



DTB

Date: December 19, 2008
Order No.: P-B-42.46/102
Supersedes:
Group: 42

**SUBJECT: Model 211.022/026/056/065/070/076/082/087/256/265/276/282/283/287 MY 2003 - 2006
Model 219.375/376, MY 2006
All Model 230
Vehicle Fails STAR Diagnosis Test “Inspect Brake System For Air”**

If you encounter instances in the above model vehicles of the Sensotronic Brake System (SBC) failing the STAR Diagnosis test “Inspect Brake System for Air”, perform the following.

1. When the vehicle initially fails the “Inspect Brake System for Air” test, follow the guided test procedures listed within STAR Diagnosis. If the issue is still present after following the guided tests, proceed to step 2.

i **Note:** Vehicles fail the STAR Diagnosis test “Inspect Brake System for Air” during the test of wheel brake circuit HZ1 (primary brake circuit) or wheel brake circuit HZ2 (secondary brake circuit). STAR Diagnosis specifies air in the brake system as a potential cause. Only in this case may a manual test of the maximum achievable pressure at the front axle be performed in hydraulic back-up mode.

2. Using STAR Diagnosis follow the menu path: Control Units → Chassis → SBC-Sensotronic Brake System → Actual Values → Pressures

i **Note:** The SBC unit will now be in hydraulic back-up mode.

3. Actuate the brake pedal with maximum pedal force. The vehicle will pass the manual test if the left front pressure sensor (A7/3b3) and right front pressure sensor (A7/3b4) each obtain a pressure of at least 90 bar.
4. If a value of 90 bar is not attained in the above test, then the front axle circuit must be bled with a reduced filling pressure (0.5 – 1.0 bar), as instructed below in steps **a – i**.
 - a. Connect SBC hydraulic bleeding unit to vehicle and set pressure to 0.5 – 1.0 bar.

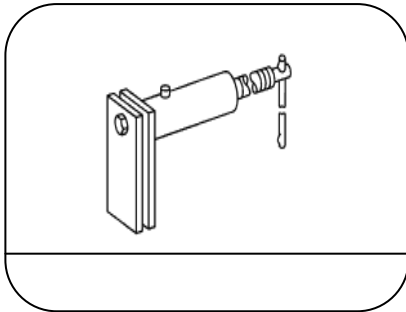
This bulletin has been created and maintained in accordance with MBUSA-SLP S423QH001, Document and Data Control, and MBUSA-SLP S424HH001, Control of Quality Records.

- b. Using STAR Diagnosis follow the menu path: Control Units → Chassis → SBC-Sensotronic Brake System → Actual Values → Pressures
 - c. Open bleed screw on the left front axle.
 - d. Bleed front axle circuit by slowly operating the brake pedal 3 times.
 - e. Close bleed screw on the left front axle.
 - f. Open bleed screw on the right front axle.
 - g. Bleed front axle circuit by slowly operating the brake pedal 3 times.
 - h. Close bleed screw on the right front axle.
 - i. Repeat the STAR Diagnosis test "Inspect Brake System for Air"
5. If the STAR Diagnosis test "Inspect Brake System for Air" fails at any other point other than those specified above, then there is still air in the system. Bleeding the SBC system must be repeated with STAR Diagnosis routine "Bleed Brake System". The test "Inspect Brake System for Air" must then be repeated.
6. If one or both of the front axle brake calipers were replaced, then the pistons of the brake calipers must be moved before starting the bleeding routine, as instructed below in steps **a - b**.
- a. Using STAR Diagnosis follow the menu path: Control Units → Chassis → SBC-Sensotronic Brake System → Actual Values → Pressures
 - b. Install one pusher tool (W000 589 52 43 00) in place of each brake lining in the caliper, then slowly operate the brake pedal 5 times to extend the brake piston up to the pusher tool and then push it back with the pusher tool.



Note: This procedure is necessary to eliminate any free travel at the sealing ring.

Special Tools



W000 489 52 43 00

MBUSA Special Tool Number	Category	Description
---------------------------	----------	-------------

W 000 589 52 43 00		
--------------------	--	--



Note: The following allowable labor operations should be used when submitting a warranty claim for this repair. This information has been generated on December 19, 2008. Please refer to Netstar → Star TekInfo → Star Time for the most current labor time allowance.

In Case of Warranty

- Operation:** Short test, perform (54-1011)
 SBC system – check for air, perform (42-0653)
 SBC system – check for air perform (42-0000)
 Test program – after short test, perform (54-1012)
 Battery charger connect (with SDS connected) (02-5058)
 Hydraulic brake system bleed, perform (02-4566)
 Hydraulic brake system bleed, perform (02-0000)

Damage Code	Operation Number	Time (hrs.)	Model Indicator (s)
42001 S9	54 1011	0.3 hrs.	T1, T2, T3, T4, T6, T7, T8, TC, U1, U3, U4, U5, U6, U7, Y1, Y2
	42 0653	0.3 hrs.	T1, T2, T3, T4, T6, T7, T8, U1, U3, U4, U5, U6, U7, Y1, Y2
	42 0000	0.3 hrs. *	TC
	54 1012	0.5 hrs.	T1, T2, T3, T4, T6, T7, T8, TC, U1, U3, U4, U5, U6, U7, Y1, Y2
	02 4566	1.0 hrs.	T1, T2, T3, T4, T6, T7, T8, TC, U1, U3, U4, U5, U6, U7
	02 0000	1.0 hrs. *	TC, Y1, Y2
	02 5058	0.1 hrs.	T1, T2, T3, T4, T6, T7, T8, TC, U1, U3, U4, U5, U6, U7

*Maximum time allowed with a separate time punch. Ensure that punches are labeled as NON time.