



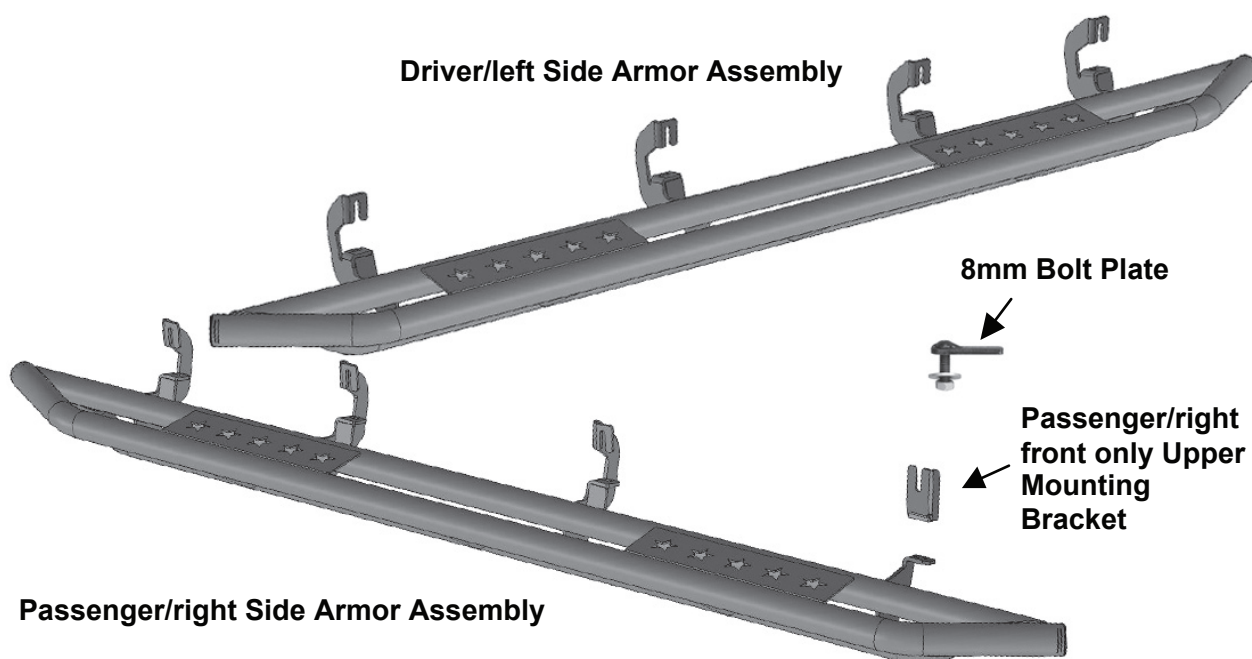
TYGER[®]

TG-AM2C20128

STAR ARMOR[®]

Parts List

- | | | |
|--|--|---------------------|
| x1 Driver Side Armor | x1 8-1.25mm x 40mm Hex Bolt | x15 8mm Lock Washer |
| x1 Passenger Side Armor | x15 8-1.25mm x 25mm Hex Bolts | |
| x1 Passenger/right Front Upper Bracket (all incl. DEF) | x1 8mm x 28mm x 3mm LRG Flat Washer | |
| x1 8mm Bolt Plate | x16 8mm x 24mm x 2mm STD Flat Washers | |
| x15 8-1.25mm Clip-On Nuts | x1 8mm Nylon Lock Nut (use w-bolt plate) | |





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Before Installation

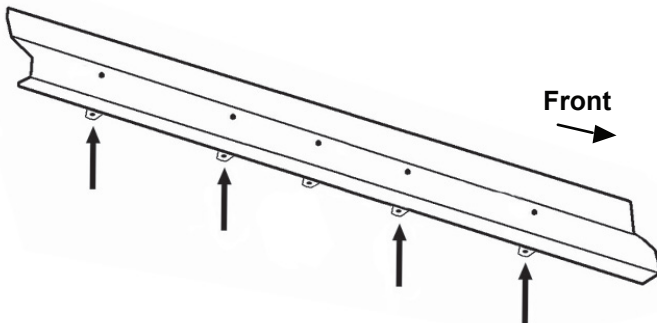
REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. ASSISTANCE IS RECOMMENDED. ON MODELS WITH DEF TANK, SELECT A FLAT, LEVEL AREA FOR INSTALLATION. MAY REQUIRE CUTTING.

