

Automotive

RECALL CAMPAIGN "VS"
Technical Service Bulletin

October 2, 2015
Bulletin No. TS 15 10161

SAFETY RECALL CAMPAIGN "VS" 2012-2013 SX4 POWER STEERING PUMP ASSEMBLY

Affected Models: Certain 2012-2013 SX4 (RW420)
(See Affected Models on Page 2 for affected VIN range)

Reference: 2012-2013 SX4 Service Manual

Affected Departments: Management, Service, Warranty, Sales, Parts, Accessories

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Suzuki Motor Corporation has decided that a defect which relates to motor vehicle safety exists in certain Model-Year 2012 and 2013 Suzuki SX4 automobiles.

NOTE:

This Technical Service Bulletin includes a copy of the customer letter, the service repair procedure, and warranty administrative information for Suzuki Service Providers.

SERVICE PROVIDER CAMPAIGN RESPONSIBILITY

Suzuki Service Providers will complete this important safety recall campaign on all affected SX4 vehicles, including branded title vehicles. This repair must be performed regardless of vehicle age or mileage, and at no charge to the customer. When contacted by the customer, Suzuki Service Providers will need to schedule an appointment to perform the campaign service and order required parts.

If you have questions, please contact your Suzuki District Service and Parts Manager (DSPM) or the Warranty Assistance Helpline at (714) 996-7042.

What is the problem?

Under certain operating conditions, insufficient clearance between the power steering pump body and the fluid control valve may cause improper movement of the valve, which can lead to seizure of the power steering pump. If the power steering pump seizes, the pump system cannot provide steering assist. This condition will require the driver to use increased steering effort, increasing the risk of a crash.

Affected Models

2012 MODEL-YEAR SX4 (RW420) VIN RANGE	2013 MODEL-YEAR SX4 (RW420) VIN RANGE
JS2YA5A1#C6300001 to JS2YA5A1#C6300280	JS2YA5A1#D6100020 to JS2YA5A1#D6100242
JS2YA5A3#C6300022 to JS2YA5A3#C6300357	JS2YA5A3#D6100001 to JS2YA5A3#D6100128
JS2YA5A5#C6300204 to JS2YA5A5#C6300899	JS2YA5A5#D6100002 to JS2YA5A5#D6100291
JS2YA5A7#C6300096 to JS2YA5A7#C6300229	JS2YA5A7#D6100001 to JS2YA5A7#D6100209
JS2YB5A3#C6301674 to JS2YB5A3#C6308840	JS2YB5A3#D6100002 to JS2YB5A3#D6102811
JS2YB5A7#C6300012 to JS2YB5A7#C6300334	JS2YB5A4#D6100001 to JS2YB5A4#D6100748
JS2YC5A1#C6300001 to JS2YC5A1#C6300008	JS2YB5A7#D6100004 to JS2YB5A7#D6100221
JS2YC5A3#C6301505 to JS2YC5A3#C6305832	JS2YC5A1#D6100011 to JS2YC5A1#D6100012
JS2YC5A5#C6300181 to JS2YC5A5#C6300410	JS2YC5A3#D6100001 to JS2YC5A3#D6103180
JS2YC5A9#C6300274 to JS2YC5A9#C6300650	JS2YC5A5#D6100002 to JS2YC5A5#D6100042
	JS2YC5A9#D6100001 to JS2YC5A9#D6100647

Verify if the vehicle is affected by the safety recall:

Confirm the recall status by checking the vehicle identification number (VIN), which is located on the left side of the instrument panel, against the Vehicle Master in Suzuki Connect to see if the steering pump assembly needs to be replaced. If you have a question regarding vehicle eligibility, contact the Suzuki Motor of America, Inc. (SMAI) Warranty Department.

What you will do as a Suzuki Service Provider:

- 1) Replace the power steering pump assembly.
- 2) Submit a warranty claim.

What Suzuki Motor of America, Inc., will do:

During the week of October 5, 2015, SMAI will mail notification letters to owners of affected vehicles for whom we have information. The letter instructs the customer to contact a Suzuki Service Provider to schedule an appointment.

Ordering parts for the safety recall campaign:

- Parts are available now. A Maximum Order Quantity of 5 parts per order has been initially established for this campaign. Any order quantity more than 5 per order will drop from the order and not back order. If you have an immediate need for more than 5 parts sets, please contact Parts Coordination at (714) 854-2165.
- Use the normal parts ordering procedure to order the parts kits needed for vehicles in your inventory or for customer vehicles in your shop for service.
- If you have questions regarding your parts order, please contact Parts Coordination at (714) 854-2165.

PARTS ORDERING INFORMATION

Parts Kit Name	Parts Kit Number	Qty. Required
Power Steering Pump Set	49100-54811-RX0	1

The parts kit includes:

Power Steering
Pump Assembly



Pressure Pipe
Gasket



Warranty Claim Processing:

Submit a warranty claim for each safety recall campaign service immediately upon completion of the repair. This campaign requires you to file a warranty claim using ONE of the methods described below:

Suzuki Connect Short Campaign Claim:

A Short Campaign Claim will reimburse you for replacement of the power steering pump assembly, the necessary power steering fluid (Quantity 1, P/N 99963-01501-519), and the replacement labor time of 1.1 hours.

