## **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

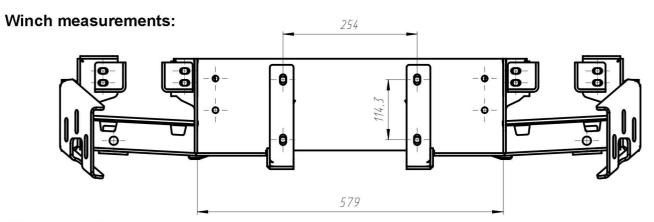
Whilst the bumper adds additional protection to your vehicle, precautionary measures still need to be taken to avoid damage. Always drive to the conditions and your surroundings.

# ADR69 COMPATIBLE AIR BAG COMPLIANT

# **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.

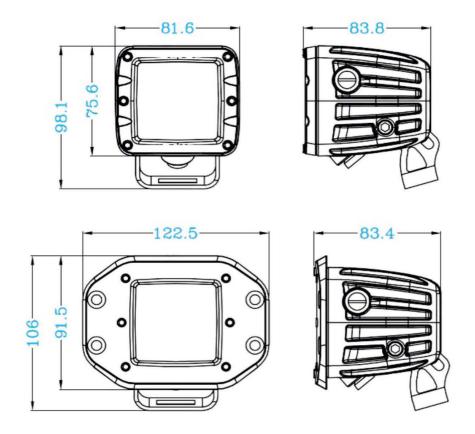


#### Winch size limits:

Date: 04 Apr 2023

L 570 x W 190 mm x H 170 mm

#### **COMPATIBLE LIGHTS**



# **TECHNICAL INFORMATION**

#### \*RECOVERY POINTS



#### WARNING

Date: 04 Apr 2023

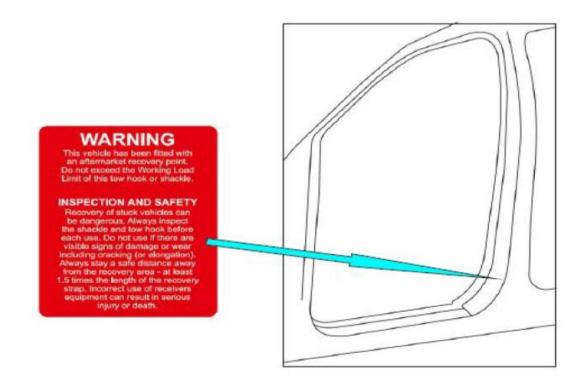
Do not exceed the Working Load Limit of these recovery points or shackle.

#### 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 dangeous 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.

<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**

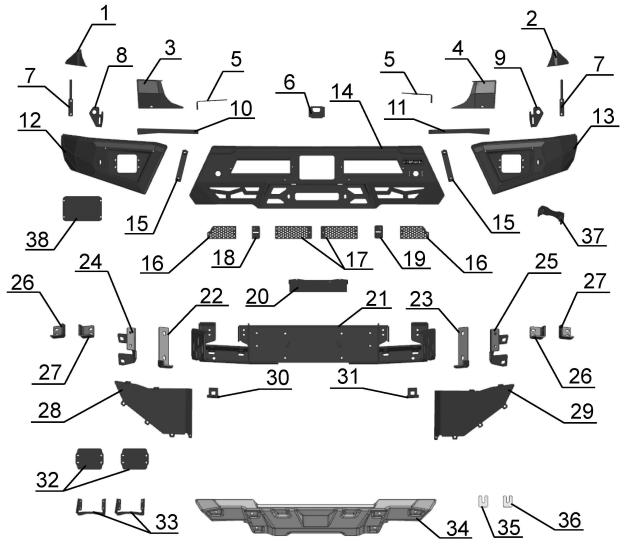
- \* Basic tool kit
- \* Torque wrench
- \* Crosspoint and flat head screwdriver
- \* Marker
- \* Angle grinder

