

 

 Service Category
 Brake

 Section
 Brake Control/Dynamic Control System
 Market
 USA

 ASE Certification
 ASE Certification
 ASE Certification

### Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2007 – 2009	LS460, LS600H	

### Introduction

Small amounts of air in the brake system may cause a squawk or bark type noise from the brake actuator in some LS 460/460L and LS 600h vehicles. If present, this condition is most noticeable when the vehicle is not moving and the brake pedal is depressed, or when coming to an abrupt stop. Follow the procedures outlined in this bulletin to remove any residual air from the system that could contribute to this condition.

This procedure should also be followed anytime the brake actuator assembly is replaced.

Refer to the video link below for an example of the squawk/bark noise condition:

LS Squawk/Bark Noise Example

### Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
BR9002	Special Brake Bleed Procedure	1.0	44050-50130	91	99

### **APPLICABLE WARRANTY**

- This repair is covered under the Lexus Comprehensive Warranty. This warranty is in effect for 48 months or 50,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to correction of a problem based upon a customer's specific complaint.

### **Required Tools & Equipment**

REQUIRED MATERIALS	PART NUMBER	QTY
Brake Fluid	SAE J1703 or FMVSS No. 116 DOT 3	As Needed
Vinyl Tube for Brake Bleeder	-	1
Clear Plastic Bottle (to Bleed Brake Fluid into)	_	1

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream*			4
NOTE: Software version 4.11.000 or later is required.	ADE	ISPKGI	

\* Essential SST.

### NOTE

Additional TIS Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

SPECIAL SERVICE TOOLS (SST'S)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	00002-MCGR8	1

\* Essential SST.

### NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

### Repair Procedure Overview

The brake bleed procedure consists of 5 main sections:

### • Section 1: Zero Down Accumulator Pressure (Zero Down)

This procedure is used to release the pressure from the accumulator prior to bleeding the brakes (or replacing the brake actuator). Techstream is used for this procedure.

### • Section 2: Disable Electronic Controlled Brakes (ECB Invalid)

This procedure, using Techstream, disables the ECB system temporarily to allow the front brakes to be bled manually. Using Techstream to disable brake control causes the master cylinder cut solenoid to turn OFF and the line from the master cylinder to front brake calipers to open, allowing manual bleeding of the front brakes.

### • Section 3: Front Brake Bleed — Manual Process

This is a two-man process in which one technician pumps and holds the brake pedal, while another technician opens the right front bleeder screw to remove air from the system. The same procedure is repeated for the left front.

### • Section 4: Rear Brake Bleed

• Right Rear Brake Line Air Bleed

During this procedure, Techstream opens the solenoid for the right rear brake line and then the accumulator pump runs during this process to push fluid and air out of the right rear caliper bleeder valve. During this process, the brake pedal is NOT applied — the accumulator pump will automatically pump fluid out of the right rear caliper bleeder valve. This process bleeds the red brake line (suction line from the accumulator to the actuator) and passes air out through the right rear caliper bleeder.

• Left Rear Brake Line Air Bleed

The left rear brake line is bled using a combination of the brake pedal being pressed-and-held and the accumulator pump.

### • Section 5: Reset Memory and Linear Valve Offset Calibration

The purpose of this step is to erase all previously memorized brake actuator linear valve calibration values and to re-calibrate the brake actuator linear valves after all brake bleeding procedures are finished. This procedure resets the memory of the skid control computer and then performs the Linear Valve Offset Learning Process. During the Linear Valve Offset Learning Process, the skid control computer memorizes the characteristics of the actuator linear solenoids.



### **Repair Procedure**

Section 1: Zero Down Accumulator Pressure (Zero Down)

### **IMPORTANT**

- When the actuator is replaced, there is no pressure in the accumulator and the Zero Down procedure is NOT necessary.
- If the actuator has just been replaced and no bleeding has yet been performed, DO NOT connect accumulator connectors and press the "Engine Start/Stop" button to the ignition ON position. (If the connectors are plugged in and the ignition is turned "ON", pressure will be built up in the accumulator.)

Press the "Engine Start/Stop" button to the ignition ON position, then start with "Section 2: Disable Electronic Controlled Brakes (ECB Invalid)".

This procedure releases pressure from the accumulator.

