SAFETY COMPLIANCE TESTING FOR
FMVSS NO. 138
TIRE PRESSURE MONITORING SYSTEMS

AUDI AG
2009 AUDI A6
FOUR-DOOR PASSENGER CAR
NHTSA NO. C95800

U.S. DOT SAN ANGELO TEST FACILITY
131 COMANCHE TRAIL, BUILDING 3527
GOODFELLOW AFB, TEXAS 76908

December 9, 2009

FINAL REPORT

PREPARED FOR
U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
NVS-220
OFFICE OF VEHICLE SAFETY COMPLIANCE
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Approved By: John M. Egan
Accepted By: John H. Flowers
Acceptance Date: 12/09/09
Compliance tests were conducted on the subject 2009 Audi A6 four-door passenger car in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure Number TP-138-03 for the determination of FMVSS 138 compliance. Test failures identified were as follows: The TPMS telltale self extinguishes while a malfunction is still in effect, a violation of FMVSS 138, S4.4(c)(2).
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SECTION 1
INTRODUCTION

1.1 PURPOSE OF COMPLIANCE TEST

A 2009 Audi A6 four-door passenger car was tested to determine if the vehicle was in compliance with the requirements of FMVSS 138. All tests were conducted in accordance with NHTSA/Office of Vehicle Safety Compliance (OVSC) Laboratory Test Procedure TP-138-03 dated July 12, 2007.

1.2 TEST VEHICLE

The test vehicle was a 2009 Audi A6 four-door passenger car. Nomenclatures applicable to the test vehicle are:

A. Vehicle Identification Number: WAUCH74F29N022298

B. NHTSA Number: C95800

C. Manufacturer: Audi AG

D. Manufacture Date: 11/2008

1.3 TEST DATE

The test vehicle was tested during the time period May 27, 2009, through June 9, 2009.
SECTION 2
TEST PROCEDURE AND SUMMARY OF RESULTS

2.1 TEST PROCEDURE

Prior to test, the test vehicle was inspected for completeness, systems operability, and appropriate fuel and liquid levels, i.e. oil and coolant. The vehicle was then photographically documented as required by the NHTSA/OVSC Test Procedure. Tire sidewall information was recorded. The owner’s manual was reviewed, and pertinent tire and TPMS information were noted. Telltale’s symbol, color, location, and lamp function were checked.

Subsequent events included weighing the vehicle to establish the Unloaded Vehicle Weight (UVW) and the distribution of weight on the front and rear axles and each wheel position. The vehicle was loaded to its Lightly Loaded Vehicle Weight (LLVW) for eight tire deflation scenarios. This LLVW included the weights of driver, one passenger, and test equipment. The vehicle was loaded to its Unloaded Vehicle Weight plus Vehicle Capacity Weight (VCW) for seven additional tire deflation scenarios. The VCW included the weights of driver, one passenger, test equipment, ballast in the rear seat, and ballast in the rear cargo area. The vehicle is required to be loaded to its maximum capacity without exceeding either the Vehicle Capacity Weight or Gross Vehicle Weight Rating (GVWR). For determination of the telltale warning activation pressure, the recommended cold inflation pressure was identified from the vehicle placard.

The vehicle was instrumented with a Racelogic VBOX III 100 Hz GPS Data Logger and brake pedal trigger. The VBOX uses GPS to measure vehicle speed, time, and distance. Test data were recorded to a compact flash card. During the test, a stopwatch was used to determine the approximate ‘Cumulative Driving Time’ during each test phase. Cumulative driving time does not include time during the brake application or when the vehicle speed was below 50 km/h or above 100 km/h. Upon completion of a tire deflation scenario, graphs were generated by VBOX software showing vehicle speed versus time during the test procedures. The graphs furnish a second by second analysis of each calibration and low inflation pressure detection phase (as appropriate). The cumulative driving time was calculated by post-processing the VBOX graph data, and is reported in Section 3 (Test Data) as ‘Total Driving Time’.

The tire deflation test scenario consisted of four phases:

1. Calibration phase: Tires were set at vehicle placard cold inflation pressure and the vehicle was driven for at least twenty minutes of cumulative driving time between 50 and 100 km/h.

2. Detection phase: Immediately after calibration phase, the selected tire(s) were deflated to seven kPa (one psi) below the Telltale Warning Activation Pressure. After one minute, the inflation pressure(s) of only deflated tire(s) were rechecked and adjusted if necessary. The vehicle was started and driven to ensure that the low inflation pressure telltale illuminated.
3. Cool down phase: Vehicle was parked in the San Angelo Test Facility (SATF) open bay shielded from direct sunlight. Tires were allowed to cool down for a minimum of one hour. After cool down, the vehicle was started and the low tire pressure telltale was checked for re-illumination.

4. Extinguishment phase: Tires were adjusted to vehicle placard cold inflation pressure. The vehicle was started, the TPMS was reset, and the vehicle was driven to ensure that the low inflation pressure telltale extinguished, unless the TPMS low tire pressure telltale extinguished prior to engaging of transmission.

Four malfunction scenarios were performed on the Audi A6. The first malfunction was simulated by disconnecting wiring to the TPMS ECU. The second scenario was performed by removing the TPMS fuse. The wheel speed sensor (ABS) was disconnected for the third scenario, and in the fourth, the right front tire was replaced with a smaller size tire.

2.2 SUMMARY OF RESULTS

Eight tire deflation scenarios were performed on the test vehicle at LLVW:

A. Left front
B. Left front and left rear
C. Left front, left rear, right rear, and right front
D. Left front and right rear
E. Left rear and right rear
F. Left front, left rear, and right rear
G. Right rear
H. Left front, right rear, and right front

Seven tire deflation scenarios were performed on the test vehicle at UVW + VCW:

I. Left front and right front
J. Left rear, right rear, and right front
K. Left rear and right front
L. Right front
M. Left rear
N. Right front and right rear
O. Left front, left rear, and right front

The data indicate compliance of the test vehicle’s tire pressure monitoring system for the fifteen tire deflation scenarios tested.

Four malfunction detection scenarios were performed on the test vehicle:

1. Wiring to the TPMS ECU was disconnected.
2. TPMS fuse was removed.
3. Wheel speed sensor was disconnected.
4. Right front tire was replaced with a smaller size tire at LLVW.

In all scenarios except the last one, the vehicle’s combination malfunction telltale properly operated per the standard’s requirements. After a power cycle in the last scenario, the TPMS light self extinguished while the malfunction was still in effect.
SECTION 3
TEST DATA
**FMVSS No. 138 – TEST DATA SUMMARY**

TEST DATES: May 27 - June 9, 2009  LAB: U. S. DOT San Angelo Test Facility

VIN: WAUCH74F29N022298  VEHICLE NHTSA NUMBER: C95800

CERTIFICATION LABEL BUILD DATE: 11/2008

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
<th>PASS/FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOW TIRE PRESSURE WARNING TELLTALE</strong></td>
<td></td>
</tr>
<tr>
<td>S138: S4.3.1 (a), (b); S4.3.3 (a), (b)</td>
<td></td>
</tr>
<tr>
<td>Mounting</td>
<td>PASS</td>
</tr>
<tr>
<td>Symbol and color</td>
<td>PASS</td>
</tr>
<tr>
<td>Check of lamp function</td>
<td>PASS</td>
</tr>
<tr>
<td><strong>MALFUNCTION TELLTALE</strong></td>
<td></td>
</tr>
<tr>
<td>S138: S4.4 (b) or (c)</td>
<td></td>
</tr>
<tr>
<td>Mounting</td>
<td>PASS</td>
</tr>
<tr>
<td>Symbol and color</td>
<td>PASS</td>
</tr>
<tr>
<td>Check of lamp function</td>
<td>PASS</td>
</tr>
<tr>
<td><strong>LOW TIRE PRESSURE WARNING - OPERATIONAL PERFORMANCE</strong></td>
<td></td>
</tr>
<tr>
<td>S138: S4.2, S4.3.1 (c), S4.3.2</td>
<td></td>
</tr>
<tr>
<td>Telltale illumination</td>
<td>PASS</td>
</tr>
<tr>
<td><strong>MALFUNCTION INDICATOR – OPERATIONAL PERFORMANCE</strong></td>
<td></td>
</tr>
<tr>
<td>S138: S4.4 (a)</td>
<td></td>
</tr>
<tr>
<td>Telltale illumination</td>
<td>FAIL</td>
</tr>
<tr>
<td><strong>TPMS WRITTEN INSTRUCTIONS</strong></td>
<td></td>
</tr>
<tr>
<td>S138: S4.5</td>
<td></td>
</tr>
<tr>
<td>Image of telltales</td>
<td>PASS</td>
</tr>
<tr>
<td>Verbatim statements</td>
<td>PASS</td>
</tr>
</tbody>
</table>

**REMARKS:** None
DATA SHEET 1 (Sheet 1 of 3)
TEST PREPARATION INFORMATION

TEST DATE: May 27, 2009     LAB: U. S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800     VIN: WAUCH74F29N022298

CERTIFICATION LABEL BUILD DATE: 11/2008     ENGINE: 3.2 liter, 6 cylinder

MY/MAKE/MODEL/BODY STYLE: 2009 Audi A6 four-door passenger car

TIRE CONDITIONING:
( X ) Tires used more than 100 km. Actual odometer reading: 460 km (286 mi)

VEHICLE ALIGNMENT AND WHEEL BALANCING:
Alignment checked: ( ) Front   ( ) Rear   ( X ) COTR waived
Wheels balanced: ( ) Front   ( ) Rear   ( X ) COTR waived

TPMS IDENTIFICATION:
TPMS MAKE/MODEL: ECU: NIRA Dynamics AB
Source: Manufacturer supplied information

TPMS TYPE: ( ) Direct   ( X ) Indirect   ( ) Other

Does TPMS require execution of a learning/calibration driving phase? ( X )YES   ( )NO
Source: Manufacturer supplied information

Does TPMS have a manual reset control? ( X )YES   ( )NO
Location and function: In Multi Media Interface center console display

TPMS MALFUNCTION INDICATOR TYPE:
( ) None   ( ) Dedicated Telltale   ( X ) Combination low tire pressure/malfunction telltale
DESIGNATED TIRE SIZE(S) FROM VEHICLE LABELING AND OWNER’S MANUAL:

<table>
<thead>
<tr>
<th>Axle</th>
<th>Tire Size</th>
<th>Recommended Cold Inflation Pressure</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front and Rear</td>
<td>245/40R18</td>
<td>270 kPa (39 psi)</td>
<td>Vehicle placard</td>
</tr>
<tr>
<td>Front Normal Load</td>
<td>245/40R18</td>
<td>250 kPa (36 psi)</td>
<td>Owner’s manual</td>
</tr>
<tr>
<td>Front Full Load</td>
<td>245/40R18</td>
<td>270 kPa (39 psi)</td>
<td>Owner’s manual</td>
</tr>
<tr>
<td>Rear Normal Load</td>
<td>245/40R18</td>
<td>230 kPa (33 psi)</td>
<td>Owner’s manual</td>
</tr>
<tr>
<td>Rear Full Load</td>
<td>245/40R18</td>
<td>270 kPa (39 psi)</td>
<td>Owner’s manual</td>
</tr>
</tbody>
</table>

INSTALLED TIRE DATA

Diagram - PASSENGER CAR Tire Labeling

Front and Rear Axles

Tire Size and Load Index / Speed Rating: 245/40R18  97H  Extra Load

Manufacturer/Tire Name: Continental ContiPro Contact

Sidewall Max Load Rating: 730 kg (1,609 lbs)

Max Inflation Pressure: 350 kPa (51 psi)

Sidewall Construction (number of plies and ply material): 1 rayon

Tread Construction (number of plies and ply material): 1 rayon, 2 steel, 1 polyamide

Do all installed tires have the same sidewall information? (X) YES ( ) NO

Are all installed tires the same as designated by the vehicle manufacturer on the vehicle placard? (X) YES ( ) NO
Worksheet for Determining FMVSS No. 138 Telltale Warning Activation Pressure for Tires Installed on Vehicle

<table>
<thead>
<tr>
<th>Part</th>
<th>Front Axle</th>
<th>Rear Axle</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>270 kPa x .75 = 202.5 kPa</td>
<td>270 kPa x .75 = 202.5 kPa</td>
</tr>
<tr>
<td>(B)</td>
<td>( ) P-metric-Standard load ( X ) P-metric-Extra Load Load Range ( ) C, ( ) D, or ( ) E</td>
<td>( ) P-metric-Standard load ( X ) P-metric-Extra Load Load Range ( ) C, ( ) D, or ( ) E</td>
</tr>
<tr>
<td></td>
<td>( X ) Maximum or ( ) Rated 350 kPa (51 psi)</td>
<td>( X ) Maximum or ( ) Rated 350 kPa (51 psi)</td>
</tr>
<tr>
<td></td>
<td>160 kPa (23 psi)</td>
<td>160 kPa (23 psi)</td>
</tr>
<tr>
<td>(C)</td>
<td>202.5 kPa (29.4 psi)</td>
<td>202.5 kPa (29.4 psi)</td>
</tr>
<tr>
<td>(D)</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
</tr>
</tbody>
</table>

FMVSS 138 Table 1 - Low Tire Pressure Warning Telltale - Minimum Activation Pressure

<table>
<thead>
<tr>
<th>Tire Type</th>
<th>Maximum or Rated Inflation Pressure</th>
<th>Minimum Activation Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(kPa)</td>
<td>(psi)</td>
</tr>
<tr>
<td>P-metric -- Standard Load</td>
<td>240, 300, or 350</td>
<td>35, 44, or 51</td>
</tr>
<tr>
<td>P-metric - Extra Load</td>
<td>280 or 340</td>
<td>41 or 49</td>
</tr>
<tr>
<td>Load Range C</td>
<td>350</td>
<td>51</td>
</tr>
<tr>
<td>Load Range D</td>
<td>450</td>
<td>65</td>
</tr>
<tr>
<td>Load Range E</td>
<td>550</td>
<td>80</td>
</tr>
</tbody>
</table>

REMARKS: None

RECORDED BY: Todd P. Groghan DATE: May 27, 2009

APPROVED BY: Kenneth H. Yates
DATA SHEET 2 (Sheet 1 of 2)
LOW TIRE PRESSURE WARNING AND MALFUNCTION TELLTALE

TEST DATE: May 27, 2009 LAB: U. S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

TPMS Low Tire Pressure Warning Telltale
Telltales is mounted inside the occupant compartment in front of and in clear view of the driver?

( X )YES ( )NO (fail)

TPMS Low Tire Pressure Warning Telltale Location: In instrument cluster at top left of speedometer

Identify Telltale Symbol Used (check box above figure).

