

OCT 21 1986

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC(U.S. Customary)

Passenger Car

1987

Manufacturer Mitsubishi Motors Corporation	Car Line RAIDER	
Mailing Address 33-8, Shiba 5-chome, Minato-ku, Tokyo, 108, Japan	Issued 3-1-1986	Revised

Questions concerning these specifications should be directed to the manufacturer whose address is shown above.

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

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Motor Vehicle Manufacturers Association
of the United States, Inc.

MVMA Specifications Form

Passenger Car

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 completion and are subject to change without notice by the manufacturer.
4. Additional Car and Body Dimensions (based in part on SAE J1100 "Motor Vehicle Dimensions") may be available from the manufacturer.

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Car Line RAIDER
Model Year 1987 Issued 3-1-1986 Revised (•) _____

Car Models

Model Description & Drive (FWD, RWD)	Introduction Date	Make, Car Line, Series, Body Type (Mfr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk Cargo Load—Kilograms (Pounds)
2 DOOR METAL TOP (4WD)		L042GTNJL 2/7 L042GTRJL 2/7	2 2	

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

[illegible]

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METRIC (U.S. Customary)

Car Line RAIDER
Model Year 1987 Issued 3-1-1986 Revised (•) _____

Engine Description/Carb.
Engine Code

G54B (2.555 Liters)			
for 49-State		for 50-State	
MT*	AT*	MT*	AT*

ENGINE - GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-camber, etc.)	In line Front Longitudinal			
Manufacturer	MMC			
No. of cylinders	4			
Bore	91.1			
Stroke	98			
Bore spacing (C : L to C / L)	101			
Cylinder block material & mass kg (lbs.) (machined)	48.5			
Cylinder block deck height	251			
Cylinder block length	439			
Deck clearance (minimum) (above or below block)	Above 0.3			
Cylinder head material & mass kg (lbs.)	10.0 (22.0)			
Cylinder head volume (cm ³)	75.2			
Cylinder liner material	N.A.			
Head gasket thickness (compressed)	1.25			
Minimum combustion chamber total volume (cm ³)	83.0			
Cyl. no. system (front to rear)*	L. Bank	N.A.		
	R. Bank	N.A.		
Firing order	1-3-4-2			
Intake manifold material & mass [kg (lbs.)]**	Aluminum alloy, 3.0 (6.6)			
Exhaust manifold material & mass [kg (lbs.)]**	Cast iron, 7 (15.5)			
Recommended fuel (leaded, unleaded, diesel)	Unleaded			
Fuel antiknock index (R + M) 2	RON 91 (minimum)			
Total dressed engine mass (wt) dry***	164	154	164	154

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum alloy 468 (16.5)
--	------------------------------

Engine - Camshaft

Location	Center of IN. and EX. valve on cylinder-head		
Material & mass kg (weight, lbs.)	Cast iron 2.8 (6.2)		
Drive type	Chain/belt	Chain	
	Width / pitch	23.3 / 9.525	

* 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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Engine Code

G54B (2.555 Liters)

Engine - Valve System

Hydraulic lifters (std., opt., NA)	Std.
Valves	Number intake / exhaust 4 / 4
	Head O.D. intake / exhaust 46 / 38

Engine - Connecting Rods

Material & mass (kg., (weight, lbs.))*	Drop-forged steel, 0.81 (1.8)
--	-------------------------------

Engine - Crankshaft

Material & mass (kg., (weight, lbs.))*	Drop-forged steel, 17.5 (38.6)
End thrust taken by bearing (no.)	3
Number of main bearings	5
Seal (material, one, two piece design, etc.)	Front Synthetic rubber, One piece
	Rear Synthetic rubber, One piece

Engine - Lubrication System

Normal oil pressure (kPa (psi) at engine rpm)	390 (56.5) at 2000
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, part, other)	Full flow
Capacity of c/case, less filter-refill-L (qt.)	4.5 (4.0)

Engine - Diesel Information

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

Engine - Intake System

Turbo charger - manufacturer	N.A.
Super charger - manufacturer	N.A.
Charge cooler	N.A.

*Finished State

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Engine Description/Carb.
Engine Code

G54B (2.555 Liters)	
M/T	A/T

Engine - Cooling System

Coolant recovery system (std., opt., n.a.)		With condenser tank (Std.)
Coolant fill location (rad., bottle)		Radiator & condenser tank
Radiator cap relief valve pressure [kPa (psi)]		88 (12.8)
Circulation thermostat	Type (choke, bypass)	Choke pellet
	Starts to open at °C (°F)	88 (190.4)
Water pump	Type (centrifugal, other)	Centrifugal
	GPM 1000 pump rpm	-
	Number of pumps	1
	Drive (V-belt, other)	V belt
	Bearing type	Ball, integral shaft permanentary sealed
	Impeller material	Cold-rolled carbon steel sheet
	Housing material	Aluminum die casting
	By-pass recirculation (type (inter., ext.))	External
Cooling system capacity	With heater-L (qt.)	4.0 (4.2)
	With air cond.-L (qt.)	4.0 (4.2)
	Opt. equipment (specify-L (qt.))	-
Water jackets full length of cyl. (yes, no)		Yes
Water all around cylinder (yes, no)		No
Water jackets open at head face (yes, no)		Yes
Radiator core	Std., A/C, HD	Standard
	Type (cross-flow, etc.)	Down-flow
	Construction (fin & tube mechanical, braze, etc.)	Tube and corrugated fin
	Material, mass [kg (wgt. lbs.)]	Copper & Brass 8.5 kg Copper & Brass 8.8 kg
	Width	598
	Height	400
	Thickness	49
	Fins per inch	13
Radiator end tank material		Brass
Fan	Std., elec., opt.	Std.
	Number of blades & type (flex, solid, material)	7-Uneven
	Diameter & projected width	410
	Ratio (fan to crankshaft rev.)	1.1 : 1
	Fan cutout type	Thermo-hydraulic coupling
	Drive type (direct, remote)	V-belt direct
	RPM at idle (elec.)	-
	Motor rating (wattage) (elec.)	-
	Motor switch (type & location) (elec.)	-
	Switch point (temp., pressure) (elec.)	-
	Fan shroud (material)	-

