

Part Number: PTR11-18130

Kit Contents:

Item #	Quantity Req'd.	Description
1	1	Front Sway Bar, 21mm
2	1	Rear Sway Bar, 16mm
4	2	Hardware Bag (1 Front & 1 Rear)
5	1	Instructions

Hardware Bag Contents

Item #	Quantity Req'd.	Description
1	2	Front Bushings
2	1	Lube
3	2	M10x50 Flange Bolt (SU003-02816)
4	6	M10x26.5 Flange Bolt (SU003-02801)
5	2	*M12 Flange Nut (SU003-04506 or SU003-02887)
6	2	Rear Bushings
7	1	Lube
8	2	Reinforcement Bracket, Rear
9	2	M10x20 Flange Bolt
10	2	M10 Flange Nut
11	2	M10 Flange Nut (SU003-02883)

*Kit may contain either flange nut part number

Additional Items Required For Installation

Item #	Quantity Req'd.	Description
1		

Conflicts

None

Recommended Tools

Personal & Vehicle Protection	Notes
Eye Protection	
Ear Plugs	
Special Tools	Notes
Installation Tools	Notes
Sockets	10mm, 12mm, 14mm, 15mm, 17mm
Impact Gun	3/8" (Disassembly only)
Open Wrench	17mm
Ratchet	3/8" & 1/2"
Torque Wrench	3/8" & 1/2"
Nylon Pry Tool	
Pliers	
Hex Wrench	5 mm & 6mm

General Applicability

All models 2013~

Recommended Sequence of Application

Item #	Accessory
1	Springs
2	Sway Bars

Vehicle Service Parts (may be required for reassembly)

Item #	Part Number	Description
1		

Legend

 **STOP:** Damage to the vehicle may occur. Do not proceed until process has been complied with.

 **OPERATOR SAFETY:** Use caution to avoid risk of injury.

 **CAUTION:** A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.

 **TOOLS & EQUIPMENT:** Used in Figures calls out the specific tools and equipment recommended for this process.

 **REVISION MARK:** This mark highlights a change in installation with respect to previous issue.

 **SAFETY TORQUE:** This mark indicates that torque is related to safety.

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

1. Pre-installation Preparation



(a) Use Seat & Floor Protectors to avoid damage to surfaces.



(b) Put transmission in "P" (Automatic) or reverse (Manual).



(c) Lift the vehicle using a drive-on lift if available. If using a two-post lift or jack, use the lift points recommended in the owner's manual.

2. Remove Front OE Sway Bar

(a) Remove the four engine under covers.

(1) Using a 10mm and a 12mm socket, remove the bolts on the engine under covers and retain for reinstallation (Fig. 2-1).



HINT: Remove the leading edge fasteners first. Tabs help hold the leading edges of these pieces in place.



(2) Using a nylon pry tool, remove the clips and retain for reinstallation (Fig. 2-1).

