

REPORT NO. 118-KAR-07-003

**SAFETY COMPLIANCE TESTING
FOR FMVSS 118**

**Power-Operated Window, Partition,
And Roof Panel Systems**

2007 HYUNDAI ENTOURAGE
5-DOOR MPV

NHTSA NO. C70504

PREPARED BY:
KARCO ENGINEERING, LLC.
9270 HOLLY ROAD
ADELANTO, CALIFORNIA 92301



October 12, 2007

Final Report

PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
MAIL CODE: NVS-221
1200 NEW JERSEY AVE SE, ROOM W43-498
WASHINGTON, D.C. 20590

This final test report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, under Contract DTNH22-06-C-00034.

This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration in the interest of information exchange. The opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufacturers' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

Prepared by: Matthew S. Hubbard Date: 10-12-07
Mr. Matthew S. Hubbard, Test Engineer
KARCO Engineering, LLC.

Reviewed by: [Signature] Date: 10-12-07
Mr. Michael L. Dunlap, Director of Operations
KARCO Engineering, LLC.

Approved by: Frank D. Richardson Date: 10-12-07
Mr. Frank D. Richardson, Program Manager
KARCO Engineering, LLC.

FINAL REPORT ACCEPTED BY OVSC:
Accepted By: [Signature]
Acceptance Date: 11/2/07

Technical Report Documentation Page

1. <i>Report No.</i> 118-KAR-07-003	2. <i>Government Accession No.</i>	3. <i>Recipient's Catalog No.</i>	
4. <i>Title and Subtitle</i> Final Report of FMVSS 118 Compliance Testing of 2007 Hyundai Entourage 5-Door MPV, NHTSA NO. C70504		5. <i>Report Date</i> 10-12-07	
		6. <i>Performing Organization Code</i> KAR	
7. <i>Author(s)</i> Mr. Matthew S. Hubbard, Test Engineer, KARCO Mr. Michael L. Dunlap, Director of Operations, KARCO		8. <i>Performing Organization Report No.</i> TR-P27009-01-NC	
9. <i>Performing Organization Name and Address</i> KARCO Engineering 9270 Holly Road Adelanto, California 92301		10. <i>Work unit No.</i>	
		11. <i>Contract or Grant No.</i> DTNH22-06-C-00034	
12. <i>Sponsoring Agency Name and Address</i> U.S. Department of Transportation National Highway Traffic Safety Administration Enforcement Office of Vehicle Safety Compliance Mail Code: NVS-221 1200 New Jersey Ave SE, Room W43-410 Washington, D.C. 20590		13. <i>Type of report and Period Covered</i> Final Report- October 03, 2007	
		14. <i>Sponsoring Agency Code</i> NVS-221	
15. <i>Supplementary Notes</i>			
16. <i>Abstract</i> Compliance tests were conducted on the subject 2007 Hyundai Entourage 5-Door MPV in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP118-05 for the determination of FMVSS 118 compliance. Test failures identified were as follows: None			
17. <i>Key Words</i> Compliance Testing Safety Engineering FMVSS 118		18. <i>Distribution Statement</i> Copies of this report are available from: National Highway Traffic Safety Admin. Technical Information Services (TIS) Mail Code: NVS-221 1200 New Jersey Ave SE, Room W43-410 Washington, D.C. 20590	
19. <i>Security Classification (of this report)</i> UNCLASSIFIED	20. <i>Security Classification (of this page)</i> UNCLASSIFIED	21. <i>No. of Pages</i> 37	22. <i>Price</i>

Form DOT F1700.7 (8-72)

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1	Purpose of Compliance Test	1
2	Test Procedure and Data Summary	2
3	Test Data	5
4	Photographs	15
5	Data Plots	25
6	Copy of Owner's Manual Instructions for Use of Power Windows	26

1. PURPOSE OF COMPLIANCE TEST

Tests were conducted on a 2007 Hyundai Entourage 5-Door MPV, manufactured by Kia Motors Corporation to determine compliance with FMVSS 118 "Power-Operated Window, Partition, and Roof Panel Systems". FMVSS 118 specifies requirements for power operated window, partition and roof panel systems to minimize the likelihood of death or injury from their accidental operation.

All tests were conducted based on the current National Highway Traffic Safety Administration (NHTSA), Office of Vehicle Safety Compliance (OVSC) Laboratory Procedures, TP-118-05, dated March 24, 2005, and corresponding KARCO Engineering test procedure KTP-118, dated March 16, 2004. Detailed procedures for receiving, inspecting, testing and reporting of test results are described in the test procedures and are not repeated in this report.

