

INSTALLATION MANUAL

PRODUCT: FRONT ALUMINUM BUMPER

MODEL: MITSUBISHI L200 / TRITON (2019 - 2023)

PART NO: 2D.4011.1-NL



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 400 km and periodically thereafter.

NOTICE

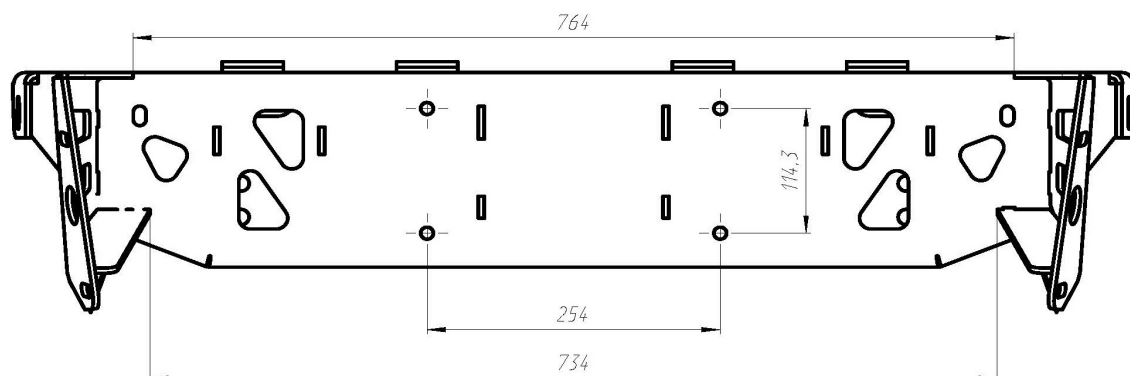
Whilst the bumper adds additional protection to your vehicle, precautionary measures still need to be taken to avoid damage. Always drive to the conditions and your surroundings.

TECHNICAL INFORMATION

*WINCH INSTALLATION

A winch with a pull capacity of up to 12000 lbs 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 12000 lbs recommended capacity is exceeded.

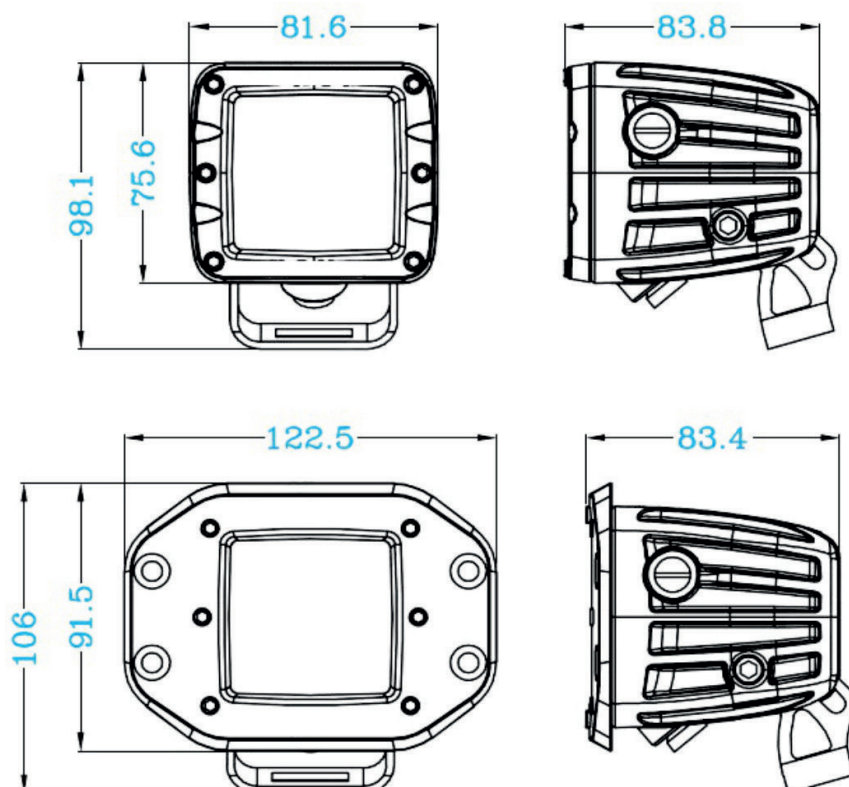
Winch measurements:



Winch size limits:

L 730 x W 220 mm x H 210 mm

COMPATIBLE LIGHTS



TECHNICAL INFORMATION

*RECOVERY POINTS



WARNING

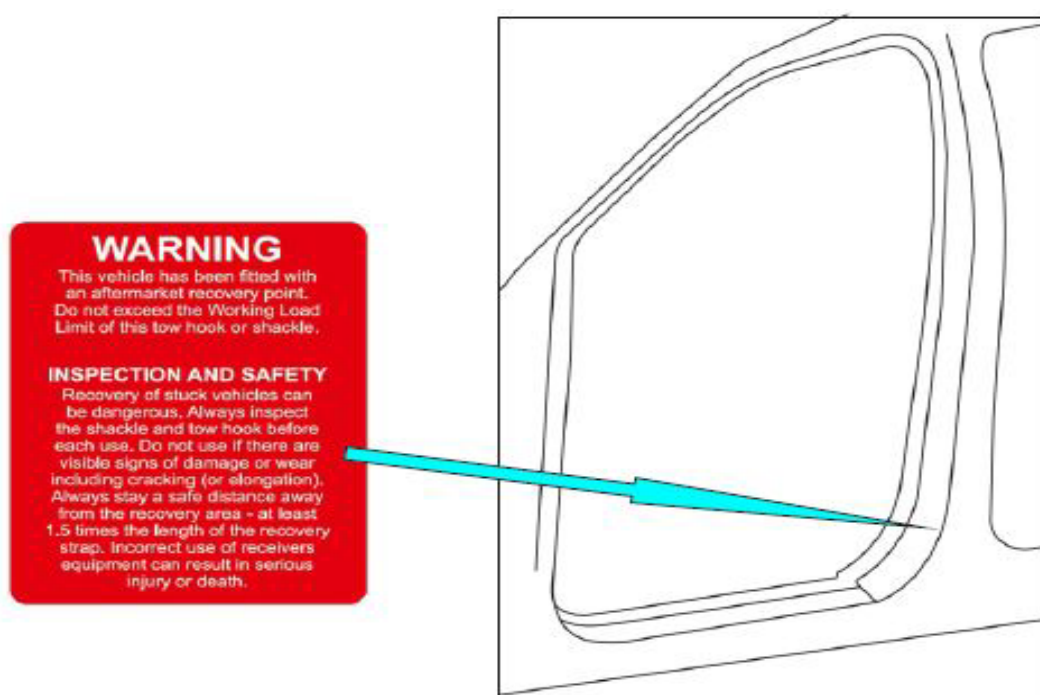
Do not exceed the Working Load Limit of these recovery points or shackle.

INSPECTION AND SAFETY

Recovery of stuck vehicles can be dangerous. Always inspect the shackle and recovery points before each use. Do not use if there are visible signs of damage or wear including cracking (or elongation). Always stay a safe distance away from the recovery area - at least 1.5 times the length of the recovery strap. Incorrect use of receivers equipment can result in serious injury or death.

Always use recovery points as a matched pair teamed with an equalising bridle during any recovery situation.

Please attach this "Warning" label to the door aperture.



FRONT BUMPER

Part number 2D.4011.1-NL

Suited to vehicle: MITSUBISHI L200 / Triton (2019 - 2023)

Material: Aluminum / Steel

Compatibility: RIVAL 4046.2 Skid Plate Mitsubishi L200 Triton 4WD (radiator) (2015-2023)



SAFETY NOTICE

- * The RIVAL Bumper is designed to compliment the use and design of the specified vehicle under conditions specified by the vehicle 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 dealer. Vehicle, or where the bumper has been damaged, is extremely dangerous and must be avoided at all cost.
- * 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.
- * A winch with a pull capacity of up to and including 12000 lb 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. The Rival bumper provides standard 4 1/2"x10" mounting holes.

INSTALLATION NOTICE

- * Personal safety during the installation process must be adhered to at all times.
- * Estimated time for installation: 4 hours.
- * The RIVAL Bumper must be mounted and affixed to the vehicle according to this installation manual and the use of personal safety equipment is highly recommended.
- * Do not install this bumper on vehicle models other than those allowed in this manual.
- * Check state and local highway safety laws regarding permitted bumper types and heights.

NOTE: if the bumper is to be color coded it is advised to test fit before color coding. RIVAL is not liable for color coding cost, it is the installers' responsibility to check the fitment and alignment before color coding.

ADR69 AND AIR BAG SYSTEM

The Rival bumper has been tested and certified to be compatible with ADR69 and will not affect the operation of the Air bag System on this vehicle. This product or mounting brackets must not be modified in any way, and must be fitted in accordance with the installation instructions.

