



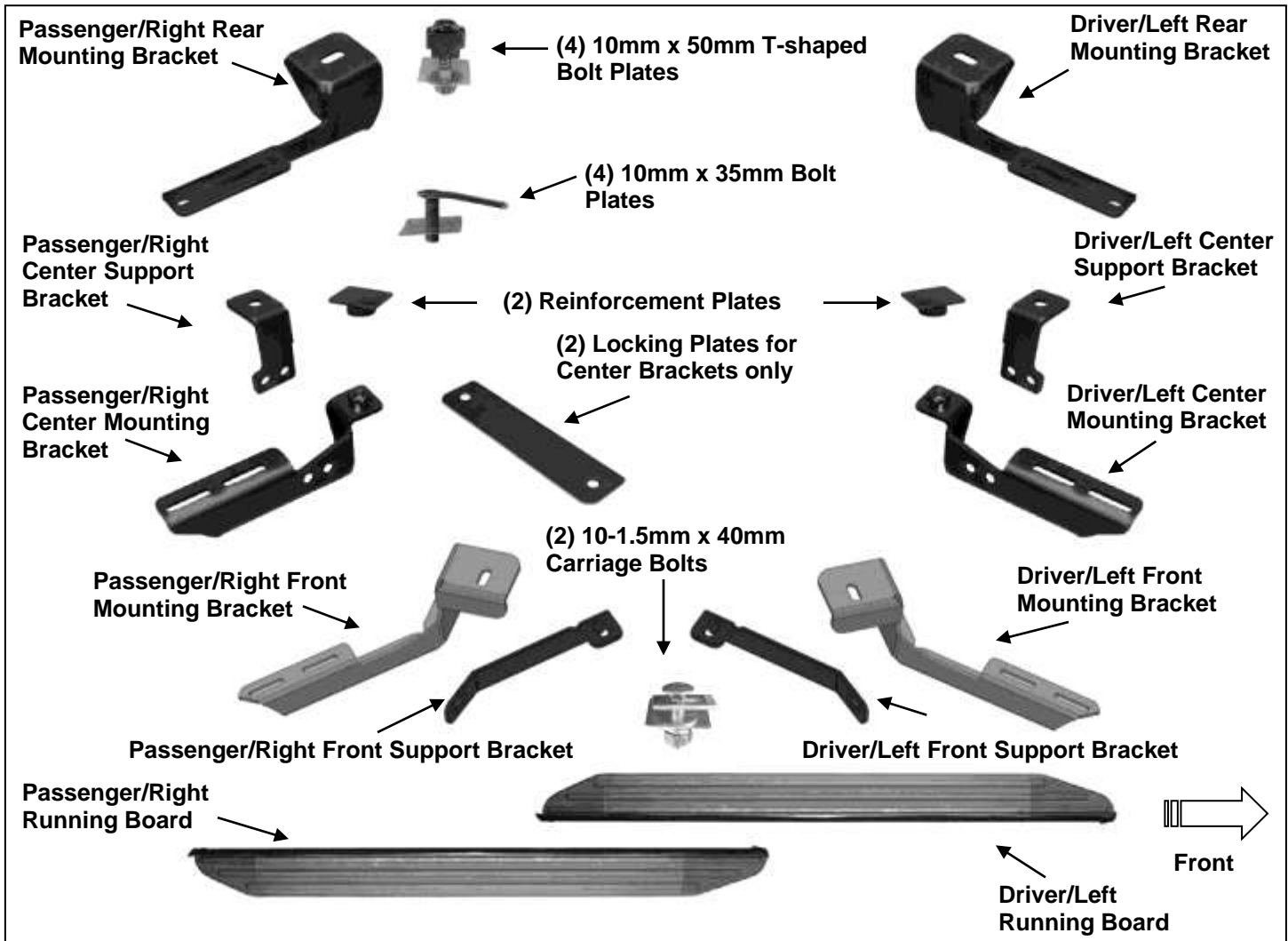
INSTALLATION INSTRUCTIONS

**VORTEX RUNNING BOARD
FOR TOYOTA RAV4 06-18 (Excl. 2018 Adventure Trim)**

PART # VO-TYRA

PARTS LIST:

1	Driver/Left Side Running Board	2	Locking Plates (for 10mm x 35mm Bolt Plates)
1	Passenger/Right Side Running Board	2	10mm Rectangular Washers
1	Driver/Left Front Bracket	10	10mm Plastic Retainers
1	Passenger/Right Front Bracket	2	10-1.5mm x 40mm Hex Bolts
1	Driver/Left Front Support Bracket	2	10-1.5mm x 30mm Hex Bolts
1	Passenger/Right Front Support Bracket	6	10mm x 27mm OD x 3mm Large Flat Washers
1	Driver/Left Center Mounting Bracket	8	10mm x 24mm OD x 2.2mm STD Flat Washers
1	Passenger/Right Center Mounting Bracket	12	10mm Lock Washers
1	Driver/Left Center Support Bracket	12	10-1.5mm Hex Nuts
1	Passenger/Right Center Support Bracket	2	10-1.5mm Hex Nuts (Jam Nuts)
1	Driver/Left Rear Bracket	4	8-1.25mm x 30mm Hex Bolts
1	Passenger/Right Rear Bracket	8	8mm x 16mm OD x 1.6mm Flat Washers
2	Surface Reinforcement Plates	4	8-1.25mm Nylon Lock Nuts
4	10mm x 50mm T-shaped Bolt Plates	12	6-1.0mm x 20mm T-Bolts
2	10-1.5mm x 40mm Carriage Bolts	12	6mm x 22mm OD x 2mm Flat Washers
4	10mm x 35mm Bolt Plates	12	6mm Lock Washers
		12	6mm Hex Nuts



PROCEDURE:

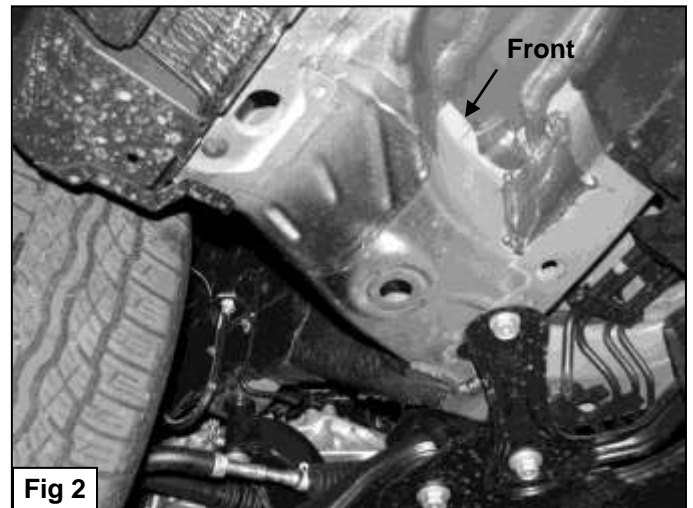
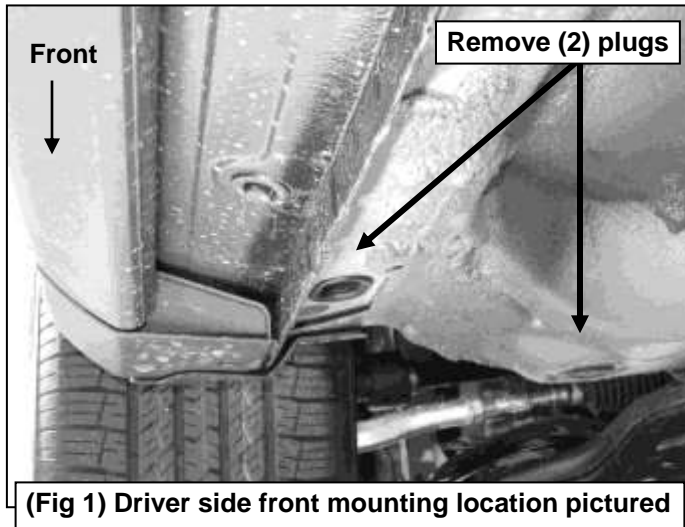
1. **REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.**
2. Starting on the driver side of the vehicle, locate and remove the factory oval rubber plug and (2) round plugs in the bottom of the floor panel located closest to the front tire opening, **(Figure 1 & 2)**. Select (1) 10mm x 40mm Carriage Bolt, (1) 10mm Rectangular Washer and (1) 10mm Plastic Retainer, **(Figure 3A)**. Slide the Rectangular Washer onto and over the square shoulder on the Carriage Bolt. Thread the Retainer part way onto the Bolt. **NOTE:** The Plastic Retainer is designed to help hold the Bolt in place during Bracket installation. Insert the Carriage Bolt with Rectangular Washer and Retainer into the inner round hole in the floor panel. Line up the Carriage Bolt with the center of the hole and the Rectangular Washer across the hole. Pull the Carriage Bolt down through the slot in the Washer. Thread the Retainer down tight against the floor panel, **(Figure 3B)**.
3. Select (1) 10mm x 50mm T-shaped Bolt Plate and (1) 10mm Plastic Retainer, **(Figure 4A)**. Insert the T-shaped Bolt Plate up into the oval hole and rotate it 90-degrees so that the block is across the oval hole. Thread the Plastic Retainer onto the T-shaped Bolt Plate tight against the floor panel, **(Figure 4B)**. Select the driver side Front Bracket. Secure the Front Bracket to the T-shaped Bolt Plate with (1) 10mm x 27mm Large Flat Washer, (1) 10mm Lock Washer and (1) 10mm Hex Nut, **(Figure 5)**. Snug but do not tighten.
4. Select the driver side Front Support Bracket. Bolt the Support Bracket to the inner 10mm Carriage Bolt with (1) 10mm x 27mm Large Flat Washer, (1) 10mm Lock Washer and (1) 10mm Hex Nut, **(Figures 5)**. Line up the slot in the Support Bracket with the slot in the Front Mounting Bracket. Bolt the Support Bracket to the front of the Mounting Bracket with (1) 10mm x 30mm Hex Bolt, (2) 10mm x 24mm STD Flat Washers, (1) 10mm Lock Washer and (1) 10mm Hex Nut, **(Figure 5)**. Do not tighten hardware.
5. Move along the side of the vehicle to the center location below where the front and rear doors meet. Locate the 4th and 5th hole in the floor panel from the front wheel opening, **(Figure 6)**. Remove the (2) rubber plugs. Select (2) 10mm x 35mm Bolt Plates and (2) 10mm Plastic Retainers. Thread (1) Plastic Retainer part way onto each Bolt Plate, **(Figure 7A)**. Insert (1) Bolt Plate into the first and second round hole in the floor panel next to the pinch weld, **(Figure 7B)**. **IMPORTANT:** Install the Bolt Plates with the "plates" pointing toward each other, **(Figure 7C)**. Thread the Retainer down tight against the panel.
6. Slide (1) Lock Plate over the (2) 10mm x 35mm Bolt Plates. Attach the Lock Plate to the forward Bolt Plate with (1) 10mm x 24mm Flat Washer, (1) 10mm Lock Washer and (1) 10mm Hex Nut, **(Figure 8)**. Hang the Center Support Bracket from the rear Bolt Plate with (1) 10mm x 24mm STD Flat Washer, (1) 10mm Lock Washer and (1) 10mm Hex Nut, **(Figures 8—10)**. Do not tighten hardware at this time.
7. Select the Center Mounting Bracket, (1) 10mm x 40mm Hex Bolt, (1) 10mm Hex Jam Nut and (1) Reinforcement Plate, **(Figure 9)**. Thread the 10mm Hex Nut all the way down the 10mm x 40mm Hex Bolt. Insert the Hex Bolt with Nut up and into the welded nut on the tab on the Center Bracket, **(Figure 9)**. **NOTE:** Thread the Bolt in until a few threads are sticking out of the welded nut. **Do not** thread the Hex Bolt all of the way into the welded nut. Bolt the Center Mounting Bracket to the front side of the Center Support Bracket with (2) 8mm x 30mm Hex Bolts, (4) 8mm Flat Washers and (2) 8mm Nylon Lock Nuts, **(Figure 10)**. Leave hardware loose at this time.
8. Place (1) Reinforcement Plate onto the threaded end of the 10mm x 40mm Hex Bolt, **(Figure 9)**. Continue to thread the Hex Bolt in until the Reinforcement Plate is close to but not touching the bottom of the body panel, **(Figure 10)**. Snug but do not tighten the 8mm mounting hardware. **IMPORTANT:** Do not tighten the hardware on the Center Brackets until the final Steps, **(see Step 16)**.
9. Move along the vehicle to the rear mounting location, **(Figure 11)**. Remove the oval rubber plug. Select (1) 10mm x 50mm T-shaped Bolt Plate and (1) 10mm Plastic Retainer, **(Figure 12A)**. Insert the T-shaped Bolt Plate up into the oval hole and rotate 90-degrees so that the block is across the oval hole. Thread the Plastic Retainer onto the Bolt Plate and tight against the floor panel **(Figures 12B)**.
10. Select the driver side Rear Mounting Bracket. Hang the Rear Bracket from the 10mm T-shaped Bolt Plate with (1) 10mm x 27mm Large Flat Washer, (1) 10mm Lock Washer and (1) 10mm Hex Nut, **(Figure 13)**. Snug but do not tighten the 10mm hardware on the rear Bracket.
11. Carefully un-wrap the driver side Running Board. From the front, slide (3) T-Bolts into each channel in the bottom of the Running Board, **(Figure 14)**. Slide the T-Bolts forward or back to line up with the slots in the (3) previously installed Mounting Brackets. Hold the Running Board up to the vehicle at a slight

angle and gently push it into position against the rocker panel. Loosen Brackets if necessary to slide Running Board into place. Insert the T-Bolts through the slots in the Brackets, **(Figure 15)**.

