LEXUS IS 250/350 2006-
IS 250/350 Conv 2010-
F SPORT Performance Shocks, Front

Preparation

Part Number: PTR13-53080
PTR13-53081
PTR13-53093
PTR13-53094

General Applicability

IS 250, IS 350, IS 250C, IS 350C

Kit Contents:

Item #	Quantity Reqd.	Description
1	1	Shock Absorber
2	1	Hardware Bag
3		

Recommended Sequence of Application

Item #	Accessory
1	F-Sport Springs should be installed at the same time as F-Sport Shocks
2	F-Sport Shocks should be installed before F-Sport exhaust
3	F-Sport Shocks should be installed before F-Sport rear brakes

Hardware Bag Contents

Item #	Quantity Reqd.	Description
1	1	Spring Seat
2	1	Locking Shock Nut
3	1	Shock Collet (spacer)

Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Reqd.	Description
1		
2		
3		

Additional Items Required For Installation

Item #	Quantity Reqd.	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.

SAFETY TORQUE: This mark indicates that torque is related to seat belts or SRS safety components.

Conflicts

IS 250 AWD

Recommended Tools

Personal & Vehicle Protection	**Notes**
Fender Covers	
Safety Glasses	
Special Tools	**Notes**
Spring Compressor	
Installation Tools	**Notes**
Air tools	May only be used for disassembly
Special Chemicals	**Notes**

Procedure

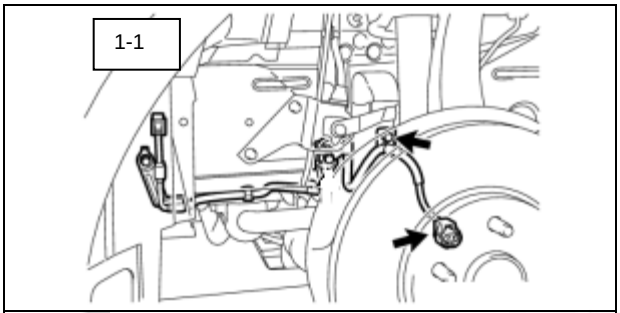
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation

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

This document covers such items as:

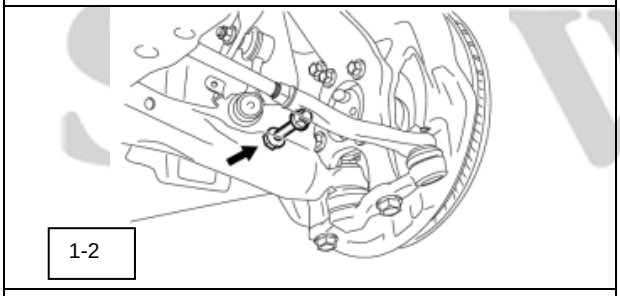
- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

1. Remove Front Shock Assemblies.

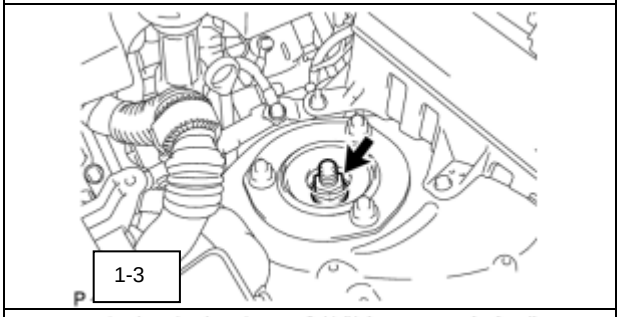


(a) Remove front wheel.

(b) Detach speed sensor wire from shock assembly and disconnect it from the speed sensor. (Fig 1-1)



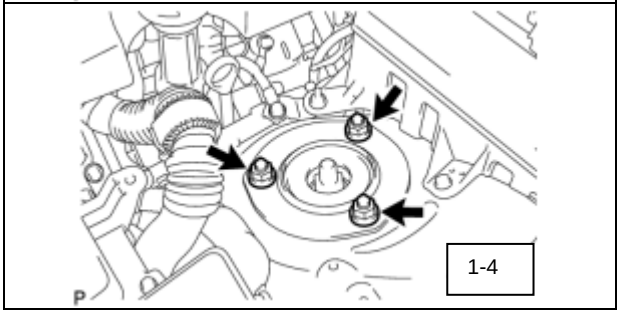
(c) Remove nut and bolt holding lower end of shock absorber. (Fig 1-2)



(d) Remove engine room side covers.

