

MS303-47004 GR performance damper



Mounting/handling instructions

Thank you for purchasing the GR Performance Damper. This manual describes the points and cautions regarding the installation and handling of this product. Be sure to read it before installation, and carry out correct installation and handling. Be sure to give this manual to the customer.

"PERFORMANCE DAMPER" is a registered trademark of Yamaha Motor Co., Ltd.

- This product cannot be installed on unregistered vehicles, please install after vehicle registration.
- Installation work of this product
- Be sure to perform parts replacement at a specialized repair shop.
- Installation of this product
- When replacing parts, be sure to follow the repair manual for the vehicle (issued by Toyota Motor Corporation) and observe the precautions in this manual.

Product number and compatible models

Product number	Vehicle	remarks
MS303-47004	type Prius '22.12~	

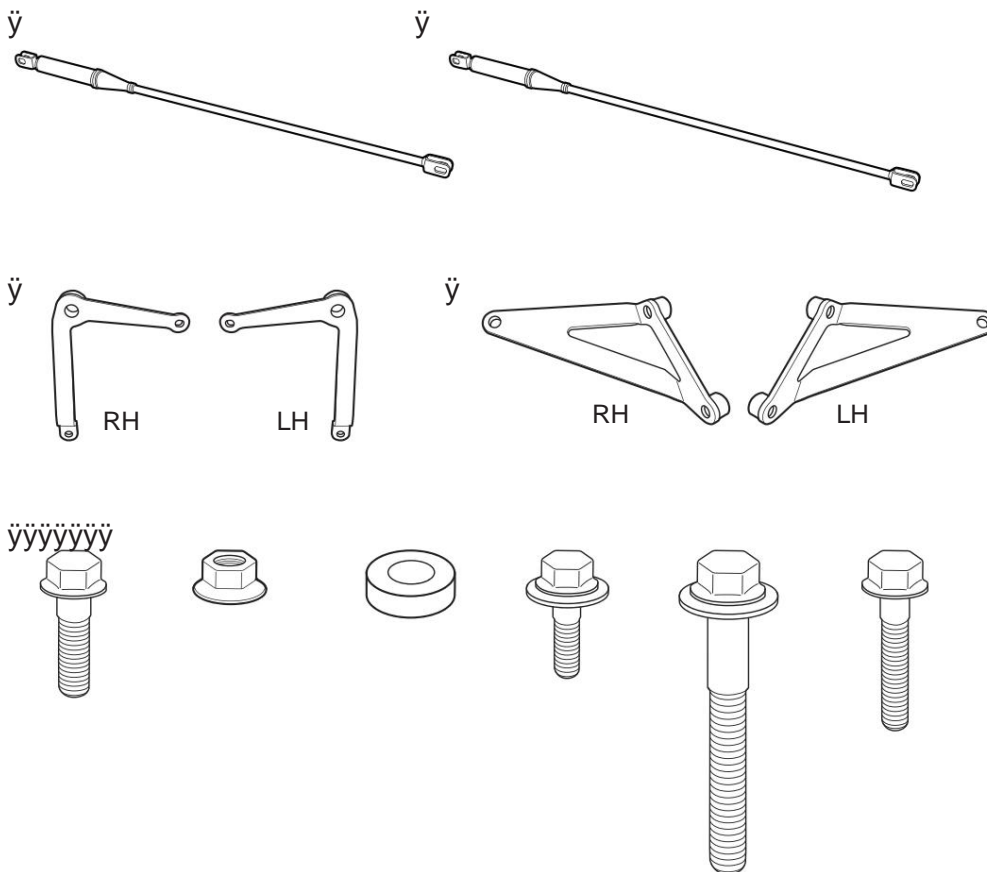
- Please refer to the TRD catalog site for the latest compatibility information. <https://www.trdparts.jp/>

Component

No.		quantity	remarks
	Product name Performance damper FR	1	L=687mm
Performance Damper		1	L=720mm
RR Bracket FR (RH/LH)		1 each	
Bracket RR (RH/LH)		1 each	
Flange bolt A		4	M10×40
Flange nut		M10	4
Spacer		t6.0	4
Washer bolt A		M8×25	2
Washer bolt B		M14×119	2
Flange bolt B		4	M8×45
Installation • Instruction manual		1	This document

*Confirmation - Upon arrival of this product, immediately check that there is no damage to the main unit and that all accessories are included.

Component diagram



Precautions for installation (For installers)

Be sure to read it before starting work, and perform safe and reliable installation work.



caveat

It describes the contents that may cause life hazard or serious injury, etc. if you do not follow this content and install or handle it incorrectly.



