AUTOMOBILE MANUFACTURERS ASSOCIATION
CONSOLIDATED SPECIFICATION QUESTIONNAIRE

MAKE OF CAR: BUICK		**MODEL NAME**	**SYMBOL**
COMPANY: BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN		Special Century Super Roadmaster	Series 40 Series 60 Series 50 Series 70
MODEL YEAR: 1954	**DATE** January 6, 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 5 or 6 passenger, 4-door sedan or equivalent.

GENERAL SPECIFICATIONS

Model		Series 40	Series 60	Series 50	Series 70
Wheelbase		122		127	
Tread	Front	59			
	Rear	59.0		62.2	
Maximum Overall Dimensions	Length (L-103)	206.3		216.8	
	Width (W-103)	76.8		79.9	
	Height (H-101)	60.5		62.4	62.6
Steering ratio—overall		26.7:1			24.1:1
Turning diameter (curb to curb)		42.8 Right - 42.9 Left		43.0 Right - 43.0 Left	
Shipping weight*		**3714	**3786	4105	4250
Transmission—(Specify standard, optional, not avail.)	Conventional	Standard			None
	Overdrive	None			
	Automatic	Optional			Standard
Axle ratio	Conventional	3.9			None
	Overdrive	None			
	Automatic	3.6	3.4		
Tire size		7.60-15 4 Ply			8.00-15 4 Ply
Engine	Type	90°V			
	No. of cylinders	8			
	Valve arrangement	In-Head			
	Bore and stroke	3.625 x 3.20	4.00 x 3.20		
	Piston displacement, cu. in.	264.0	322.0		
	Standard compression ratio	7.2	8.0		8.5
	Maximum bhp at engine rpm	143 @ 4200	195 @ 4100	177 @ 4100	200 @ 4100
	Maximum torque at rpm	228 @ 2400	302 @ 2400	295 @ 2000	309 @ 2400

*Standard car weight, not including gas and water.

** Estimated

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ENGINE—GENERAL				
Type — V, In-line, other	V			
Type — Angle of V	90°			
No. of cylinders	8			
Valve arrangement	In-Head			
Bore and stroke	3.625 x 3.20	4.00 x 3.20		
Piston displacement, cu. in.	264.0	322.0		
Numbering system (front to rear) — L. Bank	2-4-6-8			
Numbering system (front to rear) — R. Bank	1-3-5-7			
Firing order	1-2-7-8-4-5-6-3			
Compression ratio — Standard Head	7.2	8.0		8.5
Compression ratio — Optional Head **	8.1	8.5		None
Cylinders — Head Material — Standard	Cast Iron			
Cylinders — Head Material — Optional	None			
Cylinders — Sleeve—Wet, dry, other, none	None			
Number of mounting points — Front	Two			
Number of mounting points — Rear	One			
Taxable horsepower $\frac{(\text{Dia.}^2 \times \text{No. Cyl.})}{2.5}$	42.05	51.20		
Advertised max. brake horsepower at engine RPM* — Standard head	143 @ 4200	195 @ 4100	177 @ 4100	200 @ 4100
Advertised max. brake horsepower at engine RPM* — Optional head **	150 @ 4200	200 @ 4100	182 @ 4100	None
With fuel (Octane and method) — Standard Head	Regular	Premium		
With fuel (Octane and method) — Optional Head	Premium			None
Max. torque (lb. ft. @ RPM) — Standard head	228 @ 2400	302 @ 2400	295 @ 2000	309 @ 2400
Max. torque (lb. ft. @ RPM) — Optional head	240 @ 2400	309 @ 2400	300 @ 2000	None
Recommended idle speed (neutral)	450 R.P.M.			
ENGINE—PISTONS				
Material	Aluminum Alloy			
Description and finish	Cam Ground - Transverse Slot Anodized			
Weight (piston only) oz. ***	16.25	19.95		
Clearance — Top land	.025			
Clearance — Skirt — Top	.0015	.0017		
Clearance — Skirt — Bottom	.0015	.0017		
Ring groove depth — No. 1 ring	.1955	.2145		
Ring groove depth — No. 2 ring	.198	.217		
Ring groove depth — No. 3 ring	.198	.217		
Ring groove depth — No. 4 ring	None			

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

** Compression ratio change not obtained with optional head but with changes in cylinder head gasket and on Series 40 only with piston change on Dynaflow equipped cars only.

