

PRODUCT: ALUMINUM ENGINE SKID PLATE

APPLICATION: INEOS GRENADIER & QUARTERMASTER
(2023-Present)

PART NO: 2333.4501.1.6

UP-TO-DATE
MANUAL



CAUTION!

To reduce the risk of serious injury or damage to property: Before you start installing and using this product, read the full instructions, pay special attention to the conditions of safe use and recommendations for installation! When installing or maintaining this product, it is necessary to use protective goggles. Check the integrity of the installed components and torque all hardware every 250 miles (400 kms). Discontinue use if there is any damage to the structure or fasteners!

NOTICE

Skid plates are supplemental protection. We cannot guarantee protection against all possible damage from impacts. When driving, be careful of objects and terrain that may damage sensitive parts of the vehicle.

ENGINE SKID PLATE

RIVAL

Part number 2333.4501.1.6

Suited to vehicle: Ineos Grenadier 3.0, 3.0D; AT; 4WD (2023-Present)
Ineos Grenadier Quartermaster 3.0, 3.0D; AT; 4WD (2023-Present)

Material: Aluminum, steel



SAFETY NOTICE

- * The RIVAL skid plate is designed to complement the use and design of the specified vehicle under conditions underlined by the vehicle manufacturer.
- * While driving the vehicle at any speed, collision with another vehicle, animal or object must always be avoided.
- * Following any collision with another vehicle, animal or object, the RIVAL skid plate and the vehicle must be inspected by a specialized or suitably qualified vehicle technician 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 skid plate or its components. In the case of damage, please contact the nearest RIVAL dealer. A damaged vehicle or skid plate is extremely dangerous and should be avoided at all cost.
- * If applicable, we recommend using a funnel when changing the oil to prevent spills and ensure a clean process.

INSTALLATION NOTICE

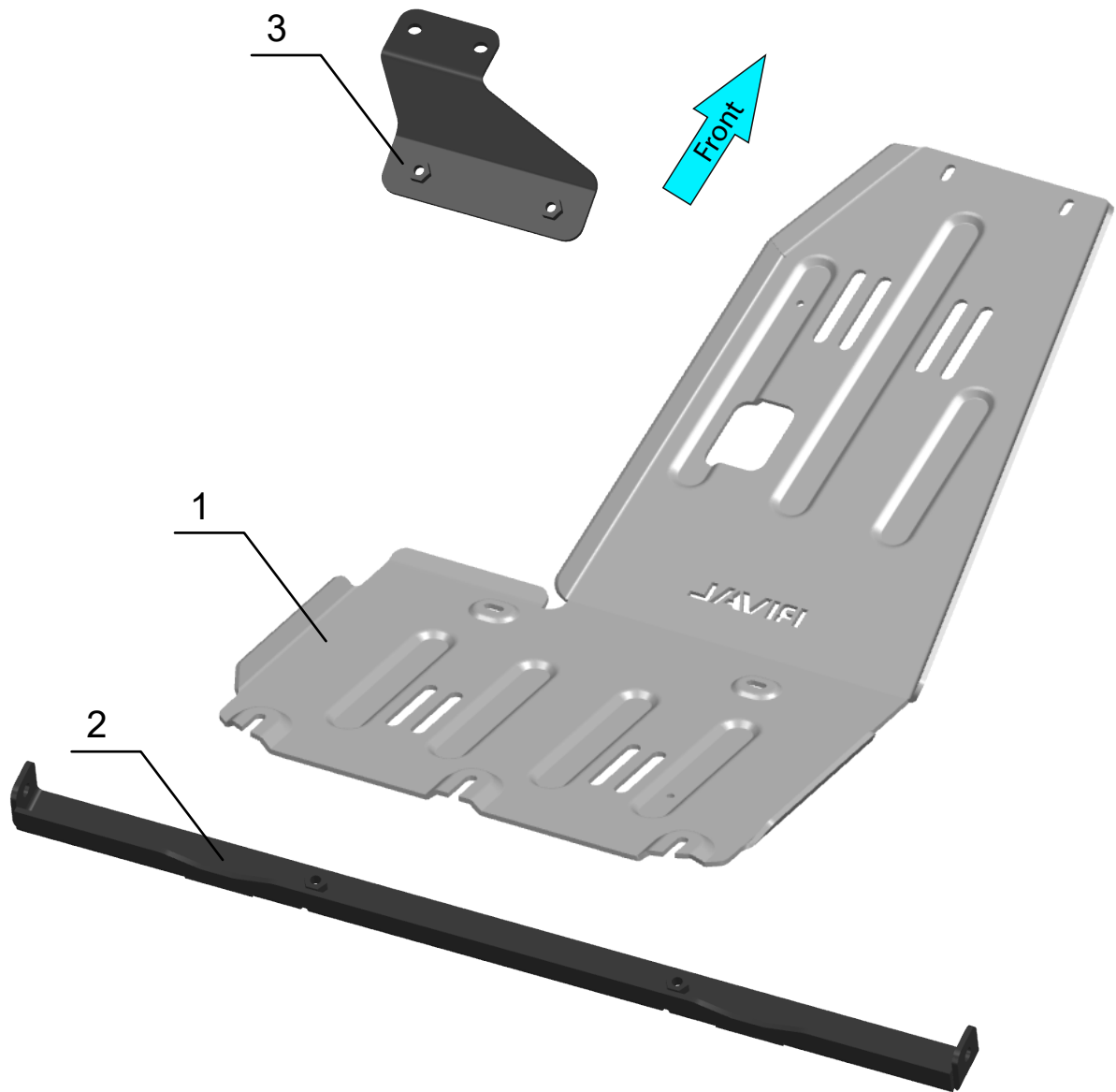
- * The RIVAL skid plate must be mounted to the vehicle according to this installation manual.
- * Personal safety during the installation process must be adhered to at all times.
- * Do not install this skid plate on vehicle models other than those listed in this manual.
- * We recommend using blue threadlocker on all hardware
- * Estimated time for installation: 1 hour.