2. TEST PROCEDURE AND DATA SUMMARY

A 2007 Hyundai Entourage 5-Door MPV was subjected to FMVSS 118 compliance testing. The tests were conducted at KARCO Engineering in Adelanto, California on October 12, 2007. FMVSS 118 Compliance testing was performed in the following sequence:

- Vehicle Receiving Photographs
- Test Vehicle Check-in
- Power Window, Partitions and Roof Panel Identification/Documentation
- Interior, Exterior and Remote Control Switch Identification/Documentation
- Pre-Test Operation of all Power Windows, Partitions and Roof Panels
- Photograph Vehicle Ignition Switch and Master and Individual Power Window, Partition and Roof Panel Switches
- Perform Ignition Switch off Test
- Perform Ignition Key Removed Test
- Perform Exterior Key Locking System Test
- Perform Remote Control System Test
- Perform Reversal System Test

DATA SUMMARY

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

SWITCH ACTUATION

WINDOWS, PARTITIONS, ROOF PANEL SWITCHES	INTERIOR KEY LOCKING SYSTEM		EXTERIOR LOCKING SYSTEM (PASS / FAIL)
	IGNITION KEY OFF (PASS/FAIL)	IGNITION KEY REMOVED (PASS/FAIL)	
MASTER SWITCH PANEL			
Left Front (LF)	PASS	PASS	N/A
Right Front (RF)	PASS	PASS	N/A
Left Rear (LR)	PASS	PASS	N/A
Right Rear (RR)	PASS	PASS	N/A
Tail Gate (TG)	N/A	N/A	N/A
Partition	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A
INDIVIDUAL SWITCHES			
Left Front (LF)	PASS	PASS	N/A
Right Front (RF)	PASS	PASS	N/A
Left Rear (LR)	PASS	PASS	N/A
Right Rear (RR)	PASS	PASS	N/A
Tail Gate (TG)	N/A	N/A	N/A
Partition (P)	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A

REMARKS: The master switch control panel is located on the driver's side door panel and includes the individual left front window switch. Vehicle passed as soon as ignition "off" test was performed.

DATA SUMMARY...(CONTINUED)

REMOTE ACTUATION DEVICE

VEHICLE ORIENTATION REMOTE ACTUATION DEVICE	NON-LINE OF SIGHT REMOTE (METERS)	LINE OF SIGHT REMOTE (METERS)
FRONT	N/A	N/A
DRIVER SIDE	N/A	N/A
PASSENGER SIDE	N/A	N/A
REAR	N/A	N/A

WPRP OBSTRUCTION FORCE REVERSAL

WINDOW, PARTITION, ROOF PANEL	FORCE TO REVERSE (NEWTONS)	DISTANCE WINDOW, PARTITION, OR ROOF PANEL OPENED ON REVERSAL (mm)
LEFT FRONT (LF)	N/A	N/A
RIGHT FRONT (RF)	N/A	N/A
LEFT REAR (LR)	N/A	N/A
RIGHT REAR (RR)	N/A	N/A
PARTITION (P)	N/A	N/A
ROOF PANEL (RP)	N/A	N/A
TAIL GATE (TG)	N/A	N/A

REMARKS: This vehicle is not equipped with automatic power window up feature. This vehicle is not equipped with a remote actuation device that allows the windows to be opened.

The subject 2007 Hyundai Entourage 5-Door MPV appeared to meet the requirements of FMVSS 118.

3. TEST DATA

**DATA SHEET NO. 2
IGNITION KEY OFF TEST**

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

Pre-Test Check: Window, Partition, Roof Panel Systems operate with Ignition Switch in "ON" Position		YES	X	NO			
Pre-Test Check: Window, Partition, Roof Panel Systems operate with Ignition Switch in "ACCESSORY" Position		YES		NO	X		
WINDOW SWITCHES	DOORS CLOSED		LEFT DOOR OPEN		RIGHT DOOR OPEN		PASS/FAIL
	INOP.	OPER.	INOP.	OPER.	INOP.	OPER.	
MASTER							
Left Front (LF)	N/A	X	X	N/A	X	N/A	PASS
Right Front (RF)	N/A	X	X	N/A	X	N/A	PASS
Left Rear (LR)	N/A	X	X	N/A	X	N/A	PASS
Right Rear (RR)	N/A	X	X	N/A	X	N/A	PASS
Tail Gate (TG)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Partition (P)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
INDIVIDUAL							
Left Front (LF)	N/A	X	X	N/A	X	N/A	PASS
Right Front (RF)	N/A	X	X	N/A	X	N/A	PASS
Left Rear (LR)	N/A	X	X	N/A	X	N/A	PASS
Right Rear (RR)	N/A	X	X	N/A	X	N/A	PASS
Tail Gate (TG)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Partition (P)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
REMARKS: The master left front switch is the same as the individual left front switch. Test was performed with key in the "Lock" position. For the pre-test check in the "Accessory" position the key was moved from the "Lock" position to the "Accessory" position without cycling through the "On" position or starting the engine. Vehicle passed as soon as ignition "off" test was performed.							

