

NISSON

2-18-2013

ATTACHMENT C

R50

FMVSS Test Report

AND

WD21 FMVSS Test Report

PG 51

EA12-005

NISSAN

2/18/2013

Attachment C

R50

R50 FMVSS Test Report

4. TEST CONDITIONS

(1) REASON ABOUT THE SELECTION OF TEST VEHICLE

The test vehicle was selected by the reason that the fuel system, rear body construction and rear suspension for applied models do not have any differences which influence on the performance of this crash.

The weight of test vehicle was set up the maximum weight among application models.

(2) WEIGHT CONDITION

(units : kg)

	TOTAL	FRONT	REAR
* DESIGN WEIGHT	2 2 2 3	1 1 2 3	1 1 0 0
TEST WEIGHT	2 2 2 3	1 0 9 2	1 1 3 1

* Vehicle Type TLPZLVAR50 with FULL OPTION

CARDO & LUGGAGE WEIGHT	<p style="text-align: right;">1 3 6 kg</p> <p>Loading Position : Luggage Room</p>
WEIGHT ADJUSTMENT	<p style="text-align: right;">5 5 kg</p>
DUMMY	<p>TYPE OF DUMMY : HYB-2(PART572 Subpart B)</p> <p>DUMMY POSITION : each front outboard seating position</p> <p>RESTRAINT SYSTEM : Driver : Air bag device with active belt (three points)</p> <p style="padding-left: 150px;">: Passenger : Air bag device with active belt (three points)</p> <p>SEAT POSITION :</p> <p>SEAT BACK :Driver : Nominal design position (7 notch front most)</p> <p style="padding-left: 100px;">Passenger : Nominal design position (7 notch front most)</p> <p>SEAT SLIDE:Driver : Midway or the closest position to the rear or it (120 mm from front most)</p> <p style="padding-left: 100px;">Passenger : Midway or the closest position to the rear of it (120 mm from front most)</p>

(3) VEHICLE CONDITION

*means specified in this standard.

FUEL TANK	Usable Capacity: <u>79</u> l Charged Volum: <u>75</u> l (<u>95</u> %) Test Fluid Name: <u>Shell Laws</u> Specific gravity: <u>0.79</u> Used the fluid specified in Table 1 ASTM D484-71.
IGNITION KEY POSITION	ON
FUEL PUMP OPERATION	(<u>YES</u>), NO)
*PARKING BRAKE	Disengaged
*TRANSMISSION	Neutral
TIRE PRESSURE	Front: <u>196</u> kpa Rear: <u>196</u> kpa
STEERING COLUM POSITION	Tilt: Midpoint of swing or normal design position Telescopic: Midpoint of stroke None
HOOD	Fully closed and latched
WIPER	Not operated
TEMPERATURE	Inside of the vehicle : <u>25</u> ° C Test site : <u>25</u> ° C Wind Shield Moulding: <u>25</u> ° C
DOOR & TRUNKLID (REAR GATE)	Fully Closed and Latched but not locked
SIDE WINDOW GLASS	Front Right (Opened, <u>Closed</u>) Rear Right (Opened, <u>Closed</u>) Front Left (Opened, <u>Closed</u>) Rear Left (Opened, <u>Closed</u>)
OTHER FLUID	Radiator (Normal, <u>Drained</u>) Battery (Normal, <u>Drained</u>) Washer (Normal, <u>Drained</u>) Oil (Normal, <u>Drained</u>)
OPTIONAL EQUIPMENT	SUN ROOF SIDE STEP
TOOLS & JACK	Installed
REMOVED PARTS	None

5. TEST DATE

5.1 Detailed data of fuel leakage tests.

See table 1 & 2.

5.2 Photos graph of the test vehicle pretest and posttest.

See photo graph No.1~24.

Table 1, FUEL LEAKAGE MEASUREMENT IN BARRIER CRASH TEST

Item	Location	Fuel Tank	Fuel Piping	Fuel Strainer	fuel Pump	Canister	Carburetor	Others
Damage to component. If yes, describe the damage.		Yes · <input checked="" type="radio"/> No	Yes · <input checked="" type="radio"/> No	Yes · <input checked="" type="radio"/> No	Yes · No	Yes · <input checked="" type="radio"/> No	Yes · No	Yes · <input checked="" type="radio"/> No
Front impact until vehicle motion ceases.		None	None	None		None		None
For 5 minutes period after vehicle motion ceases. ----- For next 25 minutes.		↑	↑	↑		↑		↑

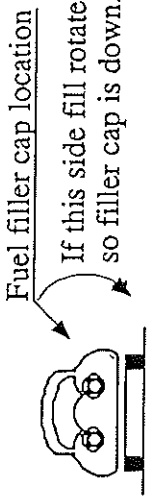


Table 2, FUEL LEAKAGE MEASUREMENT IN STATIC ROLLOVER TEST

Phase of Rotation	Time Period(min.)	Fuel Tank	Fuel Piping	Fuel Strainer	Fuel Pump	Carburetor	Others
Rotation 0° 90°	2						
Hold at 90°	5	None	None	None			None
	1						
Rotation 90° 180°	2						
	5						
Hold at 180°	5						
	1						
Rotation 180° 270°	2						
	5						
Hold at 270°	5						
	1						
Rotation 270° 360°	2						
	5						
Hold at 360°	5						
	1						

Rotate so filler cap is down

	Film No.
Photo. No.1	57-149
Photo. No.2	4
Photo. No.3	
Photo. No.4	

Test Report No. _____



Photo .No.1 PRETEST
SUBJECT: Side view

Photo. No.2 POSTTEST
SUBJECT: Side view



Photo. No.3 PRETEST
SUBJECT: Rear view

Photo. No.4 POSTTEST
SUBJECT: Rear view

	Film No.
Photo. No.5	57-149
Photo. No.6	4
Photo. No.7	
Photo. No.8	

Test Report No. _____

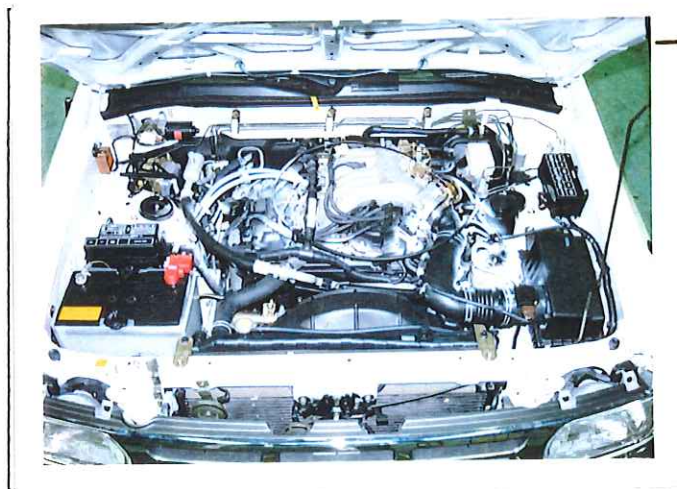


Photo .No.5 PRETEST
 SUBJECT: Engine compartment view



Photo. No.6 POSTTEST
 SUBJECT: Engine compartment view



Photo. No.7 PRETEST
 SUBJECT: Front underbody view

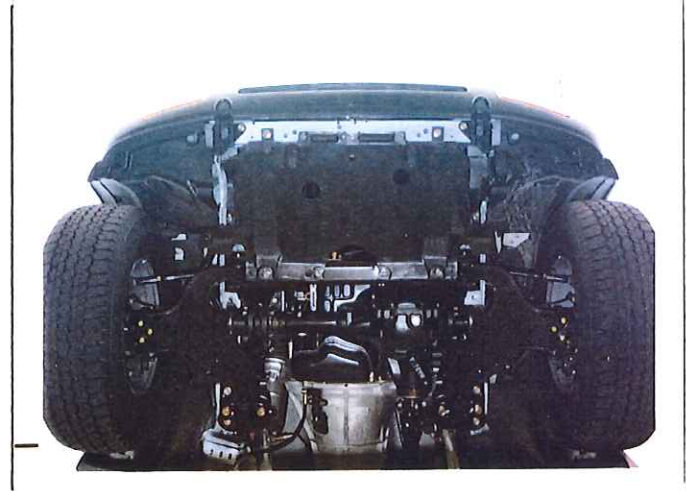


Photo. No.8 POSTTEST
 SUBJECT: Front underbody view

	Film No.
Photo. No.9	87-149
Photo. No.10	4
Photo. No.11	
Photo. No.12	

Test Report No. _____

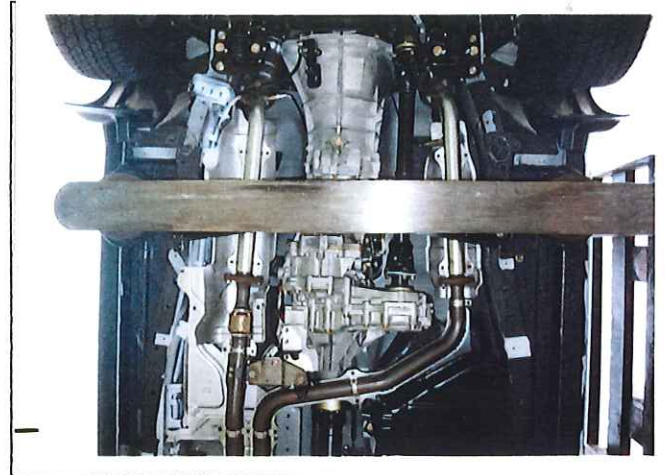
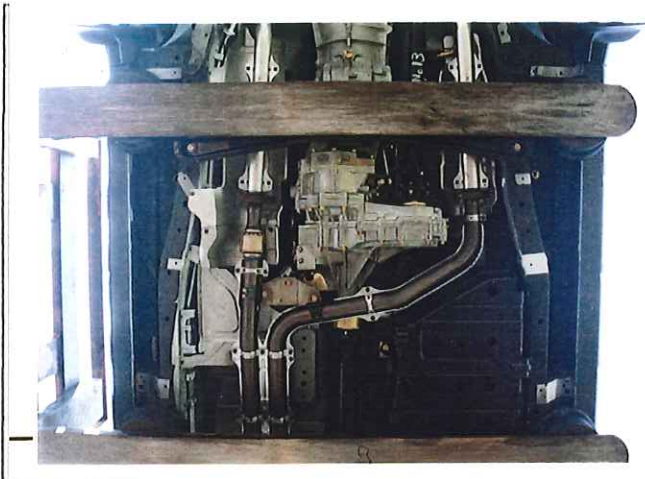


Photo. No.9 PRETEST
SUBJECT: Center underbody view front

Photo. No.10 POSTTEST
SUBJECT: Center underbody view front

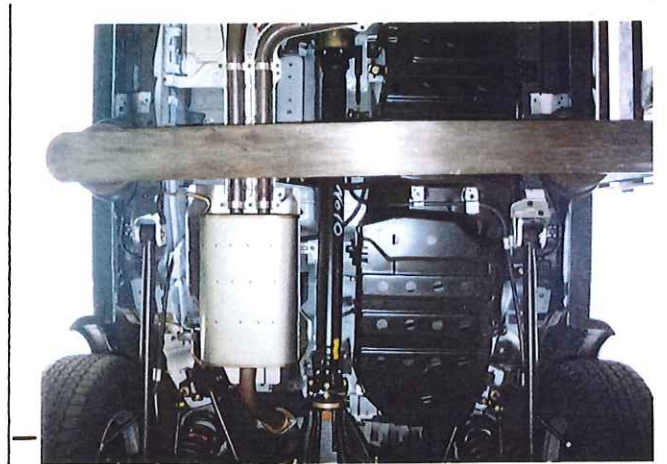
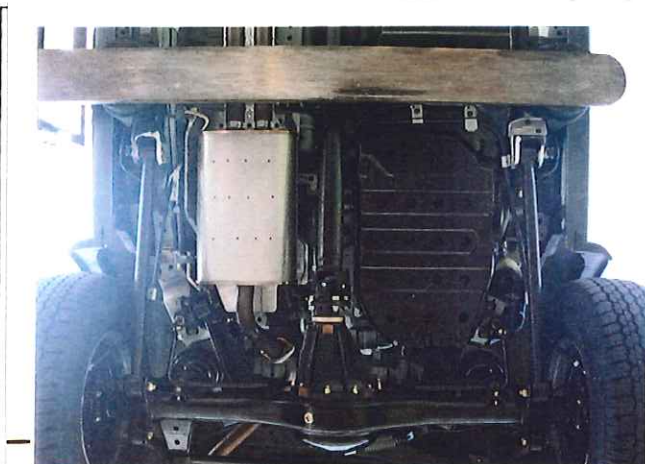


Photo. No.11 PRETEST
SUBJECT: Center underbody view rear

Photo. No.12 POSTTEST
SUBJECT: Center underbody view rear

	Film No.
Photo. No.13	57-149
Photo. No.14	4
Photo. No.15-	
Photo. No.16	

Test Report No. _____

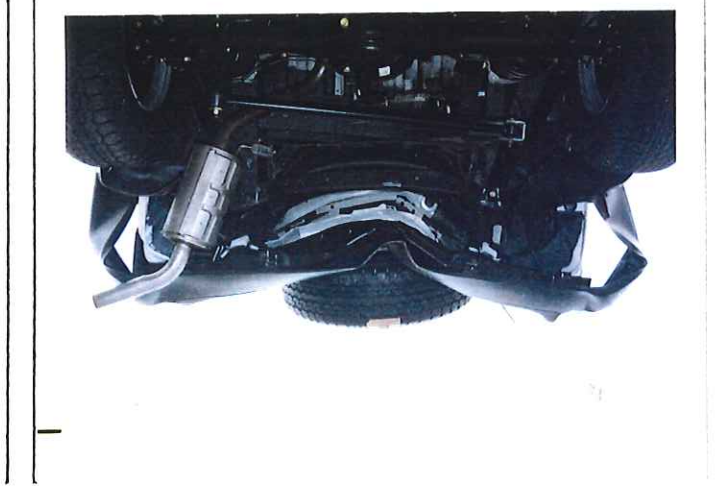


Photo .No.13 PRETEST
SUBJECT: Rear underbody view

Photo. No.14 POSTTEST
SUBJECT: Rear underbody view

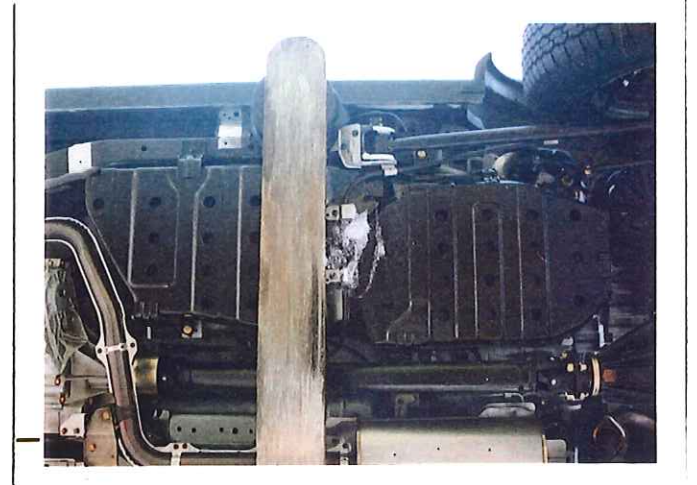
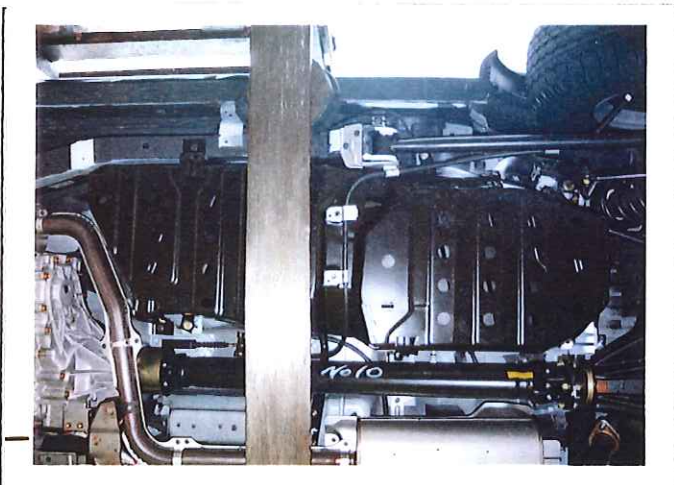


Photo. No.15 PRETEST
SUBJECT: Fuel tank view

Photo. No.16 POSTTEST
SUBJECT: Fuel tank view

	Film No.
Photo. No.17	57-149
Photo. No.18	4
Photo. No.19	
Photo. No.20	

Test Report No. _____



Photo. No.17 PRETEST

Photo. No.18 POSTTEST

SUBJECT: Filler hose view

SUBJECT: Filler hose view

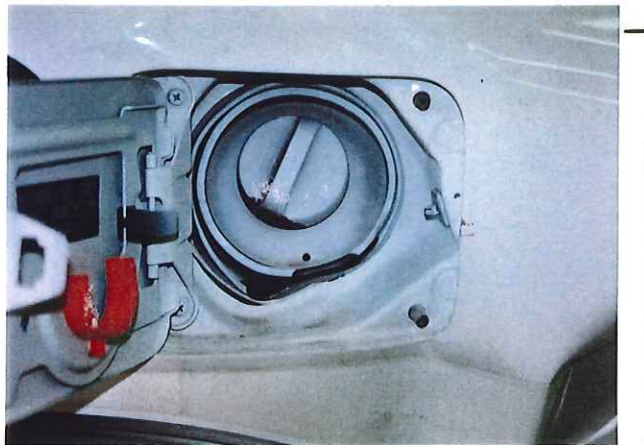


Photo. No.19 PRETEST

Photo. No.20 POSTTEST

SUBJECT: Fuel filler cap view

SUBJECT: Fuel filler cap view

	Film No.
Photo. No.21	S7-149
Photo. No.22	4
Photo. No.23	
Photo. No.24	

Test Report No. _____



Photo .No.21 POSTTEST

Photo. No.22 POSTTEST

SUBJECT: Static rollover 0°

SUBJECT: Static rollover 90°

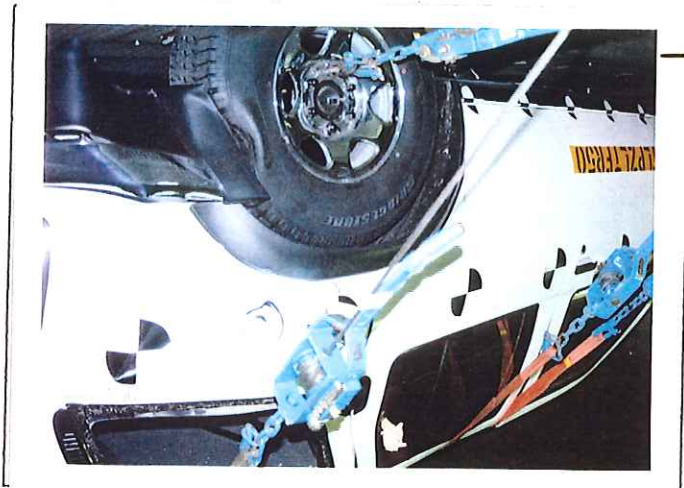


Photo. No.23 POSTTEST

Photo. No.24 POSTTEST

SUBJECT: Static rollover 180°

SUBJECT: Static rollover 270°

(3) VEHICLE CONDITION

*means specified in this standard.

FUEL TANK	Usable Capacity: <u>79 l</u> Charged Volum: <u>75 l (95 %)</u> Test Fluid Name: <u>SHELL LAWS</u> Specific gravity: <u>0.79</u> Used the fluid specified in Table 1 ASTM D484-71.
IGNITION KEY POSITION	ON
FUEL PUMP OPERATION	(YES , <input checked="" type="radio"/> NO)
*PARKING BRAKE	Disengaged
*TRANSMISSION	Neutral
TIRE PRESSURE	Front: <u>196</u> kpa Rear: <u>196</u> kpa
STEERING COLUM POSITION	Tilt: <input checked="" type="radio"/> Midpoint of swing or nomial design position Telescopic: Midpoint of stroke None
HOOD	Fully closed and latched
WIPER	Not operated
TEMPERATURE	Inside of the vehicle : <u>26</u> ° C Test site : <u>26</u> ° C Wind Shield Moulding: <u>26</u> ° C
DOOR & TRUNKLID (REAR GATE)	Fully Closed and Latched but not locked
SIDE WINDOW GLASS	Front Right (Opened, <input checked="" type="radio"/> Closed) Rear Right (Opened, <input checked="" type="radio"/> Closed) Front Left (Opened, <input checked="" type="radio"/> Closed) Rear Left (Opened, <input checked="" type="radio"/> Closed)
OTHER FLUID	Radiator (Normal , <input checked="" type="radio"/> Drained) Battery (Normal , <input checked="" type="radio"/> Drained) Washer (Normal , <input checked="" type="radio"/> Drained) Oil (Normal , <input checked="" type="radio"/> Drained)
OPTIONAL EQUIPMENT	
TOOLS & JACK	Installed
REMOVED PARTS	NONE

5. TEST DATE

5.1 Detailed data of fuel leakage tests.

See table 1 & 2.

5.2 Photos graph of the test vehicle pretest and posttest.

See photo graph No.1~24.

Table 1, FUEL LEAKAGE MEASUREMENT IN BARRIER CRASH TEST

Item	Lotaition	Fuel Tank	Fuel Piping	Fuel Strainer	fuel Pump	Canister	Carburetor	Others
Damage to component. If yes, describe the damage.		Yes · <input checked="" type="radio"/> No	Yes · <input checked="" type="radio"/> No	Yes · <input checked="" type="radio"/> No	Yes · No	Yes · <input checked="" type="radio"/> No	Yes · No	Yes · <input checked="" type="radio"/> No
Front impact until vehicle motion ceases.		None	None	None		None		None
For 5 minutes period after vehicle motion ceases. For next 25 minutes.		↑	↑	↑		↑		↑

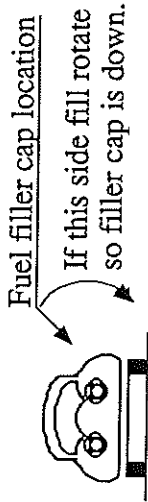


Table 2, FUEL LEAKAGE MEASUREMENT IN STATIC ROLLOVER TEST

Phase of Rotation	Time Period(min.)		Fuel Tank	Fuel Piping	Fuel Strainer	Fuel Pump	Carburetor	Others
Rotation 0° 90°	2							
Hold at 90°	5	5	None	None	None			None
		1	↑	↑	↑		↑	
		1						
Rotation 90° 180°	2							
Hold at 180°	5	5						
		1						
		1						
Rotation 180° 270°	2							
Hold at 270°	5	5						
		1						
		1						
Rotation 270° 360°	2							
Hold at 360°	5	5						
		1						
		1						

