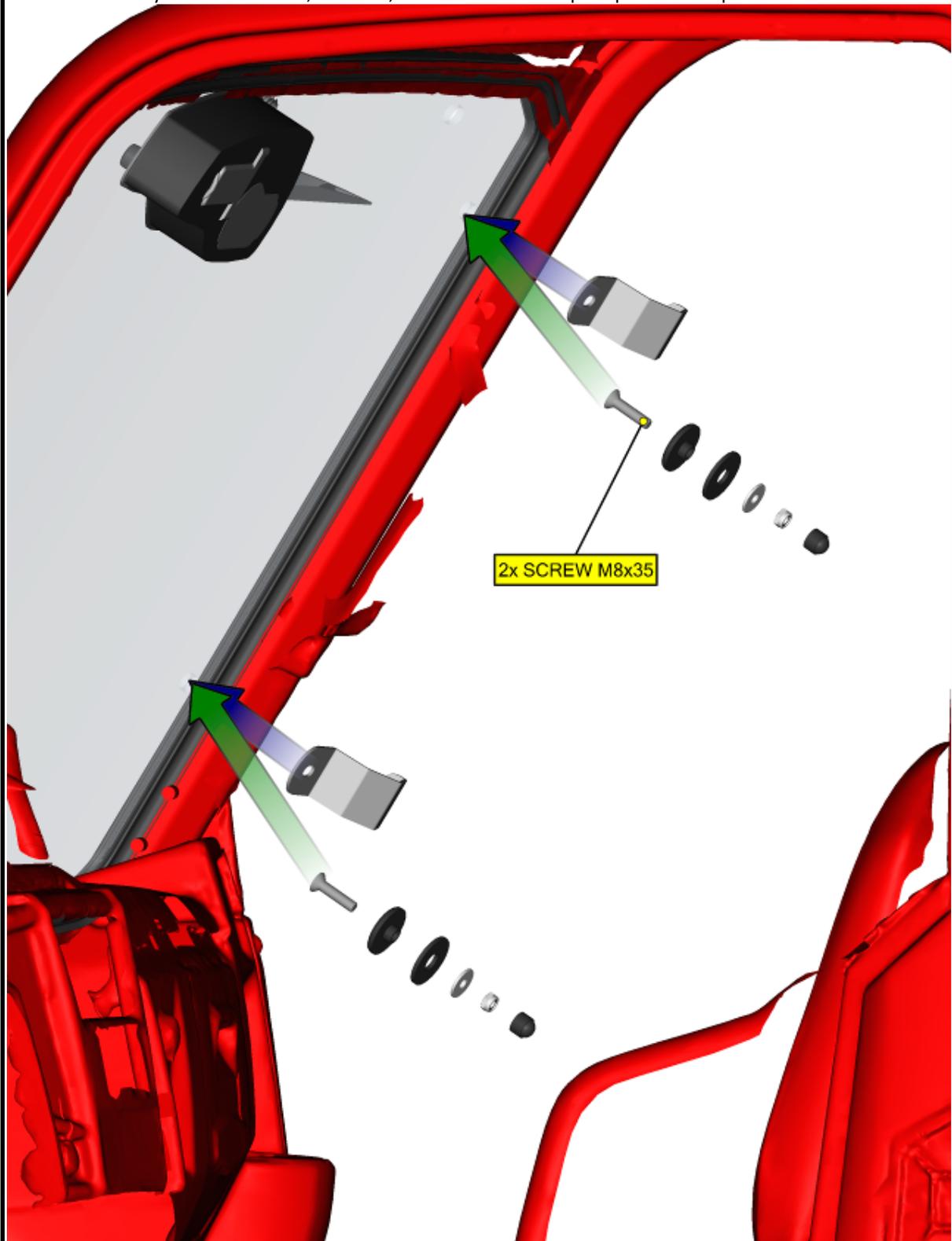


Place the front window onto the vehicle frame.

