SAFETY COMPLIANCE TESTING FOR FMVSS 124 ACCELERATOR CONTROL SYSTEMS

DAIMLER AG STUTTGART
2010 MERCEDES GLK 350, MPV
NHTSA NO. CA0514

GENERAL TESTING LABORATORIES, INC.
1623 LEEDSTOWN ROAD
COLONIAL BEACH, VIRGINIA 22443

April 28, 2010
FINAL REPORT
PREPARED FOR

U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
1200 NEW JERSEY AVE., SE
WASHINGTON, D.C. 20590
Compliance tests were conducted on the subject 2010 Mercedes GLK 350 4-door MPV in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-124-06 for the determination of FMVSS 124 compliance.

Test failures identified were as follows: None

Compliance Testing
Safety Engineering
FMVSS 124

Copies of this report are available from NHTSA Technical Information Services (TIS) Room W45-212 (NPO-411) 1200 New Jersey Ave., S.E. Washington, DC 20590 Telephone No. (202) 366-4947
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Purpose of Compliance Test</td>
<td>1</td>
</tr>
<tr>
<td>2  Test Procedure and Discussion of Results</td>
<td>2</td>
</tr>
<tr>
<td>3  Compliance Test Data</td>
<td>4</td>
</tr>
<tr>
<td>4  Test Equipment List and Calibration Information</td>
<td>12</td>
</tr>
<tr>
<td>5  Photographs</td>
<td>13</td>
</tr>
<tr>
<td>5.1 Front View of Vehicle</td>
<td></td>
</tr>
<tr>
<td>5.2 Left Side View of Vehicle</td>
<td></td>
</tr>
<tr>
<td>5.3 Right Side View of Vehicle</td>
<td></td>
</tr>
<tr>
<td>5.4 Close-Up View of Vehicle’s Certification Label</td>
<td></td>
</tr>
<tr>
<td>5.5 Close-Up View of Vehicle Placard</td>
<td></td>
</tr>
<tr>
<td>5.6 Accelerator Pedal Assembly</td>
<td></td>
</tr>
<tr>
<td>5.7 Close-up of Springs #1 &amp; #2</td>
<td></td>
</tr>
<tr>
<td>5.8 Close-up of Spring #3</td>
<td></td>
</tr>
<tr>
<td>5.9 Test Set-Up</td>
<td></td>
</tr>
<tr>
<td>5.10 Test Set-Up at Throttle Body</td>
<td></td>
</tr>
<tr>
<td>5.11 Throttle Position Sensor with Springs #4 &amp; #5</td>
<td></td>
</tr>
<tr>
<td>6  Plots</td>
<td>25</td>
</tr>
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</table>
SECTION 1
PURPOSE OF COMPLIANCE TEST

FMVSS 124 specifies requirements for the return of a vehicle’s throttle to the idle position when the driver removes the actuating force from the accelerator control, or in the event of a severance or disconnection in the accelerator control system. The purpose of FMVSS 124 is to reduce the number of deaths and injuries resulting from engine overspeed caused by malfunctions in the accelerator control system. This standard applies to passenger cars, multipurpose passenger vehicles (MPV’s), trucks and buses.
Compliance testing was conducted on a 2010 Mercedes GLK 350 MPV, NHTSA No. CA0514 in accordance with the National Highway Traffic Safety Administration (NHTSA) Laboratory Procedure TP-124-06.

The vehicle is equipped with two throttle position sensors (TPS) on the air throttle plate shaft. Output from one of the two sensors was used to measure throttle position and data was recorded at 100 HZ with GTL’ s data acquisition system. Testing was conducted to simulate the normal removal of the driver’s foot from the accelerator pedal. This was performed by depressing the accelerator with a control rod which incorporated an electrical contact strip in the depressing end. The accelerator was depressed to the required amount and then the control rod was quickly removed from the pedal, releasing the accelerator and activating the contact strip for time zero. Failures (excluding spring disconnect) were induced simultaneously with release of the accelerator pedal. Testing was performed with the vehicle in drive and the engine running. Testing could not be conducted in neutral as throttle plate movement in this condition was limited upon accelerator pedal application.