Rotate so filler cap is down

	Film No.
Photo. No.1	95 - 4921
Photo. No.2	4

Test Report No. _____



Photo . No.1 PRETEST

SUBJECT : Side view



Photo . No.2 POSTTEST

SUBJECT : Side view

	Film No.
Photo. No.3	'28 - 6 9 2 /
Photo. No.4	

Test Report No. _____



Photo . No.3 PRETEST

SUBJECT : Rear view



Photo . No.4 POSTTEST

SUBJECT : Rear view

	Film No.
Photo. No.5	95 - 4921
Photo. No.6	95 - 4929

Test Report No. _____

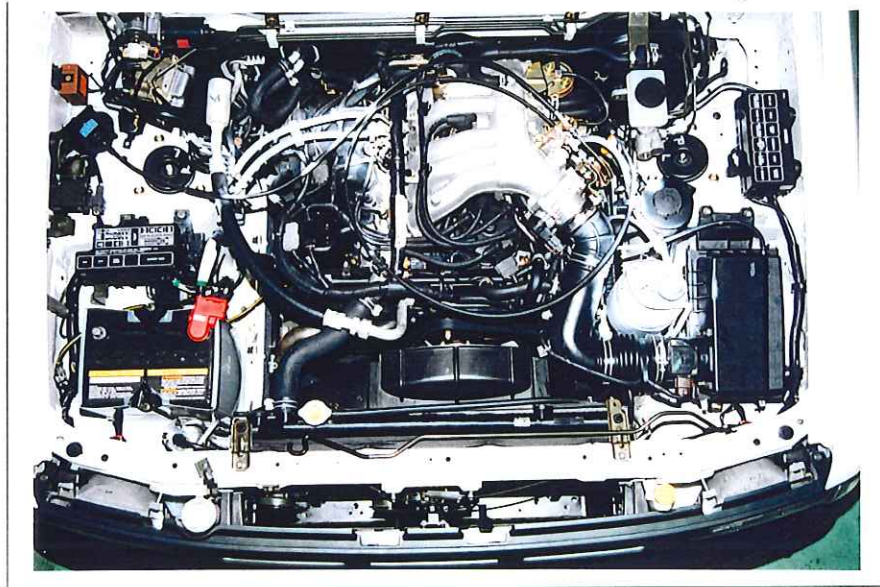


Photo . No.5 PRETEST

SUBJECT : Engine compartment view

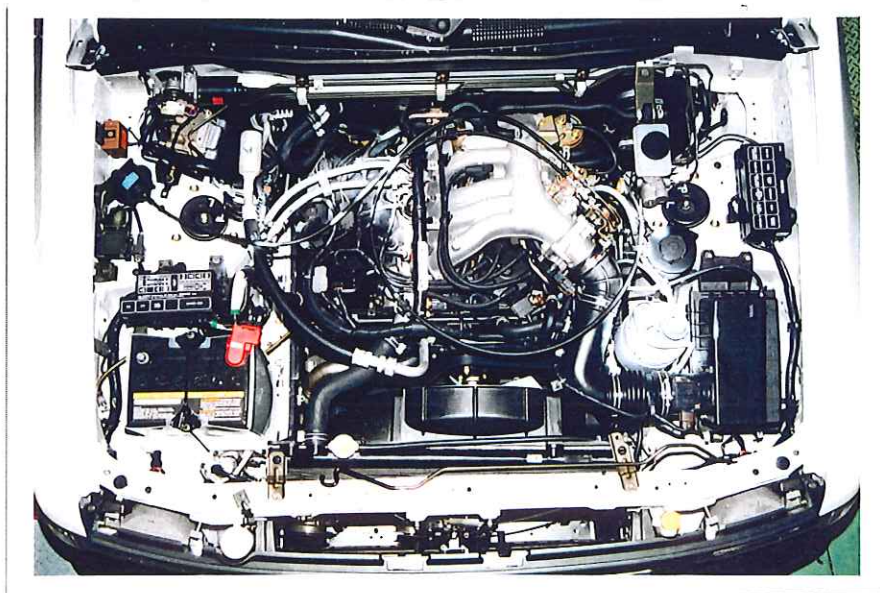


Photo . No.6 POSTTEST

SUBJECT : Engine compartment view

	Film No.
Photo. No.7	95 - 4911
Photo. No.8	95 - 4921

Test Report No. _____

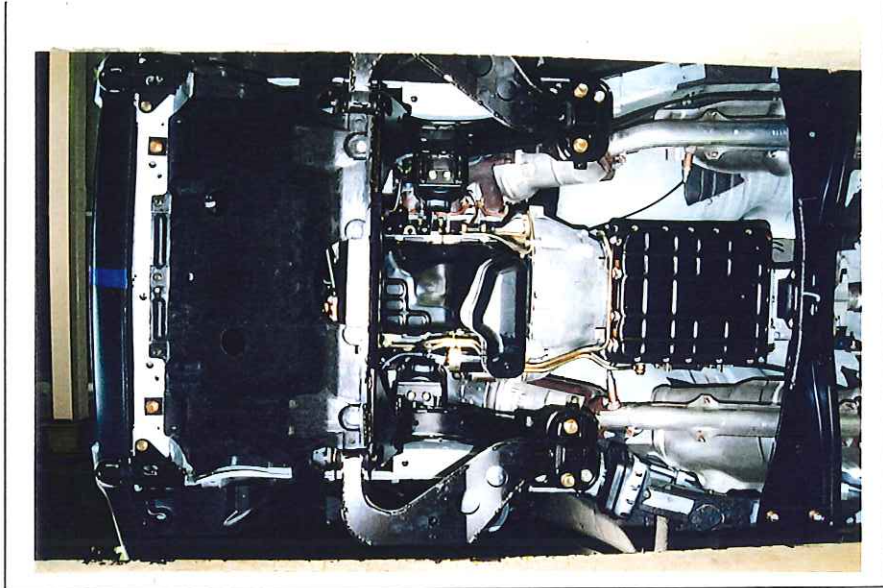


Photo . No.7 PRETEST

SUBJECT : Front underbody view

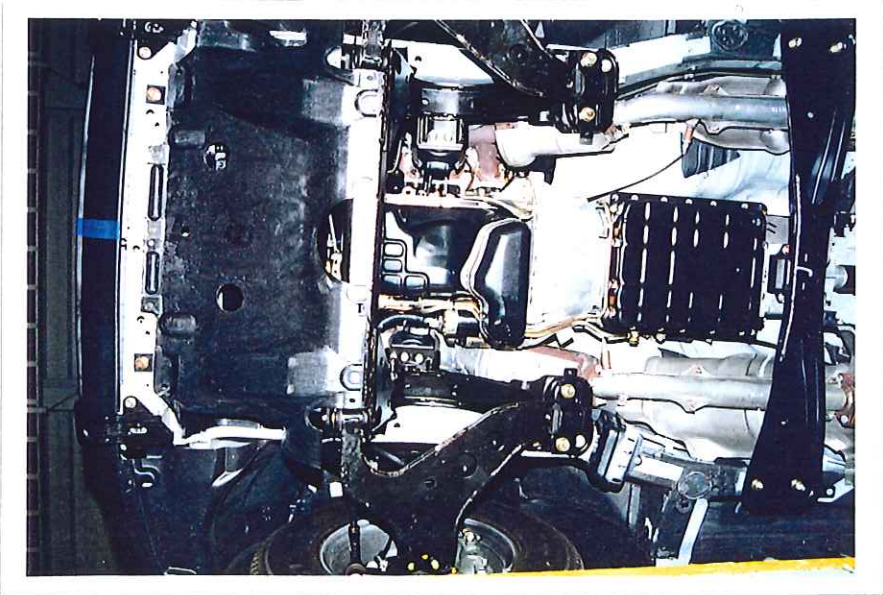


Photo . No.8 POSTTEST

SUBJECT : Front underbody view

	Film No.
Photo. No.9	98-4911
Photo. No.10	98-4921

Test Report No. _____

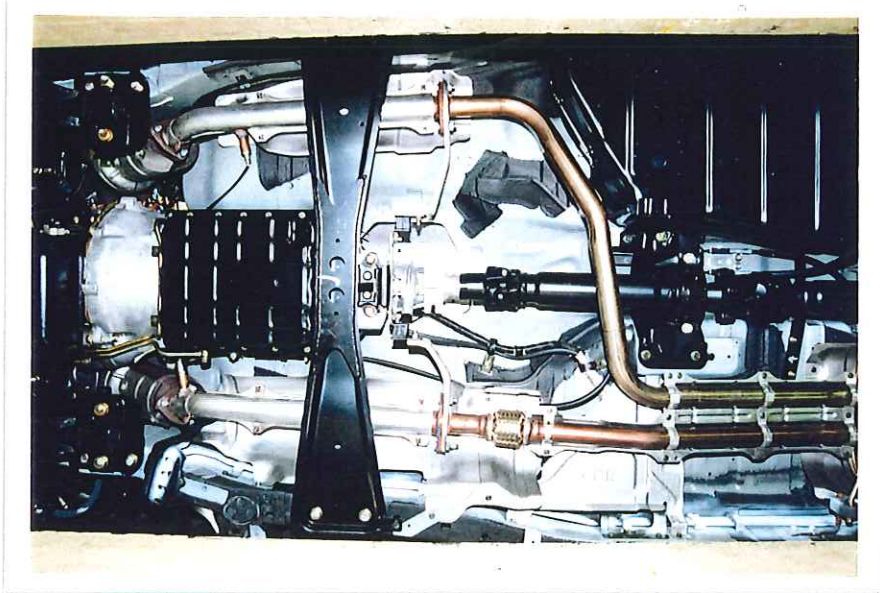


Photo . No.9 PRETEST

SUBJECT : Center underbody view front

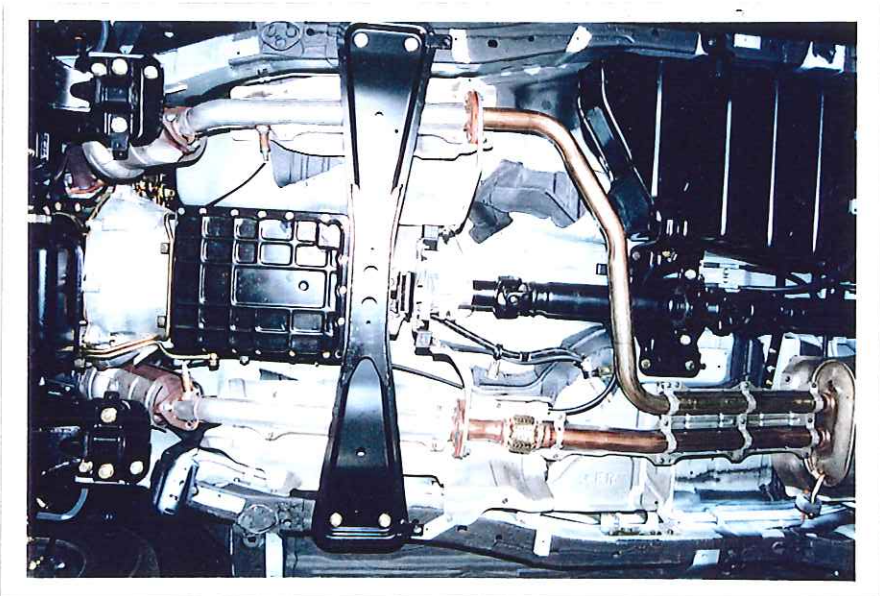


Photo . No.10 POSTTEST

SUBJECT : Center underbody view front

	Film No.
Photo. No.11	95-4911
Photo. No.12	95-4921

Test Report No. _____

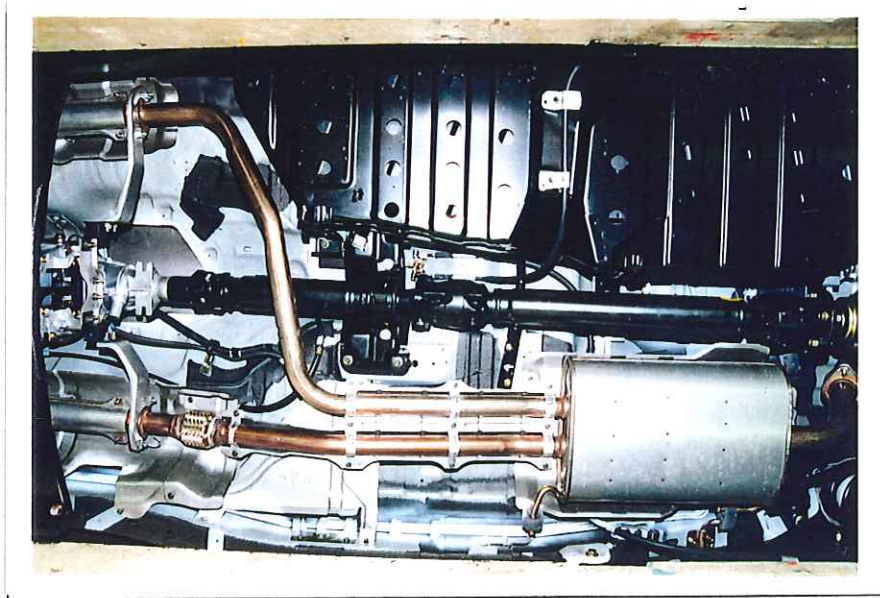


Photo . No.11 PRETEST

SUBJECT : Center underbody view rear

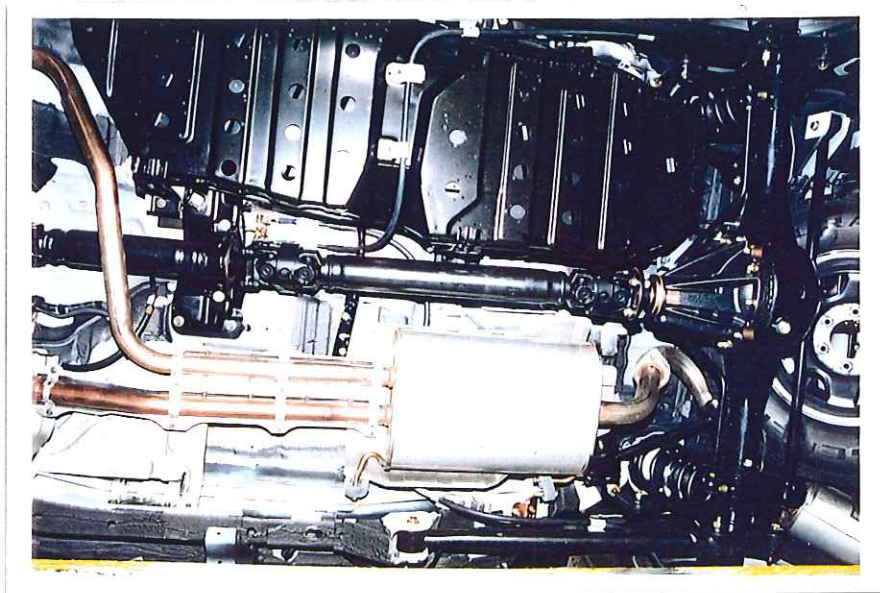


Photo . No.12 POSTTEST

SUBJECT : Center underbody view rear

	Film No.
Photo. No.13	95-4P11
Photo. No.14	95-4P21

Test Report No. _____

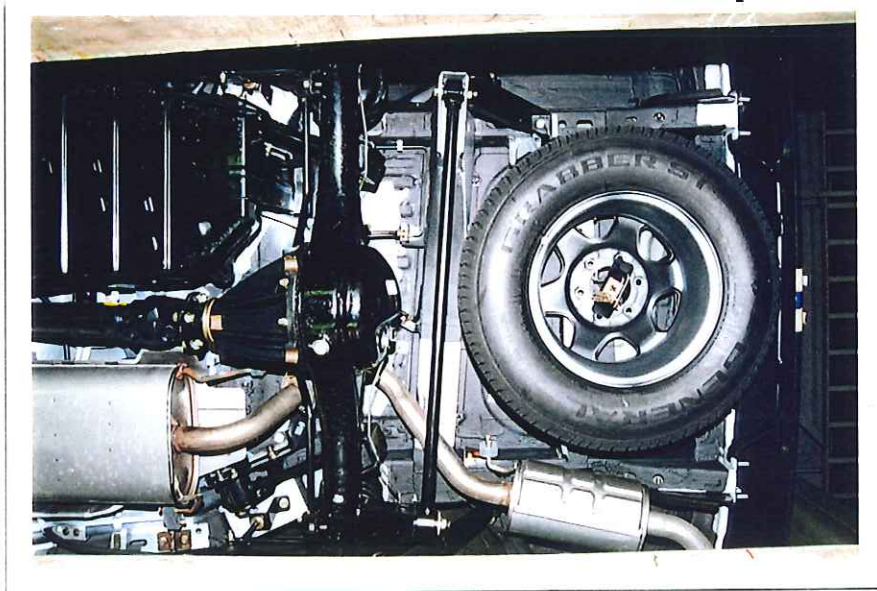


Photo . No.13 PRETEST

SUBJECT : Rear underbody view

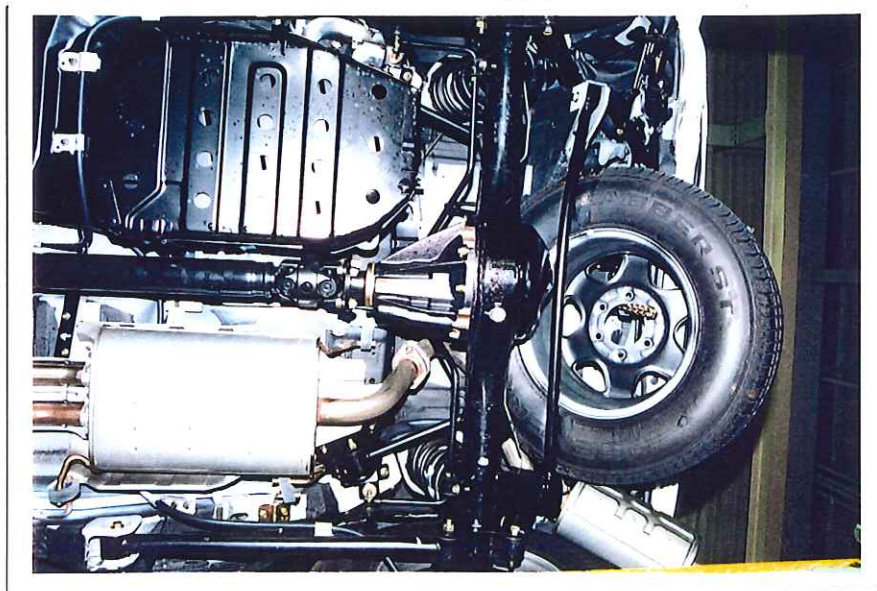


Photo . No.14 POSTTEST

SUBJECT : Rear underbody view

	Film No.
Photo. No.15	'P8 - 4 P 11
Photo. No.16	'P8 - 4 P 21

Test Report No. _____

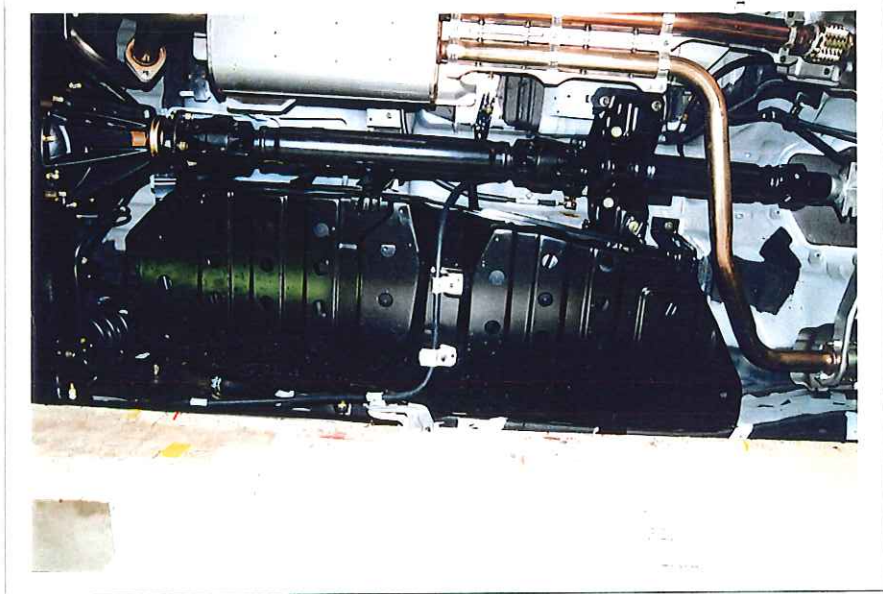


Photo . No.15 PRETEST

SUBJECT : Fuel tank view

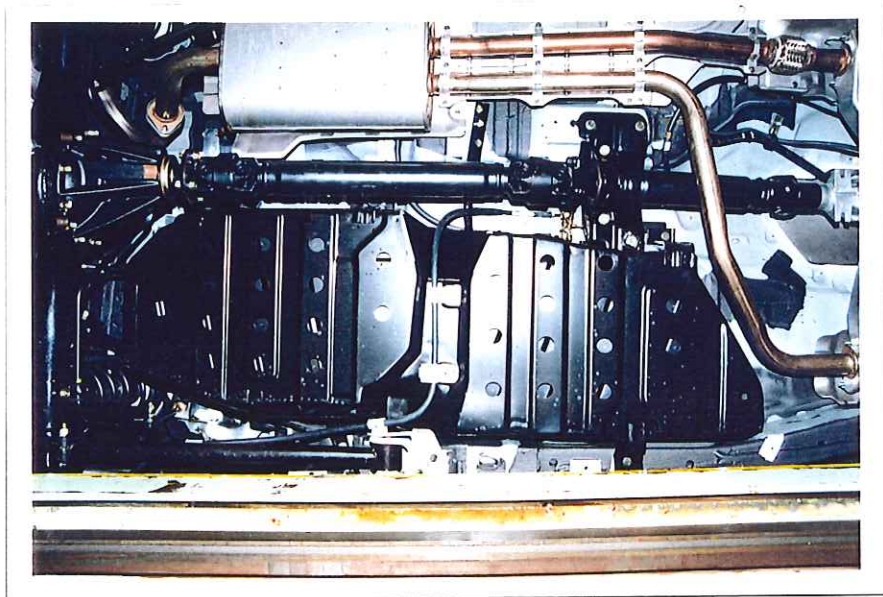


Photo . No.16 POSTTEST

SUBJECT : Fuel tank view

	Film No.
Photo. No.17	'95-4P11
Photo. No.18	'95-4P21

Test Report No. _____

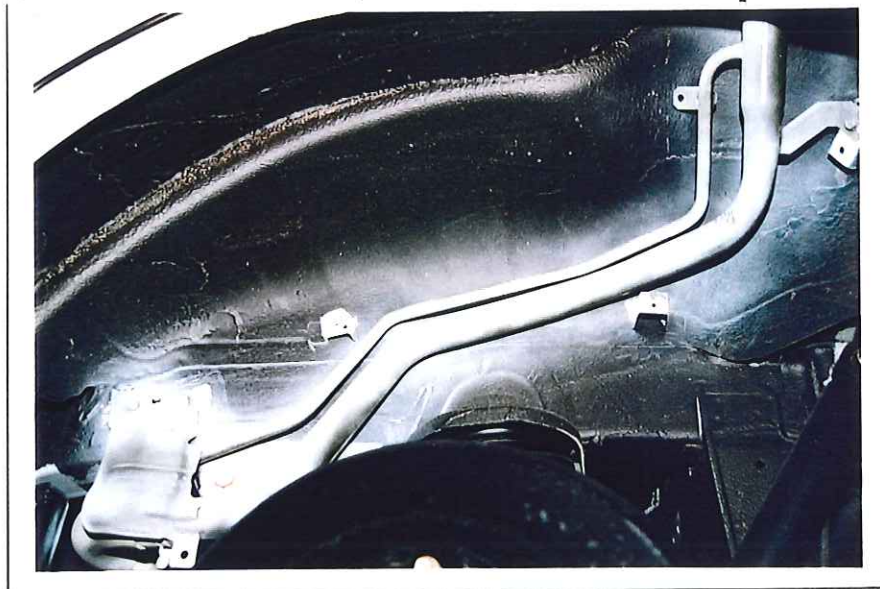


Photo . No.17 PRETEST

SUBJECT : Filler hose view

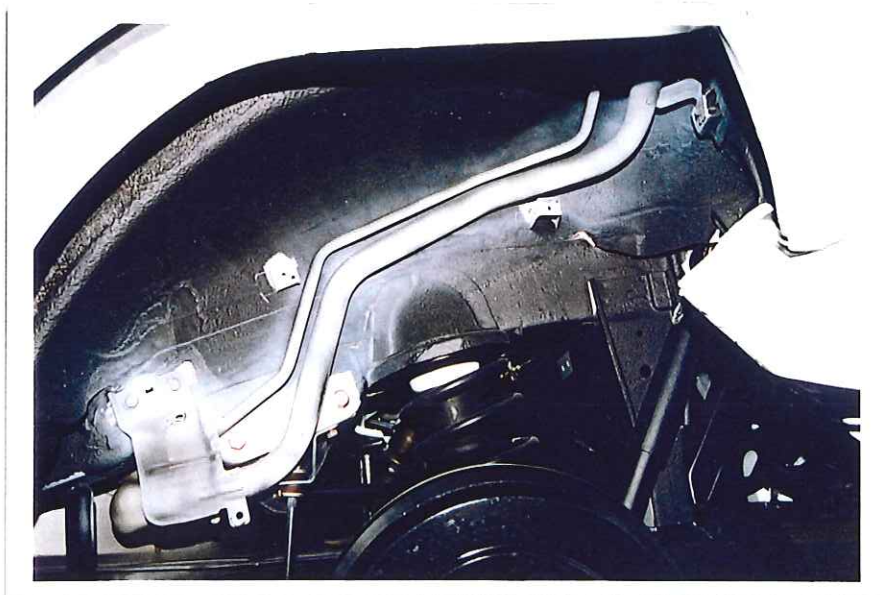


Photo . No.18 POSTTEST

SUBJECT : Filler hose view

	Film No.
Photo. No.19	195-4921
Photo. No.20	4

Test Report No. _____



Photo . No.19 PRETEST

SUBJECT : Fuel filler cap view



Photo . No.20 POSTTEST

SUBJECT : Fuel filler cap view

	Film No.
Photo. No.21	'95-6929
Photo. No.22	4

Test Report No. _____

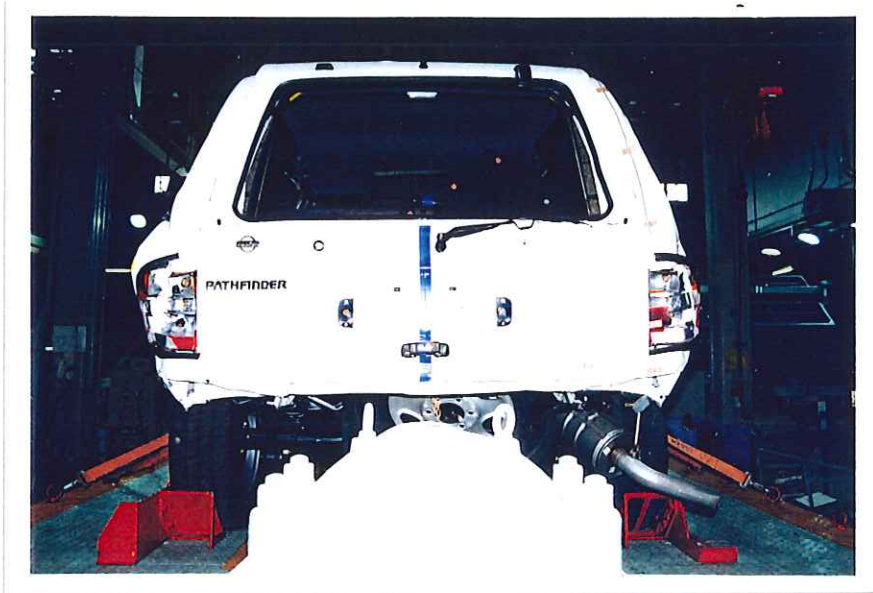


Photo . No.21 POSTTEST

SUBJECT : Static rollover 0°

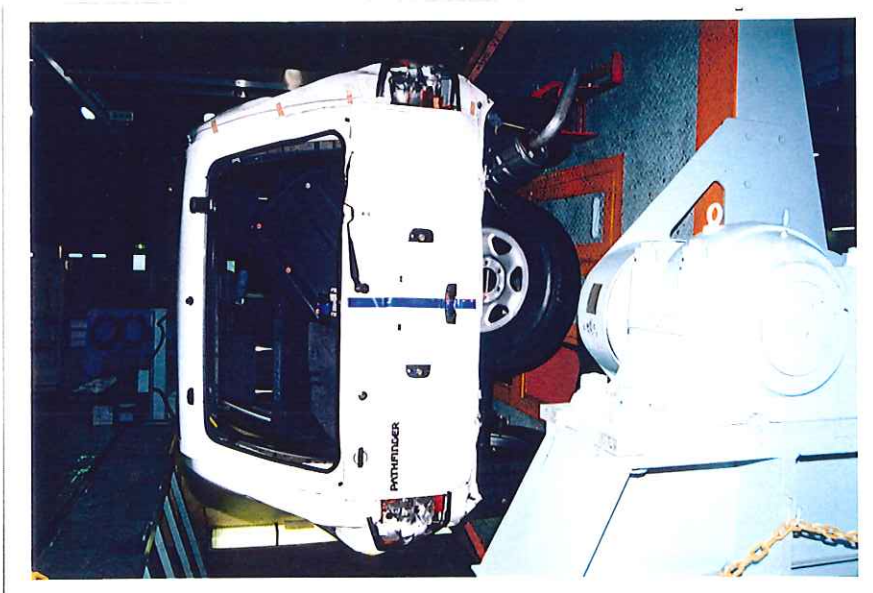


Photo . No.22 POSTTEST

SUBJECT : Static rollover 90°

	Film No.
Photo. No.23	26 - 622P
Photo. No.24	↓

Test Report No. _____

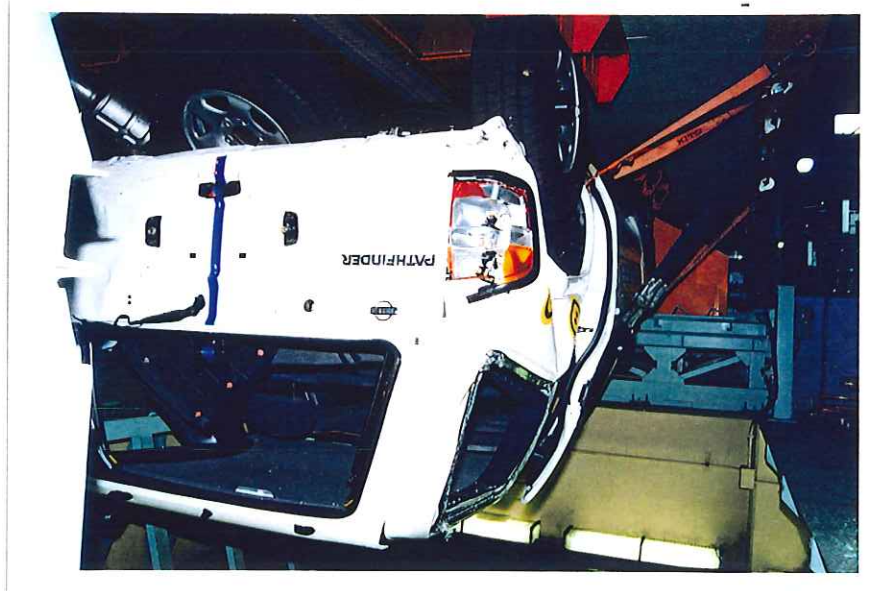


Photo . No.23 POSTTEST

SUBJECT : Static rollover 180°

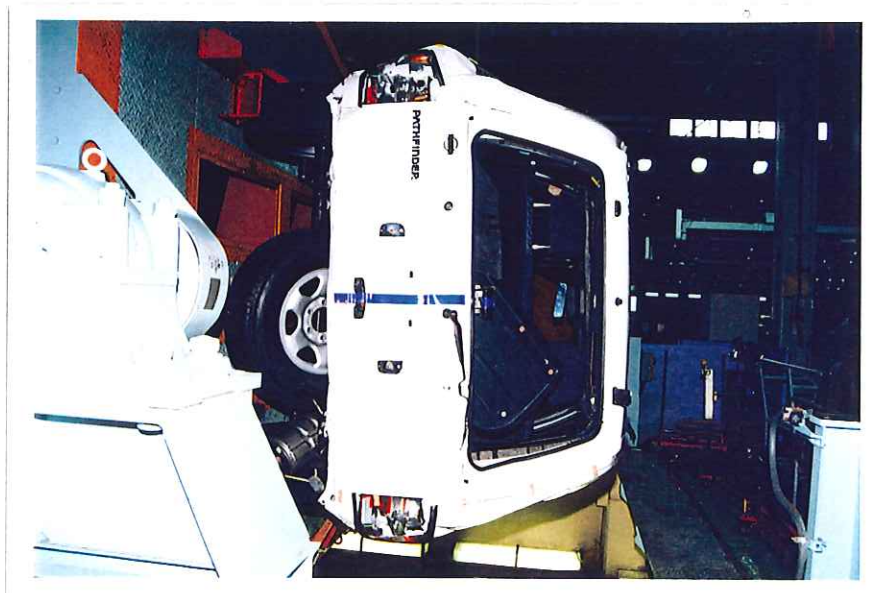


Photo . No.24 POSTTEST

SUBJECT : Static rollover 270°

区分 認証

実験番号

依頼番号

秘

認証

実験報告

No. S5X96N154

分類番号	7	1
最大保管期限	2016年5月迄	

LS0 部 LS5 課

発行日付 96.5.29.

報告配付先

部署	詳細	要報
ZPH		1
XR3		1
LS5		1
合計		3

題目 R50 , '97 Year Model C/FMVSS No.301 Self-Certification Test

担当者 力竹 篤 一ツ松 敦史 実験期間 _____

試験日 _____

1. Purpose

This is a certification test report for the requirements of C/FMVSS No.301 on 1997 Year Model.

Applied Models

- R50 All
- Federal
 - California
 - Canada
- Models

2. Conclusion

Complied with C/FMVSS No.301.

There were no modifications concerning with the performance required in this standard, therefore, the test results of this standard on 1997 year model can be carried over from 1996 year model.

C/FMVSS No.	Item	Original Test Report No.	
301	Fuel System Integrity	Front	S5X95N015
		Right 30DEG	S5X95N016
		Left 30DEG	S5X95N017
		Lateral	S5X95N018 (leftside)
		Rear	S5X95N019, S5X95N020 (後面 S/T) (床 F S/T)

P. 1 迄要報

KS4	LS5
課長	課長
山井	若狭
担当者	担当者
山口	石川 工藤
一ツ松	力竹

区分 R50
 実験番号 _____
 依頼番号 _____



認証

実験報告

No. S5X97N083

分類番号	7 1
最大保管期限	2018年7月迄

LS0 部 LS5 課
 発行日付 97.5.28.

報告配付先

部署	詳報	要報
XR3		1
ZPH		1
KS4		1
合計		3

P. 1 迄要報

題目 R50 , '98 Year Model C/FMVSS No.301 Self-Certification Test

"Fuel system integrity".

担当者 渡辺 = 研

実験期間 '97.5.20 ~ '97.5.21

試験日 _____

1. Purpose

This is a certification test report for the requirements of C/FMVSS No.301 on 1998 Year Model.

Applied Models

R50

FED, CAL, CAN

All Models.

2. Conclusion

Complied with C/FMVSS No.301.

There were no modifications concerning with the performance required in this standard, therefore, the test results of this standard on 1998 year model can be carried over from 1996 year model.

C/FMVSS No.	Item	Original Test Report No.
301	Fuel System Integrity	
	Front	<u>S5X95N015</u>
	Right 30DEG	<u>S5X95N016</u>
	Left 30DEG	<u>S5X95N017</u>
	Lateral	<u>S5X95N018</u>
Rear	S/Tire 1/6 - B/Door	<u>S5X95N019</u>
	S/Tire 1/6 - U/Floor	<u>S5X95N020</u>

KS4	LS5
課長	課長
<u>堀</u>	<u>若狭</u>
担当者	担当者
<u>山</u>	<u>工藤</u>
<u>仁</u>	<u>五木</u>
<u>一松</u>	<u>渡辺</u>

実験報告

No. S5X99N103

LS0部 LS5グループ

発行日付 99.5.18

報告配布先

部署	詳報	要報
XR4		1
ZPH		1
KS4		1
合計		3

P.1 迄要報

題 目 R50 , 2000 Year Model, C/FMVSS No.301 Self-Certification Test

Fuel system integrity

担当者 渡辺 = 前

実験期間

試験日

1.PURPOSE

This is a certification test report for the requirements of C/FMVSS No.301 Fuel system integrity.

Applied Models
<u>R50</u>
<u>FED, CAL, CAN</u>
<u>All Models</u>

2.CONCLUSION

Complied with C/FMVSS No.301.

There were no modification concerning with the performance required in this standard , therefore , the test results of this standard on 2000 year models can be carried over from 1996 year models.

C/FMVSS No.	Item		Original Test Report No.
301	Fuel system integrity.	Front	<u>S5X95N015</u>
		Right 30DEG	<u>S5X95N016</u>
		Left 30DEG	<u>S5X95N017</u>
		Lateral	<u>S5X95N018</u>
		Rear	<u>S5X95N019... Back door 4/0 S/T</u> <u>S5X95N020... Under floor 4/0 S/T</u>

KS4	LS5
主担	主担
<u>鶴川</u>	<u>山口</u>
担当者	担当者
<u>田嶋</u>	<u>工藤</u>
	<u>渡辺</u>

秘 認 証

実験報告

No. SKX99N043

