

# AUTOMOBILE MANUFACTURERS ASSOCIATION CONSOLIDATED SPECIFICATION QUESTIONNAIRE

<b>MAKE OF CAR:</b>	FORD	<b>MODEL NAME</b>	<b>SYMBOL</b>
<b>COMPANY:</b>	FORD DIVISION FORD MOTOR COMPANY	THUNDERBIRD-SOFT TOP	40A
		THUNDERBIRD-HARD TOP	40B
<b>MODEL YEAR:</b>	1955	<b>DATE</b>	OCTOBER 19, 1954
REVISED NOVEMBER 30, 1954			

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- NOTES: 1. The specifications set forth herein are those in effect at the date of compilation and are subject to change without notice.  
 2. All specifications are standard for the models under which they are listed unless otherwise indicated.  
 3. All dimensions are nominal engineering dimensions unless otherwise indicated.  
 4. Unless otherwise indicated, specifications apply to  $\frac{1}{2}$  or  $\frac{1}{4}$  passenger,  $\frac{1}{2}$  passenger or equivalent  
2 CONVERTIBLE

## GENERAL SPECIFICATIONS

Model	THUNDERBIRD	40A	40B
Wheelbase			102"
Tread	Front		56"
	Rear		56"
Maximum Overall Dimensions	Length (L-103)		175.3"
	Width (W-103)		70.3"
	Height (H-101) (TOP-UP)	52.4	
Steering ratio—overall			20.1 TO 1
Turning diameter (curb to curb)			36.0
Shipping weight*			2985
Transmission— (Specify standard, optional, not avail.)	Conventional		STANDARD
	Overdrive		OPTIONAL
	Automatic		OPTIONAL
Axle ratio	Conventional		3.73
	Overdrive		3.92 STANDARD
	Automatic		3.31 STANDARD
Tire size			6.70 X 15 4 PLY WSW TUBELESS
Engine	Type		V
	No. of cylinders		8
	Valve arrangement		OVERHEAD
	Bore and stroke		3.75 X 3.30
	Piston displacement, cu. in.		292
	Standard compression ratio		8.1 TO 1
	Maximum bhp at engine rpm		193 @ 4400
Maximum torque at rpm		280 @ 2600	

\*Standard car weight, not including gas and water.

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<b>MODEL</b> THUNDERBIRD	40A	40B
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## ENGINE—GENERAL

<b>Type</b>	V, In-line, other		V	
	Angle of V		90°	
<b>No. of cylinders</b>			8	
<b>Valve arrangement</b>			OVERHEAD	
<b>Bore and stroke</b>			3.7500-3.7524 X 3.30	
<b>Piston displacement, cu. in.</b>			292	
<b>Numbering system (front to rear)</b>	L. Bank		5-6-7-8	
	R. Bank		1-2-3-4	
<b>Firing order</b>			1-5-4-8-6-3-7-2	
<b>Compression ratio</b>	Standard Head		8.1 TO 1	
	Optional Head		8.5 TO 1	
<b>Cylinders</b>	<b>Head Material</b>	Standard	CAST IRON	
		Optional	CAST IRON	
	<b>Sleeve—Wet, dry, other, none</b>		NONE	
<b>Number of mounting points</b>	Front		2	
	Rear		1	
<b>Taxable horsepower</b>	(Dia. <sup>2</sup> x No. Cyl.) 2.5		45.0	
<b>Advertised max. brake horsepower at engine RPM*</b>	Standard head		193@4400	
	Optional head		198@4400	
	With fuel (Octane and method)	Standard Head		REGULAR
		Optional Head		PREMIUM
<b>Max. torque (lb. ft. @ RPM)</b>	Standard head		280@2600	
	Optional head **		286@2500	
<b>Recommended idle speed (neutral)</b>			475 - 500 RPM - ALL TRANSMISSIONS	

## ENGINE—PISTONS

<b>Material</b>	ALUMINUM ALLOY		
<b>Description and finish</b>	AUTOTHERMIC, CLOSED TYPE, CAM GROUND, FLATHEAD, TIN PLATED		
<b>Weight (piston only) oz.</b>	8 GRADES 19.36-19.48		
<b>Clearance</b>	Top land	.0023 - .0028	
	Skirt	Top	.0010 - .0024
		Bottom	.0006 - .0012
<b>Ring groove depth</b>	No. 1 ring	.2085 - .2135	
	No. 2 ring	.2085 - .2135	
	No. 3 ring	.2055 - .2105	
	No. 4 ring	NONE	

\*Corrected as defined by SAE Engine Test Code, with the following standard power consuming accessories:

\*\*WITH FORDOMATIC

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## ENGINE—RINGS

Type (top to bottom)	No. 1 oil or comp.	TAPER FACE
	No. 2 oil or comp.	TAPER FACE
	No. 3 oil or comp.	THREE PIECE-SEGMENTED EXPANDER
	No. 4 oil or comp.	NONE
No. rings above piston pin		3
Compression	Material	CAST IRON
	Coating	UPPER - CHROME PLATE LOWER - PHOSPHATE-COATED
	Width	.0775 - .0780
	Gap	.010 - .020
	Maximum wall thickness	.187
Oil	Material	STEEL
	Coating	CHROME-PLATED
	Width	.1860 - .1865
	Gap	.015 - .053
	Maximum wall thickness	.171
Location of expanders		NONE

## ENGINE—PISTON PINS

Material		ALLOY STEEL, HEAT TREATED	
Length		3.016 - 3.030	
Diameter		.9120 - .9123	
Type	Locked in rod, in piston, floating, etc.	FULL FLOATING	
	Bushing	In rod or piston	IN ROD
		Material	BRONZE
Clearance	In piston	SELECTED FOR .0001 - .0003	
	In rod	SELECTED FOR .0001 - .0003	
Direction offset in piston		RIGHT	

## ENGINE—CONNECTING RODS

Material		FORGED STEEL
Weight (oz.)		24.06 (LESS BRG.)
Length (center to center)		6.320 - 6.324
Lubricating	Material	COPPER LEAD - STEEL-BACKED
	Type (cast-in or removable)	REPLACEABLE INSERTS
	Effective length	.711
	Clearance	SELECTED FOR .0005 - .0021
	End play	.006 - .016 (TWO RODS)

## ENGINE—CRANKSHAFT

Material	ALLOY IRON
Weight (lb.)	50.59

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## ENGINE—CRANKSHAFT (cont.)

