

⚠WARNING *Many troubleshooting procedures present hazards that can result in severe personal injury or death. Only qualified service personnel with knowledge of fuels, electricity, and machinery hazards should perform service procedures. Review safety precautions on page iii.*

TABLE 6-1. SPEC A CONTROL TROUBLESHOOTING – CRANKING MODE

Trouble	Possible Cause	Corrective Action	Section/ Page
Engine Does Not Crank	1. Open control fuse F1.	1. Check fuse. If open, locate and correct cause of overload. Replace fuse.	
	2. Insufficient cranking voltage due to: (Also see Table 6-5 on page 6-13) a. Battery not charged. b. Battery connections loose or dirty. c. Battery cable size too small.	2a. Check condition of battery and recharge or replace. 2b. Clean and tighten all connections at battery, K1 start solenoid, and starter motor. 2c. Increase starting battery cable size.	
	3. Start solenoid (K1) not energized due to: a. Open circuit to start solenoid coil. b. Defective start solenoid coil. c. Defective Start/Stop switch. d. Defective control assembly (A1).	3a. Check wiring continuity to the start solenoid (K1) coil from control assy. (A1) and from ground to start solenoid. 3b. Test start solenoid (K1). 3c. Test Start/Stop switch (S1). 3d. Measure voltage between start solenoid terminal I and ground with switch (S1) held in the Start position. If voltage is not present and continuity and battery check OK, Cont. assy. (A1) is defective.	7-6 7-5 7-6
	4. Starter (B1) not energized due to: a. Open circuit to starter (B1). b. Open circuit between battery (B+) and the start solenoid contact (BAT). c. Defective start solenoid (K1). d. Defective starter (B1).	4a. Check continuity between starter lead on start solenoid (S) and gnd. (4 ± 1 ohm). 4b. Check wiring continuity between battery (B+) and the start solenoid (BAT). 4c. Measure voltage between starter terminal and ground with switch (S1) held in the Start position. If voltage is not present and continuity checks OK, start solenoid (K1) is defective. 4d. If voltage is present in step 4c, starter is defective.	7-6 7-6 7-6 8-26
	5. If engine cranks from set but not from remote control panel, fault is due to: a. Open circuit between control assy. (A1) and remote Start/Stop switch. b. Remote Start/Stop switch faulty.	5a. Check wiring continuity between control assembly (A1) and remote Start/Stop switch. 5b. Test remote Start/Stop switch.	