
MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1990

| | | |
|---|------------------------------------|-----------------------------------|
| Manufacturer Suzuki Motor Co., LTD | Vehicle Line Geo TRACKER | |
| Mailing Address Chevrolet-Pontiac-Canada Group Engineering Center General Motors Corporation 30003 Van Dyke Warren, Michigan 48090-9060 | Issued June, 1989 | Revised September, 1989 |

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.

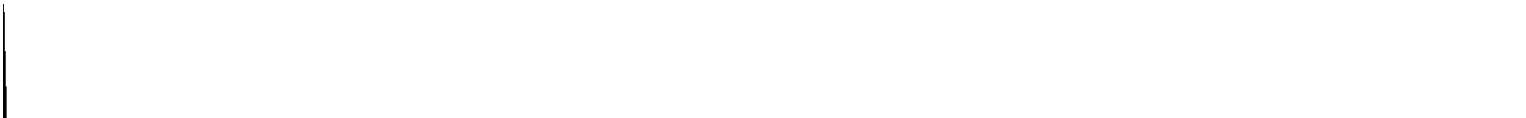


Motor Vehicle Manufacturers Association
of the United States, Inc.

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MVMA Specifications

METRIC (U.S. Customary)

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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) specs. 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.

FORM MVMA-90



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MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*) 9-89

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o Vehicle Origin

| | |
|--|------------------------|
| Design & development (company) | SUZUKI MOTOR CO., LTD. |
| Where built (country) | JAPAN/CANADA |
| Authorized U.S. Sales marketing representative | Geo |

o Vehicle Models

| Model Description & Drive (FWD/RWD/AWD/4WD)* | Introduction Date | Make, Vehicle Models, Series, Body Type (Mfg's Model Code) | No. of Designated Seating Positions (Front/Rear) | Max. Trunk/Cargo Load-Kilograms (Pounds) |
|--|-------------------|--|--|--|
| Geo TRACKER Convertible (4WD) | | J10367 | 2 | 408 (900) (2-PASS) |
| Geo TRACKER Hardtop (4WD) | | J10316 | 2 | 408 (900) (2-PASS) |

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

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Engine Description
 Engine Code

1.6 LITER L4 (97 CID)
 THROTTLE BODY INJECTION RPO LS5

ENGINE - GENERAL

| | | |
|--|---|-------------------------------------|
| Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, 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.) |
| Cyl block matl & 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.) |
| Cyl. head material & mass kg (lbs.) | | Aluminum Alloy, 6.9 (15.2) |
| Cylinder head volume (cu. cm.) | | 32.2 |
| Cylinder liner material | | Cast Iron |
| Head gasket thickness (compressed) | | 1.2 mm (0.05 in.) |
| Minimum combustion chamber total volume (cm. cu.) | | 44.6 |
| Cyl. no. system (front to rear) | L. Bank | 1-2-3-4 |
| | R. Bank | --- |
| Firing order | | 1-3-2-4 |
| Intake manifold matl & mass(kg(lbs.))** | | Aluminum Alloy, 2.6 (5.7) |
| Exh. manifold matl & mass [kg (lbs.)]** | | Cast Iron, 3.9 (8.6) |
| Fuel required unleaded, diesel, etc. | | Unleaded |
| Fuel antiknock index (R + M) / 2 | | 87 |
| Engine mounts | Quantity | 3 |
| | Matl 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 lbs.) |

Engine - Pistons

| | |
|--|---------------------------|
| Material & mass, g (weight, oz.) - piston only | Aluminum Alloy, 226 (7.9) |
|--|---------------------------|

Engine Camshaft

| | | |
|-----------------------------------|-------------|------------------------------|
| Location | | In Cylinder Head |
| Material & mass kg (weight, lbs.) | | Cast Iron, 2,145 (4.73) |
| Drive type | Chain/belt | Belt |
| | Width/pitch | 19.1/9.53 mm (0.75/0.38 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:

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 THROTTLE BODY INJECTION RPO LS5

Engine - Valve System

| | | |
|------------------------------------|--------------------------|------------------------------|
| Hydraulic lifters (std., opt., NA) | | Not Applicable |
| Valves | Number intake/exhaust | 4/4 |
| | Head O.D. intake/exhaust | 36.6/32.5 mm (1.44/1.28 in.) |

Engine - Connecting Rods

| | |
|---|-----------------------------|
| Material & mass [kg., (weight, lbs.)]* | Forged Steel, 0.396 (0.873) |
| Length(axis centerline to centerline)mm | 139.6 |

Engine - Crankshaft

| | | |
|--|-------------------------------|---|
| Material & mass [kg., (weight, lbs.)]* | Nodular Cast 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) @ eng rpm] | 40 (0.58) @ 4,000 |
| Type oil intake (floating, stationary) | Stationary |
| Oil filter sys. (full flow, part, other) | Full Flow |
| Capacity of c/case, less filter-refill-L (qL) | 4.0 (4.2) |

Engine - Diesel Information (NOT APPLICABLE)

| | |
|---|----------------------------|
| Diesel engine manufacturer | |
| Glow plug, current drain at 0 deg. F | |
| Injector Nozzle | Type |
| | Opening pressure[kPa(PSI)] |
| Pre-chamber design | |
| Fuel injection pump | Manufacturer |
| | Type |
| Fuel inj. 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 (NOT APPLICABLE)

| | |
|------------------------------|--|
| Turbo charger - manufacturer | |
| Super charger - manufacturer | |
| Intercooler | |

* Finished State

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|--------------------|---------------------------------|
| Engine Description | 1.6 LITER L4 (97 CID) |
| Engine Code | THROTTLE BODY INJECTION RPO LS5 |

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 @ deg's 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, AT: 5.2, MT: 5.6*, AT: 5.5* |
| | With air conditioner-L (qt.) | Not Applicable |
| | Opt. equip. [specify-L (qt.)] | " |
| Water jackets full length of cycles (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 & Tube |
| | Matl., mass [kg(wgt., lbs.)] | Aluminum, 3.0 (6.6) |
| | Width | MT: 487.7 mm, AT: 507.8 mm, MT: 482 mm*, AT: 504 mm* |
| | Height | 375 mm (14.76 in.) |
| | Thickness | 32 mm, 34 mm* (1.26, 1.34* in.) |
| | Fins per inch | MT: 3.5 mm/2, AT: 3.5 mm/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 crnkshft, rev.) | 117:130 |
| | Fan cutout type | Bimetal & Fluid Coupling |
| | Drive type (direct, remote) | Clutch Fan, Remote |
| | RPM at idle (elec.) | 800 |
| | Motor rating (wattage) (elec.) | Not Applicable |
| | Motor switch (type & location) (elec.) | " |
| | Switch point (temp., pressure) (elec.) | " |
| Fan shroud (material) | | Plastics |

Note: * Indicates CAMI Production

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 THROTTLE BODY INJECTION RPO L55

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

| | | |
|---|--|---|
| Induction type: carburetor, fuel injection system, etc. | | Fuel Injection |
| Manufacturer | | Mitsubishi - Mikuni |
| Carburetor no. of barrels | | Not Applicable |
| Idle A/F mix. | | 14.6 |
| Fuel Injection | Point of inj. (no.) | Throttle Body (1) |
| | Constant, pulse, flow | Pulse Flow |
| | Control (elec., mech.) | Electronic |
| | Sys. press. [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 |
| Fuel pump | Type (elec. or mech.) | Electrical |
| | Location (eng., tank) | Fuel tank |
| | Press. range [kPa(psi)] | 250 (36) |
| | Flow rate at regulated pressure (L (gal)/hr @ kPa (psi)) | 80 (21.1) @ 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) |
| Filler 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) | | Not Applicable |
| Vapor line (material) | | " |
| Extended range tank | Opt., n.a. | Not |
| | Capacity [L (gallons)] | Applicable |
| | Location & material | |
| | Attachment | |
| Auxiliary tank | Opt., n.a. | Not |
| | Capacity [L (gallons)] | Applicable |
| | Location & material | |
| | Attachment | |
| | Sictr switch or valve | |
| Separate fill | | |

