

PRODUCT SUPPORT DIVISION

INTEROFFICE MEMORANDUM

Volume: XIX
Number: TC14-027
Date: 7/10/2014
☒ Action
☒ Retain
☐ Information

To: All Toyota Region General Managers/Vice Presidents
From: Bob Waltz, *Bob Waltz*
Group Vice President, Product Quality and Service Support
Subject: Limited Service Campaign (LSC) E0U
2007-2011 Model Year Camry Hybrid Vehicles
Brake Reservoir Tank Replacement

In our continuing efforts to ensure the best in customer satisfaction, Toyota is launching a Limited Service Campaign (LSC) on 2007-2011 Model Year Camry Hybrid vehicles. This LSC will cover approximately 177,500 vehicles.

Background

The subject vehicles contain a brake reservoir which has two separate chambers connected by a filter. This filter may become clogged, resulting in illumination of the Brake (BRAKE) warning lamp due to low fluid level in one of the reservoir chambers. Under certain conditions this could cause additional warning lamps shown below to illuminate and front brake assist could be temporarily lost.

				
Master Warning Light (Red)	Brake Warning Light (Red)	Electronically Controlled Brake Warning (Yellow)	Anti-Lock Brake System (Yellow)	SLIP Indicator (Yellow)

Please note: In limited operating conditions, a warning buzzer may also sound.

A new brake reservoir assembly has been designed to prevent this condition from occurring.

Limited Service Campaign (LSC) Remedy

Authorized Toyota dealerships are requested to replace the Brake Reservoir Tank at **NO CHARGE** to the vehicle's owner.

This LSC will be available **until June 30, 2017**, and will only be available at an authorized Toyota Dealer.

1. Dealer Letter Mailing Date

The attached Dealer Letter will be sent to all Toyota dealers in mid-July, 2014.

2. Owner Notification Mailing Date

The owner notification will commence in Late July, 2014, approximately one week after the Dealer Letter.

Please note that only owners of the covered vehicles will be notified. If a dealer is contacted by an owner who has not yet received a notification, please instruct them to **verify eligibility by confirming through TIS prior to performing repairs**. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

3. New and Used Vehicles in Dealership Inventory (In-Stock Vehicles)

To ensure customer satisfaction, Toyota requests that dealers conduct this LSC remedy on any new or used vehicles currently in dealer inventory that are covered by this LSC prior to customer delivery.

4. Number and Identification of Covered Vehicles

There are approximately 177,500 Camry Hybrid (2007-2011MY) vehicles covered under this LSC

5. Parts Ordering Process (Dealer Ordering Solutions)

Orders can be placed through the dealership's facing PDC. The Brake Reservoir Tanks have been placed on Dealer Ordering Solutions and will be systematically released daily based on dealer ordering criteria. Each dealer has received specific dealer ordering criteria in an email from their facing PDC Manager based on Repair Order Volume * PDC Affected UIO. Therefore, it is vital that each dealership work with both Parts and Service to immediately file claims and coordinate appropriate kit orders.

Additional Part Ordering information can be found in the dealer communication.

6. Region/District Summary Reports

We have enclosed the following LSC E0U Summary Reports in the Region/Private Distributor (PD) Service Manager/Customer Service Operations Manager/Director of Service package:

- Region/PD Summary Report that provides an overview of the entire Region/PD for this LSC.
- A District Summary Report that indicates the number of covered vehicles per dealership in each district for this LSC.

The attached Dealer Notification Letter contains additional details.

Please review this notification with your staff to assure that all relevant personnel have been briefed regarding this subject.

Thank you for your cooperation.

Enclosures

cc: Region/Private Distributor Assistant General Managers
Region/Private Distributor Customer Service Operations Managers
Region/Private Distributor Service Managers/Directors/VPs
Region/Private Distributor Parts Managers/Directors/VPs
Region/Private Distributor Customer Services Field Managers
Region/Private Distributor Technical Services and Training Managers
Region/Private Distributor District Service and/or Parts Managers
Region/Private Distributor Customer Relations Managers
Region/Private Distributor PDC Managers
Region/Private Distributor Field Technical Specialists
Region/Private Distributor Service Training Specialists
Region/Private Distributor Vehicle Operations Managers
All NAPC General Managers
All TMS Sales Administration Managers
All TMS Product Quality & Service Support Managers
All Field Product Engineers



Toyota Motor Sales, U.S.A., Inc.
19001 South Western Avenue
Torrance, CA 90501
(310) 468-4000

To: All Toyota Dealer Principals, Service Managers, and Parts Managers

Subject: Limited Service Campaign (LSC) E0U
2007-2011 Model Year Camry Hybrid Vehicles
Brake Reservoir Tank Replacement

In our continuing efforts to ensure the best in customer satisfaction, Toyota is launching a Limited Service Campaign (LSC) on 2007-2011 Model Year Camry Hybrid vehicles. This LSC will cover approximately 177,500 vehicles.

Background

The subject vehicles contain a brake reservoir which has two separate chambers connected by a filter. This filter may become clogged, resulting in illumination of the Brake ^(BRAKE) warning lamp due to low fluid level in one of the reservoir chambers. Under certain conditions this could cause additional warning lamps shown below to illuminate and front brake assist could be temporarily lost.

				
Master Warning Light (Red)	Brake Warning Light (Red)	Electronically Controlled Brake Warning (Yellow)	Anti-Lock Brake System (Yellow)	SLIP Indicator (Yellow)

Please note: In limited operating conditions, a warning buzzer may also sound.

A new brake reservoir assembly has been designed to prevent this condition from occurring.

Limited Service Campaign (LSC) Remedy

Authorized Toyota dealerships are requested to replace the Brake Reservoir Tank at **NO CHARGE** to the vehicle's owner.

This LSC will be available until **June 30, 2017**, and will only be available at an authorized Toyota Dealer.

1. Owner Notification Mailing Date

The owner notification will commence in Late July, 2014, approximately 1 week after the dealer notification.

Toyota makes significant effort to obtain current customer name and address information from each state through industry resources when mailing owner letters. In the event your dealership receives a notice for a vehicle that was sold prior to the LSC announcement, it is the dealership's responsibility to forward the owner letter to the customer who purchased the vehicle.

Please note that only owners of the covered vehicles will be notified. If you are contacted by an owner who has not yet received a notification, please **verify eligibility by confirming through TIS prior to performing repairs**. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

2. New and Used Vehicles in Dealership Inventory (In-Stock Vehicles)

To ensure customer satisfaction, Toyota requests that dealers conduct the LSC remedy on any new or used vehicles currently in dealer inventory that are covered by this LSC prior to customer delivery.

3. Number and Identification of Covered Vehicles

There are approximately 177,500 Camry Hybrid (2007-2011 MY) Vehicles covered by this LSC.

WMI	MY	VDS	START	FINISH
4T1	2007	BB46K	U001012	U030790
	2008		U024787	U062522
	2009		U061175	U111424
	2010	BB3EK	U089187	U126215
	2011		U125695	U143974
JTN	2007	BB46K	3000160	3044808
	2008		3044111	3049003
	2009		3048659	3053539
	2010	BB3EK	3053459	3053881
	2011		3053902	3054497

Please note that only owners of the covered vehicles will be notified. If a dealer is contacted by an owner who has not yet received the notification, please **verify coverage by confirming through TIS**. Dealers should perform the procedure as outlined in the Technical Instructions located on TIS. **Not all vehicles in the VIN range are covered by this LSC.**

4. Dealer Summary Reports

Summary Reports, containing the following will be enclosed in the dealer packet:

- The number of covered vehicles in your dealership's primary marketing area. (Please verify eligibility by confirming through TIS prior to performing repairs.)

5. Parts Ordering

Orders can be placed through the dealership's facing PDC. The Brake Reservoir Tanks have been placed on Dealer Ordering Solutions and will be systematically released daily based on dealer ordering criteria.

Campaign	Part Number	Part Description	Qty.
EOU	04004-32133	Reservoir Sub-Assy., Master Cylinder	1

Each dealer has received specific dealer ordering criteria in an email from their facing PDC Manager based on Repair Order Volume * PDC Affected UIO. Therefore, it is vital that each dealership work with both Parts and Service to immediately file claims and coordinate appropriate kit orders.

TOYOTA

Parts Allocation Report

99999
SAMPLE TOYOTA of NOWHERE

The below matrix provides information for parts managed by NAPO Dealer Ordering Solution (DOS) and illustrates updates to your current daily allocation quantities. Parts shipments, arrivals and inventory quantities at your local PDC will change daily as parts are received and shipped from NAPO Suppliers. Therefore, your daily allocation quantity is subject to change based on the parts in-stock availability as well as in-transit inventory to your facing PDC. This report is provided as needed when daily allocation changes for DOS parts.

