

# MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

# 1991

|   |                                |                |
|---|--------------------------------|----------------|
| <b>Manufacturer</b><br>SUZUKI MOTOR CORPORATION                                   | <b>Vehicle Line</b><br>SWIFT   |                |
| <b>Mailing Address</b><br>HAMAMATSU-NISHI, P.O. BOX 1<br>432-91, HAMAMATSU, JAPAN | <b>Issued</b><br>Feb. 12, 1991 | <b>Revised</b> |

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 suggested 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.

Forms Provided by Technical Affairs Division

# MVMA Specifications

METRIC (U.S. Customary)

## Table of Contents

| Ø       |   | Ø Indicates Format Change<br>From Previous Year |
|---------|---|---|
| 1       | Vehicle Models/Origin                         |   |
| 2       | Power Teams                                   |   |
| 1       | 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, Tires and Wheels                      |   |
| 14      | Steering                                      |   |
| Ø 15-16 | Electrical                                    |   |
| 17      | Body – Miscellaneous Information              |   |
| 18      | Restraint System                              |   |
| 18      | Glass   |   |
| 18      | Headlamps                                     |   |
| 18      | Frame   |   |
| 19-20   | Convenience Equipment                         |   |
| Ø 20    | Trailer Towing                                |   |
| 21-23   | Vehicle Dimensions                            |   |
| 24      | Vehicle Fiducial Marks                        |   |
| Ø 25    | Vehicle Mass (Weight)                         |   |
| 26      | Optional Equipment Differential Mass (Weight) |   |
| 27-33   | Vehicle Dimensions Definitions - Key Sheets   |   |
| Ø 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

Vehicle Line SWIFT  
Model Year 1991 Issued Feb 12, 91 Revised (\*)

METRIC (U.S. Customary)

## Vehicle Origin

|  |                                   |
|--|-----------------------------------|
| Design & development (company)                 | SUZUKI MOTOR CORPORATION          |
| Where built (country)                          | JAPAN                             |
| Authorized U.S. sales marketing representative | AMERICAN SUZUKI MOTOR CORPORATION |

## 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) | EPA Fuel Economy (City/hwy) |
|--|-------------------|--|--|--|-----------------------------|
| SWIFT GA (FWD)                                     |                   | 3-door, Hatch<br>M/T:HES532M<br>A/M:HES552M                | 2/2  | M/T:225 (495)<br>A/T:205 (450)             | M/T:39/43<br>A/T:29/33      |
|  |                   | 4-door, Sedan<br>M/T:SEF532M<br>A/T:SEF552M                |  | M/T:215 (470)<br>A/T:195 (430)             |                             |
| SWIFT GS (FWD)                                     |                   | 4-door, Sedan<br>M/T:SEF534M<br>A/T:SEF554M                |  | M/T:210 (460)<br>A/T:190 (420)             |                             |
| SWIFT GT (FWD)                                     |                   | 3-door, Hatch<br>HES574M                                   |  | 205 (455)                                  | 28/35                       |

\*Include two passenger wights

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

## ØMVMA Specifications

Vehicle Line SWIFTModel Year 1991

Issued Feb. 12, 91

Revised (\*)

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

## Power Teams

SAE J1349 Net bhp (brake horsepower) and Net Torque corrected to 77°F/25°C and 29.61 in. Hg/100 kPa atmospheric pressure.

|                            |                                      | A                       | B               | C                  | D               |
|----------------------------|--------------------------------------|-------------------------|-----------------|--------------------|-----------------|
| E<br>N<br>G<br>I<br>N<br>E | Engine Code                          |                         |                 |                    |                 |
|                            | Displacement<br>Liters (in³)         |                         | 1.298 (79.2)    | 1.298 (79.2)       | 1.298 (79.2)    |
|                            | Induction system<br>(FI, Carb, etc.) |                         | TBI             | TBI                | MPI             |
|                            | Compression<br>ratio                 |                         | 9.5             | 9.5                | 10.0            |
|                            | SAE<br>Net<br>at<br>RPM              | Power<br>kW (bhp)       | 52 (70) @6,000  | 52 (70) @6,000     | 75 (100) @6,500 |
|                            |                                      | Torque<br>N·m (lb. ft.) | 100 (74) @3,300 | 100 (74) @3,300    | 113 (83) @5,000 |
|                            | Exhaust<br>single, dual              |                         | Single          | Single             | Single          |
| T<br>R<br>A<br>N<br>S      | Transmission/<br>Transaxle           |                         | Man. 5-speed    | Auto. 3-speed      | Man. 5-speed    |
|                            | Axle Ratio<br>(std. first)           |                         | 3.523           | 3.540 (equivalent) | 4.105           |

[illegible]

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb.12,91 Revised (v) \_\_\_\_\_

## METRIC (U.S. Customary)

Engine Description  
Engine Code

L-4, 1.3L, OHC

L-4, 1.3, DOHC

## ENGINE - GENERAL

|   |   |  |
|---|---|--|
| Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-camber, etc.) | Inline, Front, OHC<br>Transverse, Front engine<br>faces right side of vehicle | Inline, Front, DOHC<br>Transverse, Front engine<br>faces right side of vehicle |
| Manufacturer  | SUZUKI MOTOR CORPORATION  |  |
| No. of cylinders  | 4   |  |
| Bore  | 74(2.91)  |  |
| Stroke  | 75.5(2.97)  |  |
| Bore spacing (C/L to C/L)   | 84(3.31)  |  |
| Cylinder block material & mass kg (lbs.) (machined)   | Al.alloy, 14.1(31.0)  | 15.7(39.0)   |
| Cylinder block deck height  | 186.8(7.35)   |  |
| Cylinder block length   | 372 (14.65)   |  |
| Deck clearance (minimum)<br>(above or below block)  | 0   |  |
| Cylinder head material & mass kg (lbs.)   | Al.alloy, 7.02(15.47)   | 5.23(11.53)  |
| Cylinder head volume cm <sup>3</sup> (inches <sup>3</sup> )   | 32.2(1.96)  | 29.2(1.78)   |
| Cylinder liner material   | Cast iron   |  |
| Head gasket thickness<br>(compressed)   | 1.2(0.05)   |  |
| Minimum combustion chamber<br>total volume cm <sup>3</sup> (inches <sup>3</sup> )   | 38.2(2.33)  | 35.9(2.19)   |
| Cyl. no. system<br>(front to rear)*   | L. Bank   | 1-2-3-4  |
|   | R. Bank   | N.A.   |
| Firing order  | 1-3-4-2   |  |
| Intake manifold material & mass kg (lbs.)**   | Al.alloy  | 1.66(3.66)   |
| Exhaust manifold material & mass kg (lbs.)**  | Cast iron   | 3.37(7.43)   |
| Knock sensor (yes / no)   | N.A.  |  |
| Fuel required unleaded, diesel, etc.  | Unleaded  |  |
| Fuel antiknock index (R + M) + 2  | 87  |  |
| Engine<br>mounts  | Quantity  | 3  |
|   | Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)         | Rubber, Elastomeric  |
|   | Added isolation (sub-frame, crossmember, etc.)                                | N.A.   |
| Total dressed engine mass (wt) dry***   | 73(161)   | 88(194)  |

## Engine - Pistons

|   |                     |           |
|---|---------------------|-----------|
| Material & mass, g<br>(weight, oz.) - piston only | Al.alloy, 226(7.97) | 220(7.76) |
|---|---------------------|-----------|

## Engine - Camshaft

|                                   |                       |                       |
|-----------------------------------|-----------------------|-----------------------|
| Location                          | In cylinder head      |                       |
| Material & mass kg (weight, lbs.) | Cast iron, 1.92(4.22) | 1.24(2.73)X2          |
| Drive type                        | Chain / belt          | Belt                  |
|                                   | Width / pitch         | 19.1/9.53 (0.75/0.38) |

\* 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

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

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L-4, 1.3L, OHC

L-4, 1.3L, DOHC

### Engine - Valve System

|                                      |                            |                   |
|--------------------------------------|----------------------------|-------------------|
| Hydraulic lifters (std., opt., n.a.) | N.A.                       | STD.              |
| Valves                               | Number intake / exhaust    | 4/4               |
|                                      | Head O.D. intake / exhaust | 36/30 (1.42/1.18) |
|                                      |                            | 29/24 (1.14/0.94) |

### Engine - Connecting Rods

|                                      |                           |             |
|--------------------------------------|---------------------------|-------------|
| Material & mass kg., (weight, lbs.)* | Forged steel, 0.37 (0.84) | 0.46 (1.00) |
| Length (axes C/L to C/L)             | 120 (4.72)                |             |

### Engine - Crankshaft

|  |       |                           |
|--|-------|---------------------------|
| Material & mass kg., (weight, lbs.)*         |       | Modular iron, 7.25(15.98) |
| End thrust taken by bearing (no.)            |       | 2                         |
| Length & number of main bearings             |       | 5                         |
| Seal (material, one, two piece design, etc.) | Front | Rubber, 1 piece           |
|  | Rear  | Rubber, 1 piece           |

### Engine - Lubrication System

|  |                    |
|--|--------------------|
| Normal oil pressure kPa (psi) at engine rpm    | 392 (56.9) @ 4,000 |
| Type oil intake (floating, stationary)         | Stationary         |
| Oil filter system (full flow, part, other)     | Full flow          |
| Capacity of c/case, less filter-refill-L (qt.) | 3.1 (3.3)          |

### Engine - Diesel Information

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

### Engine - Intake System

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

\* Finished State

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb.12,91 Revised (•) \_\_\_\_\_

## METRIC (U.S. Customary)

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L-4, 1.3L, OHC

L-4, 1.3L, DOHC

### Engine – Cooling System

|  |   |  |                   |
|--|---|--|-------------------|
| Coolant recovery system (std., opt., n.a.)   |   | STD.                                       |                   |
| Coolant fill location (rad., bottle)         |   | Radiator                                   |                   |
| Radiator cap relief valve pressure kPa (psi) |   | 88.3 (12.8)                                |                   |
| Circulation thermostat                       | Type (choke, bypass)                              | Bypass                                     |                   |
|  | Starts to open at °C (°F)                         | 88 (190)                                   |                   |
| Water pump                                   | Type (centrifugal, other)                         | Centifugal                                 |                   |
|  | GPM 1000 pump rpm                                 |  |                   |
|  | Number of pumps                                   | 1  |                   |
|  | Drive (V-belt, other)                             | V-ribbed belt                              |                   |
|  | Bearing type                                      | Ball and roller                            |                   |
|  | Impeller material                                 | Steel                                      |                   |
|  | Housing material                                  | Aluminum alloy                             |                   |
| By-pass recirculation type (inter., ext.)    |   | External                                   |                   |
| Cooling system capacity                      | With heater -- L(qt.)                             | 4.7 (4.9)                                  |                   |
|  | With air conditioner -- L(qt.)                    | 4.7 (4.9)                                  |                   |
|  | 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                                     | STD.                                       |                   |
|  | Type (cross-flow, etc.)                           | Vertical flow                              |                   |
|  | Construction (fin & tube mechanical, braze, etc.) | Fin & tube                                 |                   |
|  | Material, mass kg (wgt., lbs.)                    | Cupper & brass, M/T:2.8(6.2), A/T:3.3(7.3) |                   |
|  | Width   | 328 (12.91)                                |                   |
|  | Height  | M/T:325(12.80), A/T:350(13.78)             |                   |
|  | Thickness   | 32 (1.26)                                  |                   |
|  | Fins per inch                                     | 20   |                   |
| Radiator end tank material                   |   | Plastics                                   |                   |
| Fan  | Std., elec., opt.                                 | Electric                                   |                   |
|  | Number of blades & type (flex, solid, material)   | 4, Solid, Plastics                         |                   |
|  | Diameter & projected width                        | 300 (11.81)                                |                   |
|  | Ratio (fan to crankshaft rev.)                    | N.A.                                       |                   |
|  | Fan cutout type                                   | N.A.                                       |                   |
|  | Drive type (direct, remote)                       | Electric motor drive                       |                   |
|  | RPM at idle (elec.)                               | M/T:1,900, A/T:2,100                       | 2,100             |
|  | Motor rating (wattage/elec.)                      | M/T:45, A/T:80                             | 80                |
|  | Motor switch (type & location/elec.)              | Bimetal type, On intake manifold           |                   |
|  | Switch point (temp./pressure/elec.)               | ON/OFF:98/93C (208/199F)                   | 93/88C (199/190F) |
|  | Fan shroud (material)                             | Steel                                      |                   |

