MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1989½

Manufacturer	Vehicle Line	
FORD MOTOR COMPANY	MERCURY TRACER	
Mailing Address		
P.O. BOX 2053 DEARBORN, MICHIGAN 48121	Issued APRIL 31, 1989	Revised MAY 15, 1989

Direct questions concerning these specifications to the manufacturer listed above.

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mvma
Motor Vehicle Manufacturers Association
of the United States, Inc.

Forms Provided by Technical Affairs Division

FORM MVMA-90

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line MERCURY TRACER
Model Year 1989½ Issued 3/31/89 Revised (e) 5/15/89

Vehicle Origin

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

Vehicle Models

Model Description & Drive (FWD/RWD/AWD/4WD)*	Introduction Date	Make, Vehicle Models, Series, Body Type (Mfgr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load—Kilograms (Pounds)
(e) **MERCURY TRACER (FWD)**	10/5/89			
2-Door Hatchback		DA/HVS	2/2	36.0 (80)
4-Door Hatchback		HC/HVS	2/2	36.0 (80)
4-Door Wagon		FF/HVS	2/2	36.0 (80)

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

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Power Teams

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

			A	B	C	D
ENGINE	Engine Code		995	995		
	Displacement Liters (in³)		1.6 (97.5)	1.6 (97.5)		
	Induction system (FI, Carb, etc.)		Electronic Port Fuel Injection	Electronic Port Fuel Injection		
	Compression Ratio		9.3	9.3		
	SAE Net at RPM	Power kW (bhp)	61 (82) @ 5000	61 (82) @ 5000		
		Torque N · m (lb. ft.)	125 (92) @ 2500	125 (92) @ 2500		
	Exhaust single, dual		Single	Single		
TRANS	Transmission/ Transaxle		5-Spd. Man. Transaxle	3-Spd. Auto. Transaxle		
	Axle Ratio (std. first)		3.85 — Hatchback 4.10 — Wagon	3.63		

Series Availability		Power Teams (A-B-C-D)	
Model	Code	Standard	Optional
2-Door Hatchback	DA/HVS	A	B
4-Door Hatchback	HC/HVS	A	B
4-Door Wagon	FF/HVS	A	B

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METRIC (U.S. Customary)

Engine Description Engine Code	1.6

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 Camshaft, Multi-Spherical Combustion Chambers
Manufacturer		Mazda
No. of cylinders		Four
Bore		78 (3.07)
Stroke		83.6 (3.29)
Bore spacing (C/L to C/L)		88 (3.38)
Cylinder block material & mass kg (lbs.) (machined)		Cast Iron
Cylinder block deck height		206.5 (8.13)
Cylinder block length		373.5 (14.7)
Deck clearance (minimum) (above or below block)		0
Cylinder head material & mass kg (lbs.)		Cast Aluminum Alloy & 8 (17.6)
Cylinder head volume (cm³)		36.4
Cylinder liner material		N/A
Head gasket thickness (compressed)		1.25 (0.05)
Minimum combustion chamber total volume (cm³)		48.2
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.)]**		Cast Aluminum Alloy & 2.9 (6.4)
Exhaust manifold material & mass [kg (lbs.)]**		Cast Iron & 7.3 (16.1)
Fuel required unleaded, diesel, etc.		Regular Unleaded
Fuel antiknock index (R + M) + 2		87 Minimum
Engine mounts	Quantity	
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	
	Added isolation (sub-frame, crossmember, etc.)	
Total dressed engine mass (wt) dry***		108 (237.6)

Engine — Pistons

Material & mass, g (weight, oz.)-piston only	Cast Aluminum Alloy & 268 (9.45)

Engine — Camshaft

Location		On Cylinder Head
Material & mass kg (weight, lbs.)		Cast Iron & 2.39 (5.28)
Drive type	Chain/belt	Belt
	Width/pitch	22 (0.87)/8 (0.32)

*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: Front End Dress, All Engine Mounted Components and Flex Plate; Excludes Starter and Generator.

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Engine Description Engine Code	1.6L

Engine — Valve System

Hydraulic lifters (std., opt., NA)		Standard
Valves	Number intake/exhaust	4/4
	Head O.D. intake/exhaust	38 (1.5)/32 (1.26)

Engine — Connecting Rods

Material & mass [kg., (weight, lbs.)]*	Carbon Steel & 0.55 (1.21)
Length (axes ℄ to ℄) mm	132 (5.2)

Engine — Crankshaft

Material & mass [kg., (weight, lbs.)]*		Cast Iron & 10.2 (22.5)
End thrust taken by bearing (no.)		#2
Length & number of main bearings		5
Seal (material, one, two piece design, etc.)	Front	Rubber
	Rear	Rubber

Engine — Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]	294-392 (42.6-56.8) @ 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.)	3.4 (3.6)

Engine — Diesel Information (NOT OFFERED)

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 (NOT APPLICABLE)

Turbo charger - manufacturer	
Super charger - manufacturer	
Intercooler	

*Finished State

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Engine Description Engine Code	1.6L W/MANUAL TRANS.	W/AUTO. TRANS.