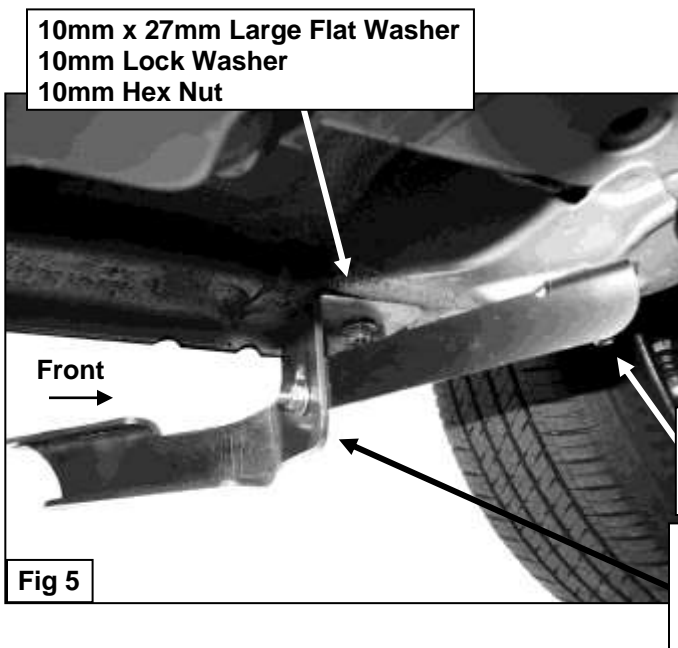
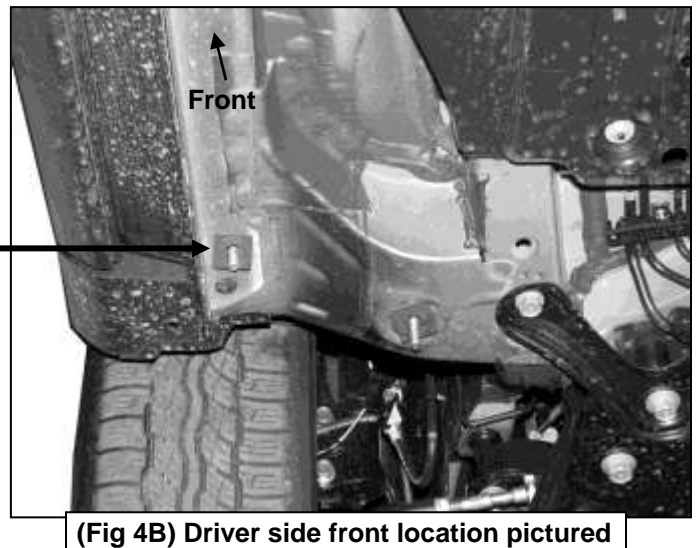
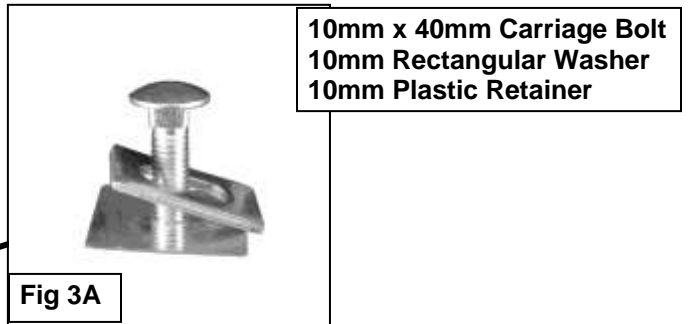
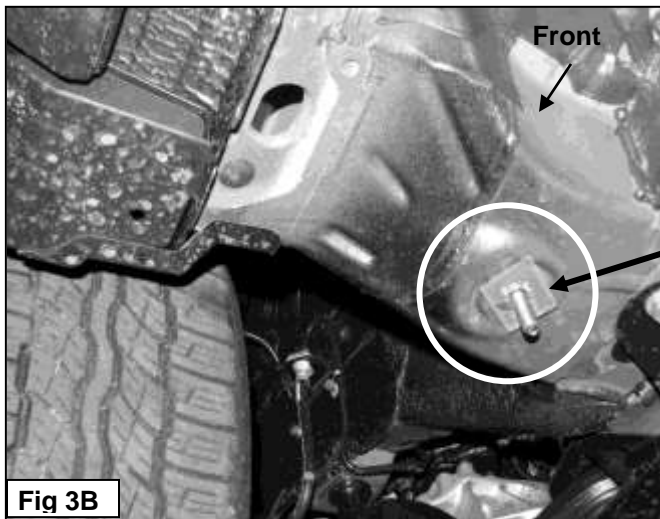
12. Attach the Running Board to the (3) Mounting Brackets with the included (6) 6mm Flat Washers, (6) 6mm Lock Washers and (6) 6mm Hex Nuts, **(Figure 15)**. Do not tighten hardware at this time.
13. Check to see if the Running Board is level to the bottom of the car, front to rear, not level to the ground. Adjust the Brackets as necessary to line up the Running Board with the side of the vehicle. Move to the rear Bracket and once aligned, tighten the 10mm hardware on the Bolt Plate, **(Figure 13)**.
14. Next, move to the front Bracket. Tighten the T-shaped Bolt Plate and Carriage Bolt hardware only, **(Figures 3A & 4A)**. Adjust the height of the front Bracket as necessary. Once properly adjusted, tighten the 10mm Hex Bolt securing the Support Bracket to the front Mounting Bracket, **(Figure 5)**.
15. With the front and rear Brackets fully tightened to the vehicle, move to the Center Bracket. Fully tighten the 10mm hardware securing the Support Bracket to the Bolt Plate, **(Figure 16)**. Gently push the Mounting Bracket up against and level to the bottom of the Running Board. Tighten the (2) 8mm Hex Bolts. Slowly tighten the 10mm x 40mm Hex Adjustment Bolt until the Reinforcement Plate is snug against the bottom of the body panel. Turn the Hex Bolt 1/2 to 1 full turn tighter to add preload. Tighten the 10mm Hex Nut to lock the 10mm x 40mm Hex Bolt in the Bracket, **(Figure 16)**.
16. Once properly adjusted, fully tighten all Bracket hardware first. Check for front to back adjustment on the Running Board and tighten all 6mm Running Board to Bracket hardware, **(Figures 15 & 16)**.
17. Repeat **Steps 2—16** for the passenger side Running Board installation.
18. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