Note

This indicates that improper installation or handling without following the precautions may lead to an accident, injury, or damage to the vehicle.



advice

This section contains information that you should know in order to work speedily.

What not to do

Must do



- WARNING** Do not modify or modify this product, or install it on non-compatible models, as doing so may result in serious accidents. Never disassemble or process this product. It may cause damage or an accident.
- Before installation, be sure to turn off the engine on a flat surface and check that the parking brake is engaged. The vehicle may move unexpectedly and cause a serious accident such as a body being caught. When installing or replacing this product, follow the repair manual for the vehicle (issued by Toyota Motor Corporation) and observe the precautions in this manual. Tighten securely according to the specified torque when installing. Insufficient tightening may cause a serious accident or malfunction due to falling off. When remodeling to lower the vehicle height, ensure a minimum ground clearance of 90 mm (3.54 in.) (depending on the wheelbase and overhang value of the vehicle) When driving on public roads with a vehicle equipped with a vehicle height adjustment type suspension kit, please be careful of interference with the road surface.



Please

- be sure to replace or install this product at a well-equipped specialized repair shop. When replacing, be sure to follow the repair manual for the vehicle (issued by Toyota Motor Corporation) and observe the precautions in this manual. Before installing this product,
- check that the main unit and components are complete and that there are no damages or defects. We may not be able to respond to claims for damage or defects discovered after installation. When installing this product, handle it on a protective sheet to prevent it from being scratched, and at the same time cover the installation area with a protective material before starting work. Be careful not to scratch or damage the product during installation. Make sure the engine is cold before installing. If the engine compartment and muffler are hot, you may get burned. After installation, check for interference between this product and other parts. If there is any interference, please contact the
- store where you purchased this product. Continuing to drive as is may cause damage or malfunction. If you receive a strong impact such as a collision after installing this product, please stop using it immediately. Doing so may
- cause deformation, damage, or malfunction of the mounting part or the main unit. Please be sure to have it inspected at the repair shop. After installing this product, if you feel any abnormal vibration or noise while driving, immediately stop in a safe place.
- Continuing to drive under these conditions may cause a serious accident or damage. Please have it checked at a repair shop.

After installation

- After installation, please confirm that there is no interference between this product and the vehicle. If you disconnect the negative terminal of the battery during work, set up and check the system after work is complete.
- It may be necessary to reconfigure or adjust the parts that have been disassembled or removed during this installation. Please check, adjust and set each part according to the repair manual (issued by Toyota Motor Corporation) of the applicable vehicle. If a problem occurs, please contact the store where you purchased the product as soon as possible.

