Individual Vehicle dimensions were obtained through the use of the Expert AutoStats(R) program.

The Expert AutoStats(R) program contains a multitude of vehicle dimensions and specifications on over 54,000 different vehicles and 203 different manufacturers spanning more than 80 years.

While every attempt has been made to ensure accurate data, these dimensions are meant to be used as first approximations. Some measurements are dependant on such factors as tire and rim sizes, tire inflation pressure and wear, suspension system condition, bumper type and style, and other manufacturing variations from vehicle to vehicle.

Whenever feasible, the vehicle in question or an exemplar vehicle should be measured to verify data important to your case.

Individual Vehicle Data Search Service (R)

Provided by: 4N6XPRT SYSTEMS (R) Forensic Expert Software 8387 University Avenue La Mesa, CA 91942-9342

(619) 464-3478 / (800) 266-9778 / FAX: (619) 464-2206 Web Site - <u>www.4N6XPRT.com</u> Email - 4n6@4n6xprt.com

Through the use of

EXPERT AUTOSTATS(R)

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DEVELOPED BY:

Daniel W. Vomhof III & Daniel W. Vomhof, Ph.D.

VEHICLE DATA RESEARCH BY:

Sheryl Cozby, Marion Vomhof, Muriel Vomhof, & Cindy Christensen

Expert VIN DeCoder®

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Version Number 4.4.0.1

DeCoded VIN: KNAFK4A61F5436833

Model:	2015 Kia Forte LX 4 door Sedan
Engine Size:	1.8 L/ 110 cu.in.
Engine Description:	Inline 4 cylinder with Dual Overhead Cam
Horse Power:	145 @ 6500 rpms
Torque:	130 lb-ft at 4700 rpms
Injection System:	Electronic Gasoline Injection (EGI)
PSI:	N/A Ignition: electronic
Manufacturer:	Kia
Assembly Plant:	Hwasung, Korea
Drive Wheels:	This is a Front Wheel Drive vehicle w/ Manual Belts w/ Driver & Passenger Airbags (Front, Side and Curtain)

The First through Third characters (KNA) indicate a Kia Passenger Car made in Korea

The Fourth character (F) indicates a Forte

The Fifth character (K) indicates a GL series

The Sixth character (4) indicates a 4 door Sedan

The Seventh character (A) indicates Manual Belts w/ Driver & Passenger Airbags (Front, Side and Curtain)

The Eighth character (6) indicates the OEM engine: 1.8 L/ 110 cu.in., L4, DOHC

The Ninth character (the check digit) is entered as 1.

The VIN appears Valid, the calculated value is 1.

The Tenth character (F) indicates the model year 2015

The Eleventh character (5) indicates the vehicle was made in the assembly plant in Hwasung, Korea

The Twelfth through Seventeenth characters (436833) indicate the Serial Number and are unique to this vehicle.

Expert AutoStats®

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PROVIDED BY: 4N6XPRT Systems 8387 University Avenue La Mesa CA 91941

5/18/2025

2015 KIA FORTE 4 DOOR SEDAN			
	2786 lbs.	126	4 149
Curb Weight: Curb Weight Distribution - Front:	56 %	Rear: 44	4 kg. %
curb weight bistribution - Front.		Real. 44	
Gross Vehicle Weight Rating:	lbs.		kg.
Number of Tires on Vehicle: Drive Wheels:	FRONT		
Horizontal Dimensions	Inches	Feet	Meters
Total Length	179	14.92	4.55
<pre>wheelbase:</pre>	106	8.83	2.69
Front Bumper to Front Axle:	34	2.83	0.86
Front Bumper to Front of Front Well:	20	1.67	0.51
Front Bumper to Front of Hood:	3	0.25	0.08
Front Bumper to Base of Windshield:	34	2.83	0.86
Front Bumper to Top of Windshield:	73	6.08	1.85
Rear Bumper to Rear Axle:	39	3.25	0.99
Rear Bumper to Rear of Rear Well:	23	1.92	0.58
Rear Bumper to Rear of Trunk:	5	0.42	0.13
Rear Bumper to Base of Rear Window:	18	1.50	0.46
Width Dimensions	F		
Maximum Width:	70	5.83	1.78
Front Track:	61	5.08	1.55
Rear Track:	62	5.17	1.57
Vertical Dimensions			
Height:	56	4.67	1.42
Ground to -			
Front Bumper (Top)	20	1.67	0.51
Headlight - center	28	2.33	0.71
Hood - top front:	27	2.25	0.69
Base of Windshield	37	3.08	0.94
Rear Bumper - top:	25	2.08	0.64
Trunk - top rear:	42	3.50	1.07
Base of Rear Window:	44	3.67	1.12

Expert AutoStats®

2015 KIA FORTE 4 DOOR SEDAN

Interior Dimensions Front Seat Shoulder Width Front Seat to Headliner Front Leg Room - seatback to floor (max) Rear Seat Shoulder Width Rear Seat to Headliner Front Leg Room - seatback to floor (min)	56 39 42 55 37 36	Feet 4.67 3.25 3.50 4.58 3.08 3.00	1.42 0.99 1.07 1.40 0.94 0.91
Seatbelts: 3pt - front and rear Airbags: FRONT SEAT AIRBAGS + SIDE A	AIRBAGS		
Steering Data			
Turning Circle (Diameter) Steering Ratio: 14.50:1 Wheel Radius: Tire Size (OEM): P195/65R15	420	35	10.67
Acceleration & Braking Information			
Brake Type: ALL DISC			
ABS System: ALL WHEEL ABS			
Braking, 60 mph to 0 (Hard pedal, no skid, $d = \boxed{114.0}$ ft $t = \boxed{2.6}$ sec	dry pavement): $a = \begin{bmatrix} -33.9 \end{bmatrix}$ ft/s	ec² G-foi	rce = -1.05
Acceleration:			
0 to 30mph $t = 2.7$ sec	$a = \boxed{16.3} ft/s$	ec² G-foi	rce = 0.51
0 to 60mph $t = 6.8$ sec	a = 12.9 ft/s	ec² G-foi	rce = 0.40
45 to 65mph $t = 4.2$ sec	a = 7.0 ft/s	ec² G-foi	rce = 0.22
Transmission Type: 6spd MANUAL			

Notes:

Federal Bumper Standard Requirements:	2.5	mph
This vehicles Rated Bumper Strength:	2.5	mph

N.S.D.C = 2014 - 2016

2015 KIA FORTE 4 DOOR SEDAN

Other Information		
Tip-Over Stability Ratio =	1.40	Stable
NHTSA Star Rating (calculated)		***
Center of Gravity (No Load):		Inches Feet Meters
behind front axle	=	46.64 3.89 1.18
in front of rear axle	=	59.36 4.95 1.51
from side of vehicle	=	35.00 2.92 0.89
from ground	=	21.98 1.83 0.56
from front corner	=	87.91 7.33 2.23
from rear corner	=	104.40 8.70 2.65
from front bumper	=	80.64 6.72 2.05
from rear bumper	=	98.36 8.20 2.50
Moments of Inertia Approximations (No Loa	.d):	lb*ft*sec² kg*m*sec²
Yaw Moment of Inertia	=	1663.58 230.00
Pitch Moment of Inertia	=	1609.14 222.47
Roll Moment of Inertia	=	351.48 48.59
Front Profile Information		
Angle Front Bumper to Hood Front	=	66.8 deg
Angle Front of Hood to Windshield Base	=	17.9 deg
Angle Front of Hood to Windshield Top	=	21.1 deg
Angle of Windshield	=	23.6 deg
Angle of Steering Tires at Max Turn	=	28.9 deg
3		

First Approximation Crush Factors:

Speed Equivalent (mph) of Kinetic Energy (KE) used in causing crush of indentation may be evaluated using the following formula, the appropriated Crush Factor (CF), and Maximum Indentation Depth (MID), in feet:

These CF values are based upon analysis of NHTSA Barrier Crash data, and from over 1000 vehicle accidents where independent evaluation of speed was possible. (These are NOT 'A', 'B', 'C', or 'G' values)

The rear Impact data with more then 2-3 inches of crush damage should be looked at carefully, since some vehicles have very weak trunk & fender strength. Therefore, on some cars, especially GM, you estimate from the rear crush data may be high by as much as 4-5 mph (on a crush of 18 inches).

Stiffness Values and Test Data

Derived from

NHTSA Crash Test #10688

2019 KIA FORTE

Provided By

4N6XPRT StifCalcs®

Registered to:

4N6XPRT SYSTEMS 8387 UNIVERSITY AVENUE LA MESA CA 91941-3842 24R-030201SC01301

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Similar Vehicle database reader

You entered: 2015 KIA FORTE

The Similar Vehicle Year/Model list indicates the following are Similar Models

Year Range	Make	Model	Body Styles	Wheelbase
2014 - 2018 Remarks:	KIA	FORTE	4D	106
2014 - 2018 Remarks:	KIA	FORTE 5	5D	106
2014 - 2017 Remarks:	KIA	FORTE KOUPE	RDSTR	106
2019 - 2021 Remarks: REFRE	KIA SH	FORTE	4D	106

The Similar Vehicle List contained in 4N6XPRT StifCalcs is an extension of the free Vehicle Interchange List provided by Gregory C. Anderson of Scalia Safety Engineering through the 2012 model year. 4N6XPRT Systems® has taken over the maintenance of the Similar Vehicle List beginning with the 2013 version of the 4N6XPRT StifCalcs program. 4N6XPRT Systems® makes no warranties, either expressed or implied, with respect to this data, its quality, performance, merchantability, or fitness for any particular purpose. The entire risk as to its quality and performance is with the user. In no event will 4N6XPRT Systems® be liable for direct, indirect, incidental, or consequential damages resulting from any data presented here, even if 4N6XPRT Systems® has been advised of the possibility of such damages. The user must agree to assume full responsibility for any decisions which are based, in whole or in part, upon information obtained by using this data. Some of the listed similarities are based on estimates or memory. Most of the data are pulled from specification tables which may contain inaccuracies of their own. Use common sense - if something seems wrong, check it (and if it is wrong, let us know!).

If you have suggestions and/or corrections, we request and urge you to contact us - 4n6@4n6xprt.com.

Test Information

Test # 10688		NHTS	A Test Re	ference Gu	iide Version #	V5			
Test Date 2/10/2019					Contract #	DTNH22-12-	D-00260		
Contract/Study Title	NEW CAR A	SSESSMEN	IT PROG	RAM FRO	NTAL BARRIE	R IMPACT TES	T		
Test Objective(s)	TO OBTAIN	VEHICLE C	RASHWO	ORTHINES	S AND OCCU	IPANT RESTRA	INT INFO	RMATION	
Test Type	NEW CAR A	SSESSMEN	IT TEST			Configuration	VEHICLE	INTO BARRI	ER
Impact Angle	0			Side	Impact Point	0	mm	0.0	inches
				(Offset Distance	e 0	mm	0.0	inches
					Closing Speed	56.2	Km/Hr	34.93] MPH
Test Performer	CALSPAN								
Test Reference #	TR3425								
Test Track Surface	CONCRETE				Condition	DRY			
Ambient Temperature	21 C	69.8	F	Total Num	ber of Curves	143			
Data Recorder Type	DIGITAL DA	TA ACQUIS	ITION			Data Link	UMB		
Test Commentary	TR3425 - M	20194206	- 2019 K	IA FORTE	- NCAP - FRO	NTAL			
			Fixe	d Barrier l	nformation				
									_
Barrier Type				Pole Ba	rrier Diamete	r[0	mm	0	inches
Barrier Shape	_								
Barrier Commentary	FRONTAL F	LAT BARRI	ER WITH	36 LOAD	CELLS				

2019 KIA FORTE LEFT FRONT SEAT

2013 KIATOKTE ELITTKONT SEAT
Test # 10688
Vehicle # 1 Sex MALE
Location LEFT FRONT SEAT Age 0
Position CENTER POSITION Height 0.0 mm 0.0 inches
Type HYBRID III DUMMY Weight 0.0 kg 0.0 pounds
Size 50 PERCENTILE
Calibration Method HYBRID III
Occupant Manufacturer MFG: HUMANETICS S/N: 142
Occupant Modification NO COMMENTS
Occupant Description NO COMMENTS
Occupant Commentary CNTRH2 = HEADREST
<u>Head</u>
Head to -
Windshielder Header 357.0 mm 14.1 inches Head Injury Criteria (HIC) 245.0
WindShield 698.0 mm 27.5 inches HIC Lower Time Interval (ms) 66.9
Seatback 0.0 mm 0.0 inches HIC Upper Time Interval (ms) 81.9
Side Header 214.0 mm 8.4 inches
Side Window 349.0 mm 13.7 inches
Neck to Seatback 0.0 mm 0.0 inches
First Contact Region (Head) AIR BAG
Second Contact Region (Head) OTHER
<u>Chest</u>
Chest to -
Dash 528.0 mm 20.8 inches Arm to Door 117.0 mm 4.6 inches
Steering Wheel 305.0 mm 12.0 inches Hip to Door 160.0 mm 6.3 inches
Seatback 0.0 mm 0.0 inches
Chest Severity Index 0.0 Pelvic Peak Lateral Acceleration (g's) 0.0
Thoracic Trauma Index 0.0 Thorax Peak Acceleration (g's) 44.0
Lap Belt Peak Load 7833.0 Newtons 1760.9 pound Force
Shoulder Belt Peak Load 5301.0 Newtons 1191.7 pound Force
First Contact Region (Chest/Abdomen) AIR BAG
Second Contact Region (Chest/Abdomen) NONE
<u>Legs</u>
Knees to Dash 190.0 mm 7.5 inches Knees to Seatback 0.0 mm 0.0 inches
Left Femur Peak Load -328.0 Newtons -73.7 pounds Force
Right Femur Peak Load -588.0 Newtons -132.2 pounds Force
First Contact Region (Legs) DASHPANEL
Second Contact Region (Legs)

2019 KIA FORTE LEFT FRONT SEAT

Restraint Commentary

Test #	10688					
Vehicle #	1		Sex	MALE		
Location	LEFT FRONT	SEAT	Age	0		
Position	CENTER POS	SITION] Height	0.0 mm	0.0 inches	
Type	HYBRID III DU	JMMY	Weight	0.0 kg	0.0 pounds	
Size	50 PERCENT	ILE				
Calibra	tion Method	HYBRID III				
Occupa	ant Manufacture	er MFG: HUMANETICS S/N	l: 142			
Occupa	ant Modification	NO COMMENTS				
Occupa	ant Description	NO COMMENTS				
Occupa	ant Commentary	CNTRH2 = HEADREST				
		Restraints	<u>s</u>			
Restrai	int # 1 3 POIN	NT BELT				
Mounte	ed BELT	- CONVENTIONAL MOUNT				
Deploy	yment NOT APPLICABLE					
Restra	int Commentary	BELT PRETENSIONER	& LOAD LIMITER			-
Restrai	int #2 FRON	TAL AIRBAG				
Mounte	ea <u>(STEE</u>)	RING WHEEL				
Donlov	ment DEDL	OVED DDODEDIV				

FRONTAL AIRBAG

2019 KIA FORTE RIGHT FRONT SEAT

2013 MATORIE MOITI FRONT SEAT
Test # 10688
Vehicle # 1 Sex FEMALE
Location RIGHT FRONT SEAT Age 0
Position FORWARD Of CENTER POSITION Height 0.0 mm 0.0 inches
Type HYBRID III DUMMY Weight 0.0 kg 0.0 pounds
Size 5 PERCENTILE
Calibration Method HYBRID III
Occupant Manufacturer MFG: DENTON S/N: 139
Occupant Modification NO COMMENTS
Occupant Description NO COMMENTS
Occupant Commentary CNTRH2 = HEADREST
<u>Head</u>
Head to -
Windshielder Header 282.0 mm 11.1 inches Head Injury Criteria (HIC) 325.0
WindShield 587.0 mm 23.1 inches HIC Lower Time Interval (ms) 68.3
Seatback 0.0 mm 0.0 inches HIC Upper Time Interval (ms) 83.3
Side Header 240.0 mm 9.4 inches
Side Window 358.0 mm 14.1 inches
Neck to Seatback 0.0 mm 0.0 inches
First Contact Region (Head) AIR BAG
Second Contact Region (Head) OTHER
<u>Chest</u>
Chest to -
Dash 408.0 mm 16.1 inches Arm to Door 113.0 mm 4.4 inches Steering Wheel 0.0 mm 0.0 inches Hip to Door 191.0 mm 7.5 inches
Steering Wheel 0.0 mm 0.0 inches Hip to Door 191.0 mm 7.5 inches Seatback 0.0 mm 0.0 inches
Chest Severity Index 0.0 Pelvic Peak Lateral Acceleration (g's) 0.0
Thoracic Trauma Index 0.0 Thorax Peak Acceleration (g's) 47.0
Lap Belt Peak Load 5934.0 Newtons 1334.0 pound Force
Shoulder Belt Peak Load 5454.0 Newtons 1226.1 pound Force
First Contact Region (Chest/Abdomen) AIR BAG
Second Contact Region (Chest/Abdomen) NONE
Legs Knoon to Dook 120.0 mm 5.1 inches Knoon to Scothook 0.0 mm 0.0 inches
Knees to Dash 129.0 mm 5.1 inches Knees to Seatback 0.0 mm 0.0 inches Left Femur Peak Load 772.0 Newtons 713.6 pounds Force
First Contact Region (Legs) Second Contact Region (Legs) DASHPANEL Second Contact Region (Legs)
Gecond Contact Neglon (Legs)

2019 KIA FORTE RIGHT FRONT SEAT

Restraint Commentary

Test #	10688					
Vehicle #	1		Sex	FEMALE		
Location	RIGHT FRO	ONT SEAT	Age	0		
Position	FORWARD	Of CENTER POSITION] Height	0.0 mm	0.0 inches	
Type	HYBRID III	DUMMY	Weight	0.0 kg	0.0 pounds	
Size	5 PERCEN	TILE				
Calibra	tion Method	HYBRID III				
Occupa	ant Manufact	urer MFG: DENTON S/N: 139				
Occupa	ant Modificati	on NO COMMENTS				
Occupa	ant Descriptio	n NO COMMENTS				
Occupa	ant Comment	ary CNTRH2 = HEADREST				
		<u>Restraint</u>	<u>s</u>			
Restrai	int # 1 3 P	OINT BELT				
Mounte	ed BEI	T - CONVENTIONAL MOUNT				
Deploy	ment NOT APPLICABLE					
Restrai	int Commenta	ary BELT PRETENSIONER	& LOAD LIMITER			
Restrai	int #2 FRO	ONTAL AIRBAG				
Mounte		SH PANEL - TOP		-		
Denloy		PLOYED PROPERLY				