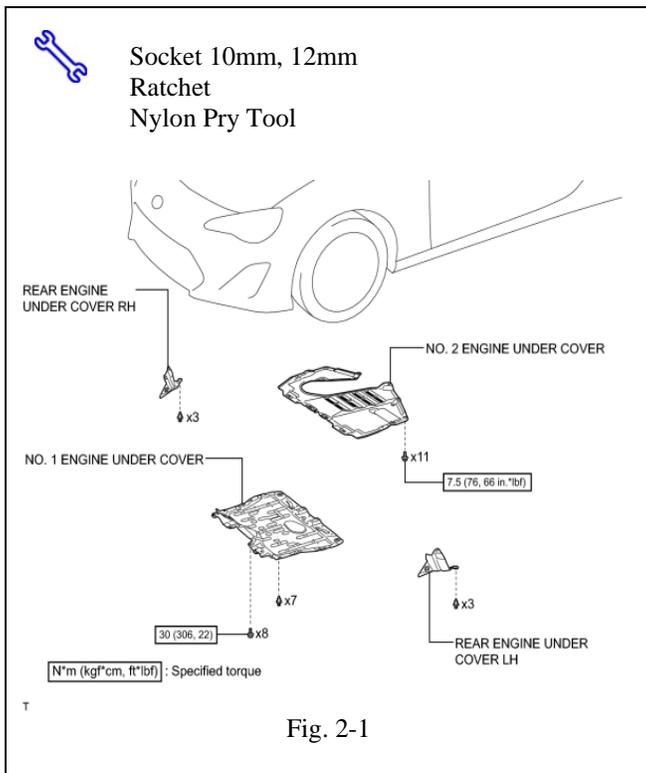


Fig. 2-1

 Wrench 17mm
Hex Wrench 6mm

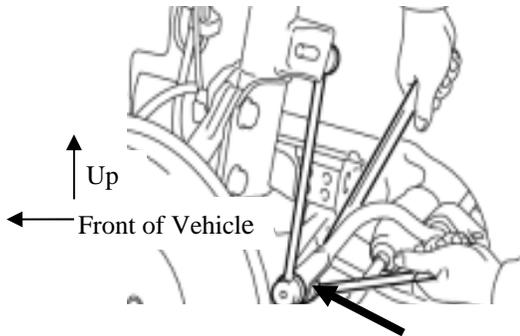


Fig. 2-2

(b) Using a 17mm wrench and 6mm hex wrench, remove the lower nut (black arrow) on the sway bar end links on the RH and the LH side of vehicle and discard (Fig. 2-2).



HINT: Leave both end links attached until you are ready to remove the assembly from the vehicle.

 Socket 12mm
Ratchet



Fig. 2-3

(c) Remove the lower member sub-assemblies with sway bar.

(1) Using a 12mm socket, remove the nut from the sub-assembly bushing brackets (Right & Left) and retain for reinstallation (Fig. 2-3).

 Socket 14mm
Ratchet

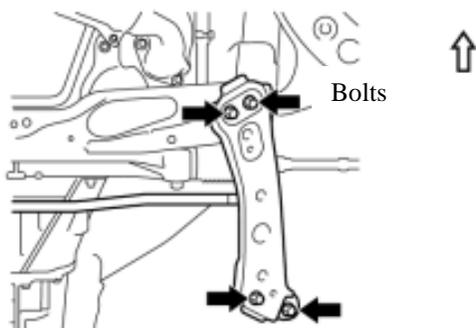


Fig. 2-4

(2) Using a 14mm socket, remove the four bolts from the member sub-assemblies (Right & Left) and discard (Fig. 2-4).

(3) Free the sway bar from the end links.

(4) Remove the right and left member sub-assemblies and bar together.

 Socket 14mm
Ratchet

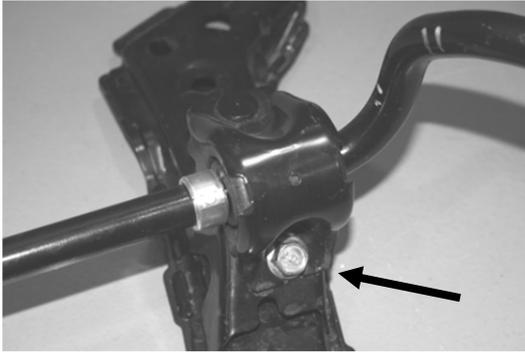


Fig. 2-5

(d) Use a 14mm socket to remove the bolts holding the bushing brackets to the lower member sub-assembly and retain for reinstallation (Fig. 2-5).

(e) Remove the front sway bar.

(1) Observe the orientation of the front sway bar prior to removing.

(2) Remove and discard the front sway bar.



3. Install TRD Front Sway Bar

(a) Grease the bore of the front bushings as shown in Fig. 3-1. The bushing bore **must be completely coated with the lube supplied.**



Fig. 3-1

(b) Install the front sway bar bushings.

(1) Install the front sway bar bushing so that the slit on the bushing is toward the front of the vehicle.

(2) Make sure the bushings sit against the stop rings (Fig. 3-2).

