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401-NVS-05-001

SAFETY COMPLIANCE TESTING FOR FMVSS 401 Interior Trunk Release

2005 Hyundai XG 350

NHTSA No. C50512

Prepared by:
NHTSA
OFFICE OF VEHICLE SAFETY COMPLIANCE
400 7th Street, SW
Washington, D.C. 20590

1/27/2005

FINAL REPORT

PREPARED FOR:

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
400 SEVENTH STREET, SW
ROOM 6111 (NVS-221)
WASHINGTON, D.C. 20590

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Prepared By: _____
Eduardo Maximo Aviles , Safety Compliance Engineer

Accepted By: _____
Eduardo Maximo Aviles

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16. Abstract A compliance test was conducted on the subject 2005 Hyundai XG 350, NHTSA No. C50512 in accordance with the U. S. Department of Transportation, National Highway Traffic Safety Administration's Laboratory Test Procedure TP-401-01. The test was conducted by NHTSA Office of Vehicle Safety Compliance test engineers on 1/27/200 . Test Location: Fitzgerald Hyundai in Rockville, MD Test failures were as follows: NONE		
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1.0 PURPOSE OF COMPLIANCE TEST

The purpose of this compliance test was to determine whether the subject vehicle, a 2005 Hyundai XG 350, meets the performance requirements of FMVSS 401, Interior Trunk Release.

The test was conducted in accordance with the U. S. Department of Transportation, National Highway Traffic Safety Administration's Laboratory Test Procedure TP-401-01.

The test was conducted by NHTSA Office of Vehicle Safety Compliance test engineers on 1/27/2005 .

Test Location:
Fitzgerald Hyundai in Rockville, MD

2.0 TEST PROCEDURE AND DISCUSSION OF RESULTS

Based on the test performed, the Vehicle: 2005 Hyundai XG 350, NHTSA No. C50512 appeared to meet the requirements of FMVSS 401.

The vehicle was tested by entering the trunk and closing the lid. The release slide lever was easily observed in the darkened, enclosed trunk. A force gauge was attached to the release handle and 3 separate attempts were made to exit the trunk by applying a load to the instrument. For each attempt, the trunk released from the single latching position at a force level of approximately 34.3 newtons (7.7 lbs.) or less.

3.0 COMPLIANCE TEST DATA

DATA SHEET 1
FMVSS 401 - VEHICLE DESCRIPTION

VEHICLE MY/MAKE/MODEL/BODY STYLE: 2005 Hyundai XG 350
VEH. NHTSA NO.: C50512 ; VIN: KMHFU45E45A384003

DATE OF TEST: 1/27/2005 TEST LAB: BY OVSC @ DEALER

GVWR: 2122 KG MANUFACTURED DATE: SEP/14/04

TRUNK LOCATION: ◉ REAR ○ FRONT
If Front, Front Opening?
NUMBER OF TRUNK LID LATCHING POSITIONS: 1

INTERIOR TRUNK RELEASE: ○ MANUAL ◉ AUTOMATIC ○ BOTH

POWER OPERATED CLOSURE: No
OWNER'S MANUAL DESCRIPTION OF TRUNK RELEASE: ◉ YES ○ NO

REMOVABLE EQUIPMENT DELIVERED IN TRUNK:

- SPARE TIRE: ☑ (SIZE) P205/60R16
- TIRE JACK: ☑
- LUG WRENCH: ☑
- TOOL BOX: ☐ (SIZE) _____
- PARTITIONS: _____
- OTHER: _____

REMARKS:

RECORDED BY: Eduardo Maximo Aviles DATE: 1/27/2005

APPROVED BY: Eduardo Maximo Aviles

3.0 DATA SHEETS....Continued

DATA SHEET 2 (1 of 2)

FMVSS 401 - All trunks except for front trunk compartments with front opening hoods