FRONTAL AIRBAG

Vehicle 1 2019 KIA FORTE

Test #	10688					
VIN	3KPF24AD7KE03225	6	NHTSA Te	st Vehicle Number	1	
Year	2019		Vehicle Mod	dification Indicator	PRODUCTION	I VEHICLE
Make	KIA	Post-test Steering Colu	ımn Shear C	apsule Seperation	NOT APPLICA	BLE
Model	FORTE	Steering	g Column Col	llapse Mechanism	NOT APPLICA	BLE
Body	FOUR DOOR SEDAN					
Engine	4 CYLINDER TRANS	VERSE FRONT				
Displacement	2 Liter Tr	ansmission AUTOM	TIC - FRON	T WHEEL DRIVE		
Vehicle Modific	ation(s) Description	NONE				
Vehicle Comme	entary TR3425 - M20	194206 - 2019 KIA FOI	RTE - NCAP	- FRONTAL		
Vehicle Len	gth 4635 mm	182.5 inches	CG	behind Front Axle	1106 mm	43.5 inches
Vehicle V	Vidth 1768 mm	69.6 inches	Center of Da	amage to CG Axis	-404 mm	-15.9 inches
Vehicle Wheel	lbase 2701 mm	106.3	Total Lengt	th of Indentation	1404 mm	55.3 inches
Vehicle Test W	eight 1455 KG	3207 pounds	Maximum S	tatic Crush Depth	421 mm	16.6 inches
]	Pre-Impact Speed	56 kph	34.9 mph
Vel	hicle Damage Index [1	2FDEW2	Princi	pal Direction of For	ce 0	
Domogo Dr	ofilo Diotopoo Mooo	uramanta	Cruch from	Dro 9 Doot Too	ot Domogo Mo	a a uramanta
	ofile Distance Meas		Crush from	n Pre & Post Tes		
_	ured Left-to-Right, Rear	-		Pre-Test	Post-Test	Crush Depth
DPD 1		7	per Corner	180.7 inches	168.2 inches	inches
DPD 2		inches		4589 mm	4272 mm	317 mm
DPD 3		inches	Centerline	182.5 inches	166.3 inches	16.2 inches
DPD 4		inches		4635 mm	4224 mm	411 mm
DPD 5		inches Right Bum	per Corner	180.6 inches	166.4 inches	14.2 inches
DPD 6	222 mm <u>8.7</u>	_ inches Kigiit Buili	POI OUITIEI	4588 mm	4227 mm	361 mm
					<u> 7221 </u>	<u> </u>
Bumper F	ngagement	Sill Eng	agement		A-nillar F	ngagement
•	pact Only)	_	npact Only)		•	pact Only)
`	0.0		PPLICABLE		<u></u>	0.0
	V.V	<u> </u>	LIVADEL		<u> </u>	<u> </u>
Moving	g Test Cart	Moving Te	st Cart/Vehic	le	Vehicle Orie	ntation on Cart
А	ngle	Crabb	ed Angle		Moving	Test Cart
DIRECT	ENGAGEMENT		0.0			0
Magnitude	e of the Tilt Angle	Magniture of	the Crabbed An	gle	Magnitude	e of the Angle
Measured b	petween surface of a	Measure	Clockwise from		Measured between	the Vehicle Orientation
Rollover Test	Cart and the Ground	Longitudinal Vector	to Velocity Vecto	or of Vehicle	and Direction o	of Test Cart Motion

Vehicle 1 2019 KIA FORTE

		verlicie i zura	KIA FOR IE		
Test # 1068	38				
VIN 3KP	F24AD7KE032256	NH	ITSA Test Vehicle Nu	mber 1	
Year 201 9	9	Veh	icle Modification Indic	ator PRODUCT	TION VEHICLE
Make KIA	Post	-test Steering Column S	Shear Capsule Seper	ation NOT APPL	ICABLE
Model FOR	RTE	Steering Col	umn Collapse Mecha	nism NOT APPL	ICABLE
Body FOL	JR DOOR SEDAN				
Engine 4 C)	LINDER TRANSVERS	SE FRONT			
Displacement 2	Liter Transm	ission AUTOMATIC	- FRONT WHEEL DR	RIVE	
Vehicle Modification	(s) Description NON	E			
Vehicle Commentary	/ TR3425 - M201942	06 - 2019 KIA FORTE	- NCAP - FRONTAL		
Vehicle Length	4635 mm 182	.5 inches	CG behind Front	Axle 1106 mn	n 43.5 inches
Vehicle Width	1768 mm 69. 6	inches Cer	ter of Damage to CG	Axis -404 mn	n -15.9 inches
Vehicle Wheelbase	2701 mm 106	.3 inches Total	tal Length of Indentati	on 1404 mn	n 55.3 inches
Vehicle Test Weight	1455 KG 320	7 pounds Max	kimum Static Crush D	epth 421 mn	n 16.6 inches
			Pre-Impact Sp	peed 56 kpł	n 34.9 mph
Vehicle I	Damage Index 12FD	EW2	Principal Direction	of Force 0	
	<u> Pre 8</u>	R Post Test Dama	age Measureme	<u>ents</u>	
(Measurements ar	e taken in a longitudinaldirec	tion. Except for Engine Block	, all measurements are tak	e from the Rear Vehicle	e Surface forward.)
Left S	_	Cente			ght Side
Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test
mm inches	mm inches	mm inches	mm inches	mm inche	
111111 11101100	111111		cle at Centerline	11111	3 111111 11101100
		4635 182.5	4224 166.3		
			e Block		
		253 10.0	253 10.0		
4589 180.7	4272 168.2		mper Corner	4588 180.6	4227 166.4
			of Engine		
		4011 157.9	3796 149.4		
3693 145.4	3682 145.0	Fire	ewall	3695 145.5	3691 145.3
		3674 144.6	0.0		
3288 129.4	3284 129.3	Upper Leadin	g Edge of Door	3286 129.4	3291 129.6
3275 128.9	3273 128.9	Lower Leading	g Edge of Door	3276 129.0	3275 128.9
	3349 131.9	Bottom of	f 'A' Post	3350 131.9	3355 132.1
	2144 84.4	Upper Trailin	g Edge of Door	2146 84.5	2151 84.7
2164 85.2	2162 85.1	Lower Trailin	g Edge of Door	2166 85.3	2168 85.4
		Steerin	g Column		
		2753 108.4	2823 111.1		
	(Center of Seering Colu	nn to 'A' Post (Horizo	ntal)	
		277 10.9	282 11.1		
		Center of Steering Colu	mn to Headliner (Vert	ical)	

4N6XPRT StifCalcs® licensed by 4N6XPRT Systems (www.4N6XPRT.com) to:

421

16.6

Registered Owner: 4N6XPRT SYSTEMS Serial Number: 24R-030201SC01301

15.6

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2019 KIA FORTE

NHTSA Crash Test - #10688 - Front Impact

Pre/Post Depths - Vehicle Width - Closing Speed - Trapezoidal Average

Test Vehicle Weight = 3207 pounds Vehicle Closing Speed = 34.9 MPH Test Crush Length = 69.6 inches

Pre/Post Collision Crush Depths (inches)

Left Side Crush Centerline Crush Right Side Crush (Pass. Side)

(Driver Side) 12.5 16.2 14.2

		CRASH	SMAC Stiffness		
		_ <u>A</u>	<u>B</u>	<u>G</u>	Kv
Minimum Crush = 12.5 inches					289.3
Using a Rated No Damage Speed of	2.5mph	239.9	249.4	115.4	
Using a Rated No Damage Speed of	5.0mph	442.9	212.4	461.7	
Using a Rated No Damage Speed of	7.5mph	608.8	178.4	1038.8	
Using a Rated No Damage Speed of	10.0mph	737.7	147.3	1846.8	
Average Crush = 14.8 inches					206.7
Using a Rated No Damage Speed of	2.5mph	202.8	178.2	115.4	
Using a Rated No Damage Speed of	5.0mph	374.4	151.8	461.7	
Using a Rated No Damage Speed of	7.5mph	514.6	127.5	1038.8	
Using a Rated No Damage Speed of	10.0mph	623.6	105.3	1846.8	
Maximum Crush = 16.2 inches					172.1
Using a Rated No Damage Speed of	2.5mph	185.0	148.3	115.4	
Using a Rated No Damage Speed of	5.0mph	341.6	126.3	461.7	
Using a Rated No Damage Speed of	7.5mph	469.5	106.1	1038.8	
Using a Rated No Damage Speed of	10.0mph	569.0	87.7	1846.8	

Rated No Damage Speed = Impact speed with a barrier resulting in no permanant vehicle deformation

Normal "Rated No Damage Speed" is 2.5 or 5 mph. Some Specific vehicles may, however, have a higher rating

A = Maximum force per inch of damage without permanent damage, lb/in

B = Crush resistance per inch of damage width (Crash), lb/in^2

G = Energy dissipated without permanent damage, lb

Kv = Crush resistance per inch of damage width (SMAC), lb/in^2

4N6XPRT System's First Approximation Crush Factor (CF)

Speed from Crush calculation using a generic CF of 21 as suggested in Expert AutoStats

KE Speed (mph) = SQRT(30 * CF * max crush in feet)

Crush	Maximum Crush	Calculated KE Speed	Calculated Error	Calculated Error
Factor	(inches)	(mph)	(mph)	(%)
21	16.6	29.1	5.8	16.6

4N6XPRT Systems Specific Crush Factor (CF Specific to this test) = 30.2

CF = (mph * mph) / (30 * max crush in feet), dimensionless

4N6XPRT Systems CF is calculated based upon the data reported and is specific to this vehicle and this test

2019 KIA FORTE

NHTSA Crash Test - #10688 - Front Impact

Pre/Post Depths - Indention Length - Closing Speed - Trapezoidal Average

Test Vehicle Weight = 3207 pounds Vehicle Closing Speed = 34.9 MPH Test Crush Length = 55.3 inches

Pre/Post Collision Crush Depths (inches)

Left Side Crush Centerline Crush Right Side Crush (Pass. Side)

(Driver Side) 12.5 16.2 14.2

		CRASH	SMAC Stiffness		
		A	<u>B</u>	<u>G</u>	Kv
Minimum Crush = 12.5 inches					364.3
Using a Rated No Damage Speed of	2.5mph	302.1	314.0	145.3	
Using a Rated No Damage Speed of	5.0mph	557.7	267.5	581.4	
Using a Rated No Damage Speed of	7.5mph	766.6	224.6	1308.1	
Using a Rated No Damage Speed of	10.0mph	929.0	185.5	2325.6	
Average Crush = 14.8 inches					260.3
Using a Rated No Damage Speed of	2.5mph	255.4	224.4	145.3	
Using a Rated No Damage Speed of	5.0mph	471.4	191.1	581.4	
Using a Rated No Damage Speed of	7.5mph	648.0	160.5	1308.1	
Using a Rated No Damage Speed of	10.0mph	785.3	132.6	2325.6	
Maximum Crush = 16.2 inches					216.7
Using a Rated No Damage Speed of	2.5mph	233.0	186.8	145.3	
Using a Rated No Damage Speed of	5.0mph	430.1	159.1	581.4	
Using a Rated No Damage Speed of	7.5mph	591.3	133.6	1308.1	
Using a Rated No Damage Speed of	10.0mph	716.5	110.4	2325.6	

Rated No Damage Speed = Impact speed with a barrier resulting in no permanant vehicle deformation

Normal "Rated No Damage Speed" is 2.5 or 5 mph. Some Specific vehicles may, however, have a higher rating

A = Maximum force per inch of damage without permanent damage, lb/in

B = Crush resistance per inch of damage width (Crash), lb/in^2

G = Energy dissipated without permanent damage, lb

Kv = Crush resistance per inch of damage width (SMAC), lb/in^2

4N6XPRT System's First Approximation Crush Factor (CF)

Speed from Crush calculation using a generic CF of 21 as suggested in Expert AutoStats

KE Speed (mph) = SQRT(30 * CF * max crush in feet)

Crush	Maximum Crush	Calculated KE Speed	Calculated Error	Calculated Error
Factor	(inches)	(mph)	(mph)	(%)
21	16.6	29.1	5.8	16.6

4N6XPRT Systems Specific Crush Factor (CF Specific to this test) = 30.2

CF = (mph * mph) / (30 * max crush in feet), dimensionless

4N6XPRT Systems CF is calculated based upon the data reported and is specific to this vehicle and this test

Available Test Results Front Impact Test Summary

Report Filter Settings

Year Range: 2014 - 2018

Make: KIA Model: FORTE

Test	Vehicle	No							
Number	Info	Damage	Average	Closing		Vehicle	Width		
		Speed	Crush	Speed	S t	iffness	Value	s	Crush
		(mph)	(inch)	(mph)	Α	В	G	Kv	Factor
8294	2014 KIA FORTE FOUR DOOR SEDAN	5.0	17.7	34.8	311.1	104.9	461.2	143.0	27.4
10688	2019 KIA FORTE FOUR DOOR SEDAN	5.0	14.7	34.9	375.3	152.5	461.7	207.7	33.1
8909	2015 KIA FORTE FOUR DOOR SEDAN	5.0	12.7	34.8	440.7	207.8	467.4	283.2	38.4
		Avera	ge (AVG))	375.7	155.1	463.4	211.3	33.0
		Minim	um (MIN)	311.1	104.9	461.2	143.0	27.4
		Maxim	um (MAX	()	440.7	207.8	467.4	283.2	38.4
	Standard Devia	tion (STDev	-sample)	64.8	51.5	3.5	70.2	5.5
		Number of	Tests (n)	3					

Available Test Results Front Impact Test Summary

Report Filter Settings

Year Range: 2014 - 2018

Make: KIA Model: FORTE

Test	Vehicle	No								
Number	Info	Damage	Max	Closing		Vehicle	Width			
		Speed	Crush	Speed	S t	iffness	Value	s	Crush	
		(mph)	(inch)	(mph)	Α	В	G	Kv	Factor	
10687	2019 KIA FORTE FOUR DOOR SEDAN	5.0	11.7	20.0	221.3	57.0	429.5	101.3	13.7	
8294	2014 KIA FORTE FOUR DOOR SEDAN	5.0	21.6	34.8	255.2	70.6	461.2	96.2	22.5	
10688	2019 KIA FORTE FOUR DOOR SEDAN	5.0	16.6	34.9	333.5	120.4	461.7	164.0	29.4	
8909	2015 KIA FORTE FOUR DOOR SEDAN	5.0	15.3	34.8	364.4	142.0	467.4	193.6	31.7	
		_								
		Averag	e (AVG)	293.6	97.5	454.9	138.8	24.4	
		Minimu	m (MIN)	221.3	57.0	429.5	96.2	13.7	
		Maximu	m (MAX	()	364.4	142.0	467.4	193.6	31.7	
	Standard	Deviation (STDev-	sample	·)	66.6	40.3	17.2	47.8	8.1	
		Number of T	ests (n) 4						

Expert VIN DeCoder®

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Version Number 4.4.0.1

Model:	2006 Chevrolet Aveo LT 4 door Sedan
Engine Size:	1.6L/ 97.5cu.in.
Liigine 312e.	[I. 0E/ J7. Jeu. III.
Engine Description:	Inline 4 with Dual Overhead Cam (DOHC)
Horse Power:	103 @ 6000rpm
Torque:	1071b-ft at 3600rpm
Torque:	LEOT TO THE ACT SOURTHIN
Injection System:	Multi-Port Fuel Injection (MPI)
PSI:	Not Available Ignition: Electronic
Manufacturer:	Geo/Chevrolet
Accombly Blant.	Bunyaana Cauth Kanaa
Assembly Plant:	Bupyeong, South Korea
Drive Wheels:	This is a Front Wheel Drive vehicle w/ Manual Belts w/Driver & Passenger Air Bags
	(Front/Side)

The First through Third characters (KL1) indicate a Chevrolet Passenger Car made in South Korea

The Fourth through Fifth characters (TG) indicate an Aveo LT

The Sixth character (6) indicates a 4 door Sedan

The Seventh character (6) indicates Manual Belts w/Driver & Passenger Air Bags (Front/Side)

The Eighth character (6) indicates the OEM engine: 1.6L/ 97.5cu.in., L4 DOHC

The Ninth character (the check digit) is entered as 2.

The VIN appears Valid, the calculated value is 2.

The Tenth character (6) indicates the model year 2006

The Eleventh character (B) indicates the vehicle was made in the assembly plant in Bupyeong, South Korea

The Twelfth through Seventeenth characters (669799) indicate the Serial Number and are unique to this vehicle.

Expert AutoStats®

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PROVIDED BY: 4N6XPRT Systems 8387 University Avenue La Mesa CA 91941

5/18/2025

2008 CHEVROLET AVEO 4 DOOR HATCHBACK			
Curb Weight:	2348 lbs.	106	5 kg.
Curb Weight Distribution - Front:	62 %	Rear: 38	%
Gross Vehicle Weight Rating:	3287 lbs.	149	1 kg.
Number of Tires on Vehicle: Drive Wheels:	FRONT		
Horizontal Dimensions	Inches	Feet	Meters
Total Length	153	12.75	3.89
Wheelbase:	98	8.17	2.49
Front Bumper to Front Axle:	33	2.75	0.84
Front Bumper to Front of Front Well:	19	1.58	0.48
Front Bumper to Front of Hood:	5	0.42	0.13
Front Bumper to Base of Windshield:	36	3.00	0.91
Front Bumper to Top of Windshield:	68	5.67	1.73
Rear Bumper to Rear Axle:	22	1.83	0.56
Rear Bumper to Rear of Rear Well:	9	0.75	0.23
Rear Bumper to Rear of Trunk:	4	0.33	0.10
Rear Bumper to Base of Rear Window:	5	0.42	0.13
Width Dimensions			
Maximum Width:	66	5.50	1.68
Front Track:	57	4.75	1.45
Rear Track:	56	4.67	1.42
Vertical Dimensions			
Height:	59	4.92	1.50
Ground to -		7.32	1.50
Front Bumper (Top)	21	1.75	0.53
Headlight - center	26	2.17	0.66
Hood - top front:	28	2.33	0.71
Base of Windshield	38	3.17	0.97
Rear Bumper - top:	25	2.08	0.64
Trunk - top rear:	38	3.17	0.97
Base of Rear Window:	39	3.25	0.99

Expert AutoStats®

2008 CHEVROLET AVEO 4 DOOR HATCHBACK

Interior Dimensions Front Seat Shoulder Width Front Seat to Headliner Front Leg Room - seatback to floor (max) Rear Seat Shoulder Width Rear Seat to Headliner Front Leg Room - seatback to floor (min)	54 39 41 53 38 35	Feet 4.50 3.25 3.42 4.42 3.17 2.92	1.37 0.99 1.04 1.35 0.97 0.89
Seatbelts: 3pt - front and rear Airbags: FRONT SEAT AIRBAGS			
Steering Data Turning Circle (Diameter) Steering Ratio: :1 Wheel Radius: Tire Size (OEM): P185/60R14	312 10	0.83	7.92
Acceleration & Braking Information Brake Type: FRONT DISC - REAR DRUM ABS System: ALL WHEEL ABS - OPTIONAL Braking, 60 mph to 0 (Hard pedal, no skid, d = 146.0 ft t = 3.3 sec	<pre>dry pavement): a = -26.5 ft/s</pre>	ec² G-fo	rce = \[\begin{align*} -0.82 \]
Acceleration: 0 to 30mph $t = 2.7$ sec 0 to 60mph $t = 10.2$ sec 45 to 65mph $t = 6.1$ sec Transmission Type: 5spd MANUAL	$a = \boxed{16.3} \text{ ft/s}$	ec² G-for	rce = 0.51 rce = 0.27 rce = 0.15

Notes:

Federal Bumper Standard Requirements: 2.5 mph
This vehicles Rated Bumper Strength: 2.5 mph

N.S.D.C = 2004 - 2011

2008 CHEVROLET AVEO 4 DOOR HATCHBACK

Other Information Tip-Over Stability Ratio = NHTSA Star Rating (calculated)	1.24	Reasonably Sta	ble
Center of Gravity (No Load): behind front axle in front of rear axle from side of vehicle from ground from front corner from rear corner	Inch = 37. = 60. = 33. = 22. = 77. = 89.	24 3.10 76 5.06 00 2.75 80 1.90 61 6.47	1.54 0.84 0.58 1.97
from front bumper from rear bumper	= 70. = 82.		
Moments of Inertia Approximations (No Load Yaw Moment of Inertia Pitch Moment of Inertia Roll Moment of Inertia): = [= [1212.44	*m*sec² 167.63 162.52 37.69
Front Profile Information Angle Front Bumper to Hood Front Angle Front of Hood to Windshield Base Angle Front of Hood to Windshield Top Angle of Windshield Angle of Steering Tires at Max Turn	= = =	54.5 deg 17.9 deg 24.7 deg 30.7 deg 36.0 deg	

First Approximation Crush Factors:

Speed Equivalent (mph) of Kinetic Energy (KE) used in causing crush of indentation may be evaluated using the following formula, the appropriated Crush Factor (CF), and Maximum Indentation Depth (MID), in feet:

These CF values are based upon analysis of NHTSA Barrier Crash data, and from over 1000 vehicle accidents where independent evaluation of speed was possible. (These are NOT 'A', 'B', 'C', or 'G' values)

The rear Impact data with more then 2-3 inches of crush damage should be looked at carefully, since some vehicles have very weak trunk & fender strength. Therefore, on some cars, especially GM, you estimate from the rear crush data may be high by as much as 4-5 mph (on a crush of 18 inches).