REQUIRED TOOLS

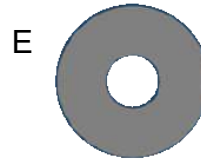
- * Basic tool kit
- * Torque wrench

TORQUE SETTING

M10 - 47 N·m (34.7 lb/ft)



- 1. Engine skid plate.....Qty 1
- 2. Crossmember.....Qty 1
- 3. Bracket.....Qty 1



A. Bolt M10x1.5x150.....	Qty 2
B. Bolt M10x1.5x30.....	Qty 9
C. Insert nut M10.....	Qty 3
D. Spacer 8mm.....	Qty 2
E. Washer M10.....	Qty 15
F. Nut M10.....	Qty 4
G. Spacer 10mm.....	Qty 2



Fig. 1

1. Install M10x30 bolts with M10 washers (items B, E) through holes as shown in fig.1.



Fig. 2

2. Secure bracket (item 3) to the previously installed bolts using M10 nuts and M10 washers (items E, F) as shown in Fig.2.
***Do not tighten yet.**

Installation without RIVAL control arm skid plates (2333.4503.1.6)



Fig. 3

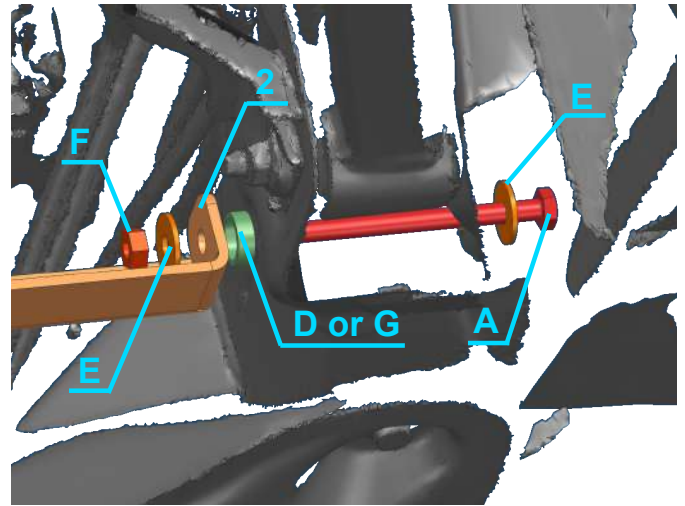


Fig. 4

3. Secure crossmember (item 2) using M10x150 bolts (item A), M10 washers (item E), spacers (items D or G), nuts M10 (item F) as shown in fig. 3 & 4.
***Due to factory tolerances we include two different size spacers. Utilize the pair that offer a tighter overall fitment.**
***Do not tighten yet.**
****Proceed to step 5**

Installation with RIVAL control arm skid plates (2333.4503.1.6)