**POWER STEERING PUMP REPLACEMENT
SUZUKI CONNECT SHORT CAMPAIGN CLAIM INSTRUCTIONS**

CLAIM INFORMATION

CLAIM NUMBER:	XXXXX.X (Service Provider enters number)
ENTRY TYPE:	Vehicle Identification Number (VIN)
VEHICLE IDENTIFICATION NUMBER:	XXXXXXXXXXXXXXXXXXXX
REPAIR DATE:	Enter date of repair
MILEAGE:	Enter mileage at repair date
CAMPAIGN NUMBER:	VS
VARIATION CODE:	JB

Suzuki Connect Long Campaign Claim:

The Long Campaign Claim entry should be used when additional parts or labor are required to complete the Recall Campaign service. A Long Campaign Claim requires prior DSPM authorization.

**POWER STEERING PUMP REPLACEMENT
SUZUKI CONNECT LONG CAMPAIGN CLAIM INSTRUCTIONS**

CLAIM INFORMATION

CLAIM NUMBER:	XXXXX.X (Service Provider enters number)
ENTRY TYPE:	Vehicle Identification Number (VIN)
VEHICLE IDENTIFICATION NUMBER:	XXXXXXXXXXXXXXXXXXXX
REPAIR DATE:	Enter date of repair
MILEAGE:	Enter mileage at repair date
CAMPAIGN NUMBER:	VS
VARIATION CODE:	JK
LABOR OPERATION:	LJ9999
LABOR HOURS:	AS AUTHORIZED

PARTS INFORMATION

FAILED PART NUMBER:	49100-54811-RX0
REPLACEMENT PARTS:	AS AUTHORIZED
AUTHORIZATION NUMBER:	(Issued by DSPM)

FAILURE DESCRIPTION

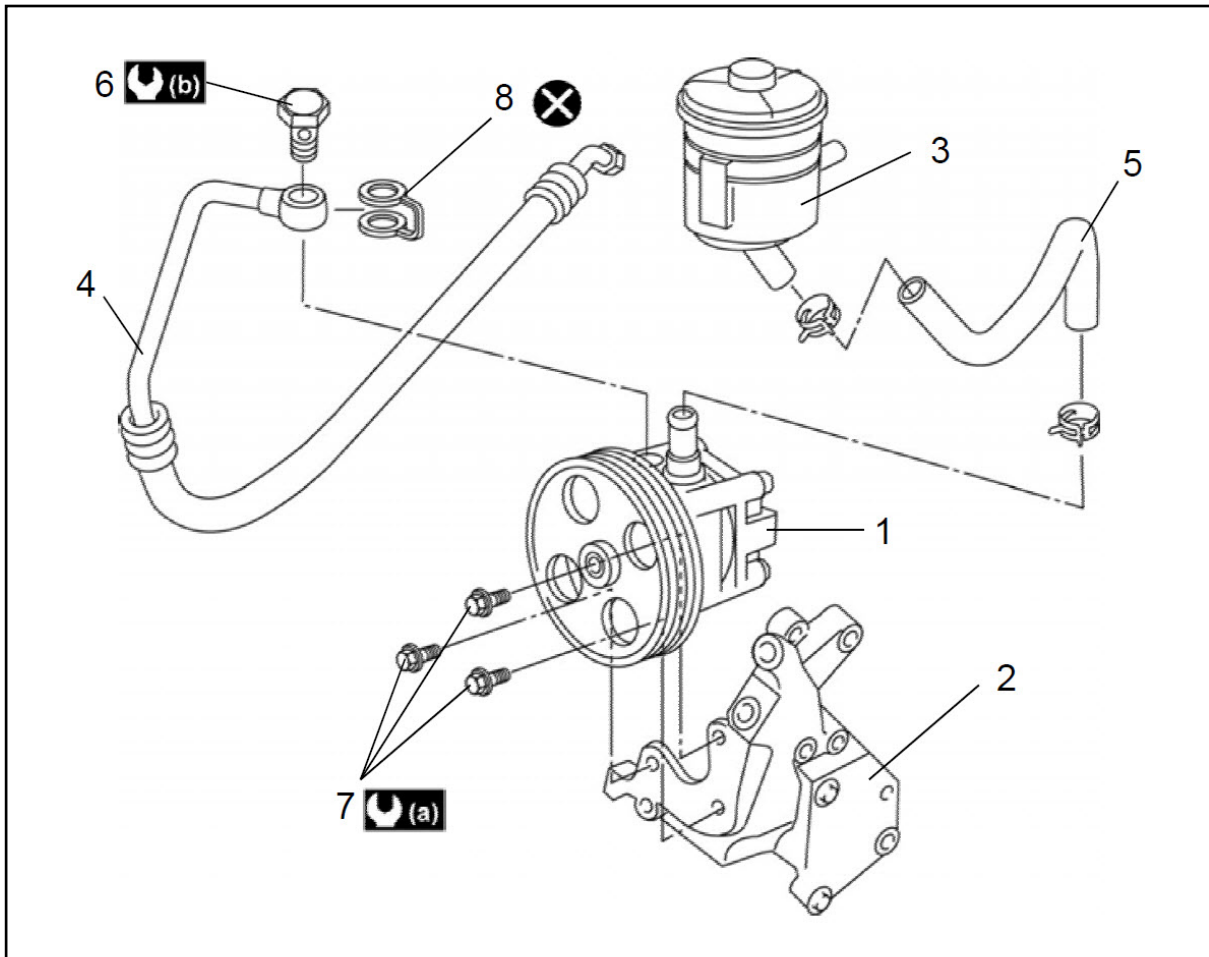
DESCRIPTION OF DEFECT:
DESCRIPTION OF REPAIR:

SUBLET INFORMATION: Sublet Expenses (only as authorized by your DSPM)

WARRANTY INFORMATION

Model	Model Year	Part Description	Part Number	Flat Rate	Campaign Number
SX4 (RW420)	2012-2013	Power Steering Pump Set	49100-54811-RX0	1.1 HR	VS

Repair Procedure:

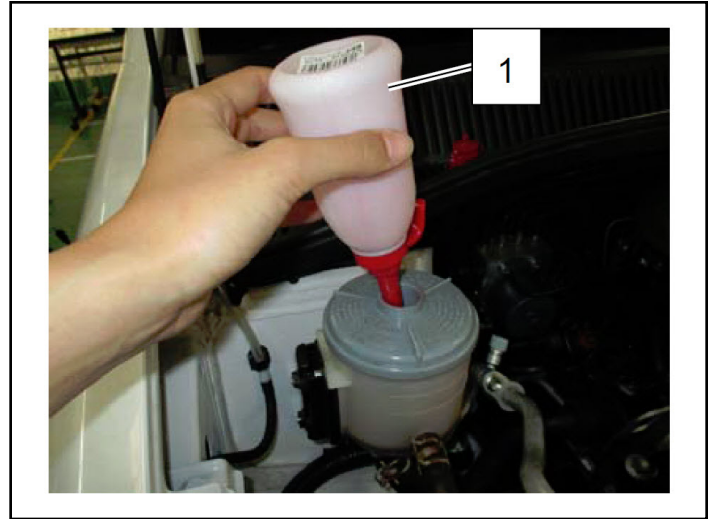


1. Power steering pump assembly	7. Power steering pump mounting bolt
2. Power steering pump bracket	8. Pressure pipe gasket
3. Power steering fluid reservoir	:25 N·m (2.5 kgf-m, 18.5 lbf-ft)
4. High pressure pipe	:65 N·m (6.6 kgf-m, 48.0 lbf-ft)
5. Suction hose	:Do not reuse.
6. High pressure pipe union bolt	

NOTE:

Record the clock and audio settings before disconnecting the battery so you can restore them after the repair is complete.

- 1) Disconnect the negative (-) battery cable from the battery.
- 2) Remove the power steering fluid from the reservoir using a dropper or other such tool (1).

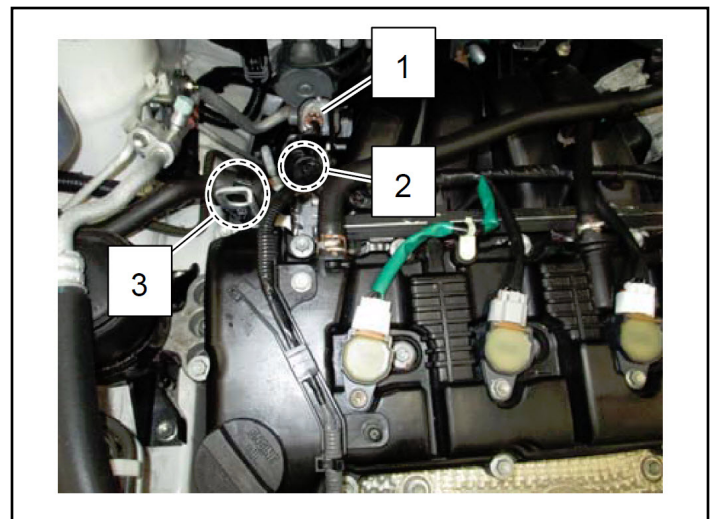
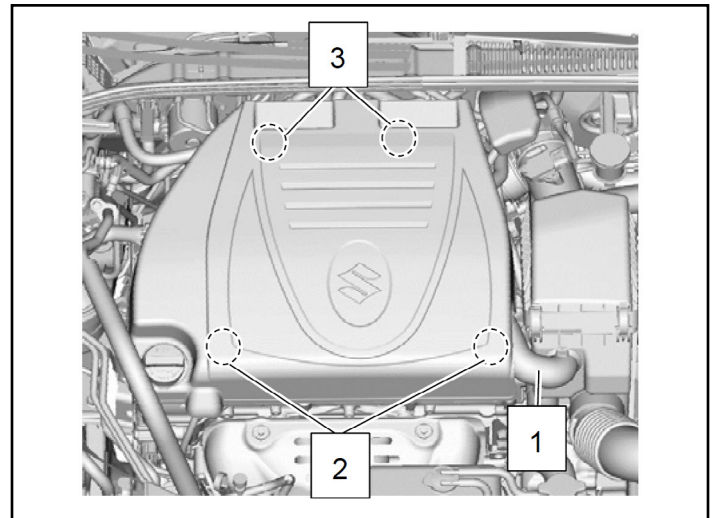