Expert VIN DeCoder®

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Version Number 4.4.0.1

	DeCoded VIN: 1C4NJCBA2GD621639
Model:	2016 Jeep Compass 4x2 Sport Hatchback
Engine Size:	2.0 L/ 122 cu.in.
Engine Description:	In-line 4 cylinder Double Overhead Cqm
Horse Power:	158 @ 6,400 rpm
Torque:	141 lb-ft at 5,000 rpm
·	
Injection System:	Fuel Injection
PSI:	N/A Ignition: Electronic
Manufacturer:	Chrysler
Assembly Plant:	Belvidere, Illinois

This is a Front Wheel Drive vehicle with Manual Belts w/ Front Airbags and Side Airbags

The First through Third characters (1C4) indicate a Chrysler Multi-purpose Vehicle (MPV) made in the U.S.A.

The Fourth character (N) indicates the GVWR 4001-5000 lbs with Hydraulic Brakes and Manual Belts w/ Front Airbags and Side Airbags

The Fifth through Seventh characters (JCB) indicate a Compass Front Wheel Drive and a Sport series and a Hatchback

The Eighth character (A) indicates the OEM engine: 2.0 L/ 122 cu.in., L4 DOHC

The Ninth character (the check digit) is entered as 2.

Drive Wheels:

The VIN appears Valid, the calculated value is 2.

The Tenth character (G) indicates the model year 2016

The Eleventh character (D) indicates the vehicle was made in the assembly plant in Belvidere, Illinois

The Twelfth through Seventeenth characters (621639) indicate the Serial Number and are unique to this vehicle.

Expert AutoStats®

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PROVIDED BY: 4N6XPRT Systems 8387 University Avenue La Mesa CA 91941

5/18/2025

,	•		
2016 JEEP COMPASS 4 DOOR 4X2 UTILITY			
Curb Weight:	3150 lbs.	142	29 kg.
Curb Weight Distribution - Front:	59 %	Rear: 41	1 %
Gross Vehicle Weight Rating:	4435 lbs.	202	12 kg.
Number of Tires on Vehicle: Drive Wheels:	FRONT		
Horizontal Dimensions	Inches	Feet	Meters
Total Length	175	14.58	4.44
Wheelbase:	104	8.67	2.64
Front Bumper to Front Axle:	36	3.00	0.91
Front Bumper to Front of Front Well:			
Front Bumper to Front of Hood:	6	0.50	0.15
Front Bumper to Base of Windshield:	43	3.58	1.09
Front Bumper to Top of Windshield:	70	5.83	1.78
Rear Bumper to Rear Axle:	35	2.92	0.89
Rear Bumper to Rear of Rear Well:			
Rear Bumper to Rear of Trunk:	5	0.42	0.13
Rear Bumper to Base of Rear Window:	7	0.58	0.18
Width Dimensions			
Maximum Width:	71	5.92	1.80
Front Track:	60	5.00	1.52
Rear Track:	60	5.00	1.52
Vertical Dimensions			
неight:	65	5.42	1.65
Ground to -			
Front Bumper (Top)	21	1.75	0.53
Headlight - center	32	2.67	0.81
Hood - top front:	38	3.17	0.97
Base of Windshield	44	3.67	1.12
Rear Bumper - top:	28	2.33	0.71
Trunk - top rear:	45	3.75	1.14
Base of Rear Window:	46	3.83	1.17

Expert AutoStats®

2016 JEEP COMPASS 4 DOOR 4X2 UTILITY

Interior Dimensions	Inches	Feet	Meters
Front Seat Shoulder Width	55	4.58	1.40
Front Seat to Headliner	41	3.42	1.04
Front Leg Room - seatback to floor (max)	41	3.42	1.04
Rear Seat Shoulder Width	54	4.50	1.37
Rear Seat to Headliner	40	3.33	1.02
Front Leg Room - seatback to floor (min)	39	3.25	0.99
Seatbelts: 3pt - front and rear			
Airbags: FRONT SEAT AIRBAGS + SIDE AIR	RBAGS		
Steering Date			
Steering Data	T 422 I	76	[10, 07]
Turning Circle (Diameter)	432	36	10.97
Steering Ratio: :1 Wheel Radius:			
Tire Size (OEM): 205/70R16			
Acceleration & Braking Information			
Brake Type: FRONT DISC - REAR DRUM			
ABS System: ALL WHEEL ABS			
Braking, 60 mph to 0 (Hard pedal, no skid, o	dry <u>pavement</u>):		
d = ft t = sec a	ı = ft/se	c² G-for	ce =
Acceleration:			
0 to 30mph t = sec a	ı = T ft/se	c² G-for	ce =
	ı = ft/se	c² G-for	'ce =
45 to 65mph t = sec a	ı = ft/se	c² G-for	'ce =
Transmission Type: 5spd MANUAL			
Transmission Type.			
Notes:			
	o Requirement		
. ca.c. a. Bamper ocaridara regari emerico	qu ccre		

N.S.D.C = 2014 - 2021

2016 JEEP COMPASS 4 DOOR 4X2 UTILITY

Other Information Tip-Over Stability Ratio =	1.16	6 Reasonably Stable
NHTSA Star Rating (calculated)		^ ^ ^
Center of Gravity (No Load):		Inches Feet Meters
behind front axle	=	42.64 3.55 1.08
in front of rear axle	=	61.36 5.11 1.56
from side of vehicle	=	35.50 2.96 0.90
from ground	=	25.94 2.16 0.66
from front corner	=	86.28 7.19 2.19
from rear corner	=	102.69 8.56 2.61
from front bumper	=	78.64 6.55 2.00
from rear bumper	=	96.36 8.03 2.45
Moments of Inertia Approximations (No Load	d):	lb*ft*sec² kg*m*sec²
Yaw Moment of Inertia	=	1901.50 262.89
Pitch Moment of Inertia	=	1871.00 258.68
Roll Moment of Inertia	=	458.00 63.32
Front Profile Information		
Angle Front Bumper to Hood Front	=	70.6 deg
Angle Front of Hood to Windshield Base	=	9.2 deg
Angle Front of Hood to Windshield Top	=	21.3 deg
Angle of Windshield	=	35.1 deg
Angle of Steering Tires at Max Turn	=	27.6 deg

First Approximation Crush Factors:

Speed Equivalent (mph) of Kinetic Energy (KE) used in causing crush of indentation may be evaluated using the following formula, the appropriated Crush Factor (CF), and Maximum Indentation Depth (MID), in feet:

These CF values are based upon analysis of NHTSA Barrier Crash data, and from over 1000 vehicle accidents where independent evaluation of speed was possible. (These are NOT 'A', 'B', 'C', or 'G' values)

The rear Impact data with more then 2-3 inches of crush damage should be looked at carefully, since some vehicles have very weak trunk & fender strength. Therefore, on some cars, especially GM, you estimate from the rear crush data may be high by as much as 4-5 mph (on a crush of 18 inches).

Stiffness Values and Test Data

Derived from

NHTSA Crash Test #8036

2013 JEEP COMPASS

Provided By

4N6XPRT StifCalcs®

Registered to:

4N6XPRT SYSTEMS 8387 UNIVERSITY AVENUE LA MESA CA 91941-3842 24R-030201SC01301

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Similar Vehicle database reader

You entered: **2016 JEEP COMPASS**

The Similar Vehicle Year/Model list indicates the following are Similar Models

Year Range	Make	Model	Body Styles	Wheelbase
2014 - 2021 Remarks:	JEEP	COMPASS	SUV	104
2006 - 2012 Remarks:	DODGE	CALIBER	5D	103.7, 133
2007 - 2017 Remarks:	JEEP	PATRIOT	SUV	103.7
2007 - 2013 Remarks:	JEEP	COMPASS		103.7

The Similar Vehicle List contained in 4N6XPRT StifCalcs is an extension of the free Vehicle Interchange List provided by Gregory C. Anderson of Scalia Safety Engineering through the 2012 model year. 4N6XPRT Systems® has taken over the maintenance of the Similar Vehicle List beginning with the 2013 version of the 4N6XPRT StifCalcs program. 4N6XPRT Systems® makes no warranties, either expressed or implied, with respect to this data, its quality, performance, merchantability, or fitness for any particular purpose. The entire risk as to its quality and performance is with the user. In no event will 4N6XPRT Systems® be liable for direct, indirect, incidental, or consequential damages resulting from any data presented here, even if 4N6XPRT Systems® has been advised of the possibility of such damages. The user must agree to assume full responsibility for any decisions which are based, in whole or in part, upon information obtained by using this data. Some of the listed similarities are based on estimates or memory. Most of the data are pulled from specification tables which may contain inaccuracies of their own. Use common sense - if something seems wrong, check it (and if it is wrong, let us know!).

If you have suggestions and/or corrections, we request and urge you to contact us - 4n6@4n6xprt.com.

Test Information

Test # 8036	NHTSA Test Reference Guide Version	# V 5					
Test Date 10/24/2012	2 Contract	# DTNH22-12-	R-00540				
Contract/Study Title	NEW CAR ASSESSMENT PROGRAM FRONTAL IMPA	CT TESTING					
Test Objective(s)	REDUCE THE RISK OF SERIOUS & FATAL INJURY IN	FRONTAL IMPA	CT CRASH	ES			
Test Type	NEW CAR ASSESSMENT TEST	Configuration	VEHICLE	INTO BARRIE	R		
Impact Angle	O Side Impact Poi	nt 0	mm	0.0	inches		
	Offset Distar	nce 0	mm	0.0	inches		
	Closing Spe	ed 56.5	Km/Hr	35.11	MPH		
Test Performer	TRC OF OHIO						
Test Reference #	121024						
Test Track Surface	CONCRETE Condition	n DRY					
Ambient Temperature	21 C 69.8 F Total Number of Curv	es 136					
Data Recorder Type	DIGITAL DATA ACQUISITION	Data Link	TEL				
Test Commentary	COTR=BRIAN PARK						
Fixed Barrier Information							
					-		
Barrier Type	<u> </u>	ter 0	mm	0	inches		
Barrier Shape	LOAD CELL BARRIER						
Barrier Commentary							

2013 JEEP COMPASS LEFT FRONT SEAT

2013 DELI COMI AGO ELI I I NORI SEAT
Test # 8036
Vehicle # 1 Sex MALE
Location LEFT FRONT SEAT Age 0
Position CENTER POSITION Height 0.0 mm 0.0 inches
Type HYBRID III DUMMY Weight 0.0 kg 0.0 pounds
Size 50 PERCENTILE
Calibration Method HYBRID III
Occupant Manufacturer FIRST TECH., S/N: 037
Occupant Modification
Occupant Description
Occupant Commentary HIC=15 MSEC; CNTRH2=HEAD RESTRAINT
Head
Head to -
Windshielder Header 478.0 mm 18.8 inches Head Injury Criteria (HIC) 324.0
WindShield 723.0 mm 28.5 inches HIC Lower Time Interval (ms) 66.2
Seatback 0.0 mm 0.0 inches HIC Upper Time Interval (ms) 81.3
Side Header 243.0 mm 9.6 inches
Side Window 369.0 mm 14.5 inches
Neck to Seatback 0.0 mm 0.0 inches
First Contact Region (Head) AIR BAG
Second Contact Region (Head) OTHER
<u>Chest</u>
Chest to -
Dash 550.0 mm 21.7 inches Arm to Door 104.0 mm 4.1 inches
Steering Wheel 282.0 mm 11.1 inches Hip to Door 150.0 mm 5.9 inches
Seatback 0.0 mm 0.0 inches
Chest Severity Index 429.0 Pelvic Peak Lateral Acceleration (g's) 0.0
Thoracic Trauma Index 0.0 Thorax Peak Acceleration (g's) 46.0
Lap Belt Peak Load 6168.0 Newtons 1386.6 pound Force
Shoulder Belt Peak Load 5147.0 Newtons 1157.1 pound Force
First Contact Region (Chest/Abdomen) AIR BAG
Second Contact Region (Chest/Abdomen) NONE
<u>Legs</u>
Knees to Dash 35.0 mm 1.4 inches Knees to Seatback 0.0 mm 0.0 inches
Left Femur Peak Load -3700.0 Newtons -831.8 pounds Force
Right Femur Peak Load -5155.0 Newtons -1158.9 pounds Force
First Contact Region (Legs) KNEE RESTRAINT
Second Contact Region (Legs)

2013 JEEP COMPASS LEFT FRONT SEAT

Test #	8036						
Vehicle #	1			Sex	MALE		
Location	LEFT	FRONT SE	AT	Age	0		
Position	CENTI	ER POSITIO	ON	Height	0.0 mm	0.0 inch	es
Type	HYBR	ID III DUMN	ΛY	Weight	0.0 kg	0.0 pour	nds
Size	50 PEI	RCENTILE					
Calibra	tion Met	hod	HYBRID III				
Occupa	ant Mani	ufacturer	FIRST TECH., S/N: 037				
Occupa	ant Modi	fication					
Occupa	ant Desc	ription					
Occupa	ant Com	mentary	HIC=15 MSEC; CNTRH	2=HEAD RESTRAIN	Τ		
			<u>Restrain</u>	<u>ts</u>			
Restrai	int # 1	3 POINT E	BELT				
Mounte	ed	BELT - CC	ONVENTIONAL MOUNT				
Deploy	ment	NOT APPI	LICABLE				
Restrai	int Comr	mentary					
Restrai	int #2	FRONTAL	. AIRBAG				
Mounte	ed	STEERING					
Deploy	ment	DEPLOYE	D PROPERLY				
Restrai	int Comr	mentary	FRONTAL AIR BAG				

2013 JEEP COMPASS RIGHT FRONT SEAT

Second Contact Region (Legs)

T	
Test # 8036	
Vehicle # 1 Sex FEMALE	
Location RIGHT FRONT SEAT Age 0	
Position FORWARD OF CENTER POSITION Height 0.0 mm 0.0 inches	
Type HYBRID III DUMMY Weight 0.0 kg 0.0 pounds	
Size 5 PERCENTILE	
Calibration Method HYBRID III	
Occupant Manufacturer FTSS; S/N: 426	
Occupant Modification	
Occupant Description	
Occupant Commentary CNTRH2=HEAD RESTRAINT	
<u>Head</u>	
Head to -	
Windshielder Header 393.0 mm 15.5 inches Head Injury Criteria (HIC) 324.0	
WindShield 736.0 mm 29.0 inches HIC Lower Time Interval (ms) 64.9	
Seatback 0.0 mm 0.0 inches HIC Upper Time Interval (ms) 79.9	
Side Header 262.0 mm 10.3 inches	
Side Window 391.0 mm 15.4 inches	
Neck to Seatback 0.0 mm 0.0 inches	
First Contact Region (Head)	
Second Contact Region (Head) OTHER	
<u>Chest</u>	
Chest to -	
Dash 372.0 mm 14.6 inches Arm to Door 88.0 mm 3.5 inches	
Steering Wheel 0.0 mm 0.0 inches Hip to Door 169.0 mm 6.7 inches	
Seatback 0.0 mm 0.0 inches	
Chest Severity Index 435.0 Pelvic Peak Lateral Acceleration (g's) 0.0	
Thoracic Trauma Index 0.0 Thorax Peak Acceleration (g's) 45.0	
Lap Belt Peak Load 4104.0 Newtons 922.6 pound Force	
Shoulder Belt Peak Load 17326.0 Newtons 3895.1 pound Force	
First Contact Region (Chest/Abdomen) AIR BAG	
Second Contact Region (Chest/Abdomen) NONE	
<u>Legs</u>	
Knees to Dash 37.0 mm 1.5 inches Knees to Seatback 0.0 mm 0.0 inches	
Left Femur Peak Load -3294.0 Newtons -740.5 pounds Force	
Right Femur Peak Load -2406.0 Newtons -540.9 pounds Force	
First Contact Region (Legs) KNEE RESTRAINT	

2013 JEEP COMPASS RIGHT FRONT SEAT

Restraint Commentary

	T	_										
Test #	8036						_				_	
Vehicle #	1				5	Sex	FEMALE					
Location	RIGHT F	RONT SI	EAT			Age	0					
Position	FORWA	RD Of CE	NTER POSITION	ON	He	ight	0.0	mm	0.0	inches	3	
Type	HYBRID	III DUMN	ſΥ		We	eight	0.0	kg	0.0] pound	ls	
Size	5 PERCI	NTILE										
Calibra	ition Metho	od	HYBRID III									
Occupa	ant Manufa	acturer	FTSS; S/N: 4:	26								
Occupa	ant Modific	ation										
Occupa	ant Descri	otion										
•	ant Comm		CNTRH2=HE	AD RESTRA	AINT							
		,										
				5								
	_			Restraints	<u> </u>							
Restrai	int # 1 3	POINT E	<u>BELT</u>									
Mounte	ed E	BELT - CC	NVENTIONAL	MOUNT								
Deploy	ment N	IOT APPI	LICABLE									
Restrai	int Comme	entary										
	_											
Restrai	int #2 <u>[F</u>	RONTAL	AIRBAG									
Mounte	ed 🖸	ASH PA	NEL - TOP									
Deploy	ment [EPLOYE	D PROPERLY									

FRONTAL AIR BAG

Vehicle 1 2013 JEEP COMPASS

Test #	8036								
VIN	1C4NJDBB0D	D158488			NHTSA Te	st Vehicle Number	1		
Year	2013		1			dification Indicator	PRODUCTION VEHICLE		
Make							NOT APPLIC		===
Model	COMPASS			Ū		llapse Mechanism	NOT APPLIC		
Body	UTILITY VEHI	ICLE		Oto Otting	, 00.0	napos mosnamom			
Engine	4 CYLINDER		RSF FRO	NT					
Displacement	2.4 Liter		smission		TIC - FOUR	WHEEL DRIVE			
•	ation(s) Descrip		MODIFIE						
Vehicle Commo	` ′				AX CRUSH	AT CENTERLINE			
Vehicle Len				ches		behind Front Axle	1191 mm	46.9	inches
Vehicle V	· ===	= =		ches			0 mm	0.0	inches
Vehicle Whee		= =	03.5	51100		th of Indentation	1115 mm	43.9	inches
Vehicle Test W		= =		ounds	_	Static Crush Depth	435 mm	17.1	inches
VOI 1001 VV	01g11t [1720	c <u>@</u> .	, pc	, arrao		Pre-Impact Speed	57 kph	35.1	mph
Vel	hicle Damage Ir	ndex 12F	DEW2			pal Direction of For			шрп
VO	mole Damage ii	Idox III	DLIIZ		1 111101	pai Direction of 1 of			
Damage Pro	ofile Distance	e Measure	<u>ements</u>		Crush fron	n Pre & Post Tes	st Damage Me	asurem	<u>ents</u>
(Meası	ured Left-to-Rig	ht, Rear-to-	-Front)			Pre-Test	Post-Test	Crush I	<u>Depth</u>
DPD 1	360 mm	14.2 i	inches	Left Bum	per Corner	170.9 inches	156.7 inches	14.2	inches
DPD 2	385 mm	15.2 i	inches			4340 mm	3980 mm	360] mm
DPD 3	395 mm	15.6 i	inches		Centerline	174.8 inches	157.7 inches	17.1	inches
DPD 4	415 mm	16.3 i	inches		Ochtomic	4440 mm	4005 mm	435] mm
DPD 5	392 mm	15.4 i	inches						_
DPD 6	375 mm	14.8 i	inches	Right Bum	per Corner	171.1 inches	156.3 inches		inches
						4345 mm	3970 mm	375] mm
	ngagement			_	agement		•	ngageme	
-	pact Only)				npact Only)		(Side Ir	npact Onl	<u>y</u>)
	0.0			NOT AP	PLICABLE			0.0	
Moving	g Test Cart			Moving Tes	st Cart/Vehic	ele	Vehicle Ori	entation o	n Cart
Α	ngle			Crabb	ed Angle		Moving	Test Car	t
NOT A	APPLICABLE				0.0			0	
Magnitude	e of the Tilt Angle			Magniture of	the Crabbed An	ngle	Magnitud	le of the Ang	gle
Measured b	petween surface of a	а		Measure	Clockwise from		Measured betweer	the Vehicle	Orientation
Rollover Test	Cart and the Groun	nd	Longitu	udinal Vector t	o Velocity Vecto	or of Vehicle	and Direction	of Test Cart	Motion