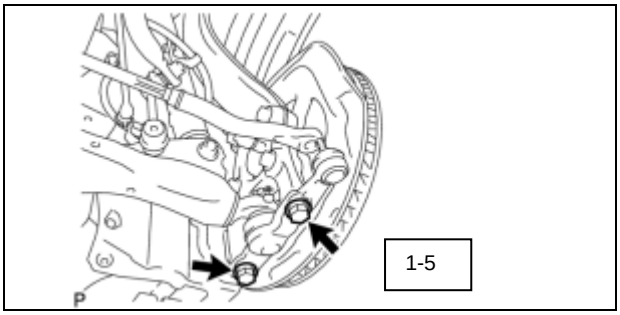
(e) Loosen the lock nut of the front shock absorber. (Fig 1-3)

NOTE: Do not remove the lock nut.



(f) Remove the 3 nuts on the upper side of the front suspension support. (Fig 1-4)

NOTE: Lower arm bushing preload will not allow the shock assembly to fall.

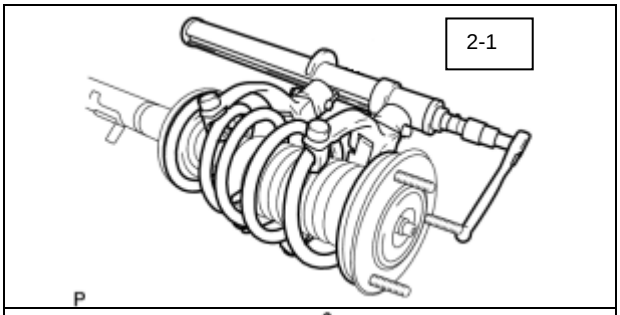


(g) Remove the 2 bolts from the front lower ball joint. (Fig 1-5)

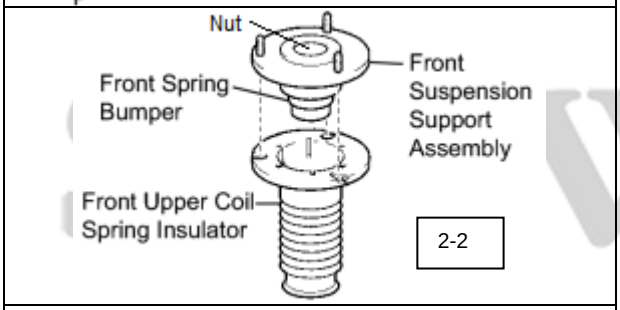
(h) Pull shock assembly from the vehicle.

(i) Repeat for other side of vehicle.

2. Replace Front Shocks



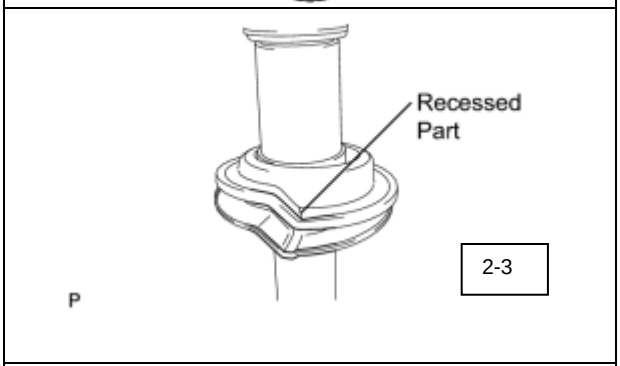
(a) Compress spring enough to remove tension from the upper spring support. (Fig 2-1)



(b) Remove the lock nut. (Fig 2-2)

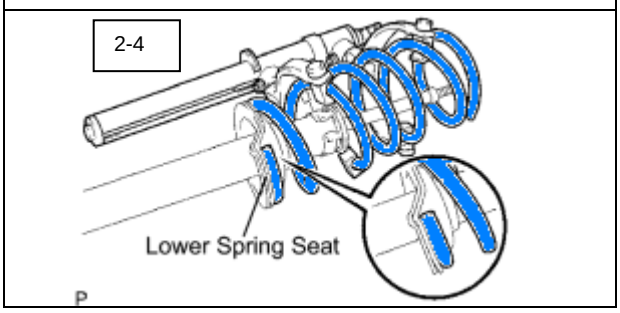
(c) Remove the front suspension support assembly with the front upper coil spring insulator.

