SERVICE PROCEDURE

G-10505 MARCH 2010

SUBJECT: SAFETY RECALL PARKING BRAKE on certain 3300, 4100, 4300, 4400, BE, CE, and FE models built 1/28/09 thru 2/9/10 with feature code 04085 WABCO hydraulic brake system and code 04GAW power park brake.

DEFECT DESCRIPTION

The powered parking brake may release if the brake system electronic control unit software misinterprets input signals generated from rapidly cycling the ignition switch. Release of the parking brake may cause a sudden, unexpected shift in vehicle position possibly resulting in property damage, personal injury, or death.

MODELS INVOLVED

This Safety Recall involves certain 3300, 4100, 4300, 4400, BE, CE, and FE models built 1/28/09 thru 2/9/10 with feature code 04085 WABCO hydraulic brake system and with feature code 04GAW powered parking brake. Note: vehicles built without powered park brakes are not involved.

PARTS INFORMATION

There are no parts for this safety recall remedy.

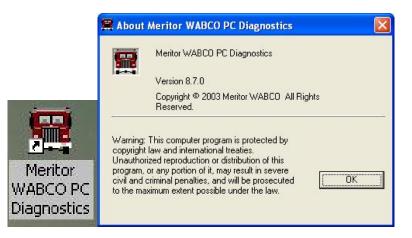
SERVICE PROCEDURE

WARNING! PARK VEHICLE ON HARD FLAT SURFACE, TURN THE ENGINE OFF, SET THE PARKING BRAKE AND BLOCK THE WHEELS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND/OR DEATH.

WARNING! ALWAYS WEAR SAFE EYE PROTECTION WHEN PERFORMING VEHICLE MAINTENANCE. FAILURE TO DO SO MAY RESULT IN SERIOUS EYE INJURY.

- 1. This repair will involve the updating of the WABCO brake ECU software.
- 2. Determine if the gauge cluster is equipped with an ammeter. The ammeter location is shown in picture below. This example does not have an ammeter.

- 3. If the vehicle is equipped with an ammeter, remove its fuse from the chassis fuse block.
- 4. Select and run the *Meritor WABCO PC Diagnostics*. Select *Help* >> *About*. Verify that Version 8.7.0 or newer is installed. If EZ-Tech is not equipped with the specified software version, stop and contact EZ-Tech Programming Support to obtain the correct software.



5. Select and run the HPB Programmer.



6. Verify that HPB Programmer v3.0.2 is installed. If EZ-Tech is not equipped with the specified software version, stop and contact EZ-Tech Programming Support to obtain the correct software.

Communications Adapter:		
EZTECH IC4 USB Adapter		
ECU and Software ID	14 <u> 1</u> 84	
		Get ID
		decid
Surrook Statue		det to
Current Status:		
	Ĩ.	

7. Ensure that the IC4 USB Adapter is selected, press Start Download.

Meritor Wabco HPB Flash Pro	grammer v3.0.2	
Communications Adapter:		
EZTECH IC4 USB Adapter		
ECU and Software ID		
		Get IDs
Current Status:		
Idle		
, 	Z	
Start Download	Abort Download	Exit
L		

8. Following the on-screen instructions, with the ignition **OFF**, and brake pedal released, press *OK*.

😕 HPB FLash Programmer - Initiate HPB Communicatio	m 🗖 🗖 🔀
About to initiate HPB Flashing. To Contin Turn ignition OFF.	nue
Release brake pedal and press OK to continue>	ОК
Or, press Cancel to exit>	Cancel

9. To initiate the ECU re-flash, depress and *HOLD BRAKE PEDAL* during entire process.

PB Flash Programmer
Attempting to initiate a download session with the HPB. This process may take up to 7 minutes.
Wait for status message on main screen to say :
" Waiting to initiate commmunications with HPB".
Then DEPRESS and HOLD brake pedal to establish a session. Keep pedal depressed as long as this screen is displayed.
Note: If status on main screen indicates "Waiting to initiate communications with HPB' for over 2 seconds, release the brake pedal and wait 2 seconds, then depress and hold the pedal down until a session is established. If unable to establish a session after 5 attempts, close this screen and press 'Abort Download' button and start over.

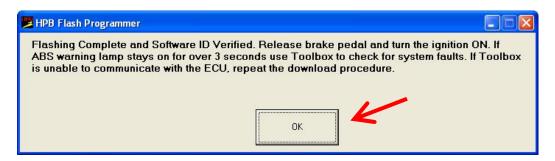
10. When the re-flash is complete, the following screen is displayed. Release the brake pedal. Wait three (3) seconds. Apply brake pedal.

HPB Flash Programmer	
Flashing Complete. Release the brake pedal. Wait 3 seconds and then re-apply the brake pedal. The Software ID is being checked.	

11. Ensure the Software ID is: HEBF0001.

ommunications Adapter: ZTECH IC4 USB Adapter		
CU and Software ID		
ECU ID: HPB Software IE): HEBF0001	Get ID
urrent Status:		

12. Brake ECU is now re-flashed. Press OK, close the HPB Programmer.



13. Select and run the Meritor WABCO PC Diagnostics.



14. Select System Setup, and select COM PORT.



15. Ensure the IC4 Interface Device is selected and Protocol is set to J1708. Select *OK*

Current Settings:	
IC4 Interface Device	•
Protocol:	
J1708	•
Device:	
USB Port	•

- 16. Turn the ignition to the "ON" position. Do not start the vehicle.
- 17. Select the HABS icon.