X                                 

OTHER (fail)
(describe below)

Note any words or additional symbols used: See Remarks

Telltales is part of a reconfigurable display? ( )YES ( X )NO

TPMS Malfunction Telltale

( ) None ( ) Dedicated stand-alone ( X ) Combined with low tire pressure telltale
Check Telltale Lamp Functions:

**LOW TIRE PRESSURE WARNING AND MALFUNCTION TELLTALE**

Ignition locking system position when telltale illuminates:

- [ ] OFF/LOCK
- [ ] Between OFF/LOCK and ON/RUN
- [x] ON/RUN
- [ ] Between ON/RUN and START

Is the telltale yellow in color?  (X) YES ( ) NO (fail)

Time telltale remains illuminated 2.5 seconds.

Starter Interlocks:

Does vehicle have any starter, transmission or other interlocks that affect operation of the telltale lamp check function?  ( ) YES (X) NO

Low Tire Pressure Warning and Malfunction Telltales (PASS/FAIL)  PASS

REMARKS: In addition to the combined low inflation pressure/malfunction telltale, the Audi is equipped with a reconfigurable display (Driver Information System) that provides supplementary low inflation pressure and malfunction information (see Figure 5.11).

RECORDED BY: Todd P. Groghan

DATE: May 27, 2009

APPROVED BY: Kenneth H. Yates
TEST DATE: June 3, 2009  LAB: U.S. DOT San Ang elo Test Facility

VEHICLE NHTSA NUMBER: C95800

Time: Start: 1:55 pm  End: 2:48 pm

Ambient Temperature: Start: 27.8°C (82.0°F)  End: 29.6°C (85.3°F)

Trip Odometer Reading: Start: 534.0 km (331.8 mi)

Fuel Level: Start: Full

Weather Conditions: Sunny

Time vehicle remained with engine off and tires shielded from direct sunlight (1 hour minimum): 1 hour

PRE-TEST TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test cold measurements after ambient soak: Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>23.8°C (74.8°F)</td>
<td>23.4°C (74.1°F)</td>
<td>23.2°C (73.8°F)</td>
<td>23.8°C (74.8°F)</td>
</tr>
</tbody>
</table>
VEHICLE WEIGHT:

Vehicle Ratings from Certification Label:

GVWR: 2,265 kg (4,993 lbs)
GAWR (front): 1,190 kg (2,623 lbs)
GAWR (rear): 1,175 kg (2,590 lbs)

Vehicle Capacity Weight:

Vehicle Capacity Weight 500 kg (1,102 lbs)

Measured Unloaded Vehicle Weight:

LF 504 kg (1,112 lbs)  LR 378 kg (834 lbs)
RF 501 kg (1,105 lbs)  RR 373 kg (822 lbs)
Front Axle 1,005 kg (2,217 lbs)  Rear Axle 751 kg (1,656 lbs)
Total Vehicle 1,756 kg (3,873 lbs)

Measured Test Weight: (X) LLVW (+50, -0 kg)  ( ) UVW + VCW  ( ) GVWR (+0, -50 kg)

LF 550 kg (1,213 lbs)  LR 420 kg (927 lbs)
RF 548 kg (1,208 lbs)  RR 416 kg (918 lbs)
Front Axle 1,098 kg (2,421 lbs) (≤ GAWR)  Rear Axle 836 kg (1,845 lbs) (≤ GAWR)
Total Vehicle 1,934 kg (4,266 lbs) (not greater than GVWR)

Note: For scenarios A through H, this Total Vehicle Weight measures the vehicle loaded to Lightly Loaded Vehicle Weight (LLVW), 178 kg (393 lbs) of driver, passenger, and test equipment.
DATA SHEET 3 (Sheet 3 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO A – Left Front Tire Deflation at LLVW

TEST DATE: June 4, 2009 LAB: U. S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 2 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to LLVW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>19.3°C (66.7°F)</td>
<td>Vehicle cool down period:</td>
<td>overnight</td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>21.0°C (69.8°F)</td>
<td>20.8°C (69.4°F)</td>
<td>20.8°C (69.4°F)</td>
<td>21.2°C (70.2°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>23.6°C (74.5°F)</td>
<td>23.2°C (73.8°F)</td>
<td>23.2°C (73.8°F)</td>
<td>23.2°C (73.8°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:


Trip Odometer Reading: Start: 539.1 km (335.0 mi) End: 571.2 km (354.9 mi)

Ambient Temperature: Start: 19.0°C (66.2°F) End: 20.3°C (68.5°F)

Roadway Temperature: Start: 22.0°C (71.6°F) End: 24.6°C (76.3°F)

Driving in first direction:

Goodfellow Air Force Base (GAFB) north gate Direction: see chart, page 96

10:14 minutes (stopwatch time) 15.8 km (9.8 mi) distance

Driving in opposite direction:

Starting point: US 87 crossover overpass Direction: see chart, page 96

10:21 minutes (stopwatch time) 16.3 km (10.1 mi) distance

Max speed: 98.1 km/h (61.0 mph)

Total Driving Time: 20:37 minutes (VBox time)
DATA SHEET 3 (Sheet 4 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO A – Left Front Tire Deflation at LLVW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inflation Pressure</td>
<td>295.0 kPa (42.8 psi)</td>
<td>290.0 kPa (42.1 psi)</td>
<td>289.7 kPa (42.0 psi)</td>
</tr>
<tr>
<td></td>
<td>Tire Sidewall Temp</td>
<td>37.2°C (99.0°F)</td>
<td>31.8°C (89.2°F)</td>
<td>30.2°C (86.4°F)</td>
</tr>
<tr>
<td></td>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>23.4°C (74.1°F)</td>
<td>23.6°C (74.5°F)</td>
<td>23.4°C (74.1°F)</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( X )LF ( )LR ( )RR ( )RF</td>
<td>195.5 kPa (28.4 psi)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Starting point: San Angelo Test Facility shop  Direction: see chart, page 97

1.4 km (0.9 mi) distance (non-cumulative)

Max speed: 75.1 km/h (46.7 mph)
Total Driving Time: 0:15 minutes (VBox time)

TEST RESULTS
TELLTALE ILLUMINATES WITHIN 20 MINUTES: ( X )YES ( )NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the "On" or “Run” position? ( X )YES ( )NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)
DATA SHEET 3 (Sheet 5 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO A – Left Front Tire Deflation at LLVW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELTTALE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>22.3°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle cool down period:</td>
<td>61 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>187.5 kPa</td>
<td>278.1 kPa</td>
<td>277.4 kPa</td>
<td>281.0 kPa</td>
</tr>
<tr>
<td></td>
<td>(27.2 psi)</td>
<td>(40.3 psi)</td>
<td>(40.2 psi)</td>
<td>(40.8 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>29.6°C</td>
<td>26.6°C</td>
<td>26.8°C</td>
<td>30.0°C</td>
</tr>
<tr>
<td></td>
<td>(85.3°F)</td>
<td>(79.9°F)</td>
<td>(80.2°F)</td>
<td>(86.0°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>24.4°C</td>
<td>24.0°C</td>
<td>24.6°C</td>
<td>24.6°C</td>
</tr>
<tr>
<td></td>
<td>(75.9°F)</td>
<td>(75.2°F)</td>
<td>(76.3°F)</td>
<td>(76.3°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)

TELETTALE EXTINGUISHMENT:

RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>270.0 kPa</td>
<td>270.0 kPa</td>
<td>270.0 kPa</td>
<td>270.0 kPa</td>
</tr>
<tr>
<td></td>
<td>(39.2 psi)</td>
<td>(39.2 psi)</td>
<td>(39.2 psi)</td>
<td>(39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? ( )YES ( X )NO (See Remarks)

TEST RESULTS

TPMS Performance Test Results (PASS/FAIL) 
PASS

Left front tire was deflated at LLVW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 4, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 3 (Sheet 6 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO B – Left Front and Left Rear Tire Deflation at LLVW

TEST DATE: June 4, 2009  LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 2 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES
BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to LLVW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature: 22.3°C (72.1°F)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle cool down period: 68 minutes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>29.4°C (84.9°F)</td>
<td>26.2°C (79.2°F)</td>
<td>26.4°C (79.5°F)</td>
<td>29.6°C (85.3°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>24.4°C (75.9°F)</td>
<td>24.6°C (76.3°F)</td>
<td>24.6°C (76.3°F)</td>
<td>24.4°C (75.9°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:


Trip Odometer Reading: Start: 575.8 km (357.8 mi)  End: 607.8 km (377.7 mi)

Ambient Temperature: Start: 22.3°C (72.1°F)  End: 23.2°C (73.8°F)

Roadway Temperature: Start: 33.4°C (92.1°F)  End: 37.6°C (99.7°F)

Driving in first direction:
Starting point: GAFB north gate  Direction: see chart, page 98
10:10 minutes (stopwatch time)  15.8 km (9.8 mi) distance

Driving in opposite direction:
Starting point: US 87 crossover overpass  Direction: see chart, page 98
10:31 minutes (stopwatch time)  16.3 km (10.1 mi) distance

Max speed: 97.0 km/h (60.3 mph)
Total Driving Time: 20:43 minutes (VBox time)
TPMS OPERATIONAL PERFORMANCE

SCENARIO B – Left Front and Left Rear Tire Deflation at LLVW

TIRES INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>288.5 kPa (41.8 psi)</td>
<td>288.5 kPa (41.8 psi)</td>
<td>288.7 kPa (41.9 psi)</td>
<td>290.0 kPa (42.1 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>41.0°C (105.8°F)</td>
<td>35.2°C (95.4°F)</td>
<td>34.0°C (93.2°F)</td>
<td>38.4°C (101.1°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>24.8°C (76.6°F)</td>
<td>24.8°C (76.6°F)</td>
<td>24.8°C (76.6°F)</td>
<td>24.4°C (75.9°F)</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( X )LF ( X )LR ( )RR ( )RF</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Starting point: San Angelo Test Facility shop  Direction: see chart, page 99

3.2 km (2.0 mi) distance (non-cumulative)

Max speed: 81.5 km/h (50.6 mph)

Total Driving Time: 2:01 minutes (VBox time)

TEST RESULTS

TELLTALE ILLUMINATES WITHIN 20 MINUTES: ( X )YES ( )NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)
TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELLTALE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>25.0°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle cool down period:</td>
<td>62 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation Pressure</td>
<td>186.4 kPa (27.0 psi)</td>
<td>188.1 kPa (27.3 psi)</td>
<td>274.8 kPa (39.9 psi)</td>
<td>275.1 kPa (39.9 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>33.0°C (91.4°F)</td>
<td>30.2°C (86.4°F)</td>
<td>30.0°C (86.0°F)</td>
<td>32.8°C (91.0°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>25.6°C (78.1°F)</td>
<td>25.6°C (78.1°F)</td>
<td>25.6°C (78.1°F)</td>
<td>25.8°C (78.4°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES (   )NO (fail)

TELLTALE EXTINGUISHMENT:

RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? (   )YES ( X )NO (See Remarks)

TPMS Performance Test Results (PASS/FAIL)  
PASS

Left front and left rear tires were deflated at LLVW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan  
DATE: June 4, 2009

APPROVED BY: Kenneth H. Yates
DATA SHEET 3 (Sheet 9 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO C – Left Front, Left Rear, Right Rear, and Right Front Tire Deflation at LLVW

TEST DATE: June 4, 2009 LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 2 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to LLVW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>26.9°C (80.4°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle cool down period:</td>
<td>69 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>33.4°C (92.1°F)</td>
<td>30.4°C (86.7°F)</td>
<td>30.0°C (86.0°F)</td>
<td>33.0°C (91.4°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.0°C (78.8°F)</td>
<td>25.8°C (78.4°F)</td>
<td>26.2°C (79.2°F)</td>
<td>26.0°C (78.8°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

Time: Start: 17:01:47 UTC End: 17:26:13 UTC

Trip Odometer Reading: Start: 616.1 km (382.8 mi) End: 648.1 km (402.7 mi)

Ambient Temperature: Start: 26.9°C (80.4°F) End: 26.8°C (80.2°F)

Roadway Temperature: Start: 46.8°C (116.2°F) End: 48.4°C (119.1°F)

Driving in first direction:
Starting point: GAFB north gate Direction: see chart, page 100
10:14 minutes (stopwatch time) 15.8 km (9.8 mi) distance

Driving in opposite direction:
Starting point: US 87 crossover overpass Direction: see chart, page 100
10:34 minutes (stopwatch time) 16.3 km (10.1 mi) distance

Max speed: 99.3 km/h (61.7 mph)
Total Driving Time: 20:50 minutes (VBox time)
TPMS OPERATIONAL PERFORMANCE

SCENARIO C – Left Front, Left Rear, Right Rear, and Right Front Tire Deflation at LLVW

TIRE INFLATION Pressures AND Temperatures AFTER Calibration PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off: Inflation Pressure</td>
<td>288.8 kPa (41.9 psi)</td>
<td>286.6 kPa (41.6 psi)</td>
<td>288.0 kPa (41.8 psi)</td>
<td>289.6 kPa (42.0 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>45.0°C (113.0°F)</td>
<td>39.2°C (102.6°F)</td>
<td>38.6°C (101.5°F)</td>
<td>42.8°C (109.0°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.4°C (79.5°F)</td>
<td>26.8°C (80.2°F)</td>
<td>27.0°C (80.6°F)</td>
<td>26.4°C (79.5°F)</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( X )LF ( X )LR ( X )RR ( X )RF</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Starting point:  San Angelo Test Facility shop  Direction:  see chart, page 101

7.9 km (4.9 mi) distance (non-cumulative)

Max speed:  95.5 km/h (59.3 mph)
Total Driving Time:  5:03 minutes (VBox time)

TEST RESULTS

TELLTALE ILLUMINATES WITHIN 20 MINUTES:  ( X )YES  ( )NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position?  ( X )YES  ( )NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position?  ( X )YES  ( )NO (fail)
### TPMS OPERATIONAL PERFORMANCE

**SCENARIO C – Left Front, Left Rear, Right Rear, and Right Front Tire Deflation at LLVW**

#### TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELTTALE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>29.6°C (85.3°F)</td>
<td>Vehicle cool down period:</td>
<td>61</td>
<td>minutes</td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>185.9 kPa (27.0 psi)</td>
<td>187.8 kPa (27.2 psi)</td>
<td>188.6 kPa (27.4 psi)</td>
<td>187.3 kPa (27.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>35.8°C (96.4°F)</td>
<td>32.8°C (91.0°F)</td>
<td>32.6°C (90.7°F)</td>
<td>35.6°C (96.1°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.8°C (80.2°F)</td>
<td>27.2°C (81.0°F)</td>
<td>27.4°C (81.3°F)</td>
<td>27.2°C (81.0°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position?  

- [X] YES  
- [ ] NO (fail)

#### TELTTALE EXTINGUISHMENT:

#### RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale?  

- [ ] YES  
- [X] NO  

(See Remarks)

#### TEST RESULTS

**TPMS Performance Test Results (PASS/FAIL)**  
PASS

Left front, left rear, right rear, and right front tires were deflated at LLVW.

