

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1994

| | | | |
|-----------------|--|--------------|-----------------|
| Manufacturer | CHEVROLET MOTOR DIVISION GENERAL MOTORS CORPORATION | Vehicle Line | LUMINA MINIVAN |
| Mailing Address | 30007 VAN DYKE WARREN, MI 48090-9065 | Issued | SEPTEMBER, 1993 |
| | | Revised | |

Direct questions concerning these specifications to the manufacturer listed above.

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

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.

MVMA

Motor Vehicle Manufacturers Association
of the United States, Inc.

Blank Forms Provided by Technical Affairs Division

MVMA Specifications

METRIC (U.S. Customary)

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NOTE:

1. This form uses both SI metric units and U.S. Customary units. The metric unit of measure is presented first, and the U.S. Customary unit follows in parentheses.
2. UNLESS OTHERWISE INDICATED:
 - a. Specifications apply to standard models without optional equipment. Significant deviations are noted.
 - b. Nominal design dimensions are used throughout these specifications.
 - c. All linear dimensions are in millimeters (inches), and all mass (weight) 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 LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*)

METRIC (U.S. Customary)

Vehicle Origin

| | |
|--|----------------------------|
| Design & development (company) | G.M., Midsize Car Division |
| Where built (country) | U.S.A. |
| Authorized U.S. Sales marketing representative | Chevrolet Motor Division |

Vehicle Models

| Model Description & Drive (FWD/RWD/AWD/4WD)* | 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) |
|--|--|--|--|-----------------------------|
| LUMINA 3-Door Cargo Minivan | 1UM05 | 2 (2/-) | | 19/23 |
| 3-Door Minivan | 1UM06 | 5 (2/3), Std. 7 (2/3/2), Opt. | | 19/23 |

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

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METRIC (U.S. Customary) Power Teams

SAE J1349 Net bhp (brake hrspwr) and Net Torque corrected to 77 deg. F / 25 deg. C and 29.61 in. Hg/100 kPa atmos. press.

| | | A | B | C | D | |
|--|---|-------------------------------------|----------------------------------|------------------|---|--|
| E N G I N E | Engine Code | LG6 | L27 | | | |
| | Displacement Liters (cu. in.) | 3.1 (191) | 3.8 (231) | | | |
| | Induction system (FI, Carb, etc.) | Electronic Fuel Injection | Multi-Port Fuel Injection | | | |
| | Compression ratio | 8.5:1 | 9.0:1 | | | |
| | SAE Net at RPM | Power kW(bhp) | 90 (120) @ 4200 | 127 (170) @ 4800 | | |
| | | Torque Newton meters (lb.ft.) | 237 (175) @ 2200 | 305 (225) @ 3200 | | |
| Exhaust Single, dual | | Single | Single | | | |
| T R A N S | Transmission/ Transaxle | MD9 Auto Transaxle 3-Speed | M13 Auto Transaxle 4-Speed | | | |
| | Effective Overall Final Drive/Axle Ratio (std. first) | 3.06 | 3.06 | | | |

| Series Availability | | Power Teams (A - B - C - D) | |
|---------------------|-------|-----------------------------|----------|
| Model | Code | Standard | Optional |
| LUMINA | | | |
| 3-Dr. Cargo Minivan | 1UM05 | A | - |
| 3-Dr. Minivan | 1UM06 | A | B |
| | | | |
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MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 ELECTRONIC FUEL INJECTION RPO LG6

ENGINE - GENERAL

| | | |
|--|---|--|
| Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.) | 60 deg. V, Front, Transverse | |
| Manufacturer | General Motors Powertrain Division | |
| No. of cylinders | 6 | |
| Bore | 89.0 mm (3.50 in.) | |
| Stroke | 84 mm (3.3 in.) | |
| Bore spacing (C/L to C/L) | 111.8 mm (4.40 in.) | |
| Cyl blk matl & mass kg(lbs.)(machined) | Cast Iron, 53.12 (117) | |
| Cylinder block deck height | 224 mm (8.8 in.) | |
| Cylinder block length | 435.5 mm (17.1 in.) | |
| Deck clearance (minimum) (above or below block) | 0.12mm (.005 in.) Below Deck, Nominal | |
| Cyl. head material & mass kg (lbs.) | Cast Iron, 11.227 (24.8) | |
| Cylinder head volume cu. cm. (cu. in.) | 51.346 (3.13) | |
| Cylinder liner material | Not Applicable | |
| Head gasket thickness (compressed) | 1.0 mm (.039 in.) | |
| Minimum combustion chamber total volume cm. cu. (cu. in.) | 50.346 (3.07) | |
| Cyl. no. system (front to rear) | L. Bank | 2-4-6 |
| | R. Bank | 1-3-5 |
| Firing order | 1-2-3-4-5-6 | |
| Intake manifold matl & mass kg(lbs.) ** | Cast Aluminum, 6.0 (13.2) | |
| Exh. manifold matl & mass kg (lbs) ** | Cast Iron, 3.610 (8.0) RH, 2.425 (5.3) LH | |
| Knock sensor (number & location) | None | |
| Fuel required unleaded, diesel, etc. | Unleaded | |
| Fuel antiknock index (R + M) / 2 | 87 | |
| Engine mounts | Quantity | 4 (1 Engine, 2 Transmission) |
| | Matl and type (elastomeric, hydroelastic, hydraulic damper, etc.) | 2 - Elastomeric; 1 - Hydraulic; 1 - Torque Strut |
| | Added isolation (sub-frame, crossmember, etc.) | Isolated Engine Cradle |
| Total dressed engine mass (wt) dry*** | 151.0 kg. (332.9 lbs.) | |

Engine - Pistons

| | |
|--|----------------------------|
| Material & mass, g (weight, oz.) - piston only | Aluminum Alloy, 365 (12.8) |
|--|----------------------------|

Engine Camshaft

| | | |
|-----------------------------------|---------------------------|-----------|
| Location | In Block Above Crankshaft | |
| Material & mass kg (weight, lbs.) | Cast Iron, 3.098 (6.83) | |
| Drive type | Chain/belt | Chain |
| | Width/pitch | 19.4/60.9 |

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

**Finished state.

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

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Vehicle Line LUMINA MINIVAN
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METRIC (U.S. Customary)

Engine Description
 Engine Code

3800 V6 (231 CID)
 MULTI-PORT FUEL INJECTION RPO L27

ENGINE - GENERAL

| | | |
|--|---|--|
| Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.) | | 60 Deg. V, Front, Transverse |
| Manufacturer | | General Motors Powertrain Division |
| No. of cylinders | | 6 |
| Bore | | 96.52mm (3.800 in.) |
| Stroke | | 86.36mm (3.400 in.) |
| Bore spacing (C/L to C/L) | | 107.7mm (4.24 in.) |
| Cyl blk matl & mass kg(lbs.)(machined) | | Cast Iron, 58.46 (128.88) |
| Cylinder block deck height | | 241.9mm (9.522 in.) |
| Cylinder block length | | 398.0mm (15.67 in.) |
| Deck clearance (minimum) (above or below block) | | 1.09mm (.043 in.), Below |
| Cyl. head material & mass kg (lbs.) | | Cast Iron, 13.09 (28.86) |
| Cylinder head volume cu. cm. (cu. in.) | | 37.36 (2.28) |
| Cylinder liner material | | None |
| Head gasket thickness (compressed) | | 1.57mm (.062 in.) |
| Minimum combustion chamber total volume cu. cm. (cu. in.) | | 84.49 (5.156) |
| Cyl. no. system (front to rear)* | L. Bank | 1-3-5 |
| | R. Bank | 2-4-6 |
| Firing order | | 1-6-5-4-3-2 |
| Intake manifold matl & mass kg (lbs.)** | | Aluminum Lower Manifold, 6.142 (13.54); Thermoplastic Upper, 4.0 (8.8) |
| Exh. manifold matl & mass kg (lbs.)** | | Stainless Steel: Left, 3.312 (7.286); Right, 3.607 (7.952) |
| Knock sensor (number & location) | | 1, Cylinder Case |
| Fuel required unleaded, diesel, etc. | | Unleaded |
| Fuel antiknock index (R + M) / 2 | | 87 |
| Engine mounts | Quantity | 4 (1 Engine, 2 Transmission) |
| | Matl and type (elastomeric, hydroelastic, hydraulic damper, etc.) | 2 - Elastomeric; 1 - Hydraulic; 1 - Torque Strut |
| | Added isolation (sub-frame, crossmember, etc.) | Isolated Sub-frame |
| Total dressed engine mass (wt) dry*** | | 176.9 kg. (390.0 lbs.) |

Engine - Pistons

| | |
|--|-----------------------------|
| Material & mass, g (weight, oz.) - piston only | Aluminum Alloy 413 (14.568) |
|--|-----------------------------|

Engine Camshaft

| | | |
|-----------------------------------|---------------------------------|---|
| Location | Above Crankshaft At Center Of V | |
| Material & mass kg (weight, lbs.) | 5150 Steel 3.08 (6.776) | |
| Drive type | Chain/belt | Chain |
| | Width/pitch | 9.75mm (.384 in.) Over Guides / 9.53mm (.375 in.) |

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

**Finished state.

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

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 ELECTRONIC FUEL INJECTION RPO LG6

Engine - Valve System

| | | |
|--------------------------------------|--------------------------|---|
| Hydraulic lifters (std., opt., n.a.) | | Standard |
| Valves | Number intake/exhaust | 6/6 |
| | Head O.D. intake/exhaust | 43.64 mm (1.72 in.)/36.20 mm (1.43 in.) |

Engine - Connecting Rods

| | |
|---------------------------------------|---------------------------|
| Material & mass kg., (weight, lbs.)* | Forged Steel, .592 (1.30) |
| Length(axes centerline to centerline) | 144.78 mm (5.79 in.) |

Engine - Crankshaft

| | | |
|--|---------------------------------------|--------------------------------------|
| Material & mass kg., (weight, lbs.)* | Nodular Cast Iron, 17.9 (39.5) | |
| End thrust taken by bearing (no.) | 3 | |
| Length & number of main bearings | 29.5 mm - 1, 4; 24.0 mm - 2, 3 / Four | |
| Seal (material, one, two piece design, etc.) | Front | Fluoroelastomer, One-Piece, Lip Seal |
| | Rear | Fluoroelastomer, One-Piece, Lip Seal |

Engine - Lubrication System

| | |
|--|------------------------|
| Normal oil pressure kPa(psi) @ eng rpm | 345-448 (50-65) @ 1200 |
| Type oil intake (floating, stationary) | Stationary |
| Oil filter sys. (full flow, part, other) | Full Flow |
| Capacity of c/case, less filter-refill-L (qt.) | 3.8 (4.0) |

Engine - Diesel Information

(NOT APPLICABLE)

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

Engine - Intake System

(NOT APPLICABLE)

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

* Finished State

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METRIC (U.S. Customary)

| | |
|--------------------|-----------------------------------|
| Engine Description | 3800 V6 (231 CID) |
| Engine Code | MULTI-PORT FUEL INJECTION RPO L27 |

Engine - Valve System

| | | |
|--------------------------------------|--------------------------|--------------------------------------|
| Hydraulic lifters (std., opt., n.a.) | Standard | |
| Valves | Number intake/exhaust | 6/6 |
| | Head O.D. intake/exhaust | 43.4mm (1.71 in.) / 38.1mm (1.5 in.) |

Engine - Connecting Rods

| | |
|--|---------------------------------------|
| Material & mass kg., (weight, lbs.)* | Pearlitic Malleable Iron .697 (1.534) |
| Length (axes centerline to centerline) | 162mm (6.382 in.) |

Engine - Crankshaft

| | | |
|--|------------------------------|----------------------|
| Material & mass kg., (weight, lbs.)* | Nodular Iron, 15.100 (33.29) | |
| End thrust taken by bearing (no.) | 2 | |
| Length & number of main bearings | 4 | |
| Seal (material, one, two piece design, etc.) | Front | One Piece Rubber Lip |
| | Rear | One Piece Rubber Lip |

Engine - Lubrication System

| | |
|--|-----------------|
| Normal oil pressure kPa (psi) @ eng rpm | 255 (37) @ 2400 |
| Type oil intake (floating, stationary) | Stationary |
| Oil filter sys. (full flow, part, other) | Full Flow |
| Capacity of c/case, less filter-refill-L (qt.) | 3.78 (4.0) |

Engine - Diesel Information

(NOT APPLICABLE)

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

Engine - Intake System

(NOT APPLICABLE)

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

* Finished State

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METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 ELECTRONIC FUEL INJECTION RPO LG6

