

INSTALLATION MANUAL

PRODUCT: FRONT BUMPER
MODEL: TOYOTA HILUX (2011-2015)
PART NO: 2D.5707.1



CAUTION!

To reduce the risk of serious injury or damage, please read and understand all instructions and procedures before attempting to install or use this product.
Safety glasses must be worn at all times during installation or maintenance of this product.
Ensure all mounting bolts are tensioned after 1000 kms and periodically there after.

NOTICE

Whilst the bumper adds additional protection to your vehicle, precautionary measures still need to be taken to avoid damage.
Always drive to the conditions and your surroundings.

ADR69 COMPATIBLE
AIR BAG COMPLIANT

FRONT BUMPER FOR TOYOTA HILUX VIGO

Part Number:	2D.5707.1
Suited to vehicle:	2011-2015 Toyota Hilux Vigo
Material:	aluminum/steel
Dimensions:	1845 x 710 x 520
Weight:	40 kg 42 kg including LED lights
Compatibility:	RIVAL 2333.5790.1 Underbody Armor



SAFETY NOTICE

- * The RIVAL bumper is designed to compliment the use and design of the specified vehicle under conditions specified by the car manufacturer.
- * While driving the vehicle at any speed, collision with any other vehicle, animal or object must always be avoided.
- * Following any collision with any other vehicle, animal or object, the RIVAL bumper and the vehicle must be inspected by a specialized or suitably qualified vehicle repairer for possible damage to the components and assemblies in order to confirm suitability for further use of the vehicle.
- * It is strongly recommended that you do not operate a vehicle with a damaged bumper or its components. In the case of damage, please contact the nearest RIVAL Authorised stocklist.
- * The operation of a vehicle where the bumper is not properly attached and fastened to the vehicle, or where the bumper has been damaged, is extremely dangerous and must be avoided at all cost.
- * It is recommended that you carry out regular inspections of all the bumper elements such as all bolts, wires, connectors.

INSTALLATION NOTICE

- * The RIVAL bumper must be mounted and affixed to the vehicle according to this installation manual.
- * Personal safety during the installation process must be adhered to at all times and the use of personal safety equipment is highly recommended.
- * Do not use this product for any vehicle make or model, other than those specified by RIVAL.

REQUIRED TOOLS

- * Basic tool kit
- * Electric drill
- * Drill set
- * Torque wrench
- * Box knife
- * Marker

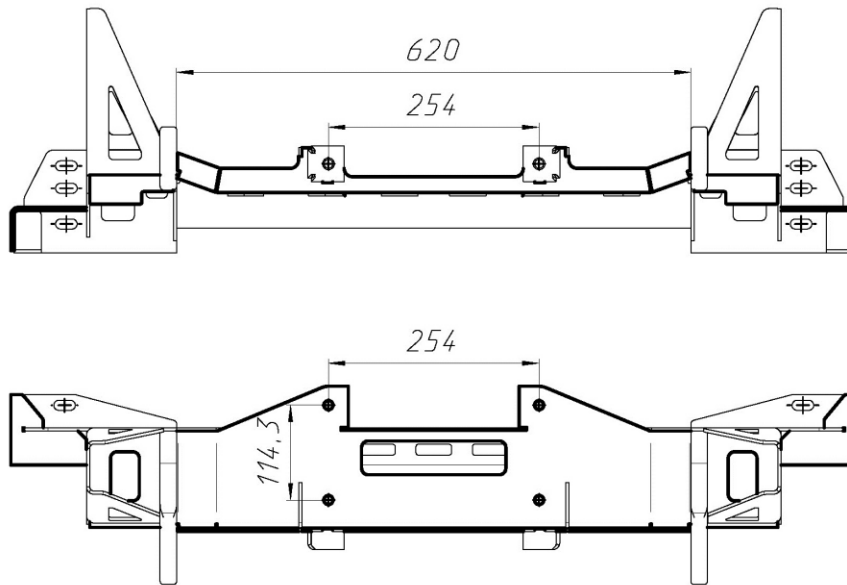
TORQUE SETTING

* M6	9 Nm	7lbft
* M10	44 Nm	32lbft
* M12	77 Nm	57lbft

***WINCH INSTALLATION**

A winch with a pull capacity of up to 4989 kg (12000lb) can be installed with the RIVAL bumper. It is not advisable to exceed this pulling capacity since damage, injury or death may occur where the 12000lb recommended capacity is exceeded. There is a special license plate holder supplied with the bumper which will provide access to the winch.