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

Induction type: carburetor, fuel injection system, etc.		Carburetor	
Manufacturer		Mikuni Co., Ltd. 32-35 DID EF	
Carburetor	Choke (type)	Automatic	
	Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	725 (Up to 300 mile), 800 (After 300 mile)
		Automatic	725 (Up to 300 mile), 800 (After 300 mile)
Idle A/F mix.		14.7	
Fuel injection	Point of injection (no.)	N.A.	
	Constant, pulse, flow	N.A.	
	Control (electronic, mech.)	N.A.	
	System pressure (kPa (psi))	N.A.	
Intake manifold heat control (exhaust or water thermostatic or fixed)		Water Fixed	
Air cleaner type	Standard	Dry, Non-woven cloth	
	Optional	N.A.	
Fuel pump	Type (elec. or mech.)	Mechanical	
	Location (eng., tank)	Engine	
	Pressure range (kPa (psi))	19 to 30 (2.8 to 4.3)	

Fuel Tank

Capacity (refill L (gallons))		60 (15.85 gallons)	
Location (describe)		Rear side frame under rear floor	
Attachment		Bolt & nut	
Material & Mass (kg (weight lbs))		Steel 8.39 (18.5 lbs)	
Filler pipe	Location & material	Left rear fender, steel	
	Connection to tank	Rubber hose	
Fuel line (material)		Steel	
Fuel hose (material)		Rubber	
Return line (material)		Steel	
Vapor line (material)		Steel	
Extended range tank	Opt., n.a.	N.A.	
	Capacity (L (gallons))	-	
	Location & material	-	
	Attachment	-	
Auxiliary tank	Opt., n.a.	N.A.	
	Capacity (L (gallons))	-	
	Location & material	-	
	Attachment	-	
	Selector switch or valve	-	
	Separate fill	-	

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G54B (2.555 Liters)	
for 49-State	for California

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		Three-way Catalyst with feedback control, Exhaust gas recirculation and Air induction
	Air Injection	Pump or pulse	Pulse
		Driven by	N.A.
		Air distribution (head, manifold, etc.)	N.A.
		Point of entry	N.A.
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled flow
		Exhaust source	Exhaust port No.2
		Point of exhaust injection (spacer, carburetor, manifold, other)	Intake manifold
	Catalytic Converter	Type	Three-way
		Number of	1
		Location(s)	Under floor
		Volume [L (in³)]	
Substrate type		Monolith	
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Induction system
	Energy source (manifold vacuum, carburetor, other)		Intake manifold vacuum
	Discharges (to intake manifold, other)		To intake manifold
	Air inlet (breather cap, other)		Air cleaner
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister
		Carburetor	Canister
	Vapor storage provision		Canister
Electronic system	Closed loop (yes/no)		Yes
	Open loop (yes/no)		Yes

Engine - Exhaust System

Type (single, single with cross-over, dual, other)		Single with cross-over
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass [kg (weight lbs)]		One (Reverse flow), Aluminized steel, 4.9 kg (10.8 lb)
Resonator no. & type		
Exhaust pipe	Branch o.d., wall thickness	42.7 x 1.6 (Dual) (mm)
	Main o.d., wall thickness	48.6 x 1.6 (mm)
	Material & Mass [kg (weight lbs)]	Aluminized steel tube, 2.6 kg (5.8 lb)
Inter-mediate pipe	o.d. & wall thickness	48.6 x 1.6 (mm)
	Material & Mass [kg (weight lbs)]	Aluminized steel tube, 1.6 kg (3.5 lb)
Tail pipe	o.d. & wall thickness	45 x 1.2 (mm)
	Material & Mass [kg (weight lbs)]	Aluminized steel tube, 1.2 kg (2.6 lb)

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Engine Description/Carb.
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G54B (2.555 Liters)

Transmissions/Transaxle

Manual 3-speed (std., opt., n.a.) (mfr.)	N.A.
Manual 4-speed (std., opt., n.a.) (mfr.)	N.A.
Manual 5-speed (std., opt., n.a.) (mfr.)	Std. MMC
Manual overdrive (std., opt., n.a.) (mfr.)	N.A.
Automatic (std., opt., n.a.) (mfr.)	N.A.
Automatic overdrive (std., opt., n.a.) (mfr.)	Std. AISIN-WARNER

