

INSTALLATION MANUAL

PRODUCT: FRONT ALUMINUM BUMPER

MODEL: FORD RANGER (2022 - PRESENT)

FORD EVEREST (2022 - PRESENT)

PART NO: 2D.1814.1-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 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

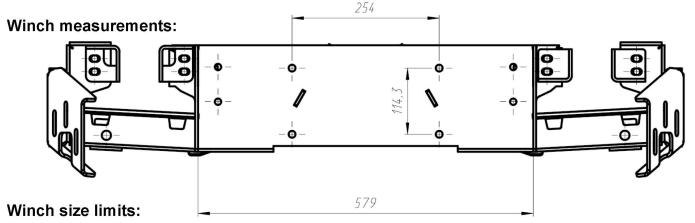
Ver. 3 www.rival4x4.com

TECHNICAL INFORMATION

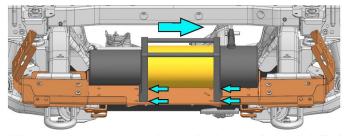


*WINCH INSTALLATION

A winch with a pull capacity of up to 10000 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 10000 lbs recommended capacity is exceeded.

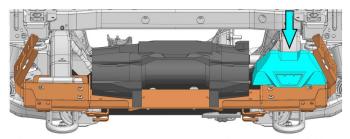


L 570 x W 190 mm x H 170 mm



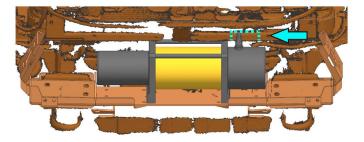
If neccessary, move the winch, mark and drill 4 new holes in the bracket.

*For example Runva 11XP.



If neccessary, remove the control box and fix it close by the winch.

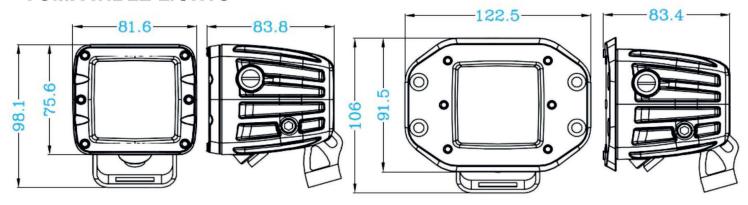
*For example Warn VR EVO.



If neccessary, mark and cut OE plastic bracket.

*COMPATIBLE LIGHTS

Date: 23 Aug 2023



Installation manual 2D.1814.1-NL < Page 2 of 19 >

TECHNICAL INFORMATION



*RECOVERY POINTS



WARNING

Date: 23 Aug 2023

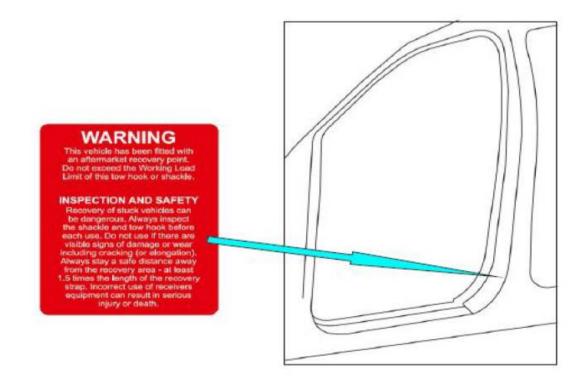
Do not exceed the Working Load Limit of these recovery points or shackle.

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.1814.1-NL

Suited to vehicle: FORD RANGER (2022 - PRESENT)

FORD EVEREST (2022 - PRESENT)

Material: Aluminum / Steel



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 10000 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 10000lb 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: 5 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.