Vibration damper type		RUBBER-FLOATED	
End thrust taken by bearing (No.)		3	
Crankshaft end play		.002 - .006	
Main bearing	Material	COPPER LEAD, STEEL BACKED	
	Type (cast-in or removable)	REPLACEABLE INSERTS	
	Clearance	SELECTED FOR .0005 - .0021	
	Journal dia. and bearing effective length	No. 1	2.4984 - 2.4988 X .728
		No. 2	2.4984 - 2.4988 X .728
		No. 3	2.4984 - 2.4988 X .662
		No. 4	2.4984 - 2.4988 X .728
		No. 5	2.4984 - 2.4988 X .728
No. 6		---	
No. 7		---	
Direction offset from cyl. bore		---	
Connecting rod crankpin journal diameter		2.1880 - 2.1888	

## ENGINE—CAMSHAFT

Material		CAST ALLOY IRON	
Bearings	Material	STEEL-BACKED BABBITT	
	Number	5	
Type of drive	Gear or chain		CHAIN
	Crankshaft gear or sprocket material		STEEL, HEAT-TREATED
	Camshaft gear or sprocket material		CAST IRON
	Timing chain	Make	---
		No. of links	56
		Width	1.00 (NOMINAL)
Pitch		.375	

## ENGINE—VALVE SYSTEM

Hydraulic lifters (yes, no)		NO
Special provision for valve lamination (intake, exhaust)		YES - INTAKE AND EXHAUST
Valve rocker ratio		1.43 TO 1
Operating tappet clearance (indicate hot or cold)	Intake	.018 HOT
	Exhaust	.018 HOT
Tappet clearance timing	Intake	SEE PAGE 5
	Exhaust	SEE PAGE 5
Timing marks on flywheel, damper, other		VIBRATION DAMPER PULLEY

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## ENGINE—VALVE SYSTEM (cont.)

Timing	Intake	Opens (°BTC)	12° @ .016 CAM LIFT	
		Closes (°ABC)	54° @ .019 CAM LIFT	
	Exhaust	Opens (°BBC)	58° @ .015 CAM LIFT	
		Closes (°ATC)	8° @ .018 CAM LIFT	
Intake	Material		CHROME STEEL	
	Overall length		5.11	
	Actual overall head dia.		1.775 - 1.785	
	Angle of seat		45°30' - 45°45'	
	Seat insert material		NONE	
	Stem diameter		.3415 - .3425	
	Stem to guide clearance		SELECTED FOR .001 - .002	
	Lift		.360	
	Outer spring press. and length	Valve closed (lb. @ in.)	54 - 62# @ 1.82	
		Valve open (lb. @ in.)	124 - 140# @ 1.50	
	Inner spring press. and length	Valve closed (lb. @ in.)	NONE	
		Valve open (lb. @ in.)	NONE	
	Exhaust	Material		CAST AUSTENITIC STEEL
		Overall length		5.09
Actual overall head dia.		1.505 - 1.515		
Angle of seat		45°30' - 45°45'		
Seat insert material		NONE		
Stem diameter		.3405 - .3415		
Stem to guide clearance		SELECTED FOR .002 - .003		
Lift		.360		
Outer spring press. and length		Valve closed (lb. @ in.)	54 - 62# @ 1.82	
		Valve open (lb. @ in.)	124 - 140# @ 1.50	
Inner spring press. and length		Valve closed (lb. @ in.)	NONE	
		Valve open (lb. @ in.)	NONE	

## ENGINE—LUBRICATION SYSTEM

Type of lubrication (splash, pressure, nozzle)	Main bearings	PRESSURE
	Connecting rods	PRESSURE
	Piston pins	OIL MIST
	Camshaft bearings	PRESSURE
	Tappets	GRAVITY FROM DRAINBACK
	Timing gear or chain	DIRECT DRAINBACK
	Cylinder walls	PRESSURE STREAM

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## ENGINE—LUBRICATION SYSTEM (cont.)

Type		GEAR
Pressure (lb. @ rpm) (HOT)		45 - 50 @ 2000
Gauge type (mechanical)		ELECTRIC
Valve (floating)		STATIONARY
Pressure (full flow, psi)		FULL FLOW (REPLACEABLE CARTRIDGE)
Oil capacity (qt.)		5
Recommended (SAE viscosity temperature range)		+32°F AND ABOVE - SAE 20 OR 20W +32°F TO -10°F - SAE 10 OR 10W BELOW - 10°F - SAE 5W
Recommended		A.P.I. TYPE ML FOR AVERAGE DRIVING A.P.I. TYPE MS FOR SEVERE DRIVING

## ENGINE—FUEL SYSTEM

Standard head		REGULAR
Optional head		PREMIUM
Capacity (gals.)		17.5
Filler Location		CENTER DECKLID
Type		LAMINATED PAPER
Location		BETWEEN FUEL PUMP AND CARBURETOR
Type (elec. or mech.)		MECHANICAL
Location		LOWER LEFT FRONT OF ENGINE
Pressure range		4 - 5 PSI @ 900 RPM
Vacuum booster (std., optl., none)		OPTIONAL
Make		---
Model number		---
Number used		ONE
Type	Downdraft, side inlet, other Single or dual	DOWNDRAFT, TO INLET, CONCENTRIC BOWL, AIR CLEANER FORMS AIR HORN 4 BARREL
Intake manifold heat control (manual, auto., none)		AUTOMATIC
Automatic choke type (integral, other)		INTEGRAL
Air cleaner type	Standard Optional	OIL BATH ---