*** 16.82 when equipped with Dynaflow Transmission, Series 40.

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ENGINE—RINGS						
Type (top to bottom)	No. 1 oil or comp.		Compression			
	No. 2 oil or comp.		Compression			
	No. 3 oil or comp.		Oil			
	No. 4 oil or comp.		None			
No. rings above piston pin			Three			
Compression	Material		Cast Iron			
	Coating		Lubrite Type			
	Width		.078			
	Gap		.015			
	Maximum wall thickness		.181		.200	
Oil	Material		Steel			
	Coating		None			
	Width		.186			
	Gap		.025			
	Maximum wall thickness		.135			
Location of expanders			Oil Ring			
ENGINE—PISTON PINS						
Material			CDS 1117			
Length			3.100		3.400	
Diameter			.940			
Type	Locked in rod, in piston, floating, etc.		Locked In Rod			
	Bushing	In rod or piston	None			
		Material	None			
Clearance	In piston		.0004			
	In rod		None			
Direction offset in piston			None			
ENGINE—CONNECTING RODS						
Material			1145 Forged Steel			
Weight (oz.)			22.16			
Length (center to center)			6.00			
Bearing	Material		Durex 100A			
	Type (cast-in or removable)		Removable			
	Effective length		.881			
	Clearance		.0012			
	End play		.007			
ENGINE—CRANKSHAFT						
Material			1145 Forged Steel			
Weight (lb.)			56.7			

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ENGINE—CRANKSHAFT (cont.)

Vibration damper type			None	Rubber Absorption
End thrust taken by bearing (No.)			Five	
Crankshaft end play			.006	
Main bearing	Material		Steel Backed Durex - 100A	
	Type (cast-in or removable)		Removable	
	Clearance		.0018	
	Journal dia. and bearing effective length	No. 1	2.4985 x 1.220	
		No. 2	2.4985 x 1.250	
		No. 3	2.4985 x 1.250	
		No. 4	2.4985 x 1.250	
		No. 5	2.4985 x 1.765	
		No. 6	None	
		No. 7	None	
	Direction offset from cyl. bore		None	
Connecting rod crankpin journal diameter			2.2495	

ENGINE—CAMSHAFT

Material			Forged Steel
Bearings	Material		Steel Backed Babbitt
	Number		Five
Type of drive	Gear or chain		Chain
	Crankshaft gear or sprocket material		Sprocket - C.D.S. 1140
	Camshaft gear or sprocket material		Sprocket - Cast Iron
	Timing chain	Make	Link Belt
		No. of links	52
		Width	.688
		Pitch	.500

ENGINE—VALVE SYSTEM

Hydraulic lifters (yes, no)			Yes
Special provision for valve rotation (intake, exhaust)			None
Rocker ratio			1.5:1
Operating tappet clearance (indicate hot or cold)	Intake		None
	Exhaust		None
Tappet clearance for timing	Intake		.004 Off Seat
	Exhaust		.004 Off Seat
Timing marks on fly-wheel, damper, other		Fan Driving Pulley	Harmonic Balancer

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ENGINE—VALVE SYSTEM (cont.)						
Timing	Intake	Opens (°BTC)	25			
		Closes (°ABC)	67	77		
	Exhaust	Opens (°BBC)	70			
		Closes (°ATC)	42			
Intake	Material		Nickel - Chrome Alloy Steel			
	Overall length		4.704			
	Actual overall head dia.		1.750			
	Angle of seat		45°			
	Seat insert material		None			
	Stem diameter		.3720			
	Stem to guide clearance		.0025			
	Lift		.358	.378		
	Outer spring press. and length	Valve closed (lb. @ in.)	40.5 - 45.5 1.500			
		Valve open (lb. @ in.)	85 - 91 1.142	88-94 1.120		
	Inner spring press. and length	Valve closed (lb. @ in.)	21.5 - 26.5 1.530			
		Valve open (lb. @ in.)	53 - 59 1.172	55-61 1.150		
Exhaust	Material		21 - 4NS or 2155 N			
	Overall length		4.704			
	Actual overall head dia.		1.250			
	Angle of seat		45°			
	Seat insert material		None			
	Stem diameter		.3714			
	Stem to guide clearance		.0030			
	Lift		.350			
	Outer spring press. and length	Valve closed (lb. @ in.)	40.5 - 45.5 1.500			
		Valve open (lb. @ in.)	84 - 90 1.150			
	Inner spring press. and length	Valve closed (lb. @ in.)	21.5 - 26.5 1.530			
		Valve open (lb. @ in.)	52 - 58 1.180			
ENGINE—LUBRICATION SYSTEM						
Type of lubrication (splash, pressure, nozzle)	Main bearings		Pressure			
	Connecting rods		Pressure			
	Piston pins		Splash			
	Camshaft bearings		Pressure			
	Tappets		Pressure			
	Timing gear or chain		Nozzle			
	Cylinder walls		Splash and Nozzle			