3. Table of Contents

3. Table of Contents, Tools, Protective Equipment, Consumables Required for Installation, Warranty, Installation Diagram

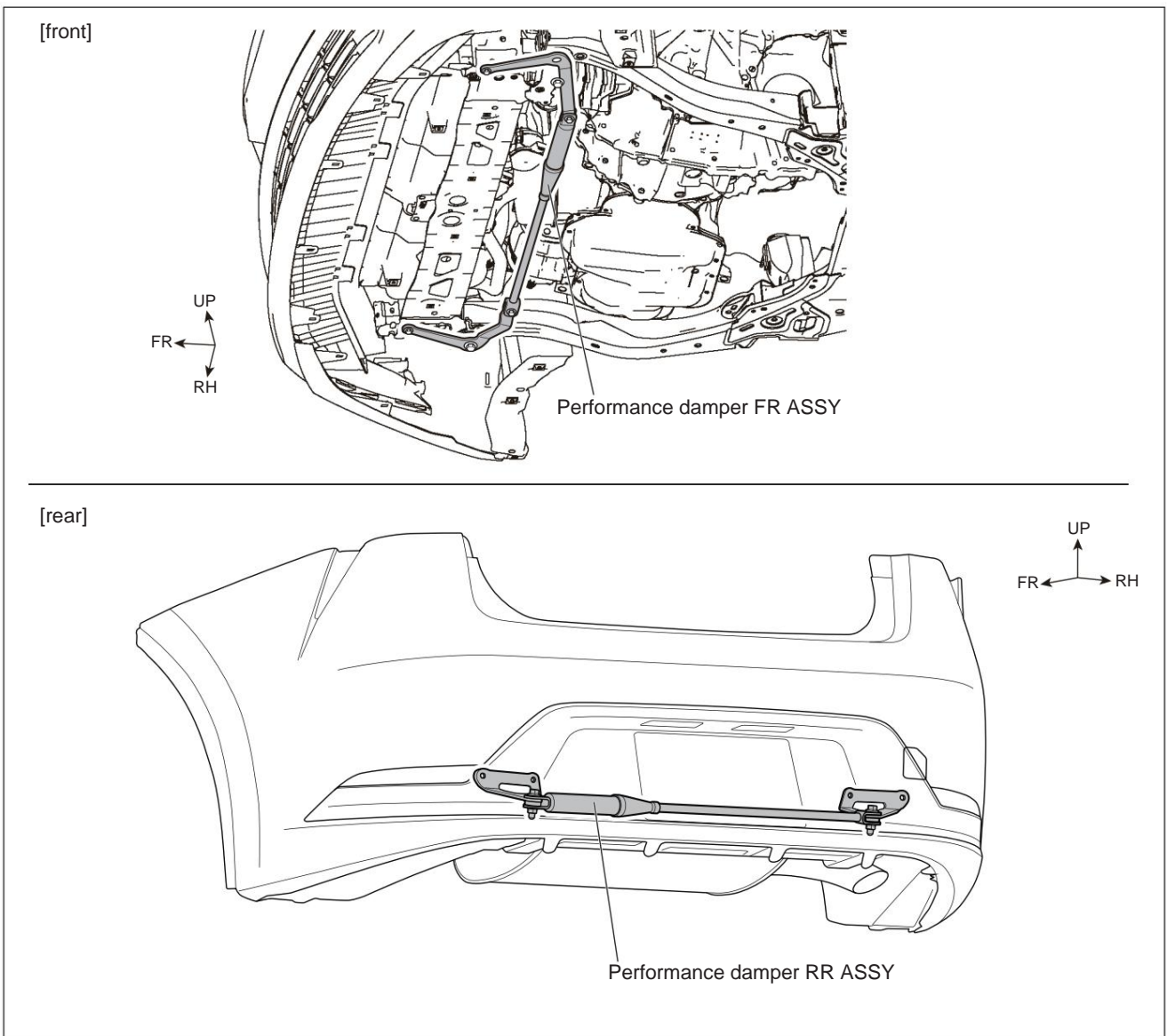
4. Installation Preparation, Installation Instructions, Tightening Torque List Table

5. Inspection and precautions after completion of installation

Tools required for installation, protective equipment, consumables, general tools, torque wrench, protective glasses, work gloves, protective sheet

Warranty This product is guaranteed for 1 year and 20,000km. (Until 1 year or 20,000 km running, whichever comes first) * For details of the warranty, please refer to the TRD parts catalog site <<https://www.trdparts.jp/>> "Warranty".

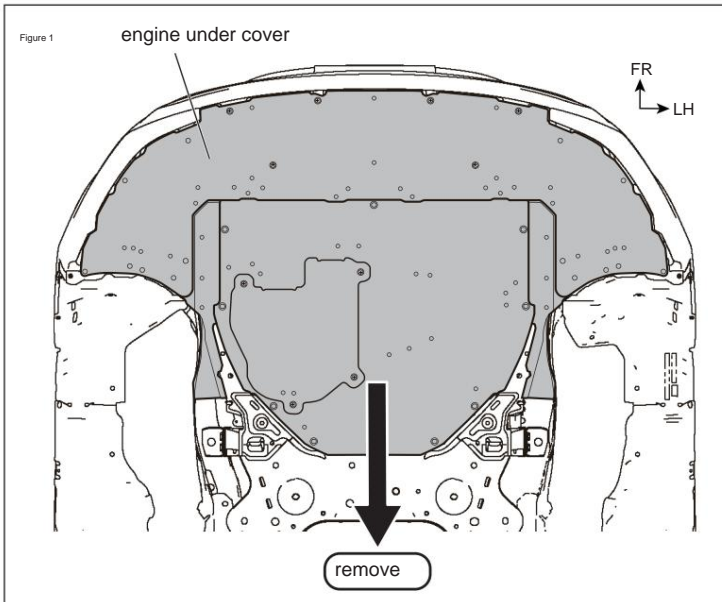
Installation diagram




Installation procedure

When installing the performance damper, be sure to place a screw jack in place on the underside of the vehicle.