## ENGINE—EXHAUST SYSTEM

Configuration (single with cross-over, dual, other)		DUAL
Flow (reverse flow, str. thru, sep. resonator)		REVERSE
Location	Branch Main	--- 2"
Diameter		1.75"

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## ENGINE—COOLING SYSTEM

Type (pressure system, atmospheric, other)		PRESSURE VENTED	
Radiator cap relief valve press.		13 PSI VENTED	
Circulation thermostat	Type (choke, bypass)	CHOKE - PELLET-OPERATED	
	Starts to open at	157-162°F STD. (177 - 182°F OPT.)	
Water pump	Type (centrifugal, other)	CENTRIFUGAL	
	Number of pumps	ONE	
	Drive (V-belt, other)	SINGLE V-BELT	
	Bearing type	DOUBLE ROW, SEALED BALL, PRE-LUBRICATED	
By-pass recirculation type (internal, external)		EXTERNAL	
Radiator core type (cellular, tube and fin)		CORRUGATED FIN AND TUBE	
Cooling system capacity	With heater (qt.)	21	
	Without heater (qt.)	20	
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 MOULDED
		Inside diameter and length	2.00 X 13.3 (DEVELOPED)
	Upper	Number and type (molded, straight)	ONE MOULDED
		Inside diameter and length	1.75 X 19.8 (DEVELOPED)
	By-pass	Number and type (molded, straight)	ONE RUBBER HOSE
		Inside diameter and length	.578 - .640 X 4.25
Drive belts	Fan	Number used	ONE
		Angle of V	38°
		Outside length	44.50
		Width	.50"
	Generator	Angle of V	SAME AS FAN
		Outside length	---
		Width	---
Fan	Number of blades and spacing	3 UNEQUAL SPACING	
	Diameter	18.0	
	Ratio—fan to crankshaft revolutions	.9 TO 1	
	Bearing type	SEE WATER PUMP BEARING	

POWER STEERING (OPT.)	HYDRAULIC PUMP DRIVE BELT
ANGLE OF V	38°
OUTSIDE LENGTH	38.50
WIDTH	.50

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## ELECTRICAL—SUPPLY SYSTEM

Battery	Make and Model		FDA-10655-A
	Voltage Rtg. & Plates/plates/ total		6-51-3
	SAE Designation & Amp Hr. Rtg		90
	Location		REAR LEFT UNDER HOOD
Terminal grounded			POSITIVE
Generator	Make		FORD
	Model		FBA-10000-C
	Type		SHUNT
	Ratio—Gen. to Cr/s rev.		2 TO 1
Regulator	Make		FORD
	Model		FAD-10505-A & C
	Type		VOLTAGE & CURRENT CONTROL
	Cutout relay	Closing voltage @ generator rpm	6.0 - 6.6 VOLTS @ 80°F
		Reverse current to open	4.0 - 8.0 AMPS
	Regulated	Voltage	7.4 - 7.8 VOLTS @ 80°F
		Current	38 - 42 AMPS
	Min. Gen. rpm required		1900
	Voltage test conditions	Temperature	75°F - 85°F
		Load	10A
Other		3000 GEN RPM	

## ELECTRICAL—STARTING SYSTEM

Starting motor	Make		FORD
	Model		FAC-11001-H
	Rotation (drive end view)		CLOCKWISE
	Engine cranking speed		110 TO 130 RPM @ 70°F WITH SAE 30
	Test conditions		70°F AMBIENT SAE #30 OIL
	Lock test	Amps	700 MAXIMUM
		Volts	3.5
		Torque (lb. ft.)	14.25 MINIMUM
	No load test	Amps	70 MAXIMUM
		Volts	6
RPM (min.)		4000 - 6000	
Motor control	Switch (solenoid, manual)		SOLENOID
	Starting procedure		TURN IGNITION KEY TO RIGHT BEYOND "ON" POSITION



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## ELECTRICAL—STARTING SYSTEM (cont.)

Motor drive	Engagement type		BENDIX FOLO THRU
	Pinion meshes (front, rear)		REAR
	Number of teeth	Pinion	9
		Flywheel	146
	Flywheel tooth face width		

## ELECTRICAL—IGNITION SYSTEM

Coil	Make		FORD
	Model		8BA-12029
	Amps	Engine stopped	5
		Engine idling	3
Distributor	Make		HOLLEY
	Model		FEC-12127-A (STANDARD) FEA-12127 (R.P.O. TACH. DR.)
	Spark advance data (at distributor shaft)	Centr. advance start (rpm)	NONE
		Centr. advance max. deg. @ rpm	NONE
		Vacuum advance start (in. Hg./H <sub>2</sub> O)	.5° @ 300 @ 2.5 IN H <sub>2</sub> O
		Vac. adv. (max. deg. @ in. Hg./H <sub>2</sub> O)	16 1/2° @ 1500 @ 32.4 IN H <sub>2</sub> O
	Breaker gap (in.)		.014 - .016
	Cam angle (deg.)		26° - 28.5°
	Breaker arm tension (oz.)		17 - 20
	Timing	C/S deg. @ rpm	
Mark location		CRANKSHAFT PULLEY	
Cylinder numbering system (see page 2)		L. BANK 5-6-7-8 R. BANK 1-2-3-4	
Firing order (see page 2)		15486372	
Spark plug	Make and model		CHAMPION 870
	Thread (mm)		18 MM
	Tightening torque (lb. ft.)		20 - 30 LB. FT.
	Gap		.032" - .036"
Cable	Conductor type		STRANDED COPPER
	Insulation type		NEOPRENE SHEATH
	Spark plug protector		NEOPRENE CAP

## ELECTRICAL—SUPPRESSION

Description	
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## ELECTRICAL—INSTRUMENTS AND SWITCHES