Manual Transmission/Transaxle

Number of forward speeds		5	
Transmission ratios	In first	3.967	
	In second	2.136	
	In third	1.360	
	In fourth	1.000	
	In fifth	0.856	
	In overdrive	-	
	In reverse	3.578	
Synchronous meshing (specify gears)		1, 2, 3, 4, 5	
Shift lever location		Floor	
Lubricant	Capacity [L (pt.)]		2.2 (4.7)
	Type recommended		Multipurpose gear oil conforming to API GL-4
	SAE viscosity number	Summer	SAE 80W, 75W/85W
		Winter	SAE 80W, 75W/85W
		Extreme cold	SAE 80W, 75W/85W

Clutch (Manual Transmission)

Make, type, engagement (describe) - (hydraulic, cable, rod)		Daikin Manufacturing Co., Ltd. dry single plate type (Hydraulic)
Assist (yes, no, percent)		No
Type pressure plate springs		Diaphragm
Total spring load [N (lb.)]		4511 (1014)
No. of clutch driven discs		One
Clutch facing	Material	Woven Asbestos
	Manufacturer	Hitachi Chemical Co., Ltd.
	Part number	None
	Rivets/plate	16
	Rivet size	4 (mm)
	Outside & inside dia.	225 x 150 (mm)
	Total eff. area [cm ² (in. ²)]	442 (68.5)
	Thickness	3.5 (mm)
Engagement cushion method		Flat-wave spring
Release bearing	Type & method of lubrication	Ball bearing, permanently lubricated
Torsional damping	Method: springs, friction material	Coil springs and friction washers

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Engine Description/Carb.
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G54B (2.555 Liters)

Automatic Transmission/Transaxle

Trade name	AISIN-WARNER AW372	
Type and special features (describe)	Torque converter with automatically operated planetary gear transmission	
Selector	Location	Lever : Console mounted
	Ltr. No. designation	P, R, N, D, 2, L / 6
Gear ratios	1st	2.826
	2nd	1.493
	3rd	1.000
	4th	0.688
	Reverse	2.703
Max. upshift speed - drive range [km/h (mph)]		97 (61)
Max. kickdown speed - drive range [km/h (mph)]		90 (56)
Min. overdrive speed [km/h (mph)]		24 (15)
Torque converter	Number of elements	Three
	Max. ratio at stall	2.10
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	248
Lubricant	Capacity (refill L (pt.))	7.2 (15.3)
	Type Recommended	DEXRON or DEXRON II automatic transmission fluid
Oil cooler (std., opt., NA, internal, external, air, liquid)		Liquid cooling by auxiliary cooler and air cooling

Axle or Front Wheel Drive Unit

Type (front, rear)	Rear	
Description	Separable	
Limited slip differential (type)	N.A.	
Drive pinion offset	30	(mm)
Drive pinion (type)	Hypoid	
No. of differential pinions	2	
Pinion : differential adjustment (shim, other)	Shim	
Pinion : differential bearing adjustment (shim, other)	Shim	
Driving wheel bearing (type)	Taper roller	
Lubricant	Capacity [L (pt.)]	1.8 (3.88)
	Type recommended	Multipurpose gear oil, conforming to API GL-4 or GL-5
	SAE viscosity number	SAE 90, 85W-90, 80W-90 (Above -10°F)
	Summer	SAE 80W, 80W-90 (As low as -30°F)
	Winter	SAE 75W (Bwlow -30°F)
	Extreme cold	

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

Axle ratio (or overall top gear ratio)		4.625
No. of teeth	Pinion	8
	Ring gear or gear	37
Ring gear o.d.		201
Transaxle	Transfer gear ratio	1 and 1.944
	Final drive ratio	-

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Axle Shafts – Front Wheel Drive

Manufacturer and number used		Toyo Bearing Co., Ltd. two	
Type (straight, solid bar, tubular, etc.)	Left	Straight Bar	
	Right	Straight Bar	
Outer diam. x length* x wall thickness	Manual transmission	Left	30 x 267
		Right	30 x 294
	Automatic transmission	Left	30 x 267
		Right	30 x 294
	Optional transmission	Left	-
		Right	-
Slip yoke	Type	None	
	Number of teeth		
	Spine o.d.	-	
Universal joints	Make and mfg. no.	Inner	Toyo Bearing Co., Ltd.
		Outer	Toyo Bearing Co., Ltd.
	Number used	two x two	
	Type, size, plunge	Inner	C.V. Joint
		Outer	C.V. Joint
	Attach (u-bolt, clamp, etc.)		-
	Bearing	Type (plain, anti-friction)	-
Lubncation (fitting, prepack)		-	
Drive taken through (torque tube, arms or springs)		Lower & Upper Arm	
Torque taken through (torque tube, arms or springs)		Lower & Upper Arm	

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

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Engine Description/Carb.
Engine Code

G54B (2.555 Liters)	
5 M/T	A/T

Propeller Shaft – Rear Wheel Drive

Manufacturer Type (straight tube, tube-in-tube, internal-external damper, etc.)		MMC, Straight tube	
Outer diam. x length* x wall thickness	Manual 3-speed trans.	-	
	Manual 4-speed trans.	-	
	Manual 5-speed trans.	50.8 x 665 x 2.6 75 x 598 x 1.6	-
	Overdrive	-	
	Automatic transmission	50.8 x 741 x 2.6 75 x 522 x 1.6	
Inter- mediate bearing	Type (plain, anti-friction)	-	
	Lubrication (fitting, prepack)	-	
Slip yoke	Type	Sliding yoke	
	Number of teeth	23 (24 Indexed)	
	Spline o.d.	27.3	
Universal joints	Make and mfg. no.	Front	MMC (Bearing: Koyo Seiko Co., Ltd.)
		Rear	MMC (Bearing: Koyo Seiko Co., Ltd.)
	Number used	2 x 2	
	Type (ball and trunnion, cross)	Cross	
	Rear attach (u-bolt, clamp, etc.)	Clamp (Snap ring)	
	Bearing	Type (plain, anti-friction)	Anti-friction
Lubrication (fitting, prepack)		Prepack	
Drive taken through (torque tube, arms or springs)		Leaf spring	
Torque taken through (torque tube, arms or springs)		Leaf spring	