To protect your investment, wax this product after installing. Regular waxing is recommended to add a protective layer over the finish. Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the Running Board Brackets.

Driver Side Installation Pictured



VORTEX RUNNING BOARD FOR TOYOTA RAV4 06-18 (Excl. 2018 Adventure Trim)
Driver Side Installation Pictured



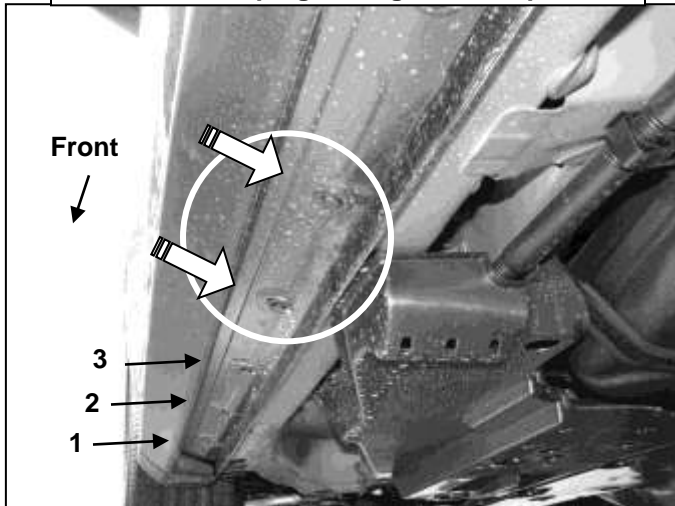
10mm x 27mm Large Flat Washer
 10mm Lock Washer
 10mm Hex Nut

10mm x 27mm Large Flat Washer
 10mm Lock Washer
 10mm Hex Nut

10mm x 30mm Hex Bolt
 (2) 10mm x24 STD Flat Washers
 10mm Lock Washer
 10mm Hex Nut

VORTEX RUNNING BOARD FOR TOYOTA RAV4 06-18 (Excl. 2018 Adventure Trim)
Driver Side Installation Pictured

From the front fender opening, locate the 4th and 5th rubber plugs along the floor panel



(Fig 6) Driver side Center Bracket location pictured



(Fig 7A) 10mm x 35mm Bolt Plate

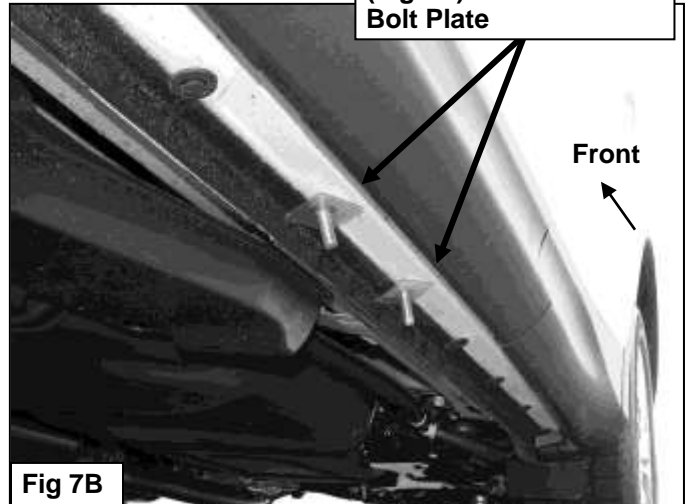
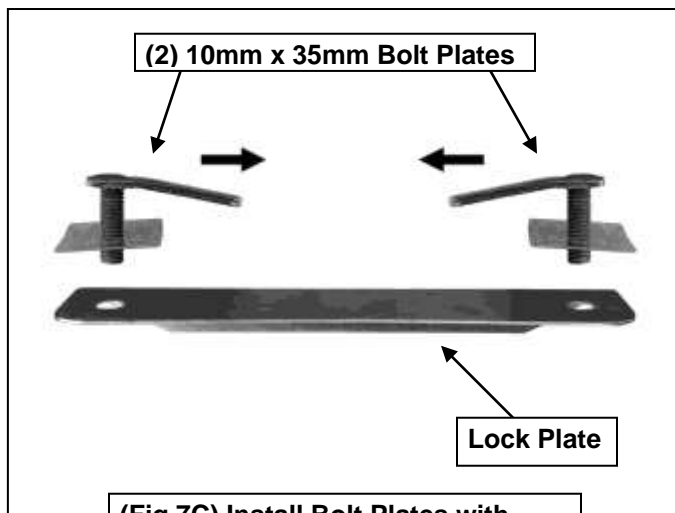


