

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1989

Manufacturer FORD MOTOR COMPANY	Vehicle Line PROBE	
Mailing Address P.O. BOX 2053 DEARBORN, MICHIGAN 48121	Issued OCTOBER, 1987	Revised AUGUST 31, 1988

Direct questions concerning these specifications to the manufacturer listed above.

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

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



Motor Vehicle Manufacturers Association
of the United States, Inc.

Blank Forms Provided by Technical Affairs Division

MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line PROBE
 Model Year 1989 Issued 10/87 Revised (e) 5/16/88

⑦ Vehicle Origin

(e) Design & development (company)	Ford Motor Co. & Mazda
Where built (country)	U.S.A.
Authorized U.S. sales marketing representative	Ford Motor Company

⑦ Vehicle Models

Model Description & Drive (FWD/RWD/AWD/4WD)*	Introduction Date	Make, Vehicle Models, Series, Body Type (Mfr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load—Kilograms (Pounds)
GL Model (FWD) 2-Door Hatchback	5/12/88	T20	2/2	36.0 (80)
LX Model (FWD) 2-Door Hatchback	5/12/88	T21	2/2	36.0 (80)
GT Model (FWD) 2-Door Hatchback	5/12/88	T22	2/2	36.0 (80)

⑦ * FWD-Front Wheel Drive RWD-Rear Wheel Drive
 AWD-All Wheel Drive 4WD-Four Wheel Drive

MVMA Specifications Form

Vehicle Line PROBE
 Model Year 1989 Issued 10/87 Revised (e) 1/15/88

METRIC (U.S. Customary)

Power Teams (Indicate whether standard or optional)

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

SERIES AVAILABILITY	ENGINE						E x h a u s t S/D*	TRANSMISSION/ TRANSAXLE	AXLE RATIO (std. first)
	Code	Displ. Liters (in ³)	Induction (FI,CARB/ BBL, etc.)	Compr. Ratio	SAE Net at RPM				
					Power kW (bhp)	Torque N-m (lb.ft.)			
GL & LX Models	99C	2.2 (133.3)	EFI	8.6	82 (110) 4700	176 (130) 3000	S	M5 4EAT	4.10 3.70
GT Model	99L	2.2 (133.3) Turbo	EFI	7.8	108 (145) 4300	258 (190) 3500	S	M5	4.10

*Single/Dual

MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 8/31/88

Engine Description/Carb.
Engine Code

2.2L

2.2L TURBO

ENGINE — GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)

Inline, Front Transverse, (SOHC) Single Overhead Cam, Multispherical Combustion Chambers, 12 Valves

Manufacturer

Mazda

No. of cylinders

Four

Bore

86 (3.39)

Stroke

94 (3.7)

Bore spacing (C/L to C/L)

96-98 (3.78-3.85)

Cylinder block material & mass kg (lbs.) (machined)

Cast Iron

Cylinder block deck height

241.5 (9.5)

Cylinder block length

Deck clearance (minimum)
(above or below block)

0

Cylinder head material & mass kg (lbs.)

Cast Aluminum Alloy

Cylinder head volume (cm³)

Cylinder liner material

Cast Iron

Head gasket thickness
(compressed)

1.2 (0.047)

Minimum combustion chamber
total volume (cm³)

Cyl. no. system
(front to rear)*

L. Bank

1, 2, 3, 4

R. Bank

N/A

Firing order

1, 3, 4, 2

Intake manifold material & mass [kg (lbs.)]**

Aluminum & 3.7 (8.2)

Exhaust manifold material & mass [kg (lbs.)]**

Cast Iron & 7.2 (15.9)

Fuel required unleaded, diesel, etc.

Unleaded

Fuel antiknock index (R + M) + 2

87

Engine
mounts

Number

4

Material and type (elastomeric,
hydroelastic, hydraulic damper, etc.)

Rubber and Elastomeric

Rubber and Hydroelastic

Added isolation (sub-frame,
crossmember, etc.)

Sub-Frame

(e) Total dressed engine mass (wt) dry***

208 (458) — MT, 198 (436) — AT 227 (500) — MT

Engine — Pistons

Material & mass, g
(weight, oz.)-piston only

Aluminum Alloy

Engine — Camshaft

Location

In Cylinder Head

Material & mass kg (weight, lbs.)

Special Alloy Iron, Induction-Hardened, Phosphate Coated

Drive type

Chain/belt

Belt

Width/pitch

25.4 (1.0)/9.5 (0.37)

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

**Finished state.

(e) ***Dressed engine mass (weight) includes the following: Front End Dress, All Engine Mounted Components Including Exhaust and Cooling Systems

MVMA Specifications Form

Vehicle Line PROBEModel Year 1989Issued 10/87Revised (e) 4/15/88

METRIC (U.S. Customary)

Engine Description/Carb.
Engine Code

2.2L

2.2L TURBO

Engine — Valve System

Hydraulic lifters (std., opt., NA)		Standard
Valves	Number intake/exhaust	8/4
	Head O.D. intake/exhaust	32.5 (1.28)/34 (1.34)

Engine — Connecting Rods

Material & mass [kg., (weight, lbs.)]*	Forged Steel
Length (axes ϵ to ϵ) mm	158.5 (6.2)

Engine — Crankshaft

Material & mass [kg., (weight, lbs.)]*	Cast Iron
End thrust taken by bearing (no.)	3
Length & number of main bearings	5
Seal (material, one, two piece design, etc.)	Front
	Rear

Engine — Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]	294-392 (43-57) @ 3000
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, part, other)	Full Flow
Capacity of c/case, less filter-refill-L (qt.)	4.6 (4.9)

Engine — Diesel Information (Not Applicable)

Diesel engine manufacturer	
Glow plug, current drain at 0°F	
Injector nozzle	Type
	Opening pressure [kPa (psi)]
Pre-chamber design	
Fuel injection pump	Manufacturer
	Type
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	Ishikawajima Harima Ind.
Super charger - manufacturer	N/A	
Intercooler	N/A	Mazda

*Finished State

MVMA Specifications Form

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 4/15/88

METRIC (U.S. Customary)