RECORDED BY: **MATTHEW S. HUBBARD** DATE: **10/12/07**
 APPROVED BY: **MICHAEL L. DUNLAP** DATE: **10/12/07**

**DATA SHEET NO. 3
IGNITION KEY REMOVED TEST**

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

WINDOW SWITCHES	DOORS CLOSED		LEFT DOOR OPEN		RIGHT DOOR OPEN		PASS/FAIL
	INOP.	OPER.	INOP.	OPER.	INOP.	OPER.	
MASTER							
Left Front (LF)	N/A	X	X	N/A	X	N/A	PASS
Right Front (RF)	N/A	X	X	N/A	X	N/A	PASS
Left Rear (LR)	N/A	X	X	N/A	X	N/A	PASS
Right Rear (RR)	N/A	X	X	N/A	X	N/A	PASS
Tail Gate (TG)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Partition (P)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
INDIVIDUAL							
Left Front (LF)	N/A	X	X	N/A	X	N/A	PASS
Right Front (RF)	N/A	X	X	N/A	X	N/A	PASS
Left Rear (LR)	N/A	X	X	N/A	X	N/A	PASS
Right Rear (RR)	N/A	X	X	N/A	X	N/A	PASS
Tail Gate (TG)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Partition (P)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

REMARKS: The master left front switch is the same as the individual left front switch. Vehicle passed as soon as ignition "off" test was performed.

RECORDED BY: MATTHEW S. HUBBARD DATE: 10/12/07
 APPROVED BY: MICHAEL L. DUNLAP DATE: 10/12/07

**DATA SHEET NO. 4
EXTERIOR KEY LOCKING SYSTEM**

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

EXTERIOR LOCKING CONTROL SWITCH TEST				
Can Any WPRP Be Operated by Directly Using A Key in an Exterior Locking Control Switch?	Yes	N/A	No	X
If Yes: Is Continuous Activation of the Switch Required	Yes	N/A	No	X

IDENTIFY WINDOW, PARTITION AND ROOF PANEL POSITIONS WHICH ARE OPERABLE WITH EXTERIOR KEY.

LOCATION	OPERABLE W/KEY		CONTINUOUS ACTION		PASS / FAIL
	YES	NO	YES	NO	
LEFT FRONT (LF)	N/A	N/A	N/A	N/A	N/A
RIGHT FRONT (RF)	N/A	N/A	N/A	N/A	N/A
LEFT REAR (LR)	N/A	N/A	N/A	N/A	N/A
RIGHT REAR (RR)	N/A	N/A	N/A	N/A	N/A
PARTITION (P)	N/A	N/A	N/A	N/A	N/A
ROOF PANEL (RP)	N/A	N/A	N/A	N/A	N/A
TAIL GATE (TG)	N/A	N/A	N/A	N/A	N/A

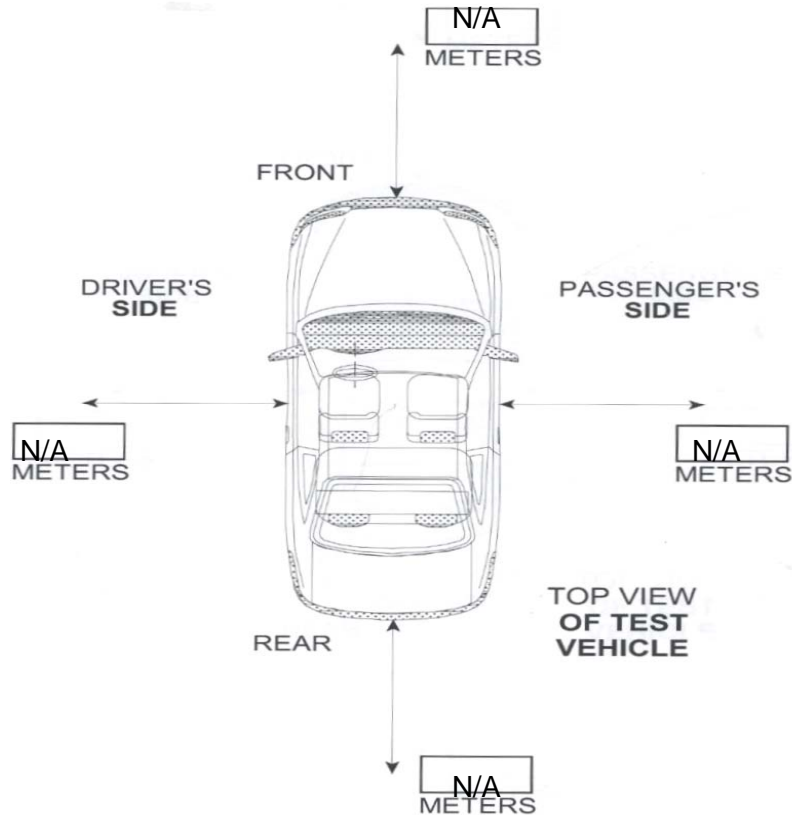
REMARKS: Vehicle is not equipped with an exterior key locking system capable of opening windows.