KS2部 KSKグループ

発行日付 99.12.13

報告配布先

部署	詳報	要報
XR4		1
KJ6		1
KSD		1
合計		3

P.1 迄要報

題 目 R50 , 2001 Year Model, C/FMVSS No.301 Self-Certification Test

Fuel system integrity

担当者 渡辺 = 朝

実験期間

試験日

1. PURPOSE

This is a certification test report for the requirements of C/FMVSS No.301 Fuel system integrity.

Applied Models

R50

FED, CAL, CAN

All Models

2. CONCLUSION

Complied with C/FMVSS No.301.

There were no modification concerning with the performance required in this standard , therefore , the test results of this standard on 2001 year models can be carried over from 1996 year models.

C/FMVSS No.	Item	Original Test Report No.
301	Fuel system integrity.	
	Front	
	Right 30DEG	
	Left 30DEG	
	Lateral	S5X95N018
Rear	Back door S/T	S5 X 95 N 019
	Under-floor S/T	S5 X 95 N 020

KSD	KSK
主担	主担
<u>内村</u>	<u>山</u>
担当者	担当者
<u>丸山</u>	<u>藤</u>
<u>宮田</u>	<u>前川</u>
	<u>渡辺</u>

(秘) 認証

実験報告

No. K4X01N073

KS0部 KS4グループ

発行日付 01.7.16.

報告配布先

部署	詳報	要報
XR4		1
KAB		1
合計		2

P.1 迄要報

題目 R50, '02 Year Model, C/F.M.V.S.S. No.301 Self-Certification Test

Moving Barrier Rear Impact (30mph)

担当者 小竹 誠司 実験期間 2001.6.25. ~ 2001.6.28.

試験日 2001.6.27.

1. PURPOSE

This is a certification test report for the requirements of C/FMVSS No.301 "Fuel system integrity".

APPLIED MODELS

R50
FED
CAL
ALL Models

2. CONCLUSION

Complied with C/FMVSS No.301 rear moving barrier crash requirement.

3. SUMMARY OF TEST RESULTS

3.1 TEST RESULTS

*() means the item of CMVSS

ITEM	REQUIREMENT	RESULT	JUDGEMENT
S.5.5 *((2))	Fuel spillage in any fixed or moving barrier crash test shall not exceed 1 ounce by weight from impact until motion of the vehicle has ceased, and shall not exceed a total of 5 ounces by weight in the 5-minute period following cessation of motion. For the subsequent 25-minute period, fuel spillage during any 1-minute interval shall not exceed 1 ounce by weight.	None	OK
S.5.6 *((3))	Fuel spillage in any rollover test, from the onset of rotational motion, shall not exceed a total of 5 ounces by weight for the first 5 minutes of testing at each successive 90° increment. For the remaining testing period, at each increment of 90° fuel spillage during any 1-minute interval shall not exceed 1 ounce by weight.	None	OK

Note : 1ounce = 36cc (at specific gravity 0.79)

Impact Velocity : 55.9 km/h (34.8 mph)

3.2 SUMMARY OF TEST CONDITIOINS

(1) TEST VEHICLE : VLJWLVA R50 (VEC No. SPW 615)

VIN :

J	N	8	D	R	0	9	Y	2	Z	W	7	0	0	0	0	8
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

ENG : VQ 35 T/M : A/T

(2) TEST METHOD : M.V.S.S. No.301 S.6.2[Rear moving barrier crash]
S.6.4[Static Roll Over] and [MOTOR VEHICLE TEST METHODS].

(3) WEIGHT OF TEST VEHICLE : 2150 kg (4740 lbs)

(4) WEIGHT OF MOVING BARRIER : 1800 kg (3968 lbs)

KAB	KS4
主担	主担
丸山	石川
担当者	担当者
田嶋	工藤
	小竹

4. TEST CONDITIONS

(1) REASON ABOUT THE SELECTION OF TEST VEHICLE

The test vehicle was selected by the reason that the fuel system and body construction for applied models do not have any differences which influence on the performance of this crash.

(2) WEIGHT CONDITION

(units : kg)

	TOTAL	FRONT	REAR
*DESIGN WEIGHT	2150	1217	933
TEST WEIGHT	2150	1163	987

*Vehicle Type : VLJWLVA R50 with Full Option

CARGO & LUGGAGE WEIGHT	50 kg Loading Position : Luggage Area
WEIGHT ADJUSTMENT	230 kg
DUMMY	<p>TYPE OF DUMMY : HYB-3(PART 572 Subpart E)</p> <p>DUMMY POSITION : Each front outboard seating position</p> <p>RESTRAINT SYSTEM : Driver : Air bag device with active belt (three points)</p> <p>Passenger : Air bag device with active belt (three points)</p> <p>SEAT POSITION</p> <p>SEAT BACK : Driver : Nominal design position Torso angle 25° (7 notch front most)</p> <p>Passenger : Nominal design position Torso angle 25° (7 notch front most)</p> <p>SEAT SLIDE : Driver : Midway or the closest position to the rear of it (120 mm from front most)</p> <p>Passenger : Midway or the closest position to the rear of it (126 mm from front most)</p>

(3) VEHICLE CONDITION

*means specified in this standard.

FUEL TANK	Usable Capacity : <u>80</u> l Charged Volume : <u>75.2</u> l (<u>94</u> %) Test Fluid Name : <u>SHELL LAWS</u> Specific gravity : <u>0.79</u> Used the Fluid specified in Table 1 ASTM D484-71.
IGNITION KEY POSITION	ON
FUEL PUMP OPERATION	(YES , NO)
*PARKING BRAKE	Disengaged
*TRANSMISSION	Neutral
TIRE PRESSURE	Front : <u>180</u> kpa Rear : <u>180</u> kpa
STEERING COLUMN POSITION	Tilt : Midpoint of swing or nominal design position Telescopic : Midpoint of stroke
HOOD	Fully closed and latched
WIPER	Not operated
TEMPERATURE	Inside of the vehicle : <u>26</u> °C Test site : <u>26</u> °C Wind Shield Molding : <u>26</u> °C
DOOR&TRUNK LID (REAR GATE)	Fully Closed and Latched but not locked
SIDE WINDOW GLASS	Front Right (Opened, Closed) Rear Right (Opened, Closed) Front Left (Opened, Closed) Rear Left (Opened, Closed)
OTHER FLUID	Radiator (Normal , Drained) Battery (Normal , Drained) Washer (Normal , Drained) Oil (Normal , Drained)
OPTIONAL EQUIPMENT	<u>None</u>
TOOLS&JACK	Installed
REMOVED PARTS	<u>None</u>

5. TEST DATA

5.1 Detailed data of fuel leakage tests.

See table 1&2.

5.2 Photograph of the test vehicle pretest and posttest.

See photo graph No.1 ~ 24.

Table 1, FUEL LEAKAGE MEASUREMENT IN BARRIER CRASH TEST

Item	Location	Fuel Tank	Fuel Piping	Fuel Strainer	Fuel Pump	Carburetor	Others
		Yes · No	Yes · No	Yes · No	Yes · No	Yes · No	Yes · No
Damage to component. If yes, describe the damage.							
Rear impact until vehicle motion ceases.		4	4				4
For 5 minutes period after vehicle motion ceases. ----- For next 25 minutes.							

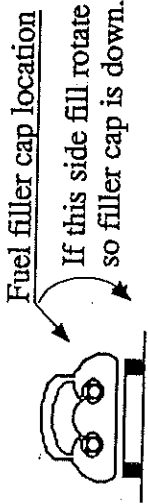


Table 2. FUEL LEAKAGE MEASUREMENT IN STATIC ROLLOVER TEST

Phase of Rotation	Time Period(min.)		Fuel Tank	Fuel Piping	Fuel Strainer	Fuel Pump	Carburetor	Others
Rotation 0° 90°	2	5	None	None				None
Hold at 90°	5	1	4	4				4
		1						
Rotation 90° 180°	2	5						
Hold at 180°	5	1						
		1						
Rotation 180° 270°	2	5						
Hold at 270°	5	1						
		1						
Rotation 270° 360°	2	5						
Hold at 360°	5	1						
		1						