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 THROTTLE BODY INJECTION RPO L55

Vehicle Emission Control

| | | | |
|------------------------------|--|--|--------------------------|
| Exhaust Emission Control | Type (air injection, engine modifications, other) | | EFI + 3 Way Catal. + EGR |
| | Air injection | Pump or pulse | Not Applicable |
| | | Driven by | " |
| | | Air distribution (head, manifold, etc.) | " |
| | | Point of entry | " |
| | Exhaust Gas Recirculation | Type (controlled flow, open orifice, other) | Backpressure Controlled |
| | | Exhaust source | |
| | Catalytic Converter | Point of exh.inj. (spacer, carb., manifold, other) | Manifold |
| | | Type | Single Bed |
| | | Number of | 2 |
| Location(s) | | Under Floor | |
| Volume [L(cu.in)] | | 1.4 (85) | |
| Substrate type | | Monolith | |
| Noble metal type | | Platinum (Pt), Rhodium (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 inlt(breather cap, other) | | Air Intake Case |
| Evaporative Emission Control | Vapor vented to crankcase, canister, other) | Fuel tank | Canister |
| | | Carburetor | Not Applicable |
| | 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:35-1.2 mm (1.80-0.05 in.), Outer:48.6-1.2 mm (1.91-0.05 in.) |
| | Main o.d., wall thickness | 42.7 - 1.5 mm (1.68 - 0.06 in.) |
| | Matl. & Mass [kg(wght.lbs.)] | Stainless Steel & Aluminum Coated Steel, 7.5 (16.5) |
| Intermediate pipe | o.d. & wall thickness | 42.7 - 1.2 mm (1.68 - 0.05 in.) |
| | Matl. & Mass [kg(wght.lbs.)] | Aluminum Coated Steel, 7.0 (15.4) |
| Tail pipe | o.d. & wall thickness | 38.1 - 1.2 mm (1.45 - 0.05 in.) |
| | Matl. & Mass [kg(wght.lbs.)] | Aluminum Coated Steel, 1.5 (3.3) |

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| | |
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| Engine Code | THROTTLE BODY INJECTION RPO L55 |

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

| | |
|--|--|
| Manual 3-speed (manufacturer/country) | Not Applicable |
| Manual 4-speed (manufacturer/country) | Not Applicable |
| Manual 5-speed (manufacturer/country) | Suzuki Motor Co., Ltd./Japan, Std. |
| Automatic (manufacturer/country) | Hydra-Matic, Strasbourgh, General Motors, France |
| Auto, 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 (hyd., cable, rod, lever, other) | | Cable |
| Max. pedal effort (nom. spring load, new) N (lbs.) | Depressed | 120 |
| | Released | 75 |
| Assist (spring, power/percent, nominal) | | Not Applicable |
| Type pressure plate springs | | Diaphragm Spring |
| Total spring load (nominal, new) N(lbs) | | 3,530 |
| Clutch facing | Facing mfr. & mat'l. coding | Daikin Manufacturing Co. Ltd., HN603 |
| | Facing mat'l. & construction | Non-Asbestos, Semi-Mold |
| | Rivets per facing | 16 |
| | Outside x inside dia. (nom.) | 200 x 140 mm (7.87 x 5.51 in.) |
| | Total eff. area [sq cm (sq in)] | 160 |
| | Thickness (pressure plate side/fly wheel side) | 3.5/3.5 mm (0.138/0.138 in.) |
| | Rivet depth (pressure plate side/fly wheel side) | 1.3 - 1.9 (0.051-0.075 in.) / 1.3 - 1.9 mm (0.051-0.075 in.) |
| Engagement cushion method | | Separate Cushion Type |
| Release bearing type & method lub. | | Automatic Center Adjusting Type Without Grease Lubrication |
| Torsional damping method, springs, hysteresis | | Spring Type |

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

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 THROTTLE BODY INJECTION RPO L55

○ Automatic Transmission/Transaxle

| | | |
|--|-------------------------------------|---------------------------------------|
| Trade Name | | 3-Speed Automatic |
| Type and special features (describe) | | Torque Converter With Planetary Gears |
| Gear selector | Location (column, floor, other) | Floor Mounted |
| | Ltr./No. designation (e.g. PRND21) | P-R-N-D-2-L |
| | Shift interlock (yes, no, describe) | Yes |
| Gear ratios | 1st | 2.40 (Equivalent) |
| | 2nd | 1.48 " |
| | 3rd | 1.00 " |
| | 4th | Not Applicable |
| | Reverse | 1.92 " |
| Max. upshift speed - drive range [km/h (mph)] | | 56.4 (35) [1-2], 101.9 (63) [2-3] |
| Max. kickdown speed - drive range [km/h (mph)] | | 44.2 (27) [2-1], 93.1 (58) [3-2] |
| Min. overdrive speed [km/h (mph)] | | Not Applicable |
| Torque converter | Number of elements | 3 |
| | Max. ratio at stall | 2.40:1 |
| | Type of cooling (air, liquid) | Liquid |
| | Nominal diameter | 245 mm (9.6 in.) |
| | Capacity factor K^m | 260 |
| Lubricant | Capacity (refill L (pt.)) | 5.1 (10.8) |
| | Type recommended | DEXRON II |
| Oil cooler (std., opt., N.A., internal, external, air, liquid) | | Radiator |
| Trans. mass [kg(lbs)] & case matl.** | | Aluminum, 64.2 (141) |

○ All Wheel / 4 Wheel Drive

| | | |
|--|--|----------------------------|
| Desc. & type (part-time, full-time, 2/4 shift while moving, mech., elect., chain/gear, etc.) | | Part-Time |
| Transfer case | Manufacturer and model | Suzuki Motor Co., Ltd. |
| | Type and location | Constant Mesh Helical Gear |
| Low-range gear ratio | | 1.816 |
| System disconnect (describe) | | Floor Shift |
| Center differential | Type (bevel, planetary, w or w/o viscous bias, torsen, etc.) | Not Applicable |
| | Torque split(% frt/rear) | " |

* Input speed / square root of torque.
 ** Includes torque converter, lubricant and shift linkage

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Axle Ratio and Tooth Combinations (See 'Power Teams' for axle ratio usage)

| | | | |
|---|---|-------------------|----|
| Effec. final drv. ratio (or overall top gear ratio) | 5.125 (Manual) | 4.625 (Automatic) | |
| Trnsfr ratio and method(chain,gear,etc) | 1.00 (High Range), 1.82 (Low Range), Gear | | |
| Front drive unit | Ring gear o.d. | 175 mm (6.89 in.) | |
| | No. of teeth | Pinion | 8 |
| | | Ring gear | 37 |

Front Drive Unit

| | | |
|--|---|----------------------|
| Description (integral to trans., etc.) | Differential With Hypoid Gear And Taper Bearing | |
| Limited slip differential (type) | None | |
| Drive pinion | Type | Hypoid Gear |
| | Offset | 23 mm (0.906 in.) |
| No. of differential pinions | 2 | |
| Pinion/differential | Adjustment (shim, etc.) | Shim |
| | Bearing adjustment | Collapsible |
| Driving wheel bearing (type) | Taper Bearing | |
| Lubricant | Capacity [L (pt.)] | 1.0 |
| | Type recommended | Hypoid Gear Oil GL-5 |
| | SAE Viscosity Number | 75W-85 |