Vehicle 1 2013 JEEP COMPASS

-						
	8036					
VIN [1C4NJDBB0DD1584	88	NHTSA Test	Vehicle Number	1	
Year	2013		Vehicle Modifi	ication Indicator	PRODUCTIO	N VEHICLE
Make	JEEP	Post-test Steering C	Column Shear Cap	sule Seperation	NOT APPLIC	ABLE
Model	COMPASS	Stee	ring Column Colla	pse Mechanism	NOT APPLIC	ABLE
Body	UTILITY VEHICLE					
Engine [4 CYLINDER TRANS	VERSE FRONT				
Displacement [2.4 Liter T	ransmission AUTO	MATIC - FOUR W	HEEL DRIVE		
Vehicle Modifica	tion(s) Description	UNMODIFIED				
Vehicle Comme	ntary MODEL=COM	MPASS SPORT 4WD	; MAX CRUSH A	T CENTERLINE		
Vehicle Leng	th 4440 mm	174.8 inches	CG b	ehind Front Axle	1191 mm	46.9 inches
Vehicle W	idth 1810 mm	71.3 inches	Center of Dan	nage to CG Axis	0 mm	0.0 inches
Vehicle Wheelb	pase 2630 mm	103.5 inches	Total Length	of Indentation	1115 mm	43.9 inches
Vehicle Test We	ight 1723 KG	3798 pounds	Maximum Sta	tic Crush Depth	435 mm	17.1 inches
			Pr	e-Impact Speed	57 kph	35.1 mph
Veh	icle Damage Index [12FDEW2	Principa	al Direction of Fo	rce 0	
	F	Pre & Post Test	Damage Me	asurements	;	
(Measureme	 nts are taken in a longitudir	naldirection. Except for End	gine Block, all measure	ements are take fron	- n the Rear Vehicle Su	rface forward.)
	ft Side		Centerline		Right	
Pre-Test	Post-Test	Pre-Te		:-Test	Pre-Test	Post-Test
mm inches			inches mm		mm inches	mm inches
min mones	min mones		of Vehicle at Cen		min mones	min mones
			174.8 4005	157.7		
		[+++0]	Engine Block][137.7]		
		850	33.5 850	33.5		
4340 170.9	3980 156.7		ront Bumper Corr		345 171.1	3970 156.3
110.0	10000	·	Front of Engine	ici <u>- </u>	040 [171.1	0070 100.0
		3950	155.5 3705	145.9		
3425 134.8	0 0.0		Firewall		437 135.3	3390 133.5
0-120	<u> </u>	3495	137.6 0	0.0	101	
3010 118.5	3005 118.3	<u>-</u>	Leading Edge of		007 118.4	3007 118.4
2790 109.8	2923 115.1		Leading Edge of		935 115.6	2934 115.5
2960 116.5	2970 116.9		Sottom of 'A' Post		960 116.5	2970 116.9
1994 78.5	1990 78.3		er Trailing Edge of		994 78.5	1992 78.4
2002 78.8	1980 78.0	• •	er Trailing Edge of		994 78.5	1989 78.3
		Lowe	Steering Column	·		
		2565 1	101.0 2610	102.8		
Center of Seering Column to 'A' Post (Horizontal)						
320 12.6 320 12.6						
Center of Steering Column to Headliner (Vertical)						
			18.1 400	, ,		

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2013 JEEP COMPASS

NHTSA Crash Test - #8036 - Front Impact

Pre/Post Depths - Vehicle Width - Closing Speed - Trapezoidal Average

Test Vehicle Weight = 3798 pounds Vehicle Closing Speed = 35.1 MPH Test Crush Length = 71.3 inches

Pre/Post Collision Crush Depths (inches)

Left Side Crush Centerline Crush Right Side Crush (Driver Side) 14.2 17.1 14.8 (Pass. Side)

		CRASH 3 Stiffness Coefficents			SMAC Stiffness
		_ <u>A</u>	<u>B</u>	<u>G</u>	<u> </u>
Minimum Crush = 14.2 inches					262.1
Using a Rated No Damage Speed of	2.5mph	245.7	226.1	133.5	
Using a Rated No Damage Speed of	5.0mph	453.8	192.8	534.1	
Using a Rated No Damage Speed of	7.5mph	624.2	162.1	1201.6	
Using a Rated No Damage Speed of	10.0mph	756.8	134.1	2136.2	
Average Crush = 15.8 inches					211.0
Using a Rated No Damage Speed of	2.5mph	220.5	182.0	133.5	
Using a Rated No Damage Speed of	5.0mph	407.1	155.2	534.1	
Using a Rated No Damage Speed of	7.5mph	560.0	130.5	1201.6	
Using a Rated No Damage Speed of	10.0mph	679.0	107.9	2136.2	
Maximum Crush = 17.1 inches					179.5
Using a Rated No Damage Speed of	2.5mph	203.4	154.9	133.5	
Using a Rated No Damage Speed of	5.0mph	375.5	132.0	534.1	
Using a Rated No Damage Speed of	7.5mph	516.5	111.0	1201.6	
Using a Rated No Damage Speed of	10.0mph	626.4	91.8	2136.2	

Rated No Damage Speed = Impact speed with a barrier resulting in no permanant vehicle deformation

Normal "Rated No Damage Speed" is 2.5 or 5 mph. Some Specific vehicles may, however, have a higher rating

4N6XPRT System's First Approximation Crush Factor (CF)

Speed from Crush calculation using a generic CF of 21 as suggested in Expert AutoStats

KE Speed (mph) = SQRT(30 * CF * max crush in feet)

Crush	Maximum Crush	Calculated KE Speed	Calculated Error	Calculated Error
Factor	(inches)	(mph)	(mph)	(%)
21	16.3	30.0	5.1	14.6

4N6XPRT Systems Specific Crush Factor (CF Specific to this test) = 28.8

CF = (mph * mph) / (30 * max crush in feet), dimensionless

4N6XPRT Systems CF is calculated based upon the data reported and is specific to this vehicle and this test

A = Maximum force per inch of damage without permanent damage, lb/in

B = Crush resistance per inch of damage width (Crash), lb/in^2

G = Energy dissipated without permanent damage, lb

Kv = Crush resistance per inch of damage width (SMAC), lb/in^2

2013 JEEP COMPASS

NHTSA Crash Test - #8036 - Front Impact

Pre/Post Depths - Indention Length - Closing Speed - Trapezoidal Average

Test Vehicle Weight = 3798 pounds Vehicle Closing Speed = 35.1 MPH Test Crush Length = 43.9 inches

Pre/Post Collision Crush Depths (inches)

Left Side Crush Centerline Crush Right Side Crush (Driver Side) 14.2 17.1 14.8 (Pass. Side)

		CRASH	SMAC Stiffness		
		A	<u>B</u>	<u>G</u>	<u> Kv</u>
Minimum Crush = 14.2 inches					425.5
Using a Rated No Damage Speed of	2.5mph	398.9	367.1	216.7	
Using a Rated No Damage Speed of	5.0mph	736.6	313.0	866.9	
Using a Rated No Damage Speed of	7.5mph	1013.2	263.1	1950.6	
Using a Rated No Damage Speed of	10.0mph	1228.6	217.6	3467.7	
Average Crush = 15.8 inches					342.5
Using a Rated No Damage Speed of	2.5mph	357.9	295.5	216.7	
Using a Rated No Damage Speed of	5.0mph	660.9	251.9	866.9	
Using a Rated No Damage Speed of	7.5mph	909.0	211.8	1950.6	
Using a Rated No Damage Speed of	10.0mph	1102.3	175.2	3467.7	
Maximum Crush = 17.1 inches					291.4
Using a Rated No Damage Speed of	2.5mph	330.1	251.4	216.7	
Using a Rated No Damage Speed of	5.0mph	609.6	214.3	866.9	
Using a Rated No Damage Speed of	7.5mph	838.5	180.2	1950.6	
Using a Rated No Damage Speed of	10.0mph	1016.8	149.1	3467.7	

Rated No Damage Speed = Impact speed with a barrier resulting in no permanant vehicle deformation

Normal "Rated No Damage Speed" is 2.5 or 5 mph. Some Specific vehicles may, however, have a higher rating

4N6XPRT System's First Approximation Crush Factor (CF)

Speed from Crush calculation using a generic CF of 21 as suggested in Expert AutoStats

KE Speed (mph) = SQRT(30 * CF * max crush in feet)

Crush	Maximum Crush	Calculated KE Speed	Calculated Error	Calculated Error
Factor	(inches)	(mph)	(mph)	(%)
21	16.3	30.0	5.1	14.6

4N6XPRT Systems Specific Crush Factor (CF Specific to this test) = 28.8

CF = (mph * mph) / (30 * max crush in feet), dimensionless

4N6XPRT Systems CF is calculated based upon the data reported and is specific to this vehicle and this test

A = Maximum force per inch of damage without permanent damage, lb/in

B = Crush resistance per inch of damage width (Crash), lb/in^2

G = Energy dissipated without permanent damage, lb

Kv = Crush resistance per inch of damage width (SMAC), lb/in^2

Available Test Results Front Impact Test Summary

Report Filter Settings

Year Range: 2014 - 2021

Make: JEEP Model: COMPASS

Test Number	Vehicle Info	No Damage Speed (mph)	Average Crush (inch)			Vehicle iffness B			Crush Factor
7189	2011 DODGE CALIBER FIVE DOOR HATCHBACK	5.0	20.0	35.0	305.9	91.9	509.1	125.0	24.5
8030	2013 JEEP PATRIOT UTILITY VEHICLE	5.0	18.7	35.1	352.2	113.6	545.9	154.5	26.4
8036	2013 JEEP COMPASS UTILITY VEHICLE	5.0	15.4	35.1	417.9	163.5	534.1	222.3	32.0
6530	2008 DODGE CALIBER FIVE DOOR HATCHBACK	5.0	11.6	29.8	420.9	180.4	490.9	260.4	30.7
10159	2018 JEEP COMPASS UTILITY VEHICLE	5.0	15.2	34.9	422.8	166.7	536.1	227.2	32.1
5828	2007 JEEP COMPASS UTILITY VEHICLE	5.0	15.9	35.1	422.8	160.2	558.2	217.8	31.0
5661	2007 DODGE CALIBER FIVE DOOR HATCHBACK	5.0	14.3	34.9	428.2	179.7	510.1	244.8	34.2
5967	2007 JEEP PATRIOT UTILITY VEHICLE	5.0	15.0	34.6	443.6	175.0	562.3	239.1	31.9
9107	2014 JEEP PATRIOT OTHER	5.0	8.1	24.7	507.2	248.5	517.7	390.4	30.4
		Avera	ge (AVG))	413.5	164.4	529.4	231.3	30.4
		Minim	um (MIN)	305.9	91.9	490.9	125.0	24.5
		Maximu	ım (MAX	()	507.2	248.5	562.3	390.4	34.2
	Standard Deviation	n (STDev	-sample)	56.4	44.1	24.1	74.0	3.0
	N	umber of	Tests (n)	9					

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Available Test Results Front Impact Test Summary

Report Filter Settings

Year Range: 2014 - 2021

Make: JEEP Model: COMPASS

Test Number	Vehicle Info	No Damage Speed (mph)	Max Crush (inch)			Vehicle iffness B			Crush Factor
7189	2011 DODGE CALIBER FIVE DOOR HATCHBACK	5.0	21.5	35.0	284.4	79.4	509.1	108.1	22.8
8030	2013 JEEP PATRIOT UTILITY VEHICLE	5.0	19.7	35.1	334.0	102.2	545.9	139.0	25.1
10159	2018 JEEP COMPASS UTILITY VEHICLE	5.0	18.5	34.9	346.5	112.0	536.1	152.6	26.3
5661	2007 DODGE CALIBER FIVE DOOR HATCHBACK	5.0	17.3	34.9	352.3	121.6	510.1	165.7	28.1
5828	2007 JEEP COMPASS UTILITY VEHICLE	5.0	18.8	35.1	357.9	114.8	558.2	156.1	26.3
6530	2008 DODGE CALIBER FIVE DOOR HATCHBACK	5.0	13.5	29.8	361.0	132.7	490.9	191.6	26.4
5967	2007 JEEP PATRIOT UTILITY VEHICLE	5.0	17.9	34.6	372.4	123.3	562.3	168.5	26.8
8036	2013 JEEP COMPASS UTILITY VEHICLE	5.0	17.1	35.1	375.5	132.0	534.1	179.5	28.8
9107	2014 JEEP PATRIOT OTHER	5.0	10.8	24.7	378.7	138.5	517.7	217.7	22.7
7322	2010 JEEP COMPASS OTHER	5.0	9.9	24.7	422.6	168.8	529.2	265.1	24.8
Average (AVG)				358.6	122.5	529.3	174.4	25.8	
	Minimum (MIN)				284.4	79.4	490.9	108.1	22.7
		Maximu	m (MAX	()	422.6	168.8	562.3	265.1	28.8
	Standard Deviation	n (STDev	-sample)	35.4	23.6	22.7	43.5	2.0
	N	umber of	Tests (n)) 10					

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Expert VIN DeCoder®

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Version Number 4.4.0.1

DeCoded VIN: JM1BL1V	-7в1438949
----------------------	------------

Model: 2011 Mazda Mazda3 4 door Sedan 2.0 L/ 122 cu.in. Engine Size: Engine Description: Inline 4 cylinder with Dual Overhead Cam 148 @ 6500 rpm Horse Power: 135 lb-ft at 4500 rpm Torque: Injection System: Multiport Fuel Injection (MFI) PSI: 35-50 psi Ignition: electronic Manufacturer: Mazda Assembly Plant: Yamaguchi, Japan This is a Front Wheel Drive vehicle w/ Manual Belts w/ Airbags Drive Wheels:

The First through Third characters (JM1) indicate a Mazda Car made in Japan

The Fourth through Fifth characters (BL) indicate a Mazda3

The Sixth through Seventh characters (1V) indicate a 4 door Sedan

The Eighth character (F) indicates the OEM engine: 2.0 L/ 122 cu.in., L4, DOHC

The Ninth character (the check digit) is entered as 7.

The VIN appears Valid, the calculated value is 7.

The Tenth character (B) indicates the model year 2011

The Eleventh character (1) indicates the vehicle was made in the assembly plant in Yamaguchi, Japan

The Twelfth through Seventeenth characters (438949) indicate the Serial Number and are unique to this vehicle.

Expert AutoStats®

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PROVIDED BY: 4N6XPRT Systems 8387 University Avenue La Mesa CA 91941

5/18/2025

2011 MAZDA 3 4 DOOR SEDAN			
Curb Weight: Curb Weight Distribution - Front:	2946 lbs.	133 Rear: 40	
Gross Vehicle Weight Rating:	4081 lbs.	185	51 kg.
Number of Tires on Vehicle: Drive Wheels:	FRONT		
Horizontal Dimensions Total Length Wheelbase:	Inches 181 104	Feet 15.08 8.67	Meters 4.60 2.64
Front Bumper to Front Axle: Front Bumper to Front of Front Well: Front Bumper to Front of Hood: Front Bumper to Base of Windshield: Front Bumper to Top of Windshield:	36 21 7 44 77	3.00 1.75 0.58 3.67 6.42	0.91 0.53 0.18 1.12 1.96
Rear Bumper to Rear Axle: Rear Bumper to Rear of Rear Well: Rear Bumper to Rear of Trunk: Rear Bumper to Base of Rear Window:	41 24 6 20	3.42 2.00 0.50 1.67	1.04 0.61 0.15 0.51
Width Dimensions Maximum Width: Front Track: Rear Track:	69 60 60	5.75 5.00 5.00	1.75 1.52 1.52
Vertical Dimensions Height: Ground to -	58	4.83	1.47
Front Bumper (Top) Headlight - center Hood - top front: Base of Windshield Rear Bumper - top: Trunk - top rear: Base of Rear Window:	21 29 30 39 25 45	1.75 2.42 2.50 3.25 2.08 3.75	0.53 0.74 0.76 0.99 0.64 1.14 1.14

Expert AutoStats®

2011 MAZDA 3 4 DOOR SEDAN

39 42	4.58 3.25 3.50	1.40 0.99 1.07
54 38 36	4.50 3.17 3.00	1.37 0.97 0.91
GS		
12	1.00	0.30
pavement):		
	42 54 38 36 36 408 12	42 3.50 54 4.50 38 3.17 36 3.00 SS 408 34 12 1.00

. 7		
$\Lambda CCOI$	eration	•
ACCE	ciation	

O to 30mph	t =	2.5	sec	a =	17.6 ft/sec²	G-force =	0.55
0 to 60mph	t =	7.5	sec	a =	11.7 ft/sec²	G-force =	0.36
45 to 65mph	t =	4.1	sec	a =	7.2 ft/sec²	G-force =	0.22

Transmission Type: 5spd MANUAL

Notes:

Federal Bumper Standard Requirements:	2.5	mph
This vehicles Rated Bumper Strength:	2.5	mph

N.S.D.C = 2010 - 2011

2011 MAZDA 3 4 DOOR SEDAN

Other Information Tip-Over Stability Ratio = NHTSA Star Rating (calculated)	1.3	2 Stable ****
Center of Gravity (No Load): behind front axle in front of rear axle from side of vehicle from ground from front corner from rear corner	= = = = =	Inches Feet Meters 41.60 3.47 1.06 62.40 5.20 1.58 34.50 2.88 0.88 22.77 1.90 0.58 84.92 7.08 2.16 109.00 9.08 2.77
from front bumper from rear bumper	=	77.60 6.47 1.97 103.40 8.62 2.63
Moments of Inertia Approximations (No Load Yaw Moment of Inertia Pitch Moment of Inertia Roll Moment of Inertia	i): = = =	1b*ft*sec² kg*m*sec² 1828.38 252.78 1767.54 244.37 380.28 52.58
Front Profile Information Angle Front Bumper to Hood Front Angle Front of Hood to Windshield Base Angle Front of Hood to Windshield Top Angle of Windshield Angle of Steering Tires at Max Turn	= = = = =	52.1 deg 13.7 deg 20.4 deg 27.3 deg 29.2 deg

First Approximation Crush Factors:

Speed Equivalent (mph) of Kinetic Energy (KE) used in causing crush of indentation may be evaluated using the following formula, the appropriated Crush Factor (CF), and Maximum Indentation Depth (MID), in feet:

These CF values are based upon analysis of NHTSA Barrier Crash data, and from over 1000 vehicle accidents where independent evaluation of speed was possible. (These are NOT 'A', 'B', 'C', or 'G' values)

The rear Impact data with more then 2-3 inches of crush damage should be looked at carefully, since some vehicles have very weak trunk & fender strength. Therefore, on some cars, especially GM, you estimate from the rear crush data may be high by as much as 4-5 mph (on a crush of 18 inches).

