## **DIAGNOSIS AND TESTING (Continued)**

## PINPOINT TEST A VARIABLE ASSIST POWER STEERING ELECTRICAL COMPONENT DIAGNOSIS (Continued) TEST STEP RESULT **ACTION TO TAKE** A2 MODULE CHECK Turn ignition switch to OFF. Effort changes GO to A4. 0 Connect an analog voltmeter as in Step A1. with 2 sweeps Use jumper wire and ground Circuit 200. No effort change GO to A7. with 2 sweeps Effort change with GO to A 19. 4 sweeps 606 No effort change GO to A19. with 4 sweeps 200 Effort change with GO to A20. 6 sweeps No effort change GO to A12. G5320-A with 6 sweeps Start engine. Effort change with GO to A20. Rotate steering wheel for approximately 90 0 sweeps seconds noting any changes in steering effort. The No effort change GO to A12. effort required to turn the steering wheel should vary with 0 sweeps between light and heavy in both directions. After approximately 90 seconds, voltmeter will show a sweep pattern four times between battery voltage and zero if module proveout is OK. Six or zero sweeps if a system component is malfunctioning. After a five second pause, the sweep pattern will be repeated. Remove Circuit 200 ground before proceeding to next test A3 **FUSE CHECK** Inspect fuse located in fuse panel on LH side below Yes GO to A 16. instrument panel. No REPLACE fuse, GO to A1. Is fuse OK? TEST DRIVE VEHICLE AA Ensure VAPS system is connected. Change in steering Diagnostics complete. Drive vehicle up to 55 mph and set speed control. System is OK. Do steering efforts change and is effort balanced Assist only at high GO to A11. (left vs. right turn direction)? speed While driving vehicle, note operation of speedometer. No change in GO to A5. steering effort REPLACE steering gear unbalanced left to assembly. REPEAT A4. right A5 SPEEDOMETER CHECK Note operation of speedometer and speed control Yes GO to A6. (from Step A4). No SERVICE as required. GO Are speedometer and speed control operating to A4. properly? The VAPS system requires a speed signal from the vehicle speed sensor. If the speedometer or speed control does not work, these systems should be serviced using the appropriate diagnostic and service procedures.