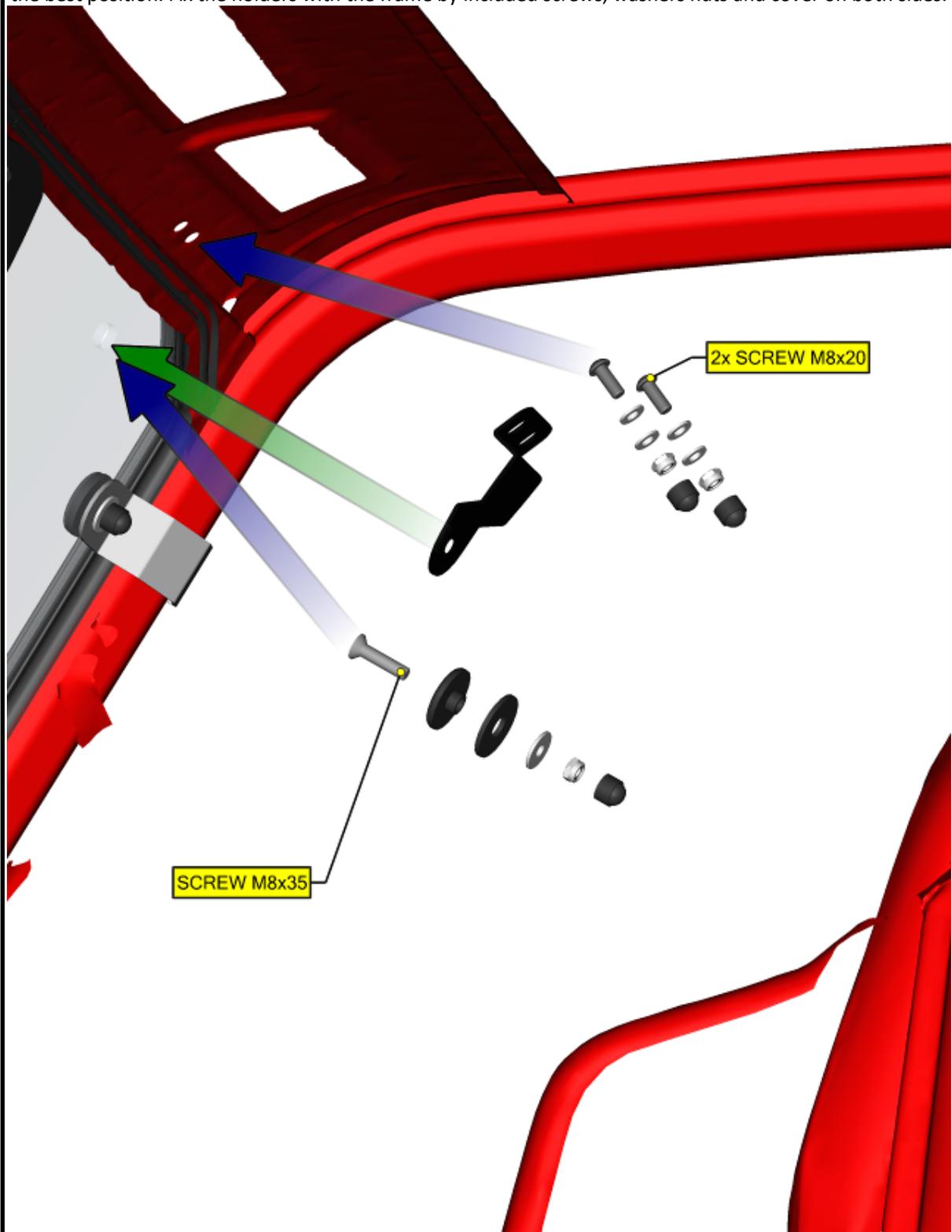


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Place the side holders onto the window and onto the vehicle frame. Fix the holders with the window to the vehicle by included screws, washers, nuts and covers. Repeat previous steps on the left side.



Place the front upper holder onto the window and onto the frame on both sides. Fix the holder with the window by included screw, washers, nut and covers on both sides. Adjust the window and the holders to the best position. Fix the holders with the frame by included screws, washers nuts and cover on both sides.

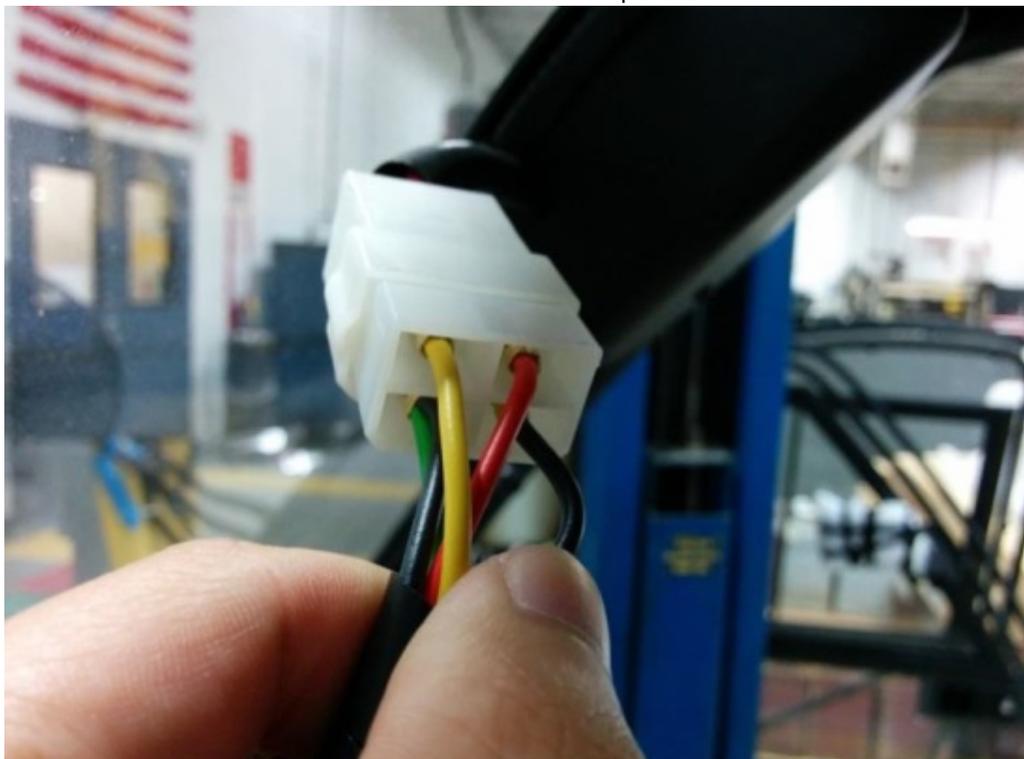


ELECTROINSTALLATION step 2.

Lead the harness branch No.: 1 around the roller cage to the front wiper motor.



Connect the harness branch with the wiper motor connector.



Now you can turn on wiper switch and look on the larger wiper pin.
If you connect all harness connectors correctly, pin is turning. Find the ends of turning and install the wiper arm on correct position.



Fix the wiper arm with the wiper motor pin by included nut.
Insert plastic holder onto the wiper latch pin in correct position



View onto the installed plastic holder.



Insert the wiper arm hook onto the wiper latch plastic holder and press it into the correct position.



View onto installed wiper arm hook.