(d) Remove the front coil spring.



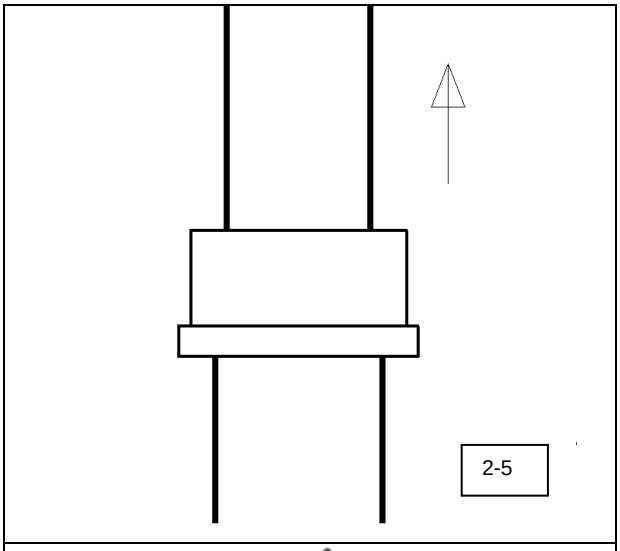
(e) Place provided spring seat over the new shock assembly. There is a groove machined into the spring seat that rests on the snap ring found on the body of the shock.

(f) Transfer lower spring insulator from old shock to new spring seat. Confirm it is indexed properly and free from debris. (Fig 2-3)

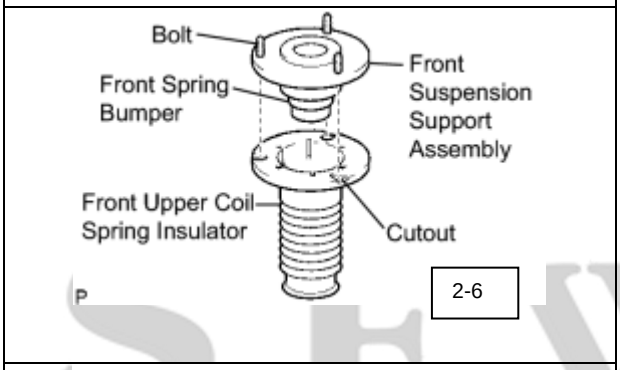


(g) Compress new front spring and place over shock assy.

(h) Confirm that the end of the spring sits in the stepped portion of the lower spring seat. (Fig 2-4)

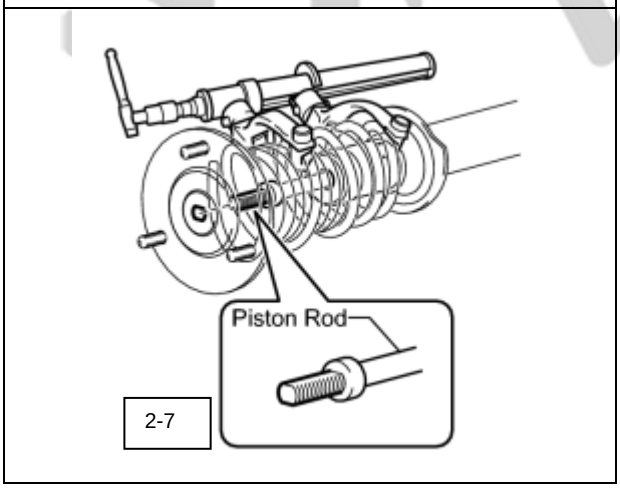


(i) Place supplied collet / spacer over piston shaft as shown to the left. (If there is no lip on the collet supplied with your shock absorber, the direction of the collet does not matter.) (Fig 2-5)