Rotate so filler cap is down

	Film No.
Photo. No.	2
Photo. No.	2

Test Report No. KSX 01N 073

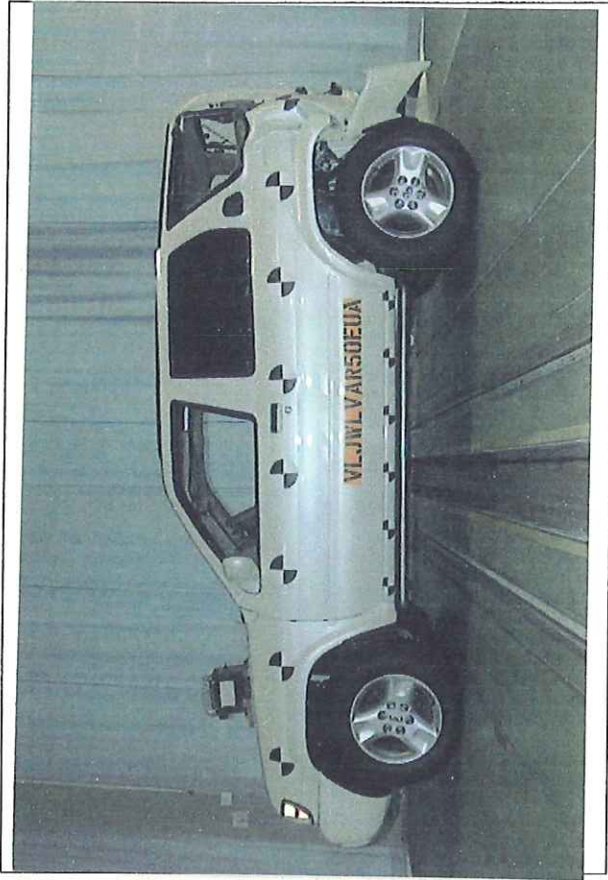


Photo . No.2 POSTTEST
SUBJECT : Side view



Photo . No.4 POSTTEST
SUBJECT : Rear view

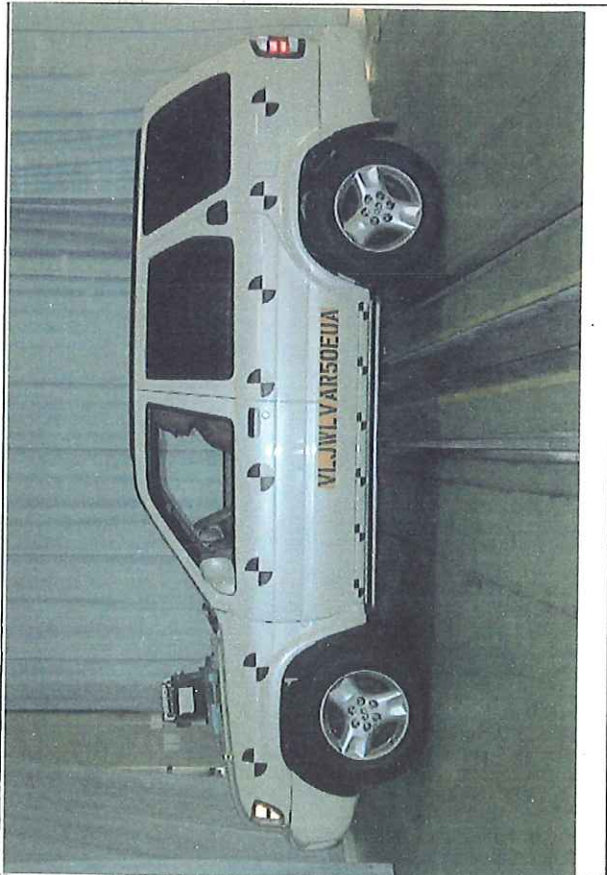


Photo . No.1 PRETEST
SUBJECT : Side view

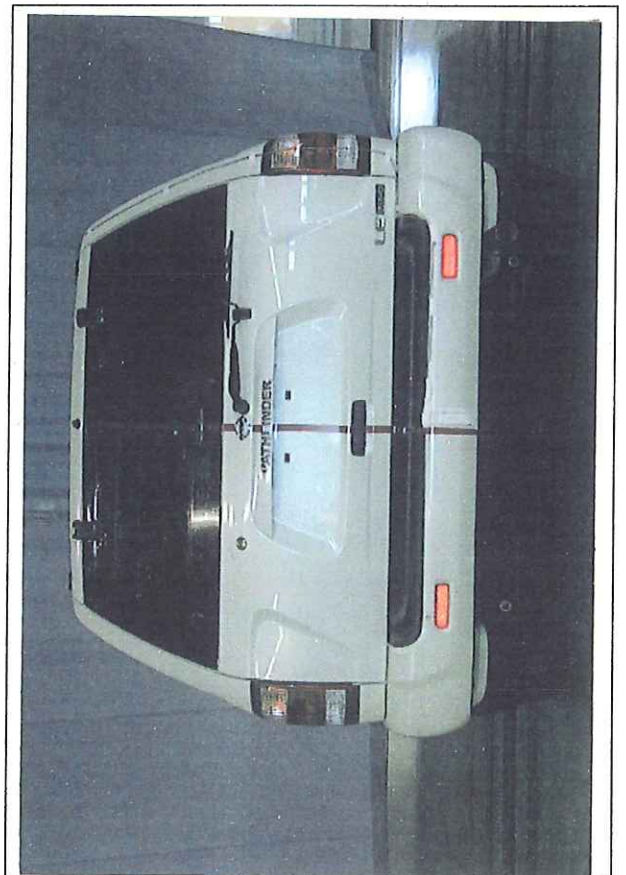


Photo . No.3 PRETEST
SUBJECT : Rear view

	Film No.
Photo. No.	<i>2</i>
Photo. No.	<i>2</i>

Test Report No. KSX01N073



Photo .No.6 POSTTEST
SUBJECT : Engine compartment view

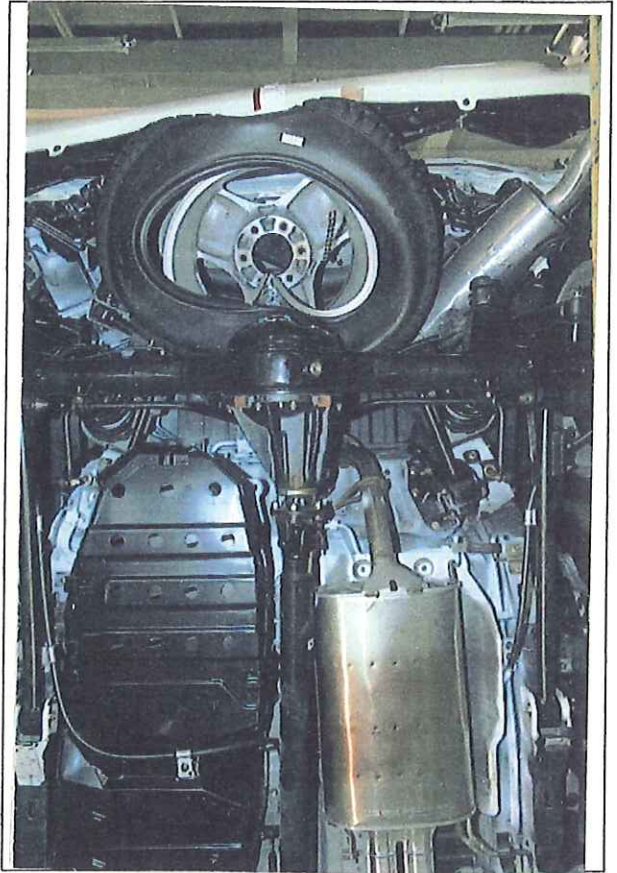


Photo .No.8 POSTTEST
SUBJECT : Rear underbody view



Photo .No.5 PRETEST
SUBJECT : Engine compartment view

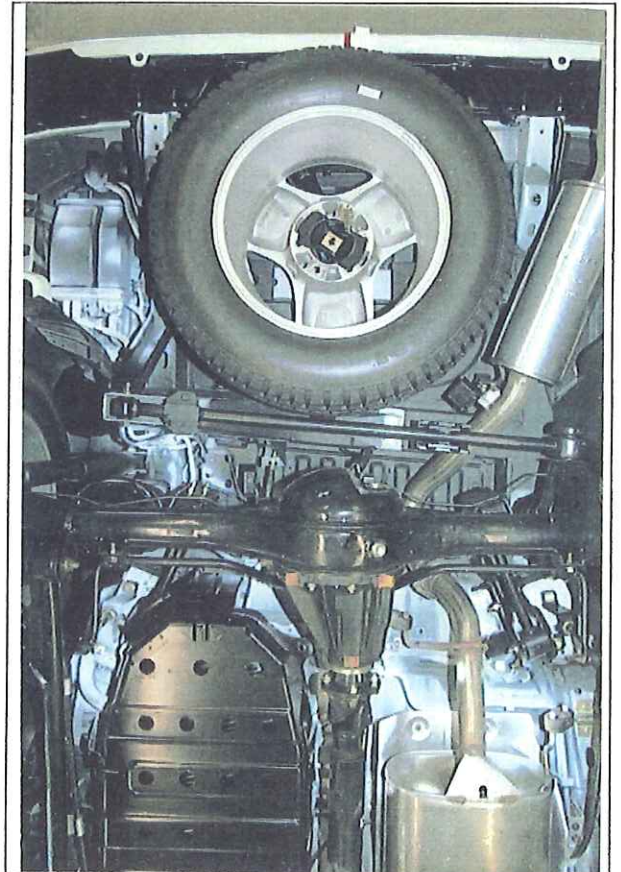


Photo .No.7 PRETEST
SUBJECT : Rear underbody view

	Film No.
Photo. No.	2
Photo. No.	2

Test Report No. KSX01N073

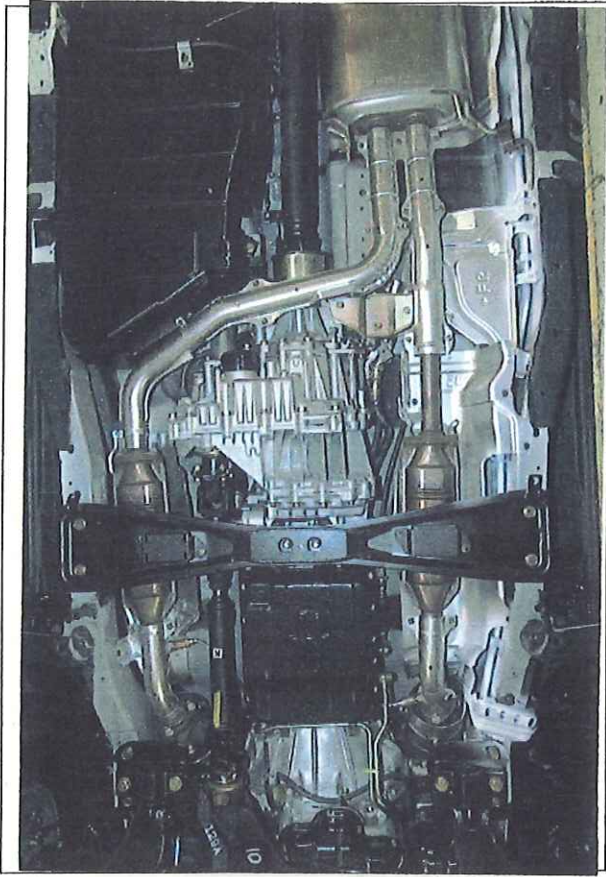


Photo .No.10 POSTTEST
SUBJECT : Center underbody view

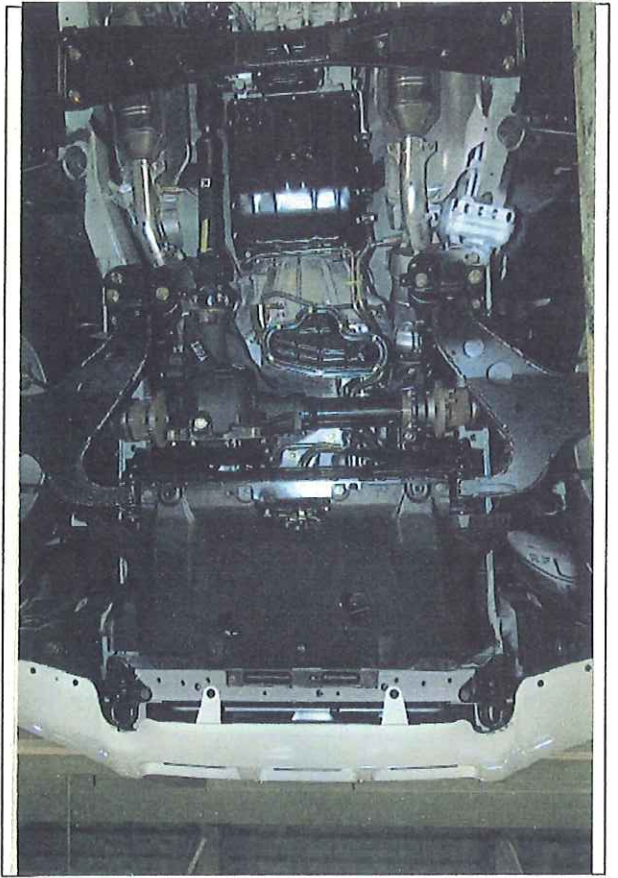


Photo .No.12 POSTTEST
SUBJECT : Front underbody view

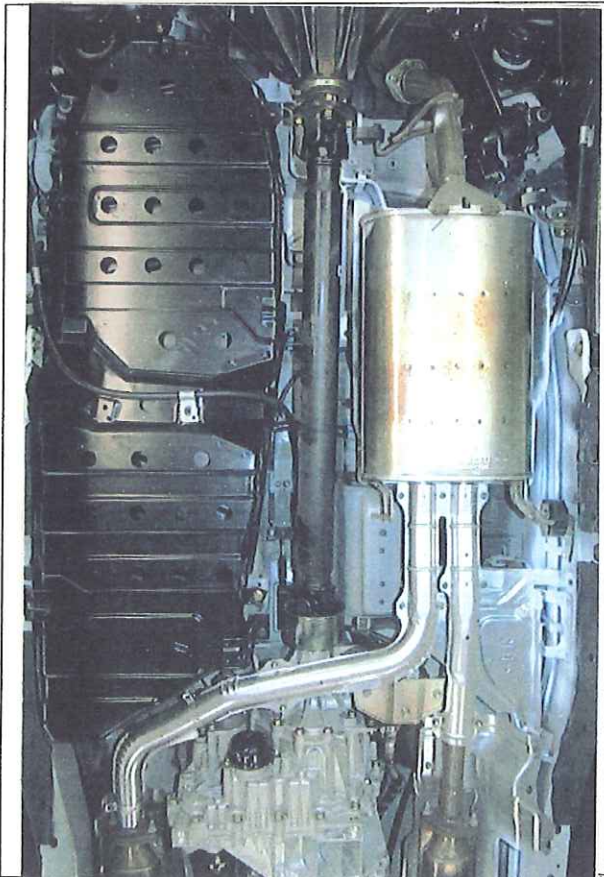


Photo .No.9 PRETEST
SUBJECT : Center underbody view

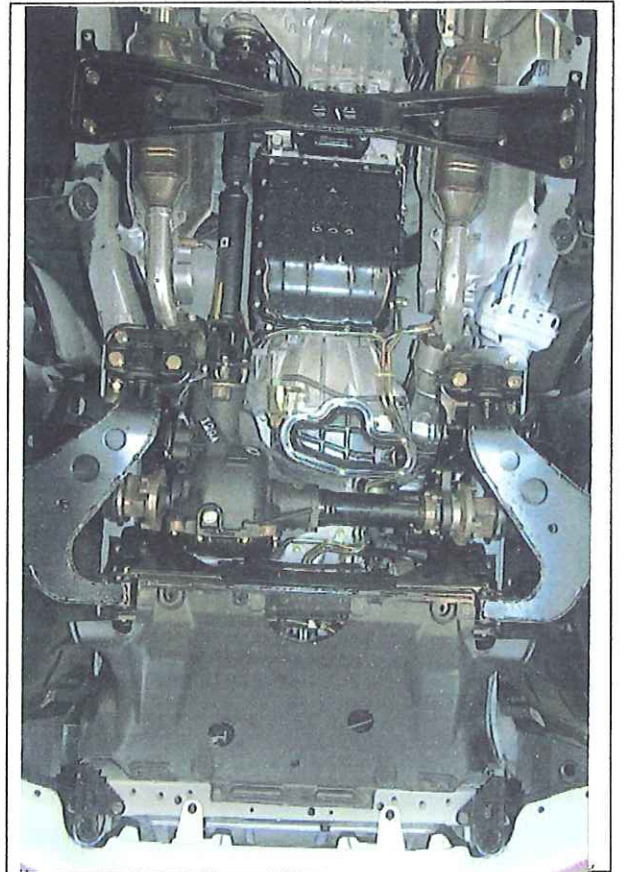


Photo .No.11 PRETEST
SUBJECT : Front underbody view

	Film No.
Photo. No.	<i>[Handwritten]</i>
Photo. No.	<i>[Handwritten]</i>

Test Report No. KSX01N073

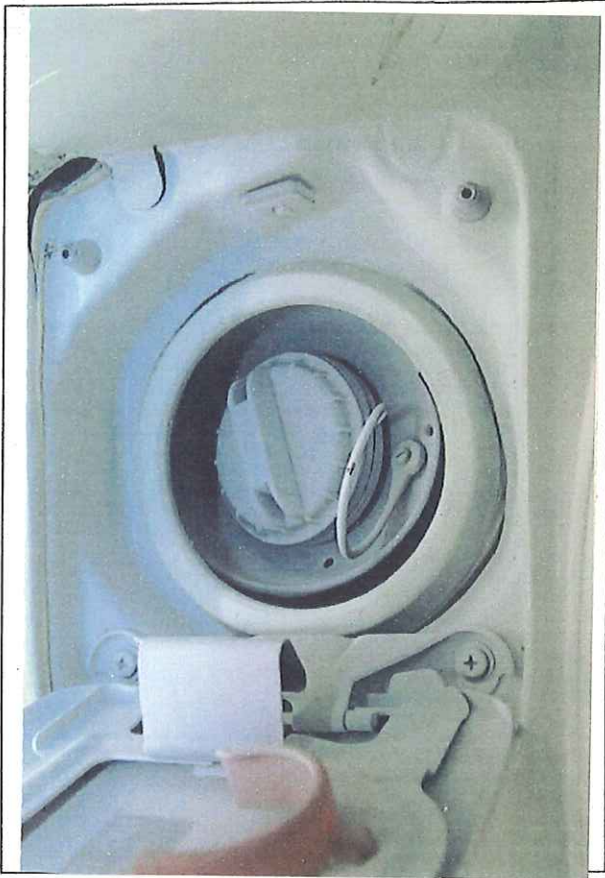


Photo . No.14 POSTTEST
SUBJECT : Fuel filler cap view

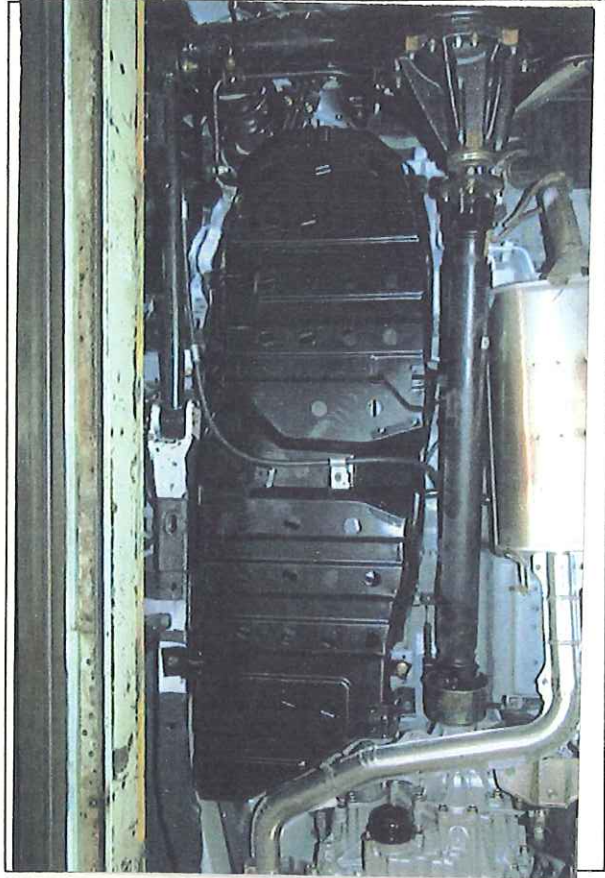


Photo . No.16 POSTTEST
SUBJECT : Fuel tank view



Photo . No.13 PRETEST
SUBJECT : Fuel filler cap view

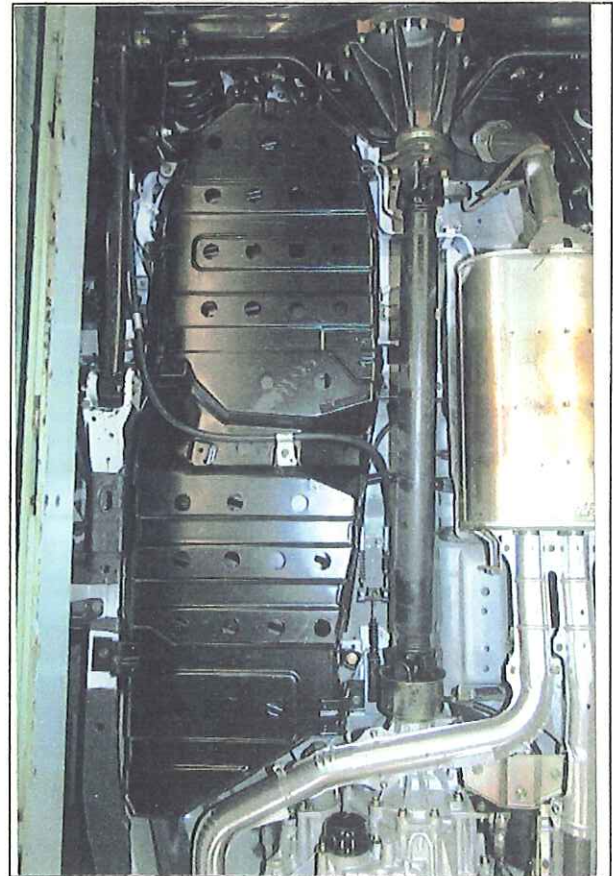


Photo . No.15 PRETEST
SUBJECT : Fuel tank view

	Film No.
Photo. No.	8
Photo. No.	8

Test Report No. KSX01N073

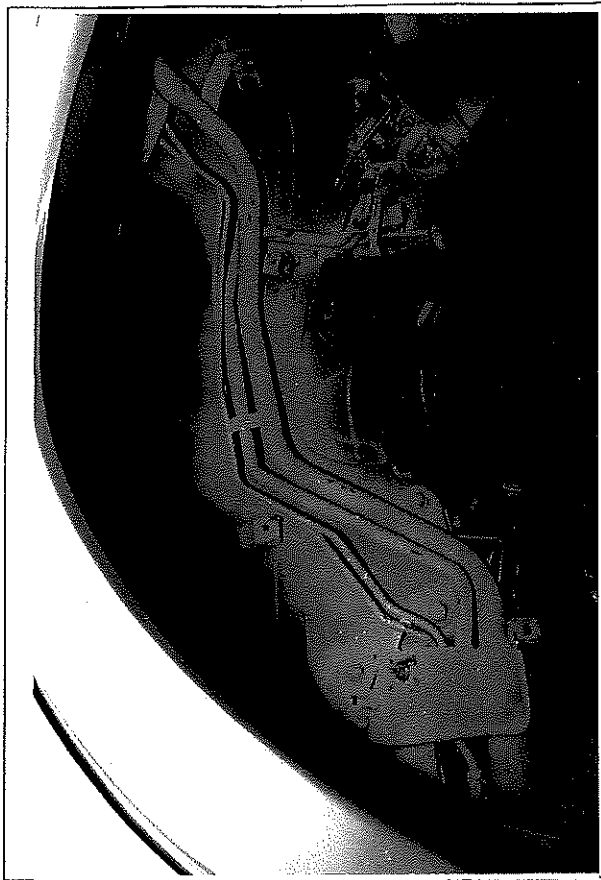


Photo. No.18 POSTTEST
 SUBJECT: Filler hose view

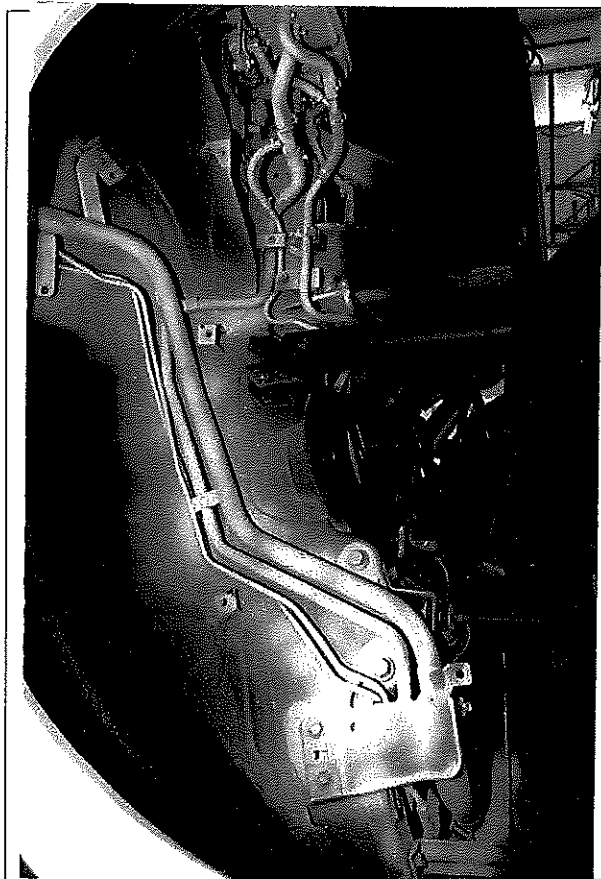


Photo. No.17 PRETEST
 SUBJECT: Filler hose view

	Film No.
Photo. No.	2
Photo. No.	2

Test Report No. KSX 01N073



Photo . No.20
SUBJECT : Static rollover 90°



Photo . No.22
SUBJECT : Static rollover 270°

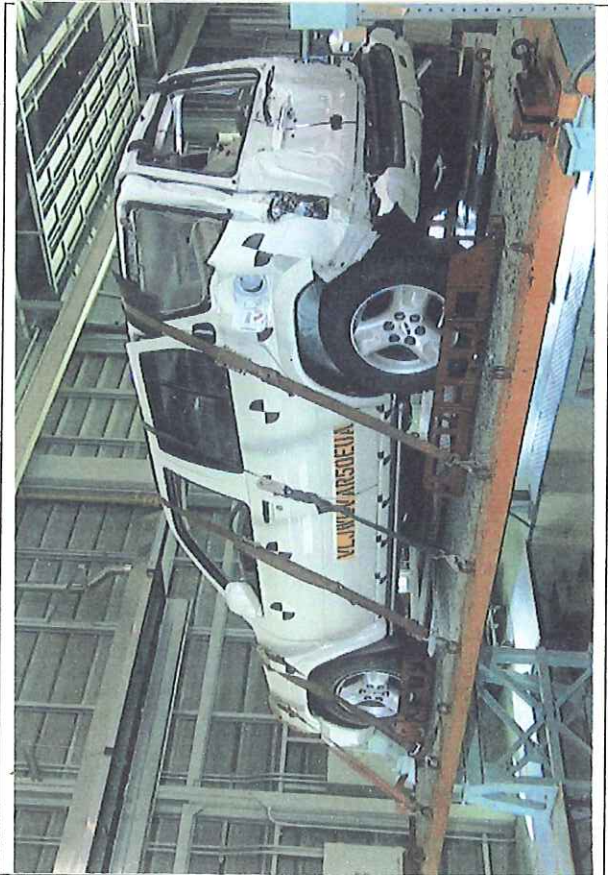


Photo . No.19
SUBJECT : Static rollover 0°

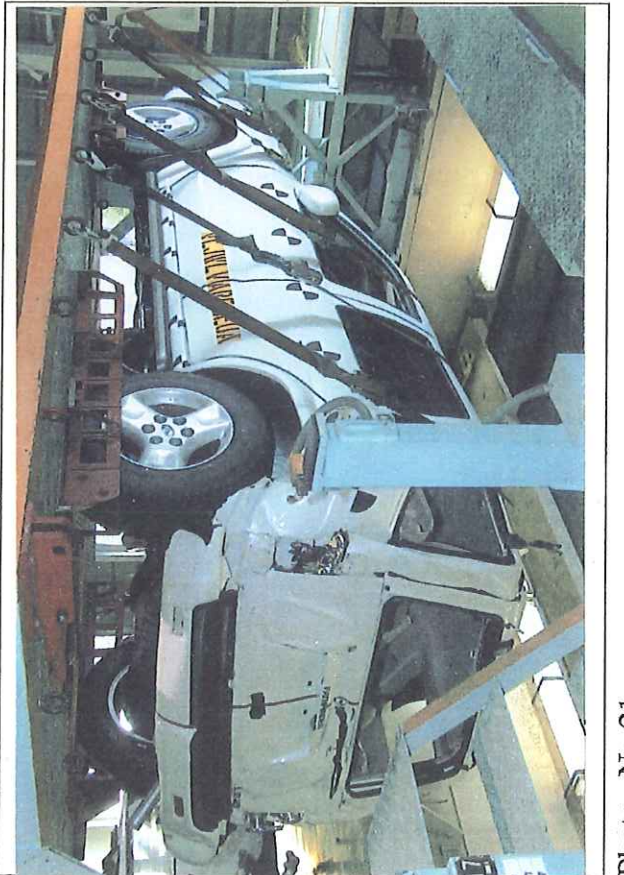


Photo . No.21
SUBJECT : Static rollover 180°

実験報告

No. K4X02N107

KS0部 KS4グループ

発行日付 02.5.17.

報告配布先

部署	詳報	要報
XR4		1
KAB		1
合計		2

P.1 迄要報

題目 R50 , 2003 Year Model, C/FMVSS No.301 Self-Certification Test

Fuel system integrity

担当者 上野 公士

実験期間

試験日 '02.05.13

1.PURPOSE

This is a certification test report for the requirements of C/FMVSS No.301 Fuel system integrity.

Applied Models

R50
FED, CAL, CAN
All Models.

2.CONCLUSION

Complied with C/FMVSS No.301.

There were no modification concerning with the performance required in this standard , therefore , the test results of this standard on 2003 year models can be carried over from ¹⁹⁹⁶~~2002~~ year models.

C/FMVSS No.	Item		Original Test Report No.
301	Fuel system integrity.	Lateral	<u>S5X95N018</u>
		Rear	<u>K4X01N073</u>

XR4 主担
若崎
担当
塚口

KAB	KS4
主担	主担
丸山	石川
担当者	担当者
日嶋	橋本
高木	西村
	上野

EA12-005

NISSAN

2/18/2013

Attachment C

WD21 FMVSS Test Report

4. TEST CONDITIONS

(1) REASON ABOUT THE SELECTION OF TEST VEHICLE

The test vehicle was selected by the reason that the fuel system, rear body construction and rear suspension for applied models do not have any differences which influence on the performance of this crash.

The weight of test vehicle was set up the maximum weight among application models.

(2) WEIGHT CONDITION

(units : kg)

	TOTAL	FRONT	REAR
#DESIGN WEIGHT	2161	1079	1082
TEST WEIGHT	2163	1064	1099

#Vehicle Type: WHL YD 21 DP KB U with Air conditioner, ASCD, Sun roof, etc
or V

CARGO & LUGGAGE WEIGHT	<p style="text-align: center;">136 kg</p> <p>Loading Position: <u>Luggage Room</u></p>
WEIGHT ADJUSTMENT	<p style="text-align: center;">90 kg</p>
DUMMY	<p>TYPE OF DUMMY : <u>HYE-II (PART 572 Subpart B)</u></p> <p>DUMMY POSITION : <u>each front outboard Seating Position</u></p> <p>RESTRAINT SYSTEM : <u>Driver : Active 3 pointslap-shoulder belt.</u> <u>Passenger: Active 3 pointslap-shoulder belt.</u></p> <p>SEAT POSITION :</p> <p>SEAT BACK :Driver :Nominal design position (<u>7</u> notch from front most)</p> <p>Passenger:Nominal design position (<u>7</u> notch from front most)</p> <p>SEAT SLIDE:Driver : Midway <u>the closest position to the rear of it (120 mm from front most)</u></p> <p>Passenger: Midway <u>the closest position to the rear of it (120 mm from front most)</u></p>

(3) VEHICLE CONDITION

*means specified in this standard.

*FUEL TANK	Usable Capacity: <u>78.5</u> <u>1</u> Charged Volume: <u>74.6</u> <u>1</u> (<u>95</u> %) Test Fluid Name: <u>NISSEKI SOLVENT</u> Specific gravity: <u>0.79</u> Used the fluid specified in Table 1 ASTM D484-71.
IGNITION KEY POSITION	ON
FUEL PUMP OPERATION	(YES, <u>(NO)</u>) <u>Electric</u> Pump
*PARKING BRAKE	Disengaged
*TRANSMISSION	Neutral
*TIRE PRESSURE	Front: <u>1.8</u> Kg/cm ² Rear: <u>1.8</u> Kg/cm ²
STEERING COLUMN POSITION	Tilt: <u>(Midpoint of swing)</u> or nominal design position. Telescopic: <u>Midpoint of stroke</u> . <u>None</u>
HOOD	Fully closed and latched
WIPER	Not operated
TEMPERATURE	Inside of the vehicle: <u>23</u> °C Test site: <u>23</u> °C Wind Shield Moulding: <u>23</u> °C
DOOR & TRUNK LID (REAR GATE)	Fully Closed and Latched but not locked
SIDE WINDOW GLASS	Front Right (Opened, <u>(Closed)</u>) Rear Right (Opened, <u>(Closed)</u>) Front Left (Opened, <u>(Closed)</u>) Rear Left (Opened, <u>(Closed)</u>)
OTHER FLUID	Radiator (Normal, <u>(Drained)</u>) Battery (Normal, <u>(Drained)</u>) Washer (Normal, <u>(Drained)</u>) Oil (Normal, <u>(Drained)</u>)
OPTIONAL EQUIPMENT	<u>Air conditioner, ASCD.</u>
TOOLS & JACK	Installed
REMOVED PARTS	<u>None</u>

— 3/18 —

12109N217

5. TEST DATA

5.1 Detailed data of fuel leakage tests.

See table 1 & 2.