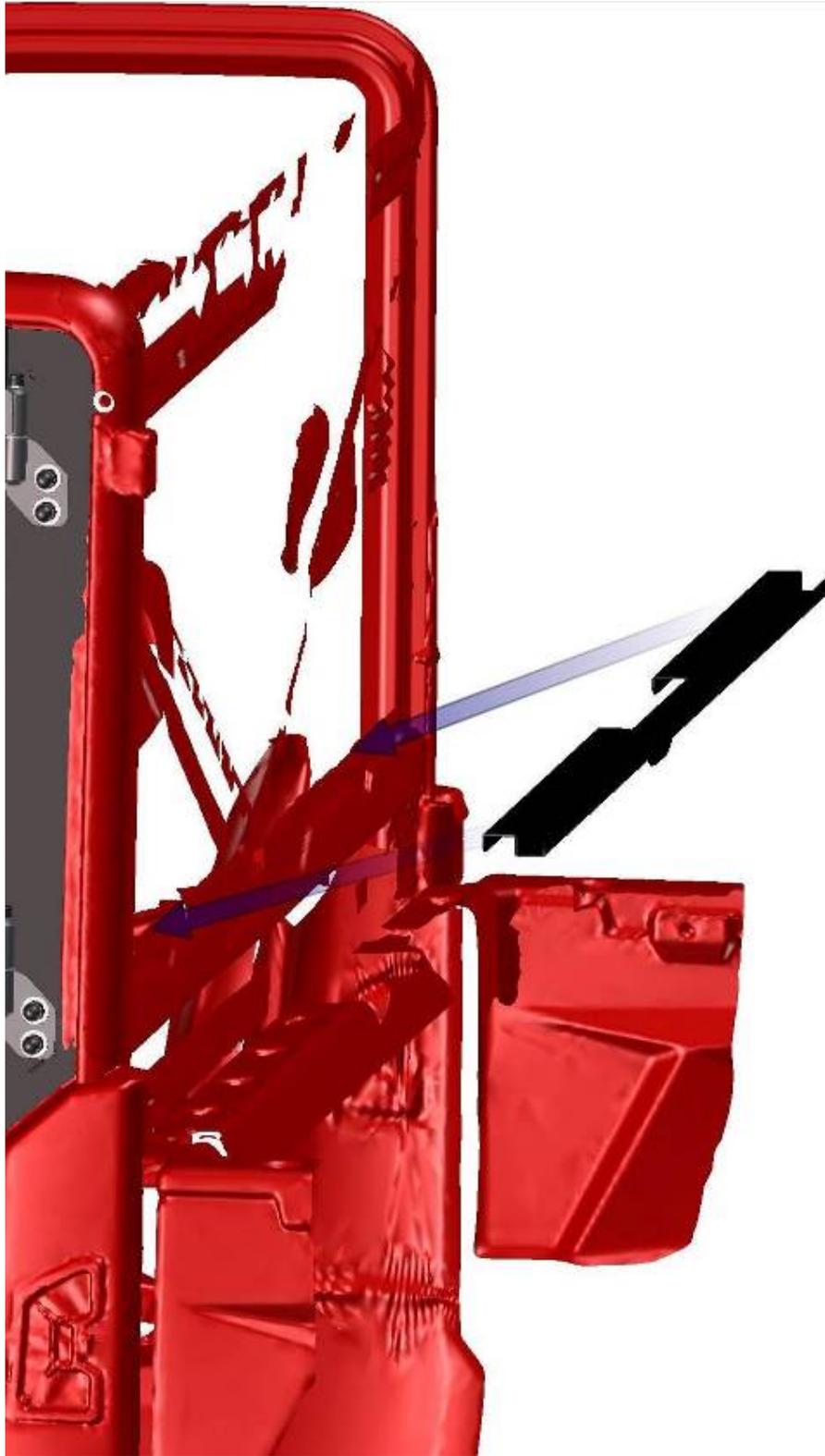


Connect the washer hose from the harness with the washer hose from wiper arm by included tube.