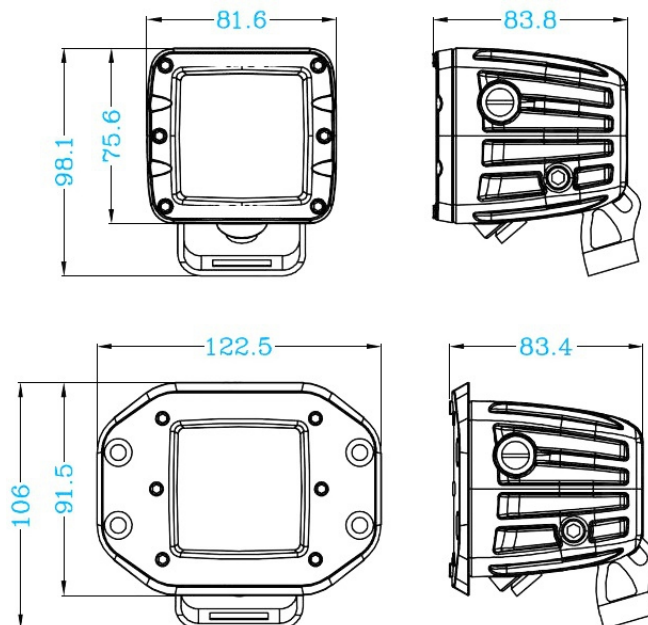
Winch measurements:



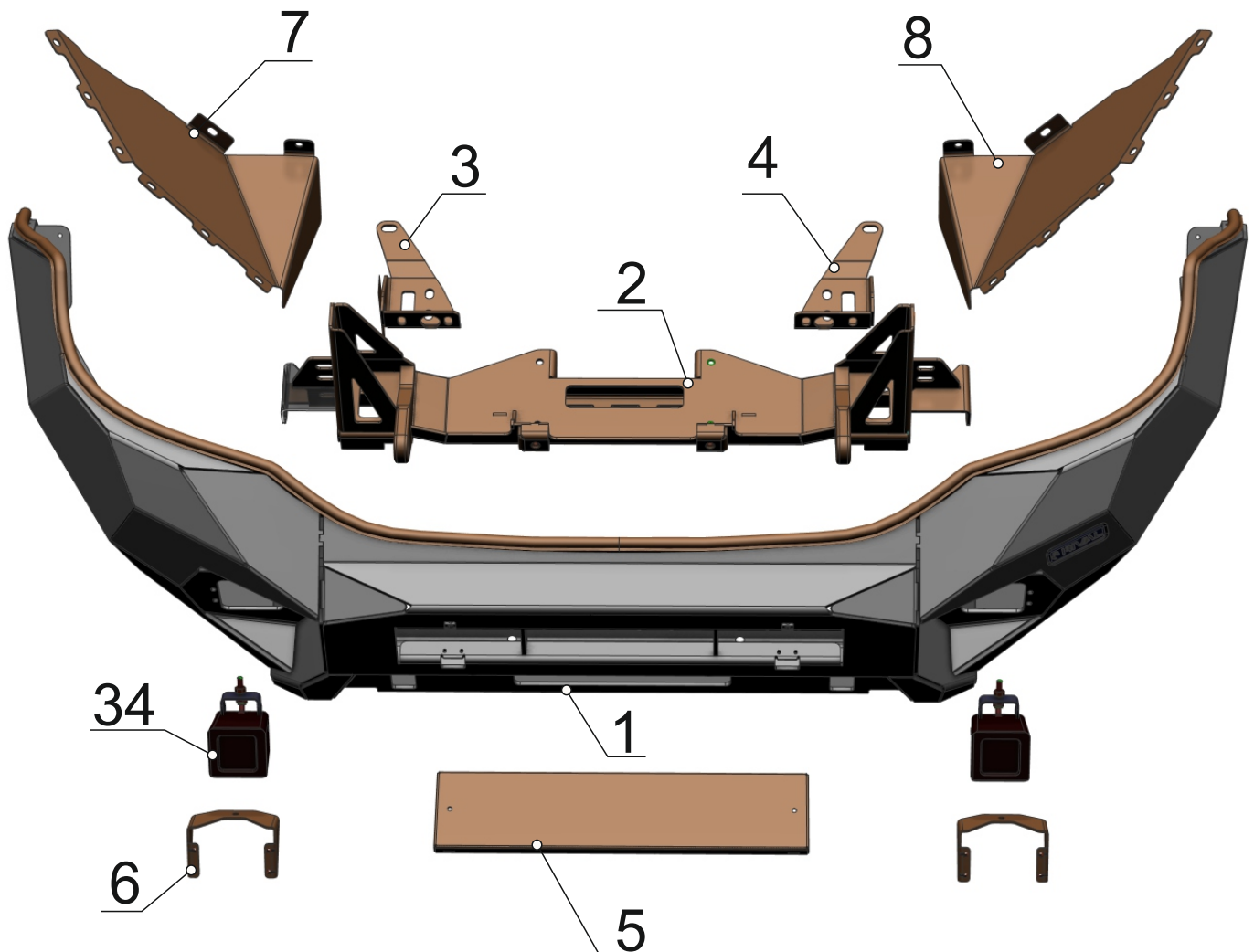
***LIGHTS**

The Bumper is supplied with brackets for mounting optional LED lights.

