

**SAFETY COMPLIANCE TESTING FOR
FMVSS 401
Interior Trunk Release**

**2003 Toyota Corolla 4-Door
NHTSA No. C35104**

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FINAL REPORT

PREPARED FOR:

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Date: _____

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16. Abstract A compliance test was conducted on the subject 2003 Toyota Corolla 4-Door, NHTSA No. C35104 in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-401-01 for the determination of FMVSS 401 compliance. The test was conducted at Karco Testing Laboratories in Adelanto, California by NHTSA personnel on July 16, 2003. Test failures identified 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 2003 Toyota Corolla 4-Door, 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 at Karco Testing Laboratories in Adelanto, California on July 16, 2003 by a NHTSA Office of Safety Compliance test engineer.

2.0 TEST PROCEDURE AND DISCUSSION OF RESULTS

Based on the test performed, the 2003 Toyota Corolla 4-Door, NHTSA No. C35104 appeared to meet the requirements of FMVSS 401.

The vehicle was tested by entering the trunk and closing the lid. The release handle 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 11 newtons (2.5 lbs.) or less.

3.0 COMPLIANCE TEST DATA

DATA SHEET 1

FMVSS 401 - VEHICLE DESCRIPTION

VEHICLE MY/MAKE/MODEL 2003/TOYOTA /COROLLA

BODY STYLE: 4-DOOR

VEH. NHTSA NO.: C35104 ; VIN: 1NXBR32E93Z115536

DATE OF TEST: 07/16/03

TEST LAB: BY OVSC @ KARCO

GVWR: 1629 KG

MANUFACTURED DATE: 11/02

TRUNK LOCATION: REAR X FRONT _____

If Front, Front Opening? na

NUMBER OF TRUNK LID LATCHING POSITIONS: 1

INTERIOR TRUNK RELEASE: MANUAL X; AUTOMATIC _____;

BOTH _____

POWER OPERATED CLOSURE: na

OWNER'S MANUAL DESCRIPTION OF TRUNK RELEASE: YES X

NO _____

REMOVABLE EQUIPMENT DELIVERED IN TRUNK:

SPARE TIRE: X (SIZE) T125/70R1696M

TIRE JACK: X

LUG WRENCH: X

TOOL BOX: _____ (SIZE) _____

PARTITIONS: _____

OTHER: _____

REMARKS:

RECORDED BY: SSe

DATE: 7/16/03

APPROVED BY: S. Seigel

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: 2003/TOYOTA / COROLLA/4-DR

VEH. NHTSA NO.: C35104 ; VIN: 1NXBR32E93Z115536

DATE OF TEST: 7/16/03

Method used to actuate interior trunk release: Rotating Lever (Grab handle, Rotating lever, etc.)

Can test personnel enter trunk and be closed within: Yes X 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 X No

Does Release Mechanism require electric power: Yes No X

Can release mechanism be easily seen inside the closed trunk: Yes X 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	* note * Force Required to Release Trunk Lid (Newtons) [no requirement]	Trunk Released from <u>All</u> latching positions	Pass/Fail
Attempt 1	11 N - 2.5 pounds	Yes	pass
Attempt 2	11 N - 2.5 pounds	Yes	pass
Attempt 3	11 N - 2.5 pounds	Yes	pass
Average -	11N - 2.5 pounds		

* Note -- Force applied at end of lever (5" from pivot point)

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)	Force Required to Release Trunk Lid (Newtons) [no requirement]	Trunk Released from <u>All</u> latching positions	Pass/Fail
ENGINE IDLING			
Attempt 1			
Attempt 2			
Attempt 3			
Average -			

Vehicle Speed (km/h)	Force Required to Release Trunk Lid (Newtons) [no requirement]	Trunk Released from <u>All</u> latching positions	Pass/Fail
10			
20			
30			

Describe method used to propel vehicle: _____

PASS X FAIL _____

REMARKS:

RECORDED BY: SSe

DATE: 7/16/03

APPROVED BY: S. Seigel

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	X		Manual release lever handle
If manual release, lighting feature is included. S4.2(a)	X		Self Lighting
If automatic release, unlatches trunk lid within 5 minutes. S4.2(b)	na		
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)	X		Single Latch Position Only
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)	na		