<b>Speed-ometer</b>	<b>Make</b> <b>Trip odometer (yes, no)</b>	KING SEELEY NO
<b>Charge indicator—type</b>		LAMP
<b>Temperature indicator—type</b>		ELECTRIC
<b>Oil pressure indicator—type</b>		LAMP
<b>Fuel indicator—type</b>		ELECTRIC
<b>Ignition switch</b>	<b>Identify positions in order and circuits controlled</b>	TO LEFT-ACCESSORIES ON CENTER-ACCESSORIES & ENGINE OFF TO RIGHT-1ST POSITION-ACCESSORIES & ENGINE ON 2ND POSITION-STARTER & ENGINE ON
	<b>Provision for illumination</b>	LIGHTED WITH INST. PANEL LIGHTS ON
	<b>Location</b>	IN INST. PANEL TO LEFT OF STEERING COLUMN
	<b>Theft protection type</b>	NO
<b>Main lighting switch</b>	<b>Identify positions and lights controlled</b>	PUSH PULL SWITCH. PUSH CLEAR IN TO "OFF" FIRST "ON" POSITION OPERATES PARK AND REAR LIGHTS. SECOND "ON" POSITION OPERATES HEAD AND REAR LIGHTS, WHILE IN EITHER "ON" POSITION TURN KNOB TO CONTROL INST. PANEL LIGHTS.
<b>Other light switches</b>	<b>Locations and lamps controlled</b>	MAP LAMP SWITCH INTEGRAL WITH MAP LAMP ON INSTR. PANEL. COURTESY LAMP SWITCHES IN DOOR PILLARS OPERATE MAP LAMP. STOP LIGHT SWITCH IN BRAKE LINE ON TOP OF FRAME IN ENGINE COMPARTMENT LEFT SIDE. ROAD LAMP SWITCH ON BRACKET UNDER INSTR. PANEL CONTROLS ROAD AND REAR LAMPS.
<b>Other switches</b>	<b>Locations and devices controlled</b>	FOUR WAY SEAT REGULATOR SWITCH IN LEFT DOOR TRIM MOULDING. ELECTRIC WINDOW REGULATOR SWITCHES IN BOTH DOOR TRIM PANELS AUTOMATIC TRANSMISSION NEUTRAL SWITCH ON TRANSMISSION SHIFTER TOWER OPENS STARTER CONTROL CIRCUIT. TURN SIGNAL SWITCH IN STEERING COLUMN HUB. HEATER BLOWER SWITCH ON INSTR. PANEL BACK-UP LAMP SWITCH ON TRANSMISSION UNDER FLOOR.
<b>Windshield wiper</b>	<b>Make</b>	TRICO
	<b>Type</b>	VACUUM
	<b>Vacuum booster provision</b>	OPTIONAL VACUUM BOOSTER & FUEL PUMP
	<b>Washer provision</b>	OPTIONAL
<b>Horn</b>	<b>Type</b>	AIR-ELECTRIC
	<b>Number used</b>	MATCHED PAIR
	<b>Amp draw (each)</b>	17.0

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## ELECTRICAL—LAMP BULBS

Give quantity used and trade number, e.g., Headlamp 2-4030.  
Indicate accessories which are not standard equipment by an asterisk following the numbers.

Headlamp		2-4030
Headlamp beam indicator		1-51
Parking light		2-1154
Tail light		2-1154
Stop light		2-1154
Direction indicator	Front	2-1154
	Rear	2-1154
	Tell-Tale	2-51 (IN INSTRUMENT CLUSTER)
License plate light		2-63
Instrument light	4-55 (2) FOR SPEEDOMETER & (2) FOR OIL & GENERATOR WARNING LTS.	
Ignition lock light		1-55
Map light		1-81
<del>Rome light</del>		
Clock light		1-55 & TACHOMETER 1-55
Radio dial light		1-44
Glove compartment light		1-55
Courtesy light		1-81
<del>Trunk compartment light</del>		
Other R.H. AIR LIGHT OR BLOWER SW. LIGHT AND HEATER CONTROL PANEL 1-55		
EXT. LIGHTING SWITCH LT. 1-55		
L.H. AIR-LIGHT 1-55		
CIGAR LIGHTER & W/S WIPER LIGHT 1-55		
TRANS. SELECTOR DIAL ILLUMINATION 1-51		

## 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 light: SFE-10 (a), Direction Indicator: same as (a).

Headlamp		20 CB (B)
Headlamp beam indicator		20 CB (B)
Parking light		20 CB (A)
Tail light		20 CB (A)
Stop light		20 CB (A)
Direction indicator		SFE 9
License plate light		20 CB (A)
Instrument light		20 CB (A)
Ignition light		20 CB (A)
Map light		SFE 9 (C)
Dome light		
Clock		20 CB (A)
Clock light		20 CB (A)
Radio		1-SFE 14
Glove compartment light		SFE 9 (C)
Courtesy light		SFE 9 (C)
Trunk compartment light		20 CB (A)
Other		
HEATER		SFE 20 AMP
OVERDRIVE		AGC 30

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## DRIVE UNITS—CLUTCH (PEDAL OPERATED)

<b>Make</b>		LONG	
<b>Type (dry or wet plate)</b>		DRY	
<b>In combination with fluid coupling (yes, no)</b>		NO	
<b>Semi-centrifugal (yes, no)</b>		YES	
<b>Type pressure plate springs</b>		COIL	
<b>Total plate pressure (lb.)</b>		1395	
<b>No. of clutch driven discs</b>		ONE	
<b>Clutch facing</b>	<b>Material</b>	WOVEN ASBESTOS	
	<b>Inside diameter</b>	7.0"	
	<b>Outside diameter</b>	11.06"	
	<b>Total eff. area (sq. in.)</b>	113.10"	
	<b>Thickness</b>	0.125"	
	<b>Number required</b>	TWO	
	<b>Engagement cushioning method</b>		TORBEND DISC WITH SPRING VIBRATION DAMPENER
	<b>Release bearing</b>	<b>Type</b>	BALL THRUST
		<b>Method of lubrication</b>	PREPACKED
	<b>Torsional damping</b>	<b>Method (springs, other)</b>	SPRINGS
<b>Frict. mat.</b>		STEEL	

## DRIVE UNITS—TRANSMISSIONS

<b>Conventional (std. or opt.)</b>	STANDARD
<b>Conventional with overdrive (std. or opt.)</b>	OPTIONAL
<b>Automatic (std. or opt.)</b>	OPTIONAL

## DRIVE UNITS—CONVENTIONAL TRANSMISSION

<b>Number of forward speeds</b>		THREE
<b>Transmission ratios</b>	<b>In first</b>	2.32
	<b>In second</b>	1.48
	<b>In third</b>	1.00
	<b>In fourth</b>	---
	<b>In reverse</b>	2.82
<b>Constant mesh gears in 2nd (yes, no)</b>		YES
<b>Spur gear used in (indicate speeds)</b>		NONE
<b>Helical gears used in (indicate speeds)</b>		ALL
<b>Synchronous meshing in 2nd and 3rd gears (yes, no)</b>		YES

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## DRIVE UNITS—CONVENTIONAL TRANSMISSION (cont.)

