

Part Number: PTR04-52061

Kit Contents:

| Item # | Quantity Req'd. | Description |
|--------|-----------------|-------------------------|
| 1 | 2 | Front Struts |
| 2 | 2 | Rear Shocks |
| 3 | 4 | Nuts / M12x1.25 (Front) |
| 4 | 4 | Nuts / M10x1.25 (Rear) |
| 5 | 1 | Instruction Form |
| | | |

Hardware Bag Contents

| Item # | Quantity Req'd. | Description |
|--------|-----------------|-------------|
| 1 | | |
| 2 | | |
| 3 | | |
| | | |

Additional Items Required For Installation

| Item # | Quantity Req'd. | Description |
|--------|-----------------|-------------|
| 1 | | |
| 2 | | |
| 3 | | |
| | | |

Conflicts

| |
|------|
| None |
|------|

Recommended Tools

| | |
|--|--------------|
| Personal & Vehicle Protection | Notes |
| Jack Stand | |
| Fender Cover | |
| | |
| Special Tools | Notes |
| Spring Compressor | |
| Vehicle Lift or Floor Jack | |
| | |
| Installation Tools | Notes |
| 17 mm deep offset box end wrench | |
| 6 mm allen wrench | |
| | |
| Special Chemicals | Notes |
| | |
| | |

General Applicability

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|--|
| Yaris (Liftback, Sedan, & S Sedan) Scion xD |
|--|






Recommended Sequence of Application

| Item # | Accessory |
|--------|--|
| 1 | TRD Strut brace can be installed easily when front strut assemblies are removed. |
| 2 | TRD Springs |
| 3 | TRD Rear Sway Bar |

Vehicle Service Parts (may be required for reassembly)

| Item # | Quantity Req'd. | Description |
|--------|-----------------|-------------|
| 1 | | |
| 2 | | |
| 3 | | |
| | | |

Legend

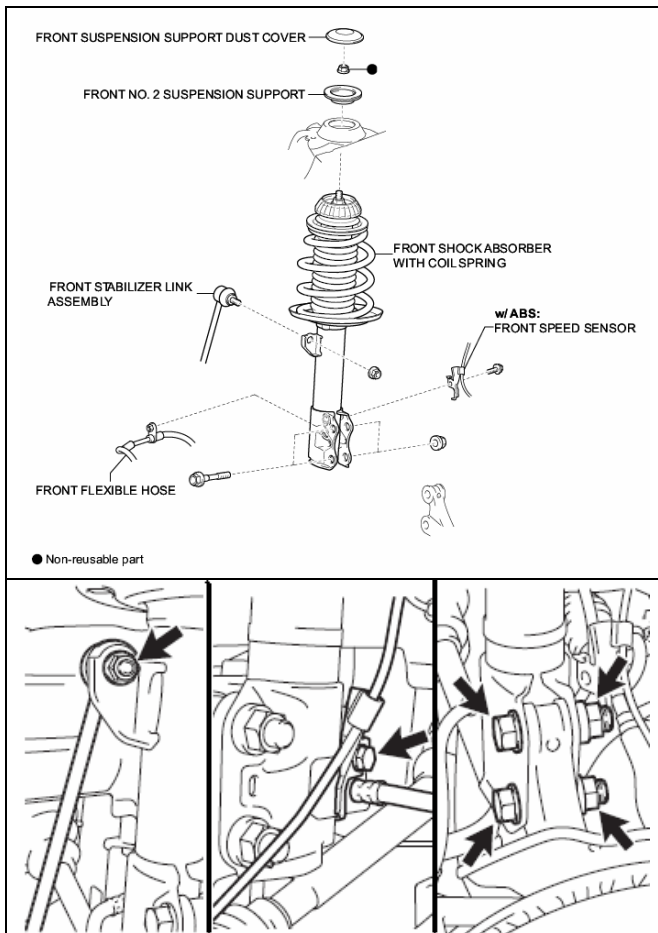
| | |
|---|--|
|  | STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with. |
|  | OPERATOR SAFETY: Use caution to avoid risk of injury. |
|  | CAUTION: A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to 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. |

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. REMOVE FRONT STRUT ASSEMBLY.

