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MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC(U.S. Customary)

Passenger Car

1987

Manufacturer	Car Line	
FORD MOTOR COMPANY	THUNDERBIRD	
Mailing Address		
P.O. BOX 2053 DEARBORN, MICHIGAN 48121	Issued APRIL, 1986	Revised OCTOBER, 1986

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.

Blank Forms Provided by Technical Affairs Division

MVMA

Motor Vehicle Manufacturers Association
of the United States, Inc.

MVMA-C-87

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

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•) 10/86

Car Models

	Model Description & Drive (FWD/RWD)	Introduction Date	Make, Car Line, Series, Body Type (Mfgr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load—Kilograms (Pounds)
	REAR WHEEL DRIVE (RWD)				
(•)	**THUNDERBIRD**	11/86			
	2-Door		63D/HVS	2/3	45.0 (100)
(•)	**SPORT**	11/86			
	2-Door		63D/HVS	2/3	45.0 (100)
(•)	**LX**	11/86			
	2-Door		63D/HVB	2/3	45.0 (100)
(•)	**TURBO COUPE**	11/86			
	2-Door		63D/HVC	2/3	45.0 (100)

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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			SAE Net at RPM		Exhaust S/D	TRANSMISSION/ TRANSAXLE	AXLE RATIO (std. first)
		Displ. Liters (in^3)	Carb. (Barrels, FI, etc.)	Compr. Ratio	Power kW (bhp)	Torque N-m (lb.ft.)			
	50 STATES/ALTITUDE/CANADA								
(•)	All (Excl. Turbo Coupe)	3.8 (232)	CFI	8.7	90 (120) 3600	278 (205) 1600	S	AOD	3.27*, 3.45#
(•)	All (Excl. Turbo Coupe)	5.0 (302)	EFI	8.9	112 (150) 3200	366 (270) 2000	S	AOD	2.73$
(•)	Turbo Coupe	2.3 (140) Turbo	EFI	8.0	142 (190) 4600	325 (240) 3400	D	M5OD	3.55%
					112 (150) 4400	271 (200) 3000	S	A4LD	3.73%

(•)
AOD — 4-Speed Automatic Overdrive
A4LD — 4-Speed Automatic Overdrive
M5OD — 5-Speed Manual Overdrive
$ — Traction-Lok Available
% — Traction-Lok Standard
# — Altitude Only
* — Not Available Altitude

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Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•) _____

Engine Description/Carb. Engine Code	3.8L

ENGINE — GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-camber, etc.)		90°V, Front, Longitudinal Overhead Valve Engine with Modified Wedge Combustion Chamber
Manufacturer		Ford Motor Company
No. of cylinders		Six
Bore		96.8 (3.8)
Stroke		86.0 (3.4)
Bore spacing (C/L to C/L)		106.5
Cylinder block material & mass kg (lbs.) (machined)		Cast Iron, 48.9 (107.5)
Cylinder block deck height		234.5 (9.2)
Cylinder block length		
Deck clearance (minimum) (above or below block)		0.255 (0.010) Above
Cylinder head material & mass kg (lbs.)		Aluminum
Cylinder head volume (cm^3)		61.5-64.5
Cylinder liner material		N/A
Head gasket thickness (compressed)		1.04-1.19 (0.041-0.047)
Minimum combustion chamber total volume (cm^3)		76.8
Cyl. no. system (front to rear)*	L. Bank	4, 5, 6
	R. Bank	1, 2, 3
Firing order		1, 4, 2, 5, 3, 6
Intake manifold material & mass [kg (lbs.)]**		Aluminum, 5.0 (11.0)
Exhaust manifold material & mass [kg (lbs.)]**		Cast Iron, 7.1 (15.6)
Recommended fuel (leaded, unleaded, diesel)		Unleaded
Fuel antiknock index $\frac{(R+M)}{2}$		87 Minimum Octane
Total dressed engine mass (wt) dry***		188.4 (415.3)

Engine — Pistons

Material & mass, g (weight, oz.)-piston only	Aluminum Alloy, 521 (18.4)

Engine — Camshaft

Location		In Block
Material & mass kg (weight, lbs.)		Special Alloy Iron, Green Sand Molded, Induction Hardened, Phosphate Coated, 4.04 (8.9)
Drive type	Chain/belt	Chain (Silent)
	Width/pitch	19.99-18.72 (0.79-0.74)/9.53 (0.37)

*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 Alternator

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Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (●) _____

Engine Description/Carb. Engine Code	5.0L

ENGINE — GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-camber, etc.)		90°V, Front, Longitudinal Overhead Valve Engine with Modified Wedge Combustion Chamber
Manufacturer		Ford Motor Company
No. of cylinders		Eight
Bore		101.6 (4.00)
Stroke		76.2 (3.00)
Bore spacing (C/L to C/L)		111.3 (4.38)
Cylinder block material & mass kg (lbs.) (machined)		Cast Iron, 56.7 (125)
Cylinder block deck height		208.4 (8.20)
Cylinder block length		
Deck clearance (minimum) (above or below block)		0.343 (0.0135) Above
Cylinder head material & mass kg (lbs.)		Cast Iron, 20.9 (46.0)
Cylinder head volume (cm^3)		62.0-65.0
Cylinder liner material		
Head gasket thickness (compressed)		1.04-1.19 (0.041-0.047)
Minimum combustion chamber total volume (cm^3)		73.4
Cyl. no. system (front to rear)*	L. Bank	5, 6, 7, 8
	R. Bank	1, 2, 3, 4
Firing order		1, 5, 4, 2, 6, 3, 7, 8
Intake manifold material & mass [kg (lbs.)]**		Aluminum, 16.8 (37.0)
Exhaust manifold material & mass [kg (lbs.)]**		Cast Iron, 14.3 (31.6)
Recommended fuel (leaded, unleaded, diesel)		Unleaded
Fuel antiknock index $\frac{(R+M)}{2}$		87 Minimum Octane
Total dressed engine mass (wt) dry***		252.8 (557.3)

Engine — Pistons

Material & mass, g (weight, oz.)-piston only	Aluminum Alloy 583 (20.6)

Engine — Camshaft

Location		In Block
Material & mass kg (weight, lbs.)		Special Alloy Iron, Green Sand Molded, Induction Hardened, Phosphate Coated, 4.08 (9.0)
Drive type	Chain/belt	Chain (Silent)
	Width/pitch	18.8 (0.74)/9.5 (0.37)

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

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Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•) _____

Engine Description/Carb. Engine Code	2.3L

ENGINE — GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-camber, etc.)		Inline, Front, Longitudinal, Single Overhead Camshaft Engine with Modified Wedge Combustion Chamber
Manufacturer		Ford Motor Company
No. of cylinders		Four
Bore		96.04 (3.78)
Stroke		79.40 (3.12)
Bore spacing (C/L to C/L)		105.99 (4.17)
Cylinder block material & mass kg (lbs.) (machined)		Cast Iron, 39.5 (87.0)
Cylinder block deck height		212.55 (8.36)
Cylinder block length		
Deck clearance (minimum) (above or below block)		0.178 (0.007) Above
Cylinder head material & mass kg (lbs.)		Cast Iron, 24.5 (54.0)
Cylinder head volume (cm^3)		61.3
Cylinder liner material		
Head gasket thickness (compressed)		1.09 (0.043)
Minimum combustion chamber total volume (cm^3)		74.6
Cyl. no. system (front to rear)*	L. Bank	—
	R. Bank	—
Firing order		1, 3, 4, 2
Intake manifold material & mass [kg (lbs.)]**		Aluminum (Cast), 5.5 (12.1)
Exhaust manifold material & mass [kg (lbs.)]**		Nodular Iron, 5.4 (11.9)
Recommended fuel (leaded, unleaded, diesel)		Unleaded
Fuel antiknock index $\frac{(R+M)}{2}$		87 Minimum Octane
Total dressed engine mass (wt) dry***		192.8 (425.1)

Engine — Pistons

Material & mass, g (weight, oz.)-piston only	480 (16.9) Forged Aluminum Alloy

Engine — Camshaft

Location		Cylinder Head
Material & mass kg (weight, lbs.)		Hardenable Cast Iron, 2.93 (6.45)
Drive type	Chain/belt	Belt
	Width/pitch	21.8-22.7 (0.86-0.90)/9.52 (0.37)

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

**Finished state.

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Engine Description/Carb. Engine Code	3.8L

Engine — Valve System

Hydraulic lifters (std., opt., NA)		Standard
Valves	Number intake/exhaust	6/6
	Head O.D. intake/exhaust	45/37

Engine — Connecting Rods

Material & mass [kg., (weight, lbs.)]*	Forged Steel (SAE-1151-M) .665-.667 (1.46-1.47)

Engine — Crankshaft

Material & mass [kg., (weight, lbs.)]*		Nodular Cast Iron Alloy 14.06 (31)
End thrust taken by bearing (no.)		#3
Number of main bearings		4
Seal (material, one, two piece design, etc.)	Front	One Piece, Poly Acrylic or Flourocarbon
	Rear	One Piece, Flourocarbon

Engine — Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]	276-414 (40-60) @ 2000 RPM
Type oil intake (floating, stationary)	Stationary Shrouded Screen in Sump
Oil filter system (full flow, part, other)	Full Flow
Capacity of c/case, less filter-refill-L (qt.)	3.8 (4.0) Plus 0.9 (1.0) for Filter

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 OFFERED)

Turbo charger - manufacturer	
Super charger - manufacturer	
Charge cooler	

*Finished State

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Engine Description/Carb. Engine Code	5.0L

Engine — Valve System

Hydraulic lifters (std., opt., NA)		Standard
Valves	Number intake/exhaust	8/8
	Head O.D. intake/exhaust	45.2 (1.78)/36.8 (1.45)

Engine — Connecting Rods

Material & mass [kg., (weight, lbs.)]*	Forged Steel 0.55 (1.23)

Engine — Crankshaft

Material & mass [kg., (weight, lbs.)]*		Nodular Cast Iron Alloy 17.3 (38.2)
End thrust taken by bearing (no.)		#3
Number of main bearings		5
Seal (material, one, two piece design, etc.)	Front	Viton, One Piece
	Rear	Viton, One Piece

Engine — Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]	276-414 (40-60) @ 2000 RPM
Type oil intake (floating, stationary)	Stationary Shrouded Screen in Sump
Oil filter system (full flow, part, other)	Full Flow
Capacity of c/case, less filter-refill-L (qt.)	3.8 (4.0) Plus 0.9 (1.0) for Filter

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 OFFERED)

Turbo charger - manufacturer	
Super charger - manufacturer	
Charge cooler	

*Finished State

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Engine Description/Carb. Engine Code	2.3L

Engine — Valve System

Hydraulic lifters (std., opt., NA)		Standard
Valves	Number intake/exhaust	4/4
	Head O.D. intake/exhaust	44/38

Engine — Connecting Rods

Material & mass [kg., (weight, lbs.)]*	Forged Steel (SAE-1041-H or SAE-1541-H) 0.626-0.642 (1.38-1.41)