**REMARKS:** In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

**RECORDED BY:** Todd P. Groghan  
**DATE:** June 4, 2009

**APPROVED BY:** Kenneth H. Yates
TEST DATE: June 5, 2009 LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 2 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to LLVW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature: 20.4°C (68.7°F)</td>
<td>Vehicle cool down period: overnight minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>22.0°C (71.6°F)</td>
<td>21.6°C (70.9°F)</td>
<td>21.8°C (71.2°F)</td>
<td>22.4°C (72.3°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>23.8°C (74.8°F)</td>
<td>23.4°C (74.1°F)</td>
<td>23.8°C (74.8°F)</td>
<td>23.8°C (74.8°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

| Trip Odometer Reading: Start: 669.3 km (415.9 mi) End: 701.5 km (435.9 mi) |
| Ambient Temperature: Start: 20.4°C (68.7°F) End: 21.4°C (70.5°F) |
| Roadway Temperature: Start: 22.6°C (72.7°F) End: 26.6°C (79.9°F) |

Driving in first direction:
- Starting point: GAFB north gate
- Direction: see chart, page 102
- 10:08 minutes (stopwatch time) 15.9 km (9.9 mi) distance

Driving in opposite direction:
- Starting point: US 87 crossover overpass
- Direction: see chart, page 102
- 10:35 minutes (stopwatch time) 16.3 km (10.1 mi) distance

Max speed: 97.6 km/h (60.6 mph)
Total Driving Time: 20:43 minutes (VBox time)
DATA SHEET 3 (Sheet 13 of 51)  
TPMS OPERATIONAL PERFORMANCE  
SCENARIO D – Left Front and Right Rear Tire Deflation at LLVW

### Tire Inflation Pressures and Temperatures After Calibration Phase:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off: Inflation Pressure</td>
<td>294.3 kPa (42.7 psi)</td>
<td>290.2 kPa (42.1 psi)</td>
<td>290.2 kPa (42.1 psi)</td>
<td>294.2 kPa (42.7 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>38.0°C (100.4°F)</td>
<td>32.6°C (90.7°F)</td>
<td>31.6°C (88.9°F)</td>
<td>36.4°C (97.5°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>24.4°C (75.9°F)</td>
<td>24.0°C (75.2°F)</td>
<td>24.0°C (75.2°F)</td>
<td>24.2°C (75.6°F)</td>
</tr>
</tbody>
</table>

### System Detection Phase:

#### Location and Pressure(s) of Deflated Tire(s):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated:</td>
<td>LF</td>
<td>LR</td>
<td>RR</td>
<td>RF</td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Telltale Illumination:

- Starting point: San Angelo Test Facility shop
- Direction: see chart, page 103
- 3.5 km (2.2 mi) distance (non-cumulative)
- Max speed: 82.0 km/h (51.0 mph)
- Total Driving Time: 2:12 minutes (VBox time)

### Test Results

- Telltale Illuminates within 20 Minutes: (X) YES ( ) NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)
DATA SHEET 3 (Sheet 14 of 51)
TPMS OPERATIONAL PERFORMANCE

SCENARIO D – Left Front and Right Rear Tire Deflation at LLVW

TIREF INFLATION PRESSURES AND TEMPERATURES AFTER TELLTALE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td>187.7 kPa (21.7 psi)</td>
<td>277.9 kPa (21.7 psi)</td>
<td>188.8 kPa (21.7 psi)</td>
<td>280.9 kPa (21.8 psi)</td>
</tr>
<tr>
<td>Ambient Temperature: 23.3°C (73.9°F)</td>
<td>29.8°C (63.3°F)</td>
<td>27.6°C (63.3°F)</td>
<td>28.2°C (63.7°F)</td>
<td>30.4°C (65.5°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>24.8°C (63.0°F)</td>
<td>24.6°C (63.0°F)</td>
<td>24.8°C (63.0°F)</td>
<td>24.8°C (63.0°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES (   )NO (fail)

TELLTALE EXTINGUISHMENT:
RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td>270.0 kPa (31.9 psi)</td>
<td>270.0 kPa (31.9 psi)</td>
<td>270.0 kPa (31.9 psi)</td>
<td>270.0 kPa (31.9 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? (   )YES ( X )NO
(See Remarks)

TEST RESULTS

TPMS Performance Test Results (PASS/FAIL)
Left front and right rear tires were deflated at LLVW. PASS

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 5, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 3 (Sheet 15 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO E – Left Rear and Right Rear Tire Deflation at LLVW

TEST DATE: June 5, 2009 LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 2 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to LLVW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>23.3°C (73.9°F)</td>
<td>Vehicle cool down period:</td>
<td>68 minutes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Inflation Pressure</th>
<th>Tire Sidewall Temp</th>
<th>San Angelo Test Facility Shop Floor Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>270.0 kPa (39.2 psi)</td>
<td>30.0°C (86.0°F)</td>
<td>25.0°C (77.0°F)</td>
</tr>
<tr>
<td></td>
<td>270.0 kPa (39.2 psi)</td>
<td>27.4°C (81.3°F)</td>
<td>25.2°C (77.4°F)</td>
</tr>
<tr>
<td></td>
<td>270.0 kPa (39.2 psi)</td>
<td>27.8°C (82.0°F)</td>
<td>25.2°C (77.4°F)</td>
</tr>
<tr>
<td></td>
<td>270.0 kPa (39.2 psi)</td>
<td>30.2°C (86.4°F)</td>
<td>25.2°C (77.4°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

<table>
<thead>
<tr>
<th>Time:</th>
<th>Start:</th>
<th>15:06:52 UTC</th>
<th>End:</th>
<th>15:31:38 UTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trip Odometer Reading:</td>
<td>Start:</td>
<td>709.9 km (441.1 mi)</td>
<td>End:</td>
<td>741.9 km (461.0 mi)</td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>Start:</td>
<td>23.3°C (73.9°F)</td>
<td>End:</td>
<td>25.2°C (77.4°F)</td>
</tr>
<tr>
<td>Roadway Temperature:</td>
<td>Start:</td>
<td>35.6°C (96.1°F)</td>
<td>End:</td>
<td>40.2°C (104.4°F)</td>
</tr>
</tbody>
</table>

Driving in first direction:
Starting point: GAFB north gate    Direction: see chart, page 104
10:11 minutes (stopwatch time)    15.9 km (9.9 mi) distance

Driving in opposite direction:
Starting point: US 87 crossover overpass    Direction: see chart, page 104
10:28 minutes (stopwatch time)    16.1 km (10.0 mi) distance

Max speed: 97.8 km/h (60.8 mph)
Total Driving Time: 20:40 minutes (VBox time)
TPMS OPERATIONAL PERFORMANCE

SCENARIO E – Left Rear and Right Rear Tire Deflation at LLVW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off:</td>
<td>290.9 kPa (42.2 psi)</td>
<td>290.6 kPa (42.1 psi)</td>
<td>289.3 kPa (42.0 psi)</td>
<td>291.7 kPa (42.3 psi)</td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>44.6°C (112.3°F)</td>
<td>38.8°C (101.8°F)</td>
<td>37.2°C (99.0°F)</td>
<td>42.6°C (108.7°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>25.6°C (78.1°F)</td>
<td>25.6°C (78.1°F)</td>
<td>25.8°C (78.4°F)</td>
<td>25.8°C (78.4°F)</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( )LF ( X )LR ( X )RR ( )RF</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Starting point: San Angelo Test Facility shop  Direction: see chart, page 105

4.2 km (2.6 mi) distance (non-cumulative)

Max speed: 87.3 km/h (54.2 mph)

Total Driving Time: 2:38 minutes (VBox time)

TEST RESULTS

TELLTALE ILLUMINATES WITHIN 20 MINUTES: ( X )YES ( )NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)
DATA SHEET 3 (Sheet 17 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO E – Left Rear and Right Rear Tire Deflation at LLVW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELTTLAME ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>28.1°C (82.6°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle cool down period:</td>
<td>60 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>274.9 kPa (39.9 psi)</td>
<td>187.2 kPa (27.2 psi)</td>
<td>187.5 kPa (27.2 psi)</td>
<td>277.0 kPa (40.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>34.6°C (94.3°F)</td>
<td>31.2°C (88.2°F)</td>
<td>32.2°C (90.0°F)</td>
<td>35.8°C (96.4°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.6°C (79.9°F)</td>
<td>26.2°C (79.2°F)</td>
<td>26.6°C (79.9°F)</td>
<td>26.2°C (79.2°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES (   )NO (fail)

TELLTALE EXTINGUISHMENT:
RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? (   )YES ( X )NO (See Remarks)

TPMS Performance Test Results (PASS/FAIL) PASS
Left rear and right rear tires were deflated at LLVW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 5, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 3 (Sheet 18 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO F – Left Front, Left Rear, and Right Rear Tire Deflation at LLVW

TEST DATE: June 5, 2009 LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 2 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to LLVW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature: 29.1°C (84.4°F)</td>
<td>Vehicle cool down period: 68 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>34.6°C (94.3°F)</td>
<td>31.2°C (88.2°F)</td>
<td>32.2°C (90.0°F)</td>
<td>35.8°C (96.4°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.6°C (79.9°F)</td>
<td>26.2°C (79.2°F)</td>
<td>26.6°C (79.9°F)</td>
<td>26.2°C (79.2°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

Time: Start: 17:08:13 UTC End: 17:32:46 UTC
Trip Odometer Reading: Start: 752.5 km (467.6 mi) End: 784.6 km (487.5 mi)
Ambient Temperature: Start: 29.1°C (84.4°F) End: 29.1°C (84.4°F)
Roadway Temperature: Start: 47.4°C (117.3°F) End: 49.6°C (121.3°F)

Driving in first direction:
Starting point: GAFB north gate Direction: see chart, page 106
10:11 minutes (stopwatch time) 15.9 km (9.9 mi) distance

Driving in opposite direction:
Starting point: US 87 crossover overpass Direction: see chart, page 106
10:26 minutes (stopwatch time) 16.1 km (10.0 mi) distance

Max speed: 98.9 km/h (61.5 mph)
Total Driving Time: 20:37 minutes (VBox time)
TPMS OPERATIONAL PERFORMANCE
SCENARIO F – Left Front, Left Rear, and Right Rear Tire Deflation at LLVW

**TIRE INFLATION Pressures AND Temperatures AFTER CALIBRATION PHASE:**

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off: Inflation Pressure</td>
<td>292.8 kPa (42.5 psi)</td>
<td>290.9 kPa (42.2 psi)</td>
<td>290.4 kPa (42.1 psi)</td>
<td>292.6 kPa (42.4 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>49.4°C (120.9°F)</td>
<td>43.6°C (110.5°F)</td>
<td>42.4°C (108.3°F)</td>
<td>47.2°C (117.0°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>27.4°C (81.3°F)</td>
<td>27.4°C (81.3°F)</td>
<td>27.2°C (81.0°F)</td>
<td>27.2°C (81.0°F)</td>
</tr>
</tbody>
</table>

**SYSTEM DETECTION PHASE:**

**LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):**

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated: Inflation Pressure</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
<td>0 kPa (0.0 psi)</td>
</tr>
</tbody>
</table>

**TELLTALE ILLUMINATION:**

Starting point: San Angelo Test Facility shop
Direction: see chart, page 107

3.7 km (2.3 mi) distance (non-cumulative)

Max speed: 87.5 km/h (54.4 mph)
Total Driving Time: 2:12 minutes (VBox time)

**TEST RESULTS**

TELLTALE ILLUMINATES WITHIN 20 MINUTES: (X) YES ( ) NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)
TPMS OPERATIONAL PERFORMANCE

SCENARIO F – Left Front, Left Rear, and Right Rear Tire Deflation at LLVW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELLTALE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>After vehicle cool down period:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>32.9°C (91.2°F)</td>
<td>Vehicle cool down period:</td>
<td>63 minutes</td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>184.3 kPa (26.7 psi)</td>
<td>185.4 kPa (26.9 psi)</td>
<td>185.9 kPa (27.0 psi)</td>
<td>274.7 kPa (39.8 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>37.8°C (100.0°F)</td>
<td>34.6°C (94.3°F)</td>
<td>35.4°C (95.7°F)</td>
<td>38.4°C (101.1°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>28.2°C (82.8°F)</td>
<td>27.8°C (82.0°F)</td>
<td>28.4°C (83.1°F)</td>
<td>28.0°C (82.4°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES (   )NO (fail)

TELLTALE EXTINGUISHMENT:

RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>After illumination verification:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? (   )YES ( X )NO (See Remarks)

TEST RESULTS

TPMS Performance Test Results (PASS/FAIL) PASS

Left front, left rear, and right rear tires were deflated at LLVW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 5, 2009
APPROVED BY: Kenneth H. Yates
TEST DATE: June 8, 2009
LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 2 of 51) for Test Weight.

**TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES BEFORE CALIBRATION PHASE:**

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to LLVW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Ambient Temperature: 23.8°C (74.8°F)</td>
<td>Vehicle cool down period: overnight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>24.4°C (75.9°F)</td>
<td>24.4°C (75.9°F)</td>
<td>24.8°C (76.6°F)</td>
<td>25.2°C (77.4°F)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>26.2°C (79.2°F)</td>
<td>26.2°C (79.2°F)</td>
<td>26.6°C (79.9°F)</td>
<td>26.0°C (78.8°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SYSTEM CALIBRATION/LEARNING PHASE:**

<table>
<thead>
<tr>
<th>Time: Start: 13:06:54 UTC</th>
<th>End: 13:31:06 UTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trip Odometer Reading: Start: 793.2 km (492.9 mi)</td>
<td>End: 825.4 km (512.9 mi)</td>
</tr>
<tr>
<td>Ambient Temperature: Start: 23.8°C (74.8°F)</td>
<td>End: 23.8°C (74.8°F)</td>
</tr>
<tr>
<td>Roadway Temperature: Start: 26.0°C (78.8°F)</td>
<td>End: 28.8°C (83.8°F)</td>
</tr>
</tbody>
</table>

Driving in first direction:
Starting point: GAFB north gate  Direction: see chart, page 108
10:09 minutes (stopwatch time)  15.9 km (9.9 mi) distance

Driving in opposite direction:
Starting point: US 87 crossover overpass  Direction: see chart, page 108
10:29 minutes (stopwatch time)  16.3 km (10.1 mi) distance

Max speed: 98.0 km/h (60.9 mph)
Total Driving Time: 20:38 minutes (VBox time)
DATA SHEET 3 (Sheet 22 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO G – Right Rear Tire Deflation at LLVW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off: Inflation Pressure</td>
<td>294.2 kPa (42.7 psi)</td>
<td>288.9 kPa (41.9 psi)</td>
<td>287.5 kPa (41.7 psi)</td>
<td>292.3 kPa (42.4 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>35.2°C (95.4°F)</td>
<td>35.8°C (96.4°F)</td>
<td>34.2°C (93.6°F)</td>
<td>39.4°C (102.9°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.6°C (79.9°F)</td>
<td>27.0°C (80.6°F)</td>
<td>26.8°C (80.2°F)</td>
<td>27.0°C (80.6°F)</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated: Inflation Pressure</td>
<td>( )LF ( )LR ( X )RR ( )RF</td>
<td>195.5 kPa (28.4 psi)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Starting point: San Angelo Test Facility shop  Direction: see chart, page 109

1.3 km (0.8 mi) distance (non-cumulative)

Max speed: 82.7 km/h (51.4 mph)

Total Driving Time: 0:29 minutes (VBox time)

TEST RESULTS

TELLTALE ILLUMINATES WITHIN 20 MINUTES: ( X )YES ( )NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)
### TPMS OPERATIONAL PERFORMANCE

#### SCENARIO G – Right Rear Tire Deflation at LLVW

**TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELLTALE ILLUMINATION:**

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td><strong>25.8°C (78.4°F)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vehicle cool down period:</strong></td>
<td><strong>64 minutes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>278.4 kPa (40.4 psi)</td>
<td>275.4 kPa (39.9 psi)</td>
<td>188.7 kPa (27.4 psi)</td>
<td>279.8 kPa (40.6 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>30.6°C (87.1°F)</td>
<td>28.2°C (82.8°F)</td>
<td>29.4°C (84.9°F)</td>
<td>32.8°C (91.0°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.8°C (80.2°F)</td>
<td>26.8°C (80.2°F)</td>
<td>26.8°C (80.2°F)</td>
<td>26.8°C (80.2°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position?  