Engine - Cooling System

| | | | |
|---|---|---|-----------------------|
| Coolant recovery system (std, opt, n.a.) | | Standard | |
| Coolant fill location (rad., bottle) | | Bottle, Coolant Recovery | |
| Radiator cap relief valve pressure kPa (psi) | | 103.4 (15) | |
| Circulation thermostat | Type (choke, bypass) | Bypass | |
| | Starts to open @ deg's C(F) | 91 (195) | |
| Water Pump | Type (centrifugal, other) | Centrifugal | |
| | GPM 1000 pump rpm | 15.5 | |
| | Number of pumps | 1 | |
| | Drive (V-belt, other) | Single Belt Poly 'V' Accessory Drive (Serpentine) | |
| | Bearing type | Sealed Ball-Roller | |
| | Impeller material | Cast Iron | |
| Housing material | | Aluminum | |
| By-pass recirculation type (inter., ext.) | | Internal | |
| Cooling system capacity | With heater - L (qt.) | 11.50 (12.15); w/C36 Rear Heater, 13.02 (13.76) | |
| | With air conditioner-L(qt.) | 11.80 (12.47); w/C36 Rear Heater 13.32 (14.08) | |
| | Opt. equip. specify-L(qt.) | -- | |
| Water jackets full length of cyl(yes,no) | | Yes | |
| Water all around cylinder (yes, no) | | Yes | |
| Water jackets open at head face (yes,no) | | Yes | |
| Radiator core | Std., A/C, HD | Standard | A/C (Opt.) |
| | Type (cross-flow, etc.) | Cross-Flow | Cross-Flow |
| | Construction (fin & tube mechanical, braze, etc.) | Tube & Center, Brazed | Tube & Center, Brazed |
| | Matl., mass kg (wt., lbs.) | Aluminum, 4.0 (8.8) | Aluminum, 6.0 (13.1) |
| | Width | 668 mm (26.3 in.) | 668 mm (26.3 in.) |
| | Height | 438 mm (17.2 in.) | 438 mm (17.2 in.) |
| | Thickness | 24 mm (0.94 in.) | 34 mm (1.33 in.) |
| | Fins per inch | 12.7 | 17.0 |
| Radiator end tank material | | Plastic | Plastic |
| Fan | Std., elec., opt. | Standard, Front A/C Electric | |
| | Number of blades & type (flex, solid, material) | 5, Solid, Plastic | |
| | Number & location (front, rear of radiator) | 1 - Rear Of Radiator | |
| | Diameter & projected width | 415 (16.3) | |
| | Ratio(fan to crnkshft.rev.) | -- | |
| | Fan cutout type | None | |
| | Drive type (direct, remote) | Direct | |
| | RPM at idle (elec.) | 1750 - 1800 | |
| | Motor rating(wattage)(elec) | 150 | |
| | Motor switch (type & location/elec.) | Remote, Behind Radiator | |
| | Switch point (temp./ pressure/elec.) | 223 deg. F/200 psi | |
| | Fan shroud (material) | Plastic | |

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METRIC (U.S. Customary)

Engine Description
 Engine Code

3800 V6 (231 CID)
 MULTI-PORT FUEL INJECTION RPO L27

Engine - Cooling System

| | | | |
|---|--|--|---------------------------------|
| Coolant recovery system (std, opt, n.a.) | | Standard | |
| Coolant fill location (rad., bottle) | | Bottle Coolant Recovery | |
| Radiator cap relief valve pressure kPa (psi) | | 103.4 (15) | |
| Circulation thermostat | Type (choke, bypass) | Choke | |
| | Starts to open @ deg's C(F) | 91 (195) | |
| Water Pump | Type (centrifugal, other) | Centrifugal | |
| | GPM 1000 pump rpm | 8.0 | |
| | Number of pumps | 1 | |
| | Drive (V-belt, other) | Single Belt Poly 'V' Accessory Drive (Serpentine) | |
| | Bearing type | Two Row Ball | |
| | Impeller material | Aluminum Alloy | |
| | Housing material | Aluminum Alloy | |
| By-pass recirculation type (inter., ext.) | | External | |
| Cooling system capacity | With heater - L (qt.) | Not Applicable | |
| | With air conditioner-L(qt.) | 10.75 (11.4); HD (V08), 10.69 (11.3) | |
| | Opt. equip. specify-L(qt.) | 12.27 (13.0) w/C34 Front & Rear A/C; V08 + C34, 12.21 (12.9) | |
| Water jackets full length of cyl(yes,no) | | No | |
| Water all around cylinder (yes, no) | | Yes | |
| Water jackets open at head face (yes,no) | | No | |
| Radiator core | Std., A/C, HD | A/C | V08 (H.D.) (Opt. W/V92) |
| | Type (cross-flow, etc.) | Cross-Flow | Cross-Flow |
| | Construction (fin & tube mechanical, braze, etc.) | Tube & Center, Brazed | Tube & Center, Brazed |
| | Matl., mass kg (wgt.,lbs.) | Aluminum, 7.2 (15.9) | Aluminum, 6.7 (14.8) |
| | Width | 718 mm (28.3 in.) | 718 mm (28.3 in.) |
| | Height | 438 mm (17.2 in.) | 438 mm (17.2 in.) |
| | Thickness | 34.0 mm (1.33 in.) | 34.0 mm (1.33 in.) |
| | Fins per inch | 16.93, Fins Per Inch (3.0 K) | 16.93 Fins Per Inch (3.0 K) |
| Radiator end tank material | | Plastic | Plastic |
| Fan | Std., elec., opt. | Standard, Electric | Standard, Electric |
| | Number of blades & type (flex, solid, material) | 5, Solid, Plastic | 6, Solid, Plastic |
| | Number & location (front, rear of radiator) | 1 - Rear Of Radiator | 1 - Front Of Radiator/Condenser |
| | Diameter & projected width | 415 mm (16.3 in.) | 300 mm (11.8 in.) |
| | Ratio(fan to crnkshft.rev.) | -- | -- |
| | Fan cutout type | None | None |
| | Drive type (direct, remote) | Direct | Direct |
| | RPM at idle (elec.) | 1800 | 2000 |
| | Motor rating(wattage/elec.) | 150 | 80 |
| | Motor switch (type & location/elec.) | Remote, ECM Driven From Inlet Manifold Sensor/ Pressure Switch At Refrigerant Orifice | |
| | Switch point (temp.,/ pressure/elec.) | 212 deg. F. A/C "On" | 226 deg. F/195 psi |
| | Fan shroud (material) | Plastic | Plastic |

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Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 ELECTRONIC FUEL INJECTION RPO LG6

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

| | | |
|---|--|--|
| Induction type: carburetor, fuel injection system, etc. | | Throttle Body Fuel Injection |
| Manufacturer | | AC/Rochester Products |
| Carburetor no. of barrels | | Not Applicable |
| Idle A/F mix. | | Preset - No Adjustment Provided |
| Fuel Injection | Point of inj. (no.) | Throttle Body, 2 |
| | Constant, pulse, flow | Pulse |
| | Control (elec., mech.) | ECM |
| | Sys. press. kPa (psi) | 76 (11) |
| Idle spd.-rpm (spec. neutral or drive and propane if used) | Manual | Not Applicable |
| | Automatic | PCM Controlled |
| Intake manifold heat control (exhaust or water thermostatic or fixed) | | Water |
| Air cleaner type | | Replaceable Paper Element Single Snorkel |
| Fuel filter (type/location) | | Stainless Steel/Left Underbody - Mid Car |
| Fuel pump | Type (elec. or mech.) | Electric |
| | Location (eng., tank) | Fuel Tank |
| | Press. range kPa (psi) | 81-85 (11.7-12.3) |
| | Flow rate at regulated pressure L (gal)/hr @ kPa (psi) | 72.0 (19.0) +/- 17.0 (4.5) @ 83.0 (12.0) +/- 2.0 (0.3) |

Fuel Tank

| | | |
|----------------------------------|-----------------------|--------------------------------------|
| Capacity refill L (gallons) | | 75.7 (20.0) |
| Location (describe) | | Left Center Of Vehicle Between Rails |
| Attachment | | Steel Straps - Cross Car |
| Material & Mass kg (weight lbs.) | | High Density Polyethylene |
| Filler pipe | Location & material | Behind Left Rear Wheel - Steel |
| | Connection to tank | Hose And Clamp |
| Fuel line (material) | | Nylon |
| Fuel hose (material) | | Low Permeation/Kevlar Reinforced |
| Return line (material) | | Nylon |
| Vapor line (material) | | Steel |
| Extended range tank | Opt., n.a. | Not Applicable |
| | Capacity L (gallons) | " |
| | Location & material | " |
| | Attachment | " |
| Auxiliary tank | Opt., n.a. | Not Applicable |
| | Capacity L (gallons) | " |
| | Location & material | " |
| | Attachment | " |
| | Sictr switch or valve | " |
| | Separate fill | " |

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 Model Year 1994 Issued 9-93 Revised _____

METRIC (U.S. Customary)

Engine Description 3800 V6 (231 CID)
 Engine Code MULTI-PORT FUEL INJECTION RPO L27

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

| | | |
|---|--|--|
| Induction type: carburetor, fuel injection system, etc. | | Port Fuel Injection |
| Manufacturer | | Bosch |
| Carburetor no. of barrels | | Not Applicable |
| Idle A/F mix. | | PCM Controlled |
| Fuel Injection | Point of inj. (no.) | 6 |
| | Constant, pulse, flow | Pulse |
| | Control (elec., mech.) | Electronic |
| | Sys. press. kPa (psi) | 230-300 (33-43) |
| Idle spd.-rpm (spec. neutral or drive and propane if used) | Manual | Not Applicable |
| | Automatic | Computer Controlled |
| Intake manifold heat control (exhaust or water thermostatic or fixed) | | Water Thermostatic |
| Air cleaner type | | Replaceable Paper Element Single Snorkel |
| Fuel filter (type/location) | | Stainless Steel/Left Underbody - Mid Car |
| Fuel pump | Type (elec. or mech.) | Electric |
| | Location (eng., tank) | Tank |
| | Press. range kPa (psi) | 345-355 (50-51) |
| | Flow rate at regulated pressure L (gal)/hr @ kPa (psi) | 13 min. @ 350 +/- 5.0 |

Fuel Tank

| | | |
|----------------------------------|-----------------------|--------------------------------------|
| Capacity refill L (gallons) | | 75.7 (20.0) |
| Location (describe) | | Left Center Of Vehicle Between Rails |
| Attachment | | Steel Straps - Cross Car |
| Material & Mass kg (weight lbs.) | | High Density Polyethylene |
| Filler pipe | Location & material | Behind Left Rear Wheel - Steel |
| | Connection to tank | Hose And Clamp |
| Fuel line (material) | | Nylon |
| Fuel hose (material) | | Low Permeation / Kevlar Reinforced |
| Return line (material) | | Nylon |
| Vapor line (material) | | Steel |
| Extended range tank | Opt., n.a. | Not Applicable |
| | Capacity L (gallons) | " |
| | Location & material | " |
| | Attachment | " |
| Auxiliary tank | Opt., n.a. | Not Applicable |
| | Capacity L (gallons) | " |
| | Location & material | " |
| | Attachment | " |
| | Slctr switch or valve | " |
| | Separate fill | " |

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*)

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 ELECTRONIC FUEL INJECTION RPO LG6

Vehicle Emission Control

| | | | |
|------------------------------|--|---|--|
| Exhaust Emission Control | Type (air injection, engine modifications, other) | | -- |
| | Air injection | Pump or pulse | Not Applicable |
| | | Driven by | " |
| | | Air distribution (head, manifold, etc.,) | " |
| | | Point of entry | " |
| | Exhaust Gas Recirculation | Type (controlled flow, open orifice, other) | Backpressure Type Controlled Flow |
| | | Exhaust source Point of exh.inj. (spacer, carb, manifold, other) | Manifold Exhaust Crossover Inlet Manifold |
| | Catalytic Converter | Type | Single Bed, Oxidizing & Reducing |
| | | Number of | 1 |
| | | Location(s) | Beneath RF Underbody |
| Volume L (cu.in) | | 2.78 (170) | |
| Substrate type | | Monolith | |
| Noble metal type | | Platinum (Pt), Palladium (Pd), Rhodium (Rh) | |
| Crankcase Emission Control | Type (ventilates to atmosphere, induction system, other) | | Closed Induction System |
| | Energy source (manifold vacuum, carburetor, other) | | Manifold Vacuum |
| | Discharges to (intake manifold, other) | | Inlet Manifold |
| | Air int.(breather cap, other) | | Air Cleaner |
| Evaporative Emission Control | Vapor vented to (crankcase, canister, other) | Fuel tank | Fuel Tank To Canister To TBI Port |
| | Carburetor | | -- |
| Vapor storage provision | | Canister | |
| Electronic System | Closed loop (yes/no) | | No |
| | Open loop (yes/no) | | No |

Engine - Exhaust System

| | | |
|--|-----------------------------|----------------------------------|
| Type (single, single with cross-over, dual, other) | | Single W/Cross Over |
| Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass kg (weight lbs.) | | 1, Reverse Flow |
| Resonator no. & type | | None |
| Exhaust pipe | Branch o.d., wall thickness | 50.8 mm (2.0 in.), Diameter |
| | Main o.d., wall thickness | 50.8 x 1.52 mm (2.0 x .060 in.) |
| | Matl. & Mass kg (wght.lbs.) | Stainless Steel |
| Inter-mediate pipe | o.d. & wall thickness | 57.2 x 1.22 mm (2.25 x .048 in.) |
| | Matl. & Mass kg (wght.lbs.) | Stainless Steel |
| Tail pipe | o.d. & wall thickness | 50.8 x 1.40 mm (2.0 x .055 in.) |
| | Matl. & Mass kg (wght.lbs.) | Stainless Steel |

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3800 V6 (231 CID)
 MULTI-PORT FUEL INJECTION RPO L27