Engine — Cooling System

Coolant recovery system (std., opt., n.a.)		Standard	
Coolant fill location (rad., bottle)		Radiator w/Added Bottle	
Radiator cap relief valve pressure [kPa (psi)]		90 (13)	
Circulation thermostat	Type (choke, bypass)	Bypass	
	Starts to open at °C(°F)	Sub 85° (185°); Main 88° (190.4°)	
Water Pump	Type (centrifugal, other)	Centrifugal	
	GPM 1000 pump rpm	2.9	
	Number of pumps	1	
	Drive (V-belt, other)	V-Belt	
	Bearing type	Ball	
	Impeller material	Steel	
	Housing material	Cast Aluminum Alloy	
By-pass recirculation [type (inter., ext.)]		External	
Cooling system capacity	With heater-L(qt.)	5 (5.3)	6.0 (6.3)
	With air conditioner-L(qt.)	5 (5.3)	6.0 (6.3)
	Opt. equipment [specify-L(qt.)]	5 (5.28)	6 (6.34)
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	Std.	
	Type (cross-flow, etc.)	Vertical Flow	
	Construction (fin & tube mechanical, braze, etc.)	Tube & Fin	
	Material, mass [kg (wgt. lbs.)]	Brass-Tube, Copper-Fin	
	Width	528 (20.8)	
	Height	350 (13.8)	
	Thickness	16 (0.63)	32 (1.26)
	Fins per inch	2.25	2.5
Radiator end tank material		Resin Plastic	
Fan	Std., elec., opt.	Electric	
	Number of bladea & type (flex, solid, material)	4	
	Diameter & projected width	300 (11.8)	
	Ratio (fan to crankshaft rev.)	N/A	
	Fan cutout type	Coolant Sensor & Electric Switch	
	Drive type (direct, remote)	N/A	
	RPM at idle (elec.)	2100	2080
	Motor rating (wattage) (elec.)	80	120
	Motor switch (type & location) (elec.)	Thermo Switch & Water Outlet	
	Switch point (temp., pressure) (elec.)	Temp. 97° (206.6°)	
	Fan shroud (material)	Metal	

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Engine Description **Engine Code**	1.6L

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		Nippon-Denso
Carburetor no. of barrels		N/A
Idle A/F mix.		14.7 (Feedback)
Fuel injection	Point of injection (no.)	Intake Port (4)
	Constant, pulse, flow	Pulse
	Control (electronic, mech.)	Electronic
	System pressure [kPa (psi)]	196-216 (28.4-31.3)
Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	850
	Automatic	850
Intake manifold heat control (exhaust or water thermostatic or fixed)		N/A
Air cleaner type		Wet Type
Fuel filter (type/location)		Paper Element
Fuel pump	Type (elec. or mech.)	Impeller (Electric)
	Location (eng., tank)	In-Tank
	Pressure range [kPa (psi)]	250 (36.27)
	Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))	More than 80 (21.1)/hr. @ 250 (36.27)

Fuel Tank

Capacity [refill L (gallons)]		45 (11.9)
Location (describe)		In Front of Rear Suspension
Attachment		4 Bolts
Material & Mass [kg (weight lbs.)]		Steel & 8.2 (18.1)
Filler pipe	Location & material	Left Rear Quarter Panel & Steel
	Connection to tank	Rubber Hose
Fuel line (material)		Steel
Fuel hose (material)		Reinforced 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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METRIC (U.S. Customary)

Engine Description
Engine Code

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		O_2, S/TWC
	Air Injection	Pump or pulse	N/A
		Driven by	N/A
		Air distribution (head, manifold, etc.)	N/A
		Point of entry	N/A
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	N/A
		Exhaust source	N/A
		Point of exhaust injection (spacer, carburetor, manifold, other)	N/A
	Catalytic Converter	Type	3-Way, Side Flow
		Number of	1 (2-Bed)
		Location(s)	Under Floor
		Volume [L (in³)]	0.79 x 2 (48.2 x 2)
		Substrate type	Monolith
		Noble metal type	Pt/Rh
		Noble metal Concentration (g/cm³)	0.00016
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Induction System
	Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum
	Discharges (to intake manifold, other)		To Surge Tank
	Air inlet (breather cap, other)		Air Pipe
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)		No

Engine — Exhaust System

Type (single, single with cross-over, dual, other)		Single
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass [kg (weight lbs.)]		One, Expansion, Aluminized & 7 (15.4)
Resonator no. & type		One, Resonance
Exhaust pipe	Branch o.d., wall thickness	N/A
	Main o.d., wall thickness	45.0 x 2.0 (1.8 x 0.08)
	Material & Mass [kg (weight lbs.)]	Stainless Steel & 3 (6.6)
Intermediate pipe	o.d. & wall thickness	42.7 x 1.6 (1.68 x 0.06)
	Material & Mass [kg (weight lbs.)]	Aluminum Coated Steel & 6 (13.2)
Tail pipe	o.d. & wall thickness	38.1 x 1.2 (1.5 x 0.05)
	Material & Mass [kg (weight lbs.)]	Stainless Steel & 1 (2.2)

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Engine Description Engine Code	ALL MODELS

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)	Optional (Mazda/Japan) 3-Speed
Automatic overdrive (manufacturer/country)	N/A

Manual Transmission/Transaxle

Number of forward speeds		Five (M5)
Gear ratios	1st	3.42
	2nd	1.84
	3rd	1.29
	4th	0.92
	5th	0.73
	Reverse	3.21
Synchronous meshing (specify gears)		All Forward Gears
Shift lever location		Floor
Trans. case mat'l. & mass kg (lbs)*		Aluminum & 29.8 (65.7)
Lubricant	Capacity [L (pt.)]	3.2 (6.8)
	Type recommended	API GL-4 or GL-5 (SAE 90 or 80W-90)

Clutch (Manual Transmission)

