

AMA Specifications – Passenger Car

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MANUFACTURER Ford Motor Company		CAR NAME Thunderbird	
MAILING ADDRESS 20,000 Rotunda Drive, Dearborn, Mich.		MODEL YEAR 1961	ISSUED: 11-10-60 REVISED (•)

NOTES:

1. The Specifications herein are those in effect at date of compilation and are subject to change without notice by the manufacturer.
2. UNLESS OTHERWISE INDICATED:
 - a. Specifications apply to the standard model without optional equipment. Significant deviations are noted.
 - b. Specifications apply basically to 4-door sedan or equivalent.
 - c. Nominal design dimensions are used throughout these specifications.

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BODY—TYPES AND STYLE NAMES—

Body type, number of passenger & style names; use manufacturer's code for series & body style.

2-Door Hardtop

63A

2-Door Convertible

76A

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GENERAL SPECIFICATIONS

(All dimensions in inches unless otherwise indicated)

MODEL		Additional Information Page No.:	63A	76A
Wheelbase (L-101)		23	113.0	
Tread	Front (W-101)	24	61.0	
	Rear (W-102)	24	60.0	
Maximum Overall Dimensions	Length (L-103)	23	205.0	
	Width (W-103)	24	75.9	
	Height (H-101)	22	52.5	53.3
Transmission— (Specify trade name - opt., not available)	Manual	13	Not Offered	
	Overdrive	14	Not Offered	
	Automatic	14	Dual Range	
Axle ratio	Manual	15	- - - -	
	Overdrive	15	- - - -	
	Automatic	15	3.00:1	
Tire size		16	8.00 x 14-4 PR	
Engine	Type, no. cyl., valve arr.	2	90° V8 OHV	
	Fuel system (Carb., other)	6	Carburetor	
	Bore and stroke	2	4.05 x 3.78	
	Piston displ., cu.in.	2	390	
	Std. compression ratio	2	9.6	
	Max. bhp at engine rpm	2	300 @ 4600	
	Max. torque at rpm	2	427 @ 2800	

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MAKE OF CAR Thunderbird MODEL YEAR 1961 DATE ISSUED 11-10-60 REVISED (a)
 MODEL All

ENGINE—GENERAL

Type, no. cyls., valve arr.	90° V8 OHV
Bore and stroke (nominal)	4.05 x 3.78
Piston displacement, c.u. in.	390
Bore spacing (C/L to C/L)	4.63
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
Compras. ratio (nominal)	9.6:1
Cylinder Head Material	Cast Iron
Cylinder Sleeve-Wet, dry, none	None
Number of mounting points	Front Two - attached to #2 crossmember Rear One - attached to #3 crossmember
Engine installation angle	1° 20'
Taxable horsepower $\frac{\text{Dia.}^2 \times \text{No. Cyl.}}{2.5}$	52.49
Published max. bhp* @ eng. RPM	300 @ 4600
Published max. torque* (lb. ft. @ RPM)	427 @ 2800
Recommended fuel regular - premium	Premium
Idle speed (spec. neutral or drive)	Manual 475 - 500 RPM (Dr.) Automatic

ENGINE—PISTONS

Material	Aluminum
Description and finish	Autothermic type, closed slipper skirt, tin plated
Weight (piston only) oz.	24.41 - 24.62

* Max. bhp (brake horsepower) and max. torque corrected as defined by SAE Engine Test Code.

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MODEL All

ENGINE PISTONS (Cont.)

Clearance (limits)	Top land		.0180 - .0212
	Skirt	Top	.0020 - .0041
		Bottom	.0015 - .0021
Ring groove depth	No. 1 ring		.1890 - .1960
	No. 2 ring		.1890 - .1960
	No. 3 ring		.1855 - .1925
	No. 4 ring		

ENGINE—RINGS

Function (top to bottom)	No. 1, oil or comp.		Compression
	No. 2, oil or comp.		Compression
	No. 3, oil or comp.		Oil Ring
	No. 4, oil or comp.		
Compression	Description - material, type, coating, etc.		#1 -Plain face, cast iron alloy, chrome plated #2 -Plain, scraper groove, cast iron alloy phosphated coated.
	Width		#1, .0774 - .0781; #2 .093 - .094
	Gap		.015 - .025
Oil	Description - material, type, coating, etc.		Three piece, sectional blued expander - SAE-1070 Steel rail - chrome plated.
	Width		3/16 nominal - snug in groove
	Gap		.015 - .055
Expanders		Integral with oil ring	

ENGINE—PISTON PINS

Material			Alloy steel, heat treated, SAE-5015 steel	
Length			3.150 - 3.170	
Diameter			.9750 -.9753	
Type	Locked in rod, in piston, floating, etc.		Full Floating Tubular	
	Bushing	In rod or piston		In Rod
		Material		Bronze
Clearance	In piston		.0001 - .0003 (Select Fit)	
	In rod		.0001 - .0003 (Select Fit)	
Direction & amount offset in piston			To Right .0575 - .0675	

ENGINE—CONNECTING RODS

Material		Forged steel, with separately forged caps
Weight (oz.)		25.25 - 25.68
Length (center to center)		6.486 - 6.490
Bearing	Material & Type	Steel backed, copper-lead alloy replaceable inserts
	Overall length	.735 - .746
	Clearance (limits)	.0010 - .0028
	End play	.006 - .016 (Two Rods)

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MODEL _____ All _____

ENGINE—CRANKSHAFT

Material		Precision molded, alloy cast iron
Vibration damper type		Rubber floated
End thrust taken by bearing (No.)		#3
Crankshaft end play		.004 - .008
Main bearing	Material & type	Steel-backed copper-lead alloy Replaceable inserts
	Clearance	.0010 - .0031
	Journal dia. and bearing overall length	No. 1 2.7488 x .907
		No. 2 2.7488 x .907
		No. 3 2.7488 x 1.119
		No. 4 2.7488 x .907
		No. 5 2.7488 x .907
		No. 6 2.7488 x .907
	Dir. & amt. cyl. offset	None
Crankpin journal diameter		2.4380 - 2.4388