- 1. Connect a battery charger to maintain battery voltage.
- 2. Press the "Engine Start/Stop" button to the ignition ON position.
- 3. Using Techstream, navigate to the following menu: ABS/VSC/TRAC

Figure 1.

ystem select   ore				
2009 LS460 1UR-FSE Health Check	System Selection Menu Select desired system and then press Live D System Yellow = ECU status unknow System White = ECU communication *System White w/Asterisk = ECU not All ECUs Powertrain Chassis B	Data to access the ECU. n. OK. supported or not responding. ody Electrical		
Customize	Air suspension	ABS/VSC/TRAC	Tire Pressure Monitor	
Setting	EMPS	VGRS	Electric Parking Brake	
ECU	Advanced Parking Guidance System	Lane Keeping Assist		
Reprogramming				
CAN				
Bus Check				
			25	1
		24		

### **Repair Procedure**

Section 1: Zero Down Accumulator Pressure (Zero Down) (Continued)

4. Select the "Utility" menu.

### Figure 2.

ile Function Setup	TIS User Help		<u></u>
System Select   Sto	ored Data ABS/VSC/TRAC Live		
2009 L S460 1UR-F SE	Utility Selection Menu Select desired Utility and then press Next but	ton.	
	ABS History	Air Bleeding	
	Reset Memory	Signal Check	
Trouble Codes	Test Mode	ECB Utility	
	Inspection Mode		
Data List			
Active Test	)    ==================================		
Monitor			
Utility			

5. Select "ECB Utility".

### Figure 3.

System Select     Stored Data     ABS/VSC/TRAC Live       2009 LS460 1UR FSE     Utility Selection Menu Select desired Utility and then press Next button.       Trouble Codes     Air Bleeding Reset Memory Trouble Codes       Data List     EcB Utility       Monitor     Image: Code Selection Mode       Utility     Image: Code Selection Mode	ile Function Setup	TIS User Help		
Utility Selection Menu         Select desired Utility and then press Next button.         Trouble Codes         Data List         Data List         Monitor         Utility	System Select   Sto	ored Data ABS/VSC/TRAC Live		
Trouble Codes       ABS History       Air Bleeding         Data List       Test Mode       ECB Utility         Active Test       Inspection Mode       Inspection Mode         Utility       Inspection Mode       Inspection Mode         Utility       Inspection Mode       Inspection Mode	2009 L S460 1UR-FSE	Utility Selection Menu Select desired Utility and then press Next buttor	к.	
Trouble Codes       Reset Memory       Signal Check         Data List       Inspection Mode       ECB Utility         Active Test		ABS History	Air Bleeding	
Trouble Codes     Test Mode     ECB Utility       Data List     Inspection Mode     Inspection Mode       Active Test     Inspection Mode     Inspection Mode       Monitor     Inspection Mode     Inspection Mode       Utility     Inspection Mode     Inspection Mode	-	Reset Memory	Signal Check	
Data List       Inspection Mode         Active Test	Trouble Codes	Test Mode	ECB Utility	
Data List		Inspection Mode		
Active Test Monitor Utility I I I I I I I I I I I I I I I I I I I	Data List			
Active Test	Data List			
Monitor Utility Utility	Active Test			
Monitor Utility Utility	Active rest			
Utility	Monitor			
Utility Utility Contract of the second secon				
	LINIGHT			
	Otinty			

### **Repair Procedure**

### Section 1: Zero Down Accumulator Pressure (Zero Down) (Continued)

6. Select "Zero Down" from the ECB Utility screen and press "Next".



7. Press "Next" to proceed.

### Figure 5.

	Zero Down	
This function is u of the accumulat	used to lower the int tor.	ernal pressure
Hint: Use this fur actuator.	nction before replac	ing the brake
Press Next to pr	oceed.	
Press Next to pr	oceed.	

### **Repair Procedure**

### Section 1: Zero Down Accumulator Pressure (Zero Down) (Continued)

8. Confirm the conditions listed on Techstream and press "Next".

		Help
	Zero Down	
Confirm the following	g conditions:	
- Parking brake is an - Shift lever is in P. - IG is ON, engine is	oplied. s OFF.	
Press Next to proce	ed.	
< Back	Next >	Cancel

9. Press "Next" to proceed.

### Figure 7.

		Help
	Zero Down	
This operation will ta	ike 20 seconds.	
Press Next to proce	ed.	
< Back	Next >	Cancel



### **Repair Procedure**

### Section 1: Zero Down Accumulator Pressure (Zero Down) (Continued)

10. Wait for the Zero Down process to finish and press "Next".

Figure 8.