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

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Body Type And/Or
Engine Displacement

L042GV, L042GT

Suspension - General

Car leveling	Std. opt. n.a.	N.A.
	Type (air, hyd., etc.)	-
	Manual auto. controlled	-
Provision for brake dip control		N.A.
Provision for acct. squat control		N.A.
Provisions for car jacking		None
Shock absorber (front & rear)	Type	Telescopic type
	Make	Kayaba Industry Co., Ltd.
	Piston diameter	Front: 30.2 Rear: 25.0 (mm)
	Rod diameter	12.5 (mm)

Suspension - Front

Type and description		Independent double-wishbone
Travel	Full jounce	100 (mm)
	Full rebound	50 (mm)
Spring	Type (coil, leaf, other) & material	Torsion bar, Sup 9
	Insulators (type & material)	Bushing, rubber
	Size (coil design height & i.d., bar length x dia.)	1277.5 x 24.5 (mm)
	Spring rate (N/mm (lb./in.))	-
	Rate at wheel (N/mm (lb./in.))	21.5 (123.1)
Stabilizer	Type (link, linkless, frameless)	Link
	Material & bar diameter	Sup 6, 23 (mm)

Suspension - Rear

Type and description		Rigid axle
Travel	Full jounce	140 (mm)
	Full rebound	90 (mm)
Spring	Type (coil, leaf, other) & material	Leaf, Sup 9
	Size (length x width, coil design height & i.d., bar length & dia.)	1200 x 70 (mm)
	Spring rate (N/mm (lb./in.))	-
	Rate at wheel (N/mm (lb./in.))	K1 = 23.5 (134.3) K2 = 54.9 (313.3)
	Insulators (type & material)	Bushing, rubber
	If leaf	No. of leaves 4
		Shackle (comp. or tens.) Comp.
Stabilizer	Type (link, linkless, frameless)	N.A.
	Material & bar diameter	-
Track bar (type)		-

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Body Type And/Or
Engine Displacement

L042GV, L042GT

Brakes - Service

Description				
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)	Akebono Brake Industry Co.,Ltd. Disc		
	Rear (disc or drum)	Drum		
Self-adjusting (std., opt., n.a.)		Std.		
Special valving	Type (proportion, delay, metering, other)	Proportion Valve		
Power brake (std., opt., n.a.)		Std.		
Booster type (remote, integral, vac., hyd., etc.)		Integral vacuum		
Vacuum source (inline, pump, etc.)		Inline		
Vacuum reservoir (volume in. ³)		N.A.		
Vacuum pump-type (elec. gear driven, belt driven, if other so state)		N.A.		
Anti-lock device type (std., opt., n.a.) (F R)		N.A.		
Effective area [cm ² (in. ²)]*		F: 212 (32.9) / R: 520 (80.6)		
Gross lining area [cm ² (in. ²)]**(F R)		F: 218 (33.8) / R: 520 (80.6)		
Swept area [cm ² (in. ²)]*** (F R)		F: 1268 (197) / R: 798 (124)		
Rotor	Outerworking diameter	F R	F: 255 (mm) / R: -	
	Inner working diameter	F R	F: 150 (mm) / R:-	
	Thickness	F R	F: 20 (mm) / R: -	
	Material & type (vented solid)	F R	Cast Iron (Vented) / R: -	
Drum	Diameter & width	F R	F: - / R: 254 (mm) & 57.5 (mm)	
	Type and material	F R	F: - / R: Cast Iron	
Wheel cylinder bore		F: 53.97 (mm) / R: 20.64 (mm)		
Master cylinder	Bore stroke	F R	Bore: 22.22 (mm) / Stroke: 17 (mm) / 13 (mm)	
Pedal arc ratio		4.46		
Line pressure at 445 N(100 lb.) pedal load [kPa (psi)]		10780 (1560)		
Lining clearance		F R	No major adjust, required/0.25 0.40(Self adjusting)	
Brake lining	Front wheel	Bonded or riveted (rivets, seg.)		Bonded
		Rivet size		-
		Manufacturer		Akebono Brake Industry Co.,Ltd.
		Lining code*****		AKS35GG
		Material		Molded
		****	Primary or out-board	112 x 47.4 x 10.5 (mm)
		Size	Secondary or in-board	112 x 47.4 x 10.5 (mm)
	Rear wheel	Shoe thickness (no lining) *		5.0 (mm)
		Bonded or riveted (rivets, seg.)		Bonded
		Manufacturer		Akebono Brake Industry Co.,Ltd.
		Lining Code*****		AKP 324 FF
		Material		Molded
		****	Primary or out-board	260 x 50 x 4.6 (mm)
		Size	Secondary or in-board	260 x 50 x 4.6 (mm)
Shoe thickness (no lining)		2.0 (mm)		

*Excludes rivet holes, grooves, chamfers, etc.

