

Make: Toyota

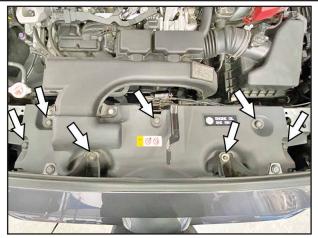
Model: 2019+ RAV4

Application: Light Bar

PACKAGE CONTENTS						TOOLS
QTY		QTY		QTY		1/2" Socket/Wrench
1	Light Bar	6	3/8"-16 Hex Nut	2	3/8" Round Spacer	9/16" Socket/Wrench
2	Upper Mount Bracket	14	3/8" SAE Flat Washer	2	3/8"-16 x 4.25" Hex Bolt	10mm Socket/Wrench
2	Grille Bracket	12	3/8" Split Lock Washer	4	5/16"-18 Bolt Plate (Short)	12mm Socket/Wrench
1	Skid Plate	4	3/8"-16 x1" Hex Bolt	2	3/8"-16 Nyloc Nut	Panel Removal Tool
1	3/8"-16 x1.5" Bolt Plate (Offset)	2	3/8"-16 x1.5" Hex Bolt (TRD)	4	1x1" Card Square	
1	3/8"-16 x1.5" Bolt Plate	2	3/8"-16 x2" Hex Bolt			

## INSTALLATION INSTRUCTIONS

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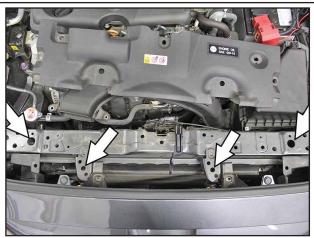


Remove air diverter above front bumper. Start by removing the fasteners at the top of the bumper under the hood. Set aside.



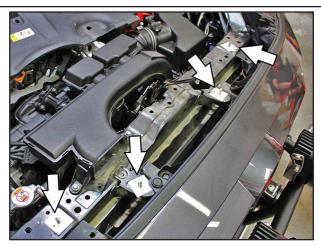
Remove this 10mm-head bolt on the front bumper, on both sides (driver and passenger area). This will help in removing the air diverter panel.

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Once the air diverter panel is removed, locate the following (4) holes on top of the core support.

Insert a 5/16" Bolt Plate into each hole with the threads pointing upwards. The included white card squares on the threads of the bolt plates are to keep them from falling in.



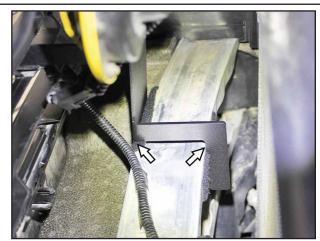
They should look like shown when installed. Set aside the hex nuts, lock washers, and flat washers for use later.

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Locate passenger-side Upper Mounting Bracket. Carefully insert the bracket into the cavity behind the grille. Rest the bottom of the bracket on the bumper beam and ensure the mounting holes align with the bolts on top.



Once in position, mark the areas on the bumper beam where the bracket makes contact. Remove the bracket and clean the surface to place velcro on it with included wipes. The velcro will dampen the contact between the bracket and the beam.

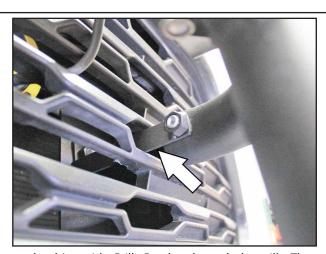
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Repeat the previous two steps with the driver-side bracket.

Fasten (1) 5/16" Flat Washer, Lock Washer and 5/16"-18 Hex Nut onto the threads of each 5/16" bolt plate. Do not tighten.

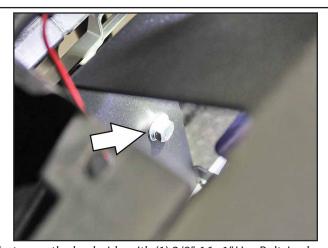


Insert the driver-side Grille Bracket through the grille. The holes on both brackets should line up. TRD Off-road/Adventure models use the included 3/8" spacer between the Grille Bracket and Upper Mounting Bracket.

Nut Flange

Driver side

Note the orientation of the driver-side Grille Bracket. The passenger-side is the mirror opposite.

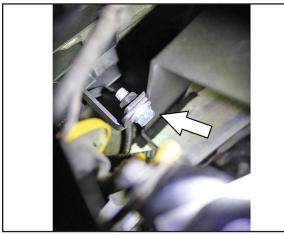


Fasten on the back side with (1) 3/8"-16 x1" Hex Bolt, Lock Washer, and Flat Washer. Do not tighten. TRD Off-road/Adventure models use 3/8"-16" x1.5" Hex Bolts (see Addendum for more).