Torque Value

Fastener Size	Class 8.8 Tightening Torque (ft-lbs)	Class 10.9 Tightening Torque (ft-lbs)
6mm	6-7	6-7
8mm	15-16	22-23
10mm	31-32	44-45
12mm	54-55	78-79
14mm	87-88	125-126

STEP 1

Start the installation under the driver side of the vehicle. Locate the 5 tabs along the bottom edge of the body, (pinch weld). Mounting Brackets will bolt to the 1st, 2nd, 4th and 5th mounting tabs, (Figure 1). Directly above each tab is a top mounting location on the side of the body panel. If necessary, line up the driver/left Side Armor with the mounting holes in the body panel to help determine correct locations.



(Fig 1) Driver side (4) mounting locations

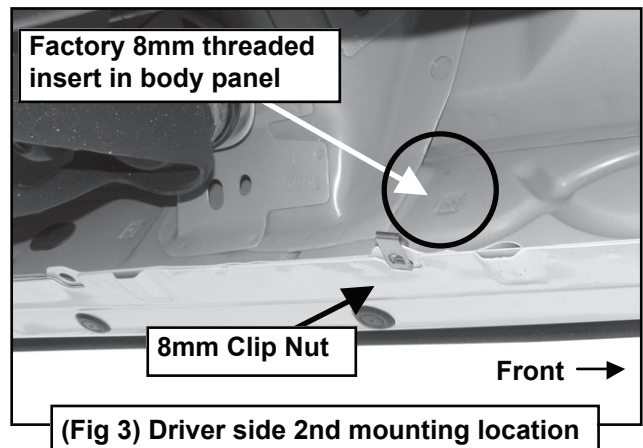
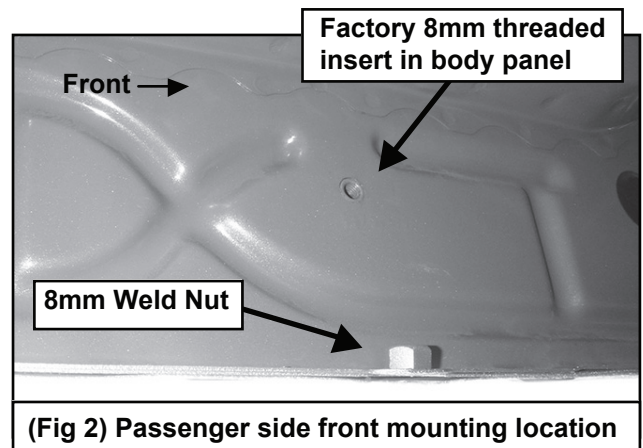
STEP 2

Determine the correct procedure for your model year and each Bracket location.

Bottom mounting location on the edge of the pinch weld.

Flat tab on pinch weld with factory installed weld nut: Thread hex bolt into weld nut from the backside-down to clear paint from threads, (Figure 2).

Flat tab on pinch weld with hole: Select (1) 8mm Clip Nut. Slide the Clip Nut over the tab with the nut facing up behind the tab, (Figures 3-5). Line up threaded nut with hole in the tab. Repeat for each mounting location.