LED lights measurements:



1. Aluminum bumper body.....	1 pc.	19. Bolt M12x30.....	4 pc.
2. Winch bracket.....	1 pc.	20. Bolt M3x12.....	8 pc.
3. Adapter right.....	1 pc.	21. Bolt M6x16.....	8 pc.
4. Adapter left.....	1 pc.	22. Bolt M6x20.....	20 pc.
5. License plate holder.....	1 pc.	23. Bolt M10x35.....	4 pc.
6. LED brackets.....	2 pc.	24. Nut M3.....	4 pc.
7. Flap right.....	1 pc.	25. U-nut M6.....	16 pc.
8. Flap left.....	1 pc.	26. Nut M10.....	12 pc.
9. 2xM12 nut plate.....	2 pc.	27. Washer M6x12.....	26 pc.
10. M3 nut plate.....	2 pc.	28. Washer M6x18.....	8 pc.
11. M10 nut plate.....	2 pc.	29. Washer M10x20.....	8 pc.
12. Radiator grill bracket.....	2 pc.	30. Washer M10x30.....	18 pc.
13. Washer fluid bottle plug.....	1 pc.	31. Washer M12x37.....	6 pc.
14. Countersunk washer.....	4 pc.	32. Roll latch.....	2 pc.
15. Bolt M6x16.....	2 pc.	33. Nut M6.....	4 pc.
16. Bolt M10x25.....	2 pc.	34. LED (if supplied).....	2 pc.
17. Bolt M10x30.....	8 pc.		
18. Bolt M12x30x1,25.....	2 pc.		





1. Open the bonnet and remove all scrivets holding the grill in place.

Set aside scrivets removed for re-use later on.



2. Remove upper grill retaining screws.

Set aside for re-use later on.



3. Remove plastic scrivet.



4. Remove lower bumper retaining screws and scrivets.



5. Remove lower bumper retaining screws.

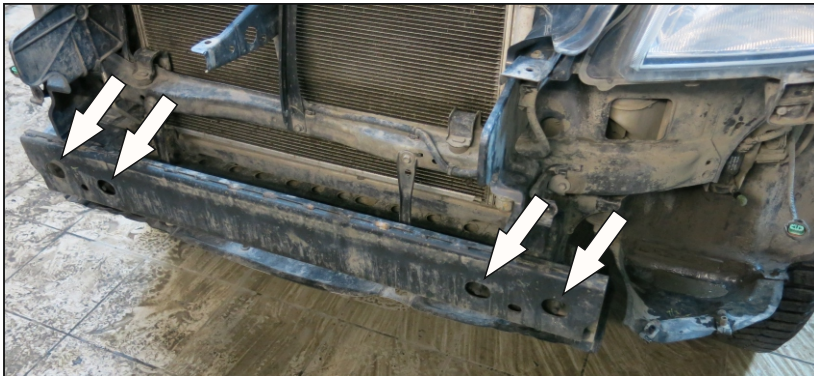


6. Remove M6 bolts out of the bumper.



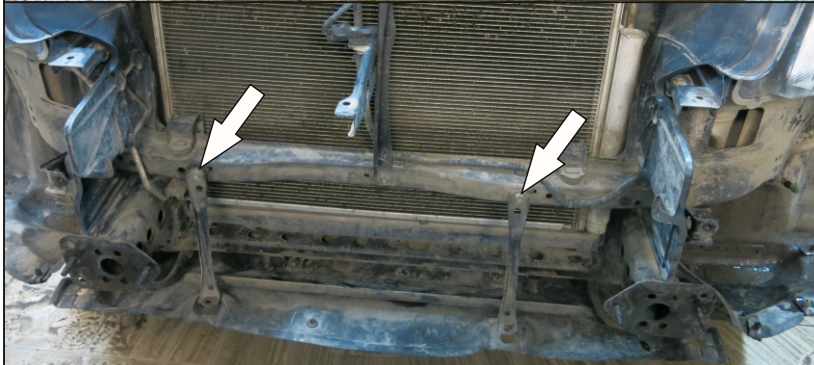
7. Carefully remove bumper from vehicle by pulling on each side of the bumper near the wheel arches and working your way towards the centre.

Disconnect lights.
Disconnect the washer fluid hose.