(3) Install the OE brackets and torque the OE LH and RH bolts to 75 N•m.

Torque: 75 N•m (55 ft•lbs)

 Socket 14mm
Torque wrench



Fig. 3-2



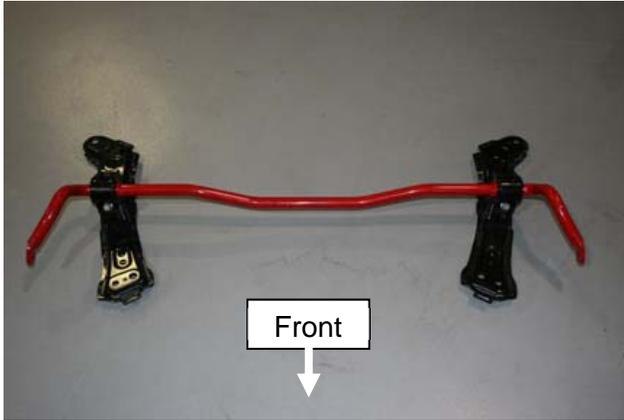


Fig. 3-3



NOTE: Check the proper orientation of the front TRD sway bar on the sub-frame assembly (Fig. 3-3). Confirm the bar has the same orientation as the OE sway bar.

Socket 14mm
Torque Wrench

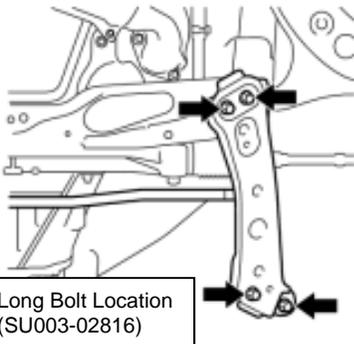
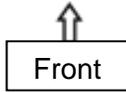


Fig. 3-4



(c) Using a 14mm socket, reinstall the front lower member sub-assembly with the 4 supplied OE bolts, LH and RH side, (Fig. 3-4). Torque the bolts to 60 N•m.

Torque: 60 N•m (44 ft•lbs)

HINT: Insert the end link studs into end of the sway bar to hold the assembly in place.

Socket 12mm
Torque Wrench



Fig. 3-5



(d) Using a 12mm socket, install and torque the nut on the bushing bracket, LH and RH side (Fig. 3-5). Torque the nuts to 25 N•m.

Torque: 25 N•m (18 ft•lbs)

-  Wrench 17mm
- Socket 17mm,
- Hex Wrench 6mm
- Torque Wrench

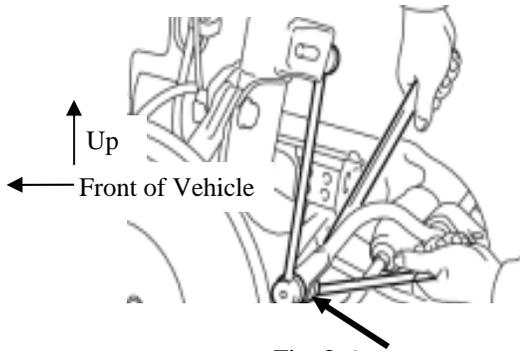


Fig. 3-6

- (e) Using a 17mm wrench and 6mm hex wrench, install the supplied OE lower nut (black arrow) on the sway bar end link, LH and RH side (Fig 3-6). Torque the nuts to 46 N•m.

Torque: 46 N•m (34 ft•lbs)