Parts with recent changes will be illustrated from top to bottom with the most recent effective date.

If you have any questions or concerns, please contact your facing PDC Customer Support Leader, John Q Sample at (999) 999-9999.

Part Number	Total Allocation Quantity	Allocation Quantity	Allocation Frequency	Total Allocation Shipped	Total Allocation Remaining	Effective Date

6. Technician Training Requirements

The repair quality of covered vehicles is extremely important to Toyota. All dealership associates involved in the LSC process are required to successfully complete E-Learning course SC13A. To ensure that all vehicles have the repair performed correctly; technicians performing this LSC repair are required to currently hold at least one of the following certification levels:

- **Expert Chassis**
- **Master**
- **Master Diagnostic Technician**

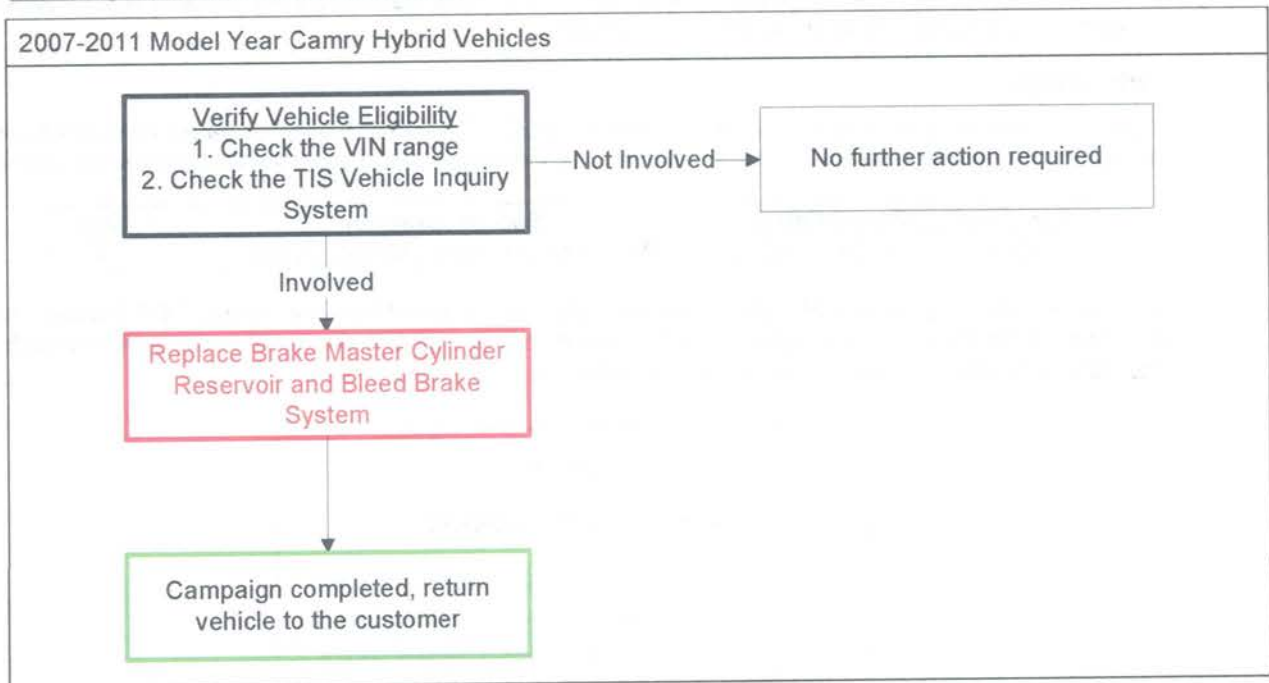
It is the dealership's responsibility to select technicians with the above certification level or greater to perform this Limited Service Campaign repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

7. Remedy Procedures

Please refer to TIS for Technical Instructions.

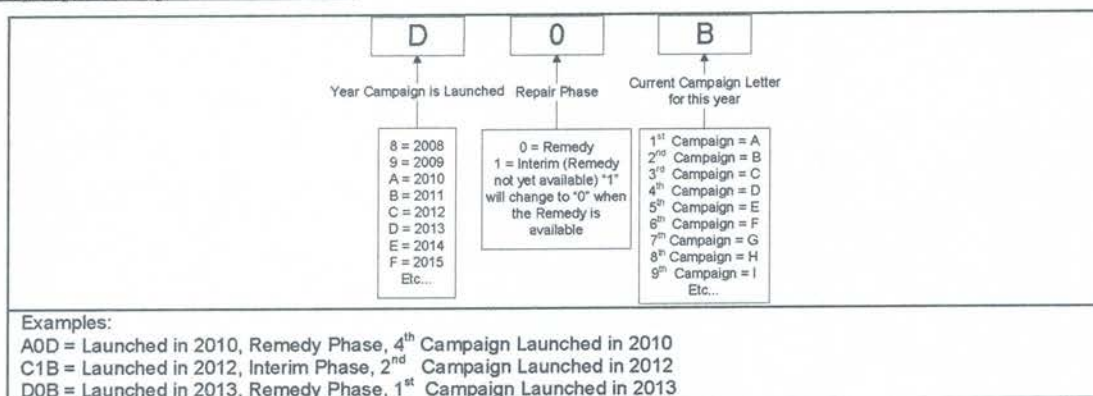
Conduct all applicable, non-completed Safety Recall and Service Campaigns on the vehicle during the time of appointment.

8. Warranty Reimbursement Procedure



LSC	Op. Code	Description	Flat Rate
E0U	AGG53A	Replace Brake Reservoir Tank and Bleed Brake System	1.4 hr/vehicle

- The above operation codes include 0.1 hour for administrative cost per unit for the dealership.
- The cost of Brake Fluid (2.0L per vehicle) can be claimed up to \$36 dollars per vehicle as sublet type "OF" under Op. Code AGG53A.

9. Campaign Designation Decoder**10. Repair Quality Confirmation**

The repair quality of covered vehicles is extremely important to Toyota. To help ensure that all vehicles have the repair performed correctly, please designate at least one associate (someone other than the individual who performed the repair) to verify the repair quality of every vehicle prior to customer delivery.

11. Media Contacts

It is imperative that all media contacts (local and national) receive a consistent message. In this regard, all media contacts must be directed to Cindy Knight (310) 468-2170 in Toyota Corporate Communications. (Please do not provide this number to customers. Please provide this contact to only media associates.)

12. Customer Contacts

Customers who receive the owner letter may contact your dealership with questions regarding the letter and/or LSC remedy. Please welcome them to your dealership and answer any questions that they may have. A Q&A is provided to assure a consistent message is communicated.

Customers with additional questions or concerns are asked to please contact the Toyota Customer Experience Center (1-888-270-9371).

Please review this entire package with your Service and Parts staff to familiarize them with the proper step-by-step procedures required to implement this Limited Service Campaign.

Thank you for your cooperation.
 TOYOTA MOTOR SALES, U.S.A., INC.



Toyota Motor Sales, U.S.A., Inc.
19001 South Western Avenue
P.O. Box 2991
Torrance, CA 90509-2991

2007–2011 Model Year Camry Hybrid Vehicles
Brake Reservoir Tank
LIMITED TIME OFFER






[VIN]

Dear Toyota Camry Hybrid Owner:

At Toyota, we are dedicated to providing vehicles of outstanding quality and value. As part of our continuing efforts to provide superior customer satisfaction, Toyota is announcing a Limited Service Campaign, which includes your vehicle.

What is the condition?

The subject vehicles contain a brake reservoir which has two separate chambers connected by a filter. This filter may become clogged, resulting in illumination of the Brake (BRAKE) warning lamp due to low fluid level in one of the reservoir chambers. Under certain conditions this could cause additional warning lamps shown below to illuminate and front brake assist could be temporarily lost.

				
Master Warning Light	Brake Warning Light	Electronically Controlled Brake System	Anti-Lock Brake System	SLIP Indicator

Please note: In limited operating conditions, a warning buzzer may also sound.

A new brake reservoir assembly has been designed to prevent this condition from occurring.

What is included in the Limited Service Campaign?

Before you are inconvenienced by this condition, any authorized Toyota dealer will replace the Brake Reservoir Tank at **NO CHARGE** to you for a limited time. ***This Limited Service Campaign will remain available until June 30, 2017,*** and will only be available at an authorized Toyota dealer.