5.2 Photos of the test vehicle pretest and posttest,

See photos No.1 ~ 22.

4/18

Table 1, FUEL LEAKAGE MEASUREMENT IN BARRIER CRASH TEST

Item	Rotation	Fuel Tank	Fuel Piping	Fuel Strainer	Fuel Pump	Canister	Carburetor	Others
Damage to component. If yes, describe the damage.		Yes • <input checked="" type="radio"/> No	Yes • <input checked="" type="radio"/> No	Yes • <input checked="" type="radio"/> No	Yes • No	Yes • <input checked="" type="radio"/> No	Yes • No	Yes • <input checked="" type="radio"/> No
Front impact until vehicle motion ceases.		None	None	None		None		None
For 5 minutes period after vehicle motion ceases.		4	4	4		4		4
For next 25 minutes.								

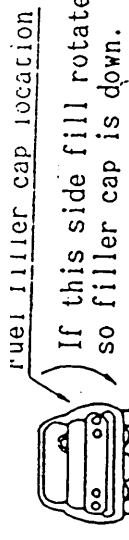


Table 2. FUEL LEAKAGE MEASUREMENT IN STATIC ROLLOVER TEST

Phase of Rotation	Time Period(min.)		Fuel Tank	Fuel Piping	Fuel Strainer	Fuel Pump	Canister	Carburetor	Others
	2	5							
Rotation 0° 90°		5	None	None	None		None		None
Hold at 90°	5	1	4	4	4		4		4
Rotation 90° 180°	2								
Hold at 180°	5	1							
Rotation 180° 270°	2								
Hold at 270°	5	1							
Rotation 270° 360°	2								
Hold at 360°	5	1							

Rotate so filler cap is down

Phase of Rotation	Time Period(min.)		Fuel Tank	Fuel Piping	Fuel Strainer	Fuel Pump	Canister	Carburetor	Others
	2	5							
Rotation 0° 90°		5							
Hold at 90°	5	1							
Rotation 90° 180°	2								
Hold at 180°	5	1							
Rotation 180° 270°	2								
Hold at 270°	5	1							
Rotation 270° 360°	2								
Hold at 360°	5	1							

Rotate so filler cap is up

6/18

LINBERGER

	Film No.
Photo. No.1	MC2-1040
Photo. No.2	↑

Test Report No. _____



Photo No.1
SUBJECT: Side view



Photo No.2
SUBJECT: Side view

	Film No.
Photo, No.3	MC2-1040
Photo, No.4	↑

Test Report No. _____

[Handwritten signature]



Photo No.3

PRETEST

SUBJECT: Rear view



Photo No.4

POSTTEST

SUBJECT: Rear view

	Film No.
Photo. No. 5	MCZ-1040
Photo. No. 6	↑

Test Report No. _____

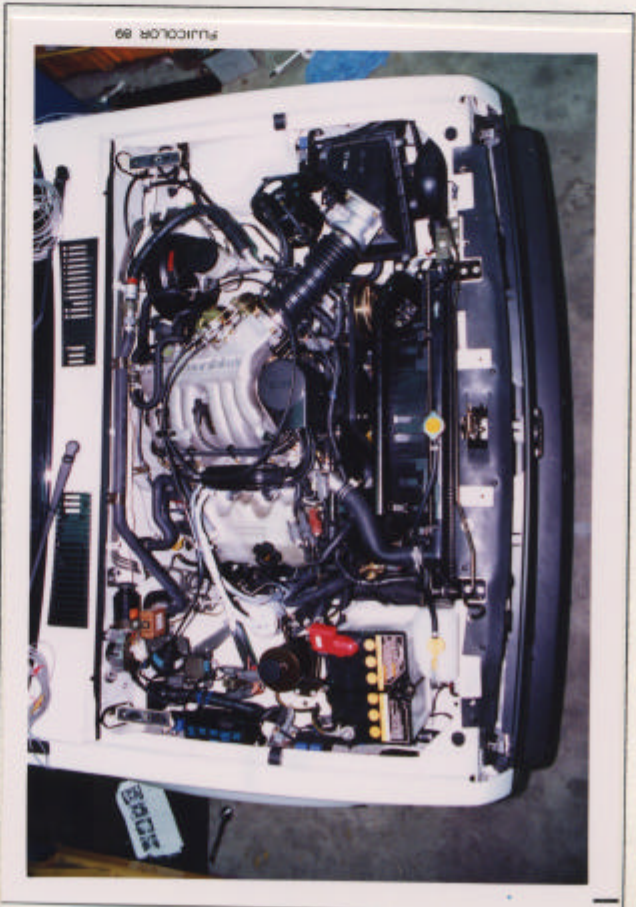


Photo No. 5 PRETEST
 SUBJECT: Engine compartment view

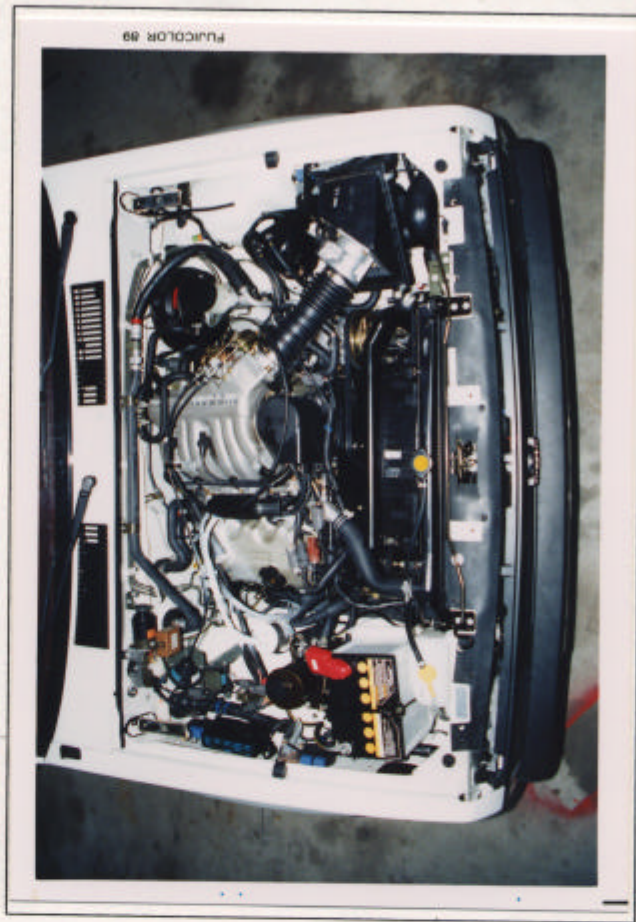


Photo No. 6 POSTTEST
 SUBJECT: Engine compartment view

	Film No.
Photo. No.7	MCZ-1040
Photo. No.8	↑

Test Report No. _____

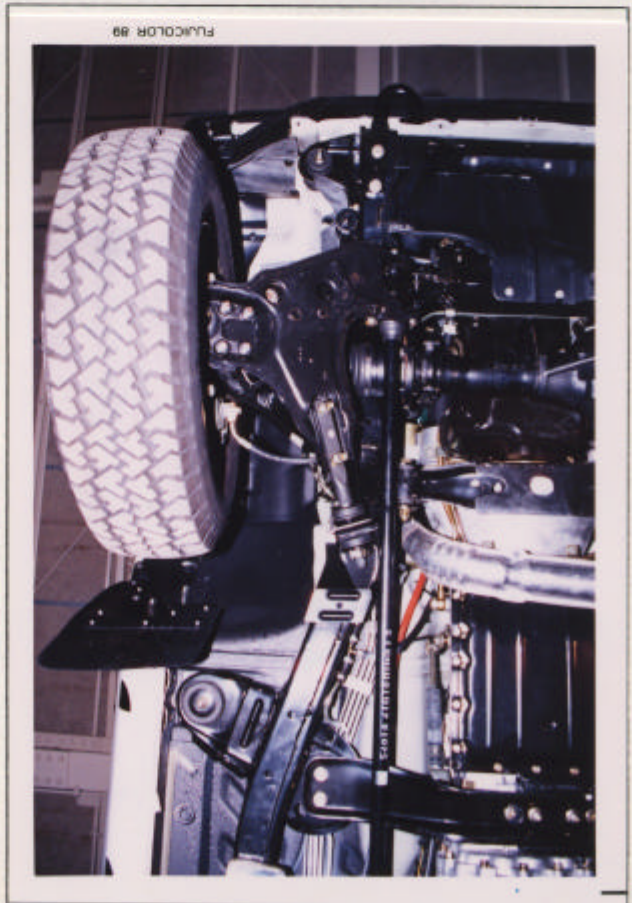


Photo No. 7 PRETEST
SUBJECT: Front underbody view

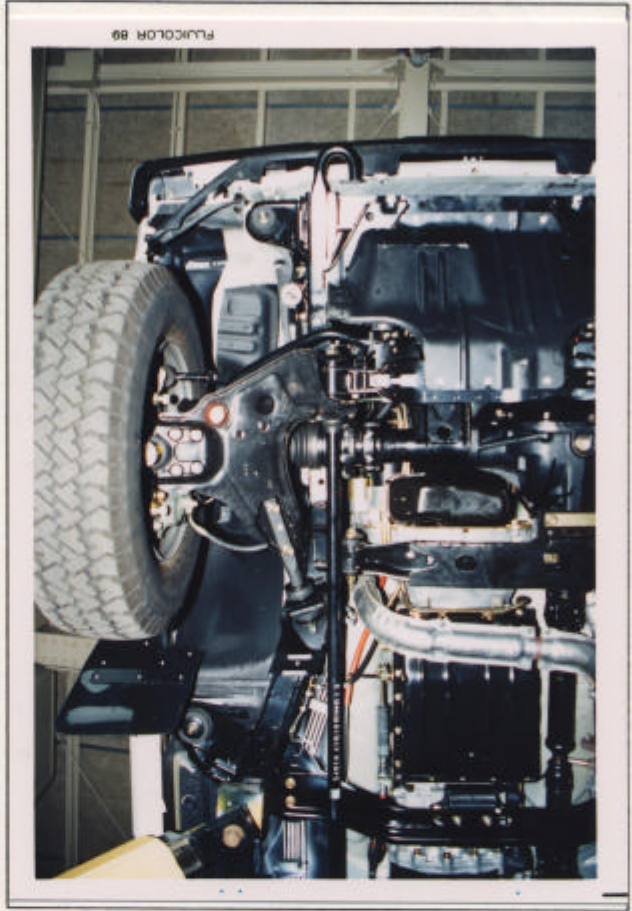


Photo No. 8 POSTTEST
SUBJECT: Front underbody view

	Film No.
Photo. No. 9	MC2-1040
Photo. No. 10	↑

Test Report No. _____

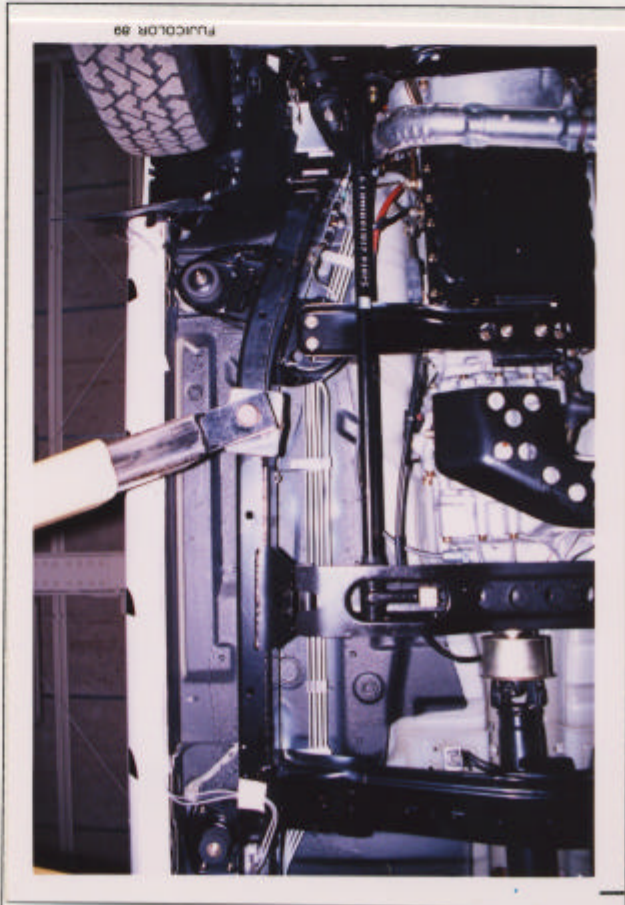


Photo No. 9 PRETEST
SUBJECT: Center underbody view Front

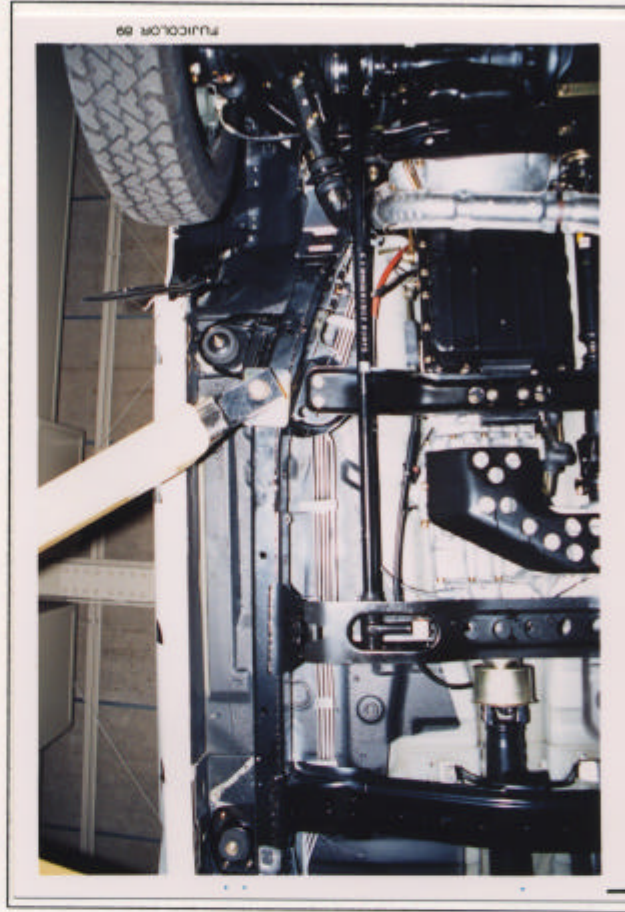


Photo No. 10 POSTTEST
SUBJECT: Center underbody view Front

	Film No.
Photo. No. 11	MC2-1040
Photo. No. 12	↑

Test Report No. _____

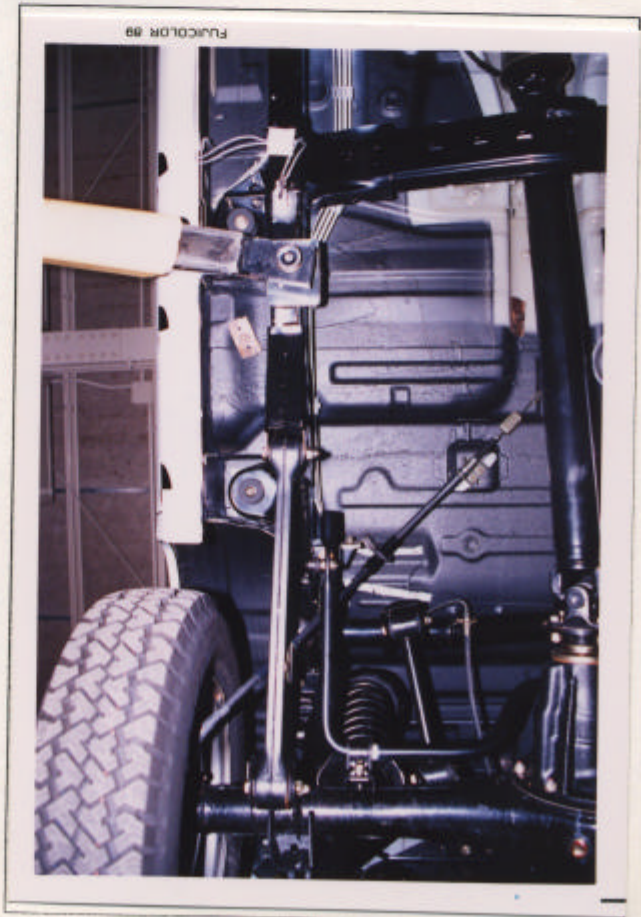


Photo No. 11
SUBJECT: Center underbody view Rear

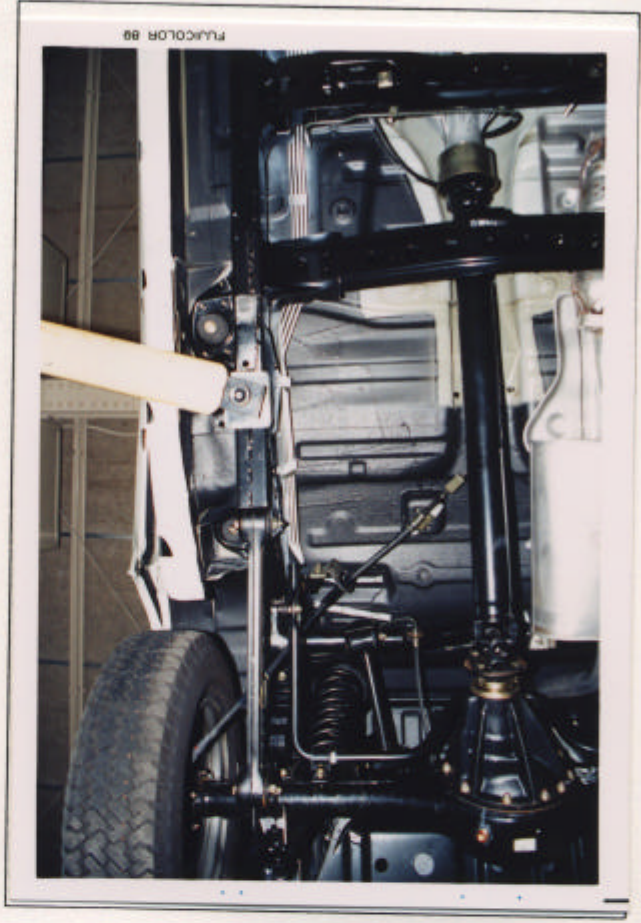


Photo No. 12
SUBJECT: Center underbody view Rear

	Film No.
Photo. No. 13	MC2-1040
Photo. No. 14	↑

Test Report No. _____

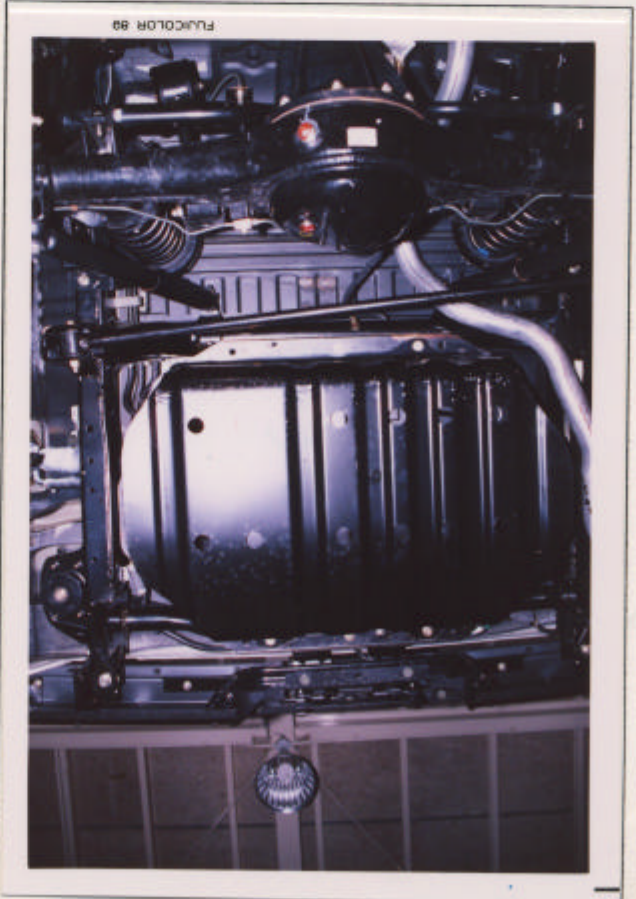


Photo No. 13 PRETEST
SUBJECT: Rear underbody view



Photo No. 14 POSTTEST
SUBJECT: Rear underbody view

	Film No.
Photo. No. 15	MC2-1040
Photo. No. 16	↑

Test Report No. _____

[Handwritten signature]

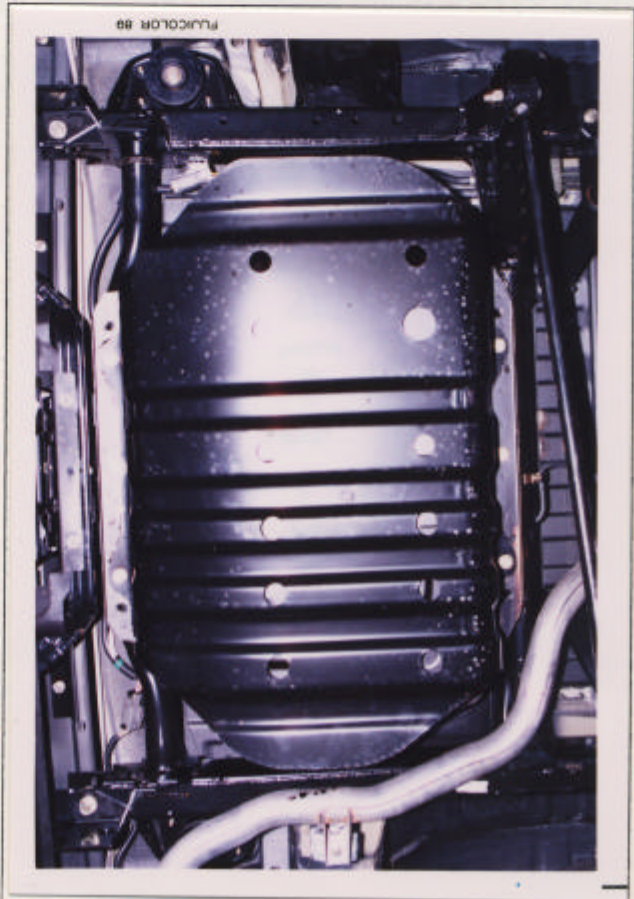


Photo No. 15 PRETEST
SUBJECT: Fuel tank view

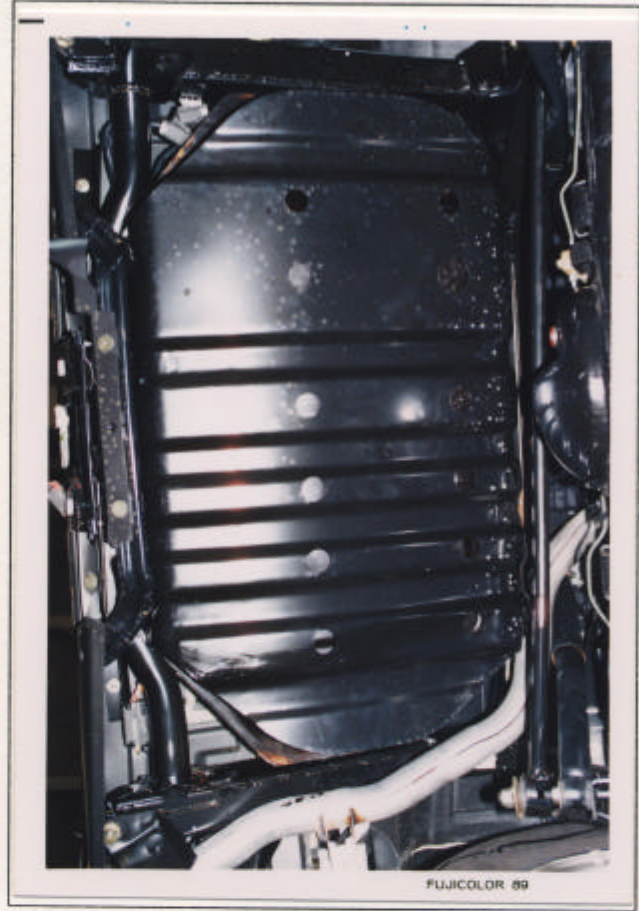


Photo No. 16 POSTTEST
SUBJECT: Fuel tank view

	Film No.
Photo. No. 17	MC2-1040
Photo. No. 18	↑

Test Report No. _____

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Photo No. 17 PRBTEST
SUBJECT: Filler hose view



Photo No. 18 POSTTEST
SUBJECT: Filler hose view

	Film No.
Photo. No. 19	MC2-1040
Photo. No. 20	↑

Test Report No. _____



Photo No. 19 POSTTEST
SUBJECT: Fuel filler cap view



Photo No. 20 POSTTEST
SUBJECT: Fuel filler cap view

	Film No.
Photo. No. 21	MC2-1040
Photo. No. 22	↑

Test Report No. _____



FUJICOLOR 89



FUJICOLOR 89

Photo. No. 21 POSTTEST
SUBJECT: Static rollover 0°

Photo. No. 22 POSTTEST
SUBJECT: Static rollover 90°

	Film No.
Photo. No. 23	MC2-1040
Photo. No. 24	↑

Test Report No. _____



Photo. No. 23 POSTTEST
SUBJECT: Static rollover 180°



Photo. No. 24 POSTTEST
SUBJECT: Static rollover 270°



認証実験報告

LSO 部 LS8 課

部署	詳報	要報
X) LS0-S(島)		1
LS2-3	←	
X) LS8-3	1	
S) LS0-0(岡)	1	
S) LP7-3	1	
X) KO4-3	1	
X) Z40-3(津)	1	

実験番号 JARi89-063
 依頼番号

No. S8M89N218

発行日付 90.4.4

題目 D21 '90 年型, C.M.V.S.S. F.H.V.S.S. No. 301 自己認証試験

後面衝突 (30mph)

担当者 上野公士 (JARi) 鷹取 収
 TEL 6-312-3564

実験期間 89.9.4.~89.10.2.