Stiffness Values and Test Data

Derived from

NHTSA Crash Test #7448

2012 MAZDA MAZDA3

Provided By

4N6XPRT StifCalcs®

Registered to:

4N6XPRT SYSTEMS 8387 UNIVERSITY AVENUE LA MESA CA 91941-3842 24R-030201SC01301

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Similar Vehicle database reader

You entered: 2011 MAZDA 3

The Similar Vehicle Year/Model list indicates the following are Similar Models

Year Range	Make	Model	Body Styles	Wheelbase
2010 - 2013 Remarks:	MAZDA	3	4D, 5D	103.9

The Similar Vehicle List contained in 4N6XPRT StifCalcs is an extension of the free Vehicle Interchange List provided by Gregory C. Anderson of Scalia Safety Engineering through the 2012 model year. 4N6XPRT Systems® has taken over the maintenance of the Similar Vehicle List beginning with the 2013 version of the 4N6XPRT StifCalcs program. 4N6XPRT Systems® makes no warranties, either expressed or implied, with respect to this data, its quality, performance, merchantability, or fitness for any particular purpose. The entire risk as to its quality and performance is with the user. In no event will 4N6XPRT Systems® be liable for direct, indirect, incidental, or consequential damages resulting from any data presented here, even if 4N6XPRT Systems® has been advised of the possibility of such damages. The user must agree to assume full responsibility for any decisions which are based, in whole or in part, upon information obtained by using this data. Some of the listed similarities are based on estimates or memory. Most of the data are pulled from specification tables which may contain inaccuracies of their own. Use common sense - if something seems wrong, check it (and if it is wrong, let us know!).

If you have suggestions and/or corrections, we request and urge you to contact us - 4n6@4n6xprt.com.

Test Information

Test # 7448		NHTS	A Test Re	eference Guide	Version #	V5			
Test Date 9/15/2011				C	ontract #	DTNH22-09-	D-00027		
Contract/Study Title	NCAP SIDE	IMPACT - 2	2012 MA	ZDA 3 I-SPOR	T 4-DOO	R SEDAN			
Test Objective(s)	TO GENERA	TE SIDE IM	IPACT PE	RFORMANCE	INFORM	ATION			
Test Type	OPTIONAL I	NEW CAR	ASSESSN	MENT TEST		Configuration	IMPACT	OR INTO VEH	ICLE
Impact Angle	270			Side Im	oact Point	-76	mm	-3.0	inches
				Offse	et Distance	e 0	mm	0.0	inches
				Clos	ing Speed	61.5	Km/Hr	38.18] МРН
Test Performer	KARCO ENG	INEERING							
Test Reference #	ZC5400								
Test Track Surface	CONCRETE				Condition	DRY			
Ambient Temperature	34 C	93.2	F	Total Number	of Curves	62			
Data Recorder Type	DIGITAL DA	TA ACQUIS	SITION			Data Link	OTH		
Test Commentary	NO COMME	NTS							
			Fixe	ed Barrier Info	rmation				
5 · +					5	_			1
Barrier Type				Pole Barrier	Diametei	r <u> </u>	mm		inches
Barrier Shape									
Barrier Commentary									

2012 MAZDA MAZDA3 LEFT FRONT SEAT

Test #	7448						
Vehicle #	2			Sex	MALE		٦
Location	LEFT FRONT SEA	ΔT		Age	0		_
Position	CENTER POSITION		!	Height	0.0 mm 0.0	inches	s
Туре	EUROSID 2 (ES-2		ACT DUMMY	=			
Size	50 PERCENTILE			g.n.		pourio	
	ion Method	SIDE IMPACT	DUMMY				
	nt Manufacturer	FTSS, S/N F03					
•	nt Modification	NO COMMEN					
•	nt Description	ES2RE					
-	•	NO COMMEN	TS				
•	ŕ						
			<u>Head</u>				
Head to -							
Windshie	lder Header 369.	0 mm 14 .	5 inches	Head Injury (Criteria (HIC) 19	4.0	
	WindShield 615.	0 mm 24 .	2 inches	HIC Lo	wer Time Interval (r	ms) 29.9	
	Seatback 0.0	mm 0.0	inches	HIC Up	per Time Interval (r	ms) 61.9	
,	Side Header 202.	0 mm 8.0	inches				
S	Side Window 340.	0 mm 13.	4 inches	;			
Neck to Sea	atback 0.0 m	nm 0.0 i	nches				
	First Contact Re	gion (Head)	AIR BAG				
S	econd Contact Reg	jion (Head)	HEADER - S	IDE			
			<u>Chest</u>				
Chest to -	_			_			
			nches	=	6.0 mm 3.8	inches	
Steering W			nches	Hip to Door 1	50.0 mm 5.9	inches	
Seat			nches				
	everity Index 0.0		Pel	lvic Peak Lateral A	(3 /	0.0	
Thoracic Tra	auma Index <u>[0.0</u>		<u> </u>		Acceleration (g's)	0.0	
	•	elt Peak Load		lewtons 0.0	pound Force		
First Os		elt Peak Load		ewtons 0.0	pound Force		
	ontact Region (Ches	· -	AIR BAG				
Second Co	ntact Region (Ches	t/Abdomen) [I	NONE				
			<u>Legs</u>				
Knees to I				ees to Seatback 0		inches	
	ır Peak Load 0.0		wtons 0.		ls Force		
Right Femu	r Peak Load 0.0	_	wtons 0.	0 pound	ls Force		
	First Contact Re	· · · · -	DOOR				
;	Second Contact Re	gion (Legs)					

2012 MAZDA MAZDA3 LEFT FRONT SEAT

Restraint Commentary

Test #	7448					
Vehicle #	2			Sex	MALE	
Location	LEFT F	RONT SE	AT	Age	0	
Position	CENTE	R POSITION	ON	Height	0.0 mm	0.0 inches
Type	EUROS	SID 2 (ES-2	RE) SIDE IMPACT DUMM	Y Weight	0.0 kg	0.0 pounds
Size	50 PER	CENTILE				
Calibra	tion Meth	hod	SIDE IMPACT DUMMY			
Occupa	ant Manu	ıfacturer	FTSS, S/N F035			
Occupa	ant Modif	fication	NO COMMENTS			
Occupa	ant Desc	ription	ES2RE			
Occupa	ant Comr	mentary	NO COMMENTS			
			<u>Restraints</u>			
Restrai	int # 1	3 POINT E				
Restrai Mounte						
	ed	BELT - CO	BELT			
Mounte Deploy	ed	BELT - CO	DNVENTIONAL MOUNT		DRCE LIMITER	
Mounte Deploy	ed rment int Comm	BELT - CO	BELT DIVENTIONAL MOUNT ED PROPERLY SHOULDER BELT PRETE		ORCE LIMITER	<u> </u>
Mounte Deploy Restrai	ed rment int Comm int #2	BELT - CO DEPLOYE nentary	BELT DIVENTIONAL MOUNT ED PROPERLY SHOULDER BELT PRETE		DRCE LIMITER	
Mounte Deploy Restrai Restrai Mounte	ed vment int Comm int #2 ed	BELT - CO DEPLOYE nentary CURTAIN HEADER	BELT DIVENTIONAL MOUNT ED PROPERLY SHOULDER BELT PRETE		ORCE LIMITER	<u></u>
Mounte Deploy Restrai Restrai Mounte Deploy	ed vment int Comm int #2 ed	DEPLOYE CURTAIN HEADER DEPLOYE	BELT DIVENTIONAL MOUNT ED PROPERLY SHOULDER BELT PRETE AIRBAG - SIDE		DRCE LIMITER	
Mounte Deploy Restrai Restrai Mounte Deploy	ed rment int Comm int #2 ed rment int Comm	DEPLOYE CURTAIN HEADER DEPLOYE nentary	BELT DIVENTIONAL MOUNT DIPROPERLY SHOULDER BELT PRETE AIRBAG SIDE DIPROPERLY		DRCE LIMITER	
Mounte Deploy Restrai Restrai Mounte Deploy Restrai	ed rment int Comm int #2 ed rment int Comm int #3	DEPLOYE CURTAIN HEADER DEPLOYE nentary	SELT ONVENTIONAL MOUNT ED PROPERLY SHOULDER BELT PRETE AIRBAG - SIDE ED PROPERLY SIDE CURTAIN AIRBAG ELVIS AIRBAG		DRCE LIMITER	

SIDE TORSO/ABDOMEN/PELVIS AIRBAG

2012 MAZDA MAZDA3 LEFT REAR SEAT

Test # 7448	
Vehicle # 2 Sex FEMALE	
Location LEFT REAR SEAT Age 0	
Position NONADJUSTABLE SEAT Height 0.0 mm 0.0 inches	
Type SID-IIS SIDE IMPACT DUMMY Weight 0.0 kg 0.0 pounds	
Size 5 PERCENTILE	
Calibration Method SIDE IMPACT DUMMY	
Occupant Manufacturer FTSS, S/N: 307	
Occupant Modification NO COMMENTS	
Occupant Description SID IIS-D	
Occupant Commentary CNTRC1:TORSO CONTACTED THE DOOR PANEL	
<u>Head</u>	
Head to -	
Windshielder Header 0.0 mm 0.0 inches Head Injury Criteria (HIC) 452.0	
WindShield 0.0 mm 0.0 inches HIC Lower Time Interval (ms) 42.4	
Seatback 464.0 mm 18.3 inches HIC Upper Time Interval (ms) 68.7	
Side Header 242.0 mm 9.5 inches	
Side Window 341.0 mm 13.4 inches	
Neck to Seatback 0.0 mm 0.0 inches	
First Contact Region (Head) AIR BAG	
Second Contact Region (Head) NONE	
<u>Chest</u>	
Chest to -	
Dash 0.0 mm 0.0 inches Arm to Door 151.0 mm 5.9 inches	
Steering Wheel 0.0 mm 0.0 inches Hip to Door 175.0 mm 6.9 inches	
Seatback 463.0 mm 18.2 inches	
Chest Severity Index 0.0 Pelvic Peak Lateral Acceleration (g's) 0.0	
Thoracic Trauma Index 0.0 Thorax Peak Acceleration (g's) 0.0	
Lap Belt Peak Load 0.0 Newtons 0.0 pound Force	
Shoulder Belt Peak Load 0.0 Newtons 0.0 pound Force	
First Contact Region (Chest/Abdomen) OTHER	
Second Contact Region (Chest/Abdomen) NONE	
<u>Legs</u>	
Knees to Dash 0.0 mm 0.0 inches Knees to Seatback 219.0 mm 8.6 inches	
Left Femur Peak Load 0.0 Newtons 0.0 pounds Force	
Right Femur Peak Load 0.0 Newtons 0.0 pounds Force	
First Contact Region (Legs) DOOR	
Second Contact Region (Legs)	

2012 MAZDA MAZDA3 LEFT REAR SEAT

Restraint Commentary

Test #	7448					
Vehicle #	2			Sex	FEMALE	
Location	LEFT R	EAR SEA	T	Age	0	
Position	NONAD	JUSTABL	E SEAT	Height	0.0 mm	0.0 inches
Туре	SID-IIS	SIDE IMP	ACT DUMMY	Weight	0.0 kg	0.0 pounds
Size	5 PERC	ENTILE				
Calibra	tion Metho	od	SIDE IMPACT DUMMY			
Occupa	ant Manuf	acturer	FTSS, S/N: 307			
Occupa	ant Modific	cation	NO COMMENTS			
Occupa	ant Descri	ption	SID IIS-D			
Occupa	ant Comm	entary	CNTRC1:TORSO CONTA	CTED THE DOOR	PANEL	
			Restraints	<u> </u>		
Dootro:	_					
Restrai	int # 1 🔼	POINT E	BELT			
Mounte	_		BELT DNVENTIONAL MOUNT			
	ed E		ONVENTIONAL MOUNT			
Mounte Deploy	ed E	BELT - CO	ONVENTIONAL MOUNT			
Mounte Deploy	ed E ment N int Comme	BELT - CO	DNVENTIONAL MOUNT LICABLE NO COMMENTS			
Mounte Deploy Restrai	ed Ement Mint Comment	BELT - CO NOT APPI entary	INVENTIONAL MOUNT LICABLE NO COMMENTS AIRBAG			
Mounte Deploy Restrai Restrai	ed Ement Note int #2	NOT APPI entary CURTAIN	INVENTIONAL MOUNT LICABLE NO COMMENTS AIRBAG			
Mounte Deploy Restrai Restrai Mounte Deploy	ed Ement Note int #2	NOT APPLE Entary CURTAIN HEADER	INVENTIONAL MOUNT LICABLE NO COMMENTS AIRBAG - SIDE			
Mounte Deploy Restrai Restrai Mounte Deploy	ed Ement Mint Commerciant #2 Ced Imment Int Commerciant Commerciant Commerciant Int Int Int Int Int Int Int Int Int I	NOT APPLE entary CURTAIN HEADER : DEPLOYE entary	INVENTIONAL MOUNT LICABLE NO COMMENTS AIRBAG - SIDE D PROPERLY			
Mounte Deploy Restrai Restrai Mounte Deploy Restrai	ed Ement Mint Commonint #2 Ged Finent Commonint #3	NOT APPLE entary CURTAIN HEADER : DEPLOYE entary	INVENTIONAL MOUNT LICABLE NO COMMENTS AIRBAG - SIDE D PROPERLY SIDE CURTAIN AIRBAG ELVIS AIRBAG			

SIDE TORSO/ABDOMEN/PELVIS AIRBAG

Vehicle 1 0 NHTSA DEFORMABLE IMPACTOR

Test #	7448								
VIN					NHTSA Te	est Vehicle Number	1		
Year	0				Vehicle Mo	dification Indicator	RESEARCH	VEHICLE	
Make	NHTSA		Post-test S	teering Colu	ımn Shear C	apsule Seperation	NOT APPLIC	ABLE	
Model	DEFORMAB	LE IMPA	CTOR] Steering	g Column Co	llapse Mechanism	NOT APPLIC	ABLE	
Body	NOT APPLIC	ABLE							
Engine	NOT APPLIC	ABLE							
Displacement	0 Lite	er Tra	ansmission	NOT APP	PLICABLE				
Vehicle Modific	ation(s) Descri	ption	NO COMM	ENTS					
Vehicle Comme	entary NHTS	A SIDE	IMPACT MO	OVING DEF	ORMABLE	BARRIER			
Vehicle Leng	gth 4023	mm	158.4 in	nches	CG	behind Front Axle	1118 mm	44.0	inches
Vehicle V	Vidth 1251	mm	49.3 in	nches	Center of D	amage to CG Axis	0 mm	0.0	inches
Vehicle Wheel	base 2595	mm	102.2		Total Leng	th of Indentation	0 mm	0.0	inches
Vehicle Test We	eight 1368	KG	3015 p	ounds	Maximum S	Static Crush Depth	0 mm	0.0	inches
						Pre-Impact Speed	61 kph	38.2	mph
Vel	nicle Damage I	ndex			Princ	ipal Direction of Fo	rce 0		
Damage Pro	ofile Distanc	e Meas	urements		Crush fror	n Pre & Post Te	st Damage Me	easuremo	ents
(Measu	red Left-to-Riو	ght, Rear	-to-Front)			Pre-Test	Post-Test	Crush D	 Depth
DPD 1		0.0	inches	Left Burn	per Corner	0.0 inches	0.0 inches		inches
DPD 2) mm	0.0	inches		•	0 mm	0 mm	0	mm
DPD 3) mm	0.0	inches		Centerline	0.0 inches	0.0 inches	s 0.0	inches
DPD 4) mm	0.0	inches		Centennie	0 mm	0.0 mm	0.0	mm
DPD 5) mm	0.0	inches						, ,,,,,,
DPD 6) mm	0.0	inches	Right Bum	per Corner	0.0 inches	0.0 inches		inches
						0 mm	0 mm	0	mm
•	ngagement			_	agement			Engageme	
`	pact Only)			•	mpact Only)		(Side Iı	mpact Only	<u>/</u>)
	0.0			NOT AF	PLICABLE			0.0	_
Moving	Test Cart			Moving Te	st Cart/Vehic	cle	Vehicle Ori	entation or	n Cart
A	ngle			Crabb	oed Angle		Moving	g Test Cart	
	ENGAGEMEN	T			27.0			0	
_	of the Tilt Angle			_	the Crabbed Ar	-	_	de of the Ang	
	etween surface of				Clockwise from		Measured between		
Rollover Test	Cart and the Grou	ınd	Longi	itudinal Vector	to Velocity Vect	or of Vehicle	and Direction	of Test Cart I	Motion

Vehicle 1 0 NHTSA DEFORMABLE IMPACTOR

			cilicic i d	MILLOA		IADLL IIIII	70101	`		
Test #	7448									
VIN					NHTSA	Test Vehicle	Number	1		
Year	0				Vehicle I	Modification I	ndicator	RESEARC	H VEHICLE	
Make	NHTS	4	Post-test S	Steering Co	lumn Shea	r Capsule Se	eperation	NOT APPL	ICABLE	
Model	DEFO	RMABLE IMP	ACTOR	Steerir	ng Column	Collapse Me	chanism	NOT APPL	ICABLE	
Body	NOT A	PPLICABLE								
Engine	NOT A	PPLICABLE								
Displacement	0	Liter 7	Transmissior	NOT AF	PLICABL					
Vehicle Modifica	ation(s)	Description	NO COMM	MENTS						
Vehicle Comme	entary	NHTSA SIDE	IMPACT M	OVING DE	FORMABL	E BARRIER				
Vehicle Leng	gth	4023 mm	158.4	inches		CG behind F	ront Axle	1118 mm	44.0	inches
Vehicle W	/idth	1251 mm	49.3	inches	Center of	f Damage to	CG Axis	0 mm	0.0	inches
Vehicle Wheelt	base	2595 mm	102.2	inches	Total Le	ength of Inde	ntation	0 mm	0.0	inches
Vehicle Test We	eight	1368 KG	3015	pounds	Maximur	n Static Crus	sh Depth	0 mm	0.0	inches
						Pre-Impa	ct Speed	61 kph	38.2	mph
Veh	icle Da	mage Index			Pri	ncipal Direct	ion of Fo	rce 0		
		<u> </u>	Pre & Po	st Test D	<u>Damage</u>	Measure	ements			
(Measureme	ents are t	aken in a longitudi	naldirection. Ex	cept for Engir	ne Block, all m	easurements ar	re take from	the Rear Vehicle	Surface forwa	rd.)
1 4	eft Side	2			Centerline	۵		Rid	ght Side	
Pre-Test	ort Orac	Post-Test		Pre-Tes		Post-Test		Pre-Test		t-Test
mm inches	s 1	nm inches				mm inche	20	mm inches		inches
monec	,	11111 11101100				t Centerline	,,	11111	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	11101100
			Г	0 0.0		0.0	\neg			
			Ľ	<u> </u>	Engine Blo					
			Г	0 0.0		0.0	\neg			
0.0	0	0.0	1		ont Bumper			0.0	0	0.0
0.0			J		Front of En		<u> </u>	[0:0	. <u>v</u>	0.0
			Ī	0.0		0.0	\neg			
0.0	0	0.0]	<u> </u>	Firewall			0.0	0	0.0
0.0				0.0		0.0	<u> </u>	10.0	<u> </u>	
0.0	0	0.0]		eading Ed			0.0	0	0.0
0.0	- <u>-</u>	0.0	1	• •	eading Ed	•	0	0.0	i	0.0
0.0	<u> </u>	0.0]		tom of 'A' F	-	0	0.0	j [0	0.0
0 0.0		0.0]		Trailing Ed		0	0.0	0	0.0
0.0] <u> </u>	0.0]		Trailing Ed	•	0	0.0	0	0.0
0.0			J		Steering Co	_	<u> </u>	[0:0	. <u>v</u>	0.0
			Г	0.0		0.0				
			-			'A' Post (Ho	— orizontal)			
			_	0.0		0.0				
			_			Headliner (— Vertical)			
			_	0.0		0.0				
			L							