Engine — Crankshaft

Material & mass [kg., (weight, lbs.)]*		Nodular Cast Iron Alloy 15.48 (34.13)
End thrust taken by bearing (no.)		#3
Number of main bearings		5
Seal (material, one, two piece design, etc.)	Front	Polyacrylic, One Piece Design
	Rear	Silicon, One Piece Design

Engine — Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]	379 (55) @ 2000 RPM
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, part, other)	Full Flow
Capacity of c/case, less filter-refill-L (qt.)	4.3 (4.5) Plus 0.45 (0.5) for Filter

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

Turbo charger - manufacturer	Warner-ISHI
Super charger - manufacturer	N/A
Charge cooler	N/A

*Finished State

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Engine Description/Carb. Engine Code	3.8L

Engine — Cooling System

Coolant recovery system (std., opt., n.a.)		Standard	
Coolant fill location (rad., bottle)		Radiator Coolant Fill; Bottle Coolant Add	
Radiator cap relief valve pressure [kPa (psi)]		97-127 (14-18)	
Circulation thermostat	Type (choke, bypass)	Reverse Poppet	
	Starts to open at °C(°F)	89.5-127 (193-200)	
Water Pump	Type (centrifugal, other)	Centrifugal	
	GPM 1000 pump rpm	9	
	Number of pumps	One	
	Drive (V-belt, other)	Six Rib Poly-V	
	Bearing type	Double Row, Sealed, Ball and Roller	
	Impeller material	Steel	
	Housing material	Aluminum	
By-pass recirculation [type (inter., ext.)]		External	
Cooling system capacity	With heater-L(qt.)	10.1 (10.7) Plus 1.5 Quart in Overflow Bottle	
	With air cond.-L(qt.)	10.2 (10.8) Plus 1.5 Quart in Overflow Bottle	
	Opt. equipment [specify-L(qt.)]	N/A	
Water jackets full length of cyl. (yes, no)		No	
Water all around cylinder (yes, no)		Yes	
Water jackets open at head face (yes, no)		No	
Radiator core	Std., A/C, HD	Standard	A/C
	Type (cross-flow, etc.)	Crossflow	
	Construction (fin & tube mechanical, braze, etc.)	Tube and Slit Fin, Copper and Brass, 2 Rows	
	Material, mass [kg (wgt, lbs.)]	Copper Core, 4.9 (10.9)	
	Width	622.3 (24.5)	
	Height	452.1 (17.8)	
	Thickness	16.5 (0.7)	29.0 (1.1)
(•)	Fins per inch	11	9
Radiator end tank material		Brass	
Fan	Std., elec., opt.	Standard	
	Number of blades & type (flex, solid, material)	5 Blade Solid, Steel	
	Diameter & projected width	457 (18.0); 68.5 (2.7)	
	Ratio (fan to crankshaft rev.)	1.25:1	
	Fan cutout type	Clutch	
	Drive type (direct, remote)	Direct	
	RPM at idle (elec.)	N/A	
	Motor rating (wattage) (elec.)	N/A	
	Motor switch (type & location) (elec.)	N/A	
	Switch point (temp., pressure) (elec.)	N/A	
	Fan shroud (material)	Plastic	

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Engine Description/Carb. Engine Code	5.0L

Engine — Cooling System

Coolant recovery system (std., opt., n.a.)		Standard
Coolant fill location (rad., bottle)		Radiator Coolant Fill; Bottle Coolant Add
Radiator cap relief valve pressure [kPa (psi)]		97-127 (14-18)
Circulation thermostat	Type (choke, bypass)	Choke
	Starts to open at °C(°F)	90-93 (193-200)
Water Pump	Type (centrifugal, other)	Centrifugal
	GPM 1000 pump rpm	12
	Number of pumps	One
	Drive (V-belt, other)	Poly-V-Belt
	Bearing type	Ball
	Impeller material	Stamped Steel
	Housing material	Aluminum
By-pass recirculation [type (inter., ext.)]		External
Cooling system capacity	With heater-L(qt.)	12.6 (13.3)
	With air cond.-L(qt.)	12.7 (13.4)
	Opt. equipment [specify-L(qt.)]	N/A
Water jackets full length of cyl. (yes, no)		Yes
Water all around cylinder (yes, no)		Yes
Water jackets open at head face (yes, no)		No
Radiator core	Std., A/C, HD	Standard A/C
	Type (cross-flow, etc.)	Crossflow
	Construction (fin & tube mechanical, braze, etc.)	Tube and Slit Fin, Copper and Brass, 2 Rows
	Material, mass [kg (wgt. lbs.)]	Copper & Brass (Optimized)
	Width	622.3 (24.5)
	Height	452.1 (17.8)
	Thickness	28.8 (1.14)
	Fins per inch	9 11
Radiator end tank material		Plastic
Fan	Std., elec., opt.	Standard
	Number of blades & type (flex, solid, material)	7, Uneven, Plastic
	Diameter & projected width	19.0 x 2.0
	Ratio (fan to crankshaft rev.)	1.30:1
	Fan cutout type	Clutch
	Drive type (direct, remote)	Belt, Direct
	RPM at idle (elec.)	N/A
	Motor rating (wattage) (elec.)	N/A
	Motor switch (type & location) (elec.)	N/A
	Switch point (temp., pressure) (elec.)	N/A
	Fan shroud (material)	Filled Polymer

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Engine Description/Carb. Engine Code	2.3L

Engine — Cooling System

Coolant recovery system (std., opt., n.a.)		Standard	
Coolant fill location (rad., bottle)		Radiator Coolant Fill; Bottle Coolant Add	
Radiator cap relief valve pressure [kPa (psi)]		82.7-110.3 (12-16) Non A.C.; 96.5-124.1 (14-18) w/A/C	
Circulation thermostat	Type (choke, bypass)	By Pass	
	Starts to open at °C(°F)	87.9 (188-195)	
Water Pump	Type (centrifugal, other)	Centrifugal	
	GPM 1000 pump rpm	13.1	
	Number of pumps	One	
	Drive (V-belt, other)	Poly-V-Belt	
	Bearing type	Double Row, Sealed, Ball and Roller	
	Impeller material	Steel	
	Housing material	Cast Iron	
By-pass recirculation [type (inter., ext.)]		Internal	
Cooling system capacity	With heater-L(qt.)	8.4 (8.9)	
	With air cond.-L(qt.)	8.4 (8.9)	
	Opt. equipment [specify-L(qt.)]	N/A	
Water jackets full length of cyl. (yes, no)		Yes	
Water all around cylinder (yes, no)		Yes	
Water jackets open at head face (yes, no)		Yes	
Radiator core	Std., A/C, HD	Standard	A/C
	Type (cross-flow, etc.)	Crossflow	
	Construction (fin & tube mechanical, braze, etc.)	Tube and Slit Fin, Copper and Brass, 2 Rows	
	Material, mass [kg (wgt, lbs.)]	Copper/Brass, 5.9 (12.9)	
	Width	623.3 (24.5)	
	Height	453.1 (17.8)	
	Thickness	16.5 (0.65)	35.6 (1.1)
	Fins per inch	14 (10 w/Auto Trans)	13 (14 w/Auto Trans)
Radiator end tank material		Brass	
Fan	Std., elec., opt.	Electric — Two	
	Number of blades & type (flex, solid, material)	Seven, Solid, Plastic (Two Fans)	
	Diameter & projected width	312.4/36.0 & 279.4/48.0	
	Ratio (fan to crankshaft rev.)	Electrodrive — Dual	
	Fan cutout type	N/A	
	Drive type (direct, remote)	Direct	
	RPM at idle (elec.)	1900 RPM & 2000 RPM Respectively	
	Motor rating (wattage) (elec.)	180 Watts	
	Motor switch (type & location) (elec.)	Two Terminal, Bi-Metallic Snap Disc LWR Intake Manif.	
	Switch point (temp., pressure) (elec.)	Approx. 221°	
	Fan shroud (material)	Plastic	

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Engine Description/Carb. Engine Code	3.8L

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

Induction type: carburetor, fuel injection system, etc.			Central Fuel Injection
Manufacturer			N/A
Carburetor	Choke (type)		N/A
	Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	N/A
		Automatic	550-625-DR (A/C on A/C Clutch De-Energized)
Idle A/F mix.			13.9:1 Open Loop
Fuel injection	Point of injection (no.)		Throttle Body (Two Injectors)
	Constant, pulse, flow		Pulse
	Control (electronic, mech.)		Electronic
	System pressure [kPa (psi)]		300 (39.5)
Intake manifold heat control (exhaust or water thermostatic or fixed			Exhaust
Air cleaner type	Standard		Dry, Remote Paper Element
	Optional		N/A
Fuel pump	Type (elec. or mech.)		Electric
	Location (eng., tank)		In Tank
	Pressure range [kPa (psi)]		275-310 (40-45)

Fuel Tank

Capacity [refill L (gallons)]		83.7 (22.1 Gal.)
Location (describe)		Behind Rear Axle
Attachment		Two Straps with Pin and Loop at Rear, Bolt at Front
Material & Mass [kg (weight lbs.)]		Steel (Nickel Flash/Tempered Roll)
Filler pipe	Location & material	Right Hand Quarter Panel
	Connection to tank	Rubber Seal
Fuel line (material)		Nylon
Fuel hose (material)		Nylon
Return line (material)		Nylon
Vapor line (material)		Nylon
Extended range tank	Opt., n.a.	N/A
	Capacity [L (gallons)]	N/A
	Location & material	N/A
	Attachment	N/A
Auxiliary tank	Opt., n.a.	N/A
	Capacity [L (gallons)]	N/A
	Location & material	N/A
	Attachment	N/A
	Selector switch or valve	N/A
	Separate fill	N/A

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Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•) _____

Engine Description/Carb. Engine Code	5.0L

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 System
Manufacturer			N/A
Carburetor	Choke (type)		N/A
	Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	N/A
		Automatic	N/A
Idle A/F mix.			14.6:1
Fuel injection	Point of injection (no.)		Intake Ports, Eight (8)
	Constant, pulse, flow		Timed
	Control (electronic, mech.)		Electronic
	System pressure [kPa (psi)]		270.3 (39.2)
Intake manifold heat control (exhaust or water thermostatic or fixed			N/A
Air cleaner type	Standard		Dry, Remote Paper Element
	Optional		N/A
Fuel pump	Type (elec. or mech.)		Electric
	Location (eng., tank)		One Pump System in Fuel Tank
	Pressure range [kPa (psi)]		N/A

Fuel Tank

Capacity [refill L (gallons)]		83.7 (22.1 Gal.)
Location (describe)		Behind Rear Axle
Attachment		Two Straps with Pin and Loop at Rear, Bolt at Front
Material & Mass [kg (weight lbs.)]		Steel (Nickel Flash/Tempered Roll)
Filler pipe	Location & material	Right Rear Quarter Panel; Steel
	Connection to tank	Rubber Seal
Fuel line (material)		Nylon and Steel
Fuel hose (material)		Nylon
Return line (material)		Nylon and Steel
Vapor line (material)		Nylon
Extended range tank	Opt., n.a.	N/A
	Capacity [L (gallons)]	N/A
	Location & material	N/A
	Attachment	N/A
Auxiliary tank	Opt., n.a.	N/A
	Capacity [L (gallons)]	N/A
	Location & material	N/A
	Attachment	N/A
	Selector switch or valve	N/A
	Separate fill	N/A