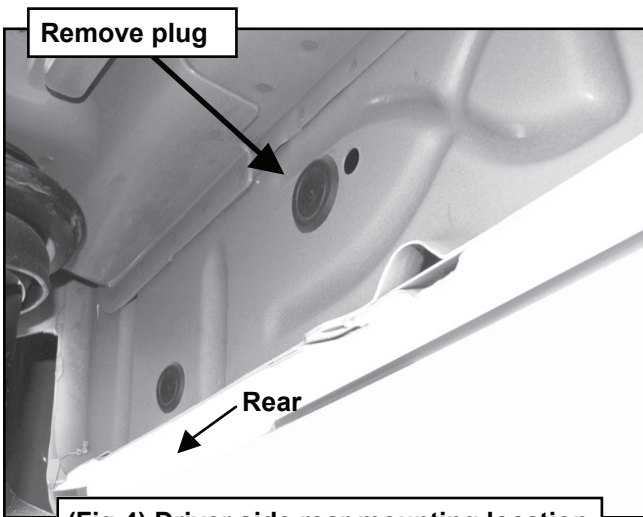


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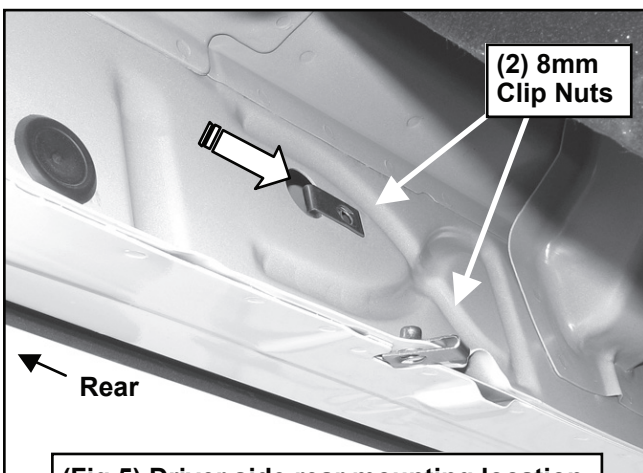
Locate top mounting location on the back side of the body panel.

Models with factory installed threaded insert in body panel: Thread 8mm Hex Bolt into threaded insert to clear paint as required, (Figures 2 & 3).

Large and small hole in side of body panel: Remove the rubber plug from the larger hole, (Figure 4). Select (1) 8mm Clip Nut. Slide the Clip Nut into the larger hole. Line up the threaded nut with the smaller hole, (Figure 5).



(Fig 4) Driver side rear mounting location

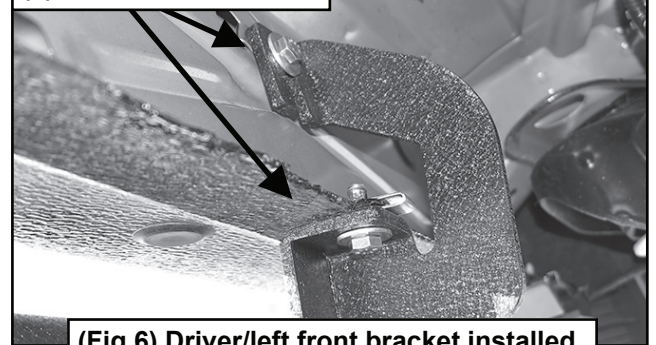


(Fig 5) Driver side rear mounting location

STEP 3

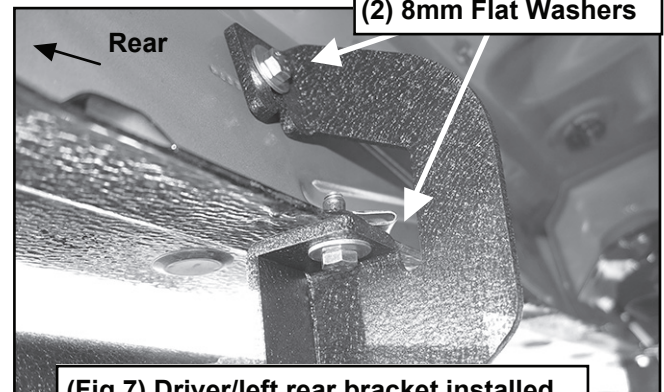
With assistance, hold the Side Armor up in position. Attach the mounting tabs on the Side Armor to the Clip Nuts and/or the factory threaded holes with (8) 8mm x 25mm Hex Bolts, (8) 8mm Lock Washers and (8) 8mm STD Flat Washers, (Figures 6 & 7).

(2) 8mm Hex Bolts
(2) 8mm Lock Washers
(2) 8mm Flat Washers



(Fig 6) Driver/left front bracket installed

(2) 8mm Hex Bolts
(2) 8mm Lock Washers
(2) 8mm Flat Washers



(Fig 7) Driver/left rear bracket installed

STEP 4

Level and adjust the Side Armor and fully tighten all hardware.