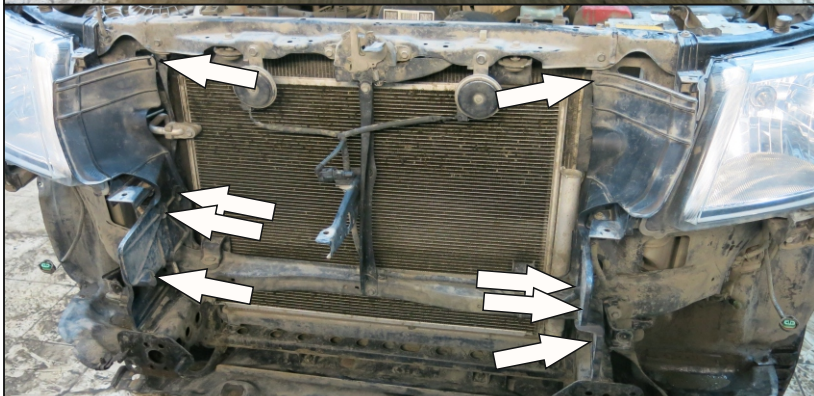


8. Remove nuts and plastic deflector from vehicle and discard.

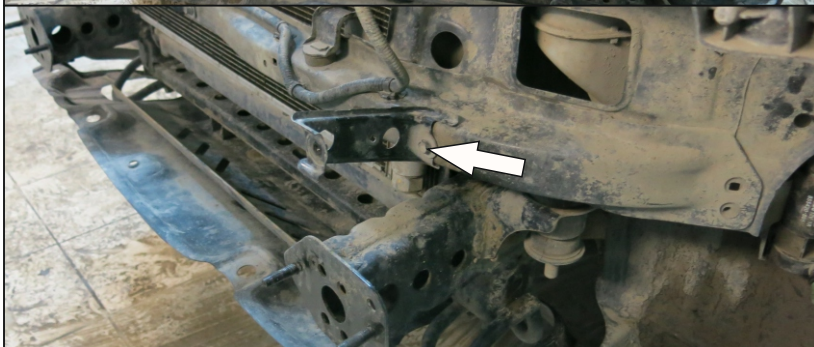
Set aside for re-use later on.



9. Remove M6 bolts to remove the brackets.



10. Remove plastic scrivenets and remove plastic side deflectors.



11. Remove M6 bolts.
Remove side brackets.



12. Remove screws.
Remove plastic brackets from the lights.



13. Remove M6 bolts and scrivets. Remove plastic side fittings.



14. Screw OE bolts M6 back in to fix light.



15. Disconnect washer fluid bottle. Remove the pump and insert the supplied plug (13) instead.

*If vehicle is not fitted with headlight washers, please disregard this step.



16. Mount support bracket (3) and fix it with bolt M12x30x1,25 (18) with washer M12x37 (31).

DO NOT TIGHTEN YET.

Winch bracket bar has been mounted to bumper for transport purposes. Please remove the winch bracket before you begin installation.



17. Place bolts M10x30 (17) with washers M10x30 (30). Push support bracket to the front of the chassis. If there is a gap of more than 2mm, place washers M10x30 inside.



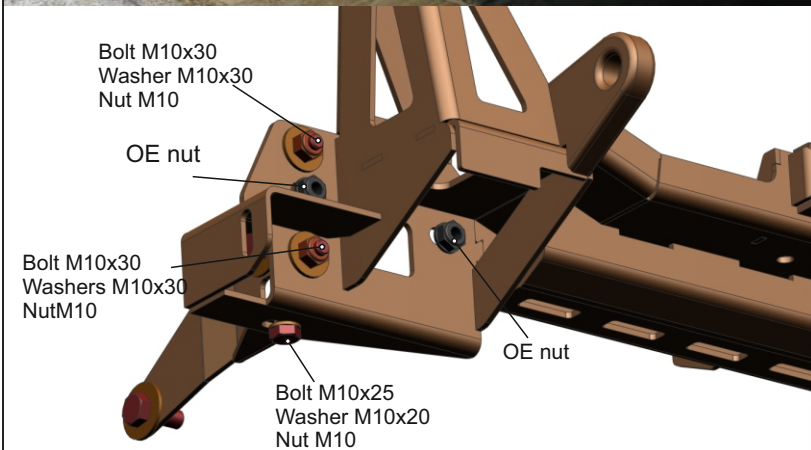
18. Place insert nut 2xM12 (9) inside of the chassis. Screw on bolts M12x30 (19) with washers M12x37 (31).