Axle Shafts - Front Wheel Drive

| | | | | |
|---|------------------------------|--|----------------------------------|--|
| Manufacturer and number used | | NTN TOYO BEARING CO., LTD. | | |
| Type (straight, solid bar, tubular, etc.) | Left | Solid Bar | | |
| | Right | Solid Bar | | |
| Outer diam. x length* x wall thickness | Manual transaxle | Left | 22 x 310.5 mm (0.87 x 12.22 in.) | |
| | | Right | 22 x 305.5 mm (0.87 x 12.03 in.) | |
| | Automatic transaxle | Left | 22 x 310.5 mm (0.87 x 12.22 in.) | |
| | | Right | 22 x 305.5 mm (0.87 x 12.03 in.) | |
| | Optional transaxle | Left | Not Applicable | |
| | | Right | " | |
| Slip yoke | Type | " | | |
| | 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 DOJ812 | |
| | | Outer | Rzeppa BJ82 | |
| | Attach (u-bolt, clamp, etc.) | Bolt & Clip | | |
| | Bearing | Type (plain, anti-friction) | Anti-Friction | |
| Lubrication (fitting, prepack) | | Prepacked | | |
| 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 | | |

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

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| Engine Description | 1.6 LITER L4 (97 CID) |
| Engine Code | THROTTLE BODY INJECTION RPO LSS |

○ Axle Ratio and Tooth Combinations (See 'Power Teams' for axle ratio usage)

| | | | |
|--|-----------|----------------|-------------------|
| Axle ratio (or overall top gear ratio) | | 5.125 (Manual) | 4.625 (Automatic) |
| Ring gear o.d. | | 190 mm | |
| No. of teeth | Pinion | 8 | 8 |
| | Ring gear | 41 | 37 |

○ Rear Axle Unit

| | | |
|----------------------------------|-------------------------|--|
| Description | | Differential With Hypoid Gear And Taper Bearings |
| Limited slip differential (type) | | None |
| Drive pinion | Type | Hypoid Gear |
| | Offset | 27 mm (1.06 in.) |
| No. of differential pinions | | 4 |
| Pinion/differential | Adjustment (shim, etc.) | Shim |
| | Bearing adjustment | Collapsible |
| Driving wheel bearing (type) | | Taper Bearing |
| Lubricant | Capacity [L (pt.)] | 2.2 |
| | Type recommended | Hypoid Gear Oil GL-5 |
| | SAE Viscosity Number | 75W-85 |

○ 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 | Not Applicable | |
| | Manual 4-speed transmission | Not Applicable | |
| | 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 2.3 mm (2.0 x 28.43 x 0.09 in.) | |
| | Overdrive | Not Applicable | |
| | 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 2.3 mm (2.0 x 28.43 x 0.09 in.) | |
| Inter-mediate bearing | Type (plain, anti-friction) | Not Applicable | |
| | Lub. (fitting, prepack) | " | |
| Slip yoke | Type | Involute Serration Hole | |
| | Number of teeth | 26 | |
| | Spline o.d. | 27 mm (1.06 in.) | |
| Universal joints | Make and mfg. no. | Front | KOYO SEIKO CO., LTD. |
| | | Rear | KOYO SEIKO CO., LTD. |
| | Number used | 4 | |
| | Type (ball and trunnion, cross) | Cross Type | |
| | Rr. attach (u-bolt, clamp, etc) | Flange and Bolts | |
| Bearing | Type (plain, anti-friction) | Needle Bearing | |
| | Lubrication (fitting, prepack) | 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 attachment.

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*) _____

METRIC (U.S. Customary)

Body Type And/Or

Engine Displacement

| | |
|-------------|---------|
| CONVERTIBLE | HARDTOP |
|-------------|---------|

Suspension - General Including Electronic Controls

| | | | |
|---------------------------------|---|--|--|
| Car leveling | Std./opt./not avail. | Not | |
| | Manual/automatic control | Applicable | |
| | 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. | Not | |
| | Manual/automatic control | Applicable | |
| | Number of damping rates | | |
| | Type of actuation (manual/electric motor/air, etc.) | | |
| | s e n s o r s | Lateral acceleration | |
| | | Deceleration | |
| | | Acceleration | |
| | | Road surface | |
| Shock absorber (front & rear) | Type | Front & Rear: Double Action Telescopic | |
| | Make | SHOWA MANUFACTURING CO., LTD.. Rear: TOKICO LTD. | |
| | Piston diameter | Ft: 32 mm (1.26 in.), Rr: 25 mm (0.98 in.) | |
| | Rod diameter | Ft: 22 mm (0.87 in.), Rr: 12.5 mm (0.49 in.) | |
| | | | |

Suspension - Front

| | | |
|----------------------|---|---|
| Type and description | McPherson Strut (Separated Coil Spring) | |
| Travel* | Full jounce | 100 mm (3.94 in.) |
| | Full rebound | 60 mm (2.36 in.) |
| Spring | Type (coil, leaf, other) & matl | Coil, Steel |
| | Insulators (type & matl) | Rubber |
| | Size (coil design height & i.d.) | 227 x 83 mm (8.93 x 3.27 in.) |
| | Spring rate [N/mm (lb./in.)] | 79.4 (452.8) |
| | Rate @ wheel [N/mm (lb./in.)] | 27.4 (156.5) |
| Stabilizer | Type (link, linkless, frmless) | Link |
| | Material & bar diameter | Steel, 024.2 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 jounce | 110 mm (4.33 in.) |
| | Full rebound | 50 mm (1.97 in.) |
| Spring | Type (coil, leaf, other) & matl | Coil, Steel |
| | Size (length x width, coil design height & i.d.) | 250 x 83.7 mm (9.84 x 3.3 in.) |
| | Spring rate [N/mm (lb/in)] | 27.4 (156.5) |
| | Rate @ wheel [N/mm (lb/in)] | 27.4 (156.5) |
| | Insulators (type & material) | Rubber |
| | If leaf | No. of leaves |
| Shackle (comp or tens) | | " |
| Stabilizer | Type (link, linkless, frmless) | " |
| | Material & bar diameter | " |
| Track bar (type) | " | |

* Define load condition:

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*)

METRIC (U.S. Customary)

Body Type And/Or

Engine Displacement

Brakes - Service

CONVERTIBLE

HARDTOP

| | | | |
|---|-------------------------------|---|--|
| Description | | Hydraulic, Front: Floating Caliper Rear: Leading Trailing Shoe | |
| Manufacturer and brake type (std., opt., n.a.) | Front (disc or drum) | TOKICO LTD., Disc | |
| | Rear (disc or drum) | NISSHIN KOGYO CO., LTD., Drum | |
| Valving type(prop, delay, metering, other) | | Proportioning | |
| Power brake (std., opt., n.a.) | | Standard | |
| Booster type(rmt, intgrl, vac., hyd., etc.) | | Vacuum | |
| Vacuum | Source (inline, pump, etc.) | Inline (Intake Manifold) | |
| | Reservoir (volume cu. in.) | Not Applicable | |
| | Pump-type | " | |
| Traction Control | Operational speed range | Not Applicable | |
| | Type engine intervention | " | |
| Anti-lock device | Front/rear (std., opt., n.a.) | " | |
| | Manufacturer | " | |
| | Type (electronic, mech.) | " | |
| | Number sensors or circuits | " | |
| | No. anti-lock hyd. circuits | " | |
| | Integral or add-on system | " | |
| | Yaw control (yes, no) | " | |
| Hydraulic power source | | " | |
| Effective area [sq. cm. (sq. in.)]* | | 135/287 (21/44) | |
| Gross Lng area [sq cm (sq in)] ** (F/R) | | 140/287 (22/44) | |
| Swept area [sq cm (sq in)]*** (F/R) | | 1322/470 (205/73 in.) | |
| 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.) |
| | Matl & type (vented/sld) | F/R | Cast Iron, Solid/- |
| Drum | Diameter & width | F/R | -/220 x 34 mm (-/8.66 x 1.34 in.) |
| | Type and material | F/R | -/Cast Iron, Solid |
| Wheel cylinder bore | | 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 | Bonded |
| | | Rivet size | Not Applicable |
| | | Manufacturer | JAPAN BRAKE INDUSTRIAL CO., LTD. |
| | | Lining code **** | JB KC 80FE |
| | | Material | Resin Mold |
| | | *** Pri. or out-brd | 99 x 42 x 10 mm (3.90 x 1.65 x 0.39 in.) |
| | | Size Sec. or in-brd | 99 x 42 x 10 mm (3.90 x 1.65 x 0.39 in.) |
| | Shoe thcknss. (no lng) | 5 mm (0.20 in.) | |
| | Rear wheel | Bonded or riveted | Bonded |
| | | Manufacturer | JAPAN BRAKE INDUSTRIAL CO. LTD. |
| | | Lining code **** | JB NL 60FF |
| | | Material | Resin Mold |
| | | *** Pri. or out-brd | 211 x 34 x 5.5 mm (8.31 x 1.34 x 0.22 in.) |
| | | Size Sec. or in-brd | 211 x 34 x 5.5 mm (8.31 x 1.34 x 0.22 in.) |
| Shoe thcknss (no lng) | | 2 mm (0.08 in.) | |