-  Socket 10mm, 12mm
- Torque Wrench

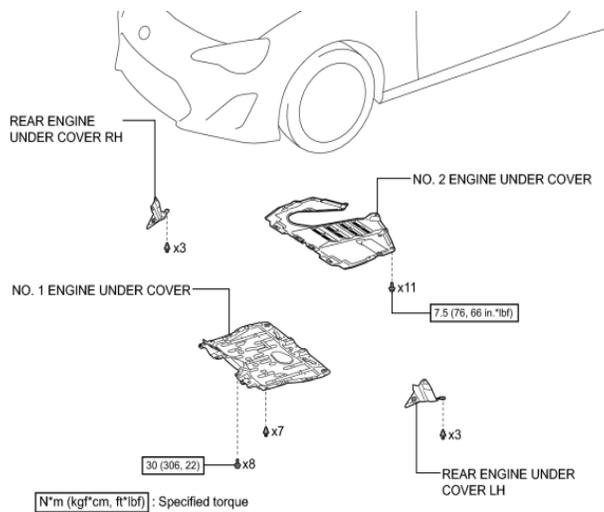


Fig. 3-7

- (f) Install the four under engine covers (Fig. 3-7). Using a 10mm socket, torque the bolts to 7.5 N•m. Using a 12mm socket, torque the bolts to 30 N•m. Install plastic pop-in fasteners.

10mm socket - Torque: 7.5 N•m (66 in•lbs)

12mm socket - Torque: 30 N•m (22 ft•lbs)



-  Wrench 14mm
- Hex Wrench 5mm

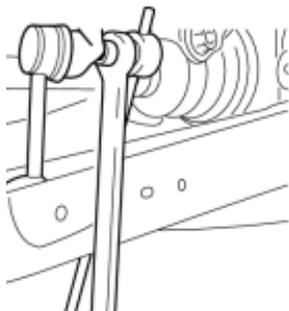


Fig. 4-1

4. Remove OE Rear Sway Bar

- (a) Remove the nut from the LH and RH end links and discard the nuts (Fig. 4-1).



HINT: If the stud turns with the nut, hold the stud with a 5mm hex wrench and remove the nut with a wrench.

 Socket 12mm
Ratchet

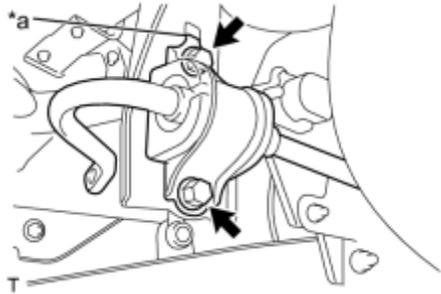


Fig. 4-2



(b) Using a 12mm socket, remove the bolts holding the bushing bracket to the chassis from the LH and the RH sides and retain for reinstallation (Fig. 4-2).

(1) Observe the orientation of the rear sway bar prior to removing.

(2) Remove and discard the rear sway bar and bushings.

(3) Retain the bushing brackets for reinstallation.

5. Install TRD Rear Sway Bar

(a) Install the rear reinforcement bracket.



(1) Place the bracket so that it fits flush with the mounting surface and all holes line up (Fig. 5-1).

HINT: Install a bushing bracket bolt to hold the bracket in place (White Arrow).

(2) Install the M10 nut and bolt supplied thru the top hole. Hand-tighten at this time.



NOTE: Hold the M10 nut on reinforcement bracket and insert M10 bolt from behind.



Hint: Install bushing bracket bolt

Fig. 5-1



Fig. 5-2a

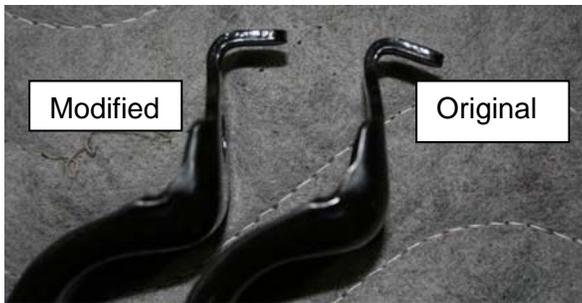


Fig. 5-2b

(b) Modify the bushing bracket tab.

- (1) With a pair of pliers, gently bend the tab of the bushing bracket (Fig 5-2a) so that it is 90 degrees as shown in Fig 5-2b.