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ENGINE—LUBRICATION SYSTEM (cont.)

Oil pump type	Gear
Normal oil pressure (lb. @ rpm)	35 @ 35
Oil pressure gage type (electric or mechanical)	Mechanical
Type oil intake (floating, stationary)	Stationary
Oil filter type (full flow, partial flow)	Full Flow
Capacity of crankcase, less filter—refill (qt.)	6
Oil grade recommended (SAE viscosity and temperature range)	Not Lower Than 32° F - 20W Not Lower Than Minus 10° F - 10W Below-10° F - 5W
Oil type recommended	Heavy Duty

ENGINE—FUEL SYSTEM

Recommended fuel	Standard head		Regular	Premium		
	Optional head***		Premium		None	
Fuel Tank	Capacity (gals.)		19			
	Filler Location		Left Rear Fender			
Fuel Filter	Type		Metal - Sintered Bronze Element			
	Location		At Carburetor			
Fuel pump	Type (elec. or mech.)		Mechanical			
	Location		Right Side of Engine - Near Front			
	Pressure range		5 lbs.			
	Vacuum booster (std., optl., none)		Standard			
Carburetor	Make		Stromberg or Carter			
	Model number		*AAVB-267	**4AUVB-267	*AAVB-267	**4AUVB-267
	Number used		One			
	Type	Downdraft, side inlet, other	Downdraft			
		Single or dual	2 bbl.	4 bbl.	2 bbl.	4 bbl.
	Intake manifold heat control (manual, auto., none)		Automatic			
	Automatic choke type (integral, other)		Integral			
	Air cleaner type	Standard	Heavy Duty Oil Bath			
		Optional	None			

ENGINE—EXHAUST SYSTEM

Type (single, single with cross-over, dual, other)		Single With Cross-Over	
Muffler type (rev. flow, str. thru, sep.resonator)		Reverse Flow	
Exhaust pipe dia.	Branch	2.00	
	Main	2.50	
Tail pipe diameter		2.00	2.12

* Carter WCD
** Carter WCFB
** Used In Conjunction With Dynaflow Transmission.

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ENGINE—COOLING SYSTEM

MODEL			Series 40	Series 60	Series 50	Series 70
Type (pressure system, atmospheric, other)			Pressure System			
Radiator cap relief valve press.			7 lbs.			
Circulation thermostat	Type (choke, bypass)		Choke			
	Starts to open at		157-162			
Water pump	Type (centrifugal, other)		Centrifugal			
	Number of pumps		One			
	Drive (V-belt, other)		V-Belt			
	Bearing type		Sealed, Double Row Ball Bearing			
By-pass recirculation type (internal, external)			Internal			
Radiator core type (cellular, tube and fin)			Vee Cellular			
Cooling system capacity	With heater (qt.)		*18			20.0
	Without heater (qt.)		**16.5			18.5
Water jackets full length of cylinder (yes, no)			No			
Water all around cylinder (yes, no)			Yes			
Radiator hose	Lower	Number and type (molded, straight)	One - Molded			
		Inside diameter and length	Dia. 1.562			
	Upper	Number and type (molded, straight)	One - Molded			
		Inside diameter and length	Dia. 1.562			
	By-pass	Number and type (molded, straight)	None			
		Inside diameter and length	None			
Drive belts	Fan	Number used	***One			
		Angle of V	36°			
		Outside length	52.7			
		Width	.380			
	Generator	Angle of V	***			
		Outside length	***			
		Width	***			
Fan	Number of blades and spacing		Four, 76° - 104°			
	Diameter		18 inches			
	Ratio—fan to crankshaft revolutions		.92:1			
	Bearing type		Fan and Water Pump Bearing Shown Above			

* When equipped with Dynaflow Transmission, Series 40, 60 & 50, 20 Qts.
** When Equipped with Dynaflow Transmission, Series 40, 60 & 50, 18.5 Qts.
*** One Belt is used for both fan and generator.