Clutch manufacturer		Daikin
Clutch type (dry, wet; single, multiple disc)		Single Disc, Dry Plate
Linkage (hydraulic, cable, rod, lever, other)		Cable
Max. pedal effort (nom. spring load, new) N (lbs)	Depressed	
	Released	
Assist (spring, power/percent, nominal)		N/A
Type pressure plate springs		Diaphragm Spring
Total spring load (nominal, new) N (lbs)		3277 (736.7)
Clutch facing	Facing mfgr. & material coding	Valqua
	Facing material & construction	Molded (Non-Asbestos)
	Rivets per facing	16
	Outside x inside dia. (nominal)	190 (7.5)/132 (5.2)
	Total eff. area [cm^2($in.^2$)]	147 (22.8)
	Thickness (pressure plate side/fly wheel side)	3.5 (0.14)
	Rivet depth (pressure plate side/fly wheel side)	1.4 (.055)/1.4 (.055)
	Engagement cushion method	Cushion Spring
Release bearing type & method lub.		Ball & Pre-Packed
Torsional damping method, springs, hysteresis		Coil Springs and Friction Material

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

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Engine Description Engine Code	ALL MODELS

∅ Automatic Transmission/Transaxle

Trade name		Transaxle (F3A)
Type and special features (describe)		Lock-up Torque Converter
Gear Selector	Location (column, floor, other)	Floor
	Ltr./No. designation (e.g. PRND21)	P R N D 2 1
	Shift interlock (yes, no, describe)	
Gear ratios	1st	2.84
	2nd	1.54
	3rd	1.0
	4th	—
	Reverse	2.4
Max. upshift speed - drive range [km/h (mph)]		95 (59)
Max. kickdown speed - drive range [km/h (mph)]		87 (54)
Min. overdrive speed [km/h (mph)]		N/A
Torque converter	Number of elements	Three
	Max. ratio at stall	2.0:1
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	2.36 (9.3)
	Capacity factor "K"*	243
Lubricant	Capacity [refill L (pt.)]	5.7 (12.1)
	Type Recommended	ATF Type F (M2C33-F)
Oil cooler (std., opt., NA, internal, external, air, liquid)		Standard, External Combined w/Rad. Eng. Coolant
Transmission mass kg (lbs) & case material**		

∅ All Wheel/4 Wheel Drive (NOT APPLICABLE)

Description & type (part-time, full-time, 2/4 shift while moving, mechanical, elect., chain/gear, etc.)		
Transfer case	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 (% front/rear)	

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

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

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Engine Description Engine Code	ALL MODELS

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

Effective final drive ratio (or overall top gear ratio)			3.63:1 (F3A)	2.81:1 (M5)	3.00:1 (M5)
Transfer ratio and method (chain, gear, etc.)			3.63:1, Gear	3.85:1, Gear	4.11:1, Gear
Front drive unit	Ring gear o.d.		180 (7.1)	200 (7.8)	202.5 (8.0)
	No. of teeth	Pinion	19	20	19
		Ring gear	69	77	78

Front Drive Unit

Description (integral to trans., etc.)			Integral to Transmission
Limited slip differential (type)			N/A
Drive pinion		Type	
		Offset	
No. of different pinions			Two
Pinion/differential		Adjustment (shim, etc.)	None
		Bearing adjustment	Shim
Driving wheel bearing (type)			Tapered Roller
Lubricant	Capacity [L (pt.)]		5.7 (12.1)
	Type recommended		ATF (M2C33F)

Axle Shafts — Front Wheel Drive

Manufacturer and number used			Two
Type (straight, solid bar, tubular, etc.)		Left	Solid Bar
		Right	Solid Bar
Outer diam. x length* x wall thickness	Manual transaxle	Left	22 x 381 (0.87 x 15)
		Right	22 x 657 (0.87 x 25.9)
	Automatic transaxle	Left	22 x 378 (0.87 x 14.9)
		Right	22 x 653 (0.87 x 25.7)
	Optional transaxle	Left	22 x 381 (0.87 x 15)
		Right	22 x 657 (0.87 x 25.9)
Slip yoke	Type		N/A
	Number of teeth		N/A
	Spline o.d.		N/A
Universal joints	Make and mfg. no.	Inner	Toyo Bearing K.K.
		Outer	Toyo Bearing K.K.
	Number used		4
	Type, size, plunge	Inner	Double Offset Joint-Man. Trans.; Tripod Joint-Auto. Trans.
		Outer	Ball Joint
	Attach (u-bolt, clamp, etc.)		N/A
	Bearing	Type (plain, anti-friction)	Anti-Friction
		Lubrication (fitting, prepack)	Prepacked
Drive taken through (torque tube, arms or springs)			Lower Arms & Struts
Torque taken through (torque tube, arms or springs)			Engine Mounting System

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

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Body Type And/Or Engine Displacement	ALL MODELS W/MAN. TRANS.	ALL MODELS W/OPT. AUTO. TRANS.