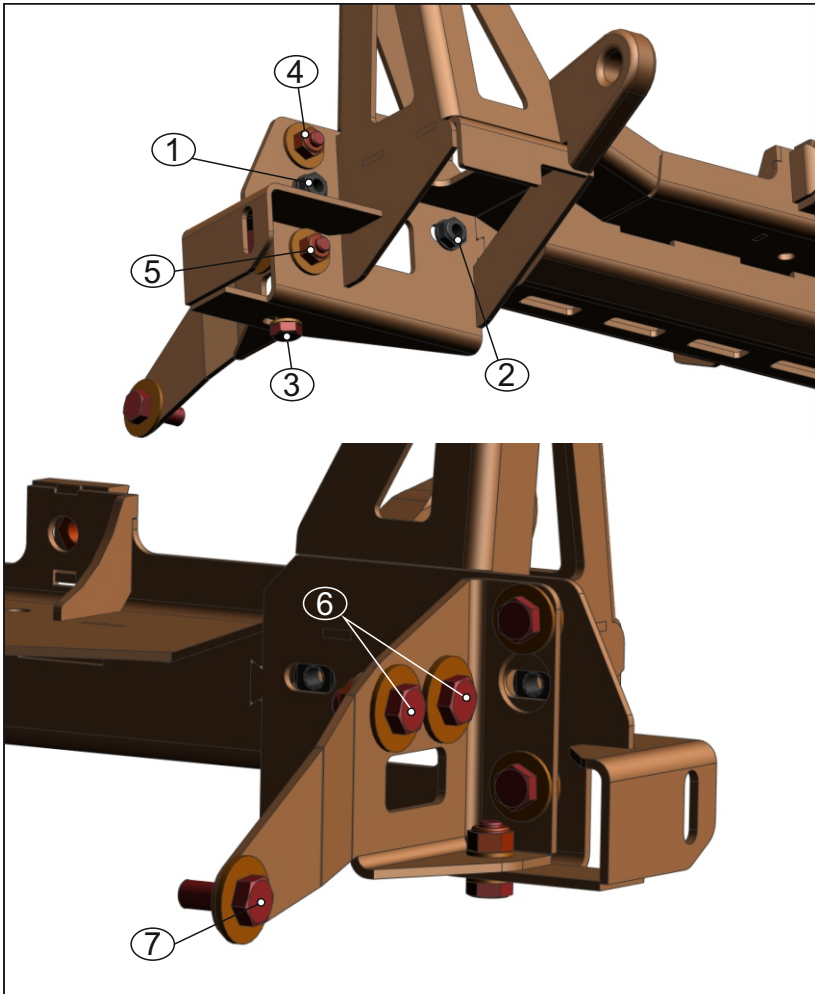
DO NOT TIGHTEN YET.

Repeat steps 16 to 18 from another side of the vehicle.



19. Mount winch bracket (2). Use OE bolts and supplied bolts M10x30 (17), bolts M10x25 (16), washers M10x20 (29), washers M10x30 (30) and nuts M10 (26) from the fitting kit bag.



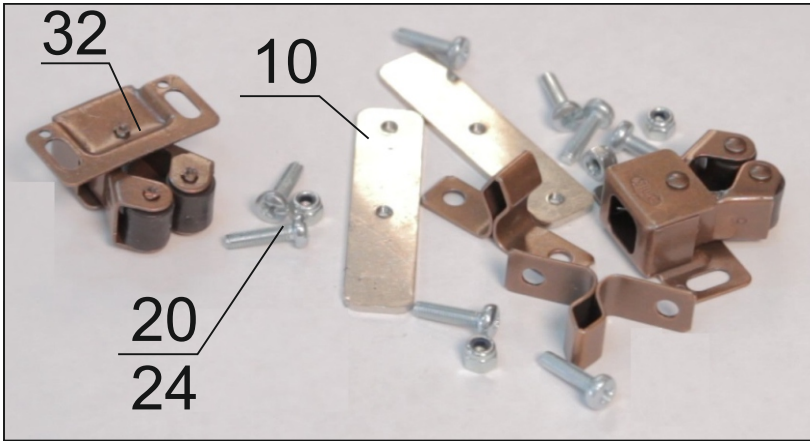


20. Align winch bracket horizontally and vertically.

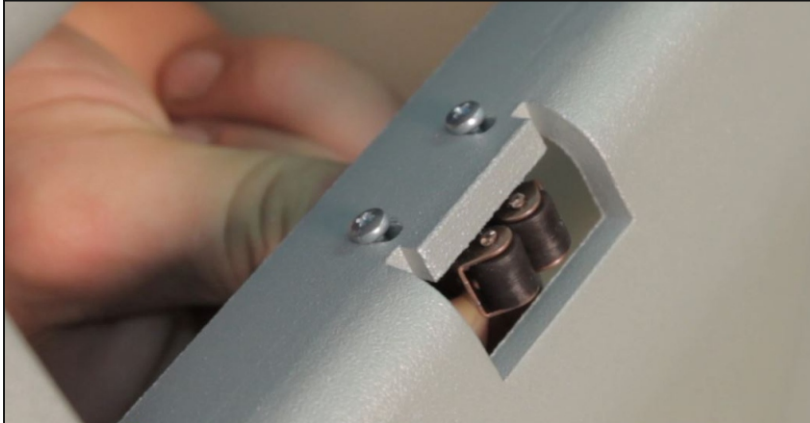
Tighten bolts on both the left and right side in order shown.