This offer is limited to your specific vehicle whose Vehicle Identification Number (VIN) is printed at the beginning of this letter and is subject to the same conditions set forth in the New Vehicle Limited Warranty section of your Owner's Manual Supplement or Owner's Warranty Information booklet. For additional information, please refer to the booklet.

How do you take advantage of this Limited Service Campaign?

Please contact your authorized Toyota dealer to make an appointment to have the Brake Reservoir Tank replaced before **June 30, 2017**. The repair will take approximately 2 hours. However, depending upon the dealer's work schedule, it may be necessary to make your vehicle available for a longer period of time.

If your vehicle is covered by this Limited Service Campaign, you do not need this owner letter to have the campaign completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present this notice at the time of your service appointment.

What if you have other questions?

- Your local Toyota dealer will be more than happy to answer any of your questions and set up an appointment to perform the repair.
- You can find additional information and locate a Toyota dealer in your area by going online and visiting www.toyota.com/recall.
- If you require further assistance, you may contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 a.m. to 6:00 p.m., or Saturday 7:00 a.m. through 4:00 p.m. Pacific Time.

If you would like to update your vehicle ownership or contact information, please go to www.toyota.com/ownersupdate. You will need your full 17-digit Vehicle Identification Number (VIN) to input the new information.

If you are a vehicle lessor, please assist us by forwarding this notice to the lessee.

We have sent this notice in the interest of your continued satisfaction with our products, and we sincerely regret any inconvenience this condition may have caused you.

Thank you for driving a Toyota.

Sincerely,

TOYOTA MOTOR SALES, U.S.A., INC.






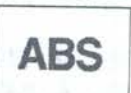

**Limited Service Campaign E0U
2007-2011 MY Camry Hybrid Vehicles
Brake Reservoir Tank Replacement - FAQ**

Customer Frequently Asked Questions

Published Mid-July, 2014

Q1: What is the condition?

A1: The subject vehicles contain a brake reservoir which has two separate chambers connected by a filter. This filter may become clogged, resulting in illumination of the Brake (BRAKE) warning lamp due to low fluid level in one of the reservoir chambers. Under certain conditions this could cause additional warning lamps shown below to illuminate and front brake assist could be temporarily lost.

				
Master Warning Light (Red)	Brake Warning Light (Red)	Electronically Controlled Brake Warning (Yellow)	Anti-Lock Brake System (Yellow)	SLIP Indicator (Yellow)

Please note: In limited operating conditions, a warning buzzer may also sound.

A new brake reservoir assembly has been designed to prevent this condition from occurring.

Q2: What is Toyota going to do?

A2: Owners of vehicles covered by this LSC will receive a notification letter by first class mail starting in Late July, 2014.

Any authorized Toyota dealer will replace the Brake Reservoir **NO CHARGE** to the vehicle owner. Please see your local authorized Toyota dealer for additional details.

Q2a: How does Toyota obtain my mailing information?

A2a: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information based upon the DMV records. Please make sure your registration or title information is correct.

Q2b: Do I need my owner letter to have the remedy performed?

A2b: No, you do not need an owner letter to have this LSC completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present the owner notification at the time of your service appointment.

Q3: Are there any warnings that this condition has occurred?

A3: If this condition has occurred, the vehicle will illuminate the Brake System (BRAKE) Warning lamp and/or the various warning lamps shown above.

If the Brake System (BRAKE) warning lamp or above warning lamps illuminate, please contact your local authorized Toyota as soon as possible for diagnosis and repair.

Please note: In limited operating conditions, a warning buzzer may also sound.

Q4: Which and how many vehicles are covered by this Limited Service Campaign?

A4: There are approximately 177,500 Camry Hybrid (2007-2011MY) vehicles covered by this Limited Service Campaign in the U.S.

Model Name	Model Year	Production Period
Camry Hybrid	2007-2011	Early March, 2006 through Late July, 2011

Q4a: Are there any other Toyota or Lexus vehicles covered?

A4a: No, this condition only affects 2007-2011 MY Camry Hybrid vehicles.

Q4b: Why are other Hybrid vehicles not covered by this Limited Service Campaign?

A4b: The Brake Reservoir Tank used in other Hybrid models is of a different design.

Q5: When will this Limited Service Campaign Expire?

A5: This Limited Service Campaign will be available until June 30, 2017

Q6: How long will the repair take?

A6: The repair will take approximately 2 hours. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Q7: What if you have previously paid for repairs to your vehicle for this specific condition?

A7: Owners who have previously paid for repairs to address this specific condition should refer to the owner letter for instructions regarding reimbursement consideration.

Please note the dealer will need to perform this LSC before reimbursement consideration requests can be processed.

Q8: What if an owner has additional questions?

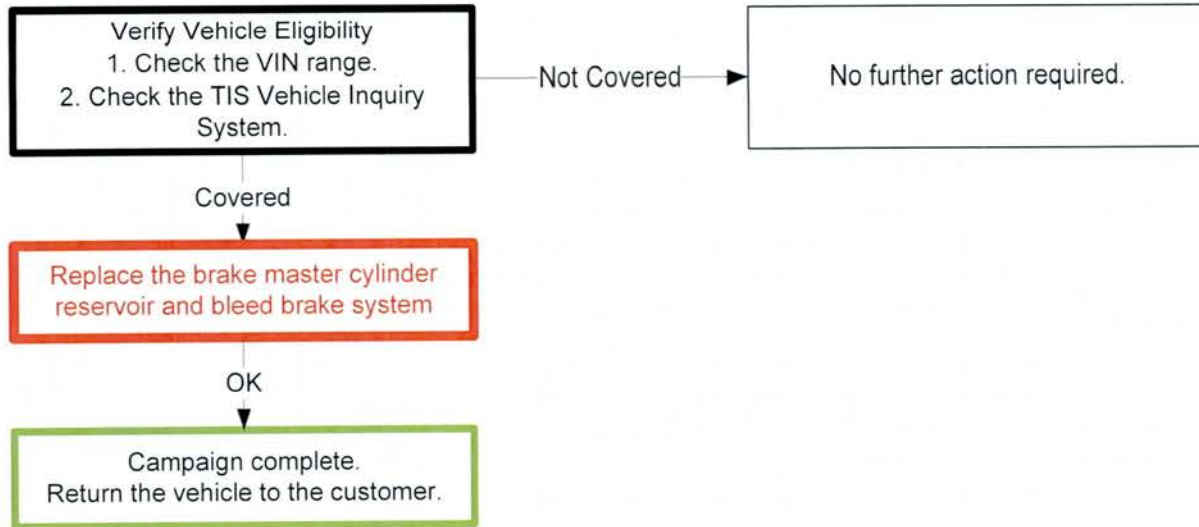
A8: Owners with questions or concerns are asked to please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.

TECHNICAL INSTRUCTIONS
FOR
LIMITED SERVICE CAMPAIGN E0U
2007 – 2011 MODEL YEAR CAMRY HV
BRAKE RESERVOIR REPLACEMENT

All dealership associates involved in the campaign process are required to successfully complete E-Learning course SC13A. To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to currently hold at least one of the following certifications levels:

- Expert Chassis
- Master
- Master Diagnostic Technician

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

A. COVERED VIN RANGE

WMI	Year	VIN Range	
		VDS	Range
4T1	2007	BB46K	U001012-U0307
	2008	BB46K	U024787-U0625
	2009	BB46K	U061175-U1114
	2010	BB3EK	U089187-U1262
	2011	BB3EK	U125695-U1439

WMI	Year	VIN Range	
		VDS	Range
JTN	2007	BB46K	3000160-30448
	2008	BB46K	3044111-30490
	2009	BB46K	3048659-30535
	2010	BB3EK	3053459-30538
	2011	BB3EK	3053902-30544

NOTE:

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this LSC and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- **TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.**

III. PREPARATION

A. PARTS

Part Number	Part Description	Quantity
04004-32133	RESERVOIR SUB-ASSY, MASTER CYLINDER	1
00475-1BF03	Brake Fluid	5