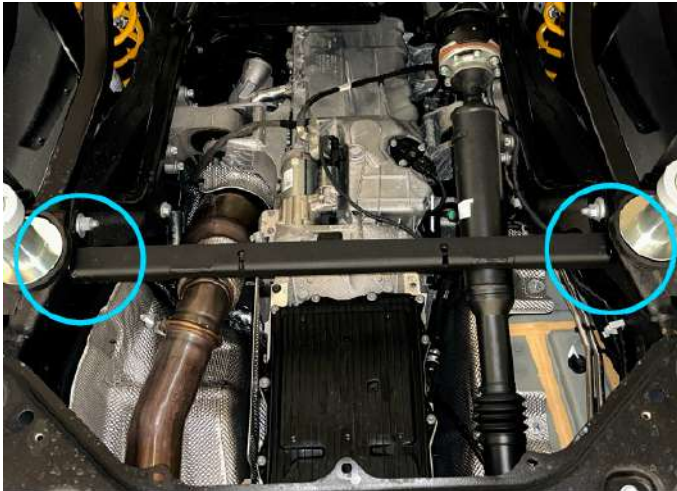


Fig. 5

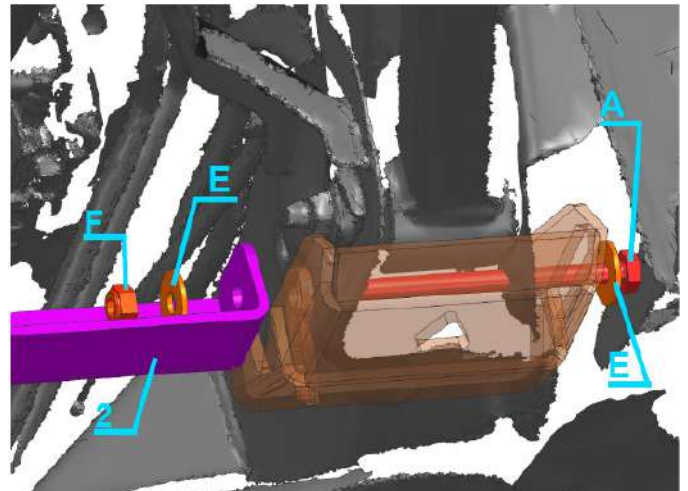


Fig. 6

4. Slide the crossmember (item 2) and left side control arm skid into place. Loosely install M10x150 bolt, M10 washers and M10 nut (items A, E, F) as shown in Fig. 5 and Fig. 6. Do the same on the right side of the vehicle.

***Do not tighten yet.**

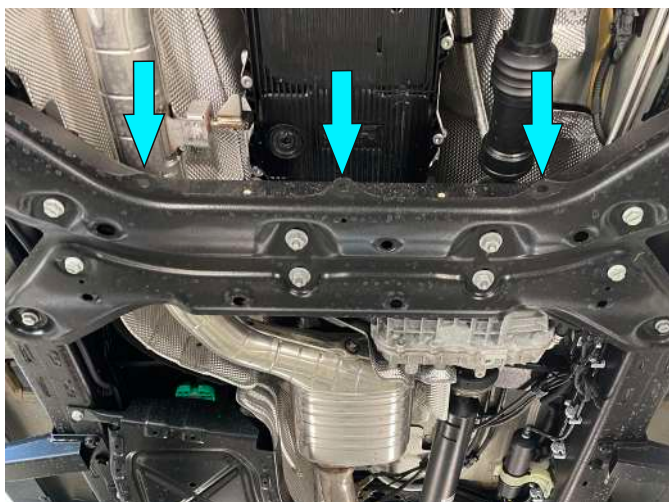


Fig. 5

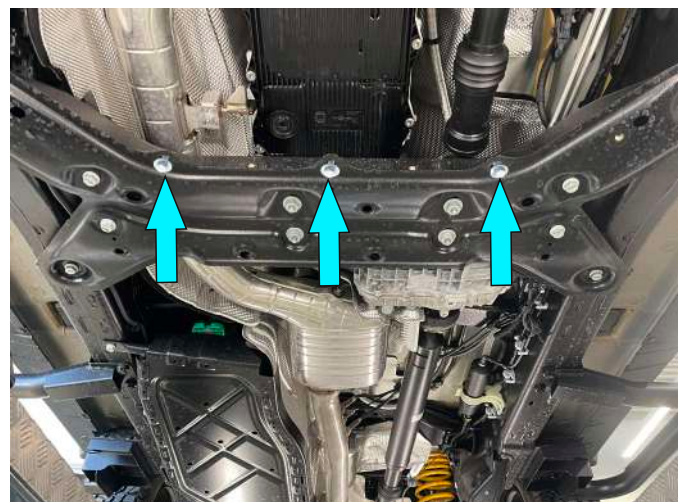


Fig. 6

4. Slide the crossmember (item 2) and left side control arm skid into place. Loosely install M10x150 bolt, M10 washers and M10 nut (items A, E, F) as shown in Fig. 5 and Fig. 6.