Suspension — General Including Electronic Controls

Car leveling	Standard/optional/not avail.		N/A
	Manual/automatic control		—
	Type (air/hydraulic)		—
	Primary/assist spring		—
	Rear only/4 wheel leveling		—
	Single/dual rate spring		—
	Single/dual ride heights		—
	Provision for jacking		Designated Rocker Panel Locations
Shock absorber damping controls	Standard/option/not avail.		N/A
	Manual/automatic control		—
	Number of damping rates		—
	Type of actuation (manual/electric motor/air, etc.)		—
	Sensors	Lateral acceleration	—
		Deceleration	—
		Acceleration	—
		Road surface	—
Shock absorber (front & rear)	Type		Strut Type — Front & Rear
	Make		Tokiko/Kayaba
	Piston diameter		20 (0.79) Front and 18 (0.71) Rear
	Rod diameter		45 (1.77)

Suspension — Front

Type and description			Strut Type, Independent Front Drive with 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)		Upper to Match Spring & Rubber
	Size (coil design height & i.d.)		Coil 391 (15.39 & 120 (4.72), 12.5 (0.49) — Wire Dia. / Coil 374 (14.72) & 118.4 (4.66), 13.3 (0.52) — Wire Dia.
	Spring rate [N/mm (lb./in.)]		18.6 (106)
	Rate at wheel [N/mm (lb./in.)]		17.6 (105)
Stabilizer	Type (link, linkless, frameless)		Link (Manual Trans. Only)
	Material & bar diameter		Steel & 27.2 (1.07)

Suspension — Rear

Type and description			Strut Type, Independent Twin Trapezoidal Link with Upper Strut Mounted Coil Springs
Travel*	Full jounce		80 (3.15)
	Full rebound		110 (4.33)
Spring	Type (coil, leaf, other) & material		Coil, Chromium Alloy Steel
	Size (length x width, coil design height & i.d.)		Coil 351 (13.80) & 103 (4.05), 10.2 (0.40) — Wire Dia.
	Spring rate [N/mm (lb./in.)]		14.7 (84)
	Rate at wheel [N/mm (lb./in.)]		15.6 (89)
	Insulators (type & material)		Upper to Match Spring & Rubber
	If leaf	No. of leaves	N/A
		Shackle (comp. or tens.)	N/A
Stabilizer	Type (link, linkless, frameless)		Link
	Material & bar diameter		Steel & 15.9 (0.63) or 17.3 (0.68)
Track bar (type)			N/A

*Define load condition:

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Body Type And/Or Engine Displacement	ALL MODELS

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
Valving type (proportion, delay, metering, other)			Proportioning
Power brake (std., opt., n.a.)			Standard
Booster type (remote, integral, vac., hyd., etc.)			Single Diaphragm, Integral, Vacuum
Vacuum	Source (inline, pump, etc.)		Inline
	Reservoir (volume in.³)		N/A
	Pump-type (elec., gear driven, belt driven)		N/A
Traction control	Operational speed range		N/A
	Type engine intervention (electronic, mech.)		N/A
Anti-lock device	Front/rear (std., opt., n.a.)		N/A
	Manufacturer		—
	Type (electronic, mech.)		—
	Number sensors or circuits		—
	Number anti-lock hydraulic circuits		—
	Integral or add-on system		—
	Yaw control (yes, no)		—
	Hydraulic power source (elect., vac. mtr., pwr. strg.)		—
Effective area [cm²(in.²)]*			160 (24.8)/188 (29.1)
Gross lining area [cm²(in.²)]**(F/R)			160 (24.8)/188 (29.1)
Swept area [cm²(in.²)]***(F/R)			1034 (160.1)/314 (48.7)
Rotor	Outerworking diameter	F/R	238 (9.4)/N/A
	Inner working diameter	F/R	144 (5.67)/N/A
	Thickness	F/R	18 (0.71)/N/A
	Material & type (vented/solid)	F/R	Cast Iron, Vented/N/A
Drum	Diameter & width	F/R	N/A/200 (7.9)
	Type and material	F/R	N/A/Cast Iron
Wheel cylinder bore			50.8 (2.0)/17.5 (0.69)
Master cylinder	Bore/stroke	F/R	22.2 (0.87) — Bore/15 (0.59) — Stroke
Pedal arc ratio			4.6:1
Line pressure at 445 N(100 lb.) pedal load [kPa (psi)]			9,000 (1305)
Lining clearance		F/R	0.4 (0.016)/0.3 (0.012)
Brake lining — Front wheel	Bonded or riveted (rivets/seg.)		Bonded
	Rivet size		N/A
	Manufacturer		Sumitomo Kogyo
	Lining code*****		CP26
	Material		Molded Resin
	**** Primary or out-board		91.7 x 47.5 x 10 (3.6 x 1.87 x .39)
	Size Secondary or in-board		91.7 x 47.5 x 10 (3.6 x 1.87 x .39)
	Shoe thickness (no lining)		5 (0.2)
Brake lining — Rear wheel	Bonded or riveted (rivets/seg.)		Bonded
	Manufacturer		Nisshin Boseki
	Lining Code*****		JB-J87-FE
	Material		Molded Resin
	**** Primary or out-board		192 x 25 x 5 (7.56 x 0.98 x 0.2)
	Size Secondary or in-board		192 x 25 x 5 (7.56 x 0.98 x 0.2)
	Shoe thickness (no lining)		1.6 (0.06)

*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

Vehicle Line MERCURY TRACER

Model Year 1989½ Issued 3/31/89 Revised (•) _____

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	HATCHBACK MODELS	WAGON MODEL

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P175/70R13	
	Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial	
	Inflation pressure (cold) for recommended max. vehicle load	Front [kPa (psi)]	200 (29)	
		Rear [kPa (psi)]	200 (29)	
	Rev./mile — at 70 km/h (45 mph)			
Wheels	Type & material		Disc, Semi Styled Stamped Steel	Aluminum, Styled
	Rim (size & flange type)		13 x 5.0JJ	
	Wheel offset		45 (1.77)	
	Attachment	Type (bolt or stud)	Stud	
		Circle diameter	114.3 (4.5)	
		Number & size	4 — 12 (0.47)	
(•) Spare	Tire and wheel		T105/70D14	
	Storage position & location (describe)		Flat Position, Deep Well in Cargo Floor (Wagon — Under Body Behind Rear Suspension)	