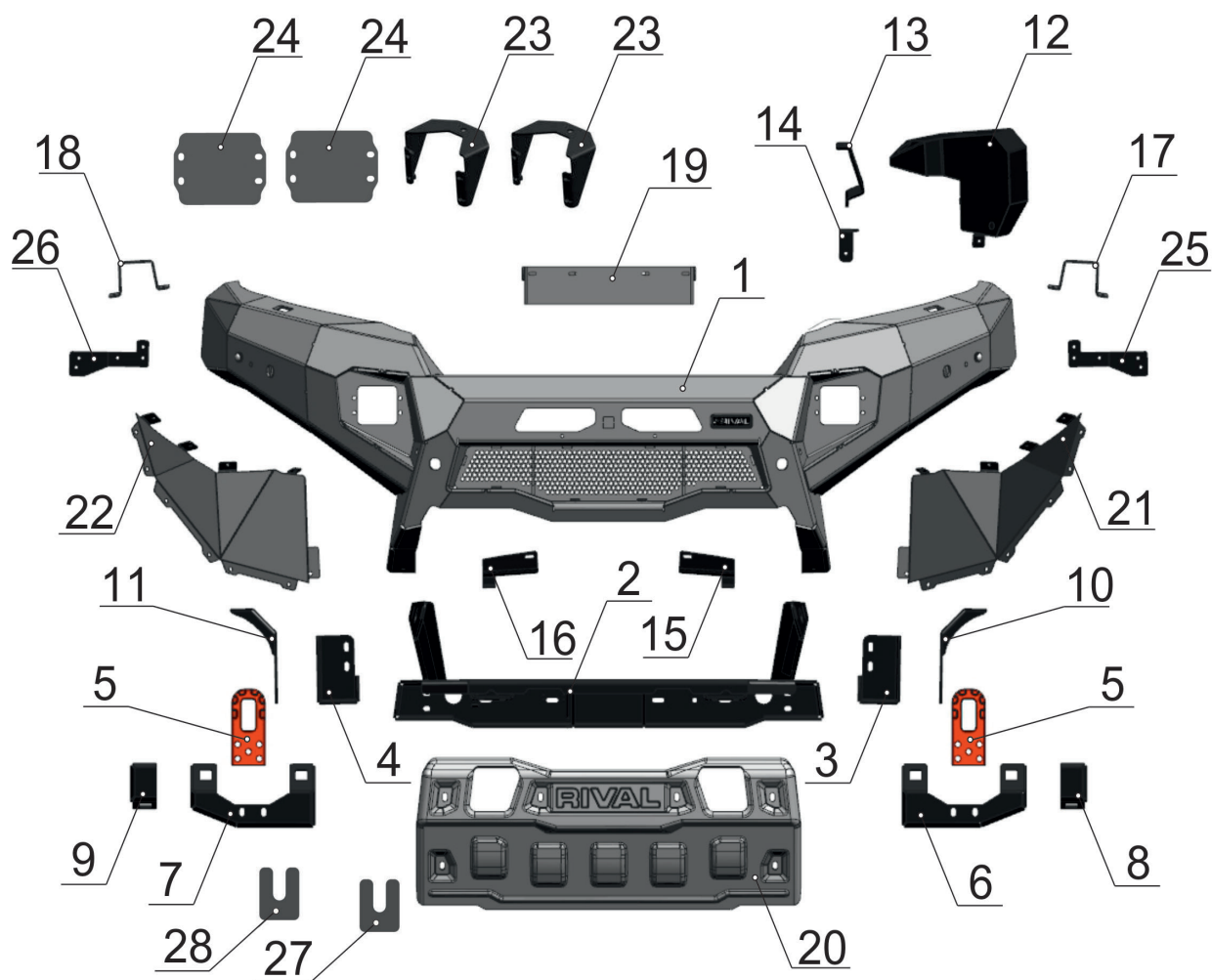
REQUIRED TOOLS

- * Basic tool kit
- * Torque wrench
- * Crosspoint and flat head screwdriver
- * Marker
- * Angle grinder

TORQUE SETTING

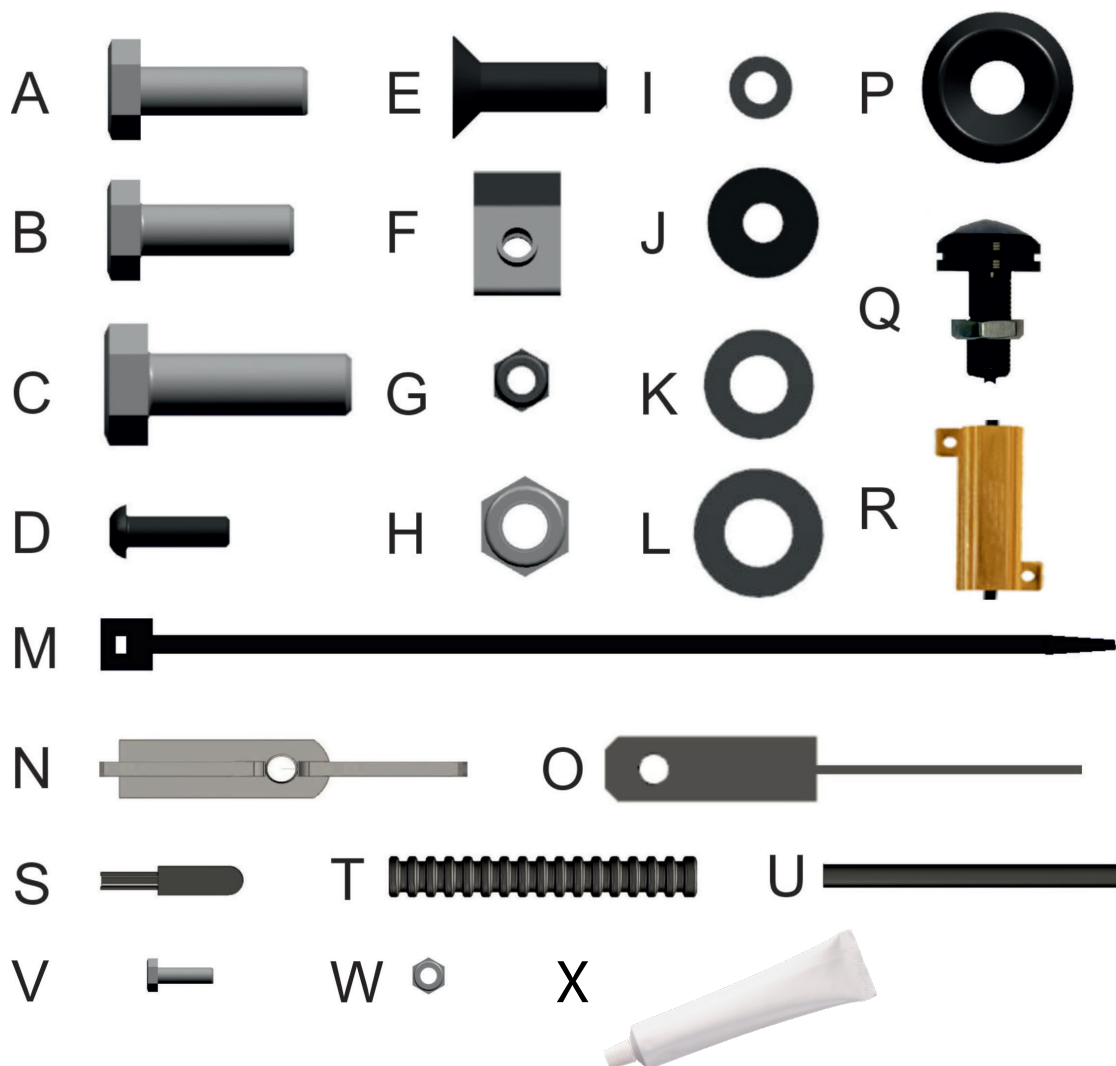
- * M6 - 9 N·m
- * M10 - 30 N·m
- * M12 - 77 N·m

PARTS LISTING



1. Aluminum bumper body.....Qty 1	15. Grille bracket left.....Qty 1
2. Winch bracket.....Qty 1	16. Grille bracket right.....Qty 1
3. Support bracket left.....Qty 1	17. Left headlight washer bracket.....Qty 1
4. Support bracket right.....Qty 1	18. Right headlight washer bracket.....Qty 1
5. Recovery points.....Qty 2	19. License plate bracket.....Qty 1
6. Front left bash plate bracket.....Qty 1	20. Bash plate.....Qty 1
7. Front right bash plate bracket.....Qty 1	21. Flap left.....Qty 1
8. Rear left bash plate bracket.....Qty 1	22. Flap right.....Qty 1
9. Rear right bash plate bracket.....Qty 1	23. LED bracket.....Qty 2
10. Left bracket for fairlead.....Qty 1	24. LED light cap.....Qty 2
11. Right bracket for fairlead.....Qty 1	25. Left bracket for OE bumper.....Qty 1
12. Washer tank reservoir.....Qty 1	26. Right bracket for OE bumper.....Qty 1
13. Side washer tank reservoir bracket.....Qty 1	27. Adjusting plate 2mm.....Qty 4
14. Top washer tank reservoir bracket.....Qty 1	28. Adjusting plate 3mm.....Qty 4

PARTS LISTING



A. Bolt M10x1.25x35.....	Qty 6	M. Cable tie.....	Qty 4
B. Bolt M10x30.....	Qty 18	N. Insert nut M10 with cable.....	Qty 10
C. Bolt M12x50.....	Qty 8	O. Insert nut M10 with cable.....	Qty 2
D. Screw M6x20 round-head.....	Qty 41	P. Countersunk washer.....	Qty 10
E. Screw M10x40 countersunk-head...	Qty 10	Q. Blink light.....	Qty 2
F. U-nut M6.....	Qty 22	R. Resistor.....	Qty 2
G. Nut M6.....	Qty 11	S. Male connector.....	Qty 4
H. Nut M10.....	Qty 12	T. Corrugated pipe.....	Qty 2
I. Washer 6.....	Qty 24	U. Heat shrink tube.....	Qty 4
J. Washer penny 6.....	Qty 28	V. Screw M3x12.....	Qty 4
K. Washer 10.....	Qty 32	W. Nut M3.....	Qty 4
L. Washer 12.....	Qty 8	X. Sealant.....	Qty 1