- (a) Raise hood and protect fenders.
- (b) Remove suspension support dust cover.
- (c) Loosen upper strut assy nut.
 - (1) Using a 6 mm allen wrench, hold the center rod in place and loosen the nut with a deep offset wrench. Do NOT remove the nut yet.
- (d) Remove front wheels.
- (e) Separate front stabilizer link from the strut assy. If the ball joint spins use an allen wrench to hold the center stud in place.
- (f) Separate front flexible hose and speed sensor wire if equipped.
- (g) Disconnect strut assy from knuckle.
- (h) Remove strut assy.
 - (1) Supporting the weight of the strut assy remove the top nut by hand and pull the strut assy out of the wheel well.



2. DISASSEMBLE STRUT.

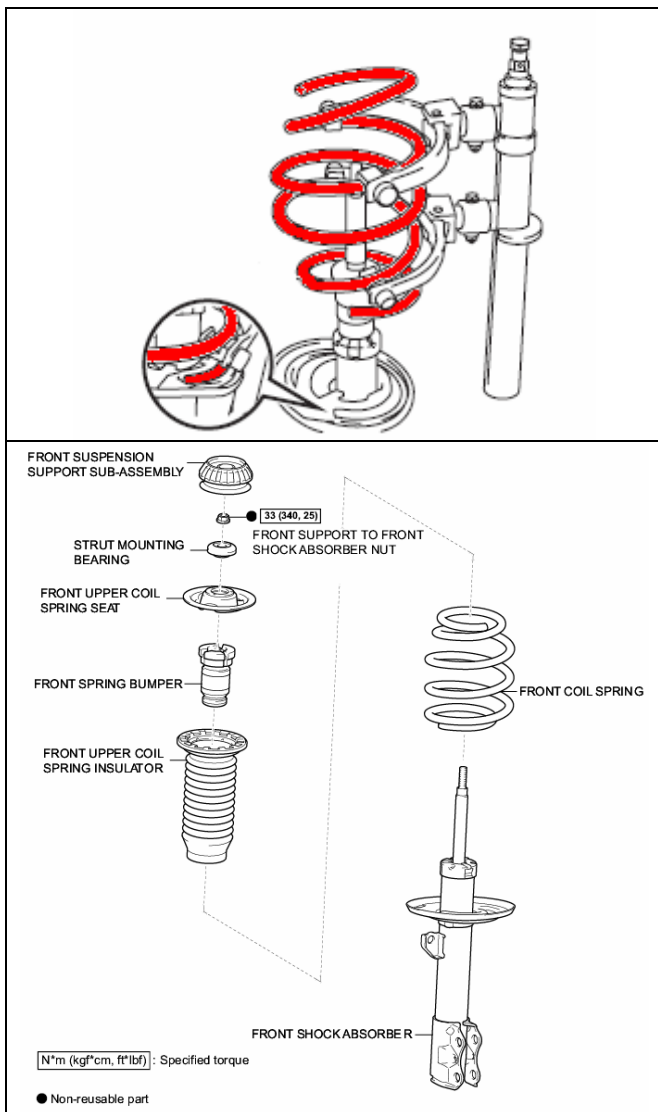
- (a) Remove front suspension support sub-assembly (rubber bushing).
- (b) Compress spring in spring compressor.
- (c) Remove upper nut, coil spring seat, bumper, and insulator.
- (d) Remove original strut.



3. ASSEMBLE STRUT ASSEMBLY.

- (a) Install front TRD spring.
 - (1) Spring wrap with the smaller diameter should be installed in the upward direction.
 - (2) Fit the lower end of the coil spring into the pocket of the shock absorber lower seat.
- (b) Install front coil spring insulator upper.
- (c) Install front spring bumper.
 - (1) Securely insert the spring bumper into the coil spring seat upper.
- (d) Install the coil spring seat upper with the strut mount bearing and spring bumper onto the shock absorber.
- (e) Install new shock absorber nut.