NOTICE

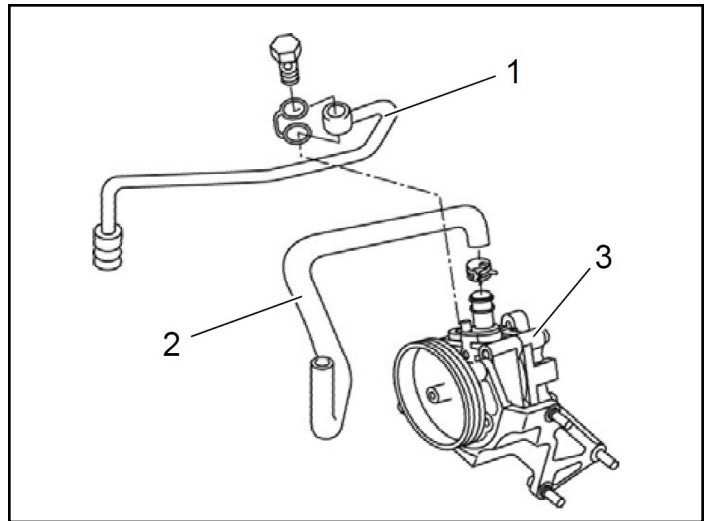
If care is not used when removing the engine cover, it can hit the cowling front panel, and damage the cover.

Remove the engine cover carefully so that it does not hit other components.

- 3) Remove the engine cover:
 - A. Disconnect the engine cover hose (1) from the air cleaner assembly. Then disconnect the front (2) and rear (3) side hooks from the engine cover pins.
 - B. Disconnect the IMT valve actuator connector (1) and harness clamp (2).
 - C. Disconnect the suction hose clamp (3).



- 4) Clean the high pressure pipe (1) joints and suction hose (2) before removing them. Then remove the high pressure pipe and the suction hose from the power steering pump assembly (3).

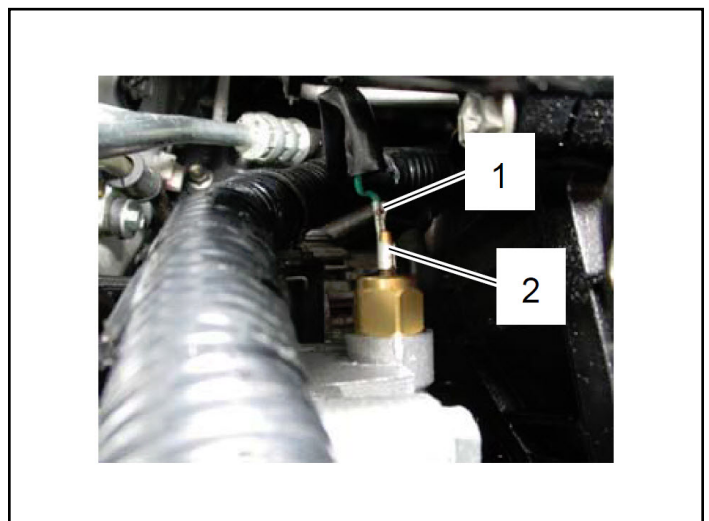


NOTICE

The power steering system can be damaged if foreign material or debris gets in the suction hose.

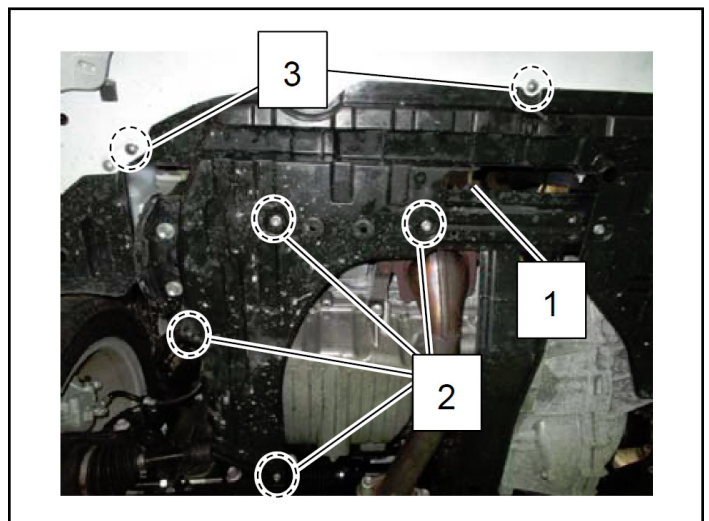
Be sure to immediately plug the suction hose after disconnecting it.