<b>Lubricant</b>	Capacity (pt.)		3
	Type recommended		MULTI PURPOSE
	SAE viscosity number	Summer	80
		Winter	80
Extreme cold		75	

## DRIVE UNITS—CONVENTIONAL TRANSMISSION WITH OVERDRIVE

For transmission data see conventional transmission section

<b>Overdrive</b>	Type (planetary or other)		PLANETARY	
	If planetary, No. of pinions		3	
	Manual lockout (yes, no)		YES	
	Downshift accelerator control (yes, no)		YES	
	Minimum cut-in speed		28 MPH	
	Gear ratio		0.7	
	<b>Lubricant</b>	Capacity (O.D. only)		1.5 PINTS
		Separate filter (yes, no)		NO
		Type recommended		MULTI PURPOSE
		SAE viscosity number	Summer	80
Winter			80	
Ext. cold		75		

## DRIVE UNITS—AUTOMATIC TRANSMISSION

Trade name	FORDOMATIC					
Type (fluid coupling with gears, torque convertor with gears, other)	TORQUE CONVERTER WITH PLANETARY GEARS					
Manual selector positions, left to right (show symbols and define, e.g., N- Neutral)	<table style="margin: auto; border: none;"> <tr> <td style="text-align: center; padding: 0 10px;">P PARK</td> <td style="text-align: center; padding: 0 10px;">R REVERSE</td> <td style="text-align: center; padding: 0 10px;">N NEUTRAL</td> <td style="text-align: center; padding: 0 10px;">DR DRIVE</td> <td style="text-align: center; padding: 0 10px;">LO LOW</td> </tr> </table>	P PARK	R REVERSE	N NEUTRAL	DR DRIVE	LO LOW
P PARK	R REVERSE	N NEUTRAL	DR DRIVE	LO LOW		
List gear ratios in each drive position (range)	DRIVE 1.47-1.00 PLUS TORQUE CONVERTER* LOW 2.40 PLUS TORQUE CONVERTER REVERSE 2.00 PLUS TORQUE CONVERTER  *2.40-1.00 AT FULL THROTTLE THROUGH DETENT PLUS TORQUE CONVERTER					
Shifting within drive position range by accelerator control and speed limiting governor (yes, no)	YES					
By governor—forced shift (yes, no)	YES					
Downshift of gears in high range possible up to (mph)	65					

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## DRIVE UNITS—AUTOMATIC TRANSMISSION (cont.)

<b>Torque convertor</b>	Number of elements		3
	Max. ratio at stall at engine rpm		2.1 TO 1 @ 1550-1750
	<b>Mechanical lockup</b>	Provided (yes, no)	NO
		Speed range	- - - -
		Releases at (speed range, mph)	- - - -
	Type of cooling (forced air, oil cooler and type, other)		FORCED AIR
Anti-creep device (yes, no)		NO	
<b>Lubricant</b>	Capacity—refill (pt.)		20.5
	Type recommended		AUTOMATIC TRANSMISSION FLUID
	<b>Grade</b>	Summer	TYPE A
		Winter	TYPE A
		Extreme cold	TYPE A

## DRIVE UNITS—PROPELLER SHAFT

Number used		ONE	
Type (exposed, torque tube)		EXPOSED	
<b>Outer diameter x length* x wall thickness</b>	Conventional trans.	2.00 X 26.98 X .083	
	Overdrive trans.	2.00 X 26.98 X .083	
	Automatic trans.	2.00 X 26.98 X .083	
		2.00 X 26.98 X .083	
<b>Intermediate bearing</b>	Type (plain, anti-friction)	NONE	
	Lubri. (fitting, prepack)	---	
<b>Universal joints</b>	Make		MECHANICS
	Number used		TWO
	Type (ball and trunion, cross, other)		CROSS-SLIP JOINT IN FRONT SPLIT JOINT IN REAR
	<b>Bearing</b>	Type (plain, anti-friction)	NEEDLE ROLLER
		Lubric. (fitting, prepack)	FITTING
	Drive taken through (torque tube or arms, spring)		REAR SPRINGS
Torque taken through (torque tube or arms, springs)		REAR SPRINGS	

\*Centerline to centerline of joints or centerline of rear attachment point.

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## DRIVE UNITS—REAR AXLE

Type (semi-floating, other)		SEMI-FLOATING	
Gear type (hypoid, other)		HYPOID	
Gear ratio and No. of teeth	Conventional trans.	3.73	
	Overdrive trans.	3.92	
	Automatic trans.	3.31	
Pinion adjustment (shim, other)		SHIMS	
Pinion bearing adj. (shim, other)		SHIMS	
Lubricant	Capacity (pt.)	3	
	Type recommended	HYPOID OR MULTI PURPOSE EXTREME PRESSURE	
	SAE viscosity number	Summer	SAE 90
		Winter	SAE 90
		Extreme cold	SAE 80

## DRIVE UNITS—WHEELS

Type (disc, other)		DISC
Size (size and flange type)		15 X 5K
Attachment	Type (bolt or stud)	STUD
	Circle diameter	4½
	Number and size	5 R.H. STUDS

## DRIVE UNITS—TIRES

Size and ply rating	Standard	6.70 X 15 4 PLY WSW TUBELESS
	Optional	NONE
Miles per mile at 30 mph		753
Inflation press. (cold)	Front	24
	Rear	24

## BRAKES—SERVICE

Type			HYDRAULIC, INTERNAL EXPANDING, DUO-SERVO, SINGLE ANCHOR
Master type			NONE
Effective area (sq. in.)			175.46
Percent brake effectiveness—rear			38%
Wheel rim	Diameter	Front	11
		Rear	11
	Type and material		COMPOSITE; PRESSED STEEL DISC AND CAST IRON DRUM

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## BRAKES—SERVICE (cont.)