B. TOOLS & EQUIPMENT

- Standard Hand Tools
- Techstream
- Torque Wrench
- Tray
- Fluid Extractor

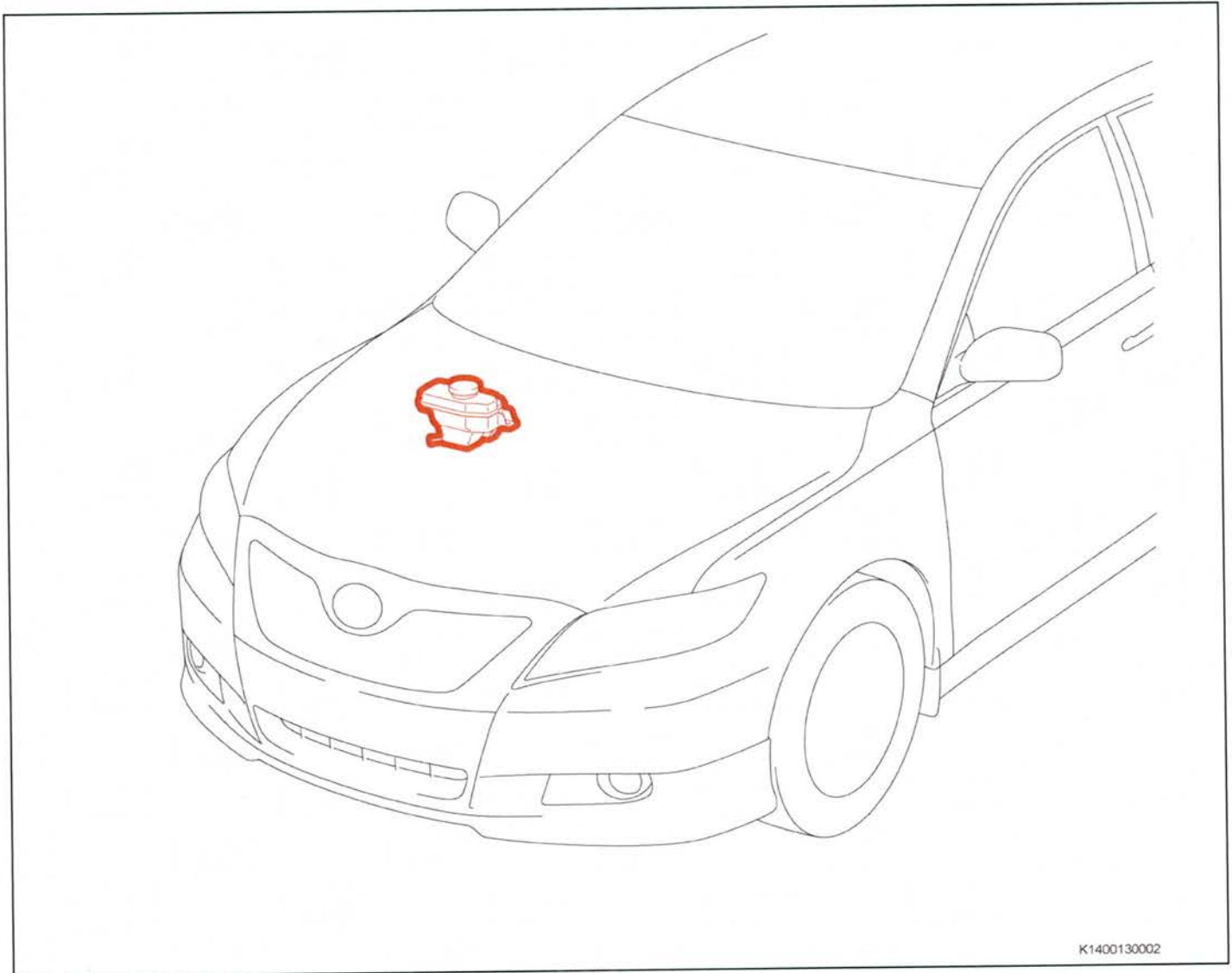
SST – This is an essential special service tool that the dealership should have.

Part Number	Part Name	Quantity
09992-00242	Turbocharger Pressure Gauge	1
09992-00350	Brake Reservoir Pressure Adapter	1
09053-1C220	Hose Plug No.2	3

C. MATERIALS

- Shop Cloth
- Protective Eyewear
- Vinyl Tube

IV. BACKGROUND



In 2007 through 2011 model year Toyota Camry hybrid vehicles, the front brake assist may be lost while the rear brake continues to be operated with normal assist. In that situation some warnings appear as below.

1. The Brake system warning lights in yellow and red
2. ABS warning light
3. Master warning light
4. Slip indicator
5. "CHECK VSC SYSTEM" in the Multi-information display

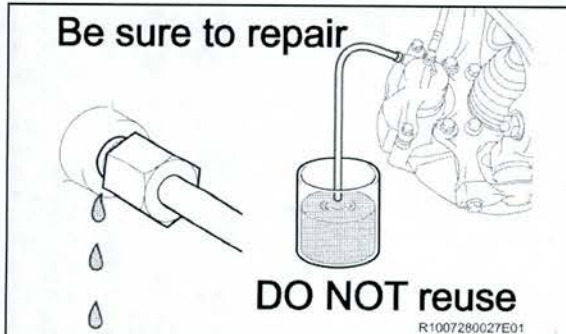
After these warning lights illuminating for 10 seconds, the brake assist for the front brake would be lost as described at the top of this paragraph.

V. PRECAUTIONS FOR HANDLING BRAKE PARTS AND BRAKE FLUID



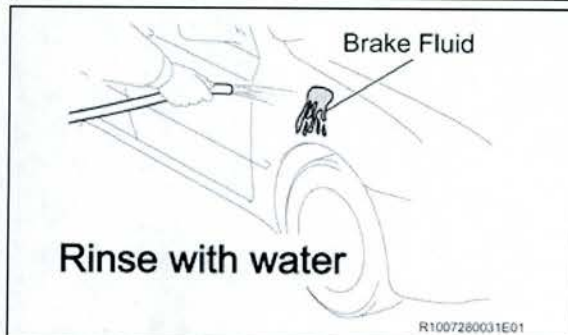
1. PREVENTION OF FOREIGN MATTER FROM GETTING INTO BRAKE SYSTEM

- a) After disconnecting the brake system parts, use a cover to prevent intrusion of foreign matters.



2. HANDLING OF BRAKE FLUID

- a) **DO NOT** reuse brake fluid. Brake fluid is hygroscopic and will absorb moisture that could cause a brake failure and cause an accident.



- b) Brake fluid damages paint. **DO NOT** allow brake fluid to contact any painted surface. If brake fluid adheres to a painted surface, immediately rinse it off with water.