Return to idle times were determined for four throttle plate positions (25%, 50%, 75% and 100%) with the accelerator control system complete and with each of the two return springs in the accelerator pedal assembly independently disconnected and disconnection of the throttle body return spring #3 and #4. With each of the wires to the APS and throttle plate position sensor disconnected and shorted to ground, return to idle times were determined at the worst case condition – wide open throttle (100%).

In addition, tests were conducted with the APS and TPS connectors disconnected.

A number of induced failures resulted in the throttle plate return to or below the idle state then shifting to a Limp-Home mode position which allows the vehicle to be removed from the roadway.

This testing was performed at mid ambient temperature of 10º C to 46º C, in accordance with the NHTSA Test Procedure TP-124-06.
SECTION 3
COMPLIANCE TEST DATA

Test data for this test can be found on the following pages. Photographs are found in Section 5 and Test Plots are found in Section 6.
VEHICLE MY/MAKE/MODEL/BODY STYLE: 2010 MERCEDES GLK 350 MPV

VEHICLE NHTSA NO.: CA0514

VEHICLE VIN: WDCGG8HB8AF474687

DATE OF TEST: APRIL 19-22, 2010

TEST LAB: GENERAL TESTING LABORATORIES

VEHICLE ENGINE TYPE: GAS

GVWR: 2480 KG

VEHICLE ENGINE SIZE: 3.5 L

MAX. BHP ENGINE SPEED: 268 HP

MFR. IDLE RPM: 600 RPM

FUEL METERING DEVICE (Carburetor, fuel injection, etc): FUEL INJECTION

REMARKS:

RECORDED BY: G. FARRAND DATE: 04/20/10

APPROVED BY: D. MESSICK
DATA SHEET 2
NORMAL OPERATION TEST
(fully operational system)

VEHICLE MY/MAKE/MODEL/BODY STYLE: 2010 MERCEDES GLK 350 MPV
VEHICLE NHTSA NO.: CA0514
DATE OF TEST: APRIL 20, 2010

Check one:

SYSTEM CONDITION: COMPLETE (no modifications) Normal Operation

<table>
<thead>
<tr>
<th>GTL #</th>
<th>ACCELERATOR POSITION % WIDE OPEN THROTTLE (WOT)</th>
<th>THROTTLE POSITION SENSOR READING</th>
<th>RPM</th>
<th>TEMPERATURE (ºC) ENGINE COOLANT</th>
<th>TEMPERATURE (ºC) AMBIENT</th>
<th>THROTTLE POSITION SENSOR READING @ IDLE (BASELINE)</th>
<th>RETURN TIME TO IDLE (Msec)</th>
<th>PASS/FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>6446</td>
<td>100%</td>
<td>100%</td>
<td>600</td>
<td>194</td>
<td>75</td>
<td>16%-20%</td>
<td>260</td>
<td>P</td>
</tr>
<tr>
<td>6447</td>
<td>75%</td>
<td>76%</td>
<td>600</td>
<td>200</td>
<td>75</td>
<td>16%-20%</td>
<td>290</td>
<td>P</td>
</tr>
<tr>
<td>6448</td>
<td>50%</td>
<td>38%</td>
<td>600</td>
<td>200</td>
<td>75</td>
<td>16%-20%</td>
<td>260</td>
<td>P</td>
</tr>
<tr>
<td>6449</td>
<td>25%</td>
<td>24%</td>
<td>600</td>
<td>198</td>
<td>75</td>
<td>16%-20%</td>
<td>160</td>
<td>P</td>
</tr>
</tbody>
</table>

RETURN TIME REQUIREMENTS:

1 second (1000 ms) for vehicles less than 4536 kg.
2 seconds (2000 ms) for vehicles more than 4536 kg.
3 seconds (3000 ms) for vehicles exposed to -18º C or less

PASS _____ X _____ FAIL ___________

REMARKS:

RECORDED BY: G. FARRAND DATE: 04/20/10
APPROVED BY: D. MESSICK
VEHICLE MY/MAKE/MODEL/BODY STYLE: 2010 MERCEDES GLK 350 MPV
VEHICLE NHTSA NO.: CA0514
DATE OF TEST: APRIL 21, 2010

Check one:
Mid Temp. Test: X Low Temp. Test:   High Temp. Test: 

SYSTEM CONDITION: #1 SPRING DISCONNECTED (OUTER SPRING) ON ACCELERATOR PEDAL ASSEMBLY

<table>
<thead>
<tr>
<th>GTL #</th>
<th>ACCELERATOR POSITION % WIDE OPEN THROTTLE (WOT)</th>
<th>THROTTLE POSITION SENSOR READING</th>
<th>RPM</th>
<th>TEMPERATURE (ºC)</th>
<th>THROTTLE POSITION SENSOR READING @ IDLE (BASELINE)</th>
<th>RETURN TIME TO IDLE (Msec)</th>
<th>PASS/FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>6453</td>
<td>100%</td>
<td>100%</td>
<td>600</td>
<td>195</td>
<td>63</td>
<td>16%-20%</td>
<td>430</td>
</tr>
<tr>
<td>6454</td>
<td>75%</td>
<td>75%</td>
<td>600</td>
<td>197</td>
<td>63</td>
<td>16%-20%</td>
<td>380</td>
</tr>
<tr>
<td>6455</td>
<td>50%</td>
<td>57%</td>
<td>600</td>
<td>200</td>
<td>63</td>
<td>16%-20%</td>
<td>190</td>
</tr>
<tr>
<td>6456</td>
<td>25%</td>
<td>24%</td>
<td>600</td>
<td>200</td>
<td>63</td>
<td>16%-20%</td>
<td>50</td>
</tr>
</tbody>
</table>

RETURN TIME REQUIREMENTS:

1 second (1000 ms) for vehicles less than 4536 kg.
2 seconds (2000 ms) for vehicles more than 4536 kg.
3 seconds (3000 ms) for vehicles exposed to -18º C or less

PASS _____ X _____  FAIL ____________

REMARKS:

RECORDED BY: G. FARRAND  DATE: 04/21/10
APPROVED BY: D. MESSICK
VEHICLE MY/MAKE/MODEL/BODY STYLE: 2010 MERCEDES GLK 350 MPV
VEHICLE NHTSA NO.: CA0514
DATE OF TEST: APRIL 14, 2010

Check one:
Mid Temp. Test: X Low Temp. Test: High Temp. Test:

SYSTEM CONDITION: #2 SPRING DISCONNECTED (INNER SPRING) ON ACCELERATOR PEDAL ASSEMBLY

<table>
<thead>
<tr>
<th>GTL #</th>
<th>ACCELERATOR POSITION % WIDE OPEN THROTTLE (WOT)</th>
<th>THROTTLE POSITION SENSOR READING</th>
<th>RPM</th>
<th>TEMPERATURE (°C)</th>
<th>THROTTLE POSITION SENSOR READING @ IDLE (BASELINE)</th>
<th>RETURN TIME TO IDLE (Msec)</th>
<th>PASS/FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>6457</td>
<td>100%</td>
<td>100%</td>
<td>600</td>
<td>198</td>
<td>63</td>
<td>16%-20%</td>
<td>260</td>
</tr>
<tr>
<td>6458</td>
<td>75%</td>
<td>73%</td>
<td>600</td>
<td>200</td>
<td>63</td>
<td>16%-20%</td>
<td>380</td>
</tr>
<tr>
<td>6459</td>
<td>50%</td>
<td>46%</td>
<td>600</td>
<td>200</td>
<td>63</td>
<td>16%-20%</td>
<td>160</td>
</tr>
<tr>
<td>6460</td>
<td>25%</td>
<td>%</td>
<td>600</td>
<td>201</td>
<td>63</td>
<td>16%-20%</td>
<td>40</td>
</tr>
</tbody>
</table>