( X )YES  (   )NO (fail)

#### TELLTALE EXTINGUISHMENT:

**RE-ADJUSTED TIRE INFLATION PRESSURES:**

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale?  

(   )YES  ( X )NO  
(See Remarks)

### TEST RESULTS

**TPMS Performance Test Results (PASS/FAIL)**  
Pass

Right rear tire was deflated at LLVW.

**REMARKS:**  
In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

**RECORDED BY:**  
Todd P. Groghan  
**DATE:**  
June 8, 2009

**APPROVED BY:**  
Kenneth H. Yates
DATA SHEET 3 (Sheet 24 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO H – Left Front, Right Rear, and Right Front Tire Deflation at LLVW

TEST DATE: June 8, 2009 LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 2 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES
BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>30.4°C (86.7°F)</td>
<td>27.8°C (82.0°F)</td>
<td>29.0°C (84.2°F)</td>
<td>32.6°C (90.7°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.6°C (79.9°F)</td>
<td>26.8°C (80.2°F)</td>
<td>27.0°C (80.6°F)</td>
<td>27.0°C (80.6°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

Time: Start: 15:09:56 UTC End: 15:34:49 UTC
Trip Odometer Reading: Start: 830.3 km (515.9 mi) End: 862.3 km (535.8 mi)
Ambient Temperature: Start: 26.8°C (80.2°F) End: 27.8°C (82.0°F)
Roadway Temperature: Start: 36.8°C (98.2°F) End: 40.2°C (104.4°F)

Driving in first direction:
Starting point: GAFB north gate Direction: see chart, page 110
10:11 minutes (stopwatch time) 15.9 km (9.9 mi) distance

Driving in opposite direction:
Starting point: US 87 crossover overpass Direction: see chart, page 110
10:32 minutes (stopwatch time) 16.1 km (10.0 mi) distance

Max speed: 98.5 km/h (61.2 mph)
Total Driving Time: 20:45 minutes (VBox time)
DATA SHEET 3 (Sheet 25 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO H – Left Front, Right Rear, and Right Front Tire Deflation at LLVW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>293.4 kPa (42.6 psi)</td>
<td>290.6 kPa (42.1 psi)</td>
<td>287.4 kPa (41.7 psi)</td>
<td>290.8 kPa (42.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>46.8°C (116.2°F)</td>
<td>40.2°C (104.4°F)</td>
<td>38.6°C (101.5°F)</td>
<td>43.8°C (110.8°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>27.8°C (82.0°F)</td>
<td>27.2°C (81.0°F)</td>
<td>27.8°C (82.0°F)</td>
<td>27.6°C (81.7°F)</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( X )LF (   )LR ( X )RR ( X )RF</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
<td></td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Starting point: San Angelo Test Facility shop
Direction: see chart, page 111
Max speed: 85.1 km/h (52.9 mph)
Total Driving Time: 2:05 minutes (VBox time)

TEST RESULTS

TELLTALE ILLUMINATES WITHIN 20 MINUTES: ( X )YES ( )NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)
TPMS OPERATIONAL PERFORMANCE

SCENARIO H – Left Front, Right Rear, and Right Front Tire Deflation at LLVW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELLTALE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>29.7°C (85.5°F)</td>
<td>Vehicle cool down period:</td>
<td>60 minutes</td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>184.6 kPa (26.8 psi)</td>
<td>274.9 kPa (39.9 psi)</td>
<td>186.9 kPa (27.1 psi)</td>
<td>187.0 kPa (27.1 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>33.6°C (92.5°F)</td>
<td>31.2°C (88.2°F)</td>
<td>31.8°C (89.2°F)</td>
<td>35.8°C (96.4°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>28.2°C (82.8°F)</td>
<td>27.8°C (82.0°F)</td>
<td>28.0°C (82.4°F)</td>
<td>28.2°C (82.8°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES (   )NO (fail)

TELLTALE EXTINGUISHMENT:

RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? (   )YES ( X )NO (See Remarks)

TEST RESULTS

TPMS Performance Test Results (PASS/FAIL) PASS

Left front, right rear, and right front tires were deflated at LLVW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 8, 2009
APPROVED BY: Kenneth H. Yates
TEST DATE: June 1, 2009       LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Time: Start: 11:46 am          End: 1:05 pm

Ambient Temperature: Start: 25.2°C (77.4°F)     End: 27.1°C (80.8°F)

Odometer Reading: Start: 460 km (286 mi)

Fuel Level: Start: Full

Weather Conditions: Sunny and calm

Time vehicle remained with engine off and tires shielded from direct sunlight (1 hour minimum): overnight

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test cold measurements after ambient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>soak:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>26.4°C (79.5°F)</td>
<td>27.4°C (81.3°F)</td>
<td>27.5°C (81.5°F)</td>
<td>26.8°C (80.2°F)</td>
</tr>
</tbody>
</table>
VEHICLE WEIGHT:

Vehicle Ratings from Certification Label:

GVWR: 2,265 kg (4,993 lbs)
GAWR (front): 1,190 kg (2,623 lbs)
GAWR (rear): 1,175 kg (2,590 lbs)

Vehicle Capacity Weight:

Vehicle Capacity Weight 500 kg (1,102 lbs)

Measured Unloaded Vehicle Weight:

<table>
<thead>
<tr>
<th>Axle</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF</td>
<td>504</td>
</tr>
<tr>
<td>RF</td>
<td>502</td>
</tr>
<tr>
<td>Front Axle</td>
<td>1,006</td>
</tr>
<tr>
<td>LR</td>
<td>376</td>
</tr>
<tr>
<td>RR</td>
<td>374</td>
</tr>
<tr>
<td>Rear Axle</td>
<td>750</td>
</tr>
<tr>
<td>Total Vehicle</td>
<td>1,756</td>
</tr>
<tr>
<td>(not greater than GVWR)</td>
<td></td>
</tr>
</tbody>
</table>

Measured Test Weight: ( ) LLVW(+50, -0 kg) ( X ) UVW + VCW ( ) GVWR(+0, -50 kg)

<table>
<thead>
<tr>
<th>Axle</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF</td>
<td>565</td>
</tr>
<tr>
<td>RF</td>
<td>558</td>
</tr>
<tr>
<td>Front Axle</td>
<td>1,123</td>
</tr>
<tr>
<td>LR</td>
<td>571</td>
</tr>
<tr>
<td>RR</td>
<td>562</td>
</tr>
<tr>
<td>Rear Axle</td>
<td>1,133</td>
</tr>
<tr>
<td>Total Vehicle</td>
<td>2,256</td>
</tr>
<tr>
<td>(not greater than GVWR)</td>
<td></td>
</tr>
</tbody>
</table>

Note: For scenarios I through L, this Total Vehicle Weight measures the vehicle loaded to Unloaded Vehicle Weight (UVW) and Vehicle Capacity Weight (VCW), 500 kg (1,102 lbs) of driver, passenger, test equipment, and ballast.
DATA SHEET 3 (Sheet 29 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO I – Left Front and Right Front Tire Deflation at UVW + VCW

TEST DATE: June 2, 2009  LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 28 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES
BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to UVW + VCW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature: 27.1°C (80.8°F)</td>
<td>Vehicle cool down period: 67 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inflation Pressure</th>
<th>270.0 kPa (39.2 psi)</th>
<th>270.0 kPa (39.2 psi)</th>
<th>270.0 kPa (39.2 psi)</th>
<th>270.0 kPa (39.2 psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tire Sidewall Temp</td>
<td>27.8°C (82.0°F)</td>
<td>27.2°C (81.0°F)</td>
<td>27.4°C (81.3°F)</td>
<td>28.4°C (83.1°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.8°C (80.2°F)</td>
<td>26.4°C (79.5°F)</td>
<td>26.8°C (80.2°F)</td>
<td>26.8°C (80.2°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

Time: Start: 16:42:45 UTC  End: 17:07:35 UTC
Trip Odometer Reading: Start: 374.2 km (232.5 mi)  End: 406.2 km (252.4 mi)
Ambient Temperature: Start: 27.1°C (80.8°F)  End: 28.0°C (82.4°F)
Roadway Temperature: Start: 44.2°C (111.6°F)  End: 43.8°C (110.8°F)

Driving in first direction:
Starting point: GAFB north gate  Direction: see chart, page 112
10:13 minutes (stopwatch time)  15.8 km (9.8 mi) distance

Driving in opposite direction:
Starting point: US 87 crossover overpass  Direction: see chart, page 112
10:27 minutes (stopwatch time)  16.3 km (10.1 mi) distance

Max speed: 98.0 km/h (60.9 mph)
Total Driving Time: 20:34 minutes (VBox time)
DATA SHEET 3 (Sheet 30 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO I – Left Front and Right Front Tire Deflation at UVW + VCW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire (kPa)</th>
<th>LR Tire (kPa)</th>
<th>RR Tire (kPa)</th>
<th>RF Tire (kPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off: Inflation Pressure</td>
<td>296.9</td>
<td>298.3</td>
<td>298.7</td>
<td>295.9</td>
</tr>
<tr>
<td></td>
<td>43.1 psi</td>
<td>43.3 psi</td>
<td>43.3 psi</td>
<td>42.9 psi</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>39.6°C</td>
<td>39.4°C</td>
<td>37.6°C</td>
<td>36.8°C</td>
</tr>
<tr>
<td></td>
<td>103.3°F</td>
<td>102.9°F</td>
<td>99.7°F</td>
<td>98.2°F</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.2°C</td>
<td>26.4°C</td>
<td>26.6°C</td>
<td>26.6°C</td>
</tr>
<tr>
<td></td>
<td>79.2°F</td>
<td>79.5°F</td>
<td>79.9°F</td>
<td>79.9°F</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire (kPa)</th>
<th>LR Tire (kPa)</th>
<th>RR Tire (kPa)</th>
<th>RF Tire (kPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated:</td>
<td>195.5</td>
<td>0</td>
<td>0</td>
<td>195.5</td>
</tr>
<tr>
<td></td>
<td>28.4 psi</td>
<td>0.0 psi</td>
<td>0.0 psi</td>
<td>28.4 psi</td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Starting point: San Angelo Test Facility shop
Direction: see chart, page 113

4.2 km (2.6 mi) distance (non-cumulative)

Max speed: 88.6 km/h (55.1 mph)
Total Driving Time: 2:25 minutes (VBox time)

TEST RESULTS

TELLTALE ILLUMINATES WITHIN 20 MINUTES: (X) YES ( ) NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)
TPMS OPERATIONAL PERFORMANCE

SCENARIO I – Left Front and Right Front Tire Deflation at UVW + VCW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELTTALE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>31.0°C (87.8°F)</td>
<td>Vehicle cool down period:</td>
<td>60 minutes</td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>185.7 kPa (26.9 psi)</td>
<td>278.2 kPa (40.3 psi)</td>
<td>279.1 kPa (40.5 psi)</td>
<td>186.9 kPa (27.1 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>29.8°C (85.6°F)</td>
<td>29.6°C (85.3°F)</td>
<td>29.8°C (85.6°F)</td>
<td>30.2°C (86.4°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>27.2°C (81.0°F)</td>
<td>27.2°C (81.0°F)</td>
<td>27.6°C (81.7°F)</td>
<td>27.4°C (81.3°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES (   )NO (fail)

TELLTALE EXTINGUISHMENT:

RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification: Re-adjusted Inflation Pressure:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td></td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? (   )YES ( X )NO (See Remarks)

TEST RESULTS

TPMS Performance Test Results (PASS/FAIL) PASS
Left front and right front tires were deflated at UVW + VCW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 2, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 3 (Sheet 32 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO J – Left Rear, Right Rear, Right Front Tire Deflation at UVW + VCW

TEST DATE: June 2, 2009 LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 28 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES
BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to UVW + VCW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature: 31.0°C (87.8°F)</td>
<td>Vehicle cool down period: 70 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>31.6°C (88.9°F)</td>
<td>30.4°C (86.7°F)</td>
<td>30.6°C (87.1°F)</td>
<td>30.8°C (87.4°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>27.2°C (81.0°F)</td>
<td>27.6°C (81.7°F)</td>
<td>27.6°C (81.7°F)</td>
<td>27.4°C (81.3°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

<table>
<thead>
<tr>
<th>Time:</th>
<th>Start: 18:49:51 UTC</th>
<th>End: 19:15:02 UTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trip Odometer Reading:</td>
<td>Start: 417.3 km (259.3 mi)</td>
<td>End: 449.3 km (279.2 mi)</td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>Start: 31.0°C (87.8°F)</td>
<td>End: 32.0°C (89.6°F)</td>
</tr>
<tr>
<td>Roadway Temperature:</td>
<td>Start: 51.2°C (124.2°F)</td>
<td>End: 52.2°C (126.0°F)</td>
</tr>
</tbody>
</table>

Driving in first direction:
Starting point: GAFB north gate Direction: see chart, page 114
10:16 minutes (stopwatch time) 15.9 km (9.9 mi) distance

Driving in opposite direction:
Starting point: US 87 crossover overpass Direction: see chart, page 114
10:27 minutes (stopwatch time) 16.1 km (10.0 mi) distance