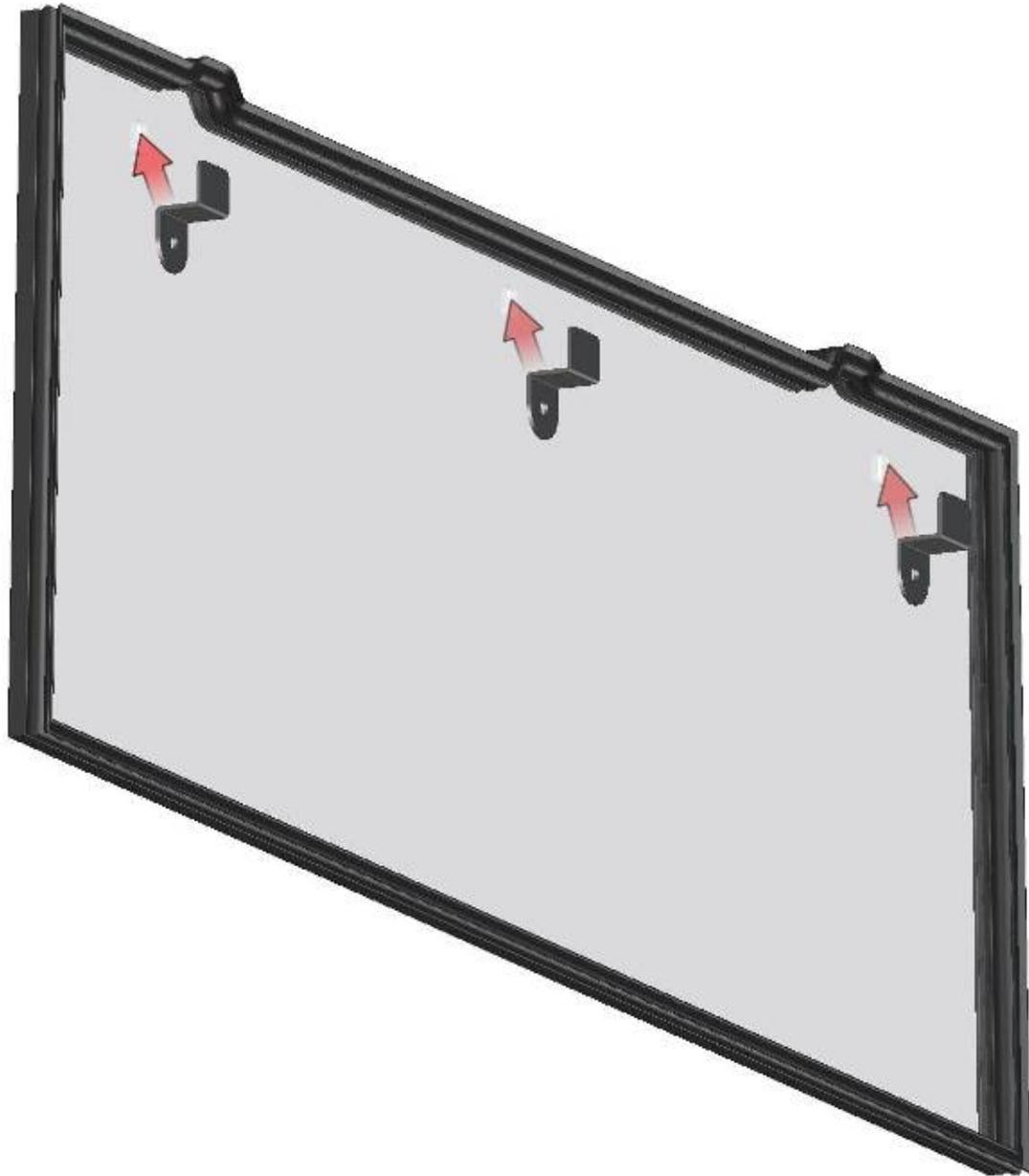


REAR PANEL

Insert the rear bottom ledge onto the rear bottom UTV's wall and adjust to correct position.

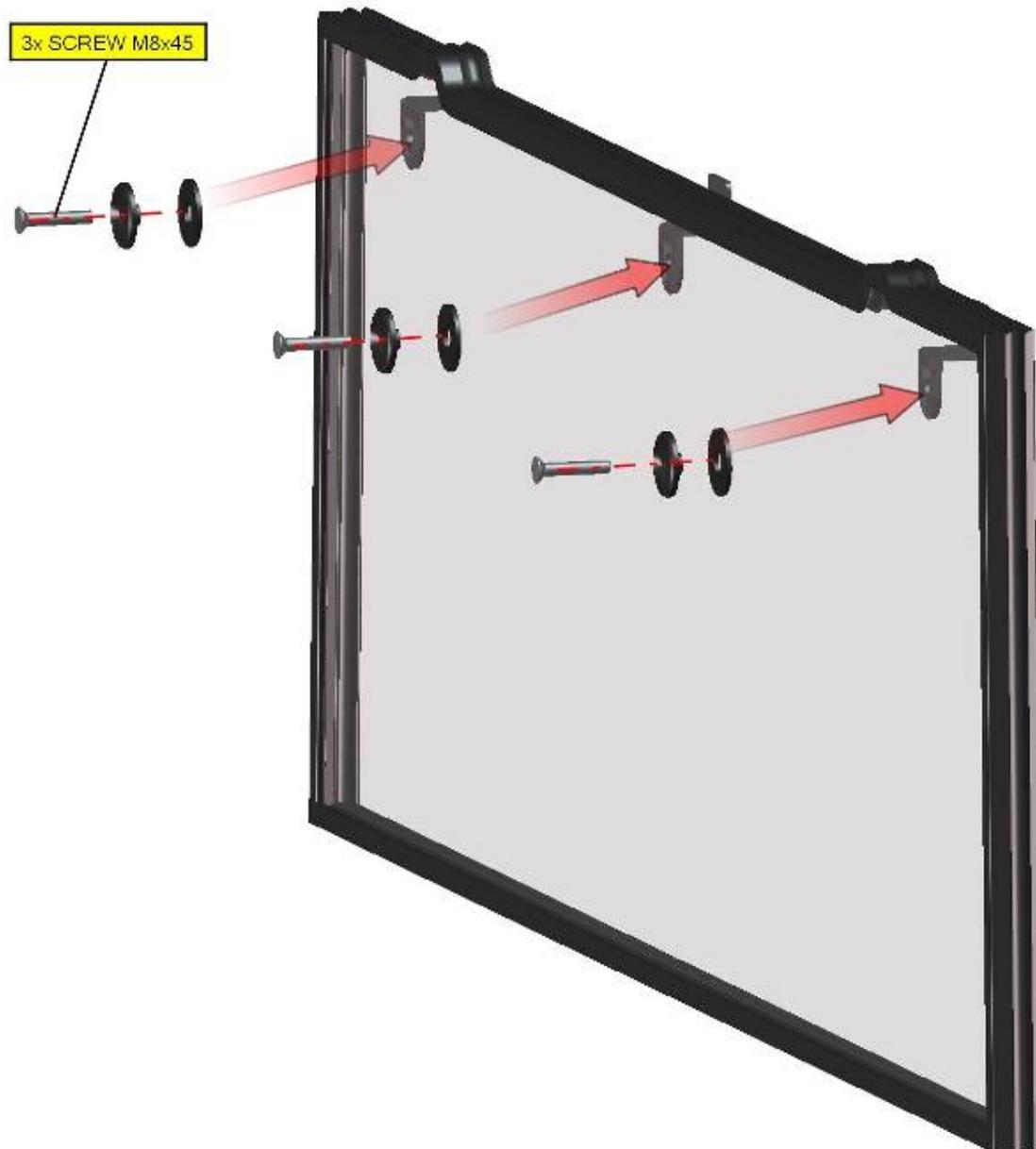


Place the rear glass holders onto the rear glass.