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

Engine Description  
Engine Code

L-4, 1.3L, OHC

L-4, 1.3L, DOHC

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

|   |  |   |                      |
|---|--|---|----------------------|
| Induction type: carburetor, fuel injection system, etc.               |  | TBI   | MPI                  |
| Manufacturer  |  | NIPPON DENSO  | HITACHI CO., LTD.    |
| Carburetor no. of barrels   |  | N.A.  | N.A.                 |
| Idle A/F mix.   |  | 14.6  | 14.6                 |
| Fuel injection  | Point of injection (no.)                               | Throttle body (1)                                   | Intake air port (4)  |
|   | Constant, pulse, flow                                  | Pulse   | Pulse                |
|   | Control (electronic, mech.)                            | Electronic  | Electronic           |
|   | System pressure kPa (psi)                              | 180 (26)  | 250 (36)             |
| Idle spd.-rpm (spec. neutral or drive and propane if used)            | Manual   | 750 (neutral)                                       | 850 (neutral)        |
|   | Automatic  | 850 (neutral)                                       | N.A.                 |
|   |  |   |                      |
| Intake manifold heat control (exhaust or water thermostatic or fixed) |  | Thermostatic water                                  | N.A.                 |
| Air cleaner type  |  | Replaceable nonwoven fabric element, Single snorkel |                      |
| Fuel filter (type/location)   |  | Paper element / Tank side                           |                      |
| Fuel pump   | Type (elec. or mech.)                                  | Electric  |                      |
|   | Location (eng., tank)                                  | Tank  |                      |
|   | Pressure range kPa (psi)                               | 180 (26)  |                      |
|   | Flow rate at regulated pressure L (gal)/hr @ kPa (psi) | 50 (13.2) @ 180 (2.6)                               | 80 (21.1) @ 250 (36) |

## Fuel Tank

|                                  |                          |                                     |
|----------------------------------|--------------------------|-------------------------------------|
| Capacity refill L (gallons)      |                          | 40 (10.6)                           |
| Location (describe)              |                          | Under floor-rear                    |
| Attachment                       |                          | Bolts                               |
| Material & Mass kg (weight lbs.) |                          | Steel, 8.6 (18.9)                   |
| Filler pipe                      | Location & material      | Left side rear quarter panel, Steel |
|                                  | Connection to tank       | Kevlar reinforced rubber hose       |
| Fuel line (material)             |                          | Steel                               |
| Fuel hose (material)             |                          | FKM/CHC/CHC                         |
| Return line (material)           |                          | Steel                               |
| Vapor line (material)            |                          | Steel                               |
| Extended range tank              | Opt., n.a.               | N.A.                                |
|                                  | Capacity L (gallons)     | N.A.                                |
|                                  | Location & material      | N.A.                                |
|                                  | Attachment               | N.A.                                |
| Auxiliary tank                   | Opt., n.a.               | N.A.                                |
|                                  | Capacity L (gallons)     | N.A.                                |
|                                  | Location & material      | N.A.                                |
|                                  | Attachment               | N.A.                                |
|                                  | Selector switch or valve | N.A.                                |
| Separate fill                    |                          | N.A.                                |

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

Engine Description  
Engine Code

L-4, 1.3L, OHC

L-4, 1.3L, DOHC

## Vehicle Emission Control

|                              |  |  |  |                            |
|------------------------------|--|--|--|----------------------------|
| Exhaust Emission Control     | Type (air injection, engine modifications, other)        |  | EFI, Catalytic converter, EGR(California only) |                            |
|                              | Air Injection  | Pump or pulse  | N.A.   |                            |
|                              |  | Driven by  | N.A.   |                            |
|                              |  | Air distribution (head, manifold, etc.)  | N.A.   |                            |
|                              |  | Point of entry   | N.A.   |                            |
|                              | Exhaust Gas Recirculation                                | Type (controlled flow, open orifice, other)  | Back pressure type                             |                            |
|                              |  | Exhaust source<br>Point of exhaust injection (spacer, carburetor, manifold, other) | Intake manifold                                |                            |
|                              | Catalytic Converter                                      | Type   | Threeway catalyst                              |                            |
|                              |  | Number of  | 1  |                            |
|                              |  | Location(s)  | Under floor                                    |                            |
|                              |  | Volume L (in <sup>3</sup> )  | 0.95 (58)                                      |                            |
|                              |  | Substrate type   | Monolith                                       |                            |
|                              |  | Noble metal type   | Platinum & rhodium                             |                            |
|                              |  | Noble metal concentration (g/cm <sup>3</sup> )                                     | 0.0013   |                            |
| Crankcase Emission Control   | Type (ventilates to atmosphere, induction system, other) |  | Positive crankcase ventilation system          |                            |
|                              | Energy source (manifold vacuum, carburetor, other)       |  | Manifold vacuum                                |                            |
|                              | Discharges to (intake manifold, other)                   |  | Intake manifold                                |                            |
|                              | Air inlet (breather cap, other)                          |  | Air cleaner                                    | Air flow meter outlet hose |
| 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)   |                                 | Single   |                   |
| Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass kg (weight lbs) |                                 | 1, Straight through, Steel, 3-dr.:8.6(18.9), 4-dr.:9.4(20.7) |                   |
| Resonator no. & type   |                                 | N.A.   |                   |
| Exhaust pipe   | Branch o.d., wall thickness     | N.A.   |                   |
|  | Main o.d., wall thickness       | 48.6-1.6/38.1-1.2  | 35.0-1.5(dual)    |
|  | Material & Mass kg (weight lbs) | Stainless & al.coated steel                                  | Stainless steel   |
| Intermediate pipe  | o.d. & wall thickness           | 41.3-1.2/38.1-1.2  | 54.0-1.6/42.7-1.2 |
|  | Material & Mass kg (weight lbs) | Stainless steel & aluminum coated steel                      |                   |
| Tail pipe  | o.d. & wall thickness           | 38.1-1.2   | 35.0-1.2 (dual)   |
|  | Material & Mass kg (weight lbs) | Aluminum coated steel  |                   |

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Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (\*)

## METRIC (U.S. Customary)

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L-4, 1.3L, OHC

L-4, 1.3L, DOHC

## 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)      | STD., SUZUKI MOTOR CORPORATION, JAPAN |
| Automatic (manufacturer/country)           | STD., AISHIN SEIKI, JAPAN             |
| Automatic overdrive (manufacturer/country) | N.A.                                  |

## Manual Transmission/Transaxle

|                                     |                  |                               |
|-------------------------------------|------------------|-------------------------------|
| Number of forward speeds            |                  | 5                             |
| Gear ratios                         | 1st              | 3.416                         |
|                                     | 2nd              | 1.894                         |
|                                     | 3rd              | 1.280                         |
|                                     | 4th              | 0.914                         |
|                                     | 5th              | 0.757                         |
|                                     | Reverse          | 3.272                         |
| Synchronous meshing (specify gears) |                  | All forward gears             |
| Shift lever location                |                  | Floor                         |
| Trans. case mat'l. & mass kg (lbs)* |                  | Aluminum die-cast, 7.7 (16.9) |
| Lubricant                           | Capacity L (pt.) | 2.4 (5.1)                     |
|                                     | Type recommended | Hypoid gear oil               |

## Clutch (Manual Transmission)

|   |   |   |
|---|---|---|
| Clutch manufacturer                           |   | DAIKEN MANUFACTURING                                  |
| Clutch type (dry, wet; single, multiple disc) |   | Dry, Single   |
| Linkage (hydraulic, cable, rod, lever, other) |   | Cable   |
| Max. pedal effort (nom. spring load) N (lbs)  | Depressed   | 103 (23.2)  |
|   | Released  | 70 (15.7)   |
| Assist (spring, power/percent, nominal)       |   | Nominal   |
| Type pressure plate springs                   |   | Diaphragm spring                                      |
| Total spring load (nominal) N (lbs)           |   | 3,190 (717.1)   |
| Clutch facing                                 | Facing mfr. & material coding                       | ASAHI SEKIMEN, NC-80A                                 |
|   | Facing material & construction                      | Semi mold   |
|   | Rivets per facing                                   | 16  |
|   | Outside x inside dia. (nominal)                     | 190X132 (7.48X5.20)                                   |
|   | Total eff. area cm <sup>2</sup> (in. <sup>2</sup> ) | 147 (22.8)  |
|   | Thickness (pressure plate side/fly wheel side)      | 3.5/3.5 (0.14/0.14)                                   |
|   | Rivet depth (pressure plate side/fly wheel side)    | Min. 1.3/1.3 (0.05/0.05)                              |
|   | Engagement cushion method                           | Separate cushion type                                 |
| Release bearing type & method lub.            |   | Automatic center adjusting type with grease lubricant |
| Torsional damping method, springs, hysteresis |   | Springs   |

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

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

Engine Description  
Engine Code

L-4, 1.3L, OHC

L-4, 1.3L, DOHC

## Automatic Transmission/Transaxle

|  |                                       |                    |
|--|---------------------------------------|--------------------|
| Trade Name   | 3-speed automatic                     | N.A.               |
| Type and special features (describe)                           | Torque converter with planetary gears | N.A.               |
| Gear selector  | Location (column, floor, other)       | Floor              |
|  | Ltr./No. designation (e.g. PRND21)    | P-R-N-D-2-1        |
|  | Shift interlock (yes, no, describe)   | Yes                |
| Gear ratios  | 1st                                   | 2.810 (equivalent) |
|  | 2nd                                   | 1.540 (equivalent) |
|  | 3rd                                   | 1.000 (equivalent) |
|  | 4th                                   | N.A.               |
|  | Reverse                               | 2.296 (equivalent) |
| Max. upshift speed - drive range km/h (mph)                    | 1-2:55 (34)<br>2-3:100 (62)           | N.A.               |
| Max. kickdown speed - drive range km/h (mph)                   | 2-1:36 (22)<br>3-2:82 (51)            | N.A.               |
| Min. overdrive speed km/h (mph)                                | N.A.                                  | N.A.               |
| Torque converter   | Number of elements                    | N.A.               |
|  | Max. ratio at stall                   | 2.34               |
|  | Type of cooling (air, liquid)         | Liquid             |
|  | Nominal diameter                      | 210 (8.27)         |
|  | Capacity factor "K"                   | 260K               |
| Lubricant  | Capacity refill L (pt.)               | 4.9 (10.4)         |
|  | Type recommended                      | DEXTON II          |
| Oil cooler (std., opt., N.A., internal, external, air, liquid) | STD., Integral with radiator          | N.A.               |
| Transmission mass kg (lbs) & case material**                   | Aluminum die cast, 51 (112)           | N.A.               |

## All Wheel / 4 Wheel Drive

|   |  |         |
|---|--|---------|
| Description & type (part-time, full-time, 2/4 shift while moving, mechanical, elect., chain/gear, etc.) |  | N . A . |
| Transfer case   | Manufacturer and model                                       | N . A . |
|   | Type and location  | N . A . |
| Low-range gear ratio  |  | N . A . |
| System disconnect (describe)  |  | N . A . |
| Center differential   | Type (bevel, planetary, w or w/o viscous bias, torsen, etc.) | N . A . |
|   | Torque split (% front/rear)                                  | N . A . |

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

\*\* Dry weight including torque converter. If other, specify.