21. Mount the winch (not supplied) following the winch installation instructions supplied with the winch manufacturers.

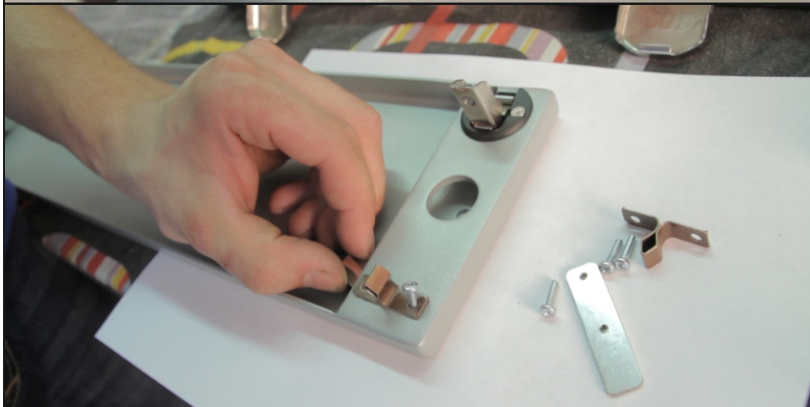


22. Unpack license plate holder fittings.



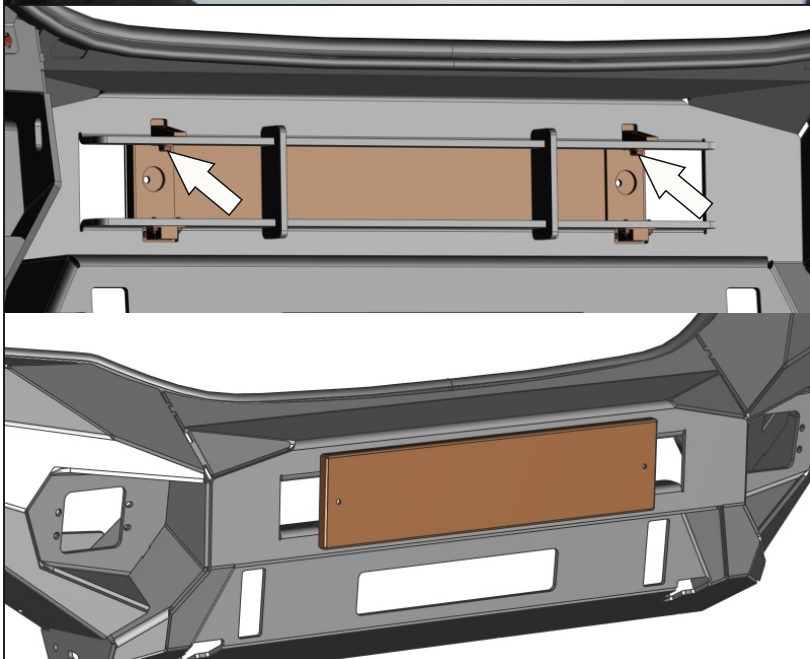
23. Mount roll latches (32) to bumper (1) with screws M3x12 (20) and nuts M3 (24).

DO NOT TIGHTEN YET.



24. Mount opposite latch to license plate holder (5) with screws M3x12 (20) and insert nut (10).

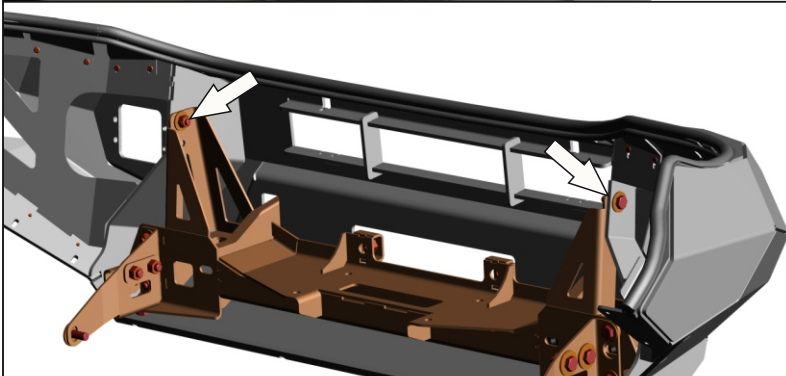
DO NOT TIGHTEN YET.



25. Place license plate holder on the bumper, fix it with bolts M6x16 (15). Adjust latches horizontally and vertically until in desired position. Tighten all screws.



26. Install bumper body onto the vehicle, make sure the plastic fender goes inside.



27. Mount bumper body onto the winch bracket using bolts M10x30 (17), washers M10x30 (30) and nuts M10 (26).

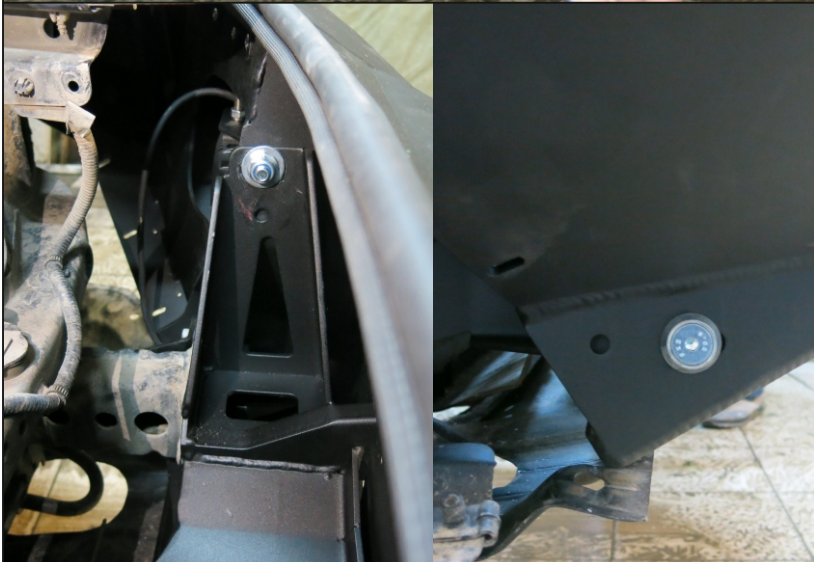
DO NOT TIGHTEN YET.