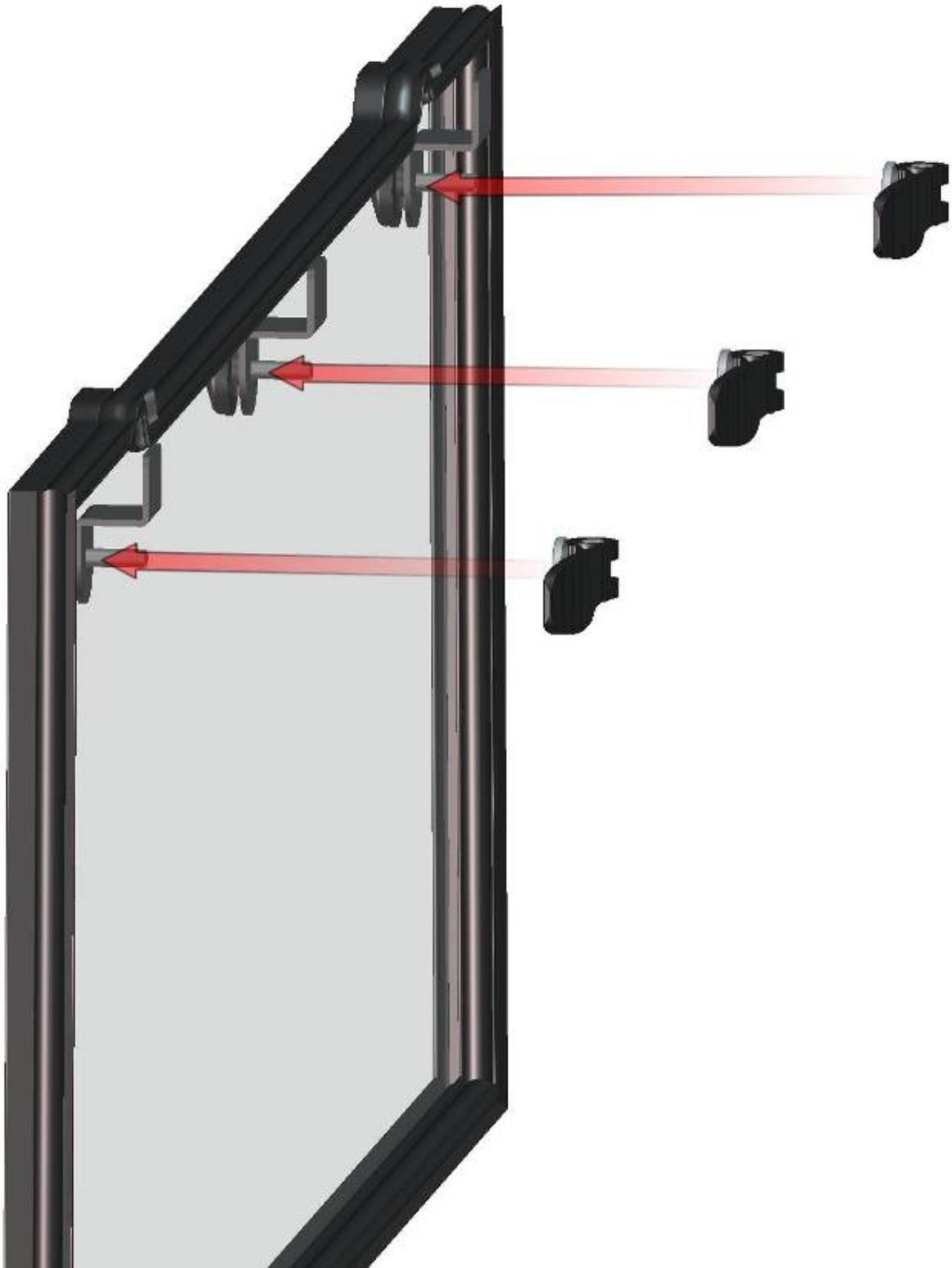


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Install the screws and washers into the rear glass from outer side.

