



# MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

# 1989

Manufacturer SUZUKI MOTOR CO., LTD. Hamamatsu-Nishi, P.O. Box 1 432-91, Hamamatsu, Japan	Vehicle Line  TRACKER	
Mailing Address Chevrolet-Pontiac-Canada Group Engineering Center General Motors Corporation 30003 Van Dyke Warren, MI 48090-9060	Issued June, 1988	Revised September, 1988

Direct questions concerning these specifications to the manufacturer listed above.

The information contained herein is prepared, distributed by, and is solely the responsibility of the vehicle manufacturing company to whose products it relates. This specification form was developed by the vehicle manufacturing companies under the auspices of the Motor Vehicle Manufacturers Association of the United States, Inc.

The General Specifications herein are those in effect at date of compilation and are subject to change without notice or incurring obligation by the manufacturer.



Motor Vehicle Manufacturers Association  
of the United States, Inc.

Blank Forms Provided by Technical Affairs Division



-----

9

8



# MVMA Specifications Form

METRIC (U.S. Customary)

## Table of Contents

		∅ Indicates Format Change From Previous Year
∅	1	Vehicle Models/Origin
	2	Power Teams
∅	3-6	Engine
	4	Lubrication System
	4	Diesel Information
	5	Cooling System
	6	Fuel System
∅	7	Vehicle Emission Control
	7	Exhaust System
∅	8-10	Transmission, Axles and Shafts
∅	11	Suspension
	12-13	Brakes
	13	Tires and Wheels
	14-15	Steering
∅	15-16	Electrical
∅	17	Body – Miscellaneous Information
∅	18	Restraint System
	18	Glass
∅	18	Headlamps
	18	Frame
∅	19-20	Convenience Equipment
	21-23	Vehicle Dimensions
	24	Vehicle Fiducial Marks
∅	25	Vehicle Mass (Weight)
	26	Optional Equipment Differential Mass (Weight)
	27-33	Vehicle Dimensions Definitions - Key Sheets
∅	34	Index

### NOTE:

1. This form uses both SI metric units and U.S. Customary units. The metric unit of measure is presented first, and the U.S. Customary unit follows in parentheses.
2. UNLESS OTHERWISE INDICATED:
  - a. Specifications apply to standard models without optional equipment. Significant deviations are noted.
  - b. Nominal design dimensions are used throughout these specifications.
  - c. All linear dimensions are in millimeters (inches), and all mass (weight) specifications are in kilograms (pounds).
3. The General Specifications herein are those in effect at date of compilation and are subject to change without notice or incurring obligation by the manufacturer.
4. Additional Vehicle Dimensions (based in part on SAE J1100 "Motor Vehicle Dimensions") may be available from the manufacturer.



•  
•



# MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line TRACKER  
 Model Year 1989 Issued 12-10-88 Revised (e) 9-88

Vehicle Origin

Design & development (company)	SUZUKI MOTOR CO., LTD.
Where built (country)	JAPAN
Authorized U.S. sales marketing representative	GEO

Vehicle Models

Model Description & Drive (FWD/RWD/AWD/4WD)*	Introduction Date	Make, Vehicle Models, Series, Body Type (Mfr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load—Kilograms (Pounds)
2 DOOR CANVAS TOP (4WD)		J10367	2	340 (750) (2-pass)
2 DOOR VAN (4WD)		J10316	2	340 (750) (2-pass)

FWD - Front Wheel Drive    RWD - Rear Wheel Drive  
 AWD - All Wheel Drive    4WD - Four Wheel Drive

# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (e) \_\_\_\_\_

METRIC (U.S. Customary)

Power Teams (Indicate whether standard or optional)  
 SAE J1349 Net bhp (brake horsepower) and net torque corrected to 77°F/25° C and 29.91 in. Hg/100 kPa atmospheric pressure.

SERIES AVAILABILITY	ENGINE						Exhaust S/D*	TRANSMISSION/TRANSAXLE	AXLE RATIO (std. first)
	Code	Displ. Liters (In <sup>3</sup> )	Induction (FI, CARB/ BBL, etc.)	Compr. Ratio	SAE Net at RPM				
					Power kW (bhp)	Torque N·m (lb. ft.)			
GMT 140 Base - All states	U	L-4 1.6 (97in <sup>3</sup> )	*EFI	8.9:1	59 (80) @ 5,400 rpm	127 (94) @ 3,000 rpm	S	Man. 5-speed (3.65 low) - Base  Auto 3-speed available	5.125   4.625
*EFI - Electronic Fuel Injection									

\* Single / Dual

# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (e) \_\_\_\_\_

METRIC (U.S. Customary)

Engine Description/Carb.  
 Engine Code

L-4 1.6 L (97 CID) EFI

## ENGINE - GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedges, pre-camber, etc.)	Inline, Front, Longitudinal, SOHC	
Manufacturer	SUZUKI MOTOR CO., LTD.	
No. of cylinders	4	
Bore	75 mm (2.95 in.)	
Stroke	90 mm (3.54 in.)	
Bore spacing (C/L to C/L)	84 mm (3.30 in.)	
Cylinder block material & mass kg (lbs.) (machined)	Aluminum alloy, 17.5 (38.6)	
Cylinder block deck height	263.8 mm (10.39 in.)	
Cylinder block length	372 mm (14.65 in.)	
Deck clearance (minimum) (above or below block)	0.9 mm (0.04 in.)	
Cylinder head material & mass kg (lbs.)	Aluminum alloy, 6.9 (15.2)	
Cylinder head volume (cm <sup>3</sup> )	32.2	
Cylinder liner material	Cast iron	
Head gasket thickness (compressed)	1.2 mm (0.05 in.)	
Minimum combustion chamber total volume (cm <sup>3</sup> )	44.6	
Cyl. no. system (front to rear)*	L. Bank	1-2-3-4
	R. Bank	---
Firing order	1-3-2-4	
Intake manifold material & mass (kg (lbs.))**	Aluminum alloy, 2.6 (5.7)	
Exhaust manifold material & mass (kg (lbs.))**	Cast iron, 3.9 (8.6)	
Fuel required unleaded, diesel, etc.	Unleaded	
Fuel antiknock index (R + M) + 2	87	
Engine mounts	Number	3
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Rubber (Elastomeric)
	Added isolation (sub-frame, crossmember, etc.)	Crossmember (for engine rear mount)
Total dressed engine mass (wt) dry***	89 kg (196 lb.)	

## Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum alloy, 225 (7.9)
--	---------------------------

## Engine - Camshaft

Location	In cylinder head	
Material & mass kg (weight, lbs.)	Cast iron, 2,145 (4.73)	
Drive type	Chain / belt	Belt
	Wden / pitch	19.1 mm / 9.53 mm (0.75 in. / 0.38 in.)

\* Rear of engine - drive takeoff. View from drive takeoff end to determine left & right side of engine.

\*\* Finished state.

\*\*\* Dressed engine mass (weight) includes the following:



# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (e) \_\_\_\_\_

METRIC (U.S. Customary)

Engine Description/Carb.  
 Engine Code

L-4 1.6 L (97 CID) EFI

## Engine - Valve System

Hydraulic lifters (std., opt., NA)	N.A.	
Valves	Number intake / exhaust	4/4
	Head O.D. intake / exhaust	36.6 mm/32.5 mm (1.44 in./1.28 in.)

## Engine - Connecting Rods

Material & mass (kg., (weight, lbs.))*	Forged steel, 0.396 (0.873)
Ø Length (max. to bolt) mm	139.6

## Engine - Crankshaft

Material & mass (kg., (weight, lbs.))*	Nodular iron, 9,8 (21.6)	
End thrust taken by bearing (no.)	2	
Length & number of main bearings	18 mm (0.71 in.) x 5	
Seal (material, one, two piece design, etc.)	Front	1
	Rear	1

## Engine - Lubrication System

Normal oil pressure (kPa (psi) at engine rpm)	40 (0.58) at 4,000
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, part, other)	Full flow
Capacity of crase, less filter-refill (qt.)	4.0 (4.2)

## Engine - Diesel Information

Diesel engine manufacturer		
Glow plug, current drain at 0°F		
Injector nozzle	Type	
	Opening pressure (kPa (psi))	
Pre-chamber design		
Fuel injection pump	Manufacturer	
	Type	N.A.
Fuel injection pump drive (belt, chain, gear)		
Supplementary vacuum source (type)		
Fuel heater (yes/no)		
Water separator, description (std., opt.)		
Turbo manufacturer		
Oil cooler-type (oil to engine coolant; oil to ambient air)		
Oil filter		

## Engine - Intake System

Turbo charger - manufacturer	N.A.
Super charger - manufacturer	"
Intercooler	"

\*Finished Size

# MVMA Specifications Form

Vehicle Line TRACKER

Model Year 1989

Issued APR 12 1989

Revised (e)

METRIC (U.S. Customary)

Engine Description/Comb.  
Engine Code

L-4 1.6 L (97 CID) EFI

## Engine - Cooling System

Coolant recovery system (std., opt., n.a.)		Standard
Coolant fill location (rad., bottle)		Bottle
Radiator cap relief valve pressure (kPa (psi))		88.2 (12.8)
Circulation thermostat	Type (choke, bypass)	Choke
	Starts to open at °C (°F)	82 (180)
Water pump	Type (centrifugal, other)	Centrifugal
	GPM/1000 pump rpm	3.5
	Number of pumps	1
	Drive (V-belt, other)	V-ribbed belt
	Bearing type	Roller & ball
	Impeller material	Steel
Housing material		Aluminum alloy
By-pass recirculation (type (inter., ext.))		Ext.
Cooling system capacity	With heater—L/qt.	MT: 5.3 (5.6), AT: 5.2 (5.5)
	With air cond.—L/qt.	N.A.
	Opt. equipment (specify—L/qt.)	N.A.
Water jackets full length of cyl. (yes, no)		Yes
Water all around cylinder (yes, no)		Yes
Water jackets open at head face (yes, no)		Yes
Radiator core	Std., A/C, HD	Standard
	Type (cross-flow, etc.)	Vertical flow
	Construction (fin & tube mechanical, braze, etc.)	Fin and tube
	Material, mass (kg (wt. lbs.))	Aluminum, 3.0 (6.6)
	Width	MT: 487.8 mm (19.20 in.), AT: 507.8 mm (19.99 in.)
	Height	375 mm (14.76 in.)
	Thickness	32 mm (1.26 in.)
Fins per inch		MT: 3.5 mm (0.14 in.)/2, AT: 3.5 mm (0.14 in.)/2
Radiator end tank material		Plastics
Fan	Std., elec., opt.	Standard
	Number of blades & type (flex, solid, material)	5, Flex, Plastics
	Diameter & projected width	340 mm (13.39 in.) & 65 mm (2.56 in.)
	Ratio (fan to crankshaft rev.)	117 : 130
	Fan output type	Bimetal & fluid coupling
	Drive type (direct, remote)	Clutch fan, Remote
	RPM at idle (elec.)	800
	Motor rating (wattage) (elec.)	N.A.
	Motor switch (type & location) (elec.)	"
	Switch point (temp., pressure) (elec.)	"
Fan shroud (material)		Plastics

# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1989 Revised (e)

METRIC (U.S. Customary)

Engine Description/Carb. Engine Code L-4 1.6 L (97 CID) EFI

**Engine - Fuel System** (See supplemental page for details of Fuel Injection, Supercharger, Turbocharger, etc. if used)

Induction type: carburetor, fuel injection system, etc.		Fuel injection
Manufacturer		Mitsubishi-Mikuni
<input checked="" type="checkbox"/>	Carburetor no. of barrels	N.A.
Idle A/F mix.		14.6
Fuel Injection	Point of injection (no.)	Throttle body (1)
	Constant, pulse, flow	Pulse flow
	Control (electronic, mech.)	Electronic control
	System pressure (kPa (psi))	250 (36)
Idle spd. (rpm) (spec. neutral or drive and propane if used)	Manual	800 (Neutral)
	Automatic	800 (Neutral or Parking)
Intake manifold heat control (exhaust or water thermostatic or fixed)		Water thermostatic
Air cleaner type		Replaceable, Paper element, Single snorkel
Fuel filter (type/location)		Paper element, Under floor - rear
<input checked="" type="checkbox"/>	Fuel pump	Type (elec. or mech.)
		Location (eng., tank)
		Pressure range (kPa (psi))
<input checked="" type="checkbox"/>		Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))
		electrical
		Fuel tank
		250 (36)
		80 (21.1) at 250 (36)

**Fuel Tank**

Capacity (refill L (gallons))		42 (11.1)
Location (describe)		Under floor - rear
Attachment		Bolts
Material & Mass (kg (weight lbs))		Steel, 8.4 (18.5)
Filter pipe	Location & material	Right side rear quarter panel, Steel
	Connection to tank	Rubber hose
Fuel line (material)		Steel
Fuel hose (material)		Steel
Return line (material)		N.A.
Vapor line (material)		N.A.
Extended range tank	Opt. n.s.	} N.A.
	Capacity [L (gallons)]	
	Location & material	
	Attachment	
Auxiliary tank	Opt. n.s.	} N.A.
	Capacity [L (gallons)]	
	Location & material	
	Attachment	
	Selector switch or valve	
Separate fill		

# MVMA Specifications Form

Vehicle Line TRACKER

Model Year 1989 Issued 10/2/1988 Revised (e)

METRIC (U.S. Customary)