Engine Description/Carb.
Engine Code

2.2L

2.2L TURBO

Engine — Cooling System

Coolant recovery system (std., opt., n.a.)		Standard	
Coolant fill location (rad., bottle)		Radiator	
Radiator cap relief valve pressure [kPa (psi)]		89.6 (13)	
Circulation thermostat	Type (choke, bypass)	By-Pass	
	Starts to open at °C(°F)	86.5-89.5° (187.7°-193.1°)	
(e) Water Pump	Type (centrifugal, other)	Centrifugal	
	GPM 1000 pump rpm	8.6	
	Number of pumps	One	
	Drive (V-belt, other)	Timing Belt	
	Bearing type	Ball	
	Impeller material	Cast Iron	
	Housing material	Aluminum	
By-pass recirculation [type (inter., ext.)]		External	
Cooling system capacity	With heater-L(qt.)	7.5 (7.9)	
	With air cond.-L(qt.)	7.5 (7.9)	
	Opt. equipment [specify-L(qt.)]	N/A	
Water jackets full length of cyl. (yes, no)		Yes	
Water all around cylinder (yes, no)		No	
Water jackets open at head face (yes, no)		No	
Radiator core	Std., A/C, HD	Standard	
	Type (cross-flow, etc.)	Vertical Flow	
	Construction (fin & tube mechanical, braze, etc.)	Tube & Fin	
	Material, mass [kg (wgt. lbs.)]	Aluminum	
	Width	648 (25.4)	
	Height	400 (15.7)	
	Thickness	16 (0.63)	32 (1.26)
	Fins per inch	19.5 (M/T); 14.5 (A/T)	23.1 (M/T)
Radiator end tank material			
(e) Fan	Std., elec., opt.	Electric	
	Number of blades & type (flex, solid, material)	4	
	Diameter & projected width	320 (12.6) M/T; 340 (13.4) A/T	320 (12.6) M/T
	Ratio (fan to crankshaft rev.)	N/A	
	Fan cutout type		
	Drive type (direct, remote)	Direct	
	RPM at idle (elec.)		
	Motor rating (wattage) (elec.)	80	120
	Motor switch (type & location) (elec.)	Thermo Switch, Electric	
	Switch point (temp., pressure) (elec.)	97° (206.6°), Electric	
	Fan shroud (material)	Plastic	

MVMA Specifications Form

Vehicle Line **PROBE**

Model Year **1989**

Issued **10/87**

Revised (e) **1/15/88**

METRIC (U.S. Customary)

Engine Description/Carb.
Engine Code

2.2L

2.2L TURBO

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

Induction type: carburetor, fuel injection system, etc.		Fuel Injection	
Manufacturer		Mazda	
Carburetor no. of barrels		N/A	
(e) Idle A/F mix.		14.7:1	
Fuel injection	Point of injection (no.)	Intake Port (4)	
	Constant, pulse, flow	Pulse	
	Control (electronic, mech.)	Electronic	
	System pressure [kPa (psi)]	250 (36.3)	
(e) Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	750-800	725-775
	Automatic	750-800 (Neutral)	N/A
Intake manifold heat control (exhaust or water thermostatic or fixed)		Water Thermostatic	
Air cleaner type		Wet Type	
Fuel filter (type/location)		Paper Element	
Fuel pump	Type (elec. or mech.)	Electric	
	Location (eng., tank)	Fuel Tank	
	Pressure range [kPa (psi)]		
	Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))	80 (21) @ 250 (36.3)	

Fuel Tank

Capacity [refill L (gallons)]		57 (15.1)
Location (describe)		Under Rear Floor Ahead of Rear Suspension
(e) Attachment		3 Bolts and 1 Strap
(e) Material & Mass [kg (weight lbs.)]		Steel & 12 (26.5)
Filler pipe	Location & material	Left Rear Quarter Panel
	Connection to tank	Rubber Hose
(e) Fuel line (material)		Steel & Rubber
(e) Fuel hose (material)		Rubber
(e) Return line (material)		Steel & Rubber
(e) Vapor line (material)		Steel & Rubber
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	

MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 8/31/88

Engine Description/Carb.
Engine Code

2.2L

2.2L TURBO

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		Vehicle and Engine Modifications, Feedback Controlled Fuel Injection, Exhaust Gas Recirculation (EGR) and Catalyst	
	Air Injection	Pump or pulse	N/A	
		Driven by		
		Air distribution (head, manifold, etc.)		
		Point of entry		
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled Flow	
		Exhaust source	Exhaust Manifold #1 & #4	Exhaust Manifold #4
		Point of exhaust injection (spacer, carburetor, manifold, other)	Intake Manifold	
	Catalytic Converter	Type	Three Way Catalyst (TWC)	
		Number of	Two — TWC	
		Location(s)	Under Floor Area	
		Volume [L (in³)]	2.1 (128)	2.3 (140.4)
		Substrate type	Monolith	
		Noble metal type	Platinum/Rhodium	
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Closed Type	
	Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum	
	Discharges (to intake manifold, other)		Surge Tank	
	Air inlet (breather cap, other)		Air Hose	
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister	
		Carburetor	N/A	
Electronic system	Vapor storage provision		Canister	
	Closed loop (yes/no)		No	
Open loop (yes/no)		Yes		

Engine — Exhaust System

Type (single, single with cross-over, dual, other)	Single	Single
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass (kg (weight lbs.))	One	
Resonator no. & type	One, Resonance & Expansion	
Exhaust pipe	Branch o.d., wall thickness	37 x 4.0 (1.5 x 0.16) 36 x 4.5 (1.4 x 0.18)
	Main o.d., wall thickness	48.8 x 2.0 (1.9 x 0.08) 50.8 x 2.0 (2.0 x 0.08)
	Material & Mass [kg (weight lbs.)]	Stainless 50.8 x 1.6 (2.0 x 0.06)
Intermediate pipe	o.d. & wall thickness	48.8 x 1.6 (1.9 x 0.06) 50.8 x 1.6 (2.0 x 0.06)
	Material & Mass [kg (weight lbs.)]	Alum. Coated Steel 38.1 x 1.2 (1.5 x 0.05)
Tail pipe	o.d. & wall thickness	45 x 1.2 (1.8 x 0.05)
	Material & Mass [kg (weight lbs.)]	Stainless

MVMA Specifications Form

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 1/15/88

METRIC (U.S. Customary)

Engine Description/Carb.
Engine Code

GL AND LX MODELS

GT MODEL

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

Manual 3-speed (manufacturer/country)	N/A
Manual 4-speed (manufacturer/country)	N/A
Manual 5-speed (manufacturer/country)	Standard (Mazda/Japan)
Automatic (manufacturer/country)	N/A
Automatic overdrive (manufacturer/country)	Optional (Mazda/Japan) N/A