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Passenger Car
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Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (●) _____

Engine Description/Carb. Engine Code	2.3L

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

Induction type: carburetor, fuel injection system, etc.			Electronic Fuel Injection
Manufacturer			N/A
Carburetor	Choke (type)		N/A
	Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	N/A
		Automatic	N/A
Idle A/F mix.			N/A
Fuel injection	Point of injection (no.)		Port Injection (Four)
	Constant, pulse, flow		Simultaneous Double Fire
	Control (electronic, mech.)		Electronic
	System pressure [kPa (psi)]		268.9 (39.0 psi) Above Intake Manifold Pressure
Intake manifold heat control (exhaust or water thermostatic or fixed			N/A
Air cleaner type	Standard		Dry, Remote Paper Element
	Optional		N/A
Fuel pump	Type (elec. or mech.)		Electric (1)
	Location (eng., tank)		In Tank (High Pressure)
	Pressure range [kPa (psi)]		37.9-44.8 (5.5-6.5)

Fuel Tank

Capacity [refill L (gallons)]		68.9 (18.2 Gal.)
Location (describe)		Behind Rear Axle
Attachment		Two Straps Pin and Loop at Rear, Bolt at Front
Material & Mass [kg (weight lbs.)]		Steel (Nickel Flash/Tempered Roll)
Filler pipe	Location & material	Right Hand Quarter Panel
	Connection to tank	Rubber Seal
Fuel line (material)		Nylon
Fuel hose (material)		N/A
Return line (material)		Nylon
Vapor line (material)		Nylon
Extended range tank	Opt., n.a.	N/A
	Capacity [L (gallons)]	N/A
	Location & material	N/A
	Attachment	N/A
Auxiliary tank	Opt., n.a.	N/A
	Capacity [L (gallons)]	N/A
	Location & material	N/A
	Attachment	N/A
	Selector switch or valve	N/A
	Separate fill	N/A

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Engine Description/Carb. Engine Code

3.8L

Vehicle Emission Control

Exhaust Emission Control	Type (air injection engine modifications, other)		Vehicle and Engine Modifications Plus Exhaust Gas Recirculation and Air Injection (a)
	Air Injection	Pump or Pulse	Pump
		Driven by	Poly-V-Belt
		Air distribution (head, manifold, etc.)	Cylinder Head and Catalyst
		Point of entry	Cylinder Head Exhaust Ports, Catalyst Mid-Bed
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled Flow
		Exhaust source	Internal From Exhaust X-Over (Intake Manifold)
		Point of exhaust injection (spacer, carburetor, manifold, other)	Spacer
	Catalytic Converter	Type	TWC Toeboard + COC Single Brick In-Line
		Number of	Two
		Location(s)	Underbody & Toeboard (L.O.)
		Volume [L (in³)]	Toeboard (2) x .62 (38); Underbody 1.3 (78)
		Substrate type	Coated Ceramic Monolith
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Closed Induction System
	Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum
	Discharges (to intake manifold, other)		Carburetor
	Air inlet (breather cap, other)		Carburetor Air Cleaner
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Externally Vented to Carbon Canister
		Carburetor	Internally Vented to Air Cleaner
	Vapor storage provision		Carbon 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 "Y" Catalyst System
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass [kg (weight lbs.)]		One, Reverse Flow (b)
Resonator no. & type		—
Exhaust pipe	Branch o.d., wall thickness	—
	Main o.d., wall thickness	—
	Material & Mass [kg (weight lbs.)]	—
Intermediate pipe	o.d. & wall thickness	50.8 x 1.75 (2.00 x .069)
	Material & Mass [kg (weight lbs.)]	Aluminized Steel (b)
Tail pipe	o.d. & wall thickness	50.8 x 1.37 (2.00 x .054)
	Material & Mass [kg (weight lbs.)]	Aluminized Steel (b)

(a) Components May Vary According to Engine Calibration
(b) Purchased in Assembly (PIA) Muffler and Pipe Assembly 11.0 (24.5)

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Model Year 1987 Issued 4/86 Revised (●)

Engine Description/Carb. Engine Code	5.0L

Vehicle Emission Control

Exhaust Emission Control	Type (air injection engine modifications, other)		Vehicle and Engine Modifications Plus Exhaust Gas Recirculation and Air Injection (a)
	Air Injection	Pump or Pulse	Pump
		Driven by	Belt
		Air distribution (head, manifold, etc.)	Cylinder Heads and Catalyst
		Point of entry	Multiple
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Electronic
		Exhaust source	Intake Manifold
		Point of exhaust injection (spacer, carburetor, manifold, other)	Spacer
	Catalytic Converter	Type	TWC Toeboard + COC Single Brick In-Line
		Number of	Two
		Location(s)	Underbody & Toeboard (L.O.)
		Volume [L (in³)]	Toeboard (2) x .69 (42); Underbody 1.3 (78)
		Substrate type	Coated Ceramic Monolith
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Closed System
	Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum
	Discharges (to intake manifold, other)		Intake Manifold
	Air inlet (breather cap, other)		Throttle Body
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Carbon Canister
		Carburetor	N/A
	Vapor storage provision		Carbon 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 "Y" Catalyst System
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass [kg (weight lbs.)]		One, Reverse Flow (b)
Resonator no. & type		None
Exhaust pipe	Branch o.d., wall thickness	—
	Main o.d., wall thickness	—
	Material & Mass [kg (weight lbs.)]	—
Intermediate pipe	o.d. & wall thickness	50.8 x 1.75 (2.00 x .069)
	Material & Mass [kg (weight lbs.)]	Aluminized Steel (b)
Tail pipe	o.d. & wall thickness	50.8 x 1.37 (2.00 x .054)
	Material & Mass [kg (weight lbs.)]	Aluminized Steel

(a) Components May Vary According to Engine Calibration
(b) Purchased in Assembly (PIA) Muffler and Pipe Assembly 10.8 (23.7)

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Engine Description/Carb.
Engine Code

2.3L

Vehicle Emission Control

Exhaust Emission Control	Type (air injection engine modifications, other)		Electronic Fuel and Spark Control Plus Exhaust Gas Recirculation
	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)	Controlled Flow Tapered Stem
		Exhaust source	Exhaust Manifold
		Point of exhaust injection (spacer, carburetor, manifold, other)	Intake Manifold
	Catalytic Converter	Type	TWC + TWC Dual Brick In-Line
		Number of	One
		Location(s)	Underbody
		Volume [L (in³)]	1.1 (66) + 1.1 (66)
		Substrate type	Coated Ceramic Monolith
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Closed Induction System
	Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum
	Discharges (to intake manifold, other)		Intake Manifold
	Air inlet (breather cap, other)		Compressor Inlet Adaptor
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Carbon Canister
		Carburetor	—
	Vapor storage provision		Carbon Canister
Electronic system	Closed loop (yes/no)		Yes
	Open loop (yes/no)		Yes

Engine — Exhaust System		A4LD	M50D
Type (single, single with cross-over, dual, other)		Single	Dual (Reverse "Y")
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass [kg (weight lbs.)]		One, Reverse Flow (a)	Two, Reverse Flow (b)
Resonator no. & type		N/A	
Exhaust pipe	Branch o.d., wall thickness	—	57.2 x 1.75 (2.25 x .069)
	Main o.d., wall thickness	—	63.5 x 1.75 (2.50 x .069)
	Material & Mass [kg (weight lbs.)]	—	Aluminized Steel 2.5 (5.5)
Intermediate pipe	o.d. & wall thickness	57.2 x 1.75 (2.25 x .069)	—
	Material & Mass [kg (weight lbs.)]	Aluminized Steel (a)	—
Tail pipe	o.d. & wall thickness	50.8 x 1.37 (2.00 x .054)	Two, 50.8 x 1.37 (2.00 x .054)
	Material & Mass [kg (weight lbs.)]	Aluminized Steel (a)	Aluminized Steel (b)

(a) Purchased in Assembly (PIA) Muffler and Pipe Assembly 11.8 (26.0)
(b) Purchased in Assembly (PIA): Muffler and Pipe Assy LH 8.4 (18.5)
Muffler and Pipe Assy RH 7.5 (16.5)

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Engine Description/Carb. Engine Code	2.3L	3.8L	5.0L

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.-Borg Warner	N/A
Manual overdrive (std., opt., n.a.) (mfr.)	N/A	
(•) Automatic (std., opt., n.a.) (mfr.)	N/A	
(•) Automatic overdrive (std., opt., n.a.) (mfr.)	Optional-Ford	Standard-Ford

Manual Transmission/Transaxle (a) (NOT OFFERED)

Number of forward speeds			Five
Transmission ratios	In first		3.97:1
	In second		2.34:1
	In third		1.46:1
	In fourth		1.00:1
	In fifth		0.79:1
	In overdrive		—
	In reverse		3.71:1
Synchronous meshing (specify gears)			All Forward Gears
Shift lever location			Floor
Lubricant	Capacity [L (pt.)]		2.6 (5.6)
	Type recommended		Dexron II
	SAE viscosity number	Summer	—
		Winter	—
		Extreme cold	—

Clutch (Manual Transmission)

Make, type, engagement (describe) — (hydraulic, cable, rod)		Single Disc, Dry Plate, Hydraulic
Assist (yes, no/percent)		No
Type pressure plate springs		Belleville Spring
Total spring load [N (lb.)]		6250 (1405)
No. of clutch driven discs		One
Clutch facing	Material	Woven Non-Asbestos, Valeo F-204
	Manufacturer	Valeo
	Part number	E7SR-7550-BA
	Rivets/plate	16
	Rivet size	4.1 x 5.4
	Outside & inside dia.	235 x 165 (9.25 x 6.50)
	Total eff. area [cm²(in.²)]	439.8 (68.04)
	Thickness	3.35 (0.132)
	Engagement cushion method	Torbend Disc
Release bearing	Type & method of lubrication	Self-Centering, Angular Contact, Constant Running, Prepacked
Torsional damping	Method: springs, friction material	Multi-Stage, Spring and Friction Material

(a) 3.55 Axle Ratio Only

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Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•) 7/86

Engine Description/Carb. Engine Code	3.8L

(•) Automatic Transmission/Transaxle

Trade name			Automatic Overdrive (AOD)
Type and special features (describe)			Torque Converter, Planetary Gear Set
Selector	Location		Column
	Ltr./No. designation		P R N (D) D 1
Gear ratios	1st		2.40:1
	2nd		1.47:1
	3rd		1.00:1
	4th		0.67:1
	Reverse		2.00:1
Max. upshift speed - drive range [km/h (mph)]			102.3 (63.6) (a) 97.0 (60.3) (b)
Max. kickdown speed - drive range [km/h (mph)]			86.6 (53.7) (a) 82.0 (50.9) (b)
Min. overdrive speed [km/h (mph)]			68.5 (42.6) (a) 65.0 (40.4) (b)
Torque converter	Number of elements		Three
	Max. ratio at stall		2.53
	Type of cooling (air, liquid)		Liquid
	Nominal diameter		305 (12)
Lubricant	Capacity [refill L (pt.)]		11.7 (24.6)
	Type Recommended		ESP-M2C138CJ (Dexron II for Service)
Oil cooler (std., opt., NA, internal, external, air, liquid)			Standard, External, Air