* Excludes rivet holes, grooves, chamfers, etc. ** Includes rivet holes, grooves, chamfers, etc.
 *** Total swept area for four brakes. (Drum brake: Widest lining contact width for each brake x its contact circum.)
 (Disc brake: Square of Outer Working Dia. - Square of inner Working Dia. X Pi/2 for each brake.)
 **** Size for drum brakes includes length x width x thickness.
 ***** Manufacturer I.D., catalog for formulation designation and coefficient of friction classification.

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*) _____

METRIC (U.S. Customary)

Body Type And/Or
 Engine Displacement

CONVERTIBLE

HARDTOP

Tires And Wheels (Standard)

| | | | |
|----------------------------|---|-------------------|--------------------------------|
| Tires | Size (load range, ply) | | P205/75R15 |
| | Type (bias, radial, 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(45mph) | | 760 | |
| Wheels | Type & material | | Drop Center, Steel |
| | Rim (size & flange type) | | 15 x 5-1/2 JJ |
| | Wheel offset | | 25 mm (0.98 in.) |
| | Attachment | Type (bolt, 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)

(NOT APPLICABLE)

| | |
|--|--|
| 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) | |
| Tire size (load range, ply) | |
| Type (bias, radial, steel, nylon, etc.) | |
| Wheel (type & material) | |
| Rim (size, flange type and offset) | |
| 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) | Not Applicable |
| | Drum diameter | " |
| | Lining size (length x width x thickness) | " |

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*) _____

METRIC (U.S. Customary)

Body Type And/Or
 Engine Displacement

| | |
|-------------|---------|
| CONVERTIBLE | HARDTOP |
|-------------|---------|

Steering

| | | | | |
|--|---|------------------------|--|--|
| Manual (std., opt., n.a.) | | Standard | | |
| Power (std., opt., n.a.) | | Optional | | |
| Adjustable steering wheel/ column (tilt, telescope, other) | Type | Not Applicable | | |
| | Manufacturer (std., opt., n.a.) | " | | |
| Wheel diameter ** (W9) SAE J1100 | Manual | 390 mm (15.35 in.) | | |
| | Power | Optional | | |
| Turning diameter m (ft.) | Out-side front | Wall to wall (l. & r.) | 10.5 (34.44) | |
| | | Curb to curb (l. & r.) | 9.8 (32.15) | |
| | In-side rear | Wall to wall (l. & r.) | Not Applicable | |
| | | Curb to curb (l. & r.) | " | |
| Scrub Radius * | | 12 mm (0.47 in.) | | |
| Manual | Gear | Type | Recirculation Ball | |
| | | Manufacturer | NIPPON SEIKO K.K. | |
| | | Ratios | Gear: 18.5 - 21.0 (Variable) Overall: 21.7 | |
| | No. wheel turns(stop to stop) | | 3.8 | |
| Power | Type (hydraulic, elec., etc.) | | Hydraulic | |
| | Manufacturer | | KOYO SEIKO CO., LTD. | |
| | Gear | Type | Recirculation Ball | |
| | | Ratios | Gear: 17.5 Overall: 19.4 | |
| | Pump (drive) | | Belt | |
| No. wheel turns(stop to stop) | | 3.4 | | |
| Linkage | Type | | Parallel | |
| | Location (front or rear of wheels, other) | | Front | |
| | Tie Rods (one or two) | | 2 | |
| Steering axis | Inclination at camber (deg.) | | 31 | |
| | Bearings (type) | Upper | Needle Bearing | |
| | | Lower | Ball Bearing | |
| Thrust | | Not Applicable | | |
| Steering spindle/knuckle & joint type | | Serrated Shaft | | |
| Wheel spindle/ hub | Dia-meter | Inner bearing | Inner: 41 mm (1.61 in.), Outer: 68 mm (2.68 in.) | |
| | | Outer bearing | Inner: 41 mm (1.61 in.), Outer: 68 mm (2.68 in.) | |
| | Thread (size) | | M40 x 15 | |
| | 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

Vehicle Line Geo Tracker
 Model Year 1990 Issued 6-89 Revised(*) _____

METRIC (U.S. Customary)

Body Type And/Or
 Engine Displacement

CONVERTIBLE

HARDTOP

Wheel Alignment

| | | | |
|--------------------------------|--------------------------|---------------------------------|----------------------------|
| 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 (deg.) | Not Applicable |
| | | Camber (deg.) | " |
| | | Toe-in (deg.) | Adjustable |
| | Periodic M.V. inspection | Caster (deg.) | 1.5 (+/-) 2 |
| | | Camber (deg.) | 0.5 (+/-) 1 |
| | | Toe-in (deg.) | 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 (deg.) | Not Applicable |
| | | Toe-in (deg.) | " |
| | Periodic M.V. inspection | Camber (deg.) | 0 (+/-) 1 |
| | | Toe-in (deg.) | 0 (+/-) 2 mm |

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

Electrical - Instruments and Equipment

| | | |
|--|------------------------------------|-------------------------------|
| Speed-ometer | Type (analog, digital, std., opt.) | Analog |
| | Trip odometer (std., opt., n.a.) | Standard |
| EGR maintenance indicator | | Not Applicable |
| Charge indicator | Type | Tell-Tale Warning Light |
| | Warning device (light, audible) | Light |
| Temperature indicator | Type | Electric Gauge With Pointer |
| | Warning device | Not Applicable |
| Oil pressure indicator | Type | Tell-Tale Warning Light |
| | Warning device | Light |
| Fuel indicator | Type | Electric Gauge With Pointer |
| | Warning device | Not Applicable |
| Wind-shield wiper | Type (standard) | Electric 2-Speed |
| | Type (optional) | Intermittent |
| | Blade length | 434 mm (17.09 in.) |
| | Swept area (sq cm (sq in)) | 5,308 (17.09) |
| Wind-shield washer | Type (standard) | Electric, Lever Control: PULL |
| | Type (optional) | Not Applicable |
| | Fluid level indicator | " |
| Rear window wiper, wiper/washer (std., opt., n.a.) | | Optional |
| Horn | Type | Electric Resonator |
| | Number used | 1 |
| Other | | |

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*) 9-89

METRIC (U.S. Customary)