28. Place insert nut plate M10 (11) as shown. Screw blind-head bolt M10x35 (23) with countersunk washer.

Repeat this step on the other side.

DO NOT TIGHTEN YET.

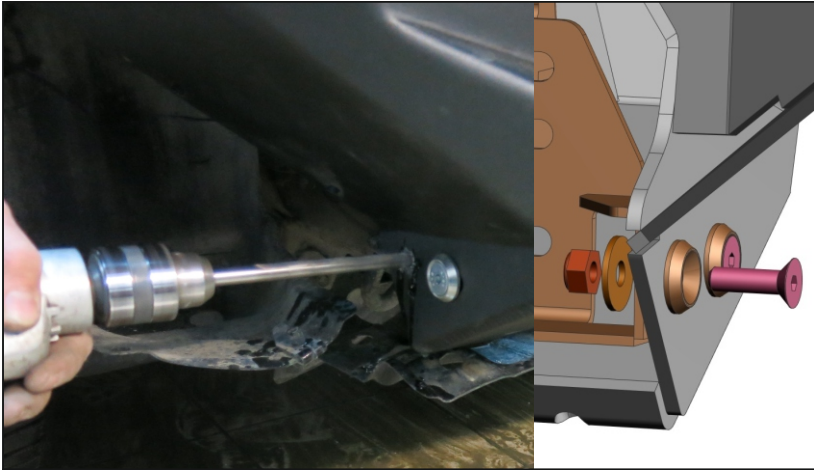


29. Adjust bumper so that there is an equal gap between the bumper and the vehicle body on both sides.

The gap should not be less than 18mm. A gap between the headlights and the rubber profile is acceptable.

Tighten the bolts.

Check if both sides are symmetrical. If adjustment is needed, go back to step 20.



30. Using a 10mm drill bit drill a hole through the bumper body and the winch bracket from both left and right.

Tighten bumper body and winch bracket together using bolts M10x35 (23), countersunk washers, washers M10x30 (30) and nuts M10 (26).



31. Using a 10mm drill bit, drill into the hole through the existing hole of the winch bracket from both left and right. This is to increase the size of the existing hole.

Tighten bumper body and winch bracket together using bolts M10x30 (17), washers M10x20 (29) and nuts M10 (26).



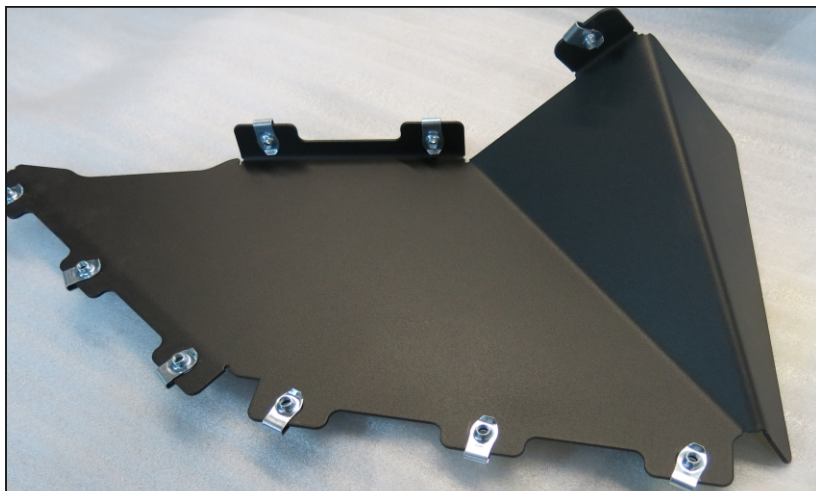
32. * Mount LED lights into brackets (6). Adjust and tighten them.

*For a kit with LED.