4N6XPRT StifCalcs® licensed by 4N6XPRT Systems (www.4N6XPRT.com) to:

Vehicle 2 2012 MAZDA MAZDA3

Test # 7448	
VIN JM1BL1UG1C1507209 NHTSA Test Vehicle Number 2	
Year 2012 Vehicle Modification Indicator PRODUCTION	VEHICLE
Make MAZDA Post-test Steering Column Shear Capsule Seperation UNKNOWN	
Model MAZDA3 Steering Column Collapse Mechanism UNKNOWN	
Body FOUR DOOR SEDAN	
Engine ROTARY	
Displacement 2 Liter Transmission AUTOMATIC - FRONT WHEEL DRIVE	
Vehicle Modification(s) Description NO COMMENTS	
Vehicle Commentary NO COMMENTS	
Vehicle Length 4273 mm 168.2 inches CG behind Front Axle 1145 mm	45.1 inches
Vehicle Width 1753 mm 69.0 inches Center of Damage to CG Axis -288 mm	-11.3 inches
Vehicle Wheelbase 2644 mm 104.1 Total Length of Indentation 3000 mm	118.1 inches
Vehicle Test Weight 1493 KG 3291 pounds Maximum Static Crush Depth 264 mm	10.4 inches
Pre-Impact Speed 0 kph	0.0 mph
Vehicle Damage Index 10LPAW3 Principal Direction of Force 297	
Damage Profile Distance Measurements	acuramante
(Measured Left-to-Right, Rear-to-Front) Pre-Test Post-Test O	Crush Depth
DPD 1 10 mm 0.4 inches Left Bumper Corner 0.0 inches 0.0 inches	0.0 inches
DPD 2 162 mm 6.4 inches 0 mm 0 mm	0 mm
DPD 3 254 mm 10.0 inches Centerline 0.0 inches 0.0 inches	0.0 inches
DPD 4 254 mm 10.0 inches 0 mm 0 mm	0 mm
DPD 5 158 mm 6.2 inches DDD 6 4 mm 0.2 inches Right Bumper Corner 0.0 inches 0.0 inches	0.0 inches
DPD 6 4 mm 0.2 inches Right Bumper Comer 0.0 inches 0.0 inches 0.0 mm	0 mm
Bumper Engagement Sill Engagement A-pillar Er	ngagement
(Inline Impact Only) (Side Impact Only) (Side Impact Only)	pact Only)
27.0 DIRECT ENGAGEMENT 9	0.0
· · · · · · · · · · · · · · · · · · ·	
	entation on Cart
	Test Cart
	Test Cart 0
Magnitude of the Tilt Angle Magniture of the Crabbed Angle Magnitude	Test Cart

Vehicle 2 2012 MAZDA MAZDA3

Test #	7448				
VIN	JM1BL1UG1C150720)9	TSA Test Vehicle Numb	er 2	
Year	2012	Vehi	cle Modification Indicate	or PRODUCTIO	N VEHICLE
Make	MAZDA	Post-test Steering Column S	Shear Capsule Seperation	on UNKNOWN	
Model	MAZDA3	Steering Colu	ımn Collapse Mechanis	m UNKNOWN	
Body	FOUR DOOR SEDAN				
Engine	ROTARY				
Displacement	2 Liter Tr	ansmission AUTOMATIC -	FRONT WHEEL DRIV	E	
Vehicle Modific	ation(s) Description	NO COMMENTS			
Vehicle Commo	entary NO COMMEN	TS			
Vehicle Len	gth 4273 mm	168.2 inches	CG behind Front Ax	de 1145 mm	45.1 inches
Vehicle V	Vidth 1753 mm	69.0 inches Cen	ter of Damage to CG Ax	is -288 mm	-11.3 inches
Vehicle Whee	lbase 2644 mm	104.1 inches Tot	al Length of Indentation	3000 mm	118.1 inches
Vehicle Test W	eight 1493 KG	3291 pounds Max	imum Static Crush Dept	th 264 mm	10.4 inches
	_		Pre-Impact Spee	ed 0 kph	0.0 mph
Vel	hicle Damage Index	IOLPAW3	Principal Direction of F	orce 297	
	_				
	<u>P</u>	<u> re & Post Test Dama</u>	<u>ige Measuremen</u>	<u>ts</u>	
(Measurem	ents are taken in a longitudin	aldirection. Except for Engine Block	all measurements are take fr	om the Rear Vehicle Su	urface forward.)
L	eft Side	Cente	rline	Righ	t Side
Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test
mm inche	s mm inches	mm inches	mm inches	mm inches	mm inches
		Length of Vehic	cle at Centerline		
		0.0	0.0		
		Engin	e Block		
		0.0	0.0		
0.0	0.0	Front Bur	nper Corner	0.0	0.0
		Front o	of Engine		
		0.0	0.0		
0.0	0.0	Fire	ewall	0.0	0.0
		0.0	0.0		
0.0	0 0.0	Upper Leading		0.0	0 0.0
0.0	0 0.0	Lower Leading	Edge of Door	0.0	0.0
0 0.0 0 0.0	0 0.0	Bottom of	'A' Post	0.0	0.0
	0 0.0	Upper Trailing		0.0	0.0
0.0	0.0			0.0	0.0
			g Column		
		0.0	0.0		
		Center of Seering Colum		ıl)	
		0.0	0.0		
		Center of Steering Colur	nn to Headliner (Vertical	1)	

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Registered Owner: 4N6XPRT SYSTEMS Serial Number: 24R-030201SC01301

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2012 MAZDA MAZDA3

NHTSA Crash Test - #7448 - Side Impact

Damage Profile Distances - Indention Length - KE Equivalent Speed - Trapezoidal Average

Test Vehicle Weight = 3291 pounds Impactor Weight = 3015 KE Equivalent Speed = 26.4 MPH Impactor Test Speed = 38.2

Test Crush Length = 118.1 inches

Damage Profile Distance Collision Crush Depths (inches)

	DPD1	DPD2	DPD3	DPD4	DPD5	DPD6	(Fro.54)
(Rear)	0.4	6.4	10.0	10.0	6.2	0.2	(Front)

		CRAS	CRASH 3 Stiffness Coefficents		
		<u>A</u>	<u>B</u>	<u>G</u>	<u>Kv</u>
Minimum Crush = 0.2 inches					627862.6
Using a Rated No Damage Speed of	1.0mph	3603.0	581203.6	11.2	
Using a Rated No Damage Speed of	2.0mph	6922.4	536345.9	44.7	
Using a Rated No Damage Speed of	3.0mph	9958.1	493289.5	100.5	
Using a Rated No Damage Speed of	5.0mph	15178.4	412580.6	279.2	
Average Crush = 6.6 inches					360.2
Using a Rated No Damage Speed of	1.0mph	86.3	333.4	11.2	
Using a Rated No Damage Speed of	2.0mph	165.8	307.7	44.7	
Using a Rated No Damage Speed of	3.0mph	238.5	283.0	100.5	
Using a Rated No Damage Speed of	5.0mph	363.6	236.7	279.2	
Maximum Crush = 10.0 inches					155.7
Using a Rated No Damage Speed of	1.0mph	56.7	144.1	11.2	
Using a Rated No Damage Speed of	2.0mph	109.0	133.0	44.7	
Using a Rated No Damage Speed of	3.0mph	156.8	122.3	100.5	
Using a Rated No Damage Speed of	5.0mph	239.0	102.3	279.2	

Rated No Damage Speed = Impact speed with a barrier resulting in no permanant vehicle deformation

Normal "Rated No Damage Speed" is 2.5 or 5 mph. Some Specific vehicles may, however, have a higher rating

CDACH 2 Stiffness Coefficients

SMAC Stiffnood

4N6XPRT System's First Approximation Crush Factor (CF)

Speed from Crush calculation using a generic CF of 21 as suggested in Expert AutoStats

KE Speed (mph) = SQRT(30 * CF * max crush in feet)

Crush	Maximum Crush	Calculated KE Speed	Calculated Error	Calculated Error
Factor	(inches)	(mph)	(mph)	(%)
21	10.0	22.9	3.5	13.2

4N6XPRT Systems Specific Crush Factor (CF Specific to this test) = 27.9

CF = (mph * mph) / (30 * max crush in feet), dimensionless

4N6XPRT Systems CF is calculated based upon the data reported and is specific to this vehicle and this test

A = Maximum force per inch of damage without permanent damage, lb/in

B = Crush resistance per inch of damage width (Crash), lb/in^2

G = Energy dissipated without permanent damage, lb

Kv = Crush resistance per inch of damage width (SMAC), lb/in^2

Available Test Results Side Impact Test Summary

Report Filter Settings

Year Range: 2010 - 2013

Make: MAZDA Model: 3

Test	Vehicle	No							
Number	Info	Damage	Average		I n	dention	Lengt	h	
		Speed	Crush	KEES	S t	iffness	Value	s	Crush
		(mph)	(inch)	(mph)	Α	В	G	Κv	Factor
7107	2011 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	19.8	20.2	40.7	18.7	44.4	23.0	8.2
6657	2010 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	8.1	19.7	120.5	131.8	55.1	163.3	19.2
7448	2012 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	6.6	26.4	165.8	307.7	44.7	360.2	42.4
7106	2011 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	7.8	26.6	187.6	297.0	59.3	347.2	36.4
6721	2010 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	7.3	26.7	201.3	339.4	59.7	396.5	39.0
6651	2010 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	3.7	26.9	307.8	1024.6	46.2	1195.8	77.4
		Avera	ge (AVG)		170.6	353.2	51.6	414.3	37.1
		Minim	um (MIN)		40.7	18.7	44.4	23.0	8.2
		Maximu	ım (MAX))	307.8	1024.6	59.7	1195.8	77.4
	Standard Deviati	on (STDev	-sample)		88.8	351.3	7.3	408.6	23.7
	N	lumber of	Tests (n)	6					

Available Test Results Side Impact Test Summary

Report Filter Settings

Year Range: 2010 - 2013

Make: MAZDA Model: 3

Test Number	Vehicle Info	No Damage Speed (mph)	Max Crush (inch)	KEES (mph)		dention iffness B			Crush Factor
7107	2011 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	19.8	20.2	40.7	18.7	44.4	23.0	8.2
6657	2010 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	18.2	19.7	53.5	25.9	55.1	32.1	8.5
7448	2012 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	10.4	26.4	104.9	123.1	44.7	144.1	26.8
6651	2010 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	9.8	26.9	117.0	147.9	46.2	172.7	29.4
7106	2011 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	10.0	26.6	145.9	179.6	59.3	209.9	28.3
6721	2010 MAZDA MAZDA3 FOUR DOOR SEDAN	2.0	9.4	26.7	156.9	206.2	59.7	240.9	30.4
		Averaç	ge (AVG)		103.2	116.9	51.6	137.1	21.9
		Minimu	ım (MIN))	40.7	18.7	44.4	23.0	8.2
		Maximu	m (MAX)	156.9	206.2	59.7	240.9	30.4
	Standard Deviati	on (STDev	-sample))	47.5	78.5	7.3	91.0	10.6
	N	Number of ⁻	Гests (n)	6					

4N6XPRT Systems

Expert System Software for Litigation

8387 University Avenue La Mesa, CA 91942 Phone: (619) 464-3478 Fax: (619) 464-2206

Toll Free: 1-800-266-9778

E-Mail: 4n6@4n6xprt.com

Web Site: http://www.4n6xprt.com

Dear Conference Attendee,

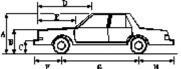
We at 4N6XPRT Systems were pleased to be able to provide you with the preceding data for the crash test vehicles.

Information regarding the Services available to you through our company, as well as the Programs used to create the data report follows this page.

We look forward to providing you similar information in the near future.

Sincerely,

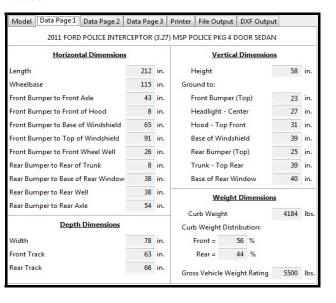
Daniel W. Vomhof III Daniel W. Vomhof, Ph.D.



Expert AutoStats®

Expert AutoStats® is a program that has over 50,000 cars, pick-ups, vans, and utility vehicles that range in years from the 1940's to the present. Expert AutoStats® has specifications that can assist in reconstructing accidents when the data for the vehicle is unavailable or the vehicle is too severely damaged to get correct measurements.

For many vehicles mid-1960's to present, data such as bumper height, front and rear overhang, hood height, etc., are also included.



4N6XPRT BioMeknx®



Collecting the Biomechanical data of importance to the Accident Investigator into one easily accessible reference location Biomechanics is the application of physics to describe, evaluate, or model living tissue and biological materials. Originally it was the application of the part of physics known as Mechanics to living systems. This is the same portion of physics which is used as the basis for much of accident reconstruction.

Biomechanics is important in many aspects of forensic work from vehicle accident reconstruction to slip-trip-stumble-fall cases. This particular program contains modules containing information on a variety of biomechanics and injury modalities, physical data found in the literature for failure of bone and tissue, calculation modules to evaluate individual specific parameters, and definitions and terminology used in the literature and found in medical reports.

4N6XPRT BioMeknx® is a program designed for the accident investigator. The BioMeknx program incorporates information from a number of different sources, as well as over 30 years of reconstruction experience. 4N6XPRT BioMeknx™ compiles into one source a number of items of information to assist in reconstructing accidents by tying in the human component more tightly without the need to be a BioMechanics expert. Identification of body location, body part illustrations, failure threshold limits, definitions of terms, calculation modules for body link lengths, weights, stride lengths, and formulas for other types of calculations are only some of the material included in the program.

To gather into your library the material included in the 4N6XPRT BioMeknxTM, you would need a minimum of 10-15 Anatomy and Physiology, Human Factors, and Biomechanics books, as well as conduct over 50 hours of internet research.

3FAPP1280MR117253

Expert VIN DeCoder®



Expert VIN DeCoder® is a program that "DeCodes" the 17 character VIN number for Cars, Vans, Pickups, and Utility vehicles manufactured from 1981 to the present.

Cars/Vans/Utility/Lt. Trucks Modules: 1981 to Present

Ford Mercury/Lincoln Chrysler/AMC/Jeep European Import Chevrolet/Geo
Pontiac / Buick / Oldsmobile
Cadillac/Saturn
Asian Import



The 4N6XPRT Ped & Bike Calcs®) program is a program that provides FIRST ESTIMATE calculations to evaluate the speed of a vehicle involved in striking a pedestrian or bicyclist, IF Vehicle, scene, and pedestrian {or pedestrian and bicycle in a vehicle-bike accident} measurements are available. This program may also be used when skateboards or roller skates are involved.



Expert Qwic Calcs®

>>>Calculate Time given D & V<<< Enter Distance (in feet): 45 Enter Velocity (in mph): 6 Expert Qwic Calcs® quickly provides answers to questions important in vehicle collision litigation. The user inputs data in response to relevant

questions, Expert Qwic Calcs® performs the mathematical calculations required. Both the input data and the calculated result are then displayed, and may be "dumped" to a printer.

When the law enforcement accident report gives insufficient information to do a full - blown accident reconstruction, Expert Qwic Calcs® may be used to "scope out" the parameters of speeds, times, and distances to determine these relationships in a vehicle accident.



Expert TireStuf®

The Expert TireStuf® program is a Menu Driven program which has 19 modules explaining the various tire size designation systems, the information which MAY be in the DOT tire number, the DOT mandated Tire Grading system, Lug Nut Tightening and Tire

Rotation schemes, Mix and Match precautions, a glossary of Tire Terms, and Addresses of a few of the sources of additional information on tires and rims.

Also included is a calculation of the number of revolutions in one mile given the tire dimensions.



4N6XPRT StifCalcs®. Is a program which puts the NHTSA Crash Test database at your fingertips with no need to access the internet in order to obtain Stiffness Values!

In addition to the NHTSA Crash Test data, the program includes a "Similar Vehicle List Reader" which allows quick retrieval of the data for the desired and "similar" vehicle(s). This will drive the initial selection of the available tests. Alternatively, we have an ADVANCED SEARCH module which allows the creation of "Class" vehicles.

WITHOUT THE INTERNET the user can:

- ★ Lookup individual tests and get basic front, side, and rear STIFFNESS VALUES from these tests. The values are based on the reported crush depths and lengths within each test.
- ★ Obtain Similar Vehicle group summary STIFFNESS data with Statistical measures.
- ★ Create "CLASS" vehicles and get summary STIFFNESS data with Statistical measures.

FRONTAL STATISTICAL MEASURES EXAMPLE:

				Width Values		
		,	Α Ι	В	G Kv	
Average (AVG)		305.7	93.5	523.6	143.1	
Minimum (MIN)		115.0	13.2	465.2	23.5	
Maximum (MAX)		461.6	200.0	614.1	387.3	
Standard Deviation (STDev-sample)		73.4	38.4	36.2	72.8	
Number of Tests (n)	53					

WITH THE INTERNET the user can:

★ RESEARCH and download the PICTURES, VIDEOS, and and REPORTS available for individual tests.

Please use this order form when ordering. Due to conditions and rising costs beyond our control, Shipping & Handling for program orders must be paid per the included schedule.

Contact Name:				
Title:				
Company/Organization:	· 			
Street:				
City:			State:	Zip:
Phone: ()			FAX: ()	F
				
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for Credit Card Orders, pl	ease circle Credit Ca	ard type: Am. E	Express / Visa / MasterC	ard, then complete the following:
Card Number:			Exni	ration Date (MM/YY): /
Card Number:Security coo	de (card ID) on back (of Visa/MasterC	ard card or front of Ame	rican Express Card:
Card ID	←Visa/MasterCard	Security	American l	Express -
(This is	the address that the credit of Zip for where the cred	dit card bill is s	, not where we would send the deent:, not where we would send the de	
PROGRAM (Pricing effective as of 5/3/20 - p	ORDER FORM: prices subject to change without n	notice)	Individual Ve	hicle Data FAX/Order Form
Expert AutoStats [®] : 4N6XPRT BioMeknx [®] : 4N6XPRT Ped & Bike Calcs [®] : Expert Qwic Calcs [®] : Expert TireStuf [®] : 4N6XPRT StifCalcs [®] :	\$ 675.00 * \$ 550.00 * \$ 375.00 * \$ 275.00 * \$ 85.00 *	\$ \$ \$ \$ \$	□ NH Please cir YEAR & MAKE:	IN Decoder & Expert AutoStats ITSA Crash Test Results □ BOTH scle <u>ALL OPTIONS</u> that apply
Expert VIN DeCoder®:	\$ 575.00 *	\$	MODEL.	
Notarized Affidavit Filing Requir	e Order = \$15.00)	\$ \$ \$10.00,	Vehicle T Car Body DR PICKUPS:Dual Rear Wheel - S	DeCoder & AutoStats please also provide: Type:Car - Pickup - Utility - Van No. of Doors:2/3/4/5 Style:Coupe/Conv./Sedan/Wagon IVE WHEELS: 4x2 / 4x4 Std. / Extra / Super / Crew Cab - Short Bed / Long E / Passenger - Short / Long Wheelbase
(\$25.00 per require	u roungeu signuare)			VIN Information
Normal delivery is v □ - Deliver via electronic download lin □ - Deliver on USB - additional cost		\$ 0.00 \$	1 2 3	4 5 6 7 8 9
	SUB-TOTAL	\$	10 11	12 13 14 15 16 17
California shipping addresses add (California orders delivered electronic	ally DO NOT owe sales tax	\$ \$	Impac	SA Crash Test Information t location - Front / Side / Rear act Speed - Lower / Higher s/Number:
Authorized signature:		·		

Individual Vehicle Data Search Service®

Charges & Services

Individual Vehicle Specifications

\$50.00-First vehicle*, \$40.00/Additional Vehicles*, \$30.00/Additional Similar Model*

Medium/Heavy Truck Specifications

\$50.00-First vehicle*, \$40.00/Additional Vehicles*, \$30.00/Additional Similar Model*

Motorcycle Specifications (1970+)

\$50.00-First cycle*, \$40.00/Additional cycles*, \$30.00/Additional Similar Model*

NHTSA Crash Test Results

\$50.00 per test - Includes A, B, & G values Calculations are based on the test results

Individual Vehicle Specifications

Now you can get the Expert AutoStats® data for the vehicles in your case *QUICKLY*, *EASILY*, and *ECONOMICALLY*, instead of guessing, or begging a printout from a friend.