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STEP 5

Move to the passenger side of the vehicle. On the passenger side, determine if the vehicle is equipped with a plastic diesel exhaust fluid (DEF) tank, (Figures 8 & 9).

Models without DEF tank, skip to Step 6.

Models with DEF tank: The tank sits close to the side of the body. With specialized tools, the passenger front upper and lower Bracket can be installed but room is limited. It may be easier to drop the tank down to access the inner side of the body panel for upper bracket installation. Tank will not need to be removed, only dropped down for access to mounting location. **IMPORTANT:** If tank is full, it will be very heavy and assistance is highly recommended to avoid injury or damage to the vehicle or the tank. It is recommended that installation is performed when the DEF tank is low on fluid before dropping the tank.

a. For models with plastic lower tray under the tank, remove the (3) hex bolts attaching the tray to the frame, (Figure 8), and remove tray. 2017 2500/3500 models: Remove the (4) hex bolts attaching the plastic cover to DEF tank, (Figure 9A) and remove plastic cover, (Figure 9B).

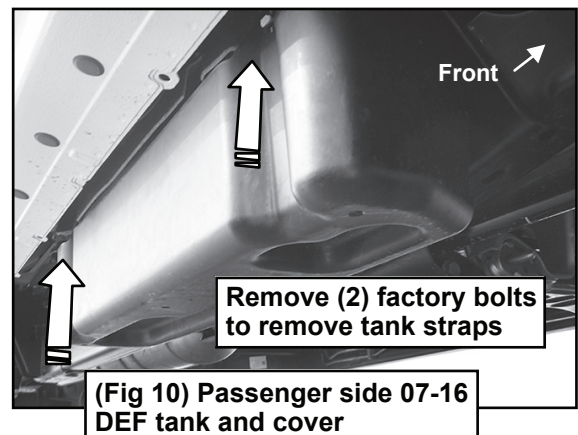
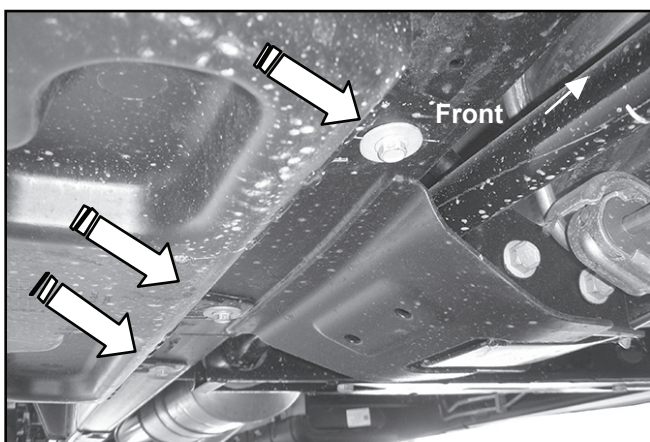
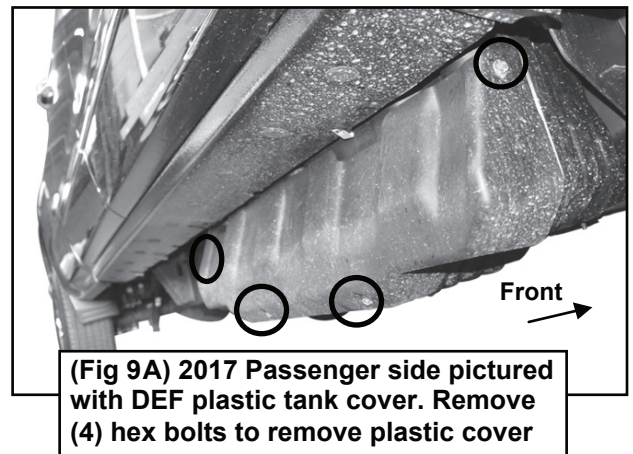
b. Release the tank filler hose. Release the plug for the sending unit on the top of the tank.

c. Support the tank with a floor jack. Place a smooth flat surface, (wooden block for example), between the floor jack

and the tank to avoid damaging the plastic tank. Do not push up on the tank; only support the weight of the tank with the jack.