Manual Transmission/Transaxle

Number of forward speeds		Five (M5)
Gear ratios	1st	3.307
	2nd	1.833
	3rd	1.233
	4th	0.914
	5th	0.717
	Reverse	3.166
Synchronous meshing (specify gears)		All Forward Gears
Shift lever location		Floor
(e) Trans. case mat'l. & mass kg (lbs)*		Aluminum & Steel & 10.3 (22.7) Aluminum & Steel & 15.2 (33.5)
Lubricant	Capacity [L (pt.)]	3.35 (7.1)
	Type recommended	ATF Dexron II

Clutch (Manual Transmission)

Clutch manufacturer		Daikin Mfg. Co., Ltd.
Clutch type (dry, wet; single, multiple disc)		Single Disc, Dry Plate
Linkage (hydraulic, cable, rod, lever, other)		Hydraulic
(e) Max. pedal effort (nom. spring load, new) N (lbs)	Depressed	103 (23)
	Released	113.7 (25.6)
Assist (spring, power/percent, nominal)		N/A
Type pressure plate springs		Diaphragm Spring
Total spring load (nominal, new) N (lbs)		4608 (1036) 5493 (1235)
Clutch facing	Facing mfr. & material coding	Valeo
	Facing material & construction	Semi-Mold
	Rivets per facing	18
	Outside x inside dia. (nominal)	225 (8.86) x 150 (5.91)
	Total eff. area [cm ² (in. ²)]	240 (9.45) x 160 (6.3)
	Thickness (pressure plate side/fly wheel side)	251 (38.9)
(e)	Rivet depth (pressure plate side/fly wheel side)	3.5 (0.14)
	Engagement cushion method	2.0 (0.079)/1.4 (0.055) 1.4 (0.055)/1.4 (0.055)
Release bearing type & method lub.		Cushion Springs
Torsional damping method, springs, hysteresis		Ball & Pre-Packed
		Coil Springs & Friction Springs

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

MVMA Specifications Form

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 1/15/88

METRIC (U.S. Customary)

Engine Description/Carb.
Engine Code

GL AND LX MODELS

Automatic Transmission/Transaxle

Trade name		Transaxle (4EAT): G4A-EL (EC-AT)
Type and special features (describe)		4-Speed with Lock-up Torque Converter
Selector	Location	Floor
	Ltr./No. designation	PRNOD21
Gear ratios	1st	2.80
	2nd	1.54
	3rd	1.00
	4th	0.70
	Reverse	2.33
Max. upshift speed - drive range [km/h (mph)]		56 (34.8) 1 to 2, 107 (66.5) 2 to 3, 168 (104) 3 to 4
Max. kickdown speed - drive range [km/h (mph)]		47 (29.2) 2 to 1, 98 (60.9) 3 to 2, 158 (98.2) 4 to 3
Min. overdrive speed [km/h (mph)]		30
Torque converter	Number of elements	3-Element, 1-Stage, 2-Phase
	Max. ratio at stall	1.8:1
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	250 (9.84)
	Capacity factor "K"	212 at Speed Ratio: 0
Lubricant	Capacity [refill L (pt.)]	6.8 (14.4)
	Type Recommended	ATF M-III
Oil cooler (std., opt., NA, internal, external, air, liquid)		Standard, External Air
Transmission case material & mass kg (lbs)**		Aluminum

Axle or Front Wheel Drive Unit

Type (front, rear)		Front
Description		Helical Gear
Limited slip differential (type)		None
(e) Drive pinion offset		None
(e) Drive pinion (type)		None
No. of differential pinions		Two
(e) Pinion/differential adjustment (shim, other)		None
(e) Pinion/differential bearing adjustment (shim, other)		Shim
(e) Driving wheel bearing (type)		Taper Unit Bearing
Lubricant	Capacity [L (pt.)]	
	Type recommended	

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

		2.2L	2.2L	2.2L Turbo
(e) Axle ratio (or overall top gear ratio)		3.70 (4EAT)	4.10 (M5)	4.10 (M5)
No. of teeth	Pinion	N/A		
	Ring gear or gear	N/A		
Ring gear o.d.		N/A		
(e) Transaxle	Transfer gear ratio			
	Final drive ratio	2.59	2.94	2.92

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

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

MVMA Specifications Form

Vehicle Line **PROBE**

Model Year **1989**

Issued **10/87**

Revised (e) **1/15/88**

METRIC (U.S. Customary)

Engine Description/Carb:
Engine Code

GL AND LX MODELS

GT MODEL

Axle Shafts — Front Wheel Drive

Manufacturer and number used		Mazda, Two, One Each RH & LH Equal Length	
Type (straight, solid bar, tubular, etc.)	Left	Solid Bar	
	Right	Solid Bar	
Outer diam. x length* x wall thickness	Manual transaxle	Left	24 x 360 (0.94 x 14.2) 26 x 355 (1.02 x 14)
		Right	24 x 360 (0.94 x 14.2) 26 x 355 (1.02 x 14)
	Automatic transaxle	Left	24 x 352.5 (0.94 x 13.9) N.A.
		Right	24 x 352.5 (0.94 x 13.9) N.A.
	Optional transaxle	Left	N.A.
		Right	N.A.
Slip yoke	Type		
	Number of teeth		
	Spline o.d.		
Universal joints	Make and mfg. no.	Inner	NTN, G03325 (M/T) (a) NTN, G05325 (M/T)
		Outer	
	Number used		
	Type, size, plunge	Inner	Double Offset Joint (M/T); Tripod Joint (A/T)
		Outer	Bell Joint
	Attach (u-bolt, clamp, etc.)		
	Bearing	Type (plain, anti-friction)	
Lubrication (fitting, prepack)			
Drive taken through (torque tube, arms or springs)			
Torque taken through (torque tube, arms or springs)			

All Wheel/4 Wheel Drive (Not Applicable)

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

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

(a) G04325 (A/T)

MVMA Specifications Form

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 5/9/88

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

BASE SUSPENSION

GT MODEL & OPT. SPORT SUSP.