Vehicle Emission Control

| | | | |
|---------------------------------------|--|--|---|
| Exhaust Emission Control | Type (air injection, engine modifications, other) | | -- |
| | Air injection | Pump or pulse | Not Applicable |
| | | Driven by | " |
| | | Air distribution (head, manifold, etc.) | " |
| | | Point of entry | " |
| | Exhaust Gas Recirculation | Type (controlled flow, open orifice, other) | Linear Controlled Flow |
| | | Exhaust source | Manifold Exhaust Crossover |
| | | Point of exh.inj. (spacer, carb., manifold, other) | Inlet Manifold |
| | Catalytic Converter | Type | Single Bed, Oxidizing & Reducing |
| | | Number of | 1 |
| | | Location(s) | Beneath R/F Underbody |
| | | Volume L (cu.in) | 2.78 (170) |
| | | Substrate type | Monolith |
| | | Noble metal type | Platinum (Pt), Palladium (Pd), Rhodium (Rh) |
| Noble metal concentration (g/cu. cm.) | | .00836 | |
| Crankcase Emission Control | Type (ventilates to atmosphere, induction system, other) | | Positive Ventilation To Induction System |
| | Energy source (manifold vacuum, carburetor, other) | | Manifold Vacuum |
| | Discharges to (intake manifold, other) | | Inlet Manifold |
| | Air inlt(breather cap, other) | | Throttle Body |
| Evaporative Emission Control | Vapor vented to (crankcase, canister, other) | Fuel tank | Canister |
| | | Carburetor | Not Applicable |
| | Vapor storage provision | | Canister |
| Electronic System | Closed loop (yes/no) | | Yes |
| | Open loop (yes/no) | | No |

Engine - Exhaust System

| | | |
|--|-----------------------------|---|
| Type (single, single with cross-over, dual, other) | | Single W/Cross Over |
| Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass kg (weight lbs.) | | 1, Reverse Flow, Stainless Steel |
| Resonator no. & type | | 1, Straight Thru, Separate Resonator, Stainless Steel |
| Exhaust pipe | Branch o.d., wall thickness | 57.2 mm (2.25 in.), Diameter |
| | Main o.d., wall thickness | 57.2 x 2.05 mm (2.25 x .080 in.) |
| | Matl. & Mass kg (wght.lbs.) | Stainless Steel |
| Inter-mediate pipe | o.d. & wall thickness | 57.2 x 1.4 mm (2.25 x .056 in.) |
| | Matl. & Mass kg (wght.lbs.) | Stainless Steel |
| Tail pipe | o.d. & wall thickness | 57.2 x 1.4 mm (2.25 x .056 in.) |
| | Matl. & Mass kg (wght.lbs.) | Stainless Steel |

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

METRIC (U.S. Customary)

| | |
|--------------------|-----------------------------------|
| Engine Description | 3.1 LITER V6 (191 CID) |
| Engine Code | ELECTRONIC FUEL INJECTION RPO LG6 |

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

| | |
|--|---------------------------|
| Manual 4-speed (manufacturer/country) | Not Applicable |
| Manual 5-speed (manufacturer/country) | " |
| Manual 6-speed (manufacturer/country) | " |
| Automatic (manufacturer/country) | Hydra-Matic, U.S.A. (MD9) |
| Auto. overdrive (manufacturer/country) | Not Applicable |

Manual Transmission/Transaxle (NOT APPLICABLE)

| | | |
|-------------------------------------|------------------|--|
| Number of forward speeds | | |
| Gear ratios | 1st | |
| | 2nd | |
| | 3rd | |
| | 4th | |
| | 5th | |
| | 6th | |
| | Reverse | |
| Synchronous meshing (specify gears) | | |
| Shift lever location | | |
| Trans. case mat'l. & mass kg (lbs)* | | |
| Lubricant | Capacity L (pt.) | |
| | Type recommended | |

Clutch (Manual Transmission) (NOT APPLICABLE)

| | | |
|---|--|--|
| Clutch manufacturer | | |
| Clutch type (dry, wet; single, multiple disc) | | |
| Linkage (hyd., cable, rod, lever, other) | | |
| Max. pedal effort (nom. spring load) N (lbs.) | Depressed | |
| | Released | |
| Assist (spring, power/percent, nominal) | | |
| Type pressure plate springs | | |
| Total spring load (nominal) N (lbs.) | | |
| Clutch facing | Facing mfr. & matl. coding | |
| | Facing matl. & construction | |
| | Rivets per facing | |
| | Outside x inside dia. (nom.) | |
| | Total eff. area sq cm (sq in) | |
| | Thickness (pressure plate side/fly wheel side) | |
| | Rivet depth (pressure plate side/fly wheel side) | |
| Engagement cushion method | | |
| Release bearing type & method lub. | | |
| Torsional damping method, springs, hysteresis | | |

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

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

METRIC (U.S. Customary)

Engine Description 3800 V6 (231 CID)
 Engine Code MULTI-PORT FUEL INJECTION RPO L27

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

| | |
|--|---------------------------|
| Manual 4-speed (manufacturer/country) | Not Applicable |
| Manual 5-speed (manufacturer/country) | " |
| Manual 6-speed (manufacturer/country) | " |
| Automatic (manufacturer/country) | " |
| Auto. overdrive (manufacturer/country) | Hydra-Matic, U.S.A. (M13) |

Manual Transmission/Transaxle (NOT APPLICABLE)

| | | |
|-------------------------------------|------------------|--|
| Number of forward speeds | | |
| Gear ratios | 1st | |
| | 2nd | |
| | 3rd | |
| | 4th | |
| | 5th | |
| | 6th | |
| | Reverse | |
| Synchronous meshing (specify gears) | | |
| Shift lever location | | |
| Trans. case mat'l. & mass kg (lbs)* | | |
| Lubricant | Capacity L (pt.) | |
| | Type recommended | |

Clutch (Manual Transmission) (NOT APPLICABLE)

| | | |
|---|--|--|
| Clutch manufacturer | | |
| Clutch type (dry, wet; single, multiple disc) | | |
| Linkage (hyd., cable, rod, lever, other) | | |
| Max. pedal effort (nom. spring load) N (lbs.) | Depressed | |
| | Released | |
| Assist (spring, power/percent, nominal) | | |
| Type pressure plate springs | | |
| Total spring load (nominal) N (lbs) | | |
| Clutch facing | Facing mfr. & matl. coding | |
| | Facing matl. & construction | |
| | Rivets per facing | |
| | Outside x inside dia. (nom.) | |
| | Total eff. area sq cm (sq in) | |
| | Thickness (pressure plate side/fly wheel side) | |
| | Rivet depth (pressure plate side/fly wheel side) | |
| Engagement cushion method | | |
| Release bearing type & method lub. | | |
| Torsional damping method, springs, hysteresis | | |

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

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

METRIC (U.S. Customary)

| | |
|--------------------|-----------------------------------|
| Engine Description | 3.1 LITER V6 (191 CID) |
| Engine Code | ELECTRONIC FUEL INJECTION RPO LG6 |

Automatic Transmission/Transaxle

| | | |
|--|--|----------------------------|
| Trade Name | Hydra-Matic 3T40 (MD9) Transaxle | |
| Type and special features (describe) | 3-Speed Automatic W/Torque Converter Clutch | |
| Shift mechanics | Hydraulic Clutches | |
| Gear selector | Location (column, floor, other) | Column (Mechanical) |
| | Ltr./No. designation (e.g. PRND21) | P-R-N-D-2-1 |
| | Shift interlock (yes, no, describe) | Yes - Brake, Ignition Key |
| Gear ratios | 1st | 2.84 |
| | 2nd | 1.60 |
| | 3rd | 1.00 |
| | 4th | Not Applicable |
| | 5th | " |
| | 6th | " |
| | Reverse | 2.07 |
| OVERALL | Final drive ratio | 3.06 |
| Max. upshift vehicle speed - drive range km/h (mph) | 1 - 2 = 67.6 (42) 2 - 3 = 117.5 (73) | |
| Max. upshift engine speed RPM | 5200 RPM | |
| Max. kickdown speed - drive range km/h (mph) | 3 - 2 = 114.3 (71) 2 - 1 = 56.3 (35) | |
| Min. overdrive speed km/h (mph) | Not Applicable | |
| Torque converter | Type | Lock-Up |
| | Torus design | Full |
| | Number of elements | 3 |
| | Max. ratio at stall | 1.95 |
| | Type of cooling (air, liquid) | Liquid |
| | Nominal diameter | 245 mm (9.65 in.) |
| | Capacity factor "K" | 180 |
| Pump type | Variable Displacement Vane | |
| Lubricant | Capacity refill L (pt.) | 6.6 (14), Dry Transmission |
| | Type recommended | Dexron IIE |
| Oil cooler (std., opt., N.A., internal, external, air, liquid) | Standard - Liquid | |
| Trans. mass kg (lbs) & case matl.** | 65.7 (144.81), Cast Aluminum | |

All Wheel / 4 Wheel Drive (NOT APPLICABLE)

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

* Input speed / square root of torque.
 ** Dry weight including torque converter. If other, specify.

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

METRIC (U.S. Customary)

| | |
|--------------------|-----------------------------------|
| Engine Description | 3800 V6 (231 CID) |
| Engine Code | MULTI-PORT FUEL INJECTION RPO L27 |

Automatic Transmission/Transaxle

| | | |
|--|-------------------------------------|--|
| Trade Name | | Hydra-Matic 4T60-E (M13) Transaxle |
| Type and special features (describe) | | 4-Speed Automatic W/Torque Converter Clutch |
| Shift mechanics | | Hydraulic Clutches/Electronic Controls |
| Gear selector | Location (column, floor, other) | Column (Mechanical) |
| | Ltr./No. designation (e.g. PRND21) | P-R-N-(D)-D-2-1 |
| | Shift interlock (yes, no, describe) | Yes - Brake, Ignition Key |
| Gear ratios | 1st | 2.92 |
| | 2nd | 1.57 |
| | 3rd | 1.00 |
| | 4th | .70 |
| | 5th | Not Applicable |
| | 6th | " |
| | Reverse | 2.38 |
| OVERALL | | Final drive ratio 3.06 |
| Max. upshift vehicle speed - drive range km/h (mph) | | 1 - 2 = 72 (45) 2 - 3 = 130 (81) 3 - 4 = 166 (103) |
| Max. upshift engine speed RPM | | 5200 RPM |
| Max. kickdown speed - drive range km/h (mph) | | 3 - 2 = 121 (75) 2 - 1 = 61 (38) |
| Min. overdrive speed km/h (mph) | | 72 (45) |
| Torque converter | Type | Lock-Up |
| | Torus design | Yes |
| | Number of elements | 3 |
| | Max. ratio at stall | 1.73 |
| | Type of cooling (air, liquid) | Liquid |
| | Nominal diameter | 245 mm |
| Capacity factor "K" | | 163 K |
| Pump type | | Variable Displacement Vane |
| Lubricant | Capacity refill L (pt.) | 9.5 (20), Dry Transmission |
| | Type recommended | Dexron IIE |
| Oil cooler (std., opt., N.A., internal, external, air, liquid) | | Standard - Liquid |
| Trans. mass kg (lbs) & case matl.** | | 81.0 (178.5), Cast Aluminum |

All Wheel / 4 Wheel Drive (NOT APPLICABLE)

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

* Input speed / square root of torque.
 ** Dry weight including torque converter. If other, specify.

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

METRIC (U.S. Customary)

| | |
|--------------------|-----------------------------------|
| Engine Description | 3.1 LITER V6 (191 CID) |
| Engine Code | ELECTRONIC FUEL INJECTION RPO LG6 |

Axle Ratio and Tooth Combinations (See 'Power Teams' for axle ratio usage) – Automatic Trans (MD9)

| | | | |
|---|----------------|----------------|---|
| Effective overall final drive ratio (or overall top gear ratio) | | 3.06 | |
| Trnsfr ratio and method(chain,gear,etc) | | 1.12, Chain | |
| Front drive unit | Ring gear o.d. | Not Applicable | |
| | No. of teeth | Pinion | " |
| | | Ring gear | " |

Front Drive Unit

| | | |
|--|-------------------------|---|
| Description (integral to trans., etc.) | | Planetary Final Drive Integral With Transmission |
| Limited slip differential (type) | | Not Applicable |
| Drive pinion | Type | " |
| | Offset | " |
| No. of differential pinions | | 2 |
| Pinion/differential | Adjustment (shim, etc.) | Not Applicable |
| | Bearing adjustment | " |
| Driving wheel bearing (type) | | " |
| Lubricant | Capacity L (pt.) | See Automatic Trans Specs |
| | Type recommended | See Automatic Trans Specs |

Axle Shafts – Front Wheel Drive

| | | | | |
|---|------------------------------|--|------------------------------------|--|
| Manufacturer and number used | | Saginaw Division (2) | | |
| Type (straight, solid bar, tubular, etc.) | Left | Straight, Solid | | |
| | Right | Straight, Solid | | |
| Outer diam. x length* x wall thickness | Manual transaxle | Left | Not Applicable | |
| | | Right | " | |
| | Automatic transaxle | Left | 27.1 x 300.0 mm (1.07 x 11.81 in.) | |
| | | Right | 27.1 x 418.0 mm (1.07 x 16.46 in.) | |
| | Optional transaxle | Left | Not Applicable | |
| | | Right | " | |
| Slip yoke | Type | Not Applicable | | |
| | Number of teeth | " | | |
| | Spline o.d. | " | | |
| Universal joints | Make and mfg. no. | Inner | Saginaw Division | |
| | | Outer | Saginaw Division | |
| | Number used | | Inbrd. & Outbrd. On Each Axle | |
| | Type, size, plunge | Inner | Tripot – 66.0 mm Stroke | |
| | | Outer | Rzeppa – Fixed Center | |
| | Attach (u-bolt, clamp, etc.) | | Retaining Ring | |
| | Bearing | Type (plain, anti-friction) | Inner – Ball & Needle Outer – Ball | |
| Lubrication (fitting, prepack) | | Prepacked | | |
| Drive taken through (torque tube, arms or springs) | | Wishbone Lower Control Arm, Upper MacPherson 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 LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

METRIC (U.S. Customary)

| | |
|--------------------|-----------------------------------|
| Engine Description | 3800 V6 (231 CID) |
| Engine Code | MULTI-PORT FUEL INJECTION RPO L27 |