MANUAL TRUNK RELEASE OPERATION

VEHICLE MY/MAKE/MODEL/BODY STYLE: 2005 Hyundai XG 350

VEH. NHTSA NO.: C50512 ; VIN: KMHFU45E45A384003

DATE OF TEST: 1/27/2005

Method used to actuate interior trunk release: Grab Handle

Other:

Can test personnel enter trunk and be closed within: (•) Yes ( ) No

If Yes, size of occupant: At least 50th percentile male

Is there access to the trunk compartment by folding down rear seat or partition: (•) Yes ( ) No

Does Release Mechanism require electric power: ( ) Yes (•) No

Can release mechanism be easily seen inside the closed trunk: (•) Yes ( ) No

Describe method used by vehicle manufacturer to ensure that release mechanism is visible in a closed trunk compartment: Phosphorescence (Phosphorescence, auxiliary lighting, etc)

Describe laboratory test method used to determine visibility of release mechanism: Trunk entry (Trunk entry, darkened room, etc.)

Vehicle Stationary (0 km/h) NO KEY IN IGNITION	Force Required to Release Trunk Lid (Newtons) [no requirement]	Trunk Released from All latching positions	Pass/Fail
Attempt 1	34.3	(•) Yes ( ) No	(•) Pass ( ) Fail
Attempt 2	34.3	(•) Yes ( ) No	(•) Pass ( ) Fail
Attempt 3	34.3	(•) Yes ( ) No	(•) Pass ( ) Fail
Average -	34.3		

3.0 DATA SHEETS....Continued

DATA SHEET 2 (2 of 2)

FMVSS 401 - MANUAL TRUNK RELEASE OPERATION (continued)

NOTE: Interior Trunk Release is a totally mechanical system with its operation and functioning not dependant upon engine operation or vehicle speed. The release mechanism will function identical to that of the stationary vehicle with the no key in the ignition (as previously tested) and thus the following tests were not required to be conducted.

Vehicle Stationary (0 km/h) ENGINE IDLING ☑ Not Applicable	Force Required to Release Trunk Lid (Newtons) [no requirement]	Trunk Released from All latching positions	Pass/Fail
Attempt 1		○ Yes ○ No	○ Pass ○ Fail
Attempt 2		○ Yes ○ No	○ Pass ○ Fail
Attempt 3		○ Yes ○ No	○ Pass ○ Fail
Average -			

Vehicle Speed (km/h)	Force Required to Release Trunk Lid (Newtons) [no requirement]	Trunk Released fromAll latching positions	Pass/Fail
10		○ Yes ○ No	○ Pass ○ Fail
20		○ Yes ○ No	○ Pass ○ Fail
30		○ Yes ○ No	○ Pass ○ Fail

Describe method used to propel vehicle:

_____

○ **Pass** ○ **Fail**

REMARKS:

_____

RECORDED BY: Eduardo Maximo Aviles **DATE:** 1/27/2005

APPROVED BY: Eduardo Maximo Aviles

3.0 DATA SHEETS....Continued

DATA SHEET 3
FMVSS 401 -TEST SUMMARY

	PASS	FAIL	COMMENTS
Automatic or Manual release mechanism inside the trunk compartment. S4.1	◉	○	Manual release lever
If manual release, lighting feature is included. S4.2(a)	◉	○	Self Lighting
If automatic release, unlatches trunk lid within 5 minutes. S4.2(b)	○	○	N/A
Except as provided by S4.3(b), actuation of release mechanism required by S4.1 completely releases trunk lid from all latching positions of the trunk lid latch. S 4.3(a)	◉	○	Single Latch Position
For front trunk compartments, front opening hoods, when vehicle is stationary latch releases trunk lid from all locking positions. When moving forward at a speed less than 5km/h, must release the primary latch and may release all latches. At speeds greater than 5km/h must release the primary latch only. S4.3(b)	○	○	N/A