試験日 89.9.21

1. SUBJECT

This is the certification test report in compliance with **CMVSS No.301 "Fuel system integrity"**.

CMVSS
FMVSS

APPLIED MODEL
WHL-D21
WHL-D21
◦ Federal
◦ California Models.
VHL-D21
◦ Federal
◦ Canada Models.
VHLY-D21
◦ Canada Models

with rear spare tire hanger

2. JUDGEMENT

Complied with **CMVSS FMVSS No.301** rear moving barrier crash requirement.

3. SUMMARY OF TEST

3.1 TEST RESULTS * () means the item of CMVSS.

ITEM	REQUIREMENT	RESULT	JUDGE
S.5.5 *((2))	Fuel spillage in any fixed or moving barrier crash test shall not exceed 1 ounce by weight from impact until motion of the vehicle has ceased, and shall not exceed a total of 5 ounces by weight in the 5-minute period following cessation of motion. For the subsequent 25-minute period, fuel spillage during any 1-minute interval shall not exceed 1 ounce by weight.	None	OK
S.5.6 *((3))	Fuel spillage in any rollover test, from the onset of rotational motion, shall not exceed a total of 5 ounce by weight for the first 5 minutes of testing at each successive 90° increment. For the remaining testing period, at each increment of 90° fuel spillage during any 1-minute interval shall not exceed 1 ounce by weight.	None	OK

Impact Velocity : 30.3 mph (48.8 km/h) Note: 1ounce=36cc (at specific gravity 0.79)

3.2 SUMMARY OF TEST CONDITIONS

(1) TEST VEHICLE: WHL-D21DPKEU (VEC No. SXD22)
 VIN: JN18HD117Y11LW200125
 ENG: TG30E T/M: A/K

(2) TEST METHOD: In accordance with SAE J850 [Barrier Collision Tests],
 F.M.V.S.S No.301 S.6.3 [Lateral Moving Barrier Crash],
 S.6.4 [Static Roll Over] and [MOTOR VEHICLE TEST METHODS].

(3) WEIGHT OF TEST VEHICLE: 771 lbs (2164 kg)

(4) WEIGHT OF MOVING BARRIER: 3962 lbs (1797 kg)

C19

合計	2	4
P.	/	迄要報

課長 岡本
 担当者 高橋 工
上野

A	
B	
C	
T	

4. TEST CONDITIONS

(1) REASON ABOUT THE SELECTION OF TEST VEHICLE

The test vehicle was selected by the reason that fuel system, rear body construction and rear suspension for applied models do not have any differences which influence on the performance of this crash.

(2) WEIGHT CONDITION

(units : kg)

	TOTAL	FRONT	REAR
#DESIGN WEIGHT	2161	1074	1087
TEST WEIGHT	2154	1033	1121

*Vehicle Type: with Air conditioner, ASCD, Sun roof, etc

CARGO & LUGGAGE WEIGHT	<p style="text-align: right;">136 kg</p> <p>Loading Position: <u>Luggage Room</u></p>
WEIGHT ADJUSTMENT	<p style="text-align: right;">10 kg</p>
DUMMY	<p>TYPE OF DUMMY : <u>HYB-II (PART 572 sub part B)</u></p> <p>DUMMY POSITION : <u>each front outboard Seating Position</u></p> <p>RESTRAINT SYSTEM : Driver : <u>Active 3 points lap - shoulder belt.</u> Passenger: <u>Active 3 points lap - shoulder belt.</u></p> <p>SEAT POSITION :</p> <p>SEAT BACK : Driver : <u>Nominal design position (7 notch from front most)</u> Passenger: <u>Nominal design position (7 notch from front most)</u></p> <p>SEAT SLIDE: Driver : <u>Higher or the closest position to the rear of it (120 mm from front most)</u> Passenger: <u>Higher or the closest position to the rear of it (120 mm from front most)</u></p>

— 2/18 —

N2M29N218

(3) VEHICLE CONDITION

*means specified in this standard.

*FUEL TANK	Usable Capacity: <u>78.5</u> <u>1</u> Charged Volume: <u>74.6</u> <u>1 (95 %)</u> Test Fluid <u>Name: NISSEKI SOLVENT</u> <u>Specific gravity: 0.79</u> Used the fluid specified in Table 1 ASTM D484-71.
IGNITION KEY POSITION	ON
FUEL PUMP OPERATION	(YES, <u>(NO)</u>) <u>Electric</u> Pump
*PARKING BRAKE	Disengaged
*TRANSMISSION	Neutral
*TIRE PRESSURE	Front: <u>1.8</u> Kg/cm ² Rear: <u>1.8</u> Kg/cm ²
STEERING COLUMN POSITION	Tilt: <u>(Midpoint of swing)</u> or nominal design position. Telescopic: <u>Midpoint of stroke. None</u>
HOOD	Fully closed and latched
WIPER	Not operated
TEMPERATURE	Inside of the vehicle: <u>24</u> °C Test site: <u>24</u> °C Wind Shield Moulding: <u>24</u> °C
DOOR & TRUNK LID (REAR GATE)	Fully Closed and Latched but not locked
SIDE WINDOW GLASS	Front Right (Opened, <u>(Closed)</u>) Rear Right (Opened, <u>(Closed)</u>) Front Left (Opened, <u>(Closed)</u>) Rear Left (Opened, <u>(Closed)</u>)
OTHER FLUID	Radiator (Normal, <u>(Drained)</u>) Battery (Normal, <u>(Drained)</u>) Washer (Normal, <u>(Drained)</u>) Oil (Normal, <u>(Drained)</u>)
OPTIONAL EQUIPMENT	<u>Air conditioner, ASCD etc</u>
TOOLS & JACK	Installed
REMOVED PARTS	None

— 3/18 —

N21429 N218

5. TEST DATA

5.1 Detailed data of fuel leakage tests.

See table 1 & 2.

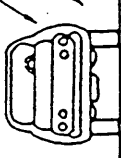
5.2 Photos of the test vehicle pretest and posttest,

See photos No.1 ~ 22.

Table 1, FUEL LEAKAGE MEASUREMENT IN BARRIER CRASH TEST

Item	Rotation	Fuel Tank	Fuel Piping	Fuel Strainer	Fuel Pump	Canister	Carburetor	Others
Damage to component. If yes, describe the damage.		Yes • <input checked="" type="radio"/> No	Yes • <input checked="" type="radio"/> No	Yes • <input checked="" type="radio"/> No	Yes • No	Yes • <input checked="" type="radio"/> No	Yes • No	Yes • <input checked="" type="radio"/> No
Front impact until vehicle motion ceases.		None	None	None		None		None
For 5 minutes period after vehicle motion ceases.		4	4	4		4		4
For next 25 minutes.								

Fuel filler cap location



If this side fill rotate so filler cap is down.

Table 2, FUEL LEAKAGE MEASUREMENT IN STATIC ROLLOVER TEST

Phase of Rotation	Time Period (min.)		Fuel Tank	Fuel Piping	Fuel Strainer	Fuel Pump	Canister	Carburetor	Others
	2	5							
Rotation 0° 90°		5	None	None	None	None	None		None
Hold at 90°	5	1	4	4	4	4	4		4
Rotation 90° 180°	2								
Hold at 180°	5	1							
Rotation 180° 270°	2								
Hold at 270°	5	1							
Rotation 270° 360°	2								
Hold at 360°	5	1							

Rotate so filler cap is down

Phase of Rotation	Time Period (min.)		Fuel Tank	Fuel Piping	Fuel Strainer	Fuel Pump	Canister	Carburetor	Others
	2	5							
Rotation 0° 90°		5							
Hold at 90°	5	1							
Rotation 90° 180°	2								
Hold at 180°	5	1							
Rotation 180° 270°	2								
Hold at 270°	5	1							
Rotation 270° 360°	2								
Hold at 360°	5	1							

Rotate so filler cap is up

6/18

218942

	Film No.
Photo. No. 1	MCZ-1041
Photo. No. 2	↑

Test Report No. _____

[Handwritten signature]



Photo No. 1
SUBJECT: Side view

PRBTTEST



Photo No. 2
SUBJECT: Side view

POSTTEST

7/20

118A911212

	Film No.
Photo. No. 3	MC2-1041
Photo. No. 4	↑

Test Report No. _____



Photo No. 3

PRETEST

SUBJECT: Rear view



Photo No. 4

POSTTEST

SUBJECT: Rear view

	Film No.
Photo. No. 5	MCZ-1041
Photo. No. 6	↑

Test Report No. _____

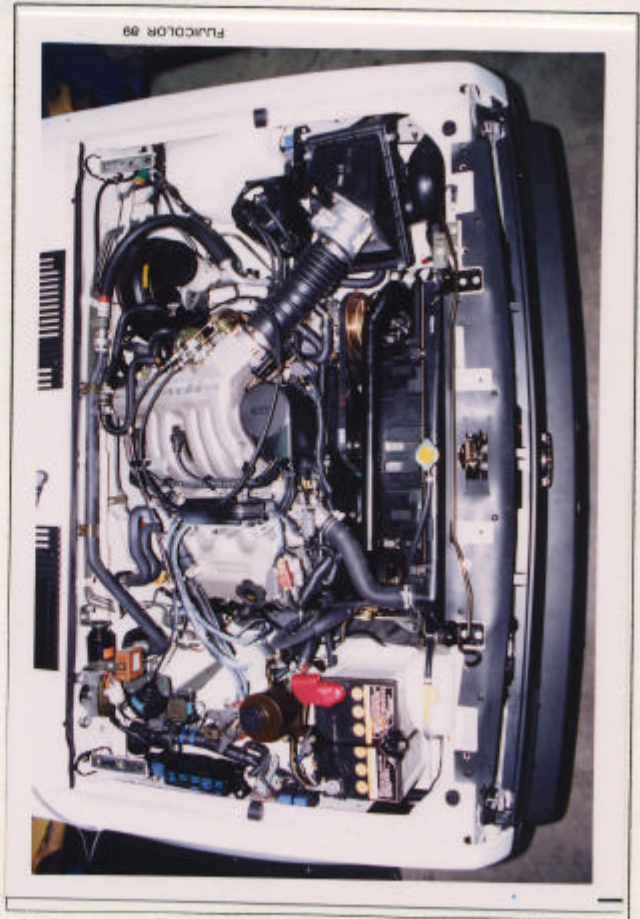


Photo No. 5 PRETEST
 SUBJECT: Engine compartment view

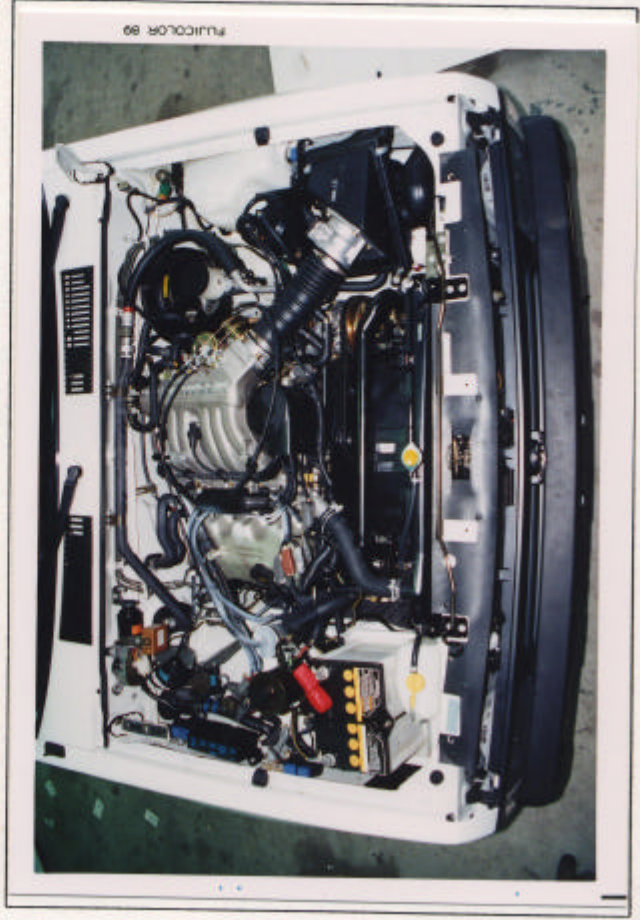


Photo No. 6 POSTTEST
 SUBJECT: Engine compartment view

	Film No.
Photo. No. 7	MCZ-1041
Photo. No. 8	↑

Test Report No. _____

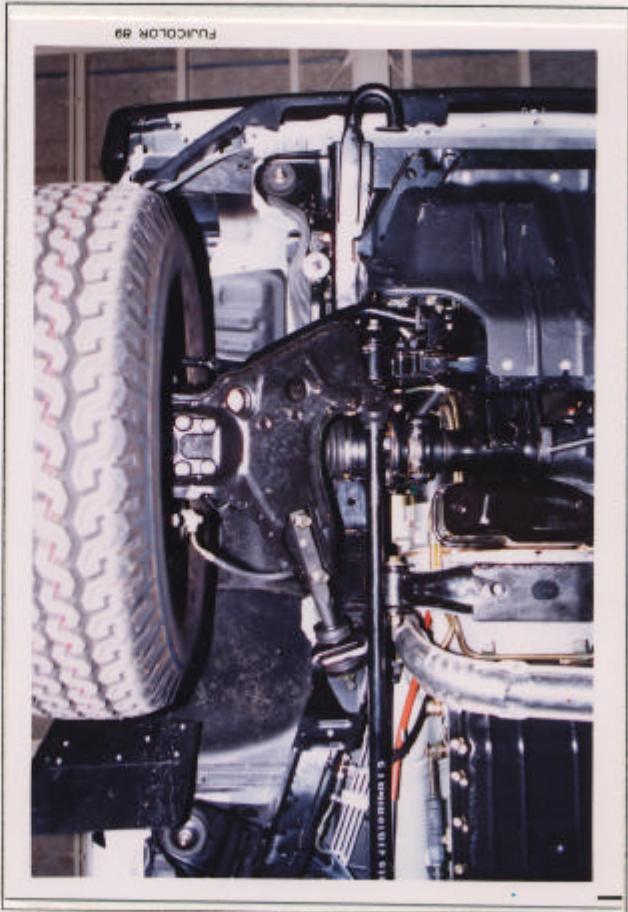


Photo No. 7 PRETEST
SUBJECT: Front underbody view



Photo No. 8 POSTTEST
SUBJECT: Front underbody view

10/20
10/20/10/20/10/20

	Film No.
Photo. No. 9	MC2-1041
Photo. No. 10	↑

Test Report No. _____

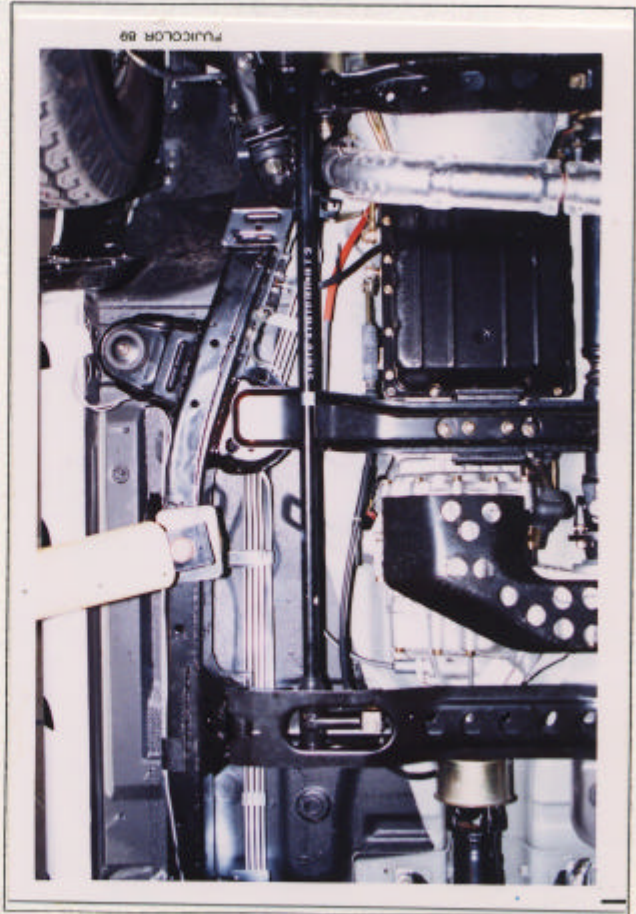


Photo No. 9
SUBJECT: Center underbody view Front

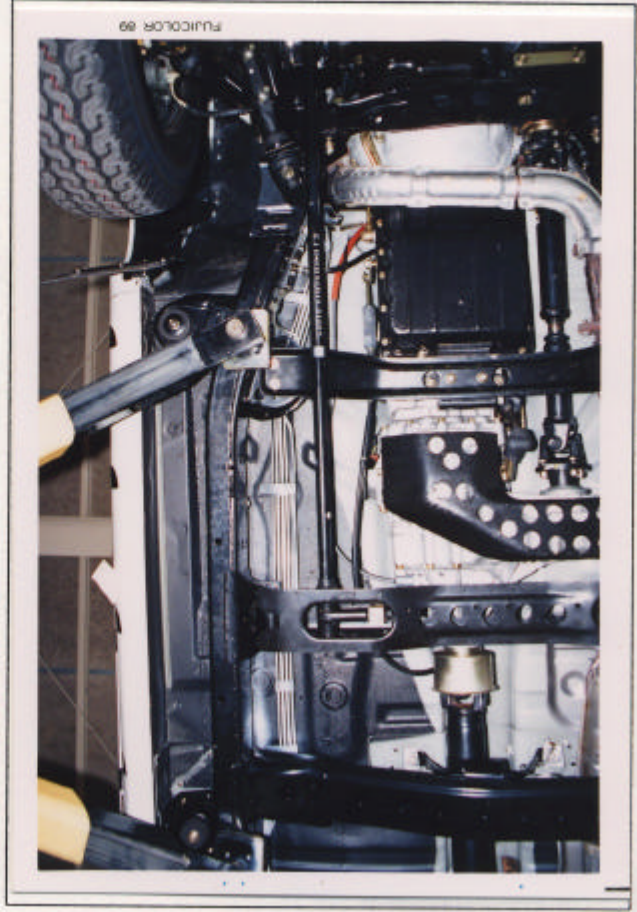


Photo No. 10
SUBJECT: Center underbody view Front

	Film No.
Photo. No. 11	MC2-1041
Photo. No. 12	↑

Test Report No. _____

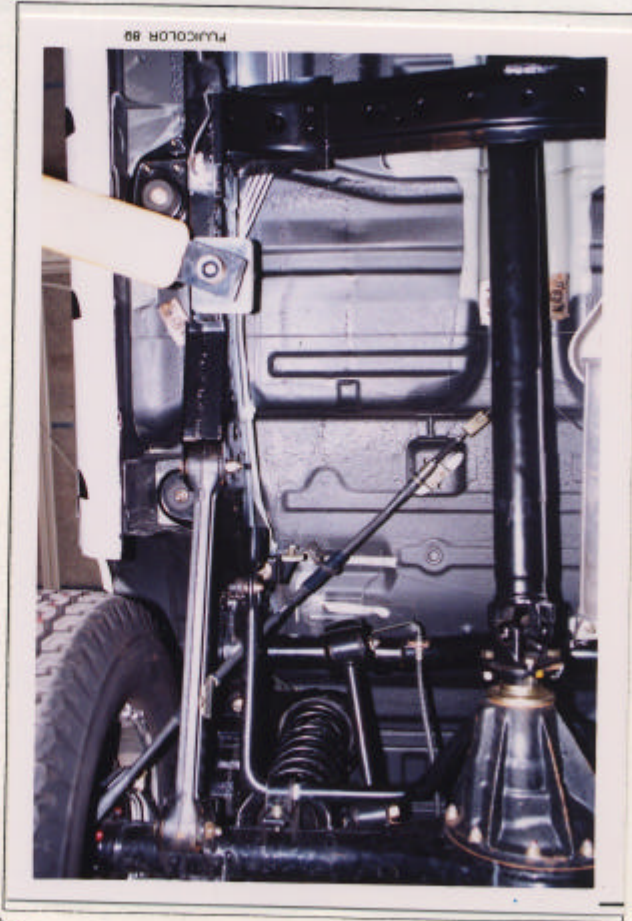


Photo No. 11 — PRETEST
SUBJECT: Center underbody view Rear



Photo No. 12 — POSTTEST
SUBJECT: Center underbody view Rear

12/18

1706-1910-10

	File No.
Photo. No. 13	MCZ-1041
Photo. No. 14	↑

Test Report No. _____

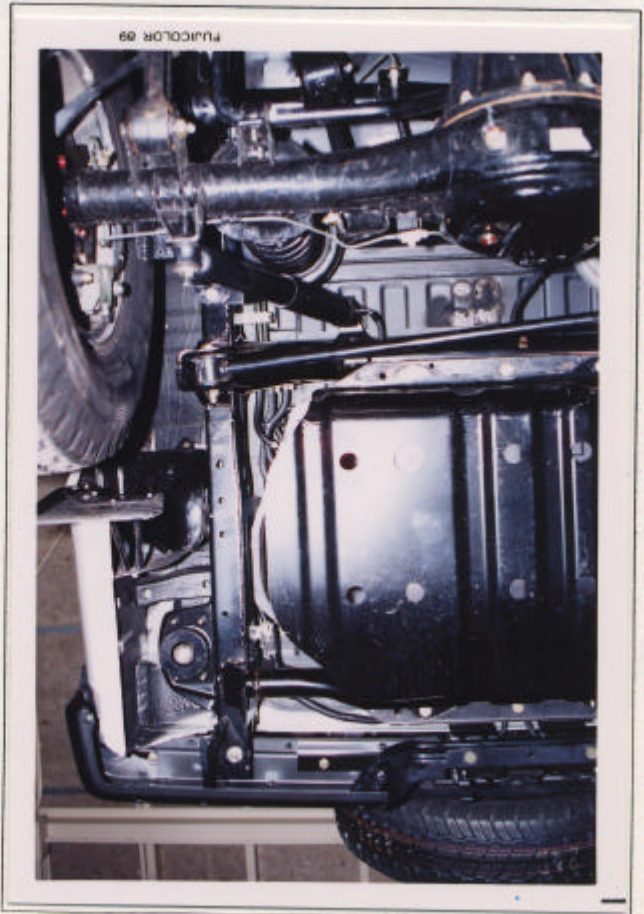


Photo No. 13 PRETEST
 SUBJECT: Rear underbody view

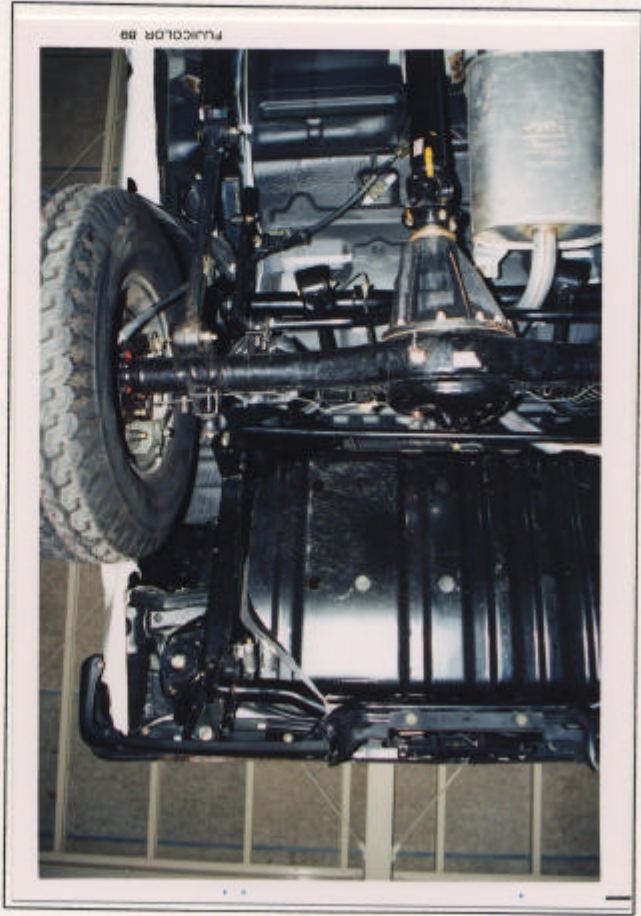


Photo No. 14 POSTTEST
 SUBJECT: Rear underbody view

13/0

10/19/71

	Film No.
Photo. No. 15	MC2-1041
Photo. No. 16	↑

Test Report No. _____

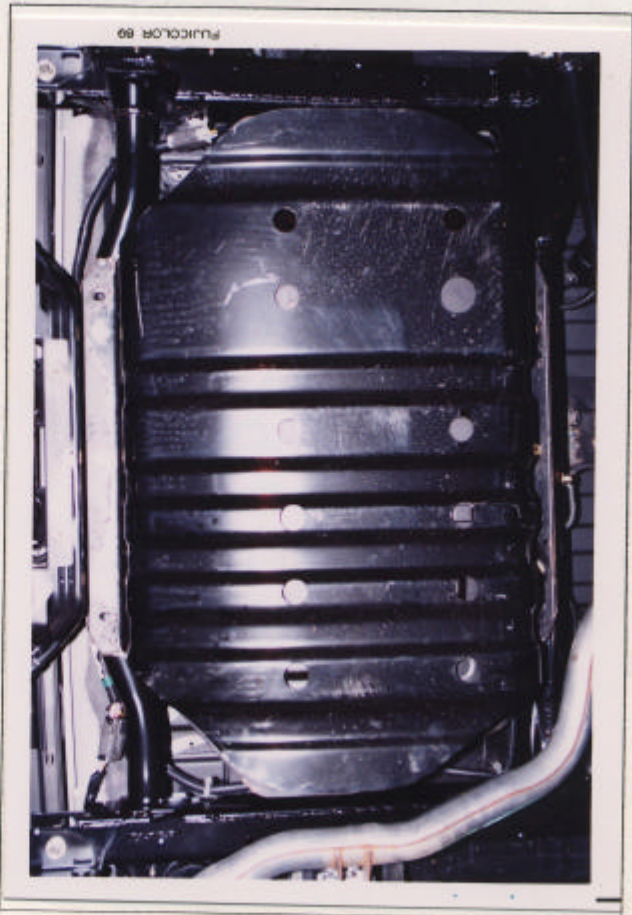


Photo No. 15 PRETEST
SUBJECT: Fuel tank view

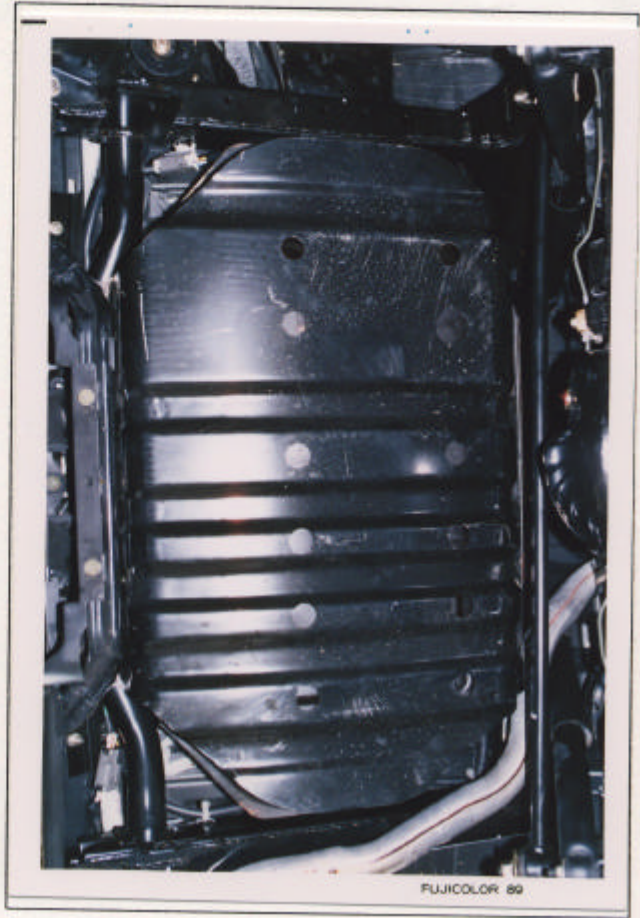


Photo No. 16 POSTTEST
SUBJECT: Fuel tank view

	Film No.
Photo. No. 17	MC2-1041
Photo. No. 18	↑

Test Report No. _____

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Photo No. 17 PRETEST
SUBJECT: Filler hose view