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

| | | | |
|---|----------------|----------------|---|
| Effective overall final drive ratio (or overall top gear ratio) | | 3.06 | |
| Trnsfr ratio and method(chain,gear,etc) | | 1.0, Chain | |
| Front drive unit | Ring gear o.d. | Not Applicable | |
| | No. of teeth | Pinion | " |
| | | Ring gear | " |

Front Drive Unit

| | | |
|--|-------------------------|--|
| Description (integral to trans., etc.) | | Planetary Final Drive Integral With Transmission |
| Limited slip differential (type) | | Not Applicable |
| Drive pinion | Type | " |
| | Offset | " |
| No. of differential pinions | | 2 |
| Pinion/differential | Adjustment (shim, etc.) | Not Applicable |
| | Bearing adjustment | " |
| Driving wheel bearing (type) | | " |
| Lubricant | Capacity L (pt.) | See Automatic Trans Specs |
| | Type recommended | " |

Axle Shafts - Front Wheel Drive

| | | | | |
|---|------------------------------|--|-------------------------------------|--|
| Manufacturer and number used | | Saginaw Division (2) | | |
| Type (straight, solid bar, tubular, etc.) | Left | Straight, Solid | | |
| | Right | Straight, Solid | | |
| Outer diam. x length* x wall thickness | Manual transaxle | Left | Not Applicable | |
| | | Right | " | |
| | Automatic transaxle | Left | 27.1 x 300 mm (1.07 x 11.81 in.) | |
| | | Right | 27.1 x 337 mm (1.07 x 13.3 in.) | |
| | Optional transaxle | Left | Not Applicable | |
| | | Right | " | |
| Slip yoke | Type | Not Applicable | | |
| | Number of teeth | " | | |
| | Spline o.d. | " | | |
| Universal joints | Make and mfg. no. | Inner | Saginaw Division | |
| | | Outer | Saginaw Division | |
| | Number used | | Inboard & Outboard On Each Axle | |
| | Type, size, plunge | Inner | Tripot - 66.0 mm Stroke | |
| | | Outer | Rzeppa - Fixed Center | |
| | Attach (u-bolt, clamp, etc.) | | Retaining Ring | |
| | Bearing | Type (plain, anti-friction) | Inner - Ball & Needle; Outer - Ball | |
| Lubrication (fitting, prepack) | | Prepacked | | |
| Drive taken through (torque tube, arms or springs) | | Wishbone Lower Control Arm, Upper MacPherson 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

METRIC (U.S. Customary)

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

Model Code/Description And/Or
 Engine Code/Description

ALL

Suspension - General Including Electronic Controls

| | | | |
|---------------------------------|---|--|---|
| Car leveling | Std./opt./not avail. | Optional | |
| | Manual/automatic control | Automatic | |
| | Type (air/hydraulic) | Air | |
| | Primary/assist spring | Assist | |
| | Rear only/4 wheel leveling | Rear Only | |
| | Single/dual rate spring | Single | |
| | Single/dual ride heights | Single | |
| Provision for jacking | None | | |
| Shock absorber damping controls | Standard/option/not avail. | Not Available | |
| | Manual/automatic control | " | |
| | Number of damping rates | " | |
| | Type of actuation (manual/electric motor/air, etc.) | " | |
| | s e n s o r s | Lateral acceleration | " |
| | | Deceleration | " |
| Acceleration | | " | |
| Road surface | | " | |
| Shock absorber (front & rear) | Type | Front: MacPherson Strut; Rear: Direct, Double Action | |
| | Make | Delco Chassis Division | |
| | Piston diameter | Frt. 32 (1.26); Rear 25 (1.00) | |
| | Rod diameter | Frt. 20 (.80); Rear 12.5 (.50) | |

Suspension - Front

| | | |
|----------------------|---|-----------------------|
| Type and description | MacPherson Strut With Coil Springs, Stamped Lower Control Arms And Nodular Iron Steering Knuckles | |
| Travel | Full jounce (define load condition) | 97 From Curb |
| | Full rebound | 77 From Curb |
| Spring | Type (coil, leaf, other & matl) | Coil, Steel |
| | Insulators (type & matl) | Upper, Natural Rubber |
| | Size (Leaf: length & width; Coil: design height & i.d.; Bar: length & diameter) | |
| | Spring rate N/mm (lb./in.) | 27.0 (239) |
| | Rate @ wheel N/mm (lb./in.) | 27.0 (239) |
| Stabilizer | Type (link, linkless, frmless) | Linkless |
| | Material & O.D. bar/tube, wall thickness | 27.0mm (1.06 in.) |

Suspension - Rear

| | | |
|------------------------|---|---|
| Type and description | Trailing Arm With Stamped Control Arms And Open Section Transverse Beam | |
| Travel | Full jounce (define load condition) | 95 From Curb |
| | Full rebound | 92 From Curb |
| Spring | Type (coil, leaf, other & matl) | Coil, Steel |
| | Size (Leaf: length & width; Coil: design height & i.d.; Bar: length & diameter) | |
| | Spring rate N/mm (lb./in.) | 48.3 (275), Standard 48.0/57.0 (277/326), Optional |
| | Rate @ wheel N/mm (lb./in.) | 28.5 (162) |
| | Insulators (type & material) | Upper & Lower, Natural Rubber |
| | If leaf | No. of leaves |
| Shackle (comp or tens) | | " |
| Stabilizer | Type (link, linkless, frmless) | Linkless |
| | Material & O.D. bar/tube, wall thickness | 25.4mm (1.0 in.) |
| Track bar (type) | Transverse Link - Open Section | |

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*)

Model Code/Description And/Or
 Engine Code/Description
Brakes - Service

ALL

| | | | | | |
|---|-------------------------------------|--|--------------------------------------|--|--|
| Description | | Single Piston Caliper Disc Front; Leading - Trailing Drum Rear | | | |
| Manufacturer and brake type (std., opt., n.a.) | Front (disc or drum) | Disc | | | |
| | Rear (disc or drum) | Drum | | | |
| Valving type(prop, delay, metering, other) | | Proportioning | | | |
| Power brake (std., opt., n.a.) | | Standard | | | |
| Booster type(rmt, intgrl, vac., hyd., etc.) | | Vacuum | | | |
| Vacuum | Source (inline, pump, etc.) | Inline | | | |
| | Reservoir (volume cu. in.) | None | | | |
| | Pump-type | Not Available | | | |
| Traction assist | Operational speed range | All Speeds | | | |
| | Type (engine or brake intervention) | Brake And Powertrain Torque Management | | | |
| Antilock device | Front/rear (std., opt., n.a) | Standard | | | |
| | Manufacturer | Delco Chassis Division, G.M. | | | |
| | Type (electronic, mech.) | Electronic | | | |
| | Number sensors or circuits | Four | | | |
| | No. antilock hyd. circuits | Four | | | |
| | Integral or add-on system | Add-On Mounted To Master Cylinder | | | |
| | Yaw control (yes, no) | Yes | | | |
| Hydraulic power source | | Not Applicable | | | |
| Effective area sq. cm. (sq. in.)* | | F 243.6 (37.8)/R 383.0 (59.4) | | | |
| Gross Lng area sq. cm. (sq. in.)**(F/R) | | F 243.6 (37.8)/R 394.7 (61.2) | | | |
| Swept area sq. cm. (sq. in.)*** (F/R) | | F 1552 (240.8)/R 620.6 (96.2) | | | |
| Rotor | Outer working diameter | F/R | 278mm (10.94 in.) | | |
| | Inner working diameter | F/R | 167mm (6.57 in.) | | |
| | Thickness | F/R | 32.2mm (1.27 in.) | | |
| | Matl & type (vented/sld) | F/R | Cast Iron, Vented | | |
| Drum | Diameter & width | F/R | 225 x 45 mm (8.86 x 1.77 in.) | | |
| | Type and material | F/R | Composite Cast Iron, Finned | | |
| Wheel cylinder bore | | F 64 mm (2.52 in.)/ R 23.8 mm (.94 in.) | | | |
| Master cylinder | Bore/stroke | F/R | 24.0 mm (.94 in.)/35.5 mm (1.40 in.) | | |
| Pedal arc ratio | | 3.4:1 | | | |
| Line pressure at 445 N (100 lb.) pedal load kPa (psi) | | 14944 kPa (2167 psi) | | | |
| Lining clearance | | F/R | Self-Adjusting 0/.381 mm | | |
| Brake lining | Front wheel | Bonded or riveted | | Integrally Molded | |
| | | Rivet size | | Not Applicable | |
| | | Manufacturer | | Delco Chassis Division, G.M. | |
| | | Lining code ***** | | DM 131 EE | |
| | | Material | | Semi-Metallic | |
| | | **** | Pri. or out-brd | 136 x 46.7 x 11.2mm (5.35 x 1.84 x .44 in.) | |
| | | Size | Sec. or in-brd | 124 x 48.6 x 12.4 mm (4.88 x 1.91 x .49 in.) | |
| | Shoe thcknss.(no lng) | | 4.85mm | | |
| | Rear wheel | Bonded or riveted | | Riveted | |
| | | Manufacturer | | Delco Chassis Division, G.M. | |
| | | Lining code ***** | | 245 FF | |
| | | Material | | Semi-Metallic | |
| | | **** | Pri. or out-brd | 224.8 x 43.9 x 6.4mm (8.85 x 1.73 x .25 in.) | |
| | | Size | Sec. or in-brd | 224.8 x 43.9 x 6.4mm (8.85 x 1.73 x .25 in.) | |
| Shoe thcknss (no lng) | | 2 mm (.079 in.) | | | |

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

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

ALL

Tires And Wheels (Standard)

| | | | |
|----------------------------|---|--|---------------------------|
| Tires | Size (service description) | | P205/70R15 All Season 95S |
| | Type (bias, radial, etc.) | | Steel Belted Radial |
| | Inflation pressure (cold) for recommended max. vehicle load | Front kPa (psi) | 240 (35) |
| | | Rear kPa (psi) | 240 (35) |
| Rev/mile-at 70 km/h(45mph) | | | |
| Wheels | Type & material | | Steel |
| | Rim (size & flange type) | | 15 x 6.0 J |
| | Wheel offset | | 36 mm |
| | Attachment | Type (bolt or stud & nut) | Stud/Nut |
| | | Circle diameter | 115 mm (4.53 in.) |
| Number & size | | 5, M12 x 1.5 | |
| Spare | Tire and wheel | T125/70R15 Compact Spare, Radial, Wheel Dia. x Width 15 x 4, Inflation Pressure (60 psi/415 kPa) | |
| | Storage position & location (describe) | Horizontal, Under Floor | |

Tires And Wheels (Optional)

| | |
|--|------------------------|
| Tire size (service description) | P205/70R15 Touring 95S |
| Type (bias, radial, steel, nylon, etc.) | Steel Belted Radial |
| Wheel (type & material) | Cast Aluminum Or Steel |
| Rim (size, flange type and offset) | 15 x 6.0 JJ x 36 |
| Tire size (service description) | |
| Type (bias, radial, steel, nylon, etc.) | |
| Wheel (type & material) | |
| Rim (size, flange type and offset) | |
| Tire size (service description) | |
| Type (bias, radial, steel, nylon, etc.) | |
| Wheel (type & material) | |
| Rim (size, flange type and offset) | |
| Tire size (service description) | |
| Type (bias, radial, steel, nylon, etc.) | |
| Wheel (type & material) | |
| Rim (size, flange type and offset) | |
| Spare tire and wheel size | |
| (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position) | |

Brakes - Parking

| | | |
|---------------------------------|---|-----|
| Type of control | Foot Pedal Application | |
| Location of control | Under Instrument Panel, Left Of Steering Column | |
| Operates on | Rear Service Brakes | |
| If separate from service brakes | Type(internal or external) | --- |
| | Drum diameter | --- |
| | Lining size (length x width x thickness) | --- |

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

ALL

Steering

| | | | | |
|--|---|--|--|--------------------------------|
| Manual (std., opt., n.a.) | | Not Applicable | | |
| Power (std., opt., n.a.) | | Standard | | |
| Speed-sensitive (std., opt., n.a.) | | Not Applicable | | |
| 4-wheel steering (std., opt., n.a.) | | " | | |
| Adjustable steering wheel/ column (tilt, telescope, other) | Type | Tilt Column | | |
| | Manufacturer | Saginaw Division | | |
| | (std., opt., n.a.) | Optional | | |
| Wheel diameter ** (W9) SAE J1100 | Manual | Not Applicable | | |
| | Power | O.D. 380.0mm | | |
| Turning diameter m (ft.) | Out-side front | Wall to wall (l. & r.) | 13.79 (45.2) / 13.90 (45.6) | |
| | | Curb to curb (l. & r.) | 13.1 (43.0) / 13.2 (43.3) | |
| | In-side rear | Wall to wall (l. & r.) | 8.24 (27.0) / 8.30 (27.2) | |
| | | Curb to curb (l. & r.) | 8.32 (27.3) / 8.40 (27.6) | |
| Scrub Radius * | | 2.0 mm (.079 in.) | | |
| Manual | Gear | Type | Not Applicable | |
| | | Manufacturer | " | |
| | | Ratios | Gear Overall | " |
| | No. wheel turns(stop to stop) | | " | |
| | Type (coaxial, elec. hyd., etc.) | | Hydraulic | |
| Power | Manufacturer | | Saginaw Division | |
| | Gear | Type | Rack And Pinion With Integral Power Unit | |
| | | Ratios | Gear | 49.90 mm / REV 45.13 mm / REV |
| | | | Overall | 15.70:1/2.74 17.56:1/On Center |
| | Pump (drive) | | Belt Off Crankshaft Pulley | |
| No. wheel turns(stop to stop) | | 15.70:1/2.74 17.56:1/3.05 | | |
| Linkage | Type | | End Take-Off Tie Rods | |
| | Location (front or rear of wheels, other) | | Rear Of Front Wheel Centerline | |
| | Tie Rods (one or two) | | 2 | |
| Steering axis | Inclination at camber (deg.) | | 14.6 | |
| | Bear-ings (type) | Upper | Ball Bearing | |
| | | Lower | Ball Joint | |
| | | Thrust | Ball Bearing | |
| Steering spindle/knuckle & joint type | | MacPherson Strut With Lower Ball Joint | | |