- 5) Disconnect the lead wire (1) of the power steering pump pressure switch at the switch terminal (2).

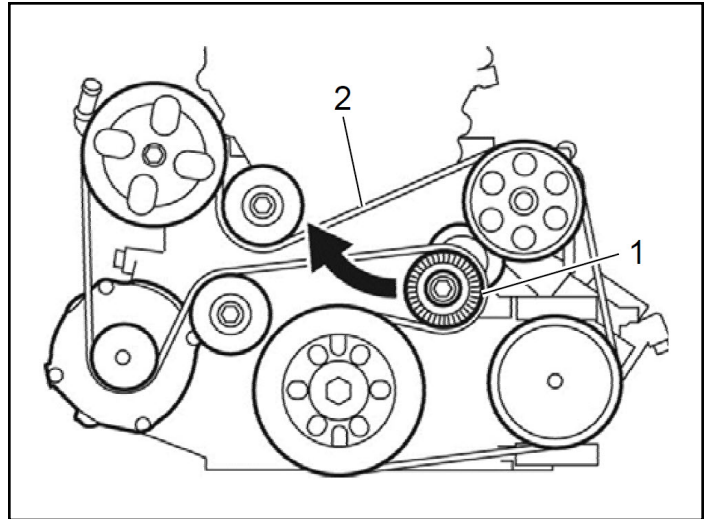


- 6) Remove the accessory drive belt:

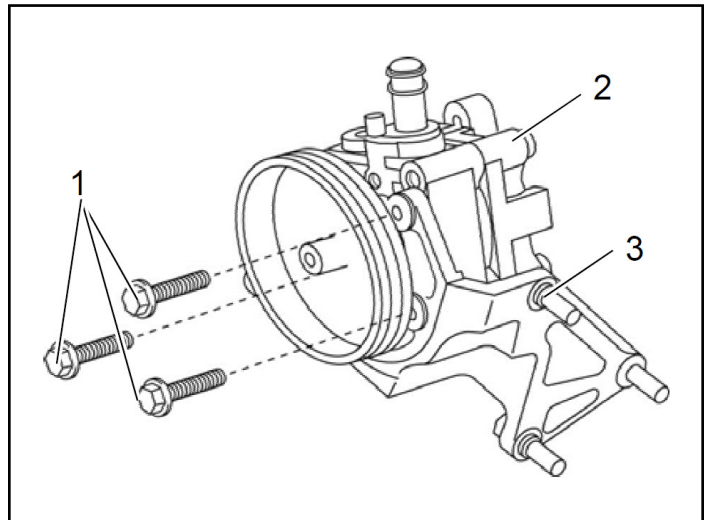
- A. Hoist the vehicle.
- B. Remove the right engine undercover (1) by removing the bolts (2), screws (3) and clips.



- C. Loosen the belt tension by turning the tensioner (1) clockwise.
- D. While keeping the tensioner loose, remove the accessory drive belt (2).



- 7) Remove the power steering pump mounting bolts (1), then remove the power steering pump assembly (2) from the brackets (3).



- 8) Install the **new** power steering pump assembly (1) and tighten the mounting bolts (2) to the specified torque.

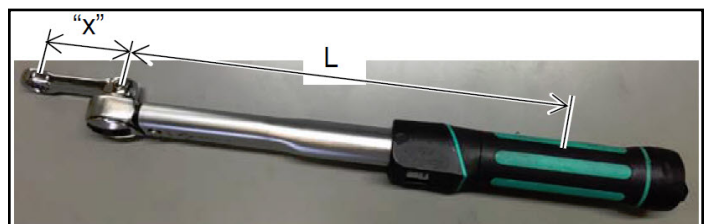
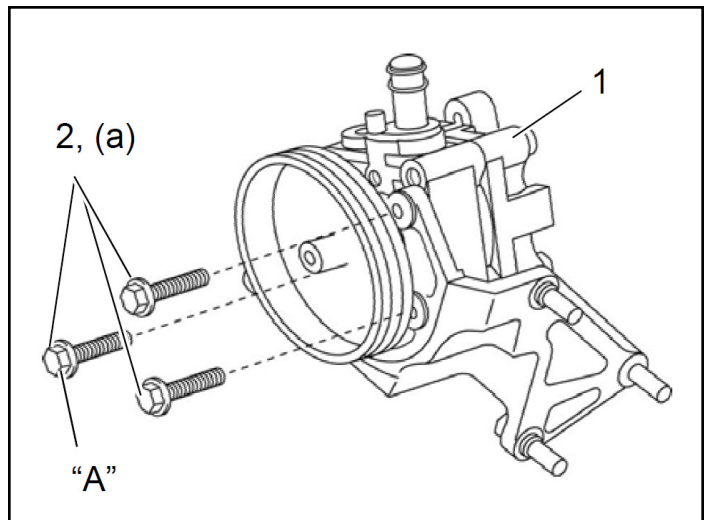
Tightening Torque:
Power Steering Pump Mounting Bolts (a)
25 N•m (92.5 kgf-m, 18.5 lbf-ft)

NOTE:

- Use a torque adapter, which is attached to a torque wrench, when tightening "A".
- When using a torque adapter on a torque wrench, calculate the torque wrench reading to the bolt being tightened using the following formula:

$$M = T \times L (L + "x")$$

- M: Torque wrench reading (N•m)
- T: Specified torque (N•m)
- L: Torque wrench length (mm)
- "x": Torque adapter length (mm)



For example:

When tightening the power steering pump mounting bolt using the following tools, tighten it to 20 N·m according to the formula.