Date: 04 Apr 2023

\* Drill

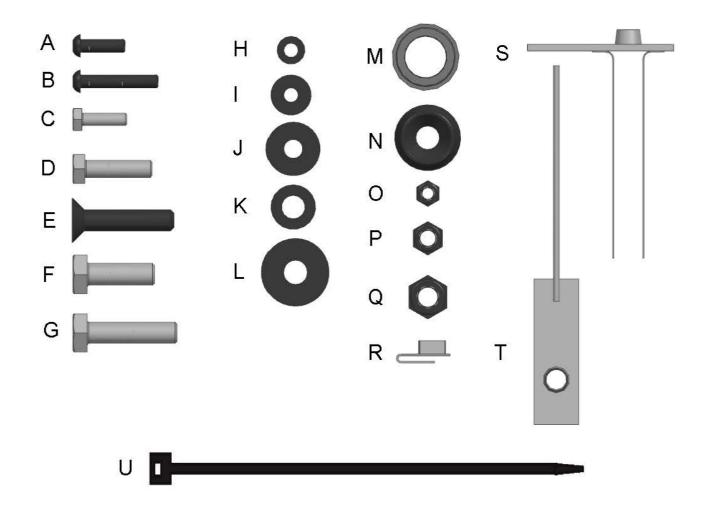
- \* M6 9 N·m
- \* M8 24 N·m
- \* M10 30 N·m
- \* M12 77 N·m

# **PARTS LISTING**



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

# **PARTS LISTING**



A. Screw M6x20 round-head	Qty	46
B. Screw M6x40 round-head	Qty	2
C. Bolt M6x20	Qty	20
D. Bolt M8x30	Qty	4
E. Screw M10x30 countersunk-head	.Qty	6
F. Bolt M10x30	.Qty	28
G. Bolt M10x40	.Qty	6
H. Washer 6	.Qty	80
I. Washer penny 6	Qty	8
J. Washer penny 8	.Qty	8
K. Washer 10	Qty	44

L. Washer penny 10	Qty 16
M. Parking sensor washer	Qty 6
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 M10	Qty 4
U. Cable tie	Qty 10

### **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 and camera washer wire connectors (fig.3).



Fig.4

- 4. Unscrew OE bolts and remove radiator grille (fig.4.)
- \* Set aside for re-use later on.

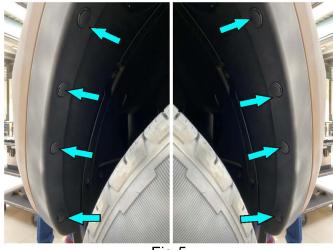


Fig.5

5. Remove plastic clips (fig.5).

Date: 04 Apr 2023



Fig.6

6. Remove side covers on both sides of the vehicle (fig.6).

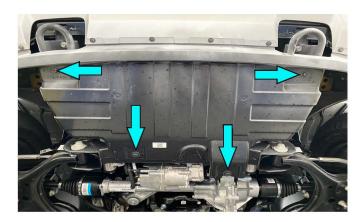


Fig.7

- 7. Unscrew OE bolts and remove OE plastic plate (fig.7.)
- \* Set aside for re-use later on.



Fig.8

- 8. Fix intercooler using transmission jack, unscrew OE bolts after that and remove OE recovery points (fig.8.)
- \* Set aside for re-use later on.

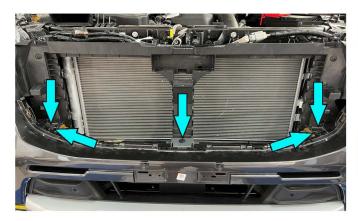


Fig.9

9. Remove plastic clips, unscrew bolts and remove OE bumper (fig.9).

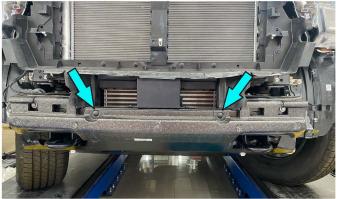


Fig.10

10. Remove plastic clips and remove damper (fig. 10).

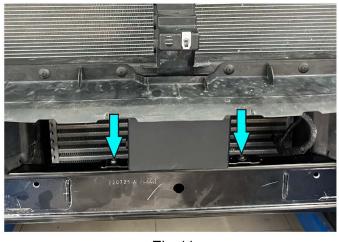


Fig.11

- 11. Unscrew OE bolts and disconnect radar plug (fig.11).
- \* Set aside for re-use later on.