RETURN TIME REQUIREMENTS:
1 second (1000 ms) for vehicles less than 4536 kg.
2 seconds (2000 ms) for vehicles more than 4536 kg.
3 seconds (3000 ms) for vehicles exposed to -18° C or less

PASS _____ X _____ FAIL ____________

REMARKS:

RECORDED BY: G. FARRAND DATE: 04/21/10
APPROVED BY: D. MESSICK
FAIL-SAFE OPERATION DISCONNECTION

VEHICLE MY/MAKE/MODEL/BODY STYLE: 2010 MERCEDES GLK 350 MPV
VEHICLE NHTSA NO.: CA0514
DATE OF TEST: APRIL 22, 2010

Check one:
Mid Temp. Test: X  Low Temp. Test:  High Temp. Test: 

SYSTEM CONDITION: #3 SPRING DISCONNECTED (OUTER SPRING) IN THROTTLE BODY

<table>
<thead>
<tr>
<th>GTL #</th>
<th>ACCELERATOR POSITION % WIDE OPEN THROTTLE (WOT)</th>
<th>THROTTLE POSITION SENSOR READING</th>
<th>RPM</th>
<th>TEMPERATURE (ºC) ENGINE COOLANT</th>
<th>AMBIENT</th>
<th>THROTTLE POSITION SENSOR READING @ IDLE (BASELINE)</th>
<th>RETURN TIME TO IDLE (Msec)</th>
<th>PASS/FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>6485</td>
<td>100%</td>
<td>100%</td>
<td>600</td>
<td>195</td>
<td>66</td>
<td>16%-20%</td>
<td>330</td>
<td>P</td>
</tr>
<tr>
<td>6486</td>
<td>75%</td>
<td>75%</td>
<td>600</td>
<td>198</td>
<td>66</td>
<td>16%-20%</td>
<td>360</td>
<td>P</td>
</tr>
<tr>
<td>6487</td>
<td>50%</td>
<td>49%</td>
<td>600</td>
<td>200</td>
<td>66</td>
<td>16%-20%</td>
<td>210</td>
<td>P</td>
</tr>
<tr>
<td>6488</td>
<td>25%</td>
<td>24%</td>
<td>600</td>
<td>198</td>
<td>66</td>
<td>16%-20%</td>
<td>70</td>
<td>P</td>
</tr>
</tbody>
</table>

RETURN TIME REQUIREMENTS:

1 second (1000 ms) for vehicles less than 4536 kg.
2 seconds (2000 ms) for vehicles more than 4536 kg.
3 seconds (3000 ms) for vehicles exposed to -18º C or less

PASS X FAIL

REMARKS:

RECORDED BY: G. FARRAND  DATE: 04/22/10
APPROVED BY: D. MESSICK
FAIL-SAFE OPERATION
DISCONNECTION

VEHICLE MY/MAKE/MODEL/BODY STYLE: 2010 MERCEDES GLK 350 MPV
VEHICLE NHTSA NO.: CA0514
DATE OF TEST: APRIL 22, 2010

Check one:

SYSTEM CONDITION: #4 SPRING DISCONNECTED (INNER SPRING) IN THROTTLE BODY

<table>
<thead>
<tr>
<th>GTL #</th>
<th>ACCELERATOR POSITION % WIDE OPEN THROTTLE (WOT)</th>
<th>THROTTLE POSITION SENSOR READING</th>
<th>RPM</th>
<th>TEMPERATURE (ºC) ENGINE COOLANT</th>
<th>AMBIENT</th>
<th>THROTTLE POSITION SENSOR READING @ IDLE (BASELINE)</th>
<th>RETURN TIME TO IDLE (Msec)</th>
<th>PASS/FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>6489</td>
<td>100%</td>
<td>97%</td>
<td>600</td>
<td>200</td>
<td>66</td>
<td>16%-20%</td>
<td>180</td>
<td>P</td>
</tr>
<tr>
<td>6490</td>
<td>75%</td>
<td>69%</td>
<td>600</td>
<td>198</td>
<td>66</td>
<td>16%-20%</td>
<td>200</td>
<td>P</td>
</tr>
<tr>
<td>6491</td>
<td>50%</td>
<td>42%</td>
<td>600</td>
<td>201</td>
<td>66</td>
<td>16%-20%</td>
<td>120</td>
<td>P</td>
</tr>
<tr>
<td>6492</td>
<td>25%</td>
<td>24%</td>
<td>600</td>
<td>200</td>
<td>66</td>
<td>16%-20%</td>
<td>60</td>
<td>P</td>
</tr>
</tbody>
</table>