Engine Description/Carb.  
Engine Code

L-4 1.6 L (97 CID) EFI

## Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		EFI + 3 way cata. + EGR
	Air Injection	Pump or pulse	N.A.
		Driven by	"
		Air distribution (head, manifold, etc.)	"
		Point of entry	"
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Back pressure controlled
		Exhaust source	
		Point of exhaust injection (spacer, carburetor, manifold, other)	Manifold
	Catalytic Converter	Type	Single bed
		Number of	2
		Location(s)	Under floor
		Volume (L (in <sup>3</sup> ))	1.4 (85)
		Substrate type	Monolith
Noble metal type		Pt, Rh	
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Induction system
	Energy source (manifold vacuum, carburetor, other)		Manifold vacuum
	Discharges (to intake manifold, other)		Intake manifold
	Air inlet (breather cap, other)		Air intake case
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister
		Carburetor	N.A.
	Vapor storage provision		Canister
Electronic system	Closed loop (yes/no)		Yes
	Open loop (yes/no)		Yes

## Engine - Exhaust System

Type (single, single with cross-over, dual, other)		Dual
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass (kg (weight lbs))		1 (separate resonator), Steel, 8.6 (18.9)
Resonator no. & type		4, Expansion, Resonance
Exhaust pipe	Branch o.d. & wall thickness	Inner:35-1.2mm(1.38-0.05in), Outer:48.6-1.2mm(1.91-0.05in)
	Main o.d. & wall thickness	42.7 - 1.5 mm (1.68 - 0.06 in.)
	Material & Mass (kg (weight lbs))	Stainless steel & aluminum coated steel, 7.5 (16.5)
Inter-mediate pipe	o.d. & wall thickness	42.7 - 1.2 mm (1.68 - 0.05 in.)
	Material & Mass (kg (weight lbs))	Aluminum coated steel, 7.0 (15.4)
Tail pipe	o.d. & wall thickness	38.1 - 1.2 mm (1.45 - 0.05 in.)
	Material & Mass (kg (weight lbs))	Aluminum coated steel, 1.5 (3.3)

# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1989 Revised (e) \_\_\_\_\_

## METRIC (U.S. Customary)

Engine Description/Carb.  
 Engine Code

1.6 LTR L-4 (97 CID) EFI

### Transmissions/Transaxle (Std., Opt., N.A.)

Manual 3-speed (manufacturer/country)	N.A.
Manual 4-speed (manufacturer/country)	N.A.
Manual 5-speed (manufacturer/country)	Suzuki Motor Co., Ltd./Japan
Automatic (manufacturer/country)	Hydra-Matic, Strasbourg, General Motors France/France
Automatic overdrive (manufacturer/country)	---

### Manual Transmission/Transaxle

Number of forward speeds	5	
Gear ratios	1st	3.65
	2nd	1.95
	3rd	1.38
	4th	1.00
	5th	0.86
	Reverse	3.67
Synchronous meshing (specify gears)	All forward gears	
Shift lever location	Floor mounted	
Trans. case mat'l. & mass kg (lbs)*	Aluminum die-cast, 31.6 (69.7)	
Lubricant	Capacity [L (pt.)]	1.5
	Type recommended	Gear oil GL4
SAE Viscosity Number	75W/85W, All season, 75W/90W available	

### Clutch (Manual Transmission)

Clutch manufacturer	Daikin Manufacturing Co., Ltd.	
Clutch type (dry, wet, single, multiple disc)	Dry single disc	
Linkage (hydraulic, cable, rod, lever, other)	Cable	
Max. pedal effort (nom. spring load, new) N (lbs)	Depressed	120
	Released	---
Assist (spring, power/percent, nominal)	N.A.	
Type pressure plate springs	Diaphragm spring	
Total spring load (nominal, new) N (lbs)	3,530	
Clutch facings	Facing mat'l. & material coding	Daikin Manufacturing Co., Ltd., AC60A
	Facing material & construction	Non-asbestos, Semi-mold
	Rivets per facing	16
	Outside x inside dia. (nominal)	200 x 140 mm
	Total eff. area (cm <sup>2</sup> (in. <sup>2</sup> ))	160
	Thickness (pressure plate side/ fly wheel side)	3.5/3.5 mm
	Rivet depth (pressure plate side/ fly wheel side)	1.3 - 1.9/1.3 - 1.9 mm
	Engagement cushion method	Separate cushion type
Release bearing type & method lub.	Automatic center adjusting type with grease lubrication	
Torsional damping method, springs, hysteresis	Sprint type	

\* Includes shift linkage, lubricant, and clutch housing, if other specify.

# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1989 Revised (e)

METRIC (U.S. Customary)

Engine Description/Comb.  
 Engine Code

1.6 LTR L-4 (97 CID) EFI

## Automatic Transmission/Transaxle

Trade name		3-speed Automatic
Type and special features (describe)		Torque converter with planetary gears
Selector	Location	Floor mounted
	Ltr./No. designation	P-R-N-D-2-L
Gear ratios	1st	2.40 (Equivalent)
	2nd	1.48 ( " )
	3rd	1.00 ( " )
	4th	N.A. ( " )
	Reverse	1.92 ( " )
Max. uphill speed - drive range (km/h (mph))		1 → 2 58.7 (36) , 2 → 3 101.9 (63)
Max. slowdown speed - drive range (km/h (mph))		2 → 1 46.7 (29) , 3 → 2 93.1 (58)
Min. overdrive speed (km/h (mph))		N.A.
Torque converter	Number of elements	3
	Max. ratio at stall	2.40 : 1
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	245 mm
Lubricant	Capacity factor "K"	260
	Capacity (refill L (pt.))	5.1 (10.8)
Type Recommended		DEXRON II
Oil cooler (std., opt., NA, internal, external, air, liquid)		Radiator
Transmission case material & mass kg (lbs)**		Aluminum, 64.4 (142.0)

## Axle or Front Wheel Drive Unit

Type (front, rear)		Front/Rear
Description		Front and rear differential with hypoid gear and taper bearing
Limited slip differential (type)		None
Drive pinion offset		23 mm
Drive pinion (type)		Hypoid gear
No. of differential pinions		Front: 2, Rear: 4
Pinion/differential adjustment (shim, other)		Shim
Pinion/differential bearing adjustment (shim, other)		Collapsible
Driving wheel bearing (type)		Taper bearing
Lubricant	Capacity (L (pt.))	Front: 1.0, Rear: 2.2
	Type recommended	Hypoid gear oil GL-5
SAE Viscosity Number		75W-85

## Axle or Transaxle Ratio and Tooth Combinations (See "Power Teams" for axle ratio usage.)

Axle ratio (or overall top gear ratio)		Manual	Automatic
No. of teeth	Pinion	8	8
	Ring gear or gear	41	37
Ring gear a.d.		Front: 175 mm, Rear: 190 mm	
Transaxle	Transfer gear ratio	H range: 1.00, L range: 1.82	
	Final drive ratio	5.125	4.625

\* Input speed +  $\sqrt{\text{torque}}$

\*\* Includes shift linkage, lubricant, & clutch housing, if other specify.

# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (\*) \_\_\_\_\_

METRIC (U.S. Customary)

Engine Description Carb.  
 Engine Code

L-4 1.6 L (97 CID) EFI

## Axle Shafts - Front Wheel Drive

Manufacturer and number used		NTN TOYO BEARING CO., LTD., 2		
Type (straight, solid bar, tubular, etc.)	Left	Solid bar		
	Right	Solid bar		
Outer diam. x length x wall thickness	Manual transaxle	Left	Ø 22 x 310.5 mm (Ø 0.87 x 12.22 in.)	
		Right	Ø 22 x 305.5 mm (Ø 0.87 x 12.03 in.)	
	Automatic transaxle	Left	Ø 22 x 310.5 mm (Ø 0.87 x 12.22 in.)	
		Right	Ø 22 x 305.5 mm (Ø 0.87 x 12.03 in.)	
	Optional transaxle	Left	N.A.	
		Right	"	
Spline yoke	Type	N.A.		
	Number of teeth	"		
	Spline o.d.	"		
Universal joints	Make and mfg. no.	Inner	NTN TOYO BEARING CO., LTD., 2	
		Outer	NTN TOYO BEARING CO., LTD., 2	
	Number used	4		
	Type, size, plunge	Inner	Double offset joint DOJ82	
		Outer	Rzeppa BJ82	
	Attach (U-bolts, clamps, etc.)	Bolt & Clip		
Bearing	Type (plain, anti-friction)	Anti-friction		
	Lubrication (oil, grease)	Prepack		
Drive taken through (torque tube, arms or springs)		Lower: Control arm, Upper: McPherson strut		
Torque taken through (torque tube, arms or springs)		Diff mounting system		

## ⊗ All Wheel/4 Wheel Drive

Description and type (part-time, full-time, 2/4 shift while moving, mechanical, elec., chain/gear, etc.)		Part-time
Transfer case	Manufacturer	SUZUKI MOTOR CO., LTD.
	Type	Constant mesh helical gear
	Model	N.A.
Low-range gear ratio		1.816
System disconnect (describe)		Floor shift
Center differential	Type (bevel, planetary, w or w/o viscous bias, torque, etc.)	N.A.
	Torque split (% front/rear)	N.A.

\* Centerline to centerline of universal joints, or to centerline of attachment.

# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APP 12 1988 Revised (e) 9-88

METRIC (U.S. Customary)

Engine Description/Carb.  
 Engine Code

L-4 1.6 L (97 CID) EFI

## Propeller Shaft - Rear Wheel Drive

Manufacturer Type (straight tube, tube-in-tube, internal-external damper, etc.)		HAMANA PARTS CO., LTD., Straight tube	
Outer diam. x length* x wall thickness	Manual 3-speed transmission	N.A.	
	Manual 4-speed transmission	N.A.	
	Manual 5-speed transmission	Front: 38.1 x 506 x 3.2 mm (1.5 x 19.92 x 0.13 in.) Rear: 50.8 x 722 x 3.2 mm (2.0 x 28.43 x 0.09 in.)	
	Overdrive	N.A.	
	Automatic transmission	Front: 38.1 x 506 x 3.2 mm (1.5 x 19.92 x 0.13 in.) Rear: 50.8 x 722 x 3.2 mm (2.0 x 28.43 x 0.09 in.)	
Inter- mediate bearing	Type (plain, anti-friction)	N.A.	
	Lubrication (filling, grease)	N.A.	
Slip yoke	Type	Involute serration hole	
	Number of teeth	26	
	Spine o.d.	27 mm (1.06 in.)	
Universal joints	Make and mtg. no.	Front	KOYO SEIKO CO., LTD.
		Rear	KOYO SEIKO CO., LTD.
	Number used	4	
	Type (ball and thrust, cross)	Cross type	
	Rear attach (u-bolt, clamp, etc.)	Flange and bolts	
Bearing	Type (plain, anti-friction)	Needle bearing	
	Lubrication (filling, grease)	Grease	
Drive taken through (torque tube, arms or springs)		Upper and lower arm	
Torque taken through (torque tube, arms or springs)		Engine mounting system	

\* Centerline to centerline of universal joints, or to centerline of rear attachment.



# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1989 Revised (e)

METRIC (U.S. Customary)

Body Type And/Or  
 Engine Displacement

2 DOOR CANVAS TOP	2 DOOR VAN
-------------------	------------

Suspension - General including Electronic Controls

Car leveling	Standard/optional/not avail.	N.A.
	Manual/automatic control	"
	Type (air/hydraulic)	"
	Primary/assist spring	"
	Rear only/4 wheel leveling	"
	Single/dual rate spring	"
	Single/dual ride heights	"
	Provision for jacking	"
Shock absorber damping controls	Standard/option/not avail.	N.A.
	Manual/automatic control	"
	Number of damping rates	"
	Type of actuation (manual/electric motor/air, etc.)	"
	<input type="checkbox"/> Lateral acceleration <input type="checkbox"/> Deceleration <input type="checkbox"/> Acceleration <input type="checkbox"/> Road surface	"
		"
"		
"		
Shock absorber (front & rear)	Type	Front & Rear: Double action telescopic
	Make	Front: SHOWA, Rear: TOKIKO
	Piston diameter	Front: 32 mm (1.26 in.), Rear: 25 mm (0.98 in.)
	Rod diameter	Front: 22 mm (0.87 in.), Rear: 12.5 mm (0.49 in.)

Suspension - Front

Type and description	McPherson strut (separated coil spring)	
Travel*	Full bounce	100 mm (3.94 in.)
	Full rebound	60 mm (2.36 in.)
	Type (coil, leaf, other) & material	Coil, Steel
	Insulators (type & material)	Rubber
Spring	Size (coil design height & i.d., bar length & dia.)	227 x 83 mm (8.93 x 3.27 in.)
	Spring rate (N/mm (lb./in.))	79.4 (452.8)
	Rate at wheel (N/mm (lb./in.))	27.4 (156.5)
Stabilizer	Type (link, linkless, frameless)	Link
	Material & bar diameter	Steel tube, $\varnothing$ 24.2 mm (0.95 in.), t 3.0 mm (0.12 in.)