5. Slightly screw bolts M10x30 with washers 10 (item B, E) into insert nuts M10 from step 4 (fig. 5).

***Do not tighten yet.**

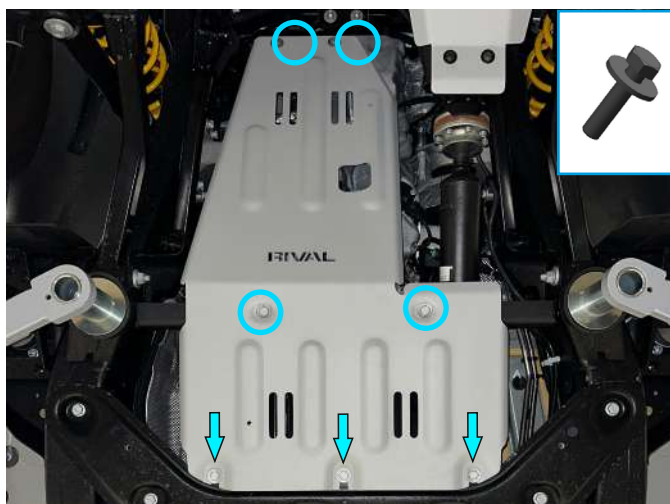


Fig. 7

7. Slide the rear of the engine skid plate (item 1) over previously installed M10 bolts & washers from step 6. Secure the skid plate to bracket and crossmember using remaining M10x30 bolts and M10 washers (items B, E) as shown in Fig. 9.

***Once all bolts are installed, check skid plate alignment and torque all hardware.**

Before operating a vehicle fitted with RIVAL Skid Plate:

- Make sure all fittings are properly torqued.
- Ensure the integrity of the structure and its components.



INSTALLATION MANUAL

RIVAL

UP-TO-DATE
MANUAL



PRODUCT: TRANSFER CASE SKID PLATE

APPLICATION: INEOS GRENADIER & QUARTERMASTER
(2023-Present)

PART NO: 2333.4502.2.6



CAUTION!

To reduce the risk of serious injury or damage to property: Before you start installing and using this product, read the full instructions, pay special attention to the conditions of safe use and recommendations for installation! When installing or maintaining this product, it is necessary to use protective goggles. Check the integrity of the structure and the moment the fastening is tightened every 250 miles (400 kms) of mileage. Do not use this product if there is damage to the structure or fasteners!

NOTICE

Skid plate is an additional protection, but it can not guarantee to protect against all possible damage in collisions. When driving, be careful of objects and terrain that may damage sensitive parts of the vehicle.

TRANSFER CASE SKID PLATE

RIVAL

Part number: 2333.4502.2.6

Suited to vehicle: Ineos Grenadier 3.0, 3.0D AT 4WD (2023-Present)
Ineos Grenadier Quartermaster 3.0, 3.0D; AT; 4WD (2023-Present)

Material: Aluminum, steel



SAFETY NOTICE

- * The RIVAL skid plate is designed to complement 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 skid plate 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 skid plate or its components. In the case of damage, please contact the nearest RIVAL dealer. Vehicle, or where the skid plate has been damaged, is extremely dangerous and must be avoided at all cost.