Fig. 5-3a

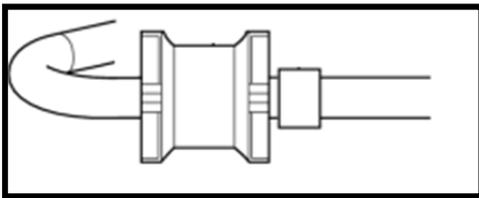


Fig. 5-3b



Socket 12mm
Torque wrench

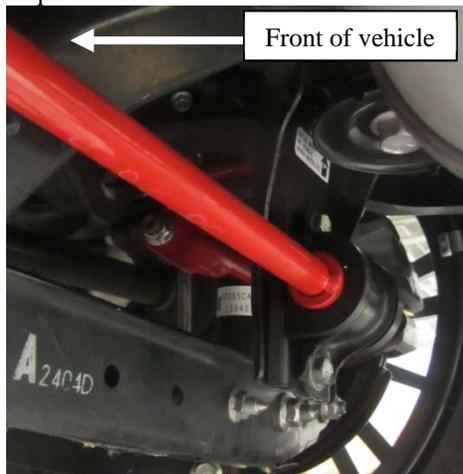


Fig. 5-4



Socket 14mm
Hex 5mm
Torque wrench

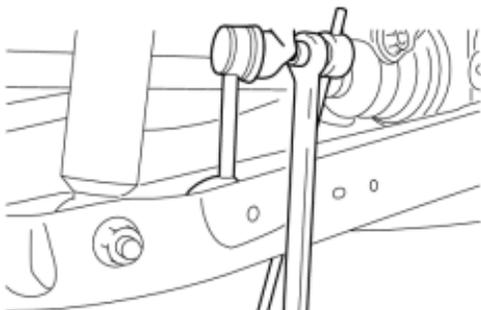


Fig. 5-5

(c) Grease the bore of the rear bushing as shown in Fig. 5-3a. The bushing bore **must be completely coated with the lube supplied**.

(d) Place the bushings on the bar so that they sit against the outside of the stop rings (Fig. 5-3b).



|| **NOTE:** Install bushing with slit facing up.

(e) Temporarily install the sway bar to the end link assemblies on the LH and the RH side.



(f) Push the brackets onto the bushings and orient the brackets and bushings so that the flat mounting surface is facing towards the front of vehicle (Fig. 5-4).



(g) Use a 12mm socket and re-install the 4 OE bolts that mount the bushing brackets and torque to 30 N•m.



Torque: 30 N•m (22 ft•lbs)

(h) Using a 14mm wrench and 5mm hex wrench, install the supplied OE nut on the sway bar end link, LH and RH side (Fig. 5-5). Torque the nuts to 38 N•m .



Torque: 38 N•m (28 ft•lbs)



Socket 15mm
Torque Wrench



Fig. 5-6

- (i) Use a 15mm socket on the top bolt on the reinforcement bracket and torque to 60 N•m (Fig. 5-6).



Torque: 60 N•m (44 ft•lbs)



CAUTION: It is imperative that the top bolts (LH & RH) are torqued as specified to reinforce the OEM structure.



- (j) Verify the orientation of the bar (Fig. 5-7).