ENGINE—CAMSHAFT

Location		In Block	
Material		Precision molded, special alloy iron	
Bearings	Material	Steel-backed, babbitt replaceable inserts	
	Number	Five	
Type of Drive	Gear or chain		Chain
	Crankshaft gear or sprocket material		Sintered iron or steel
	Camshaft gear or sprocket material		Cast Iron
	Timing chain	No.of links	48
		Width	.86
		Pitch	.50

ENGINE—VALVE SYSTEM

Hydraulic lifters (Std, opt, NA)		Hydraulic lifters (std.)
Valve rotator, type (intake, exhaust)		Ford free-turn intake and exhaust
Rocker ratio		1.76:1
Operating tappet clearance (indicate hot or cold)	Intake	Zero
	Exhaust	Zero
Timing marks on flywheel, damper, other		Pointer on front cover

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MODEL _____ ALL _____

ENGINE—VALVE SYSTEM (cont.)

Timing	Intake	Opens (°BTC)	26°
		Closes (°ABC)	64°
		Duration - deg.	270
	Exhaust	Opens (°BBC)	67
		Closes (°ATC)	23
		Duration - deg.	270
Valve opening overlap		49	
Intake	Material		Special alloy valve steel (aluminum coated)
	Overall length		5.446
	Actual overall head dia.		2.022 - 2.037
	Angle of seat & face		45°
	Seat insert material		None
	Stem diameter		.3711 - .3718
	Stem to guide clearance		.0010 - .0024
	Lift		.408
	Outer spring press. and length	Valve closed (lb. @ in.)	74 - 85 @ 1.82
		Valve open (lb. @ in.)	190 - 208 @ 1.42
	Inner spring press. and length	Valve closed (lb. @ in.)	Damper Only
		Valve open (lb. @ in.)	
Exhaust	Material		Cast Austenitic Steel
	Overall length		5.426
	Actual overall head dia.		1.551 - 1.566
	Angle of seat & face		45°
	Seat insert material		None
	Stem diameter		.3693 - .3700
	Stem to guide clearance		.0028 - .0042
	Lift		.408
	Outer spring press. and length	Valve closed (lb. @ in.)	74 - 84 @ 1.82
		Valve open (lb. @ in.)	190 - 208 @ 1.42
	Inner spring press. and length	Valve closed (lb. @ in.)	Damper Only
		Valve open (lb. @ in.)	

ENGINE—LUBRICATION SYSTEM

Type of lubrication (splash, pressure, nozzle)	Main bearings	Pressure
	Connecting rods	Pressure
	Piston pins	Oil Mist
	Camshaft bearings	Pressure
	Tappets	Pressure
	Timing gear or chain	Splash
	Cylinder walls	Indexed Pressure Stream

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MODEL _____ All

ENGINE—LUBRICATION SYSTEM (cont.)

Oil pump type	Rotor
Normal oil pressure (lb. @ engine rpm)	52 - 62 P.S.I. @ 2000
Oil pressure sending unit (elect. or mech.)	Electrical
Type oil intake (floating, stationary)	Stationary shrouded screen in sump
Oil filter system (full flow, partial, other)	Full Flow
Filter replacement (element, complete)	Complete
Capacity of crankcase, less filter-refill (qt.)	5
-with filter	6
Oil grade recommended (SAE viscosity and temperature range)	SAE 30 or 10W-30, above 90° F. SAE 20 or 20W or 10W-30, 20°F. to 90°F. SAE 5W-20, 10W or 10W-30, -10°F. to 20°F. SAE 5W-20 below -10° F.
Engine Service Requirement (MM, MS, etc.)	MS

ENGINE—EXHAUST SYSTEM

Type (single, single with cross-over, dual, other)	Dual with balance tube crossover
Muffler No. & type (reverse flow, straight thru, separate resonator)	Round, reverse flow
Exhaust pipe dia. (O.D.)	2.00 x .084 Laminated
Branch wall thickness)	2.00x .075 Solid
Main	Integral with muffler
tail pipe diameter (O.D. & wall thickness)	

ENGINE—FUEL SYSTEM

(See Supplement to Page 6 for Details of Fuel Injection, Supercharger, etc. if used)

Induction type: Carburetor, fuel injection, supercharger.	Carburetor
Fuel Tank	Capacity (gals.) 20
Filler location	Rear Center
Fuel Pump	Type (elec. or mech.) Mechanical
Locations	Left side on front cover
Pressure range	4.5 - 5.5 P.S.I.
Vacuum booster (std., optional, none)	None
Fuel Filter	Type Wire cloth plastic and paper
Locations	Wire cloth in tank; Hi Eff. Paper in Fuel line
Make & Model No.	Ford
Number of carbs., bbls. per carb. & type	One - 4 Barrel
Barrel size	1.562
Choke type	Automatic
Intake manifold heat control (exhaust or water)	Exhaust
Air clnr. type	Standard Dry, replaceable element
Optional	

