

INSTALLATION MANUAL

PRODUCT: HIDDEN WINCH MOUNTING BRACKET

MODEL: ISUZU D-MAX (2017-)

PART NO: 2L.9101.1



WARNING!

In order to reduce the risk of severe injury or property damage: Before installation and use of this product read the whole procedure, paying special attention to the safety notice and installation notice! Upon installation or maintenance of this product it is necessary to use protective glasses. Check integrity of the design and torque settings of fasteners in each 1000km of the vehicle usage. Do not use this product if there is any damage to the design or fasteners

HIDDEN WINCH MOUNTING BRACKET

Item: 2L.9101.1
Make: ISUZU
Model: D-Max
Year of manufacture: 2017-
Material: Steel
Dimensions: 920x182x221
Weight: 20,6 kg



Compatibility: RIVAL 2D.9103.1 recovery points

SAFETY NOTICE

- * The RIVAL hidden winch mount bracket are 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.
- * The operation of a vehicle where the hidden winch mount bracket are not properly attached and fastened to the vehicle, or where it has been damaged, must be avoided at all cost.
- * It is recommended that you carry out regular inspections of all fittings
- * It is not allowed to load hidden winch mount bracket with force of more than that specified

INSTALLATION NOTICE

- * The hidden winch mount bracket should be mounted in strict compliance with this procedure in specialized service centers.
- * During installation it is required to use personal protective equipment.
- * Do not install this hidden winch mount bracket onto the vehicle models other than those specified herein.

REQUIRED TOOLS

- * Basic tool kit
- * Torque wrench
- * Angle grinder
- * Marker
- * Scotch tape
- * Masking tape
- * Scissors
- * Knife
- * Pliers

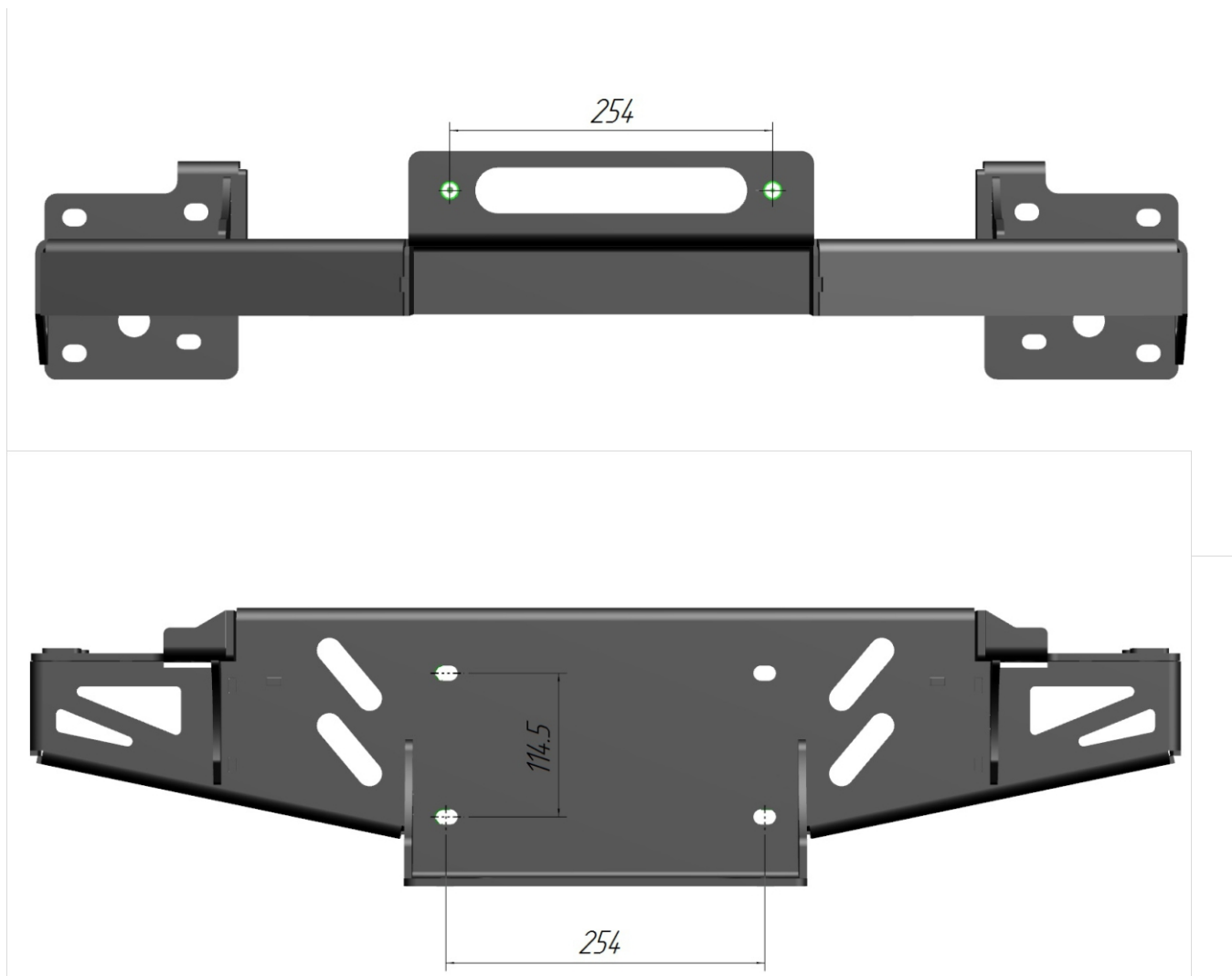
TORQUE SETTINGS

- * M6 - 9 Nm
- * M10 - 44 Nm
- * M12 - 80 Nm

WINCH INSTALLATION

A winch with a pull capacity of up to 11000lb (4989 kg) can be installed with the RIVAL concealed winch mounting bracket. It is not advisable to exceed this pulling capacity since damage, injury or death may occur where the 11000lb recommended capacity is exceeded.