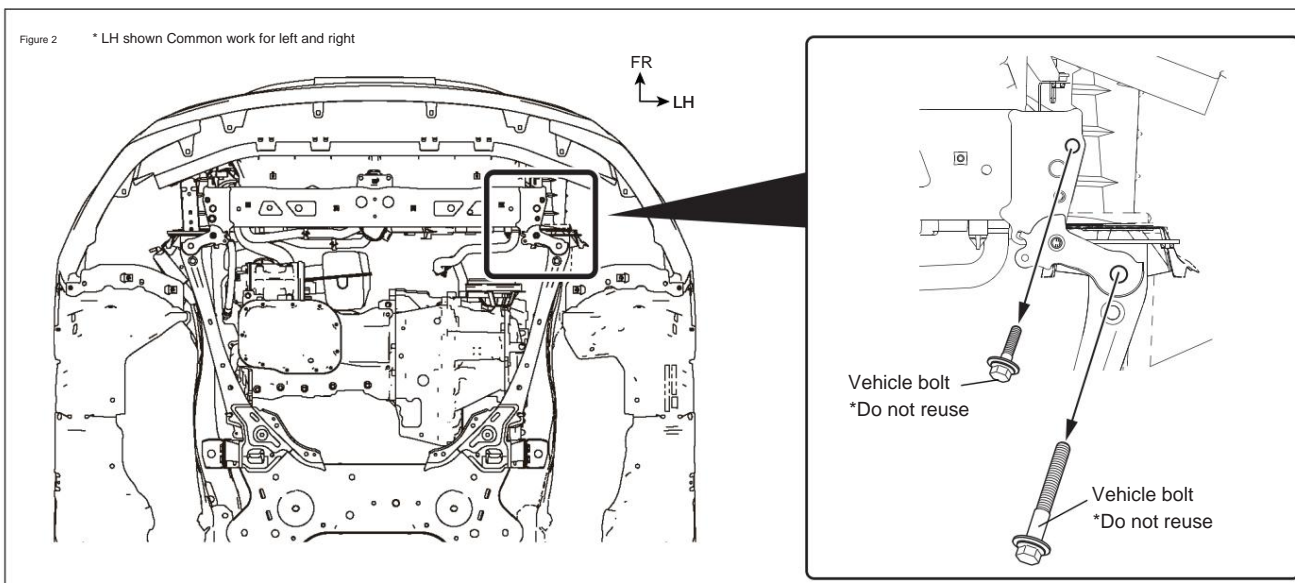
Front performance damper installation preparation



1. Remove the engine under cover from the vehicle according to the repair manual for the vehicle as shown in Figure 1.

 Advice: Take care not to damage or lose the removed vehicle bolts and engine under cover, as they will be reused.

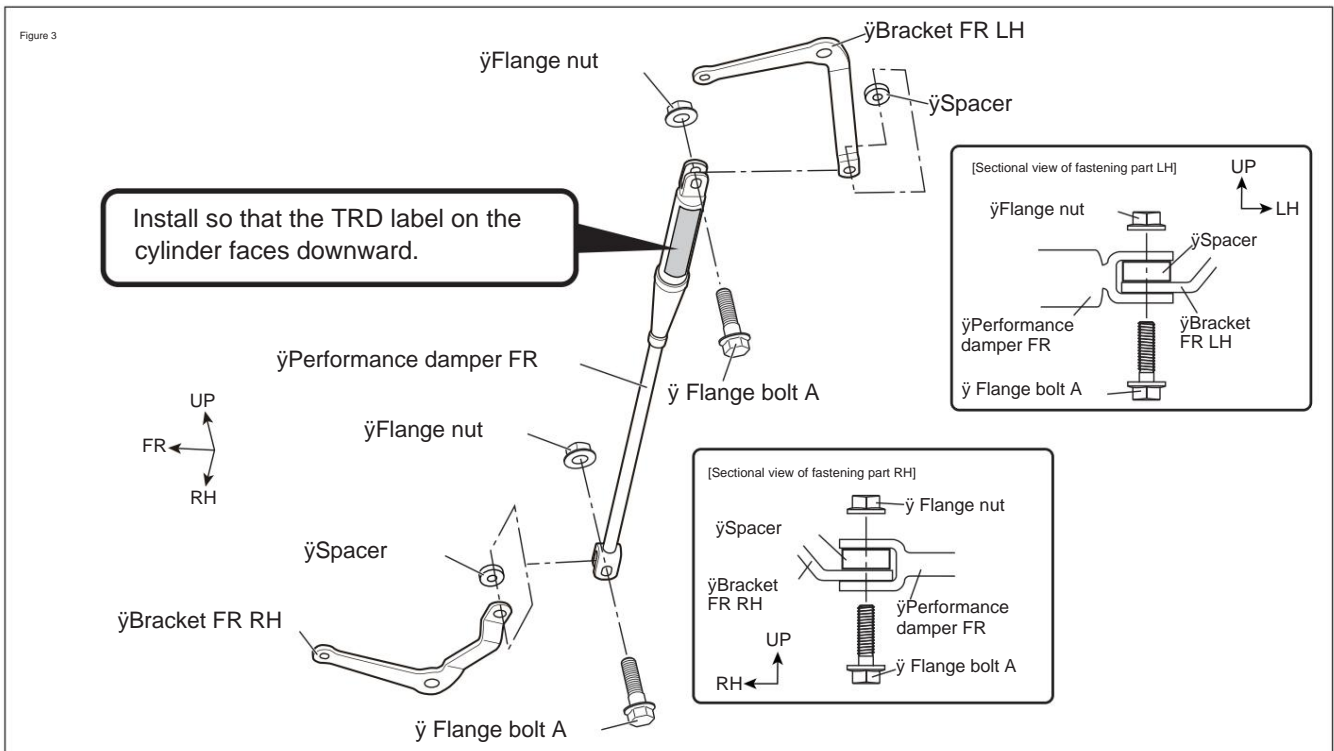
2. As shown in Figure 2, remove the vehicle bolts shown on the bottom of the vehicle. (2 places each on the left and right)