INSTALLATION NOTICE

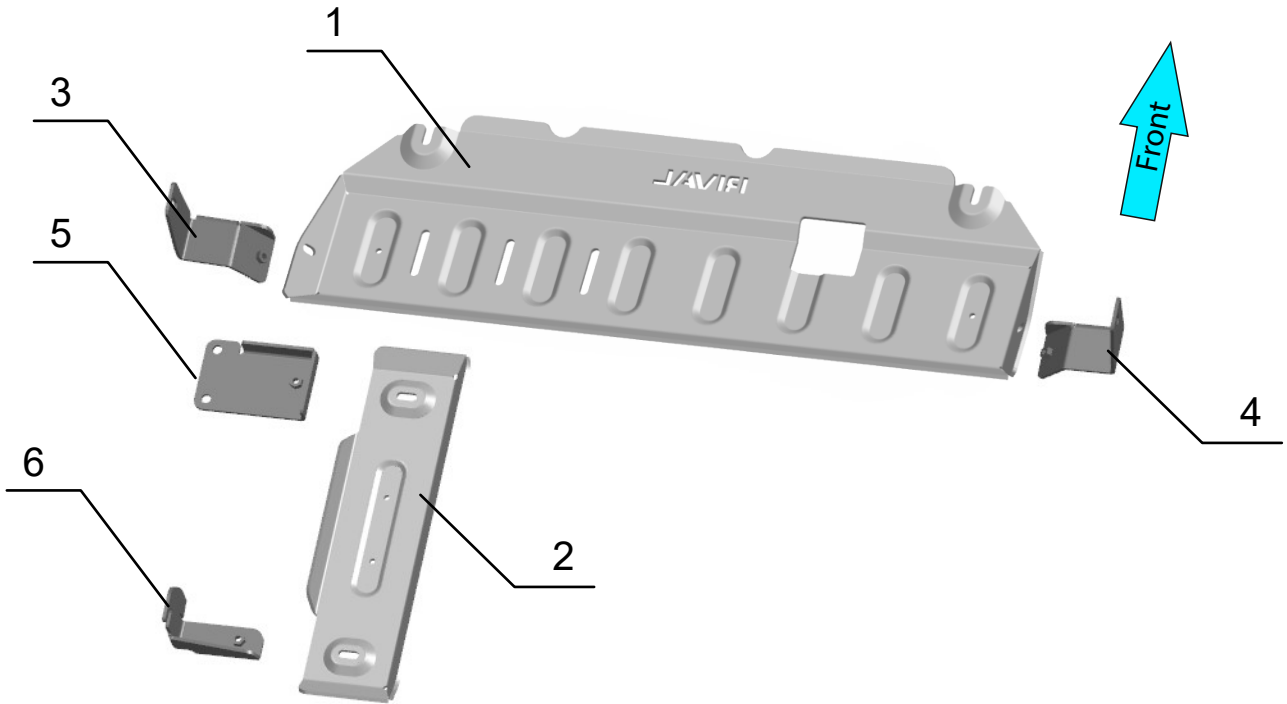
- * The RIVAL skid plate must be mounted and affixed to the vehicle according to this installation manual.
- * Personal safety during the installation process must be adhered to at all times.
- * Do not install this skid plate on vehicle models other than those allowed in this manual.
- * Estimated time for installation: 1 hour.

REQUIRED TOOLS

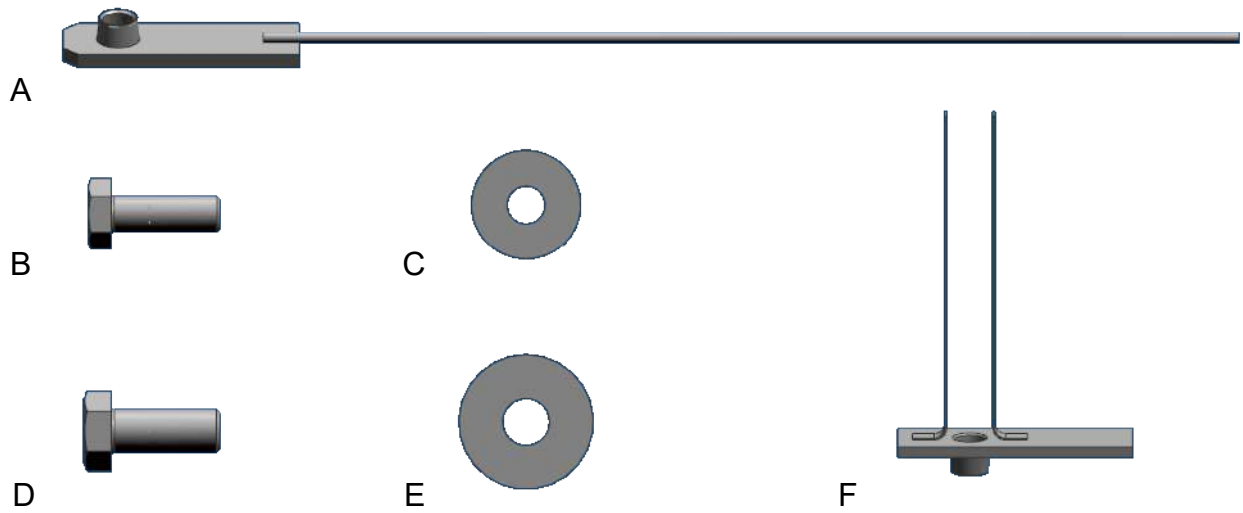
- * Basic tool kit
- * Torque wrench

TORQUE SETTING

- * M10 - 30 N·m (22.1 lb/ft)
- * M12 - 77 N·m (56.8 lb/ft)



1. Transfer case skid plate.....	Qty 1
2. Fuel filter (diesel)/fuel pipes (gasoline) skid plate.....	Qty 1 (except Quartermaster)
3. Bracket left.....	Qty 1
4. Bracket right.....	Qty 1
5. Bracket 1.....	Qty 1
6. Bracket 2.....	Qty 1



A. Insert nut M10x60/10 with wire.....	Qty 2
B. Bolt M10x1x30.....	Qty 9
C. Washer M10.....	Qty 9
D. Bolt M12x1x30.....	Qty 2
E. Washer M12.....	Qty 2
F. Insert nut M10x65/20 with wires.....	Qty 3

INSTALLATION PROCEDURE



*If equipped, remove the factory skid plate or any other aftermarket skid plate.