RECORDED BY: MATTHEW S. HUBBARD DATE: 10/12/07
 APPROVED BY: MICHAEL L. DUNLAP DATE: 10/12/07

**DATA SHEET NO. 5
MAXIMUM OPERATING RANGE FOR LINE-OF-SIGHT REMOTE**

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

If range of operation exceeds 11 meters in any of the below measured directions, the window, partition, and roof panel must meet the reversing requirements of FMVSS 118. Continuous activation of remote device is required to close windows, partition and roof panel YES () NO ().



REMARKS: The vehicle is not equipped with a remote actuation device that allows the windows to be opened.

RECORDED BY: **MATTHEW S. HUBBARD**

DATE: **10/12/07**

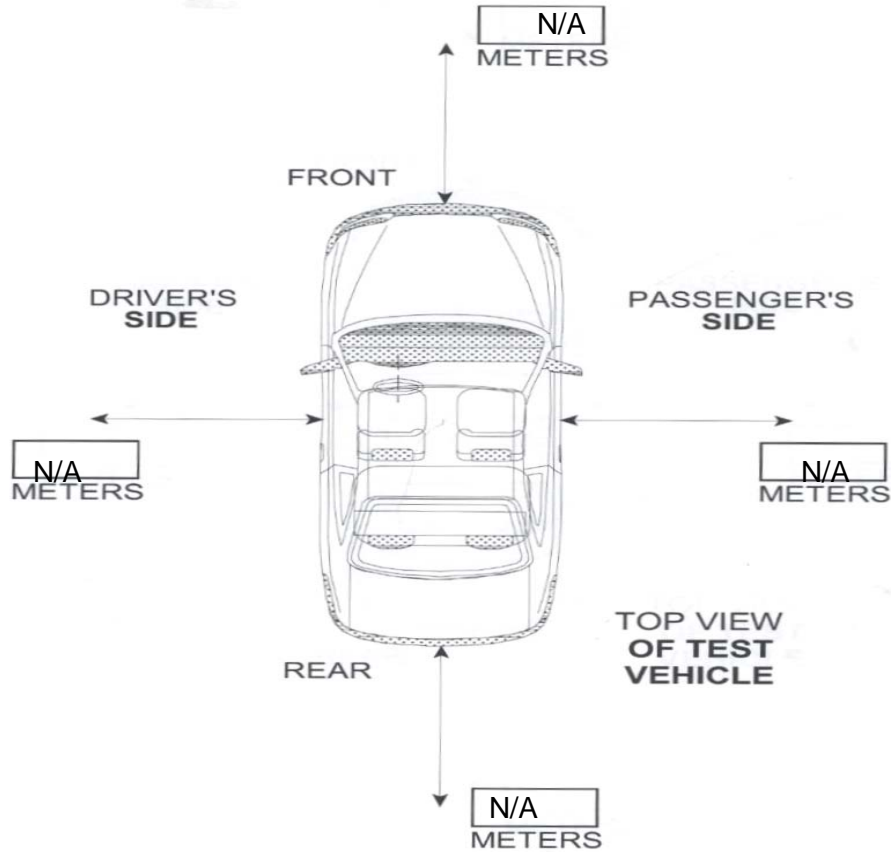
APPROVED BY: **MICHAEL L. DUNLAP**

DATE: **10/12/07**

DATA SHEET NO. 6
MAXIMUM OPERATING RANGE FOR NON-LINE-OF-SIGHT REMOTE

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

If range of operation exceeds 6 meters in any of the below measured directions, the window, partition, and roof panel must meet the reversing requirements of FMVSS 118. Continuous activation of remote device is required to close windows, partition and roof panel YES () NO ().



REMARKS: The vehicle is not equipped with a remote actuation device that allows the windows to be opened.

RECORDED BY: MATTHEW S. HUBBARD DATE: 10/12/07
APPROVED BY: MICHAEL L. DUNLAP DATE: 10/12/07

**DATA SHEET NO. 7
AUTO REVERSAL**

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

IDENTIFY WINDOW, PARTITION AND ROOF PANEL POSITIONS WHICH ARE EQUIPPED WITH AUTO REVERSAL.