Max speed: 98.3 km/h (61.1 mph)
Total Driving Time: 20:43 minutes (VBox time)
DATA SHEET 3 (Sheet 33 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO J – Left Rear, Right Rear, Right Front Tire Deflation at UVW + VCW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>291.0 kPa</td>
<td>296.0 kPa</td>
<td>295.9 kPa</td>
<td>291.4 kPa</td>
</tr>
<tr>
<td></td>
<td>(42.2 psi)</td>
<td>(42.9 psi)</td>
<td>(42.9 psi)</td>
<td>(42.3 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>43.8°C</td>
<td>45.2°C</td>
<td>44.0°C</td>
<td>42.2°C</td>
</tr>
<tr>
<td></td>
<td>(110.8°F)</td>
<td>(113.4°F)</td>
<td>(111.2°F)</td>
<td>(108.0°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>29.8°C</td>
<td>29.8°C</td>
<td>29.4°C</td>
<td>28.8°C</td>
</tr>
<tr>
<td></td>
<td>(85.6°F)</td>
<td>(85.6°F)</td>
<td>(84.9°F)</td>
<td>(83.8°F)</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( )LF ( X )LR ( X )RR ( X )RF</td>
<td>195.5 kPa</td>
<td>195.5 kPa</td>
<td>195.5 kPa</td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>(28.4 psi)</td>
<td>(28.4 psi)</td>
<td>(28.4 psi)</td>
<td></td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Driving in first direction:

TELLTALE ILLUMINATION:

Starting point: San Angelo Test Facility shop Direction: see chart, page 115

3.4 km (2.1 mi) distance (non-cumulative)

Max speed: 83.4 km/h (51.8 mph)
Total Driving Time: 1:58 minutes (VBox time)

TEST RESULTS

TELLTALE ILLUMINATES WITHIN 20 MINUTES: ( X )YES ( )NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)
DATA SHEET 3 (Sheet 34 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO J – Left Rear, Right Rear, Right Front Tire Deflation at UVW + VCW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELTTLAUE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>33.8°C (92.8°F)</td>
<td>Vehicle cool down period:</td>
<td>66 minutes</td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>270.6 kPa (39.2 psi)</td>
<td>181.7 kPa (26.4 psi)</td>
<td>182.9 kPa (26.5 psi)</td>
<td>184.3 kPa (26.7 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>32.6°C (90.7°F)</td>
<td>32.8°C (91.0°F)</td>
<td>32.8°C (91.0°F)</td>
<td>32.8°C (91.0°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>28.8°C (83.8°F)</td>
<td>29.0°C (84.2°F)</td>
<td>29.2°C (84.6°F)</td>
<td>28.8°C (83.8°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)

TELLTALE EXTINGUISHMENT:
RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? ( ) YES (X) NO (See Remarks)

TEST RESULTS

TPMS Performance Test Results (PASS/FAIL) PASS
Left rear, right rear, and right front tires were deflated at UVW + VCW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 2, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 3 (Sheet 35 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO K – Left Rear and Right Front Tire Deflation at UVW + VCW

TEST DATE: June 3, 2009 LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 28 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES
BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to UVW + VCW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature: 20.8°C (69.4°F)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>23.4°C (74.1°F)</td>
<td>23.2°C (73.8°F)</td>
<td>22.8°C (73.0°F)</td>
<td>22.8°C (73.0°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>23.6°C (74.5°F)</td>
<td>23.8°C (74.8°F)</td>
<td>23.6°C (74.5°F)</td>
<td>23.8°C (74.8°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

<table>
<thead>
<tr>
<th>Time:</th>
<th>Start: 13:47:10 UTC</th>
<th>End: 14:11:44 UTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trip Odometer Reading:</td>
<td>Start: 458.0 km (284.6 mi)</td>
<td>End: 490.2 km (304.6 mi)</td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>Start: 20.8°C (69.4°F)</td>
<td>End: 21.8°C (71.2°F)</td>
</tr>
<tr>
<td>Roadway Temperature:</td>
<td>Start: 24.2°C (75.6°F)</td>
<td>End: 26.4°C (79.5°F)</td>
</tr>
</tbody>
</table>

Driving in first direction:

Starting point: GAFB north gate
Direction: see chart, page 116
10:10 minutes (stopwatch time) 15.9 km (9.9 mi) distance

Driving in opposite direction:

Starting point: US 87 crossover overpass
Direction: see chart, page 116
10:29 minutes (stopwatch time) 16.3 km (10.1 mi) distance

Max speed: 100.4 km/h (62.4 mph)
Total Driving Time: 20:40 minutes (VBox time)
TPMS OPERATIONAL PERFORMANCE

SCENARIO K – Left Rear and Right Front Tire Deflation at UVW + VCW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off:</td>
<td>296.0 kPa (42.9 psi)</td>
<td>296.1 kPa (42.9 psi)</td>
<td>295.9 kPa (42.9 psi)</td>
<td>294.8 kPa (42.8 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>33.4°C (92.1°F)</td>
<td>31.4°C (88.5°F)</td>
<td>32.2°C (90.0°F)</td>
<td>31.4°C (88.5°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>24.2°C (75.6°F)</td>
<td>24.0°C (75.2°F)</td>
<td>23.8°C (74.8°F)</td>
<td>24.2°C (75.6°F)</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated:</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tire Inflation Pressure</td>
<td>295.9 kPa (42.9 psi)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Starting point: San Angelo Test Facility shop
Direction: see chart, page 117

3.1 km (1.9 mi) distance (non-cumulative)

Max speed: 46.0 km/h (28.6 mph)
Total Driving Time: 1:54 minutes (VBox time)

TEST RESULTS

TELLTALE ILLUMINATES WITHIN 20 MINUTES: (X) YES ( ) NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)
TPMS OPERATIONAL PERFORMANCE

SCENARIO K – Left Rear and Right Front Tire Deflation at UVW + VCW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELLTALE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>23.7°C (74.7°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle cool down period:</td>
<td>60 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation Pressure</td>
<td>281.1 kPa (40.8 psi)</td>
<td>184.6 kPa (26.8 psi)</td>
<td>276.5 kPa (40.1 psi)</td>
<td>186.8 kPa (27.1 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>26.6°C (79.9°F)</td>
<td>26.2°C (79.2°F)</td>
<td>25.2°C (77.4°F)</td>
<td>25.6°C (78.1°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>24.4°C (75.9°F)</td>
<td>24.6°C (76.3°F)</td>
<td>24.4°C (75.9°F)</td>
<td>24.6°C (76.3°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES (   )NO (fail)

TELLTALE EXTINGUISHMENT:
RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? (   )YES ( X )NO (See Remarks)

TEST RESULTS

TPMS Performance Test Results (PASS/FAIL) PASS
Left rear and right front tires were deflated at UVW + VCW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 3, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 3 (Sheet 38 of 51)
TPMS OPERATIONAL PERFORMANCE
SCENARIO L – Right Front Tire Deflation at UVW + VCW

TEST DATE: June 3, 2009  LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 28 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES
BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to UVW + VCW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature: 23.7°C (74.7°F)</td>
<td>Vehicle cool down period: 67 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>26.4°C (79.5°F)</td>
<td>25.8°C (78.4°F)</td>
<td>25.0°C (77.0°F)</td>
<td>25.8°C (78.4°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>24.6°C (76.3°F)</td>
<td>24.6°C (76.3°F)</td>
<td>24.6°C (76.3°F)</td>
<td>24.6°C (76.3°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

Trip Odometer Reading: Start: 497.9 km (309.4 mi)  End: 530.0 km (329.3 mi)
Ambient Temperature: Start: 23.7°C (74.7°F)  End: 23.7°C (74.7°F)
Roadway Temperature: Start: 32.4°C (90.3°F)  End: 33.2°C (91.8°F)

Driving in first direction:
Starting point: GAFB north gate  Direction: see chart, page 118
10:07 minutes (stopwatch time)  15.8 km (9.8 mi) distance

Driving in opposite direction:
Starting point: US 87 crossover overpass  Direction: see chart, page 118
10:27 minutes (stopwatch time)  16.3 km (10.1 mi) distance

Max speed: 99.7 km/h (62.0 mph)
Total Driving Time: 20:39 minutes (VBox time)
TIRE INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off: Inflation Pressure</td>
<td>289.1 kPa (41.9 psi)</td>
<td>290.5 kPa (42.1 psi)</td>
<td>292.5 kPa (42.4 psi)</td>
<td>287.9 kPa (41.8 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>35.0°C (95.0°F)</td>
<td>35.4°C (95.7°F)</td>
<td>33.8°C (92.8°F)</td>
<td>35.4°C (95.7°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>25.2°C (77.4°F)</td>
<td>25.2°C (77.4°F)</td>
<td>24.8°C (76.6°F)</td>
<td>24.8°C (76.6°F)</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated: Inflation Pressure</td>
<td>( ) LF ( ) LR ( ) RR (X) RF 195.5 kPa (28.4 psi)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Starting point: San Angelo Test Facility shop  Direction: see chart, page 119

1.1 km (0.7 mi) distance (non-cumulative)

Max speed: 75.7 km/h (47.0 mph)

Total Driving Time: 0:17 minutes (VBox time)

TEST RESULTS

TELLTALE ILLUMINATES WITHIN 20 MINUTES: (X) YES ( ) NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)
TPMS OPERATIONAL PERFORMANCE

SCENARIO L – Right Front Tire Deflation at UVW + VCW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELTTALE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>25.0°C (77.0°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle cool down period:</td>
<td>62 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>272.8 kPa (39.6 psi)</td>
<td>270.7 kPa (39.3 psi)</td>
<td>272.1 kPa (39.5 psi)</td>
<td>186.2 kPa (27.0 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>27.6°C (81.7°F)</td>
<td>27.2°C (81.0°F)</td>
<td>26.6°C (79.9°F)</td>
<td>26.6°C (79.9°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>25.6°C (78.1°F)</td>
<td>25.8°C (78.4°F)</td>
<td>25.4°C (77.7°F)</td>
<td>25.2°C (77.4°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? (X) YES ( ) NO (fail)

TELLTALE EXTINGUISHMENT:

RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? ( ) YES (X) NO

(See Remarks)

TEST RESULTS

TPMS Performance Test Results (PASS/FAIL) PASS

Right front tire was deflated at UVW + VCW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 3, 2009

APPROVED BY: Kenneth H. Yates
TEST DATE: June 8, 2009       LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Time: Start: 1:32 pm       End: 2:30 pm

Ambient Temperature: Start: 32.7°C (90.9°F)       End: 32.7°C (90.9°F)

Trip Odometer Reading: Start: 873 km (542.2 mi)

Fuel Level: Start: Full

Weather Conditions: Sunny and calm

Time vehicle remained with engine off and tires shielded from direct sunlight (1 hour minimum): overnight

PRE-TEST TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test cold measurements after ambient soak: Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>30.2°C (86.4°F)</td>
<td>29.8°C (85.6°F)</td>
<td>29.6°C (85.3°F)</td>
<td>30.2°C (86.4°F)</td>
</tr>
</tbody>
</table>
VEHICLE WEIGHT:

Vehicle Ratings from Certification Label:

- **GVWR:** 2,265 kg (4,993 lbs)
- **GAWR (front):** 1,190 kg (2,623 lbs)
- **GAWR (rear):** 1,175 kg (2,590 lbs)

Vehicle Capacity Weight:

Vehicle Capacity Weight  500 kg (1,102 lbs)

Measured Unloaded Vehicle Weight:

- **LF:** 504 kg (1,112 lbs)
- **LR:** 378 kg (833 lbs)
- **RF:** 503 kg (1,108 lbs)
- **RR:** 372 kg (821 lbs)
- **Front Axle:** 1,007 kg (2,220 lbs)
- **Rear Axle:** 750 kg (1,654 lbs)

Total Vehicle 1,757 kg (3,874 lbs)

Measured Test Weight:  (   ) LLVW (+50, -0 kg)  ( X ) UVW + VCW  (   ) GVWR (+0, -50 kg)

- **LF:** 560 kg (1,234 lbs)
- **LR:** 575 kg (1,268 lbs)
- **RF:** 556 kg (1,225 lbs)
- **RR:** 567 kg (1,249 lbs)
- **Front Axle:** 1,116 kg (2,459 lbs) ( ≤ GAWR)
- **Rear Axle:** 1,142 kg (2,517 lbs) ( ≤ GAWR)

Total Vehicle 2,258 kg (4,976 lbs) (not greater than GVWR)

Note: For scenarios M, N, and O, this Total Vehicle Weight measures the vehicle loaded to Unloaded Vehicle Weight (UVW) and Vehicle Capacity Weight (VCW), 500 kg (1,102 lbs) of driver, passenger, test equipment, and ballast.
DATA SHEET 3 (Sheet 43 of 51)
TPMS OPERATIONAL PERFORMANCE

SCENARIO M – Left Rear Tire Deflation at UVW + VCW

TEST DATE: June 9, 2009 LAB: U. S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 42 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES
BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inflation Pressure</strong></td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td><strong>Tire Sidewall Temp</strong></td>
<td>24.8°C (76.6°F)</td>
<td>24.8°C (76.6°F)</td>
<td>25.2°C (77.4°F)</td>
<td>25.4°C (77.7°F)</td>
</tr>
<tr>
<td><strong>San Angelo Test Facility Shop Floor Temp</strong></td>
<td>26.4°C (79.5°F)</td>
<td>26.2°C (79.2°F)</td>
<td>26.4°C (79.5°F)</td>
<td>26.2°C (79.2°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

| Trip Odometer Reading | Start: 872.6 km (542.2 mi) | End: 904.6 km (562.1 mi) |
| Ambient Temperature | Start: 24.0°C (75.2°F) | End: 24.0°C (75.2°F) |
| Roadway Temperature | Start: 27.6°C (81.7°F) | End: 28.4°C (83.1°F) |

Driving in first direction:

Starting point: GAFB north gate  Direction: see chart, page 120
10:13 minutes (stopwatch time)  15.9 km (9.9 mi) distance

Driving in opposite direction:

Starting point: US 87 crossover overpass  Direction: see chart, page 120
10:30 minutes (stopwatch time)  16.1 km (10.0 mi) distance

Max speed: 99.1 km/h (61.6 mph)
Total Driving Time: 20:43 minutes (VBox time)
TPMS OPERATIONAL PERFORMANCE
SCENARIO M – Left Rear Tire Deflation at UVW + VCW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation Pressure</td>
<td>294.8 kPa (42.8 psi)</td>
<td>294.1 kPa (42.7 psi)</td>
<td>293.0 kPa (42.5 psi)</td>
<td>293.5 kPa (42.6 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>40.8°C (105.4°F)</td>
<td>38.4°C (101.1°F)</td>
<td>37.6°C (99.7°F)</td>
<td>40.2°C (104.4°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.6°C (79.9°F)</td>
<td>26.6°C (79.9°F)</td>
<td>26.8°C (80.2°F)</td>
<td>26.6°C (79.9°F)</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated:</td>
<td>( )LF ( X )LR ( )RR ( )RF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>195.5 kPa (28.4 psi)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Starting point: San Angelo Test Facility shop  Direction: see chart, page 121