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

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

ALL

Wheel Alignment

| | | | |
|--------------------------------|---------------------------|---------------------------------|--|
| Front wheel at curb mass (wt.) | Service checking | Caster (deg.) | 3.0 (+/-) .7; Left And Right Should Be Within .7 |
| | | Camber (deg.) | 0.0 (+/-) .5; Left And Right Should Be Within .7 |
| | | Toe-in outside track - mm (in.) | 0.0 (+/-) 0.2 Total |
| | Service reset* | Caster (deg.) | Not Adjustable |
| | | Camber (deg.) | 0.0 (+/-) .5; Left And Right Should Be Within .7 |
| | | Toe-in - mm(in.) | 0.0 (+/-) 0.2 Total |
| Periodic M.V. in-spection | Caster (deg.) | Not Adjustable | |
| | Camber (deg.) | 0.0 (+/-) .5 | |
| | Toe-in - mm(in.) | 0.0 (+/-) 0.2 Total | |
| Rear wheel at curb mass (wt.) | Service checking | Camber (deg.) | -0.1 (+/-) 0.3 |
| | | Toe-in outside track - mm (in.) | 0.0 (+/-) 0.3 Total (Thrust = +/- .15) |
| | Service reset* | Camber (deg.) | Not Adjustable |
| | | Toe-in - mm(in.) | " |
| | Periodic M.V. in-spection | Camber (deg.) | -0.1 (+/-) 0.3 |
| | | Toe-in - mm(in.) | 0.0 (+/-) 0.3 Total |

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

Electrical - Instruments and Equipment

| | | |
|--|---|-----------------------------------|
| Speed-ometer | Type (analog, digital, std., opt.) | Analog, Standard |
| | Trip odometer (std., opt., n.a.) | Standard |
| Head-up display | Std., opt., not avail. | Not Available |
| | Type - Secondary, Opto-electronic | " |
| | Speedometer Digital | " |
| | Status/warn. indicators - Turn signals, high beam, low fuel, check gauges | " |
| | Brightness control Day/night mode, adj. | " |
| EGR maintenance indicator | | Not Available |
| Charge indicator | Type | Analog |
| | Warning device (light, audible) | Not Available |
| Temperature indicator | Type | Analog |
| | Warning device | Not Available |
| Oil pressure indicator | Type | Light |
| | Warning device | Light |
| Fuel indicator | Type | Analog |
| | Warning device | Not Available |
| Wind-shield wiper | Type (standard) | Pulse Wipe NDP |
| | Type (optional) | -- |
| | Blade length | 24 in. |
| Wind-shield washer | Swept area sq cm (sq in) | 9111 (1412) |
| | Type (standard) | Wet-Arm System |
| | Type (optional) | Not Available |
| | Fluid level indicator | Not Available |
| Rear window wiper, wiper/washer (std., opt., n.a.) | | Standard (Delay Wipe/Demand Wash) |
| Horn | Type | Air Tone |
| | Number used | 2 |
| ABS Fault/Active Indicator | Type | Light |
| | Warning device | Not Available |

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

METRIC (U.S. Customary)

Engine Code/Description

3.1 LITER V6 (191 CID)
 ELECTRONIC FUEL INJECTION RPO LG6

Electrical – Supply System

| | | |
|------------|----------------------------|---|
| Battery | Manufacturer | Delco Remy |
| | Model, std., (opt.) | 75-525 |
| | Voltage | 12 |
| | Amps at 0 deg F cold crnk | 525 |
| | Minutes-reserve capacity | 90 |
| | Amps/hrs. - 20 hr. rate | -- |
| | Location | Engine Compartment |
| Alternator | Manufacturer | Delco Remy |
| | Rating (idle/max. rpm) | 36 /100 |
| | Ratio (alt. crank/rev.) | 2:65:1 |
| | Output at idle (rpm, park) | 2120 (W/AC On) 1855 (W/AC Off) |
| | Optional (type & rating) | 40/105 Req'd. With RHVAC (C34)/RR. Htr. (C36) |
| Regulator | Type | Integral W/Alternator |

Electrical – Starting System

| | | |
|-------------|-----------------------------------|-------------------------------|
| Motor | Manufacturer | Delco Remy |
| | Current drain deg C (F) | 340 Amps |
| | Power rating kw (hp) | 1.5 (SD210) |
| Motor drive | Engagement type | Solenoid Operated Shift Lever |
| | Pinion engages from (front, rear) | Front |

Electrical – Ignition System

| | | | |
|-------------|---|---|----------------------|
| Type | Electronic (std, opt, n.a.) | Standard | |
| | Other (specify) | -- | |
| Coil | Manufacturer | Delco Remy | |
| | Model | High Efficiency (High Energy Ignition) Remote Mount | |
| | Current | Engine stopped-A | 100 ma (Approximate) |
| | | Engine idling - A | 6 Amps Peak |
| Spark plug | Manufacturer | AC | |
| | Model | .R43TS | |
| | Thread (mm) | 14 x 1.25 | |
| | Tightening torque Newton meters (lb. ft.) | 9 - 20 (7-15) | |
| | Gap | 1.14mm (.045 in.) | |
| | Number per cylinder | 1 | |
| Distributor | Manufacturer | Delco Remy | |
| | Model | 6-89mm | |

Electrical – Suppression

| | |
|------------------|--|
| Locations & type | Internal Alternator Capacitor, Non-Metallic High Tension Ignition Cables, Resistor Spark Plugs, Ignition Coil By-Pass Capacitor, Internal AC Blower Motor By-pass Capacitor & A/C Compressor Diode, Internal Capacitors For Cooling Fan And Windshield Wiper Motor |
|------------------|--|

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

METRIC (U.S. Customary)

Engine Code/Description

3800 V6 (231 CID)
 MULTI-PORT FUEL INJECTION RPO L27

Electrical - Supply System

| | | |
|------------|----------------------------|--|
| Battery | Manufacturer | Delco Remy |
| | Model, std., (opt.) | 75-630 |
| | Voltage | 12 |
| | Amps at 0 deg F cold crnk | 630 |
| | Minutes-reserve capacity | 90 |
| | Amps/hrs. - 20 hr. rate | -- |
| | Location | Engine Compartment |
| Alternator | Manufacturer | Delco Remy |
| | Rating (idle/max. rpm) | 42/105 |
| | Ratio (alt. crank/rev.) | 2.96:1 |
| | Output at idle (rpm, park) | 2072 (W/AC On), 1924 (W/AC Off) |
| | Optional (type & rating) | 50/140 W/RHVAC (C34) / Rear Heater (C36) |
| Regulator | Type | Integral W/Alternator |

Electrical - Starting System

| | | |
|-------------|-----------------------------------|-------------------------------|
| Motor | Manufacturer | Delco Remy |
| | Current drain deg C (F) | 440 A |
| | Power rating kw (hp) | 1.7 (SD250) |
| Motor drive | Engagement type | Solenoid Operated Shift Lever |
| | Pinion engages from (front, rear) | Front |

Electrical - Ignition System

| | | |
|-------------------|---|------------------------|
| Type | Electronic (std, opt, n.a.) | Standard |
| | Other (specify) | -- |
| Coil | Manufacturer | Magnavox |
| | Model | Direct Ignition System |
| | Current | Engine stopped-A |
| Engine idling - A | | 9.5A |
| Spark plug | Manufacturer | AC |
| | Model | R45LTS6 41-601 |
| | Thread (mm) | 14 x 1.25 |
| | Tightening torque Newton meters (lb. ft.) | 20-34 (15-25) |
| | Gap | 1.52 (.060) |
| | Number per cylinder | 1 |
| Distributor | Manufacturer | Not Applicable |
| | Model | " |

Electrical - Suppression

| | |
|------------------|--|
| Locations & type | Internal Alternator Capacitor, Non-Metallic High Tension Ignition Cables, Resistor Spark Plugs, Ignition Coil By-Pass Capacitor, Internal AC Blower Motor By-pass Capacitor & A/C Compressor Diode, Internal Capacitors For Cooling Fan And Windshield Wiper Motor |
|------------------|--|

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*)

METRIC (U.S. Customary)

Model Code/Description

ALL

Body

| | |
|-------------------------------|---|
| Structure | Full Unitized Steel Spaceframe Construction. Roof, Body Sides And Rear Surround SMC Panels Are Adhesively Attached To Form Body Shell. Doors, Hood And Liftgate Features Double Panel Construction. |
| Bumper System Front - Rear | Foam Energy Absorbers, Front - S.R.I.M. Impact Bar, Rear - "Azdel" Polypropylene Impact Bar and T.P.O. Fascia - Front & Rear. |
| Anti-Corrosion Treatment | Galvanized Metals, Zinc Rich Primers And Wax Coatings Used Throughout |

Body - Miscellaneous Information

| | | |
|---|--|--|
| Type of finish (lacquer, enamel, other) | Base Coat/Clear Coat High Solids Enamel | |
| Hood | Material & mass | SMC |
| | Hinge location (front, rear) | Rear |
| | Type (counterbalance, prop) | Four Bar Link With A Prop Rod At The Front |
| | Release control (int., ext.) | Body Interior Release Of Primary Latch With Lever Operation Secondary |
| Trunk lid | Material & mass | Not Applicable |
| | Type (counterbalance, other) | " |
| | Internal release control (elec., mech., n.a.) | " |
| Hatch-back lid | Material & mass | Not Applicable |
| | Type (counterbalance, other) | " |
| | Internal release control (elec., mech., n.a.) | " |
| Tailgate | Material & mass | SMC |
| | Type (drop, lift, door) | Liftgate One Piece With Fixed Glass |
| | Internal release control (elec., mech., n.a.) | External Key Operated Unlatch |
| Vent window control (crank, friction, pivot, power) | Front | Not Applicable |
| | Rear | " |
| Window regulator type (cable, tape, flex drive, etc.) | Front | Single Arm Crank Type |
| | Rear | Rear Side Glass Is Flip Out Hinged At The Front Over Center Latch At Rear |
| Seat cushion type (e.g., 60/40, bucket, bench, wire, foam, etc.) | Front | Buckets With Full Foam Cushions |
| | Rear | Std. - Bench W/Full Foam Cushion Easy Removal Opt. - Buckets With Full Foam Cushions Flip Up Or Easy Remove For Stowage |
| | 3rd seat | Buckets W/Full Foam Cushions Flip Up Or Easy Remove For Stowage |
| Seat back type (e.g., 60/40, bucket, bench, wire, foam, etc.) | Front | Bucket Full Foam |
| | Rear | Bucket Full Foam; Bench Full Foam |
| | 3rd seat | Bucket Full Foam |
| Type and description (separate frame, unitized frame, partially-unitized frame) | Unitized Space Frame. Separate Engine/Front Suspension Cradle. | |

* No Second/Third Row Seats In Cargo Van

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

METRIC (U.S. Customary)

Model Code/Description

ALL

Restraint System

| Seating Position | | | Left | Center | Right |
|------------------|--|-------------|------------------------|----------|---------------------|
| Active | Type & description (lap & shoulder belt, lap belt, etc.) Standard/ optional | First seat | Lap & Shoulder Belt | | Lap & Shoulder Belt |
| | | Second seat | Lap & Shoulder Belt | Lap Belt | Lap & Shoulder Belt |
| | | Third seat | Lap & Shoulder Belt | | Lap & Shoulder Belt |
| Passive | Type & description (air bag, motorized-2-point belt, fixed belt, knee bolster, manual-lap belt) Standard/ optional | First seat | Air Bag & Knee Bolster | | |
| | | Second seat | | | |
| | | Third seat | | | |

| Glass | SAE Ref No | |
|---|------------|--|
| Windshield glass exposed surface area sq. cm. (sq. in.) | S1 | 16169 (2506.2) |
| Side glass exposed surface area sq. cm. (sq. in. - total 2-sides) | S2 | 27250 (4223.8) |
| Backlight glass exposed surface area sq. cm. (sq. in.) | S3 | 9886 (1532.3) |
| Total glass exposed surface area sq. cm. (sq. in.) | S4 | 53305 (8262.3) |
| Windshield glass (type/thickness) | | Laminated Glass, 5.4 mm |
| Side glass (type/thickness) | | Tempered Glass, 4.0 mm |
| Backlight glass (type/thickness) | | Tempered Glass, 4.0 mm |
| Tinted (yes/no, location) | | Yes, Front Doors |
| Solar control (yes/no, coated/batched, location) | | Yes, Coated, Windshield; Batched, Sides And Liftgate |

Headlamps

| | |
|--|-------------------------------------|
| Description - sealed beam, halogen, replaceable bulb, etc. | Halogen Replaceable Bulb; 9005-9006 |
| Shape | Rectangular |
| Lo-beam type (2A1, 2B1, 2C1, etc.) | 9006 Bulb |
| Quantity | 2 - 1 On Each Side (Outboard) |
| Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.) | 9005 Bulb |
| Quantity | 2 - 1 On Each Side (Inboard C/C) |