Winch measurements:

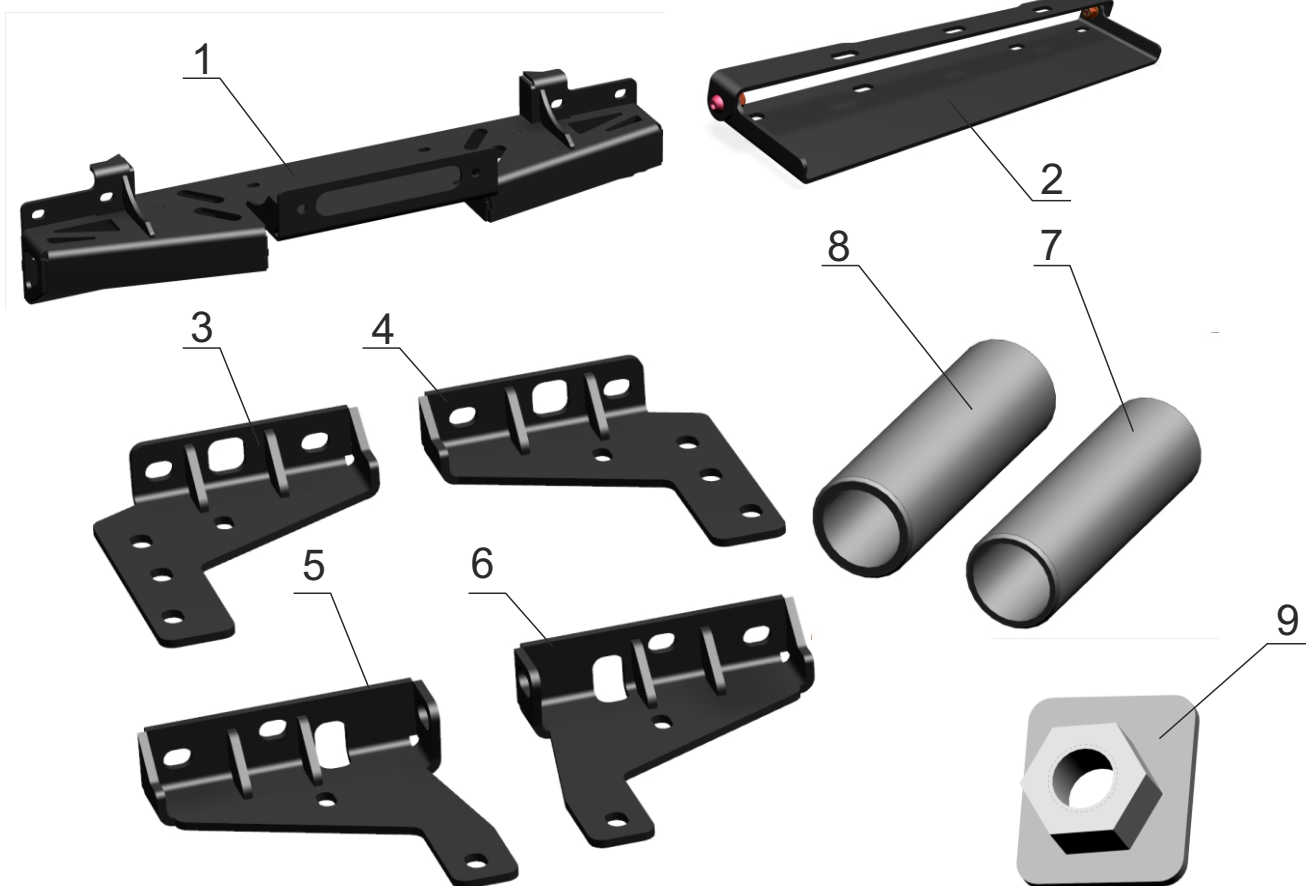


Winch size limits:

L 580 mm x W 170 mm x H 190 mm

PARTS LISTING

1. License plate.....	1 pc.	24. Pressure sensitive liner.....	5 pc.
2. Winch bracket.....	1 pc.	25. Tie wrap390x4,8 mm.....	6 pc.
3. External left bracket.....	1 pc.		
4. External right bracket.....	1 pc.		
5. Internal left bracket.....	1 pc.		
6. Internal right bracket.....	1 pc.		
7. Small end bushing.....	2 pc.		
8. Large end bushing.....	2 pc.		
9. Insert nut M12.....	4 pc.		
10. Screw M6x20.....	3 pc.		
11. Bolt M8x25.....	2 pc.		
12. Bolt 10x35.....	8 pc.		
13. Bolt 10x110.....	2 pc.		
14. Bolt 12x40.....	10 pc.		
15. Bolt 12x110.....	2 pc.		
16. Washer M6.....	6 pc.		
17. Adjusting washer M10	12 pc.		
18. Washer M12.....	12 pc.		
19. Adjusting washer M12	6 pc.		
20. Nut M6.....	3 pc.		
21. Nut M8.....	2 pc.		
22. Nut M10.....	2 pc.		
23. Nut M12.....	8 pc.		