Brake lining	Bonded or riveted		RIVETED	
	Pri- mary	Material	MOULDED ASBESTOS	
		Size (length x width x thickness)	Front wheel	10.62 X 1.75 X .187
			Rear wheel	11.95 X 1.75 X .187
		Segments per shoe		ONE
	Second- ary	Material	MOULDED ASBESTOS	
		Size (length width x thickness)	Front wheel	11.93 X 2.25 X .232
			Rear wheel	11.93 X 1.75 X .187
Segments per shoe		ONE		
Wheel cyl- inder bore	Front	1.125		
	Rear	0.875		
Master cylinder bore		1.00		
Available pedal travel		6.5		
Line pressure at 100 lb. pedal load		APPROXIMATELY 700		
Shoe clearance adjustment		.010		

## BRAKES—PARKING

Type of control		T-HANDLE PULL-TWIST RELEASE
Location of control		UNDER INSTRUMENT PANEL-LEFT SIDE
Operates on		REAR BRAKES
If sepa- rate from service brakes	Type (internal or external)	---
	Drum diameter	---
	Lining size (length x width x thickness)	---

## FRAME

Type and description	X MEMBER, BOX SECTION SIDE RAILS AND 4 CROSS MEMBERS
----------------------	---

## FRONT SUSPENSION

Type and description	INDEPENDENT BALL JOINT COIL SPRING SYSTEM INCORPORATING TWO UNEQUAL LENGTH TRANSVERSE CONTROL ARMS
----------------------	--



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## FRONT SUSPENSION (cont.)

<b>Spring</b>	Type	COIL	
	Material	SAE 9260 OR 5160	
	Size (length x width x No. leaves or coil I.D.)	14.99 X 4.03	
	Spring rate (lb. per in.)	290 ± 10	
	Rate at wheel (lb. per in.)	87	
<b>Shock absorbers</b>	Normal load (lb. @ rated length)	1540 ± 30	
	Manufacturer	HOUDE	
	Type (direct or lever)	DIRECT	
<b>Stabilizer</b>	Piston diameter	1.00	
	Type (link, linkless, frameless)	LINK-FRAME MOUNTED	
	Material	1065	

## STEERING

<b>Type used (Standard or optional)</b>	<b>Mechanical</b>	STANDARD		
	<b>Power</b>	OPTIONAL		
<b>Wheel diameter</b>		17"		
<b>Turning diameter</b>	<b>Outside front</b>	Wall to wall (r. & l.)	38.4	
		Curb to curb (r. & l.)	36.0	
	<b>Inside rear</b>	Wall to wall (r. & l.)	N.A.	
		Curb to curb (r. & l.)	21.50	
<b>Inside wheel angle with outside wheel at 20°</b>			25°	
<b>Mechanical</b>	<b>Gear</b>	Type	WORM AND TWO TOOTH ROLLER	
		Make	FORD	
		Ratios	Gear	20.1 TO 1
			Overall	20.1 TO 1
	<b>No. wheel turns</b>		3.4	
<b>Power</b>	<b>Linkage booster</b>	Type	LINKAGE BOOSTER	
		Make	BENDIX	
		Trade name	MASTER GUIDE	
	<b>Gear</b>	Type	SAME AS STANDARD	
		Ratios	Gear	SAME AS STANDARD
			Overall	SAME AS STANDARD
	<b>Pump driven by</b>		BELT TO CRANKSHAFT PULLEY	
	<b>Overall torque ratio</b>		25% STANDARD STEERING EFFORT	
	<b>Number wheel turns</b>		3.5	
	<b>Linkage</b>	<b>Type</b>	PARALLELOGRAM	
<b>Location (front or rear of wheels)</b>		REAR OF WHEELS		
<b>Tie rods (one or two)</b>		TRANSVERSE TWO		

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## STEERING (cont.)

Kingpin	Inclination at camber (deg.)		7° 7' 0" (CURB WEIGHT)
	Diameter		NO KINGPIN
	Bearings (type)	Upper	NO KINGPIN
		Lower	NO KINGPIN
		Thrust	BALL BEARING IN LOWER BALL JOINT
Wheel alignment (range and preferred)	Caster (deg.)		0° 30' TO +1° 30' CASTER NOT TO VARY MORE THAN 1/2° FROM ONE SIDE TO OTHER
	Camber (deg.)		0° 8' TO +1° 8' CAMBER NOT TO VARY MORE THAN 1/4° FROM ONE SIDE TO OTHER
	Toe-in (outside tread-inches)		1/16 TO 1/8
Steering knuckle type			BALL JOINTS
Wheel spindle	Diameter	Inner bearing	1.2493 - 1.2498
		Outer bearing	.7493 - .7498
	Thread size		3/4 - 16
	Bearing type		TAPERED ROLLER

## REAR SUSPENSION

Type			LONGITUDINAL LEAF	
Drive and torq. taken through (see page 14)			REAR SPRINGS	
Spring	Type		SEMI-ELLIPTIC	
	Material		SAE 5147 OR 5160	
	Size (length x width x No. leaves or coil I.D.)		48.0 X 2.0 X 5	
	Spring rate (lb. per in.)		120	
	Rate at wheel (lb. per in.)		125	
	Normal load (lb. at rated length)		760	
	Mounting insulation type			RUBBER BUSHED SHACKLES AND RUBBER PAD AT AXLE
	If leaf	No. of leaves		5
		Covers (yes, no)		NO
		Lubricated (yes, no)		NO
Inserts		Type and size		LEAF TIP INSERTS (ONE PIECE)
		Material		MOLDED IMPREGNATED FABRIC
Shackle (comp. or tens.)			TENSION	
Shock absorbers	Manufacturer		HOLDE	
	Type (direct or lever)		DIRECT	
	Piston diameter		1.0	
Stabilizer	Type (link, linkless, frameless)		NONE	
	Material		---	
Track bar type			NONE	