① Suspension — General Including Electronic Controls

Car leveling	Standard/optional/not avail.		N/A	
	Manual/automatic control		N/A	
	Type (air/hydraulic)		N/A	
	Primary/assist spring		N/A	
	Rear only/4 wheel leveling		N/A	
	Single/dual rate spring		N/A	
	Single/dual ride heights		N/A	
	Provision for jacking		N/A	
(e) Shock absorber damping controls	Standard/option/not avail.		N/A	Standard
	Manual/automatic control		N/A	Automatic Control
	Number of damping rates		N/A	Three; Soft, Normal-Auto, Sport-Auto
	Type of actuation (manual/ electric motor/ air, etc.)		N/A	Electric Actuator
	s e n s o r s	Lateral acceleration	N/A	Steering Wheel Angle
		Deceleration	N/A	Braking
		Acceleration	N/A	Speed Increase
		Road surface	N/A	
Shock absorber (front & rear)	Type		Combined Strut/Hydraulic	Comb. Strut/Nitro. Gas Press./Hyd.
	Make		Kayaba-Front, Showa Seisakusho — Rear	
	Piston diameter		32 (1.26) Front and Rear	
	Rod diameter		22 (0.87) Front and Rear	

① Suspension — Front

Type and description		Independent Strut Type with Lower Asymmetric Control Arms and Upper Strut Mounted Coil Springs	
Travel*	Full jounce	85 (3.35)	
	Full rebound	90 (3.54)	
Spring	Type (coil, leaf, other) & material	Coil, Chromium Alloy Steel	
	Insulators (type & material)	Seat & Rubber	
	Size (coil design height & i.d., bar length x dia.)	Coil 162.3 (6.4) — Height & 13.1 ~ 14.0 (0.51 ~ 0.55) — Bar Dia.	Coil 162.3 (6.4) — Height & 14.2 (0.56) — Bar Dia.
	Spring rate [N/mm (lb./in.)]	Variable 17.5 (100) to 24.8 (142)	29.4 (168)
	Rate at wheel [N/mm (lb./in.)]	Variable 16.0 (91.4) to 22.7 (130)	26.9 (154)
Stabilizer	Type (link, linkless, frameless)	Link	
	Material & bar diameter	Steel Tube	

① Suspension — Rear

Type and description		Independent Strut Type Four Bar with Single Trailing Arms and Upper Strut Mounted Coil Springs	
Travel*	Full jounce	80 (3.15)	
	Full rebound	120 (4.72)	95 (3.74)
Spring	Type (coil, leaf, other) & material	Coil, Chromium Alloy Steel	
	Size (length x width, coil design height & i.d., bar length & dia.)	Coil	
	Spring rate [N/mm (lb./in.)]	17.4 (99.43)	24.5 (140)
	Rate at wheel [N/mm (lb./in.)]	16.6 (94.86)	23.4 (134)
	Insulators (type & material)	Seat & Rubber	
	If leaf	No. of leaves	N/A
		Shackle (comp. or tens.)	N/A
Stabilizer	Type (link, linkless, frameless)	Link	
	Material & bar diameter	Steel Tube	
Track bar (type)		N/A	

*Define load condition:

MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 1/15/88

Body Type And/Or
Engine Displacement

GL & LX MODELS

GT MODEL

Brakes — Service

Description		Four Wheel Hydraulic Actuated System		
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)	Disc		
	Rear (disc or drum)	Drum	Disc	
(e) Valving type (proportion, delay, metering, other)		Proportion		
Power brake (std., opt., n.a.)		Standard		
Booster type (remote, integral, vac., hyd., etc.)		Vacuum		
(e) Vacuum	Source (inline, pump, etc.)	Inline		
	Reservoir (volume in.) and source	N.A.		
(e)	Pump-type (elec., gear driven, belt driven)	N.A.		
Traction control	Operational speed range	N.A.		
	Type engine intervention (electronic, mech.)			
(e)	Front/rear (std., opt., n.a.)	N.A.	Optional	
	Manufacturer	N.A.	Sumitomo Electric Industries, Ltd.	
(e) Anti-lock (e) device	Type (electronic, mech.)	N.A.	Electronic	
	Number sensors or circuits	N.A.	4 Sensors	
(e)	Number anti-lock hydraulic circuits	N.A.	3	
(e)	Integral or add-on system	N.A.	Add-On	
(e)	Yaw control (yes, no)	N.A.	No	
(e)	Hydraulic power source (elect., vac. mtr., pwr. strg.)	N.A.	Electric	
Effective area [cm ² (in. ²)]*		F/R	192 (29.8)/263 (48.8) 192 (29.8)/116 (18)	
Gross lining area [cm ² (in. ²)]** (F/R)			192 (29.8)/263 (48.8) 192 (29.8)/116 (18)	
Swept area [cm ² (in. ²)]*** (F/R)			1196 (185.4)/860 (133.4) 1196 (185.4)/1036 (160.6)	
(e)	Outerworking diameter	F/R	264 (10.4)/N.A. 264(10.4)/259(10.2)	
	Inner working diameter	F/R	173 (6.8)/N.A. 173(6.8)/180(7.1)	
(e) Rotor	Thickness	F/R	24 (0.94)/N.A. 24 (0.94)/10 (0.39)	
(e)	Material & type (vented/solid)	F/R	Cast Iron	
Drum	Diameter & width	F/R	N.A./228.6 (9.0) & 47 (1.9) N.A./N.A.	
	Type and material	F/R	Cast Iron	
Wheel cylinder bore		F/R	53.97 (2.12)/17.46 (0.69) 53.97 (2.12)/30.2 (1.19)	
Master cylinder Bore/stroke		F/R	22.22 (0.87)/15 (0.59)	
Pedal arc ratio			4.2:1	
Line pressure at 445 N(100 lb.) pedal load [kPa (psi)]			11290 (1637)	
(e) Lining clearance		F/R	0.1 ~ 0.3 (0.004 ~ 0.012)/0.1 ~ 0.3 (0.004 ~ 0.012)	
(e)	Front wheel	Bonded or riveted (rivets/seg.)	Bonded	
		Rivet size		
		Manufacturer	Sumitomo Electric Industries, Ltd.	
		Lining code*****	M2238 FF	
		Material	Molded Resin	
		**** Primary or out-board	116 x 43 x 10 (4.6 x 1.7 x 0.39)	
		Size Secondary or in-board	116 x 43 x 10 (4.6 x 1.7 x 0.39)	
		Shoe thickness (no lining)	6 (0.24)	
		Bonded or riveted (rivets/seg.)	Bonded	
		Manufacturer	Nishinbo Japan Brake	
(e)	Rear wheel	Lining Code*****	NBK D3216 FF	
		Material	Molded Resin	
		**** Primary or out-board	217 x 30 x 4.5 (8.5 x 1.2 x 0.18) 85 x 36 x 8 (3.3 x 1.4 x 0.31)	
		Size Secondary or in-board	217 x 30 x 4.5 (8.5 x 1.2 x 0.18) 85 x 36 x 8 (3.3 x 1.4 x 0.31)	
		Shoe thickness (no lining)	1.6 (0.06) 5 (0.197)	