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

METRIC (U.S. Customary)

Engine Code/Description

3.1 LITER V6

Climate Control System

| | | |
|---|--------------------------|----------------------------------|
| Air conditioning (std., opt., man., auto.) | | Manual Optional C67 Front A/C |
| Condenser | Type | Header Tube Aluminum |
| | Eff. face area (sq. mm.) | 268,787 |
| | Fins per inch | 17 |
| Evaporator | Type | Plate & Center |
| | Eff. face area (sq. mm.) | 61,300 |
| | Fins per inch | 14 |
| Heater Core | Material | Copper - Brass |
| | Eff. face area (sq. mm.) | 39,700 |
| | Fins per inch | 11 |
| Compressor | Type | Variable Disp. 5 Cyl. Axial |
| | Displacement (cc) | 150.7 |
| | Manufacturer | Harrison Division |
| | A/C pulley ratio | 1.23 |
| Accumulator | Type | Aluminum |
| | Height (mm.) | 232.2 |
| | Diameter (mm.) | 88.8 |
| Receiver | Type | Not Applicable |
| | Height (mm.) | " |
| | Diameter (mm.) | " |
| Refrigerant control (CCOT, TVS, etc.) | | CCOT |
| Heater water valve (yes / no) | | No |
| Refrigerant (R - 12, R - 134a, etc.) | | R-134a |
| Charge level (lbs. - oz.) | | 2 lbs. 4 oz. |
| Cold engine lockout switch (yes / no) | | No |
| Wide open throttle cutout switch (yes / no) | | Yes |

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

METRIC (U.S. Customary)

Engine Code/Description

3800 V6

Climate Control System

| Air conditioning (std., opt., man., auto.) | | Manual Optional C67 Front A/C C67 | Manual Optional C34 Front & Rear A/C |
|---|--------------------------|--------------------------------------|---|
| Condenser | Type | Header Tube Aluminum | Header Tube Aluminum |
| | Eff. face area (sq. mm.) | 268,787 | 268,787 |
| | Fins per inch | 17 | 17 |
| Evaporator | Type | Plate & Center | Plate & Center & Rear: Staggered Rib Plate |
| | Eff. face area (sq. mm.) | 61,300 | 61,300 + Rear, 33,200 |
| | Fins per inch | 14 | 14 |
| Heater Core | Material | Copper - Brass | Copper - Brass |
| | Eff. face area (sq. mm.) | 39,700 | 39,700 + 29,300 |
| | Fins per inch | 11 | 11 |
| Compressor | Type | Axial 6 Cylinder | |
| | Displacement (cc) | 163.8 | |
| | Manufacturer | Harrison Division | |
| | A/C pulley ratio | 1.24 | |
| Accumulator | Type | Aluminum | |
| | Height (mm.) | 232.2 | |
| | Diameter (mm.) | 88.8 | |
| Receiver | Type | Not Applicable | |
| | Height (mm.) | " | |
| | Diameter (mm.) | " | |
| Refrigerant control (CCOT, TVS, etc.) | | CCOT | CCOT + TXV |
| Heater water valve (yes / no) | | No | Yes |
| Refrigerant (R - 12, R - 134a, etc.) | | R-134a | R-134a |
| Charge level (lbs. - oz.) | | 2 lbs. 4 oz. | 3 lbs. |
| Cold engine lockout switch (yes / no) | | No | No |
| Wide open throttle cutout switch (yes / no) | | Yes | Yes |

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

METRIC (U.S. Customary)

Model Code/Description

ALL

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

| | | |
|------------|---|--|
| | Clock (digital, analog) | Digital Standard, Included W/Standard Radio |
| | Compass / thermometer | Not Available |
| | Console (floor, overhead) | Overhead Lighting Package, Standard |
| | Defroster, electric windshield | Not Available |
| | Defroster, electric backlight | Optional |
| Electronic | Diagnostic monitor (integrated, individual) | Not Available |
| | Instrument cluster (list instruments) | Speedometer, Temperature Gage, Oil Pressure Gage, Fuel Gage, Odometer, Trip Odometer |
| | Keyless entry | Optional (Active, 2-Button); (Active 3-Button W/Opt. Power Sliding Door) |
| | Tripminder (avg. spd. fuel) | " |
| | Voice alert (list items) | " |
| | Other | |
| | Fuel door lock (remote, key, electric) | Not Available |
| Lamps | Auto head on/off delay, dimming | Not Available |
| | Cornering | " |
| | Courtesy (map, reading) | Standard, Not Available Cargo |
| | Door lock, ignition | Interior Door Lock Switches Lighted (W/Opt. Power Door Locks) |
| | Engine compartment | Standard, Not Available Cargo |
| | Fog | Not Available |
| | Glove compartment | Standard |
| | Trunk | Not Applicable |
| | Illuminated entry system (list lamps, activation) | Standard -- I/P Courtesy (2), Center Dome, Sliding Door Stepwell W/Door Jamb Switches, Roof -- Console Map Lamps (2) And Liftgate Cargo Lamps (2) (Console Map Lamps and Liftgate Cargo Lamps N.A. Cargo Van.) |
| | Other | Rear Area Switchable Dome Reading Lamp Standard |
| Mirrors | Day / night (auto, man.) | Standard - Manual |
| | L.H. (remote, pwr., heated) | Cable Remote, Standard; Power Optional |
| | R.H. (convex, rmt, pwr, htd) | Fixed - Convex, Standard; Power Optional |
| | Visor vanity (RH/LH illum.) | RH/LH Non-Illum., Standard |
| | Navigation system (describe) | Not Available |
| | Prkg. brake-auto release (warn. light) | Warning Light Standard; Auto Release Not Available |

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*)

METRIC (U.S. Customary)

Model Code/Description

ALL

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

| | | | |
|---|---|---|---|
| | Deck lid(release, pull down) | Not Applicable | |
| | Door locks (manual, auto., describe system) | Optional System Provides Lock/Unlock Of All Doors Inc. Liftgate Via Front Door Switches, Sliding Door Lock Delay, Auto Lock Out Of Park, Customized Feature With RKE | |
| Power equipment | Seats | 2 - 4 - 6 way, etc. | 6-Way Power Optional For Driver Seat, Not Available Cargo |
| | | Reclining(R.H., L.H.) | Not Available |
| | | Memory (R.H., L.H., preset, recline) | " |
| | | Support (lumbar, hip, thigh, etc.) | " |
| | | Heated (R.H., L.H., other) | " |
| | Side windows | Optional - Front Door Windows Only | |
| | Vent windows | Not Available | |
| | Rear windows | Not Available | |
| Integral Child Seat | | Optional (2 Mode) Seating System Provides Second Row Seating: 5 Pt. Harness/Booster Cushion For Small Children (Over Age One) 3 Pt. Belt/Booster Cushion For Larger Child | |
| Radio systems | Antenna (location, whip, w/shield, power) | Integrated Roof Antenna Above Headliner | |
| | Stan. | AM/FM Stereo/Clock | |
| | Opt. | AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc. AM/FM/Stereo/Cassette, Not Available Cargo AM/FM/Stereo/Compact Disc, Not Available Cargo | |
| | Speaker (number, location) | 2 - 4 x 6 Front - Standard 2 - 6 in. Round - Rear - Standard No Optional Speakers Available; Cargo Van - 2 - 4 x 6 Front - Standard | |
| Roof: open air or fixed (flip-up, sliding, T) | | Fixed, Manual Flip-Up-Optional; N/A Cargo Van | |
| Speed control device | | Optional, Includes Resume Speed And Acceleration Feature | |
| Speed warn. dev. (light, buzzer, etc.) | | Not Available | |
| Tachometer (rpm) | | Not Available | |
| Telephone system (describe) | | Not Available | |
| Theft deterrent system | | Not Available | |

Trailer Towing

| Towing capable | Yes / No | Yes |
|---------------------------------|-----------|--|
| Engine/transmission/axle | Std / Opt | 3.1L V6/3A/3.06, Std.; 3.8L V6/4A/3.06, Opt. |
| Tow class (I, II, III)* | Std / Opt | I (Class II W/Opt. 3.8L Engine (L27) And Opt. Trailering Provisions (V92)) |
| Max. gross trailer wgt. (lbs.) | Std / Opt | 2000 lbs. (Limited By Max. GCW Of 6400 lbs.), Std.; 3000 lbs. (Limited By Max. GCW Of 7400 lbs.), Opt. |
| Max. trailer tongue load (lbs.) | Std / Opt | 200 lbs., Std.; 300 lbs., Opt. |
| Towing package available | Yes / No | Yes (W/Opt. Trailering Provisions (V92) And Opt. 3.8L V6 Engine (L27) Not Available - Cargo Van. |

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

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 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.

Model Code/Description

ALL

Width

SAE Ref. No.

| | SAE Ref. No. | |
|----------------------------------|--------------|--------------------------------|
| Tread (front) | W101 | 1503 (59.2) |
| Tread (rear) | W102 | 1559 (61.4) |
| Vehicle width | W103 | 1878 (73.9) |
| Body width at Sg RP (front) | W117 | 1874 (73.8) |
| Vehicle width (front doors open) | W120 | 3364 (132.4) |
| Vehicle width (rear doors open) | W121 | Not Required With Sliding Door |
| Tumble-home (deg.) | W122 | 19.5 |
| Outside mirror width | W410 | 2116 (83.3) |

Length

| | SAE Ref. No. | |
|-------------------------------|--------------|--------------|
| Wheelbase | L101 | 2788 (109.8) |
| Vehicle length | L103 | 4863 (191.5) |
| Overhang (front) | L104 | 1047 (41.2) |
| Overhang (rear) | L105 | 1028 (40.5) |
| Upper structure length | L123 | -- |
| Rear wheel C/L 'X' coordinate | L127 | 4583 (180.4) |

Height **

| | SAE Ref. No. | | |
|-------------------------------------|--------------|-------------|----|
| Passenger distribution (front/rear) | PD1,2,3 | | ** |
| Trunk/cargo load | | | ** |
| Vehicle height | H101 | 1670 (65.7) | |
| Cowl point to ground | H114 | 1096 (43.1) | |
| Deck point to ground | H138 | No Deck | |
| Rocker panel-front to ground | H112 | 288 (11.3) | |
| Rocker panel-rear to ground | H111 | 301 (11.9) | |
| Windshield slope angle (deg.) | H122 | 66.0 | |
| Backlight slope angle (deg.) | H121 | 22.0 | |

Ground Clearance **

| | SAE Ref. No. | |
|---|--------------|---------------|
| Front bumper to ground | H102 | 241 (9.5) |
| Rear bumper to ground | H104 | 337 (13.3) |
| Bumper to ground front at curb mass (wt.) | H103 | Not Available |
| Bumper to ground rear at curb mass (wt.) | H105 | " |
| Angle of approach (deg.) | H108 | " |
| Angle of departure (deg.) | H107 | " |
| Ramp breakover angle (deg.) | H147 | " |
| Axle differential to ground (front/rear) | H153 | " |
| Min. running ground clearance | H156 | " |
| Location of min. run. grd. clear. | | " |

** All Vehicle Height And Ground Clearance Are Made Using EPA Loaded Vehicle Weight, Loading Conditions.

EPA Loaded Vehicle Weight is the Base Vehicle Weight Plus All Coolant and Fluids Necessary For Operation Plus 100% Of The Fuel Capacity, Plus The Weight Of All Options And Accessories Which Weigh Three Pounds Or More And Which Are Sold On At Least 33% Of The Car Line, Plus Two Occupants.

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*)

METRIC (U.S. Customary) Vehicle Dimensions

See Key Sheets for Definitions

Model Code/Description

PASSENGER VAN

CARGO VAN

Front Compartment

SAE Ref. No.

| | | |
|--|-----|---|
| SgRP front, 'X' coordinate | L31 | Height = 912 (35.9), Fore & Aft = 3077.5 (121.16) |
| Effective head room | H81 | 996 (39.2) |
| Max. eff. leg room (accelerator) | L34 | 1016 (40.0) |
| SgRP to heel point | H30 | 372 (14.6) |
| SgRP to heel point | L53 | 762 (30.0) |
| Back angle (deg.) | L40 | 24.0 |
| Hip angle (deg.) | L42 | 99.0 |
| Knee angle (deg.) | L44 | 114.0 |
| Foot angle (deg.) | L46 | 87.0 |
| Design H-point front travel | L17 | 181 (7.1) |
| Normal driving & riding seat track trvl. | L23 | 178 (7.0) |
| Shoulder room | W3 | 1540 (60.6) |
| Hip room | W5 | 1410 (55.5) |
| *** Upper body opening to ground | H50 | 1236 (48.7) |
| Steering wheel maximum diameter* | W9 | 381 (15.0) |
| Steering wheel angle (deg.) | H18 | 28.0 |
| Accel. heel pt. to steer. whl. cntr | L11 | 395 (15.6) |
| Accel. heel pt. to steer. whl. cntr | H17 | 851 (33.5) |
| Undepressed floor covering thickness | H67 | 11 (0.433) |

Front Compartment Int. Dim. Are Measured With The Seating Ref. Pt.