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 MODEL _____ All

ENGINE—COOLING SYSTEM

Type system (pressure, pressure vented, atmospheric, other)	Pressure			
Radiator cap relief valve pressure	12-15			
Circulation thermostat	Type (choke, bypass)	Choke - poppet type		
	Starts to open at (°F)	175 - 180° F.		
Water pump	Type (centrifugal, other)	Centrifugal		
	Number of pumps	One		
	Drive (V-belt, other)	V-Belt		
	Bearing type	Double row, sealed ball		
By-pass recirculation type (internal, external)		External		
Radiator core type (cellular, tube and fin, other)		Crossflow, tube or corrugated fin		
Cooling system capacity	With heater (qt.)	20.5		
	Without heater (qt.)	19.5		
	Opt. equipment-specify (qt.)	----		
Water jackets full length of cylinder (yes, no)		yes		
Water all around cylinder (yes, no)		yes		
Radiator hose	Lower	Number and type (molded, straight)	One -Formed	
		Inside diameter	1.75	
	Upper	Number and type (molded, straight)	One -Formed	
		Inside diameter	1.75	
	By-pass	Number and type (molded, straight)	One Straight	
		Inside diameter	.82 - .87	
Fan	Number of blades & Spacing		Five - Unequal	
	Diameter		18.5	
	Ratio-fan to crankshaft rev.		.90 to 1 (1.25 with A.C.)	
	Fan cutout type		None, except with A.C.	
	Bearing type		Double row sealed ball (water pump bearing)	
*Drive belts (indicate belt used by letter)	Fan	Std./ F	Air Cond./ J	Dual
	Generator	F	J	"
	Water Pump	F	J	"
	Power Steering	G	G	
	Air Conditioning		H	

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* Drive Belt Dimensions	F	G	H	J	
Angle of V	36°	36°	36°	36°	
Nominal length (SAE)	44.00	38.50	41.50	41.67	
Width	.469	.50	.50	.38	

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MODEL All

ELECTRICAL—SUPPLY SYSTEM

Battery	Make and Model		Various
	Voltage Rtg. & Total Plates		12 - 78
	SAE Designation & Amp Hr. Rtg		65
	Location		Engine Compartment-Right Front
Generator	Terminal grounded		Negative
	Make		Ford
	Model		
	Type		Shunt
	Ratio—Gen. to Cr/s rev.		2.25:1
Regulator	Gen. cut-in (hot)—engine rpm		6.25
	Make		Ford or American Bosch
	Model		-----
	Type		Three Coil
	Cutout relay	Closing voltage @ generator rpm	12.4 - 13.2 @ 75° F @ 1200 RPM
		Reverse current to open	5.9 AMP
	Regu-lated	Voltage	14.6 - 15.4 @ 75° F.
		Current	28 - 32
	Voltage test con-ditions	Temperature	75° F.
		Load	5 amperes
		Other	

ELECTRICAL—STARTING SYSTEM

Starting motor	Make		Ford
	Model		FAR-11001-A
	Rotation (drive end view)		Clockwise
	Engine cranking speed		150-180 RPM
	Test conditions		85° F.
	Lock test	Amps	580
		Volts	5
		Torque (lb. ft.)	14.8
	No load test	Amps	110
		Volts	12
		RPM (min.)	5200
Motor control	Switch (solenoid, manual)		Solenoid
	Starting procedure		Turn ignition key to right beyond the "on" position.

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MODEL _____ All

ELECTRICAL—STARTING SYSTEM (cont.)

Motor Drive	Engagement type		Bendix Folo-thru
	Pinion meshes (front, rear)		Rear
	Number of teeth	Pinion	9
		Flywheel	153
	Flywheel tooth face width		.370 - .380

ELECTRICAL—IGNITION SYSTEM

Coil	Make		Ford
	Model		FAC-12029-A
	Amps	Engine stopped	4.5
		Engine idling	2.5
Distributor	Make		Ford
	Model		CISF-12127-A
	Cent'fgal adv. in crankshaft degrees @ engine rpm (nominal)	Start (rpm)	0° @ 700
		Intermediate points deg. @ rpm	11° @ 1000
		Max deg. @ rpm	23° @ 4000
	Vacuum adv. in crankshaft degrees @ in. Hg. (nominal)	Start (in Hg)	0° @ 7"
		Intermediate points, deg @ in Hg	6° @ 10.5" 11° @ 14"
		Max. deg. in. Hg.	15° @ 17"
	Breaker gap (in.)		.014 - .016
	Cam angle (deg.)		26° - 28.5°
Timing	Breaker arm tension (oz.)		17-20
	Crankshaft deg. @ rpm.		6° @ 500
	Mark location		Vibration Damper
	Cylinder numbering system (see page 2)		R-1-2-3-4 L-5-6-7-8
Spark Plug	Firing order (see page 2)		1-5-4-2-6-3-7-8
	Make and model		Champion F11Y
	Thread (mm)		18 MM
	Tightening torque (lb. ft.)		20-30
Cable	Gap		.032-.036
	Conductor type		Resistance Core Cable
	Insulation type		Neoprene Sheath
	Spark plug protector		Applied "Hypalon Boot"

ELECTRICAL—SUPPRESSION

Locations & type	Capacitors at the generator and voltage regulator. Resistance core cable from coil to the distributor and from the distributor to spark plugs.
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MAKE OF CAR Thunderbird MODEL YEAR 1961 DATE ISSUED 11-10-60 REVISED _____
 MODEL _____ All