*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

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 1/15/88

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

GL AND LX MODELS

GT MODEL

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P185/70SR14		P195/80VR15 (Eagle VR)	
	Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial			
	Inflation pressure (cold) for recommended max. vehicle load	Front [kPa (psi)]	221 (32)			
		Rear [kPa (psi)]	179 (26)			
	Rev./mile — at 70 km/h (45 mph)					
Wheels	Type & material		Styled Disc, Steel		Disc, Aluminum Alloy	
	Rim (size & flange type)		14" x 5.5"		15" x 6"	
	Wheel offset		42 (1.65)			
	Attachment	Type (bolt or stud)	Stud			
		Circle diameter	114.3 (4.5)			
		Number & size	Five & M12 – 1.5			
Spare	Tire and wheel		T125/70D15, 415 KPA (60 PSI), Wheel 15"			
	Storage position & location (describe)		Flat Position, Deep Well In Rear Load Floor			

Tires And Wheels (Optional)

(e)	Tire size (load range, ply)	P185/70HR14 (Eagle GT+4)	N/A
	Type (bias, radial, steel, nylon, etc.)	Steel Belted Radial	
	Wheel (type & material)	Aluminum Alloy	
	Rim (size, flange type and offset)	14" x 6", Offset	
	Tire size (load range, ply)		
	Type (bias, radial, steel, nylon, etc.)		
	Wheel (type & material)		
	Rim (size, flange type and offset)		
	Tire size (load range, ply)		
	Type (bias, radial, steel, nylon, etc.)		
	Wheel (type & material)		
	Rim (size, flange type and offset)		
	Tire size (load range, ply)		
	Type (bias, radial, steel, nylon, etc.)		
	Wheel (type & material)		
	Rim (size, flange type and offset)		
⑦	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		Manual
Location of control		Between Front Seats — Floor
Operates on		Rear Service Brakes
If separate from service brakes	Type (internal or external)	N/A
	Drum diameter	N/A
	Lining size (length x width x thickness)	N/A

MVMA Specifications Form

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 1/15/88

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

GL AND LX MODELS

GT MODEL

Steering

Manual (std., opt., n.a.)		N.A.	
Power (std., opt., n.a.)		Standard	
Adjustable steering wheel/column (tilt, telescope, other)	Type	Tilt Column	
	Manufacturer	Mazda	
	(Std., opt., n.a.)	Optional (Standard w/LX and GT)	
Wheel diameter** (W9) SAE J1100	Manual	N.A.	
	Power	380 (15)	
(e) Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)	
		Curb to curb (l. & r.)	10.6 (34.8)
	Inside rear	Wall to wall (l. & r.)	
		Curb to curb (l. & r.)	
Scrub Radius*			
Manual	Gear	Type	N.A.
		Manufacturer	
		Ratios	Gear Overall
	No. wheel turns (stop to stop)		
(e) Power	Type (coaxial, elec., hyd., etc.)		Hydraulic Integral Rack & Pinion
	Manufacturer		Tokai TRW Co. Nihon Power Steering Co.
	Gear	Type	Rack & Pinion, Constant Ratio Rack & Pinion, Variable Assist (a)
		Ratios	Gear Overall
(e)	Pump (drive)		Belt
(e)	No. wheel turns (stop to stop)		2.9
(e) Linkage	Type		Integral with Gear
(e)	Location (front or rear of wheels, other)		Rear
(e)	Tie rods (one or two)		Two Integral with Gear
Steering axis	Inclination at camber (deg.)		
	Bearings (type)	Upper	
		Lower	
Thrust			
Steering spindle & joint type			
Wheel spindle/hub	Diameter	Inner bearing	42 (1.7)
		Outer bearing	38 (1.5)
	Thread (size)		
	Bearing (type)		Taper Roller Unit

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

**See Page 22.

(a) Speed Sensitive

MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line PROBE
Model Year 1989 Issued 10/87 Revised (e) 1/15/88

Body Type And/Or
Engine Displacement

ALL MODELS

1/15/88

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	1° 26' ± 45'
		Camber (deg.)	0° 16' ± 45'
		Toe-in [outside track-mm (in.)]	3 (0.12) ± 3 (0.12)
	Service reset*	Caster	
		Camber	
		Toe-in	
	Periodic M.V. inspection	Caster	
		Camber	
		Toe-in	
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	-0° 26' ± 45'
		Toe-in [outside track-mm (in.)]	3 (0.12) ± 3 (0.12)
	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.)	Standard, Analog
	Trip odometer (std., opt., n.a.)	Standard, Analog
EGR maintenance indicator		N.A.
Charge indicator	Type	Standard, Analog Voltmeter
	Warning device (light, audible)	N.A.
Temperature indicator	Type	Standard, Analog
	Warning device (light, audible)	Optional, Light
Oil pressure indicator	Type	Standard, Analog
	Warning device (light, audible)	Optional, Light
Fuel indicator	Type	Standard, Analog
	Warning device (light, audible)	Optional, Light
(e) Wind-shield wiper	Type (standard)	Standard, Electric Two-Speed with Fixed Interval Position
	Type (optional)	N.A.
	Blade length	500 (19.6) — Driver Side; 450 (17.7) — Pass. Side
	Swept area [cm ² (in. ²)]	6274 (972)
(e) Wind-shield washer	Type (standard)	Standard, Electric Pump
	Type (optional)	N.A.
	Fluid level indicator (light, audible)	Optional, Light
Rear window wiper, wiper/washer (std., opt., n.a.)		Standard with LX and GT Models Only
Horn	Type	Electric
	Number used	Standard, Two-One Hi-Pitch, One Lo-Pitch
Other		See Page 15A

MVMA Specifications Form

Vehicle Line PROBE
Model Year 1989 Issued 10/87 Revised (e) _____

METRIC (U.S. Customary)

SUPPLEMENTAL PAGE

Electrical — Instruments and Equipment: (Cont'd)