d. Remove the (2) bolts securing the tank straps to the vehicle, (Figure 10). Tilt the straps to release from the brackets. Slowly lower the tank until the top of the tank is almost visible. Use blocks or stands to support the tank while installing the front Upper and Lower Brackets.

e. Proceed to Step 6





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STEP 6

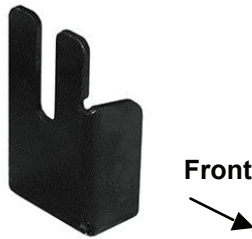
Locate the first tab on the edge of the pinch weld, (Figures 2-4, 12 & 14). Select the Upper Bracket, (Figure 11). Repeat Step 2 to attach the passenger front Upper Bracket to the side of the body panel, (Figure 12). Do not tighten hardware at this time.

STEP 7

Line up the hole in the bottom of the Upper Bracket with the hole in the tab on the pinch weld.

Models with a weld-nut: Slide the Bracket over the weld-nut, (Figure 12). Insert (1) 8mm x 40mm Hex Bolt with (1) 8mm x 28mm Large Flat Washer down through the threaded hole in the weld nut and Upper Bracket, (Figure 18). Tighten all hardware attaching the Upper Bracket only at this time.

Models with flat tab and hole: Insert the 8mm Bolt Plate down through the hole in the Upper Bracket and mounting tab, (Figures 13, 14 & 18).



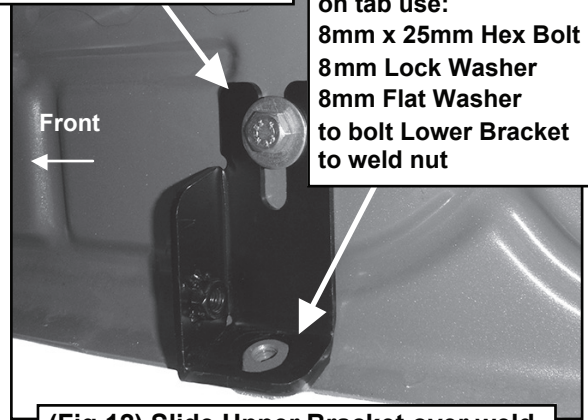
(Fig 11) Passenger/right Front Upper Bracket (all models)



(Fig 13) 8mm x 35mm Bolt Plate

8mm x 25mm Hex Bolt
8mm Lock Washer
8mm Flat Washer

Models with weld nut on tab use:
8mm x 25mm Hex Bolt
8mm Lock Washer
8mm Flat Washer
to bolt Lower Bracket to weld nut



(Fig 12) Slide Upper Bracket over weld nut if equipped-also see Figure 2

On models with flat tab (see Fig 3 & 4), insert 8mm Bolt Plate (Fig 12) down through Upper Bracket and mounting tab

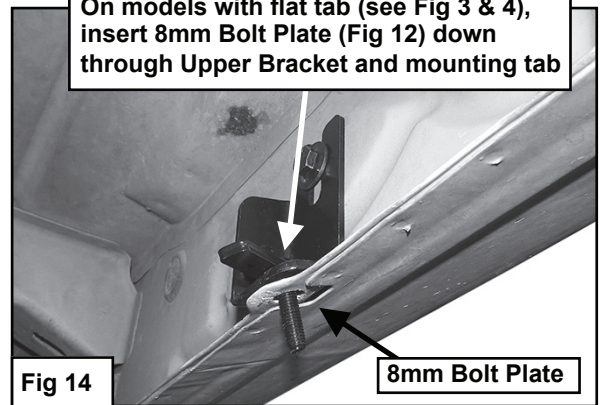
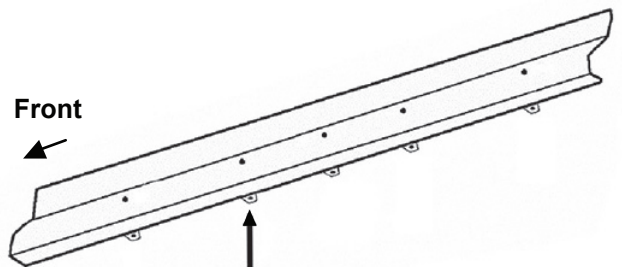