Is vehicle equipped with Auto Reversal	YES		NO	X
--	-----	--	----	---

SWITCHES EQUIPPED WITH AUTO REVERSAL	MASTER	INDIVIDUAL
LEFT FRONT (LF)	N/A	N/A
RIGHT FRONT (RF)	N/A	N/A
LEFT REAR (LR)	N/A	N/A
RIGHT REAR (RR)	N/A	N/A
PARTITION (P)	N/A	N/A
ROOF PANEL (RP)	N/A	N/A
TAIL GATE (TG)	N/A	N/A

REMARKS: On this vehicle there are no windows equipped with the auto reversal feature. The reversal feature is not required because the window appears to meet the operational requirements of FMVSS 118 paragraph S.4.

RECORDED BY: MATTHEW S. HUBBARD DATE: 10/12/07
 APPROVED BY: MICHAEL L. DUNLAP DATE: 10/12/07

4. PHOTOGRAPHS

Figure 1	Frontal $\frac{3}{4}$ View from Right Side of Vehicle	16
Figure 2	Rear $\frac{3}{4}$ View from Left Side of Vehicle	17
Figure 3	Vehicle Certification Label	18
Figure 4	Tire Information Placard	19
Figure 5	Ignition Switch	20
Figure 6	Left Front Master Power Window Switch	21
Figure 7	Right Front Power Window Switch	22
Figure 8	Left Rear Power Window Switch	23
Figure 9	Right Rear Power Window Switch	24
Figure 10	Overall Test Set-Up	25



Figure 1: Frontal ¾ View From Right Side of Vehicle

2007 HYUNDAI ENTOURAGE
NHTSA NO. C70504
FMVSS NO. 118



Figure 2: Rear ¾ View From Left Side of Vehicle

2007 HYUNDAI ENTOURAGE
NHTSA NO. C70504
FMVSS NO. 118

WEIGHT INFORMATION
WEIGHT INFORMATION

7	FRONT 2	REAR 5
7	AVANT 2	ARRIÈRE 5

never exceed 525 kg or 1,157 lbs.
 jamais excéder 525 kg ou 1,157 lb.

OWNER'S MANUAL FOR ADDITIONAL INFORMATION
CONSULTER LE GUIDE DU PROPRIÉTAIRE POUR OBTENIR DES RENSEIGNEMENTS ADDITIONNELS

MFD. BY KIA MOTORS CORP. FOR
HYUNDAI MOTOR COMPANY

02/06 GAWR 5898LB PAINT J9 TRIM CS
 GAWR TIRES RIMS COLD TIRE INFL

FRONT 2998 LB 225/70R16 6.5Jx16 35 psi SINGLE
 REAR 3064 LB 225/70R16 6.5Jx16 35 psi SINGLE

THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S.A. FEDERAL
 MOTOR VEHICLE SAFETY AND THEFT PREVENTION STANDARDS
 IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE

V.I.N. KNDMC233776011787
 MPV

2007 HYUNDAI ENTOURAGE
 NHTSA NO. C70504
 FMVSS NO. 118

Figure 3: Vehicle Certification Label

MFD. B
 HYUNDA
 02/06 GAWR
 FRONT 2998 LB 22
 REAR 3064 LB 22
 THIS VEHICLE CO
 MOTOR VEHICLE
 IN EFFECT ON
 V.I.N. KN

TIRE AND LOADING INFORMATION
PNEUS ET CHARGE-INFORMATION

SEATING CAPACITY	TOTAL 7	FRONT 2	REAR 5
NOMBRE DE SIÈGES	TOTAL 7	AVANT 2	ARRIÈRE 5

The combined weight of occupants and cargo should never exceed 525 kg or 1,157 lbs.
 Le poids combiné des occupants et du chargement ne doit jamais excéder 525 kg ou 1,157 lb.

TIRE/ PNEU	SIZE/ DIMENSION	COLD TIRE PRESSURE/ PRESSION À FROID	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION	CONSULTER LE GUIDE DU PROPRIÉTAIRE POUR OBTENIR DES RENSEIGNEMENTS ADDITIONNELS
FRONT/ AVANT	225/70R16	240KPA , 35PSI		
REAR/ ARRIÈRE	225/70R16	240KPA , 35PSI		
SPARE/ SECOURS	T135/90R17	420kPa , 60psi		