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (v) \_\_\_\_\_

## METRIC (U.S. Customary)

Engine Description  
Engine Code

L-4, 1.3L, OHC

L-4, 1.3L, DOHC

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

|   |                |                                       |          |
|---|----------------|---------------------------------------|----------|
| Effective final drive ratio (or overall top gear ratio) |                | A:3.524, B:3.540 (equivalent) C:4.105 |          |
| Transfer ratio and method (chain, gear, etc.)           |                | N.A.                                  |          |
| Front drive unit  | Ring gear o.d. | A:178.55, B:186.98                    | C:184.61 |
|   | No. of teeth   | Pinion A:21, B:19                     | C:19     |
|   | Ring gear      | A:74, B:70                            | C:78     |

## Front Drive Unit

|  |                         |                          |
|--|-------------------------|--------------------------|
| Description (integral to trans., etc.) |                         | Integral to transmission |
| Limited slip differential (type)       |                         | N.A.                     |
| Drive pinion                           | Type                    | Helical gear type        |
|  | Offset                  | N.A.                     |
| No. of differential pinions            |                         | 2                        |
| Pinion / differential                  | Adjustment (shim, etc.) | Shim                     |
|  | Bearing adjustment      | N.A.                     |
| Driving wheel bearing (type)           |                         | Ball bearing             |
| Lubricant                              | Capacity L (pt.)        | N.A.                     |
|  | Type recommended        | Same as transmission oil |
|  |                         |                          |
|  |                         |                          |

## 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  | 23X455.7 (0.91X17.94)          | 24X371.3 (0.94X14.62)         |  |
|   |                                | Right | 23X546.5 (0.91X21.52)          | 24X371.3 (0.94X14.62)         |  |
|   | Automatic transaxle            | Left  | 19.4X410.1 (0.76X16.15)        | N.A.                          |  |
|   |                                | Right | 19.4X591.6 (0.76X23.29)        | N.A.                          |  |
|   | Optional transaxle             | Left  | N.A.                           |                               |  |
|   |                                | Right | N.A.                           |                               |  |
| Slip yoke   | Type                           |       | N.A.                           |                               |  |
|   | Number of teeth                |       | N.A.                           |                               |  |
|   | Spline o.d.                    |       | N.A.                           |                               |  |
| Universal joints                                    | Make and mfg. no.              |       | Inner                          | NTN TOYO BEARING CO.,LTD.     |  |
|   |                                |       | Outer                          | NTN TOYO BEARING CO., LTD.    |  |
|   | Number used                    |       | 4                              |                               |  |
|   | Type, size, plunge             |       | Inner                          | M/T:Double offset, A/T:Tripod |  |
|   |                                |       | Outer                          | Rzeppa                        |  |
|   | Attach (u-bolt, clamp, etc)    |       | Serration                      |                               |  |
| Bearing   | Type (plain, anti-friction)    |       | Anti-friction                  |                               |  |
|   | Lubrication (fitting, prepack) |       | Prepack                        |                               |  |
| Drive taken through (torque tube, arms or springs)  |                                |       | Lower:Control arm, Upper:Strut |                               |  |
| 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 SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (\*) \_\_\_\_\_

## METRIC (U.S. Customary)

Engine Description  
Engine Code

L-4, 1.3L, OHC

L-4, 1.3L, DOHC

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

|  |           |      |
|--|-----------|------|
| Axle ratio (or overall top gear ratio) |           | N.A. |
| Ring gear o.d.                         |           | N.A. |
| No. of teeth                           | Pinion    | N.A. |
|  | Ring gear | N.A. |

## Rear Axle Unit

|                                  |                         |      |
|----------------------------------|-------------------------|------|
| Description                      |                         | N.A. |
| Limited slip differential (type) |                         | N.A. |
| Drive pinion                     | Type                    | N.A. |
|                                  | Offset                  | N.A. |
| No. of differential pinions      |                         | N.A. |
| Pinion / differential            | Adjustment (shim, etc.) | N.A. |
|                                  | Bearing adjustment      | N.A. |
| Driving wheel bearing (type)     |                         | N.A. |
| Lubricant                        | Capacity L (pt.)        | N.A. |
|                                  | Type recommended        | N.A. |
|                                  |                         |      |
|                                  |                         |      |
|                                  |                         |      |

## Propeller Shaft – Rear Wheel Drive

|   |                                  |                                   |         |
|---|----------------------------------|-----------------------------------|---------|
| Manufacturer<br>Type (straight tube, tube-in-tube,<br>internal-external damper, etc.) |                                  |                                   | N . A . |
| Outer<br>diam. x<br>length* x<br>wall<br>thickness                                    | Manual 3-speed transmission      |                                   | N . A . |
|   | Manual 4-speed transmission      |                                   | N . A . |
|   | Manual 5-speed transmission      |                                   | N . A . |
|   | Overdrive                        |                                   | N . A . |
|   | Automatic transmission           |                                   | N . A . |
| Inter-<br>mediate<br>bearing  | Type (plain, anti-friction)      |                                   | N . A . |
|   | Lubrication (fitting, prepack)   |                                   | N . A . |
| Slip<br>yoke  | Type                             |                                   | N . A . |
|   | Number of teeth                  |                                   | N . A . |
|   | Spline o.d.                      |                                   | N . A . |
| Universal<br>joints   | Make and mfg. no.                | Front                             | N . A . |
|   |                                  | Rear                              | N . A . |
|   | Number used                      |                                   | N . A . |
|   | Type (ball and trunnion, cross)  |                                   | N . A . |
|   | Rear attach (u-bolt, clamp, etc) |                                   | N . A . |
|   | Bearing                          | Type (plain,<br>anti-friction)    | N . A . |
|   |                                  | Lubrication<br>(fitting, prepack) | N . A . |
| Drive taken through (torque tube,<br>arms or springs)                                 |                                  |                                   | N . A . |
| Torque taken through (torque tube,<br>arms or springs)                                |                                  |                                   | N . A . |

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

Body Type And/Or  
Engine Displacement

L-4, 1.3L, OHC

L-4, 1.3L, OHC

## Suspension – General Including Electronic Controls

|                                 |   |  |
|---------------------------------|---|--|
| Car leveling                    | Standard/optional/not avail.                        | N.A.   |
|                                 | Manual/automatic control                            | N.A.   |
|                                 | Type (air/hydraulic)                                | N.A.   |
|                                 | Primary/assist spring                               | N.A.   |
|                                 | Rear only/4 wheel leveling                          | N.A.   |
|                                 | Single/dual rate spring                             | N.A.   |
|                                 | Single/dual ride heights                            | N.A.   |
|                                 | Provision for jacking                               | N.A.   |
| Shock absorber damping controls | Standard/option/not avail.                          | N.A.   |
|                                 | Manual/automatic control                            | N.A.   |
|                                 | Number of damping rates                             | N.A.   |
|                                 | Type of actuation (manual/electric motor/air, etc.) | N.A.   |
|                                 | s<br>e<br>n<br>s<br>o<br>r<br>s                     |  |
|                                 | Lateral acceleration                                | N.A.   |
| Shock absorber (front & rear)   | Deceleration  | N.A.   |
|                                 | Acceleration  | N.A.   |
|                                 | Road surface  | N.A.   |
|                                 | Type  | Front:MacPherson, Rear:MacPherson, Double acting hydraulic |
|                                 | Make  | Front:SHOWA, Rear:TOKIKO                                   |
|                                 | Piston diameter                                     | Front:25(0.98), Rear:25(0.98)                              |
|                                 | Rod diameter  | Front:18(0.71), Rear:18(0.71)                              |

## Suspension – Front

|                      |                                     |  |                     |
|----------------------|-------------------------------------|--|---------------------|
| Type and description |                                     | MacPherson strut with coil spring                          |                     |
| Travel*              | Full jounce                         | 100(3.94)  |                     |
|                      | Full rebound                        | 50(1.97)   |                     |
| Spring               | Type (coil, leaf, other & material) | Coil, Steel  |                     |
|                      | Insulators (type & material)        | Rubber top only  |                     |
|                      | Size (coil design height & i.d.)    | M/T:309.5X125.5(12.19X4.94)<br>A/T:315.5X125.3(12.42X4.93) | 286X157(11.26X6.18) |
|                      | Spring rate N/mm (lb./in.)          | 17.2(98.2)   | 20.6(117.6)         |
|                      | Rate at wheel N/mm (lb./in.)        | 17.2(98.2)   | 20.6(117.6)         |
| Stabilizer           | Type (link, linkless, frameless)    | Link   |                     |
|                      | Material & bar diameter             | Steel, 18(0.71)  | 22(0.87)            |

## Suspension – Rear

|                      |  |  |                   |
|----------------------|--|--|-------------------|
| Type and description |  | MacPherson strut, Separate coil spring               |                   |
| Travel*              | Full jounce                                      | 120(4.72)  |                   |
|                      | Full rebound                                     | 50(1.97)   |                   |
| Spring               | Type (coil, leaf, other & material)              | Coil, Steel  |                   |
|                      | Size (length x width, coil design height & i.d.) | 3-dr.:258X95(10.16X3.74)<br>4-dr.:262X95(10.31X3.74) | 241X95(9.49X3.74) |
|                      | Spring rate N/mm (lb./in.)                       | 45.1(257.5)  | 54.9(313.5)       |
|                      | Rate at wheel N/mm (lb./in.)                     | 17.6(100.5)  | 21.6(123.4)       |
|                      | Insulators (type & material)                     | Rubber top only                                      |                   |
|                      | If leaf  | No. of leaves  | N.A.              |
|                      |  | Shackle (comp. or tens.)                             | N.A.              |
| Stabilizer           | Type (link, linkless, frameless)                 | Link   |                   |
|                      | Material & bar diameter                          | N.A.   | Steel, 15(0.59)   |
| Track bar (type)     |  | N.A.   |                   |