Engine Description
 Engine Code

1.6 LITER L4 (97 CID)
 THROTTLE BODY INJECTION RPO LS5

Electrical - Supply System

| | | |
|--------------------------|----------------------------|---|
| Battery | Manufacturer | FURUKAWA BATTERY CO., LTD., DELCO REMY* |
| | Model, std., (opt.) | Standard 55B24R-MF, 26-500* |
| | Voltage | 12 |
| | Amps at 0 deg F cold crnk | 470, 500* |
| | Minutes-reserve capacity | 80, 75* |
| | Amps/hrs. - 20 hr. rate | 45 |
| Location | | RH Side Of Engine Compartment |
| Alternator | Manufacturer | MITSUBISHI ELECTRIC CORP. |
| | Rating (idle/max. rpm) | 55 (2,159) |
| | Ratio (alt. crank/rev.) | 2.36 |
| | Output at idle (rpm, park) | 30 (800) |
| Optional (type & rating) | | Not Applicable |
| Regulator | Type | Integral With Alternator |

Electrical - Starting System

| | | |
|-------------|-----------------------------------|------------------------------|
| Motor | Manufacturer | MITSUBISHI ELECTRIC CORP. |
| | Current drain 0 deg 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.) | Not Applicable | |
| | 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 [Newton meters (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 Resistor Spark Plug With Resistor |
|------------------|--|

Note: * Indicates CAMI Production

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*) _____

METRIC (U.S. Customary)

Body Type

CONVERTIBLE

HARDTOP

Body

| | |
|-------------------------------|---|
| Structure | Body With Chassis Frame |
| 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) |

Body - Miscellaneous Information

| | | |
|---|---|----------------------------|
| Type of finish (lacquer, enamel, other) | Enamel | |
| Hood | Material & mass | Steel, 10.8 kg (23.8 lbs.) |
| | Hinge location (front, rear) | Rear |
| | Type (counterbalance, prop) | Prop |
| | Release control (int., ext.) | Internal And External |
| Trunk lid | Material & mass | Not Applicable |
| | Type (counterbalance, other) | " |
| | Internal release control (elec., mech., n.a.) | " |
| Hatch-back lid | Material & mass | Not Applicable |
| | Type (counterbalance, other) | " |
| | Internal release control (elec., mech., n.a.) | " |
| Tailgate | Material & mass | Steel, 13.8 kg (30.4 lbs.) |
| | Type (drop, lift, door) | Door |
| | Internal release control (elec., mech., n.a.) | Not Applicable |
| Vent window control (crank, friction, pivot, power) | Front | " |
| | Rear | Pivot |
| Window regulator type (cable, tape, flex drive, etc.) | Front | Cable |
| | Rear | Not Applicable |
| Seat cushion type (e.g., 60/40, bucket, bench wire, foam, etc.) | Front | Semi Bucket |
| | Rear | Bench Bucket |
| | 3rd seat | Not Applicable |
| Seat back type (e.g., 60/40, bucket, bench, wire, foam, etc.) | Front | Semi Bucket |
| | Rear | Bench Bucket |
| | 3rd seat | Not Applicable |

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*) _____

METRIC (U.S. Customary)

Body Type

CONVERTIBLE

HARDTOP

Restraint System

| Seating Position | | Left | Center | Right |
|------------------|---|--|--------|---|
| Active | Type & description (lap & shoulder belt, lap belt, etc.) | First seat Lap & Shoulder Belt ELR, Standard | | Lap & Shoulder Belt ELR-ALR, Standard |
| | | Second seat Lap & Shoulder Belt ELR-ALR, Standard | | Lap & Shoulder Belt ELR-ALR, Standard |
| | Standard/ optional | Third seat Not Applicable | | Not Applicable |
| Passive | Type & description (air bag, motorized-2-point belt, fixed belt, knee bolster, manual-lap belt) | First seat | | |
| | | Second seat | | |
| | Standard/ optional | Third seat | | |

| | SAE Ref No | | |
|---|---------------|-----------------|----------------|
| Glass | | | |
| Windshield glass exposed surface area [sq. cm. (sq. in.)] | S1 | 8,315 (1,288) | |
| Side glass exposed surface area [sq. cm. (sq. in.)] - total 2-sides | S2 | 8,540 (1,324) | 17,040 (2,641) |
| Backlight glass exposed surface area [sq. cm. (sq. in.)] | S3 | Not Applicable | 5,472 (848) |
| Total glass exposed surface area [sq. cm. (sq. in.)] | S4 | 16,855 (2,612) | 30,827 (4,777) |
| Windshield glass (type) | | Laminated Glass | |
| Side glass (type) | | Tempered Glass | |
| Backlight glass (type) | | Tempered Glass | |

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, unitized frame, partially-unitized frame) | Separate Frame |
|---|----------------|

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*) _____

METRIC (U.S. Customary)

Body Type

CONVERTIBLE

HARDTOP

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

| | | |
|---|---|--|
| Air conditioning (manual, auto, temp control) | | Optional. (Manual Control) |
| Clock (digital, analog) | | Optional. Digital, Integral With Radio |
| Compass / thermometer | | Not Applicable |
| Console (floor, overhead) | | Standard, Floor |
| Defroster, elec. backlight | | Not Applicable Optional |
| Electronic | Diagnostic monitor (integrated, individual) | " |
| | Instrument cluster (list instruments) | " |
| | Keyless entry | " |
| | Tripminder (avg. spd. fuel) | " |
| | Voice alert (list items) | " |
| | Other | " |
| Fuel door lock (remote, key, electric) | | " |
| Lamps | Auto head on/off delay, dimming | " |
| | Cornering | " |
| | Courtesy (map, reading) | Standard, Map Lamp 1 |
| | Door lock, ignition | Not Applicable |
| | Engine compartment | " |
| | Fog | " |
| | Glove compartment | " |
| | Trunk | " |
| | Illuminated entry system (list lamps, activation) | " |
| Other | " | |
| Mirrors | Day / night (auto, man.) | Standard, Manual |
| | L.H. (remote, pwr., heated) | Standard, Manual |
| | R.H. (convex, rmt, pwr, htd) | Standard, Convex |
| | Visor vanity (RH/LH illum.) | Not Applicable |
| Navigation system (describe) | | " |
| Prkg. brake-auto release (warn. light) | | " |

MVMA Specifications

Vehicle Line Geo Tracker
 Model Year 1990 Issued 6-89 Revised(*) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

CONVERTIBLE

HARDTOP

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

| | | | |
|--|---|---|---|
| Power equipment | Deck lid (release, pull down) | | Not Applicable |
| | Door locks (manual, auto., describe system) | | " |
| | Seats | 2 - 4 - 6 way, etc. | " |
| | | Reclining (R.H., L.H.) | " |
| | | Memory (R.H., L.H., preset, recline) | " |
| | | Lumbar, hip, thigh, support | " |
| | | Heated (R.H., L.H., other) | " |
| | Side windows | | " |
| | Vent windows | | " |
| | Rear windows | | " |
| Radio systems | Antenna (location, whip, w/shield, power) | | Left Front Pillar, Whip |
| | Stan. | | Antenna Only |
| | Opt. | 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: I.P. Mounted, 2: Rear Quarter Trim |
| Roof: open air or fixed (flip-up, sliding, T') | | Canvas, Flip-up | Not Applicable |
| Speed control device | | Not Applicable | |
| Speed warn. dev. (light, buzzer, etc.) | | " | |
| Tachometer (rpm) | | Standard | |
| Telephone system (describe) | | Not Applicable | |
| Theft deterrent system | | Steering Lock - Type | |

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*) _____

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

CONVERTIBLE HARDTOP

Width

SAE Ref. No.

| | SAE Ref. No. | | |
|----------------------------------|--------------|----------------|--|
| Tread (front) | W101 | 1,395 (54.92) | |
| Tread (rear) | W102 | 1,400 (55.12) | |
| Vehicle width | W103 | 1,630 (64.17) | |
| Body width at Sg RP (front) | W117 | 1,566 (61.65) | |
| Vehicle width (front doors open) | W120 | 3,450 (135.83) | |
| Vehicle width (rear doors open) | W121 | Not Applicable | |
| Tumble-home (deg.) | W122 | 15.50' | |
| Outside mirror width | W410 | 1,820 (71.65) | |

