

DIAGNOSIS AND TESTING (Continued)

**PINPOINT TEST SC:
SPEEDOMETER READS CONSTANTLY TOO HIGH OR LOW**

TEST STEP		RESULT	ACTION TO TAKE
SC1	VERIFY CONDITION		GO to SC2.
SC2	CHECK ODOMETER ACCURACY		
	<ul style="list-style-type: none"> Over a known distance, compare the odometer reading with the distance traveled. 	Odometer accurate Odometer not accurate	System OK. GO to SC3.
SC3	CHECK VEHICLE SPEED SENSOR DRIVE GEAR		
	<ul style="list-style-type: none"> Remove vehicle speed sensor from transmission and verify that correct drive gear is installed for vehicle transmission / axle / tire combination. 	Correct gear installed Incorrect gear installed	GO to SC4. INSTALL correct gear with retaining clip.
SC4	CHECK DRIVE GEAR ON TRANSMISSION OUTPUT SHAFT		
	<ul style="list-style-type: none"> Check that correct drive gear is installed on transaxle output shaft. 	Correct gear installed Incorrect gear installed	REPLACE cluster module. ² INSTALL correct shaft / gear.

**PINPOINT TEST SD:
SPEED INDICATION JUMPS UP AND DOWN ERRATICALLY**

TEST STEP		RESULT	ACTION TO TAKE
SD1	VERIFY CONDITION		GO to SD2.
SD2	CHECK VEHICLE SPEED SENSOR DRIVE GEAR		
	<ul style="list-style-type: none"> Remove vehicle speed sensor from transmission. Check that all gear teeth are in good condition, retainer clip is installed and gear does not slip on shaft. 	Gear / clip OK Gear / clip not OK	GO to SD3. REPLACE drive gear and / or retaining clip.
SD3	CHECK WIRING TO VEHICLE SPEED SENSOR		
	<ul style="list-style-type: none"> Disconnect connector to vehicle speed sensor. Using Rotunda Digital Volt Ohmmeter 014-00407 or equivalent, check for intermittent resistance between the two wires in the harness to the vehicle speed sensor. Resistance should be greater than 500 ohms. 	Resistance greater than 500 ohms Resistance less than 500 ohms	GO to SD4. SERVICE wiring Circuit 150, speed control for intermittent shorts or opens. CHECK speedometer operation.
SD4	CHECK VEHICLE SPEED SENSOR RESISTANCE		
	<ul style="list-style-type: none"> Using Rotunda Digital Volt Ohmmeter 014-00407 or equivalent, check for intermittent resistance at vehicle speed sensor. Resistance should be 200-230 ohms. 	Resistance between 200 and 230 ohms Resistance not as specified	GO to SD5. REPLACE vehicle speed sensor. CHECK speedometer operation.
SD5	CHECK WIRING TO CLUSTER		
	<ul style="list-style-type: none"> Reconnect vehicle speed sensor wiring. Disconnect battery ground cable. Remove cluster. Using Rotunda Digital Volt-Ohmmeter 014-00407 or equivalent, measure the resistance between Pin 12 and 8 (ground) of Connector A. Resistance should be between 200 and 300 ohms. 	Resistance constant Resistance intermittent	REPLACE cluster. ² SERVICE connectors / wiring from cluster to vehicle speed sensor Circuit 150. CHECK speedometer operation.

² Affix odometer sticker to door pillar.