Axle or Front Wheel Drive Unit

Type (front, rear)			Rear
Description			Semi-Floating Type with Cast Center and Overhung Pinion
Limited slip differential (type)			Friction Plate
Drive pinion offset			25.4 (1.0)
Drive pinion (type)			Hypoid
No. of differential pinions			2 Pinion
Pinion/differential adjustment (shim, other)			Shim
Pinion/differential bearing adjustment (shim, other)			Collapsible Spacer
Driving wheel bearing (type)			Straight Roller
Lubricant	Capacity [L (pt.)]		1.5 (3.25) to 1.6 (3.50)
	Type recommended		ESP-M2C154-A
	SAE viscosity number	Summer	SAE 85W90
		Winter	SAE 85W90
		Extreme cold	SAE 85W90

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

(•) Axle ratio (or overall top gear ratio)			2.73:1(b)	3.27:1(a)
(•) No. of teeth	Pinion		15	11
	Ring gear or gear		41	36
Ring gear o.d.			190.5(7.5)	198.1(7.8)
Transaxle	Transfer gear ratio		—	
	Final drive ratio		—	

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Model Year 1987 Issued 4/86 Revised (•) _____

Engine Description/Carb. Engine Code	5.0L	2.3L

Automatic Transmission/Transaxle

Trade name		Automatic Overdrive (AOD)	Automatic Overdrive (A4LD)
Type and special features (describe)		Torque Converter, Planetary Gear Set	Lock-Up Torque Converter (*) See Below
Selector	Location	Column	Floor Shift — Cable
	Ltr./No. designation	P R N (D) D 1	P R N (D) D 2 1
Gear ratios	1st	2.40:1	2.47:1
	2nd	1.47:1	
	3rd	1.00:1	
	4th	0.67	0.75:1
	Reverse	2.00	2.11:1
Max. upshift speed - drive range [km/h (mph)]		114.9 (71.4) (c) 101.8 (63.3) (c)	
Max. kickdown speed - drive range [km/h (mph)]		97.2 (60.4) (c) 86.2 (53.6) (c)	
Min. overdrive speed [km/h (mph)]		65.5 (40.7) (c) 58.0 (36.1) (c)	
Torque converter	Number of elements	Three	
	Max. ratio at stall	2.30	2.60
	Type of cooling (air, liquid)	Liquid Passed Through a Heat Exchanger in Radiator	
	Nominal diameter	305 (12)	260.4 (10.3)
Lubricant	Capacity [refill L (pt.)]	11.7 (24.6)	9.0 (19.0)
	Type Recommended	ESP-M2C166-H	ESP-M2C138-CJ (Dexron II For Svc.)
Oil cooler (std., opt., NA, internal, external, air, liquid)		Standard, External, Air	

Axle or Front Wheel Drive Unit

Type (front, rear)			Rear
Description			Semi-Floating Type with Cast Center and Overhung Pinion
Limited slip differential (type)			Friction Plate
Drive pinion offset			25.4 (1.0)
Drive pinion (type)			Hypoid
No. of differential pinions			2 Pinion
Pinion/differential adjustment (shim, other)			Shim
Pinion/differential bearing adjustment (shim, other)			Collapsible Spacer
Driving wheel bearing (type)			Straight Roller
Lubricant	Capacity [L (pt.)]		1.5 (3.25) to 1.6 (3.50)
	Type recommended		ESP-M2C154-A
	SAE viscosity number	Summer	SAE 85W90
		Winter	SAE 85W90
		Extreme cold	SAE 85W90

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

Axle ratio (or overall top gear ratio)		2.73:1 (c)	3.73:1
No. of teeth	Pinion	15	11
	Ring gear or gear	41	
Ring gear o.d.		190.5 (7.5)	198.1 (7.8)
Transaxle	Transfer gear ratio	N/A	
	Final drive ratio	N/A	

(*) Lock-Up Override and 3-4 Shift Solenoids, Planetary Gear Set

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Engine Description/Carb. Engine Code	3.8L	5.0L

Propeller Shaft — Rear Wheel Drive

Manufacturer Type (straight tube, tube-in-tube, internal-external damper, etc.)			Straight Tube with Internal Tuned Damper	
Outer diam. x length* x wall thickness	Manual 3-speed trans.		N/A	
	Manual 4-speed trans.		N/A	
	Manual 5-speed trans.		N/A	
	Overdrive (AOD)		76.20x1272x1.65 (3.0x50.10x.065)	76.20x1247.1x1.65 (3.0x49.1x0.065)
(●)	Automatic transmission		N/A	
Intermediate bearing	Type (plain, anti-friction)		N/A	
	Lubrication (fitting, prepack)		N/A	
(●) Slip yoke	Type		Tuned Damper	
	Number of teeth		28	
	Spline o.d.		30.99 (1.22)	
(●) Universal joints	Make and mfg. no.	Front	Ford 1310	
		Rear	Ford 1310	
	Number used		Two	
	Type (ball and trunnion, cross)		Cross	
	Rear attach (u-bolt, clamp, etc.)		Circular Flange	
	Bearing	Type (plain, anti-friction)	Needle Roller	
		Lubrication (fitting, prepack)	Prepack	
Drive taken through (torque tube, arms or springs)			Control Arms	
Torque taken through (torque tube, arms or springs)			Control Arms	

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

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Engine Description/Carb. Engine Code	2.3L

Propeller Shaft — Rear Wheel Drive

Manufacturer Type (straight tube, tube-in-tube, internal-external damper, etc.)			Straight Tube With Internal Tuned Damper
Outer diam. x length* x wall thickness	Manual 3-speed trans.		N/A
	Manual 4-speed trans.		N/A
	Manual 5-speed trans. (M5OD)		88.9x1224x1.65 (3.5x48.20x.065)
	Overdrive (A4LD)		90.1x1163x1.93 (3.15x45.80x.076)
	Automatic transmission (AT3)		N/A
Inter-mediate bearing	Type (plain, anti-friction)		N/A
	Lubrication (fitting, prepack)		N/A
Slip yoke	Type		Tuned Damper
	Number of teeth		25 — Automatic 28 — Manual
	Spline o.d.		28.32 (1.12) Automatic 30.99 (1.22) Manual
Universal joints	Make and mfg. no.	Front	Ford 1310 Automatic, 1330 Manual
		Rear	Ford 1310 Automatic, 1330 Manual
	Number used		Two
	Type (ball and trunnion, cross)		Cross
	Rear attach (u-bolt, clamp, etc.)		Circular Flange
	Bearing	Type (plain, anti-friction)	Needle Roller
		Lubrication (fitting, prepack)	Prepack
Drive taken through (torque tube, arms or springs)			Control Arms
Torque taken through (torque tube, arms or springs)			Control Arms

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

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Model Year 1987 Issued 4/86 Revised (●) _____

Body Type And/Or Engine Displacement	ALL MODELS (EXCL. TURBO COUPE)

Suspension — General

Car leveling	Std./opt./n.a.	N/A
	Type (air, hyd., etc.)	—
	Manual/auto. controlled	—
Provision for brake dip control		Front Springs Mounted on Lower Control Arms
Provision for accl. squat control		Rear Suspension Control Arm Geometry
Provisions for car jacking		Notched Rocker Panel Positions, Front and Rear
Shock absorber (front & rear)	Type	(a) See Page 11B
	Make	Motorcraft
	Piston diameter	34.8 (1.37) Front; 25.4 (1.0) Rear
	Rod diameter	22 (0.90) Front; 12.5 (0.50) Rear

Suspension — Front

Type and description		Hybrid MacPherson Strut with Spring Mounted on Lower Control Arm
Travel	Full jounce	94.6 (3.72)
	Full rebound	103.5 (4.07)
Spring	Type (coil, leaf, other) & material	Coil, SAE-5160-H Steel (Variable Rate)
	Insulators (type & material)	Top-Steel Bonded in Rubber; Bottom Rubber
	Size (coil design height & i.d., bar length x dia.)	Check Height; 254 (10.00), ID: 89 (3.50) Bar Length; 3.8L, 3468 (136.53); 5.0L, 3475 (136.81) Bar Dia; 3.8L, 15.7 (0.59)-14.9 (0.58) 5.0L, 15.9 (0.62)-15.3 (0.60)
	Spring rate [N/mm (lb./in.)]	3.8L, 56.0 (320.0)-64.4 (367.7); 5.0L, 59.5 (339.7)-68.5 (391.1)
	Rate at wheel [N/mm (lb./in.)]	3.8L, 13.8 (78.8); 5.0L, 14.5 (82.8)
Stabilizer	Type (link, linkless, frameless)	Link, Teflon Lined Rubber Side Rail Insulator
	Material & bar diameter	SAE 1090 28.5 (1.12) & 33.0 (1.30)

Suspension — Rear

Type and description			Four Bar Link with Coil Spring on Lower Arm
Travel	Full jounce		112.3 (4.41)
	Full rebound		104.4 (4.12)
Spring	Type (coil, leaf, other) & material		Coil, SAE-5160-H (Variable Rate)
	Size (length x width, coil design height & i.d., bar length & dia.)		Check Height 241.3 (9.50), ID 102 (4.02) Length 3081 (121.29) Bar Diameter 14.2 (0.56)-12.2 (0.48)
	Spring rate [N/mm (lb./in.)]		33.1 (189.0)-38.1 (217.6)
	Rate at wheel [N/mm (lb./in.)]		17.9 (102.2)
	Insulators (type & material)		Rubber
	If leaf	No. of leaves	None
		Shackle (comp. or tens.)	None
Stabilizer	Type (link, linkless, frameless)		Linkless
	Material & bar diameter		(b) See Page 11B
Track bar (type)			None

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Passenger Car
METRIC (U.S. Customary)

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•)

Body Type And/Or Engine Displacement	TURBO COUPE

Suspension — General

Car leveling	Std./opt./n.a.	N/A
	Type (air, hyd., etc.)	—
	Manual/auto. controlled	—
Provision for brake dip control		Front Springs Mounted on Lower Control Arms
Provision for accl. squat control		Rear Suspension Control Arm Geometry
Provisions for car jacking		Notched Rocker Panel Positions, Front and Rear
Shock absorber (front & rear)	Type	(c) See Page 11B
	Make	Motorcraft
	Piston diameter	34.8 (1.37) Front; 25.4 (1.0) Rear
	Rod diameter	22 (0.90) Front; 12.5 (0.50) Rear

Suspension — Front

Type and description		Hybrid MacPherson Strut with Spring Mounted on Lower Control Arm
Travel	Full jounce	91.8 (3.61)
	Full rebound	110.7 (4.36)
Spring	Type (coil, leaf, other) & material	Coil, SAE-5160-H Steel (Variable Rate)
	Insulators (type & material)	Top-Steel Bonded in Rubber; Bottom Rubber
	Size (coil design height & i.d., bar length x dia.)	Check Height; 267 (10.51), ID: 89 (3.50) Bar Length; 3336 (131.33) Bar Diameter; 16.9 (0.66)-14.9 (0.59)
	Spring rate [N/mm (lb./in.)]	74.5 (425)
	Rate at wheel [N/mm (lb./in.)]	17.6 (100.5)
Stabilizer	Type (link, linkless, frameless)	Link, Teflon Lined Rubber Side Rail Insulator
	Material & bar diameter	SAE 1090 28.5 (1.12) & 33.0 (1.30)

Suspension — Rear

Type and description			Quadra-Shock
Travel	Full jounce		102.8 (4.05)
	Full rebound		112.5 (4.43)
Spring	Type (coil, leaf, other) & material		Coil, SAE-5160-H (Variable Rate)
	Size (length x width, coil design height & i.d., bar length & dia.)		Check Height 241.3 (9.50), ID 102 (4.02)
	Spring rate [N/mm (lb./in.)]		35.0 (200.0)-43.8 (250.1)
	Rate at wheel [N/mm (lb./in.)]		18.9 (107.5)
	Insulators (type & material)		Rubber
	If leaf	No. of leaves	None
		Shackle (comp. or tens.)	None
Stabilizer	Type (link, linkless, frameless)		Linkless
	Material & bar diameter		SAE-5160 Steel 20.0 (0.79)
Track bar (type)			None

Suspension (Cont'd):

(a) Direct, double acting nitrogen gas pressurized hydraulic front struts and rear shocks.