Length

| | SAE Ref. No. | | |
|-------------------------------|--------------|----------------|---------------|
| Wheelbase | L101 | 2,200 (86.61) | |
| Vehicle length | L103 | 3,620 (142.52) | |
| Overhang (front) | L104 | 655 (25.79) | |
| Overhang (rear) | L105 | 765 (30.12) | |
| Upper structure length | L123 | 2,285 (89.96) | 2,301 (90.59) |
| Rear wheel C/L 'X' coordinate | L127 | 1,840 (72.44) | |

Height **

| | SAE Ref. No. | | |
|-------------------------------------|--------------|---------------|---------------|
| Passenger distribution (front/rear) | PD1,2,3 | 2/2 | ** |
| Trunk/cargo load | | 1,595 (62.79) | ** |
| Vehicle height | H101 | 1,650 (64.96) | |
| Cowl point to ground | H114 | 1,061 (4.77) | 1,062 (41.81) |
| Deck point to ground | H138 | --- | |
| Rocker panel-front to ground | H112 | 246 (9.69) | 247 (9.72) |
| Rocker panel-rear to ground | H111 | 228 (8.98) | 230 (9.06) |
| Windshield slope angle (deg.) | H122 | 46.10 in. | |
| Backlight slope angle (deg.) | H121 | 25 | 13.35 in. |

Ground Clearance **

| | SAE Ref. No. | | |
|---|--------------|---------------------|------------|
| Front bumper to ground | H102 | 323 (12.72) | |
| Rear bumper to ground | H104 | 240 (9.45) | 244 (9.61) |
| Bumper to ground (front at curb mass (wt.)) | H103 | 333 (13.11) | |
| Bumper to ground (rear at curb mass (wt.)) | H105 | 327 (12.87) | |
| Angle of approach (deg.) | H106 | 44 | |
| Angle of departure (deg.) | H107 | 34 | |
| Ramp breakover angle (deg.) | H147 | 18 | |
| Axle differential to ground (front/rear) | H153 | 215/200 (8.46/7.87) | |
| Min. running ground clearance | H156 | 200 (7.87) | |
| 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 Coolant 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.

All linear dimensions are in millimeters (Inches)

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*)

METRIC (U.S. Customary) Vehicle Dimensions

See Key Sheets for Definitions

Body Type

| | |
|-------------|---------|
| CONVERTIBLE | HARDTOP |
|-------------|---------|

○ Front Compartment

SAE Ref. No.

| | | | |
|--|-----|---------------------------------------|---------------|
| SgRP front, 'X' coordinate | L31 | 1,085 (42.71) | |
| Effective head room | H61 | 1,004 (39.53) | 1,017 (40.04) |
| Max. eff. leg room (accelerator) | L34 | 1,069 (42.09) | |
| SgRP to heel point | H30 | 325 (12.80) | |
| SgRP to heel point | L53 | 820 (32.28) | |
| Back angle (deg.) | L40 | 20 | |
| Hip angle (deg.) | L42 | 85.5 | |
| Knee angle (deg.) | L44 | 122 | |
| Foot angle (deg.) | L46 | 80 | |
| Design H-point front travel | L17 | 180 (7.09) | |
| Normal driving & riding seat track trvl. | L23 | 180 (7.09) | |
| Shoulder room | W3 | STD: 1,325 (52.17), DX: 1,310 (51.57) | |
| Hip room | W5 | STD: 1,316 (51.81), DX: 1,310 (51.57) | |
| *** Upper body opening to ground | H50 | 1,480 (58.27) | |
| Steering wheel maximum diameter* | W9 | 390 (15.35) | |
| Steering wheel angle (deg.) | H18 | 31 | |
| Accel. heel pt. to steer. whl. cntr | L11 | 337 (13.27) | |
| Accel. heel pt. to steer. whl. cntr | H17 | 715 (28.15) | |
| Undepressed floor covering thickness | H67 | 15 (0.59) | |

Front Compartment Int. Dim. Are Measured With The Seating Ref. Pt.
 (SgRP) 0 mm Forward And 0 mm Upward of Rearmost Position.

○ Rear Compartment

| | | | |
|------------------------------------|-----|--------------------|-------------|
| SgRP point couple distance | L50 | 700 (27.56) | |
| Effective head room | H63 | 990 mm (38.27 in.) | 967 (38.08) |
| Min. effective leg room | L51 | 804 (31.65) | |
| SgRP (second to heel) | H31 | 385 (15.16) | |
| Knee clearance | L48 | 101 (3.98) | |
| Shoulder room | W4 | 1,275 (50.20) | |
| Hip room | W6 | 1,064 (41.89) | |
| *** Upper body opening to ground | H51 | Not Applicable | |
| Back angle (deg.) | L41 | 20 | |
| Hip angle (deg.) | L43 | 92 | |
| Knee angle (deg.) | L45 | 80 | |
| Foot angle (deg.) | L47 | 98 | |
| Depressed floor covering thickness | H73 | 15 (0.59) | |

Luggage Compartment

| | | | |
|---------------------------------------|------|--------------|--------------|
| Usable luggage capacity [L (cu. ft.)] | V1 | 134.3 (4.74) | 145.7 (5.15) |
| *** Liftover height | H185 | 687 (27.05) | |

Interior Volumes (EPA Classification)

| | |
|-----------------------------------|-------------------------------|
| Vehicle class | Special Purpose Vehicle (4WD) |
| Interior volume index (cu. ft.)** | 87.04 |
| Trunk / cargo index (cu. ft.) | Not Applicable |

* See page 14.

** Includes passenger and trunk / cargo index - see definition page 32.

*** EPA Loaded Vehicle Weight, Loading Conditions

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*) _____

METRIC (U.S. Customary) Vehicle Dimensions

See Key Sheets for Definitions

Body Type

| | |
|-------------|---------|
| CONVERTIBLE | HARDTOP |
|-------------|---------|

Station Wagon - Third Seat SAE Ref. No. (NOT APPLICABLE)

| | | |
|-----------------------|-----|--|
| Seat facing direction | SD1 | |
| SgRP couple distance | L85 | |
| Shoulder room | W85 | |
| Hip Room | W86 | |
| Effective leg room | L86 | |
| Effective head room | H86 | |
| SgRP to heel point | H87 | |
| Knee clearance | L87 | |
| Back angle | L88 | |
| Hip angle | L89 | |
| Knee angle | L90 | |
| Foot angle | L91 | |

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(30.76) |
| 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 (41.73) | |
| Rear opening width at floor | W203 | 1,110 (43.70) | |
| Opening width at belt | W204 | 1,112 (43.78) | |
| * Min. rear opening width above belt | W205 | 900 mm (35.43 in.) | 935 (36.8) |
| Cargo height | H201 | 1,010 (39.76) | |
| Rear opening height | H202 | 870 (32.25) | |
| Tailgate to ground height | H250 | 645 (25.39) | |
| Front seat back to load floor height | H197 | STD: 750 (29.53), DX: 765 (30.12) | |
| Cargo volume index [cu. m.(cu.ft.)] | V2 | 0.91 (32.13) | 0.904 (31.92) |
| Hidden cargo vol. index [cu.m.(cu.ft.)] | V4 | Not Applicable | |
| Cargo volume index-rear of 2-seat | V10 | 0.252 (8.89) | 0.246 (8.68) |

Hatchback - Cargo Space (NOT APPLICABLE)

| | | |
|---|------|--|
| Cargo length at front seatback height | L208 | |
| 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 [cu. m. (cu. ft.)] | V3 | |
| Hidden cargo vol. index [cu.m.(cu.ft.)] | V4 | |
| Cargo volume index-rear of 2-seat | V11 | |