- Torque wrench length L = 200mm
- Torque adapter length "x" = 50mm
- Specified torque of the power steering pump mounting bolt T = 25 N·m

$$M = T \times L / (L + "a") = 25 \text{ N}\cdot\text{m} \times 200\text{mm} / (200\text{mm} + 50\text{mm}) = 20 \text{ N}\cdot\text{m}$$

9) Install the accessory drive belt:

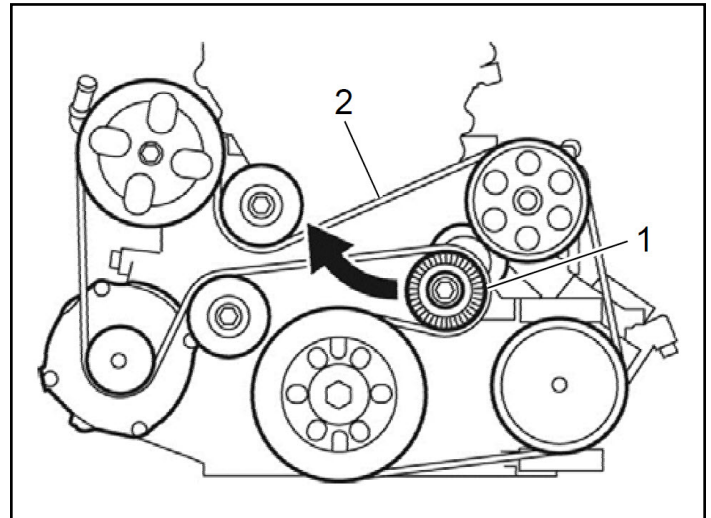
- A. Hoist the vehicle.
- B. Loosen the belt tension by turning the tensioner (1) clockwise with a torque wrench.

NOTICE

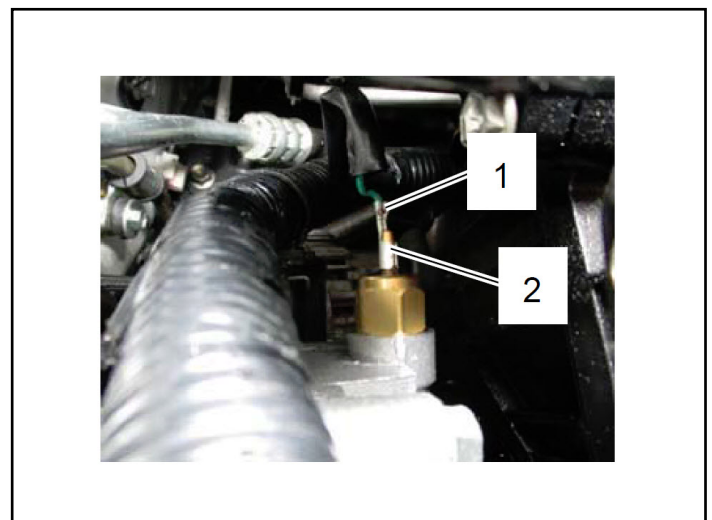
Over-tightening the tensioner may damage it.

Be careful not to turn the tensioner pulley more than 59 N·m (6.0 kgf-m, 43.5 lbf-ft) using a torque wrench.

- C. While keeping the tensioner loose, install the accessory drive belt (2).
- D. Install the right engine undercover.



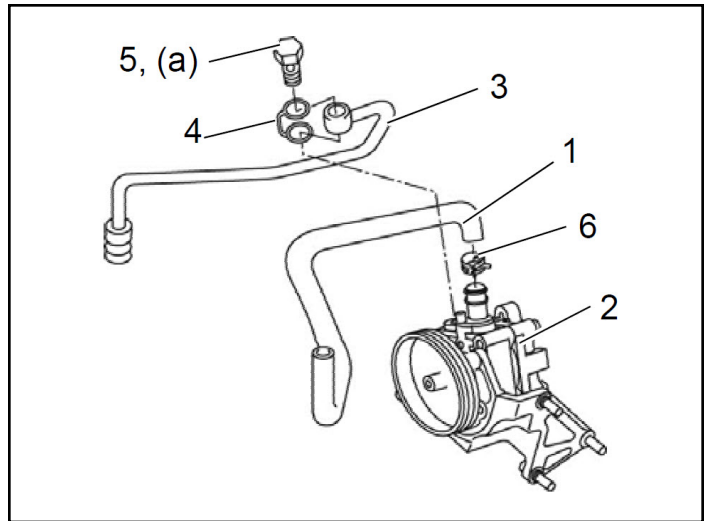
10) Connect the lead wire (1) of the power steering pump pressure switch to the switch terminal (2).