RETURN TIME REQUIREMENTS:

1 second (1000 ms) for vehicles less than 4536 kg.
2 seconds (2000 ms) for vehicles more than 4536 kg.
3 seconds (3000 ms) for vehicles exposed to -18º C or less

PASS _____ X _____ FAIL ____________

REMARKS:

RECORDED BY: G. FARRAND DATE: 04/22/10
APPROVED BY: D. MESSICK
DATA SHEET 4
FAIL-SAFE OPERATION
DISCONNECTION

VEHICLE MY/MAKE/MODEL/BODY STYLE: 2010 MERCEDES GLK 350 MPV
VEHICLE NHTSA NO.: CA0514
DATE OF TEST: APRIL 22, 2010

Check one:

SYSTEM CONDITION: SEVERANCE OF APS CONNECTOR

<table>
<thead>
<tr>
<th>GTL #</th>
<th>ACCELERATOR POSITION % WIDE OPEN THROTTLE (WOT)</th>
<th>THROTTLE POSITION SENSOR READING</th>
<th>RPM</th>
<th>TEMPERATURE (°C) ENGINE COOLANT</th>
<th>AMBIENT</th>
<th>THROTTLE POSITION SENSOR READING @ IDLE (BASELINE)</th>
<th>RETURN TIME TO IDLE (Msec)</th>
<th>PASS/FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>6461</td>
<td>100%</td>
<td>100%</td>
<td>600</td>
<td>198</td>
<td>62</td>
<td>16%-20%</td>
<td>50*</td>
<td>P</td>
</tr>
</tbody>
</table>

RETURN TIME REQUIREMENTS:

1 second (1000 ms) for vehicles less than 4536 kg.
2 seconds (2000 ms) for vehicles more than 4536 kg.
3 seconds (3000 ms) for vehicles exposed to -18º C or less

PASS _____ X _____ FAIL __________

REMARKS: *Engine stopped running when connector was removed.

RECORDED BY: G. FARRAND _______________ DATE: 04/22/10
APPROVED BY: D. MESSICK _______________
**DATA SHEET 5**  
**FMVSS 124**

**VEHICLE MY/MAKE/MODEL/BODY STYLE:** 2010 MERCEDES GLK 350 MPV  
**VEHICLE NHTSA NO.:** CA0514  
**DATE OF TEST:** APRIL 19, 2010

