

<u><b>Ignition Subsystem</b></u>		
Specification	Test Process	Results
1. Enable engine start (i.e., light the green LED) while both seats are occupied (PS, DS) and seatbelts fastened (PB, DB). Otherwise print appropriate error message.	4 buttons: DS, DB, PS, PB 1. All buttons pressed 2. All but one button (PS) pressed 3. No buttons pressed	All tests passed. 1.Green light on 2.“Passenger seatbelt not fastened” 3. All error messages printed.
2. Start the engine (i.e., light the red LED, turn off Green) when ignition is enabled (green LED) and ignition button is pressed (i.e., before the button is released).	All buttons pressed, green LED is on, ignition button pressed	Engine light illuminates and stays on after the ignition button is released.
3. The ignition stops (i.e., the red LED light turns off)	Green LED is on, ignition button pressed, ignition is on, ignition button is pressed again	Ignition turns off after the ignition button has been pressed again after already being on.
<u><b>Headlight Subsystem</b></u>		
Specification	Test Processes	Results
1. Headlights can be turned on when the ignition is already on(i.e., the red LED light).	Ignition is on, potentiometer is dialed to the middle point to set to mode on (the headlights are on).	Ignition is on and when potentiometer has been dialed to the middle the headlights turn on and remain on.
2. Headlights can be turned on to auto mode when the ignition is already on(i.e., the red LED light). Which means turning off when daylight is detected and turning on when darkness is detected.	Ignition is on, potentiometer is dialed all the way to the left to set to auto mode.	Ignition is on and when the potentiometer is dialed all the way to the right the headlights have gone on auto mode. When the sensor gets covered, after a 1 second delay the headlights turn on and when the sensor detects light, after a 2 second delay the leds turn off
3. Headlights can be turned off when the ignition is already on(i.e., the red LED light).	Ignition is on, potentiometer is dialed all the way to the right to set to off mode (the headlights are off).	Ignition is on and when potentiometer has been dialed all the way to the left the headlights turn off and remain off.