\* Define load condition:

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

Body Type And/Or  
Engine Displacement

|                |                 |
|----------------|-----------------|
| L-4, 1.3L, OHC | L-4, 1.3L, DOHC |
| 3-DOOR         | 4-DOOR          |

## Brakes – Service

|   |   |                                 |   |                                |              |
|---|---|---------------------------------|---|--------------------------------|--------------|
| Description   |   |                                 | Hydraulic, Front: Floating caliper type<br>Rear : Floating caliper type |                                |              |
| Manufacturer and<br>brake type (std., opt., n.a.)           |   | Front (disc or drum)            | TOKIKO, Disc  |                                |              |
|   |   | Rear (disc or drum)             | NISSINBO, Drum TOKIKO, Disc   |                                |              |
| Valving type (proportion, delay, metering, other)           |   |                                 | Proportion  |                                |              |
| Power brake (std., opt., n.a.)                              |   |                                 | STD.  |                                |              |
| Booster type (remote, integral, vac., hyd., etc.)           |   |                                 | Vacuum  |                                |              |
| Vacuum  | Source (inline, pump, etc.)                           |                                 | Inline (Intake manifold)  |                                |              |
|   | Reservoir (volume in. <sup>3</sup> )                  |                                 | N.A.  |                                |              |
|   | Pump-type (elec, gear driven, belt driven)            |                                 | N.A.  |                                |              |
| Traction<br>control   | Operational speed range                               |                                 | N.A.  |                                |              |
|   | Type engine intervention (electronic, mech.)          |                                 | N.A.  |                                |              |
| Anti-lock<br>device   | Front / rear (std., opt., n.a.)                       |                                 | N.A.  |                                |              |
|   | Manufacturer  |                                 | N.A.  |                                |              |
|   | Type (electronic, mech.)                              |                                 | N.A.  |                                |              |
|   | Number sensors or circuits                            |                                 | N.A.  |                                |              |
|   | Number anti-lock hydraulic circuits                   |                                 | N.A.  |                                |              |
|   | Integral or add-on system                             |                                 | N.A.  |                                |              |
|   | Yaw control (yes, no)                                 |                                 | N.A.  |                                |              |
|   | Hydraulic power source (elec., vac. mtr., pwr. strg.) |                                 | N.A.  |                                |              |
| Effective area cm <sup>2</sup> (in. <sup>2</sup> )*         |   |                                 | 136/172 (21.1/26.7)   | 146/83 (22.6/12.9)             |              |
| Gross Lining area cm <sup>2</sup> (in. <sup>2</sup> )*(F/R) |   |                                 | 139/172 (21.5/26.7)   | 151/86 (23.4/13.3)             |              |
| Swept area cm <sup>2</sup> (in. <sup>2</sup> )*(F/R)        |   |                                 | 902/282 (139.8/43.7)  | 1,002/802 (155.3/124.3)        |              |
| Rotor   | Outerworking diameter                                 | F/R                             | 229/- (9.02/-)  | 248/237 (9.76/9.33)            |              |
|   | Inner working diameter                                | F/R                             | 154/- (6.06/-)  | 172/175 (6.77/6.89)            |              |
|   | Thickness   | F/R                             | 17/- (0.67/-)   | 18.5/10 (0.73/0.39)            |              |
|   | Material & type (vented/solid)                        | F/R                             | Cast iron, Vented/-   | Vented/Solid                   |              |
| Drum  | Diameter & width                                      | F/R                             | -/180X25 -/200X30   | N.A.                           |              |
|   | Type and material                                     | F/R                             | -/Cast iron   | N.A.                           |              |
| Wheel cylinder bore   |   |                                 | 48.1/15.8   | 48.1/17.4                      | 51.1/30.2    |
| Master cylinder   | Bore/stroke   | F/R                             | 20.6/28.5 (0.81/1.12)   |                                |              |
| Pedal arc ratio   |   |                                 | 4.1   |                                |              |
| Line pressure at 445 N(100 lb.) pedal load kPa (psi) 1      |   |                                 | N.A.  |                                |              |
| Lining clearance  |   |                                 | F/R   | Self adjusting/ Self adjusting |              |
| Brake<br>lining   | Front<br>wheel  | Bonded or riveted (rivets/seg.) |   | Bonded                         |              |
|   |   | Rivet size                      |   | N.A.                           |              |
|   |   | Manufacturer                    |   | AKEBONO BRAKE INDUSTRY         |              |
|   |   | Lining code*****                |   | AK V3016 EE                    |              |
|   |   | Material                        |   | Resin mold including metal     |              |
|   |   | ****                            | Primary or out-board  | 105X37.5X10 (4.13X1.48X0.39)   | 99.8X38.3X10 |
|   |   | Size                            | Secondary or in-board   | 105X37.5X10 (4.13X1.48X0.39)   | 99.8X38.3X10 |
|   |   | Shoe thickness (no lining)      |   | 5 (0.20)                       |              |
|   | Rear<br>wheel   | Bonded or riveted (rivets/seg.) |   | Bonded                         |              |
|   |   | Manufacturer                    |   | NISSHIN SPINNING               |              |
|   |   | Lining code*****                |   | NBK D9007 FF                   | NBK N603 FF  |
|   |   | Material                        |   | Resin mold                     |              |
|   |   | ****                            | Primary or out-board  | 172.7X25X4.3                   | 191.9X30X4.5 |
|   |   | Size                            | Secondary or in-board   | 172.7X25X4.3                   | 191.9X30X4.5 |
| Shoe thickness (no lining)                                  |   | 1.8 (0.07)                      | 1.6 (0.06)  |                                |              |
|   |   | 5 (0.20)                        |   |                                |              |

\* 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 circumference.)  
(Disc brake: Square of Outer Working Dia. minus Square of inner Working Dia. multiplied by  $\pi/2$  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 SWIFT

Model Year 1991 Issued Feb. 12, 91 Revised (\*)

## METRIC (U.S. Customary)

Body Type And/Or  
Engine Displacement

L-4, 1.3L, OHC

L-4, 1.3L, DOHC

## Tires And Wheels (Standard)

|        |   |                     |                                   |            |
|--------|---|---------------------|-----------------------------------|------------|
| Tires  | Size (load range, ply)                                      |                     | P155/70R13                        | P175/60R14 |
|        | Type (bias, radial, steel, nylon, etc.)                     |                     | Radial                            |            |
|        | Inflation pressure (cold) for recommended max. vehicle load | Front kPa (psi)     | 200 (29)                          | 180 (26)   |
|        |   | Rear kPa (psi)      | 200 (29)                          | 180 (26)   |
|        | Rev./mile-at 70 km/h (45 mph)                               |                     | 970                               | 928        |
| Wheels | Type & material   |                     | 5 drop center rim contours, Steel |            |
|        | Rim (size & flange type)                                    |                     | 13X4.5J                           | 14X5J      |
|        | Wheel offset  |                     | 45 (1.77)                         |            |
|        | Attachment  | Type (bolt or stud) | Studs                             |            |
|        |   | Circle diameter     | 114.3 (4.3)                       |            |
| Spare  | Tire and wheel  |                     | T115/70D14, 14X4T                 |            |
|        | Storage position & location (describe)                      |                     | Flat under rear load floor        |            |

## Tires And Wheels (Optional)

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

## Brakes - Parking

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

# MVMA Specifications

Vehicle Line SWIFT

Model Year 1991 Issued Feb. 12, 91 Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

Body Type And/Or  
Engine Displacement

|                |        |                 |
|----------------|--------|-----------------|
| L-4, 1.3L, OHC |        | L-4, 1.3L, DOHC |
| 3-DOOR         | 4-DOOR |                 |

## 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           | N.A.                     |                |             |  |  |
|   |   | (std., opt., n.a.)     | N.A.                     |                |             |  |  |
| Wheel diameter** (W9) SAE J1100                           |   | Manual                 | 375 (14.71)              |                | 365 (14.37) |  |  |
|   |   | Power                  | N.A.                     |                |             |  |  |
| Turning diameter m (ft.)                                  | Outside front                             | Wall to wall (l. & r.) | 10.0 (32.8)              | 10.4 (34.1)    | 10.0 (32.8) |  |  |
|   |   | Curb to curb (l. & r.) | 9.2 (30.2)               | 9.6 (31.5)     | 9.2 (30.2)  |  |  |
|   | Inside rear                               | Wall to wall (l. & r.) | N.A.                     |                |             |  |  |
|   |   | Curb to curb (l. & r.) | N.A.                     |                |             |  |  |
| Scrub Radius*   |   |                        |                          | -1             |             |  |  |
| Manual  | Gear                                      | Type                   | Rack & pinion            |                |             |  |  |
|   |   | Manufacturer           | SUZUKI MOTOR CORPORATION |                |             |  |  |
|   |   | Ratios                 | Gear                     | N.A.           |             |  |  |
|   |   |                        | Overall                  | 18             |             |  |  |
|   | No. wheel turns (stop to stop)            |                        | 3.6                      |                |             |  |  |
| Power   | Type (coaxial, elec., hyd., etc.)         |                        | N.A.                     |                |             |  |  |
|   | Manufacturer                              |                        | N.A.                     |                |             |  |  |
|   | Gear                                      | Type                   | N.A.                     |                |             |  |  |
|   |   | Ratios                 | Gear                     | N.A.           |             |  |  |
|   |   |                        | Overall                  | N.A.           |             |  |  |
|   | Pump (drive)                              |                        | N.A.                     |                |             |  |  |
|   | No. wheel turns (stop to stop)            |                        | N.A.                     |                |             |  |  |
| Linkage   | Type                                      |                        | N.A.                     |                |             |  |  |
|   | Location (front or rear of wheels, other) |                        | N.A.                     |                |             |  |  |
|   | Tie rods (one or two)                     |                        | N.A.                     |                |             |  |  |
| Steering axis   | Inclination at camber (deg.)              |                        | 25.7                     |                |             |  |  |
|   | Bearings (type)                           | Upper                  | Ball bearing             |                |             |  |  |
|   |   | Lower                  | Rubber bushing           |                |             |  |  |
|   |   | Thrust                 | N.A.                     |                |             |  |  |
| Steering spindle/knuckle & joint type                     |   |                        |                          | Serrated shaft |             |  |  |

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

\*\* See Page 22.