1.0 km (0.6 mi) distance (non-cumulative)

Max speed: 74.1 km/h (46.0 mph)
Total Driving Time: 0:10 minutes (VBox time)

TEST RESULTS

TELLTALE ILLUMINATES WITHIN 20 MINUTES: ( X )YES ( )NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)
TPMS OPERATIONAL PERFORMANCE
SCENARIO M – Left Rear Tire Deflation at UVW + VCW

TIRE INFLATION Pressures AND TEMPERATURES AFTER TELLTALE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td>280.6 kPa (40.7 psi)</td>
<td>185.0 kPa (26.8 psi)</td>
<td>276.7 kPa (40.1 psi)</td>
<td>280.4 kPa (40.7 psi)</td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>26.1°C (79.0°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle cool down period:</td>
<td>61 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td></td>
<td>30.2°C (86.4°F)</td>
<td>30.6°C (87.1°F)</td>
<td>34.4°C (93.9°F)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>32.4°C (90.3°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.8°C (80.2°F)</td>
<td>26.8°C (80.2°F)</td>
<td>27.2°C (81.0°F)</td>
<td>27.2°C (81.0°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)

TELLTALE EXTINGUISHMENT:

RE-ADJUSTED TIRE INFLATION Pressures:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? ( )YES (X)NO
(See Remarks)

TEST RESULTS

TPMS Performance Test Results (PASS/FAIL) PASS

Left rear tire was deflated at UVW + VCW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 9, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 3 (Sheet 46 of 51)
TPMS OPERATIONAL PERFORMANCE

SCENARIO N – Right Front and Right Rear Tire Deflation at UVW + VCW

TEST DATE: June 9, 2009  LAB: U. S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 42 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES
BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After loading vehicle to UVW + VCW, positioning vehicle at selected test start point, and vehicle cool down period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature: 26.1°C (79.0°F)</td>
<td>Vehicle cool down period: 67 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>32.6°C (90.7°F)</td>
<td>29.8°C (85.6°F)</td>
<td>30.6°C (87.1°F)</td>
<td>34.0°C (93.2°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>26.8°C (80.2°F)</td>
<td>26.8°C (80.2°F)</td>
<td>26.9°C (80.4°F)</td>
<td>26.8°C (80.2°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

Time: Start: 15:17:35 UTC  End: 15:41:49 UTC
Trip Odometer Reading: Start: 908.8 km (564.7 mi)  End: 940.8 km (584.6 mi)
Ambient Temperature: Start: 26.1°C (79.0°F)  End: 26.1°C (79.0°F)
Roadway Temperature: Start: 31.6°C (88.9°F)  End: 34.2°C (93.6°F)

Driving in first direction:
Starting point: GAFB north gate  Direction: see chart, page 122
10:12 minutes (stopwatch time)  15.8 km (9.8 mi) distance

Driving in opposite direction:
Starting point: US 87 crossover overpass  Direction: see chart, page 122
10:26 minutes (stopwatch time)  16.3 km (10.1 mi) distance

Max speed: 98.4km/h (61.1 mph)
Total Driving Time: 20:38 minutes (VBox time)
TPMS OPERATIONAL PERFORMANCE

SCENARIO N – Right Front and Right Rear Tire Deflation at UVW + VCW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately, after vehicle is stopped, engine off:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>289.2 kPa (41.9 psi)</td>
<td>290.7 kPa (42.2 psi)</td>
<td>291.2 kPa (42.2 psi)</td>
<td>288.2 kPa (41.8 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>45.6°C (114.1°F)</td>
<td>42.4°C (108.3°F)</td>
<td>40.8°C (105.4°F)</td>
<td>43.4°C (110.1°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>27.8°C (82.0°F)</td>
<td>27.6°C (81.7°F)</td>
<td>27.8°C (82.0°F)</td>
<td>27.6°C (81.7°F)</td>
</tr>
</tbody>
</table>

SYSTEM DETECTION PHASE:

LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate Location of Tire(s) Deflated:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( )LF ( )LR ( X )RR ( X )RF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Pressure</td>
<td>0 kPa (0.0 psi)</td>
<td>0 kPa (0.0 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
<td>195.5 kPa (28.4 psi)</td>
</tr>
</tbody>
</table>

TELLTALE ILLUMINATION:

Starting point: San Angelo Test Facility shop  
Direction: see chart, page 123

3.1 km (1.9 mi) distance (non-cumulative)

Max speed: 85.4 km/h (53.1 mph)
Total Driving Time: 1:49 minutes (VBox time)

TEST RESULTS

TELLTALE ILLUMINATES WITHIN 20 MINUTES: ( X )YES ( )NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES ( )NO (fail)
TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELTALOE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td>272.9 kPa (39.6 psi)</td>
<td>272.0 kPa (39.5 psi)</td>
<td>184.9 kPa (26.8 psi)</td>
<td>186.9 kPa (27.1 psi)</td>
</tr>
<tr>
<td>Ambient Temperature:</td>
<td>30.0°C (86.0°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle cool down period:</td>
<td>60 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>34.2°C (93.6°F)</td>
<td>32.4°C (90.3°F)</td>
<td>33.2°C (91.8°F)</td>
<td>36.2°C (97.2°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>28.2°C (82.8°F)</td>
<td>28.6°C (83.5°F)</td>
<td>28.4°C (83.1°F)</td>
<td>28.4°C (83.1°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES (   )NO (fail)

TELLTALE EXTINGUISHMENT:

RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? (   )YES ( X )NO (See Remarks)

TEST RESULTS

TPMS Performance Test Results (PASS/FAIL) PASS

Right front and right rear tires were deflated at UVW + VCW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 9, 2009

APPROVED BY: Kenneth H. Yates
TPMS OPERATIONAL PERFORMANCE

SCENARIO O – Left Front, Left Rear, and Right Front Tire Deflation at UVW + VCW

TEST DATE: June 9, 2009 LAB: U. S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Note: See Data Sheet 3 (Sheet 42 of 51) for Test Weight.

TIRE INFLATION PRESSURES AND TIRE/SURFACE TEMPERATURES BEFORE CALIBRATION PHASE:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation Pressure</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
<td>270.0 kPa (39.2 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>33.4°C (92.1°F)</td>
<td>31.2°C (88.2°F)</td>
<td>32.2°C (90.0°F)</td>
<td>35.4°C (95.7°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>27.4°C (81.3°F)</td>
<td>27.4°C (81.3°F)</td>
<td>27.8°C (82.0°F)</td>
<td>27.8°C (82.0°F)</td>
</tr>
</tbody>
</table>

SYSTEM CALIBRATION/LEARNING PHASE:

<table>
<thead>
<tr>
<th>Time</th>
<th>Start: 17:16:16 UTC</th>
<th>End: 17:41:59 UTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trip Odometer Reading</td>
<td>Start: 948.5 km (589.4 mi)</td>
<td>End: 980.6 km (609.3 mi)</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>Start: 30.0°C (86.0°F)</td>
<td>End: 31.0°C (87.8°F)</td>
</tr>
<tr>
<td>Roadway Temperature</td>
<td>Start: 43.2°C (109.8°F)</td>
<td>End: 46.2°C (115.2°F)</td>
</tr>
</tbody>
</table>

Driving in first direction:

Starting point: GAFB north gate Direction: see chart, page 124
10:11 minutes (stopwatch time) 15.9 km (9.9 mi) distance

Driving in opposite direction:

Starting point: US 87 crossover overpass Direction: see chart, page 124
10:25 minutes (stopwatch time) 16.1 km (10.0 mi) distance

Max speed: 99.2 km/h (61.6 mph)
Total Driving Time: 20:35 minutes (VBox time)
---

### DATA SHEET 3 (Sheet 50 of 51)

**TPMS OPERATIONAL PERFORMANCE**

**SCENARIO O – Left Front, Left Rear, and Right Front Tire Deflation at UVW + VCW**

**TIRE INFLATION PRESSURES AND TEMPERATURES AFTER CALIBRATION PHASE:**

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
</table>
| Immediately, after vehicle is stopped, engine off:  
Inflation Pressure | 292.2 kPa (42.4 psi) | 293.5 kPa (42.6 psi) | 292.2 kPa (42.4 psi) | 289.7 kPa (42.0 psi) |

<table>
<thead>
<tr>
<th>Tire Sidewall Temp</th>
<th>50.6°C (123.1°F)</th>
<th>47.8°C (118.0°F)</th>
<th>46.4°C (115.5°F)</th>
<th>48.8°C (119.8°F)</th>
</tr>
</thead>
</table>

| San Angelo Test Facility Shop Floor Temp | 29.0°C (84.2°F) | 29.2°C (84.6°F) | 29.4°C (84.9°F) | 28.8°C (83.8°F) |

**SYSTEM DETECTION PHASE:**

**LOCATION AND PRESSURE(S) OF DEFLATED TIRE(S):**

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
</table>
| Indicate Location of Tire(s) Deflated:  
( X )LF ( X )LR ( )RR ( X )RF  
Inflation Pressure | 195.5 kPa (28.4 psi) | 195.5 kPa (28.4 psi) | 195.5 kPa (28.4 psi) |

**TELLTALE ILLUMINATION:**

- Starting point: San Angelo Test Facility shop  
- Direction: see chart, page 125

- 3.1 km (1.9 mi) distance (non-cumulative)

- Max speed: 85.2 km/h (52.9 mph)
- Total Driving Time: 1:56 minutes (VBox time)

**TEST RESULTS**

**TELLTALE ILLUMINATES WITHIN 20 MINUTES:**  
( X )YES ( )NO (fail)

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position?  
( X )YES ( )NO (fail)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position?  
( X )YES ( )NO (fail)

---
TPMS OPERATIONAL PERFORMANCE

SCENARIO O – Left Front, Left Rear, and Right Front Tire Deflation at UVW + VCW

TIRE INFLATION PRESSURES AND TEMPERATURES AFTER TELLTALE ILLUMINATION:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vehicle cool down period:</td>
<td>185.6 kPa</td>
<td>184.7 kPa</td>
<td>273.8 kPa</td>
<td>186.6 kPa</td>
</tr>
<tr>
<td></td>
<td>(26.9 psi)</td>
<td>(26.8 psi)</td>
<td>(39.7 psi)</td>
<td>(27.1 psi)</td>
</tr>
<tr>
<td>Tire Sidewall Temp</td>
<td>38.4°C</td>
<td>36.6°C</td>
<td>37.2°C</td>
<td>40.0°C</td>
</tr>
<tr>
<td></td>
<td>(101.1°F)</td>
<td>(97.9°F)</td>
<td>(99.0°F)</td>
<td>(104.0°F)</td>
</tr>
<tr>
<td>San Angelo Test Facility Shop Floor Temp</td>
<td>29.4°C</td>
<td>29.6°C</td>
<td>30.2°C</td>
<td>29.8°C</td>
</tr>
<tr>
<td></td>
<td>(84.9°F)</td>
<td>(85.3°F)</td>
<td>(86.4°F)</td>
<td>(85.6°F)</td>
</tr>
</tbody>
</table>

After the cool down period of a minimum of one hour, restart the vehicle engine. Does the telltale re-illuminate and stay illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES (   )NO (fail)

TELLTALE EXTINGUISHMENT:

RE-ADJUSTED TIRE INFLATION PRESSURES:

<table>
<thead>
<tr>
<th>Execution Procedure</th>
<th>LF Tire</th>
<th>LR Tire</th>
<th>RR Tire</th>
<th>RF Tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>After illumination verification:</td>
<td>270.0 kPa</td>
<td>270.0 kPa</td>
<td>270.0 kPa</td>
<td>270.0 kPa</td>
</tr>
<tr>
<td>Re-adjusted Inflation Pressure:</td>
<td>(39.2 psi)</td>
<td>(39.2 psi)</td>
<td>(39.2 psi)</td>
<td>(39.2 psi)</td>
</tr>
</tbody>
</table>

Is it necessary to drive the vehicle to extinguish the telltale? (   )YES ( X )NO
(See Remarks)

TEST RESULTS

TPMS Performance Test Results (PASS/FAIL) PASS
Left front, left rear, and right front tires were deflated at UVW + VCW.

REMARKS: In order to extinguish the low inflation pressure telltale, the Audi A6 indirect TPMS requires a manual reset of the system after the tire pressures have been readjusted back to the cold recommended inflation pressure.

RECORDED BY: Todd P. Groghan DATE: June 9, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 4 (Sheet 1 of 8)

Malfunction Detection Test 1
Disconnect Wiring to TPMS ECU

TEST DATE: _______June 3, 2009______ LAB: ______U.S. DOT San Angelo Test Facility_____

VEHICLE NHTSA NUMBER: _______C95800_____

Time: Start: ______12:53 pm______ End: ______1:21 pm______

Trip Odometer Reading: Start: ______534.0 km (331.8 mi)______ End: ______534.0 km (331.8 mi)______

Ambient Temperature: Start: ______26.9°C (80.4°F)______

Fuel Level: Start: ______Full______

Note: See Data Sheet 3 (Sheet 28 of 51) for Test Weight.

TPMS TYPE: (   ) Direct     ( X ) Indirect    (   ) Other    Describe: ________________________________

TPMS MALFUNCTION TELLTALE:
(   ) Dedicated stand-alone   ( X ) Combination low tire pressure warning/malfunction telltale

METHOD OF MALFUNCTION SIMULATION:
Describe method of malfunction simulation:  Wiring to TPMS ECU was disconnected.

MALFUNCTION TELLTALE ILLUMINATION
(after ignition locking system is activated to “On” ("Run") position):

Combination Malfunction Telltale

Telltale illuminated immediately upon reactivation of ignition locking system. Driving the vehicle was not necessary.

COMBINATION MALFUNCTION TELLTALE ILLUMINATES (FLASHING AND ILLUMINATION SEQUENCE) WITHIN 20 MINUTES:
( X )YES   (   )NO
Malfunction Detection Test 1
Disconnect Wiring to TPMS ECU

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the combination low tire pressure/malfunction telltale flash for a period of at least 60 seconds but no longer than 90 seconds, and then remain illuminated when the ignition locking system is activated to the “On” or “Run” position?  ( X )YES (   )NO (fail)

Time it takes before telltale starts flashing  ____0____ seconds
Time telltale remains flashing  ____61____ seconds
Time telltale remains illuminated  ____60+____ seconds
(Verified for a minimum of 60 seconds)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale’s illumination sequence repeat when the ignition locking system is activated and the engine running?  ( X )YES (   )NO (fail)

Extinguishment Phase:

Restore the TPMS to normal operation. Is it necessary to drive the vehicle to extinguish the telltale?  (   )YES  ( X )NO

COMBINATION MALFUNCTION TELLTALE EXTINGUISHED:  ( X )YES (   )NO (FAIL)

TPMS MALFUNCTION PERFORMANCE TEST RESULTS (PASS/FAIL)  PASS
Wiring to TPMS ECU was disconnected.