INSTALLATION PROCEDURE

Preparation for installation



Fig.1

1. Open the hood. Disconnect terminal “-” from the vehicle battery (fig.1).



Fig.2

2. Remove the plastic pad clips. Dismantle the clips (fig.2).

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



Fig.3

3. Remove upper grille plastic pad clips (fig.3).

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



Fig.4

4. Remove license plate frame (fig.4).



Fig.5

5. Remove radiator grille, by pulling grille up and unfastening plastic clips on the bottom of grille (fig.5).



Fig.6

6. Remove the plastic pad clip on the bottom of OE bumper, on both sides of the vehicle (fig.6).

INSTALLATION PROCEDURE



Fig.7

7. Unscrew screws retaining wheel arches to OE bumper, on both sides of the vehicle (fig.7).



Fig.8

8. Remove plastic covers of OE bumper, on both sides of the vehicle (fig.8).



Fig.9

9. Unscrew screws retaining OE bumper to vehicle body (fig.9).



Fig.10

10. Detach bumper side plates from brackets on each side by pulling them (fig.10).

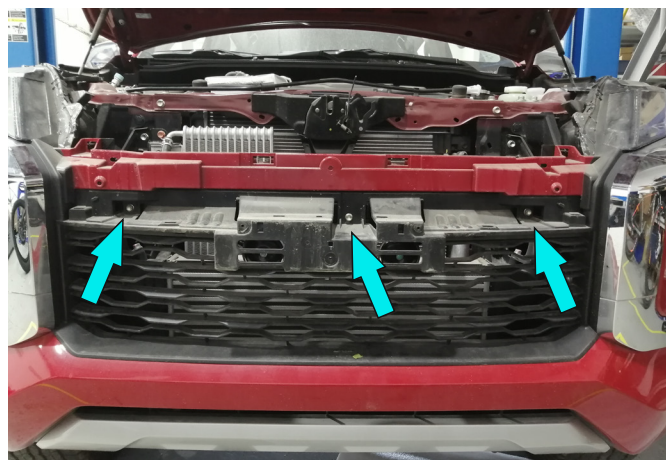


Fig.11

11. Unscrew 3 screws, in central part of the vehicle, retaining OE bumper to vehicle body (fig.11).

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

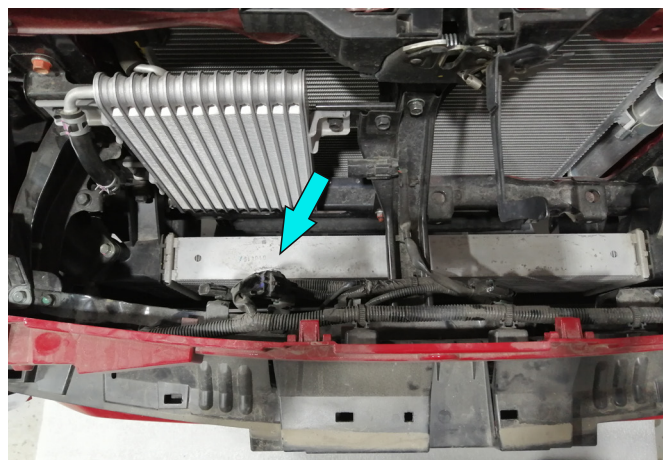


Fig.12

12. Disconnect wiring that attach OE bumper (fig.12).

INSTALLATION PROCEDURE



Fig.13

13. Remove OE bumper (fig.13).

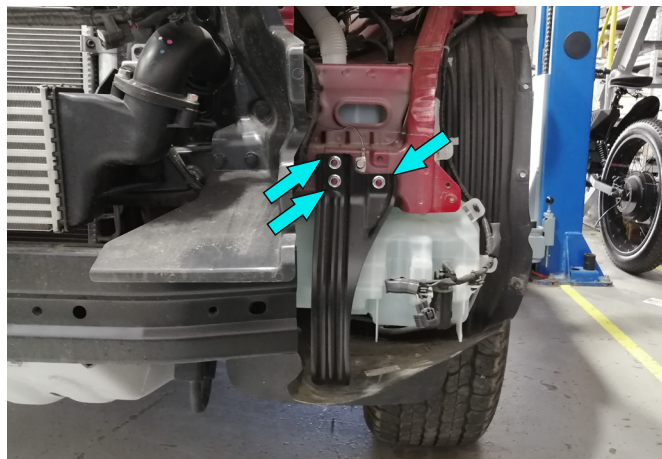


Fig.14

14. Remove bottom brackets, by unscrewing 3 nuts on both sides of the vehicle (fig.14).

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

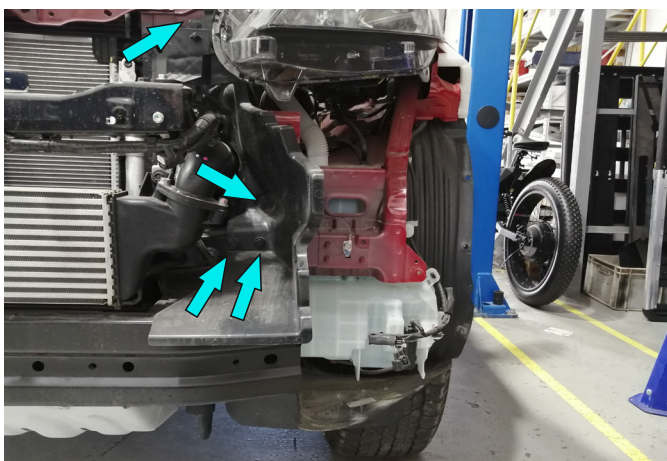


Fig.15

15. Remove left plastic deflector, unfastening plastic clips (fig.15).

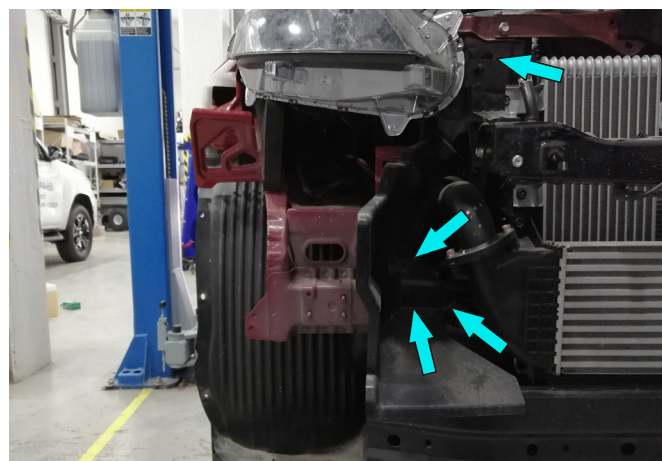


Fig.16

16. Remove right plastic deflector, unfastening plastic clips (fig.16).



Fig.17

17. Remove right bracket of OE bumper (fig.17).



Fig.18

18. Remove side brackets of OE bumper, by unscrewing 2 screws on both sides of the vehicle (fig.18).

INSTALLATION PROCEDURE

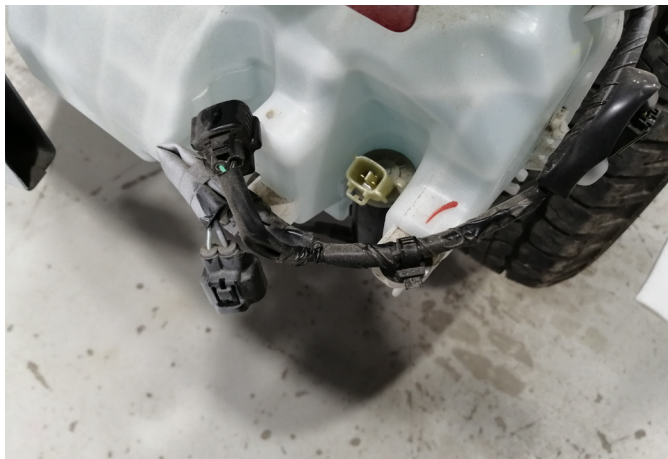


Fig.19

19. Disconnect wirings from the washer pumps and washer liquid level sensor (if any) (fig.19).



Fig.20

20. Disconnect washer pumps pipes and wring out pipes, to be sure, there is no liquid leaking (fig.20).

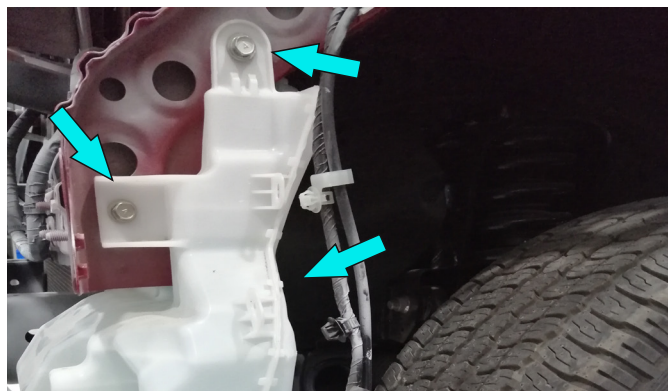


Fig.21

21. Remove washer tank reservoir by unscrewing bolts M6 (fig.21).

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



Fig.22

22. Remove washer tank reservoir filler by removing plastic clip (fig.22).

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

Vehicle body cutting procedure

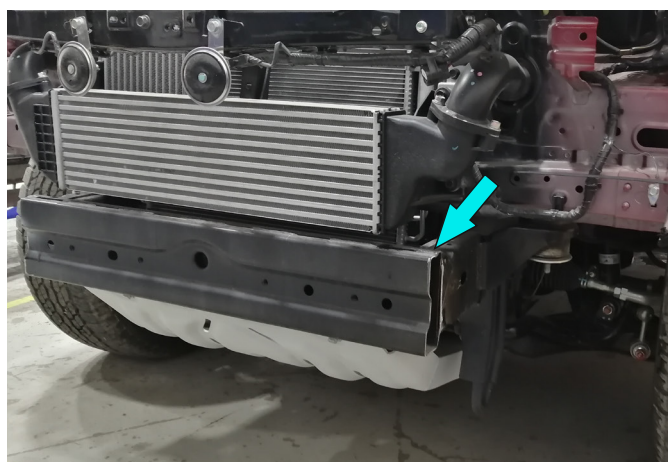


Fig.23

23. Cut off the safety beam side members, flush with the frame lateral surface, on both sides of the vehicle (fig.23).

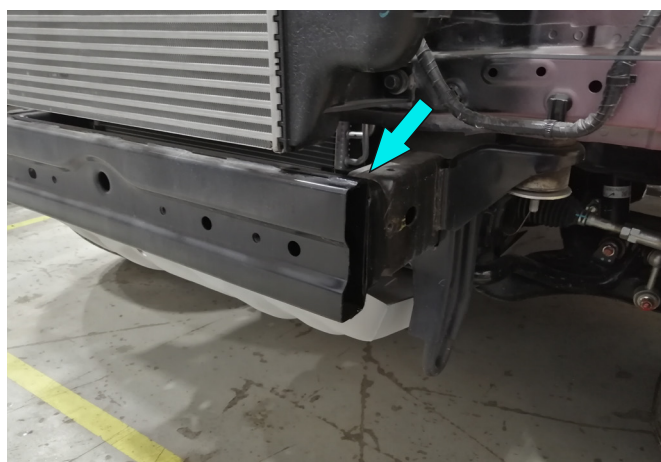


Fig.24