### NOTE

The Zero Down process will take 20 seconds to complete.

The Low Pressure beeper will sound at the end of Zero Down to indicate the accumulator pressure is low. This is normal.

		He
Zero Do	own	
seconds.		
aining:	19	sec.
	Zero Do seconds.	Zero Down seconds. aining: 19

### **Repair Procedure**

Section 1: Zero Down Accumulator Pressure (Zero Down) (Continued)

11. STOP — DO NOT turn the ignition OFF and ON as instructed by Techstream. Just press "Next".

Figure 9.

	Het Zero Down
STOP	Perform the following operations, then press Next. 1.Turn the ignition switch OFE and ON. 2.Confirm the ABS motor pump rune and stops.
	< Back Next > Cancel

### **Repair Procedure**

## Section 1: Zero Down Accumulator Pressure (Zero Down) (Continued)

12. Once the "Zero Down" function is complete, press Figure 10. "Exit".

		Help
	Zero Down	
This function is c	omplete.	
Press Next to go press Exit to exit	back to the ECB Utilit	y menu or
press Exit to exit	uno unity.	
		1

### **Repair Procedure**

### Section 1: Zero Down Accumulator Pressure (Zero Down) (Continued)

13. Navigate back to the ABS/VSC/TRAC utility menu, select "Data List", then "Accumulator Sensor", and check accumulator pressure. Pressure should be approximately 0.5 volts.

### Figure 11.

2008 L \$460		1		1		1 10 10
1UR-FSE	Parameter	Value	Unit	Parameter	Value	Unit
	ABS Warning Light	ON		Taw Rate Sensor	U	degrees/s
	VSC Warning Light	ON	0	Zero Point of Yaw Rate	0	degrees
	Olia Indiantes Light	ON		Yew Data Canada	0	1000
	Sip indicator Light	ON		Taw Rate Sensorz	0	degrees/s
Trouble Codes	ECD warning Light	ON		Staaring Apple Sames	150.0	degrees/s
	Duzzer Oten Linkt OW	OFF		Zere Daint of Stearing Angle	400.0	degrees
Data List	Darking Proke SIM	OFF	-	ED IN/O Server	400.0	uegrees
Data List	TROTRACIALSON	OFF	-	FR W/C Sensor	0.47	V
	Desterin Warries OW	OFF	-	PD W/C Sensor	0.47	V
Active Test	Reservoir warning Svv	OFF	0	RK W/C Sensor	0.47	V
	Iviain Idle SVV	ON	-	RL W/C Sensor	0.47	V
Monitor	Gear Position	P.N	-	Lateral G	-0.19	m/sz
WIGHTED	Shift Lever Position	PN	6	Forward and Rearward G	0.19	m/sz
	Shift Information	UFF		Yaw Rate Value	0	degrees/s
Utility	Inspection Mode	Other	-	Steering Angle Value	-0.6	degrees
	Number of IG ON(Inspection)	255		FR Wheel Speed	0	MPH
	Master Cylinder Sensor	0.47	V	FL Wheel Speed	0	MPH
	Voltage of M/C	0.00	V	RR Wheel Speed	0	MPH
	Master Cylinder Sensor2	0.47	V	RL Wheel Speed	0	MPH
	Voltage of M/C2	-0.01	V	Vehicle Speed	0	MPH
	Stroke Sensor	0.94	V	FR Wheel Acceleration	0.00	m/s2
	Voltage of Stroke Sensor	-0.03	V	FL Wheel Acceleration	0.00	m/s2
	Stroke Sensor2	4.07	V	RR Wheel Acceleration	0.00	m/s2
	Voltage of Stroke Sensor2	-0.07	V	RL Wheel Acceleration	0.00	m/s2
	Accumulator Sensor	0.56	V	FR Wheel Direction	Forward	
	Deceleration Sensor	0.430	m/s2	FL Wheel Direction	Forward	

14. Press the "Engine Start/Stop" button to the ignition OFF position.

### **Repair Procedure**

Section 1: Zero Down Accumulator Pressure (Zero Down) (Continued)

15. Disconnect both accumulator pump electrical connectors.

Figure 12.