REMARKS: None

RECORDED BY: Todd P. Groghan  DATE: June 3, 2009
APPROVED BY: Kenneth H. Yates
TEST DATE: June 3, 2009
LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Time: Start: 1:28 pm  End: 1:45 pm
Trip Odometer Reading: Start: 534.0 km (331.8 mi)  End: 534.0 km (331.8 mi)
Ambient Temperature: Start: 26.8°C (80.2°F)  
Fuel Level: Start: Full

Note: See Data Sheet 3 (Sheet 28 of 51) for Test Weight.

TPMS TYPE: ( ) Direct  (X) Indirect  ( ) Other  Describe: ____________________________

TPMS MALFUNCTION TELLTALE:
( ) Dedicated stand-alone  (X) Combination low tire pressure warning/malfunction telltale

METHOD OF MALFUNCTION SIMULATION:
Describe method of malfunction simulation: TPMS fuse was removed.

MALFUNCTION TELLTALE ILLUMINATION
(after ignition locking system is activated to “On” (“Run”) position):

Combination Malfunction Telltale

Telltale illuminated upon reactivation of ignition locking system. Driving the vehicle was not necessary.

COMBINATION MALFUNCTION TELLTALE ILLUMINATES (FLASHING AND ILLUMINATION SEQUENCE) WITHIN 20 MINUTES:
(X) YES  ( ) NO
Malfunction Detection Test 2
Remove TPMS Fuse

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the combination low tire pressure/malfunction telltale flash for a period of at least 60 seconds but no longer than 90 seconds, and then remain illuminated when the ignition locking system is activated to the “On” or “Run” position?  
( X )YES (   )NO (fail)

Time it takes before telltale starts flashing 0 seconds
Time telltale remains flashing 60 seconds
Time telltale remains illuminated 60+ seconds
(Verified for a minimum of 60 seconds)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale’s illumination sequence repeat when the ignition locking system is activated and the engine running?  
( X )YES (   )NO (fail)

Extinguishment Phase:

Restore the TPMS to normal operation. Is it necessary to drive the vehicle to extinguish the telltale?  
(   )YES ( X )NO

COMBINATION MALFUNCTION TELLTALE EXTINGUISHED:  
( X )YES (   )NO (FAIL)

TPMS MALFUNCTION PERFORMANCE TEST RESULTS (PASS/FAIL)  
PASS
TPMS fuse was removed.

REMARKS: None

RECORDED BY: Todd P. Groghan  DATE: June 3, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 4 (Sheet 5 of 8)
Malfunction Detection Test 3
Disconnect Wheel Speed (ABS) Sensor

TEST DATE: June 3, 2009 LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Time: Start: 2:51 pm End: 3:08 pm
Trip Odometer Reading: Start: 534.6 km (332.2 mi) End: 534.6 km (332.2 mi)
Ambient Temperature: Start: 27.8°C (82.0°F)
Fuel Level: Start: Full

Note: See Data Sheet 3 (Sheet 2 of 51) for Test Weight.

TPMS TYPE: ( ) Direct ( X ) Indirect ( ) Other Describe: ________________________________

TPMS MALFUNCTION TELLTALE:
( ) Dedicated stand-alone ( X ) Combination low tire pressure warning/malfunction telltale

METHOD OF MALFUNCTION SIMULATION:
Describe method of malfunction simulation: Wheel speed (ABS) sensor was disconnected.

MALFUNCTION TELLTALE ILLUMINATION
(after ignition locking system is activated to “On” (“Run”) position):

Combination Malfunction Telltale

Telltale illuminated upon reactivation of ignition locking system. Driving the vehicle was not necessary.

COMBINATION MALFUNCTION TELLTALE ILLUMINATES (FLASHING AND ILLUMINATION SEQUENCE) WITHIN 20 MINUTES:
( X )YES ( )NO
Malfunction Detection Test 3
Disconnect Wheel Speed (ABS) Sensor

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the combination low tire pressure/malfunction telltale flash for a period of at least 60 seconds but no longer than 90 seconds, and then remain illuminated when the ignition locking system is activated to the “On” or “Run” position? ( X )YES (   )NO (fail)

Time it takes before telltale starts flashing 0 seconds
Time telltale remains flashing 62 seconds
Time telltale remains illuminated 60+ seconds (Verified for a minimum of 60 seconds)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale’s illumination sequence repeat when the ignition locking system is activated and the engine running? ( X )YES (   )NO (fail)

Extinguishment Phase:

Restore the TPMS to normal operation. Is it necessary to drive the vehicle to extinguish the telltale? (   )YES ( X )NO

COMBINATION MALFUNCTION TELLTALE EXTINGUISHED: ( X )YES (   )NO (FAIL)

TPMS MALFUNCTION PERFORMANCE TEST RESULTS (PASS/FAIL) PASS
Wheel speed sensor (ABS) was disconnected.

REMARKS: None

RECORDED BY: Todd P. Groghan DATE: June 3, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 4 (Sheet 7 of 8)
Malfunction Detection Test 4
Replace Right Front Tire with Smaller Size Tire at LLVW

TEST DATE: June 3, 2009  LAB: U.S. DOT San Angelo Test Facility

VEHICLE NHTSA NUMBER: C95800

Time: Start: 3:10 pm  End: 3:59 pm
Trip Odometer Reading: Start: 534.6 km (332.2 mi)  End: 538.5 km (334.6 mi)
Ambient Temperature: Start: 28.8°C (83.8°F)
Fuel Level: Start: Full

Note: See Data Sheet 3 (Sheet 2 of 51) for Test Weight.

TPMS TYPE: ( ) Direct  (X) Indirect  ( ) Other  Describe: 

TPMS MALFUNCTION TELLTALE:
( ) Dedicated stand-alone  (X) Combination low tire pressure warning/malfunction telltale

METHOD OF MALFUNCTION SIMULATION:
Describe method of malfunction simulation: Right front tire was replaced with a smaller size tire -215/35ZR18.

MALFUNCTION TELLTALE ILLUMINATION
(after ignition locking system is activated to “On” (“Run”) position):

Combination Malfunction Telltale

Starting point: San Angelo Test Facility shop

0.3 km (0.2 mi) distance (non-cumulative)

TEST RESULTS

COMBINATION MALFUNCTION TELLTALE ILLUMINATES (FLASHING AND ILLUMINATION SEQUENCE) WITHIN 20 MINUTES:
(X) YES  ( ) NO
DATA SHEET 4 (Sheet 8 of 8)
Malfunction Detection Test 4
Replace Right Front Tire with Smaller Size Tire at LLVW

After 5 minutes with the ignition locking system in the “Off” or “Lock” position, does the combination low tire pressure/malfunction telltale flash for a period of at least 60 seconds but no longer than 90 seconds, and then remain illuminated when the ignition locking system is activated to the “On” or “Run” position?  ( X )YES  (   )NO (fail)

Time it takes before telltale starts flashing  ___0___ seconds
Time telltale remains flashing  ___65___ seconds
Time telltale remains illuminated  ___60+___ seconds
(Verified for a minimum of 60 seconds)

Deactivate the ignition locking system and then re-start the vehicle engine. Does the telltale’s illumination sequence repeat when the ignition locking system is activated and the engine running?  ( X )YES  (   )NO (fail)

Extinguishment Phase:

Restore the TPMS to normal operation. Is it necessary to drive the vehicle to extinguish the telltale?  (   )YES  (   )NO [see Remarks]

COMBINATION MALFUNCTION TELLTALE EXTINGUISHED:  (   )YES  ( X )NO (FAIL) [see Remarks]

TPMS MALFUNCTION PERFORMANCE TEST RESULTS (PASS/FAIL)  FAIL
Right front tire was replaced with a smaller size tire.

REMARKS:  During extinguishment phase, the vehicle had to be driven back to the test facility so the original tire could be reinstalled on the vehicle. However, before arriving back at the test facility, the malfunction telltale extinguished even though the malfunction had not been corrected. Paragraph S4.4(c)(2) requires the malfunction to remain illuminated until the malfunction has been corrected.

RECORDED BY:  Todd P. Groghan  DATE:  June 3, 2009
APPROVED BY:  Kenneth H. Yates
The following statement, in the English language, is provided verbatim in the Owner's Manual. (X) YES ( ) NO

"Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle’s handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver’s responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale."
As specified, the following sections, in the English language, are required verbatim in paragraph form in the Owner’s Manual:

The following statement is required for all vehicles certified to the standard starting on September 1, 2007 and for vehicles voluntarily equipped with a compliant TPMS MIL before that time.
"Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly."

The above statement in the English language is provided verbatim in owner’s manual:
( X )YES (   )NO

For vehicles with a dedicated MIL telltale, add the following statement:
"The TPMS malfunction indicator is provided by a separate telltale, which displays the symbol "TPMS" when illuminated."

The above statement in the English language is provided verbatim in owner’s manual:
(   )YES (   )NO ( X )N/A

For vehicles with a combined low tire pressure/MIL telltale, add the following statement:
"The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists."

The above statement in the English language is provided verbatim in owner’s manual:
( X )YES (   )NO (   )N/A

The following statement is required for all vehicles certified to the standard starting on September 1, 2007 and for vehicles voluntarily equipped with a compliant TPMS MIL before that time.
"When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly."

The above statement in the English language is provided verbatim in owner’s manual:
( X )YES (   )NO

DATA INDICATES COMPLIANCE:  PASS/FAIL: **PASS**
DATA SHEET 5 (Sheet 3 of 3)
TPMS WRITTEN INSTRUCTIONS

Does the Owner’s Manual provide an image of the Low Tire Pressure Warning Telltale symbol (and an image of the TPMS Malfunction Telltale warning (“TPMS”), if a dedicated telltale is utilized for this function)?

( X )YES  ( )NO

Does the Owner’s Manual include the following (allowable) information?

☑ Significance of the low tire pressure warning telltale illuminating
☑ A description of corrective action to be undertaken
☐ Whether the tire pressure monitoring system functions with the vehicle's spare tire (if provided)
☑ How to use a reset button, if one is provided
☐ The time for the TPMS telltale(s) to extinguish once the low tire pressure condition or the malfunction is corrected

REMARKS: None

RECORDED BY: Todd P. Groghan  DATE: May 27, 2009
APPROVED BY: Kenneth H. Yates
## 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>STOPWATCH</td>
<td>CHAMPION SPORTS TIMER</td>
<td>910 R</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VBOX RECORDING DEVICE</td>
<td>RACELOGIC VBOX III</td>
<td>SERIAL # 030209</td>
<td>3/22/2009</td>
<td>3/22/2010</td>
</tr>
<tr>
<td>AMBIENT TEMPERATURE GAUGE</td>
<td>FLUKE 179 DIGITAL THERMOMETER</td>
<td>SERIAL # 84740316</td>
<td>2/12/2009</td>
<td>2/12/2010</td>
</tr>
<tr>
<td>LASER TEMPERATURE GAUGE</td>
<td>RAYTEK ST20</td>
<td>SERIAL 2065640101-0014</td>
<td>8/14/2008</td>
<td>8/08/2009</td>
</tr>
<tr>
<td>AIR PRESSURE GAUGE</td>
<td>ASHCROFT GENERAL PURPOSE DIGITAL GAUGE</td>
<td>MODEL # D1005PS 02L 100 PSI SERIAL # 20017398-01</td>
<td>11/20/2008</td>
<td>11/20/2009</td>
</tr>
<tr>
<td>FLOOR SCALES (VEHICLE)</td>
<td>INTERCOMP SW DELUXE SCALES</td>
<td>PART # 100156 SERIAL # 27032382</td>
<td>8/5/2008</td>
<td>8/5/2009</td>
</tr>
<tr>
<td>PLATFORM SCALE (BALLAST)</td>
<td>HOWE RICHARDSON</td>
<td>MODEL # 6401 SERIAL # 0181-5509-26</td>
<td>8/5/2008</td>
<td>8/5/2009</td>
</tr>
</tbody>
</table>
SECTION 5
PHOTOGRAPHS
2009 AUDI A6
NHTSA NO. C95800
FMVSS NO.138

FIGURE 5.1
¾ FRONT VIEW FROM LEFT SIDE OF VEHICLE
MFD. BY AUDI AG 11 08
GVWR LBS 4993 GAWR LBS FRONT 2623/REAR 2590
THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S.
FEDERAL MOTOR VEHICLE SAFETY, BUMPER AND THEFT
PREVENTION STANDARDS IN EFFECT ON THE DATE OF
MANUFACTURE SHOWN ABOVE

PASSENGER CAR
WAUCH74F29N022298
GERMANY

2009 AUDI A6
NHTSA NO. C95800
FMVSS NO.138

FIGURE 5.2
VEHICLE CERTIFICATION LABEL
### Tire and Loading Information

<table>
<thead>
<tr>
<th>Seat Capacity</th>
<th>Front</th>
<th>Rear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbre de Places</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

The combined weight of occupants and cargo should never exceed 500 kg or 1102 lbs.

<table>
<thead>
<tr>
<th>Tires</th>
<th>Size</th>
<th>Cold Tire Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Avant</td>
<td>245/40 R18 97H</td>
<td>270 KPA, 39 PSI</td>
</tr>
<tr>
<td>Rear Arriere</td>
<td>245/40 R18 97H</td>
<td>270 KPA, 39 PSI</td>
</tr>
<tr>
<td>Spare de Secours</td>
<td>245/40 R18 97H</td>
<td>270 KPA, 39 PSI</td>
</tr>
</tbody>
</table>

See Owner’s Manual for Additional Information.
2009 AUDI A6
NHTSA NO. C95800
FMVSS NO. 138

FIGURE 5.4
TIRE SHOWING BRAND
2009 AUDI A6
NHTSA NO. C95800
FMVSS NO. 138

FIGURE 5.5
TIRE SHOWING MODEL
Figure 5.6

2009 AUDI A6
NHTSA NO. C95800
FMVSS NO. 138

TIRE SHOWING SIZE AND LOAD INDEX / SPEED RATING
FIGURE 5.7
TIRE SHOWING DOT SERIAL NUMBER
FIGURE 5.8
TIRE SHOWING MAX COLD INFLATION PRESSURE AND MAX LOAD RATING
2009 AUDI A6
NHTSA NO. C95800
FMVSS NO. 138

FIGURE 5.9
TIRE SHOWING SIDEWALL / TREAD CONSTRUCTION
FIGURE 5.10
RIM CONTOUR FOR FULL WIDTH OF CROSS SECTION
Underinflated!
Check all 4 tires.
Then reset TPMS in MMI
If the pressures of all 4 tires have been checked and adjusted correctly, please store.