- Brake System Warning Light
- Direction Turn Signal Lights
- Emergency Flashers
- High-Beam Indicator
- Fasten Seat Belt Warning Light/Warning Tone
- Check Engine Warning Light, Malfunction (EEC)
- Key in Ignition Warning Tone
- Headlamp on Warning Tone
- Turbo Overboost Buzzer (GT Model)
- Up-Shift Indicator Light (Manual Trans. Only)
- Vehicle Maintenance Monitor (VMM) — Optional Warning Functions:

- Door or Decklid Ajar
- Low Oil Level
- Low Coolant
- Low Fuel
- Stoplamp Out
- Taillamp Out
- Low Windshield Washer
- Headlamp Out
- Service Interval

<u>Message</u>	<u>Indicator / Sound</u>
Door Ajar	Light / Tone
Check Oil	Light
Low Coolant	Light
Low Fuel	Light
Stoplamp	Light
Taillamp	Light
Washer Fluid	Light
Headlamp	Light
Service	Light

MVMA Specifications Form

Vehicle Line **PROBE**

Model Year **1989** Issued **10/87** Revised (e) **4/15/88**

METRIC (U.S. Customary)

Engine Description/Carb.
Engine Code

GL AND LX MODELS

GT MODEL

Electrical — Supply System

(e) Battery	Manufacturer	Johnson Control Inc.	
	Model, std., (opt.)	50D20L, Standard	Optional
	Voltage	12	
	Amps at 0°F cold crank	505	
	Minutes-reserve capacity	88	
	Amp/hrs. - 20 hr. rate	56	
Alternator	Location	Engine Compartment	
	Manufacturer	Mitsubishi	
	Rating (idle/max. rpm)	170 AMP	
	Ratio (alt. crank/rev.)	2.33:1	
	Output at idle (rpm, park)		
Regulator	Optional (type & rating)		
	Type	Electronic Integral with Alternator	

Electrical — Starting System

Start, motor	Manufacturer	Mitsubishi	
	Current drain at 0°F		
	Power rating [kw (hp)]	1.4 (1.88)	
Motor drive	Engagement type	Pre-engagement	
	Pinion engages from (front, rear)	Front	

Electrical — Ignition System

Type	Electronic (std., opt., n.a.)	Standard	
	Other (specify)	N/A	
Coil	Manufacturer	Hanshin/Diamond	Diamond
	Model	FTC-4/E-019	F-092
	Current	Engine stopped — A	
		Engine idling — A	
Spark plug	Manufacturer	Nippon Denso/NGK	
	Model	AGSP33C	
	Thread (mm)		
	Tightening torque [N-m (lb, ft)]	1.8 (1.3) ± 0.3 (0.2)	
	Gap	1.1 (0.043)	
	Number per cylinder	One	
Distributor	Manufacturer	Mitsubishi	
	Model		

Electrical — Suppression

Locations & type	Resistance Spark Plugs and Ignition Wires
------------------	---

MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 1/15/88

Body Type

ALL MODELS

Body

Structure

Unitized Construction with Separate Front Sub-Frame

⊙ Bumper system
front-rear

Front — With PGM Unit
Rear — With Honeycomb Biscuit
Front/Rear — 5 MPH Ford Requirements

Anti-corrosion treatment

- Major Exterior and Structural Metal Components Pre-Coated Steel
- Body Cathodically Electrocoat Primed
- Vinyl Chip Resistant Coating in Lower Body Sides
- Application of Spray-On Sealer & Wax in Enclosed Areas

⊙ Body — Miscellaneous Information

Type of finish (lacquer, enamel, other)		Enamel
(e) Hood	Material & mass	Zinc Plated Steel & 18.3 (40.3)
	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Prop
	Release control (internal, external)	Internal
Trunk lid	Material & mass	N.A.
	Type (counterbalance, other)	N.A.
	Internal release control (elec., mech., n.a.)	N.A.
(e) Hatch-back lid	Material & mass	Zinc Plated Steel & 38.5 (84.9)
	Type (counterbalance, other)	Gas Struts
	Internal release control (elec., mech., n.a.)	Mechanical Cable
Tailgate	Material & mass	N.A.
	Type (drop, lift, door)	N.A.
	Internal release control (elec., mech., n.a.)	N.A.
Vent window control (crank, friction, pivot, power)	Front	N.A.
	Rear	N.A.
(e) Window regulator type (cable, tape, flex, drive, etc.)	Front	N.A.
	Rear	N.A.
Seat cushion type (e.g., 60/40, bucket, bench, wire, foam etc.)	Front	Bucket
	Rear	50/50 Split Folding
	3rd seat	N.A.
Seat back type (e.g., 60/40, bucket, bench, wire, foam etc.)	Front	Low Back Bucket
	Rear	50/50 Split Folding
	3rd seat	N.A.

MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 1/15/88

Body Type

ALL MODELS

⑦ Restraint System

Seating Position			Left	Center	Right
(e) Active	Type & description (lap & shoulder belt, lap belt, etc.) Standard/optional	First seat	Type 2 & 3-Point Lap & Shoulder Belt, Standard	N.A.	Type 2 & 3-Point Lap & Shoulder Belt, Standard
		Second seat	Type 1 & 2-Point Lap, Standard	N.A.	Type 1 & 2-Point Lap, Standard
		Third seat	N.A.	N.A.	N.A.
Passive	Type & description (air bag, motorized-2-point belt, fixed belt, knee bolster, manual-lap belt) Standard/optional	First seat	N.A.	N.A.	N.A.
		Second seat	N.A.	N.A.	N.A.
		Third seat	N.A.	N.A.	N.A.