# Ø MVMA Specifications

Vehicle Line **SWIFT**

Model Year **1991** Issued **Feb.12,91** Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

Body Type And/Or  
Engine Displacement

L-3, 1.3L, OHC

L-3, 1.3L, DOHC

## Wheel Alignment

|                                |                          |                               |                   |
|--------------------------------|--------------------------|-------------------------------|-------------------|
| Front wheel at curb mass (wt.) | Service checking         | Caster (deg.)                 | 3'                |
|                                |                          | Camber (deg.)                 | 0'                |
|                                |                          | Toe-in outside track-mm (in.) | 0                 |
|                                | Service reset*           | Caster (deg.)                 | Not adjustable    |
|                                |                          | Camber (deg.)                 | Not adjustable    |
|                                |                          | Toe-in - mm (in.)             | Adjustable        |
|                                | Periodic M.V. inspection | Caster (deg.)                 | 3±2               |
|                                |                          | Camber (deg.)                 | 0±1               |
|                                |                          | Toe-in - mm (in.)             | 0±2 (0±0.079)     |
| Rear wheel at curb mass (wt.)  | Service checking         | Camber (deg.)                 | 0±1               |
|                                |                          | Toe-in outside track-mm (in.) | 2 (0.079)         |
|                                | Service reset*           | Camber (deg.)                 | Not adjustable    |
|                                |                          | Toe-in - mm (in.)             | Adjustable        |
|                                | Periodic M.V. inspection | Camber (deg.)                 | 0±1               |
|                                |                          | Toe-in - mm (in.)             | 2±2 (0.079±0.079) |

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

## Ø Electrical – Instruments and Equipment

|  |  |  |
|--|--|--|
| Speedometer  | Type (analog, digital, std., opt.)     | Analog   |
|  | Trip odometer (std., opt., n.a.)       | STD.   |
| Head-up display                                    | Standard, optional, not available      | N.A.   |
|  | Type                                   | Secondary, opto-electronic   |
|  | Speedometer                            | Digital  |
|  | Status / warning indicators            | Turn signals, high beam, low fuel, check gauges  |
|  | Brightness control                     | Day / night mode, adjustable   |
|  | EGR maintenance indicator              | N.A.   |
| Charge indicator                                   | Type                                   | Telltale warning light   |
|  | Warning device (light, audible)        | Light  |
| Temperature indicator                              | Type                                   | Electric gauge with pointer  |
|  | Warning device (light, audible)        | N.A.   |
| Oil pressure indicator                             | Type                                   | Telltale warning light   |
|  | Warning device (light, audible)        | Light  |
| Fuel indicator                                     | Type                                   | Electric gauge with pointer  |
|  | Warning device (light, audible)        | N.A.   |
| Wind-shield wiper                                  | Type (standard)                        | GA:Electric 2-speed, GS&GT:Electric 2-spä w/intermittent   |
|  | Type (optional)                        | N.A.   |
|  | Blade length                           | Dr:500(19.68) , As:450(17.72)  |
|  | Swept area cm²(in.²)                   | 6,161 (955)  |
| Wind-shield washer                                 | Type (standard)                        | Electric, Pull-lever   |
|  | Type (optional)                        | N.A.   |
|  | Fluid level indicator (light, audible) | N.A.   |
| Rear window wiper, wiper/washer (std., opt., n.a.) |  | N.A. STD., Wiper & washer  |
| Horn   | Type                                   | Electric reasonator  |
|  | Number used                            | 1  |
| Other  |  | Service & parking brake failure warning light, Seat belt warning light & buzzer, Head lamp high beam indicating light, Check engine indicating light, Turn signal indicating light, Shift-up indicator(GA&GS-MT) |

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (-)

## METRIC (U.S. Customary)

Engine Description  
Engine Code

L-4, 1.3L, OHC

L-4, 1.3L, DOHC

## Electrical – Supply System

|            |                            |                                      |          |
|------------|----------------------------|--------------------------------------|----------|
| Battery    | Manufacturer               | FURUKAWA BATTERY CO., LTD.           |          |
|            | Model, std., (opt.)        | 55B24R-MF (55B24S-MF)                |          |
|            | Voltage                    | 12 V                                 |          |
|            | Amps at 0°F cold crank     | 400 Amp                              |          |
|            | Minutes-reserve capacity   | 70 min.                              |          |
|            | Amps/hrs.-20 hr. rate      | 45 AH                                |          |
|            | Location                   | Left hand side of engine compartment |          |
| Alternator | Manufacturer               | NIPPON DENSO                         |          |
|            | Rating (idle/max. rpm)     | 50 A (2,500rpm)                      |          |
|            | Ratio (alt. crank/rev.)    | 2.36                                 |          |
|            | Output at idle (rpm, park) | M/T:18A(750), A/T:23A(850)           | 23A(850) |
|            | Optional (type & rating)   | N.A.                                 |          |
| Regulator  | Type                       | Integral with alternator             |          |

## Electrical – Starting System

|             |                                   |                            |           |
|-------------|-----------------------------------|----------------------------|-----------|
| Motor       | Manufacturer                      | NIPPON DENSO               |           |
|             | Current drain _____ °C(°F)        | 200 A max.                 |           |
|             | Power rating kw (hp)              | M/T:1.0(1.3), A/T:1.2(1.6) | 1.0 (1.3) |
| Motor drive | Engagement type                   | Positive shift solenoid    |           |
|             | Pinion engages from (front, rear) | Front                      |           |

## Electrical – Ignition System

|             |                                |                               |                                |
|-------------|--------------------------------|-------------------------------|--------------------------------|
| Type        | Electronic (std., opt., n.a.)  | STD.:Electronic spark advance |                                |
|             | Other (specify)                | High energy ignition          |                                |
| Coil        | Manufacturer                   | NIPPON DENSO                  | MITSUBISHI ELCTRIC CORPORATION |
|             | Model                          |                               |                                |
|             | Current                        | Engine stopped - A            | 0                              |
|             |                                | Engine idling - A             | 1.5 A max.                     |
| Spark plug  | Manufacturer                   | NGK, NIPPON DENSO or AC       | NGK or NIPPON DENSO            |
|             | Model                          | BPR6ES-11,W20EPR-U11,R42XLS   | BPR6ES, W20EPR-U               |
|             | Thread (mm)                    | 14                            | 14                             |
|             | Tightening torque N-m (lb. ft) | 24.5                          | 24.5                           |
|             | Gap                            | 1.1                           | 0.8                            |
|             | Number per cylinder            | 1                             | 1                              |
| Distributor | Manufacturer                   | NIPPON DENSO                  | HITACHI LTD.                   |
|             | Model                          |                               |                                |

## Electrical – Suppression

|                  |  |
|------------------|--|
| Locations & type | Internal alternator capacitor, Resister high-tension ignition cable, Resister spark plugs, Ignition coil by-pass capacitor, Flame spraying rotor distributor |
|------------------|--|

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

### Body Type

3-DOOR, HATCHBACK

4-DOOR, SEDAN

### Body

#### Structure

Unitized frame

#### Bumper system front - rear

Composed of energy absorption formed polypropylene, steel, and polypropylene cover

#### Anti-corrosion treatment

Use of surface treatment steel in major body component.  
Application of vinyl chloride coating to floor bottom surface  
Application of tipping coating to side sill outer surface  
Application of corrosion protection oil to side sill inner surface

### Body - Miscellaneous Information

|   |   |  |              |
|---|---|--|--------------|
| Type of finish (lacquer, enamel, other)                         |   | Enamel   |              |
| Hood  | Material & mass                               | Steel  |              |
|   | Hinge location (front, rear)                  | Rear   |              |
|   | Type (counterbalance, prop)                   | Prop   |              |
|   | Release control (internal, external)          | Internal and external                                  |              |
| Trunk lid   | Material & mass                               | N.A.   | Steel        |
|   | Type (counterbalance, other)                  | N.A.   | Torsion bars |
|   | Internal release control (elec., mech., n.a.) | N.A.   | Mechanical   |
| Hatch-back lid  | Material & mass                               | Steel  | N.A.         |
|   | Type (counterbalance, other)                  | Gas dumper stays                                       | N.A.         |
|   | Internal release control (elec., mech., n.a.) | N.A.   |              |
| Tailgate  | Material & mass                               | N.A.   |              |
|   | Type (drop, lift, door)                       | N.A.   |              |
|   | Internal release control (elec., mech., n.a.) | N.A.   |              |
| Vent window control (crank, friction, pivot, power)             | Front   | N.A.   |              |
|   | Rear  | 3-door:Pivot, 4-door:Cable                             |              |
| Window regulator type (cable, tape, flex drive, etc.)           | Front   | X-arm  |              |
|   | Rear  | 3-door:N.A., 4-door:Cable                              |              |
| Seat cushion type (e.g., 60/40 bucket, bench, wire, foam, etc.) | Front   | Bucket type, Steel plate press frame, Urethane mold    |              |
|   | Rear  | Bench type, Steel wire frame, Urethane mold            |              |
|   | 3rd seat                                      | N.A.   |              |
| Seat back type (e.g., 60/40 bucket, bench, wire, foam, etc.)    | Front   | Bucket type, Steel tube and press frame, Urethane mold |              |
|   | Rear  | Bench type, Steel tube and press frame, Urethane mold  |              |
|   | 3rd seat                                      | N.A.   |              |

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

### Body Type

3-DOOR, HATCHBACK

4-DOOR, SEDAN

### Restraint System

| Seating Position |   |             | Left   | Center | Right  |
|------------------|---|-------------|--|--------|--|
| Active           | Type & description<br>(lap & shoulder belt,<br>lap belt, etc.)  | First seat  | N.A.   | N.A.   | N.A.   |
|                  |   | Second seat | Lap & shoulder<br>belt, ELR-ALR, STD.            | N.A.   | Lap & shoulder<br>belt, ELR-ALR, STD.            |
|                  |   | Third seat  | N.A.   | N.A.   | N.A.   |
| Passive          | Type & description<br>(air bag, motorized -<br>2-point belt, fixed belt,<br>knee bolster, manual -<br>lap belt) | First seat  | Door mounted lap<br>& shoulder belt<br>ELR, STD. | N.A.   | Door mounted lap<br>& shoulder belt<br>ELR, STD. |
|                  |   | Second seat | N.A.   | N.A.   | N.A.   |
|                  |   | Third seat  | N.A.   | N.A.   | N.A.   |

| Glass  | SAE<br>Ref. No. |                 |                |
|--|-----------------|-----------------|----------------|
| Windshield glass exposed<br>surface area cm <sup>2</sup> (in. <sup>2</sup> )           | S1              | 8,281 (1,284)   | 8,620 (1,336)  |
| Side glass exposed surface<br>area cm <sup>2</sup> (in. <sup>2</sup> ) - total 2-sides | S2              | 12,384 (1,920)  | 11,516 (1,785) |
| Backlight glass exposed<br>surface area cm <sup>2</sup> (in. <sup>2</sup> )            | S3              | 4,071 ( 631)    | 5,406 ( 838)   |
| Total glass exposed surface<br>area cm <sup>2</sup> (in. <sup>2</sup> )                | S4              | 24,736 (3,834)  | 25,542 (3,959) |
| Windshield glass (type)  |                 | Laminated glass |                |
| Side glass (type)  |                 | Tempered glass  |                |
| Backlight glass (type)   |                 | Tempered glass  |                |

### Headlamps

|   |                           |
|---|---------------------------|
| Description (sealed beam,<br>halogen, replaceable bulb, etc.) | Halogen, Replaceable bulb |
| Shape   | Flush                     |
| Lo-beam type (2A1, 2B1,<br>2C1, etc.)                         | Flush                     |
| Quantity  | 2                         |
| Hi-beam type (1A1, 2A1, 1C1,<br>2C1, etc.)                    | Flush                     |
| Quantity  | 2                         |

### Frame

|  |                |
|--|----------------|
| Type and description (separate frame,<br>unitized frame, partially-unitized frame) | Unitized frame |
|--|----------------|