Suspension - Rear

Type and description	Rigid axle with lower trailing arm & upper A shape arm	
Travel*	Full bounce	110 mm (4.33 in.)
	Full rebound	50 mm (1.97 in.)
Spring	Type (coil, leaf, other) & material	Coil, Steel
	Size (length x width, coil design height & i.d., bar length & dia.)	250 x 83.7 mm (9.84 x 3.3 in.)
	Spring rate (N/mm (lb./in.))	27.4 (156.5)
	Rate at wheel (N/mm (lb./in.))	27.4 (156.5)
	Insulators (type & material)	Rubber
	<input type="checkbox"/> No. of leaves <input type="checkbox"/> Shackles (comp. or lens.)	N.A.
"		
Stabilizer	Type (link, linkless, frameless)	N.A.
	Material & bar diameter	"
Track bar (type)	"	

\* Define load condition:

# MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (e)

Body Type And/Or  
 Engine Displacement

2 DOOR CANVAS TOP	2 DOOR VAN
-------------------	------------

**Brakes - Service**

Description		Hydraulic, Front: Floating caliper type Rear: Leading trailing shoe type			
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)	TOKIKO, Disc			
	Rear (disc or drum)	NISSIN K06YO KK, Drum			
Valving type (proportion, delay, metering, other)		Proportion type			
Power brake (std., opt., n.a.)		Std.			
Booster type (remote, integral, vac., hyd., etc.)		Vacuum type			
Vacuum	Source (line, pump, etc.)	Inline (intake manifold)			
	Reservoir (volume in. <sup>3</sup> ) and source	N.A.			
	Pump-type (elec. gear driven, ball driven)	"			
Traction control	Operational speed range	N.A.			
	Type engine intervention (electronic, mech.)	"			
Anti-lock device	Front/rear (std., opt., n.a.)	"			
	Manufacturer	"			
	Type (electronic, mech.)	"			
	Number sensors or circuits	"			
	Number anti-lock hydraulic circuits	"			
	Integral or add-on system	"			
	Yaw control (yes, no)	"			
Hydraulic power source (elec., vac. mtr., pwr. sup.)		"			
Effective area (cm <sup>2</sup> (in. <sup>2</sup> )) <sup>1</sup> (F/R)		135/287 (21/44)			
Gross lining area (cm <sup>2</sup> (in. <sup>2</sup> )) <sup>2</sup> (F/R)		140/287 (22/44)			
Swept area (cm <sup>2</sup> (in. <sup>2</sup> )) <sup>3</sup> (F/R)		1322/484 (205/75)			
Rotor	Outer working diameter	F/R	290/- mm (11.42/- in.)		
	Inner working diameter	F/R	205/- mm (8.07/- in.)		
	Thickness	F/R	10/- mm (0.39/- in.)		
	Material & type (vented/solid)	F/R	Cast iron, Solid/-		
Drum	Diameter & width	F/R	-/220 x 35 mm (-/8.66 x 1.38 in.)		
	Type and material	F/R	-/Cast iron, Solid		
Wheel cylinder bore (F/R)		48.1/23.81 mm (1.89/0.94 in.)			
Master cylinder	Bore/stroke	F/R	20.64/29.5 mm (0.81/1.16 in.)		
Pedal arc ratio		3.8 : 1			
Line pressure at 445 N(100 lb.) pedal load (kPa (psi))		505 (73)			
Lining clearance		F/R	Self adjusting/Self adjusting		
Brake Lining	Front wheel	Bonded or riveted (rivets/bag.)		Bonded	
		Rivet size		N.A.	
		Manufacturer		JAPAN BRAKE INDUSTRY	
		Lining code <sup>4</sup>		JB KC 80FE	
		Material		Resin mold	
		Size	Primary or out-board	99 x 42 x 10 mm (3.90 x 1.65 x 0.39 in.)	
		Size	Secondary or in-board	99 x 42 x 10 mm (3.90 x 1.65 x 0.39 in.)	
	Shoe thickness (no lining)		5 mm (0.20 in.)		
	Rear wheel	Bonded or riveted (rivets/bag.)		Bonded	
		Manufacturer		JAPAN BRAKE INDUSTRY	
		Lining code <sup>4</sup>		JB NL 60FF	
		Material		Resin mold	
		Size	Primary or out-board	211 x 34 x 5.5 mm (8.31 x 1.34 x 0.22 in.)	
		Size	Secondary or in-board	211 x 34 x 5.5 mm (8.31 x 1.34 x 0.22 in.)	
Shoe thickness (no lining)		2 mm (0.08 in.)			

<sup>1</sup>Excludes rivet holes, grooves, chamfers, etc. <sup>2</sup>Includes rivet holes, grooves, chamfers, etc.  
<sup>3</sup>Total swept area for four brakes. (Drum brake: Widest lining contact width for each brake x its contact circumference.)  
 (Disc brake: Square of Outer Working Dia. minus Square of Inner Working Dia. multiplied by Pi/2 for each brake.)  
<sup>4</sup>Size for drum brakes includes length x width x thickness. <sup>5</sup>Manufacturer I.D., catalog or formulation designation and coefficient of friction classification.

# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued 10? 12 1988 Revised (e) \_\_\_\_\_

METRIC (U.S. Customary)

Body Type And/Or  
 Engine Displacement

2 DOOR CANVAS TOP	2 DOOR VAN
-------------------	------------

## Tires And Wheels (Standard)

Tire	Size (load range, ply)		P205/75R15
	Type (bias, radial, steel, nylon, etc.)		Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front (kPa (psi))	160 (23)
		Rear (kPa (psi))	160 (23)
Rev./mile—at 70 km/h (45 mph)		760	
Wheels	Type & material		Drop center, Steel
	Rim (size & flange type)		15 x 5½ JJ
	Wheel offset		25 mm (0.98 in.)
	Attachment	Type (bolt or stud)	Stud
		Circle diameter	139.7 mm (5.50 in.)
Number & size		5 x M12	
Spare	Tire and wheel		Same size
	Storage position & location (describe)		Vertical, Outside of back door

## Tires And Wheels (Optional)

Tire size (load range, ply)	} N.A.
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
<input checked="" type="checkbox"/> Spare tire and wheel size (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	

## Brakes - Parking

Type of control	Lever - hand operated	
Location of control	Between front seat	
Operates on	Rear service brake	
If separate from service brakes	Type (internal or external)	N.A.
	Drum diameter	"
	Lining size (length x width x thickness)	"

# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (e)

**METRIC (U.S. Customary)**

Body Type And/Or  
 Engine Displacement

2 DOOR CANVAS TOP	2 DOOR VAN
-------------------	------------

## Steering

Manual (std., opt., n.a.)		Std.		
Power (std., opt., n.a.)		N.A.		
Adjustable steering wheel/column (tilt, telescope, other)	Type	N.A.		
	Manufacturer	"		
	(Std., opt., n.a.)	"		
Wheel diameter** (W3) SAE J1100	Manual	390 mm (15.35 in.)		
	Power	N.A.		
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)	10.5 m (34.44 ft.)	
		Curb to curb (l. & r.)	9.8 m (32.15 ft.)	
	Inside rear	Wall to wall (l. & r.)	N.A.	
		Curb to curb (l. & r.)	"	
Scrub Radius*		12 mm (0.47 in.)		
Manual	Gear	Type	Recirculation ball	
		Manufacturer	NIPPON SEIKO K.K.	
		Ratios	18.5 - 21.0 (variable)	
	Overall	21.7		
No. wheel turns (stop to stop)		3.8		
Power	Type (coaxial, elec., hyd., etc.)		N.A.	
	Manufacturer		"	
	Gear	Type	"	
		Ratios	Gear	"
		Overall	"	
	Pump (drive)		"	
No. wheel turns (stop to stop)		"		
Linkage	Type		Parallel linkage	
	Location (front or rear of wheels, other)		Front	
	Tie rods (one or two)		Two	
Inclination at camber (deg.)		31°		
Steering axis	Bearings (type)	Upper	Needle bearing	
		Lower	Ball bearing	
		Thrust	N.A.	
Steering spindle & joint type		Serrated shaft		
Wheel spindle/hub	Diameter	Inner bearing	Inner: Ø 41 mm (1.61 in.), Outer: Ø 68 mm (2.68 in.)	
		Outer bearing	Inner: Ø 41 mm (1.61 in.), Outer: Ø 68 mm (2.68 in.)	
	Thread (size)		M40 x 1.5	
	Bearing (type)		Double row taper roller bearing	

\*The horizontal distance in the front elevation between wheel centerline and kingpin (ball joint) axis at ground.  
 \*\*See Page 22

# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1989 Revised (•) \_\_\_\_\_

METRIC (U.S. Customary)

Body Type And/Or  
 Engine Displacement

2 DOOR CANVAS TOP	2 DOOR VAN
-------------------	------------

## Wheel Alignment

Wheel	Service	Parameter	Value
Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	1.5°
		Camber (deg.)	0.5°
		Toe-in (outside track-mm (in.))	2 - 6 mm (0.08 - 0.24 in.)
	Service reset	Caster	N.A.
		Camber	"
		Toe-in	Adjustable
	Periodic M.V. inspection	Caster	1.5°±2°
		Camber	0.5°±1°
		Toe-in	2 - 6 mm (0.08 - 0.24 in.)
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	0°
		Toe-in (outside track-mm (in.))	0
	Service reset	Camber	N.A.
		Toe-in	"
	Periodic M.V. inspection	Camber	0°±1°
		Toe-in	0±2 mm

\* Indicates pre-set, adjustable, trend set or other.

## Electrical - Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)	Analog
	Trip odometer (std., opt., n.a.)	Std.
EGR maintenance indicator		N.A.
Charge Indicator	Type	Tell-tale warning light
	Warning device (light, audible)	Light
Temperature Indicator	Type	Electric gauge with pointer
	Warning device (light, audible)	N.A.
Oil pressure Indicator	Type	Tell-tale warning light
	Warning device (light, audible)	Light
Fuel Indicator	Type	Electric gauge with pointer
	Warning device (light, audible)	N.A.
Windshield wiper	Type (standard)	Electric 2-speed
	Type (optional)	Intermittent
	Blade length	434 mm (17.09 in.)
	Sweep area (cm <sup>2</sup> (in. <sup>2</sup> ))	5,308 (17.09)
Windshield washer	Type (standard)	Electric, Push button ON
	Type (optional)	N.A.
	Fluid level indicator (light, audible)	"
Rear window wiper, wiper/washer (std., opt., n.a.)		Opt.
Horn	Type	Electric resonator
	Number used	1
Other		

# MVMA Specifications Form

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (e) 9-88

**METRIC (U.S. Customary)**

Engine Description/Carb.  
 Engine Code

L-4 1.6 L (97 CID) EFI

## Electrical - Supply System

Battery	Manufacturer	DELCO
	Model, std., (opt.)	
	Voltage	12
	Amps at 0°F cold crank	470
	Minutes-reserve capacity	80 min.
	Amps/hr. - 20 hr. rate	45
	Location	RH side of engine compartment
Alternator	Manufacturer	MITSUBISHI ELECTRIC CORP.
	Rating (idle/max. rpm)	55 (2,159)
	Ratio (alt. cranks/rev.)	2.36 : 1
	Output at idle (rpm, park)	30 (800)
	Optional (type & rating)	N.A.
Regulator	Type	Integral with alternator

## Electrical - Starting System

Start, motor	Manufacturer	MITSUBISHI ELECTRIC CORP.
	Current drain at 0°F	200 A max.
	Power rating [kw (hp)]	MT: 1.2 (1.6), AT 1.4 (1.9)
Motor drive	Engagement type	Positive shift solenoid
	Pinion engages from (front, rear)	Front

## Electrical - Ignition System

Type	Electronic (std., opt., n.a.)	N.A.	
	Other (specify)	High energy ignition (integral with distributor)	
Coil	Manufacturer	NIPPON DENSO	
	Model	029700-6660	
	Current	Engine stopped - A	0
		Engine idling - A	1.5 max.
Spark plug	Manufacturer	NGK, NIPPON DENSO	
	Model	BPR5ES, W16EXR-U	
	Thread (mm)	M14 x 1.25	
	Tightening torque (N-m (lb. ft))	20 - 30 (15 - 22)	
	Gap	0.8 mm (0.03 in.)	
	Number per cylinder	1	
Distributor	Manufacturer	NIPPON DENSO	
	Model	100291-2370	

## Electrical - Suppression

Locations & type	Metax oxide coating rotor (distributor) High tension cord with resister Spark plug with resister
------------------	--

# MVMA Specifications Form

Vehicle Models TRACKER

Model Year 1989 Issued APR 12 1988 Revised (\*) \_\_\_\_\_

METRIC (U.S. Customary)

Body Type

2 DOOR CANVAS TOP

2 DOOR VAN

Body

Structure

Body with chassis frame

Ø Bumper system  
front - rear

Front: Energy absorption type by P.P. foam

Rear: P.P. skin with steel core

Anti-corrosion treatment

1. Surface treated steel plates

2. Vinyl chloride coating (bottom/side of floor)

Ø Body - Miscellaneous Information

Type of finish (lacquer, enamel, other)	Enamel	
Hood	Material & mass	Steel, 10.8 kg (23.8 lb)
	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Prop
	Release control (internal, external)	Internal and external
Trunk lid	Material & mass	N.A.
	Type (counterbalance, other)	"
	Internal release control (elec., mech., n.a.)	"
Hatch-back lid	Material & mass	N.A.
	Type (counterbalance, other)	"
	Internal release control (elec., mech., n.a.)	"
Tailgate	Material & mass	Steel, 13.8 kg (30.4 lb)
	Type (drop, lift, door)	Door
	Internal release control (elec., mech., n.a.)	N.A.
Vent window control (crank, friction, pivot, power)	Front	N.A.
	Rear	" Pivot
Window regulator type (cable, tape, flex, drive, etc.)	Front	Cable
	Rear	N.A.
Seat cushion type (e.g., 80/40, bucket, bench, wire, foam etc.)	Front	Semi bucket
	Rear	Bench Bucket
	3rd seat	N.A.
Seat back type (e.g., 80/40, bucket, bench, wire, foam etc.)	Front	Semi bucket
	Rear	Bench Bucket
	3rd seat	N.A.