 Note: Removed vehicle bolts will not be reused.

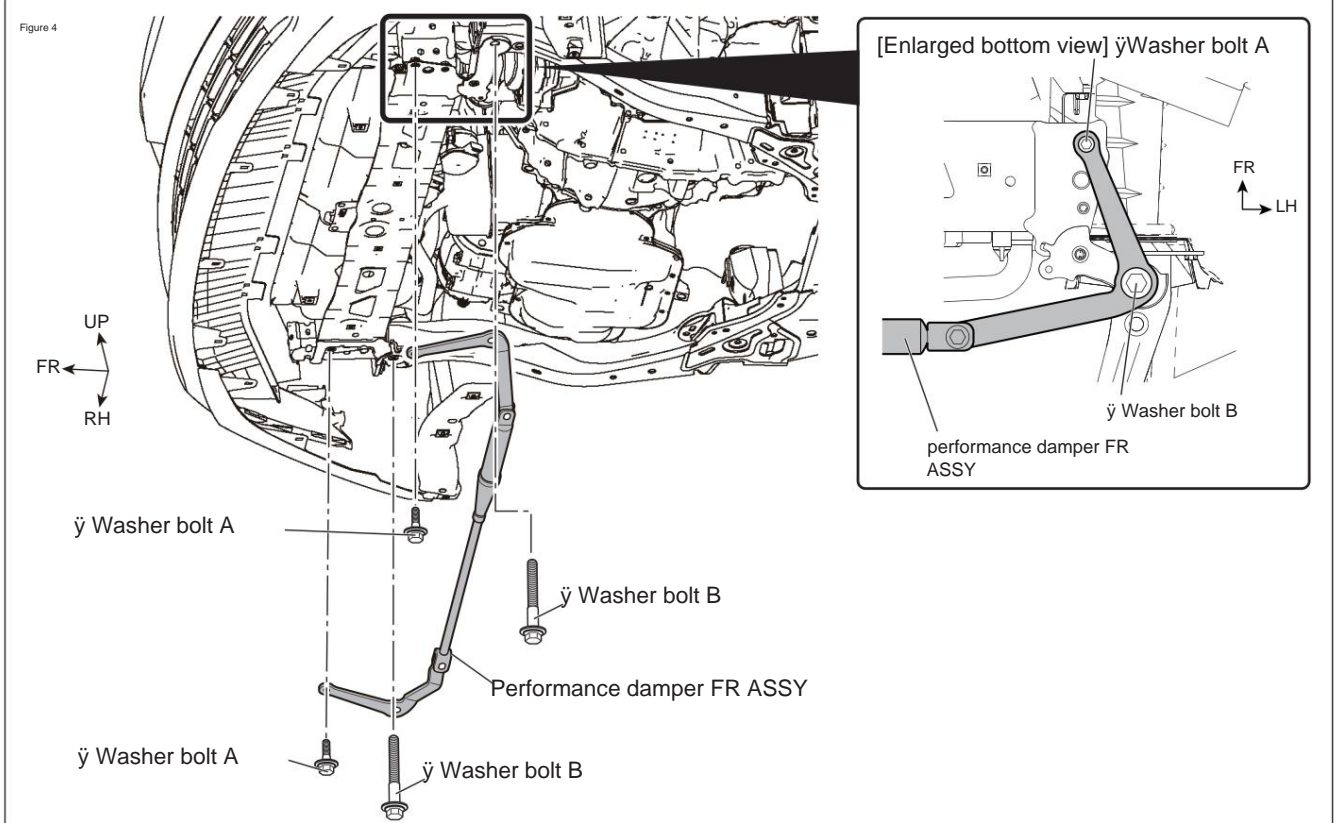
Front performance damper installation instructions

- As shown in Fig. 3, align the performance damper FR and spacer with the holes in the bracket FR, and temporarily fix them with the flange bolt A and flange nut.