Tires And Wheels (Optional)

Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	Aluminum (Includes Locking Lug Nuts)
Rim (size, flange type and offset)	13 x 5.0J, Offset 45 (1.77)
Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Spare tire and wheel size (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	

Brakes — Parking

Type of control		Hand Operated — Manual Release
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

Vehicle Line MERCURY TRACER
Model Year 1989½ Issued 3/31/89 Revised (●) _____

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	ALL MODELS

Steering

Manual (std., opt., n.a.)				Standard w/2-Door Hatchback
Power (std., opt., n.a.)				Optional (Standard w/4-Door Hatchback and Wagon)
Adjustable steering wheel/column (tilt, telescope, other)		Type		
		Manufacturer		
		(Std., opt., n.a.)		N/A
Wheel diameter** (W9) SAE J1100		Manual		380 (15.0)
		Power		380 (15.0)
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)		10.1 (33.1)
		Curb to curb (l. & r.)		9.4 (30.8)
	Inside rear	Wall to wall (l. & r.)		
		Curb to curb (l. & r.)		
Scrub Radius*				10 (0.39)
Manual	Gear	Type		Rack and Pinion
		Manufacturer		Nippon Seiko
		Ratios	***	
			Overall	20.0:1 (On Center)
	No. wheel turns (stop to stop)			3.6
Power	Type (coaxial, elec., hyd., etc.)			
	Manufacturer			Nippon Power Steering Co.
	Gear	Type		Rack and Pinion
		Ratios	***	
			Overall	17.6:1 (On Center)
	Pump (drive)			Belt Off Crankshaft Pulley
	No. wheel turns (stop to stop)			3.2
Linkage	Type			Integral with Wheel
	Location (front or rear of wheels, other)			Rear
	Tie rods (one or two)			Two — Integral with Gear
Steering axis	Inclination at camber (deg.)			
	Bearings (type)	Upper		Shock Strut Shaft
		Lower		Ball Joint
		Thrust		N/A
Steering spindle/knuckle & joint type				Cast Spindle Support with Integral Steering Arm
Wheel spindle/hub	Diameter	Inner bearing		
		Outer bearing		
	Thread (size)			
	Bearing (type)			Tapered Roller

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

**See Page 22.

***Rack Speed

MVMA Specifications

Vehicle Line MERCURY TRACER
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METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	ALL MODELS

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	1°35′ ± 45′
		Camber (deg.)	0°48′ ± 45′
		Toe-in [outside track-mm (in.)]	− 1 to 5 (− 0.04 to 0.2)
	Service reset*	Caster	Pre-Set
		Camber	Trend-Set
		Toe-in	Adjustable
	Periodic M.V. inspection	Caster	Factory Set and Cannot Be Adjusted
		Camber	0 ± 45′
		Toe-in	0 ± 3 (0.12)
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	− 0°0.2′ ± 45′
		Toe-in [outside track-mm (in.)]	− 1 (.039) to 5 (0.2)
	Service reset*	Camber	Pre-Set
		Toe-in	Adjustable
	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
EGR maintenance indicator		N/A
Charge indicator	Type	N/A
	Warning device (light, audible)	Standard, Light
Temperature indicator	Type	Standard, Gauge
	Warning device (light, audible)	N/A
Oil pressure indicator	Type	N/A
	Warning device (light, audible)	Standard, Light
Fuel indicator	Type	Standard, Gauge
	Warning device (light, audible)	Standard, Light
Windshield wiper	Type (standard)	Std., 2-Spd. Electric (Col. Mtd. Cntl., Fixed Timing Interval Wipe)
	Type (optional)	N/A
	Blade length	450 (17.7)
	Swept area [cm²(in.²)]	
Windshield washer	Type (standard)	Standard, Electric Pump
	Type (optional)	N/A
	Fluid level indicator (light, audible)	Standard, Light
Rear window wiper, wiper/washer (std., opt., n.a.)		Standard w/Wagon Only (N.A. w/Hatchback Models)
Horn	Type	Standard, Electric
	Number used	Two
Other		SEE PAGE 15A

Electrical — Instruments and Equipment: (Cont'd)

- Brake System Warning Light
- Directional Turn Signal Lights
- Emergency Flashers
- Hi-Beam Indicator
- Fasten Seat Belt Warning Light and Signal
- Headlamp On Warning Signal
- Stop Lamp Out Warning Light
- Diagnostic Warning — Brake Lamp, Low Fuel, Washer Fluid
- Ignition and Driver Door Lock Illumination
- Interior Light Switches On All Passenger Doors

MVMA Specifications

Vehicle Line MERCURY TRACER
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METRIC (U.S. Customary)

Engine Description Engine Code	ALL MODELS

Electrical — Supply System

Battery	Manufacturer	Pacific Chloride Inc.
	Model, std., (opt.)	Standard
	Voltage	12
	Amps at 0°F cold crank	390
	Minutes-reserve capacity	
	Amp/hrs. - 20 hr. rate	60
	Location	Left Front of Engine Compartment
Alternator	Manufacturer	Mitsubishi
	Rating (idle/max. rpm)	60 Amp.
	Ratio (alt. crank/rev.)	2.2:1
	Output at idle (rpm, park)	
	Optional (type & rating)	N/A
Regulator	Type	Electronic Integral with Alternator

Electrical — Starting System

Motor	Manufacturer	Mitsubishi
	Current drain 0 °F	
	Power rating [kw (hp)]	0.85
Motor drive	Engagement type	Pre-Engaged
	Pinion engages from (front, rear)	Front