**MVMA Specifications Form**  
**METRIC (U.S. Customary)**

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (e) \_\_\_\_\_

Body Type

2 DOOR CANVAS TOP

2 DOOR VAN

**Restraint System**

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.)  Standard / optional	First seat	Lap & shoulder belt, ELR, std.	N.A.	Lap & shoulder belt, ELR-ALR, std.
		Second seat	Lap & shoulder belt, ELR-ALR, std.	N.A.	Lap & shoulder belt, ELR-ALR, std.
		Third seat	N.A.	N.A.	N.A.
Passive	Type & description (air bag, motorized - 2-point belt, fixed belt, knee bolster, manual - lap belt)  Standard / optional	First seat	N.A.	N.A.	N.A.
		Second seat	N.A.	N.A.	N.A.
		Third seat	N.A.	N.A.	N.A.

Glass	SAE Ref. No.		
Windshield glass exposed surface area [cm <sup>2</sup> (in. <sup>2</sup> )]	S1	8,315 (1,288)	
Side glass exposed surface area [cm <sup>2</sup> (in. <sup>2</sup> )] - total 2-sides	S2	8,540 (1,324)	17,040 (2,641)
Backlight glass exposed surface area [cm <sup>2</sup> (in. <sup>2</sup> )]	S3	N.A.	5,472 (848)
Total glass exposed surface area [cm <sup>2</sup> (in. <sup>2</sup> )]	S4	16,855 (2,612)	30,827 (4,777)
Windshield glass (type)		Laminated glass	
Side glass (type)		Tempered glass	
Backlight glass (type)		Tempered glass	

**Lamps and Headlamp Locations**

Headlamps	Description - sealed beam, halogen, replaceable bulb, etc.	Halogen, Replaceable bulb
	Shape	Composite
	Lo-beam type (2A1, 2B1, 2C1, etc.)	Composite
	Quantity	2
	Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	Composite
	Quantity	2

**Frame**

Type and description (separate frame, unuzed frame, partially-unuzed frame)	Separate frame
---	----------------



# MVMA Specifications Form

## METRIC (U.S. Customary)

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (e)

Body Type

2 DOOR CANVAS TOP	2 DOOR VAN
-------------------	------------

**Convenience Equipment (standard, optional, n.a.)**

<input checked="" type="checkbox"/> Air conditioning (manual, auto, temp control)	Optional, Manual control	
Clock (digital, analog)	Optional, Digital, Integral with radio	
Compass/thermometer	N.A.	
Console (floor, overhead)	Floor	
Defroster, elec. backlight	N.A.   Optional	
Electronic	Diagnostic monitor (integrated, individual)	N.A.
	Instrument cluster (list instruments)	"
	Keyless entry	"
	Tripmeter (avg. spd., fuel)	"
	Voice alert (list items)	"
	Other	"
Fuel door lock (remote, key, electric)	N.A.	
Lamps	Auto head on/off delay, dimming	N.A.
	Cornering	"
	Courtesy (map, reading)	Std. map lamp 1
	Door lock, ignition	N.A.
	Engine compartment	"
	Fog	"
	Glove compartment	"
	Trunk	"
	Illuminated entry system (list lamps, activation)	"
	Other	"
Mirrors	Day/night (auto, man.)	Std, Manual
	L.H. (remote, power, heated)	Std, Manual
	R. H. (convex, remote, power, heated)	Std, Convex
	Visor vanity (RH / LH, illuminated)	N.A.
<input checked="" type="checkbox"/> Navigation system (describe)	N.A.	
Parking brake-auto release (warning light)	N.A.	

**MVMA Specifications Form**  
**METRIC (U.S. Customary)**

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (e)

Body Type

2 DOOR CANVAS TOP	2 DOOR VAN
-------------------	------------

**Convenience Equipment (standard, optional, n.a.)**

Ø	Deck lid (release, pull down)		N.A.	
	Door locks (manual, automatic, describe system)		N.A.	
	Power equipment	Seats	2 - 4 - 6 way, etc.	N.A.
			Reclining (R.H., L.H.)	"
			Memory (R.H., L.H., preset, recline)	"
			Lumbar, hip, thigh, support	"
			Heated (R.H., L.H., other)	"
	Side windows		N.A.	
	Vent windows		N.A.	
	Rear windows		N.A.	
Antenna (location, whip, w/ shield, power)		Left front pillar, Whip		
Ø	Radio systems	Standard	Antenna only	
		Optional	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc. AM/FM, ETR, Stereo AM/FM, ETR, Stereo with cassette tape deck	
	Speaker (number, location)		Opt. 2: IP mounted, 2: Rear quarter trim	
Roof open air fixed (flip-up, sliding, T)		Canvas, flip-up	N.A.	
Speed control device		N.A.		
Speed warning device (light, buzzer, etc.)		N.A.		
Tachometer (rpm)		Std.		
Telephone system (describe)		N.A.		
Theft deterrent system		Steering lock - type		

# MVMA Specifications Form

Vehicle Model TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (e)

## METRIC (U.S. Customary)

### Vehicle Dimensions See Key Sheets for definitions

All dimensions to ground are for comparative purposes only. Dimensions are to be shown for all base body models of each vehicle line. SAE Ref. no. refers to the definition published in SAE Recommended Practice J1100 "Motor Vehicle Dimensions," unless otherwise specified.

Body Type	SAE Ref. No.	2 DOOR CANVAS TOP	2 DOOR VAN
<b>Width</b>			
Tread (front)	W101	1,395 mm (54.92 in.)	
Tread (rear)	W102	1,400 mm (55.12 in.)	
Vehicle width	W103	1,630 mm (64.17 in.)	
Body width at Sq RP (front)	W117	1,566 mm (61.65 in.)	
Vehicle width (front doors open)	W120	3,450 mm (135.83 in.)	
Vehicle width (rear doors open)	W121	N.A.	
Front fender overall width	W108	1,620 mm (63.78 in.)	
Rear fender overall width	W107	1,620 mm (63.78 in.)	
Tumble-home (deg.)	W122	15°50'	
Vehicle width including mirrors		1,820 mm (71.65 in.)	

### Length

Wheelbase	L101	2,200 mm (86.61 in.)	
Vehicle length	L103	3,620 mm (142.52 in.)	
Overhang (front)	L104	655 mm (25.79 in.)	
Overhang (rear)	L105	765 mm (30.12 in.)	
Upper structure length	L123	2,285 mm (89.96 in.)	2,301 mm (90.59 in.)
Rear wheel C/L "X" coordinate	L127	1,840 mm (72.44 in.)	
Cowl point "X" coordinate	L125	60 mm (2.36 in.)	
Front end length at centerline	L126	981 mm (38.62 in.)	
Rear end length at centerline	L129	38 mm (1.50 in.)	

### Height \*\*

Passenger distribution (front/rear)	PD1.2.3	2/2	**
Trunk/cargo load		1,595 mm (62.79 in.)	**
Vehicle height	H101	1,650 mm (64.96 in.)	
Cowl point to ground	H114	1,061 mm (41.77 in.)	1,062 mm (41.81 in.)
Deck point to ground	H138	---	
Rocker panel-front to ground	H112	246 mm (9.69 in.)	247 mm (9.72 in.)
Bottom of door closed-front to ground	H133	340 mm (13.39 in.)	342 mm (13.46 in.)
Rocker panel-rear to ground	H111	228 mm (8.98 in.)	230 mm (9.06 in.)
Bottom of door closed-rear to ground	H135	---	
Windshield slope angle	H122	46°10'	
Backlight slope angle	H121	25°	13°35'

### Ground Clearance \*\*

Front bumper to ground	H102	323 mm (12.72 in.)	
Rear bumper to ground	H104	240 mm (9.45 in.)	244 mm (9.61 in.)
Bumper to ground (front at curb mass (wt.))	H103	333 mm (13.11 in.)	
Bumper to ground (rear at curb mass (wt.))	H105	327 mm (12.87 in.)	
Angle of approach (degrees)	H106	44°	
Angle of departure (degrees)	H107	34°	
Ramp breakover angle (degrees)	H147	18°	
Axle differential to ground (front/rear)	H153	215/200 mm (8.46/7.87 in.)	
Min. running ground clearance	H156	200 mm (7.87 in.)	
Location of min. run. grd. clear.		Front differential	

\*\* All Vehicle Height And Ground Clearance Are Made Using EPA Loaded Vehicle Weight, Loading Conditions. EPA Loaded Vehicle Weight is the Base Vehicle Weight Plus All Cost and Fluids Necessary For Operation Plus 100% Of The Fuel Capacity, Plus The Weight Of All Options And Accessories Which Weigh Three Pounds Or More And Which Are Sold On At Least 33% Of The Car Line. Plus Two Occupants

# MVMA Specifications Form

Vehicle Models TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (\*) \_\_\_\_\_

METRIC (U.S. Customary)  
 Vehicle Dimensions See Key Sheets for definitions

Body Type	2 DOOR CANVAS TOP	2 DOOR VAN
-----------	-------------------	------------

SAE Ref. No.	Front Compartment	
L31	Sg RP front "X" coordinate	1,085 mm (42.71 in.)
M81	Effective head room	1,004 mm (39.53 in.)   1,017 mm (40.04 in.)
L34	Max. eff. leg room (accelerator)	1,069 mm (42.09 in.)
M30	SgRP to heel point	325 mm (12.80 in.)
L53	SgRP to heel point	820 mm (32.28 in.)
L40	Back angle	20°
L42	Hip angle	95.5°
L44	Knee angle	122°
L46	Foot angle	80°
L17	Design H-point front travel	180 mm (7.09 in.)
L23	Normal driving & riding seat track lvl.	180 mm (7.09 in.)
W3	Shoulder room	STD: 1,325 mm (52.17 in.), DX: 1,310 mm (51.57 in.)
W5	Hip room	STD: 1,316 mm (51.81 in.), DX: 1,310 mm (51.57 in.)
M50	Upper body opening to ground	1,480 mm (58.27 in.)
W9	Steering wheel maximum diameter*	390 mm (15.35 in.)
H18	Steering wheel angle	31°
L11	Accel. heel pt. to steer. whl. ctr	337 mm (13.27 in.)
M17	Accel. heel pt. to steer. whl. ctr	715 mm (28.15 in.)
M13	Steering wheel to C/L of thigh	96 mm (3.78 in.)
L7	Steering wheel torso clearance	404 mm (15.98 in.)
M37	Headlining to roof panel (front)	N.A.   15 mm (0.59 in.)
M67	Undeepressed floor covering thickness	15 mm (0.59 in.)

Front Compartment Interior Dimensions Are Measured With The Seaton. Reference Point (SgRP) 0 mm Forward And 0 mm Upward of Rearmost Position.

SAE Ref. No.	Rear Compartment	
L50	Sg RP Point couple distance	700 mm (27.56 in.)
M63	Effective head room	990 mm (38.27 in.)   967 mm (38.08 in.)
L51	Min. effective leg room	804 mm (31.65 in.)
M31	Sg RP (second to heel)	385 mm (15.16 in.)
L48	Knee clearance	101 mm (3.98 in.)
L3	Compartment room	710 mm (27.95 in.)
W4	Shoulder room	1,275 mm (50.20 in.)
W6	Hip room	1,064 mm (41.89 in.)
M51	Upper body opening to ground	N.A.
L41	Back angle	20°
L43	Hip angle	92°
L45	Knee angle	80°
L47	Foot angle	98°
M38	Headlining to roof panel (second)	---   15 mm (0.59 in.)
M73	Depressed floor covering thickness	15 mm (0.59 in.)

SAE Ref. No.	Luggage Compartment	
V1	Usable luggage capacity [L. (cu. ft.)]	134.3 (4.74)   145.7 (5.15)
M185	Lift-over height	687 mm (27.05 in.)

Interior Volumes (EPA Classification)	
Vehicle class	Special purpose vehicle (4WD)
Interior volume index (cu. ft.)	87.04
Trunk/cargo index (cu. ft.)	N.A.