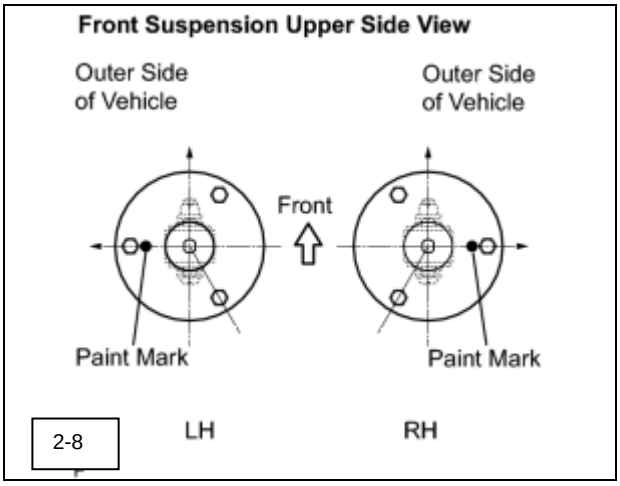
(j) Install the front spring bumper onto the front suspension support assembly.

(k) Align the bolt heads of the front suspension support assembly with the cutouts of the front upper coil spring insulator, and install the front upper coil spring insulator on the front suspension support assembly. (Fig 2-6)



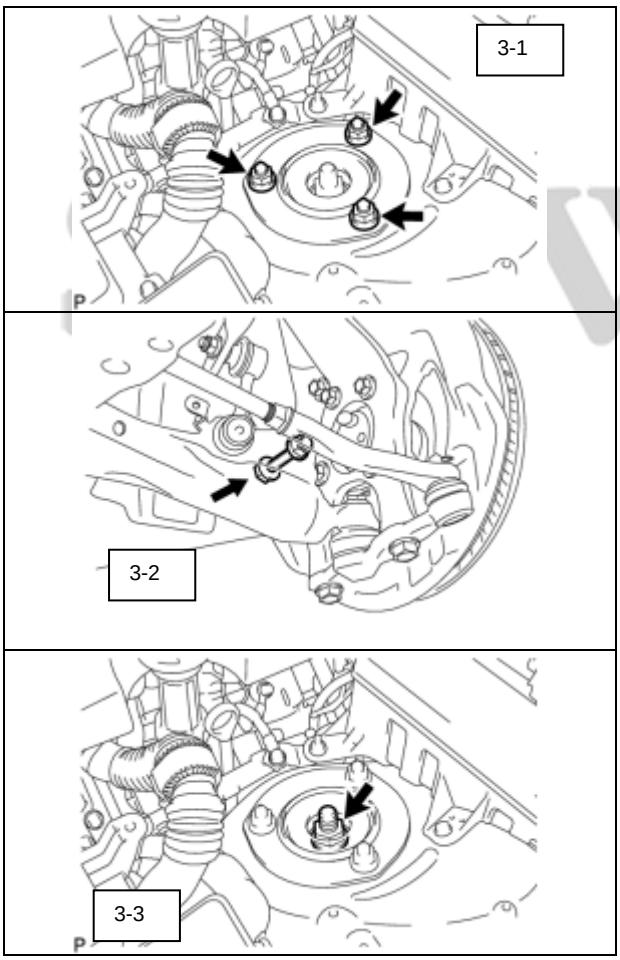
(l) Match the shape of the piston rod end to the hole in the front suspension support assembly to install the front shock absorber. (Fig 2-7)

(m) Temporarily tighten a new lock nut to the front shock absorber.



(n) Adjust the front suspension support assembly so that the bolts come to the positions shown in the illustration, and remove the spring compressor from the front coil spring. (Fig 2-8)

3. Install Front Shock Assy.



(a) Install the front shock absorber assy onto the vehicle by tightening the 3 nuts on the suspension support side. (Fig 3-1)

Torque: 67 N·m (683 kgf·cm, 49 ft·lbf)

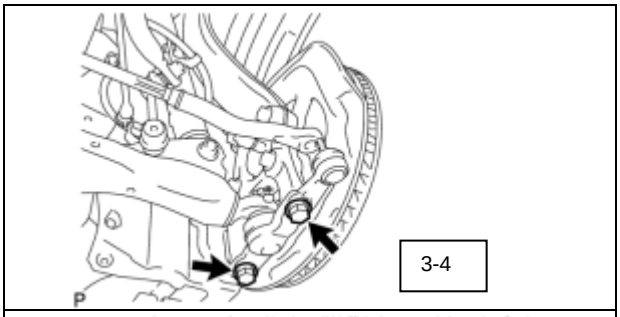
(b) Insert the bolt from the rear of the vehicle, and install the front shock absorber lower side on the front lower suspension arm. (Fig 3-2)

(c) Temporarily tighten the nut while holding the bolt.