24. Paint all trimming points, using paint, undercoating or any other corrosion resistance coating (fig.24).

INSTALLATION PROCEDURE

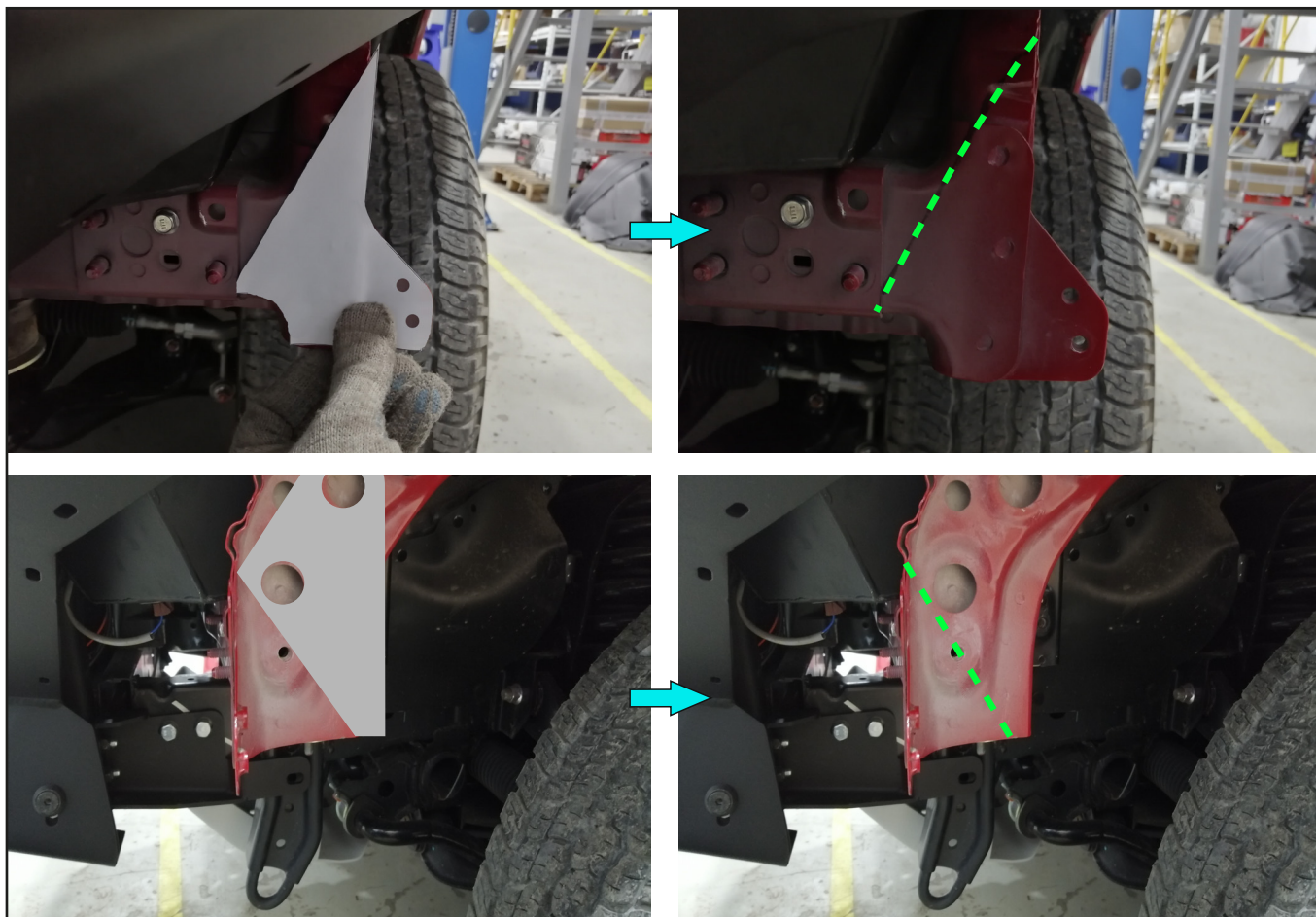


Fig.25

25. Prepare template 1 and template 2 from the end of this manual. Mark cutting lines using templates on both sides of the vehicle (fig.25).



Fig.26

26. Cut off vehicle body following marked lines on both sides of the vehicle (fig.26).

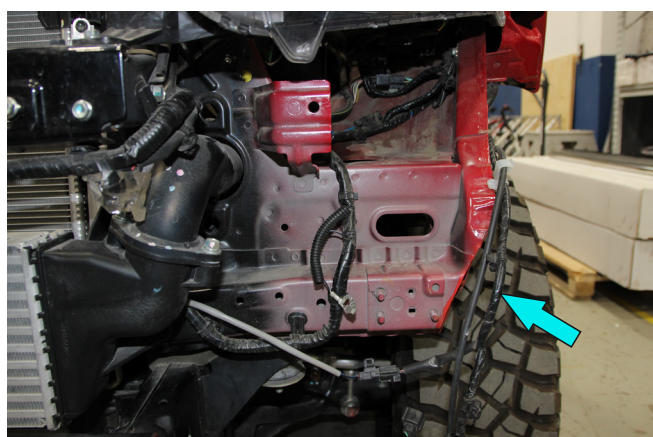


Fig.27

27. Paint all trimming points, using paint, undercoating or any other corrosion resistance coating (fig.27).

If it's necessary, you can replace parts of the vehicle body, that you cut on steps 25-27, using replacement brackets (item 25,26) supplied with RIVAL Front bumper 2D.4011.1-NL.

INSTALLATION PROCEDURE

Preparation for washer tank reservoir (steps 28-38)

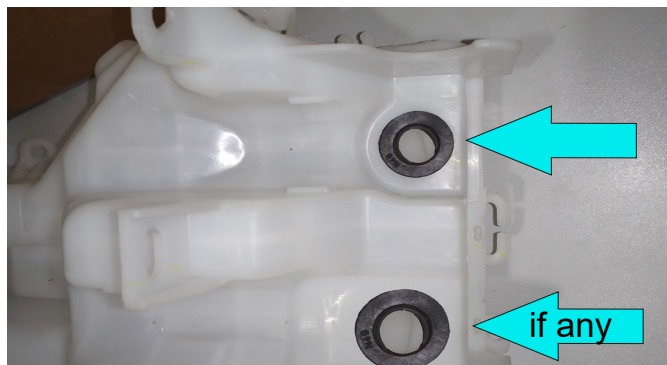


Fig.28

28. Displace rubber seals of washer pumps out of OE washer tank reservoir (fig.28).



Fig.29

29. Displace rubber sealant of the washer tank reservoir filler out of OE washer tank reservoir (fig.29).



Fig.30

30. Displace rubber sealant of the washer liquid level sensor out of OE washer tank reservoir, if any (fig.30).

With headlight washer installation (steps 31-32)



Fig.31

31. 1 - Install rubber sealant of the washer pump on the washer tank reservoir (item 12)
2 - Locate knock-out for the headlight washer bump and knock them out by a hammer. Install rubber sealant of the washer pump on the washer tank reservoir (fig.31).



Fig.32

32. Install washer pumps on the washer tank reservoir (item 12) (fig.32).

INSTALLATION PROCEDURE

Without headlight washer installation (steps 33-34)



Fig.33

33. **1** - Install rubber sealant of the washer pump on the washer tank reservoir (item 12)
2 - Seal the hole using sealent (item X) (fig.33).



Fig.34

34. Install washer pump on the washer tank reservoir (item 12) (fig.34).

With washer liquid level sensor installation (steps 35-36)



Fig.35

35. Locate knock-out for the washer liquid level sensor and knock them out by a hammer. Install rubber sealant of the washer liquid level sensor on the washer tank reservoir (item 12) (fig.35).



Fig.36

36. Install liquid level sensor on the washer tank reservoir (item 12) (fig.36).

Without washer liquid level sensor installation (step 37)

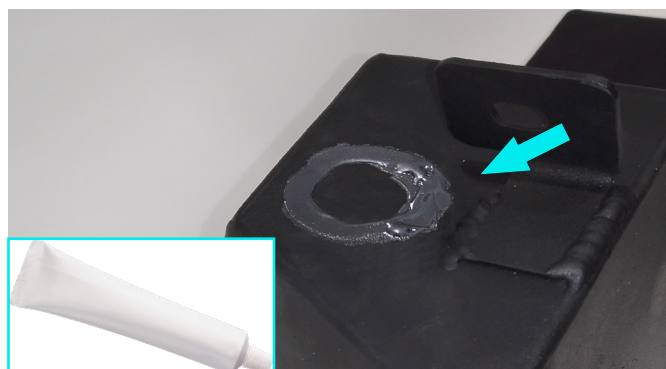


Fig.37

37. Seal the hole using sealent (item X) (fig.37).

INSTALLATION PROCEDURE



Fig.38

38. Install rubber sealant of the washer tank reservoir filler on Washer tank reservoir (item 12) (fig.38).

Washer tank reservoir installation



Fig.39

39. Unscrew OE Bolt, disconnect the wiring and screw OE Bolt in back at the same hole (fig.39).

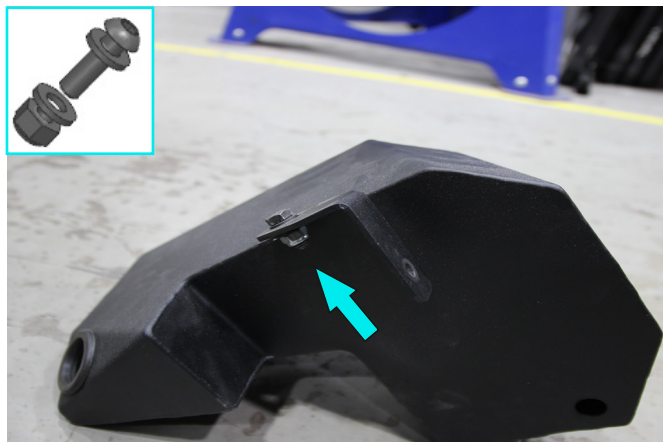


Fig.40

40. Install top washer tank reservoir bracket (item 14) on washer tank reservoir (item 12), using screw M6 (item D), washer 6 (item J) and nut M6 (item G) (fig.40).

