

DIAGNOSIS AND TESTING (Continued)

PINPOINT TEST F: DTC C1446 — BRAKE SWITCH CIRCUIT FAILURE

Test Step		Result / Action to Take
F1	MONITOR THE SMART JUNCTION BOX (SJB) PIDs	<p>Yes GO to F2.</p> <p>No For further diagnosis of the stoplamps, REFER to Section 417-01.</p>
	<ul style="list-style-type: none"> Connect the diagnostic tool. Key in ON position. Enter the following diagnostic mode on the diagnostic tool: SJB Stoplamp Switch PID. Press and release the brake pedal while monitoring the SJB stoplamp switch PID. Do the stoplamps illuminate and does the PID agree? 	
F2	MONITOR THE ABS MODULE STOPLAMP SWITCH PID	
	<ul style="list-style-type: none"> Enter the following diagnostic mode on the diagnostic tool: ABS Module Stoplamp Switch PID. Press and release the brake pedal while monitoring the stoplamp switch PID and observing the stoplamps. Does the PID agree with the brake pedal position? 	<p>Yes GO to F3.</p> <p>No REPAIR circuit 535 (LB/RD).</p>
F3	CHECK FOR CORRECT ABS MODULE OPERATION	<p>Yes INSTALL a new ABS module. REFER to Anti-Lock Brake System (ABS) Module in this section. CLEAR the DTCs. REPEAT the self-test.</p> <p>No The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. CLEAR the DTCs. CARRY OUT the self-test with the brake pedal not applied.</p>
	<ul style="list-style-type: none"> Disconnect the ABS connector. Check for: <ul style="list-style-type: none"> corrosion spread or bent pins pushed-out pins Connect the ABS connector and make sure it seats correctly. Operate the system and verify the concern is still present. Is the concern still present? 	

Pinpoint Test G: Spongy/Soft/Low Brake Pedal with No Warning Indicator

Possible Causes

- base brake system
- hydraulic control unit (HCU)

Normal Operation

The brake pedal should be firm when applied.

PINPOINT TEST G: SPONGY/SOFT/LOW BRAKE PEDAL WITH NO WARNING INDICATOR

Test Step		Result / Action to Take
G1	CHECK THE BASE BRAKE COMPONENTS	<p>Yes REPAIR or INSTALL new components as necessary. TEST the system for normal operation.</p> <p>No GO to G2.</p>
	<ul style="list-style-type: none"> Visually inspect the brake lines from the hydraulic control unit (HCU) to the brake calipers. Visually inspect the calipers and brake components. Are any of these components damaged? 	
G2	CHECK FOR A LEAKING DUMP VALVE	
	<ul style="list-style-type: none"> Key in OFF position. 	

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