(b) 3.8L base none; 3.8L handling SAE-5160-20 (0.79); 5.0L base SAE 1090 (0.55); 5.0L handling SAE 5160-21 (0.82).

(c) Direct, double acting nitrogen gas pressurized hydraulic front struts and rear shocks with two additional freon cell hydraulic axle dampers mounted horizontally between the axle and body to control axle rotation and improve handling.

Automatic Ride Control (Computer Controlled Adjustable Damping Shock Absorbers) —

A mode select switch on the instrument panel will allow the driver to select between "automatic" and "sport" (firm damping rate). During automatic operation, the system control module monitors signals from speed, brake pressure and steering sensors and an acceleration signal from the EEC IV engine control module. The shock absorber damping will normally be soft, automatically switching to firm when the control module anticipates excessive vehicle roll, pitch, dive or speed. During sport operation, the shock absorber damping will always be firm.

The module changes damping rate by energizing 2 relays which control 4 feedback actuators, one on top of each shock absorber. The actuators rotate a valve inside the shock absorbers to change the damping rate, and provide a signal to the module indicating whether the shocks are in the firm or soft mode. This allows the module to detect malfunctions and notify the customer by flashing a warning light. The feedback signals also allow the module to flash an error code during diagnostics to isolate the location of the malfunction for the service technician.

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Body Type And/Or Engine Displacement

ALL MODELS EXCEPT TURBO COUPE

Brakes — Service				GVWR'S UNDER 4313 LBS	GVWR'S OVER 4312 LBS
Description				Four Wheel Hydraulic Actuated System	
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)			Disc, Vented, Standard; Kelsey Hayes, Teves	
	Rear (disc or drum)			Drum, Finned, Standard; Bendix	
Self-adjusting (std., opt., n.a.)				Standard	
Special valving	Type (proportion, delay, metering, other)			Pressure Differential and Proportioning (Rear)	
Power brake (std., opt., n.a.)				Standard	
Booster type (remote, integral, vac., hyd., etc.)				Integral Single Diaphragm Vacuum	
Vacuum source (inline, pump, etc.)				N/A	
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 [cm²(in.²)]*				F 212 (32.0) R 323 (50.0)	F 212 (32.0) R 372 (57.6)
Gross lining area [cm²(in.²)]**(F/R)				F 231 (35.8) R 332 (51.4)	F 231 (35.8) R 402 (62.3)
Swept area [cm²(in.²)]***(F/R)				F 1140 (176.6) R 638 (99)	F 1140 (176.6) R 709.7 (110)
Rotor	Outerworking diameter		F/R	255.5 (10.06)	
	Inner working diameter		F/R	158 (6.22)	
	Thickness		F/R	22.1 (0.87)	
	Material & type (vented/solid)		F/R	Cast Iron Vented	
Drum	Diameter & width		F/R	228.6 (9.0)	254.0 (10.0)
	Type and material		F/R	Cast Iron Composite	
Wheel cylinder bore				19.05 (.750)	
Master cylinder	Bore/stroke		F/R	21 (0.83): 30.2 (1.19)/40 (1.57) BIHAS (a)	
Pedal arc ratio				3.5:1	
Line pressure at 445 N(100 lb.) pedal load [kPa (psi)]					
Lining clearance			F/R	F 0.25 (0.010) R 0.38 (0.15)	
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)		Riveted	
		Rivet size		OB 4.6 x 7.5 (0.18 x 0.295)	IB 4.6 x 10.2 (0.28 x 0.4)
		Manufacturer		Bendix; Friction Division Products (Thiokol)	
		Lining code*****		Outboard BX-XO-EE, Inboard TP1353EE or BX-XO-EE (b)	
		Material		Outboard Semi-metallic, Inboard Organic or Semi-metallic (b)	
		****	Primary or out-board	Outboard 155 x 44 x 10.2 (6.1 x 1.75 x 0.4)	
		Size	Secondary or in-board	Inboard 119 x 44 x 11.2 (4.7 x 1.75 x 0.4)	
		Shoe thickness (no lining)		5.1 (0.20)	
	Rear wheel	Bonded or riveted (rivets/seg.)		Bonded	Riveted (pri. 8, sec 10)
		Manufacturer		Bendix P/ 3198, S/ 3199	Bendix P/ 4641A, S/ H3133
		Lining Code*****		P/ BX-RY-FE, S/ BX-PM-FE	P/ BX-RW-FE S/ BX-DV-GF
		Material		Molded Organic	
		****	Primary or out-board	155 x 44 x 4.7 (6.1 x 1.8 x 0.19)	216 x 44 x 5.1 (8.5 x 1.8 x 0.20)
		Size	Secondary or in-board	219 x 44 x 6.2 (8.6 x 1.8 x 0.25)	279 x 44 x 7.6 (11.0 x 1.8 x 0.30)
		Shoe thickness (no lining)		1.709 (0.673)	

*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.
(a) Brake Integrated Hydraulic Actuation System Master Cylinder.
(b) Semi-Metallic BX-XO-EE Inboard Used with GVWR Greater than 4470 lbs.

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Passenger Car
METRIC (U.S. Customary)

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•) _____

Body Type And/Or Engine Displacement

TURBO COUPE

Brakes — Service

Description				Four Wheel Disc Hydraulic Antilock Brake System	
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)			Disc, Uni-Cast Hub and Vented Disc, Standard	
	Rear (disc or drum)			Disc, Stamped Composite Vented Disc, Standard	
Self-adjusting (std., opt., n.a.)				Standard	
Special valving	Type (proportion, delay, metering, other)			Proportioning	
Power brake (std., opt., n.a.)				Standard	
Booster type (remote, integral, vac., hyd., etc.)				Hydraulic	
Vacuum source (inline, pump, etc.)				N/A	
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)				Four Wheel Antilock Brake System Standard	
Effective area [cm²(in.²)]*				Front: 241.0 (37.3)	Rear: 371.5 (57.6)
Gross lining area [cm²(in.²)]**(F/R)				Front: 257.7 (39.9)	Rear: 219.0 (33.9)
Swept area [cm²(in.²)]***(F/R)				Front: 1139 (176.5)	Rear: 1039 (161.0)
Rotor	Outerworking diameter		F/R	Front: 277 (10.9)	Rear: 258 (10.2)
	Inner working diameter		F/R	Front: 184.2 (7.25)	Rear: 175 (6.89)
	Thickness		F/R	Front: 26 (1.02)	Rear: 24 (0.94)
	Material & type (vented/solid)		F/R	Front: Cast Iron Vented	Rear: Cast Iron Vented
Drum	Diameter & width		F/R	N/A	
	Type and material		F/R	N/A	
Wheel cylinder bore				N/A	
Master cylinder	Bore/stroke		F/R	21 (0.83): 30.2 (1.19)/40 (1.58) BIHAS (a)	
Pedal arc ratio				3.5:1	
Line pressure at 445 N(100 lb.) pedal load [kPa (psi)]					
Lining clearance			F/R	0.25 (.010) Front	Rear: 0.41 (0.016)
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)		Riveted	
		Rivet size		6.33 (0.21)	
		Manufacturer		Friction Division Products	
		Lining code*****		TP-1471-EE	
		Material		Semi-Metallic	
		****	Primary or out-board	Outer 162.1 x 43.39 x 8.1 (6.38 x 1.71 x 0.32)	
		Size	Secondary or in-board	Inner 136.9 x 44.9 x 9.3 (5.39 x 1.77 x 0.37)	
		Shoe thickness (no lining)		5.1 (0.20)	
	Rear wheel	Bonded or riveted (rivets/seg.)		Riveted	
		Manufacturer		Nuturn	
		Lining Code*****		MG-64-FF	
		Material		Organic	
		****	Primary or out-board	99.35 (3.91)	
		Size	Secondary or in-board	99.35 (3.91)	
		Shoe thickness (no lining)		5.0 (0.196)	

*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.
(a) Brake Integrated Hydraulic Actuation System Master Cylinder

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Body Type And/Or Engine Displacement	ALL MODELS (EXCL. TURBO COUPE)	TURBO COUPE

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P215/70R14	P225/60VR16
	Type (bias, radial, etc.)		Steel Belted Radial	
	Inflation pressure (cold) for recommended max. vehicle load	Front [kPa (psi)]	207 (30)	
		Rear [kPa (psi)]	207 (30)	
	Rev./mile — at 70 km/h (45 mph)		804	
Wheels	Type & material		Stamped Steel Disc	Cast Aluminum — Pentagon
	Rim (size & flange type)		14 x 5.5JJ	16 x 7.0
	Wheel offset		28.4 (1.12)	31.8 (1.25)
	Attachment	Type (bolt or stud)	Stud	
		Circle diameter	107.9 (4.25)	
		Number & size	Four — 1/2 — 20	
Spare	Tire and wheel (same, if other describe)		T125/70D16 BSW 413.7 kPa 60 PSI with 16 x 4 Wheel (Steel) High Pressure Mini-Spare	
	Storage position & location (describe)		Left Hand Quarter Panel	

Tires And Wheels (Optional)