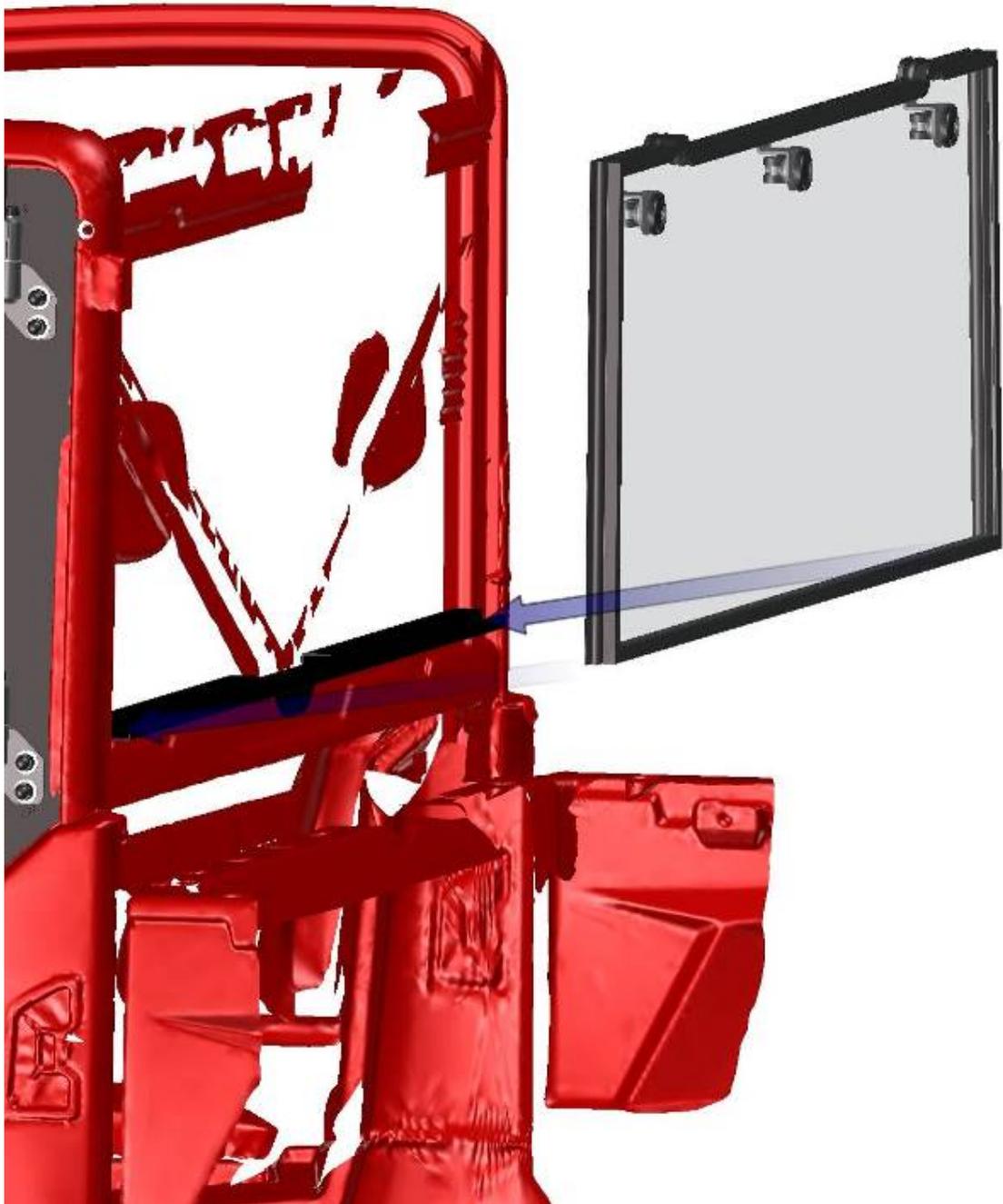


Fix the glass with the holders by screws and fast-lock handles and don't tighten these.



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Place the rear panel into the rear ledge and onto the roller cage.



Fast-lock assembly (explode view).



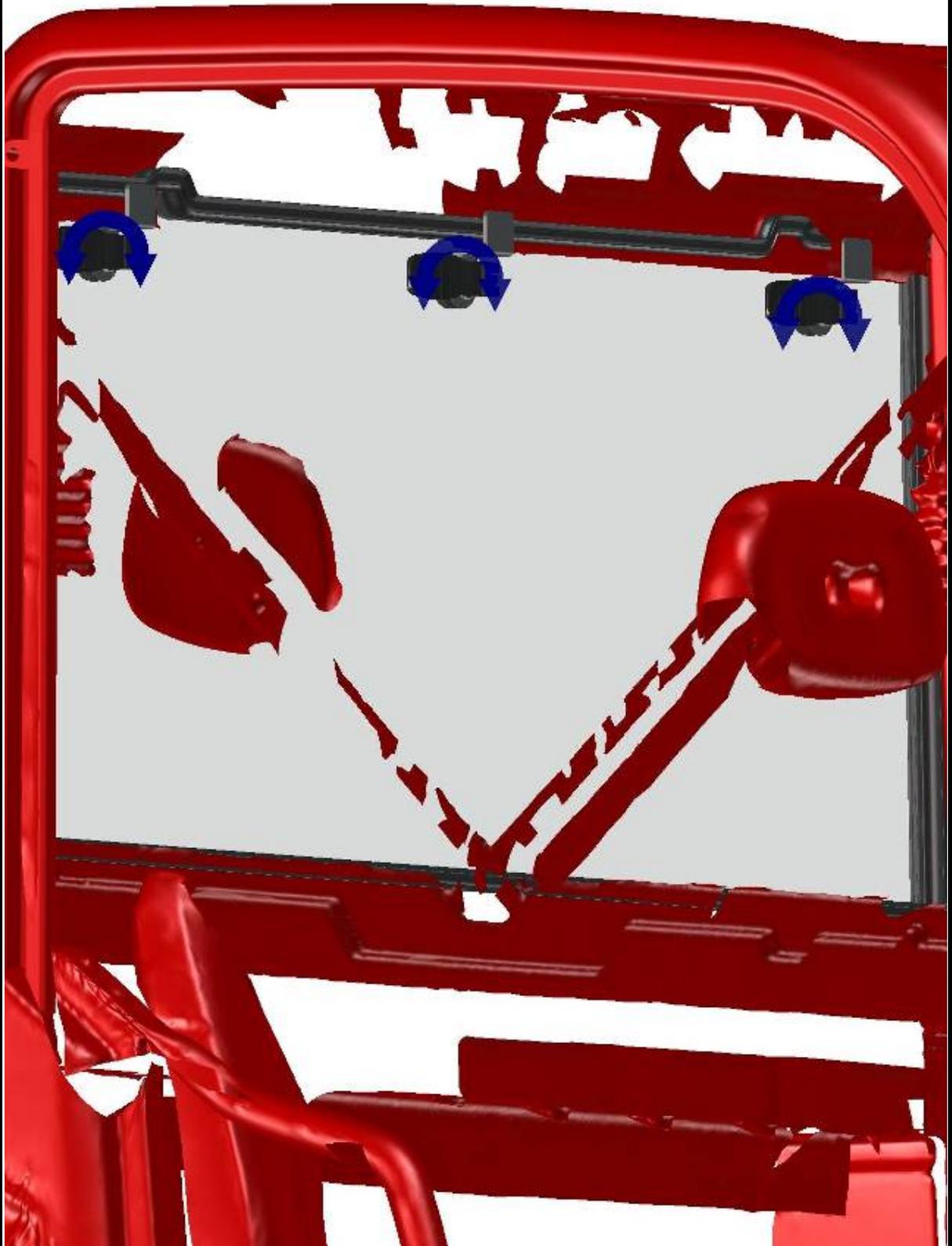
Fast-lock handle mounted.