Figure 4: Tire Information Placard

2007 HYUNDAI ENTOURAGE
 NHTSA NO. C70504
 FMVSS NO. 118



2007 HYUNDAI ENTOURAGE
NHTSA NO. C70504
FMVSS NO. 118

Figure 5: Ignition Switch



Figure 6: Left Front Master Power Window Switch

2007 HYUNDAI ENTOURAGE
NHTSA NO. C70504
FMVSS NO. 118



2007 HYUNDAI ENTOURAGE
NHTSA NO. C70504
FMVSS NO. 118

Figure 7: Right Front Power Window Switch



2007 HYUNDAI ENTOURAGE
NHTSA NO. C70504
FMVSS NO. 118

Figure 8: Left Rear Power Window Switch



2007 HYUNDAI ENTOURAGE
NHTSA NO. C70504
FMVSS NO. 118

Figure 8: Right Rear Power Window Switch



Figure 10: Overall Test Set-Up

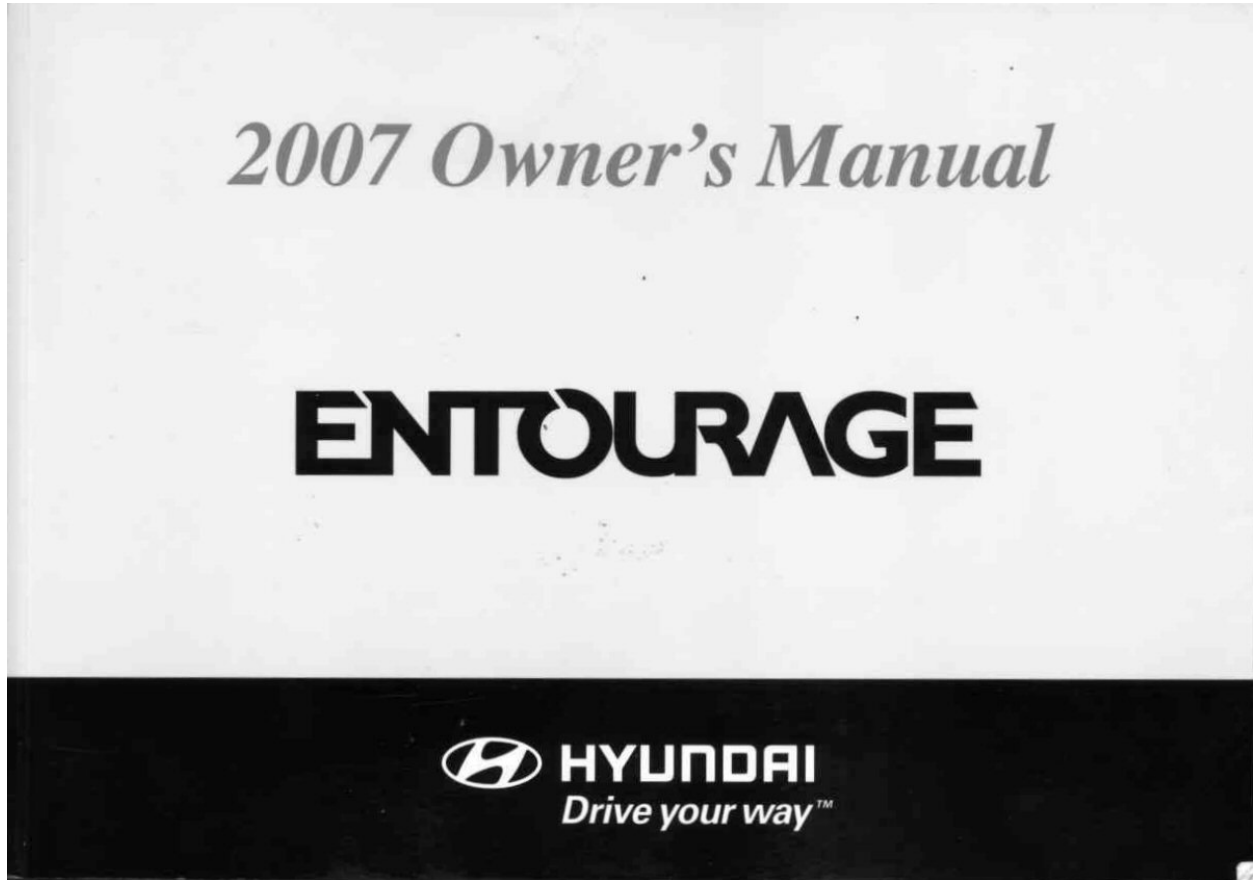
2007 HYUNDAI ENTOURAGE
NHTSA NO. C70504
FMVSS NO. 118

5. DATA PLOTS

6. COPY OF OWNER'S MANUAL INSTRUCTION FOR USE OF POWER WINDOWS

COPY OF OWNER'S MANUAL INSTRUCTIONS FOR USE OF POWER WINDOWS

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		



COPY OF OWNER'S MANUAL INSTRUCTIONS FOR USE OF POWER WINDOWS

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

Driving your vehicle

KEY POSITIONS



1VQA3017

Illuminated ignition switch

Whenever a front door is opened, the ignition switch will be illuminated for your convenience, provided the ignition switch is not in the ON position. The light will go off approximately 10 seconds after closing the door or when the ignition switch is turned on.