Size (load range, ply)	P215/70R14
Type (bias, radial, etc.)	Steel Belted Radial
Wheel (type & material)	Polycast
Rim (size, flange type and offset)	14 x 5.5, 28.4 (1.12) Offset
(•) Size (load range, ply)	P215/70HR14 (Available Sport Model Only)
Type (bias, radial, etc.)	Steel Belted Radial
Wheel (type & material)	Cast Aluminum
Rim (size, flange type and offset)	14 x 5.5, 28.4 (1.12) 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)	Cast Aluminum — 8 Hole
Rim (size, flange type and offset)	14 x 5.5, 28.4 (1.12) Offset
Spare tire and wheel (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position	Tire Matching Other Four Tires with 14 x 5.5 Steel Wheel (Conventional Spare) 16 x 4.0 (High Pressure) Steel Spare Wheel, Turbo Coupe Only

Brakes — Parking

Type of control		Foot Operated — Automatic Release (LX Model)
Location of control		LH Side Under Inst. Panel
Operates on		Rear Service Brakes
If separate from service brakes	Type (internal or external)	—
	Drum diameter	—
	Lining size (length x width x thickness)	—

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Body Type And/Or Engine Displacement

ALL MODELS

Steering

Manual (std., opt., n.a.)				N/A
Power (std., opt., n.a.)				Standard
Adjustable steering wheel/column (tilt, telescope, other)		Type		Steering Wheel Tilt — Five Positions
		Manufacturer		Adj. Steering Wheel — Various; Column-Ford Indianapolis
		(Std., opt., n.a.)		Optional
Wheel diameter** (W9) SAE J1100		Manual		N/A
		Power		368 (14.5)
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)		
		Curb to curb (l. & r.)		12.6 (41.2)
	Inside rear	Wall to wall (l. & r.)		
		Curb to curb (l. & r.)		
Scrub Radius*				2.85 (0.11)
Manual	Gear	Type		N/A
		Manufacturer		—
		Ratios	Gear	—
			Overall	—
	No. wheel turns (stop to stop)			—
Power	Type (coaxial, linkage, etc.)			Integral Rack and Pinion
	Manufacturer			Gear and Pump, Ford; Fluid ESP-M2C138-CJ
	Gear	Type		Rack and Pinion, Constant Ratio
		Ratios	(•)	6.44°/mm
			Overall	15.00:1 On Center, 13.00:1 At Stops
	Pump (drive)			Belt Off Crankshaft Pulley
	No. wheel turns (stop to stop)			2.34
Linkage	Type			Rack and Pinion (Rod and Ball Joint Directly Attached to Gear)
	Location (front or rear of wheels, other)			Front of Wheels
	Tie rods (one or two)			Two (Integral with Gear)
Steering axis	Inclination at camber (deg.)			15.7°
	Bearings (type)	Upper		Prelubricated Ball Joint Spring Loaded
		Lower		Prelubricated Ball Joint
		Thrust		Teflon Coated Fabric Wash in Lower Ball Joint
Steering spindle & joint type				Internal with Wheel Spindle Ball Socket Joints
Wheel spindle/hub	Diameter	Inner bearing		37.98 (1.50)
		Outer bearing		22.10 (0.87)
	Thread (size)			13/16-20 UNEF 2A R.H. Thread
	Bearing (type)			Tapered Roller

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

**See page 21.

(•) Rack Speed

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Body Type And/Or Engine Displacement

ALL MODELS EXCEPT TURBO COUPE

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	+ 1.22 ± .075° (a) (b)
		Camber (deg.)	− 0.65° ± 0.75° (a)
		Toe-in [outside track-mm (in.)]	4.8 ± 3.2 (0.19 ± 0.12) (c)
	Service reset*	Caster	+ 1.22° ± .075°
		Camber	− 0.65° ± 0.75°
		Toe-in	4.8 ± 3.2 (0.19 ± 0.12) (c)
	Periodic M.V. inspection	Caster	+ 1.22° ± .075°
		Camber	− 0.65° ± 0.75°
		Toe-in	4.8 ± 3.2 (0.19 ± 0.12) (c)
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	N/A
		Toe-in [outside track-mm (in.)]	N/A
	Service reset*	Camber	N/A
		Toe-in	N/A
	Periodic M.V. inspection	Camber	N/A
		Toe-in	N/A

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

Electrical — Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)	Electronic Digital Std.
	Trip odometer (std., opt., n.a.)	Standard
EGR maintenance indicator		N/A
Charge indicator	Type	45° Pointer Type Ammeter Std.
	Warning device (light, audible)	N/A
Temperature indicator	Type	45° Pointer Type Std.; Electronic Analog Optional
	Warning device (light, audible)	N/A
Oil pressure indicator	Type	45° Pointer Type Std.
	Warning device (light, audible)	N/A
Fuel indicator	Type	45° Pointer Type Gauge Std.; Electronic Analog Opt.
	Warning device (light, audible)	N/A
Windshield wiper	Type (standard)	Two Speed Electric Wipe (Column Mounted)
	Type (optional)	Interval Wipe (Column Mounted)
	Blade length	457.2 (18.0)
	Swept area [cm²(in.²)]	5314.3 (823.7)
Windshield washer	Type (standard)	Electric Pump (Impeller Type) Dual Fluidic Spray
	Type (optional)	None
	Fluid level indicator (light, audible)	Warning Light Optional
Rear window wiper, wiper/washer (std., opt., n.a.)		N/A
Horn	Type	Air Electric
	Number used	Two — 1 Lo-Pitch, 1 Hi-Pitch
Other SEE PAGE 15B		

(a) Maximum side-to-side difference between wheels (left minus right) to be within ± 0.75 with caster and camber set to specification
(b) Caster is factory-set and cannot be adjusted
(c) Steering wheel must be within ± 5° of straight ahead position after toe setting

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Body Type And/Or Engine Displacement

TURBO COUPE

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	+ 1.15 ± .075° (a) (b)
		Camber (deg.)	− 0.20° ± 0.75° (a)
		Toe-in [outside track-mm (in.)]	4.8 ± 3.2 (0.19 ± 0.12) (c)
	Service reset*	Caster	+ 1.15° ± .075°
		Camber	− 0.20° ± 0.75°
		Toe-in	4.8 ± 3.2 (0.19 ± 0.12) (c)
	Periodic M.V. inspection	Caster	+ 1.15° ± .075°
		Camber	− 0.20° ± 0.75°
		Toe-in	4.8 ± 3.2 (0.19 ± 0.12) (c)
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	N/A
		Toe-in [outside track-mm (in.)]	N/A
	Service reset*	Camber	N/A
		Toe-in	N/A
	Periodic M.V. inspection	Camber	N/A
		Toe-in	N/A

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

Electrical — Instruments and Equipment

Speed-odometer	Type (analog, digital, std., opt.)	Pointer Type Standard
	Trip odometer (std., opt., n.a.)	Standard
EGR maintenance indicator		N/A
Charge indicator	Type	45° Pointer Type Ammeter Standard
	Warning device (light, audible)	N/A
Temperature indicator	Type	45° Pointer Type Std.; Electronic Analog Optional
	Warning device (light, audible)	N/A
Oil pressure indicator	Type	45° Pointer Type Standard
	Warning device (light, audible)	N/A
Fuel indicator	Type	45° Pointer Type Gauge Std.; Electronic Analog Opt.
	Warning device (light, audible)	N/A
Wind-shield wiper	Type (standard)	Two Speed Electric Wipe (Column Mounted)
	Type (optional)	Interval Wipe (Column Mounted)
	Blade length	457.2 (18.0)
	Swept area [cm²(in.²)]	5314.3 (823.7)
Wind-shield washer	Type (standard)	Electric Pump (Impeller Type) Dual Fluidic Spray
	Type (optional)	None
	Fluid level indicator (light, audible)	Warning Light Optional
Rear window wiper, wiper/washer (std., opt., n.a.)		N/A
Horn	Type	Air Electric
	Number used	Two — 1 Lo-Pitch, 1 Hi-Pitch
Other SEE PAGE 15B		

(a) Maximum side-to-side difference between wheels (left minus right) to be within ± 0.75 with caster and camber set to specification
(b) Caster is factory-set and cannot be adjusted
(c) Steering wheel must be within ± 5° of straight ahead position after toe setting

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SUPPLEMENTAL PAGE

Car Line THUNDERBIRD

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Electrical — Instruments and Equipment: (Cont'd)

- Brake System Warning Light
- Emergency Flashers
- Directional Turn Signal Lights
- Hi-Beam Indicator Light
- Fasten Seat Belts Warning Light
- Low Oil Level Indicator Light
- Automatic Lamp System
- Illuminated Entry System
- Cornering Lamps
- Lamp Outage Module
- Turbo Boost Gauge w/2.3L TC Engine
- Overboost Light w/2.3L TC Engine

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Engine Description/Carb. Engine Code	3.8L	5.0L

Electrical — Supply System

Battery	Manufacturer		Motorcraft	
	Model, std., (opt.)		Standard	
	Voltage		12 Volt	
	Amps at 0°F cold crank		380	540
	Minutes-reserve capacity		75	100
	Amp/hrs. - 20 hr. rate		45	58
	Location		Right Front Engine Compartment	Left Front Engine Compartment
Alternator	Manufacturer			
	Rating	10300	E7SF-DA (65 Amp.)	E7SF-CA (65 Amp.)
	Ratio (alt. crank/rev.)		3.36:1	3.35:1
	Optional (type & rating)		N/A	
Regulator	Type	10316	Electronic-Integral w/Alternator	

Electrical — Starting System

Start. motor	Current drain at 0°F		270-300 Amps.	290-315 Amps.
Motor drive	Engagement type	11001	Positive (E4DF-BA)	Positive (E4AF-AA)
	Pinion engages from (front, rear)		Front	

Electrical — Ignition System

Type	Electronic (std., opt., n.a.)		Standard	
	Other (specify)		N/A	
Coil	Make		Motorcraft	
	Model	12029	E3EF-AA	E-Core
	Current — Engine stopped — A		6.5	
	Current — Engine idling — A		3.2	2.5
Spark plug	Make		Motorcraft	
	Model		AWSF-54C	AWSF-44
	Thread (mm)		14	
	Tightening torque [N-m (lb. ft)]		7-15 (5-11)	14-20 (10-15)
	Gap		1.3-1.4 (0.05-0.06)	1.3 (0.05)
	Number per cylinder		One	
Distributor	Make		Motorcraft	
	Model		Universal	

Electrical — Suppression

Locations & type	Capacitor in Alternator, Resistor Spark Plugs, Resistance Ignition Wire, Ground Cable — Engine to Dash, Ground Strap on EEC Equipped Vehicles. Hood Bond

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Car Line THUNDERBIRD
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Engine Description/Carb. Engine Code	2.3L

Electrical — Supply System

Battery	Manufacturer		Motorcraft
	Model, std., (opt.)		Standard
	Voltage		12 Volt
	Amps at 0°F cold crank		540 M/T, 650 A/T
	Minutes-reserve capacity		100 M/T, 130 A/T
	Amp/hrs. - 20 hr. rate		58 M/T, 72 A/T
	Location		Left Front Engine Compartment
Alternator	Manufacturer		Ford (EED Rawsonville)
	Rating	10300	E7SF-BA (75 Amp.)
	Ratio (alt. crank/rev.)		2.68:1
	Optional (type & rating)		N/A
Regulator	Type	10316	Electronic-Integral w/Alternator

Electrical — Starting System

Start. motor	Current drain at 0°F		260-285 Amps
Motor drive	Engagement type	11001	Positive (E4SF-AA)
	Pinion engages from (front, rear)		Front

Electrical — Ignition System

Type	Electronic (std., opt., n.a.)		Standard
	Other (specify)		N/A
Coil	Make		Motorcraft
	Model	12029	E3EF-AA
	Current — Engine stopped — A		6.5
	Current — Engine idling — A		3.2
Spark plug	Make		Motorcraft
	Model		AWSF-32C
	Thread (mm)		14
	Tightening torque [N-m (lb. ft)]		7-14 (5-10)
	Gap		0.86 (0.034)
	Number per cylinder		One
Distributor	Make		Motorcraft
	Model		TFI (Thick Film Ignition)

Electrical — Suppression

Locations & type	Capacitor in Alternator, Resistor Spark Plugs, Resistance Ignition Wire, Ground Cable — Engine to Dash, Ground Strap on EEC Equipped Vehicles. Hood Bond

M/T — Manual Transmission
A/T — Automatic Transmission

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

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•) _____

Body Type	ALL MODELS

Body

Structure	Unitized Body Construction and Energy-Absorbing Front and Rear Structures with Anchors for Engine, Suspension, Steering and Driveline Components
Bumper system front-rear	Rim Urethane Fascia Over Glass Filled Polypropylene Reinforcing Beam. PGM Energy Absorbers (Five (5) Mile Per Hour Bumper Front/Rear — Ford Requirements)
Anti-corrosion treatment	Selected critical body parts are protected by the use of galvanized steel or through application of zinc-rich primer. During body assembly, vinyl sealers and aluminized wax are used, each for selected body parts.