### **Repair Procedure (Continued)**

### Section 2: Disable Electronic Controlled Brakes (ECB Invalid)

- 1. Press the "Engine Start/Stop" button to the ignition ON position.
- 2. Select "ECB Utility" from the Utility menu screen.

TIS techstream - 1	0872 TIS User Help		
System Select St	tored Data ABS/VSC/TRAC Live		
2009 L S460 1UR-F SE	Utility Selection Menu Select desired Utility and then press Next butto	on.	
	ABS History	Air Bleeding	
	Reset Memory	Signal Check	
Trouble Codes	Test Mode	ECB Utility	
	Inspection Mode		
Data List			
Active Test			
Active rest			
A. 11			
Ivionitor			
Utility			

### **Repair Procedure**

### Section 2: Disable Electronic Controlled Brakes (ECB Invalid) (Continued)

3. Select "ECB invalid" from the ECB Utility screen, and press "Next".



4. Press "Next" to proceed.

### Figure 15.

	Help
ECB Invalid	
This function is used to prohibit the brake control (ECB).	
Hint: Use this function when replacing: - Brake actuator - Master cylinder - Front / Rear brakes	
Press Next to proceed.	
< Back Next > Cancel	



### **Repair Procedure**

### Section 2: Disable Electronic Controlled Brakes (ECB Invalid) (Continued)

5. Confirm the conditions listed on Techstream and press "Next".

				Help
	1	ECB Invali	d	
Confirm the fo	ollowing	g condition	s:	
- Parking brak - Shift lever is - IG is ON.	e is ap in P.	plied.		
Press Next to	proce	ed.		
	I.	[ <u>[</u>	_	



### **Repair Procedure**

Section 2: Disable Electronic Controlled Brakes (ECB Invalid) (Continued)

6. STOP — DO NOT turn the ignition OFF as instructed by Techstream. Press "Next" — DO NOT PRESS "Exit".

Figure 17.





### Repair Procedure (Continued)

### Section 3: Front Brake Bleed — Manual Process

### NOTE

- Keep doors closed during bleeding.
- Ignition must be ON before starting this procedure.
- 1. Connect a clear vinyl tube to the FR (Front Right) Figure 18. bleeder screw.



2. Pump and hold pressure on the brake pedal while an assistant opens the bleeder screw.

### NOTE

Make sure fluid level in reservoir does NOT fall below the low mark during this procedure.

- 3. When fluid/air bubbles stop coming out, tighten the bleeder screw and then release the brake pedal.
- 4. Repeat steps 2 and 3 until all air is removed from the FR line.
- 5. Connect a vinyl tube to the FL (Front Left) bleeder screw.
- 6. Repeat steps 2 and 3 until all air is removed from the FL line.
- 7. Press the "Engine Start/Stop" button to the ignition OFF position.

### **Repair Procedure**

### Section 3: Front Brake Bleed — Manual Process (Continued)

8. Connect the accumulator pump electrical connectors.





9. Press the "Engine Start/Stop" button to the ignition ON position.

### **IMPORTANT**

- Accumulator pressure must be approximately 0.5 volts before starting the rear brake bleed procedure.
- You should NOT hear the accumulator pump motor run after the ignition is turned ON. If the accumulator pump runs after ignition is turned ON, return to "Section 1: Zero Down Accumulator Pressure".
- 10. Check and adjust the brake fluid level to MAX.



### **Repair Procedure (Continued)**

### Section 4: Rear Brake Bleed

1. Select "Air Bleeding" from the Utility menu screen. Figure 21.

System Select Stor	red Data ABS/VSC/TRAC Live	
2008 L S600H 2UR-F SE	Utility Selection Menu Select desired Utility and then press Next button.	1
	ABS History	Air Bleeding
	Reset Memory	Signal Check
Trouble Codes	Test Mode	ECB Utility
Data List		
Active Test		
Monitor		
Utility		

2. Press "Next" from the Air Bleeding Utility screen.

### Figure 22.

		Help
Welcome to the Air I	Bleeding Utility.	
This function is used braking system.	I to purge air fro	om the hydraulic
Note: When bleeding, ens drop below the indic reservoir.	ure that the fluic ated Minimum I	d level does not ine on the
Press Next to proce	ed.	
	Next >	Cancel



### **Repair Procedure**

### Section 4: Rear Brake Bleed (Continued)

3. Confirm the conditions listed on Techstream and press "Next".

Figure 23.