***Do not tighten that.**



Fig.41

41. Install the washer tank reservoir (item 12) on the vehicle. Fix it using OE nut, screwed out on step 14 (fig.41). Don't forget to install OE terminal on the bolt, same as it was on the vehicle.

***Do not tighten that.**



Fig.42

42. Install side washer tank reservoir bracket (item 13) on washer tank reservoir (item 12), using screw M6 (item D), washer 6 (item J), nut M6 (item G) and bolt M6, screwed out on step 21 (fig.42).

***Do not tighten that.**

INSTALLATION PROCEDURE

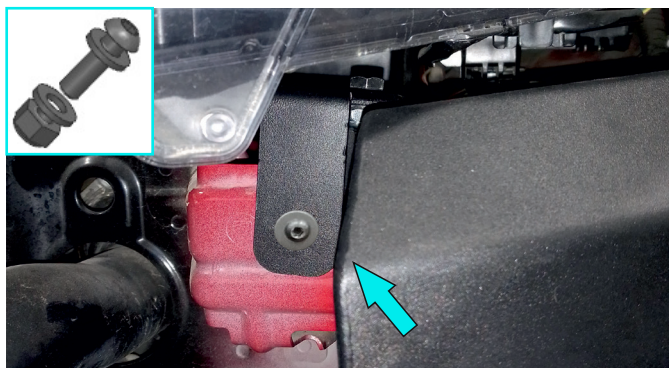


Fig.43

43. Fix washer tank reservoir (item 12) on vehicle body, using screw M6 (item D), washer 6 (item J) and nut M6 (item G) (fig.43).

***Tighten hardware after that.**

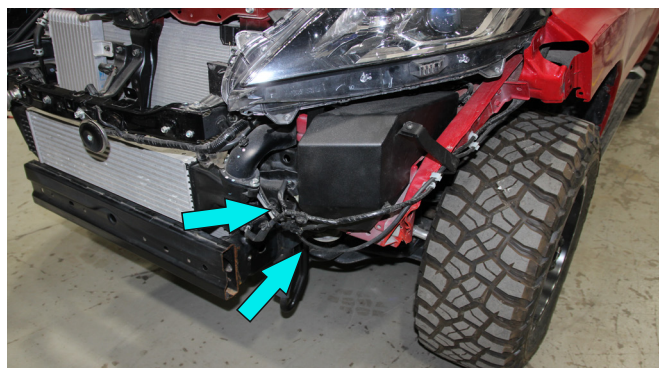


Fig.44

44. Connect wirings to the reservoir pumps and liquid level sensor (if any), that were disconnected on steps 19-20 (fig.44).

Winch bracket installation procedure



Fig.45

45. Install insert nut M10 with cable (item O) into the vehicle frame on both sides of the vehicle (fig.45).



Fig.46

46. Install support brackets (item 3 and 4) on the vehicle frame using bolts M10x1.25x35 (item A), bolts M10x30 (item B) and washers 10 (item K) on both sides of the vehicle (fig.46).

***Do not tighten that.**



Fig.47

47. Fix the winch bracket (item 2) to support brackets (item 3 and 4) using bolts M10 (item B), washers 10 (item K) and nuts M10 (item H). Align winch bracket (item 2) on the vehicle frame (fig.47 and 48).

***Tighten hardware after that.**

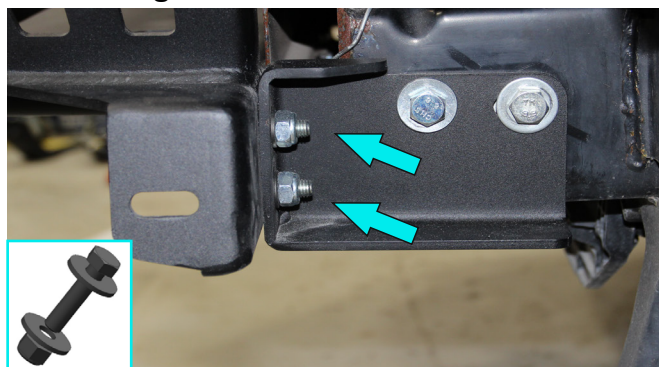


Fig.48

INSTALLATION PROCEDURE



Fig.49

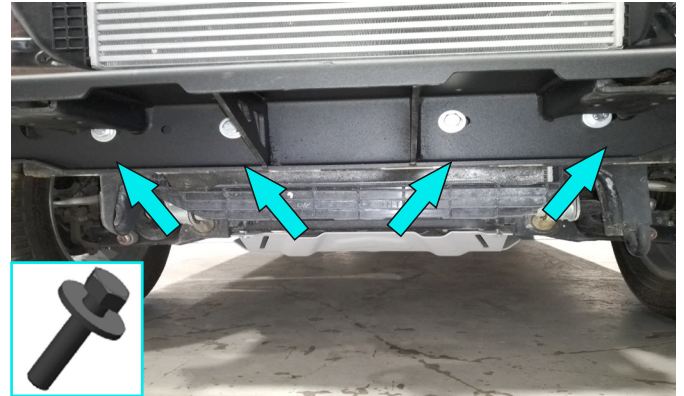


Fig.50

48. If your vehicle has a front beam, as shown in fig.51, fix winch bracket (item 2) to the OE front beam using bolts M10x1,25x35 (item A) and washers 10 (item K), (fig.52).

***Tighten hardware after that and go to step 54.**

If your vehicle has a different front beam, follow the step 51-55.

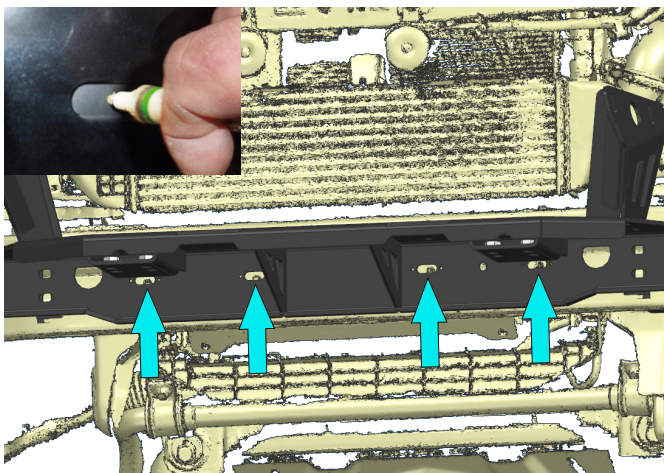


Fig.51

49. Mark the center of the holes, as shown in fig.51.



Fig.52

50. Remove the winch bracket (item 2) and drill holes using a 22mm hole saw (fig.52).



Fig.53

51. Install insert nuts M10 with cable (item N) into the front beam (fig.53).



Fig.54

52. Install winch bracket (item 2) to the OE front beam using bolts M10x30 (item B) and washers 10 (item K) (fig.54).

***Do not tighten yet.**

INSTALLATION PROCEDURE

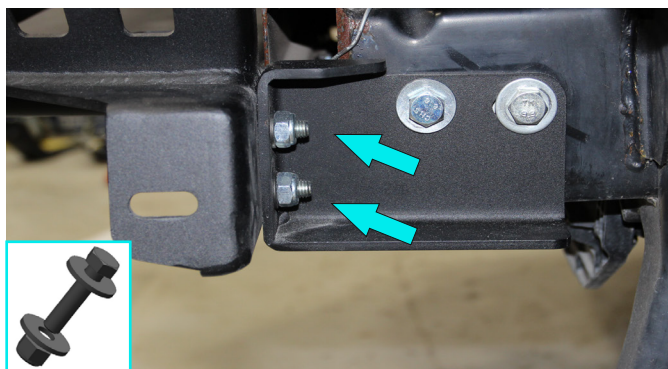


Fig.55

53. Fix the winch bracket (item 2) to support brackets (item 3 and 4) using bolts M10 (item B), washers 10 (item K) and nuts M10 (item H) (fig.55).

***Tighten hardware after that.**

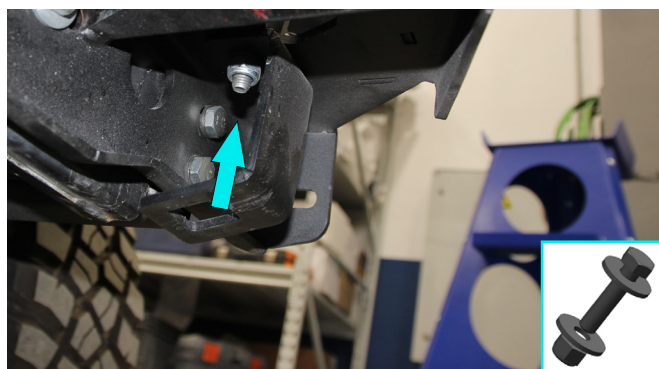


Fig.56

54. Install rear bash plate brackets (item 8,9), fix it on the winch bracket (item 2) using bolts M10 (item B), washers 10 (item K) and nuts M10 (item H) (fig.56).