INSTALLATION PROCEDURE



1. Open the bonnet.
2. Disconnect the negative battery terminal cable.



3. Remove 4 screws as shown.

* **Set aside for re-use later.**

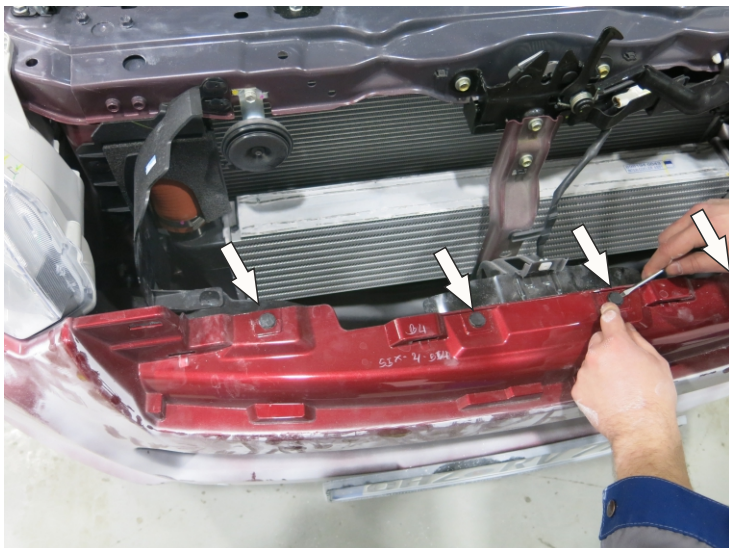


4. Remove radiator grill fittings (6 pc) as shown.

Carefully dismantle the radiator grille.

* **Set aside for re-use later.**

INSTALLATION PROCEDURE



5. Remove plastic plugs out of the bumper (4 pc) as shown.

*** Set aside for re-use later.**



6. Unscrew 1 screw in wheel arches on the vehicle's left and right side.

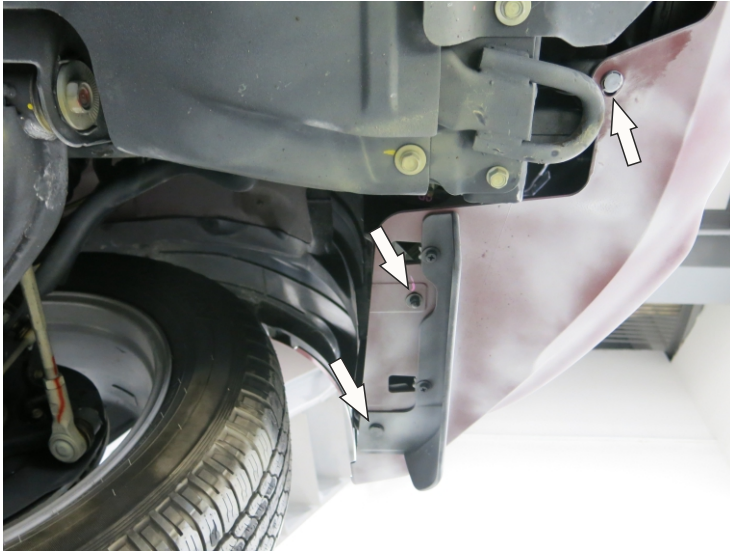
*** Set aside for re-use later.**



7. Remove 1 plug in wheel arches on the left and right, as shown.

*** Set aside for re-use later.**

INSTALLATION PROCEDURE



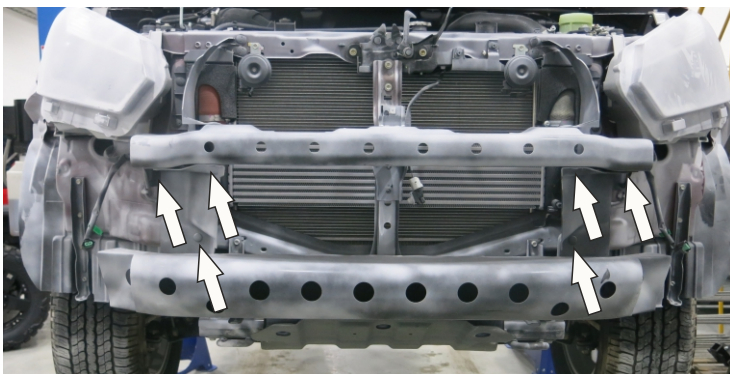
8. Remove 4 plugs in the lower part of bumper, and using torque wrench unscrew 2 nuts, as shown.

*** Set aside for re-use later.**



9. Carefully dismantle the bumper. Pull the bumper edge by unlatching the latches, moving from the bumper edge to the center.

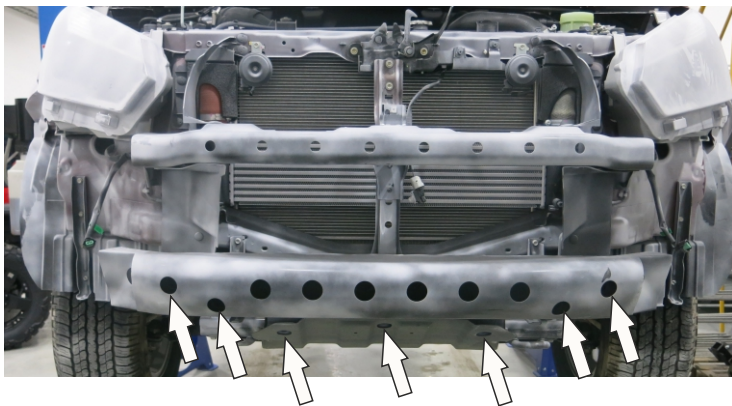
Disconnect fog lights and parking sensors.