4. Select "Actuator has been removed" and press "Next".

### Figure 24.

Please select from	the options belo	He
<ul> <li>Usual air bleeding</li> <li>Actuator has bee</li> </ul>	g n removed	
Master Cylinder of removed	or Stroke Simula	tor has been
and the second sec	Constant of the	Contraction of the



### **Repair Procedure**

Section 4: Rear Brake Bleed (Continued)

 STOP — DO NOT turn the ignition OFF as instructed by Techstream. DO NOT unplug relays or disconnect accumulator connectors. Select "Next" — But DO NOT turn the ignition OFF.

Figure 25.

	Actuator has been removed
STOP	Perform the following operations, then press Next. 1. Turn the ignition switch OFF. 2. Remove the appropriate relays or unplug connectors per the opair manual 3. Turn the ignition switch ON.
	< Back Next > Cancel



### **Repair Procedure**

### Section 4: Rear Brake Bleed (Continued)

6. Press "Next" through the Techstream screens concerning front brake bleed - front brakes have already been manually bled in section 3.

Figure 26.

	Help
Actuator has been removed	
Perform the following 4 steps.	
1.Connect the vinyl tube to the bleeder plug of F	R
2 Depress the brake pedal several times then	
loosen the bleeder plug with the pedal held dow	n
· · · · · · · · · · · · · · · · · · ·	
and the second	
Press Next for step 3 and 4.	
< Back Next > Cancel	
	- 74

7. Press "Next" through the FR (Front Right) and FL Figure 27. (Front Left) brake bleed Techstream screens.

				Help
Actu	ator has	s been re	emoved	
3.When fluid sto plug, then releas 4.Repeat this pr	ps com the b ocedure	iing out, rake pec e until air	tighten ti lal. stops c	he bleeder oming out.
Press Next to pr	oceed.			
< Back		Next >		Cancel



### **Repair Procedure**

### Section 4: Rear Brake Bleed (Continued)

8. Press "Next" through the FL brake bleed Techstream screens.

			H
	Actuato	or has been remo	oved
Perform	the following	ng 4 steps.	
1.Conne	ct the vinyl	tube to the bleed	der plug of FL
2.Depres	ss the brak	e pedal several t	times, then
ioosen u		ping marine per	
Press Ne	ext for step	3 and 4.	
	and the second s	[	

9. Press "Next" at this screen since front brakes have already been manually bled.

### Figure 29.

	Help
Actuator has been removed	
3.When fluid stops coming out, tighten the plug, then release the brake pedal. 4.Repeat this procedure until air stops com	bleeder ning out.
Press Next to proceed.	
< Back Next > C	ancel



### **Repair Procedure**

### Section 4: Rear Brake Bleed (Continued)

10. Follow the instructions on Techstream and press "Next".

### **IMPORTANT**

DO NOT press the brake pedal at this time.

- A. Attach the vinyl tube and bottle.
- B. Loosen the RR (Rear Right) bleeder screw.

### NOTE

This step removes air from the RR (Rear Right) line and actuator.

			Hel;
	Actuato	r has been remo	ved
Loosen t On the n This ope	he bleeder ext screen, ration will ta	r plug of RR when solenoids will be ake 30 seconds.	el. e activated.
Note: Th	e fluid may	gush out.	
Press Ne	ext to proce	eed.	
Press Ne	ext to proce	ed.	

### "Air Bleeding has failed" MESSAGE DISPLAYED

If Techstream displays the message shown in Figure 31:

- Repeat "Section 1: Zero Down Accumulator Pressure".
- Repeat "Section 2: Disable Electronic Controlled Brakes".
- Repeat "Section 3: Front Brake Bleed", except for manually bleeding front brake circuits.
- Repeat "Section 4: Rear Brake Bleed".