<table>
<thead>
<tr>
<th>GTL #</th>
<th>CONNECTOR</th>
<th>WIRE/PIN DESCRIPTION</th>
<th>FAULT CONDITION</th>
<th>ENGINE TEMP. °F</th>
<th>% THROTTLE/RETURN TIME (MS)</th>
<th>PASS/FAIL/NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>6462</td>
<td>APS</td>
<td>#1/Blue</td>
<td>OPEN</td>
<td>192</td>
<td>100/450</td>
<td>P</td>
</tr>
<tr>
<td>6463</td>
<td>APS</td>
<td>#2/Purple/Green</td>
<td>OPEN</td>
<td>195</td>
<td>100/450</td>
<td>P</td>
</tr>
<tr>
<td>6464</td>
<td>APS</td>
<td>#3/Brown/Yellow</td>
<td>OPEN</td>
<td>198</td>
<td>100/250</td>
<td>P</td>
</tr>
<tr>
<td>6465</td>
<td>APS</td>
<td>#4/Brown/White</td>
<td>OPEN</td>
<td>198</td>
<td>100/450</td>
<td>P</td>
</tr>
<tr>
<td>6466</td>
<td>APS</td>
<td>#5/Purple/Yellow</td>
<td>OPEN</td>
<td>200</td>
<td>100/420</td>
<td>P</td>
</tr>
<tr>
<td>6467</td>
<td>APS</td>
<td>#1/Blue</td>
<td>SHORT</td>
<td>201</td>
<td>100/40</td>
<td>P</td>
</tr>
<tr>
<td>6468</td>
<td>APS</td>
<td>#2/Purple/Green</td>
<td>SHORT</td>
<td>205</td>
<td>100/400*</td>
<td>P</td>
</tr>
<tr>
<td>6469</td>
<td>APS</td>
<td>#3/Brown/Yellow</td>
<td>SHORT</td>
<td>206</td>
<td>100/260</td>
<td>P</td>
</tr>
<tr>
<td>6470</td>
<td>APS</td>
<td>#4/Brown/White</td>
<td>SHORT</td>
<td>209</td>
<td>100/410</td>
<td>P</td>
</tr>
<tr>
<td>6471</td>
<td>APS</td>
<td>#5/Purple/Yellow</td>
<td>SHORT</td>
<td>202</td>
<td>100/420</td>
<td>P</td>
</tr>
<tr>
<td>6472</td>
<td>TPS</td>
<td>#1/Pink/Purple</td>
<td>OPEN</td>
<td>200</td>
<td>100/(&lt;200^{*})</td>
<td>P</td>
</tr>
<tr>
<td>6473</td>
<td>TPS</td>
<td>#2/Pink/Black</td>
<td>OPEN</td>
<td>201</td>
<td>100/(&lt;200^{*})</td>
<td>P</td>
</tr>
<tr>
<td>6474</td>
<td>TPS</td>
<td>#3/Orange</td>
<td>OPEN</td>
<td>200</td>
<td>100/40^{**}</td>
<td>P</td>
</tr>
<tr>
<td>6475</td>
<td>TPS</td>
<td>#4/Pink/Blue</td>
<td>OPEN</td>
<td>202</td>
<td>100/150^{**}</td>
<td>P</td>
</tr>
<tr>
<td>6476</td>
<td>TPS</td>
<td>#5/Pink/Green</td>
<td>OPEN</td>
<td>200</td>
<td>100/(&lt;200^{***})</td>
<td>P</td>
</tr>
<tr>
<td>6477</td>
<td>TPS</td>
<td>#6/Pink/Gray</td>
<td>OPEN</td>
<td>198</td>
<td>100/430</td>
<td>P</td>
</tr>
<tr>
<td>6478</td>
<td>TPS</td>
<td>#1/Pink/Purple</td>
<td>SHORT</td>
<td>198</td>
<td>100/160^{**}</td>
<td>P</td>
</tr>
<tr>
<td>6479</td>
<td>TPS</td>
<td>#2/Pink/Blue</td>
<td>SHORT</td>
<td>200</td>
<td>100/50^{*}</td>
<td>P</td>
</tr>
<tr>
<td>6480</td>
<td>TPS</td>
<td>#3/Orange</td>
<td>SHORT</td>
<td>201</td>
<td>100/540</td>
<td>P</td>
</tr>
<tr>
<td>6481</td>
<td>TPS</td>
<td>#4/Pink/Blue</td>
<td>SHORT</td>
<td>200</td>
<td>100/710^{**}</td>
<td>P</td>
</tr>
<tr>
<td>6482</td>
<td>TPS</td>
<td>#5/Pink/Gray</td>
<td>SHORT</td>
<td>200</td>
<td>100/(&lt;200^{***})</td>
<td>P</td>
</tr>
<tr>
<td>6483</td>
<td>TPS</td>
<td>#6/Pink/Gray</td>
<td>SHORT</td>
<td>205</td>
<td>100/450</td>
<td>P</td>
</tr>
<tr>
<td>6484</td>
<td>TPS</td>
<td>Pins 1-6</td>
<td>DISCONNECT</td>
<td>204</td>
<td>100/60^{**}</td>
<td>P</td>
</tr>
</tbody>
</table>

*Engine stopped running when fault was induced.