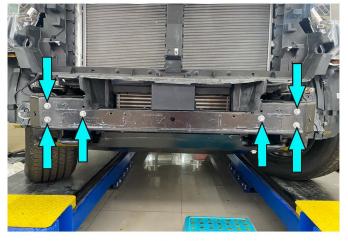


Fig.12

- 12. Unscrew OE bolts and remove OE beam (fig. 12.)
- \* Set aside for re-use later on.

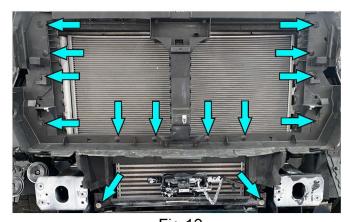


Fig.13 13. Unscrew OE bolts (fig.13).



Fig.14
14. Remove OE plustic covers (fig.14).



Fig.15
15. Unscrew OE bolts and remove bracket as shown in fig.15.

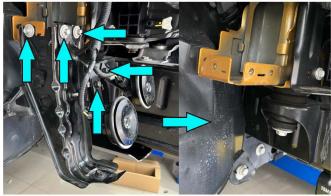
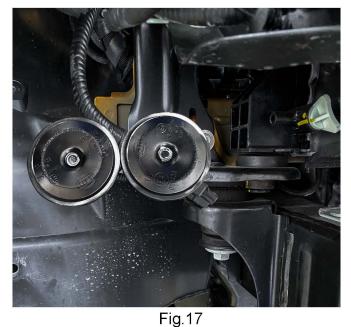


Fig.16
16. Unscrew OE bolts and remove bracket as shown in fig.16.

\* Set aside for re-use later on.



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

#### Winch bracket installation procedure (steps 18-22).



Fig.18

18. Install insert nuts M10 with cable (item T) into hole of OE frame on both sides of the frame as shown in fig.18.



Fig.19

19. Install brackets for reinforcement (item 26, 27) on both sides of the frame using bolts M10x30, washers 10 (item F, L) (fig.19).

\*Do not tighten yet.

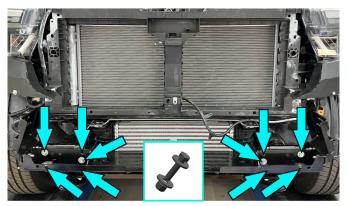


Fig.20

20. Install winch bracket (item 21). Fix on frame using OE bolts, bolts M8x30, nuts M8, washers 8 (item D, P, J). Then fix on brackets for reinforcement (item 26, 27) using bolts M10x30, nuts M10, washers 10 (item F, Q, K) (fig.20).



Fig.21

21. Install brackets for bash plate (item 30, 31) using bolts M10x30 nuts M10, washers 10 (item F, Q, K) (fig.21).

\*Tighten hardware after that.





Fig.22

22. Install central brackets for bash plate (item 24, 25) using bolts M10x30, nuts M10, washers 10 (item F, Q, K) (fig.22).



Date: 04 Apr 2023



Fig.23

23. Install U-nuts M6 (item R) on brackets between wing and light (item 8, 9) (fig.23.)

< Page 10 of 19 >



Fig.24

24. Unscrew OE screws on both sides of the vehicle as shown in fig. 24.

\* Set aside for re-use later on.



Fig.26
Install insert nuts M6 wi

26. Install insert nuts M6 with 2 nuts (item 7) on both sides of the vehicle (fig.26).

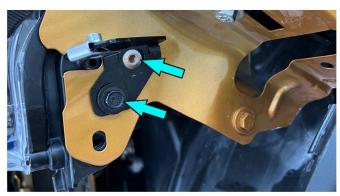


Fig.25

25. Install brackets between wing and light (item 8, 9) using OE bolts and screws M6x20 with washers 6 (item A, H) (fig.25).

\*Do not tighten yet.