10. Dismantle plastic liners, disconnect plugs (6 pc.), as shown.

*** Set aside for re-use later.**

INSTALLATION PROCEDURE



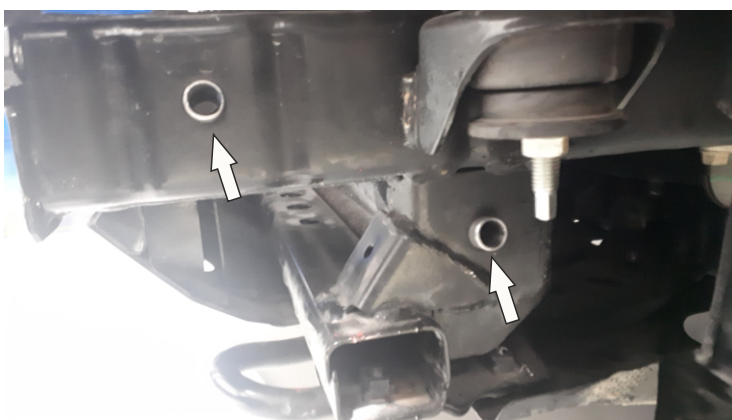
11. Unscrew fitting bolts of the front beam to the chassis, as shown. Remove front beam.

*** Set aside for re-use later.**



12. Unscrew 2 bolts of the bumper brackets, on the left and right side of the vehicle, as shown.

*** Set aside for re-use later.**



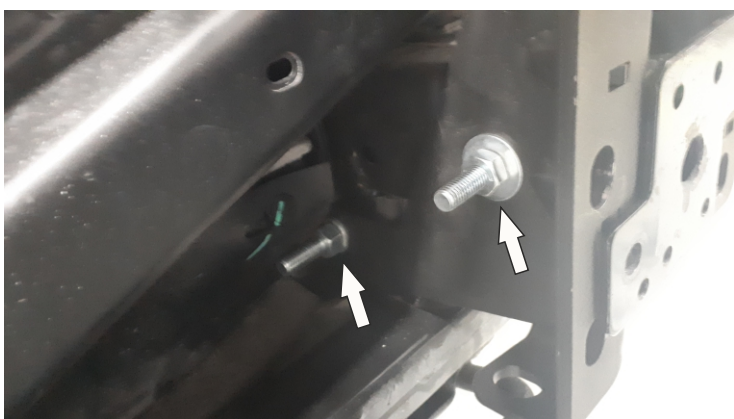
13. 11. Place bushings (pos. 7,8) into the chassis, on the left and right side of the vehicle, as shown.

INSTALLATION PROCEDURE



14. Install the bracket (pos.3) on the left side of the frame, as show, using bolts M10x100, bolt M12x110, adjusting washer M10 and washer M12.

Make the same actions, on the right side of the frame, using right bracket (pos. 4).



15. Install the bracket (pos.5) on the left inner side of the frame, as show, and fix it using adjusting washers M10, adjusting washer M12, nut M10 and nut M12.

*** Do not tighten yet.**

Make the same actions, on the right side of the frame, using right bracket (pos. 6).