<u>NOTE</u>: 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

TORQUE SETTING

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

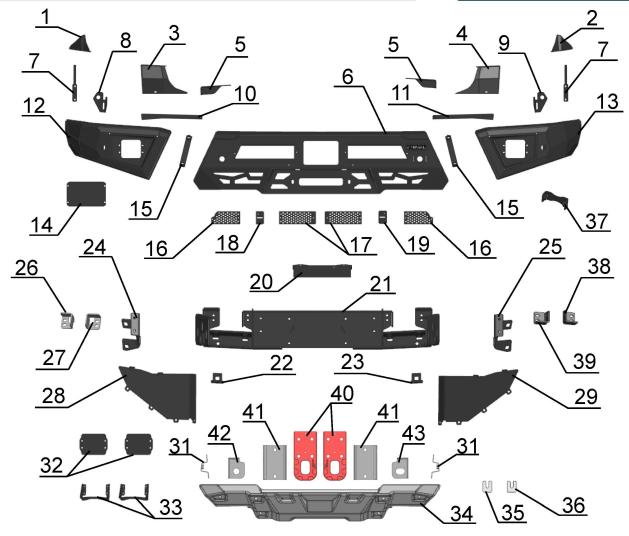
Date: 23 Aug 2023

* Drill

- * M6 9 N·m
- * M8 24 N·m
- * M10 30 N·m
- * M12 77 N·m

PARTS LISTING



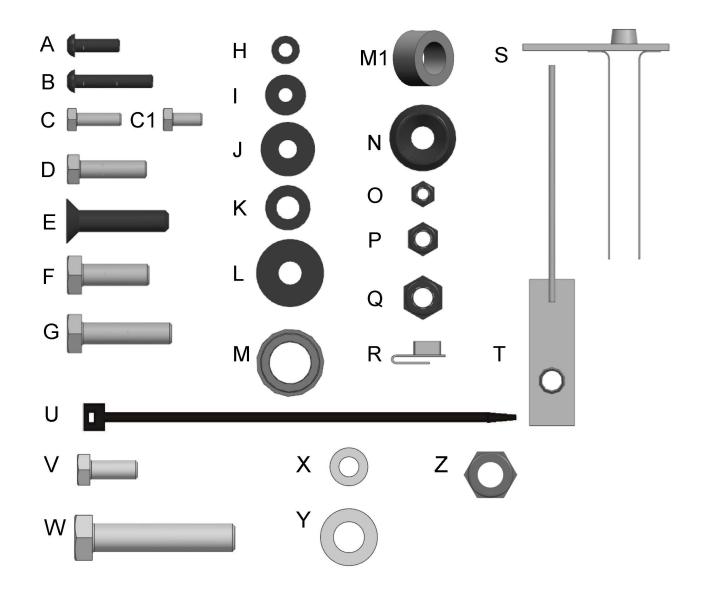


1. Right plug between wing and lightQty 1	23. Left bracket for bash plateQty 1
2. Left plug between wing and lightQty 1	24. Central right bracket for bash plate. Qty 1
3. Right plug between light and grilleQty 1	25. Central left bracket for bash plateQty 1
4. Left plug between light and grilleQty 1	26. Right bracket for reinforcementQty 1
5. Bracket for light and grille plugQty 2	27. Left bracket for reinforcementQty 1
6. Bumper bodyQty 1	28. Flap rightQty 1
7. Insert nut M6 with 2 nutsQty 2	29. Flap leftQty 1
8. Right bracket between wing and light. Qty 1	30. WeatherstripQty 1
9. Left bracket between wing and lightQty 1	31. Skid plate bracketQty 2
10. Right bracket between light and grilleQty 1	32. LED light capQty 2
11. Left bracket between light and grilleQty 1	33. LED bracketQty 2
12. Right bumper end capQty 1	34. Bash plateQty 1
13. Left bumper end capQty 1	35. Adjusting plate 2mmQty 4
14. Radar plugQty 1	36. Adjusting plate 3mmQty 4
15. Insert nut M10 with 2 nutsQty 2	37. Parking sensor holding bracketQty 6
16. Side grilleQty 2	38. Right bracket for reinforcementQty 1
17. Central grilleQty 2	39. Left bracket for reinforcementQty 1
18. Grille bracket rightQty 1	40. Recovery point Qty 2
19. Grille bracket leftQty 1	41. Recovery point bracketQty 2
20. License plate bracketQty 1	42. Left intercooler bracketQty 1
21. Winch bracketQty 1	43. Right intercooler bracketQty 1
22. Right bracket for bash plateQty 1	