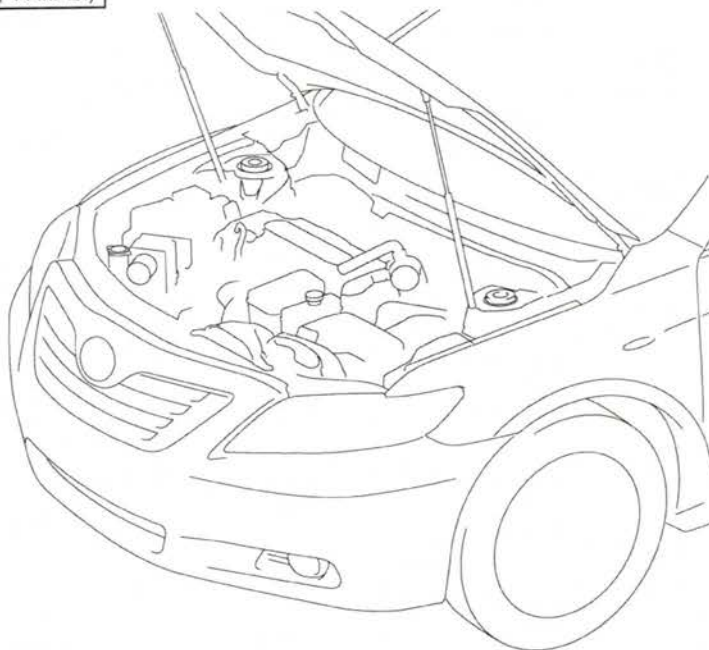
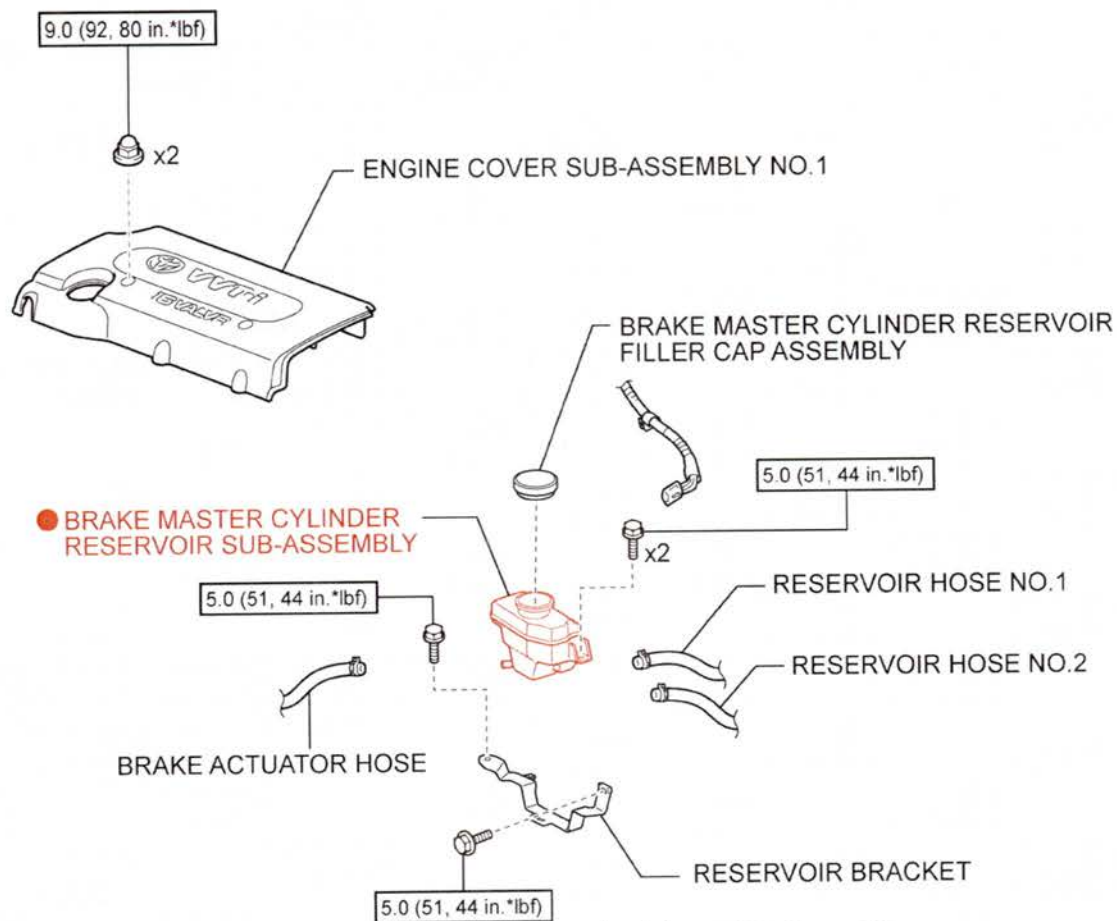
- c) Brake bleeding may cause brake fluid to spray outwards. Wear protective eyewear when bleeding the brakes.



3. DO NOT USE CLOTH RAGS OR GLOVES

- a) **DO NOT** use any fabric near open brake system components, to avoid threads and fibers from entering the braking system.

VI. COMPONENTS



● : Replacement part

N*m (kgf*cm, ft.*lbf) : Specified torque

K1400130025A

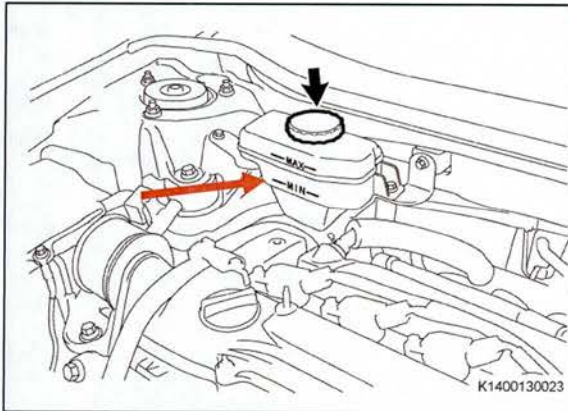
VII. REMOVE THE BRAKE MASTER CYLINDER RESERVOIR

1. CHECK FOR DTCs

- Perform a Health Check.
- Check for any DTC's



If any DTC's are Pending, Current, and/or History. Verify warranty coverage and refer to the appropriate repair manual on TIS for proper diagnosis and repair. If vehicle is not covered under warranty, advise the customer prior to diagnosing or repairing the vehicle.



2. LOWER THE BRAKE FLUID LEVEL

- Remove the brake reservoir filler cap.
- Lower the brake fluid level to MIN.



- DO NOT** use a fluid extractor that has been used on anything other than brake fluid to avoid contamination.
- DO NOT** allow brake fluid to come into contact with any painted surfaces.

- Reinstall the brake reservoir filler cap.

3. PERFORM ACCUMULATOR PRESSURE ZERO DOWN

NOTE: Perform accumulator zero down by following the steps displayed on the Techstream.

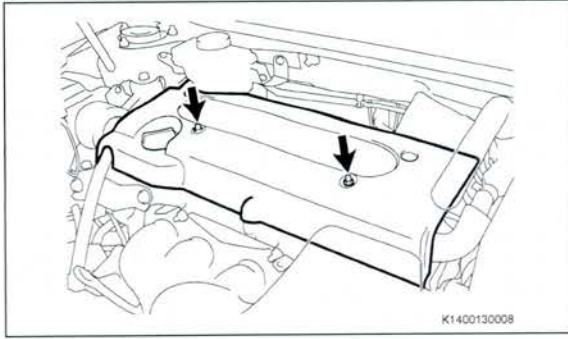
- Move the shift lever to the P position and apply the parking brake.
- Connect the Techstream to the DLC3 with the IG in the "OFF" position.
- Switch the IG to the "ON" position.

NOTE: Do not start the engine.

- Turn Techstream on and select "Chassis / ABS/VSC/TRC / Utility / ECB Utility / ZERO DOWN"
- When the buzzer sounds, turn the IG to the "OFF" position.

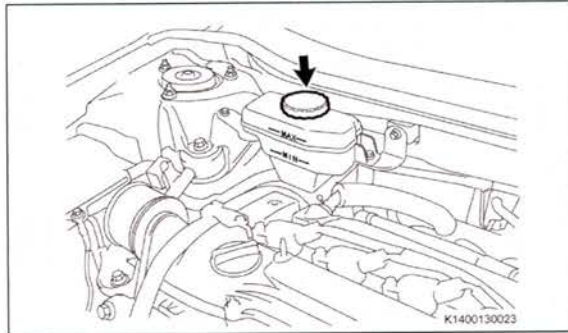


- DO NOT** turn the IG to the "ON" position until instructed.
- Wait at least 120 seconds after turning the IG to the "OFF" position before moving on to the next step.
- DO NOT** open or close a door and operate the brake pedal until the actuator hose has fully been bled.



4. REMOVE THE ENGINE COVER SUB-ASSEMBLY NO.1

- a) Remove the 2 nuts
- b) Remove engine cover sub-assembly No.1.

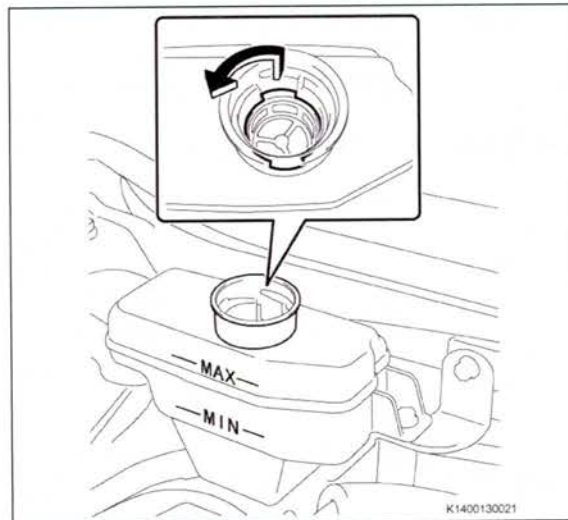


5. DRAIN BRAKE FLUID

- a) Remove the brake reservoir filler cap.

STOP

The brake reservoir filler cap will be re-used.

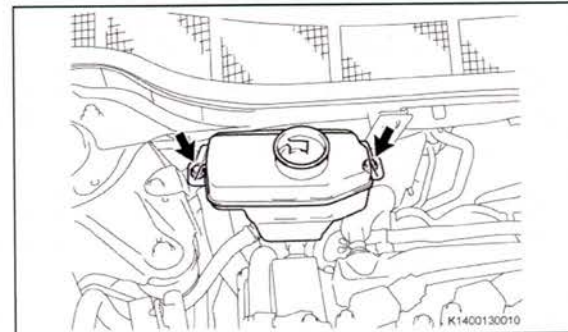


- b) Remove the brake reservoir strainer, and drain the brake fluid from the reservoir to prevent spillage.