ELECTRICAL—INSTRUMENTS AND SWITCHES

Speed-ometer	Make	King Seeley
	Trip odometer (yes, no)	No
Charge indicator—type		Warning Light
Temperature indicator—type		Electric Gage
Oil pressure indicator—type		Warning Light
Fuel indicator—type		Electric Gage
Other		
Ignition switch	Identify positions in order and circuits controlled	To Left: Accessories "On" only. Center" Accessories and Engine "Off". To Right: First Position; Accessories and Engine "On" Second Position; Starter and Engine "On" with Accessories "Off".
	Provision for illumination	None
	Location	Instrument Panel Extension
Main light-ing switch	Identify positions and lamps controlled	Pull Out - First position;- parking lamps, taillamps, license lamps instrument panel lamps and ash tray-glove box lamp. -Second position;- headlamps, taillamps, license lamps, instrument panel lamps and ash tray-glove box lamp. Rotate control knob clockwise to dim inst. panel lights and counter-clockwise to brighten & turn dome lamp and courtesy lamp.
Other light switches	Locations and lamps controlled	Map lamp switch - controls map lamp on instrument panel. Stop lamp switch - controls two stop lamps. Courtesy lamp switches located in door jam controls dome lamp and courtesy lamps when door is opened. Luggage compartment lamp switch controls luggage compartment lamp when door is open.
Other switches	Locations and devices controlled	Window lift switches located in door and quarter trim panels control windows. Master control in left front door incorporates a lock-out switch. Auto-trans. neutral & back-up lamp switch mounted on steering column. Convertible top switch mounted in left-hand door trim panel. Four-way seat switch mounted in seat side shield controls power seat. High beam switch located on floor, inside of vehicle, controls headlamps.
Windshield wiper	Make	Trico
	Type	Vacuum
	Vacuum booster provision	Yes
	Washer provision	Yes
Horn	Type	Air Electric
	Number used	Two
	Amp draw (each)	10

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 MODEL _____ ALL

ELECTRICAL—LAMP BULBS

Give quantity used and trade number, e.g., Headlamp 2-5400 S, dual headlight 2-4001, 2-4002.
 Indicate accessories which are not standard equipment by an asterisk following the numbers.

Headlamps & arrangement	Dual Headlight -	2-4001 & 2-4002
Headlamp beam indicator	1-2 CP	57
Parking	1034	
Tail	1034	
Stop	1034	
Direction signal	Front	1034
	Rear	1034
	Indicator	2-3 CP 1816
License plate	2-67	
Instrument	2-3 CP 1816 (Speedometer pod)	6-2 CP 57
Ignition lock	None	
Back up	2-1141	
Dome	1-15 CP	1008
Clock	2-3 CP -	1816
Radio	1-2 CP	57
Glove compartment (Common to Ash Tray)	1-2 CP	57
Maplight	1-6 CP	89
Luggage Compt.	1-6 CP	89
Light		
Ash Tray Light		
Oil Pressure	1-2 CP	57
Generator Warning	1-2 CP	57
Auto. Trans. Range Ind.	1-1 CP	1445

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MODEL All

ELECTRICAL—FUSE & CIRCUIT BREAKER DATA

Use trade number of fuse, e.g., SFE-10. Indicate circuit breaker by ampere capacity suffixed by letters "C.B.", e.g., 30 C.B. Where fuse or circuit breaker protects multiple circuits indicate first use by a letter and repeat the same letter for all units protected by the same fuse or circuit breaker, e.g., Parking lamp SFE-10 (a), Direction indicator same as (a).

Headlamp	18 C.B. (a) Low Beam	18 C.B. (a) Hight Beam
Headlamp beam indicator		18 C.B. (a)
Parking lamp		SFE-15 Fuse (b)
Tail lamp		SFE-15 Fuse (b)
Stop lamp		SFE-15 Fuse (b)
Direction indicator		SFE-14 Fuse (c)
License plate lamp		SFE-15 Fuse (b)
Instrument lamp		SFE-15 Fuse (b)
Ignition lamp		None
Back up lamp		SFE-14 Fuse (c)
Dome lamp		SFE-15 Fuse (b)
Clock		SFE-1
Clock lamp		SFE-15 Fuse (b)
Radio		SFE-7.5 Fuse
Glove compartment lamp		SFE-14 Fuse (b)
Power Seats		30 C.B. (e)
Power Windows		15 C.B. -4 places & 30 C.B. (e)
Air Cond.		20 C.B.
Heater		SFE-14
Luggage Compt. Lamp		SFE-14 Fuse (b)
Map Light		SFE-14 Fuse (b)
Auto. Trans. Bulb		SFE-14 Fuse (b)
Top Control		45 C.B.
Ash Tray Light		SFE-14 Fuse (b)
Electric Washers		SFE-7.5 Fuse

ELECTRICAL—LOCATION OF OUTSIDE LAMPS

Height above ground to center of bulb	Tail	Lowest	21.44
		Highest	---
	Stop		21.44
	Backup		17.9
	License, rear		19.19
	Directional	Front	16.45
		Rear	21.44
	Headlamp	Inside	23.03
		Outside*	23.03
Distance from C/L of car to center of bulb	Tail	Inside	31.13
		Outside	N.A.
	Stop		31.13
	Backup		13.80
	License, rear		6.75 In Bumper 2 req'd. sym. about <u>6</u>
	Directional	Front	28.16
		Rear	31.13
	Headlamp	Inside	21.43
		Outside*	28.00

* If single headlamps are used enter here.

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MODEL All

DRIVE UNITS—CLUTCH (Manual Transmission)

Make & type	Not Offered		
Type pressure plate springs			
Effective plate pressure (lb.)			
No. of clutch driven discs			
Clutch facing			Material
			Outside & inside dia.
			Total eff. area (sq.in.)
			Thickness
			Engagement cushioning method
Release bearing			Type & method of lubrication
Torsional damping	Methods: springs, friction material		

DRIVE UNITS—TRANSMISSIONS

Manual (std. or opt.)	Not Offered
Manual with overdrive (std. or opt.)	Not Offered
Automatic (std. or opt.)	Dual Range

DRIVE UNITS—MANUAL TRANSMISSION

Number of forward speeds	Not Offered		
Transmission ratios			In first
			In second
			In third
			In fourth
			In reverse
Synchronous meshing, specify gears			
Shift lever location			
Lubricant	Capacity (pt.)		
	Type recommended		
	SAE viscosity number	Summer	
		Winter	
	Extreme cold		

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 MODEL _____ All

DRIVE UNITS—MANUAL TRANSMISSION WITH OVERDRIVE

For transmission data see manual transmission section

Overdrive	Type (planetary or other)		Not Offered
	Manual lockout (yes, no)		
	Downshift accelerator control (yes, no)		
	Minimum cut-in speed		
	Gear ratio		
	Lu- bri- cant	Capacity (pt.) (Overdrive only)	
		Separate filler (yes, no)	
		Type recommended	
SAE vis- cosity number		Summer Winter Ext. cold	