Rear Compartment

(SgRP) mm Forward And mm Upward of Rearmost Position.

| | | | |
|------------------------------------|-----|-------------|----------------|
| SgRP point couple distance | L50 | 872 (34.3) | Not Applicable |
| Effective head room | H63 | 991 (39.0) | " |
| Min. effective leg room | L51 | 917 (36.1) | " |
| SgRP (second to heel) | H31 | 288 (11.3) | " |
| Knee clearance | L48 | 69 (2.7) | " |
| Shoulder room | W4 | 1504 (59.2) | " |
| Hip room | W6 | 1402 (55.2) | " |
| *** Upper body opening to ground | H51 | 1250 (49.2) | " |
| Back angle (deg.) | L41 | 24.0 | " |
| Hip angle (deg.) | L43 | 86.0 | " |
| Knee angle (deg.) | L45 | 92.0 | " |
| Foot angle (deg.) | L47 | 127.0 | " |
| Depressed floor covering thickness | H73 | 10 (0.4) | " |

Luggage Compartment

| | | |
|---------------------------------------|------|------------|
| Usable luggage capacity [L (cu. ft.)] | V1 | |
| *** Liftover height | H195 | 570 (22.4) |

Interior Volumes (EPA Classification)

(NOT APPLICABLE)

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

* See page 14.

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

*** EPA Loaded Vehicle Weight, Loading Conditions

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*) _____

METRIC (U.S. Customary)

Vehicle Dimensions

See Key Sheets for Definitions

Body Type

PASSENGER VAN

CARGO VAN

Station Wagon / MPV**

- Third Seat

SAE Ref. No.

| | SD1 | FWD | Not Applicable |
|-----------------------|-----|-------------|----------------|
| Seat facing direction | | | |
| SgRP couple distance | L85 | 792 (31.2) | " |
| Shoulder room | W85 | 1580 (62.2) | " |
| Hip Room | W88 | 1060 (41.7) | " |
| Effective leg room | L88 | 935 (36.8) | " |
| Effective head room | H88 | 960 (37.8) | " |
| SgRP to heel point | H87 | 283 (11.1) | " |
| Knee clearance | L87 | 25 (0.98) | " |
| Back angle (deg.) | L88 | 24.0 | " |
| Hip angle (deg.) | L89 | 81.5 | " |
| Knee angle (deg.) | L90 | 79.0 | " |
| Foot angle (deg.) | L91 | 121.0 | " |

Station Wagon / MPV** Cargo Space

| | | |
|--|------|----------------------------|
| Cargo length (open front) | L200 | Not Required For Lift Gate |
| Cargo length (open second) | L201 | Not Required For Lift Gate |
| Cargo length (closed front) | L202 | 2110 (83.1) |
| Cargo length (closed second) | L203 | 1204 (47.4) |
| Cargo length at belt (front) | L204 | 1855 (73.0) |
| Cargo length at belt (second) | L205 | 1054 (41.5) |
| Cargo width (wheelhouse) | W201 | 1024 (40.3) 1079 (42.5) |
| Rear opening width at floor | W203 | 1314 (51.7) |
| Opening width at belt | W204 | 1282 (50.5) |
| Min. rear opening width above belt | W205 | 1092 (43.0) |
| Cargo height | H201 | 1143 (45.0) |
| Rear opening height | H202 | 1050 (41.3) |
| Tailgate to ground height | H250 | Not Required For Lift Gate |
| Front seat back to load floor height | H197 | 710 (28.0) |
| Cargo volume index cu. m. (cu. ft.) | V2 | Not Applicable |
| Hidden cargo vol. index cu. m. (cu. ft.) | V4 | |
| Cargo volume index-rear of 2-seat | V10 | |
| Cargo volume index** | V6 | 3187 L (112.6 cu. ft.) |
| Cargo width at floor** | W500 | 1504 (59.3) |
| Maximum cargo height** | H505 | 1143 (45.0) |

Hatchback - Cargo Space

| | | |
|--|------|-------------|
| Cargo length at front seatback height | L208 | 1790 (70.5) |
| Cargo length at floor (front) | L209 | 2107 (83.0) |
| Cargo length at second seatback height | L210 | 1002 (39.4) |
| Cargo length at floor (second) | L211 | 557 (21.9) |
| Front seatback to load floor height | H197 | 710 (28.0) |
| Second seatback to load floor height | H198 | 695 (27.4) |
| Cargo volume index cu. m. (cu. ft.) | V3 | |
| Hidden cargo vol. index cu. m. (cu. ft.) | V4 | |
| Cargo volume index-rear of 2-seat | V11 | |

* EPA Loaded Vehicle Weight, Loading Conditions

** MPV - Multipurpose Vehicle

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised(*)

METRIC (U.S. Customary)

Model Code/Description ALL

Vehicle Fiducial Marks

| Fiducial Mark Number* | Define Coordinate Location |
|--|--|
| Front | <p>X - Fiducial Mark To Vertical Zero Grid Line - Front Measured Horizontally, From The Zero Grid Line To The Front Fiducial Mark Located On Top Of The Front Seat Adjuster Mounting Bolt</p> <p>Y - Fiducial Mark To Centerline Of Car - Front, Width Measurement Made From Centerline Car To Fiducial Mark Located On Top Of The front Seat Adjuster Mounting Bolt.</p> <p>Z - Fiducial Mark To Horizontal Zero Grid Line - Front, Measured Vertically From Zero Grid Line To Front Fiducial Mark Located On Top Of The Front Seat Adjuster Mounting Bolt.</p> |
| Rear | <p>X - Fiducial Mark To Vertical Zero Grid Line - Rear, Measured Horizontally From The Zero Grid Line To Rear Fiducial Mark Located On The Rail (Compartment Pan - Longitudinal).</p> <p>Y - Fiducial Mark To Centerline Of Car - Rear, Width Measurement Made From Centerline Of Car To Fiducial Mark Located On The Rail (Compartment Pan - Longitudinal)</p> <p>Z - Fiducial Mark To Horizontal Zero Grid Line - Rear, Measured Vertically From The Zero Grid Line To Rear Fiducial Mark Located On The Rail (Compartment Pan - Longitudinal).</p> |
| NOTE: Provide 3 of 4 Fiducial Mark Locations | |
| Front | W21** Not Available |
| | L54** 2885 (113.6) |
| | H82** Not Available |
| | *** H161** " |
| | *** H163** " |
| Rear | W22** Not Available |
| | L55** " |
| | H82** " |
| | *** H162** " |
| | *** H164** " |

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

** Reference - SAE Recommended Practice J1100 - Motor Vehicle Dimensions.

*** EPA Loaded Vehicle Weight, Loading Conditions

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

| Code | Model | VEHICLE MASS (weight) | | | | | % PASS MASS DISTRIBUTION | | | |
|----------------|------------------------------------|-----------------------|---------------|----------------|--------------------------|-------------|--------------------------|------|--------------|------|
| | | CURB MASS, kg. (lb.)* | | | SHIPPING MASS kg (lb)*** | ETWC** Code | PASS IN FRONT | | PASS IN REAR | |
| | | Front | Rear | Total | | | Front | Rear | Front | Rear |
| LUMINA (1UM05) | 3-Dr. Cargo Minivan, LG6 3.1 Liter | 941 (2074) | 576 (1270) | 1517 (3344) | 1475 (3253) | W | 50.9 | 49.1 | - | |
| LUMINA (1UM06) | 3-Dr. Minivan, LG6, 3.1 Liter | 969 (2136) | 643 (1418) | 1612 (3554) | 1570 (3462) | Y | 50.9 | 49.1 | 22.9 | 77.1 |
| LUMINA (1UM06) | 3-Dr. Minivan, L27, 3800 V6 | 1043 (2299) | 641 (1413) | 1684 (3712) | 1642 (3621) | Z | 50.9 | 49.1 | 22.9 | 77.1 |
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* Reference - SAE J1100 Motor vehicle dimensions, curb weight definition.
 ** ETWC - Equivalent Test Weight Class - basis for U.S. Environmental Protection Agency emission certifications.
 Refer to ETWC code legend below for test weight class.

- ETWC LEGEND
- | | | | |
|----------|----------|----------|-----------|
| A = 1000 | I = 2000 | Q = 3000 | Y = 4000 |
| B = 1125 | J = 2125 | R = 3125 | Z = 4250 |
| C = 1250 | K = 2250 | S = 3250 | AA = 4500 |
| D = 1375 | L = 2375 | T = 3375 | BB = 4750 |
| E = 1500 | M = 2500 | U = 3500 | CC = 5000 |
| F = 1625 | N = 2625 | V = 3625 | DD = 5250 |
| G = 1750 | O = 2750 | W = 3750 | EE = 5500 |
| H = 1875 | P = 2875 | X = 3875 | FF = 5750 |

*** Shipping Mass (weight) = Curb Weight Less:
41.6 (91.7)

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

| | | Optional Equipment Differential Mass (weight)* | | | |
|------|--|--|-----------------|-----------------|--|
| Code | Equipment | MASS, kg. (lb.) | | | Remarks Restrictions, Requirements |
| | | Front | Rear | Total | |
| AB5 | Power Door Locks | 2.6 (5.7) | 1.8 (4.0) | 4.4 (9.7) | |
| AD9 | 7-Passenger Seating - Includes 2 Integral Child Seats | 2.6 (5.7) | 55.6 (122.6) | 58.2 (128.3) | |
| AG9 | 6-Way Power Adjuster | 1.2 (2.6) | .4 (.9) | 1.6 (3.5) | |
| AP9 | Convenience Net | -.2 (-.4) | .6 (1.3) | .4 (.9) | |
| AR9 | Front Bucket Seat, Reclining, Cloth | 4.2 (9.3) | 3.2 (7.1) | 7.4 (16.3) | Opt., Cargo 1UM05; Std., Lumina 1UM06 |
| AU0 | Remote Keyless Entry | .1 (.2) | .1 (.2) | .2 (.4) | |
| A31 | Power Window | .8 (1.8) | .6 (1.3) | 1.4 (3.1) | |
| C34 | F/R HVAC | 17.4 (38.4) | 6.0 (13.2) | 23.4 (51.6) | W/3.8L Engine L27 |
| C54 | Sunroof | 6.0 (13.2) | 4.0 (8.8) | 10.0 (22.0) | |
| C67 | Air Conditioning | 21.0 (46.3) | 0 (0) | 21.0 (46.3) | |
| DD9 | Electric Power Mirrors | 2.0 (4.4) | 0 (0) | 2.0 (4.4) | |
| E58 | Power Sliding Door | 3.8 (8.4) | 4.2 (9.3) | 8.0 (17.6) | |

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

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

| | | Optional Equipment Differential Mass (weight)* | | | |
|------|---------------------------------------|--|----------------|----------------|---|
| Code | Equipment | MASS, kg. (lb.) | | | Remarks Restrictions, Requirements |
| | | Front | Rear | Total | |
| G67 | Auto Level Control | .2 (.4) | 4.6 (10.1) | 4.8 (10.5) | |
| K05 | Engine Block Heater | .4 (.9) | 0 (0) | .4 (.9) | W/3.1L Engine, LG6 |
| K05 | Engine Block Heater | .2 (.4) | 0 (0) | .2 (.4) | W/3800 Engine, L27 |
| K34 | Cruise Control | 1.0 (2.2) | 0 (0) | 1.0 (2.2) | |
| L27 | 3800 Multi-Port Fuel Injection Engine | 38.8 (85.5) | -1.8 (-3.9) | 37.0 (81.6) | Req's 4-Speed Automatic Transmission, M13 |
| M13 | 4-Speed Automatic Transmission | 17.8 (39.2) | 0 (0) | 17.8 (39.2) | Req's 3800 Engine, L27 |
| NW9 | Traction Control (Interim) | .2 (.4) | .2 (.4) | .4 (.8) | Req's 3800 Engine, L27 |
| N33 | Tilt Steering Column | .6 (1.3) | 0 (0) | .6 (1.3) | |
| PB4 | Wheel Locks | .2 (.4) | .2 (.4) | .4 (.8) | Incl. W/Alum. Wheels PH3 |
| PH3 | 15 x 6 Aluminum Wheel | -1.5 (-3.3) | -1.5 (-3.3) | -3.0 (-6.6) | |
| P42 | Self-Sealing Tires | 3.6 (7.9) | 3.6 (7.9) | 7.2 (15.9) | |
| UM6 | AM/FM Stereo/Cassette | .6 (1.3) | .4 (.9) | 1.0 (2.2) | |

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

MVMA Specifications
METRIC (U.S. Customary)

Vehicle Line LUMINA MINIVAN
 Model Year 1994 Issued 9-93 Revised _____

| | | Optional Equipment Differential Mass (weight)* | | | Remarks Restrictions, Requirements |
|------|--|--|-----------------|-----------------|---------------------------------------|
| | | MASS, kg. (lb.) | | | |
| Code | Equipment | Front | Rear | Total | |
| U1C | AM/FM Stereo/Compact Disc | .8 (1.8) | .2 (.4) | 1.0 (2.2) | |
| VK3 | License Plate - Front Mounting Package | .8 (1.8) | -.4 (-.9) | .4 (.9) | |
| V54 | Luggage Rack | .4 (.9) | 6.0 (13.2) | 6.4 (14.1) | |
| V92 | Trailer Provisions | 2.2 (4.9) | 1.0 (2.2) | 3.2 (7.1) | Req's. 3800 Engine L27 |
| XIN | 15" Tires Front, Touring | -.4 (-.9) | 0 (0) | -.4 (-.9) | |
| YIN | 15" Tires Rear, Touring | 0 (0) | -.4 (-.9) | -.4 (-.9) | |
| ZP7 | 7-Passenger Seating | 1.6 (3.5) | 45.6 (100.5) | 47.2 (104.0) | |
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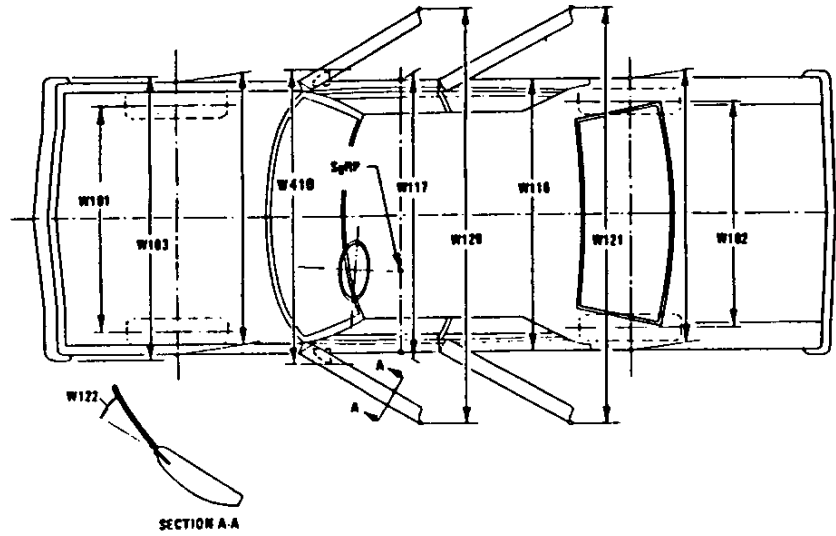
*Also see Engine - General Section for dressed engine mass (weight).