- c) Mark the removed brake reservoir strainer so it is not reused.

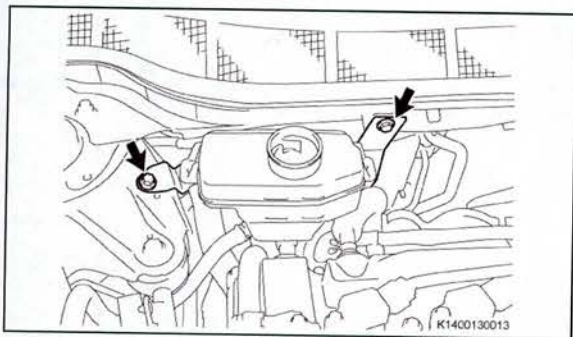
STOP

- **DO NOT** use a fluid extractor that has been used on anything other than brake fluid to avoid contamination.
- **DO NOT** allow brake fluid to contact any painted surfaces.

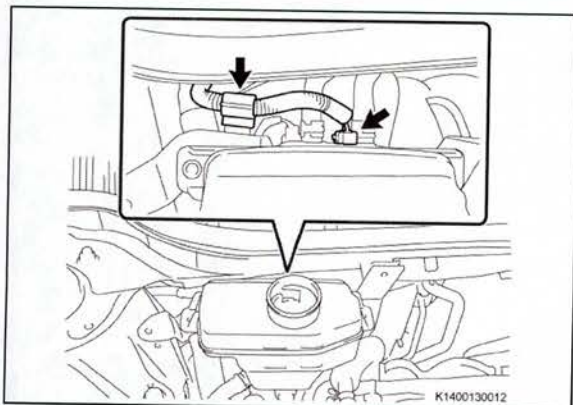


6. REMOVE THE BRAKE MASTER CYLINDER RESERVOIR

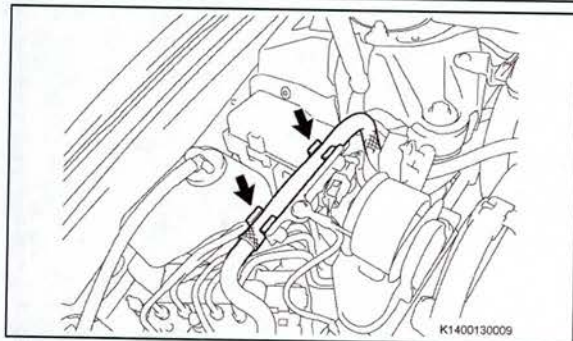
- a) Remove the 2 bolts.



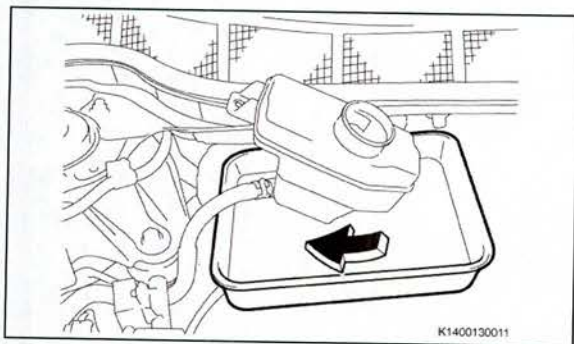
- b) Remove the 2 bolts, and separate the reservoir bracket from the brake reservoir.



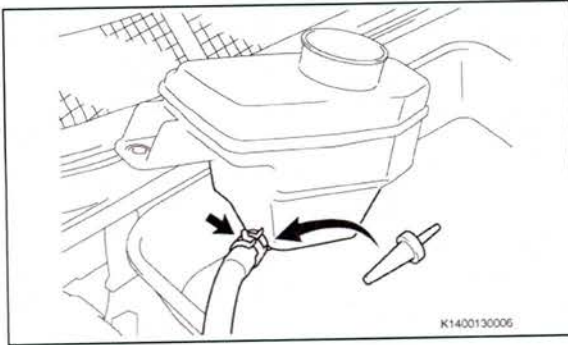
- c) Detach the harness clamp and disconnect the connector.



- d) Detach the brake actuator hose from the 2 clamps.

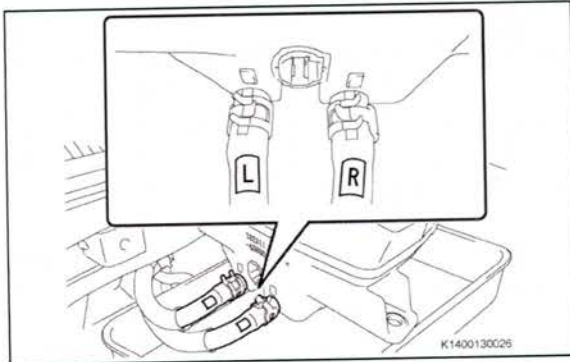


- e) Place a tray under the brake reservoir.

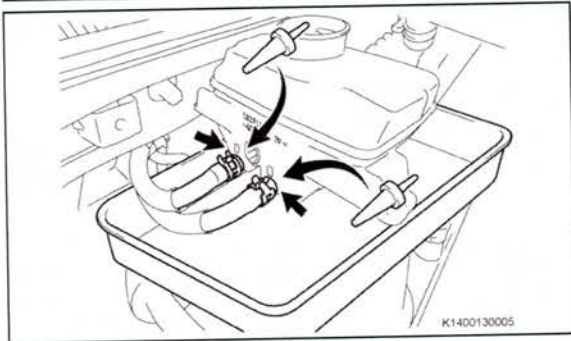


- f) Slide back the hose clip, disconnect, and immediately plug the brake actuator hose.

NOTE: Clean the surrounding area prior to disconnecting the hose



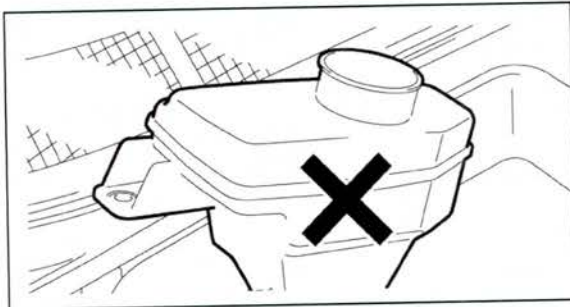
- g) Apply tape and mark the reservoir hoses to distinguish between left and right.



- h) Slide back the 2 hose clips, disconnect, and immediately plug the 2 reservoir hoses.

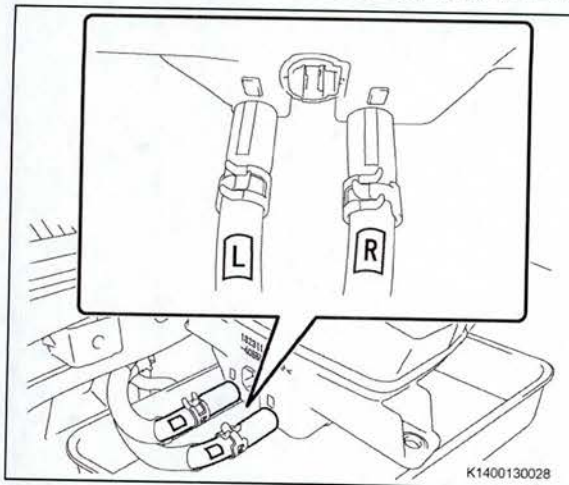
NOTE: Clean the surrounding area prior to disconnecting the hose.

- i) Remove the brake reservoir.



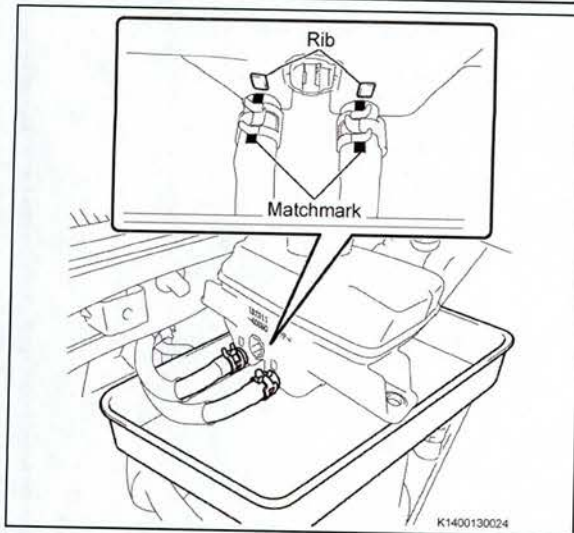
- j) Mark the brake reservoir so it is not reused.