Electrical — Ignition System

Type	Electronic (std., opt., n.a.)		Standard
	Other (specify)		
Coil	Manufacturer		Hanshin
	Model		SMC-0500
	Current	Engine stopped — A	
		Engine idling — A	
Spark plug	Manufacturer		Motorcraft
	Model		AGS-32C
	Thread (mm)		M14 x 1.25
	Tightening torque [N-m (lb, ft)]		15-23 (11.06-16.96)
	Gap		1.1 (0.04)
	Number per cylinder		One
Distributor	Manufacturer		Hitachi
	Model		Contact Less

Electrical — Suppression

Locations & type	Resistor Spark Plugs and Ignition Wires

MVMA Specifications

Vehicle Line MERCURY TRACER
Model Year 1989½ Issued 3/31/89 Revised (e) _____

METRIC (U.S. Customary)

Body Type	ALL MODELS

Body

Structure	Unitized All-Steel Welded Body with Energy Absorbing Front and Rear Structures
Bumper system front-rear	Front/Rear — 5 MPH Bumper — Ford Requirements Front/Rear — Composite Energy Absorbing Plastic Bumper Systems
Anti-corrosion treatment	• Major Exterior and Structural Sheet 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 Body Areas

Body — Miscellaneous Information

Type of finish (lacquer, enamel, other)		Enamel
Hood	Material & mass	Steel
	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Prop
	Release control (internal, external)	Internal
Trunk lid	Material & mass	N/A
	Type (counterbalance, other)	—
	Internal release control (elec., mech., n.a.)	—
Hatch-back lid	Material & mass	Steel
	Type (counterbalance, other)	Gas Struts
	Internal release control (elec., mech., n.a.)	Mechanical Cable — Hatchback Models
Tailgate	Material & mass	Steel & 20.6 (45.4) (Wt. Does Not Incl. Glass)
	Type (drop, lift, door)	Lift — Wagon Model
	Internal release control (elec., mech., n.a.)	N/A
Vent window control (crank, friction, pivot, power	Front	N/A
	Rear	N/A
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	Stamped Frame — Spring & Foam Pad, Bucket (a)
	Rear	Formed Urethane, 50/50, Bench
	3rd seat	N/A
Seat back type (e.g., 60/40, bucket, bench, wire, foam etc.)	Front	Stamped Frame — Spring & Foam Pad, Bucket w/Man. Recliner (a)
	Rear	Formed Urethane, 50/50, Bench
	3rd seat	N/A

(a) Driver Seat Only, 6-Way Manual Adjustments and Manual 3-Position Lumbar Support

MVMA Specifications

Vehicle Line MERCURY TRACER
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METRIC (U.S. Customary)

Body Type	ALL MODELS

Restraint System

Seating Position			Left	Center	Right
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 [cm²(in.²)]	S1	8308.5 (1287.8)
Side glass exposed surface area [cm²(in.²)]-total 2-sides	S2	12307.5 (1907.7)
Backlight glass exposed surface area [cm²(in.²)]	S3	7598.7 (1177.8)
Total glass exposed surface area [cm²(in.²)]	S4	28214.7 (4373.3)
Windshield glass (type)		Laminated
Side glass (type)		Tempered
Backlight glass (type)		Tempered

Headlamps

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

Frame

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

MVMA Specifications

Vehicle Line MERCURY TRACER
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METRIC (U.S. Customary)

Body Type	ALL MODELS

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

Air conditioning (manual, auto. temp control)		Optional, Manual Temperature Control
Clock (digital, analog)		Standard, Digital
Compass/thermometer		N/A
Console (floor, overhead)		Standard, Floor
Defroster, elec. backlight		Standard, On-Off Indicator Lamp
Electronic	Diagnostic monitor (integrated, individual)	N/A
	Instrument cluster (list instruments)	N/A
	Keyless entry	N/A
	Tripminder (avg. spd., fuel)	N/A
	Voice alert (list items)	N/A
	Other	
Fuel door lock (remote, key, electric)		Standard, Remote
Lamps	Auto head on/off delay, dimming	N/A
	Cornering	N/A
	Courtesy (map, reading)	Standard, Overhead Map & Door Mounted Courtesy
	Door lock, ignition	Standard
	Engine compartment	N/A
	Fog	N/A
	Glove compartment	
	~~Trunk~~ Cargo Area	Standard, (Mtd. In Hatch)
	Illuminated entry system (list lamps, activation)	
	Other	Standard, (Ashtray/Lighter)
Mirrors	Day/night (auto. man.)	Standard, Manual
	L.H. (remote, power, heated)	Standard, Power
	R.H. (convex, remote, power, heated)	Standard, Power
	Visor vanity (RH/LH, illuminated)	Standard, RH Only (Non-Illuminated)
Navigation system (describe)		N/A
Parking brake-auto release (warning light)		N/A

MVMA Specifications

Vehicle Line MERCURY TRACER

Model Year 1989½ Issued 3/31/89 Revised (●) _____

METRIC (U.S. Customary)

Body Type | ALL MODELS

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

Power equipment	Deck lid (release, pull down)		N/A
	Door locks (manual, automatic, describe system)		N/A
	Seats	2 - 4 - 6 way, etc.	N/A
		Reclining (R.H., L.H.)	N/A
		Memory (R.H., L.H., preset, recline)	N/A
		Lumbar, hip, thigh, support	N/A
		Heated (R.H., L.H., other)	N/A
	Side windows		N/A
	Vent windows		N/A
	Rear windows		N/A
			N/A
Radio systems	Antenna (location, whip, w/shield, power)		Standard, Left Side A-Pillar
	Standard		AM/FM Stereo
	Optional	AM, FM, stereo, tape compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	AM/FM Stereo w/Cassette
	Speaker (number, location)		Standard, Two Front; Optional, Two Front & Two Rear
Roof: open air or fixed (flip-up, sliding, "T")			N/A
Speed control device			Optional
Speed warning device (light, buzzer, etc.)			N/A
Tachometer (rpm)			Standard, Analog
Telephone system (describe)			N/A
Theft deterrent system			N/A