All linear dimensions are in millimeters (inches).  
 \*\* EPA Loaded Vehicle Weight, Loading Conditions

# MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Vehicle Line **TRACKER**

Model Year **1989**

Issue **APR 12 1988**

Revision (01)

Body Type

2 DOOR CANVAS TOP

2 DOOR VAN

Station Wagon - Third Seat	SAE Ref. No.	
Seat facing direction	SD1	} N.A.
Sg RP coupe distance	LB5	
Shoulder room	WB5	
Hip room	WB6	
Effective leg room	LB6	
Effective head room	H66	
Sg RP to heel point	H67	
Knee clearance	LB7	
Back angle	LB8	
Hip angle	LB9	
Knee angle	LB0	
Foot angle	LB1	

## Station Wagon - Cargo Space

Cargo length (open front)	L200	---
Cargo length (open second)	L201	---
Cargo length (closed front)	L202	STD: 793 (31.22) DX: 787 (30.98) STD: 788 (31.02) DX: 782 (30.78)
Cargo length (closed second)	L203	STD: 320 (12.60) DX: 316 (12.44) STD: 315 (12.40) DX: 311 (12.24)
Cargo length at belt (front)	L204	STD: 707 (27.83) DX: 662 (26.06) STD: 702 (27.63) DX: 657 (25.86)
Cargo length at belt (second)	L205	STD: 196 (7.71) DX: 178 (7.01) STD: 191 (7.51) DX: 173 (6.81)
Cargo width (wheelhouse)	W201	1,060 mm (41.73 in.)
Rear opening width at floor	W203	1,110 mm (43.70 in.)
Opening width at belt	W204	1,112 mm (43.78 in.)
Min. rear opening width above belt	W205	900 mm (35.43 in.) 935 mm (36.8 in.)
Cargo height	H201	1,010 mm (39.76 in.)
Rear opening height	H202	870 mm (32.25 in.)
Tailgate to ground height	H250	645 mm (25.39 in.)
Front seat back to load floor height	H197	STD: 750 mm (29.53 in.), DX: 765 mm (30.12 in.)
Cargo volume index (m <sup>3</sup> (ft. <sup>3</sup> ))	V2	0.91 (32.13) 0.904 (31.92)
Hidden cargo volume index (m <sup>3</sup> (ft. <sup>3</sup> ))	V4	N.A.
Cargo volume index-rear of 2-seat	V10	0.252 (8.89) 0.246 (8.68)

## Hatchback - Cargo Space

Cargo length at front seatback height	L208	} N.A.
Cargo length at floor (front)	L209	
Cargo length at second seatback height	L210	
Cargo length at floor (second)	L211	
Front seatback to load floor height	H197	
Second seatback to load floor height	H198	
Cargo volume index (m <sup>3</sup> (ft. <sup>3</sup> ))	V3	
Hidden cargo volume index (m <sup>3</sup> (ft. <sup>3</sup> ))	V4	
Cargo volume index-rear of 2-seat	V11	

## Aerodynamics\*

Wheel to ground, front	772 mm (30.39 in.)
Wheel to ground, rear	786 mm (30.94 in.)
Frontal area (m <sup>2</sup> (ft. <sup>2</sup> ))	2.18 (23.5)
Drag coefficient (Cd)	0.53 0.50

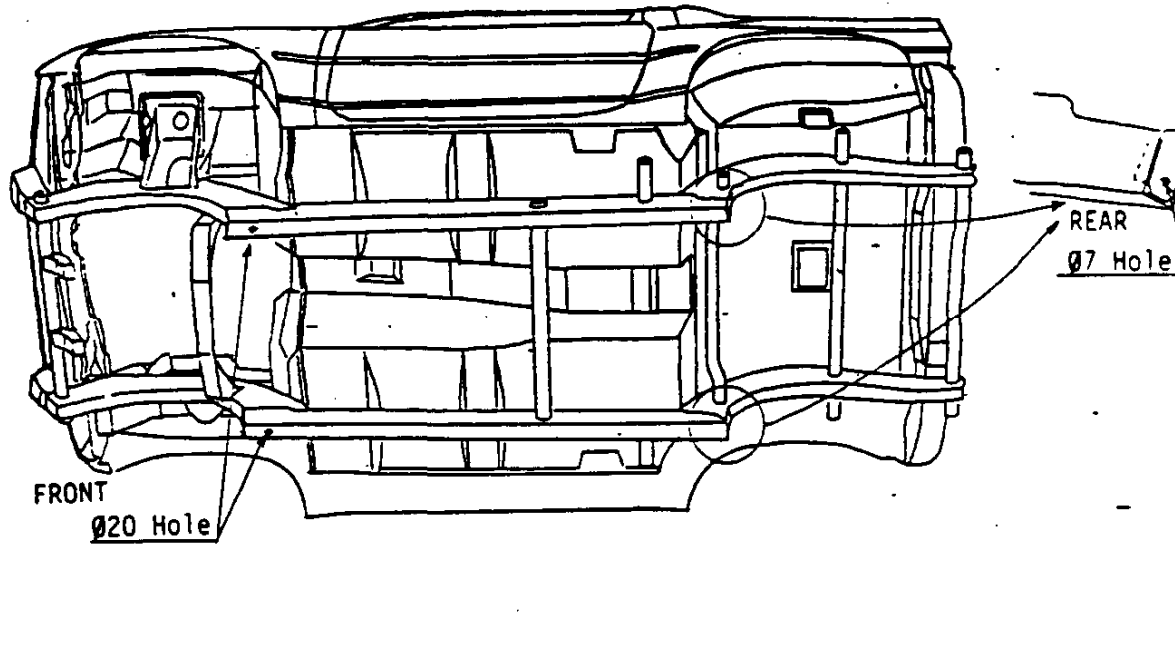
\* EPA Loaded Vehicle Weight, Loading Conditions

**MVMA Specifications Form**  
**METRIC (U.S. Customary)**

Vehicle Line TRACKER  
 Model Year 1989 Issued APR 12 1988 Revised (a)

Body Type 2 DOOR CANVAS TOP 2 DOOR VAN

**Vehicle Fiducial Marks**

Fiducial Mark Number*	Define Coordinate Location
Front	Front: Center of 20 mm dia. hole on "Side Frame Center". Rear: Center of 7 mm dia. hole on "Reinforcement Side Frame Center End".
Rear	
Fiducial Mark Number	

Front	W21*	373/-373 mm (14.69/-14.69 in.)
	L54*	-58 mm (-2.28 in.)
	H81*	-67 mm (-2.64 in.)
	H161*	218 mm (8.58 in.)
	** H163*	207 mm (8.15 in.)

Rear	W22*	405/-405 mm (15.94/-15.94 in.)
	L55*	1,560 mm (61.42 in.)
	H82*	-20 mm (-0.79 in.)
	H162*	265 mm (10.43 in.)
	** H164*	247 mm (9.72 in.)

\* Reference - SAE Recommended Practice, J162, Motor Vehicle Fiducial Marks.  
 All linear dimensions are in millimeters (inches).  
 \*\* EPA Loaded Vehicle Weight, Loading Conditions





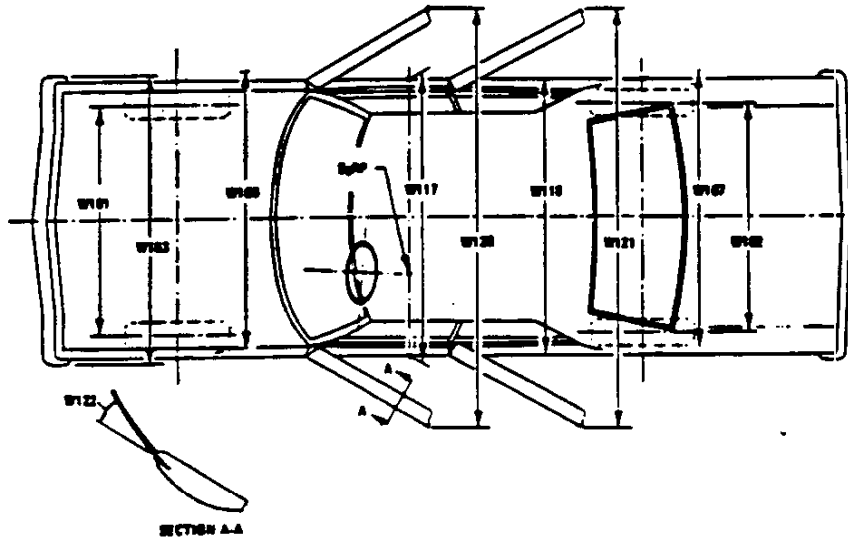


# MVMA Specifications Form

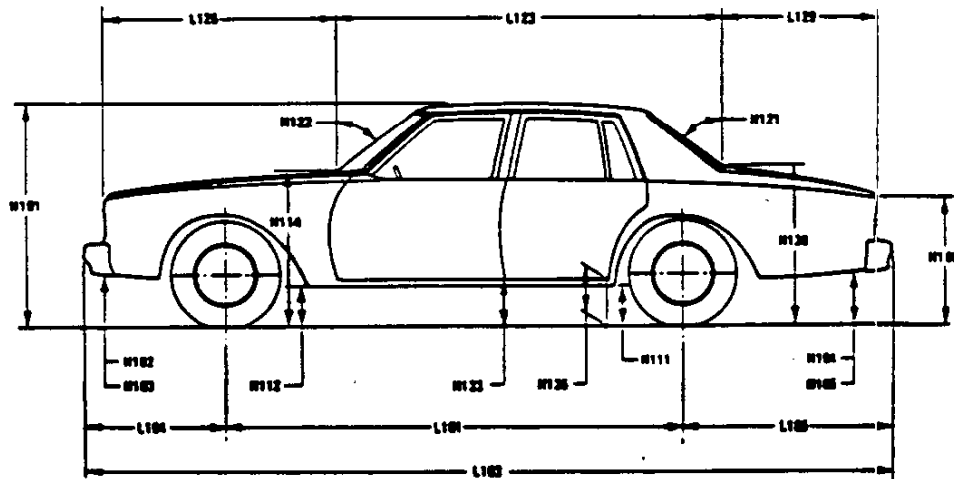
METRIC (U.S. Customary)

## Exterior Vehicle And Body Dimensions – Key Sheet

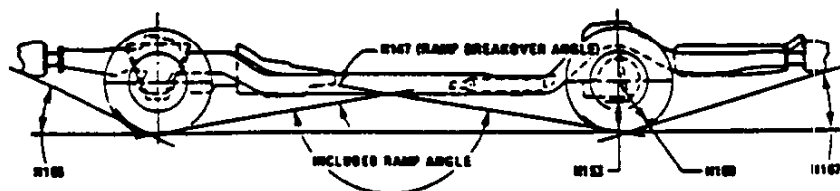
### Exterior Width



### Exterior Length & Height



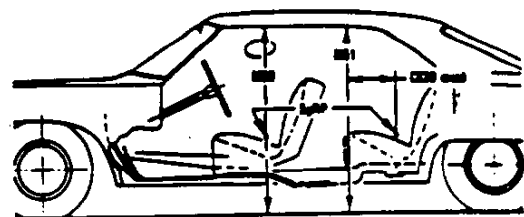
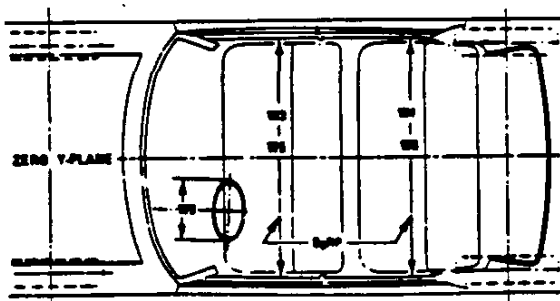
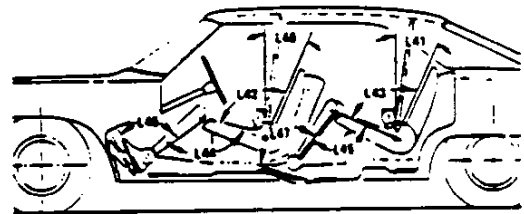
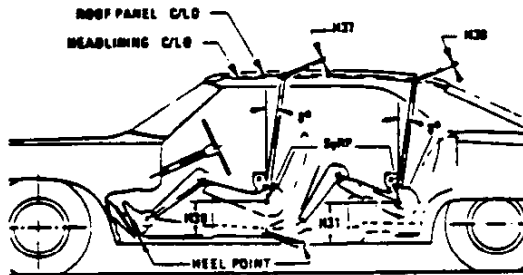
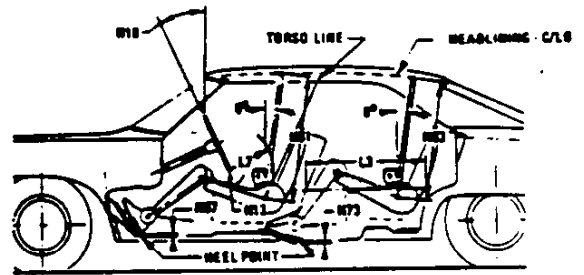
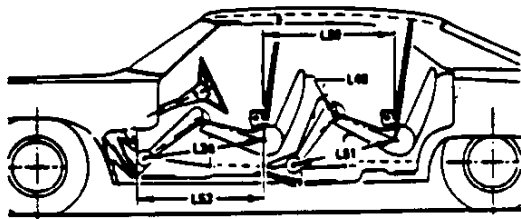
### Exterior Ground Clearance



# MVMA Specifications Form

METRIC (U.S. Customary)

## Interior Vehicle And Body Dimensions - Key Sheet

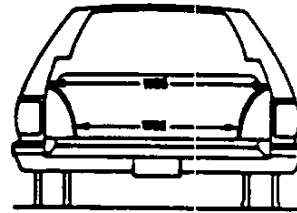
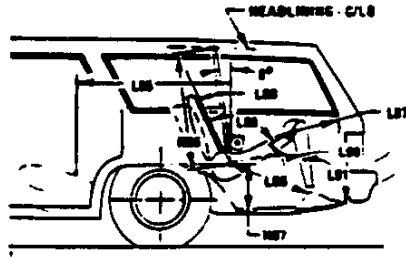