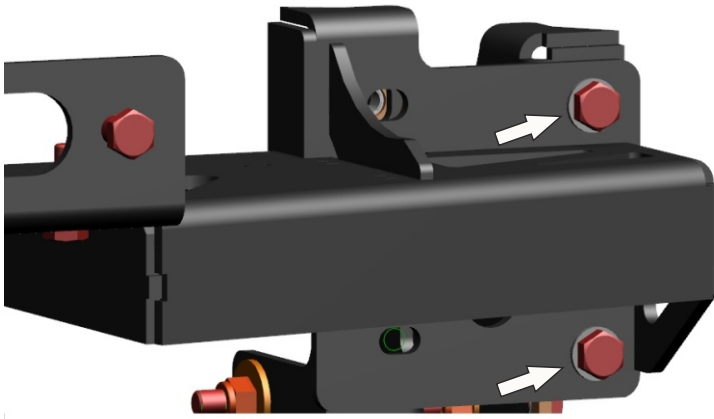


16. Install winch bracket (pos. 2), winch fairlead and winch, using bolts M10x35 and adjusting washers M10.

*** Winch fairlead and winch are not supplied with RIVAL bracket.**

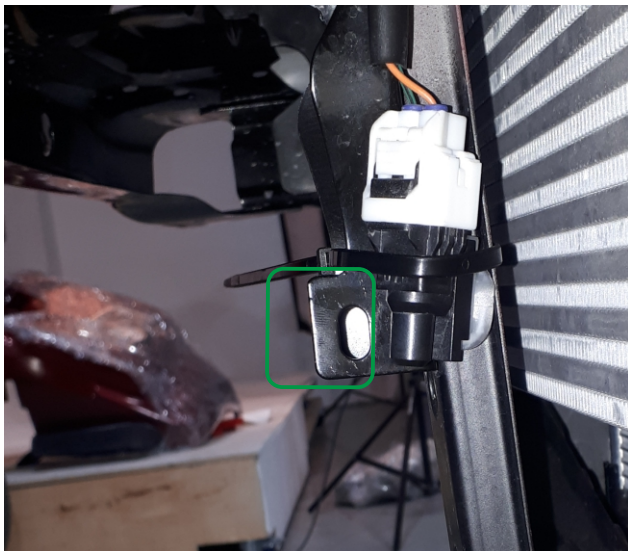
*** Tighten all the joints.**

INSTALLATION PROCEDURE



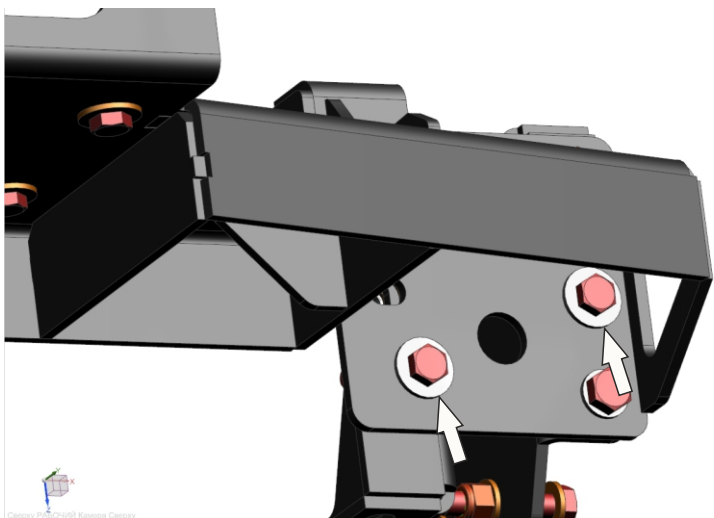
17. Install winch bracket (pos. 2) and winch on the brackets, using 2 bolts M12x40, washers M12 and nuts M12 on the both sides.

*** Do not tighten yet.**



18. Check if winch stuck on the center part of the bracket..
If so, then remove the winch bracket of the vehicle, pull the sensor out of the bracket, bend the bulge side of the bracket, using pliers inside (marked green line) and fix the sensor, using tie wrap, as shown.

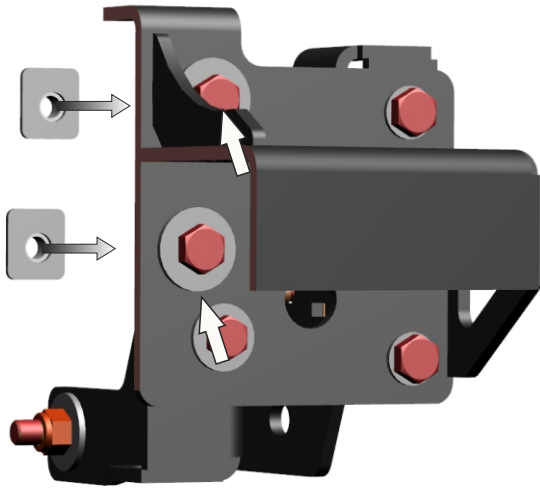
Repeat step 17.



19. Adjust and fix winch bracket to the vehicle's frame, on the left and right side, using bolts M10x35 and washers M10.

*** Do not tighten yet.**

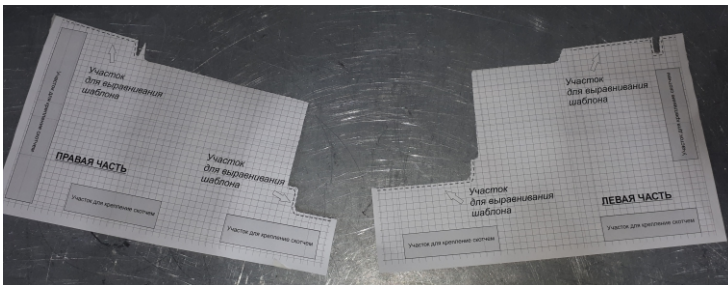
INSTALLATION PROCEDURE



20. Fix left side of the winch bracket, using bolts M12x40, insert nuts M12(pos.9), adjusting washers M12, as shown.

Make the same actions, on the right side of the winch bracket.

*** Tighten all the joints.**



21. Use templates, attached in the end of this manual, to cut the holes on the front part of the bumper.

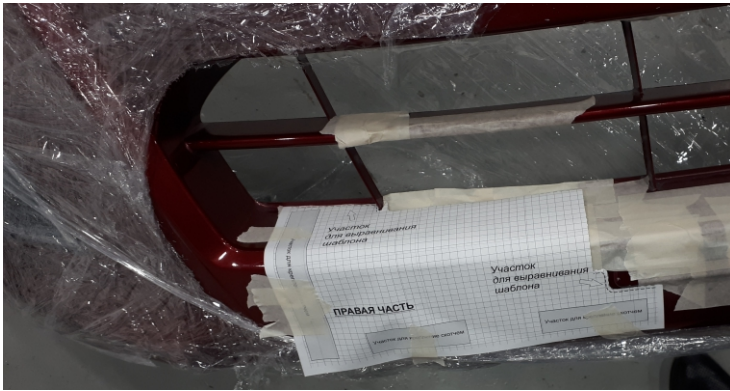
Cut template following dashed line (attachment 1 and 2), remove area #1, as shown.

*** Stick the template over for more hardness, using scotch tape.**



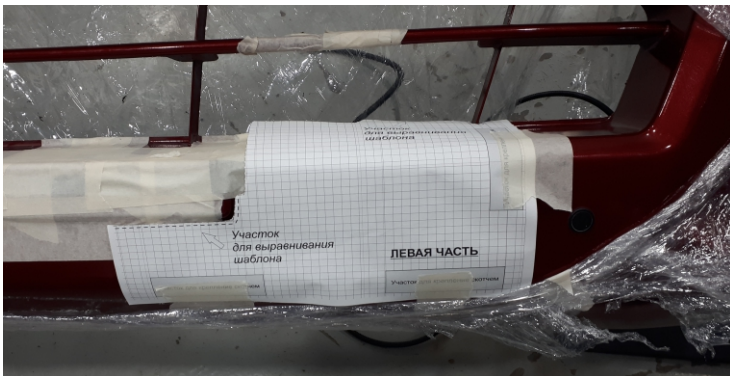
22. Protect the bumper, using masking tape, as shown.