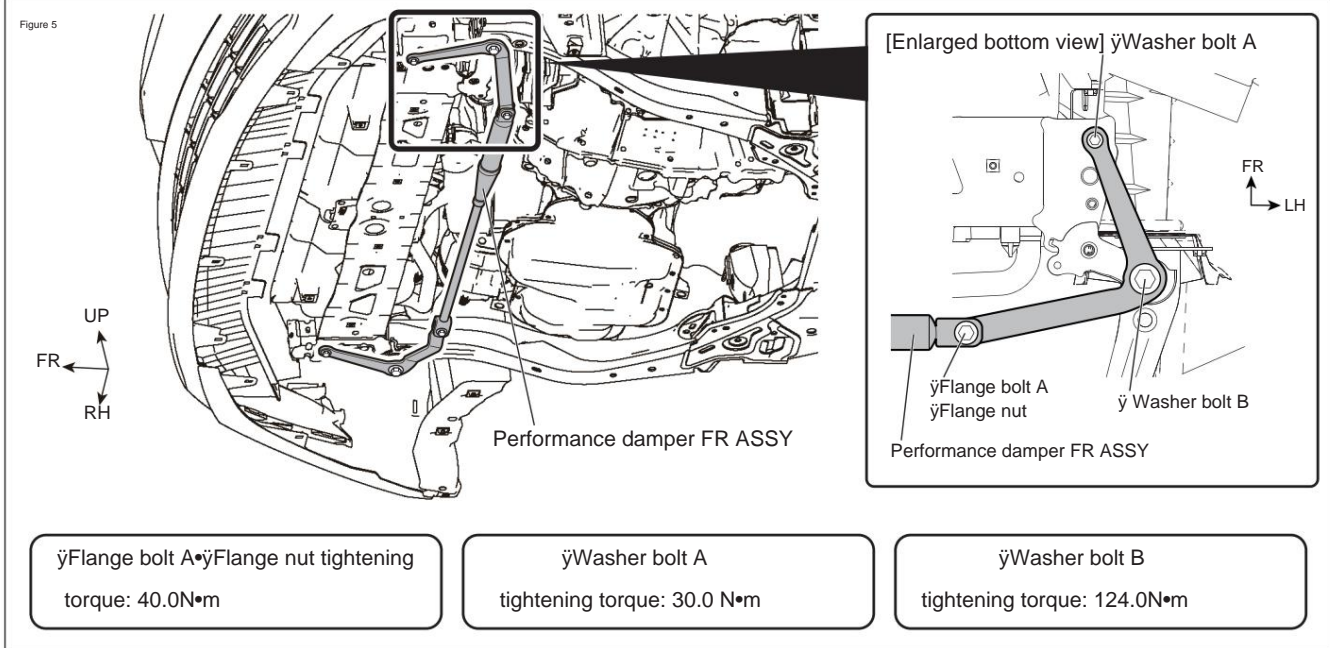
CAUTION: Do not use an impact wrench.

- As shown in Fig. 4, temporarily fix the temporarily assembled performance damper FR ASSY to the underside of the vehicle with washer bolt A and washer bolt B. (2 places each on the left and right)



CAUTION: Do not use an impact wrench.

3. As shown in Fig. 5, check the mounting position and looseness, etc., and fully tighten \dot{y} flange bolt A, \dot{y} flange nut, \dot{y} washer bolt A, and \dot{y} washer bolt B to the specified torque. *Move the vehicle to a work pit or run-on plate lift, and fully tighten the temporarily tightened bolts and nuts to the specified torque with the weight of the vehicle applied to the suspension (1G state).