MVMA Specifications

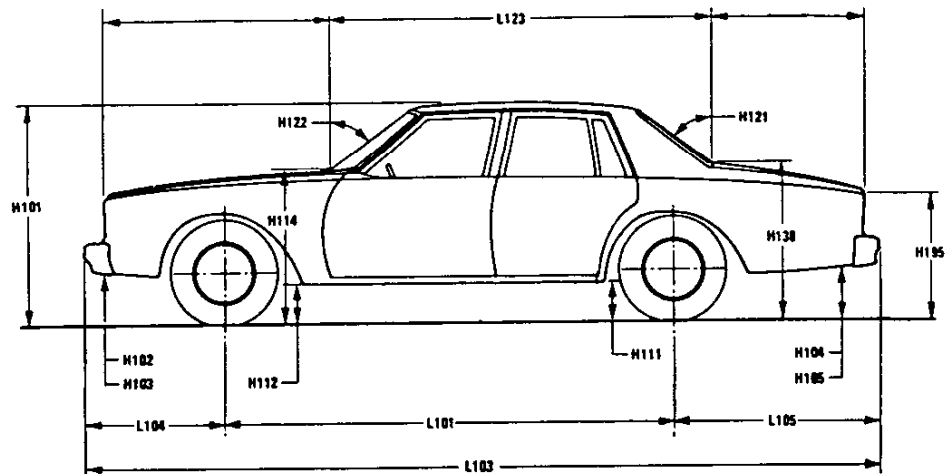
METRIC (U.S. Customary)

Exterior Vehicle And Body Dimensions – Key Sheet

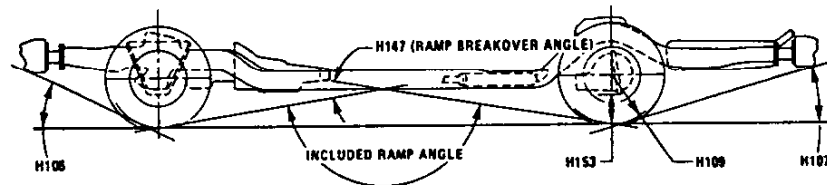
Exterior Width



Exterior Length & Height



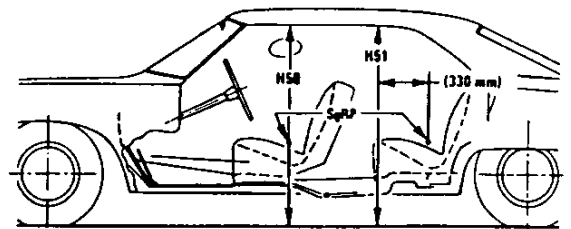
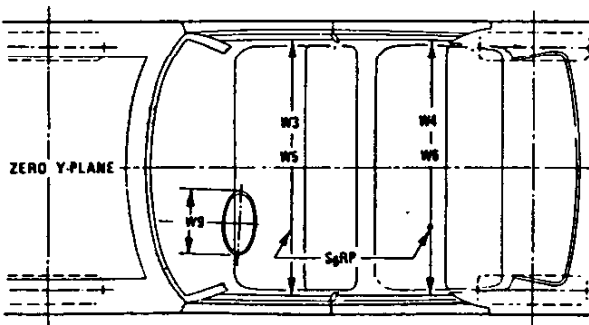
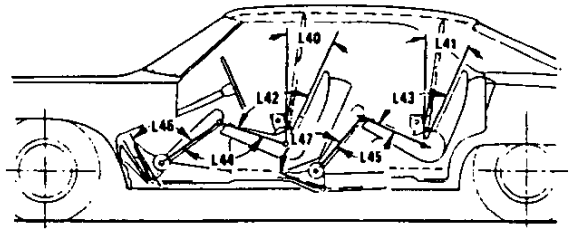
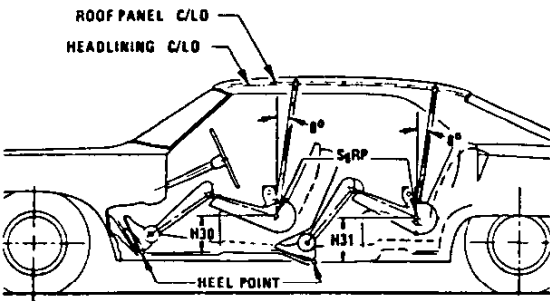
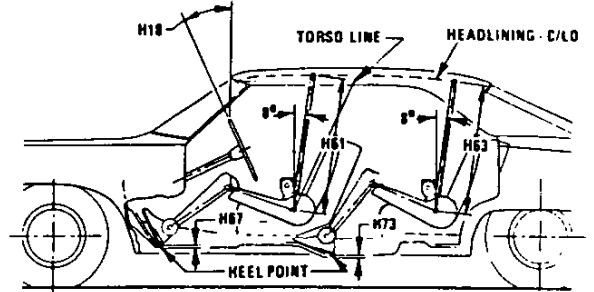
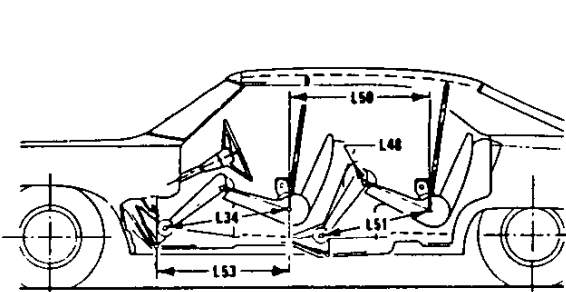
Exterior Ground Clearance



MVMA Specifications Form

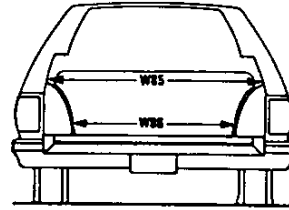
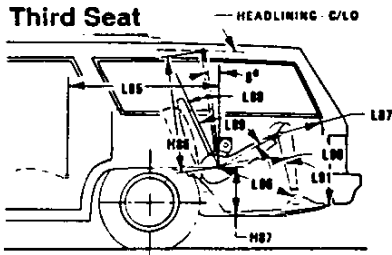
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Interior Vehicle And Body Dimensions – Key Sheet

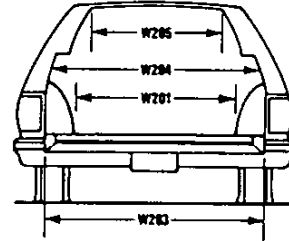
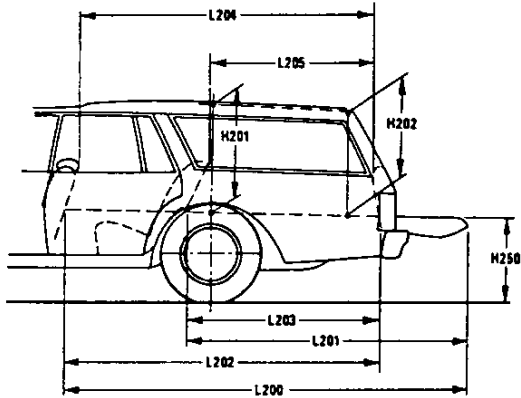


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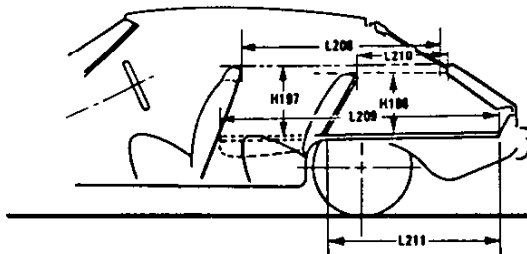
Interior Vehicle And Body Dimensions – Key Sheet



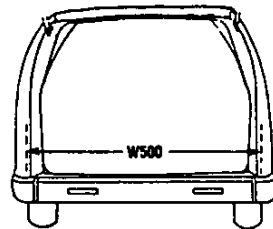
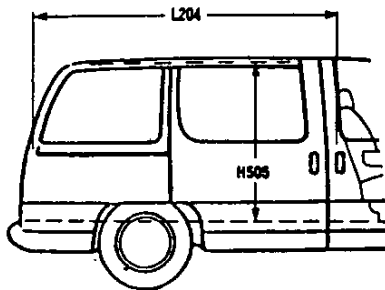
Cargo Space



Station Wagon



Hatchback



Multipurpose Vehicle

MVMA Specifications

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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 of 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 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 / MPV – 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 / MPV – Cargo Space Dimensions

- L200 CARGO LENGTH – OPEN – FRONT. The minimum dimension measured longitudinally from the back of the front seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo surface if the rear closure is a conventional door type tailgate at the zero "Y" plane.
- L201 CARGO LENGTH – OPEN – SECOND. The dimension measured longitudinally from the back of the second seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo floor surface if the rear closure is a conventional door type tailgate, at the zero "Y" plane.

- L202 CARGO LENGTH – CLOSED – FRONT. The minimum dimension measured horizontally from the back of the front seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.
- L203 CARGO LENGTH – CLOSED – SECOND. The dimension measured horizontally from the back of the second seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.
- L204 CARGO LENGTH AT BELT – FRONT. The minimum dimension measured horizontally from the back of the front seatback at the seatback top to the foremost normal surface of the closed tailgate or inside surface of the cab backpanel at the height of the belt, on the zero "Y" plane.
- L205 CARGO LENGTH AT BELT – SECOND. The minimum dimension measured horizontally from the back of the second seatback at the seatback top to the foremost normal surface of the closed tailgate at the height of the belt, on the zero "Y" plane.
- W201 CARGO WIDTH – WHEELHOUSE. The minimum dimension measured laterally between the trimmed wheelhousings at floor level. For any vehicle not trimmed, measure to the sheet metal.
- W203 REAR OPENING WIDTH AT FLOOR. The minimum dimension measured laterally between the limiting interferences of the rear opening at floor level.
- W204 REAR OPENING WIDTH AT BELT. The minimum dimension measured laterally between the limiting interferences of the rear opening at belt height or top of pick up box.
- W205 REAR OPENING WIDTH ABOVE BELT. The minimum dimension measured laterally between the limiting interferences of the rear opening above the belt height.
- W500 CARGO WIDTH AT FLOOR. The maximum dimension measured laterally between the limiting interferences at the floor level. This dimension shall include ribs and pillars, but will exclude wheelhouses.
- H197 FRONT SEATBACK TO LOAD FLOOR HEIGHT. The dimension measured vertically from the horizontal tangent to the top of the seatback to the undepressed floor covering.
- H201 CARGO HEIGHT. The dimension measured vertically from the top of the undepressed floor covering to the headlining at the rear wheel "X" coordinate on the zero "Y" plane.
- H202 REAR OPENING HEIGHT. The dimension measured vertically from the top of the undepressed floor covering to the upper trimmed opening on the zero "Y" plane with rear door fully open.
- H250 TAILGATE TO GROUND CURB MASS (WT.). The dimension measured vertically from the top of the undepressed floor covering on the lowered tailgate to ground on the zero "Y" plane.
- H505 MAXIMUM CARGO HEIGHT. The maximum vertical dimension rear of the front seat from the cargo floor to roof bow or headlining at the zero "Y" plane.

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

V2 STATION WAGON

Measured in inches:

$$\frac{W4 \times H201 \times L204}{1728} = \text{ft}^3$$

Measured in mm:

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

V4 HIDDEN LUGGAGE CAPACITY – REAR OF FRONT SEAT.

The total volumes of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the front seat.

V5 TRUCKS AND MPV'S WITH OPEN AREA.

Measured in inches:

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

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. 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. 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 SEATBACK. The minimum horizontal dimension measured at floor level from the rear of the second seatback or load floor panel to the normal limiting interference of the hatchback door on the vehicle zero "Y" plane.

H197 FRONT SEATBACK TO LOAD HEIGHT. The dimension measured vertically from the horizontal tangent to the top of the seatback to the undepressed floor covering.

H198 SECOND SEATBACK TO LOAD FLOOR HEIGHT: The dimension measured vertically from the second seatback to the undepressed floor covering.

V3 HATCHBACK.

Measured in inches:

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

Measured in mm:

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

V4 HIDDEN LUGGAGE CAPACITY – REAR OF FRONT SEAT. The total volumes of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the front seat.

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

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

Measured in mm:

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

MVMA Specifications

METRIC (U.S. Customary)

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