Date: 23 Aug 2023

PARTS LISTING





A. Screw M6x20 round-head	.Qty	46
B. Screw M6x40 round-head	Qty	2
C. Bolt M6x20	.Qty	24
C1. Bolt 6x16	.Qty	12
D. Bolt M8x30	.Qty	10
E. Screw M10x30 countersunk-head	.Qty	6
F. Bolt M10x30	.Qty	24
G. Bolt M10x40	.Qty	6
H. Washer 6	.Qty	84
I. Washer penny 6	.Qty	8
J. Washer penny 8	.Qty	14
K. Washer 10	.Qty	44
L. Washer penny 10	.Qty	12
M. Parking sensor washer	.Qty	6

Date: 23 Aug 2023

M1. Spacer	.Qty	2
N. Countersunk washer	Qty	6
O. Nut M6	Qty	20
P. Nut M8	Qty	4
Q. Nut M10	Qty	26
R. U-nut M6	Qty	14
S. Insert nut M10 with cable	Qty	6
T. Insert nut M8	.Qty	4
U. Cable tie	.Qty	10
V. Bolt M8x20	.Qty	4
W. Bolt M12x50	Qty	8
X. Washer 8	Qty	4
Y. Washer 12	Qty	16
Z. Nut M12	.Qty	8



Preparation for installation



Fig.1

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



Fig.2

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

*Set aside for re-use later on.



Fig.3

3. Disconnect OE wiring (fig.3).



Fig.4

- 4. Unscrew OE bolts (fig.4).
- *Set aside for re-use later on.



Fig.5

- 5. Remove radiator grille (fig.5).
- *Set aside for re-use later on.

Date: 23 Aug 2023

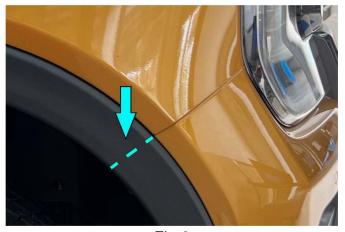


Fig.6

6. Mark future cutting line along the bumper split line (fig.6).





Fig.7

7. Remove plastic clips, unscrew OE bolts and remove fenders (fig.7). Cut plastic fender following marked cutting line using jig-saw or shears.



Fig.8

8. Install OE plastic fenders and fix it using OE hardware (fig.8).



Fig.9

9. Unscrew OE bolts (fig.9).

Date: 23 Aug 2023

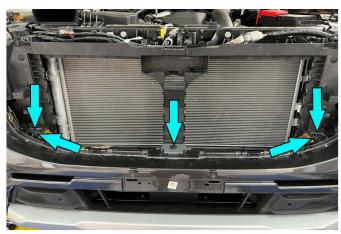


Fig.10

10. Remove plastic clips, unscrew bolts and remove OE bumper (fig.10).

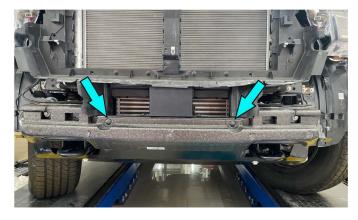


Fig.11

11. Remove plastic clips and remove damper (fig. 11).

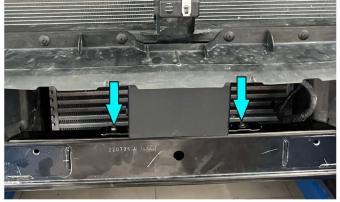


Fig.12

12. If your vehicle has radar, unscrew OE bolts (fig.12).

*Set aside for re-use later on.



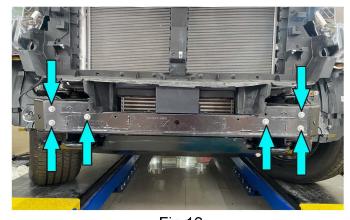


Fig.13
13. Unscrew OE bolts and remove OE beam (fig. 13).