***Tighten hardware after that.**



Fig.57

55. Install insert nuts M10 with cable (item N) into rear bash plate brackets (item 8,9), (fig.57).

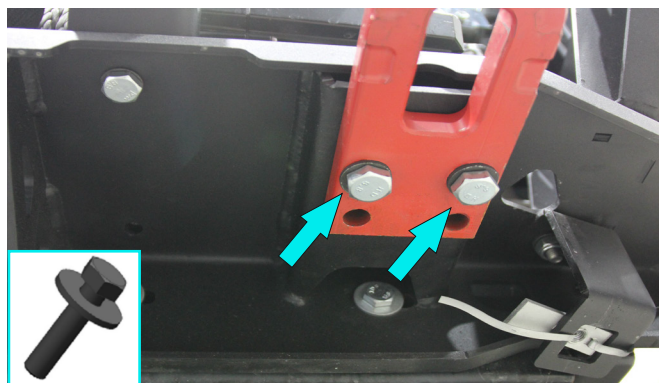


Fig.58

56. Install recovery points on winch bracket (item 2). Fix it using bolts M12 (item C) and washers 12 (item L) (fig.58).

***Do not tighten that.**

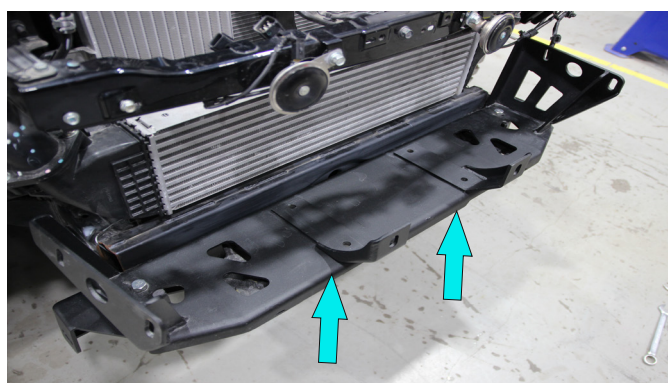


Fig.59

57. Install brackets for fairlead (item 10,11) on winch bracket (item 2) (fig.59).

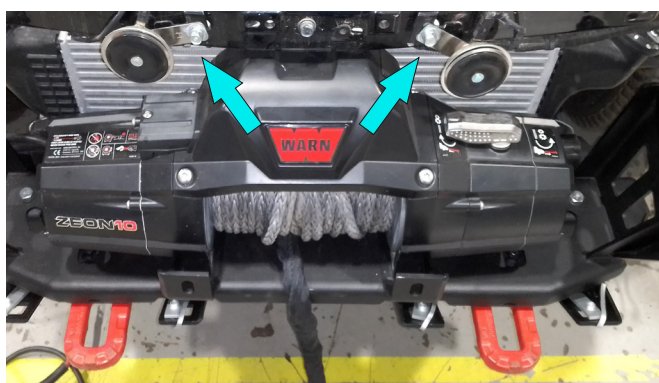


Fig.60

58. Loosen bolts on the horn, if it's necessary, to adjust horn and install winch (fig.60).

INSTALLATION PROCEDURE

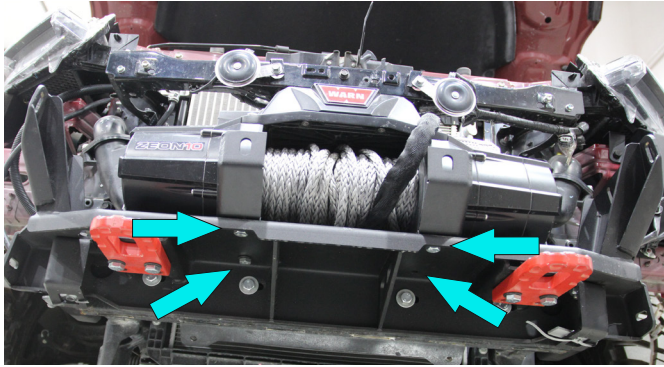


Fig.61

59. Install winch, fix it using bolts M10 (item B) and washers 10 (item K), through winch bracket (item 2) and brackets for fairlead (item 10,11) (fig.61).

***Tighten horn and winch hardware after that.**

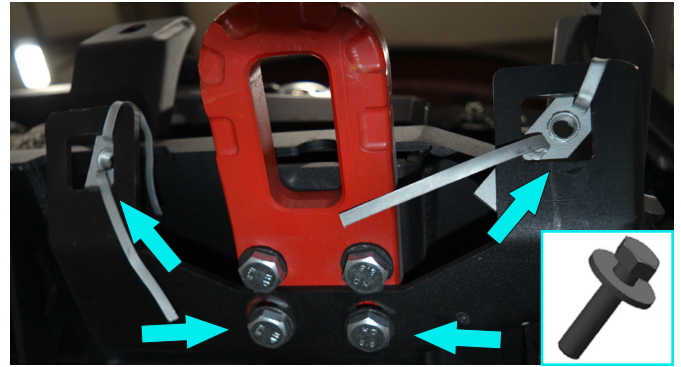


Fig.62

60. Install Front bash plate brackets (item 6,7), fix to winch bracket (item 2) using bolts M12 (item C), washers 12 (item L). Install insert nuts M10 with cable (item N) into front bash plate brackets (item 6,7) (fig.62).

***Tighten hardware after that.**

Turn signal lights installation procedure

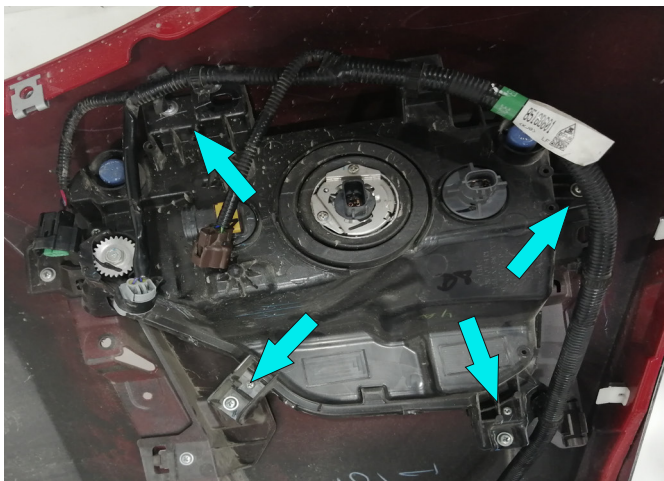


Fig.63

61. Disconnect all electronic connectors. Unscrew 4 screws retaining lights to OE bumper, on both sides of the vehicle (fig.63).



Fig.64

62. Unscrew 3 screws on OE bumper, on both sides. Lift up grille and disconnect plastic clips retaining wiring (fig.64).

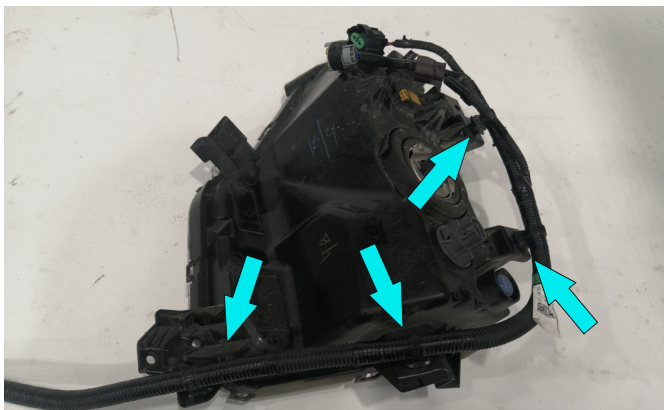


Fig.65

63. Remove plastic clips retaining lights wiring (fig.65).



Fig.66

64. Remove wiring from lights and bumper (fig.66).

INSTALLATION PROCEDURE

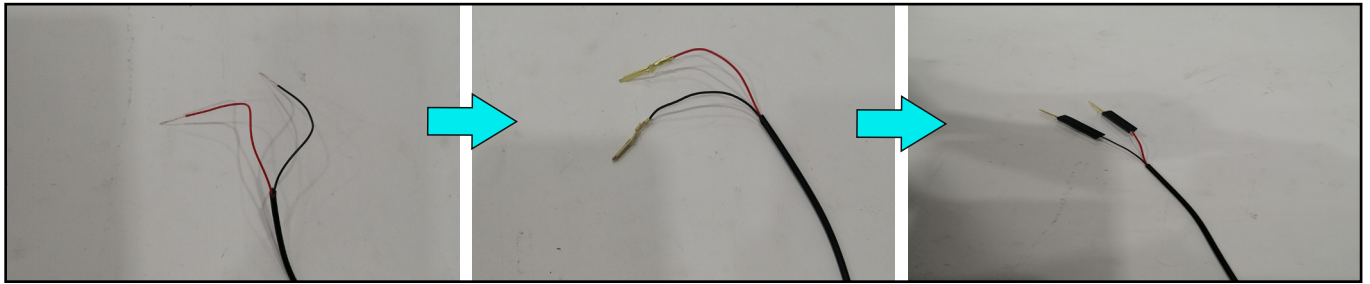


Fig.67

65. Crimp terminals (item S) on blink lights (item Q) wiring. Tape wiring using heat shrink tube (item U) (fig.67).

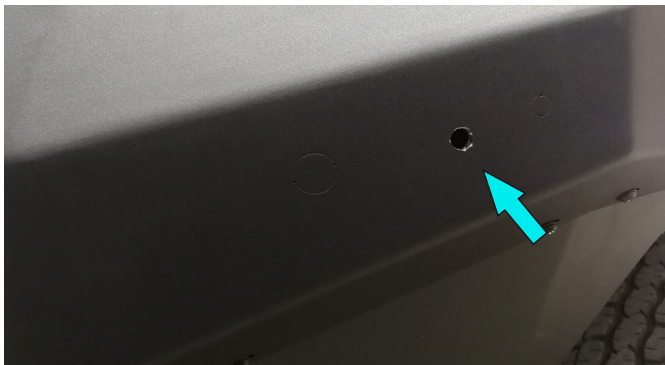


Fig.68

66. Locate knock-outs for blink lights on both sides of the bumper body (item 1) (fig.68).



Fig.69

67. Install blink lights (item Q) into bumper body (item 1). Fix lights using nut, supplied with lights kit, on the inside of the bumper body (fig.69).