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (-) \_\_\_\_\_

## METRIC (U.S. Customary)

Body Type

3-DOOR, HATCHBACK

4-DOOR, SEDAN

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

|   |   |  |
|---|---|--|
| Air conditioning (manual, auto, temp control) |   | OPT., Manual control                     |
| Clock (digital, analog)                       |   | GA:N.A.; GS&GT:STD., Integral with radio |
| Compass / thermometer                         |   | N.A.                                     |
| Console (floor, overhead)                     |   | GA:N.A.; GS & GT:STD., Floor             |
| Defroster, elec. backlight                    |   | STD.                                     |
| Electronic                                    | Diagnostic monitor (integrated, individual)       | N.A.                                     |
|   | Instrument cluster (list instruments)             | N.A.                                     |
|   | Keyless entry                                     | N.A.                                     |
|   | Tripminder (avg. spd., fuel)                      | N.A.                                     |
|   | Voice alert (list items)                          | N.A.                                     |
|   | Other   | N.A.                                     |
|   |   |  |
| Fuel door lock (remote, key, electric)        |   | GA:STD., Key; GS & GT:STD., Remote       |
| Lamps   | Auto head on / off delay, dimming                 | N.A.                                     |
|   | Cornering   | N.A.                                     |
|   | Courtesy (map, reading)                           | STD., Dome lamp                          |
|   | Door lock, ignition                               | N.A.                                     |
|   | Engine compartment                                | N.A.                                     |
|   | Fog   | GA & GS:N.A., GT:STD.                    |
|   | Glove compartment                                 | N.A.                                     |
|   | Trunk   | N.A. STD.                                |
|   | Illuminated entry system (list lamps, activation) | N.A.                                     |
|   | Other   | N.A.                                     |
| Mirrors                                       | Day / night (auto. man.)                          | GA:N.A., GS & GT:Manual                  |
|   | L.H. (remote, power, heated)                      | GA:Manual, GS & GT:Electric power        |
|   | R.H. (convex, remote, power, heated)              | GA:N.A., GS & GT:Electric power remote   |
|   | Visor vanity (RH / LH, illuminated)               | N.A.                                     |
| Navigation system (describe)                  |   | N.A.                                     |
| Parking brake-auto release (warning light)    |   | Manual release with warning light        |

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (v) \_\_\_\_\_

## METRIC (U.S. Customary)

Body Type

3-DOOR, HATCHBACK

4-DOOR, SEDAN

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

|  |   |   |   |
|--|---|---|---|
| Power equipment                            | Deck lid (release, pull down)                   |   | N.A.  |
|  | Door locks (manual, automatic, describe system) |   | N.A.  |
|  | Seats   | 2 - 4 - 6 way, etc.   | N.A.  |
|  |   | Reclining (R.H., L.H.)  | N.A.  |
|  |   | Memory (R.H., L.H., preset recline)   | N.A.  |
|  |   | Support (lumbar, hip, thigh, etc.)  | N.A.  |
|  |   | Heated (R.H., L.H., other)  | N.A.  |
|  | Side windows                                    |   | N.A.  |
|  | Vent windows                                    |   | N.A.  |
|  | Rear windows                                    |   | N.A.  |
|  |   |   |   |
| Radio systems                              | Antenna (location, whip, w / shield, power)     |   | STD., Left front pillar                               |
|  | Standard  | AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc. | GS & GT:AM/FM ETR stereo with cassette                |
|  | Optional  |   | GA:AM/FM ETR stereo<br>AM/FM ETR stereo with cassette |
|  |   |   | Speaker (number, location)                            |
|  | Roof: open air or fixed (flip-up, sliding, "T") |   | N.A.  |
| Speed control device                       |   | N.A.  |   |
| Speed warning device (light, buzzer, etc.) |   | N.A.  |   |
| Tachometer (rpm)                           |   | GA:N.A., GS & GT:STD.   |   |
| Telephone system (describe)                |   | N.A.  |   |
| Theft deterrent system                     |   | N.A.  |   |

## Trailer Towing

|                                 |           |      |
|---------------------------------|-----------|------|
| Towing capable                  | Yes / No  | No   |
| Engine / transmission / axle    | Std / Opt | N.A. |
| Tow class (I, II, III)*         | Std / Opt | N.A. |
| Max. gross trailer wgt. (lbs.)  | Std / Opt | N.A. |
| Max. trailer tongue load (lbs.) | Std / Opt | N.A. |
| Towing package available        | Yes / No  | No   |

\* Class I - 2,000 lbs. Class II - 3,500 lbs. Class III - 5,000 lbs.

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 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 | SAE Ref. No. | 3-DOOR, HATCHBACK<br>GA | GT | 4-DOOR, SEDAN |
|-----------|--------------|-------------------------|----|---------------|
|-----------|--------------|-------------------------|----|---------------|

#### Width

|                                  |      |                |                |                |
|----------------------------------|------|----------------|----------------|----------------|
| Tread (front)                    | W101 | 1,365 ( 53.74) |                |                |
| Tread (rear)                     | W102 | 1,340 ( 52.76) |                |                |
| Vehicle width                    | W103 | 1,575 ( 62.01) | 1,592 ( 62.68) | 1,600 ( 62.99) |
| Body width at Sg RP (front)      | W117 | 1,575 ( 62.01) | 1,592 ( 62.68) | 1,600 ( 62.99) |
| Vehicle width (front doors open) | W120 | 3,590 (141.34) |                | 3,250 (127.95) |
| Vehicle width (rear doors open)  | W121 | N.A.           |                | 3,156 (124.25) |
| Turnle-home (degrees)            | W122 | 22.5           |                | 22             |
| Outside mirror width             | W410 | 1,817 ( 71.54) |                |                |

#### Length

|                               |      |                |  |                |
|-------------------------------|------|----------------|--|----------------|
| Wheelbase                     | L101 | 2,265 ( 89.17) |  | 2,365 ( 93.11) |
| Vehicle length                | L103 | 3,710 (146.06) |  | 4,075 (160.43) |
| Overhang (front)              | L104 | 767 ( 30.20)   |  |                |
| Overhang (rear)               | L105 | 678 ( 26.69)   |  | 943 ( 37.13)   |
| Upper structure length        | L123 | 2,618 (103.07) |  | 2,600 (102.36) |
| Rear wheel C/L "X" coordinate | L127 | 2,810 (110.63) |  | 2,910 (114.57) |

#### Height\*

|                                     |         |                |  |                |
|-------------------------------------|---------|----------------|--|----------------|
| Passenger distribution (front/rear) | PD1,2,3 | 2/2            |  |                |
| Trunk/cargo load                    |         |                |  |                |
| Vehicle height                      | H101    | 1,330 ( 52.36) |  | 1,360 ( 53.54) |
| Cowl point to ground                | H114    | 821 ( 32.32)   |  |                |
| Deck point to ground                | H138    | N.A.           |  | 980 ( 38.58)   |
| Rocker panel-front to ground        | H112    | 193 ( 7.60)    |  |                |
| Rocker panel-rear to ground         | H111    | 205 ( 8.07)    |  | 207 ( 8.15)    |
| Windshield slope angle (degrees)    | H122    | 60             |  | 59             |
| Backlight slope angle (degrees)     | H121    | 51.5           |  | 55             |

#### Ground Clearance\*

|   |      |               |              |              |
|---|------|---------------|--------------|--------------|
| Front bumper to ground                    | H102 | 215 ( 8.46)   | 184 ( 7.24)  | 215 ( 8.46)  |
| Rear bumper to ground                     | H104 | 263 ( 10.35)  | 237 ( 9.33)  | 263 ( 10.35) |
| Bumper to ground front at curb mass (wt.) | H103 | 233 ( 9.17)   | 201 ( 7.91)  | 233 ( 9.17)  |
| Bumper to ground rear at curb mass (wt.)  | H105 | 285 ( 11.22)  | 260 ( 10.24) | 285 ( 11.22) |
| Angle of approach (degrees)               | H106 | 19            | 18           | 19           |
| Angle of departure (degrees)              | H107 | 22.5          | 20.5         | 15           |
| Ramp breakover angle (degrees)            | H147 | 17            |              | 16           |
| Axle differential to ground (front/rear)  | H153 | N.A.          |              |              |
| Min. running ground clearance             | H156 | 155 ( 6.10)   |              |              |
| Location of min. run. grd. clear.         |      | Catalyst case |              |              |

\* All vehicle height and ground clearances are measured at the Manufacturer's Design Load Weight. Manufacturers Design Load Weight is defined with indicated passenger distribution and trunk/cargo load, unless otherwise specified. All linear dimensions are in millimeters (inches) unless otherwise noted.

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Body Type

|                   |               |
|-------------------|---------------|
| 3-DOOR, HATCHBACK | 4-DOOR, SEDAN |
| GA                | GT            |

SAE  
Ref.  
No.

### Front Compartment

|  |     |                |                               |
|--|-----|----------------|-------------------------------|
| SgRP front, "X" coordinate               | L31 | 1,850 ( 72.83) |                               |
| Effective head room                      | H61 | 960 ( 37.80)   | 992 ( 39.06)                  |
| Max. eff. leg room (accelerator)         | L34 | 1,079 ( 42.48) |                               |
| SgRP to heel point                       | H30 | 240 ( 9.45)    |                               |
| SgRP to heel point                       | L53 | 882 ( 34.72)   |                               |
| Back angle (degrees)                     | L40 | 25             |                               |
| Hip angle (degrees)                      | L42 | 97.5           |                               |
| Knee angle (degrees)                     | L44 | 129            |                               |
| Foot angle (degrees)                     | L46 | 87             |                               |
| Design H-point front travel              | L17 | 210 ( 8.27)    |                               |
| Normal driving & riding seat track trvl. | L23 | 210 ( 8.27)    |                               |
| Shoulder room                            | W3  | 1,310 ( 51.57) | 1,305 ( 51.38)                |
| Hip room                                 | W5  | 1,298 ( 51.10) |                               |
| Upper body opening to ground             | H50 | 1,230 ( 48.43) | 1,320 ( 51.97) 1,253 ( 49.33) |
| Steering wheel maximum diameter*         | W9  | 375 ( 14.76)   |                               |
| Steering wheel angle (degrees)           | H18 | 25.7           |                               |
| Accel. heel pt. to steer. whl. cntr      | L11 | 457 ( 17.80)   |                               |
| Accel. heel pt. to steer. whl. cntr      | H17 | 615 ( 24.21)   |                               |
| Undepressed floor covering thickness     | H67 | 30 ( 1.18)     |                               |

### Rear Compartment

|                                    |     |                |                |
|------------------------------------|-----|----------------|----------------|
| SgRP point couple distance         | L50 | 660 ( 25.98)   | 715 ( 28.15)   |
| Effective head room                | H63 | 928 ( 36.54)   | 951 ( 37.44)   |
| Min. effective leg room            | L51 | 757 ( 29.80)   | 813 ( 32.01)   |
| SgRP (second to heel)              | H31 | 266 ( 10.47)   | 281            |
| Knee clearance                     | L48 | -73 ( -2.82)   | -40            |
| Shoulder room                      | W4  | 1,282 ( 50.47) | 1,280 ( 50.39) |
| Hip room                           | W6  | 1,080 ( 42.52) | 1,120 ( 44.09) |
| Upper body opening to ground       | H51 | N.A.           | 1,262 ( 49.69) |
| Back angle (degrees)               | L41 | 25             | 25             |
| Hip angle (degrees)                | L43 | 76             | 75             |
| Knee angle (degrees)               | L45 | 66.5           | 116.5          |
| Foot angle (degrees)               | L47 | 112            | 116.5          |
| Depressed floor covering thickness | H73 | 20 ( 0.79)     | 20 ( 0.79)     |

### Luggage Compartment

|                                     |      |              |              |
|-------------------------------------|------|--------------|--------------|
| Usable luggage capacity L (cu. ft.) | V1   | N.A.         | 324.1 (11.4) |
| Liftover height                     | H195 | 769 ( 30.28) | 650 ( 25.59) |

### Interior Volumes (EPA Classification)

|                                   |  |            |    |
|-----------------------------------|--|------------|----|
| Vehicle class                     |  | Subcompact |    |
| Interior volume index (cu. ft.)** |  | 79         | 83 |
| Trunk / cargo index (cu. ft.)     |  | 10         | 10 |

\* See page 14.