*Set aside for re-use later on.

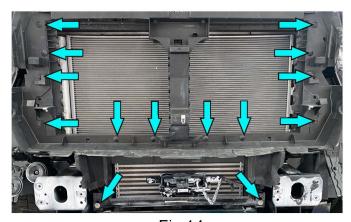


Fig.14
14. Unscrew OE bolts and remove OE plastic covers (fig.14).



Fig.15
15. If your vehicle has radiator louvres, unscrew OE bolts, disconnect electronic connector and remove radiator louvres (fig.15).



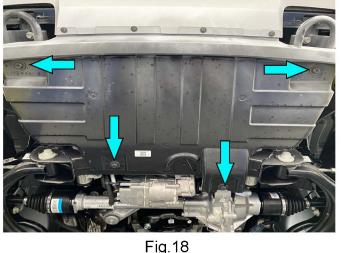
16. Unscrew OE bolts and remove bracket on both sides of the vehicle (fig.16). *Set aside for re-use later on.

Fig.16



17. Install OE horn as shown in fig 17. and fix it using OE bolts.

Date: 23 Aug 2023



18. Unscrew OE bolts and remove OE skid plate (fig.18).

*Set aside for re-use later on.





Fig.19

19. Fix intercooler using transmission jack, then unscrew OE bolts and remove OE recovery points (fig.19).

*Set aside for re-use later on.

Winch bracket installation procedure (steps 20-24)



Fig.20

20. Install insert nuts M8 with cable (item T) into hole of OE frame on both sides of the frame as shown in fig.20.



Fig.21

21. Install brackets for reinforcement (item 26, 27) on the right side of the frame using bolts M8x30, washers 8 (item D, J) (fig.21).

*Do not tighten yet.



Fig.22

22. Install brackets for reinforcement (item 38, 39) on the left side of the frame using bolts M8x30, washers 8 (item D, J) (fig.22).

*Do not tighten yet.

Date: 23 Aug 2023

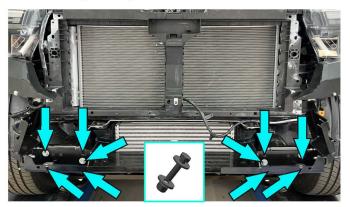


Fig.23

23. Install winch bracket (item 21). Fix it on the frame using OE bolts, bolts M8x30, nuts M8, washers 8 (item D, P, J) (fig.23).

*Do not tighten yet.



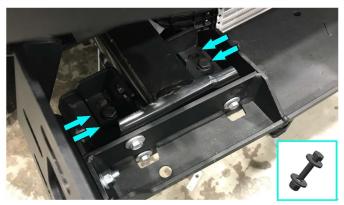


Fig.24

24. Fix winch bracket on brackets for reinforcement using bolts M10x30, nuts M10, washers 10 (item F, Q, K) (fig.24).

*Tighten hardware after that.

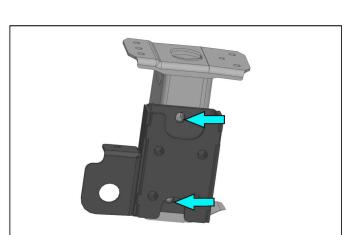


Fig.26

26. Install recovery point bracket (item 41) on the left side of the vehicle and fix it using OE bolts as shown in fig.26.

*Tighten hardware after that.

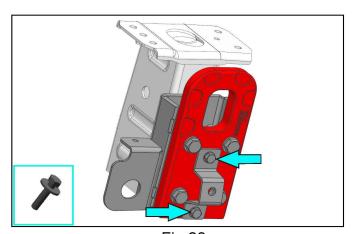


Fig.28

28. Install skid plate bracket (item 31) on recovery point (item 40) and fix it using bolts M8x20, washers 8 (item V, X) (fig.28).

*Tighten hardware after that.