Fast-lock handle tightened.



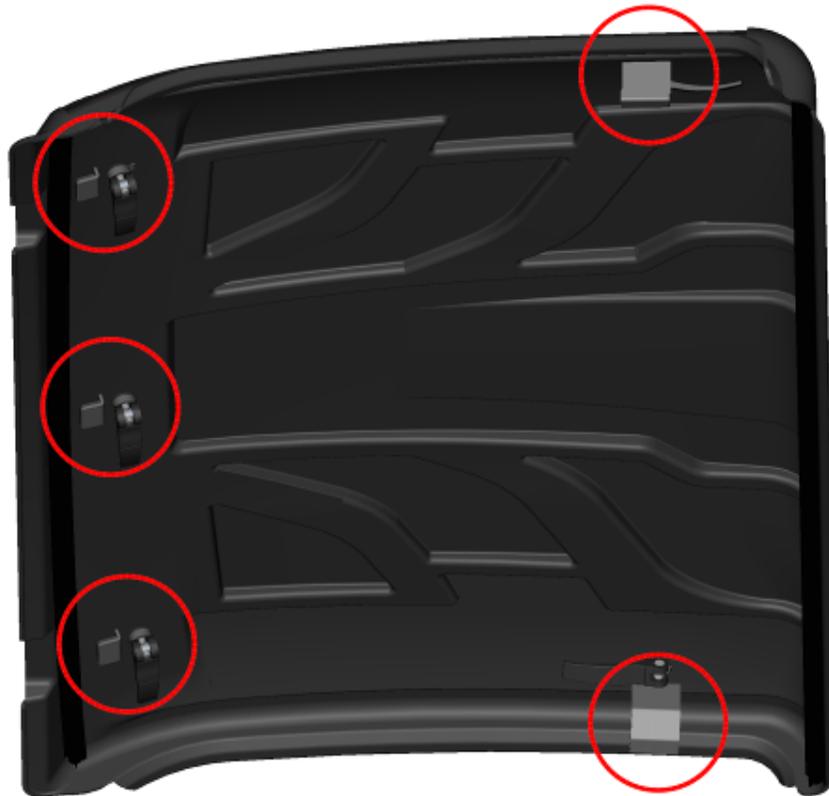
Adjust the rear glass and the holders to best position and tighten fast-lock handles.