**Limp Home Mode at 950 RPM.**

***Engine went to idle in the time frames indicated based on laboratory judgment even though output for throttle position sensor which was instrumented went to 150%. The actual position of the air plate did not correspond to the TPS output which was measured.

**REMARKS:**

**RECORDED BY:** G. FARRAND  
**DATE:** 04/19/10

**APPROVED BY:** D. MESSICK
### SECTION 4
TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

<table>
<thead>
<tr>
<th>EQUIPMENT</th>
<th>DESCRIPTION</th>
<th>MODEL/ SERIAL NO.</th>
<th>CAL. DATE</th>
<th>NEXT CAL. DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>THERMOCOUPLES</td>
<td>OMEGA</td>
<td>43P136P</td>
<td>08/09</td>
<td>08/10</td>
</tr>
<tr>
<td>ENGINE RECORDING</td>
<td>GTL COMPUTER</td>
<td>CPU1</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>TACHOMETER</td>
<td>MONARCH</td>
<td>1444664</td>
<td>05/09</td>
<td>05/10</td>
</tr>
</tbody>
</table>
SECTION 5
PHOTOGRAPHS
<table>
<thead>
<tr>
<th>KG</th>
<th>LB</th>
<th>TIRES</th>
<th>RIM SIZE</th>
<th>COLD KPA (PSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRONT 1220</td>
<td>2690</td>
<td>235/50 R19</td>
<td>7.5x19</td>
<td>240(35)</td>
</tr>
<tr>
<td>REAR 1280</td>
<td>2822</td>
<td>235/50 R19</td>
<td>7.5x19</td>
<td>270(39)</td>
</tr>
<tr>
<td>GVWR 2480</td>
<td>5467</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This vehicle conforms to all applicable Federal Motor Vehicle Safety and Theft Prevention Standards in effect on the date of manufacture shown above.

WDCGG8HB8AF474687

TYPE: MPV

FIGURE 5.4
CLOSE-UP VIEW OF VEHICLE CERTIFICATION LABEL
<table>
<thead>
<tr>
<th>TIRE PNEU</th>
<th>SIZE DIMENSIONS</th>
<th>COLD TIRE PRESSURE PRESSION DES PNEUS À FROID</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRONT AVANT</td>
<td>235/50 R19</td>
<td>240 KPA, 35 PSI</td>
</tr>
<tr>
<td>REAR ARRIÈRE</td>
<td>235/50 R19</td>
<td>270 KPA, 39 PSI</td>
</tr>
<tr>
<td>SPARE DE SECOURS</td>
<td>185/75-17 98P</td>
<td>280 KPA, 41 PSI</td>
</tr>
</tbody>
</table>
2010 MERCEDES GLK 350
NHTSA NO. CA0514
FMVSS NO. 124

FIGURE 5.6
ACCELERATOR PEDAL ASSEMBLY SHOWING SPRING 1 & 2
CLOSE-UP OF SPRINGS 1 & 2
2010 MERCEDES GLK 350
NHTSA NO. CA0514
FMVSS NO. 124

FIGURE 5.8
TEST SET-UP
2010 MERCEDES GLK 350
NHTSA NO. CA0514
FMVSS NO. 124

FIGURE 5.13
THROTTLE BODY SHOWING SPRINGS 3 & 4
GTL 6446, NHTSA CA0514, FMVSS 124.

100% Throttle, Normal Operation.

% Throttle & Foot Release.

Time in Seconds
GTL 6448, NHTSA CA0514, FMVSS 124.

50% Throttle, Normal Operation.

% Throttle & Foot Release.

Time in Seconds

0 10 20 30 40 50 60 70 80 90 100
GTL 6449, NHTSA CA0514, FMVSS 124.

25% Throttle, Normal Operation.
GTL 6453, NHTSA CA0514, FMVSS 124.

100% Throttle, Spring 1 Removed.
GTL 6454, NHTSA CA0514, FMVSS 124.

75% Throttle, Spring 1 Removed.

% Throttle & Foot Release.
GTL 6455, NHTSA CA0514, FMVSS 124.