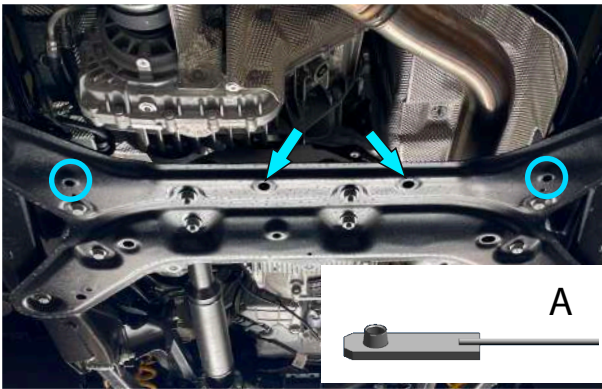


Fig. 1

1. Install insert nuts M10 with wire (item A) into side holes through center holes (fig.1).

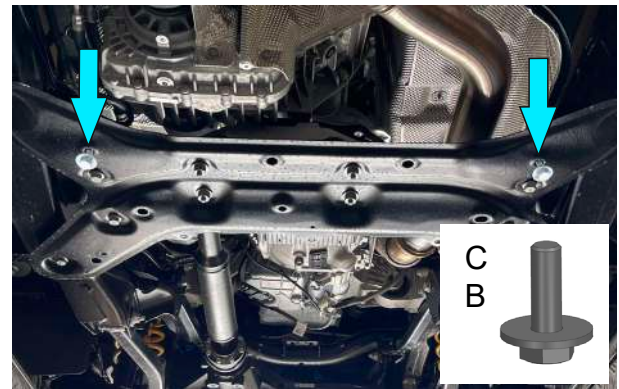


Fig. 2

2. Slightly screw bolts M10x30 with washers 10 (item B, C) into insert nuts M10 from step 1 (fig. 2).

***Do not tighten yet.**

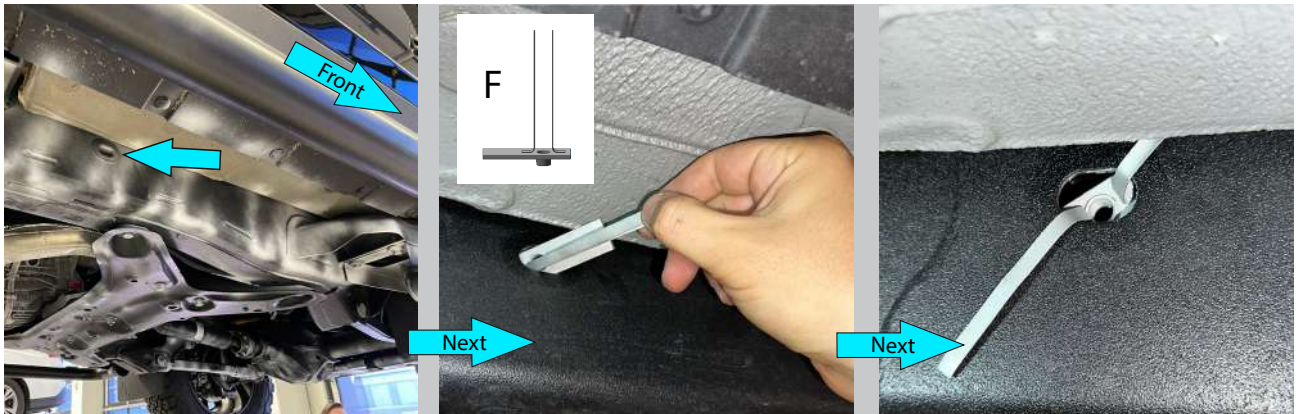


Fig. 3

3. Remove factory plug and install insert nuts M10 with wires (item F) into holes on both sides of the vehicle as shown in fig.3.