DRIVE UNITS—AUTOMATIC TRANSMISSION

Trade name	Cruise-O-Matic			
Type describe	Torque Converter with Three-Sped. Planetary Gears			
Method of Selection (Lever, Push Button or other)	Lever			
Selector Pattern	P-R-N-D2-D1-Lo			
List gear ratios Selector Pattern and indicate which are used in each selector position	Lo	D1	D2	Rev.
	2.40:1	2.40:1 1.47:1 1.00:1	1.47:1 1.00:1	2.00:1
Max. upshift speeds—drive range	75 MPH			
Max. kickdown speeds—drive range	68 MPH			
Torque convertor	Number of elements		Three	
	Max. ratio at stall		2.1:1	
	Type of cooling (air, water)		Water	
Lubricant	Capacity—refill (pt.)			
	Type recommended		Automatic Transmission Fluid-Type "A"	
Special transmission features				

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DRIVE UNITS—PROPELLER SHAFT

Number used		One
Type (exposed, torque tube)		Exposed
Outer diameter x length* x wall thickness	Manual transmission	-----
	Overdrive transmission	-----
	Automatic transmission	2.75 x 51.93 x .065
Inter-mediate bearing	Type (plain, anti-friction)	None
	Lubrication (fitting, prepack)	----
Universal joints	Make	Spicer-1310 &
	Number used	Two
	Type (ball and trunnion, cross, other)	Cross
	Bearing	Type (plain, anti-friction)
		Needle Roller
		Lubric. (fitting, prepack)
Drive taken through (torque tube or arms, springs)		Fittings
Torque taken through (torque tube or arms, springs)		Springs
		Springs

DRIVE UNITS—REAR AXLE

Description - (incl. limited slip differential)		Semi-floating, hypoid
Drive Pinion Offset		2.25
No. of differential pinions		Two
Gear ratio and No. of teeth	Manual transmission	3.00:1
	Overdrive transmission	----
	Automatic transmission	----
Ring gear pitch diameter & O.D.		8.75 x 1.375
Pinion adjustment (shim, other)		Shims
Pinion bearing adj. (shim, other)		Collapsible Spacer
Wheel bearing type		Single row, double sealed ball bearing
Lubricant	Capacity (pt.)	4.5
	Type recommended	Hypoid Extreme Pressure
	SAE viscosity number	Summer
		SAE-90
		Winter
	Extreme cold	SAE-90
		SAE-80

*Center to center of universal joints, or to centerline of rear attachment.

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 MODEL _____ All _____

DRIVE UNITS—WHEELS

Type & material	Stamped Steel Disc
Rim (size and flange type)	14 x 5.5 J
Attachment	Stud
Circle diameter	4.5
Number and size	5 - 1/2-20

DRIVE UNITS—TIRES

Standard (List option below)	Size & ply	8.00 x 14-4 Ply. Rating
	Type - Nylon, etc.	Rayon Tubeless
Rev/mile at 30 mph.		777
Inflation press.(cold)	Front	24
	Rear	24

BRAKES—SERVICE

Type (duo-servo, balanced, self adjusting, etc.)	Hydraulic, Duo Servo
Power brake make & type (remote, integral, etc.)	Fixed Anchor - Front and Rear
Effective area (sq. in.)*	Bendix - Atmosphere Suspended } - Alt. Midland-Ross - Vacuum Suspended }
Gross lining area (sq. in.)**	198
Swept drum area (sq. in.)***	234
Percent brake effectiveness—front	381
Drum	55.5%
Diameter	11.03 x 3.00
Front	11.03 x 2.50
Rear	
Type and material	Composite, Pressed Steel Disc & Cast Iron
Bonded or riveted	Riveted
Material	Molded Asbestoes
Front Shoe	9.35 x 3.0 x 0.219
Size (length x width x thickness)	9.35 x 2.5 x 0.219
Front wheel	
Rear wheel	
Segments per shoe	One
Material	Molded Asbestoes
Rear Shoe	11.96 x 3.0 x 0.250
Size (length x width x thickness)	11.96 x 2.5 x 0.250
Front wheel	
Rear wheel	
Segments per shoe	One
Wheel cyl-inder bore	1.094
Front	.94
Rear	
Master cylinder bore	1.0
Available pedal travel	4.75
Line pressure at 100 lb. pedal load	920 P.S.I.
Shoe clearance adjustment	0.010

* Excludes rivet holes, grooves, chamfers, etc.

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

*** Total swept areas for four brakes:

Widest lining contact width for each brake x its drum circumference.

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 MODEL _____ All

BRAKES—PARKING

Type of control	Foot Operated	Left
Location of control	Foot Release Attached to the Left of Brake Control	
Operates on	Rear Service Brakes	
If separate from service brakes	Type (internal or external)	
	Drum diameter	
	Lining size (length x width x thickness)	

FRAME or UNITIZED CONSTRUCTION

Type and description	Unitized - Fully Welded Construction
----------------------	--------------------------------------

SUSPENSION—GENERAL (See Supplemental page 17 for details on Air Suspension)*

Provision for car leveling		None
Provision for brake dip control		12° Upper Arm - Anti-Dive
Provision for acc. squat control		Suspension Geometry - Front & Rear
Special provisions for car jacking		Bumper
Shock absorber front & rear	Type	Direct
	Make	Gabriel
	Piston dia.	1.18
Other special features		

SUSPENSION—FRONT

Type and description	(a)
----------------------	-----

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- (a) Independent SIA Suspension. Upper arm stamped hat section structure. Lower arm one-piece stamped construction consisting of a transverse leg and forward diagonal strut, outer ends of upper and lower arms are formed in a configuration which becomes a ball socket. Springs are mounted on upper arm. Ball joints and steering linkage are equipped with grease fittings.