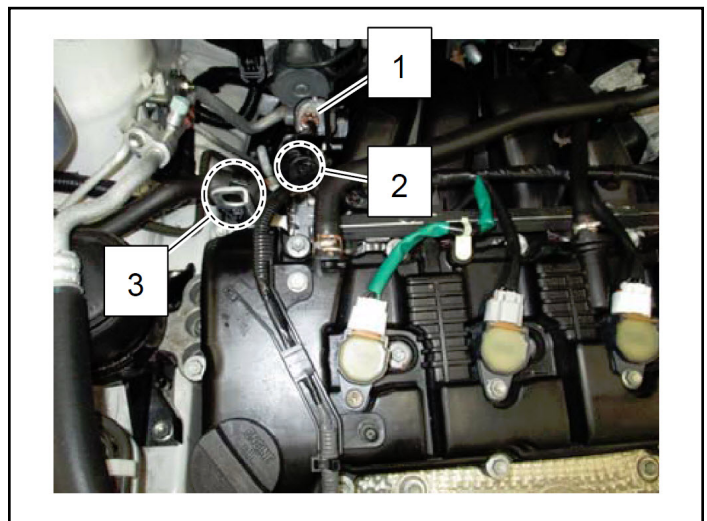
- 11) Connect the suction hose (1) to the power steering pump assembly (2) and secure it with a clamp (6).
- 12) Install a high pressure pipe (3) with a new pressure pipe gasket (4), then tighten the high pressure pipe union bolt (5) to the specified torque.

Torque Specification:

High Pressure Pipe Union Bolt (a)
65 N·m (6.6 kgf-m, 48.0 lbf-ft)



- 13) Connect the suction hose clamp (3).
- 14) Connect the IMT valve actuator connector (1) and harness clamp (2).



- 15) Install the engine cover.
- 16) Connect the negative (-) battery cable to the battery.
- 17) Bleed the power steering system:

NOTICE

The power steering system will be damaged if the power steering fluid is contaminated by foreign material.

Use a clean container of power steering fluid that is not contaminated when adding fluid to the system.

- A. Hoist the front end of the vehicle and place safety stands under it.

- B. Fill the power steering fluid reservoir with fluid up to the specified level.

**Power Steering Fluid Specification:
ATF DEXRON® - II (ESSO JWS2326) or
ATF DEXRON® - III or an equivalent**

- C. Shift the gear shift lever into neutral (M/T) or into the P range (CVT model), and apply the parking brake.
- D. Start the engine.
- E. Let the engine idle for 3 - 5 seconds, then turn it OFF and check the power steering fluid level. If necessary, add more fluid to the specified level.
- F. With the engine OFF, turn the steering wheel to the right until it stops, then turn it to the left until it stops.
Repeat this 3 times, then check the power steering fluid level and add more fluid if necessary.
- G. Start the engine and let it idle, then turn the steering wheel both right and left from stop to stop until all the foam in the power steering fluid reservoir is gone.

NOTICE

If air remains in the power steering fluid, the power steering pump may make a humming noise or the steering may feel heavy while turning the vehicle.

Be sure the air is completely bled out of the power steering system.

- H. Be sure the power steering fluid level is between the UPPER and LOWER marks on the reservoir.
- I. Perform the electronic throttle control system calibration by doing the following:
 - Turn the engine OFF.
 - Turn the ignition switch to the ON position without starting the engine for 5 seconds.
 - Check that a diagnostic trouble code (DTC) is not set.

- 18) For ESP® models, perform the sensor calibration:

NOTE:

If any DTC other than C1075 is detected, the sensor calibration cannot be completed. Repair the other detected DTC first.

METHOD USING THE SUZUKI SCAN TOOL:

- A. Set the steering wheel in the straight ahead position.
- B. Connect the Suzuki Scan tool (Suzuki SDT or Suzuki SDT-II) to the DLC with the ignition OFF.
- C. Turn the ignition ON and confirm that only DTC C1075 is detected. If any other DTCs are detected, repair them before completing the rest of this procedure.
- D. Park the vehicle on a level surface with the parking brake applied, stop the engine, but leave the ignition switch turned to the ON position. Then set the steering wheel in straight ahead position without pressing down on the brake pedal, and wait for the sensor calibration to finish.
- E. Under the Utility mode of the Scan tool, select **Sensor Calibration**.

After completing the calibration, turn the ignition OFF and disconnect the Scan tool from the DLC.