Date: 23 Aug 2023

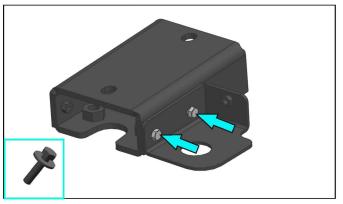


Fig.25

25. Install intercooler bracket (item 42) on recovery point bracket (item 41) and fix it using bolts M6x20, washers 6 (item C, H) (fig.25).

*Tighten hardware after that.

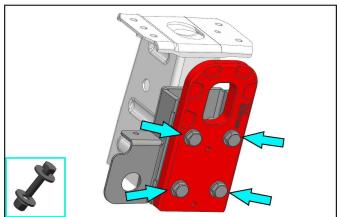


Fig.27

27. Install recovery point (item 40) on recovery point bracket (item 41) and fix it using bolts M12x60, washers 12 and nuts M12 (item W, Y, Z) (fig.27).

*Tighten hardware after that.

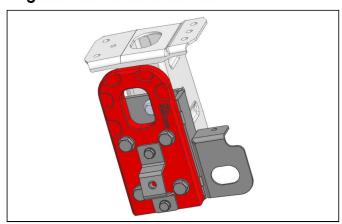


Fig.29

29. Similarly install on the right side of vehicle (fig.29).

< Page 11 of 19 >





Fig.30

30. Install brackets for bash plate (item 22, 23) using bolts M10x30 nuts M10, washers 10 (item F, Q, K) (fig.30).

*Tighten hardware after that.

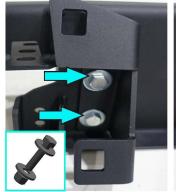




Fig.31

31. Install central brackets for bash plate (item 24, 25) using bolts M10x30, nuts M10, washers 10 (item F, Q, K) (fig.31).

*Tighten hardware after that.



Fig.32

32. Unscrew OE screws on both sides of the vehicle as shown in fig. 32.

*Set aside for re-use later on.

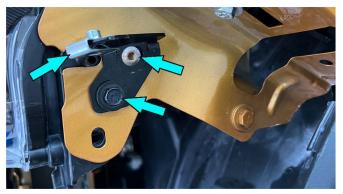


Fig.33

33. Install brackets between wing and light (item 8, 9) using OE bolts and screws M6x20 with washers 6 (item A, H). Install U-nuts M6 (item R) on brackets (fig.33).

*Do not tighten yet.



Fig.34

34. Install insert nuts M6 with 2 nuts (item 7) on both sides of the vehicle (fig.34).

Date: 23 Aug 2023



Fig.35

35. Loosen bolts M6x20 with washers 6 (item C, I) into insert nuts M6 with 2 nuts (item 7) (fig.35).





Fig.36

36. Install plugs between wings and lights (item 1, 2) on bolts installed on step 34.

Fix it on brackets between wing and light (item 8, 9) using screws M6x20 and washers 6 (item A, H) (fig.36).

*Tighten hardware after that.



Fig.38

38. Install brackets for light and grille plug (item 5) as shown in fig. 38. Fix it using bolts M6x20 and washers 6 (item C, H).

*Do not tighten yet.



Fig.40

40. Install plugs between light and grille (item 3, 4) as shown in fig. 40. Adjust the plugs and fix it using screws M6x20 and washers 6 (item A, H).

*Tighten hardware after that.

Date: 23 Aug 2023

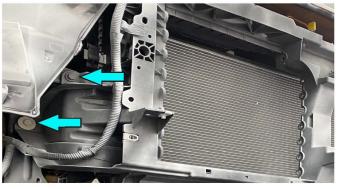


Fig.37

37. Unscrew OE bolts on both sides of the vehicle (fig.37).



Fig.39

39. Install brackets between light and grille (item 10, 11), as shown in fig. 39. Fix it using bolts M8x30 and washers 8 (item D, J).

*Do not tighten yet.