* Air Suspension:
 Air spring type
 Compressor data
 type
 make
 drive ratio
 Normal operating pressures
 spring rates
 leveling data

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MODEL	All
-------	-----

Spring	Type	Coil
	Material	Steel
	Size (coil design height & I.D.; bar length x dia.	10.27 x 4.18; 150.2 x .663
	Spring rate (lb. per in.)	295
	Rate at wheel (lb. per in.)	105
	Design load (lb. @ design height)	1930
Stabilizer	Type (link, linkless, frameless)	Link (Frame Mounted)
	Material & bar diameter	.66

Mechanical (std., opt., NA)			N.A.
Power (std., opt., NA)			Std.
Wheel diameter			16"
Turning diameter	Outside front	Wall to wall (l. & r.)	43.1
		Curb to curb (l. & r.)	40.2
	Inside rear	Wall to wall (l. & r.)	23.4
		Curb to curb (l. & r.)	24.0

Mechanical	Gear	Type		Not Offered
		Make		
		Ratios	Gear	
	Overall			
	No. wheel turns			

Power	Type (coaxial, linkage, etc.)		Integral		
	Make		Ford		
	Trade name		XR-49		
	Gear	Type		Recirculating Ball & Nut	
		Ratios	Gear		16.75
			Overall		20.31
	Pump driven by		Belt		
	Number wheel turns		3.6		

Linkage	Type	Parallelogram
	Location (front or rear of wheels, other)	Rear
	Drag link (trans. or longit.)	Transverse
	Tie rods (one or two)	Two

(Continued)

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MAKE OF CAR Thunderbird MODEL YEAR 1961 DATE: ISSUED 11-10-60 REVISED _____
 MODEL All

STEERING (cont.)

Steering Axis	Inclination at camber (deg.)		6° 45' with 10 camber (Curb [†])	
	Bearings (type)	Upper	Ball Joint	
		Lower	Ball Joint	
		Thrust	Upper Ball	
Wheel alignment (range and preferred)	Caster (deg.)		-1° to -1½° (Curb Load)	
	Camber (deg.)		0° to 1°	
	Toe-in (outside tread-inches)		1/16" - 3/16"	
	Steering spindle & joint type		Ball Socket Joints	
Wheel spindle	Diameter	Inner bearing	1.12 I.D.	
		Outer bearing	.75 I.D.	
	Thread size		.75 - 16 NF3	
	Bearing type		Tapered Roller	

SUSPENSION—REAR

Type and description			Hotchkiss			
Drive and torq. taken through (see page 15)			Springs			
Spring	Type		Leaf			
	Material		Spring Steel - SAE-5160			
	Size (length x width, coil design height and I.D.; bar length & dia.)		60.0 x 2.5			
	Spring rate (lb. per in.)		105		110 *	
	Rate at wheel (lb. per in.)		105		110 *	
	Design load (lb. at design height)		880	100 - 1000	920 *	
	Mounting insulation type		Rubber Pads			
	If leaf	No. of leaves		4		
		Inserts	Type and size	Leaf Tips		
			Material	Plastic or Wax, Impregnated Cloth		
Shackle (comp. or tens.)		Tension				
Stabilizer	Type (link, linkless, frameless)		None			
	Material		None			
Track bar type			None			

* Convertible

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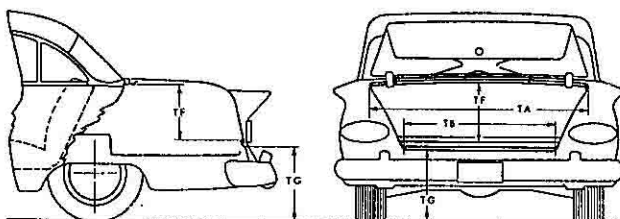
MAKE OF CAR THUNDERBIRD MODEL YEAR 1961 DATE: ISSUED 11-10-60 REVISED _____

BODY—GENERAL DEFINITIONS

NOTE: Included in the dimension definitions listed on this and the following pages are those which have been adopted by S.A.E. These are indicated by a number following the type of dimension, e.g. L 3. Additional dimensions have been added by the AMA Specifications Body Sub-Committee for inclusion in the Questionnaire. These are shown by an additional letter, e.g., HA. Symbol "a" added as suffix to SAE dimensions indicates an AMA modification. The dimensions are developed from the following basic points:

1. Body Dimensions are for all basic body models as indicated.
2. All interior dimensions are taken 15" outboard of car centerline (C/L) unless otherwise stated.
3. Front and rear seat free "A" points are taken 5" forward of vertical tangent to seat back 15" from center of body.
4. Depressed "A" point is the lowest point on the seat cushion depressed contour.
5. Front seat is in full down and normal rear position.
6. Unless otherwise specified all exterior height dimensions are taken with a full design load which consists of 5 passengers, 300 lbs. front, 450 lbs. rear; includes spare wheel, tire and tools, and full complement of gas, oil, water and tires to recommended pressure, etc.
7. DLO (Daylight opening – pages 22 & 24).
8. For further clarification of definitions see SAE Aeronautical—Automotive Drawing Standards, Section E-1.