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

All linear dimensions are in millimeters (inches) unless otherwise noted.

# MVMA Specifications

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (+) \_\_\_\_\_

## METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Body Type

|                   |    |               |
|-------------------|----|---------------|
| 3-DOOR, HATCHBACK |    | 4-DOOR, SEDAN |
| GA                | GT |               |

SAE  
Ref.  
No.

### Station Wagon -- Third Seat

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

### Station Wagon -- Cargo Space

|  |      |      |
|--|------|------|
| Cargo length (open front)                                    | L200 | N.A. |
| Cargo length (open second)                                   | L201 | N.A. |
| Cargo length (closed front)                                  | L202 | N.A. |
| Cargo length (closed second)                                 | L203 | N.A. |
| Cargo length at belt (front)                                 | L204 | N.A. |
| Cargo length at belt (second)                                | L205 | N.A. |
| Cargo width (wheelhouse)                                     | W201 | N.A. |
| Rear opening width at floor                                  | W203 | N.A. |
| Opening width at belt  | W204 | N.A. |
| Min. rear opening width above belt                           | W205 | N.A. |
| Cargo height   | H201 | N.A. |
| Rear opening height  | H202 | N.A. |
| Tailgate to ground height                                    | H250 | N.A. |
| Front seat back to load floor height                         | H197 | N.A. |
| Cargo volume index m <sup>3</sup> (ft. <sup>3</sup> )        | V2   | N.A. |
| Hidden cargo volume index m <sup>3</sup> (ft. <sup>3</sup> ) | V4   | N.A. |
| Cargo volume index-rear of 2-seat                            | V10  | N.A. |

### Hatchback -- Cargo Space

|  |      |                |              |      |
|--|------|----------------|--------------|------|
| Cargo length at front seatback height                        | L208 | 1,102 ( 43.34) | 973 ( 38.31) | N.A. |
| Cargo length at floor (front)                                | L209 | 1,018 ( 40.08) |              | N.A. |
| Cargo length at second seatback height                       | L210 | 460 ( 18.11)   |              | N.A. |
| Cargo length at floor (second)                               | L211 | 600 ( 23.62)   |              | N.A. |
| Front seatback to load floor height                          | H197 | 455 ( 17.91)   | 645 ( 25.39) | N.A. |
| Second seatback to load floor height                         | H198 | 42.7 (16.81)   |              | N.A. |
| Cargo volume index m <sup>3</sup> (ft. <sup>3</sup> )        | V3   | 0.618 (21.8)   | 0.823 (29.1) | N.A. |
| Hidden cargo volume index m <sup>3</sup> (ft. <sup>3</sup> ) | V4   | 0.390 (13.8)   |              | N.A. |
| Cargo volume index-rear of 2-seat                            | V11  | 0.290 (10.2)   |              | N.A. |

All linear dimensions are in millimeters (inches) unless otherwise noted.

# MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (-) \_\_\_\_\_

Body Type

3-DOOR, HATCHBACK

4-DOOR, SEDAN

## Vehicle Fiducial Marks

Fiducial Mark  
Number\*

Define Coordinate Location

Front

Front suspension strut upper center

Rear

Burring hole center of rear floor side member at rear most bottom surface

Fiducial  
Mark  
Number

|       |       |                |                |
|-------|-------|----------------|----------------|
| Front | W21*  | 512 ( 20.16)   |                |
|       | L54*  | 569 ( 22.40)   |                |
|       | H81*  | 525 ( 20.67)   |                |
|       | H161* | 755 ( 29.72)   |                |
|       | H163* | 738 ( 27.06)   | 737 ( 29.02)   |
| Rear  | W22*  | 463 ( 18.23)   |                |
|       | L55*  | 3,260 (128.35) | 3,625 (142.72) |
|       | H82*  | 159 ( 6.26)    |                |
|       | H162* | 413 ( 16.26)   |                |
|       | H164* | 390 ( 15.35)   | 394 ( 15.51)   |

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

All linear dimensions are in millimeters (inches) unless otherwise noted.

Vehicle Line SWIFT  
Model Year 1991 Issued Feb. 12, 91 Revised (•) \_\_\_\_\_

Page 25

## MVMA Specifications

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

Vehicle Line SWIFT

Model Year 1991 Issued Feb. 12, 91 Revised (\*)           

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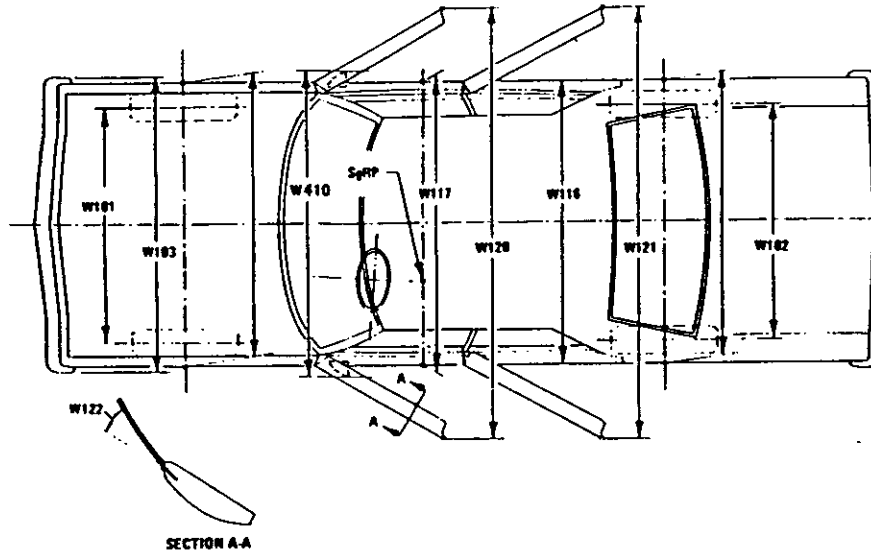
\* Also see Engine - General Section for dressed engine mass (weight).

# MVMA Specifications

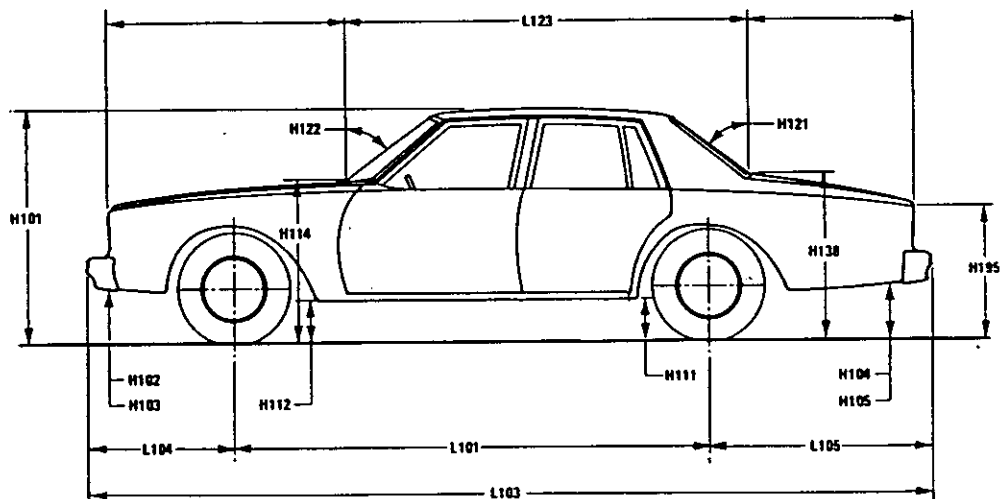
## METRIC (U.S. Customary)