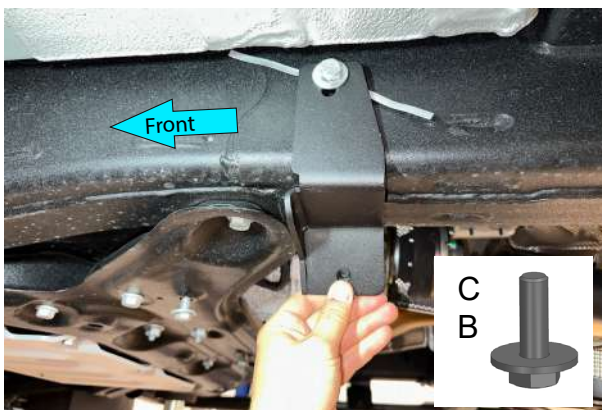


Fig. 4

4. Install left bracket (item 3) and secure it using bolt M10x30 with washer 10 (items B,C).

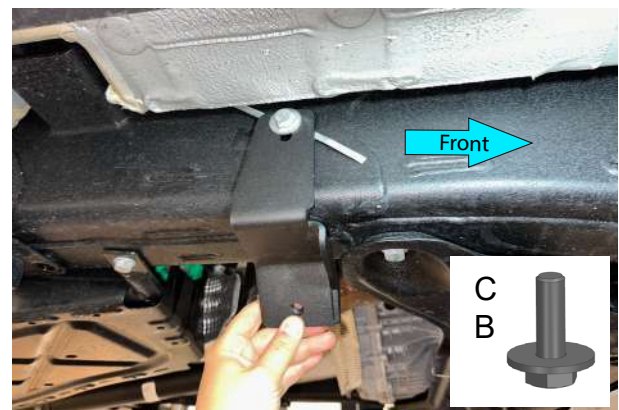


Fig. 5

5. Install right bracket (item 3) and secure it using bolt M10x30 with washer 10 (items B,C).

***Do not tighten yet.**



Fig. 6

6. Slide transfer case skid plate (item 1) on pre-installed bolts M10x30 from step 2. Secure the skid plate to brackets using bolts M10x30 and washers 10 (items B, C) (Fig. 6).