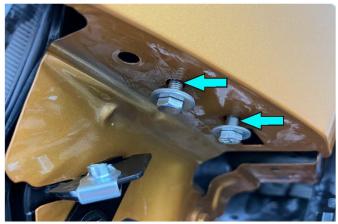


Fig.27

27. Loosen bolts M6x20 with washers 6 (item C, I) into insert nuts M6 with 2 nuts (item 7) (fig.27).



Fig.28

28. Install plugs between wings and lights (item 1, 2) on bolts installed on step 27. Fix on brackets between wing and light (item 8, 9) using screws M6x20 and washers 6 (item A, H) (fig.28).

\*Tighten hardware after that.

Date: 04 Apr 2023

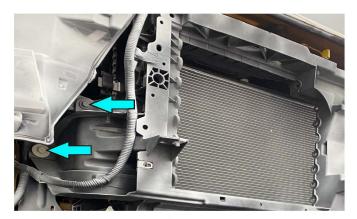


Fig.29

29. Unscrew OE bolts on both sides of the vehicle (fig.29).



Fig.30

30. Install brackets for light and grille plug (item 5) as shown in fig. 30. Fix using bolts M6x20 and washers 6 (item C, H).

#### \*Do not tighten yet.



Fig.32

32. Install plugs between light and grille (item 3, 4) as shown in fig. 32. Adjust the plugs and fix using screws M6x20 and washers 6 (item A, H).

#### \*Tighten hardware after that.

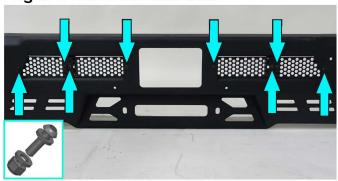


Fig.34

34. Install grilles (item 16, 17) on bumper body as shown in fig. 34. Fix using screws M6x20, nuts M6 and washers 6 (item A, O, H).

\*Tighten hardware after that.

Date: 04 Apr 2023



Fig.3

31. Install brackets between light and grille (item 10, 11), as shown in fig. 31. Fix using bolts M6x20 and washers 6 (item C, H).

#### \*Do not tighten yet.

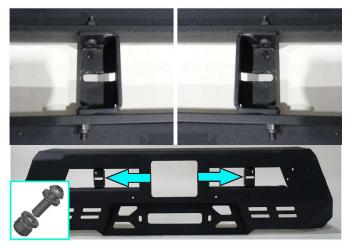


Fig.33

33. Install grille brackets (item 18, 19) as shown in fig. 32. Fix using screws M6x20, nuts M6 and washers 6 (item A, O, H).

#### \*Do not tighten that.

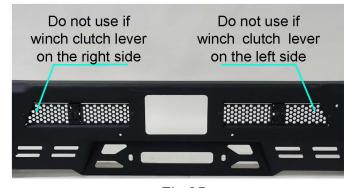


Fig.35

35. Do not install grille on the left or right side of bumper body, in case you will install winch (fig.35).

#### Parking sensor installation procedure

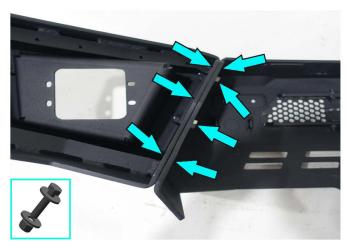


Fig.36
36. Assemble bumper body (item 14) and bumper end caps (item 12, 13) fix using insert nut M10 with 2 nuts (item 15), bolts M10x30, nuts M10, washers 10 (item F, Q, K) (fig.36).
\*Tighten hardware after that.

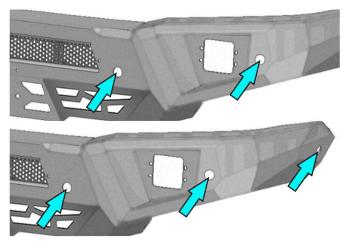


Fig.37
37. In case if your vehicle has 4 parking sensors, hummer out 4 plugs, on assembled bumper, placed closer to center. If your vehicle has 6 parking sensors, then hummer out all plugs of the bumper as shown in fig 37.

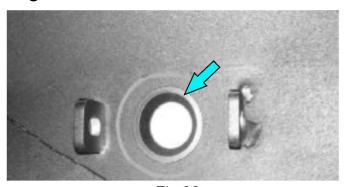


Fig.38
38. Install in parking sensors holes parking sensor washers (item M) (fig.38).