METHOD NOT USING THE SUZUKI SCAN TOOL:

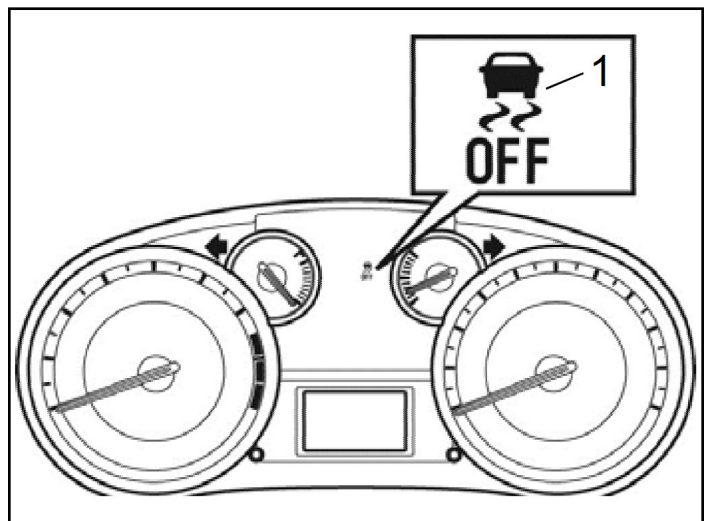
- A. Set the steering wheel in the straight ahead position.
- B. Confirm the battery terminals and related fuses are securely installed (if they were removed previously).
- C. Start the engine.

NOTE:

If power to the steering angle sensor is removed, DTC C1075 will be detected and the ESP OFF indicator (1) will turn on. If any other indicator turns on, a DTC other than C1075 may have been detected — diagnose the other DTC before C1075.

- D. Drive straight at approximately 22 mph or more for 10 seconds or more.

- 19) Restore the customer's clock and audio presets.





SUZUKI MOTOR OF AMERICA, INC.

IMPORTANT SAFETY RECALL

This Notice Applies to Your Suzuki Vehicle Identification Number (VIN)

XXXXXXXXXXXXXXXXXXXX

October 9, 2015

Dear Suzuki Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Suzuki Motor Corporation has decided that a defect which relates to motor vehicle safety exists in certain Model-Year 2012 and 2013 Suzuki SX4 automobiles.

What is the problem?

Insufficient clearance between the power steering pump body and the fluid control valve may cause improper movement of the valve, which can lead to seizure of the power steering pump. If the power steering pump seizes, the pump system cannot provide steering assist. This condition will require the driver to use increased steering effort, increasing the risk of a crash.

What is Suzuki Motor of America, Inc., doing to solve the problem?

If your SX4 is affected by this safety recall, your Suzuki Service Provider will replace the power steering pump assembly. This procedure will take less than two hours to complete. Parts are available now, and there will be no charge to you for any recall service-related parts or labor.

What you should do:

Make sure you are prepared for the recall service by taking the following steps:

- Before taking your vehicle to your Suzuki Service Provider, contact them as soon as possible to set up an appointment for the recall service.
- We suggest that you bring this letter to your Suzuki Service Provider to help them process your vehicle for repair.

What to do if you receive this letter in error:

This notice was mailed to you according to the most current information we have available. If you no longer own the Suzuki vehicle described in this letter, please complete and return the attached postage-paid card to Suzuki Motor of America, Inc., and forward this recall information to the current owner (if known).

Federal regulations require that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Customer reimbursement for remedies prior to recall notification:

If your vehicle is included in the recall and you have paid for replacement of the power steering pump assembly or other repairs to address the defect that led to this recall, you may be eligible for full or partial reimbursement. **To request reimbursement for a previous repair, contact your Suzuki Service Provider.**

Please note the following conditions for reimbursement:

- Only repairs made to address the defect that led to this recall are reimbursable. Additional expenses such as towing, car rental, accommodations, damage repairs, etc., will not be reimbursed. Reimbursement will not be provided for routine scheduled maintenance.
- Reimbursement may be limited to the suggested list price for parts, the Suzuki published flat rate time allowance for the repair, and the labor rate that an authorized Suzuki Service Provider in the same area would charge for the same repair.
- An owner will not be eligible for reimbursement if the expenses for repairs are incurred more than 10 days after the date of the last owner notification letter sent by Suzuki Motor of America, Inc.
- Reimbursement claims may also be excluded when adequate documentation is not submitted by the claimant. This includes a proof of ownership, a repair order, and proof of payment for the repair.

Who to contact if you experience problems:

Your Suzuki Service Provider can provide you the fastest response to your questions or concerns about the Power Steering Pump Assembly Safety Recall. If you have any difficulty with this recall campaign, you may contact the Suzuki Motor of America, Inc., Customer Service Department for assistance at (800) 934-0934 during the hours of 7:00 AM to 4:30 PM Pacific Time. Please have your vehicle identification number (VIN) ready when calling.

If you believe that Suzuki Motor of America, Inc., has failed to provide the Recall service without charge or is unable to do so within a reasonable time, you may submit a complaint to the Administrator of the National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington D.C., 20590 or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-888-424-9153) or go to: www.safercar.gov

We apologize for any inconvenience this recall campaign causes you. We hope you understand that your safety and satisfaction are important priorities for Suzuki.

Sincerely,

Suzuki Motor of America, Inc.