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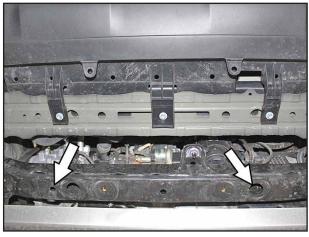
Repeat the same process with the passenger-side Grille Bracket.

Remember: TRD Off-road/Adventure models add a 3/8" spacer between Grille Bracket and Upper Mounting bracket (see Addendum).



Install the light bar by inserting (1) 3/8"-16 x2" Hex Bolt, 3/8" Lock Washer, and 3/8" Flat Washer through each hole on the upper tube of the Light Bar and into the threaded holes on the Grille Brackets.

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Moving under the vehicle. Remove the engine splash guard (TRD Off-road models see addendum regarding skid plate removal). Locate the following holes in the chassis subframe. Note: The driver-side hole is larger.



Insert the 3/8"-16 x1.5" Bolt Plate into the passenger side hole.

Slide (1) card square onto the threads until it bottoms out against the chassis. This will prevent the bolt plate from moving around during assembly. Note: The bolt plate in this step should have the threaded stud closer to the edge of the plate.



Insert the 3/8"-16 x1.5" Bolt Plate (Offset) into the larger driver-side hole like shown. Slide (1) card square onto the threads until it bottoms out against the chassis. This will prevent the bolt plate from moving around during assembly. Note: This bolt plate has the threaded stud closer to the center of the plate.



Next, locate these holes in the chassis (found closer to the front bumper).

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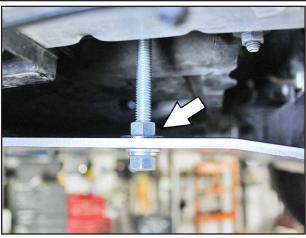


Insert (1) 3/8"-16 x4.25" Hex Bolt and Flat Washer into each hole (bolt threads facing down). Fasten them in place with a 3/8" Flat Washer, Lock Washer and Hex Nut. Center the bolt in the hole & tighten nut down. Repeat on passenger side.

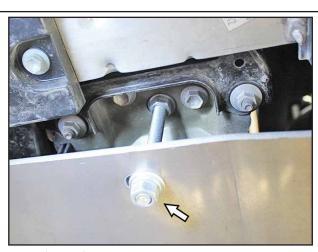


Locate the Skid Plate and align the rear holes with the bolt plates. Fasten the rear bolt plates with (1) 3/8" Flat Washer, Lock Washer, and Hex Nut on each bolt. Do not tighten.

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Thread (1) 3/8"-16 Hex Nut onto the 4.25" Hex Bolt from Step 17. Thread it upwards a couple of inches. Next slip on (1) Lock Washer, (1) Flat Washer, and (1) cardboard square to hold the hardware in place. Repeat on the passenger side.

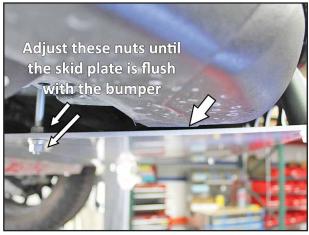


Raise the front of the skid plate upwards against the chassis and fasten (1) 3/8" Flat Washer and (1) Nyloc Nut onto each bolt. Do not tighten.

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Locate the front holes and align with the bottom mount holes on the Light Bar. Fasten (1) 3/8"-16 x1" Hex Bolt, Lock Washer, and Flat Washer into each hole. Tighten down bolt.



Tighten the nuts beneath the mid-section of the skid plate while watching the clearance of the skid plate to the front bumper. Stop when the skid plate rests flush against the bumper.

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Tighten all hardware from previous steps.



Reinstall air diverter panel in the engine bay.

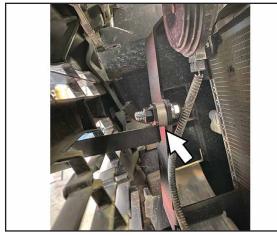
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## Addendum RAV4 TRD Off-Road Model



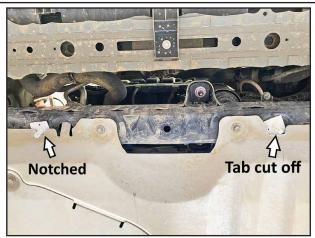


3/8" Spacer between Grille Bracket and Upper Mounting Bracket.



Grille Bracket through the grille (location: 3rd column from the right, upper hole).

The TRD front skid plate will have to be removed, but the mid-skid plate can be retained with the following modifications: notch the edge by the left tab and remove the right tab to clear the 3/8" Bolt Plates to be installed in steps 14-15.



After skid plate modifications and reinstalled on vehicle. Note the clearance to the 3/8" Bolt Plates.

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