INSTALLATION PROCEDURE



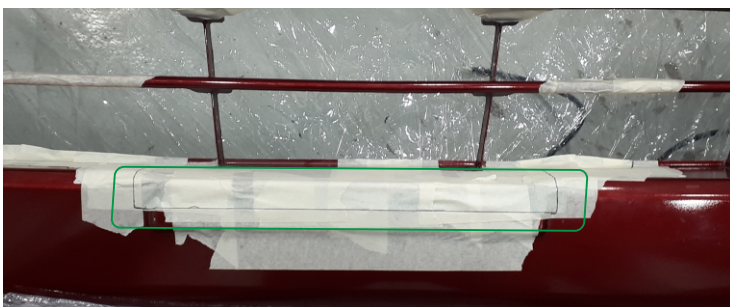
23. Place template (attachment #1) on the bumper. Adjust it on the bumper following cutout (red dash lines) and fix it using masking tape, as shown.

*** Mark cut line, using template.**



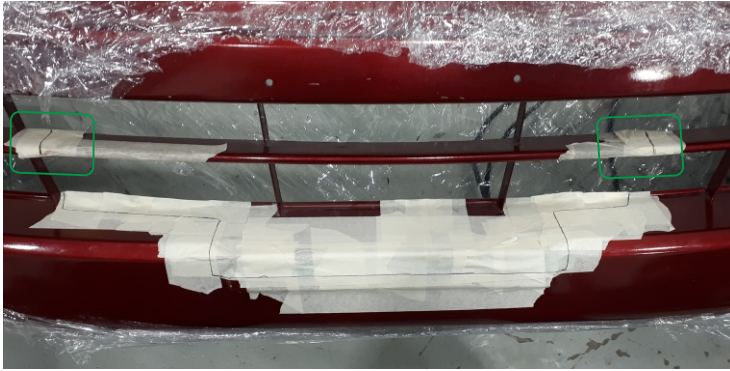
24. Place template (attachment #2) on the bumper. Adjust it on the bumper following cutout (red dash lines) and fix it using masking tape, as shown.

*** Mark cut line, using template.**

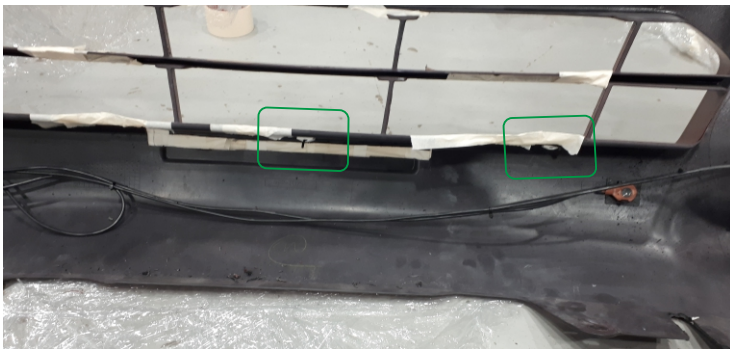


25. Connect the cut lines on the central part of the bumper, as shown.

INSTALLATION PROCEDURE



26. Measure width of radiator grille area to cut out, following winch dimensions, Stick masking tape on the grille, and mark cut line, as shown.



27. Carefully cut tie wraps, inside the bumper, that fixed wires with bumper fittings, as green zone shown.



28. Fix wires inside the bumper, as red zone shown, using pressure sensitive liner (pos. 24).

Then fix wires at this area, using tie wraps 390x4,8 mm (pos. 25). Cut tie wrap "tails".

**** It is necessary to clean bumper surface off the fat and dirt, to stick pressure sensitive liners.***

INSTALLATION PROCEDURE



29. Make sure, that wires do not handicap to cut the bumper. Carefully cut out marked area, using angle grinder.

**** Polish burrs and sharp edges.***



30. Try the bumper on the vehicle, and check that winch doesn't pull out and contact the bumper. Otherwise, it is necessary to cut out the bumper, following winch, or winch bracket dimensions.

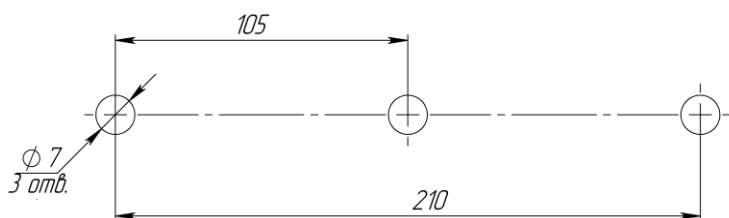
Polish burrs and sharp edges.



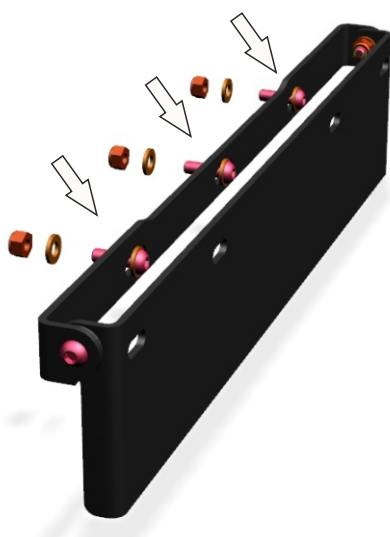
31. In case if bumper doesn't fit, depends on winch, cut out inner top part of bumper, as shown.

Polish burrs and sharp edges.