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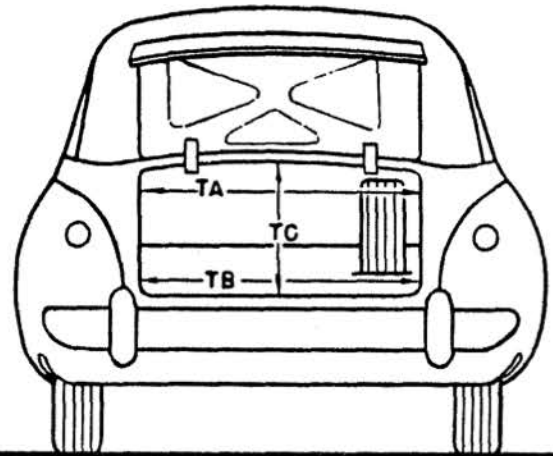
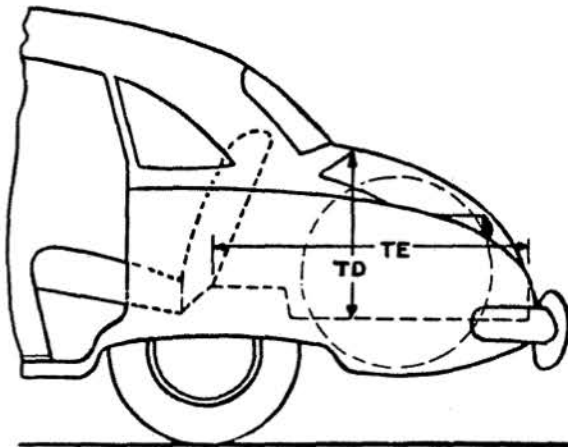
## BODY—GENERAL DEFINITIONS

NOTE: Included in the dimension definitions listed on this and the following pages are those which have been proposed for adoption by the SAE. 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., MA. The dimensions are developed from the following basic points:

1. Front and rear seat "A" points are taken 5" forward of vertical tangent to seat back  $\frac{1}{5}$  from center of body.  
14"
2. Front seat is in the rear position.
3. Loaded position—5 passengers, front 300 lb., rear 450 lb., includes spare wheel, tire and tools, and full complement of gas, oil, water, etc. and tires to recommended pressure, etc.
4. C. L. (centerline).
5. D. L. O. (daylight opening, exposed glass dimension).
6. Ramp breakover angle (page 20-A) is the supplement of the included ramp angle ( $180^\circ$  minus the included ramp angle) over which a car can pass without hanging up.

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## BODY—TRUNK OPENING DIMENSIONS



TA—Width across the top	46.3
TB—Width across the bottom	43.3
TC—Diagonal dimension at CL from top of opening to bottom	27.9
TD—Vertical height of opening (floor to top, inside edge of opening)	16.1
TE—Max. horizontal depth (forward from vertical projection of inside edge of opening)	34.8
Position of spare tire stowage	RIGHT HAND SIDE ON ANGLE
Method of holding lid open	SPRING CENTER BALANCE

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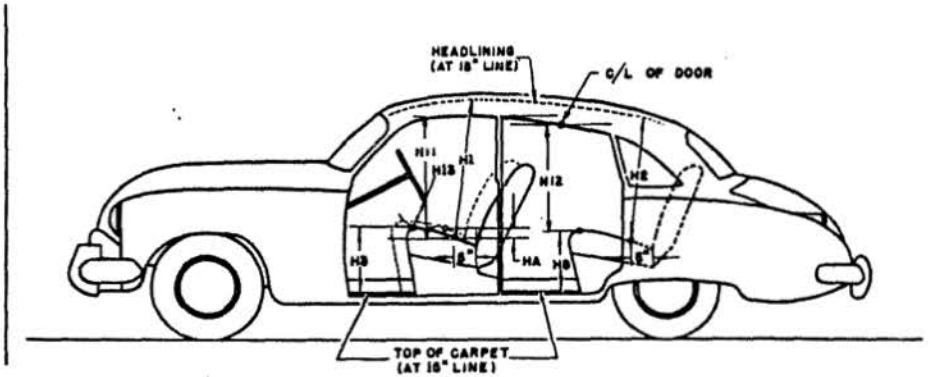
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## BODY—HEIGHT DIMENSIONS—INTERIOR



<b>H1. Front headroom</b> —from "A" pt. to headlining at 8° back of vertical on 15" line. (For "A" pt. see note 1, page 19)	33.6	33.2
<b>H2. Rear headroom</b> —from "A" pt. to headlining at 8° back of vertical on 15" line.		NONE
<b>H3. Front seat height</b> to floor carpet on 15" line (front edge of cushion).		7.3
<b>H8. Rear seat height</b> to floor carpet on 15" line (front edge of cushion).		NONE
<b>H11. Entrance—front—cushion</b> "A" point to bottom windcord vertical.		27.3
<b>H12. Entrance—rear—top of cushion</b> to bottom windcord vertical at C/L of rear door.		NONE
<b>H13. Steering wheel clearance</b> to seat cushion taken on arc.		5.6 WHEEL IN NEUTRAL POSITION
<b>HA. Front seat vertical rise</b> at "A" pt. (inches.)		1.8