# MVMA Specifications Form

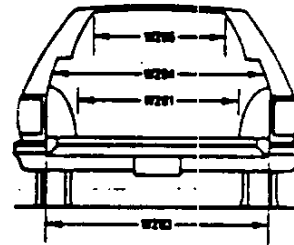
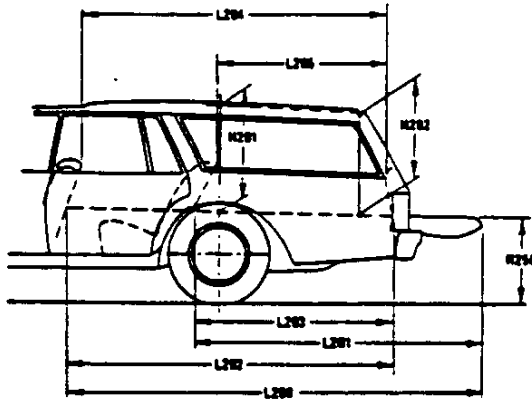
METRIC (U.S. Customary)

## Interior Vehicle And Body Dimensions - Key Sheet

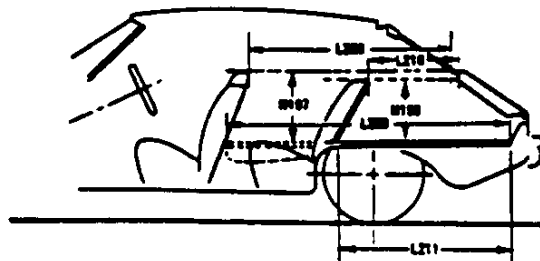
Third Seat



Cargo Space



Station Wagon



Hatchback



**CHEVROLET MOTOR DIVISION**  
 General Motors Corporation  
 Service Department



# Chevrolet Dealer Service Bulletin

89-26-10

Number

10

Section

NOV., 1988

Date

Subject: **BODY MEASUREMENTS**

Model and Year: **1989 GEO TRACKER**

**TO: ALL CHEVROLET DEALERS**

The following data should replace Figures 2, 3 and 4 in Section 10-3 of the 1989 GEO Tracker Service Manual. The dimensions corresponding to the alphabetical points should be used for measuring body dimensions.

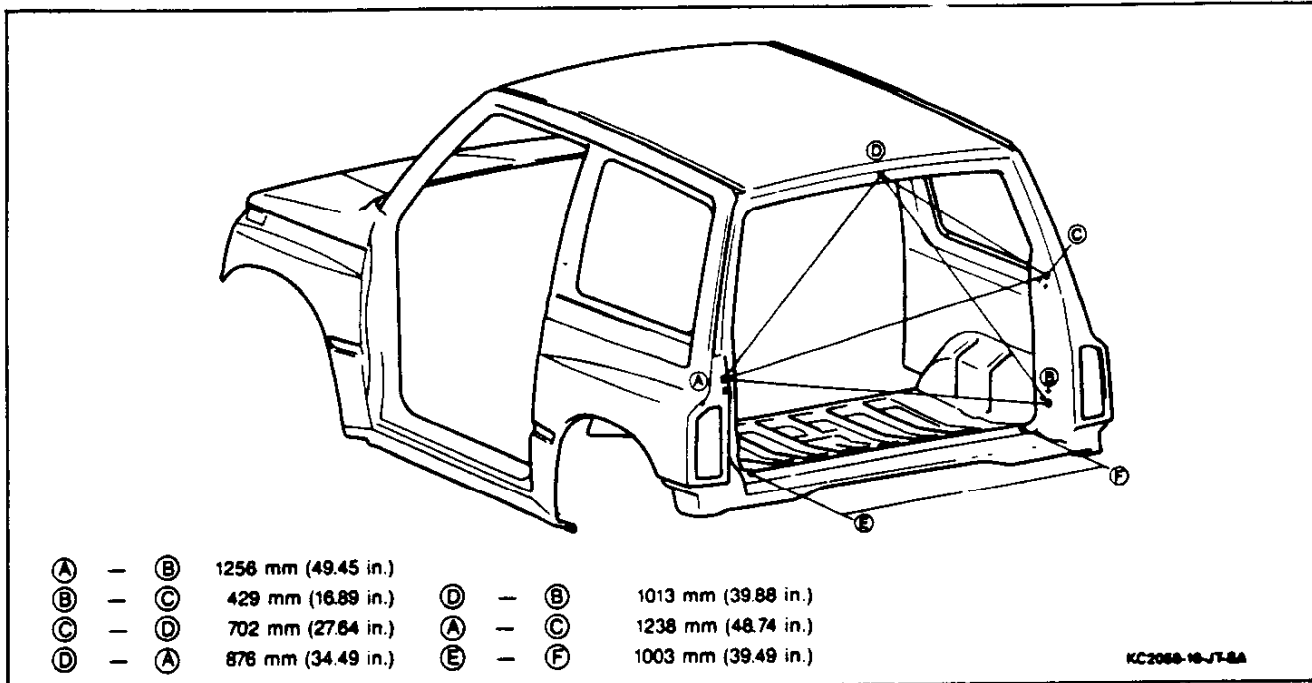


Figure 2

**COPYRIGHT 1988  
 CHEVROLET MOTOR DIVISION  
 GENERAL MOTORS CORPORATION  
 ALL RIGHTS RESERVED**

Chevrolet bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your Chevrolet dealer for information on whether your vehicle may benefit from that information.



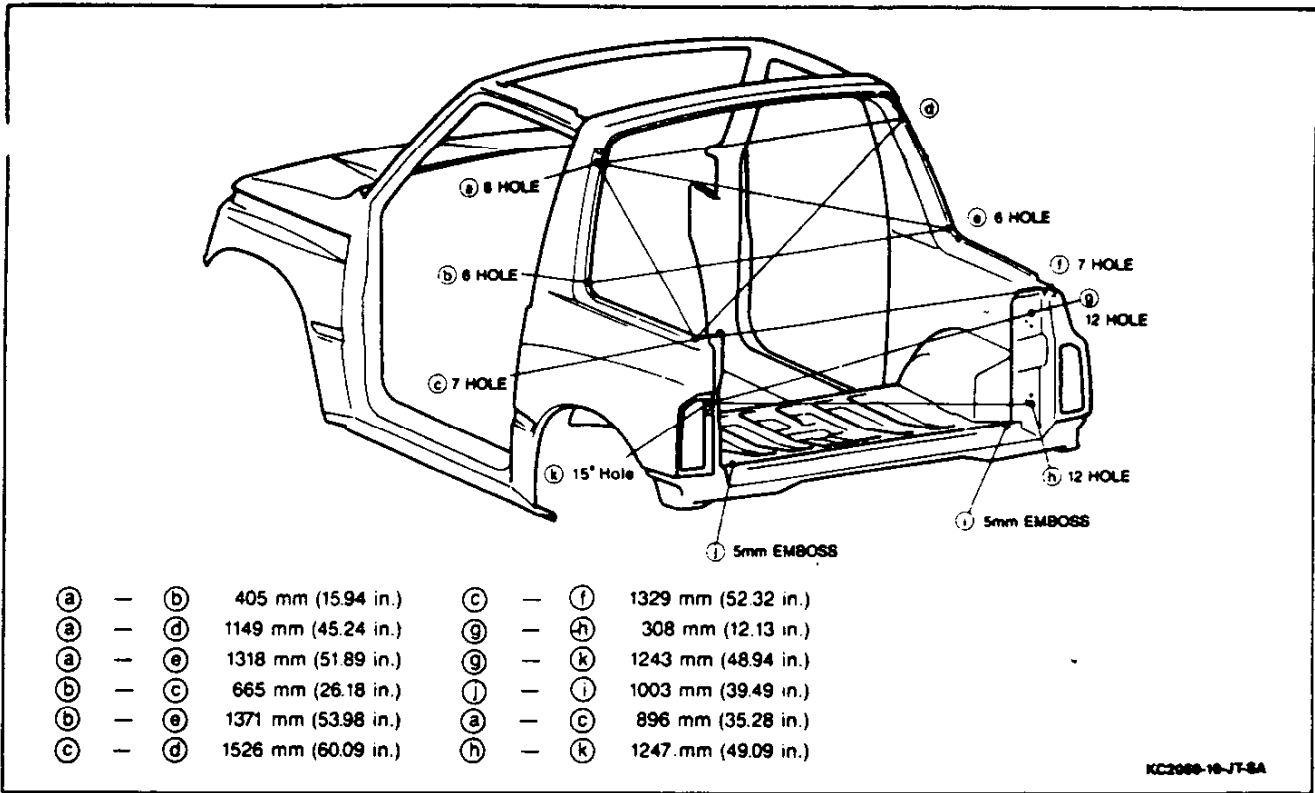


Figure 3

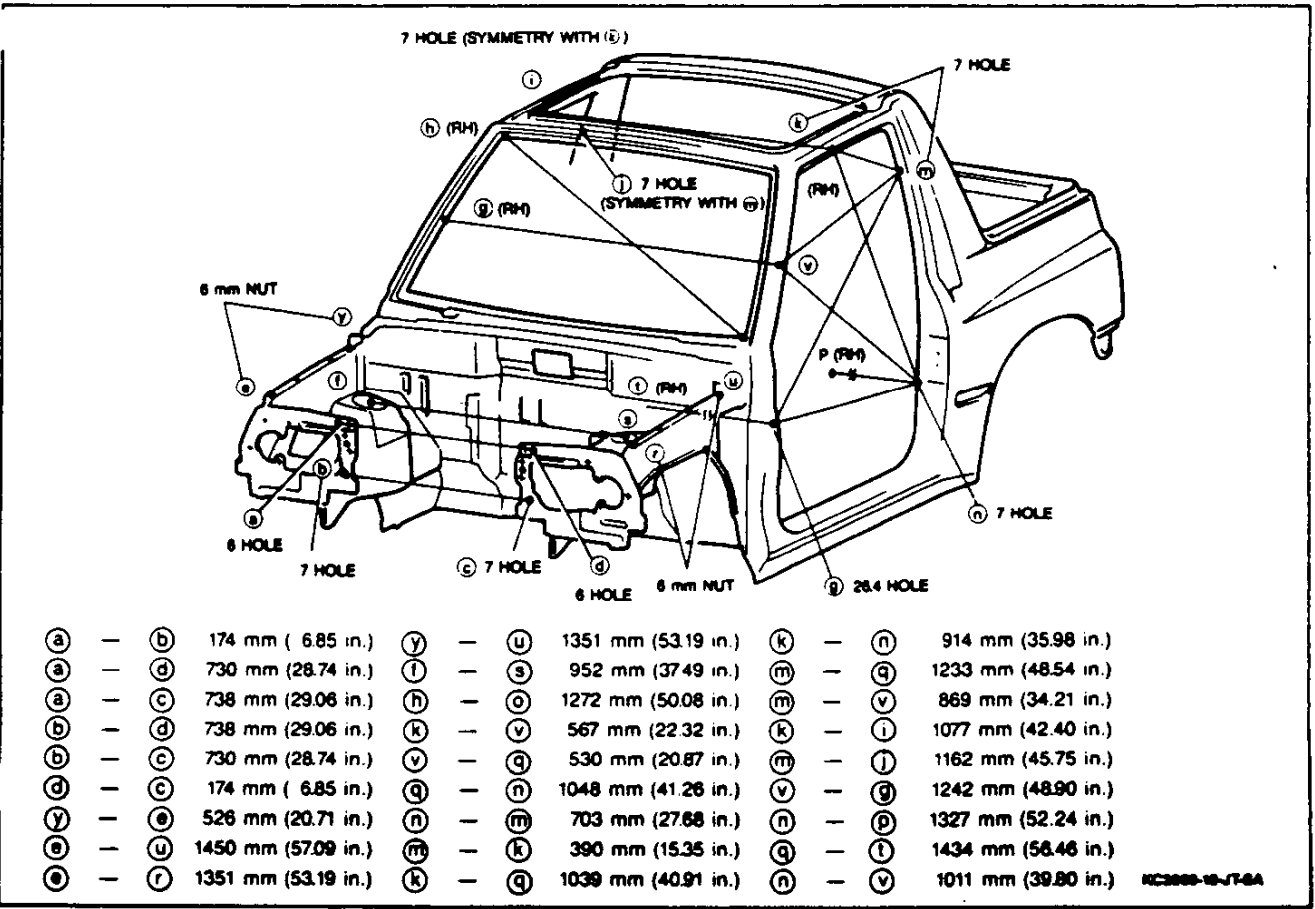


Figure 4

---

---

# MVMA Specifications Form

## METRIC (U.S. Customary)

### Exterior Vehicle And Body Dimensions - Key Sheet Dimensions Definitions

#### Seating Reference Point

SEATING REFERENCE POINT means the manufacturer's design reference point which -

- (a) Establishes the rearmost normal design driving or riding position of each designated seating position in a vehicle;
- (b) Has coordinates established relative to the design vehicle structure;
- (c) Simulates the position of the pivot center of the human torso and thigh; and
- (d) Is the reference point employed to position the two dimensional templates described in SAE Recommended Practice J826, "Devices for Use in Defining and Measuring Vehicle Seating Accommodations."