Our vehicle database includes dimensions on over 50,000 Cars, Vans, Lt. Pickups, and Utility Vehicles covering 1945 to the present.

Minimum Vehicle specifications include:

Overall Length
Overall Width
Overall Height
Wheelbase

Curb Weight
Weight Distribution
Front/Rear Track
CG Location

Model years with No Significant Dimensional Changes VIN DeCoding when VIN is provided Information available

Mid-60's to present **also includes** (*when available*)
Front/Rear Overhang Bumper Heights

Hood height Bumper-to-hood Bumper-deights Ground-to-hood

Dimensions are given in both Imperial and metric (SI) units. Motorcycle specifications will be similar to the Vehicle specifications with appropriate changes where applicable.

NHTSA Crash Test Results

Test results include: General Test information, Barrier Data when provided, Vehicle Data as reported by the testing organization, Occupant (Dummy) data when provided, and A-B-G Stiffness calculations based on the test results.

4N6XPRT Systems[®]

Providing Vehicle dimensional data, VIN DeCoding, and NHTSA Crash Test Results as a service to the Litigation community, in the form of:

Expert Systems Software Programs for Litigation

Expert AutoStats®
4N6XPRT StifCalcs®
4N6XPRT BioMeknx®
4N6XPRT Ped & Bike Calcs®
Expert Qwic Calcs®
Expert TireStuf®
Expert VIN DeCoder®

Vehicle Data Service

Individual Vehicle Data Search Service®

8387 University Avenue, Suite P La Mesa, CA 91942-9342

> Phone: 1-800-266-9778 Fax: **(619) 464-2206**

E-Mail: 4n6@4n6xprt.com

Web: http://www.4n6xprt.com

Expert VIN DeCoder®

Expert VIN DeCoder® is a program that "DeCodes" the 17 character VIN number for vehicles manufactured from 1981 to the present.

Modules: 1981 to Present

Control Module - One Required per Set

Ford Cars (includes Festiva & Merkur) Mercury/Lincoln Cars Ford vans/Utility/Lt. Trucks

Chevrolet/Geo Cars
Pontiac/GM of Canada Cars
Oldsmobile Cars
Buick Cars
Cadillac/Saturn Cars
General Motors Vans/Utility/Lt. Trucks

Chrysler/AMC/Jeep Cars Chrysler/Jeep Vans/Utility/Lt. Trucks

European Import Cars/Vans/Utility/Lt. Trucks Asian Import Cars/Vans/Utility/Lt. Trucks

SYSTEM REQUIREMENTS

Expert VIN DeCoder® has been tested on a wide variety of IBM laptop and desktop clones ranging from 8088 through Pentium® chips. A math coprocessor chip is NOT required. Expert VIN DeCoder® has also been tested under the various versions of MSDOS 3.0 thru 7.0, DrDOS 6.0, and PC DOS 7.0. It also works as a DOS program under Windows 3.x, Windows, 95, Windows 98, Windows NT, OS/2 2.x, OS/2 Warp, and various versions of LINUX.

A variety of dot matrix printers emulating the EPSON series have been used with no difficulty. The output is also compatible with the Hewlett-Packard II, IIP, III and IIIP Laser printers. Expert VIN DeCoder® works with monochrome and color monitors.

As of April 1995 the 4N6XPRT Systems® programs Expert AutoStats®, Expert Qwic Calcs®, Expert TireStuf®, 4N6XPRT Ped & Bike Calcs®, and Expert VIN DeCoder® are accessible from within RECTEC.

PLEASE PRINT

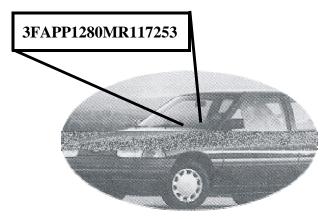
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Mailing Address:
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Phone:
Fax:
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Orders will be shipped Priority Mail within 10 working days of receipt of order.

Prices subject to change WITHOUT NOTICE.

* Checks MUST be drawn from a bank in the U.S.A.

Expert VIN DeCoder®



User Friendly Software to provide interpretation of the 17 character VIN Number on Cars, Lt. Pickups, Utility Vehicles, and Vans.

4N6XPRT Systems®

Forensic Expert Software 8387 University Avenue La Mesa, CA 91942-9342

Web: http://www.4n6xprt.com E-Mail: <u>VIN@4n6xprt.com</u>

1-800-266-9778

Expert VIN DeCoder® example

INPUT:

Enter VIN Numbers to be DeCoded: 3FAPP1280MR117253 1)

3FA PP128 0 MR 117253

2) Is this the VIN Number to be DeCoded (Y/N)? Y

OUTPUT:

EXPERT VIN DeCoder

The VIN Number is 3FA PP128 0 MR 117253

The vehicle should be a 1991 Ford

The model: Escort 2/3-door Hatchback GT
The assembly plant: Hermosillo, Mexico
The 4 passenger vehicle had: Passive (Automatic) Front Belts

The OEM engine was: In-line 4 cylinder with Double Overhead Cam
Engine Displacement/Type = 1.8 L/ 112 cu.in. L4, DOHC
Brake Horsepower (SAE) = 127 @ 6500 rpm
Torque (SAE) = 114 lb-ft at 4500 rpm
Engine manufacturer = Mazda

The fuel distribution system: Electronic Fuel Injection (EFI)
Fuel pump/line pressure = 35-45 psi
The ignition system = electronic

This is a Front Wheel Drive vehicle.

The first three characters {3, F, A} indicates that the vehicle was a Ford made in Mexico

The fourth character {P} indicates the vehicle had Passive (Automatic) Front Belts

The fifth character {P} indicates it was a Passenger Car

The sixth with the seventh character {12} indicates a Escort 2/3-door Hatchback GT

The eighth character {8} indicates the OEM engine : 1.8 L/ 112 cu.in. L4, DOHC

The 9th Character { the Check Digit } is 0 The calculated Check Digit value is

The tenth character {M} indicates the Model Year was 1991

The eleventh character {R} indicates it was made at the assembly plant in Hermosillo, Mexico

The twelveth through the seventeenth characters { 117253 } is the Serial Number unique to this vehicle.

S/N:930114VD01201 01-01-2001 Reg. User: 4N6XPRT SYSTEMS

Expert AutoStats®

The Expert AutoStats® program contains data on more than 50,000 cars, pick-ups, vans, and utility vehicles that range in years from the 1940's to the present. The Expert AutoStats® base information can assist in reconstructing accidents when the data for the vehicle is unavailable or the vehicle is too severely damaged to get correct measurements. The program is currently relied upon by over 700 private and 300 Government entities within the United States for this very purpose. Additionally, for many vehicles mid-1960's to present, data such as bumper height, front and rear overhang, hood height, etc., are also included.

As of April 1995 the 4N6XPRT Systems® programs Expert AutoStats®, Expert Qwic Calcs®, Expert TireStuf®, and Expert VIN DeCoder® are accessible from within RECTEC.

SYSTEM REQUIREMENTS

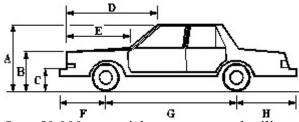
Expert AutoStats® has been tested on a wide variety of IBM laptop and desktop clones ranging from 8088 through Pentium® chips. A math coprocessor chip is NOT required. Expert AutoStats® has also been tested under the various versions of MS-DOS 3.0 thru 7.0, DrDOS 6.0, and PC DOS 7.0. It also works as a DOS program under Windows 3.x, Windows, 95, Windows 98, Windows NT, Windows Me, Windows 2000, Windows XP, Windows Vista/7/8/10, OS/2 2.x, OS/2 Warp, and various versions of LINUX.

A variety of dot matrix printers emulating the EPSON series have been used with no difficulty. The output is also compatible with the Hewlett-Packard II, IIP, III and IIIP Laser printers and Hewlett-Packard Desk Jet inkjet printers. Expert AutoStats® works with monochrome and color monitors.

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Expert AutoStats®



Over 50,000 cars, pick-ups, vans, and utility vehicles 1940's to the present are represented.

4N6XPRT Systems®

Forensic Expert Software 8387 University Avenue La Mesa, CA 91942-9342

Web: http://www.4n6xprt.com E-Mail: <u>autostats@4n6xprt.com</u>

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Orders will be shipped Priority Mail within 10 working days of receipt of order.

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Select Your Vehicle

Expert AutoStats®	Model Data Page 1	Data Page 2	Data Page 3	Printer	File Output D	(F Output		
Version 5.2.0.2 Serial Number:	Make of Vehicle:	FORD			Select the Ma	nufacture	from t	the
12R-930512AQ03201	Year of Vehicle:	2011			list below.			
Copyright© 1991-2012	Model of Vehicle:	10000			Once a Manu	facturer h	as been	1
Expert Witness Services, Inc All Rights Reserved	Number of Doors:				Selected the I		able	
All Rights Reserved					Models will b	e below.		
Introduction	Bodystyle of Vehicle:				Fill in the emp	oty boxes t	o the l	eft
Examine Vehicle Specs	Car Pickup	Other		Clear	to narrow the	search.		
	Van Utility	Cilie		Cicui	I			
rint Blank Vehicle Spec Form	Manufact		St	art Year	End '	Year		
anufacturers & Years Available	FORD		19	930	2012			
ASHTO Design Vehicle Specs	FRAZER FRAZER NASH			947 948	1951 1957			
Data Definitions	FUNKE & WILL			002	2004			Ü
	GENERIC			979	1989			
About Expert Autostats®	GEO GLAS			987 963	1998 1966			
<< <exit autostats®="">>></exit>	GMC			947	2011			0000
								-
PROVIDED BY:	Model			Body St	yle	WB (in)	OAL	(in
4N6XPRT Systems	FUSION HYBRID			4 DOOR		108	191	
8387 University Avenue	MUSTANG MUSTANG			2 DOOR	COUPE	107	188 188	
La Mesa CA 91941	MUSTANG GT			2 DOOR		107	188	
12R-930512AQ03201	MUSTANG GT				CONVERTIBLE	107	188	
	MUSTANG SHELBY	ST500		2 DOOR		107	188	
4N6XPRT Systems®	MUSTANG SHELBY				CONVERTIBLE	107	188	
Forensic Expert Software	POLICE INTERCEPTO	OR (3.27) MSP PO	DLICE PKG	4 DOOR	SEDAN	115	212	П
La Mesa, CA 91942-9342	POLICE INTERCEPTO	OR (3.55) MSP PO	DLICE PKG	4 DOOR	SEDAN	115	212	٦
(619) 464-3478 / (800) 266-9778 Fax: (619) 464-2206	RANGER 112WB			2 DOOR	4X2 PICKUP	112	188	i
raic (619) 464-2206 www.4N6XPRT.com	RANGER 112WB			2 DOOR	4X4 PICKUP	112	188	1
4N6@4N6XPRT.com	RANGER 118WB			2 DOOR	4X2 PICKUP	118	200	1

After typing in the Make, Year, and Type of vehicle, you are presented with the vehicles which are available for that year.

Screen 1

Model	Data Page 1	Data Page 2	Data Pag	je 3	Printer	File Outp	out	OXF O	utput		
	2011 FORD	POLICE INTER	RCEPTOR	(3.2	7) MSP P	OLICE PKG	4 DC	OR SE	EDAN		
	Horizont		Vert	tical [Dimen	sions					
Length			212	in.	H	Height				58	in.
Wheelba	ise		115	in.	Grou	und to:					
Front Bu	imper to Front	Axle	43	in.	F	Front Bumper (Top)				23	in.
Front Bu	imper to Front	of Hood	8	in.	F	Headlight - Center				27	in.
Front Bu	imper to Base o	of Windshield	65	in.	H	Hood - Top Front				31	in.
Front Bu	imper to Top o	f Windshield	91	in.	Base of Windshield					39	in.
Front Bu	imper to Front	Wheel Well	26	in.	R	Rear Bumper (Top)				25	in.
Rear Bur	mper to Rear of	Trunk	8	in.	Т	Trunk - Top Rear				39	in.
Rear Bur	mper to Base of	f Rear Window	38	in.	В	ase of Rea	r Wir	dow		40	in.
Rear Bur	mper to Rear W	/ell	38	in.		Wei	aht [imen	sions		
Rear Bur	mper to Rear A	xle	54	in.				illien	ISIOIIS		1
	Depth	Dimensions				urb Weigh b Weight D		ution		4184	lbs.
Width			78	in.		Front =	50				
Front Tra	ack		63	in.		Rear =	4	1 %			
Rear Tra	ck		66	in.	Gros	ss Vehicle	Weig	nt Rati	ing	5500	lbs.

The first screen of data contains exterior dimensions and weight data. Length, Height, Wheelbase, Width, and Weight Distribution are published dimensions. Curb Weight is an average of published curb weights for the given vehicle. Detail dimensions such as the bumper heights and Front Bumper to Front of

Hood are measurements obtained by our staff from actual vehicles.

Screen 2

Model Data Pa	ge 1	Data Page	2 Data	Page 3	Printer	File Output	DXF Output						
2011	FORD	POLICE INT	ERCEPT	TOR (3.2	7) MSP P	OLICE PKG 4 [OOR SEDAN						
Accelerat	tion/E	Braking											
Acceleration 0-30	mph	13.8	ft/sec	2		Bumper Stre	ength	2.5	mpl				
Acceleration 0-60	mph	9.8	ft/sec	ft/sec²		Steering Rat	io	:1					
Acceleration 45-6	5 mpl	6.5	ft/sec²		Interior Dimensions								
Braking 60-0 mph		138	feet	feet		Front Should		61	in.				
Drive Wheels			REAR			Front Head	Room	40	in.				
Turn Circle (Diam	eter)		40	feet		Front Leg Ro	oom	42	in.				
Number of Wheel	ls		4	in.		Rear Should	er Room	60	in.				
Wheel Radius			12			Rear Head Room	oom	38	in.				
Tire Size		P235	/55R17			Rear Leg Room		38	in.				
ALL DISC - ALL V	VHEE	L ABS											
3pt - front and re	ear - F	RONT SEAT	AIRBA	GS									
4spd AUTOMAT	IC												
N.S.D.C. = 2011	L - 201	11											
= No	t in D	atabase											

The second screen of data contains interior dimensions and various performance data. The data contained in the second screen comes from various published sources.

Screen 3

Model	Data Page 1	Data F	age 2	Data Page 3	Printer	File O	utput	DXF Ou	tput		
	2011 FORD	POLIC	E INTE	RCEPTOR (3.2)	7) MSP P	OLICE F	KG 4 E	OOR SEI	DAN		
				Angle Meas	urement	s					
Angle Fr	ont Bumper to	Hood	Front	=		45.0	degrees				
Angle Fr	ont of Hood to	Base =		8.0	degre	ees					
Angle Fr	ont of Hood to	Top =		16.8	degre	ees					
Angle of	Windshield	=		33.2	degre	ees					
Angle of	Steering Tires	=		27.5	degrees						
				Center of	Gravity						
Inches fr	om ground	=	2	22.77	Inch	es from	side o	of vehicle	=	39.00	
Inches b	ehind front axle	=	5	50.60	Inche	thes in front of rear axle = 64.40					
Inches fr	om front bump	er =	9	93.60	Inch	es from	rear b	umper	=	118.40	
Inches fr	om front corne	r =	10	01.40	Inch	es from	rear c	orner	=	124.66	
Tip-Over	Stability Ratio				=	1.	41	Stable			
NHTSA S	Static Stability F	actor (calcul	ated) Star Ratir	ng	=		****			
				Moments	f Inertia						
Yaw Mor	ment of Inertia				=			31	03.52	lb*ft*sec²	
Pitch Moment of Inertia =					= 1	2993.16 lb*ft				lb*ft*sec²	
Roll Mor	ment of Inertia				=			6	03.12	lb*ft*sec²	

The third and last screen contains a number of calculated items of information which may be of use depending upon the type of case, the

other software that you use, and the questions which need to be answered.

DXF Output Screen

Model Data Page 1 Data Page 2 Da	ta Page 3 Prin	ter File Outpo	ut DXF Output							
2011 FORD POLICE INTERCEPTOR (3.27) MSP POLICE PKG 4 DOOR SEDAN										
While every attempt has been made to ensure accurate data, these dimensions are meant to be used as first approximations. Some measurements are dependant on such factors as manufacturing variations from vehicle to vehicle. Whenever feasible, the vehicle in question or an exemplar vehicle should be measured TO VERIFY DATA IMPORTANT TO YOUR CASE. The provision of the DXF output is provided as an aide to your evaluation. It is not meant to be the final drawing of the vehicle.										
DXF File Name 2011_FORD_POLICE_INTERCEPTOR_(3.27)_MSP_POLICE_PKG_4_DOOR_SEDAN_										
Length	212	Inches	Drawing Notation							
Wheelbase	115	Inches	On On							
Width	78	Inches	Off							
Front Track	63	Inches	Units							
Rear Track	66	Inches	Inches							
Front Overang	43	Inches	○ Feet							
Bumper to Base of windshield	65	Inches	Meters							
Bumper to Top of windshield	91	Inches								
Rear Bumper to Base of Rear window	38	Inches								
Rear Bumper to Top of Rear window	64	Inches								
Front Tire Diameter	24	Inches								
Rear Tire Diameter	24	Inches								
CG behind Front axle	CG behind Front axle 50.6 Inches DXF Output									

From within the Expert AutoStats program you have the ability to output the data to a 2-D DXF file for importation into your CAD Scene Drawings. The screen below shows an import of the DXF file with Text into the CAD Zone program.

CADZONE Import

The Crash Zone 8.1 - [5147]		
Pile Edit Draw View Snaps	Text/Dimension Utilities Recon 3D Window Help	_ ∂ ×
	∽ ∼ 🚾 🕶 🚟 🎉 🖦 🌉 🥰 🖦 🔡 ଷ୍ର୍ୟ ପ୍ର୍ୟ ପ୍ର୍ୟ 💯 👪 🕮	
Line Types		^
	FRONT of 2001 FORD CROWN VICTORIA 4.6L MSP POLICE PACKAGE 4DR SEDAN	a
~ ≈ *** ***		
~	DXF Output Data	
Draw / Snaps / Hatch Draw / Snaps / Hatch	Length:	
(a) Edit	Width: 6.50 Feet	
	Front bumper to Front Axle: 3.67 Feet	
	Wheelbase: 9.58 Feet	
30 3D Tools	Front Track: 5.25 Feet	
(S) INCOM	Rear Track: 5.33 Feet	
ă .		
Forms	CG behind Front Axle: 4.31 Feet	
? Learning Center		>
Select Objects : Selection Tool	A:282.06* D:8.55* X:1.78* Y:-8.36*	

Introducing 4N6XPRT StifCalcs®. A program which puts the NHTSA Crash Test database at your fingertips with no need to access the internet in order to obtain Stiffness Values!