Photo No. 18 POSTTEST
SUBJECT: Filler hose view

15/1

817N62485

	Film No.
Photo. No. 19	MC2-1041
Photo. No. 20	↑

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Test Report No. _____



Photo No. 19 POSTTEST
SUBJECT: Fuel filler cap view

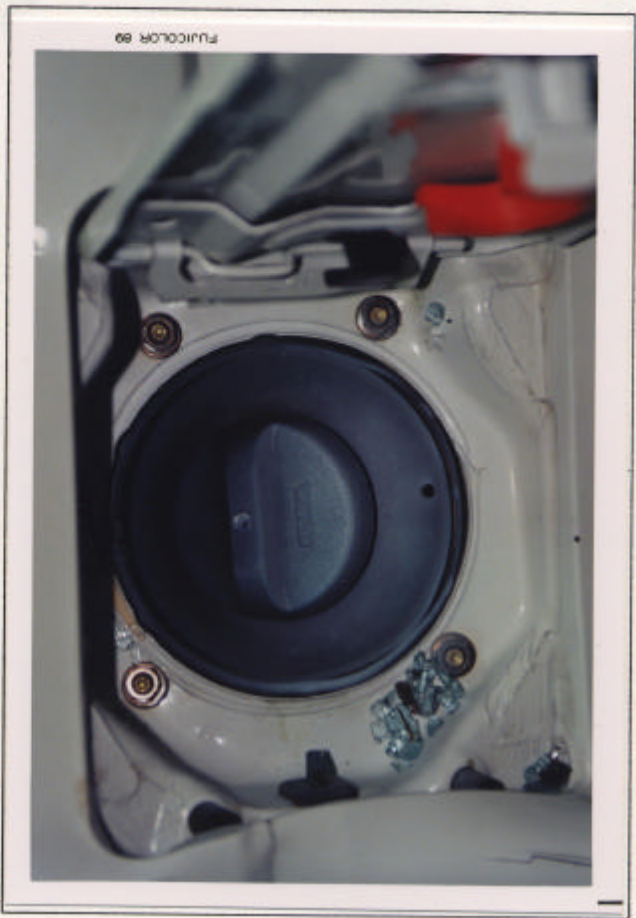


Photo No. 20 POSTTEST
SUBJECT: Fuel filler cap view

16/10

1041-1042-1043

	Film No.
Photo. No. 21	MCZ-1041
Photo. No. 22	↑

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Test Report No. _____

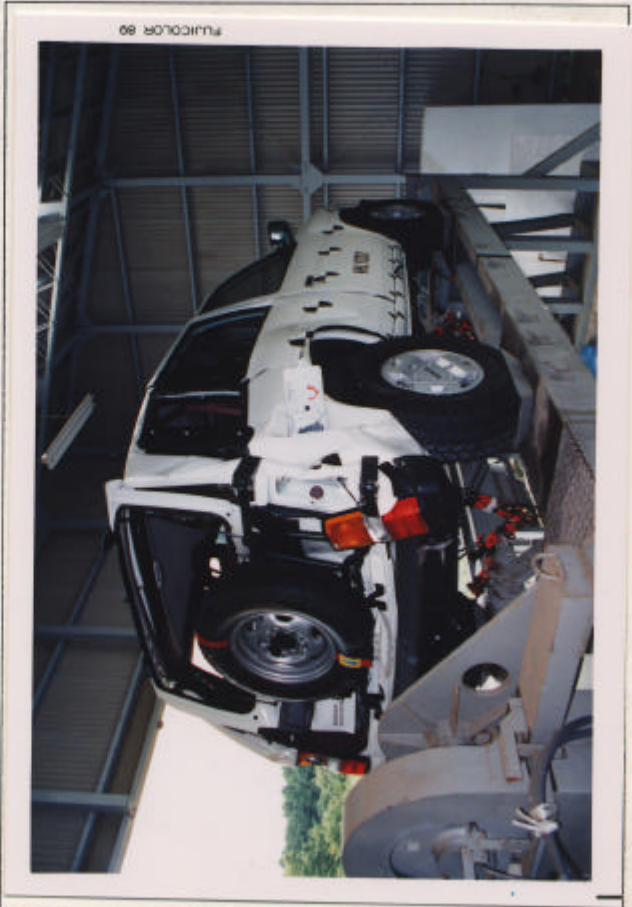


Photo. No. 21 POSTTEST
SUBJECT: Static rollover 0°



Photo. No. 22 POSTTEST
SUBJECT: Static rollover 90°

17/2

17/2 1041

	Film No.
Photo. No. 23	MC2-1041
Photo. No. 24	↑

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Test Report No. _____

18/10

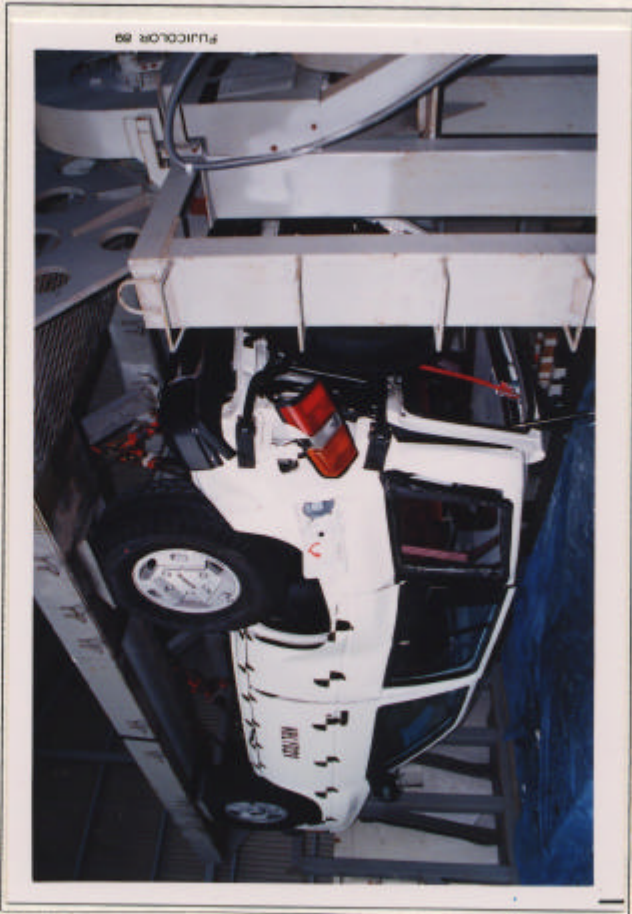


Photo. No. 23 POSTTEST
SUBJECT: Static rollover 180°



Photo. No. 24 POSTTEST
SUBJECT: Static rollover 270°

MC2-1041

秘

実験報告

LS0 部 LS8 課

報告配布先

区分	部	課	要
⑤	X00-1		1
④	X00-3		
	K04	1	
	LP7		
③	LS0-2		
	LS1		
②	LS0-3		
⑤	LS8	①	
⑦	LS8	①	
	LD0-3	①	

区分 D21

実験番号

依頼番号

No. S8P86N085

発行日付 86. 8. 20.

題目 WD21 '87年型 C.M.V.S.S. F.M.V.S.S. No. 301自己認証試験

後面衝突 (30 mile/h)

担当者 江浜光男, 力竹 篤

試験期間 '86. 6. 18. ~ '86. 6. 30.

試験日 '86. 6. 24.

1. 目的

C.M.V.S.S.
F.M.V.S.S. No. 301 [Fuel System Integrity] に対し、認証試験を行ったので結果を報告する。

適用範囲

背席側エアシートの全車

2. 結論

C.M.V.S.S.
F.M.V.S.S. No. 301 後面衝突要求に対し 合格 である。

3. 結果概要

3.1 規格に対する結果

* () 内はC.M.V.S.S.の項目を示す。

項目	規格	結果	判定
S.5.5 * (2)	Barrier衝突中のもれ量は 1oz以下、衝突後の5分間のもれ量は5oz以下、その後の25分間のもれ量は1oz/min以下のこと。	もれなし	OK
S.5.6 (3)	各90°回転開始後の5分間の総もれ量は5oz以下、その後のもれ量は1oz/min以下のこと	もれなし	OK

衝突速度 30.9 mile/h (49.7) km/h ※1oz36cc(比重0.79)

3.2 試験条件概要

(1) 供試車両 WHLYD21PKEVBC (車両管理番号: SXW088)

VIN JN8HD16Y7HM000021

ENG仕様 VG30(SPL) T/M仕様 A/T

(2) 試験方法 SAE J972 [Moving Barrier Collision Tests], F.M.V.S.S. No.301 S.6.2 [Rear Moving Barrier Crash] 及びS.6.4 [Static Roll Over] 及びカナダの [MOTOR VEHICLE SAFETY TEST METHODS] に準拠する。

(3) 重量条件

試験車重量;	4700	lb (2132	kg)
ムービングバリア重量;	4045	lb (1835	kg)

課長

守田

担当者

力竹

渡辺

A	4
B	5
C	4
T	2

4. 試験条件

(1) 試験車選定理由

適用範囲中では、本衝突性能へ影響する燃料系及び車両構造に有意差がない為、前記車両を供試車両とした。
尚、車両重量は適用範囲中の最重量車の重量に調整して実施した。

(2) 重量条件

(単位 kg)

	T o t a l	F r o n t	R e a r
★設計重量	2132	1039	1093
試験時重量	2132	1040	1092

★ WHL Y D Z I (P K E D) 相当重量
 (フルオプション仕様)

Cargo & Luggage 重量	積載位置	136 kg リアアックス上のリアフロアに固定
調整重量		90 kg
D u m m y	供試 Dummy; PART 572 Dummy 2体 積載位置; 前席左右外側席 拘束方法; 標準装備の Type 2 Seat Belt 拘束 Seat 位置; Seat Back 最高角度調節位置から Seat Slide 最前端調節位置から	Driver席 7 ノッチ Assist席 3 ノッチ Driver席 132 ■後方 Assist席 132 ■後方

ムービングバリア重量 Total; 1835 kg (FR; 1320 kg, RR; 515 kg)

5. 試験車の条件

☆印については法規規定要件である。

☆Fuel Tank	容量: 80 l 注入量: 76 l (95 %) 代用液体 名称 シェルロース 比重 0.79 F.M.V.S.S.No.301S.7.1.1 に示される液体を使用(ASTM D484-71 Table 1)
☆Ignition Key位置	ON
☆Fuel Pump 作動状態	(ON) <u>OFF</u> Pump仕様: 電重力ポンプ° (インタンク式)
☆Parking Brake	OFF
☆Transmission	Neutral
☆Tire 圧	Front: 2.8 kg/c m ² Rear: 3.2 kg/c m ²
Door及び Trunk Lid(Rear Gate)	全閉 Latchはかみ合い状態 LockはOFF
Side Window Glass	Front 右(Open, <u>Closed</u>) Rear 右(Open,Closed) 左(Open, <u>Closed</u>) 左(Open,Closed)
各 操 作 液	Radiator (正規状態、 <u>抜取り</u>) Battery (正規状態、 <u>抜取り</u>) Washer (正規状態、 <u>抜取り</u>) Oil (正規状態、 <u>抜取り</u>)
主要OPT部品	°パワーステアリング °エアコン
工具Jack類	正規状態
その他取外し部品	°なし
ムービングバリアの ブレーキ作動状態	衝突開始後0.2sec以降にブレーキが作動。

6. 試験結果

- 6.1 燃料もれ結果をFig. 1とFig. 2に示す。
- 6.2 試験前後の状況写真をPHOTO. 1～PHOTO. 4に示す。
- 6.3 燃料系に関する試験前後の状況写真をPHOTO. 5～PHOTO. 18に示す。
- 6.4 Static Roll Over試験時の状況写真をPHOTO. 19～PHOTO. 22に示す。

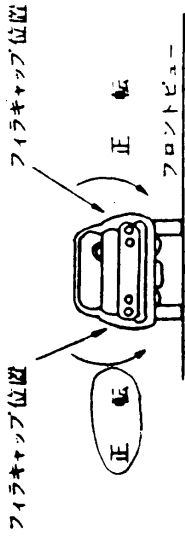


Fig. 1 燃料もれ結果 (正転時)

項目	部位	Fuel Tank回	Piping	Fuel Strainer	Fuel Pump	Canister	Carburetor	その他
Barrier Test	燃料系の破損の有無 いずれかに○印 (破損状況)	有・(無)	右・(無)	有・(無)	有・(無)	有・(無)	有・無 設定無	
	衝突中の燃料もれ	無	無	無	無	無		無
	衝突後の燃料もれ	5分 30分 25分						

Static Roll Over Test		経過時間		回転状況		通過時間		その他	
0°~90°回転中	2分	5分	無	無	無	無	無		
	7分	1分 1分							
90°~180°回転中	9分	5分							
	14分	1分 1分							
180°~270°回転中	16分	5分							
	21分	1分 分							
270°~360°回転中	23分	5分							
	28分	1分 1分							

Fig. 2 燃料もれ結果 (逆転時)★

★正転に対し逆方向回転を意味する。

回転状況	経過時間		無	無	無	無	無	無	無
	2分	7分							
0°~190°回転	5分		無	無	無	無	無	無	無
90°停止	1分	1分	無	無	無	無	無	無	無
90°~180°回転	5分	9分	無	無	無	無	無	無	無
180°停止	1分	1分	無	無	無	無	無	無	無
180°~270°回転	5分	16分	無	無	無	無	無	無	無
270°停止	1分	1分	無	無	無	無	無	無	無
270°~360°回転	5分	23分	無	無	無	無	無	無	無
360°停止	1分	1分	無	無	無	無	無	無	無
	5分	28分	無	無	無	無	無	無	無

Static Roll Over Test

複写フィルム、ロールNo _____

報告書番号 _____

複写フィルムNo _____

⑧ 認証番号 _____



PHOTO. 1 撮影フィルムロールNo _____

PHOTO. 2 撮影フィルムロールNo _____

試験前
 車両側面 撮影フィルムNo _____

試験後
 車両側面 撮影フィルムNo _____



PHOTO. 3 撮影フィルムロールNo _____

PHOTO. 4 撮影フィルムロールNo _____

試験前
 車両後面 撮影フィルムNo _____

試験後
 車両後面 撮影フィルムNo _____

複写フィルム・ロールNo _____

報告書番号 _____

複写フィルムNo _____

⑧ 認証番号 _____

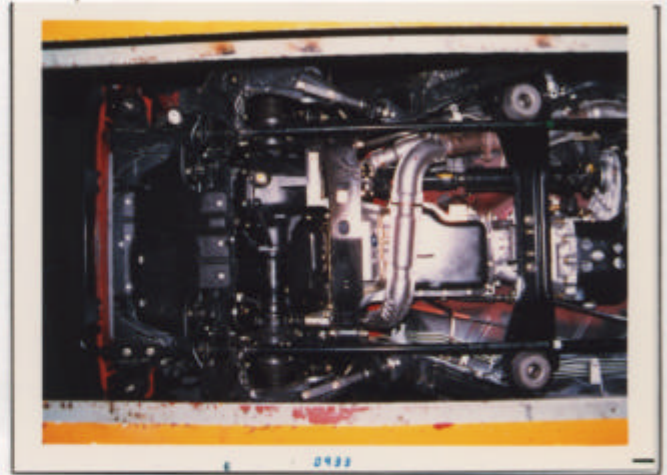
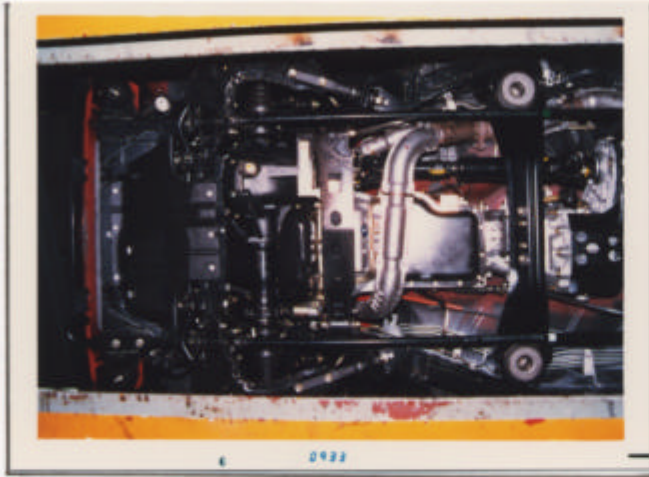


PHOTO. 5 撮影フィルムロールNo _____

PHOTO. 6 撮影フィルムロールNo _____

試験前

試験後

Fr. 下回り

Fr. 下回り

撮影フィルムNo _____

撮影フィルムNo _____

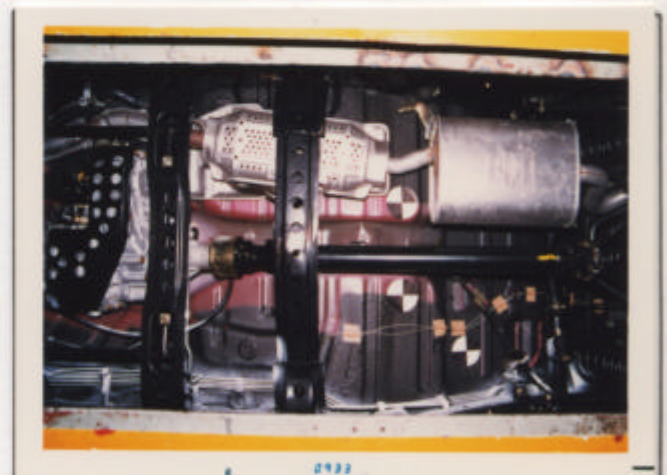
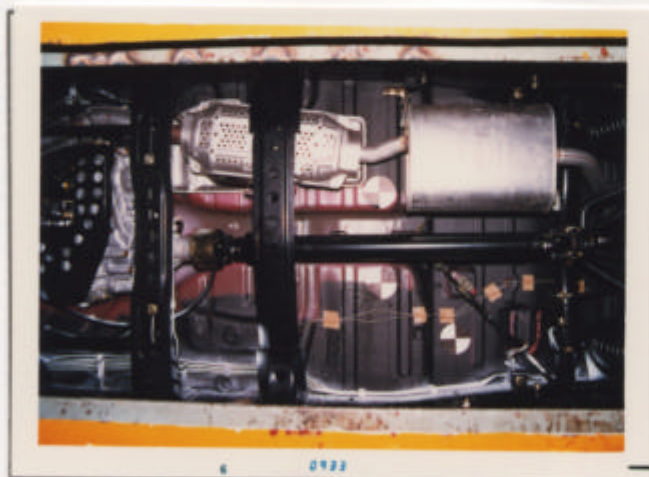


PHOTO. 7 撮影フィルムロールNo _____

PHOTO. 8 撮影フィルムロールNo _____

試験前

試験後

Center 下回り

Center 下回り

撮影フィルムNo _____

撮影フィルムNo _____

複写フィルム、ロールNo _____

報告書番号 _____

複写フィルムNo _____

⑧ 認証番号 _____

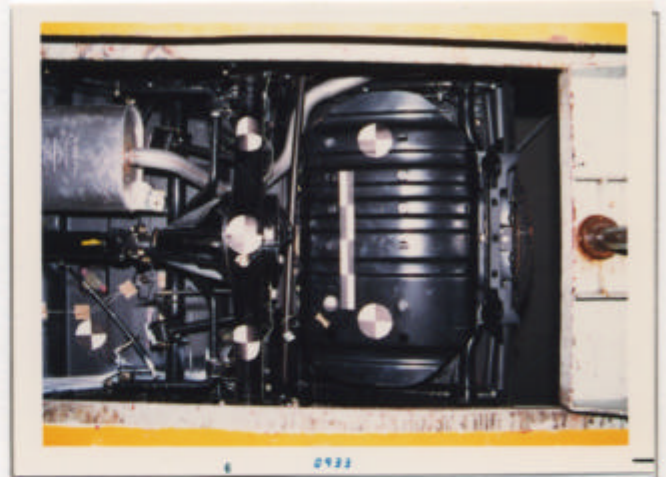
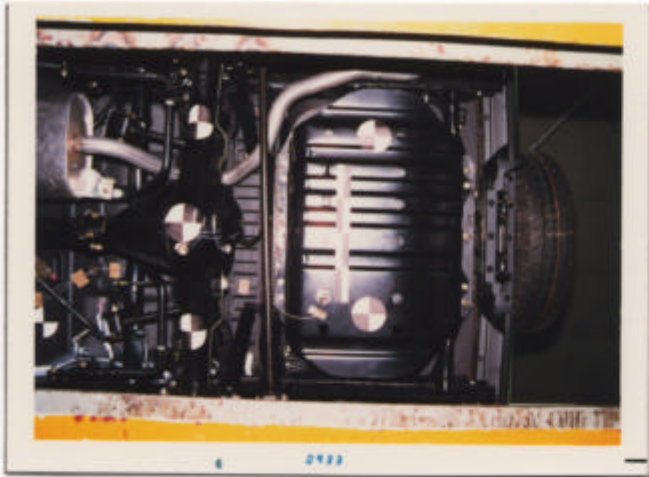


PHOTO. 9 撮影フィルムロールNo _____

PHOTO. 10 撮影フィルムロールNo _____

試験前

試験後

Rr. 下回り

Rr. 下回り

撮影フィルムNo _____

撮影フィルムNo _____

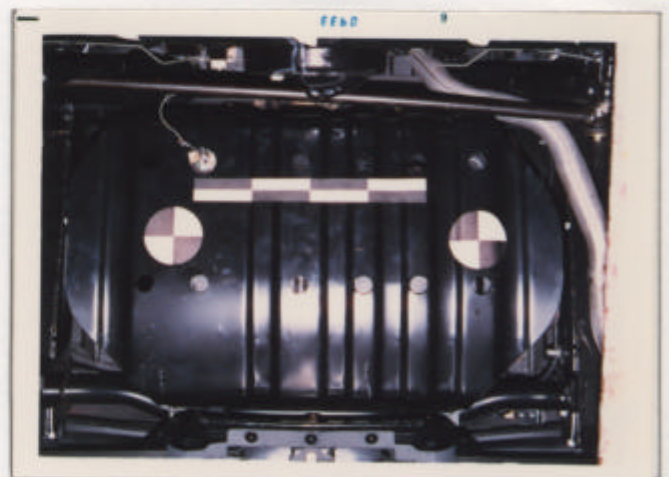
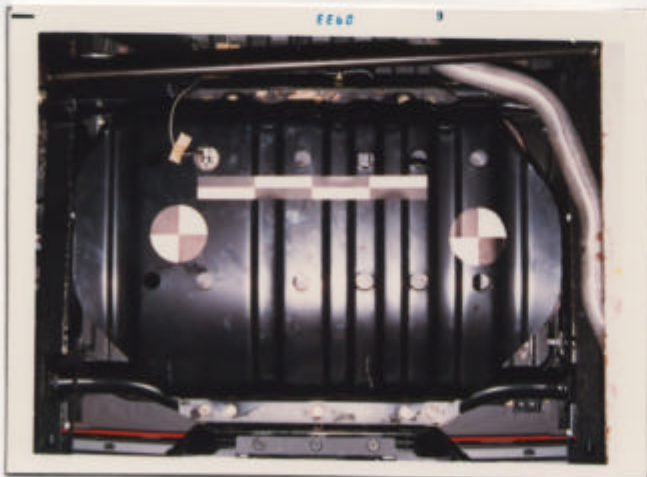