#### Width Dimensions

- W101 TREAD-FRONT. The dimension measured between the tire centerlines at the ground.
- W102 TREAD-REAR. The dimension measured between the tire centerlines at the ground. In case of dual wheels, the dimension will be measured to the centerline of tire and wheel assemblies.
- W103 VEHICLE WIDTH. The maximum dimension measured between the widest point on the vehicle, excluding exterior mirrors, flexible mud flaps, marker lamps, but including bumpers, moldings, sheet metal protrusions or dual wheels, if standard equipment.
- W106 FRONT FENDER WIDTH. The dimension measured between the widest points at the front wheel centerline, excluding moldings.
- W107 REAR FENDER WIDTH. The dimension measured between the widest points at the rear wheel centerline, excluding moldings.
- W117 BODY WIDTH AT SgRP-FRONT. The dimension measured laterally between the widest points on the body at the SgRP-front, excluding door handles, applied moldings, or appliques.
- W120 VEHICLE WIDTH-FRONT DOORS OPEN. The dimension measured between the widest point on the front doors in maximum hold-open position.
- W121 VEHICLE WIDTH-REAR DOORS OPEN. The dimension measured between the widest point on the rear doors in maximum hold-open position. For vehicles with a rear door on only one side, this dimension is to the zero "Y" plane.
- W122 TUMBLE-HOME, STRAIGHT SIDE GLASS. The angle measured from a vertical to the outside surface of the front door glass at the SgRP "X" plane.  
CURVED SIDE GLASS. The angle measured from a vertical to a chord extending from the upper DLO to the lower DLO at the outside surface of the front door glass at the front SgRP "X" plane.

#### Length Dimensions

- L101 WHEELBASE (WB). The dimension measured longitudinally between front and rear wheel centerlines. In case of dual rear axles, the dimension shall be to the midpoint of the centerlines of the rear wheels.
- L103 VEHICLE LENGTH. The maximum dimension measured longitudinally between the foremost point and the rearmost point on the vehicle, including bumper, bumper guards, tow hooks and/or rub strips, if standard equipment.
- L104 OVERHANG-FRONT. The dimension measured longitudinally from the centerline of the front wheels to the foremost point on the vehicle including bumper, bumper guards, tow hooks and/or rub strips, if standard equipment.
- L105 OVERHANG-REAR. The dimension measured longitudinally from the centerline of the rear wheels; or in the case

of dual rear axles, the dimension shall be the midpoint of the centerlines of the rear wheels, to the rearmost point on the vehicle including rear bumpers, bumper guards, tow hooks and rub strips, if standard equipment.

- L123 UPPER STRUCTURE LENGTH. The dimension measured longitudinally from the cowl point to the deck point.
- L125 COWL POINT "X" COORDINATE.
- L126 FRONT END LENGTH. The dimension measured longitudinally from the cowl point to the foremost point on the vehicle at the zero "Y" plane excluding ornamentation or bumpers. In cases where bumpers and/or grills are integrated with the profile, measurement is made at the foremost point of front end contour.
- L127 REAR WHEEL CENTERLINE "X" COORDINATE or in the case of dual rear axles, the coordinate shall be the midpoint of the distance between the rear axle centerlines.
- L129 REAR END LENGTH. The dimension measured longitudinally from the deck point to the rearmost visible point of the body sheet metal at the zero "Y" plane, excluding ornamentation or bumpers.

#### Height Dimensions

- H101 VEHICLE HEIGHT. The dimension measured vertically from the highest point on the vehicle body to ground.
- H111 ROCKER PANEL-REAR TO GROUND. The dimension measured vertically from the bottom of the rocker or side quarter panel at the front of the rear wheel opening, excluding flanges, to ground.
- H112 ROCKER PANEL-FRONT TO GROUND. The dimension measured vertically from the foremost point on the bottom of the rocker panels, excluding flanges, to ground.
- H114 COWL POINT TO GROUND. Measured at zero "Y" plane.
- H121 BACKLIGHT SLOPE ANGLE. The angle between the vertical reference line and the surface of backlight at vehicle zero "Y" plane. For curve backlight, the angle is to chord of backlight arc from lower DLO to upper DLO.
- H122 WINDSHIELD SLOPE ANGLE. The angle between the vertical reference line and a chord of the windshield arc running from the lower DLO to the upper DLO at the vehicle zero "Y" plane. In the case of wrap over glass, the angle to be measured will be formed by a chord 457 mm (18.0 in) long drawn from the lower DLO to the intersecting point on the windshield.
- H133 BOTTOM OF DOOR CLOSED-FRONT TO GROUND. The dimension measured vertically from the bottom outside corner of the door on the lock pillar side, in maximum closed position, to ground.
- H135 BOTTOM OF DOOR CLOSED-REAR TO GROUND. The dimension measured vertically from the bottom outside corner of the door on the lock pillar side, in maximum closed position, to ground.
- H138 DECK POINT TO GROUND. Measured at zero "Y" plane.
- H109 STATIC LOAD-TIRE RADIUS-REAR. Specified by the manufacturer in accordance with composite TIRE SECTION STANDARD.

#### Ground Clearance Dimensions

- H102 FRONT BUMPER TO GROUND. The minimum dimension measured vertically from the lowest point on the front bumper to ground, including bumper guards, if standard equipment.
- H103 FRONT BUMPER TO GROUND-CURB MASS (WT.). Measured in the same manner as H102.



# MVMA Specifications Form

## METRIC (U.S. Customary)

### Interior Vehicle And Body Dimensions - Key Sheet Dimensions Definitions

- H104 REAR BUMPER TO GROUND.** The minimum dimension measured vertically from the lowest point on the rear bumper to ground, including bumper guards, if standard equipment.
- H105 REAR BUMPER TO GROUND - CURB MASS (WT.).** Measured in the same manner as H104.
- H106 ANGLE OF APPROACH.** The angle measured between a line tangent to the front tire static loaded radius arc and the initial point of structural interference forward of the front tire to ground. The limiting structural component shall be designated.
- H107 ANGLE OF DEPARTURE.** The angle measured between a line tangent to the rear tire static loaded radius arc and the initial point of structural interference seaward of the rear tire to ground. The limiting component shall be designated.
- H147 RAMP BREAKOVER ANGLE.** The angle measured between two lines tangent to the front and rear tire static loaded radius and intersecting at a point on the underside of the vehicle which defines the largest ramp over which the vehicle can roll.
- H153 REAR AXLE DIFFERENTIAL TO GROUND.** The minimum dimension measured from the rear axle differential to ground.
- H156 MINIMUM RUNNING GROUND CLEARANCE.** The minimum dimension measured from the sprung vehicle to ground. Specify location.

#### Glass Areas

- S1** Windshield area.
- S2** Side windows area. Includes the front door, rear door, vents, and rear quarter windows on both sides of the vehicle.
- S3** Backlight areas.
- S4** Total area. Total of all areas (S1 + S2 + S3).

#### Fiducial Mark Dimensions

- Fiducial Mark - Number 1**
- L54** "X" coordinate.
- W21** "Y" coordinate.
- H81** "Z" coordinate.
- H161** Height "Z" coordinate to ground at curb weight.
- H163** Height "Z" coordinate to ground.
- Fiducial Mark - Number 2**
- L55** "X" coordinate.
- W22** "Y" coordinate.
- W82** "Z" coordinate.
- H162** Height "Z" coordinate to ground at curb weight.
- H164** Height "Z" coordinate to ground.

#### Front Compartment Dimensions

- L7 STEERING WHEEL TORSO CLEARANCE.** The minimum dimension measured in the side view from the rearmost edge of the steering wheel, with front wheels in the straight ahead position, to the torso line.
- L11 ACCELERATOR HEEL POINT TO STEERING WHEEL CENTER.** The dimension measured horizontally from the AHP to the intersection of the steering column centerline and a plane tangent to the upper surface of the steering wheel rim.
- L17 DESIGN H-POINT-FRONT TRAVEL.** The dimension measured horizontally between the design H-point-front in the foremost and rearmost seat track positions. (See SAE J1100)
- L23 NORMAL DRIVING AND RIDING SEAT TRACK TRAVEL.** The dimension measured horizontally between a point on the design H-point travel line from the SgRP to the displaced point on the design H-point travel line with the seat moved to the foremost seat position, but not to include seat track travel used for purposes other than normal driving and riding positions. (See SAE J1100)

- L31 SgRP-FRONT. "X" COORDINATED.**
- L34 MAXIMUM EFFECTIVE LEG ROOM-ACCELERATOR.** The dimension measured along a line from the ankle pivot center to the SgRP-front plus 254 mm (10.0 in) measured with right foot on the undepressed accelerator pedal. For vehicles with SgRP to heel (L30) greater than 18 in., the accelerator pedal may be depressed as specified by the manufacturer. If left accelerator is depressed, the manufacturer shall place foot flat on pedal and note the depression of the pedal.
- L40 BACK ANGLE-FRONT.** The angle measured between a vertical line through the SgRP-front and the torso line. If the seatback is adjustable, use the normal driving and riding position specified by the manufacturer.
- L42 HIP ANGLE-FRONT.** The angle measured between torso line and thigh centerline.
- L44 KNEE ANGLE-FRONT.** The angle measured between thigh centerline and lower leg centerline measured on the right leg.
- L46 FOOT ANGLE-FRONT.** The angle measured between the lower leg centerline and a line tangent to the ball and heel of the bare foot flesh line measured on the right leg. Ref SAE J826.
- L53 SgRP-FRONT TO HEEL.** The dimension measured horizontally from the SgRP-front to the accelerator heel point.
- W3 SHOULDER ROOM-FRONT.** The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP-front at height between the belt line and 254 mm (10.0 in.) above the SgRP-front, excluding the door assist strap and attaching parts.
- W5 HIP ROOM-FRONT.** The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP-front within 25 mm (1.0 in.) below 76 mm (3.0 in.) above the SgRP-front and 76 mm (3.0 in.) fore and aft of the SgRP-front.
- W9 STEERING WHEEL MAXIMUM OUTSIDE DIAMETER.** Define if other than round.
- H13 STEERING WHEEL TO CENTERLINE OF THIGH.** The minimum dimension measured from the bottom of steering wheel, with front wheels in the straight position, to the thigh centerline.
- H17 ACCELERATOR HEEL POINT TO THE STEERING WHEEL CENTER.** The dimension measured vertically from the AHP-front to the intersection of the steering column centerline to a plane tangent to the upper surface of the steering wheel rim.
- H18 STEERING WHEEL ANGLE.** The angle measured from a vertical to the surface plane of the steering wheel.
- H30 SgRP-FRONT TO HEEL.** This dimension measured vertically from the SgRP-front to the accelerator heel point.
- H37 HEADLINING TO ROOF PANEL-FRONT.** The dimension measured from the intersection of the headlining and the extended effective head roof line normal to the sheet metal.
- H50 UPPER BODY OPENING TO GROUND-FRONT.** The dimension measured vertically from the trimmed body opening to the ground on the SgRP-front "X" plane.
- H81 EFFECTIVE HEAD ROOM-FRONT.** The dimension measured along a line 6 deg. rear of vertical from the SgRP-front to the headlining plus 102 mm (4.0 in.).
- H87 FLOOR COVERING THICKNESS-UNDEPRESSED-FRONT.** The dimension measured vertically from the surface of the undepressed floor covering to the underbody sheet metal at the accelerator heel point.

#### Rear Compartment Dimensions

- L3 COMPARTMENT ROOM-SECOND.** The dimension measured horizontally from the back of the front seat to the front of the second seatback at a height tangent to the top of the second seat cushion.

# MVMA Specifications Form

## METRIC (U.S. Customary)

### Interior Vehicle And Body Dimensions - Key Sheet Dimensions Definitions

- L-41 **BACK ANGLE-SECOND.** The angle measured between a vertical line through the SgRP-second and the torso line.
- L43 **HIP ANGLE-SECOND.** The angle measured between torso line and thigh centerline.
- L45 **KNEE ANGLE-SECOND.** The angle measured between thigh centerline and lower leg centerline.
- L47 **FOOT ANGLE-SECOND.** The angle measured between the lower leg centerline and a line tangent to the ball and heel of the three-dimensional device bare foot flesh line (Reference J825).
- L48 **KNEE CLEARANCE-SECOND.** The minimum dimension measured from the knee pivot center to the back of the front seatback minus 51 mm (2.0 in.).
- L50 **SgRP COUPLE DISTANCE-SECOND.** The dimension measured horizontally from the driver SgRP-front to the SgRP-second.
- L51 **MINIMUM EFFECTIVE LEG ROOM-SECOND.** The dimension measured along a line from the ankle pivot center to the SgRP-second plus 254mm (10.0 in.).
- W4 **SHOULDER ROOM-SECOND.** The minimum dimension measured laterally between door or quarter trimmed surfaces on the "X" plane through the SgRP-second at height between 254-406 mm (10.0-16.0 in.) above the SgRP-second, excluding the door assist straps and attaching parts.
- W6 **HIP ROOM-SECOND.** Measured in the same manner as W5.
- H31 **SgRP-SECOND TO HEEL.** The dimension measured vertically from the SgRP-second to the two dimensional device heel point on the depressed floor covering.
- H38 **HEADLINING TO ROOF PANEL-SECOND.** The dimension measured from the intersection of the headlining and the extended effective head room line normally to the roof sheet metal.
- H51 **UPPER BODY OPENING TO GROUND-SECOND.** The dimension measured vertically from the trimmed body opening to the ground on the "X" plane 330 mm (13.0 in.) forward of the SgRP-second.
- H63 **EFFECTIVE HEAD ROOM-SECOND.** The dimension measured along a line 8 deg. rear of vertical from the SgRP to the headlining, plus 102 mm (4.0 in.).
- H73 **FLOOR COVERING-DEPRESSED-SECOND.** The dimension measured vertically from the heel point to the underbody sheet metal.