### Exterior Vehicle And Body Dimensions – Key Sheet

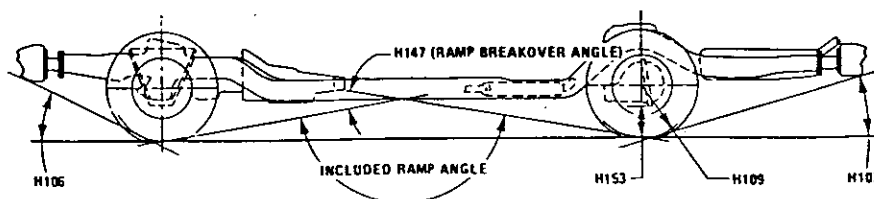
Exterior Width



Exterior Length & Height

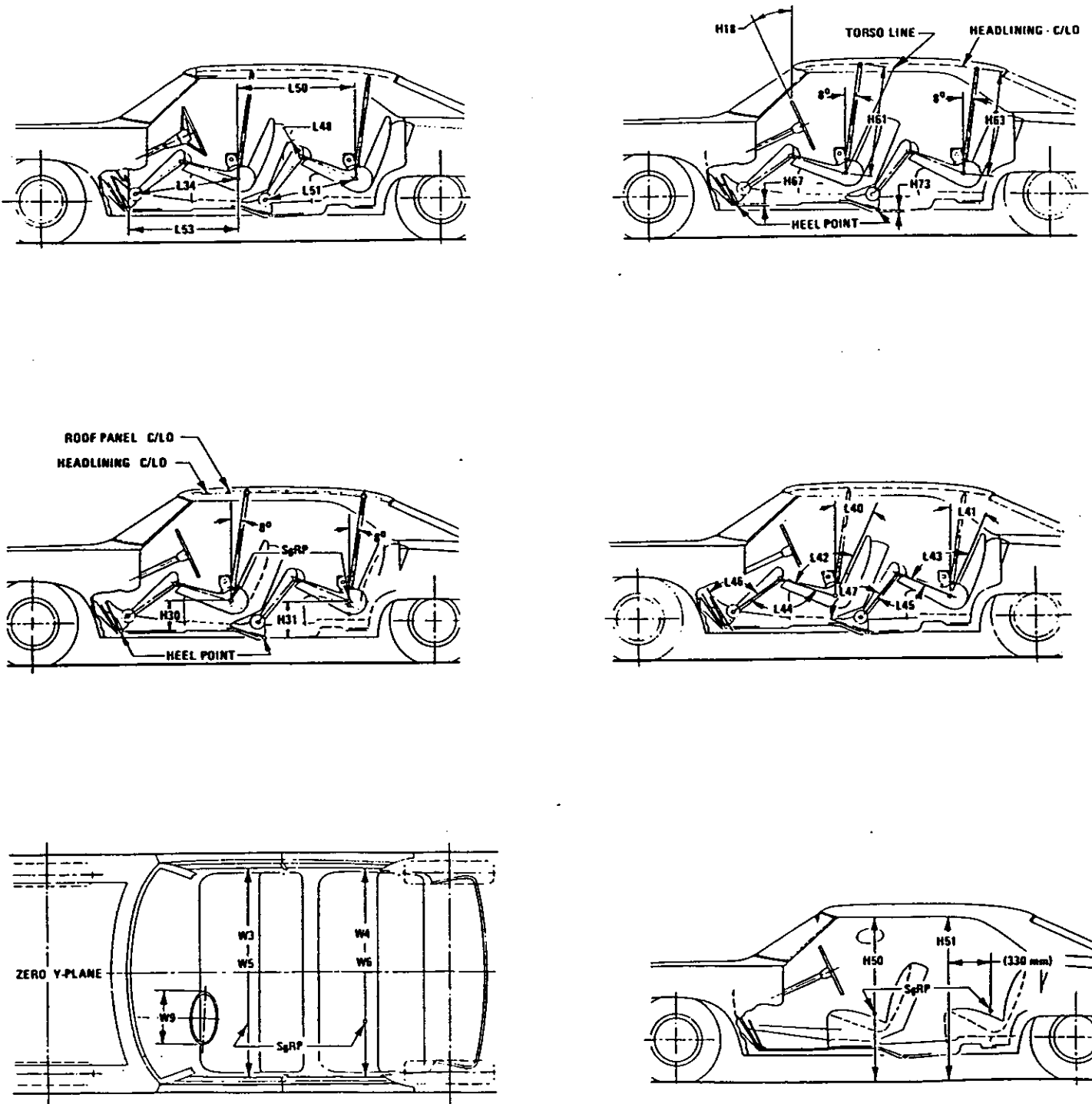


Exterior Ground Clearance



MVMA Specifications Form  
METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet

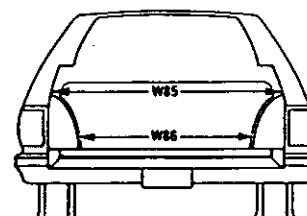
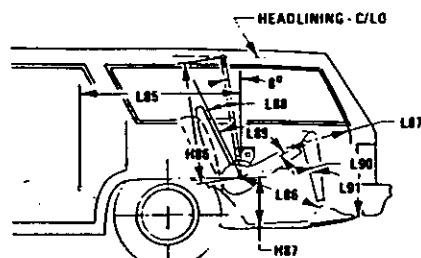


# MVMA Specifications Form

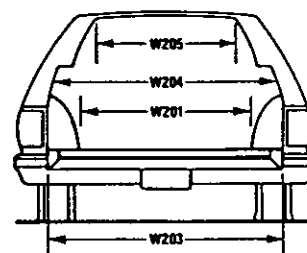
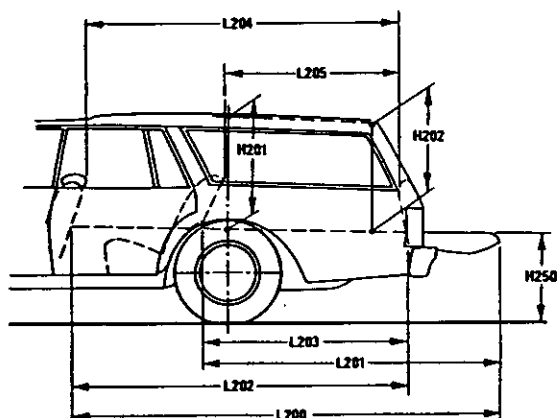
METRIC (U.S. Customary)

## Interior Vehicle And Body Dimensions – Key Sheet

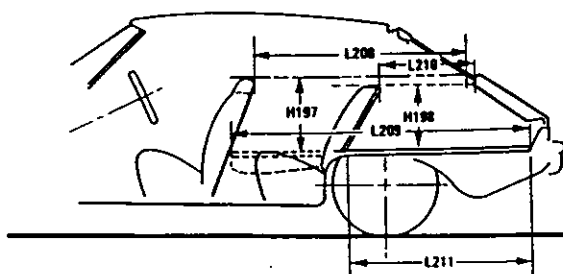
### Third Seat



### 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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed floor covering.
- H201 CARGO HEIGHT. The dimension measured vertically from the top of the undeepressed 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 undeepressed 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 undeepressed 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 undeepressed floor covering.

H198 SECOND SEATBACK TO LOAD FLOOR HEIGHT: The dimension measured vertically from the second seatback to the undeepressed 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)

## Index

| Subject                                       | Page No.           |
|---|--------------------|
| Alternator                                    | 16                 |
| Axle Drive, Front, Rear, All Four             | 2, 9, 10           |
| Axle Shafts                                   | 10                 |
| Battery                                       | 16                 |
| Body and Miscellaneous Information            | 17                 |
| Brakes - Parking Service                      | 12, 13             |
| Camber  | 15                 |
| Camshaft                                      | 3                  |
| Capacities                                    |                    |
| Cooling System                                | 5                  |
| Fuel Tank                                     | 6                  |
| Lubricants                                    |                    |
| Engine Crankcase                              | 4                  |
| Transmission / Transaxle                      | 8, 9               |
| Rear Axle                                     | 10                 |
| Carburetor                                    | 2, 6               |
| Caster  | 15                 |
| Clutch - Pedal Operated                       | 8                  |
| Coil, Ignition                                | 16                 |
| Connecting Rods                               | 4                  |
| Convenience Equipment                         | 19-20              |
| Cooling System                                | 5                  |
| Crankshaft                                    | 4                  |
| Cylinders and Cylinder Head                   | 3                  |
| Diesel Information                            | 4                  |
| Dimension Definitions                         |                    |
| Key Sheet - Exterior                          | 27, 30, 31         |
| Key Sheet - Interior                          | 28, 29, 31, 32, 33 |
| Electrical System                             | 15, 16             |
| Emission Controls                             | 7                  |
| Engine - General                              |                    |
| Bore, Stroke, Type                            | 3                  |
| Compression Ratio                             | 2                  |
| Displacement                                  | 2, 3               |
| Firing Order, Cylinder Numbering              | 3                  |
| General Information, Power & Torque           | 2                  |
| Intake System                                 | 4                  |
| Power Teams                                   | 2                  |
| Exhaust System                                | 7                  |
| Equipment Availability, Convenience           | 19                 |
| Fan, Cooling                                  | 5                  |
| Filters - Engine Oil, Fuel System             | 4                  |
| Four Wheel Drive                              | 10                 |
| Frame   | 18                 |
| Front Suspension                              | 11                 |
| Front Wheel Drive Unit                        | 10                 |
| Fuel Economy, EPA                             | 1                  |
| Fuel Injection                                | 6                  |
| Fuel System                                   | 6                  |
| Fuel Tank                                     | 6                  |
| Glass   | 18                 |
| Headlamps                                     | 18                 |
| Headroom - Body                               | 22, 23             |
| Heights                                       | 21                 |
| Horns   | 15                 |
| Horsepower - Brake                            | 2                  |
| Ignition System                               | 16                 |
| Inflation - Tires                             | 13                 |
| Interior Volumes                              | 22                 |
| Instruments                                   | 15                 |
| Legroom                                       | 22, 23             |
| Lengths                                       | 21                 |
| Leveling, Suspension                          | 11                 |
| Lifters, Valve                                | 4                  |
| Linings - Clutch, Brake                       | 8, 12              |
| Lubrication - Engine Transmission / Transaxle | 4, 8, 9            |
| Luggage Compartment                           | 22                 |
| Models  | 1                  |
| Motor Starting                                | 16                 |
| Muffler                                       | 7                  |
| Origin  | 1                  |

| Subject                              | Page No. |
|--------------------------------------|----------|
| Passenger Capacity                   | 1        |
| Passenger Mass Distribution          | 25       |
| Pistons                              | 3        |
| Power Brakes                         | 12       |
| Power, Engine                        | 2        |
| Power Steering                       | 14       |
| Power Teams                          | 2        |
| Propeller Shaft                      | 10       |
| Pumps - Fuel                         | 6        |
| Water                                | 5        |
| Radiator - Cap, Hoses, Core          | 5        |
| Ratios - Axle, Transaxle             | 2, 9, 10 |
| Compression                          | 2        |
| Steering                             | 14       |
| Transmission / Transaxle             | 2, 8, 9  |
| Rear Axle                            | 2, 10    |
| Regulator - Alternator               | 16       |
| Restraint System                     | 18       |
| Rims                                 | 13       |
| Rods - Connecting                    | 4        |
| Scrub Radius                         | 14       |
| Seats                                | 17       |
| Shock Absorbers, Front & Rear        | 11       |
| Spark Plugs                          | 16       |
| Speedometer                          | 15       |
| Springs - Front & Rear Suspension    | 11       |
| Stabilizer (Sway Bar) - Front & Rear | 11       |
| Starting System                      | 16       |
| Steering                             | 14       |
| Suppression - Ignition, Radio        | 16       |
| Suspension - Front & Rear            | 11       |
| Tail Pipe                            | 7        |
| Theft Protection                     | 20       |
| Thermostat, Cooling                  | 5        |
| Tires                                | 13       |
| Toe-In                               | 15       |
| Torque Converter                     | 9        |
| Torque - Engine                      | 2, 8, 9  |
| Trailer Towing                       | 20       |
| Transaxle                            | 9        |
| Transmission - Types                 | 2, 8, 9  |
| Transmission - Automatic             | 2, 9     |
| Transmission - Manual                | 2, 8     |
| Transmission - Ratios                | 2, 8, 9  |
| Tread                                | 21       |
| Trunk Cargo Load                     | 1        |
| Trunk Luggage Capacity               | 22       |
| Turning Diameter                     | 14       |
| Utilized Construction                | 18       |
| Universal Joints, Propeller Shaft    | 10       |
| Valve System                         | 4        |
| Vehicle Dimensions                   |          |
| Width                                | 21       |
| Length                               | 21       |
| Height                               | 21       |
| Ground Clearance                     | 21       |
| Front Compartment                    | 22       |
| Rear Compartment                     | 22       |
| Luggage Compartment                  | 22       |
| Station Wagon - Third Seat           | 22       |
| Station Wagon - Cargo Space          | 22       |
| Hatchback - Cargo Space              | 22       |
| Fiducial Marks                       | 22       |
| Voltage Regulator                    | 16       |
| Water Pump                           | 5        |
| Weights                              | 25, 26   |
| Wheel Alignment                      | 15       |
| Wheelbase                            | 21       |
| Wheels & Tires                       | 13       |
| Wheel Spindle                        | 14       |
| Widths                               | 21       |
| Windshield                           | 14       |
| Windshield Wiper and Washer          | 14       |