1VQA3018

Ignition switch and anti-theft steering column lock

Ignition switch position

LOCK

The steering wheel locks to protect against theft. The ignition key can be removed only in the LOCK position. When turning the ignition switch to the LOCK position, push the key inward at the ACC position and turn the key toward the LOCK position.

ACC (Accessory)

The steering wheel is unlocked and electrical accessories are operative.

ON

The warning lights can be checked before the engine is started. This is the normal running position after the engine is started.

Do not leave the ignition switch ON if the engine is not running to prevent battery discharge.

START

Turn the ignition key to the START position to start the engine. The engine will crank until you release the key; then it returns to the ON position. The brake warning lamp can be checked in this position.

If difficulty is experienced in turning the ignition key to the START position, turn the steering wheel right and left to release the tension and then turn the key.

COPY OF OWNER'S MANUAL INSTRUCTIONS FOR USE OF POWER WINDOWS

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

Driving your vehicle

STARTING THE ENGINE

⚠ WARNING - Ignition key

- Never turn the ignition switch to LOCK or ACC while the vehicle is moving. This would result in loss of directional control and braking function, which could cause an accident.
- The anti-theft steering column lock is not a substitute for the parking brake. Before leaving the driver's seat, always make sure the shift lever is engaged in P (Park) for the automatic transaxle and set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement may occur if these precautions are not taken.
- Never reach for the ignition switch, or any other controls through the steering wheel while the vehicle is in motion. The presence of your hand or arm in this area could cause a loss of vehicle control, an accident and serious bodily injury or death.
- Do not place any movable objects around the driver's seat as they may move while driving, interfere with the driver and lead to an accident.

⚠ WARNING

Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots, etc.) may interfere with your ability to use the brake and accelerator pedal, and the clutch (if equipped).

1. Make sure the parking brake is applied.
2. Place the transaxle shift lever in P (Park). Depress the brake pedal fully. *You can also start the engine when the shift lever is in the N (Neutral) position.*
3. Turn the ignition switch to START and hold it there until the engine starts (a maximum of 10 seconds), then release the key.
4. In extremely cold weather (below 0°F / -18°C) or after the vehicle has not been operated for several days, let the engine warm up without depressing the accelerator.

*Whether the engine is cold or warm, it should be started **without depressing the accelerator.***

⚠ CAUTION

If the engine stalls while you are in motion, do not attempt to move the shift lever to the P (Park) position. If traffic and road conditions permit, you may put the shift lever in the N (Neutral) position while the vehicle is still moving and turn the ignition switch to the START position in an attempt to restart the engine.

⚠ CAUTION

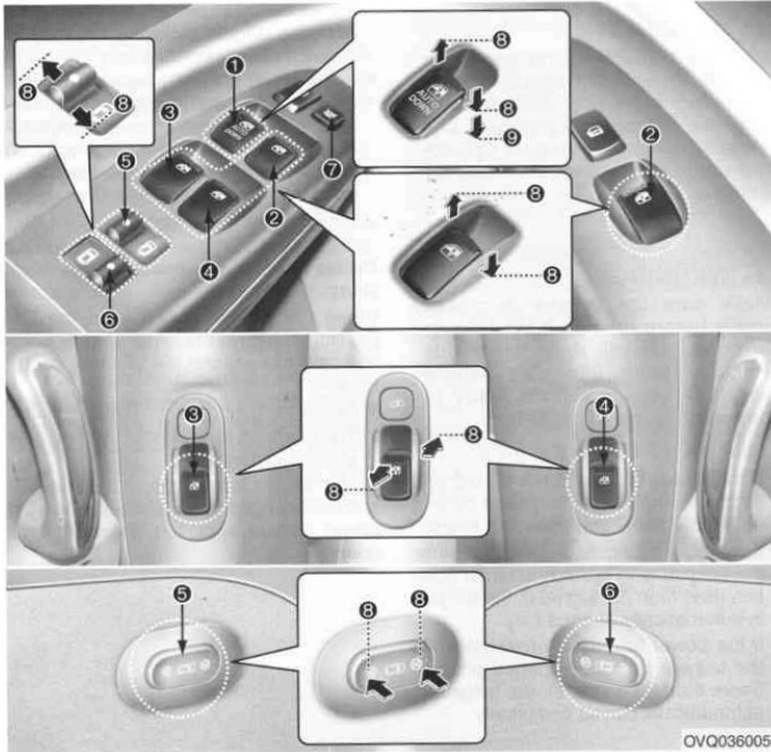
Do not engage the starter for more than 10 seconds. If the engine stalls or fails to start, wait 5 to 10 seconds before re-engaging the starter. Improper use of the starter may damage it.