* EPA Loaded Vehicle Weight, Loading Conditions
 All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

Vehicle Line Geo TRACKER
 Model Year 1990 Issued 6-89 Revised(*)

METRIC (U.S. Customary)

| | |
|-----------|---|
| Body Type | <div style="display: flex; justify-content: space-between;"> CONVERTIBLE HARDTOP </div> |
|-----------|---|

Vehicle Fiducial Marks

| 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 | <table border="1"> <tr> <td>W21*</td> <td>373/-373 (14.69/- 14.69)</td> </tr> <tr> <td>L54*</td> <td>-58 (-2.28)</td> </tr> <tr> <td>H81*</td> <td>-67 (-2.64)</td> </tr> <tr> <td>H181*</td> <td>218 (8.58)</td> </tr> <tr> <td>** H183*</td> <td>207 (8.15)</td> </tr> </table> | W21* | 373/-373 (14.69/- 14.69) | L54* | -58 (-2.28) | H81* | -67 (-2.64) | H181* | 218 (8.58) | ** H183* | 207 (8.15) |
| W21* | 373/-373 (14.69/- 14.69) | | | | | | | | | | |
| L54* | -58 (-2.28) | | | | | | | | | | |
| H81* | -67 (-2.64) | | | | | | | | | | |
| H181* | 218 (8.58) | | | | | | | | | | |
| ** H183* | 207 (8.15) | | | | | | | | | | |
| Rear | <table border="1"> <tr> <td>W22*</td> <td>405/-405 (15.94/-1 5.94)</td> </tr> <tr> <td>L55*</td> <td>1,560 (61.42)</td> </tr> <tr> <td>H82*</td> <td>-20 (-0.79)</td> </tr> <tr> <td>H182*</td> <td>265 (10.43)</td> </tr> <tr> <td>** H184*</td> <td>247 (9.72)</td> </tr> </table> | W22* | 405/-405 (15.94/-1 5.94) | L55* | 1,560 (61.42) | H82* | -20 (-0.79) | H182* | 265 (10.43) | ** H184* | 247 (9.72) |
| W22* | 405/-405 (15.94/-1 5.94) | | | | | | | | | | |
| L55* | 1,560 (61.42) | | | | | | | | | | |
| H82* | -20 (-0.79) | | | | | | | | | | |
| H182* | 265 (10.43) | | | | | | | | | | |
| ** H184* | 247 (9.72) | | | | | | | | | | |

* Reference - SAE Recommended Practice, J182, Motor Vehicle Fiducial Marks.

** EPA Loaded Vehicle Weight, Loading Conditions
 All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line Geo TRACKER

Model Year 1990 Issued _____ Revised(*) 6-89

| | | Optional Equipment Differential Mass (weight)* | | | |
|------|---|--|----------------|-----------------|---------------------------------------|
| Code | Equipment | MASS, kg. (lb.) | | | Remarks Restrictions, Requirements |
| | | Front | Rear | Total | |
| | Automatic Transmission | 10.8 (23.8) | 7.2 (15.9) | 18.0 (39.7) | |
| | Rear Window Wiper Washer | 0 | 1.4 (3.1) | 1.4 (3.1) | |
| | Rear Defogger | 0 | 0.1 (0.2) | 0.1 (0.2) | |
| | Tinted Glass | 0 | 0 | 0 | |
| | Up-Level Inside Trim (Van Type) (Including Large Arm Rest) | 0.81 (1.79) | 4.23 (9.33) | 5.04 (11.11) | |
| | Up-Level Seat (Front Seat W/Adjustable Head Restraint) | 0 | 0 | 0 | |
| | Coat Hook | 0 | 0.01 | 0.01 (0.02) | |
| | Intermittent Wiper | 0.02 (0.04) | 0 | 0.02 (0.04) | |
| | Rubber Mat | | | | |
| | Air Conditioning | 13.8 (30.4) | 2.4 (5.3) | 16.2 (35.7) | |
| | Spare Tire Cover | | | | |
| | Trailer Hitch | | | | |

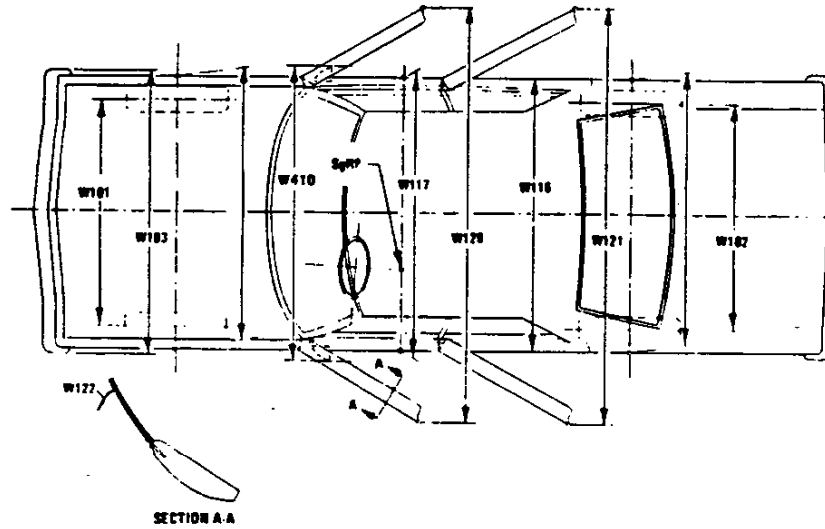
* Also see Engine - General Section for dressed engine mass (weight).

MVMA Specifications

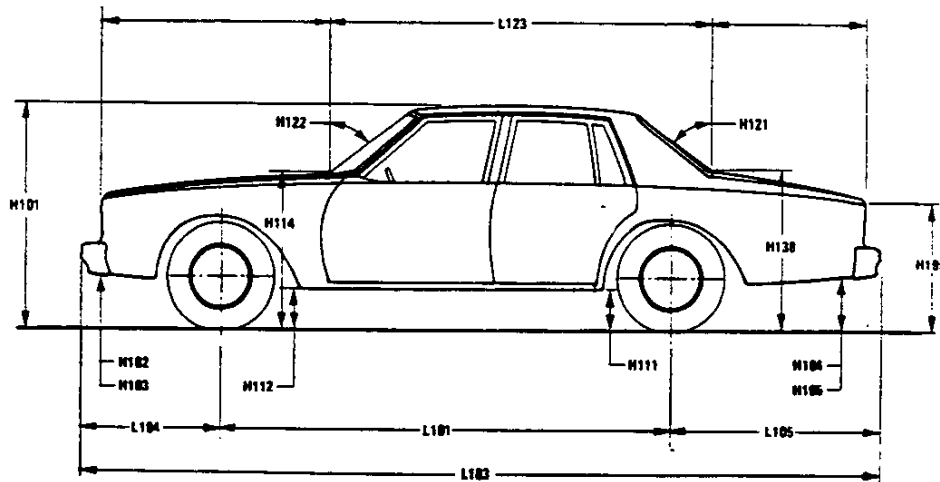
METRIC (U.S. Customary)