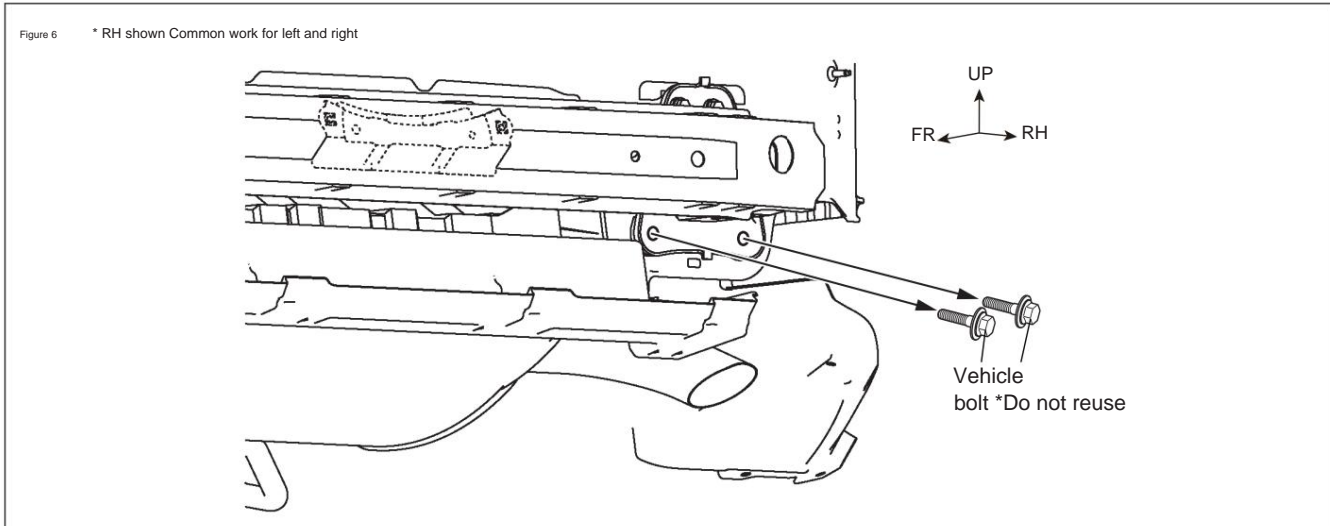


\dot{y} Preparation for rear performance damper installation

1. Remove the rear bumper from the vehicle according to the vehicle's repair manual.

Advice: The removed rear bumper, vehicle bolts, and vehicle clips will be reused, so store them carefully so as not to damage or lose them.

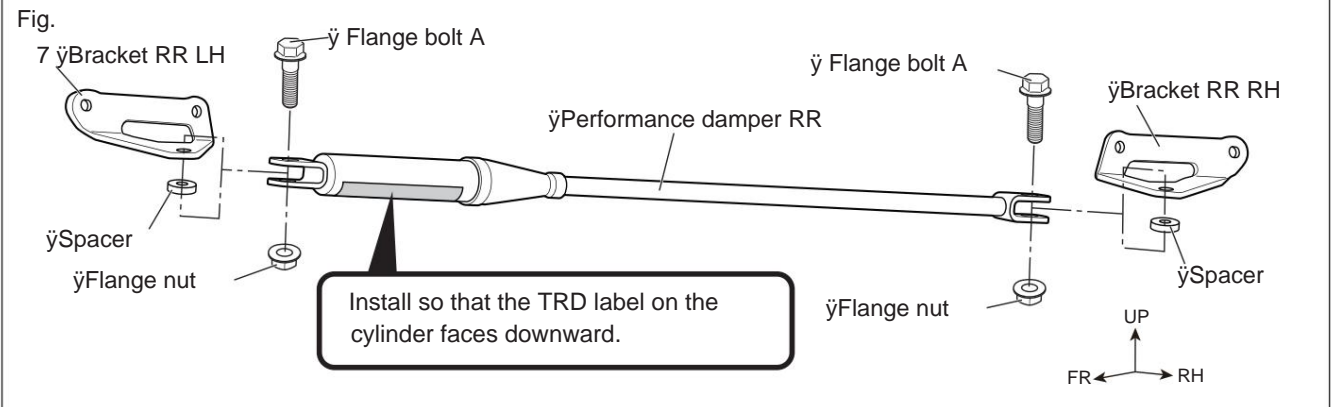
2. As shown in Figure 6, remove the bolts on the bottom of the base of the crash box on the underside of the vehicle. (2 places each on the left and right)



Note: Removed vehicle bolts will not be reused.

Rear Performance Damper Installation Instructions

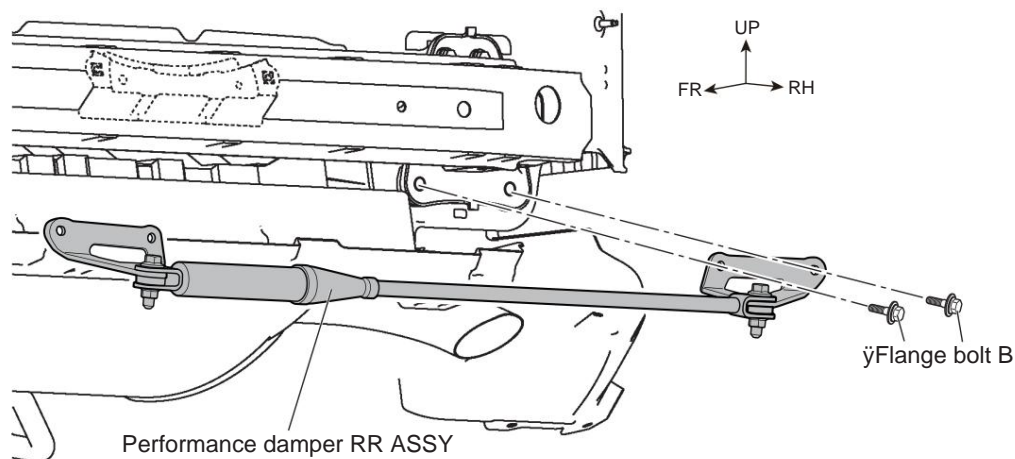
- As shown in Fig. 7, align (2) performance damper RR and (7) spacer with the holes in (4) bracket RR, and temporarily fix them with (5) flange bolt A and (6) flange nut.