Body — Miscellaneous Information

Type of finish (lacquer, enamel, other)			Acrylic Enamel for Non-Metallic Colors (a)
Hood	Hinge location (front, rear)		Rear
	Type (counterbalance, prop)		Counterbalance — Integral Spring
	Release control (internal, external)		Primary-Internal Remote Cable; Secondary-External
Trunk lid	Type (counterbalance, other)		Counterbalance
	Internal release control (elec., mech., n.a.)		Electric, Optional
Hatch-back lid	Type (counterbalance, other)		N/A
	Internal release control (elec., mech., n.a.)		N/A
Station Wagon			N/A
			N/A
Vent window control (crank, friction, pivot, power	Front		N/A
	Rear		N/A
Seat cushion type (e.g., 60/40, bucket, bench, wire, foam etc.)	Front	(b)	Deep Polyurethane Foam on Flat Wire Grid Susp. by Coil Sprgs.
	Rear		Integral Frame & Polyurethane Foam Pad
	3rd seat		N/A
Seat back type (e.g., 60/40, bucket, bench, wire, foam etc.)	Front	(b)	Full Polyurethane Foam Pad & Steel Stamped Frame
	Rear		Integral Steel Frame & Polyurethane Foam Pad
	3rd seat		N/A

(a) Acrylic Base Coat/Acrylic Clear Coat for Metallic Colors
(b) 60/40 Standard, 40/40 with Floor Console

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

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•) _____

Body Type	ALL MODELS

Restraint System

Active restraint system	Standard/optional	Deluxe Color-Keyed Seat Belts are Provided at Five (5) Seating Positions, Standard
	Type and description	(a)
	Location	2 Seat Belts — Front 3 — Rear
Passive seat belts	Standard/optional	N/A
	Power/manual	N/A
	2 or 3 point	N/A
	Knee bar/lap belt	N/A

Frame

Type and description (separate frame, unitized frame, partially-unitized frame)	Unitized Construction (Bolt on #2 Crossmember)

Glass	SAE Ref. No.	
Windshield glass exposed surface area [cm^2($in.^2$)]	S1	7398 (1147)
Side glass exposed surface area [cm^2($in.^2$)]-total 2-sides	S2	8290 (1285)
Backlight glass exposed surface area [cm^2($in.^2$)]	S3	8577 (1329)
Total glass exposed surface area [cm^2($in.^2$)]	S4	24265 (3761)
Windshield glass (type)		Laminated — Safety
Side glass (type)		Tempered
Backlight glass (type)		Tempered

(a) Front outboard restraints feature a 3-point continuous loop design with a tension reliever, finished edge webbing and buckle assemblies that move fore and aft with seat travel. Rear outboard restraints consist of a lap belt with a retractor. A lap belt is provided at the center rear position.

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

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•) 8/86

Body Type	ALL MODELS

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

(•)	Air conditioning (manual, auto. temp control)		Standard, Manual or Optional Automatic Temperature Control
(•)	Clock (digital, analog)		Std. Electric Analog; Opt. Electronic Digital; Std. on Turbo Coupe
	Compass/thermometer		N/A
	Console (floor, overhead)		Optional, Floor (Standard on Turbo Coupe)
	Defroster, elec. backlight		Optional, (Mandatory in New York State)
(•)	Electronic	Diagnostic monitor (integrated, individual)	Optional, Integrated
		Instrument cluster (list instruments)	Std: LCD Speedo., Trip Odometer, Fuel & Temp. Gauges
		Keyless entry	Optional
		Tripminder (avg. spd., fuel)	N/A
		Voice alert (list items)	N/A
		Other	Optional, Interval Windshield Wipers
	Fuel door lock (remote, key, electric)		Optional, Electric
	Lamps	Auto head on/off delay, dimming	Optional
		Cornering	Optional
		Courtesy (map, reading)	Optional
		Door lock, ignition	Optional, Illuminated Door Locks
		Engine compartment	Optional
		Fog	Standard, Available Turbo Coupe Only
		Glove compartment	Standard
		Trunk	Standard
		Other	
	Mirrors	Day/night (auto. man.)	Standard Day/Night Manual
		L.H. (remote, power, heated)	Std., Manual Remote; Optional, Power Remote Control
		R.H. (convex, remote, power, heated)	Optional, Power Remote Control, Convex
		Visor vanity (RH/LH, illuminated)	Optional, L.H. and R.H. Illuminated
	Parking brake-auto release (warning light)		Optional Base, N/A Turbo Coupe
(•)	Power equipment	Door locks/deck lid - specify	Optional, Electric Door Locks and Decklid Release
		Seat (2-4-6 way) heated (driver, pass, other) lumbar, hip, thigh support (power, manual) reclining (driver, pass) memory (1-2 preset, recline)	Optional, 6-Way Bucket Seat, 6W/6W Power Seat, Power Lumbar and Power Recliners — Driver & Passenger
		Side windows	Opt. Base, Standard on Turbo Coupe
		Vent windows	N/A
		Rear window	N/A
	Radio systems	Antenna (location, whip, w/shield, power)	Optional, Power Antenna
		AM, FM, stero, tape, CB	(a) SEE PAGE 19A
		Speaker (number, location) Premium sound	Opt. Door Speakers & Upgraded Frt. & Rear Speakers
	Roof open air/fixed (flip-up, sliding, "T")		Optional, Power Sliding
	Speed control device		Optional
	Speed warning device (light, buzzer, etc.)		N/A
	Tachometer (rpm)		N/A
	Telephone system - mobile		
(•)	Theft protection-type		N/A

MVMA Specifications Form
Passenger Car

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SUPPLEMENTAL PAGE

Car Line THUNDERBIRD

Model Year 1987 Issued 4/86 Revised (●) _____

Convenience Equipment (standard, optional, n.a.) (Cont'd):

(a) Standard: Electronic AM/FM Stereo Search
Optional: Electronic AM/FM Stereo Search w/Cassette, Electronic AM/FM Stereo Search w/Cassette Graphic Equalizer

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)
Car and Body Dimensions See Key Sheets for definitions

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 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.	2-DOOR SEDAN
Width		
Tread (front)	W101	1477 (58.1)
Tread (rear)	W102	1487 (58.5)
Vehicle width	W103	1807 (71.1)
Body width at Sg RP (front)	W117	1782 (70.2)
Vehicle width (front doors open)	W120	4038 (159.0)
Vehicle width (rear doors open)	W121	—
Front fender overall width	W106	1726 (68.0)
Rear fender overall width	W107	1807 (71.1)
Tumble-home (deg.)	W122	24.8°
Length		
Wheelbase	L101	2646 (104.2)
Vehicle length	L103	5134 (202.1)
Overhang (front)	L104	1186 (46.7)
Overhang (rear)	L105	1302 (51.3)
Upper structure length	L123	2630 (103.6)
Rear wheel C/L "X" coordinate	L127	4284 (89.9)
Cowl point "X" coordinate	L125	2192 (7.6)
Front end length at centerline	L126	1620 (63.8)
Rear end length at centerline	L129	596 (23.5)
Height*		
Passenger distribution (front/rear)	PD1,2,3	2/2
Trunk/cargo load		0
Vehicle height	H101	1357 (53.4)
Cowl point to ground	H114	987 (38.9)
Deck point to ground	H138	978 (38.5)
Rocker panel-front to ground	H112	203 (8.0)
Bottom of door closed-front to grd.	H133	264 (10.4)
Rocker panel-rear to ground	H111	191 (7.5)
Bottom of door closed-rear to grd.	H135	—
Windshield slope angle	H122	59.8°
Backlight slope angle	H121	64.2°
Ground Clearance*		
Front bumper to ground	H102	375.7 (14.8)
Rear bumper to ground	H104	347.2 (13.7)
Bumper to ground [front at curb mass (wt.)]	H103	391.7 (15.4)
Bumper to ground [rear at curb mass (wt.)]	H105	397.2 (15.6)
Angle of approach (degrees)	H106	18.9°
Angle of departure (degrees)	H107	14.7°
Ramp breakover angle (degrees)	H147	11.8°
Axle differential to grd. (front/rear)	H153	144 (5.7)
Min. running ground clearance	H156	126 (5.0)
Location of min. run. grd. clearance		Converter Grass Shield

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

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)
Car and Body Dimensions See Key Sheets for definitions

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (●)

Body Type	SAE Ref. No.	
		2-DOOR SEDAN

Front Compartment

SgRP front, "X" coordinate	L31	3040 (119.7)
Effective head room	H61	958 (37.7)
Max. eff. leg room (accelerator)	L34	1066 (42.0)
SgRP to heel point	H30	221 (8.7)
SgRP to heel point	L53	868 (34.2)
Back angle	L40	25.0°
Hip angle	L42	94.6°
Knee angle	L44	125.1°
Foot angle	L46	87.0°
Design H-point front travel	L17	179 (7.0)
Normal driving & riding seat track trvl.	L23	157 (6.2)
Shoulder room	W3	1429 (56.3)
Hip room	W5	1417 (55.8)
Upper body opening to ground	H50	1231 (48.5)
Steering wheel maximum diameter*	W9	368 (14.5)
Steering wheel angle	H18	22.9°
Accel. heel pt. to steer. whl. center	L11	516 (20.3)
Accel. heel pt. to steer. whl. center	H17	600 (23.6)
Steering wheel to C/L of thigh	H13	91 (3.6)
Steering wheel torso clearance	L7	351 (13.8)
Headlining to roof panel (front)	H37	11 (0.4)
Undepressed floor covering thickness	H67	33 (1.3)

Rear Compartment

SgRP point couple distance	L50	788 (31.0)
Effective head room	H63	938 (36.9)
Min. effective leg room	L51	872 (34.3)
SgRP (second to heel)	H31	265 (10.4)
Knee clearance	L48	31 (1.2)
Compartment room	L3	688 (27.1)
Shoulder room	W4	1401 (55.2)
Hip room	W6	1257 (49.5)
Upper body opening to ground	H51	N/A
Back angle	L41	24.0°
Hip angle	L43	80.2°
Knee angle	L45	85.0°
Foot angle	L47	118.5°
Headlining to roof panel (second)	L38	15 (0.6)
Depressed floor covering thickness	H73	20 (0.8)

Luggage Compartment

Usable luggage capacity [L (cu.ft.)]	V1	413.5 (14.6)
Liftover height	H195	811 (31.9)

Interior Volumes (EPA Classification)

Veh. class (subcompact, compact, etc.)		Compact
Interior volume index (cu.ft.)		106.3
Trunk/cargo index (cu.ft.)		14.6

*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 See Key Sheets for definitions

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•) 8/86

Body Type	SAE Ref. No.	