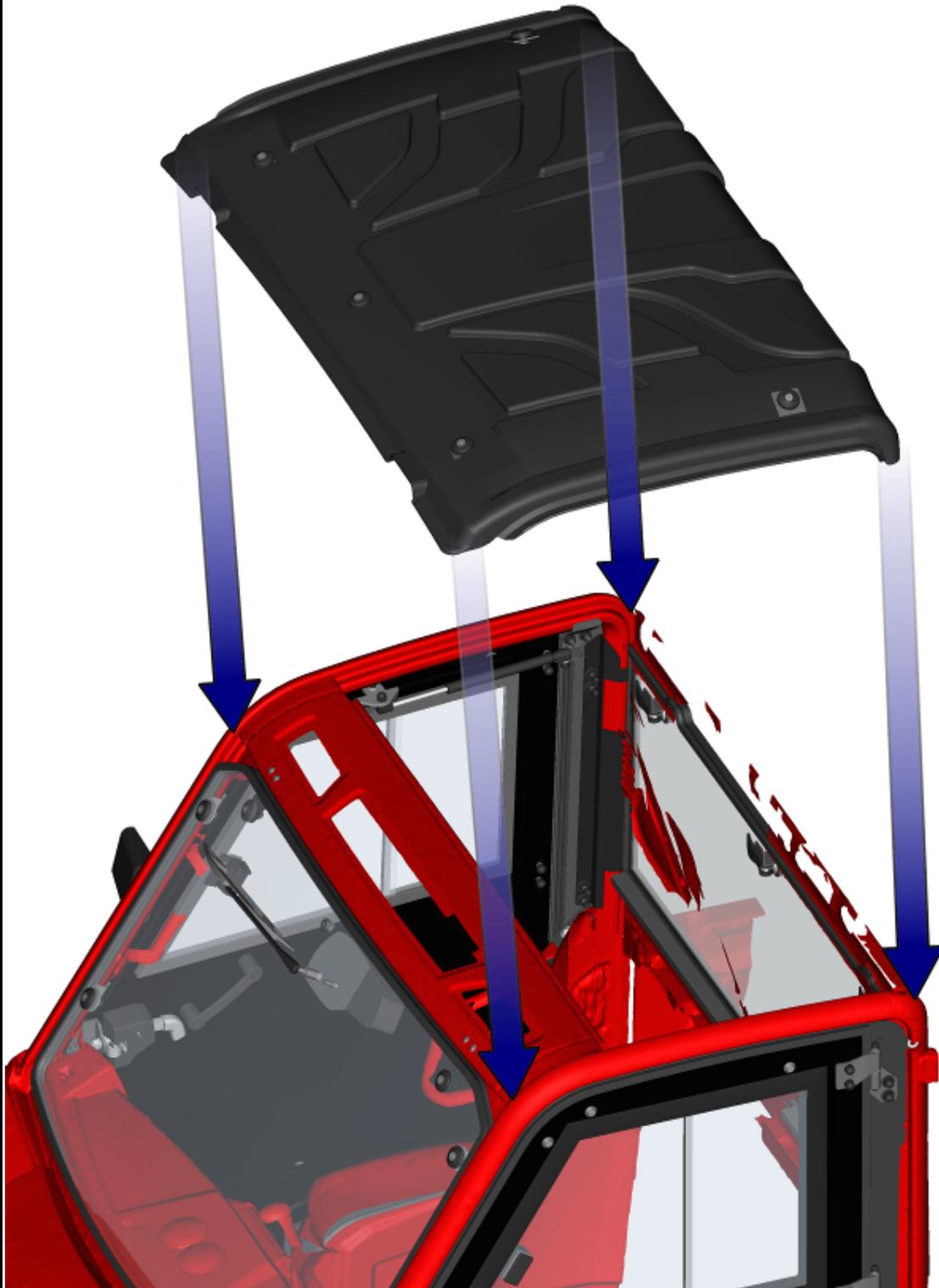
81

ROOF

Loose the roof holder screws and turn the roof holders to the neutral position.



Place the roof onto the roller cage and adjust to best position.



Adjust the roof holders to best position on both sides and tighten fast-lock handle correctly.



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FINAL VIEW

C

BOLT TORQUE

BOLT TORQUE SPECIFICATIONS

GENERAL TORQUE SPECIFICATION TABLE

Use the following torques when special torques are not given. These values apply to fasteners as received from suppliers, dry, or when lubricated with normal engine oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads. Remember to always use grade five or better when replacing bolts.

IMPORTANT: On all PLATED GRADE 8 bolts, reduce torque 15% from listed bolt torque specification.

SAE Grade No.		2				5				8*			
Bolt head identification mark as per grade. NOTE: Manufacturing Marks Will Vary													
Bolt Size		TORQUE				TORQUE				TORQUE			
		Pounds Feet		Newton-Meters		Pounds Feet		Newton-Meters		Pounds Feet		Newton-Meters	
Inches	Millimeters	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1/4	6.35	5	6	7	8	9	11	12	15	12	15	16	20
5/16	7.94	10	12	14	16	17	20.5	23	28	24	29	33	39
3/8	9.53	20	23	27	31	35	42	48	57	45	54	61	73
7/16	11.11	30	35	41	47	54	64	73	87	70	84	95	114
1/2	12.70	45	52	61	70	80	96	109	130	110	132	149	179
9/16	14.29	65	75	88	102	110	132	149	179	160	192	217	260
5/8	15.88	95	105	129	142	150	180	203	244	220	264	298	358
3/4	19.05	150	185	203	251	270	324	366	439	380	456	515	618
7/8	22.23	160	200	217	271	400	480	542	651	600	720	814	976
1	25.40	250	300	339	406	580	696	787	944	900	1080	1220	1464
1-1/8	25.58	-	-	-	-	800	880	1085	1193	1280	1440	1736	1953
1-1/4	31.75	-	-	-	-	1120	1240	1519	1681	1820	2000	2468	2712
1-3/8	34.93	-	-	-	-	1460	1680	1980	2278	2380	2720	3227	3688
1-1/2	38.10	-	-	-	-	1940	2200	2631	2983	3160	3560	4285	4827

*Thick Nuts must be used with Grade 8 bolts

METRIC BOLT TORQUE SPECIFICATIONS

Size of Screw	Property Class	Course Thread			Fine Thread		
		Pitch (mm)	Pounds Feet	Newton-Meters	Pitch (mm)	Pounds Feet	Newton-Meters
M6	5.6	1.0	3.6-5.8	4.9-7.9	-	-	-
	8.8		5.8-9.4	7.9-12.7		-	-
	10.9		7.2-10	9.8-13.6		-	-
M8	5.6	1.25	7.2-14	9.8-19	1.0	12-17	16.3-23
	8.8		17-22	23-29.8		19-27	25.7-36.6
	10.9		20-26	27.1-35.2		22-31	29.8-42
M10	5.6	1.5	20-25	27.1-33.9	1.25	20-29	27.1-39.3
	8.8		34-40	46.1-54.2		35-47	47.4-63.7
	10.9		38-46	51.5-62.3		40-52	54.2-70.5
M12	5.6	1.75	28-34	37.9-46.1	1.25	31-41	42-55.6
	8.8		51-59	69.1-79.9		55-68	75.9-92.1
	10.9		57-66	77.2-89.4		62-75	84-101.6
M14	5.6	2.0	49-56	66.4-75.9	1.5	52-64	70.5-86.7
	8.8		81-93	109.8-126		90-106	122-143.6
	10.9		96-109	130.1-147.7		107-124	145-168
M16	5.6	2.0	67-77	90.8-104.3	1.5	69-83	93.6-112.5
	8.8		116-130	157.2-176.2		120-138	162.6-187
	10.9		129-145	174.8-196.5		140-158	189.7-214.1
M18	5.6	2.0	88-100	119.2-136	1.5	100-117	136-158.5
	8.8		150-168	203.3-227.6		177-199	239.8-269.6
	10.9		175-194	237.1-262.9		202-231	273.7-313
M20	5.6	2.5	108-130	146.3-176.2	1.5	132-150	178.9-203.3
	8.8		186-205	252-277.8		206-242	279.1-327.9
	10.9		213-249	288.6-337.4		246-289	333.3-391.6