◉ Pass ○ Fail

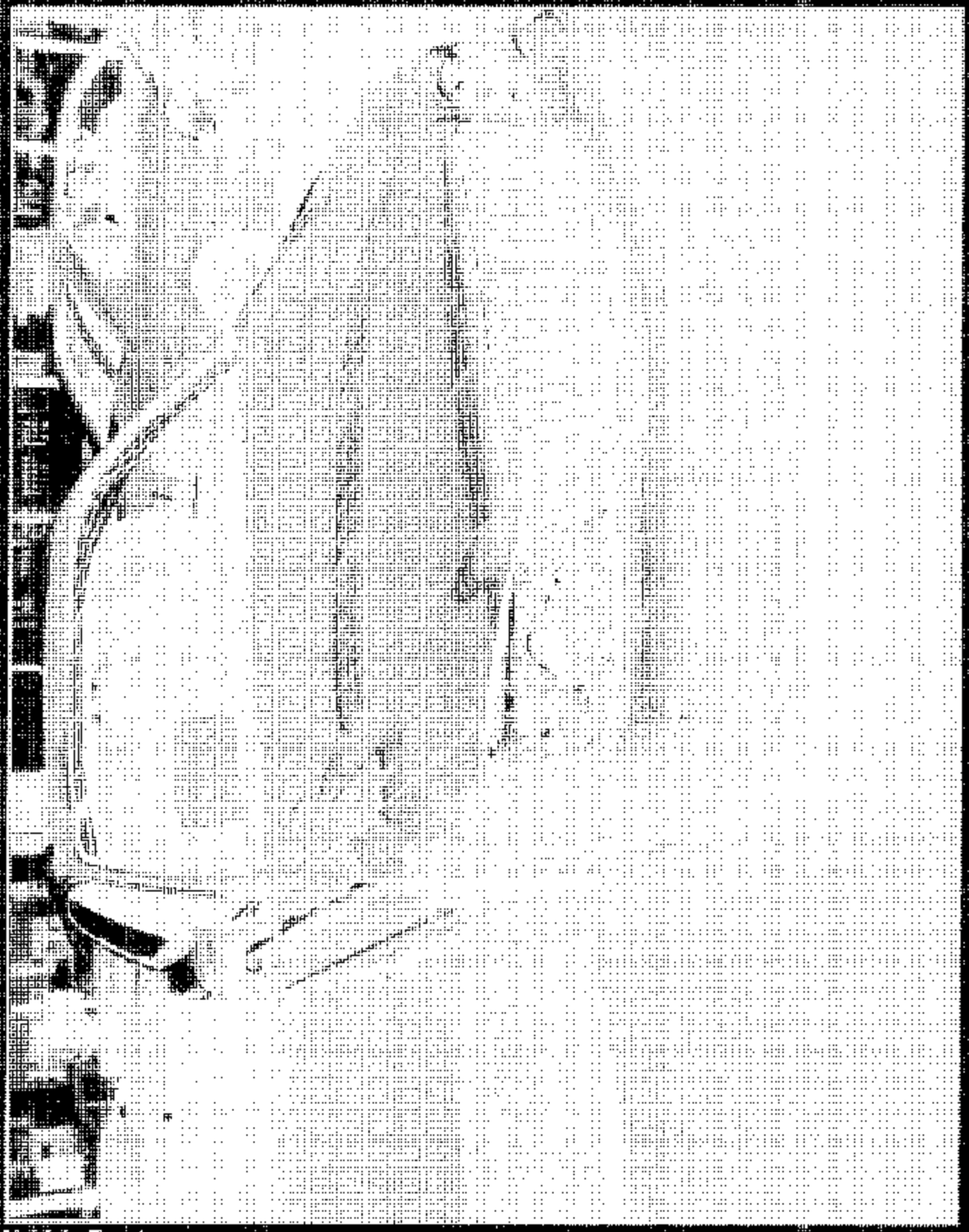
RECORDED BY: Eduardo Maximo Aviles DATE: 1/27/2005