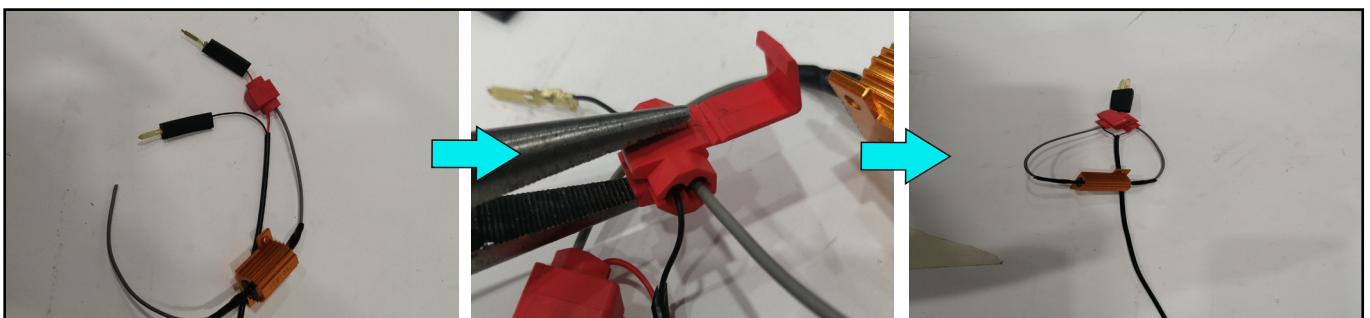
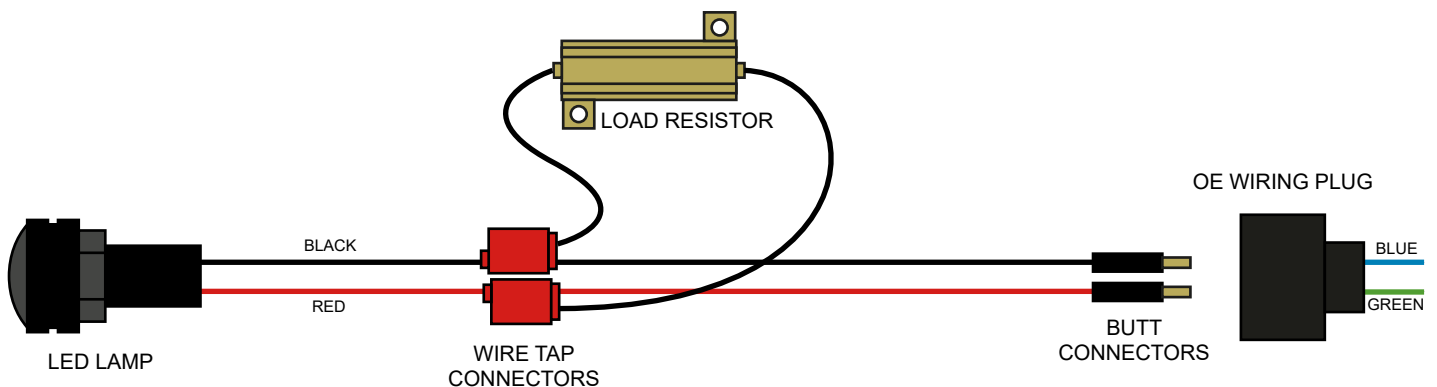


Fig.70

68. Connect resistor (item R) to blink lights (item Q) wiring using wire tap connectors supplied with resistor. Resistor connect parallel to blink lights (fig.70).

INSTALLATION PROCEDURE

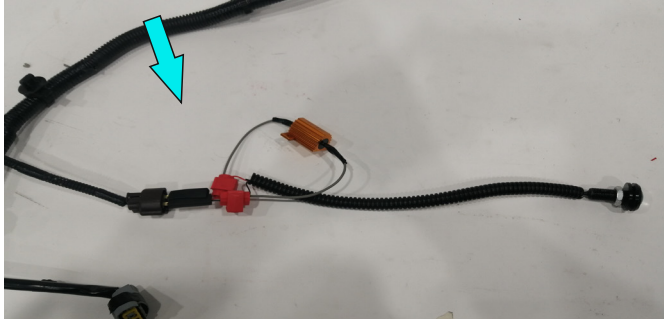


Fig.71

69. Place wiring into corrugated pipe (item T). Connect terminals to OE lights wiring (fig.71).

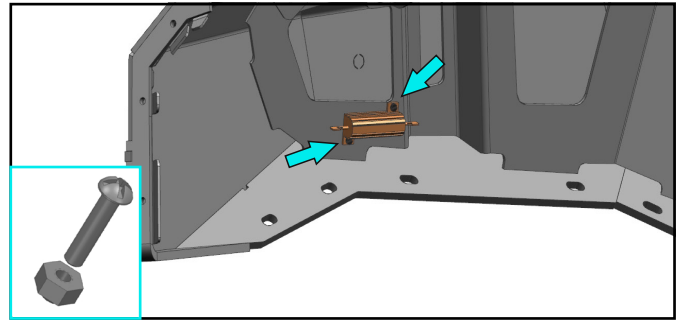


Fig.72

70. Fix wiring on the inside of bumper body (item 1) using cable ties (item M). Fix resistor on the inside of bumper body (item 1) using screws M3 (item V) and nut M3 (item W) (fig. 72). Repeat on the other side of the vehicle.

***Tighten hardware after that.**

NOTE: Resistor can get hot while operations.

Headlight washers installation procedure

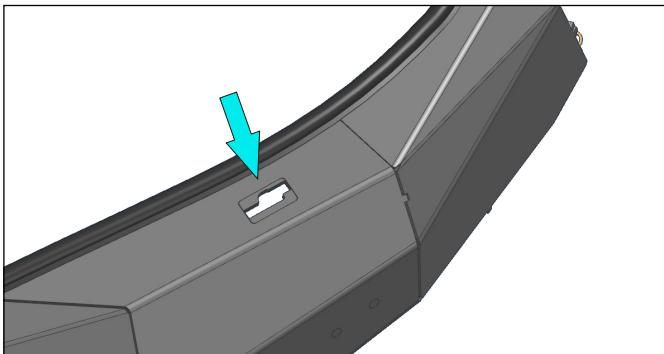


Fig.73

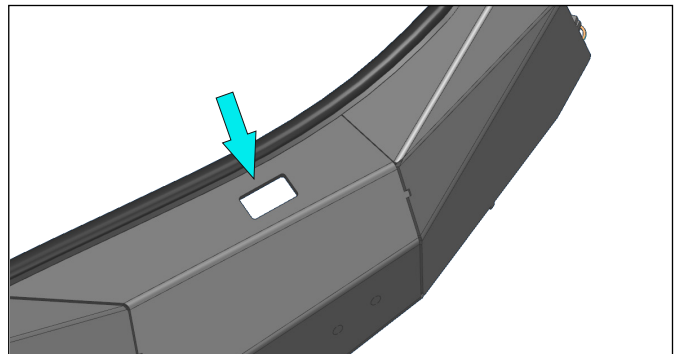


Fig.74

71. Locate knock-outs for headlight washers on the bumper body (item 1) and knock them out by a hammer to match the holes in your vehicle's bumper (fig. 73 or 74).

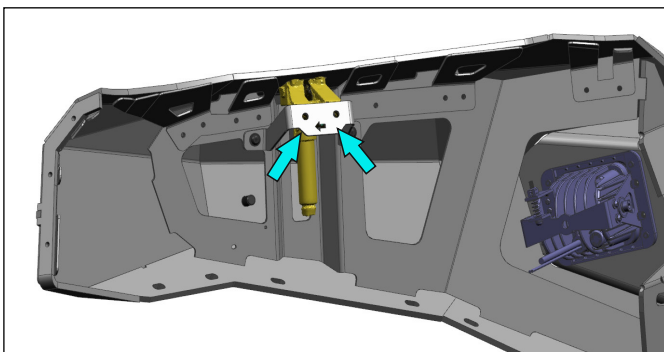


Fig.75

72. Install washer tank reservoirs and fix it on left and right headlight washer brackets (item 17,18) using OE bolts (fig. 75).

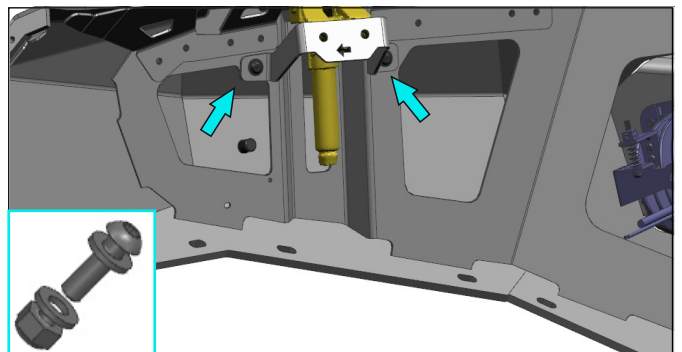


Fig.76

73. Fix left and right headlight washer brackets (item 17,18) on bumper body (item1) using screw M6 (item D), washer 6 (item I) and nut M6 (item G) (fig.76).

***Tighten hardware after that.**

INSTALLATION PROCEDURE

Bumper body installation procedure

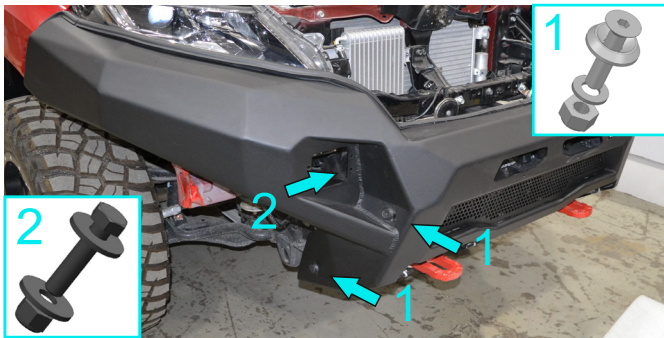


Fig.77

74. Install bumper body (item 1) onto winch bracket (item 2) and fix it on both sides using:
1- Screws M10 (item E), countersunk washers 10 (item P), washers 10 (item K) and nuts M10 (item H)
2 – Bolts M10 (item B), washers 10 (item K) and nuts M10 (item H) (fig.77).