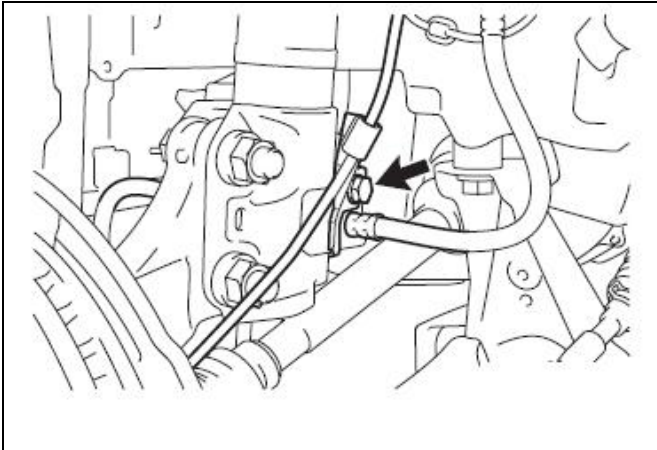
Torque: 33N·m (340 kgf·cm, 25 ft·lbf)



4. INSTALL FRONT STRUT ASSEMBLY.

- (a) Raise strut up into wheel well and hand start new upper nut. Leave assembly loose for now.
- (b) Attach strut assembly to knuckle with 2 bolts and 2 nuts.

Torque: 164 N·m (1,672 kgf·cm, 121 ft·lbf)



- (c) Attach front flexible brake hose and speed sensor, if equipped.
 - (1) Install the flexible hose and speed sensor without twisting them.

Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)

- (d) Attach front stabilizer link assembly.

- (1) If the ball joint turns with the nut, use a 6mm allen wrench to hold the stud.

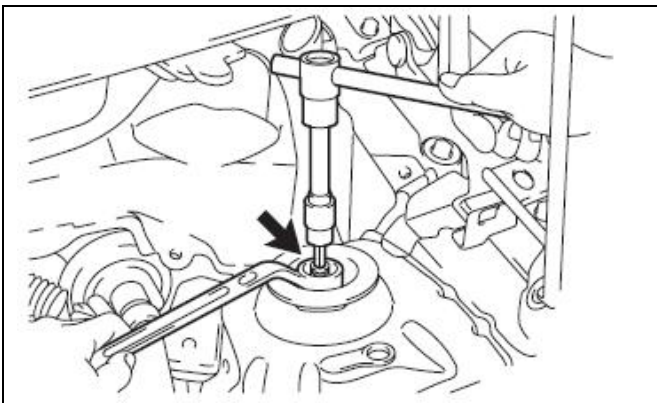
Torque: 74 N·m (755 kgf·cm, 55 ft·lbf)

- (e) Install front wheels.

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

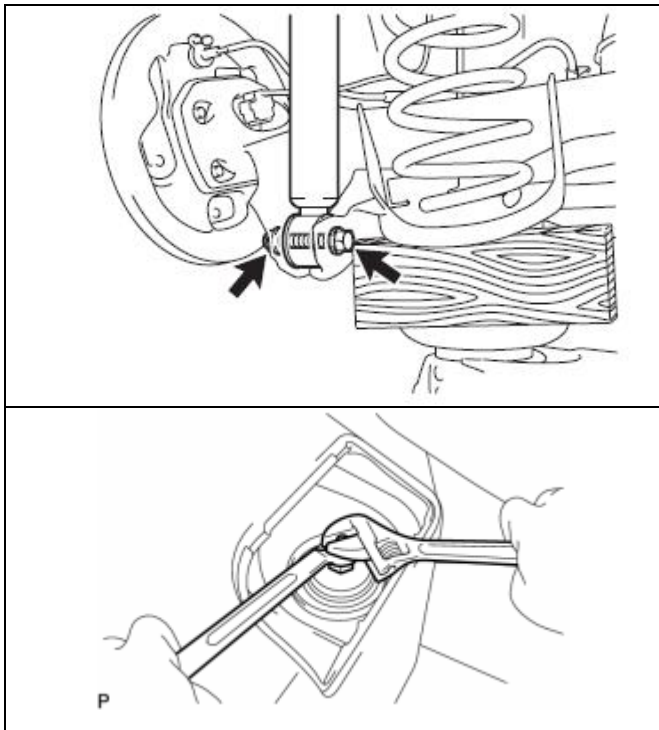
- (f) Now go back to the upper strut mounting nut and tighten it.

