

DIAGNOSIS AND TESTING (Continued)

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**PINPOINT TEST TB:
CLUSTER TOO DIM (Continued)**

TEST STEP		RESULT	ACTION TO TAKE
TB3	CHECK DIMMER VOLTAGE		
	<ul style="list-style-type: none"> Disconnect battery ground cable. Remove cluster as outlined and disconnect Connectors A and B. Connect battery ground and turn ignition to RUN. Ensure headlamps are off. Measure dimmer voltage to ground (Connector A, Pin 19). Is voltage greater than 3 volts? 	No Yes	REPLACE cluster. SERVICE Circuit 19 and dimmer for short to battery or run circuits.

**PINPOINT TEST TC:
DISPLAY SCRAMBLED, SEGMENTS HALF ILLUMINATED (GHOST SEGMENTS), SEGMENTS BLINKING OR MISSING,
DISPLAY INCORRECT ALL THE TIME, DISPLAY STUCK WITH ALL SEGMENTS ON.**

TEST STEP		RESULT	ACTION TO TAKE
TC1	VERIFY CONDITION		
	<ul style="list-style-type: none"> Turn ignition switch from OFF to RUN and observe the display prove out. All segments on one second, all segments off one second followed by a normal display. 	Prove out operates Prove out does not operate properly	System OK. REPLACE cluster.

**PINPOINT TEST TD:
CLUSTER WILL NOT DIM OR DOES NOT DIM PROPERLY**

TEST STEP		RESULT	ACTION TO TAKE
TD1	VERIFY CONDITION		
	<ul style="list-style-type: none"> Turn ignition to RUN. Turn headlamps on. Dimmer should control cluster illumination from 65 percent to almost off. Does cluster dim properly? 	Yes No	System OK. GO to TD2.
TD2	CHECK DIMMER VOLTAGE		
	<ul style="list-style-type: none"> Disconnect battery ground cable. Remove cluster as outlined. Connect battery ground cable. Turn ignition to RUN. Turn headlamps on. Voltage at Connector A, Pin 13 should vary from 5 volts to battery voltage while operating dimmer. Does voltage vary within range? 	Yes No	System OK. REPLACE cluster.

**PINPOINT TEST TE:
TEMPERATURE GAUGE DISPLAY BLANKS OUT THERMOMETER SYMBOL AND LIGHTS TOP TWO AND BOTTOM TWO BARS OF GAUGE**

TEST STEP		RESULT	ACTION TO TAKE
TE1	VERIFY CONDITION		
			GO to TE2.
TE2	CHECK FOR TEMPERATURE SENDER SHORT		
	<ul style="list-style-type: none"> Unplug wire temperature sender. Turn ignition to RUN. Temperature gauge should indicate COLD with bottom bar illuminated. 	Temperature gauge indicates as specified Temperature gauge does not indicate as specified	REPLACE temperature sender. GO to TE3.
TE3	CHECK FOR SHORT IN WIRING		
	<ul style="list-style-type: none"> Disconnect battery ground cable. Unplug wire temperature sender. Remove cluster. Measure resistance between Pin 4A and Pin 8A (GND). 	Resistance greater than 15,000 ohms Resistance less than 15,000 ohms	REPLACE cluster. SERVICE wiring Circuit 39 for shorts.