CAUTION: Do not use an impact wrench.

- Temporarily fix the temporarily assembled performance damper RR ASSY as shown in Fig. 8 to the lower side of the vehicle crash box base with flange bolt B. (2 places each on the left and right)

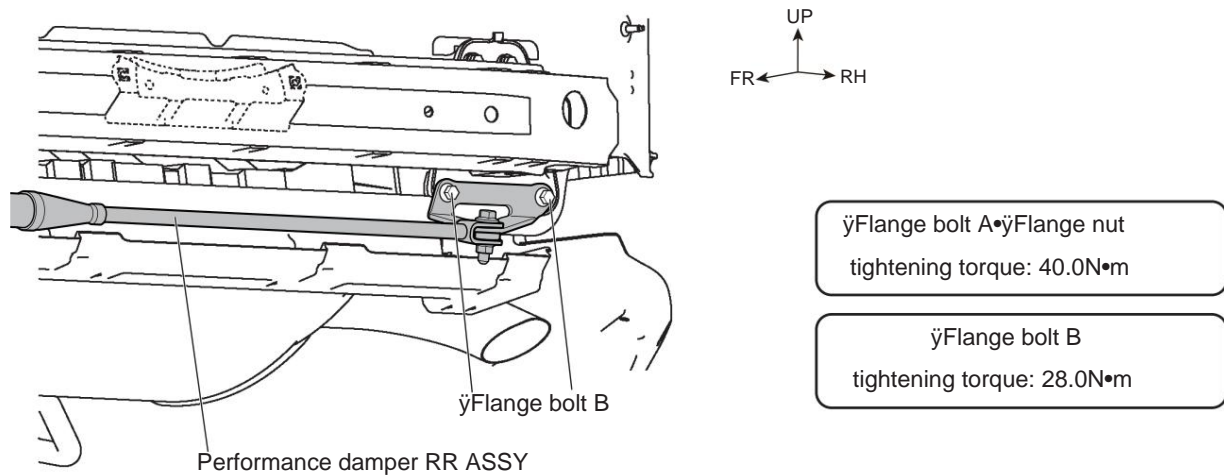
Figure 8 * RH shown Common work for left and right



CAUTION: Do not use an impact wrench.

3. As shown in Fig. 9, check the installation position and looseness, etc., and fully tighten \checkmark flange bolt A, \checkmark flange nut, and \checkmark flange bolt B to the specified torque. *Move the vehicle to a work pit or run-on plate lift, and fully tighten the temporarily tightened bolts and nuts to the specified torque with the weight of the vehicle applied to the suspension (1G state).

Figure 9 * RH shown Common work for left and right



4. Restore the engine undercover and rear bumper to the vehicle according to the repair manual for the vehicle.

\checkmark List of tightening torques

Mounting	Component	size	tightening torque	
location \checkmark Performance damper FR, \checkmark Bracket FR FR \checkmark Performance damper RR, \checkmark Bracket RR	No. \checkmark Flange bolt A	M10x40	40.0 N•m	\checkmark
	\checkmark Flange nut	M10		
Vehicle, performance damper FR ASSY	\checkmark Washer bolt A	M8x25	30.0 N•m	\checkmark
	\checkmark Washer bolt B \checkmark Flange	M14x119	124.0 N•m \checkmark	
Vehicle, performance damper RR ASSY	bolt B	M8x45 28.0N•m		\checkmark

\checkmark Inspection after installation • Precautions

1. After installation, drive for several kilometers and check that there is no interference with each part and that there is no abnormal noise. 2. It may be necessary to reconfigure or adjust the parts that have been disassembled or removed during this installation. Please check, adjust, and set each part according to the repair manual for the applicable vehicle (issued by Toyota Motor Corporation). 3. After installation, periodically (during regular inspections, etc.) check that there is no looseness in the mounting part.

Toyota Customizing & Development Co., Ltd. TRD product inquiry desk

TEL: 050-3161-2121 <https://>

www.trdparts.jp/