PASS **X** FAIL

REMARKS: RECORDED BY: **SSe**

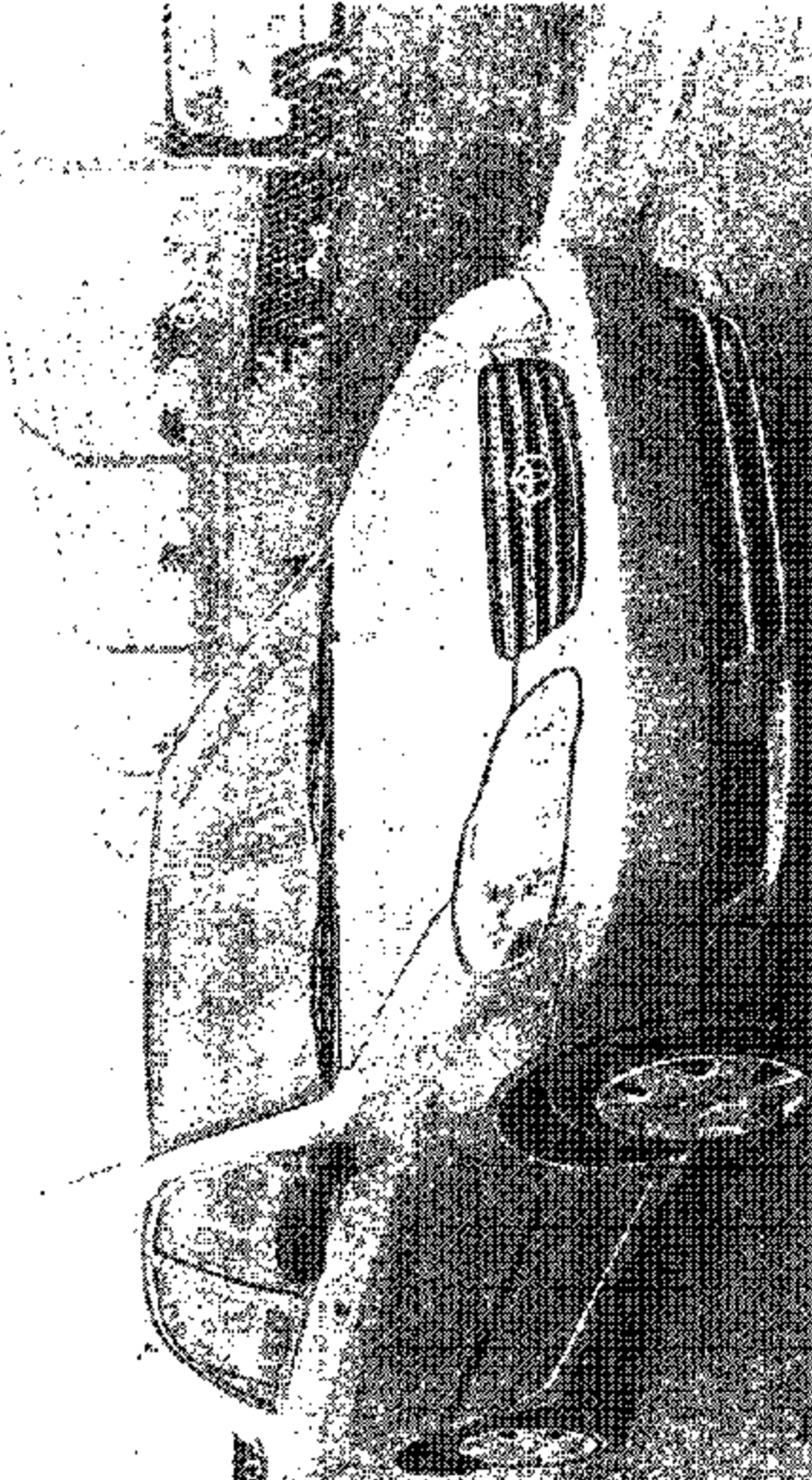
APPROVED BY: **S.Seigel**

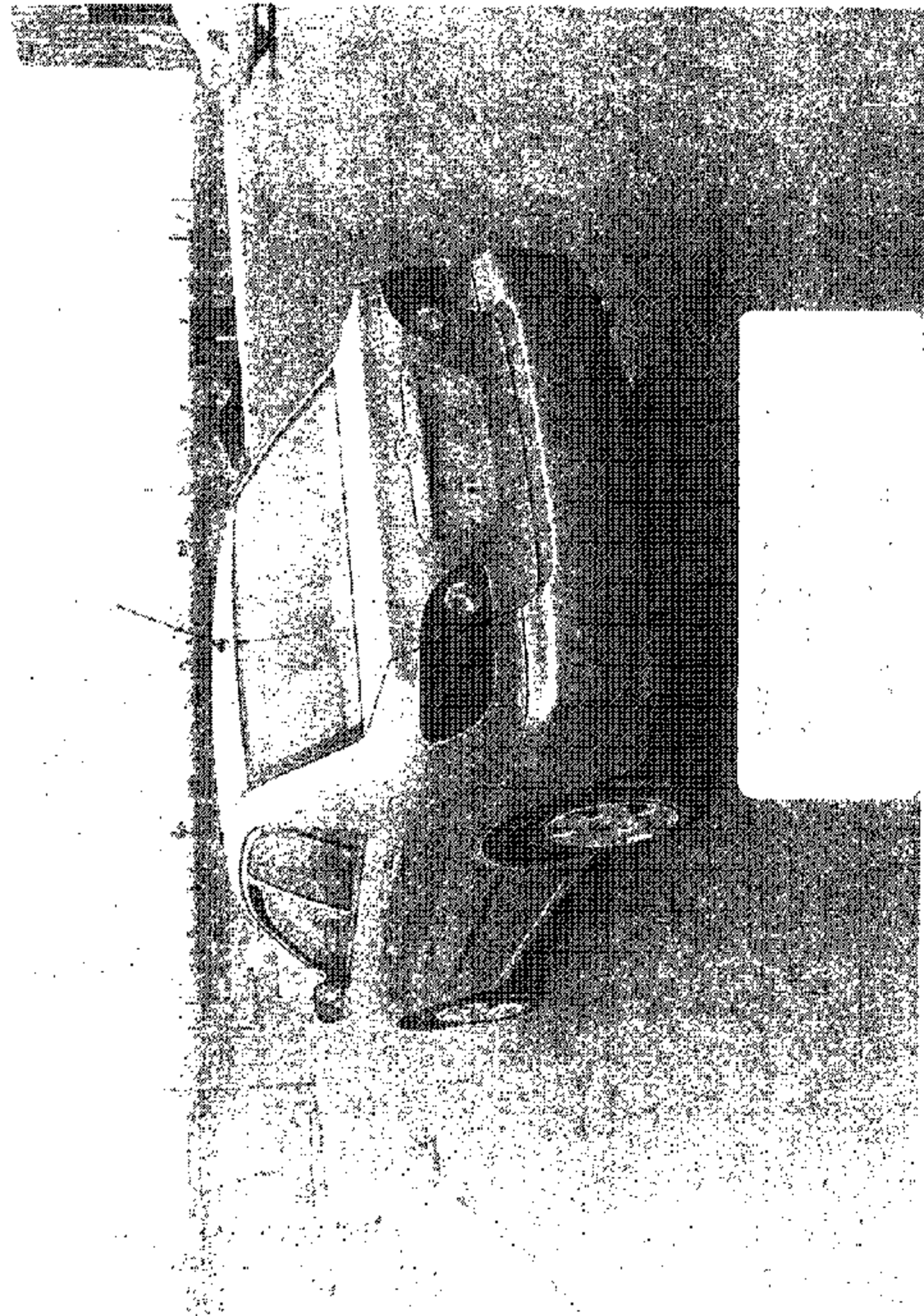
DATE: **7/16/03**

4.0 - Test Equipment List and Calibration Information

EQUIPMENT	DESCRIPTION	MODEL/SERIAL NO.	CALIBRATION DATE	NEXT CAL. DATE
Force Transducer	Jonard Tools	Part #GPP-72	Manufacturer	Manufacturer