APPROVED BY: Eduardo Maximo Aviles

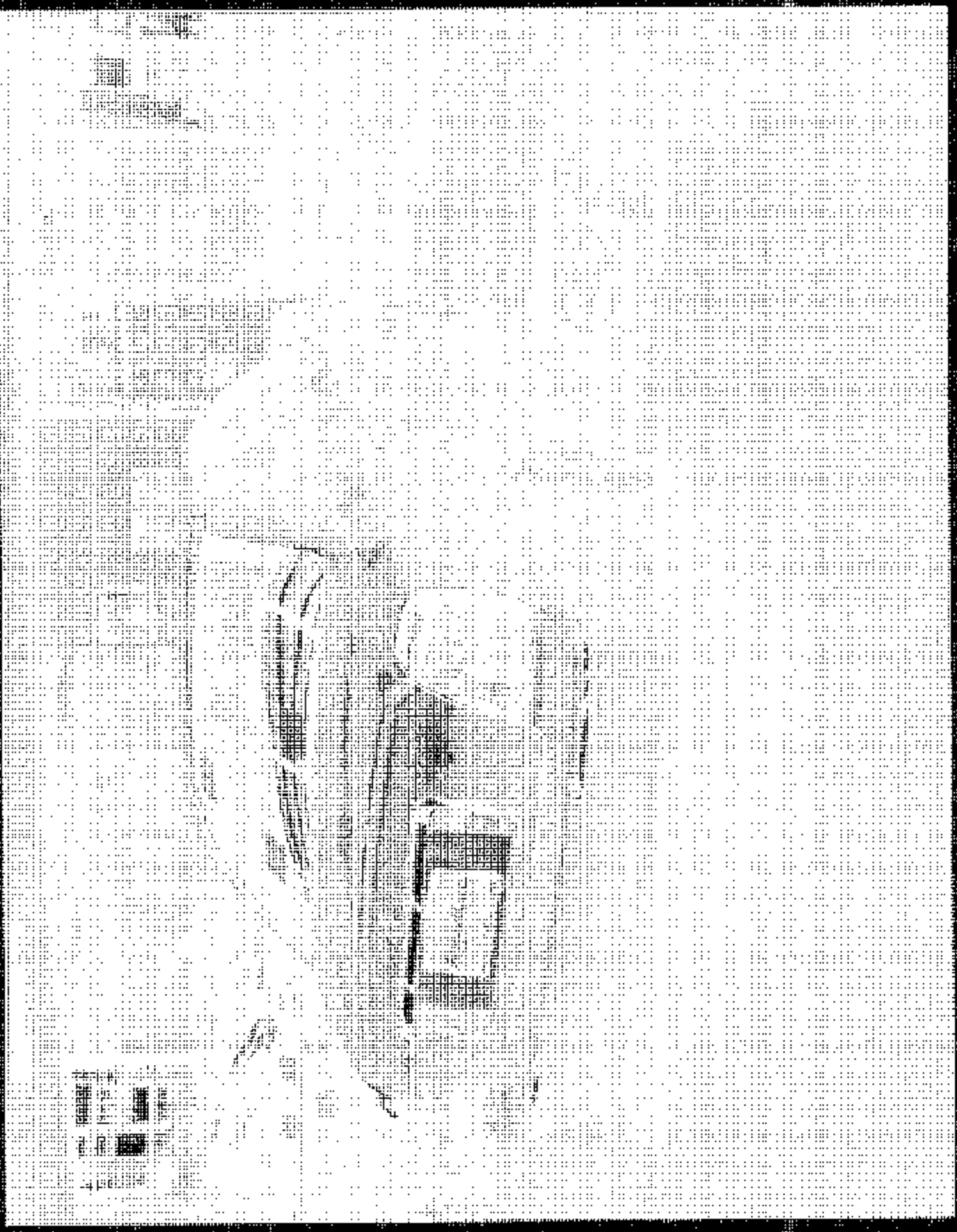
4.0 - Test Equipment List and Calibration Information

EQUIPMENT	DESCRIPTION	MODEL/SERIAL NO.	CALIBRATION DATE	NEXT CAL. DATE
Force Transducer	Shimpo Force Gauge	Model MF-50 KG	12/09/03	Manufacturer