**Includes rivet holes, grooves, chamfers, etc.

***Total swept area for four brakes. (Drum brake: Widest lining contact width for each brake x its contact circumference.)
(Disc brake: Square of Outer Working Dia. minus Square of inner Working Dia. multiplied by Pi/2 for each brake.)

****Size for drum brakes includes length x width x thickness.

*****Manufacturer I.D., catalog or formulation designation and coefficient of friction classification.

MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Car Line RAIDER

Model Year 1987 Issued 3-1-1986 Revised (•) _____

Body Type And/Or
Engine Displacement

L042GV, L042GT

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P225 / 75R15, C	
	Type (bias, radial, etc.)		Radial	
	Inflation pressure (cold) for recommended max. vehicle load	Front (kPa (psi))	180 (26)	
		Rear (kPa (psi))	240 (34)	
	Rev. mile-at 70 km/h (45 mph)		744	
Wheels	Type & material		Disc: Steel	
	Rim (size & flange type)		15 x 6-JJ	
	Wheel offset		22	(mm)
	Attachment	Type (bolt or stud)	Stud	
		Circle diameter	139.7	(mm)
Spare	Tire and wheel (same, if other describe)		Same	
	Storage position & location (describe)		On the rear door	

Tires And Wheels (Optional)

Size (load range, ply)	-
Type (bias, radial, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Size (load range, ply)	-
Type (bias, radial, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Size (load range, ply)	-
Type (bias, radial, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Size (load range, ply)	-
Type (bias, radial, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Spare tire and wheel (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	-

Brakes - Parking

Type of control		One hand: hand operated
Location of control		One the back bone of the front floor
Operates on		Rear wheels
If separate from service brakes	Type (internal or external)	-
	Drum diameter.	-
	Lining size (length x width x thickness)	-

MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Car Line RAIDER
Model Year 1987 Issued 3-1-1986 Revised (•) _____

Body Type And/Or
Engine Displacement

L042GV, L042GT

Steering

Manual (std., opt., n.a.)				N.A.	
Power (std., opt., n.a.)				Std.	
Adjustable steering wheel column (tilt, telescope, other)	Type	tilt.			
	Manufacturer	MMC			
	(Std., opt., n.a.)	-			
Wheel diameter** (W9) SAE J1100	Manual	-			
	Power	380 (mm)			
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)	11.1 (36.4)		
		Curb to curb (l. & r.)	10.4 (34.1)		
	Inside rear	Wall to wall (l. & r.)	-		
		Curb to curb (l. & r.)	-		
Scrub Radius*				-	
Manual	Gear	Type	-		
		Manufacturer	-		
		Ratios	Gear	-	
			Overall	-	
	No. wheel turns (stop to stop)				-
Power	Type (coaxial, linkage, etc.)		Integral type		
	Manufacturer		Koyo Seiko Co., Ltd.		
	Gear	Type	Recirculating ball & nut		
		Ratios	Gear	16.4 : 1	
		Overall		-	
	Pump (drive)		V-Belt		
No. wheel turns (stop to stop)		3.46			
Linkage	Type		Parallelogram: trailing		
	Location (front or rear of wheels, other)		Front		
	Tie rods (one or two)		Two		
	Inclination at camber (deg.)		8°		
Steering axis	Bearings (type)	Upper	Ball Joint		
		Lower	Ball Joint		
		Thrust	-		
		Steering spindle & joint type			
Wheel spindle/hub	Diameter	Inner bearing	73.431 (mm)		
		Outer bearing	73.431 (mm)		
	Thread (size)		M45 x 1.5 (metric)		
	Bearing (type)		Taper roller		

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

**See Page 21.

MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Car Line RAIDER
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Body Type And/Or
Engine Displacement

L042GV, L042GT

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	3°
		Camber (deg.)	1°
		Toe-in (outside track-mm (in.))	2 to 9 (0.08 to 0.35)
	Service reset*	Caster	-
		Camber	-
		Toe-in	-
	Periodic M.V. inspection	Caster	-
		Camber	-
		Toe-in	-
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	-
		Toe-in (outside track-mm (in.))	-
	Service reset*	Camber	-
		Toe-in	-
	Periodic M.V. inspection	Camber	-
		Toe-in	-

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

Electrical - Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)	Analog (Std.)
	Trip odometer (std., opt., n.a.)	Std.
EGR maintenance indicator		Std.
Charge indicator	Type	Voltage relay
	Warning device (light, audible)	Light
Temperature indicator	Type	Electric thermal
	Warning device (light, audible)	Drive pointer (N.A.)
Oil pressure indicator	Type	Pressure switch
	Warning device (light, audible)	Drive pointer (N.A.)
Fuel indicator	Type	Electric thermal
	Warning device (light, audible)	Drive pointer (N.A.)
Windshield wiper	Type (standard)	Electric two speed
	Type (optional)	N.A.
	Blade length	400
	Swept area [cm ² (in. ²)]	4815 (746)
Windshield washer	Type (standard)	Electric
	Type (optional)	N.A.
	Fluid level indicator (light, audible)	N.A.
Rear window wiper, wiper/washer (std., opt., n.a.)		Opt.
Horn	Type	90 diameter
	Number used	Two
Other		Brake system and parking brake warning light. Fasten belt indicator light. Over drive position indicator light. (A/T Only)

MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Car Line RAIDER

Model Year 1987 Issued 3-1-1986 Revised (•) _____

Engine Description/Carb.
Engine Code

G54B (2.555 Liters)

Electrical - Supply System

Battery	Manufacturer	Yuasa Battery Co., Ltd., Japan Storage Battery Co., Ltd.
	Model, std., (opt.)	55B24R
	Voltage	12
	Amps at 0°F cold crank	433
	Minutes-reserve capacity	79
	Amp/hrs. - 20 hr. rate	45
	Location	Right side of engine compartment
Alternator	Manufacturer	Mitsubishi Electric Corp.
	Rating	50
	Ratio (alt. crank/rev.)	2.03 : 1
	Optional (type & rating)	N.A.
Regulator	Type	Voltage control

Electrical - Starting System

Start, motor	Current drain at 0°F	
Motor drive	Engagement type	Solenoid
	Pinion engages from (front, rear)	Front

Electrical - Ignition System

Type	Electronic (std., opt., n.a.)	Std.
	Other (specify)	
Coil	Make	Daimond Electric Manufacturing Co., Ltd.
	Model	E-089
	Current	Engine stopped - A
		Engine idling - A
Spark plug	Make	NGK Spark Plug Co., Ltd. or Champion Spark Plug Co., Ltd. or NIPPON DENSO
	Model	BUR6EA-11 or RN-9Y or W20EPR-S11
	Thread (mm)	14
	Tightening torque (N•m (lb, ft))	20 to 30 (15 to 22)
	Gap	1.0 to 1.1
	Number per cylinder	1
Distributor	Make	Mitsubishi Electric Corp.
	Model	-

Electrical - Suppression

Locations & type	-
------------------	---

MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Car Line RAIDER
Model Year 1987 Issued 3-1-1986 Revised (•) _____

Body Type

L042GV, L042GT

Body

Structure	Separate frame
Bumper system front - rear	Steel bumper with rigid stay
Anti-corrosion treatment	Cathodic ED paint Extended use of galvanized steel Wax injection Stone chipping resistance coating

Body - Miscellaneous Information

Type of finish (lacquer, enamel, other)		Heat Setting acylic enamel	
Hood	Hinge location (front, rear)	Rear	
	Type (counterbalance, prop)	Prop	
	Release control (internal, external)	Internal	
Trunk lid	Type (counterbalance, other)	-	
	Internal release control (elec., mech., n.a.)	-	
Hatch-back lid	Type (counterbalance, other)	-	
	Internal release control (elec., mech., n.a.)	-	
Station wagon			
Vent window control (crank, friction, pivot, power)	Front		
	Rear		
Seat cushion type (e.g., 60/40, bucket, bench, wire, foam etc.)	Front	bucket, spring	
	Rear	-	
	3rd seat	-	
Seat back type (e.g., 60/40, bucket, bench, wire, foam etc.)	Front	bucket, spring	
	Rear	-	
	3rd seat	-	

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line RAIDER
 Model Year 1987 Issued 3-1-1986 Revised (●) _____

Body Type

L042GV, L042GT

Restraint System

Active restraint system	Standard/optional	Standard
	Type and description	Front: 3 point seat belt with ELR
	Location	Front
Passive seat belts	Standard/optional	-
	Power/manual	-
	2 or 3 point	-
	Knee bar/lap belt	-

Frame

Type and description (separate frame, unitized frame, partially-unitized frame)	
---	--

Glass	SAE Ref. No.	
Windshield glass exposed surface area [cm ² (in. ²)]	S1	7140 cm ² (1106m ²)
Side glass exposed surface area [cm ² (in. ²)] - total 2-sides	S2	14380 cm ² (2228m ²)
Backlight glass exposed surface area [cm ² (in. ²)]	S3	4610 cm ² (714m ²)
Total glass exposed surface area [cm ² (in. ²)]	S4	26130 cm ² (4050m ²)
Windshield glass (type)		Curved-laminated plate
Side glass (type)		Curved-tempered plate
Backlight glass (type)		Curved-tempered plate

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line RAIDER
 Model Year 1987 Issued 3-1-1986 Revised (•) _____

Body Type

L042GV, L042GT

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

Air conditioning (manual, auto temp control)		Opt. (manual)
Clock (digital, analog)		Std. (digital)
Compass thermometer		N.A.
Console (floor, overhead)		Std. (floor)
Defroster, elec. backlight		Std.
Electronic	Diagnostic monitor (integrated, individual)	N.A.
	Instrument cluster (list instruments)	N.A.
	Keyless entry	N.A.
	Tripmeter (avg. spd., fuel)	N.A.
	Voice alert (list items)	N.A.
	Other	-
Fuel door lock (remote, key, electric)		Remote with KEY
Lamps	Auto head on - off delay, dimming	N.A.
	Cornering	N.A.
	Courtesy (map, reading)	Std.
	Door lock, ignition	N.A.
	Engine compartment	N.A.
	Fog	N.A.
	Glove compartment	N.A.
	Trunk	N.A.
	Other	-
Mirrors	Day night (auto, man.)	Std. (Man)
	L.H. (remote, power, heated)	Std.
	R. H. (convex, remote, power, heated)	Std.
	Visor vanity (RH L.H. illuminated)	N.A.
Parking brake-auto release (warning light)		
Power equipment	Door locks - deck lid - specify	N.A.
	Seat (2-4-6 way) heated (driver, pass, other) lumbar, hip, thigh support (power, manual) reclining (driver, pass) memory (1-2 preset, recline)	N.A.
	Side windows	Opt.
	Vent windows	N.A.
	Rear window	N.A.
Radio systems	Antenna (location, whip, w shield, power)	Opt. (whip)
	AM, FM, stereo, tape, CB	Opt. (AM/FM MPX or AM/FM MPX & CASSETTE STEREO)
	Speaker (number, location) Premium sound	Opt. (2 speakers or 4 speakers)
Roof open air-fixed (flip-up, sliding, "T")		
Speed control device		N.A.
Speed warning device (light, buzzer, etc.)		N.A.
Tachometer (rpm)		Std. (8000 rpm)
Telephone system - mobile		N.A.
Theft protection-type		Disk tumbler, key locks on ignition switch, doors, fuel lid, luggage compartment & glove box.

MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)
Car and Body Dimensions

See Key Sheets for definitions

Car Line RAIDER

Model Year 1987

Issued 3-1-1986

Revised (●)

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

Body Type	SAE Ref. No.	L042GV	L042GT
Width			
Tread (front)	W101	1400	
Tread (rear)	W102	1375	
Vehicle width	W103	1680	
Body width at Sg RP (front)	W117	1650	
Vehicle width (front doors open)	W120	3380	
Vehicle width (rear doors open)	W121	-	
Front fender overall width	W106	1670	
Rear fender overall width	W107	1680	
Tumble-home (deg.)	W122	7.5	

Length

Wheelbase	L101	2350	
Vehicle length	L103	3995 W/Spare tire 3960 W/O Spare tire	
Overhang (front)	L104	745	
Overhang (rear)	L105	900	
Upper structure length	L123	-	
Rear wheel C L "X" coordinate	L127	2580	
Cowl point "X" coordinate	L125	795	
Front end length at centerline	L126	1150	
Rear end length at centerline	L129	-	

Height*

Passenger distribution (front/rear)	PD1/2/3	Front: 2 / Rear: 2	
Trunk cargo load		300 lbs / 136 kg	
Vehicle height	H101	1840	1850
Cowl point to ground	H114	1050	
Deck point to ground	H138	-	
Rocker panel-front to ground	H112	360	
Bottom of door closed-front to grd.	H133	440	
Rocker panel-rear to ground	H111	360	
Bottom of door closed-rear to grd.	H135	-	
Windshield slope angle	H122	33°	
Backlight slope angle	H121	12.5°	

Ground Clearance*

Front bumper to ground	H102	480	
Rear bumper to ground	H104	440	
Bumper to ground (front at curb mass (wt.))	H103	470	
Bumper to ground (rear at curb mass (wt.))	H105	510	
Angle of approach (degrees)	H106	38°	
Angle of departure (degrees)	H107	28°	
Ramp breakover angle (degrees)	H147	21°	
Axle differential to ground (front/rear)	H153	230 / 210	
Min. running ground clearance	H156	210	
Location of min. run. grd. clear.		Rear axle	

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

MVMA Specifications FormCar Line RAIDERModel Year 1987Issued 3-1-1986 Revised (•) _____**Passenger Car****METRIC (U.S. Customary)****Car and Body Dimensions** See Key Sheets for definitions

Body Type

SAE
Ref.
No.

L042GV, L043GT

Front Compartment

Sg RP front, "X" coordinate	L31	1780
Effective head room	H61	925
Max. eff. leg room (accelerator)	L34	1005
Sg RP to heel point	H30	370
Sg RP to heel point	L53	690
Back angle	L40	20°
Hip angle	L42	92°
Knee angle	L44	100°
Foot angle	L46	87°
Design H-point front travel	L17	140
Normal driving & riding seat track trvl.	L23	140
Shoulder room	W3	1400
Hip room	W5	1400
Upper body opening to ground	H50	1635
Steering wheel maximum diameter*	W9	380
Steering wheel angle	H18	36°20'
Accel. heel pt. to steer. whl. cntr	L11	300
Accel. heel pt. to steer. whl. cntr	H17	720
Steering wheel to C : L of thigh	H13	69
Steering wheel torso clearance	L7	333
Headlining to roof panel (front)	H37	4
Undepressed floor covering thickness	H67	15

Rear Compartment

Sg RP Point couple distance	L50	—
Effective head room	H63	—
Min. effective leg room	L51	—
Sg RP (second to heel)	H31	—
Knee clearance	L48	—
Compartment room	L3	—
Shoulder room	W4	—
Hip room	W6	—
Upper body opening to ground	H51	—
Back angle	L41	—
Hip angle	L43	—
Knee angle	L45	—
Foot angle	L47	—
Headlining to roof panel (second)	H38	—
Depressed floor covering thickness	H73	—

Luggage Compartment

Usable luggage capacity [L (cu. ft.)]	V1	—
Liftover height	H195	—

Interior Volumes (EPA Classification)

Vehicle class (subcompact, compact, etc.)		N. A.
Interior volume index (cu. ft.)		N. A.
Trunk cargo index (cu. ft.)		N. A.

* See page 14.

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

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)
Car and Body Dimensions

Car Line RAIDER
Model Year 1987 Issued 3-1-1986 Revised (•) _____

See Key Sheets for definitions

Body Type

SAE
Ref.
No.