Glass	SAE Ref.No.	
Windshield glass exposed surface area [cm ² (in. ²)]	S1	8646 (1340.1)
Side glass exposed surface area [cm ² (in. ²)]-total 2-sides	S2	9839 (1525.0)
Backlight glass exposed surface area [cm ² (in. ²)]	S3	6911 (1071.2)
Total glass exposed surface area [cm ² (in. ²)]	S4	25,396 (3936.3)
Windshield glass (type)		Laminated
Side glass (type)		Tempered
Backlight glass (type)		Tempered

⑦ Lamps and Headlamp Locations

Headlamps	Description-sealed beam, halogen, replaceable bulb, etc.	Halogen
	Shape	Rectangular
	Lo-beam type (2A1,2B1, 2C1, etc.)	
	Quantity	Two (Combined Two Headlamp System)
	Hi-beam type (1A1,2A1,1C1, 2C1, etc.)	
	Quantity	Two (Combined Two Headlamp System)

Frame

Type and description (separate frame, unitized frame, partially-unitized frame)	Unitized Construction with Separate Front Sub-Frame
---	---

MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 1/15/88

Body Type

ALL MODELS

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

⑦	Air conditioning (manual, auto. temp control)	Optional, Manual Temperature Control or Electronic Auto. Temperature Control
	Clock (digital, analog)	Standard, Digital (Integral with Radio)
	Compass/thermometer	Optional, Thermometer (Integral with Trip Computer)
	Console (floor, overhead)	Standard, Floor; Overhead (N/A w/Base)
	Defroster, elec. backlight	Optional (Mandatory State of New York)
Electronic	Diagnostic monitor (integrated, individual)	Optional, Individual w/Mech. Instr. or Integ. w/Elec. Instr.
	Instrument cluster (list instruments)	Optional, includes: Digital Speedometer and Odometer, Analog Tachometer, Variable Set Speed Warning, and Graphic Temperature/Oil Press./Voltage/Fuel
	Keyless entry	N.A.
	Tripfinder (avg. spd., fuel)	Optional Computer includes: Fuel Economy, Distance to Empty, Avg. Spd., Distance Travelled, Travel Time, Distance to Dest. & Time to Dest.
	Voice alert (list items)	N.A.
	Other	
	Fuel door lock (remote, key, electric)	Standard, Cable Remote
Lamps	Auto head on/off delay, dimming	N.A.
	Cornering	N.A.
	Courtesy (map, reading)	Standard, Map (N/A w/GL Model)
	Door lock, ignition	Standard, Ignition & Door (N/A w/GL Model)
	Engine compartment	Standard (N/A w/GL Model)
	Fog	Standard with GT Model
	Glove compartment	Standard (N/A w/GL Model)
	Trunk /Cargo	Standard (N/A w/GL Model)
	Illuminated entry system (list lamps, activation)	Standard, Footwell (N/A w/GL Model)
	Other	
⑨ (e) Mirrors	Day/night (auto. man.)	Standard, Manual
	L.H. (remote, power, heated)	Standard, Manual Remote w/GL; Power w/LX & GT (Opt. w/GL)
	R.H. (convex, remote, power, heated)	Std., Convex Man. Remote w/GL; Convex Pwr. w/LX & GT (Opt. w/GL)
	Visor vanity (RH/LH, illuminated)	Standard, RH only w/GL; RH & LH w/LX & GT (Non Illuminated)
⑦	Navigation system (describe)	N.A.
(e)	Parking brake-auto release (warning light)	N.A.

MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 1/15/88

Body Type

ALL MODELS

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

Power equipment	Deck lid (release, pull down)		Standard, Hatchback Cable Release
	Door locks (manual, automatic, describe system)		Standard, Manual Optional, Power Door Locks
	Seats	2 - 4 - 6 way, etc.	Optional, 6-Way (Driver Only)
		Reclining (R.H., L.H.)	N.A.
		Memory (R.H., L.H., preset, recline)	N.A.
		Lumbar, hip, thigh, support	N.A.
		Heated (R.H., L.H., other)	N.A.
	Side windows		Optional
	Vent windows		N.A.
	Rear windows		N.A.
Radio systems	Antenna (location, whip, w/shield, power)		Standard, RH Quarter, Whip; Optional, RH Quarter, Power
	Standard	AM, FM, stereo, tape compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	Electronic AM/FM Stereo with Integral Digital (LED) Station/Clock Dial
	Optional		— Electronic AM/FM Stereo with Premium Sound — Electronic AM/FM Stereo w/Cassette & Premium Sound — Electronic AM/FM Stereo w/Cassette, Premium Sound, Digital Disc Player, Power Antenna & One Sub-Woofer Speaker
	Speaker (number, location)		Std., Four, One Each Frt. Door & One Each Side Rr. Quarter — Opt., Four Premium Type w/Premium Sound or Five (Four Prem. Type + One Woofer) w/Prem. Sound & Digital Disc Player
Roof open air fixed (flip-up, sliding, "T")			Optional, Flip-Up Sunroof — Manual
Speed control device			Optional
Speed warning device (light, buzzer, etc.)			Optional, Light/Tone Alarm (Integral w/Electronic Instr.)
Tachometer (rpm)			Standard, Analog Mechanical; Optional, Electronic Graph
Telephone system (describe)			N.A.
(e) Theft deterrent system			N.A.

MVMA Specifications Form

Vehicle Line **PROBE**

Model Year **1989** Issued **10/87** Revised (e) **1/15/88**

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

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

Body Type	SAE Ref. No.	GL AND LX MODELS	GT MODELS
-----------	--------------	------------------	-----------

Width

Tread (front)	W101	1455 (57.3)	
Tread (rear)	W102	1488 (57.7)	
Vehicle width	W103	1725 (67.9)	1740 (68.5)
Body width at SgRP (front)	W117	1718 (67.6)	
Vehicle width (front doors open)	W120	3990 (157.1)	
Vehicle width (rear doors open)	W121	N/A	
Front fender overall width	W106	1708 (67.2)	
Rear fender overall width	W107	1712 (67.4)	
Tumble-home (deg.)	W122	24.4°	
(e) Vehicle width including mirrors		1878 (73.9)	

Length

Wheelbase	L101	2515 (99.0)	
Vehicle length	L103	4498 (177)	
Overhang (front)	L104	956 (37.6)	
Overhang (rear)	L105	1025 (40.4)	
Upper structure length	L123	2825 (111.2)	
Rear wheel C/L "X" coordinate	L127	2515 (99.0)	
Cowl point "X" coordinate	L125	373 (14.7)	
Front end length at centerline	L126	1328 (52.3)	
Rear end length at centerline	L129	253 (10.0)	

Height*

Passenger distribution (front/rear)	PD1,2,3	2/2	
(e) Trunk/cargo load		36.3 (80)	
Vehicle height	H101	1316 (51.8)	
Cowl point to ground	H114	911 (35.9)	917 (36.1)
Deck point to ground	H138	966 (38)	
Rocker panel-front to ground	H112	200 (7.9)	
Bottom of door closed-front to ground	H133	367 (14.5)	
Rocker panel-rear to ground	H111	199 (7.9)	
Bottom of door closed-rear to ground	H135	N/A	
Windshield slope angle	H122	64°	
Backlight slope angle	H121	71.5°	

Ground Clearance*

Front bumper to ground	H102	201 (7.9)	
Rear bumper to ground	H104	358 (14.1)	
Bumper to ground (front at curb mass (wt.))	H103	194 (7.6)	
Bumper to ground (rear at curb mass (wt.))	H105	328 (12.9)	
Angle of approach (degrees)	H106	14.7°	14.1° w/Air Dam (a)
Angle of departure (degrees)	H107	14.1°	14.2°
Ramp breakover angle (degrees)	H147	13.8°	
(e) Axle differential to ground (front/rear)	H153	177 (6.97) Front	
Min. running ground clearance	H158	127.5 (5.0)	133.5 (5.3)
Location of min. run. grd. clear.		Catalyst	

*All vehicle height and ground clearances are measured at the Manufacturer's Design Load Weight.