MVMA Specifications

Vehicle Line MERCURY TRACER

Model Year 1989½ Issued 3/31/89 Revised (e) _____

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.	2-DOOR HATCHBACK	4-DOOR HATCHBACK	4-DOOR WAGON
Ø Width				
Tread (front)	W101	1395 (54.9)		
Tread (rear)	W102	1422 (56.0)		
Vehicle width	W103	1655 (65.2)		
Body width at SgRP (front)	W117	1632 (64.3)		
Vehicle width (front doors open)	W120	3775 (148.6)	3320 (130.7)	
Vehicle width (rear doors open)	W121	N/A	3190 (125.6)	
Tumble-home (deg.)	W122	23.2°		
Outside mirror width	W410	1825 (71.8)	1829 (72)	1845 (72.6)
Ø Length				
Wheelbase	L101	2405 (94.7)		
Vehicle length	L103	4115 (162.0)		4311 (169.7)
Overhang (front)	L104	860 (33.8)		
Overhang (rear)	L105	850 (33.5)		1046 (41.2)
Upper structure length	L123	2657 (104.6)		2907 (114.4)
Rear wheel C/L "X" coordinate	L127	2405 (94.7)		
Ø Height*				
Passenger distribution (front/rear)	PD1,2,3	2/2		
Trunk/cargo load		36.3 (80)		
Vehicle height	H101	1347 (53.0)		1365 (53.7)
Cowl point to ground	H114	904 (35.6)		
Deck point to ground	H138	892 (35.1)		887 (34.9)
Rocker panel-front to ground	H112	176 (6.9)		
Rocker panel-rear to ground	H111	176 (6.9)		
Windshield slope angle	H122	56.3°		
Backlight slope angle	H121	60.3°		33°
Ground Clearance*				
Front bumper to ground	H102	239 (9.4)		
Rear bumper to ground	H104	273 (10.7)		313 (12.3)
Bumper to ground {front at curb mass (wt.)}	H103	259 (10.2)		
Bumper to ground {rear at curb mass (wt.)}	H105	327 (12.9)		369 (14.5)
Angle of approach (degrees)	H106	18°		
Angle of departure (degrees)	H107	16°		14°
Ramp breakover angle (degrees)	H147	12.5°		
Axle differential to ground (front/rear)	H153	N/A		
Min. running ground clearance	H156	130 (5.1)		
Location of min. run. grd. clear.		Powertrain Splash Shield		

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

MVMA Specifications

Vehicle Line MERCURY TRACER
Model Year 1989½ Issued 3/31/89 Revised (●) _____

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	2-DOOR HATCHBACK	4-DOOR HATCHBACK	4-DOOR WAGON
∅ Front Compartment				
SgRP front, "X" coordinate	L31	1310 (51.6)		
Effective head room	H61	974 (38.3)		971 (38.2)
Max. eff. leg room (accelerator)	L34	1054 (41.5)		
SgRP to heel point	H30	245 (9.6)		
SgRP to heel point	L53	848 (33.4)		
Back angle	L40	24°		
Hip angle	L42	94°		
Knee angle	L44	122°		
Foot angle	L46	87°		
Design H-point front travel	L17	200 (7.9)		
Normal driving & riding seat track trvl.	L23	180 (7.1)		
Shoulder room	W3	1317 (51.9)		
Hip room	W5	1341 (52.8)		
Upper body opening to ground	H50	1226 (48.3)		
Steering wheel maximum diameter*	W9	380 (15.0)		
Steering wheel angle	H18	24.9°		
Accel. heel pt. to steer. whl. cntr	L11	450 (17.7)		
Accel. heel pt. to steer. whl. cntr	H17	629 (24.8)		
Undepressed floor covering thickness	H67	25 (1.0)		
∅ Rear Compartment				
SgRP point couple distance	L50	752 (29.6)		
Effective head room	H63	940 (37.0)		969 (38.1)
Min. effective leg room	L51	882 (34.7)		
SgRP (second to heel)	H31	289 (11.4)		
Knee clearance	L48	0		
Shoulder room	W4	1317 (51.9)		
Hip room	W6	1108 (43.6)	1086 (42.7)	
Upper body opening to ground	H51	1240 (48.8)		
Back angle	L41	24°		
Hip angle	L43	84.5°		
Knee angle	L45	86.8°		
Foot angle	L47	127.1°		
Depressed floor covering thickness	H73	10 (0.4)		
Luggage Compartment				
Usable luggage capacity [L (cu. ft.)]	V1	—		
Liftover height	H195	765 (30.1)		515 (20.3)

Interior Volumes (EPA Classification)		2-Door Hatchback	4-Door Hatchback	Wagon
Vehicle class		Compact		Small
Interior volume index (cu. ft.)**		102.1	101.7	117.3
Trunk/cargo index (cu. ft.)		14.5		25.4

*See page 14.