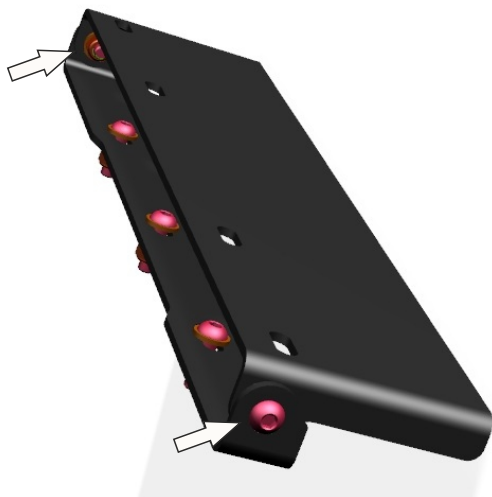
INSTALLATION PROCEDURE



32. Drill 3 holes 7mm diameter, on the top part of bumper (above the grill), for license plate, as drawing shown.



33. Install license plate (pos. 1) onto the bumper using 3 screws M6x20, nuts M6 and washer 6.



34. Adjust license plate angle. Tighten all the joints.

INSTALLATION PROCEDURE



35. Install the bumper onto the vehicle and fix it, using bolts M8, adjusting washers M8 and nuts M8.



36. Install the bumper and grill in reverse order.

INSTALLATION PROCEDURE

Before operating a vehicle fitted with a RIVAL hidden winch mounting bracket:

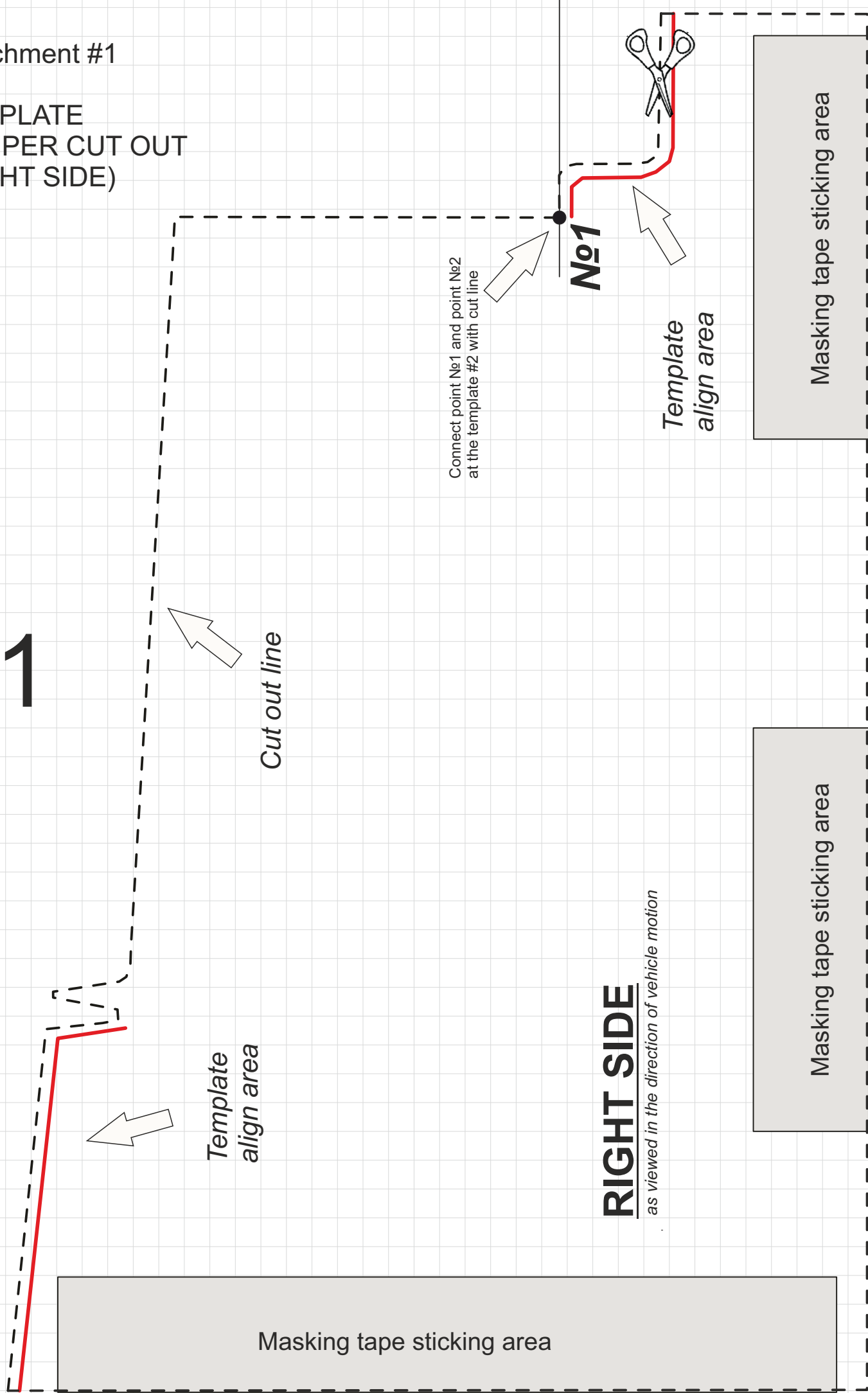
- make sure that all screw joints are tightened;
- check all electrical wiring attached to winch.