VIII. INSTALL THE NEW BRAKE MASTER CYLINDER RESERVOIR



1. INSTALL THE NEW BRAKE RESERVOIR

- a) Reinstall the left and right side hoses, remove the 2 hose plugs and reconnect the reservoir hoses to the **NEW** brake reservoir.



- b) Align the matchmarks on the 2 reservoir hoses and the ribs on the new brake reservoir.

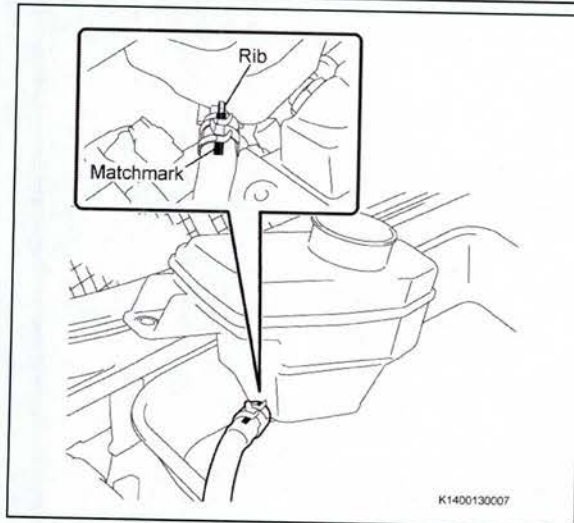
- c) Slide on the 2 hose clips to secure the hoses.

- d) Remove the tape identifying the left and right hoses.

NOTE: Confirm the hoses are connected to the correct location on the master cylinder reservoir.

Connect the hose immediately after removing the plug to prevent brake fluid from leaking.

Reinstall the hose clips into their original positions.



- e) Remove the hose plug and reconnect the brake actuator hose to the brake reservoir.

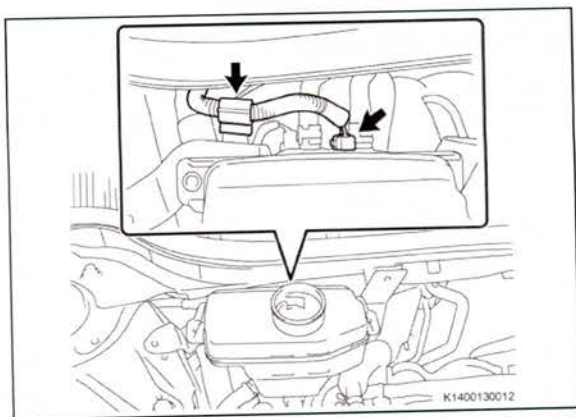
- f) Align the matchmark on the hose and the rib on the brake reservoir.

- g) Slide on the hose clip to secure the hose.

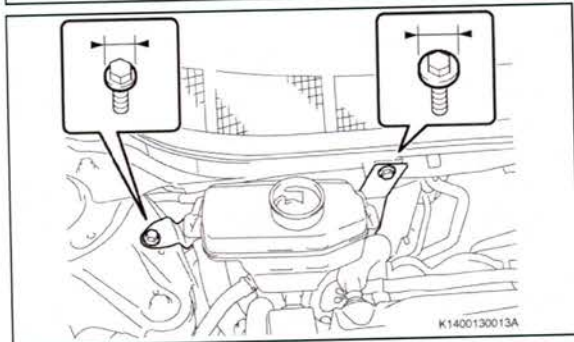
NOTE: Confirm the hoses are connected to the correct location on the master cylinder reservoir.

Connect the hose immediately after removing the plug to prevent brake fluid from leaking.

Install the hose clips into their original positions.



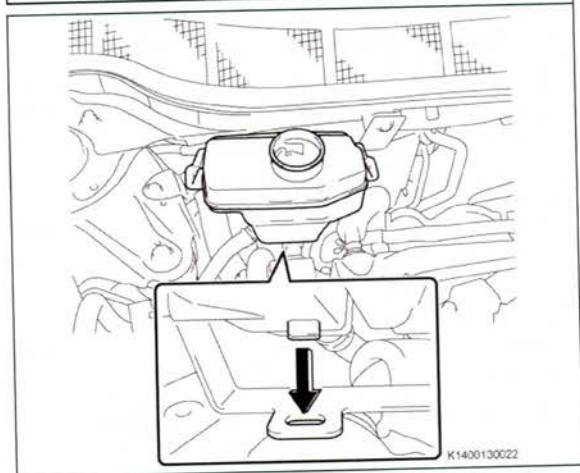
- h) Reconnect the connector, and attach the harness clamp to the reservoir bracket.



- i) Reinstall the reservoir bracket with the 2 bolts.

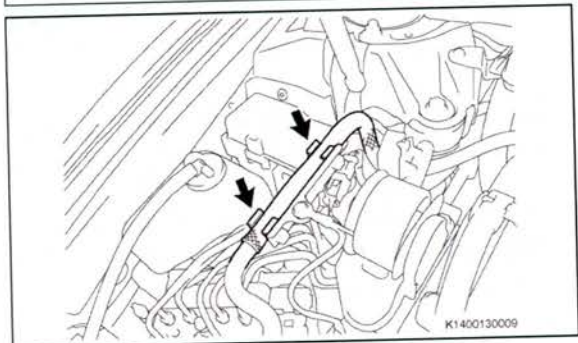
Torque: 5.0 N*m (51 kgf•cm, 44 in.•lbf)

NOTE: Each of the bolts have a different bolt head/washer design.



- j) Align the guide and install the brake reservoir with the 2 bolts.

Torque: 5.0 N*m (51 kgf•cm, 44 in.•lbf)



- k) Reattach the brake actuator hose to the 2 clamps.

2. REINSTALL THE ENGINE COVER SUB-ASSEMBLY NO.1

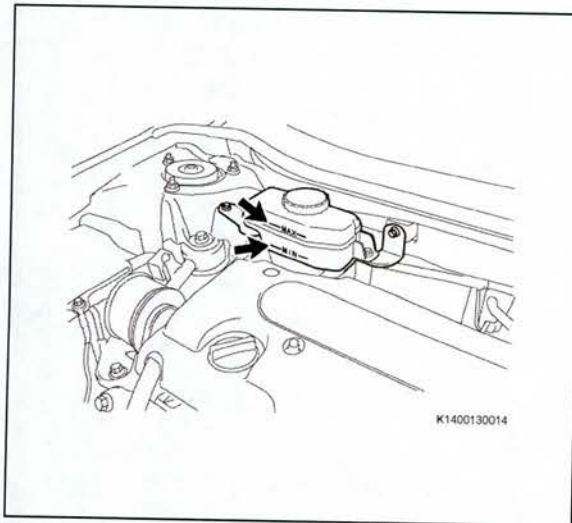
Torque: 9.0 N*m (92 kgf•cm, 80 in.•lbf)

IX. BLEED THE BRAKE SYSTEM



The brake bleeding process is an essential step to the completion of this LSC due to the following:

- To eliminate any air in the brake system
- To flush any foreign matter from the system
- Because brake fluid is hygroscopic and could have absorbed moisture over time



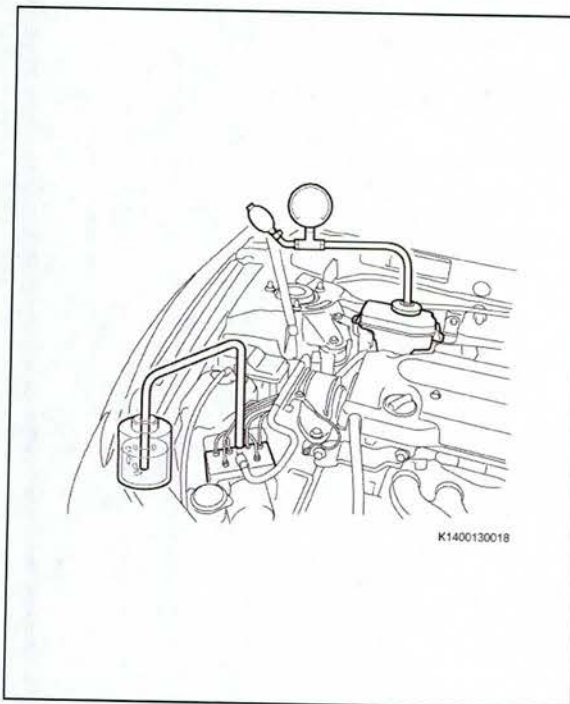
1. RAISE THE VEHICLE AND REMOVE THE WHEELS
2. ADD BRAKE FLUID TO THE RESERVOIR

- a) Add brake fluid to the MAX line of the reservoir.