NOTE: You will fully tighten the nut after settling the suspension.

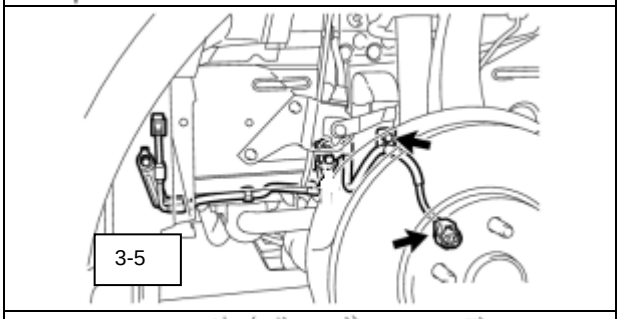
(d) Now fully tighten the new shock assy lock nut. (Fig 3-3)

Torque: 28 N·m (286 kgf·cm, 21 ft·lbf)


3-4

(e) Install the front lower ball joint with the 2 bolts. (Fig 3-4)

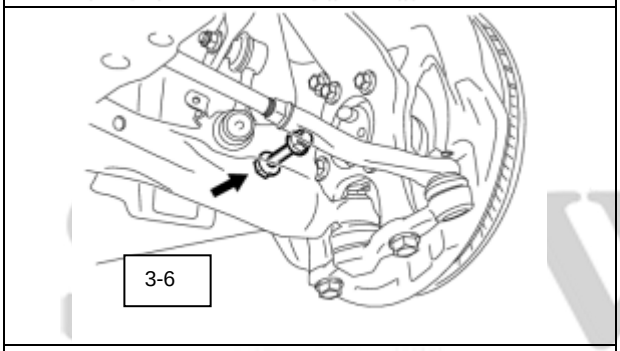
Torque: 120 N·m (1,220 kgf·cm, 89 ft·lbf)


3-5

(f) Connect front speed sensor wire. (Fig 3-5)

(1) Install the front speed sensor to the front shock absorber.

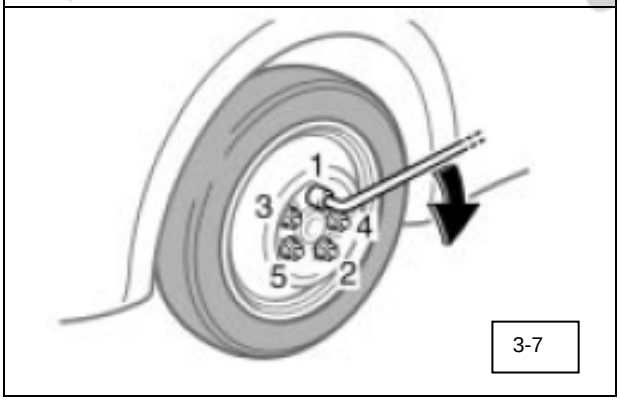
Torque: 6.0 N·m (61 kgf·cm, 4.4 ft·lbf)


3-6

(g) Fully tighten lower shock bolt. (Fig 3-6)

(1) Jack up lower suspension arm so that weight of vehicle is supported.

Torque: 157 N·m (1,600 kgf·cm, 116 ft·lbf)



3-7

(h) Install engine room side covers.

(i) Install front wheel assy. (Fig 3-7)

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

4. ADJUST WHEEL ALIGNMENT

NOTE: If the vehicle is lowered, toe settings will require adjustment.

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

CHECK FOR:	LOOK FOR:
Accessory Function Checks	
☒ Check for noise	Confirm all springs are seated properly.
☐	
☐	
☐	
Vehicle Function Checks	
☒ Confirm VSC light is not on.	Confirm speed sensor wires are plugged in.
☒ Confirm ASF OFF light is not on.	Confirm height sensor links are positioned correctly.
☒ Confirm all hardware with torque values are tight	Loose hardware.
☐	
☐	