Attachment #1

TEMPLATE
BUMPER CUT OUT
(RIGHT SIDE)

1



Cut out line

Template align area

Template align area

Connect point No1 and point No2 at the template #2 with cut line

No1

RIGHT SIDE
as viewed in the direction of vehicle motion

Masking tape sticking area

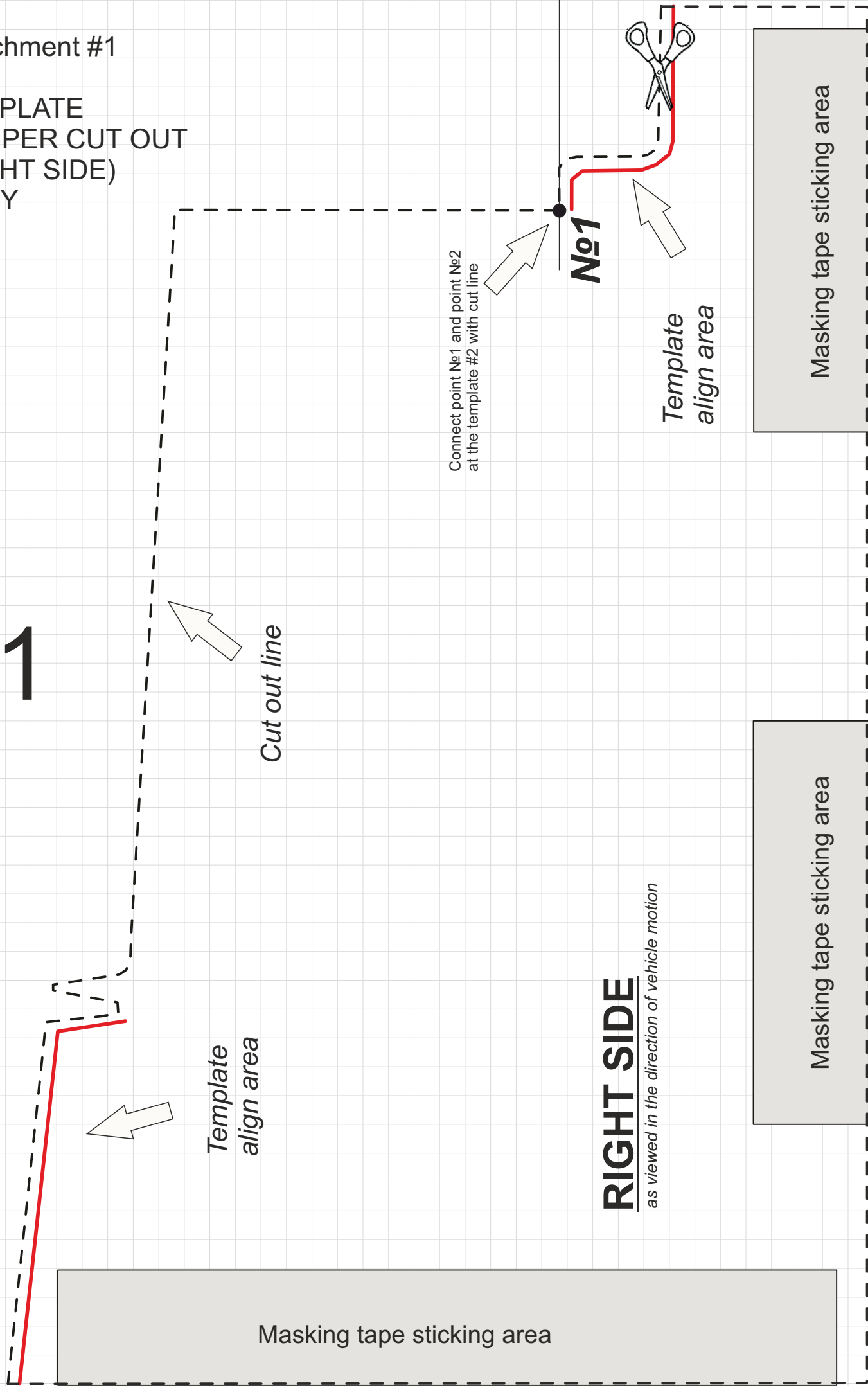
Masking tape sticking area

Masking tape sticking area

Attachment #1

TEMPLATE
BUMPER CUT OUT
(RIGHT SIDE)
COPY

1



Connect point №1 and point №2
at the template #2 with cut line

No1

Template
align area

Cut out line

Template
align area

RIGHT SIDE

as viewed in the direction of vehicle motion

Masking tape sticking area

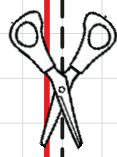
Masking tape sticking area

Masking tape sticking area

Attachment 2

TEMPLATE
BUMPER CUT OUT
(LEFT SIDE)

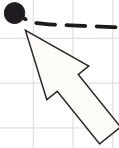
1



Template
align area

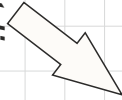
Masking tape sticking area

№2



Connect point №1 and point №2
at the template #2 with cut line

Cut out line



Template
align area

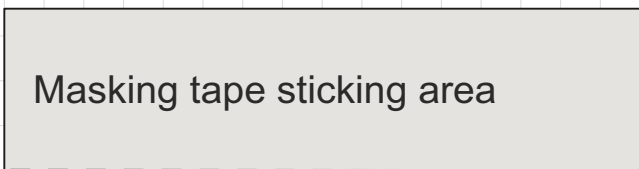


LEFT SIDE

as viewed in the direction of vehicle motion

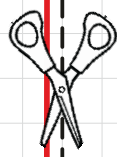
Masking tape sticking area

Masking tape sticking area



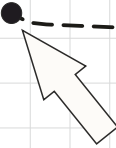
TEMPLATE
BUMPER CUT OUT
(LEFT SIDE)
COPY

1



Template
align area

No2

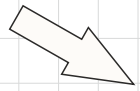


Connect point №1 and point №2
at the template #2 with cut line

Cut out line



Template
align area



Masking tape sticking area

Masking tape sticking area

Masking tape sticking area

LEFT SIDE

as viewed in the direction of vehicle motion