# Figure 31. Actuator has been removed Air Bleeding has failed. Verify the initial conditions : 1. The vehicle is stopped. 2. The parking brake is applied. 3. The ignition switch is ON. Do you want to try again? Try Again Exit



### **Repair Procedure**

Section 4: Rear Brake Bleed (Continued)

11. DO NOT press the brake pedal.

During this step, Techstream opens the solenoid in the actuator for the RR line and then runs the accumulator pump.

NOTE

This step takes 30 seconds.



12. Tighten the bleeder screw and press "Next".

### Figure 33.

	Actuator	has been some	und
	Actuator	nas been remo	ived
Tighten th Next.	e bleeder	plug of RR whe	el, then press
		·	
			100



### **Repair Procedure**

### Section 4: Rear Brake Bleed (Continued)

13. Adjust the brake fluid level to MAX before bleeding Figure 34. RL (Rear Left).



14. Follow instructions on Techstream for RL (Rear Left) brake, then press "Next".

### NOTE

- Press and hold the brake pedal during RL (Rear Left) brake bleeding.
- The accumulator pump will run when the RL brake bleeder screw is opened.

### Figure 35.

								14	Help
	Actua	ator h	as be	en rer	nove	ed			
Perform 1.Conne wheel. 2.Depre 3.Loose brake p	the follo ect the vir ess the br en the ble	wing nyl tuk ake p eder	opera be to ti bedal. plug c	tions, he ble	ther ede	n pre er plu	ess l ig o th th	Next. f RL	
4.When tighten t pedal.	edal heid all the air he bleed	r in the	n. e fluid Ig, the	is co n rele	mple ase	etely the	ble brał	ed out ke	ţ,
4.When tighten t pedal.	edai neid all the air he bleed	aowr r in th er plu	n. e fluid ig, the	is co n rele	mple	etely the	ble	ed out ke	1.



Figure 37.

# Squawk/Bark Type Noise from Brake Actuator

### **Repair Procedure**

### Section 4: Rear Brake Bleed (Continued)

15. Wait for completion of operations listed on Techstream, then press "Next".



16. Wait for completion of operations listed on Techstream, then press "Next".

### NOTE

Lowering accumulator pressure takes 20 seconds.

Actuator has b	een rei	moved
NOW PER	FORMI	NG
Please wait for 20 second	s.	
Time Remaining:	16	sec.



### **Repair Procedure**

### Section 4: Rear Brake Bleed (Continued)

17. Follow instructions on Techstream and press "Next".

### NOTE

Techstream will instruct you to perform the accumulator Zero Down procedure 4 times.

gure 38.		2
Actuato	r has been remo	oved
Turn the ignition sw	itch OFF, and O	N again.
Press Next after the	ABS motor pur	mp stops.
		-
< Rack	Next >	Cancel

18. Press "Next" to proceed.

### Figure 39.

		Help
Actuator h	nas been remo	ved
The next screen will lo pressure.	ower the accun	nulator
The pressure drop pro 20 seconds.	ocess will take	approximately
Press Next to proceed	d.	
		· · · · · · · · ·
< Back	Next >	Cancel



### **Repair Procedure**

### Section 4: Rear Brake Bleed (Continued)

19. Follow instructions on Techstream and press "Next".



20. Press "Next" after cycling the ignition switch OFF and then ON. Press "Next" AFTER the pump motor stops running.

### Figure 41.

	Help
Actuator has been	n removed
Turn the ignition switch OFF, Press Next after the ABS mot	and ON again. or pump stops.



### **Repair Procedure**

### Section 4: Rear Brake Bleed (Continued)

21. Perform the "Zero Down" procedure 4 times, per Techstream. At the end of the 4 "Zero Down" procedures, the "Air bleeding is complete" message will be displayed. Press "Exit".