PHOTO. 11 撮影フィルムロールNo _____

PHOTO. 12 撮影フィルムロールNo _____

試験前

試験後

Fuel Tank

Fuel Tank

撮影フィルムNo _____

撮影フィルムNo _____

複写フィルム、ロールNo _____

複写フィルムNo _____

報告書番号 _____

㊟ 認証番号 _____



PHOTO. 13 撮影フィルムロールNo _____

試験前

Filler Hose 撮影フィルムNo _____

PHOTO. 14 撮影フィルムロールNo _____

試験後

Filler Hose 撮影フィルムNo _____

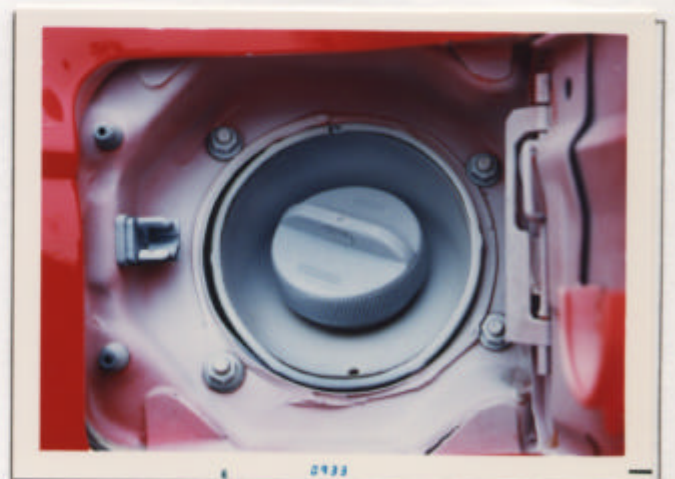


PHOTO. 15 撮影フィルムロールNo _____

試験前

Filler Cap 撮影フィルムNo _____

PHOTO. 16 撮影フィルムロールNo _____

試験後

Filler Cap 撮影フィルムNo _____

S8P86N085

複写フィルム、ロールNo _____

報告書番号 _____

複写フィルムNo _____

[S] 認証番号 _____

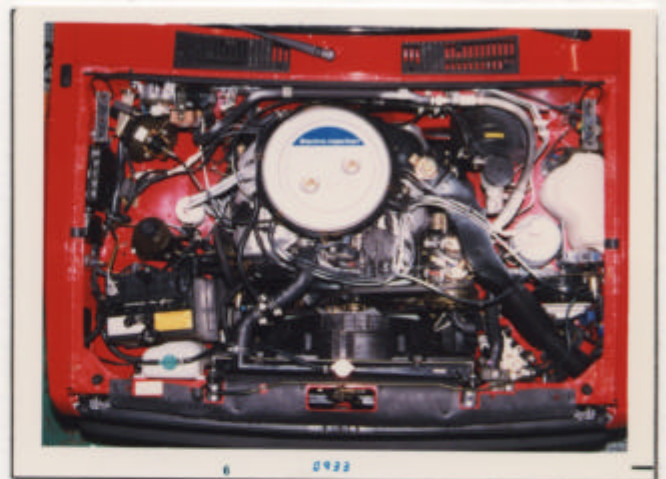
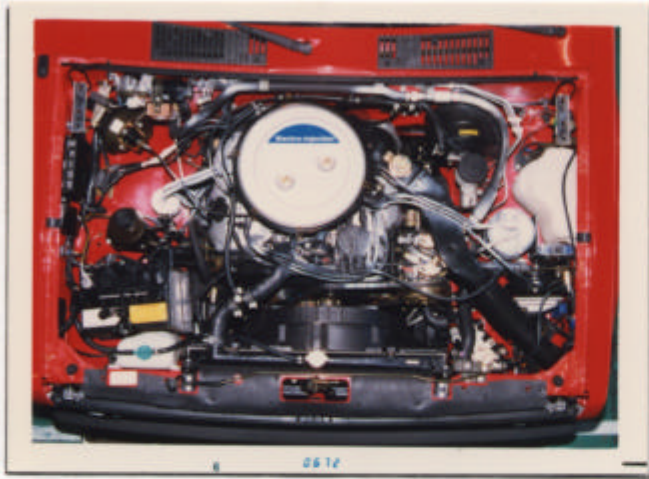


PHOTO. 17 撮影フィルムロールNo _____

PHOTO. 18 撮影フィルムロールNo _____

試験前

試験後

Engine Room

Engine Room

撮影フィルムNo _____

撮影フィルムNo _____

複写フィルム、ロールNo _____
複写フィルムNo _____

報告書番号 _____
⑧ 証 証 番号 _____



PHOTO. 19 撮影フィルムロールNo _____
Static Roll Over _____
0° (360°) 撮影フィルムNo _____

PHOTO. 20 撮影フィルムロールNo _____
Static Roll Over _____
正 転 90° 撮影フィルムNo _____



PHOTO. 21 撮影フィルムロールNo _____
Static Roll Over _____
正 転 180° 撮影フィルムNo _____

PHOTO. 22 撮影フィルムロールNo _____
Static Roll Over _____
正 転 270° 撮影フィルムNo _____

秘

実験報告

LS0部 LS8課

報告配布先

部署	詳細	要領
LS0-2		
LS1		
X00-1	1	
X00-3		
LTO-3	1	
LS0-3		
K04	1	
LP7		
LS8①		
LS8①		

区分 D21
 実験番号 _____
 依頼番号 _____

No. S8P86N086

発行日付 86. 8. 20.

題 目 WD21 '87年型 C.M.V.S.S. F.M.V.S.S. No. 301自己認証試験

後面衝突 (30 mile/h)

担当者 江浜 光男 * 力竹 篤 試験期間 '86. 7. 7. ~ '86. 7. 22.
 試験日 '86. 7. 11.

1. 目的
 C.M.V.S.S.
 F.M.V.S.S. No. 301 [Fuel System Integrity] に
 対し、認証試験を行ったので結果を報告する。

適用範囲

室内置き スパマクマ
仕様し 全車

2. 結論
 C.M.V.S.S.
 F.M.V.S.S. No. 301後面衝突要求に対し 合格 である。

3. 結果概要
 3.1 規格に対する結果

* () 内はC.M.V.S.S.の項目を示す。

項 目	規 格	結 果	判 定
S.5.5 * (2)	Barrier衝突中のもれ量は 1oz以下、 衝突後の5分間のもれ量は5oz以下、その後の 25分間のもれ量は1oz/min以下のこと。	もれなし	OK
S.5.6 (3)	各90°回転開始後の5分間の総もれ量は5oz 以下、その後のもれ量は1oz/min以下のこと	もれなし	OK

衝突速度 30.9 mile/h (49.8) km/h ※1oz36cc(比重0.79)

3.2 試験条件概要

(1) 供試車両 WNLYD21JFEUBC (車両管理番号: SXW078)

VIN JN8ND16Y4HM000015

ENG仕様 Z24(i) T/M仕様 5M/T

(2) 試験方法 SAE J972 [Moving Barrier Collision Tests], F.M.V.S.S. No.301
S.6.2 [Rear Moving Barrier Crash] 及びS.6.4 [Static Roll
Over] 及びカナダの [MOTOR VEHICLE SAFETY TEST METHODS] に
準拠する。

(3) 重量条件

試験車重量; 4652 lb (2110 kg)
 ムービングバリア重量; 4045 lb (1835 kg)

課 長

守 田

担当者

渡辺 樹
江浜 力竹

A	3
B	4
C	4
T	11

4. 試験条件

(1) 試験車選定理由

適用範囲中では、本衝突性能へ影響する燃料系及び車両構造に有意差がないため前記車両を供試車両とした。
なお車両重量は、適用範囲中の最大重量車相当の重量に調整した。

(2) 重量条件

(単位 kg)

	T o t a l	F r o n t	R e a r
★設計重量	2110	1053	1057
試験時重量	2110	1085	1025

★ W H L Y D 21 (P K E D) 相当重量
(フルオプション付)

Cargo & Luggage 重量	積載位置	136 kg リアマフスル上リアフロアに固定
調整重量		184 kg
D u m m y	供試 Dummy; PART572 Dummy 2体 積載位置; 前席左右外側席 拘束方法; 標準装備のType2 Seat Belt 拘束 Seat位置; Seat Back 最高角度調節位置から Seat Slide 最前端調節位置から	Driver席 7ノッチ Assist席 3ノッチ Driver席 132 ■後方 Assist席 132 ■後方

ムービングバリア重量 Total; 1835 kg (FR; 1320 kg, RR; 515 kg)

5. 試験車の条件

☆印については法規規定要件である。

☆Fuel Tank	容量: <u>60</u> l 注入量: <u>57</u> l (<u>95%</u>) 代用液体 <u>名称 シェルコース</u> <u>比重 0.79</u> F.M.V.S.S.No.301S.7.1.1 に示される液体を使用(ASTM D484-71 Table 1)
☆Ignition Key位置	ON
☆Fuel Pump 作動状態	(ON, <u>OFF</u>) Pump仕様: <u>電動ポンプ</u> (インタンク式)
☆Parking Brake	OFF
☆Transmission	Neutral
☆Tire 圧	Front: <u>2.8</u> kg/c m ² Rear: <u>3.2</u> kg/c m ²
Door及び Trunk Lid(Rear Gate)	全閉 Latchはかみ合い状態 LockはOFF
Side Window Glass	Front 右(<u>Open</u> , <u>Closed</u>) 左(<u>Open</u> , <u>Closed</u>) Rear 右(<u>Open</u> , <u>Closed</u>) 左(<u>Open</u> , <u>Closed</u>)
各 操 作 液	Radiator (正規状態、 <u>抜取り</u>) Battery (正規状態、 <u>抜取り</u>) Washer (正規状態、 <u>抜取り</u>) Oil (正規状態、 <u>抜取り</u>)
主要OPT部品	◦エアコン ◦パワステ
工具 Jack 類	正規状態
その他取外し部品	◦無し
ムービングバリアの ブレーキ作動状態	◦衝突開始後0.2sec以降にブレーキが作動。

6. 試験結果

- 6.1 燃料もれ結果をFig. 1とFig. 2に示す。
- 6.2 試験前後の状況写真をPHOTO. 1～PHOTO. 4に示す。
- 6.3 燃料系に関する試験前後の状況写真をPHOTO. 5～PHOTO. 18に示す。
- 6.4 Static Roll Over試験時の状況写真をPHOTO. 19～PHOTO. 22に示す。

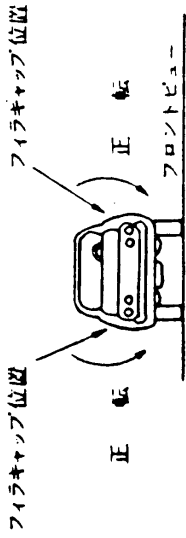


Fig.1 燃料もれ結果 (正転時)

項目	部位	Fuel Tank	Piping	Fuel Strainer	Fuel Pump	Canister	Carburetor	その他
燃料系の破損の有無 いずれかに○印 (破損状況)		有・ <input checked="" type="radio"/> 無	右・ <input checked="" type="radio"/> 左	有・ <input checked="" type="radio"/> 無	有・ <input checked="" type="radio"/> 無	有・ <input checked="" type="radio"/> 無	有・無	無
	衝突中の燃料もれ	無	無	無	無	無	設定無	無
衝突後の燃料もれ	5分							
	30分							
	25分							

回転状況		経過時間		Fuel Tank	Piping	Fuel Strainer	Fuel Pump	Canister	Carburetor	その他
0°~90°回転中	2分	5分	無	無	無	無	無	無	無	無
90°停止	7分	1分								
90°~180°回転中	9分	1分								
180°停止	14分	1分								
180°~270°回転中	16分	5分								
270°停止	21分	1分								
270°~360°回転中	23分	5分								
360°停止	28分	1分								

Fig. 2 燃料もれ結果 (逆転時)★

回転状況		経過時間										
0°~190°回転中	2分	5分	無	無	無	無	無	無	無	無	無	無
90°停止	7分	1分	無	無	無	無	無	無	無	無	無	無
90°~180°回転中	9分	5分	無	無	無	無	無	無	無	無	無	無
180°停止	14分	1分	無	無	無	無	無	無	無	無	無	無
180°~270°回転中	16分	5分	無	無	無	無	無	無	無	無	無	無
270°停止	21分	1分	無	無	無	無	無	無	無	無	無	無
270°~360°回転中	23分	5分	無	無	無	無	無	無	無	無	無	無
360°停止	28分	1分	無	無	無	無	無	無	無	無	無	無
		1分	無	無	無	無	無	無	無	無	無	無

★正転に対し逆方向回転を意味する。

Static Roll Over Test

複写フィルム・ロールNo _____

複写フィルムNo _____

報告書番号 _____

㊟ 認証番号 _____



PHOTO. 1 撮影フィルムロールNo _____

試験前

車両側面

撮影フィルムNo _____

PHOTO. 2 撮影フィルムロールNo _____

試験後

車両側面

撮影フィルムNo _____



PHOTO. 3 撮影フィルムロールNo _____

試験前

車両後面

撮影フィルムNo _____

PHOTO. 4 撮影フィルムロールNo _____

試験後

車両後面

撮影フィルムNo _____

複写フィルム、ロールNo _____

報告書番号 _____

複写フィルムNo _____

④ 認証番号 _____

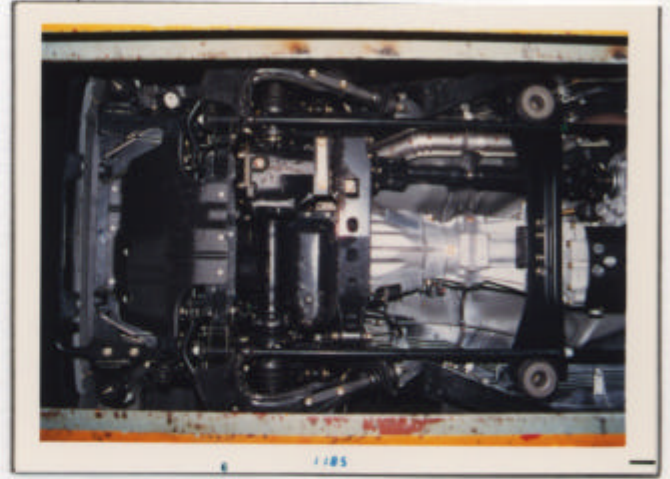
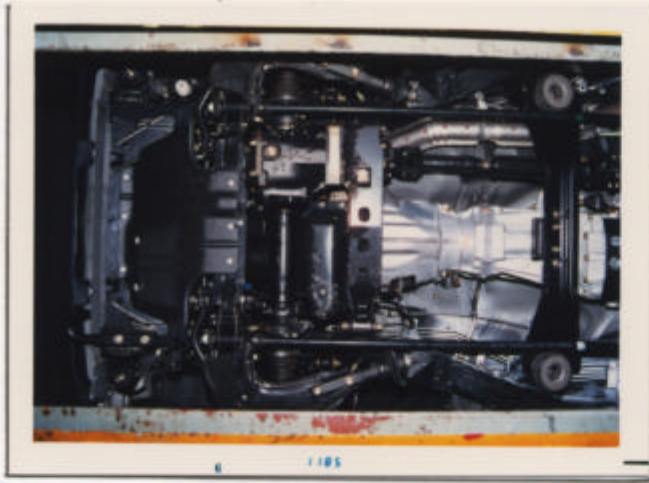


PHOTO. 5 撮影フィルムロールNo _____

PHOTO. 6 撮影フィルムロールNo _____

試験前

試験後

Fr. 下回り

Fr. 下回り

撮影フィルムNo _____

撮影フィルムNo _____

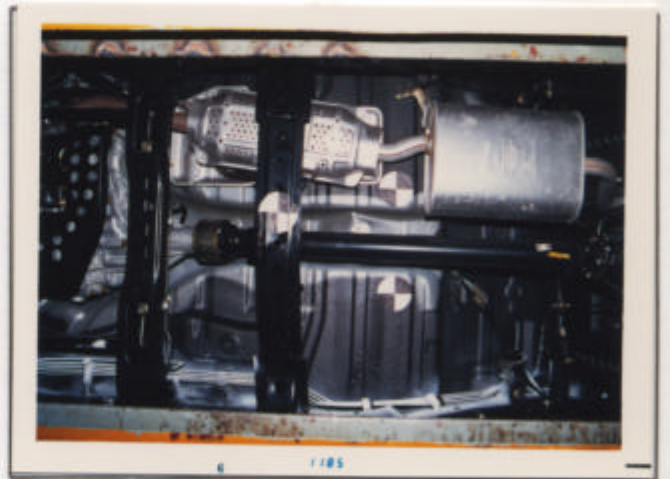
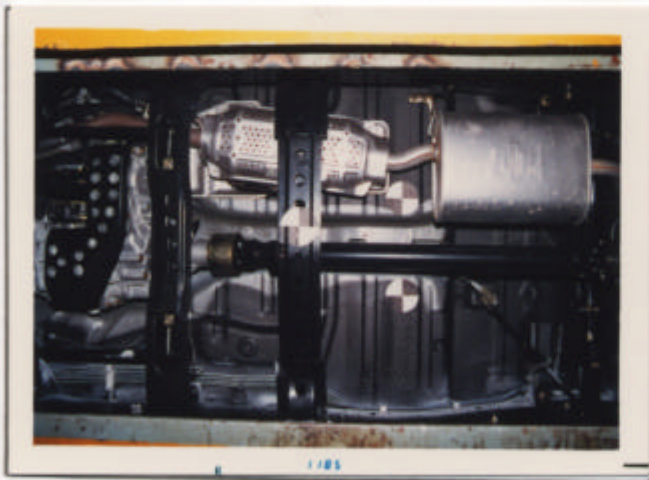


PHOTO. 7 撮影フィルムロールNo _____

PHOTO. 8 撮影フィルムロールNo _____

試験前

試験後

Center 下回り

Center 下回り

撮影フィルムNo _____

撮影フィルムNo _____

複写フィルム：ロールNo _____

報告書番号 _____

複写フィルムNo _____

㊟ 認証番号 _____

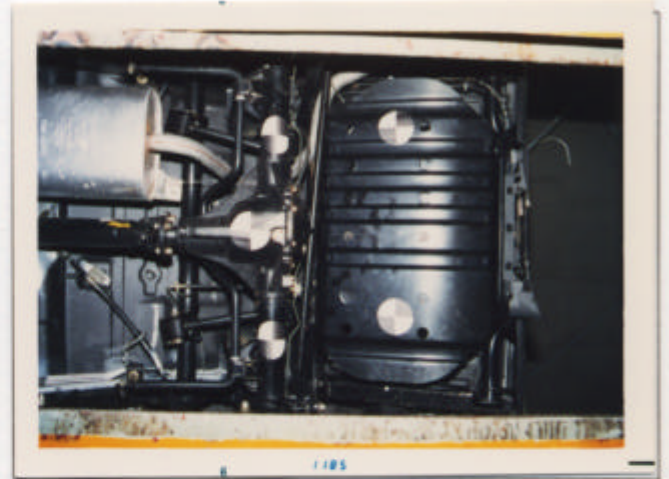
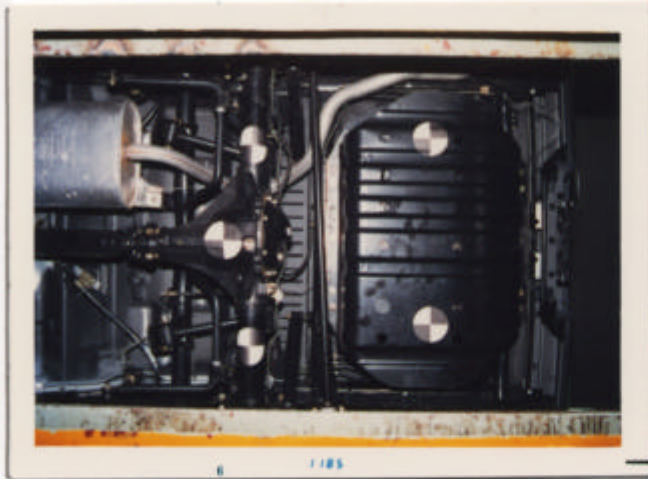


PHOTO. 9 撮影フィルムロールNo _____

PHOTO. 10 撮影フィルムロールNo _____

試験前

試験後

Rr. 下回り

Rr. 下回り

撮影フィルムNo _____

撮影フィルムNo _____

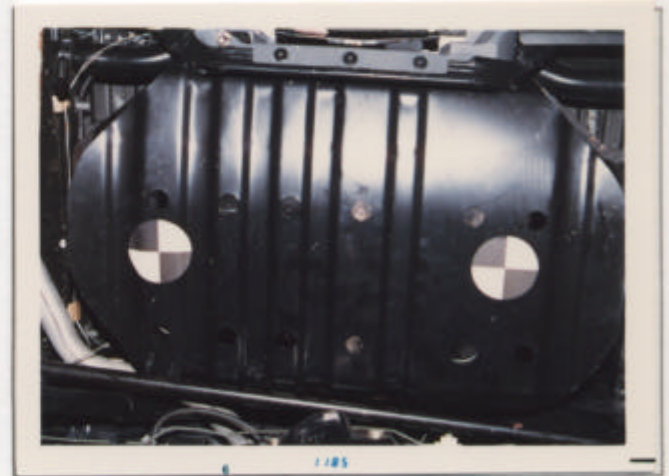
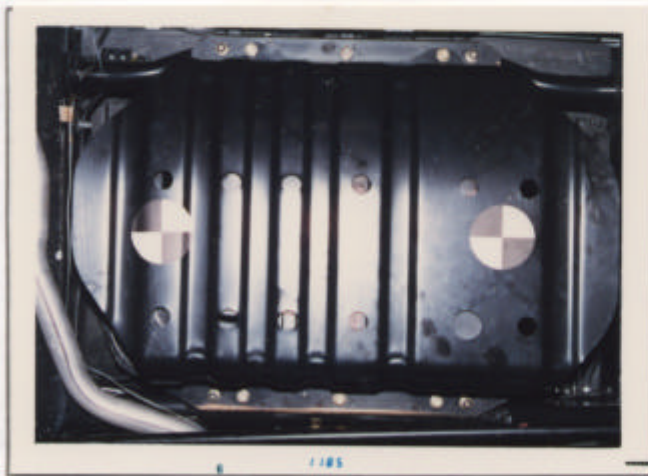


PHOTO. 11 撮影フィルムロールNo _____

PHOTO. 12 撮影フィルムロールNo _____

試験前

試験後

Fuel Tank

Fuel Tank

撮影フィルムNo _____

撮影フィルムNo _____

複写フィルム、ロールNo _____

複写フィルムNo _____

報告書番号 _____

㊟ 認証番号 _____



PHOTO. 13 撮影フィルムロールNo _____

試験前

Filler Hose

撮影フィルムNo _____

PHOTO. 14 撮影フィルムロールNo _____

試験後

Filler Hose

撮影フィルムNo _____



PHOTO. 15 撮影フィルムロールNo _____

試験前

Filler Cap

撮影フィルムNo _____

PHOTO. 16 撮影フィルムロールNo _____

試験後

Filler Cap

撮影フィルムNo _____

複写フィルム、ロールNo _____

複写フィルムNo _____

報告書番号 _____

[S] 認証番号 _____



PHOTO. 17 撮影フィルムロールNo _____

試験前

Engine Room 撮影フィルムNo _____

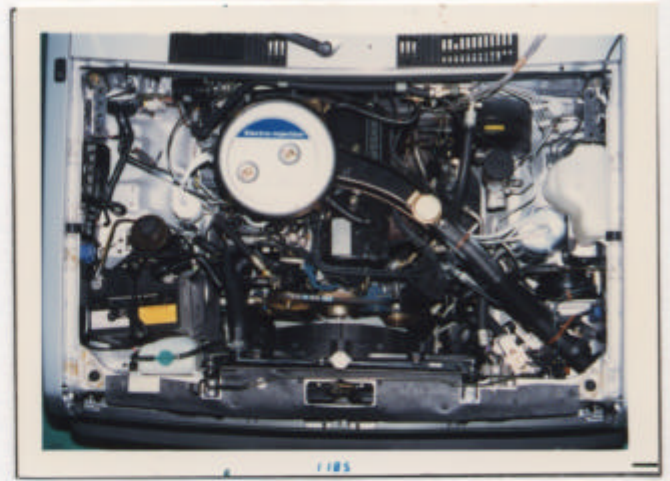


PHOTO. 18 撮影フィルムロールNo _____

試験後

Engine Room 撮影フィルムNo _____

複写フィルム、ロールNo _____

報告書番号 _____

複写フィルムNo _____

④ 総社番号 _____



PHOTO. 19 撮影フィルムロールNo _____

PHOTO. 20 撮影フィルムロールNo _____

Static Roll Over

Static Roll Over

0° (360°)

撮影フィルムNo _____

正転 90°

撮影フィルムNo _____



PHOTO. 21 撮影フィルムロールNo _____

PHOTO. 22 撮影フィルムロールNo _____

Static Roll Over

Static Roll Over

正転 180°

撮影フィルムNo _____

正転 270°

撮影フィルムNo _____