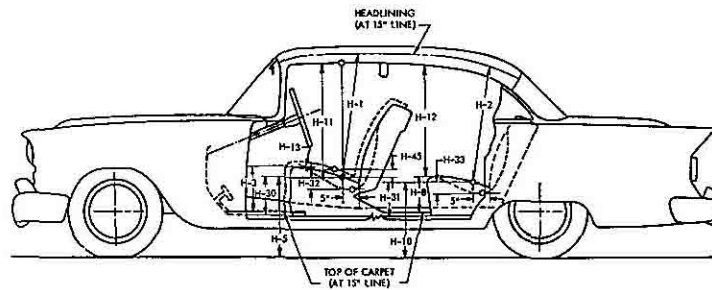
BODY—TRUNK DIMENSIONS



MODEL	63A	76A
Usable trunk luggage capacity (See Section E-1 of SAE Automotive Drawing Standards)		
Total trunk volume in cu. ft. with spare tire in place	20.1	15.7
TA—Width across the top	64.9	
TB—Width across the bottom	65.2	
TF—Vertical dimension at C/L from bottom to top of opening	7.7	
TG—Vertical height from ground to trunk lower opening (normal surface of outside sheet metal – loaded)	24.2	24.2
Position of spare tire stowage	Front of Trunk on Floor	
Method of holding lid open	Spring Counterbalance	

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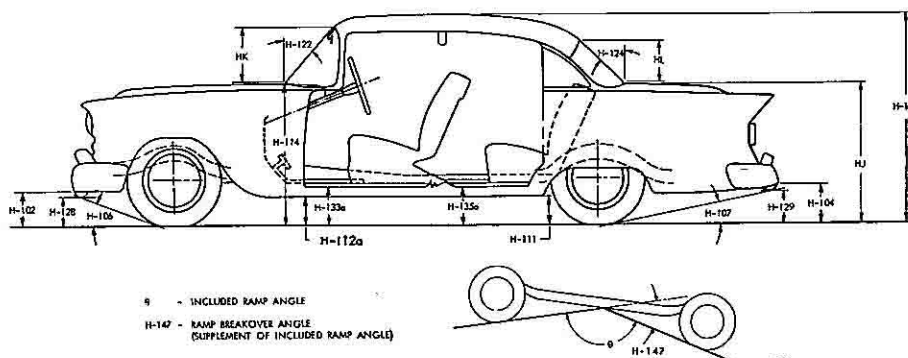
BODY—HEIGHT DIMENSIONS—INTERIOR



MODEL	63A	76A
H1. Front headroom. Free "A" pt. to headlining at 8° back of vertical. (For "A" pt. see note 3, page 20)	34.2	35.8
H2. Rear headroom. Free "A" pt. to headlining at 8° back of vertical	33.1	33.9
H3. Front cushion height above floor carpet at front edge of cushion. (Ignore risers)	12.1	12.1
H5. Free "A" pt. to ground, front. Measured vertically	17.4	17.4
H8. Rear cushion height above floor carpet at front edge of cushion. (Ignore risers)		12.6
H10. Free "A" point to ground rear. Measured vertically		17.4
H11. Entrance, front. Free "A" point to bottom of windcord, vertical	30.9	30.8
H12. Entrance, rear. Top of cushion to bottom of windcord at front edge of rear seat		---
H13. Steering wheel clearance to seat cushion taken on arc (wheel turned for min. clearance)		6.1
H30. Free "A" point reference height, front. Vertical dimension to SAE horizontal reference line		10.3
H31. Free "A" point reference height, rear. Vertical dimension to SAE horizontal reference line		10.4
H32. Front seat cushion deflection. Vertical dimension from free "A" point to depressed "A" point		3.7
H33. Rear seat cushion deflection. Vertical dimension from free "A" point to depressed "A" point		4.9
H45. Front seat maximum vertical rise at free "A" point		.70

MAKE OF CAR THUNDERBIRD MODEL YEAR 1961 DATE: ISSUED 11-10-60 REVISED (*)

BODY—HEIGHT DIMENSIONS—EXTERIOR



NOTE: For dimensions to lamps see page 12.

MODEL	63 A	76A
H101. Overall height, full design load	52.5	53.3
HB. Overall height, curb weight	53.9	54.7
H102. Front bumper bottom to ground at normal section, min. height	9.1	
H104. Rear bumper bottom to ground at normal section, min. height	9.1	
H106. Angle of approach. To interfering point on bumper, guard, other	19.0 °	
H107. Angle of departure. To interfering point on bumper, guard, other	12.2 °	
H111. Body Sill to Ground-Rear. Vertical dimension measured from bottom of body sill (rocker panel), excluding any flanges, to ground at front of rear wheel opening.	6.56	
H112a. Body Sill to Ground-Front. Measured vertically at foremost point of body sill (rocker panel), excluding flanges and front fender.	6.56	
H114. Hood at rear to ground. Vertical dimension C/L, excluding molding, at hood opening line at cowl	36.0	
H122. Windshield normal slope angle to vertical line on car C/L	55.0 °	
H124. Backlight normal slope angle to vertical line on car C/L	50.0 °	47.0 °
H128. Bottom of front bumper guard to ground	9.1	
H129. Bottom of rear bumper guard to ground	---	
H133a. Bottom of front door to ground, min. dimension	10.0	
H135a. Bottom of rear door to ground, min. dimension	---	
H147. Ramp breakover angle	11.7 °	
H153. Min. road clearance at rear axle	7.3	
H156. Min. road clearance and location	* 5.2	
HJ. Deck at rear window to ground	33.2	33.1
HK. Windshield DLO*. Vertical height at C/L	28.4	
HL. Back light DLO*. Vertical height at C/L	21.6	18.2

* See Note, page 20

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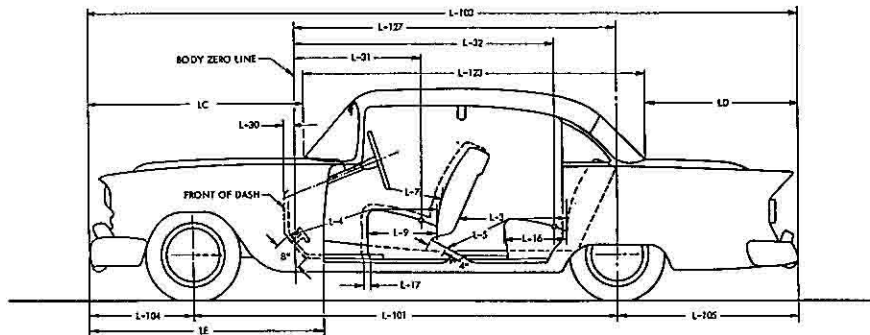
* At Rear Spring Front Hanger