***Tighten hardware after that.**

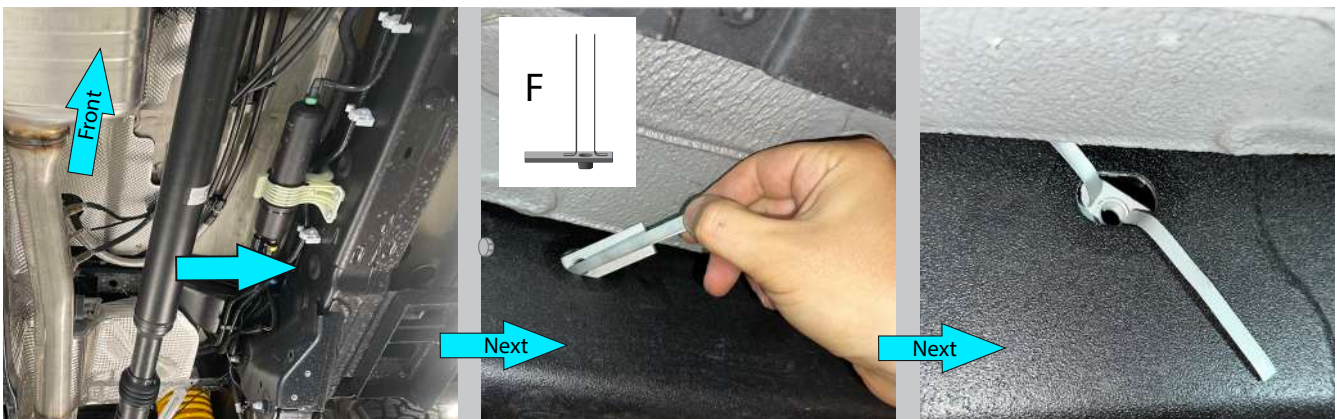


Fig. 7

7. Remove factory plug and install insert nut M10 with wires (item F) into hole as shown in fig.7.

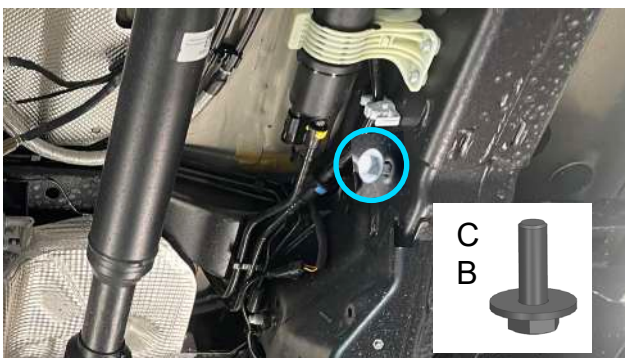


Fig. 8

8. Slightly insert supplied bolt M10x30 with washer 10 (items B, C) into insert nut M10.
***Do not tighten yet.**



Fig. 9

9. Slide bracket 2 (item 6) on pre-installed bolts M10x30 from step 8 (fig. 9).
***Do not tighten yet.**

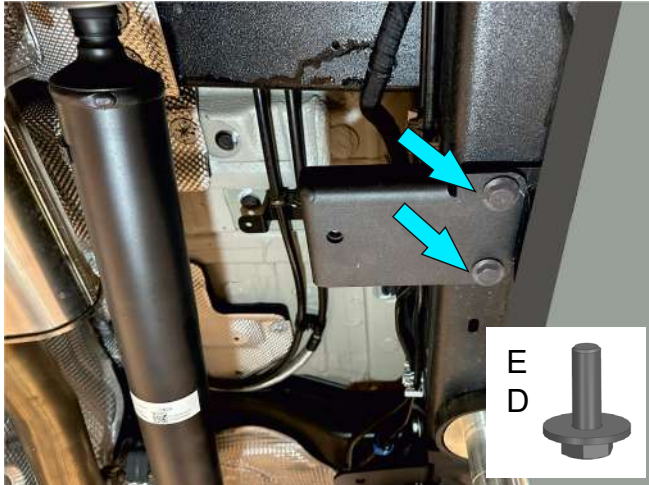


Fig. 10

10. If factory side steps are not pre-installed on the vehicle, install and secure bracket 1 (item 5) using bolts M12x30 with washers 12 (items D,E).

***Do not tighten yet.**

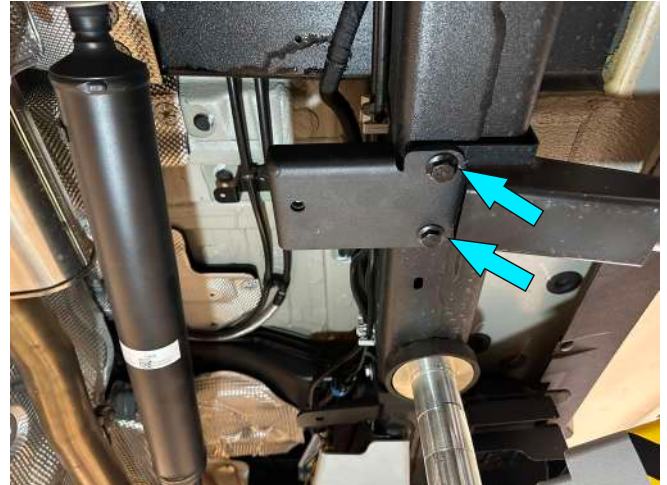


Fig. 11

11. If factory side steps are pre-installed on vehicle, install bracket 1 (item 5) over factory side step brackets as shown in fig.11. Secure bracket 1(item 5) using factory hardware.

***Do not tighten yet.**

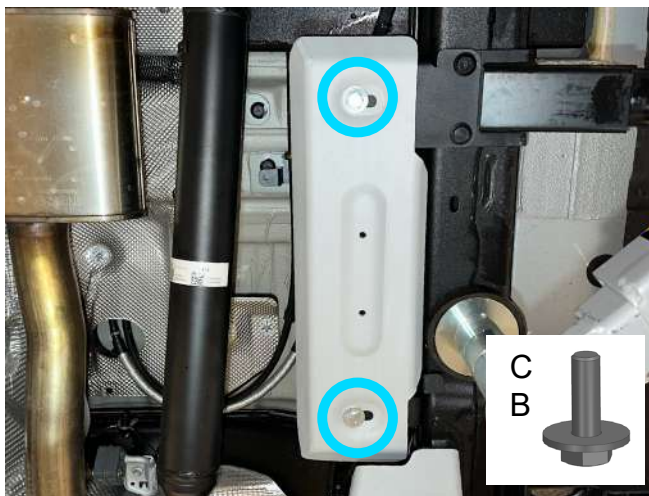


Fig. 12

12. Install fuel filter (diesel)/fuel pipes (gasoline) skid plate (item 2) on pre-installed brackets. Secure the skid plate using bolts M10x30 and washers 10 (item B, C) (Fig. 12).

***Once bolt are insertrd check skid plate alignment and tighten all previously installed hardware.**

Before operating a vehicle fitted with RIVAL Skid Plate:

- make sure all fittings are tightened;
- ensure the integrity of the structure and its components.