Station Wagon—Third Seat (NOT APPLICABLE)

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	
Seat facing direction	SD1	
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	
Max. 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 [$m^3(ft.^3)$]	V4	
Cargo volume index-rear of 2-seat	V10	

Hatchback—Cargo Space (NOT APPLICABLE)

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* 2-DOOR SEDAN

Wheel lip to ground, front	690.6 (27.2)
Wheel lip to ground, rear	684.8 (27.0)
Frontal area [$m^2(ft.^2)$]	22.2 $ft.^2$ (a)
(•) Drag coefficient (Cd)	0.34 Base; 0.36 Turbo Coupe

*EPA Loaded Vehicle Weight, Loading Conditions

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

(a) Includes Two (2) Outside Mirrors

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

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (●)

Body Type

ALL MODELS

Vehicle Fiducial Marks

Fiducial Mark Number*	Define Coordinate Location
1 & 2 Front	The rear vertical edge of the master control notch on the underside of the front door rocker panels located the "X" coordinate relative to body grid. X = 2495 Y = N/A Z = N/A
3 & 4 Rear 5 & 6	The intersection of the horizontal-vertical surfaces on the rocker panel door rabbet locates the "Y" and "Z" coordinates relative to body grid at particular fore-aft inch lines. The fore-aft location can be determined by the reference dimension from — Fiducial Mark 1 and 2.

Fiducial Mark Number			
Front	W21*	787	(30.9)
	L54*	2434	(98.2)
	H81*	456	(17.9)
	H161*	—	
	H163*	—	
Rear	W22*	796	(31.3)
	L55*	3300	(129.3)
	H82*	448	(17.6)
	H162*	—	
	H164*	—	

*Reference—SAE Recommended Practice, J182, Motor Vehicle Fiducial Marks.
All linear dimensions are in millimeters (inches).

MVMA Specifications Form
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Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (●) ____

Body Type	ALL MODELS

Lamps and Headlamp Shape*

Height above ground to center of bulb or marker	Headlamp (SAE - H127)	Highest**	690.0 (27.2)
		Lowest	—
	Taillamp (SAE - H128)	Highest**	760.6 (29.9)
		Lowest	695.9 (27.4)
	Sidemarker	Front	690.0 (27.2)
		Rear	746.8 (29.4)
Distance from C/L of car to center of bulb	Headlamp	Inside	435.5 (17.1)
		Outside**	621.0 (24.4)
	Taillamp	Inside	—
		Outside**	515.0 (20.3)
	Directional	Front	659.3 (26.0)
		Rear	582.0 (22.9)

Halogen headlamp (std., opt., n.a.)	Lo beam	Standard
	Hi beam	Standard
	Replaceable bulb	Type 9004
	Shape	Rectangular, Aerodynamic (Flush Mounted), Standard
Headlamp other than above	Lo beam	N/A
	Hi beam	N/A
	Replaceable	N/A
	Shape	N/A
	Type	N/A

*Measured at curb mass (weight).
**If single lamps are used enter here.
All linear dimensions are in millimeters (inches) unless otherwise noted.

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Model	Vehicle Mass (weight)							
	CURB MASS, kg. (weight, lb.)*			% PASS. MASS DISTRIBUTION				SHIPPING MASS, kg. (weight, lb.)**
				Pass. In Front		Pass. In Rear		
	Front	Rear	Total	Front	Rear	Front	Rear	
3.8L V-6 Engine w/Automatic								
Overdrive Transmission								
(AOD)								
2-Door 63D	779	642	1421	47	53	18	82	1345
	(1717)	(1416)	(3133)					(2966)
2-Door LX 63D	789	652	1441	47	53	18	82	1365
	(1739)	(1437)	(3176)					(3009)
2.3L EFI Turbo w/								
5-Speed Manual								
Transmission (M5OD)								
2-Door Turbo Coupe 63D	825	709	1534	47	53	18	82	1469
	(1818)	(1562)	(3380)					(3239)

*Reference — SAE J1100 Motor vehicle dimensions, curb weight definition.
**Shipping mass (weight) definition — Less Fuel and Engine Coolant.

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Passenger Car

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Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (●) 7/86

Optional Equipment Differential Mass (weight)*

Equipment	MASS, kg. (weight, lb.)			Remarks
	Front	Rear	Total	
Powertrains:				
2.3L Turbo w/Auto.	4.5	18.1	22.6	
Trans. (A4LD)	(10)	(40)	(50)	
(●)				
5.0L w/Auto. Overdrive	63.5	−0.5	63.0	
Trans. (AOD)	(140)	(−1)	(139)	
Axles:				
2.3L M5OD, 3.55 Locker	0	6.8	6.8	
	(0)	(15)	(15)	
2.3L A4LD, 3.73 Locker	0	6.8	6.8	
	(0)	(15)	(15)	
5.0L AOD, 2.73 Locker	0	8.2	8.2	
	(0)	(18)	(18)	
Tires:				
Spare Tire — Conventional	−0.5	5.9	5.4	
P215/70R14	(−1)	(13)	(12)	
Miscellaneous Options:				
Audio Equipment:				
Radio — Delete	−2.3	−1.8	−4.1	
	(−5)	(−4)	(−9)	
Radio — AM/FM/MPX — Cassette	0.5	0	0.5	
	(1)	(0)	(1)	
Premium Sound System	1.4	3.6	5.0	
	(3)	(8)	(11)	
Radio Antenna — Power	1.4	0.5	1.9	
	(3)	(1)	(4)	
Graphic Equalizer	1.0	0	1.0	
	(2)	(0)	(2)	
Battery 72 AMP Range	3.6	0	3.6	
	(8)	(0)	(8)	

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

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (●) _____

Optional Equipment Differential Mass (weight)*				
Equipment	MASS, kg. (weight, lb.)			Remarks
	Front	Rear	Total	
Misc. Options (cont'd)				
Air Conditioning:				
Auto Temp Control				
3.8L	22.2	0	22.2	
	(49)	(0)	(49)	
5.0L	22.7	0	22.7	
	(50)	(0)	(50)	
Manual Temp Control				
2.3L	18.6	0	18.6	
	(41)	(0)	(41)	
3.8L	20.0	0	20.0	
	(44)	(0)	(44)	
5.0L	20.4	0	20.4	
	(45)	(0)	(45)	
Anti-Theft System	0.5	0	0.5	
	(1)	(0)	(1)	
License Plate Bracket —	0.5	0	0.5	
Front	(1)	(0)	(1)	
Vanity Mirror — Visor —	0.9	0	0.9	
Illuminated — LH & RH	(2)	(0)	(2)	
Parking Brake Release —	0.5	0	0.5	
Automatic	(1)	(0)	(1)	
Exterior Molding — Rocker	0.5	0.5	1.0	
Panel	(1)	(1)	(2)	
Floor Mats — Front & Rear	1.3	2.3	3.6	
	(3)	(5)	(8)	
Keyless Entry System	1.3	0.5	1.8	
	(3)	(1)	(4)	
Diagnostic/Warning Light	1.3	0.9	2.2	
	(3)	(2)	(5)	
Vent Window — Manual	1.3	0.5	1.8	
	(3)	(1)	(4)	

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

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line THUNDERBIRD

Model Year 1987 Issued 4/86 Revised (•) _____

Optional Equipment Differential Mass (weight)*

Equipment	MASS, kg. (weight, lb.)			Remarks
	Front	Rear	Total	
Misc. Options (cont'd)				
Seats:				
Spl. Funct. — 6W Dual Adj.	11.8	7.7	19.5	
Passenger/Driver	(26)	(17)	(43)	
Special Functional —	4.5	1.8	6.3	
Adj D/P (Manual)	(10)	(4)	(14)	
Individual — Manual	−1.3	−1.0	−2.3	
Recl. Pass/Driver	(−3)	(−2)	(−5)	
Individual — 6W Dual Recl.	2.3	1.8	4.1	
Passenger/Driver	(5)	(4)	(9)	
Sunroof — Glass Power	4.1	15.4	19.5	
	(9)	(34)	(43)	
Suspension — Heavy-Duty				
5.0L	2.7	5.0	7.7	
	(6)	(11)	(17)	
3.8L	2.7	4.5	7.2	
	(6)	(10)	(16)	
Wheel Covers:				
Wire — Locking	1.8	1.8	3.6	
	(4)	(4)	(8)	
Illuminated Entry System	1.3	0.5	1.8	
	(3)	(1)	(4)	
Steering Column — Tilt	0.9	0	0.9	
	(2)	(0)	(2)	
Steering Wheel — Leather	0.5	0	0.5	
Wrapped	(1)	(0)	(1)	
Speed Control	2.2	0.5	2.7	
	(5)	(1)	(6)	
Tripminder	0.5	0	0.5	
	(1)	(0)	(1)	
Instrumentation Group —	0.9	0	0.9	
Electronic	(2)	(0)	(2)	

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

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

Car Line THUNDERBIRD
Model Year 1987 Issued 4/86 Revised (•) _____

Optional Equipment Differential Mass (weight)*				
Equipment	MASS, kg. (weight, lb.)			Remarks
	Front	Rear	Total	
Misc. Options: (cont'd)				
Visibility/Light Group	0.5	0	0.5	
	(1)	(0)	(1)	
Mirror — Left Hand — Power	0.5	0	0.5	
	(1)	(0)	(1)	
Mirror — Right Hand — Power	0.9	0	0.9	
	(2)	(0)	(2)	
Power Equipment Group	1.8	1.4	3.2	
	(4)	(3)	(7)	
Headlight Turn Off/Delay —	0.5	0	0.5	
Automatic	(1)	(0)	(1)	
Side Lights — Cornering	1.0	0	1.0	
	(2)	(0)	(2)	
Defroster — Rear Window —	0.5	0	0.5	
Electric	(1)	(0)	(1)	
Side Windows — Power	2.2	1.8	4.0	
	(5)	(4)	(9)	

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