L042GV

L042GT

Station Wagon – Third Seat

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

Station Wagon – Cargo Space

Cargo length (open front)	L200	—
Cargo length (open second)	L201	—
Cargo length (closed front)	L202	—
Cargo length (closed second)	L203	—
Cargo length at belt (front)	L204	1070
Cargo length at belt (second)	L205	—
Cargo width (wheelhouse)	W201	940
Rear opening width at floor	W203	—
Opening width at belt	W204	1015
Max. rear opening width above belt	W205	—
Cargo height	H201	1150
Rear opening height	H202	1005
Tailgate to ground height	H250	—
Front seat back to load floor height	H197	—
Cargo volume index [m ³ (ft. ³)]	V2	—
Hidden cargo volume [m ³ (ft. ³)]	V4	—
Cargo volume index-rear of 2-seat	V10	—

Hatchback – Cargo Space

Cargo length at front seatback height	L208	—
Cargo length at floor (front)	L209	—
Cargo length at second seatback height	L210	—
Cargo length at floor (second)	L211	—
Front seatback to load floor height	H197	—
Second seatback to load floor height	H198	—
Cargo volume index [m ³ (ft. ³)]	V3	—
Hidden cargo volume [m ³ (ft. ³)]	V4	—
Cargo volume index-rear of 2-seat	V11	—

Aerodynamics*

Wheel lip to ground, front	845
Wheel lip to ground, rear	810
Frontal area [m ² (ft. ²)]	2.53 (27.21)
Drag coefficient (Cd)	N.A.

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

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line RAIDER
 Model Year 1987 Issued 3-1-1986 Revised (•) _____

Body Type

L042GV

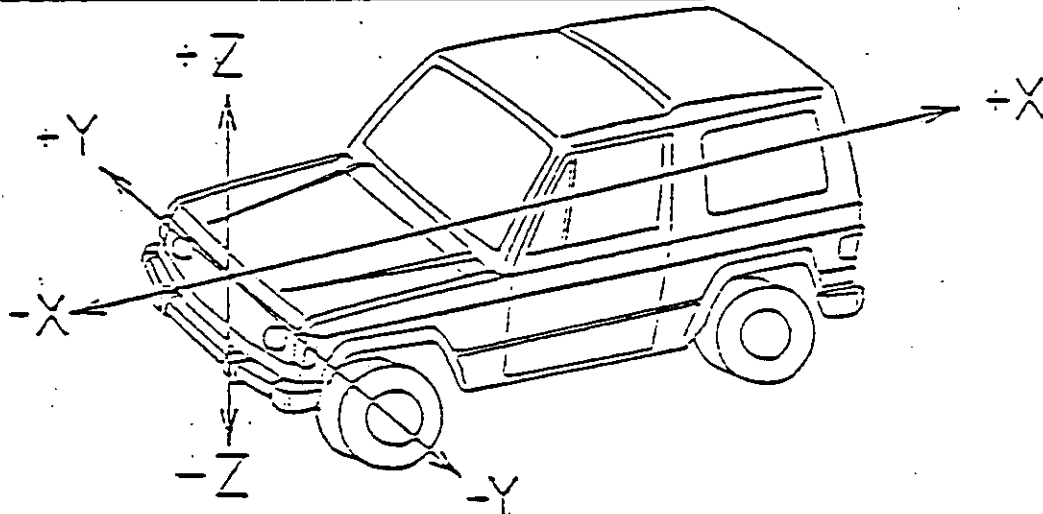
L042GT

Vehicle Fiducial Marks

Fiducial Mark
Number*

Define Coordinate Location

Front



Rear

Datum plane definition - Vertical longitudinal plane through the longitudinal center of the car.

Vertical transverse plane through the front wheel center.

Horizontal plane through the bottom of the rocker panels.

Fiducial
Mark
Number

2.6 Liters

Front	W21*	288	
	L54*	-230	
	H81*	-65	
	H161*	300	
	H163*	-	
Rear	W22*	540	
	L55*	2994	
	H82*	75	
	H162*	495	505
	H164*	-	

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

All linear dimensions are in millimeters (inches).

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line RAIDER
 Model Year 1987 Issued 3-1-1986 Revised (•) _____

Body Type

L042GV	L042GT
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Lamps and Headlamp Shape*

Height above ground to center of bulb or marker	Headlamp (SAE - H127)	Highest**	850	850
		Lowest	-	-
	Taillamp (SAE - H128)	Highest**	920	930
		Lowest	835	845
	Sidemarker	Front	830	830
		Rear	885	895
Distance from C.L. of car to center of bulb	Headlamp	Inside	-	-
		Outside**	550	550
	Taillamp	Inside	750	750
		Outside**	760	760
	Directional	Front	735	735
		Rear	Inside 750, Outside 760	
Halogen headlamp (std., opt., n.a.)	Lo beam		Opt.	
	Hi beam		Opt.	
	Replaceable bulb		N.A.	
	Shape		7 in. circular unit	
	Type		2D1	
Headlamp other than above	Lo beam		Std.	
	Hi beam		Std.	
	Replaceable		N.A.	
	Shape		7 in. circular unit	
	Type		2D1	

* Measured at curb mass (weight).

** If single lamps are used enter here.

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

METRIC (U.S. Customary)

Model Year 1987

Issued 3-1-1986

Revised (●)

* Reference - SAE J1100 Motor vehicle dimensions, curb weight definition.
** Shipping mass (weight) definition -

METRIC (U.S. Customary)

Model Year 1987 Issued 3-1-1986 Revised (•) _____

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