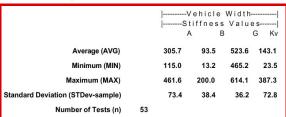
In addition to the NHTSA Crash Test data, the program includes a "Similar Vehicle Reader". Initially developed in cooperation with Greg Anderson and maintained by 4N6XPRT Systems starting with the 2013 version. The reader allows quick retrieval of vehicles similar to the desired vehicle. The Reader drives the initial selection of the available tests. Alternatively, we have an ADVANCED SEARCH module which allows the creation of "CLASS" vehicles.

STIFFNESS DATA, based on the selected test or test grouping is automatically calculated based on the reported crush depths and widths for front, side, and rear tests.

The User can - WITHOUT the need for the internet:

- ★ Lookup individual tests and get basic front, side, or rear (as appropriate to the test) STIFFNESS VALUES from the selected test. The values are based on the reported crush depths and lengths within each test.
- ★ Obtain Similar Vehicle group summary STIFFNESS VALUES with Statistical measures.
- ★ Create "CLASS" vehicles and get summary STIFFNESS VALUES with Statistical measures.

FRONTAL STATISTICAL MEASURES **EXAMPLE:**



WITH an internet connection the User will also be able to -

★ RESEARCH and download the

PICTURES. VIDEOS.

and

REPORTS

that are available for the individual tests

SYSTEM REQUIREMENTS

4N6XPRT StifCalcs® is a MS-Windows program designed to work under a 32 **or** 64-bit (2000/XP/Vista/7/8/10) Windows System.

PLEASE PRINT
Contact Name:
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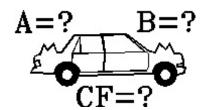
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Phone: (619) 464-3478 Fax: (619) 464-2206

Orders within the U.S. will be shipped Priority Mail or via E-mail attachment within 10 working days of receipt of order. All prices are in U.S. Dollars, and subject to change WITHOUT NOTICE. Orders outside of U.S.A. shipped via E-Mail attachment ONLY.

4N6XPRT **StifCalcs**®



Quick, Convenient, Easy access to the NHTSA Crash Test data on your own MS-Windows computer without the need for an internet connection.

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Forensic Expert Software

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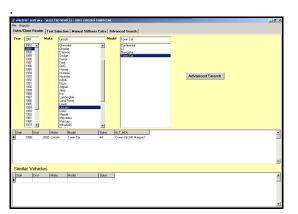
La Mesa, CA 91942-9342

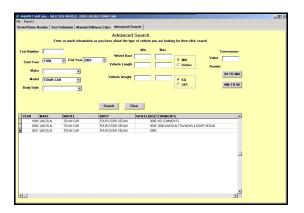
BASIC VEHICLE CRASH TEST SEARCH

ASIC VEHICLE SEARCH NHTSA TEST SELECTION ADVANCED VEHICLE SEARCH

NO REAR TESTS 1998-2008

Select the desired vehicle through our SIMILAR VEHICLE READER



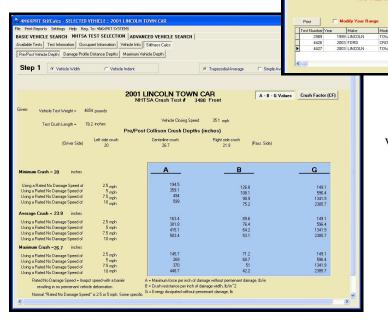


Available Tests in the NHTSA database for a 1998 - 2008 LINCOLN TOWN CAR

Side Test(s)

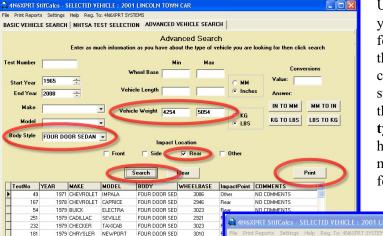
Once the desired vehicle is found/selected, click on the Test Selection tab. From here, select the test to be viewed

Once a test is selected, the available data



for the Test, Occupant(s), Vehicle(s), and Stiffness data can be viewed. The stiffness values are automatically generated from the available test data.

"CLASS" VEHICLE CRASH TEST SEARCH



Using the ADVANCED SEARCH tab, you can also create a CLASS of vehicle for when there are no tests available for the specific vehicle and test type. To create a class of REAR IMPACT stiffness values for the Lincoln, first set the weight range, body style, and test type, then search the database, when you have a sufficient number of tests (that is, more than one or two) that have been found, click the PRINT button:

Now Set your calculation parameters - No Damage Speed -Crush Depth - Indentation (Crush) Length - and Speed, then view your results, and if desired, print them to hard copy

1979 PONTIAC

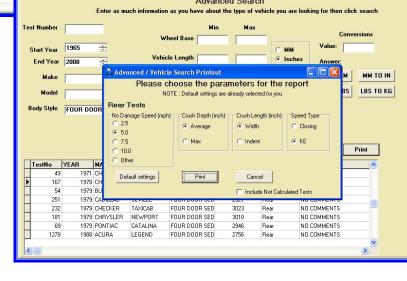
1988 ACURA

CATALINA

LEGEND

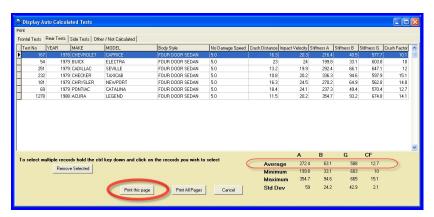
FOLIB DOOR SED

EDUB DOOR SED



BASIC VEHICLE SEARCH | NHTSA TEST SELECTION | ADVANCED VEHICLE SEARCH

The program will calculate the



AVERAGE, MINIMUM, MAXIMUM, and Standard Deviation of the Stiffness Values calculated based upon the parameters you set in the preceding step.

Expert System Software for Litigation

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Expert Qwic Calcs®:	\$ 373.00 \$ 275.00 *	\$	
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	SUB-TOTA	AL \$	
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Card #	Expires	SecCode	
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^{**} Orders will normally be shipped within 10 working days. Other shipping methods may cost extra. The Handling charge listed is for the first program, add \$5.00 per additional program ordered at the same time and shipped to the same address.

THE PRODUCT

We are now offering a new resource to our customers at what we believe to be a reasonable price. We are currently offering our models for the price of \$100.00 USD per model.

The models are to be purchased through the online shopping cart, and downloaded directly to your computer. We have placed no "locks" on the actual models, so our anticipation is that there is no need for you to purchase more than one of any model at a given time, as you can just reuse the single model purchased (as long as you don't make significant editing changes). If you do happen to some how mess up the purchased model, you can download the purchased model up to 5 times within a 90 day time period.

The point cloud models are just that, point clouds. We do not offer the models in a mesh format at this time.

Our intent in offering this new service/product is to:

- * Provide exemplar Point Clouds to our customers in a somewhat "universal" format (E57). The point cloud format can easily be converted using a program called CLOUD COMPARE if the user has a need to do so. This program can be downloaded at no charge from the internet.
- * Provide the models at a reasonable cost, especially for the lower budget cases.
- * Provide something that is Ideal for use as exemplars for crush analysis.
- * Allow users to obtain detail dimensions not readily available through other means.

CAUTIONS & LEGAL STUFF

- ® Denotes a Trademark registered with the USPTO. All of the program materials are copyrighted under U.S. and International Law
- The E57 Point Cloud model is being provided "As Is".
- We are not responsible for the mis-use or mis-representation of the scan data provided, nor the information extracted based on that mis-use or mis-representation.
- The Scan units were "inches". Depending on your Point cloud program, the import units may be Meters, Inches, or Feet. You should be sure to check a "known" dimension, such as wheelbase, to verify what your Point Cloud units are before working with the point cloud.
- The Point Cloud is provided "As Scanned". No Scaling has been done to the point cloud. If "exact" measurements are important to you, it is suggested that you scale the Point Cloud to match published or measured Overall Length, Wheelbase, or some other dimension that is important to you.
- Some manufacturers have production "problems" (eg "deer hunter"/"deer hunting season" production or last minute design changes) which lead to dimensions on the actual vehicle which may differ significantly from published information for a specific vehicle, make, or model series.
- You DO have the right to bill your clients for the Point Cloud model as an expense.
- You DO NOT have the right to resell the point clouds purchased from us as your own product.

POINT CLOUDS



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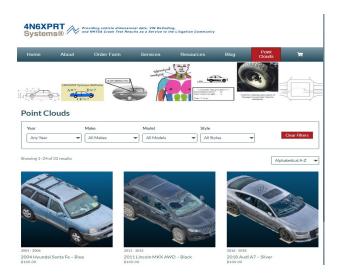
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You can enter the Point Cloud Shopping Cart page through two different "portals" on our web site, one along the top menu bar, the other down the right side menu bar.





After entering the shopping cart, you are able to filter the available models, or just scroll down to view.



FILTERS:

YEAR - will bring up all available models where the year range spans the selected year

MAKE - Will bring up all the models available for a given manufacturer.

MODEL - The filter is set for a "base" model. So, for instance, ATLAS will bring up all of the ATLAS and ATLAS CROSS models for Volkswagen, as well as any other manufacturers which have a model with ATLAS in the model name.

STYLE - This is meant as a generic classification - Car Truck / Utility / Van.

As of 4-20-2024 we have 33 models available for sale and download. We will be adding additional models weekly for the foreseeable future.

12 of the models we have already uploaded can be seen to the right.



2001-2006 2004 Hyundai Santa Fe - Blue \$100.00



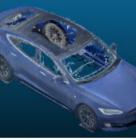
2011-2015 2011 Lincoln MKX AWD - Black \$100.00



2016-2018 2018 Audi A7 - Silver \$100.00



2016-2018 2018 Lincoln MKX - Gray \$100.00



2017 - 2024 2018 Tesla Model S 100D - Blue \$100.00



2022 2022 Chevrolet 5500HD Chassis Cab – White \$100.00



2020 - 2022 2022 Toyota Corolla - White



2022 - 2023 2023 Chevrolet Bolt EUV - White



2021 - 2024 2023 Chevrolet Suburban - White



2022-2023 2023 Chevrolet Traverse – White \$100.00



2022 - 2024 2023 Genesis GV70 - Silver \$100.00



2022 - 2024 2023 Honda Civic type R Sedan – White \$100.00

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Security code (card ID) Address for where the credi		Card card or front of Amer	rican Express Card:
(This is the address number -	for instance, ours would be 838 , not where we would send to	7 University Avenue - that the creath the data or product to)	lit card bill would go to,
City/State/Zip for where the	credit card bill is sent:		
(- for instance	e, ours would be La Mesa, CA 9 not where we would send t	1941 - that the credit card bill wou the data or product to)	ld go to,
Authorized signature:			
We appreciate your	cooperation in supplying	us with this information a	and understanding that it

Sincerely,

Daniel W. Vomhof III

General Manager/Technical Support

Individual Vehicle Data Search Service[®] Charges & Services

Individual Vehicle Specifications

\$50.00-First vehicle*, \$40.00/Additional Vehicles*, \$30.00/Additional Similar Model*

Medium/Heavy Truck Specifications

\$50.00-First vehicle*, \$40.00/Additional Vehicles*, \$30.00/Additional Similar Model*

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NHTSA Crash Test Results

\$50.00 per test - Includes A, B, & G values Calculations are based on the test results

NHTSA Crash Test Results

Test results include: General Test information, Barrier Data when provided, Vehicle Data as reported by the testing organization, Occupant (Dummy) data when provided, and A-B-G Stiffness calculations based on the test results.

You may make your request by phone or fax or Email. Our fax machine is on 24 hours/day and can be reached at:

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FAX/Order Form

□ Expert VIN Decoder & Expert AutoStats □ NHTSA Crash Test Results □ BOTH

Please circle ALL OPTIONS that apply

YEAR & MAKE	:
MODEL:	
	ting DeCoder & AutoStats de the following information:
No. of Doors: Body Style: SUV & P/U: PICKUPS: VANS:	2/3/4/5 Coupe/Conv./Sedan/Wagon 4x2 / 4x4 / Dual Rear Wheel Std. / Extra / Super / Crew Cab Short Bed / Long Bed Cargo / Passenger
	Short / Long Wheelbase VIN Information
$\frac{1}{10} \frac{2}{11}$	4 5 6 7 8 9

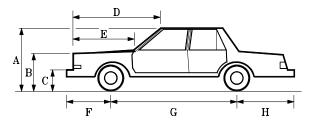
NHTSA Crash Test Information

Impact location - Front / Side / Rear

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Case Reference Name/Number:	

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VIN DeCoding Information

How often have you been confronted with the following on a Traffic Collision Report - "87 Ford, 4 door, Blue"? We have the answer to the problem of determining WHICH Ford 4 door model this was!

We will DeCode the VIN number and provide you with the information contained within that VIN number

Information generally includes:

Year OEM Engine
Make Displacement/Type
Model Rated Horsepower
Drive Wheels Rated Torque
Rated Pass. Load Iginition System
Plant of Manufacture Fuel Line Pressure

Also (when provided by VIN)

Gross Vehicle Weight Safety Equipment

Transmission

A DMV search for a vehicle identification from the registration will typically cost less than \$10.00 and will give the VIN number, Make, and Year of vehicle. However, to also obtain the vehicle Model requires a "Manual Search" which will typically cost \$30.00/vehicle/year searched or more.

With our service, you will be able to find out the model of vehicle as well as all of the other information mentioned above. This information will be faxed to you, typically in less than one working day, and the hard copy will follow in the mail.

Allow us to help you have all the information you require in your next Accident, Personal Injury, Criminal, Domestic, or Product Liability case.

Individual Vehicle Specifications

Now you can get the Expert AutoStats® data for the vehicles in your case *QUICKLY*, *EASILY*, and *ECONOMICALLY*, instead of guessing, or begging a printout from a friend.

Our vehicle database includes dimensions on over 35,000 Cars, Vans, Lt. Pickups, and Utility Vehicles covering 1945 to the present.

Minimum Vehicle specifications include:

Overall Length Curb Weight
Overall Width Weight Distribution
Overall Height Front/Rear Track
Wheelbase CG Location

Model yeasr with No Significant Dimensional Changes VIN DeCoding when VIN is provided Information available

Mid-60's to present **also includes** (when available)

Front/Rear Overhang Bumper Heights
Hood height Turning Circle
Bumper-to-hood Ground-to-hood

Dimensions are given in both Imperial and metric (SI) units. Motorcycle specifications will be similar to the Vehicle specifications with appropriate changes where applicable.

While the VIN number contains much information, it does not contain everything needed to identify a particular vehicle in every situation. Therefore, we would appreciate you providing as much of the information on the order form as possible.

If you are not sure of the specific model, we will provide dimensions on the similar model vehicles matching the provided data for a small additional cost per model*.

SERVICE

You may make your request by phone or fax. Our fax machine is on 24 hours, 7 days a week, and can be reached at (619) 464-2206. A request may also be made by e-mail, which reaches us when we are "on the road" as well as in the office...

Upon receiving your request, we will research your request and e-mail or fax the information to you at NO ADDITIONAL CHARGE!

Normal response time is one working day or

less. Your hard copy will follow in the mail.

Please include the vehicle information on the sample order form when requesting your Individual Vehicle Data Search. Please also be sure to provide a Visa, MasterCard, or American Express number, name as it appears on the card, Expiration date, and the billing address # and Zip.

*Pricing is for multiple vehicles on same Order/Request. Similar Vehicles may be required when it is not possible to determine the exact model of vehicle requested, based upon the information provided.

Individual Vehicle Data Search Service® Charges & Services

You may make your request by phone, fax, or Email. Our fax machine is on 24 hours/day and can be reached at

(619) 464-2206

Individual Vehicle Specifications

\$50.00-First vehicle*, \$40.00/Additional Vehicles*, \$30.00/Additional Similar Model*

Medium/Heavy Truck Specifications

\$50.00-First vehicle*, \$40.00/Additional Vehicles*, \$30.00/Additional Similar Model*

Motorcycle Specifications (1970+)

\$50.00-First cycle*, \$40.00/Additional cycles*, \$30.00/Additional Similar Model*

NHTSA Crash Test Results

\$50.00 per test - Includes A, B, & G values Calculations are based on the test results

	Contact Name & Address:
Phone: ()
Fax: (_)
E-Mail_	
P	PAYMENT INFORMATION
Visa/	MasterCard / American Express:
	Expires: /
Credit Ca	ard billing address and Zip:
Address:	

Security Code # _____

FAX/Order Form

□ Expert VIN Decoder & Expert AutoStats □ NHTSA Crash Test Results □ BOTH

Please circle ALL OPTIONS that apply

YEAR & MAKE:			
MODEL:			
If you are requesting VIN DeCoder & AutoStats please also provide:			
No. of Doors: Body Style: SUV - P/U:	2/3/4/5 Coupe/Conv./Sedan/Wagon 4x2 / 4x4 / Dual Rear Wheel		
PICKUPS:	Std. / Extra / Super / Crew Cab Short Bed / Long Bed		
VANS:	Cargo / Passenger Short / Long Wheelbase		
	VIN Information		
1 2 3	4 5 6 7 8 9		
10 11	12 13 14 15 16 17		
NHTSA Crash Test Information YEAR & MAKE:			
MODEL:			
Impact location - Front / Side / Rear			
Case Reference/Num	ıber:		

FAX/Order Form

□ Expert VIN Decoder & Expert AutoStats □ NHTSA Crash Test Results □ BOTH

Please circle ALL OPTIONS that apply

YEAR & MAKE:

No. of Doors: Body Style: SUV - P/U:	2/3/4/5
TITU DIT.	Coupe/Conv./Sedan/Wagon
	4x2 / 4x4 / Dual Rear Wheel
PICKUPS:	Std. / Extra / Super / Crew Cab
	Short Bed / Long Bed
VANS:	Cargo / Passenger
	Short / Long Wheelbase
	VIN Information
1 2 3	4 5 6 7 8 9
10 11	12 13 14 15 16 17
<u>NHT</u> YEAR & MAK	SA Crash Test Information E:
MODEL:	

Reference/Number:

Expert System Software for Litigation

8387 University Avenue La Mesa, CA 91942-9342

Web Site: http://www.4n6xprt.com

FED Tax ID No.: 95-3121248

Phone: 1-800-266-9778 Fax: (619) 464-2206

E-Mail: 4n6@4n6xprt.com

Dear Customer,

Due to the governments desire (both U.S. & California) to "protect us" we will need the following information from you in order to process your credit card(s). Please complete this form and return it with your order.

Card type: Am. Express Card Number:	/ Visa / MasterCard		
Expiration Date (MM/YY):	/		
1234 5678 9012 345 123 Lonard graum binard graum binard passes binard passes binard passes binard passes binard passes binard passes Card ID	← Visa/MasterCard	American Express →	3712 378 9500b
Security code (card ID) Address for where the credi		Card card or front of Ame	erican Express Card:
($\overline{\it This}$ is the address number -	for instance, ours would be 838 not where we would send	7 University Avenue - that the cre the data or product to)	edit card bill would go to,
City/State/Zip for where the	credit card bill is sent:		
(- for instance	e, ours would be La Mesa, CA 9 not where we would send	1941 - that the credit card bill wo the data or product to)	ould go to,
Authorized signature:			
We appreciate your of is being required of us to obtain		us with this information	and understanding that

it

Sincerely,

Daniel W. Vomhof III

General Manager/Technical Support