50% Throttle, Spring 1 Removed.
GTL 6456, NHTSA CA0514, FMVSS 124.

25% Throttle, Spring 1 Removed.
GTL 6457, NHTSA CA0514, FMVSS 124.

100% Throttle, Spring 2 Removed.
GTL 6458, NHTSA CA0514, FMVSS 124.

75% Throttle, Spring 2 Removed.
GTL 6459, NHTSA CA0514, FMVSS 124.

50% Throttle, Spring 2 Removed.

% Throttle & Foot Release.

Time in Seconds
GTL 6460, NHTSA CA0514, FMVSS 124.

25% Throttle, Spring 2 Removed.
GTL 6461, NHTSA CA0514, FMVSS 124.

100% Throttle, APS Connector Disconnect

% Throttle & Foot Release.

Time in Seconds
GTL 6462, NHTSA CA0514, FMVSS 124.

100% Throttle, APS Wire 1 Open.
GTL 6463, NHTSA CA0514, FMVSS 124.

100% Throttle, APS Wire 2 Open.
GTL 6464, NHTSA CA0514, FMVSS 124.

100% Throttle, APS Wire 3 Open.
GTL 6465, NHTSA CA0514, FMVSS 124.

100% Throttle, APS Wire 4 Open.

% Throttle & Foot Release.

Time in Seconds
GTL 6466, NHTSA CA0514, FMVSS 124.

100% Throttle, APS Wire 5 Open.
GTL 6467, NHTSA CA0514, FMVSS 124.

100% Throttle, APS Wire 1 Shorted.

% Throttle & Foot Release.

Time in Seconds
GTL 6468, NHTSA CA0514, FMVSS 124.

100% Throttle, APS Wire 2 Shorted.
GTL 6469, NHTSA CA0514, FMVSS 124.

100% Throttle, APS Wire 3 Shorted.
GTL 6470, NHTSA CA0514, FMVSS 124.

100% Throttle, APS Wire 4 Shorted.
GTL 6471, NHTSA CA0514, FMVSS 124.

100% Throttle, APS Wire 5 Shorted.
GTL 6472, NHTSA CA0514, FMVSS 124.

100% Throttle, TPS Wire 1 Open.

Time in Seconds

% Throttle & Foot Release.
GTL 6473, NHTSA CA0514, FMVSS 124.

100% Throttle, TPS Wire 2 Open.

% Throttle & Foot Release.

Time in Seconds
GTL 6474, NHTSA CA0514, FMVSS 124.

100% Throttle, TPS Wire 3 Open.
GTL 6475, NHTSA CA0514, FMVSS 124.

100% Throttle, TPS Wire 4 Open.
GTL 6478, NHTSA CA0514, FMVSS 124.

100% Throttle, TPS Wire 1 Shorted.

% Throttle & Foot Release.

Time in Seconds
GTL 6479, NHTSA CA0514, FMVSS 124.

100% Throttle, TPS Wire 2 Shorted.

% Throttle & Foot Release.

Time in Seconds
GTL 6480, NHTSA CA0514, FMVSS 124.

100% Throttle, TPS Wire 3 Shorted.
GTL 6482, NHTSA CA0514, FMVSS 124.

100% Throttle, TPS Wire 5 Shorted.

% Throttle & Foot Release.

Time in Seconds
GTL 6483, NHTSA CA0514, FMVSS 124.

100% Throttle, TPS Wire 6 Shorted.
GTL 6485, NHTSA CA0514, FMVSS 124.

100% Throttle, TPS Spring 3 Removed.
GTL 6486, NHTSA CA0514, FMVSS 124.

75% Throttle, TPS Spring 3 Removed.
GTL 6487, NHTSA CA0514, FMVSS 124.

50% Throttle, TPS Spring 3 Removed.
GTL 6490, NHTSA CA0514, FMVSS 124.

75% Throttle, TPS Spring 4 Removed.
GTL 6491, NHTSA CA0514, FMVSS 124.

50% Throttle, TPS Spring Removed.