**Includes passenger and trunk/cargo index — see General Section for definition.

MVMA Specifications

Vehicle Line MERCURY TRACER
Model Year 1989½ Issued 3/31/89 Revised (e) _____

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Body Type		ALL MODELS
Station Wagon—Third Seat	SAE Ref. No.	(NOT APPLICABLE)
Seat facing direction	SD1	
SgRP couple distance	L85	
Shoulder room	W85	
Hip room	W86	
Effective leg room	L86	
Effective head room	H86	
SgRP to heel point	H87	
Knee clearance	L87	
Back angle	L88	
Hip angle	L89	
Knee angle	L90	
Foot angle	L91	

Station Wagon—Cargo Space		
Cargo length (open front)	L200	1780 (70.1)
Cargo length (open second)	L201	1015 (40.0)
Cargo length (closed front)	L202	1700 (66.9)
Cargo length (closed second)	L203	935 (36.8)
Cargo length at belt (front)	L204	1518 (59.8)
Cargo length at belt (second)	L205	768 (30.2)
Cargo width (wheelhouse)	W201	990 (39.0)
Rear opening width at floor	W203	1070 (42.1)
Opening width at belt	W204	1230 (48.4)
Min. rear opening width above belt	W205	935 (36.8)
Cargo height	H201	817 (32.2)
Rear opening height	H202	750 (29.5)
Tailgate to ground height	H250	572 (22.5)
Front seatback to load floor height	H197	355 (14.0)
Cargo volume index [$m^3(ft.^3)$]	V2	1.63 (57.6)
Hidden cargo volume index [$m^3(ft.^3)$]	V4	0
Cargo volume index-rear of 2-seat	V10	0.72 (25.4)

Hatchback—Cargo Space		2-DOOR & 4-DOOR HATCHBACK
Cargo length at front seatback height	L208	1288 (50.7)
Cargo length at floor (front)	L209	1547 (60.9)
Cargo length at second seatback height	L210	517 (20.3)
Cargo length at floor (second)	L211	808 (31.8)
Front seatback to load floor height	H197	439 (17.3)
Second seatback to load floor height	H198	473 (18.6)
Cargo volume index [$m^3(ft.^3)$]	V3	0.82 (28.9)
Hidden cargo volume index [$m^3(ft.^3)$]	V4	0
Cargo volume index-rear of 2-seat	V11	0.41 (14.5)

Aerodynamics*	2-DOOR & 4-DOOR HATCHBACK	4-DOOR WAGON
Wheel lip to ground, front		
Wheel lip to ground, rear		
Frontal area [$m^2(ft.^2)$]		
Drag coefficient (Cd)		

*EPA Loaded Vehicle Weight, Loading Conditions

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line MERCURY TRACER

Model Year 1989½ Issued 3/31/89 Revised (•) _____

Body Type ALL MODELS

Vehicle Fiducial Marks

Fiducial Mark Number*	Define Coordinate Location	
Front		Zero "X" Plane
Rear	Zero "Y" Plane	Zero "Z" Plane "Z" Plane is horizontal plane which contain the front and rear wheel center at design load weight

Fiducial Mark Number		
Front	W21*	N/A
	L54*	N/A
	H81*	N/A
	H161*	N/A
	H163*	266 (10.5)
Rear	W22*	N/A
	L55*	N/A
	H82*	N/A
	H162*	N/A
	H164*	266 (10.5)

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

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line MERCURY TRACER

Model Year 1989½ Issued 3/31/89 Revised (e) _____

		Vehicle Mass (weight)							
		CURB MASS, kg. (lb.)*			% PASS. MASS DISTRIBUTION				
					Pass. In Front		Pass. In Rear		ETWC** Code
Code	Model	Front	Rear	Total	Front	Rear	Front	Rear	
995/445	1.6L Eng.								
w/5-Speed Manual Trans.									
995/445	DA/HVS	610	390	1000	45.3	54.7	14	86	M
2-Door Hatchback		(1345)	(860)	(2205)					
995/445	HC/HVS	610	405	1015	45.3	54.7	14	86	M
4-Door Hatchback		(1345)	(895)	(2240)					
995/445	FF/HVS	620	440	1060	45.3	54.7	14.3	85.7	N
4-Door Wagon		(1365)	(970)	(2335)					
995/440	1.6L Eng.								
w/Opt. 3-Speed Auto. Trans.									
995/440	DA/HVS	630	390	1020	45.3	54.7	14	86	N
2-Door Hatchback		(1390)	(860)	(2250)					
995/440	HC/HVS	630	405	1035	45.3	54.7	14	86	N
4-Door Hatchback		(1390)	(895)	(2285)					
995/440	FF/HVS	640	440	1080	45.3	54.7	14	86	N
4-Door Wagon		(1410)	(970)	(2380)					

*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) Calculation (Kg. (lbs.)

Shipping Mass (weight) = Curb Weight Less:

38 (84)

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line MERCURY TRACER
Model Year 1989½ Issued 3/31/89 Revised (•) _____

Optional Equipment Differential Mass (weight)*					
		MASS, kg. (lb.)			
Code	Equipment	Front	Rear	Total	Remarks Restrictions, Requirements
Transaxle: 3-Spd. Auto (A3)					
440	2 & 4 Door Hatchbacks	12	8	20	
		(26)	(18)	(44)	
440	4-Door Wagon	32	5	37	
		(71)	(11)	(82)	
Miscellaneous Options:					
52H	Power Steering	10	0	10	Standard w/4-Dr. & Wagon
		(22)	(0)	(22)	
572	Air Conditioning	20	0	20	Requires Opt. Power Steering
	w/Manual Temp. Cont.	(44)	(0)	(44)	
58H	AM/FM Stereo w/Cassette	5.4	0	5.4	
		(12)	(0)	(12)	

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