Store now

The current pressures of all 4 tires correspond to the required values.

Confirm
Cancel
2009 AUDI A6
NHTSA NO. C95800
FMVSS NO 138

FIGURE 5.13
TEST INSTRUMENTATION INSTALLED IN VEHICLE
2009 AUDI A6
NHTSA NO. C95800
FMVSS NO. 138

FIGURE 5.14
VEHICLE REAR SEAT BALLAST FOR UVW + VCW LOAD
2009 AUDI A6
NHTSA NO. C95800
FMVSS NO. 138

FIGURE 5.15
VEHICLE CARGO AREA BALLAST FOR UVW + VCW LOAD
FIGURE 5.17
MALFUNCTION DETECTION TEST 1-
WIRING TO TPMS ECU DISCONNECTED
92

2009 AUDI A6
NHTSA NO. C95800
FMVSS NO. 138

FIGURE 5.18
MALFUNCTION DETECTION TEST 2 -
TPMS FUSE REMOVED
93
2009 AUDI A6
NHTSA NO. C95800
FMVSS NO. 138

FIGURE 5.19
MALFUNCTION DETECTION TEST 3 -
WHEEL SPEED (ABS) SENSOR DISCONNECTED
2009 AUDI A6
NHTSA NO. C95800
FMVSS NO. 138

FIGURE 5.20
MALFUNCTION DETECTION TEST 4 - RIGHT FRONT TIRE REPLACED WITH SMALLER SIZE TIRE
SECTION 6
TEST PLOTS
Scenario A: Left Front Tire at LLVW
Test Date: 6/4/09
Data File Time: 25:48 minutes
Cumulative Driving Time: 20:37 minutes
Start Point: GAFB North Gate

Calibration Phase:

2009 Audi A6 (C95800) LF Calibration LLVW

Log Rate := 100.00 Hz
Scenario A: Left Front Tire at LLVW
Test Date: 6/4/09
Data File Time: 3:25 minutes
Cumulative Driving Time: 0:15 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:
Scenario B: Left Front, Left Rear Tires at LLVW
Test Date: 6/4/09
Data File Time: 25:24 minutes
Cumulative Driving Time: 20:43 minutes
Start Point: GAFB North Gate

Calibration Phase:

2009 Audi A6 (C95800) LF, LR Calibration LLVW

Log Rate := 100.00 Hz
Scenario B: Left Front, Left Rear Tires at LLVW
Test Date: 6/4/09
Data File Time: 5:28 minutes
Cumulative Driving Time: 2:01 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:
Scenario C: Left Front, Left Rear, Right Rear, Right Front Tires at LLVW
Test Date: 6/4/09
Data File Time: 24:27 minutes
Cumulative Driving Time: 20:50 minutes
Start Point: GAFB North Gate

Calibration Phase:

2009 Audi A6 (C95800) LF, RF, LR, RR Calibration LLVW

Log Rate: ≈ 100.00 Hz
Scenario C: Left Front, Left Rear, Right Rear, Right Front Tires at LLVW
Test Date: 6/4/09
Data File Time: 8:36 minutes
Cumulative Driving Time: 5:03 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase: 2009 Audi A6 (C95800) LF, LR, RR, RF Illumination LLVW

Log Rate: ~ 100.00 Hz
Scenario D: Left Front, Right Rear Tires at LLVW
Test Date: 6/5/09
Data File Time: 25:16 minutes
Cumulative Driving Time: 20:43 minutes
Start Point: GAFB North Gate

Calibration Phase:
Scenario D: Left Front, Right Rear Tires at LLVW
Test Date: 6/5/09
Data File Time: 4:39 minutes
Cumulative Driving Time: 2:12 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:

2009 Audi A6 (C95800) LF, RR Illumination LLVW

Log Rate: ≈ 100.00 Hz

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Scenario E: Left Rear, Right Rear Tires at LLVW
Test Date: 6/5/09
Data File Time: 24:59 minutes
Cumulative Driving Time: 20:40 minutes
Start Point: GAFB North Gate

Calibration Phase:
Scenario E: Left Rear, Right Rear Tires at LLVW
Test Date: 6/5/09
Data File Time: 5:28 minutes
Cumulative Driving Time: 2:38 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:
Scenario F: Left Front, Left Rear, Right Rear Tires at LLVW
Test Date: 6/5/09
Data File Time: 24:43 minutes
Cumulative Driving Time: 20:37 minutes
Start Point: GAFB North Gate

Calibration Phase:

2009 Audi A6 (C95800) LF, LR, RR Calibration LLW
Log Rate: ≈ 100.00 Hz
Scenario F: Left Front, Left Rear, Right Rear Tires at LLVW
Test Date: 6/5/09
Data File Time: 4:47 minutes
Cumulative Driving Time: 2:12 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:
Scenario G: Right Rear Tire at LLVW
Test Date: 6/8/09
Data File Time: 24:51 minutes
Cumulative Driving Time: 20:38 minutes
Start Point: GAFB North Gate

Calibration Phase:
Scenario G: Right Rear Tire at LLVW
Test Date: 6/8/09
Data File Time: 3:17 minutes
Cumulative Driving Time: 0:29 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:

2009 Audi A6 (C95800) RR Illumination LLVW

Log Rate : ≈ 100.00 Hz
Scenario H: Left Front, Right Rear, Right Front Tires at LLVW
Test Date: 6/8/09
Data File Time: 24:59 minutes
Cumulative Driving Time: 20:45 minutes
Start Point: GAFB North Gate

Calibration Phase:

2009 Audi A6 (C95800) LF, RR, RF Calibration LLVW
Scenario H: Left Front, Right Rear, Right Front Tires at LLVW
Test Date: 6/8/09
Data File Time: 4:39 minutes
Cumulative Driving Time: 2:05 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:

2009 Audi A6 (C95800) LF, RR, RF Illumination LLVW
Scenario I: Left Front, Right Front Tires at UVW + VCW
Test Date: 6/2/09
Data File Time: 24:51 minutes
Cumulative Driving Time: 20:34 minutes
Start Point: GAFB North Gate

Calibration Phase:

2009 Audi A6 (C95800) LF, RF Calibration UVW+VCW

Log Rate: ≈ 100.00 Hz
Scenario I: Left Front, Right Front Tires at UVW + VCW
Test Date: 6/2/09
Data File Time: 6:50 minutes
Cumulative Driving Time: 2:25 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:

2009 Audi A6 (C95800) LF, RF Illumination UVW+VCW

- Log Rate: ≈ 100.00 Hz
- Telltale Illumination
- Speed Trace
- Exit GAFB
- RT. 388 E
- Brake Triggers
Scenario J: Left Rear, Right Rear, Right Front Tires at UVW + VCW
Test Date: 6/2/09
Data File Time: 25:15 minutes
Cumulative Driving Time: 20:43 minutes
Start Point: GAFB North Gate

Calibration Phase:
Scenario J: Left Rear, Right Rear, Right Front Tires at UVW + VCW
Test Date: 6/2/09
Data File Time: 5:03 minutes
Cumulative Driving Time: 1:58 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:
Scenario K: Left Rear, Right Front Tires at UVW + VCW
Test Date: 6/3/09
Data File Time: 24:35 minutes
Cumulative Driving Time: 20:40 minutes
Start Point: GAFB North Gate

Calibration Phase:
Scenario K: Left Rear, Right Front Tires at UVW + VCW
Test Date: 6/3/09
Data File Time: 7:22 minutes
Cumulative Driving Time: 1:54 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:

2009 Audi A6 (C95800) LR, RF Illumination UVW+VCW

Log Rate : = 100.00 Hz
Scenario L: Right Front Tire at UVW + VCW
Test Date: 6/3/09
Data File Time: 25:24 minutes
Cumulative Driving Time: 20:39 minutes
Start Point: GAFB North Gate

Calibration Phase:

2009 Audi A6 (C95800) RF Calibration UVW+VCW

Log Rate: ≈ 100.00 Hz
Scenario L: Right Front Tire at UVW + VCW
Test Date: 6/3/09
Data File Time: 4:13 minutes
Cumulative Driving Time: 0:17 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:

2009 Audi A6 (C95800) RF Illumination UVW+VCW

Log Rate: ≈ 100.00 Hz
Scenario M: Left Rear Tire at UVW + VCW
Test Date: 6/9/09
Data File Time: 25:16 minutes
Cumulative Driving Time: 20:43 minutes
Start Point: GAFB North Gate

Calibration Phase:
Scenario M: Left Rear Tire at UVW + VCW
Test Date: 6/9/09
Data File Time: 2:44 minutes
Cumulative Driving Time: 0:10 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:
Scenario N: Right Rear, Right Front Tires at U VW + VCW
Test Date: 6/9/09
Data File Time: 24:27 minutes
Cumulative Driving Time: 20:38 minutes
Start Point: GAFB North Gate

Calibration Phase:
Scenario N: Right Rear, Right Front Tires at UVW + VCW  
Test Date: 6/9/09  
Data File Time: 4:22 minutes  
Cumulative Driving Time: 1:49 minutes  
Start Point: San Angelo Test Facility Shop

Detection Phase:

![Graph Image]  

2009 Audi A6 (C95800) RR, RF Illumination UVW+VCW

Log Rate: ~ 100.00 Hz
Scenario 0: Left Front, Left Rear, Right Front Tires at UVW + VCW
Test Date: 6/9/09
Data File Time: 25:48 minutes
Cumulative Driving Time: 20:35 minutes
Start Point: GAFB North Gate

Calibration Phase:
Scenario 0: Left Front, Left Rear, Right Front Tires at UVW + VCW
Test Date: 6/9/09
Data File Time: 4:31 minutes
Cumulative Driving Time: 1:56 minutes
Start Point: San Angelo Test Facility Shop

Detection Phase:

2009 Audi A6 (C95800) LF, LR, RF Illumination UVW+VCW

Log Rate: = 100.00 Hz
Tires and wheels

- After any impact, immediately inspect your tires or have them inspected by the nearest authorized Audi dealer. Replace a damaged tire as soon as possible.
- Inspect your tires every 2,000 miles (3,000 km) for damage and wear. Damage is not always easy to see. Damage can lead to loss of air and underinflation, which could eventually cause tire failure. If you believe that a tire may have been damaged, replace the tire as soon as possible.
- These tires may wear more quickly than others.
- Please also remember that, while these tires deliver responsive handling, they may ride less comfortably and make more noise than other choices.

Reduced performance in winter/cold season conditions

All tires are designed for certain purposes. The low aspect ratio, ultra high performance tires originally installed on your vehicle are intended for maximum dry and wet road performance and handling. They are not suitable for cold, snowy or icy weather conditions. If you drive under those circumstances, you should equip your vehicle with all-season or winter tires, which offer better traction under those conditions. We suggest you use the recommended snow or all-season tires specified for your vehicle, or their equivalent.

Refer to ⇒ page 333 for more detailed information regarding winter tires.

Tire pressure monitoring system

General notes (1)

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pres-
Tire pressure indicator appears

The tire pressure indicator in the instrument cluster informs you if the tire pressure is too low or if there is a system malfunction.

![Tire Pressure Indicator]

The tire pressure monitoring system must be reset via MMI each time the pressures are adjusted (e.g., when switching between partial and full load pressure) or after changing or replacing a tire on your vehicle ⇒ page 338. You can find the recommended tire pressures for your vehicle on the label on the driver’s door pillar ⇒ page 321.

Tire tread circumference and vibration characteristics can change and cause a tire pressure warning if:
- the tire pressure in one or more tires is too low,
- the tire has structural damage,
- the tire pressure was changed, wheels rotated or replaced but the TPMS was not reset ⇒ page 338.

Warning symbols

⚠️ Loss of pressure in at least one tire ⇒ ⚠️. Check the tire or tires and replace or repair if necessary. The indicator light ⚠️ in the instrument cluster also illuminates ⇒ page 16. Check/correct the pressures of all four tires and reset TPMS via MMI.

TPMS (Tire Pressure Monitoring System) Tire pressure! System malfunction. If TPMS appears after switching the ignition on or while driving ⇒ fig. 253 and the indicator light ⚠️ in the instrument cluster blinks for approximately one minute and then stays on, there is a system malfunction. See your authorized Audi dealer as soon as possible.

⚠️ WARNING

- If the tire pressure indicator appears in the instrument cluster display, one or more of your tires is significantly under-inflated. Reduce your speed immediately and avoid any hard steering or braking maneuvers. Stop as soon as possible and check the tires and their pressures. Inflate the tire pressure to the proper pressure as indicated on the vehicle's tire pressure label ⇒ page 321.

Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also is likely to impair the vehicle's handling and stopping ability.
**WARNING (continued)**

- The driver is responsible for maintaining the correct tire pressures. You must check the tire pressures regularly.
- Under certain conditions (such as a sporty driving style, winter conditions or unpaved roads), the pressure monitor indicator may be delayed.
- Ask your authorized Audi dealer if run-flat tires may be used on your vehicle. Your vehicle registration becomes invalid if you use these tires when not permitted. Damage to your vehicle or accidents could also result.
- To ensure a proper TPMS-function use Audi released tires which are marked with "AO" or "RO" on the tire sidewall ⇒ page 331.

**Tips**

- The tire pressure monitoring system stops working when there is an ESP/ABS malfunction.
- Using snow chains may result in a system malfunction.

**Reset tire pressure monitoring system**

*If the tire pressure is adjusted, wheels are rotated or changed, the TPMS must be reset via MMI.*

- Turn on the ignition.
- Select: the **CAR** function key > **Tire pressure monitoring** > **Store now**.

**Tips**

Before reset the TPMS, the current pressures of all four tires must correspond to the specified values. Adjust the tire pressure and reset the pressure in the tire pressure monitoring system according to the load you are carrying ⇒ page 321.
SECTION 8
FAILURE REPORT
LABORATORY NOTICE OF TEST FAILURE

FMVSS NUMBER: 138  TEST DATES: May 27 through June 9, 2009

LABORATORY: US DOT San Angelo Test Facility

CONTRACT NUMBER: N/A  DELIVERY ORDER NUMBER: N/A

LABORATORY PROJECT ENGINEER’S NAME: Kenneth H. Yates

TEST SPECIMEN DESCRIPTION: 2009 Audi A6 four-door passenger car

NHTSA VEHICLE NUMBER: C95800  VIN: WAUCH74F29N022298

MANUFACTURER: Audi AG

TEST FAILURE DESCRIPTION: The TPMS telltale self extinguishes while malfunction still exists.

FMVSS REQUIREMENT, PARAGRAPH: S138, S4.4(c)(2)

“After each period of prescribed flashing, the telltale must remain continuously illuminated as long as a malfunction exists and the ignition locking system is in the “On” (“Run”) position.”

NOTIFICATION TO NHTSA (COTR): John Finneran

DATE: June 3, 2009  BY: Kenneth H. Yates

REMARKS: ________________________________