18. Select Parameter, and select Refresh Parameters.

👹 Meritor WABCO HPB					
Tractor ECU Display Com	ponent Tests Pa	rameters	EOL Help		
		Read Para Write Para Refresh Pa	meters		
ECU Information		Configurat	le Parameters		
ECU Type	HPB (127)			n H	MPH
Part Number	44604600	22	Left Front	< 9	0
Manufacture Date	10/27/200)6	Right Front	< 9	0
Serial Number	40008146		Left 2nd	< 9	0
Software Rev.	HEBC0008	3	Right 2nd	< 9	0
Faults None Existing Yes	Stored		Component etarder Relay	Road Speed	(mph)
Control Status		Switches		Voltages	
ABS Brake		ATC		Battery	12.45
1)ff	Foot Brake	011	Ignition	12.67
ABS Retarder	1/A	Parking Br	ake Out of range		
ATC Brake		Brake Fluid		ABS AT	C Brake
ATC Engine		Secondary	Brake	Off Of	f Off
PB Travel Switch	1/A	Pressure Front A		Rear Axle	1956
			ATC Disabled	9/26/2008	3:00 PM

19. Open *DISPLAY*, and then select *FAULTS*.

actor ECU Display Component Tes	ts Parameters E	OL Help		
Wheel Speed Counters		! 🥖 📩		
ECU Info CU Type Pre-Charge Pressure	2V)	-Wheel Sensor	RPM	MPH
Part Number 446	0460022	Left Front	< 9	0
Manufacture Date 10/	27/2006	Right Front	< 9	0
Serial Number 400	08146	Left 2nd	< 9	0
Software Rev.	80008	Right 2nd	< 9	0
Faults None Existing <mark>Yes</mark> Stored	and the second	Component tarder Relay	Road Speed	(mph)
Control Status	Switches		Voltages	1
ABS Brake Off	. ATC		Battery	12.45
Join	Foot Brake	Oil	Ignition	12.67
Jung	Parking Bra	ke Out of range		
ATC Brake	Brake Fluid	OK	ABS AT	C Brake
ATC Engine	Secondary I	Brake	Off	f Off
PB Travel Switch N/A	Pressure (Bear Axle	1908

20. Press CLEAR FAULTS. Any faults will be displayed in the FMI column.

raui	t Inform	ation								
Faults	8:									
NUM	FAULT N					TYPE	TIMES	SID	FMI	
	Main Con	roller, S	afety Conl	troller		nactive		1 2	254 1	2
Repai	ir Instruct	ions:			-		-			
100	ir Instruct ce the ECU		onic contro	ol unit).						~
100			onic contro	ol unit).						~
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100			onic contro	ol unit).						~ ~
Repla		(electro	onic contro Clear Faul	K	Print		ave	[m		< >

- 21. Once fault codes are cleared, press EXIT and close program
- 22. Turn ignition 'OFF.'
- 23. Wait 5 seconds and then turn the ignition to the "ON" position. Do not start the vehicle.
- 24. Again select the HABS icon.



- Meritor WABCO HPB Tractor ECU Display Component Tests Parameters EOL Help ₽.1 ₽ H ESI Wheel Sensor **ECU Information** ECU Type RPM MPH HPB (12V) Part Number Left Front 4460460022 < 9 0 Manufacture Date **Right Front** 10/27/2006 < 9 0 Serial Number Left 2nd < 9 0 40008146 Software Rev. Right 2nd < 9 0 Faults Learned Component **Road Speed** None (mph) Existing None Stored F Retarder Relay 0 **Control Status** Voltages Switches Battery 12.25 ABS Brake Off Foot Brake Ignition 12.53 ABS Retarder N/A Parking Brake Out of range Lamps ATC Brake ATC Brake Fluid ABS Brake Secondary Brake Off Off Off PB Travel Switch N/A Pressure (psi) 1932 1896 Rear Axle Front Axle ATC Disabled 9/26/2008 3:04 PM
- 25. Verify the software revision level is HEBF0001 and no faults exist.

- 26. Disconnect IC4 USB cable from vehicle.
- 27. Install the ammeter fuse, if applicable.
- 28. Check brakes for proper operation.

END OF SERVICE PROCEDURE

LABOR INFORMATION

Operation Number	Description	Time
A40-10505-1	Update WABCO ECU Software	0.4

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.



ADMINSTRATIVE/DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Refer to Dealer Warranty Manual for procedures to conduct Recall Campaigns.

It is important that the Recall Coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7-1. Special attention should be given to Items 39 through 44:

	GROUP	N	OUN	С	WARR.	ΤР	PAD
GROUP Enter number G-							
NOUN Leave blank]				
C (CAUSE) Enter either 1, 2, 3. (see below)							
1. Inspected (No repair required).							
2. Inspected and repaired.	· . · · · · · · · · · · · · · · · · · ·			_			
3. Defective part from parts stock. \Box							
WARRANTY (Warranty Code) Enter 40.							
TYPE PART Enter P for type part causing failur	re						
PAD Enter 100		_					

UNITED STATES AND POSSESSIONS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

CANADA

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

EXPORT

Export Distributors should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

NAVISTAR, INC