Exterior Vehicle And Body Dimensions – Key Sheet

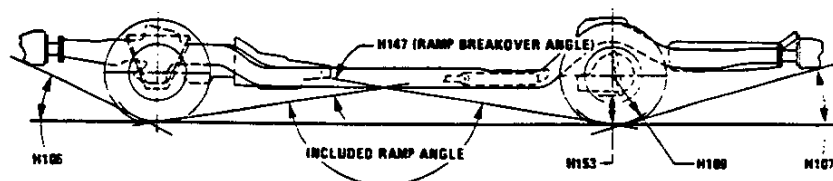
Exterior Width



Exterior Length & Height



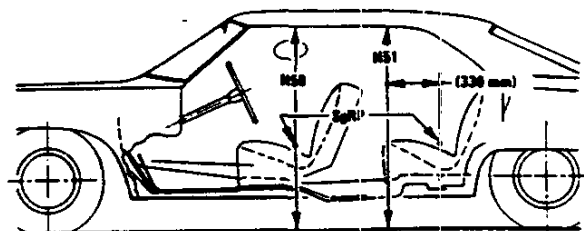
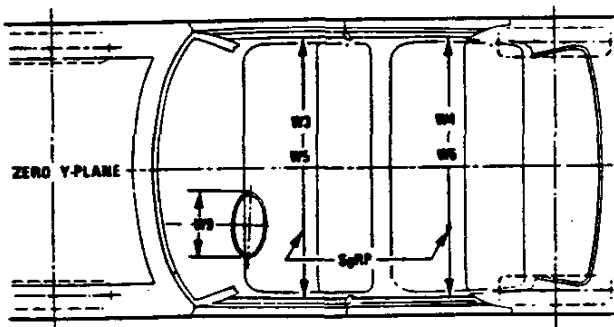
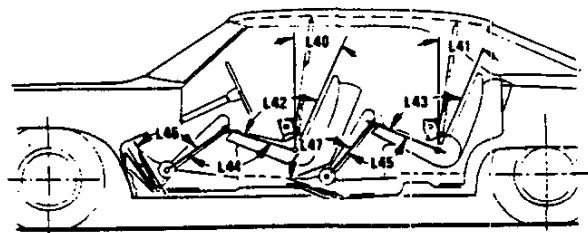
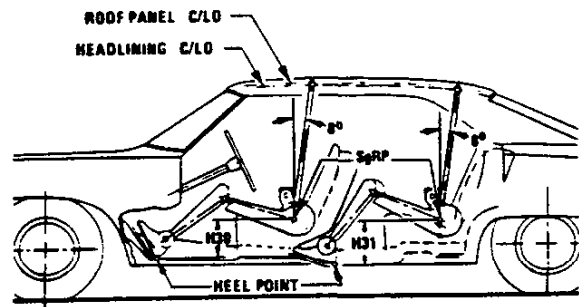
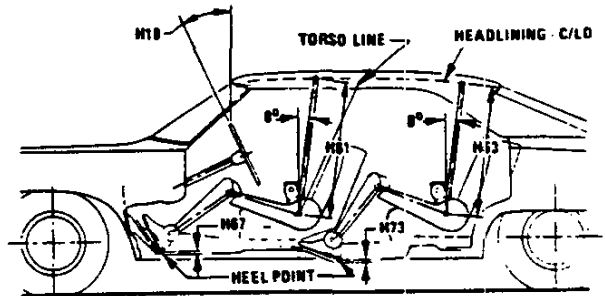
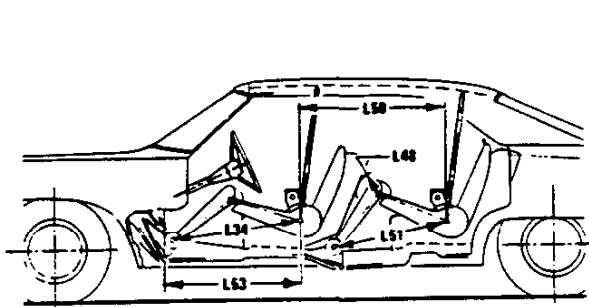
Exterior Ground Clearance



MVMA Specifications Form

METRIC (U.S. Customary)

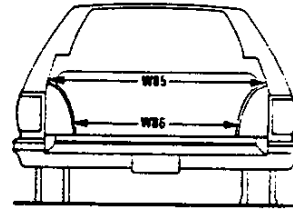
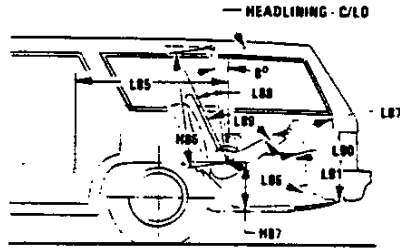
Interior Vehicle And Body Dimensions – Key Sheet



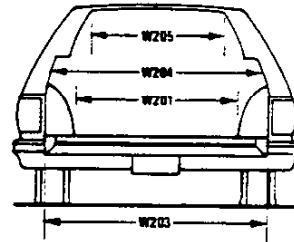
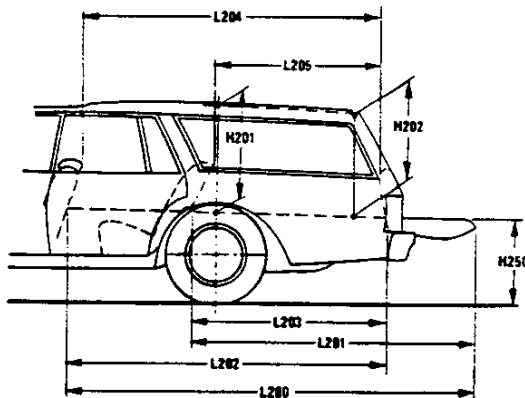
MVMA Specifications Form
METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet

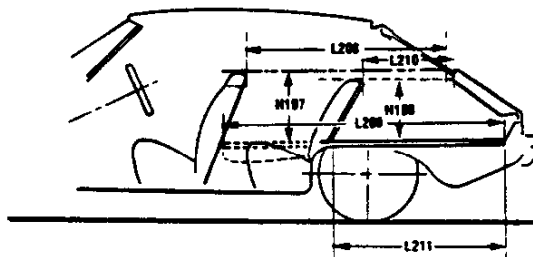
Third Seat



Cargo Space



Station Wagon



Hatchback

MVMA Specifications

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.
- 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.
- W410 OUTSIDE MIRROR WIDTH: The dimension between the widest point on the outside mirrors. The standard right and left mirror adjusted for normal driving will be shown unless otherwise noted. When only one outside mirror is standard, the dimension will be to the zero "Y" 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 OVERHAND – 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.

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.

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.
- 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.
- 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 structural interference rearward 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.

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

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

- 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 (H30) greater than 18 in., the accelerator pedal may be depressed as specified by the manufacturer. If the accelerator is depressed, the manufacturer shall place foot flat on pedal and note the depression of the pedal.
- L-40 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.
- L-42 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 and 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.
- H7 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. The dimension measured vertically from the SgRP – front to the accelerator heel point.
- 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.
- H61 EFFECTIVE HEAD ROOM – FRONT. The dimension measured along a line 8 deg. rear of vertical from the SgRP – front to the headlining plus 102 mm (4.0 in.).
- H67 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

- 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 devices bare foot flesh line (Reference J826).
- 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 254 mm (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.
- 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.

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

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.

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 51 mm (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 wheelhousings at floor level. For any vehicle not trimmed, measure to the sheet metal.
- 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:

$$\frac{W4 \times H201 \times L204}{10^9} = \text{m}^3 \text{ (cubic meter)}$$

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

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:

$$\frac{L506 \times W505 \times H503}{1728} = \text{ft}^3$$

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 electronically 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 "X" 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 seatback to the undepressed floor covering.

V3 HATCHBACK.

Measured in inches:

$$\frac{\frac{L208 - L209}{2} \times W4 \times H197}{1728} = \text{ft}^3$$

Measured in mm:

$$\frac{\frac{L208 - L209}{2} \times W4 \times H197}{10^9} = \text{m}^3 \text{ (cubic meter)}$$

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.

V11 HATCHBACK CARGO VOLUME INDEX. Usable luggage (one (1) stand and luggage set) below floor.

Measured in inches:

$$\frac{\frac{L210 + L211}{2} \times W4 \times H198}{1728} = \text{ft}^3$$

Measured in mm:

$$\frac{\frac{L210 + L211}{2} \times W4 \times H198}{10^9} = \text{m}^3 \text{ (cubic meter)}$$

MVMA Specifications

METRIC (U.S. Customary)

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