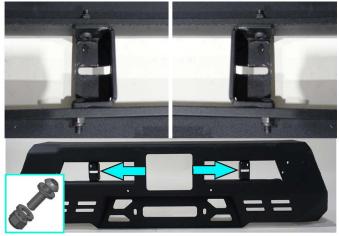
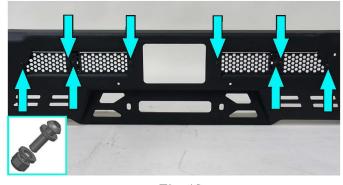


Fig.41

41. Install grille brackets (item 18, 19) as shown in fig. 41. Fix it using screws M6x20, nuts M6 and washers 6 (item A, O, H).

*Do not tighten that.





Do not use if winch clutch lever on the right side on the left side

Fig.42

42. Install grilles (item 16, 17) on bumper body as shown in fig. 42. Fix it using screws M6x20, nuts M6 and washers 6 (item A, O, H).

*Tighten hardware after that.

Fig.43

43. Do not install grille on the left or right side of bumper body, in case you will install winch (fig.43).

Parking sensor installation procedure

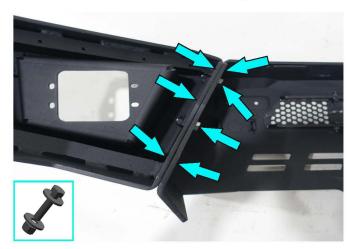


Fig.44

44. Assemble bumper body and bumper end caps (item 6, 12, 13) fix it using insert nut M10 with 2 nuts (item 15), bolts M10x30, nuts M10, washers 10 (item F, Q, K) (fig.44).

*Tighten hardware after that.

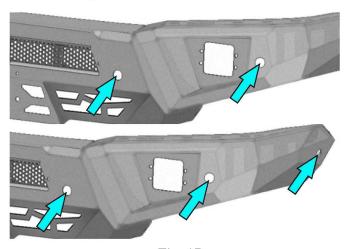


Fig.45

45. In case if your vehicle has 4 parking sensors, hummer out 4 plugs, on assembled bumper, placed closer to center. If your vehicle has 6 parking sensors, then hummer out all plugs of the bumper as shown in fig 45.

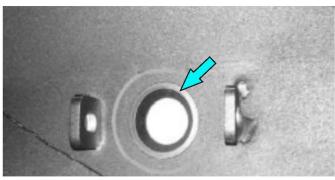


Fig.46

46. Install in parking sensors holes parking sensor washers (item M) (fig.46).

Date: 23 Aug 2023



Fig.47

47. Disconnect electronic connectors on both sides of the vehicle and remove OE wires with parking sensors on OE bumper (fig.47).



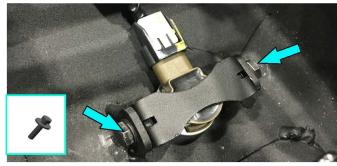


Fig.48

48. Install parking sensors in bumper body and fix them using parking sensor holding brackets, bolts M6x16, washers 6 (item 37, C1, H). Fix wiring on the bumper using cable ties (item U) (fig.48).

*Tighten hardware after that.



Fig.49

49. If there is no radar on your vehicle, then install radar plug (item 38) on bumper body and fix it using screws M6x20, nuts M6, washers 6 (item A, O, H) (fig.49).

*Tighten hardware after that.



Fig.50

50. Fix your aftermarket LED cubic lights to brackets (item 33). These brackets are not compatible with flush mount LED lights (part number 2D.0041.1, purchased separately) (fig.50).

*Tighten hardware after that.

Date: 23 Aug 2023



Fig.51

51. Install LED lights or LED Light caps (item 32), using screws M6x20, washers 6 (item A, H) and LED brackets (item 33) (fig.51).

*Tighten hardware after that.



Fig.52

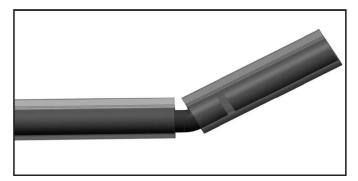


Fig.53

52. Install weatherstrip (item 30) on bumper body, as shown in fig.52, 53.



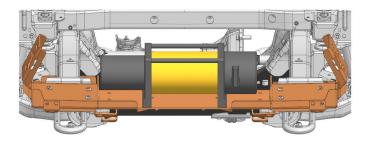


Fig.54 53. Install the winch (fig. 54).