5.0 - Photographs





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Figure 1



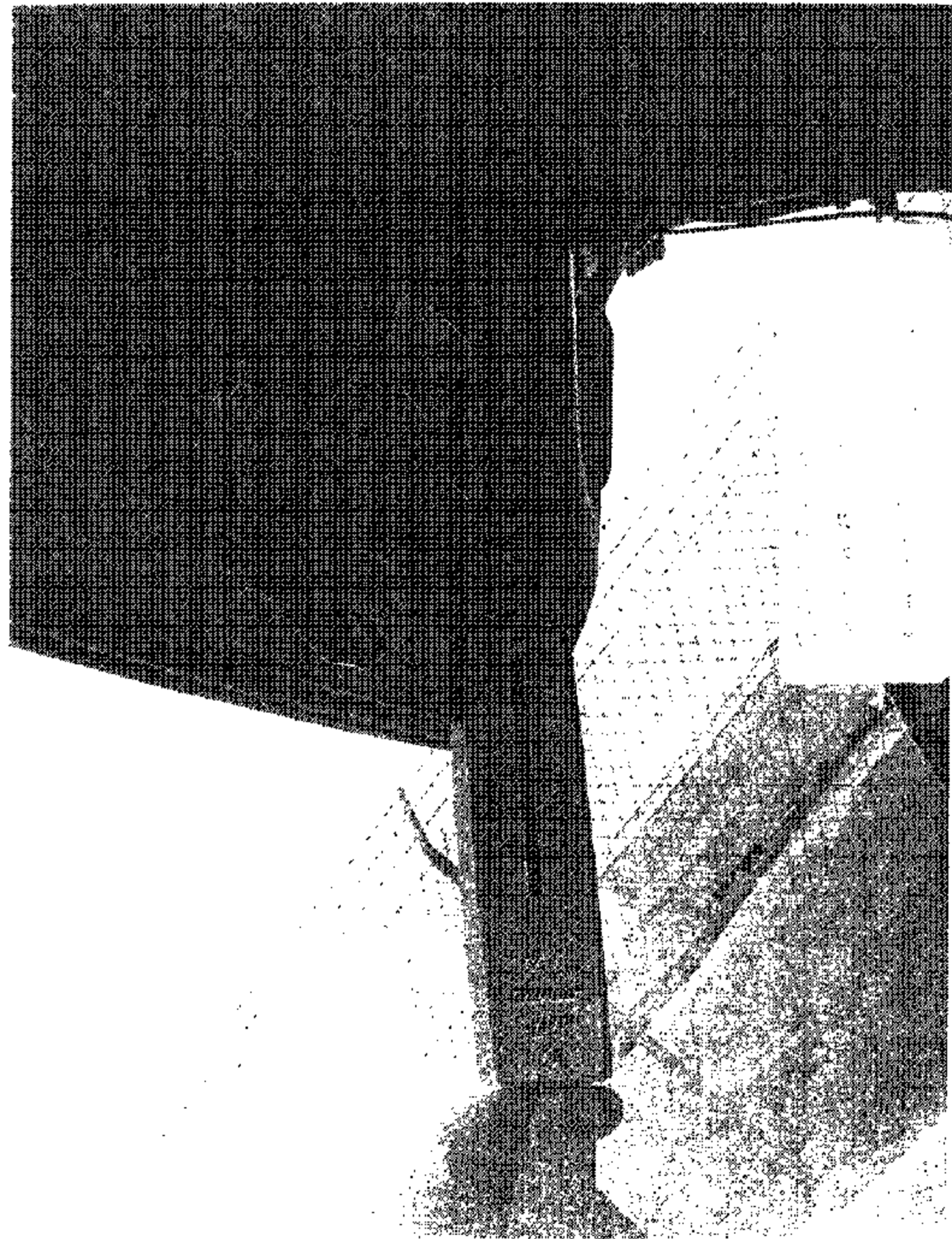
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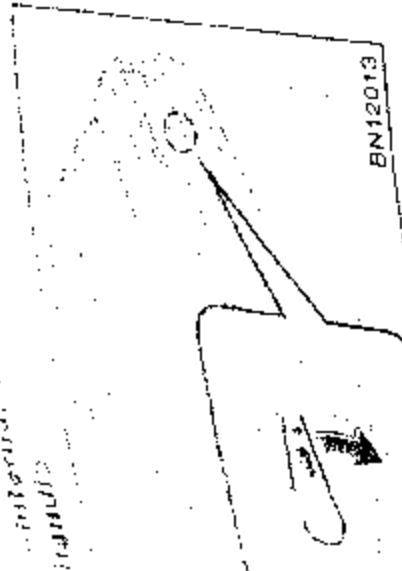
2003 Toyota Corolla
40153. #116,400
W4031# 35104

2003 Toyota Corolla
40153. #116,400
W4031# 35104



6.0 Vehicle Owner's Manual (applicable pages)

Trunk release



BN12013

If a person is locked in the trunk, he/she can pull down the phosphorescent handle on the inside of trunk lid to open the trunk lid.

The phosphorescent (glow-in-the-dark) handle will continue to glow for a time after the trunk lid is closed. Exposing the handle to stronger light will cause it to glow longer.

CAUTION

- Always lock the trunk lid and doors, and keep away the vehicle keys out of children's reaches.
- Never leave children unattended in the vehicle. Unsupervised children may lock themselves in the vehicle or trunk and suffer serious injury or death.



BN120

TVIP is a theft deterrent system. Someone attempts to damage or break into your vehicle, the system sounds the alarm while flashing the lights.