Fig 7B



(Fig 7C) Install Bolt Plates with Plates pointing towards each other

10mm x 24mm STD Flat Washer
10mm Lock Washer
10mm Hex Nut

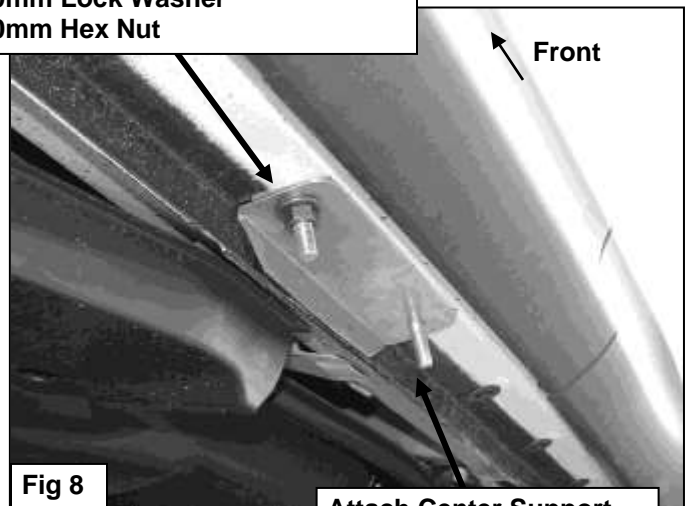
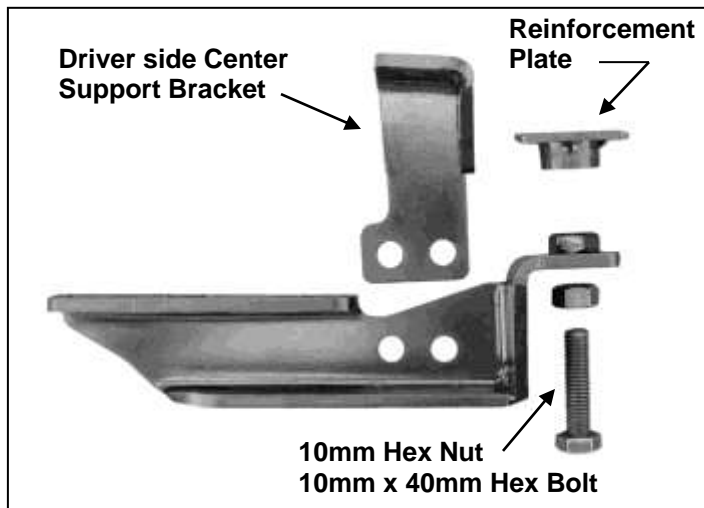