Fig 14

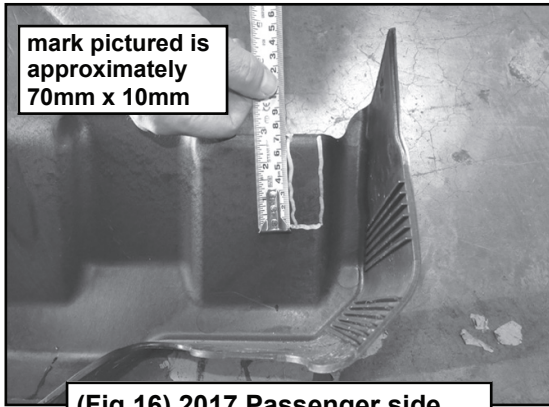
8mm Bolt Plate



(Fig 15) Passenger side 2nd bracket location from back of body panel

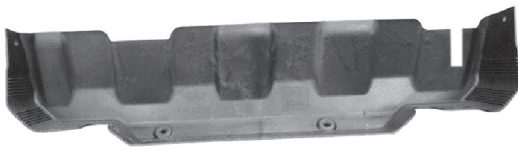


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mark pictured is approximately 70mm x 10mm

(Fig 16) 2017 Passenger side DEF cover marked for trimming



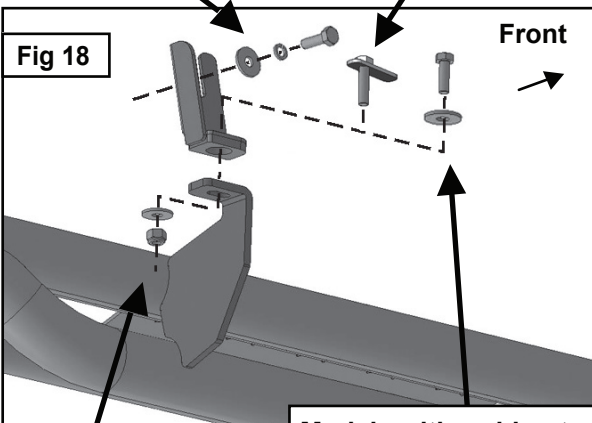
← Front

(Fig 17) 2017 Passenger side DEF cut for example only

8mm Hex Bolt
8mm Lock Washer
8mm Flat Washer

Models with flat tab on panel (Fig 14):
Use 8mm Bolt Plate

Fig 18



Front →

8mm x 24mm STD Flat Washer
8mm Nylon Lock Nut

Models with weld nut on panel (Fig 12):
8mm x 40mm Hex Bolt
8mm x 28mm Large Flat Washer

STEP 8

Repeat Step 2 to prepare the center and rear mounting locations before installation, (Figures 2-5).

STEP 9

With assistance, hold the Side Armor up in position. Repeat Step 3 to attach the Side Armor to the passenger side (2) center and (1) rear mounting locations, (Figures 6 & 7). Do not tighten hardware.

2017 2500/3500 DEF tank models:

Locate the 2nd tab bracket location along the bottom edge of the body, (pinch weld), (Figure 15). Hold the DEF cover in place and mark the 2nd Bracket location onto the cover, (Figure 16). Use a sharp knife or hacksaw blade to carefully cut a slot in the plastic cover to clear the 2nd Bracket, (Figure 17). Remove as little plastic as possible.

STEP 10

Line up the front mounting tab on the Side Armor with the Upper Bracket. Attach the mounting tab to the Hex Bolt or Bolt Plate in the bottom of the body panel with (1) 8mm x 24mm Flat Washer and (1) 8mm Nylon Lock Nut, (Figure 18). Do not tighten hardware at this time.

STEP 11

Level and adjust the Side Armor and fully tighten all hardware. Once fully installed and all hardware fully tightened, reinstall the DEF tank and cover, if equipped, as described in Step 5 & 9.



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STEP 12

Do periodic inspections to the installation to make sure that all hardware is secure and tight.