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BODY—LENGTH DIMENSIONS



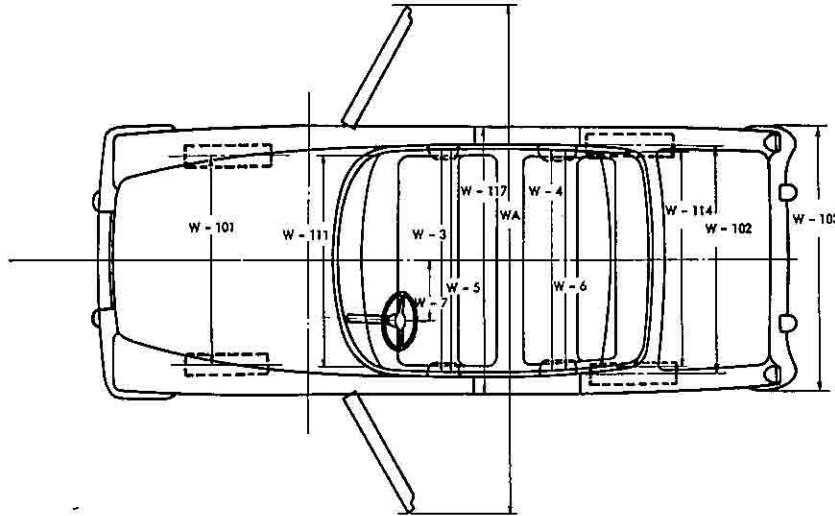
MODEL		63A	76A
Interior	L3. Rear compartment room. Back of front seat back to front of rear seat back	25.9	
	L4. Leg room, front. Ball of foot to top of seat to seat back	44.4	
	L5. Leg room, rear. Ball of foot to top of seat to seat back	37.7	
	L7. Steering wheel clearance to seat back taken on arc	14.6	
	L9. Front seat depth. Front edge to vert. tan. of seat back	19.1	
	L16. Rear seat depth. Front edge to vert. tan. of seat back	19.1	
	L17. Maximum "A" point horizontal travel with normal seat adjustment	.70	
	L30. Vertical body zero line to actual front of dash. Measured horizontally*	3.1	
	L31. Vertical body zero line to free "A" point, front	41.3	
	L32. Vertical body zero line to free "A" point, rear	71.6	
Exterior	L101. Wheelbase	113.0	
	L103. Overall length. Incl. bumper guards if standard equipment	205.0	
	L104. Overhang, front. Include bumper guards if stand. eq.	38.2	
	L105. Overhang, rear. Include bumper guards if stand. eq.	53.8	
	L123a. Body upper structure length at C/L, excl. molding	96.9	98.6
	L127. Vertical body zero line to centerline of rear wheels	92.3	
	LC. Front of car to base windshield, excl. molding	64.8	
	LD. Rear of car to base of rear window or upper structure, excl. molding	43.3	41.6
	LE. Front of car to front edge of front door	73.4	

* Precede figure with minus sign if front of dash is to rear of body zero line.

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BODY—WIDTH DIMENSIONS



MODEL		63A	76A
Interior	W3. Front shoulder room, at garnish molding height or nearest interference 5" forward of seat back		58.0
	W4. Rear shoulder room, at garnish molding height or nearest interference 5" forward of seat back		55.6
	W5. Front hip room, at top of seat 5" forward of vert. tan. to seat back		59.0
	W6. Rear hip room, at top of seat 5" forward of vert. tan. to seat back		52.3
	W7. Steering wheel center (on surface plane of wheel) to C/L of body		16.3
Exterior	W101. Front tread at ground		61.0
	W102. Rear tread at ground		60.0
	W103. Max. overall width of car incl. bumpers or moldings (specify location).		* 75.9
	WA. Max. overall width of car with doors open (2 & 4 door)		170.1
	W111. Windshield DLO, max. width		60.1
	W114. Back window DLO, max. width	61.8	
	W116a. Maximum overall sheet metal width excl. hardware and applied molding (specify location)		* 75.9
	W117. Max. body width at center pillar, less hardware and applied moldings		75.9

* At Rear Wheel CL

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MAKE OF CAR THUNDERBIRD MODEL YEAR 1961 DATE ISSUED 11-10-60 REVISED (•)

MODEL _____

BODY—MISCELLANEOUS INFORMATION

Drs. hinged (front, rear)	Front doors	Front
	Rear doors	-----
Type of finish (lacquer, enamel, other)		Enamel
Hood hinge location (front, rear)		Rear
Hood counterbalanced (yes, no)		Yes
Hood release control (internal, external)		External
Vehicle (Serial) No. Location		Left Door Pillar
Engine No. Location		On Engine Block
Theft protection - type		Door Locks - Theft Retardent Ignition Switch
Vent window control method (crank, friction pivot)	Front	Friction Pivot
	Rear	-----
Seat cushion type	Front	Zigzag
	Rear	Zigzag
Seat back type	Front	Zigzag
	Rear	Zigzag
Windshield type (single curved, compound curved, other)		Compound Curved
Rear window type (flat, curved, one piece, three piece)		Flat
Side glass type (curved, flat)		Curved
Side glass exposed surface area	1177	1177
Windshield glass exposed surface area	1473	1473
Backlight glass exposed surface area	1164	1012
Total glass exposed surface area	3814	3662

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MAJOR OPTIONAL ITEMS - WEIGHTS

* These are weights that are reported to states for licensing purposes.

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