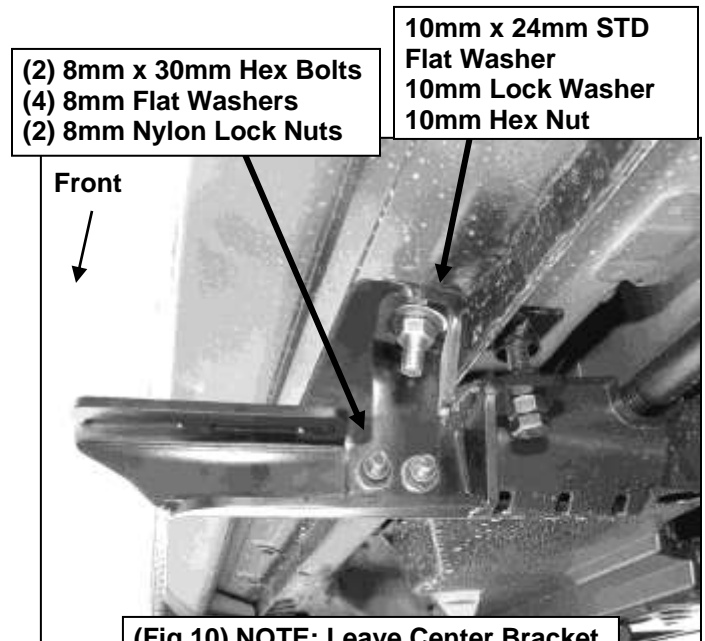
Fig 8

Attach Center Support Bracket to rear Bolt Plate

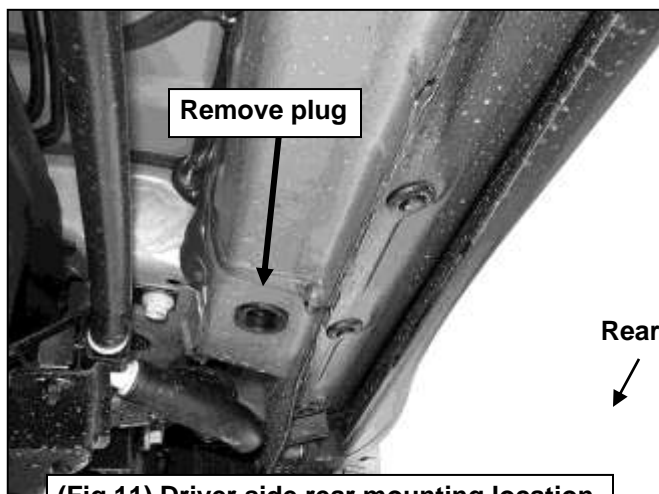
VORTEX RUNNING BOARD FOR TOYOTA RAV4 06-18 (Excl. 2018 Adventure Trim)
Driver Side Installation Pictured



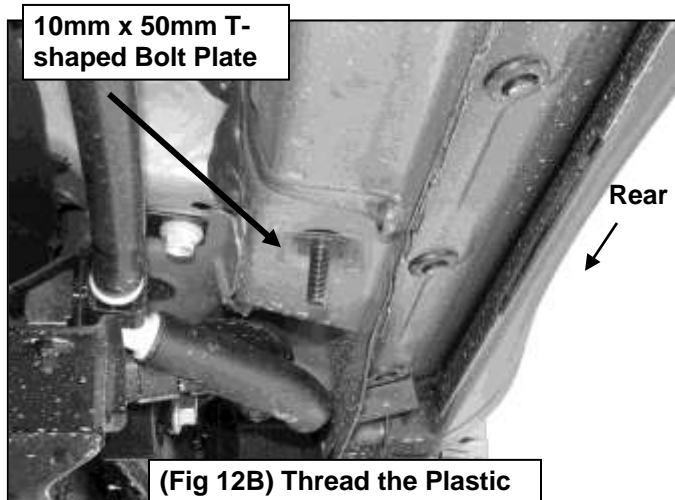
(Fig 9) Driver side Center Bracket assembly pictured



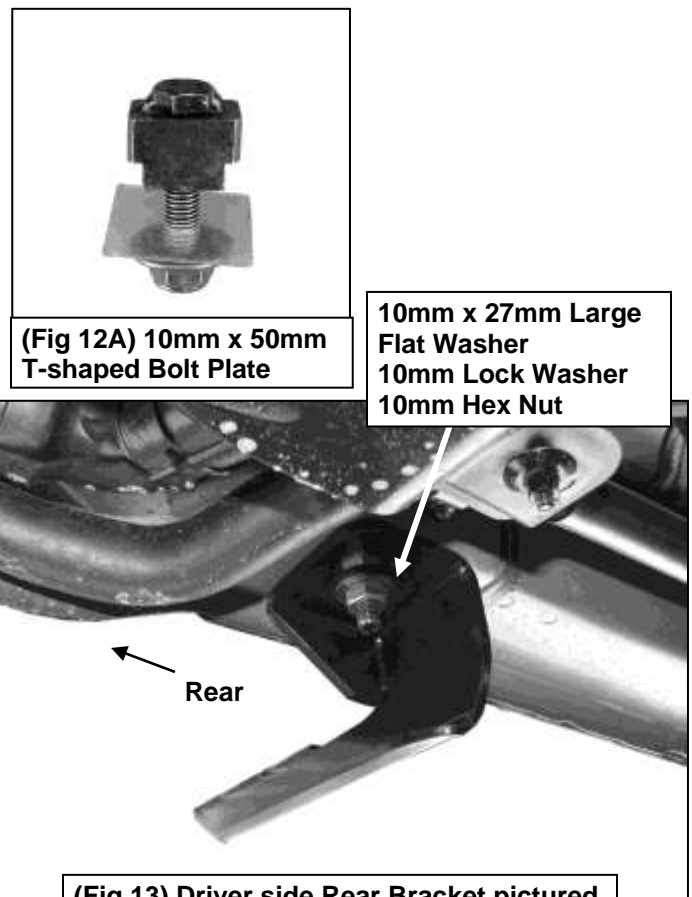
(Fig 10) NOTE: Leave Center Bracket hardware loose until final steps