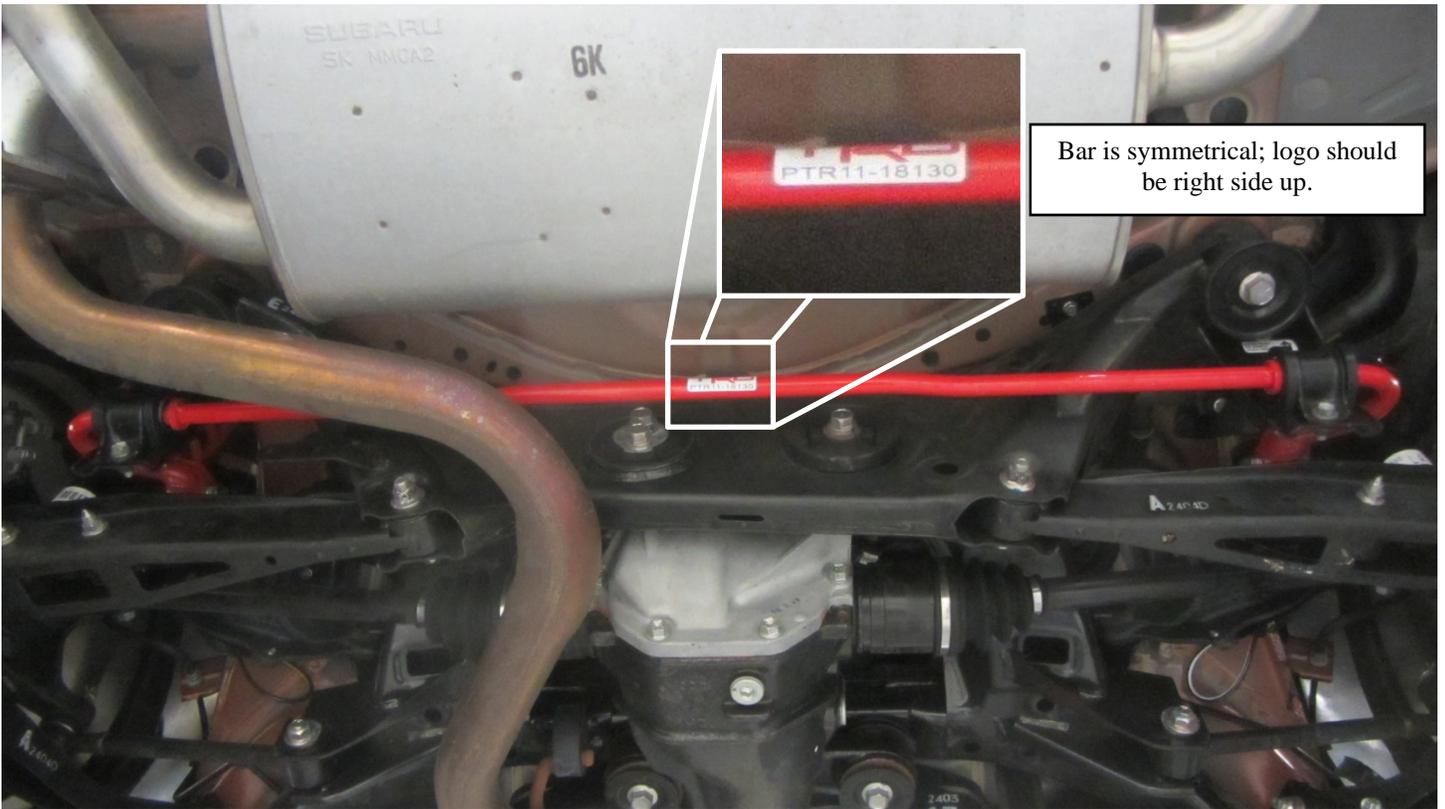


Fig. 5-7

Checklist - these points **MUST** be checked to ensure a quality installation

CHECK FOR:

Accessory Function Checks

Inspect bolt torques.

Inspect front stabilizer link assemblies.

Inspect rear link assemblies.

LOOK FOR:

Bolt torques should be as follows:

Front Sway Bar

Bushing Bracket Bolt **75 N•m (55 ft•lbs)**

Member Sub-Assembly Bolts **60 N•m (44 ft•lbs)**

Bushing Bracket Nut **25 N•m (18 ft•lbs)**

Front Stabilizer Link Assemblies **46 N•m (34 ft•lbs)**

Rear Sway Bar

Rear Sway Bar Brackets **30 N•m (22 ft•lbs)**

Rear Sway Bar Link Assemblies **38 N•m (28 ft•lbs)**

Rear Reinforcement Bracket Bolt **60 N•m (44 ft•lbs)**

Confirm boots at base of studs are not torn.

Confirm boots at base of studs are not torn.

Vehicle Function Checks

Vehicle Appearance Check

After accessory installation and removal of protective cover(s), perform a visual inspection.

Ensure no damage (including scuffs and scratches) was caused during the installation process.
(For PPO installations, refer to TMS Accessory Quality Shipping Standard.)