Brake fluid: SAE J1703 or FMVSS No.116 DOT3

NOTE: Add brake fluid carefully and check that the reservoir level remains between the MIN and MAX lines while bleeding the brakes.

DO NOT stand the fluid can on the reservoir inlet when air-bleeding the brake actuator. Doing so will cause brake fluid to overflow.



3. BLEED AIR FROM THE BRAKE ACTUATOR HOSE

- a) Connect the SST to the reservoir with the brake reservoir pressure adapter.

SST: 09992-00242, 09992-00350

- b) Connect a vinyl tube to the bleeder plug of the actuator.
- c) Quickly loosen the bleeder plug of the actuator, then tighten it lightly to release.
- d) While the bleeder plug is loosened, use the SST to boost pressure in the reservoir and drain approximately 500 cc (16.9 fl.oz.) of fluid.

NOTE: DO NOT allow the brake fluid level to drop below MIN.

- e) When air is completely bled out from the hose between the reservoir and the actuator, tighten the bleeder plug.

Torque: 8.3 N*m (85 kgf*cm, 74 in.*lbf)

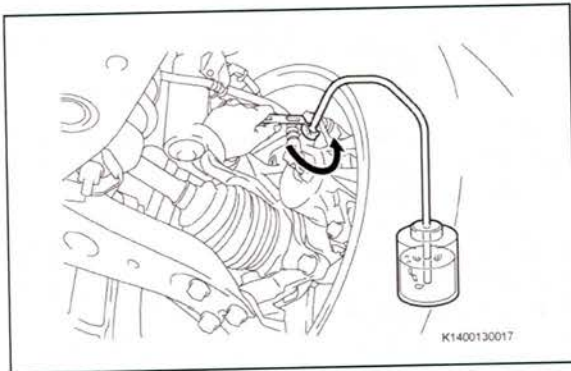
4. DISABLE BRAKE CONTROL

- Move the shift lever to the P position and apply the parking brake.
- Connect Techstream to the DLC3 with the power switch off.
- Switch the IG to the "ON" position.



DO NOT start the engine.

- Turn Techstream on and select "Chassis / ABS/VSC/TRC / Utility / ECB Utility / ECB Invalid".



5. BLEED THE FRONT BRAKE SYSTEM



- If brake fluid gets on any painted surface of the vehicle, wash or remove it completely.
- DO NOT** turn the IG to the "OFF" position.

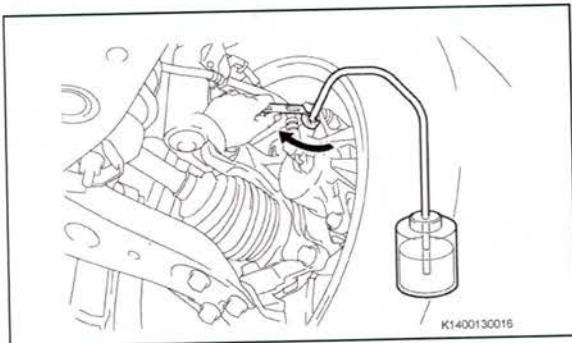
- Depress the brake pedal several times and bleed the left front brakes from the bleeder plug.

NOTE: Repeat the procedure until air is completely bled from the front brake system.

- Tighten the bleeder plugs after air-bleeding.

Torque: 8.3 N*m (85 kgf*cm, 74 in.*lbf)

- Repeat procedure on the other side.



6. BLEED THE REAR BRAKE SYSTEM



DO NOT turn the IG to the "OFF" position.

- a) Depressed the brake pedal, bleed the left rear from the bleeder plug while the pump motor and solenoid are operating.

NOTE: DO NOT allow the brake fluid level to drop below MIN.

Depress and hold the brake pedal.

After the solenoid operates for approximately 30 seconds, release the brake pedal to stop the solenoid.

Repeat the procedures until air is completely bled from the rear brake system.

The brake control warning light and buzzer will come on while air-bleeding, but they **DO NOT** indicate a malfunction.

- b) Tighten the bleeder plug after bleeding.

Torque: 8.3 N*m (85 kgf*cm, 74 in.*lbf)

- c) Repeat procedure on the other side.

NOTE: Check the brake fluid level frequently so it does not drop below MIN.

7. PERFORM ACCUMULATOR PRESSURE ZERO DOWN



Never bleed the brake system without using the Techstream. Failure to use the Techstream could cause serious injury or an accident.

NOTE: Perform accumulator zero down by following the steps displayed on the Techstream.

- a) Check the brake fluid in the reservoir tank is above the MIN line.
- b) Depressurize the accumulator.
 - 1) Check that the parking brake is applied with the IG in the "ON" position.
 - 2) Enter the following menu items on the Techstream. "Chassis / ABS/VSC/TRC / Utility / ECB Utility / ZERO DOWN"
 - 3) When the buzzer sounds, turn the IG in the "OFF" position.
- c) Circulate the fluid in the accumulator.
 - 1) Depressurize the accumulator 5 times.

NOTE: Accumulator pressure is cycled repeatedly, which circulates the fluid inside the accumulator, when repeating accumulator zero down.

The pump motor spins and the accumulator is pressurized every time the IG is switched from "OFF" to "ON".

8. CLEAR DTC FOR THE BRAKE CONTROL SYSTEM

- a) Operate Techstream to clear the codes.

9. CHECK THE BRAKE FLUID LEVEL IN THE RESERVOIR

- a) Adjust the brake fluid level in the reservoir to MAX line with the IG in the "ON" position.

NOTE: The brake fluid level must always be adjusted to the MAX line.

- b) Install the brake reservoir filler cap.

10. CHECK FOR BRAKE FLUID LEAKAGE

11. REINSTALL THE WHEELS

Torque: 103 Nm (1050 kgf•cm, 76 ft•lbf)

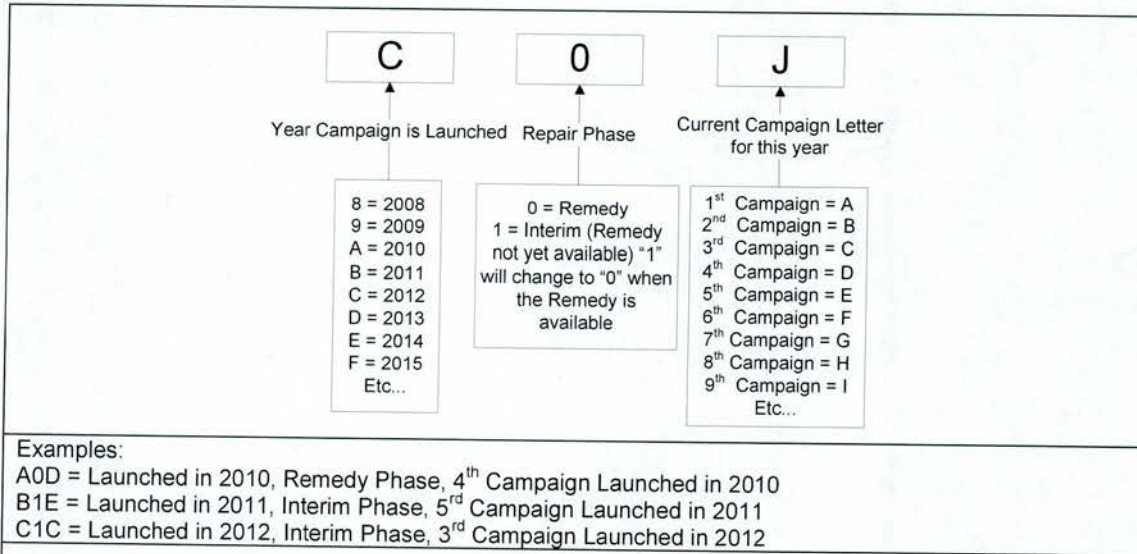
◀ VERIFY REPAIR QUALITY ▶

- No brake fluid leakage
- Brake fluid at the correct level
- No DTC's

If you have any questions regarding this update, please contact your area representative.

X. APPENDIX

A. CAMPAIGN DESIGNATION DECODER



B. CAMPAIGN PARTS DISPOSAL

As required by Federal Regulations, please make sure all campaign parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, ***unless requested for parts recovery return.***