Fig. 39
39. Remove parking sensors and wiring for parking sensors from OE bumper (fig. 39).

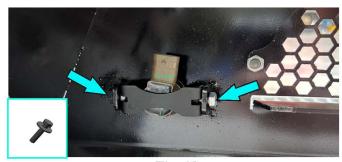


Fig.40

40. Install parking sensors in bumper body and fix them using parking sensor holding brackets, bolts M6x20, washers 6 (item 37, C, H). Connect OE wiring and fix wiring on the bumper using cable ties (item U) (fig.40).

\*Tighten hardware after that.

Date: 04 Apr 2023



Fig.41

41. If your vehicle has radar, then install radar on bumper body using radar spacers (3 pcs per side) (item 6). Fix radar using screws M6x40, nuts M6, washers 6 (item B, O, H) (fig.41).



Fig.42

**42**. 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.42).

\*Tighten hardware after that.



43. Install license plate bracket (item 20) to bumper body (item 14) using screws M6x20, washers 6, nuts M6 (item A, O, H) (fig.43).

\*Tighten hardware after that.



Fig.44

44. 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.44).

\*Tighten hardware after that.



Fig.45

45. Install LED lights or LED Light caps (item 32), using screws M6x20, washers 6 (item A, H) and LED brackets (item 33) (fig.45).

\*Tighten hardware after that.



Fig.46

46. Install weatherstrip (item 39) on bumper body, as shown in fig.46.

#### Steps 47-48 (if winch is to installed)

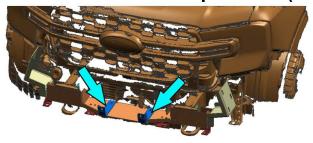


Fig.47

47. Install left and right winch hawse brackets (item 22, 23) on winch bracket (fig. 47.)

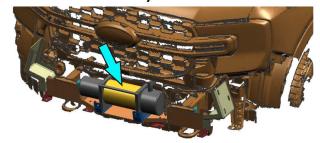


Fig.48

48. Fix winch on winch fairlead brackets (fig. 48.)

#### Bumper body installation procedure



Fig.49

49. 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's necessary. Fix bumper using bolts M10x40, nuts M10, washers penny 10 (item G, Q, L) (fig. 49).



Date: 04 Apr 2023

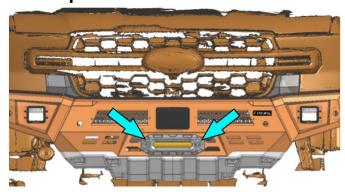


Fig.50

50. Install the fairled on the bumper, in case if you installed the winch, fasteners supplied with fairled (fig. 50).

\*Tighten hardware after that.

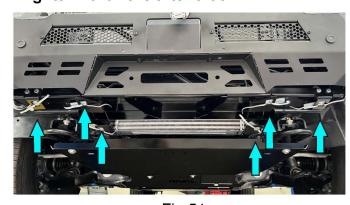


Fig.51

51. Install insert nuts M10 with cable (item S) into holes of brackets (item 24, 25, 30, 31) as shown in fig.51.

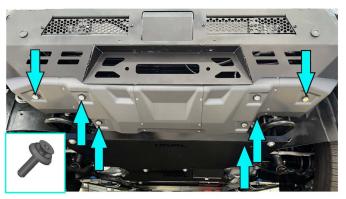
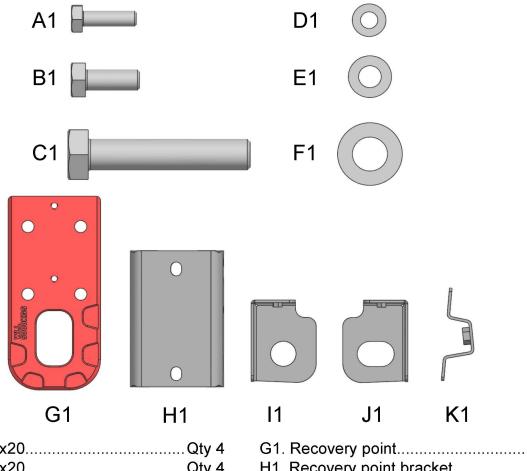


Fig.52

52. Fix bash plate (item 34) using screws M10x30 countersunk-head, countersunk washers (item E, N). Install OE recovery points (fig. 52) or install kit 2D.1817.1 (purchased separately) according to steps 53-57.