Manufacturers Design Load Weight is defined with indicated passenger distribution and trunk/cargo load, unless otherwise specified.

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

(a) 15.7° without Air Dam

MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Vehicle Line PROBE
Model Year 1989 Issued 10/87 Revised (e) 1/15/88

Body Type

GL MODEL

LX MODEL

GT MODEL

SAE
Ref.
No.

Front Compartment

SgRP front, "X" coordinate	L31	1360 (53.5)	
Effective head room	H61	947 (37.3)	
Max. eff. leg room (accelerator)	L34	1080 (42.5)	
SgRP to heel point	H30	223 (8.8)	
SgRP to heel point	L53	887 (34.9)	
Back angle	L40	24°	
Hip angle	L42	96°	
Knee angle	L44	129°	
Foot angle	L46	87°	
Design H-point front travel	L17	230 (9.1)	
Normal driving & riding seat track trvl.	L23	19 (0.7)	
Shoulder room	W3	1389 (54.7)	
Hip room	W5	1417 (55.8)	1350 (53.1)
Upper body opening to ground	H50	1259 (49.6)	
Steering wheel maximum diameter*	W9	380 (15)	
Steering wheel angle	H18	21° 15'	
Accel. heel pt. to steer. whl. cntr	L11	545 (21.5)	
Accel. heel pt. to steer. whl. cntr	H17	430 (16.9)	
Steering wheel to C/L of thigh	H13	714 (28.1)	
Steering wheel torso clearance	L7	408 (16.1)	
Headlining to roof panel (front)	H37	13 (0.5)	
Undepressed floor covering thickness	H87	0	

Rear Compartment

SgRP point couple distance	L50	678 (26.7)	
Effective head room	H83	889 (35)	
Min. effective leg room	L51	LH 759 (29.9), RH 776 (30.5)	
SgRP (second to heel)	H31	LH 236 (9.3), RH 246 (9.7)	
Knee clearance	L48	LH -51 (-2), RH -54 (-2.1)	
Compartment room	L3	584 (23)	
Shoulder room	W4	1364 (53.7)	1359 (53.5)
Hip room	W6	1209 (47.6)	
Upper body opening to ground	H61	1272 (50.1)	
Back angle	L41	24°	
Hip angle	L43	LH 72°, RH 74°	
Knee angle	L45	LH 67°, RH 69.5°	
Foot angle	L47	LH 116°, RH 116.5°	
Headlining to roof panel (second)	H38	52 (2)	
Depressed floor covering thickness	H73	16 (0.6)	

Luggage Compartment

Usable luggage capacity [L (cu.ft.)]	V1	342 (11.9)
Liftover height	H195	707 (27.8)

Interior Volumes (EPA Classification)

(e) Vehicle class		Compact
(e) Interior volume index (cu.ft.)		102.5
Trunk/cargo index (cu.ft.)		11.9

* See page 14.

MVMA Specifications Form

Vehicle Line PROBE

Model Year 1989

Issued 10/87

Revised (e) 1/15/88

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Body Type

GL MODEL

LX MODEL

GT MODEL

Station Wagon—Third Seat

SAE
Ref.
No.

(NOT APPLICABLE)

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

Station Wagon—Cargo Space

(NOT APPLICABLE)

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	
Cargo length at belt (second)	L205	
Cargo width (wheelhouse)	W201	
Rear opening width at floor	W203	
Opening width at belt	W204	
Min. rear opening width above belt	W205	
Cargo height	H201	
Rear opening height	H202	
Tailgate to ground height	H250	
Front seatback to load floor height	H197	
Cargo volume index [m ³ (ft. ³)]	V2	
Hidden cargo volume index [m ³ (ft. ³)]	V4	
Cargo volume index-rear of 2-seat	V10	

Hatchback—Cargo Space

Cargo length at front seatback height	L208	1116 (43.9)
Cargo length at floor (front)	L209	1733 (68.2)
Cargo length at second seatback height	L210	742 (29.2)
Cargo length at floor (second)	L211	1028 (40.5)
Front seatback to load floor height	H197	812 (24.1)
Second seatback to load floor height	H198	465 (18.3)
Cargo volume index [m ³ (ft. ³)]	V3	1.15 (40.7)
(e) Hidden cargo volume index [m ³ (ft. ³)]	V4	N.A.
Cargo volume index-rear of 2-seat	V11	0.34 (11.9)

Aerodynamics*

Wheel lip to ground, front	665 (26.2)	
Wheel lip to ground, rear	647 (25.5)	
Frontal area [m ² (ft. ²)]	1.88 (20.2)	
(e) Drag coefficient (Cd)	0.304	0.309

*EPA Loaded Vehicle Weight, Loading Conditions

MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line PROBE
 Model Year 1989 Issued 10/87 Revised (●) _____

Body Type

ALL MODELS

Vehicle Fiducial Marks

Fiducial Mark Number*	Define Coordinate Location	
Front		
Rear		
Fiducial Mark Number		
Front	W21*	N.A.
	L54*	N.A.
	H81*	N.A.
	H181*	N.A.
	H183*	287 (11.3)
Rear	W22*	N.A.
	L55*	N.A.
	H82*	N.A.
	H182*	N.A.
	H184*	287 (11.3)

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

METRIC (U.S. Customary)

Model Year 1989 Issued 10/87 Revised (e) 8/31/88

(*) SHIPPING MASS (weight) = Curb Weight Less Kg. (lbs.) 49 (108)

NA — Not Applicable — applies to model/series combinations not requiring testing.

METRIC (U.S. Customary)

Vehicle Line PROBE

Model Year 1989 Issued 10/87 Revised (e) 1/15/88

[illegible]

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