(Fig 11) Driver side rear mounting location

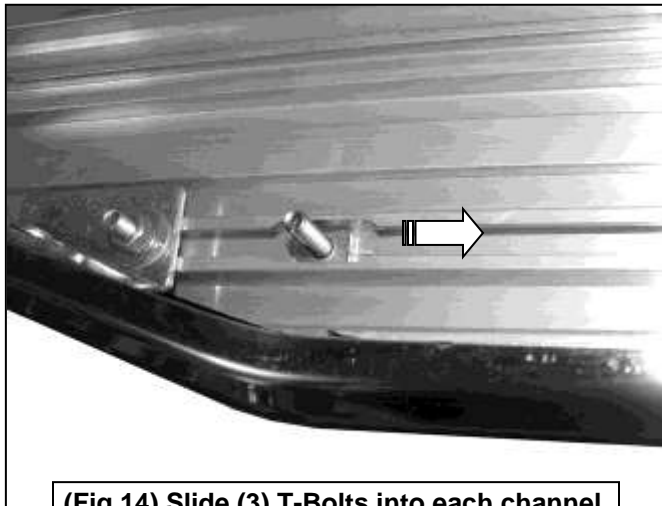


(Fig 12B) Thread the Plastic Retainer onto the Bolt Plate

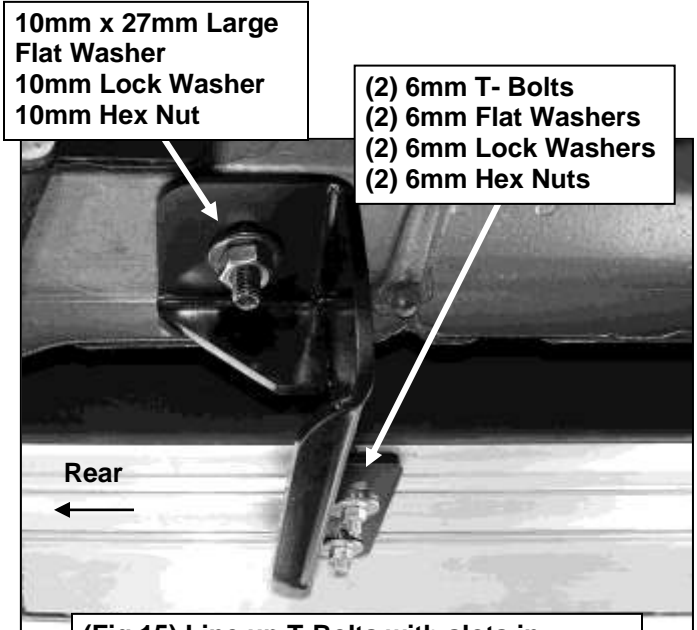


(Fig 13) Driver side Rear Bracket pictured

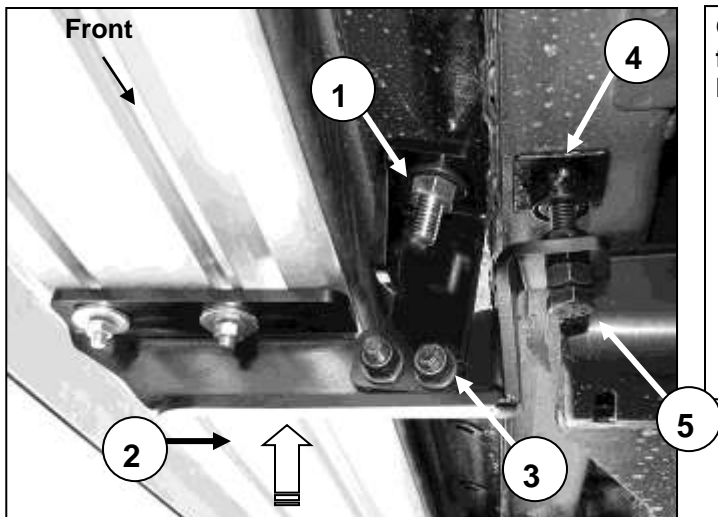
VORTEX RUNNING BOARD FOR TOYOTA RAV4 06-18 (Excl. 2018 Adventure Trim)
Driver Side Installation Pictured



(Fig 14) Slide (3) T-Bolts into each channel



(Fig 15) Line up T-Bolts with slots in Brackets. Driver side rear Bracket pictured



(Fig 16) Driver side Center Bracket pictured

Once the Running Board has been aligned and the front and rear brackets fully tightened, adjust the height of the Center Bracket:

1. Tighten the 10mm x 50mm Bolt Plate hardware
2. Hold the Bracket level and against the bottom of the Running Board
3. Tighten the (2) 8mm Hex Bolts
4. Tighten the 10mm x 40mm Hex Bolt until the Reinforcement Plate is snug up against the floor panel
5. Turn Hex Bolt 1/2 to 1 full turn and tighten jam nut to lock adjustment. Readjust as necessary



Complete Installation