#### Luggage Compartment Dimensions

- V1 **USABLE LUGGAGE CAPACITY-**Total of volumes of individual pieces of standard luggage set plus H-boxes stowed in the luggage compartment in accordance with the procedure described in paragraph 8.2 of SAE-J1100a.
- H195 **LIFTOVER HEIGHT.** The dimension measured vertically from the luggage compartment lower opening at the zero "Y" plane to ground.

#### Interior Volumes (EPA Classification)

The Interior Volume Index is listed for each body style except two seaters. The interior volume index estimates the space in a car. It is based on four measurements - head room, shoulder room, hip room, and leg room - for the front and rear seats, plus trunk capacity. The interior volume index is an estimate of the size of the passenger compartment.

The Trunk/Cargo Index is an estimate of the size of the trunk/cargo space. In station wagons and hatchbacks it is an estimate of the space behind the second seat.

#### Station Wagon - Third Seat Dimensions

- L85 **SgRP COUPLE DISTANCE-THIRD.** The dimension measured horizontally from the SgRP-second to the SgRP-third.
- L86 **EFFECTIVE LEG ROOM-THIRD.** The dimension measured along a line from the ankle pivot center to the SgRP-third plus 254 mm (10.0 in.).
- L87 **KNEE CLEARANCE-THIRD.** The minimum dimension from the knee pivot center to the back of second seatback minus a constant of 51mm (2.0 in.). With rear-facing third seat, dimension is measured to closure.
- L88 **BACK ANGLE-THIRD.** Measured in the same manner as L41.
- L89 **HIP ANGLE-THIRD.** Measured in the same manner as L43.
- L90 **KNEE ANGLE-THIRD.** Measured in the same manner as L45.
- L91 **FOOT ANGLE-THIRD.** Measured in the same manner as L47.
- W85 **SHOULDER ROOM-THIRD.** Measured in the same manner as W4.
- W86 **HIP ROOM-THIRD.** Measured in the same manner as W5.
- H86 **EFFECTIVE HEAD ROOM-THIRD.** The dimension, measured along a line 8 deg. from the SgRP-third to the headlining rear of vertical plus a constant of 102 mm (4.0 in.).
- H87 **SgRP-THIRD TO HEEL POINT.**
- SD1 **SEAT FACING DIRECTION-THIRD.**

#### Station Wagon - Cargo Space Dimensions

- L200 **CARGO LENGTH-OPEN-FRONT.** The minimum dimension measured longitudinally from the back of the front seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo surface if the rear closure is a conventional door type tailgate at the zero "Y" plane.
- L201 **CARGO LENGTH-OPEN-SECOND.** The dimension measured longitudinally from the back of the second seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo floor surface if the rear closure is a conventional door type tailgate, at the zero "Y" plane.
- L202 **CARGO LENGTH-CLOSED-FRONT.** The minimum dimension measured horizontally from the back of the front seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.
- L203 **CARGO LENGTH-CLOSED-SECOND.** The dimension measured horizontally from the back of the second seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.
- L204 **CARGO LENGTH AT BELT-FRONT.** The minimum dimension measured horizontally from the back of the front seatback at the seatback top to the foremost normal surface of the closed tailgate or inside surface of the cab backpanel at the height of the belt, on the zero "Y" plane.
- L205 **CARGO LENGTH AT BELT-SECOND.** The minimum dimension measured horizontally from the back of the second seatback at the seatback top to the foremost normal surface of the closed tailgate at the height of the belt, on the zero "Y" plane.
- W201 **CARGO WIDTH-WHEELHOUSE.** The minimum dimension measured laterally between the trimmed wheelhouseings at floor level. For any vehicle not trimmed, measure to the sheet metal.

# MVMA Specifications Form

## METRIC (U.S. Customary)

### Interior Vehicle And Body Dimensions - Key Sheet Dimensions Definitions

- W203 REAR OPENING WIDTH AT FLOOR.** The minimum dimension measured laterally between the limiting interferences of the rear opening at floor level.
- W204 REAR OPENING WIDTH AT BELT.** The minimum dimension measured laterally between the limiting interferences of the rear opening at belt height or top of pick up box.
- W205 REAR OPENING WIDTH ABOVE BELT.** The minimum dimension measured laterally between the limiting interferences of the rear opening above the belt height.
- H197 FRONT SEATBACK TO LOAD FLOOR HEIGHT.** The dimension measured vertically from the horizontal tangent to the top of the seatback to the undepressed floor covering.
- H201 CARGO HEIGHT.** The dimension measured vertically from the top of the undepressed floor covering to the headlining at the rear wheel "X" coordinate on the zero "Y" plane.
- H202 REAR OPENING HEIGHT.** The dimension measured vertically from the top of the undepressed floor covering to the upper trimmed opening on the zero "Y" plane with rear door fully open.
- H250 TAILGATE TO GROUND CURB MASS (WT.).** The dimension measured vertically from the top of the undepressed floor covering on the lowered tailgate to ground on the zero "Y" plane.
- V2 STATION WAGON**  
Measured in inches:  

$$\frac{W4 \times H201 \times L204}{1728} = \text{ft}^3$$
 Measured in mm:  

$$\frac{W4 \times H201 \times L204}{10^9} = \text{m}^3 \text{ (cubic meter)}$$
- V4 HIDDEN LUGGAGE CAPACITY-REAR OF FRONT SEAT.** The total volumes of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the front seat.
- V5 TRUCKS AND MPV'S WITH OPEN AREA.**  
Measured in inches:  

$$\frac{L506 \times W500 \times H503}{1728} = \text{ft}^3$$
 Measured in mm:  

$$\frac{L506 \times W500 \times H503}{10^9} = \text{m}^3 \text{ (cubic meter)}$$
- V6 TRUCKS AND MPV'S WITH CLOSED AREA.**  
Measured in inches:  

$$\frac{L204 \times W500 \times H505}{1728} = \text{ft}^3$$
 Measured in mm:  

$$\frac{L204 \times W500 \times H505}{10^9} = \text{m}^3 \text{ (cubic meter)}$$
- V8 HIDDEN LUGGAGE CAPACITY-REAR OF SECOND SEAT.** The total volume of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the second seat.
- V10 STATION WAGON CARGO VOLUME INDEX.**  
Measured in inches:  

$$\frac{H201 \times L205 \times \frac{W4 + W201}{2}}{1728} = \text{ft}^3$$
 Measured in mm:  

$$\frac{H201 \times L205 \times \frac{W4 + W201}{2}}{10^9} = \text{m}^3 \text{ (cubic meter)}$$

### Hatchback - Cargo Space Dimensions

All hatchback cargo dimensions are to be taken with the front seat in full down and rear position, and the rear seat folded down. The hatchback door is in the closed position. (For electrically adjusted seats, see the manufacturer's specifications for Design "H" Point).

- L208 CARGO LENGTH AT FRONT SEATBACK HEIGHT.** The minimum horizontal dimension from the "X" plane tangent to the rearmost surface of the driver's seatback to the inside limiting interference of the hatchback door on the vehicle zero "Y" plane.
- L209 CARGO LENGTH AT FLOOR-FRONT-HATCHBACK.** The minimum horizontal dimension measured at floor level from the rear of the front seatback to the normal limiting interference of the hatchback door on the vehicle zero "Y" plane.
- L210 CARGO LENGTH AT SECOND SEATBACK HEIGHT-HATCHBACK.** The minimum dimension measured from the "X" plane tangent to the rearmost surface of second seatback or the load floor which is stowed at least one half of the H198 dimension height above the rear load floor, to the rearmost inside limiting interference on the zero "Y" plane.
- L211 CARGO LENGTH AT FLOOR-SECOND HATCHBACK.** The minimum horizontal dimension measured at floor level from the rear of the second seatback or load floor panel to the normal limiting interference of the hatchback door on the vehicle zero "Y" plane.
- H197 FRONT SEATBACK TO LOAD HEIGHT.** The dimension measured vertically from the horizontal tangent to the top of the seatback to the undepressed floor covering.
- H198 SECOND SEATBACK TO LOAD FLOOR HEIGHT.** The dimension measured vertically from the second seat back to the undepressed floor covering.
- V3 HATCHBACK.**  
Measured in inches:  

$$\frac{L208 + L209}{2} \times W4 \times H197 = \text{ft}^3$$
 Measured in mm:  

$$\frac{L208 + L209}{2} \times W4 \times H197 = \text{m}^3 \text{ (cubic meter)}$$
- V4 HIDDEN LUGGAGE CAPACITY-REAR OF FRONT SEAT.** The total volumes of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the front seat.
- V11 HATCHBACK CARGO VOLUME INDEX.** Usable luggage (one (1) stand and luggage set) below floor.  
Measured in inches:  

$$\frac{L210 + L211}{2} \times W4 \times H198 = \text{ft}^3$$
 Measured in mm:  

$$\frac{L210 + L211}{2} \times W4 \times H198 = \text{m}^3 \text{ (cubic meter)}$$

# MVMA Specifications Form

## METRIC (U.S. Customary)

### Index

Subject	Page No.	Subject	Page No.
Aerodynamics	23	Origin	1
All Wheel Drive	10	Passenger Capacity	1
Alternator	16	Passenger Mass Distribution	25
Automatic Transmission / Transaxle	8, 9	Pistons	3
Axis, Steering	14	Power Brakes	12
Axis, Drive, Front, Rear, All, Four	2, 9, 10	Power, Engine	2
Axis Shafts	10	Power Steering	14
Battery	16	Power Teams	2
Body and Miscellaneous Information	17	Propeller Shaft, Universal Joints	10
Brake-Parking, Service	12, 13	Pumps - Fuel	6
Camber	15	Water	5
Camshaft	3	Radiator - Cap, Hoses, Core	5
Capacitors		Ratios - Axle, Transaxle	2, 9
Cooling System	5	Compression	2
Fuel Tank	6	Steering	14
Lubricants		Transmission / Transaxle	2, 8, 9
Engine Crankcase	4	Rear Axle	2, 9, 10
Transmission / Transaxle	8, 9	Regulator - Alternator	16
Rear Axle	10	Restraint System	18
Carburetor	2, 6	Rims	13
Caster	15	Rods - Connecting	4
Clutch - Pedal Operated	8	Scrub Radius	14
Coil, Ignition	16	Seats	17
Connecting Rods	4	Shock Absorbers, Front & Rear	11
Convenience Equipment	19-20	Spark Plugs	16
Cooling System	5	Speedometer	15
Crankshaft	4	Springs - Front & Rear Suspension	11
Cylinders and Cylinder Head	3	Stabilizer (Sway Bar) - Front & Rear	11
Diesel Information	4	Starting System	16
Dimension Definitions		Steering	14
Key Sheet - Exterior	27, 30, 31	Suppression - Ignition, Radio	16
Key Sheet - Interior	28, 29, 31, 32, 33	Suspension - Front & Rear	11
Electrical System	15, 16	Tail Pipe	7
Emission Controls	7	Theft Protection	20
Engine - General		Thermostat, Cooling	5
Bore, Stroke, Type	3	Tires	13
Compression Ratio	2	Toe-In	15
Displacement	2, 3	Torque Converter	9
Firing Order, Cylinder Numbering	3	Torque - Engine	2, 8, 9
General Information, Power & Torque	2	Transaxle	9
Intake System	4	Transmission - Types	2, 8, 9
Power Teams	2	Transmission - Automatic	2, 8, 9
Exhaust System	7	Transmission - Manual	2, 8, 9
Equipment Availability, Convenience	19	Transmission - Ratios	2, 9
Fan, Cooling	5	Tread	21
Filters - Engine Oil, Fuel System	4	Trunk Cargo Load	1
Four Wheel Drive	10	Trunk Luggage Capacity	22
Frame	18	Turning Diameter	14
Front Suspension	11	Unlized Construction	18
Front Wheel Drive Unit	10	Universal Joints, Propeller Shaft	10
Fuel System	6	Valve System	4
Fuel Injection	6	Vehicle Dimensions	
Fuel Tank	6	Width	21
Glass	18	Length	21
Headlamps	18	Height	21
Headroom - Body	22, 23	Ground Clearance	21
Height	21	Front Compartment	22
Horns	18	Rear Compartment	22
Horsepower - Brake	2	Luggage Compartment	22
Ignition System	16	Station Wagon - Third Seat	23
Inflation - Tires	13	Station Wagon - Cargo Space	23
Interior Volumes	22	Hatchback - Cargo Space	23
Instruments	15	Fluidal Marks	24
Lagroom	22, 23	Voltage Regulator	16
Lengths	21	Water Pump	5
Leveling, Suspension	11	Weights	21, 26
Lifts, Valve	4	Wheel Alignment	15
Linings - Clutch, Brake	8, 12	Wheelbase	21
Lubrication - Engine Transmission / Transaxle	4, 8, 9	Wheels & Tires	13
Luggage Compartment	22	Wheel Spindle	14
Models	1	Widths	21
Motor Starting	16	Windshield	18
Muffler	7	Windshield Wiper and Washer	15