Torque: 55 N·m (561 kgf·cm, 41 ft·lbf)



5. REPLACE REAR SHOCKS.

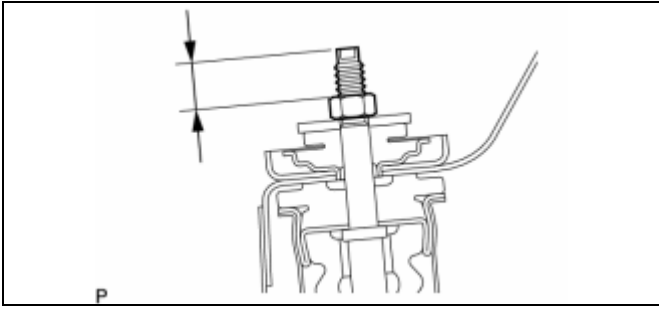
- (a) Remove rear wheel.
- (b) Remove rear seat cushion cover pad sub-assembly (for Yaris Sedan fixed seat type).
- (c) Remove rear seatback assy (for Yaris Sedan fixed seat type).
- (d) Remove rear shock absorber cap.



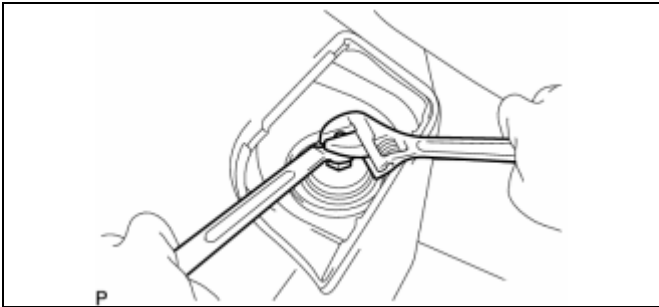
- (e) Remove rear shock absorber.
 - (1) Support the axle beam with a jack. Insert a wooden block between the jack and the rear axle spring seat to prevent damage.
 - (2) Replace one shock at a time. Do not let the beam axle hang unsupported.
 - (3) Remove the 2 nuts while keeping the piston rod from rotating.
 - (4) Remove the cushion retainer and suspension support.
 - (5) Remove lower bolt and pull shock from vehicle.

6. INSTALL REAR SHOCK

- (a) Install shock support cushions and temporarily install upper shock up into the vehicle body.
- (b) Support the axle beam with a jack. Insert a wooden block between the jack and the rear axle spring seat to prevent damage.
- (c) Jack up the axle beam slowly, and provisionally tighten the shock absorber (lower side) with the bolt and nut to the axle beam.



- (d) Install the suspension support and cushion retainer.
- (e) While holding the piston rod, install a new lower nut to the specified standard.
- (f) **Standard: 15 to 18 mm (0.591 to 0.709 in.)**



- (g) While holding the piston rod, tighten a new upper nut.

Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)

- (h) Install rear shock absorber cap.
- (i) Install rear seatback assembly (for Yaris Sedan fixed seat type).
- (j) Install rear seat cushion cover pad sub-assembly (for Yaris Sedan fixed seat type).
- (k) Install rear wheels.

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

- (l) Stabilize suspension.
 - (1) Lower the vehicle from the jack.
 - (2) Bounce the vehicle up and down several times to stabilize the suspension.
- (m) Fully tighten rear shock absorber.
 - (1) Fully tighten the shock absorber (lower side) with the bolt.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

Checklist. These points **MUST** be checked to ensure a quality installation.

CHECK FOR:

Accessory Function Checks

LOOK FOR:

Vehicle Function Checks