22. Check and adjust the brake fluid level to MAX.

### Figure 43.



### **Repair Procedure (Continued)**

### Section 5: Reset Memory and Linear Valve Offset Calibration

1. Select "Reset Memory" from the Utility menu screen.

Figure 44.	0872		- 61
File Function Setup	TIS User Help		
System Select   St	ored Data ABS/VSC/TRAC Live		
2009 L S460 1UR-FSE	Utility Selection Menu Select desired Utility and then press Next but	on.	
	ABS History	Air Bleeding	
-	Reset Memory	Signal Check	
Trouble Codes	Test Mode	ECB Utility	
	Inspection Mode		
Data List			
Contractor			
Active Test			
Active rest			
( 11-11-1			
Ivionitor			
Utility	J []		



### **Repair Procedure**

### Section 5: Reset Memory and Linear Valve Offset Calibration (Continued)

2. Confirm the conditions listed on Techstream and press "Next".



3. Press "Next" to proceed.

### Figure 46.

	Help
Welcome to the Reset Memory utility.	
This function is used to clear the learned men of the ABS ECU if the following components replaced.	nory are
- ABS ECU - Yaw Rate / G Sensor	
Press Next to proceed.	
Next > Exi	t

### **Repair Procedure**

Section 5: Reset Memory and Linear Valve Offset Calibration (Continued)

4. Press "Exit".

	Hel
Reset Memory is complete.	
	Fxit

5. Select "ECB Utility" from the Utility menu screen.

### Figure 48.

TIS techstream - 10	1872 TS User Help		X
System Select   Sto	red Data ABS/VSC/TRAC Live		
2009 L S460 1UR-F SE	Utility Selection Menu Select desired Utility and then press Next but	ton	
	ABS History	Air Bleeding	<b>_</b>
	Reset Memory	Signal Check	
Trouble Codes	Test Mode	ECB Utility	
	Inspection Mode		
Data List			
Data List			
C. AND THE R.			
Active Test			
Monitor			
Utility			



### **Repair Procedure**

### Section 5: Reset Memory and Linear Valve Offset Calibration (Continued)

6. Select "Linear Valve Offset" from the ECB Utility screen and press "Next".

Welcome to the EC	B Utility.	
This utility can perfo functions for the Ele	orm the following ectronically Cont	service rolled Brake
Please select a ser	vice operation b	elow.
C ECB Invalid		
CZero Down		
Zero Down Rear		
	set	
· Linear valve Offs		

7. Press "Next" to proceed.

### Figure 50.

		Help
Li	near Valve Offset	
This function is us valve offset.	ed to calibrate the	linear solenoid
Hint: Use this funct The ABS ECU ha The brake actuate The stroke senso	tion if : s been replaced. or has been replac r has been replac	ed. ed.
Press Next to proc	ceed.	
< Back	Next >	Cancel

### **Repair Procedure**

Section 5: Reset Memory and Linear Valve Offset Calibration (Continued)

8. Press "Next" to proceed.

### Figure 51.

			Help
	Lir	near Valve Offse	t
Note: When the replaced, "Reset Me	brake ac you must emory'' fu	tuator or stroke s t clear the stored nction before the	sensor has been I value using the e calibration.
Press Nex	xt to proc	eed.	

9. Confirm the conditions listed on Techstream and press "Next".

### Figure 52.

	Help
Linear Valve Offse	et
Confirm the following conditions:	
•The parking brake is applied. •The shift lever is in the P position. •The ignition switch is ON. •The battery voltage is normal. •The actuator's temperature is not i	high.
Press Next to proceed.	
< Back Next >	Cancel

### **Repair Procedure**

Section 5: Reset Memory and Linear Valve Offset Calibration (Continued)

10. Press "Next" to proceed.



Figure 54.

	Help
Linear Valve O	ffset
During calibration: - ABS light blinks quickly. - Brake warning light blinks slow	лу.
Press Next to proceed.	
< Back Next >	Cancel

11. Techstream is now performing Linear Valve Offset.

DO NOT depress the brake pedal at this time.

### NOTE

This process takes 120 seconds.

	Linear Valve	e Offset	Help
	NOW PERF	ORMIN	9
Leav	e the vehicle stationary pedal for 120 second	without Is.	depressing the
	Time Remaining:	118	sec.
Г			
	< Back Net	xt >	Cancel

### **Repair Procedure**

Section 5: Reset Memory and Linear Valve Offset Calibration (Continued)

12. Press "Exit".

Figure 55.

	Linear Valve Offset	
When both light	s blink fast, calibratio	on is complete.
Press Next to g press Exit to exi	o back to the ECB U it this utility.	Itility menu or
	1	

- 13. Clear all stored DTCs.
- 14. Test drive vehicle to confirm NO warning lights illuminate and there are NO abnormal brake concerns.
- 15. Verify the squawk/bark noise has been eliminated.