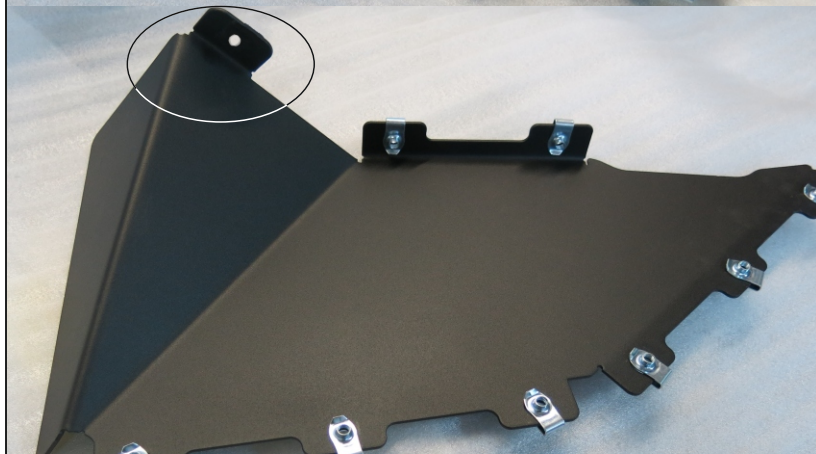
33. *Install brackets with LED lights using bolts M6x16 (21) and washers M6x12 (27). Adjust the LED position.

*For a kit with LED.



35. Place clamp M6 U-nut (25) on flaps (7, 8) as shown.

Do not install clamp on a rounded area.



36. Install flaps as shown using the bolts M6x20 (22) and washers M6x12 supplied.

Push flap to plastic fender and mark cutting line. Remove flap and cut plastic fender following the marked cutting line using jig-saw or shears.

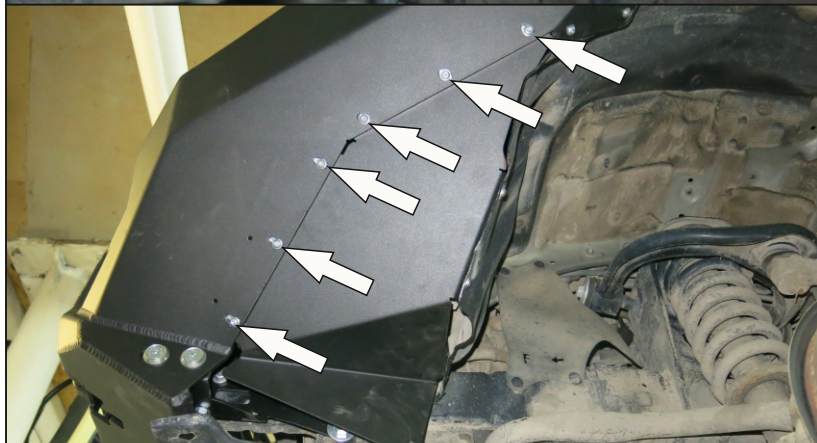
Caution: Use care not to damage the windscreen washer bottle or hoses when cutting LH plastic fender.



37. Using a 6-7 mm drill bit drill holes in plastic fender in accordance with holes in flap. Fix flaps with bolts M6x20 (22), washers M6x12 (27) and nuts M6 (33).



38. From the left, remove plastic scrivet. Place square nut M6 (33) instead.



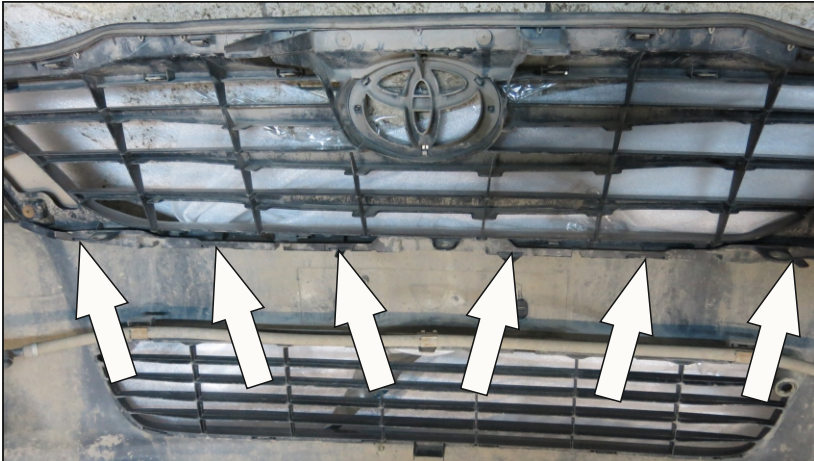
39. Install the flaps using bolts M6x20 (22) and washers M6x12 (27).



40. Mark drill points on plastic fenders in accordance with the apertures in the flaps. Using a 6-7 mm drill bit, drill holes.

Caution! Do not damage the nuts.

Fix the flaps using bolts M6x20 (22) and washers M6x18 (28) as shown.



41. Remove radiator grill from OEM bumper.



42. Cut plastic brackets as shown so the brackets supplied for radiator grill (12) can be installed.



43. Remove bolts from the radiator grill as shown.

Install brackets supplied.

Place radiator grill on the vehicle. Fix it with OE scrivenets and bolts.



Before operating a vehicle fitted with a RIVAL Bumper:

- make sure all fittings are tightened
- check winch operation
- check all electrical wiring attached to lights