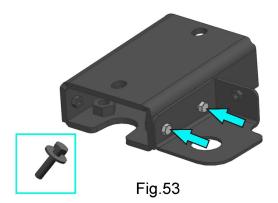
\*Tighten hardware after that.

### Installation kit 2D.1817.1 (Steps 53-57)



A1. Bolt M6x20	. Qty 4
B1. Bolt M8x20	.Qty 4
C1. Bolt M12x60	Qty 8
D1. Washer 6	Qty 4
E1. Washer 8	Qty 4
F1. Washer 12	Qty 8

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G1. Recovery point	.Qty	2
H1. Recovery point bracket	. Qty	2
I1. Left intercooler bracket	. Qty	1
J1. Right intercooler bracket	.Qty	1
K1. Bash plate bracket	Qty	2



53. Install intercooler bracket (item I1) on recovery point bracket (item H1) and fix using bolts M6x20, washers 6 (item A1, D1) (fig.53).

Date: 04 Apr 2023

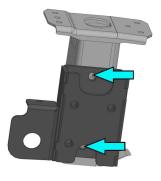


Fig.54

54. Install recovery point bracket (item H1) on the left side of the vehicle and fix using OE bolts as shown in fig.54.

\*Tighten hardware after that.

<sup>\*</sup>Tighten hardware after that.

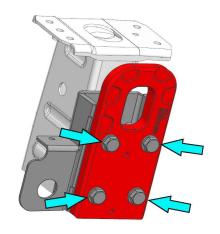




Fig.55

55. Install recovery point (item G1) on recovery point bracket (item H1) and fix using bolts M12x60, washers 12 (item C1, F1) (fig.55).

\*Tighten hardware after that.

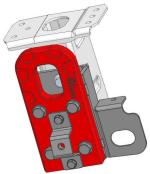


Fig.57

57. Similarly install on the right side of vehicle (fig. 57).

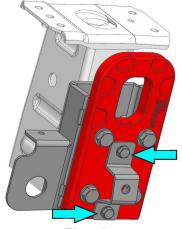


Fig.56

56. Install bash plate bracket (item K1) on recovery point (item G1) and fix using bolts M8x20, washers 8 (item B1, E1) (fig.56). \*Tighten hardware after that.

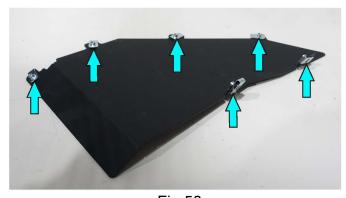


Fig.58 58. Fit U-nuts M6 (item R) on flaps (item 28, 29) (fig. 58).

Date: 04 Apr 2023

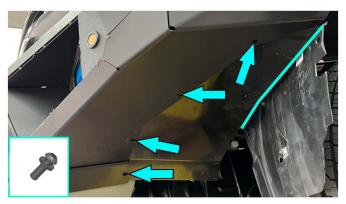


Fig.59

59. 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. 59).



Fig.60

60. 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. 60).

\*Tighten hardware after that.



Fig.61

61. Install OE plastic plate and fix it using OE hardware (fig.61).



Fig.62

62. Install OE grille (fig.62).



Fig.63

63. Connect OE wirings back (fig.63).

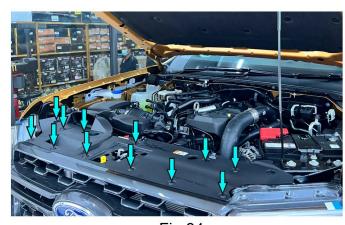


Fig.64

64. Install OE plastic pad and fix it using OE clips (fig.64).



Fig.65

65. Connect terminal "-" on the battery (fig.65).

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

- make sure all fittings are tightened
- check winch operation

Date: 04 Apr 2023

- check that all electrical wiring is attached to the lights