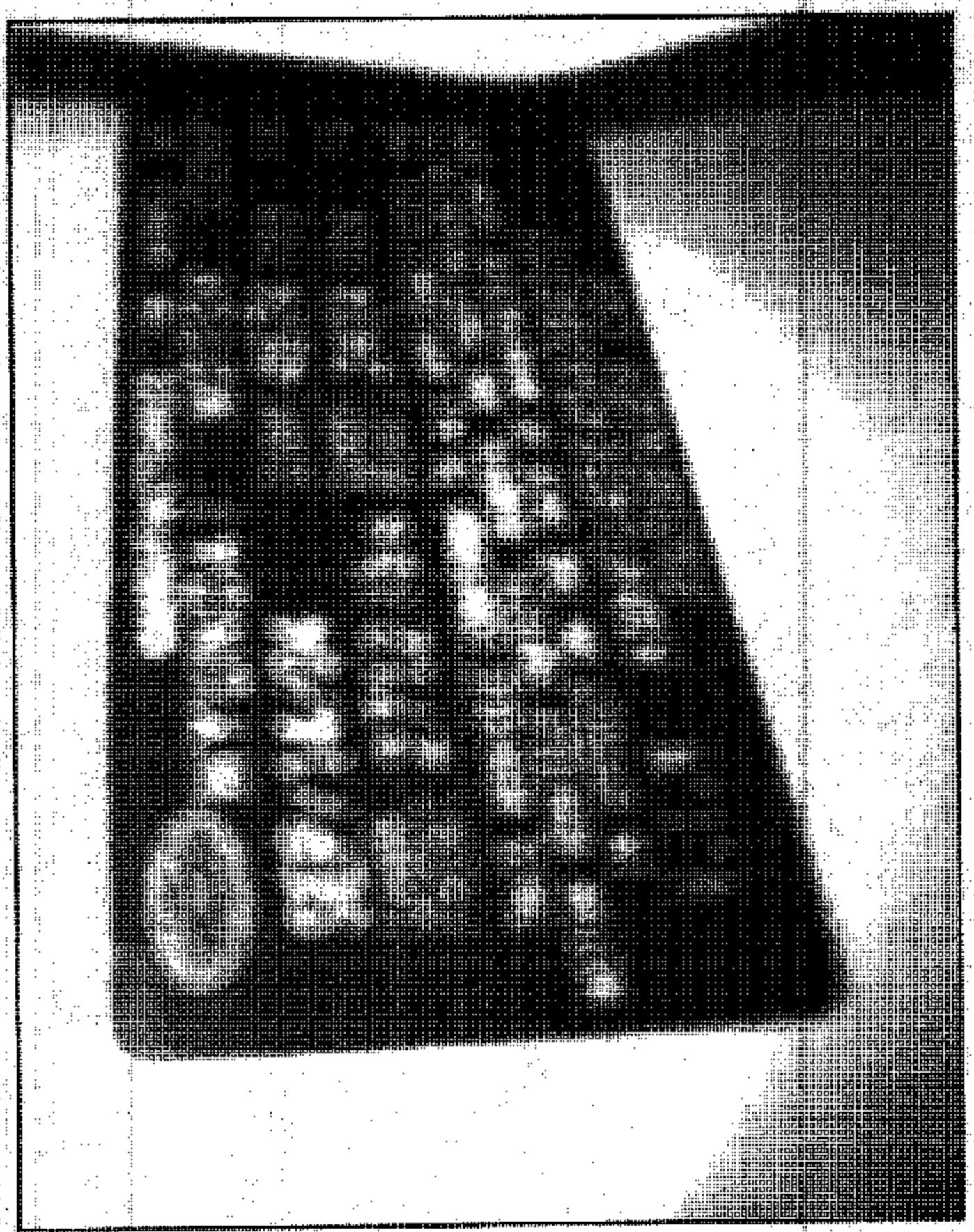
5.0 - Photographs



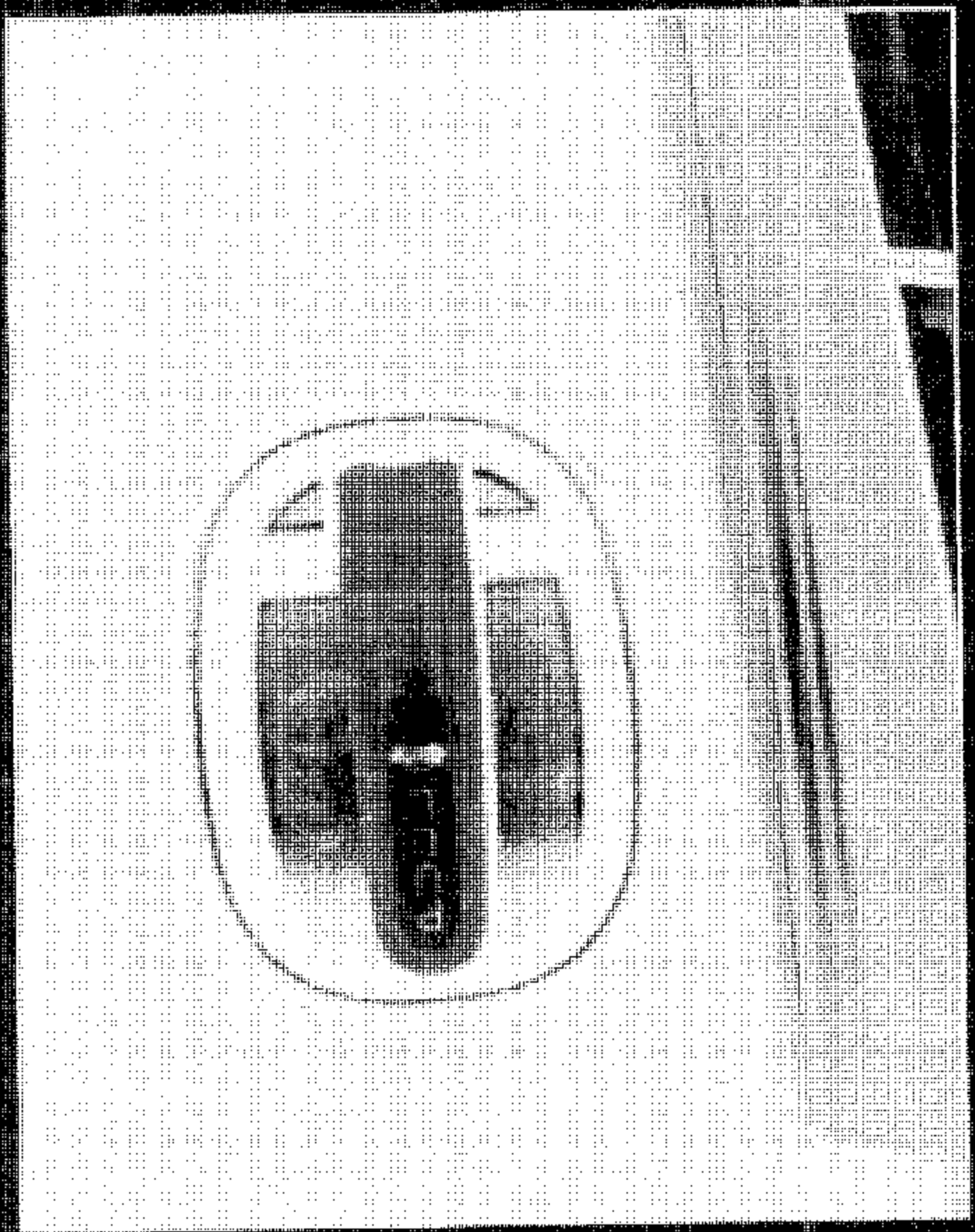
Vehicle Front



Vehicle Rear



Certification Label



Trunk Release Handle/Lever