COPY OF OWNER'S MANUAL INSTRUCTIONS FOR USE OF POWER WINDOWS

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

Features of your vehicle

WINDOWS



Power windows

- (1) Driver's door power window switch
- (2) Front passenger's door power window switch
- (3) Rear door (left) power window switch
- (4) Rear door (right) power window switch
- (5) Power rear quarter window (left) switch*
- (6) Power rear quarter window (right) switch*
- (7) Power window lock switch
- (8) Window opening and closing
- (9) Automatic power window down (Driver's window)

*: if equipped

* NOTICE

In cold and wet climates, power windows may not work properly due to freezing conditions.

COPY OF OWNER'S MANUAL INSTRUCTIONS FOR USE OF POWER WINDOWS

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

Features of your vehicle

The ignition switch must be in the ON position for power windows to operate. Each door has a power window switch that controls that door's window. The driver has a power window lock switch which can block the operation of passenger windows.

The power windows can be operated for approximately 30 seconds after the ignition key is removed or turned to the ACC or LOCK position. However, if the front doors are opened, the power windows cannot be operated within the 30 seconds after the ignition key removal.

While driving, if you notice wind buffeting or pulsation (wind shock) with either side window open, you should open the opposite window slightly to reduce the condition.

CAUTION

- To prevent the power window system from the possibility of damage, do not open or close two windows at the same time. This will also ensure the longevity of the fuse.

(Continued)

(Continued)

- Never try to operate the main switch on the driver's door and the individual door window switch in opposing directions at the same time. If this is done, the window will stop and cannot be opened or closed.

WARNING - Windows

- Passengers can be injured if their head, hands or other body parts are trapped by a closing window. Always check for obstructions before raising any window.
- NEVER leave the ignition key in the vehicle.
- NEVER leave any child unattended in the vehicle. Even very young children may inadvertently cause the vehicle to move, entangle themselves in the windows, or otherwise injure themselves or others.

(Continued)

(Continued)

- Do not attempt to operate the main switch on the driver's door and a switch on another door in opposing directions at the same time. If this is done, the window will stop and cannot be opened or closed.
- Do not allow children to play with the power windows. Keep the driver's door power window lock switch in the LOCK position (depressed). Serious injury can result from unintentional window operation by the child.
- Do not extend head, hands or arms outside through the window opening while driving.

Window opening and closing

The driver's door has a master power window switch that controls all the windows in the vehicle.

- To open or close a window, press down (8) or pull up (8) the front portion of the corresponding switch.
- To open or close a rear quarter window, push (8) the corresponding switch.

COPY OF OWNER'S MANUAL INSTRUCTIONS FOR USE OF POWER WINDOWS

VEHICLE			
YEAR	2007	MAKE	Hyundai
MODEL	Entourage	BODY STYLE	5-Door MPV
NHTSA NO.	C70504	VIN	KNDMC233776011787
TEST DATE:	10/12/07		

Features of your vehicle

Automatic power window down (driver's window)

Depressing the power window switch momentarily to the second detent position (9) completely lowers the driver's window even when the switch is released. To stop the window at the desired position while the window is in operation, pull up the switch momentarily to the opposite direction of the window movement.

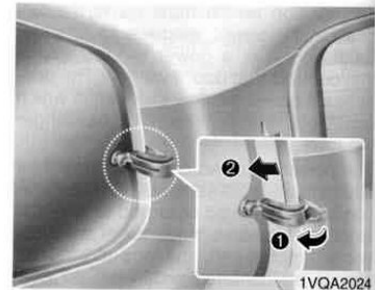
If the power window is not operating correctly, the automatic power window system can be reset as follows:

1. Turn the ignition key to ON position.
2. Close driver's window and continue pulling up on driver's power window switch for at least 1 second after the window is completely closed.



Power window lock switch

- The driver can disable the power window switches on a passenger door or rear quarter trim by depressing the power window lock switch located on the driver's door to LOCK (pressed).
- **When the power window lock switch is ON, the driver's master control cannot operate the passenger door power windows or rear quarter windows either.**



Manual flip - open (rear quarter windows, if equipped)

To open the quarter windows, pull the rear portion of the latch out. Swing the latch forward and out, then lock it into the open position by pushing outward until you hear a click. To close the windows, pull the handle inward. Then push the handle rearward until you hear a click.

* NOTICE

In cold and wet climates, rear quarter panel windows may not work properly due to freezing conditions.