Bumper body installation procedure



Fig.55

54. Install bumper body on winch bracket (item 21). Adjust the bumper to align on the vehicle, use adjusting plates 2mm or 3mm (item 35, 36) if it is necessary. Fix bumper using bolts M10x40, nuts M10, washers penny 10 (item G, Q, L) (fig. 55).

*Tighten hardware after that.

Date: 23 Aug 2023

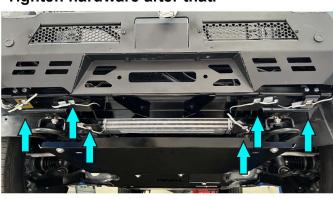


Fig.57

56. Install insert nuts M10 with cable (item S) into holes of brackets (item 22, 23, 24, 25) as shown in fig.57.



Fig.56

55. If your vehicle has radar, then install radar on bumper body using spacers (item M1). Fix radar using screws M6x40, nuts M6, washers 6 (item B, O, H) (fig.56).

*Tighten hardware after that.

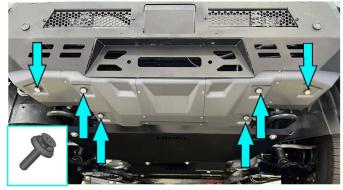


Fig.58

57. Fix bash plate (item 34) using screws M10x30 countersunk-head, countersunk washers (item E, N).

*Tighten hardware after that.





Fig.59 58. Install license plate bracket (item 20) to bumper body (item 14) using screws M6x20, washers 6, nuts M6 (item A, O, H) (fig.59). *Tighten hardware after that.



Fig.60 59. Install the fairlead on the bumper, in case if you installed the winch, fasteners supplied with fairlead (fig. 60).

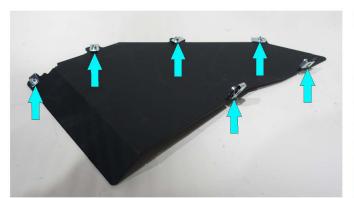


Fig.61 60. Fit U-nuts M6 (item R) on flaps (item 28, 29) (fig. 61).

*Tighten hardware after that.

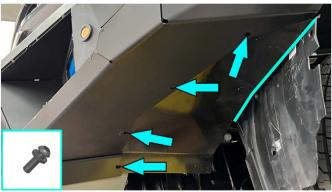


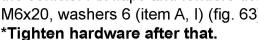
Fig.62

61. Install flaps (item 28, 29) using screws M6x20, washers 6 (item A, H) onto the bumper body on each side. *Tighten hardware after that. Push the flap to plastic fender and mark future cutting line. Cut plastic fender following marked cutting line using jig-saw or shears (fig. 62).



Fig.63

62. Mark and drill 2 holes in plastic fender according with holes in flap on each side of the vehicle. Fix flaps and fenders using screws M6x20, washers 6 (item A, I) (fig. 63).



Date: 23 Aug 2023

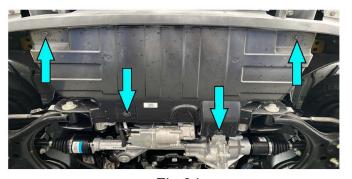


Fig.64

63. Install OE skid plate and fix it using OE hardware (fig.64).





Fig.65 64. Install OE grille (fig.65).



Fig.66 65. Fix OE grille using OE bolts (fig.66).



66. Connect OE wirings back (fig.67).



Fig.68
67. Install OE plastic pad and fix it using OE clips (fig.68).



Fig.69
68. Connect terminal "-" on the battery (fig.69).



Before operating a vehicle fitted with RIVAL Bumper 2D.1814.1-NL:

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



Date: 23 Aug 2023 www.rival4x4.com Installation manual 2D.1814.1-NL

Very Page 19 of 19 >