*** Do not tighten yet.**

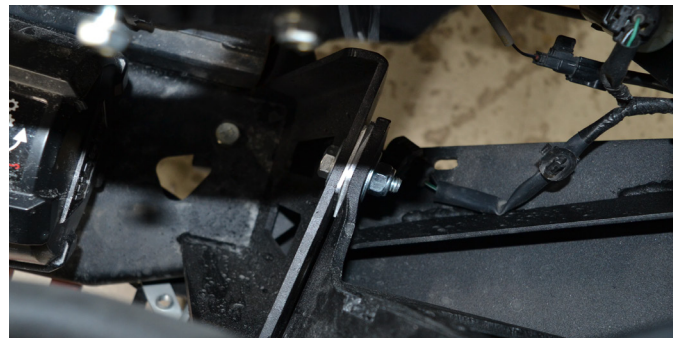


Fig.78

75. Align the bumper body with the vehicle. Add adjusting plate 2mm (item 27) or adjusting plate 3mm (item 28) if it's necessary, between bumper body and winch bracket in fixation points (fig.78).

***Tighten all the hardware from step 74 after that.**



Fig.79

76. Fix your aftermarket LED cubic lights to brackets (item 23). These brackets are not compatible with flush mount LED lights (part number 2D.0041.1, purchased separately) (fig.79).



Fig.80

77. Install LED lights or LED Light caps (item 24), using screw M6 (item D), washer 6 (item I) and LED brackets (item 23) (fig.80).

***Tighten hardware after that.**

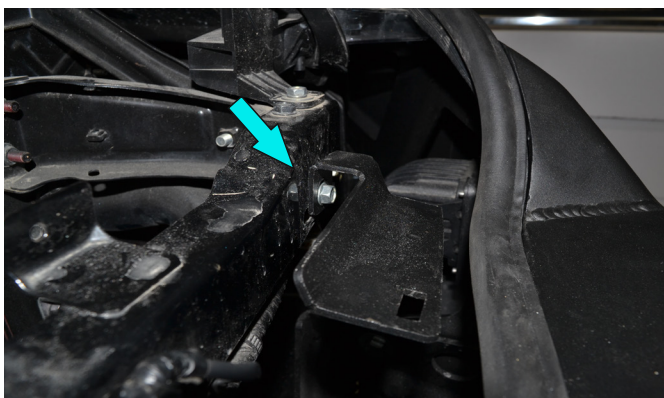


Fig.81

78. Fix grille brackets (item 15,16) to OE beam using OE screws that were unscrewed on step 11 (fig.81).

***Tighten hardware after that.**

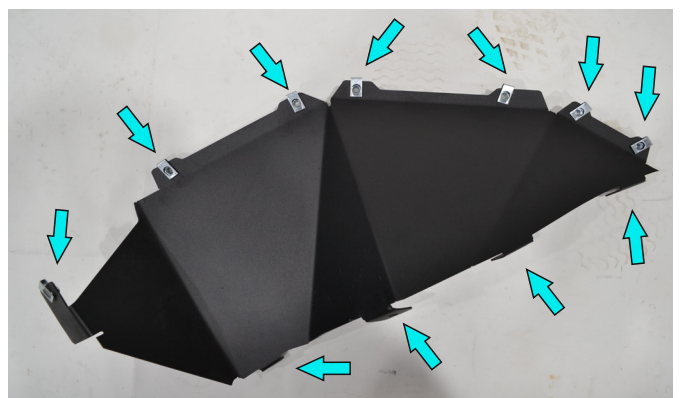


Fig.82

79. Install caged nuts (item F) onto the flaps (item 21,22) (fig.82).

INSTALLATION PROCEDURE

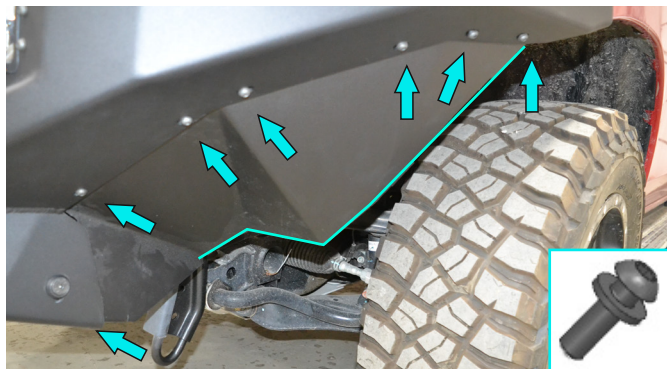


Fig.83

80. Install flaps (item 21,22) using screws M6 (item D) and washers 6 (item J) onto the bumper body on each side. Push the flap to plastic fender and mark future cutting line. Cut plastic fender following marked cutting line using jig-saw or shears (fig.83).

*** Do not tighten yet.**

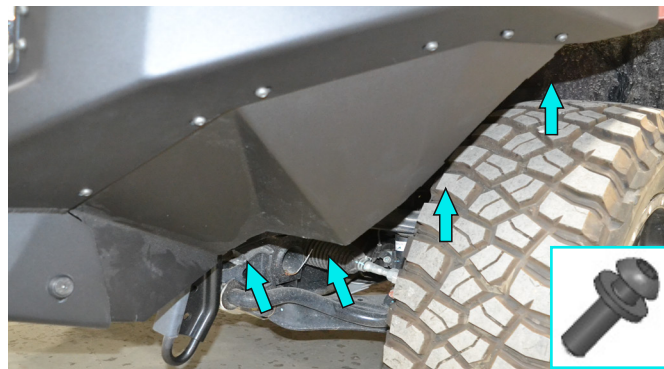


Fig.84

81. Mark and drill 4 holes in flap (item 21,22) on each side of the vehicle. Fix flaps and fenders using screws M6 (item D) and washers 6 (item J) (fig. 84).

***Tighten hardware after that.**

Steps 82-85 (if winch is to installed).



Fig.85

82. Push hawse to lower grille on bumper. Align the mounting holes with winch hawse brackets (Fig.85).



Fig.86

83. Mark contour line of hawse on grille (Fig.86).



Fig.87

84. Make a cutout at 5-10 mm above the marked line (Fig.87).



Fig.88

85. Install the winch hawse on the bumper using its own fasteners (Fig.88).

***Tighten hardware after that.**

INSTALLATION PROCEDURE



Fig.89

86. Install bash plate (item 20) using screws M10 (item E) and countersunk washers 10 (item P) (fig.89).

***Tighten hardware after that.**



Fig.90

87. Install license plate bracket (item 19) to bumper body (item1) using screws M6 (item D), washers 6 (item I) and nuts M6 (item G) (fig.90).

***Tighten hardware after that.**

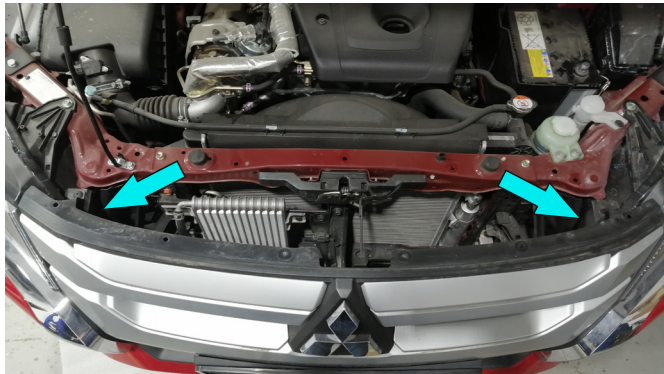


Fig.91

88. Install OE grille, that was removed on step 3 and fix bottom fixators into grille brackets (item 15,16) (fig.91).



Fig.92

89. Install plastic pad, that was removed on step 2. Connect terminal “-“ on the battery (fig.92).

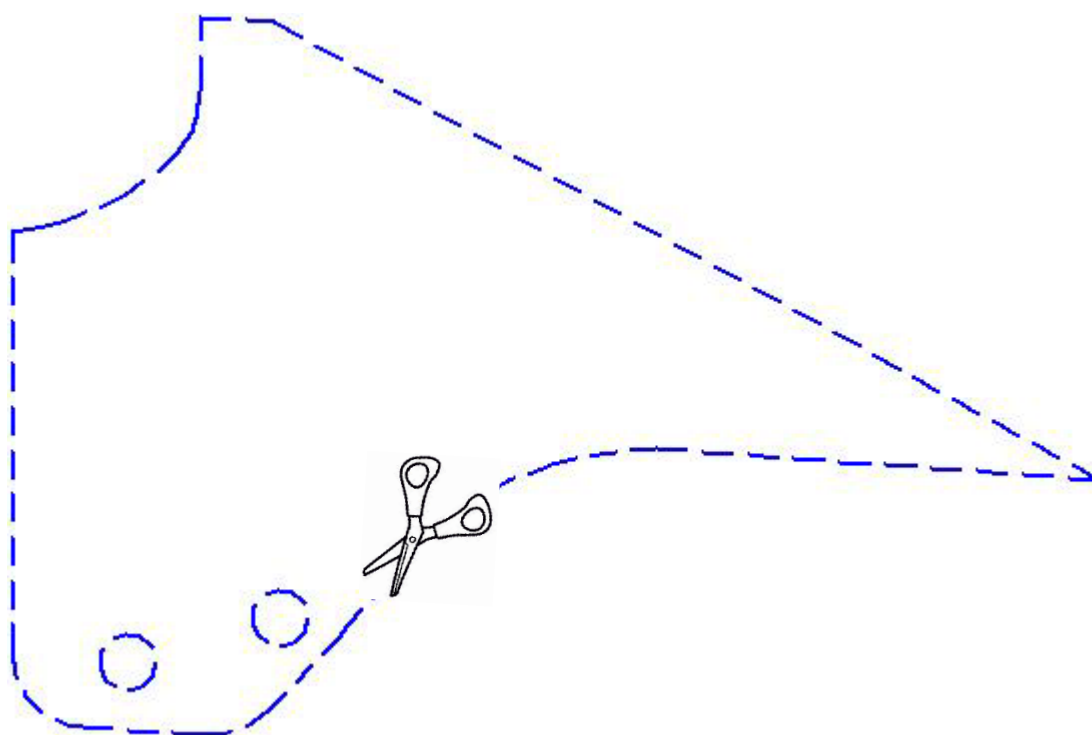
INSTALLATION PROCEDURE

Before operating a vehicle fitted with RIVAL Bumper 2D.4011.1-NL:

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



Template 1



Template 2