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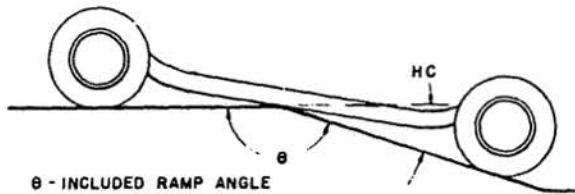
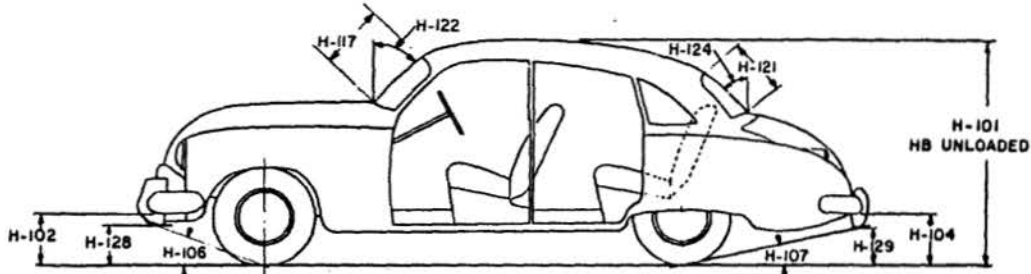
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## BODY—HEIGHT DIMENSIONS—EXTERIOR



θ - INCLUDED RAMP ANGLE  
 HC - RAMP BREAKOVER ANGLE  
 (SUPPLEMENT OF INCLUDED RAMP ANGLE)

H101. Overall height. <del>LOADED</del> TOP UP	52.4	52.2
HB. Overall height <del>LOADED</del> TOP DOWN		50.2
H102. Front bumper bottom to ground at normal section.		11.9
H104. Rear bumper bottom to ground at normal section.		11.9
H106. Angle of approach—from the tire rolling radius to lowest point on front bumper or guard.		23°45'
H107. Angle of departure—from the tire rolling radius to lowest point on rear bumper or guard.		14°21'
HC. Ramp breakover angle.*		10°57'35"
H117. Windshield DLO-slant height.		17.1
H121. Backlight DLO*—Max., slant height.	13.0	12.4
H122. Windshield slope angle to vertical line on car axis.		49°
H124. Backlight slope angle to vertical line on car axis.	42°	42°
H128. Ground to bottom of front bumper guard.		11.9
H129. Ground to bottom of rear bumper guard.		11.9
HD. Min. road clearance <del>at axle housing</del> at frame.		5.9
HE. Min. road clearance at rear axle housing.		7.3

\*See Notes, page 19.

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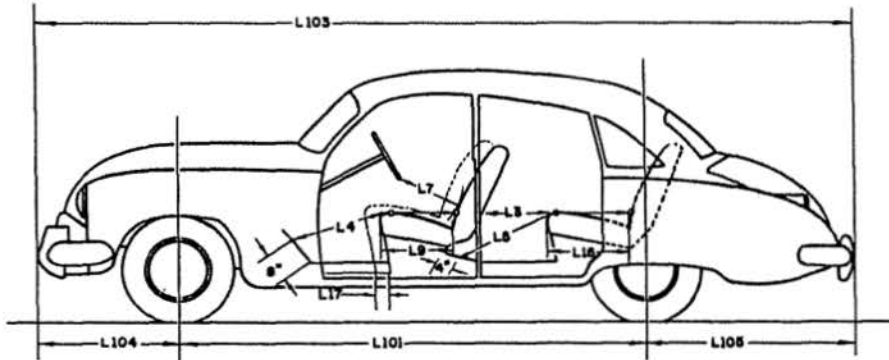
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## BODY—LENGTH DIMENSIONS



	L3. Rear compartment back of front seat back to rear seat back.	NONE
	L4. Leg room—front—diagonal—ball of foot to top of seat to front seat back— $\frac{1}{15}$ " line.	45.4 8" TO HEEL POINT
	L5. Leg room—rear—diagonal—from ball of foot to top of rear seat cushion and to seat back.	NONE
Interior	L7. Steering wheel clearance to seat back taken on arc.	14.8 WHEEL IN NEUTRAL POSITION
	L9. Front seat depth (front edge to vert. tan. to seat back on $\frac{1}{15}$ " line).	18.3
	L16. Depth of rear seat (front edge to seat back).	NONE
	L17. Total adjustment of front seat at floor.	4.0
	L101. Wheel base.	102"
	L103. Overall length (bumper to bumper inc. guards).	175.3
Exterior	L104. Overhang—front including bumper guards.	27.6
	L105. Overhang—rear including bumper guards.	45.7

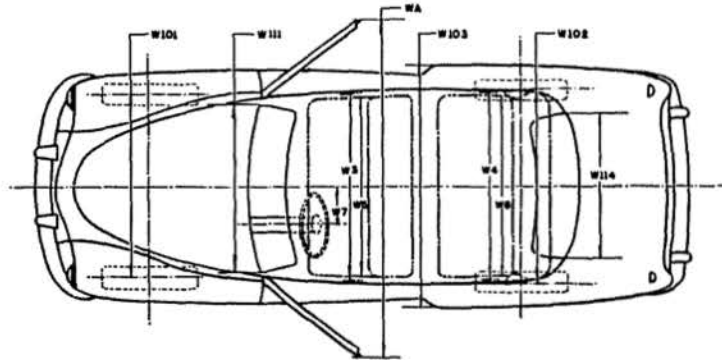
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## BODY—WIDTH DIMENSIONS



Interior	W3. Front shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	53.3	
	W4. Rear shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	NONE	
	W5. Front hip room, at top of seat 5" forward of vert. tan. to seat back.	58.8	
	W6. Rear hip room, at top of seat 5" forward of vert. tan. to seat back.	NONE	
	W7. Steering wheel center to center of body.	14.5	
	W101. Front tread at ground.	56.0	
	W102. Rear tread at ground.	56.0	
Exterior	W103. Max. overall width of car including bumpers or mouldings.	70.3	
	WA. Max. overall width of car with doors open.	148.9	
	W111. Windshield DLO, max. width.	56.6	
	W114. Back window DLO, max. width.	43.0	44.6





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