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MODEL			Series 40	Series 60	Series 50	Series 70
ELECTRICAL—SUPPLY SYSTEM						
Battery	Make and Model		Delco-Remy - 3 EM 60-W			
	Voltage Rtg. & Plates/cell		12-9			
	SAE Designation & Amp Hr. Rtg		2E-60			
	Location		Left Front Fender Skirt - Under Hood			
	Terminal grounded		Negative			
Generator	Make		Delco-Remy			
	Model		1102008			
	Type		Shunt			
	Ratio—Gen. to Cr/s rev.		2.17:1			
Regulator	Make		Delco-Remy			
	Model		1118825			
	Type		Voltage & Current Control			
	Cutout relay	Closing voltage @ generator rpm	11.8 - 13.6 - Adjust to 12.8			
		Reverse current to open	-1 to -6			
	Regulated	Voltage	14-15 - Adjust to 14.5			
		Current	27 - 33 - Adjust to 30			
	Min. Gen. rpm required		2300 (Hot)			
	Voltage test conditions	Temperature	150° F.			
		Load	Run 15 Minutes at 1-10 Amps.			
		Other				
ELECTRICAL—STARTING SYSTEM						
Starting motor	Make		Delco-Remy			
	Model		1107621			
	Rotation (drive end view)		Clockwise			
	Engine cranking speed		160 R.P.M.			
	Test conditions		Engine & Operating Temperature			
	Lock test	Amps	470			
		Volts	5.1			
		Torque (lb. ft.)	12			
	No load test	Amps	95			
		Volts	10.2			
		RPM (min.)	4000			
Motor control	Switch (solenoid, manual)		Solenoid			
	Starting procedure		1. Turn on ignition 2. Depress accelerator.			

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ELECTRICAL—STARTING SYSTEM (cont.)

Motor drive	Engagement type		Solenoid With Over Running Clutch
	Pinion meshes (front, rear)		Front
	Number of teeth	Pinion	9
		Flywheel	180
	Flywheel tooth face width		.573

ELECTRICAL—IGNITION SYSTEM

Coil	Make		Delco-Remy
	Model		*1115082
	Amps	Engine stopped	4.5
		Engine idling	2.5
Distributor	Make		Delco-Remy
	Model		1110849
	Spark advance data (at distributor shaft)	Centr. advance start (rpm)	0° - .6° @ 300
		Centr. advance max. deg. @ rpm	11° - 13.5° @ 1750
		Vacuum advance start (in. Hg.)	6.5 - 8.5
		Vac. adv. (max. deg. @ in. Hg.)	10.5 @ 11.5
	Breaker gap (in.)		**.0125 - .0175
	Cam angle (deg.)		Usage not Recommended by Buick
	Breaker arm tension (oz.)		19 - 23
Timing	C/S deg. @ rpm		5 BTC
	Mark location	Fan Drive Pulley	Harmonic Balancer
	Cylinder numbering system (see page 2)	Front to Rear	Left Bank, 2-4-6-8 Right Bank, 1-3-5-7
	Firing order (see page 2)		1-2-7-8-4-5-6-3
Spark plug	Make and model		A.C. 44-5
	Thread (mm)		14
	Tightening torque (lb. ft.)		25
	Gap		.030 - .035
Cable	Conductor type		Stranded Copper
	Insulation type		Neoprene
	Spark plug protector		Neoprene Boot & Sheet Metal Cover

ELECTRICAL—SUPPRESSION

Description	Distributor	10,000 OHM Resistance Rotor
	Coil	.33 Micro-Farad Condenser
	Generator	.33 Micro-Farad Condenser
	Voltage Regulator	.50 Micro-Farad Condenser

* To be Used in Series with Resistance Unit 1927809.

** Dwell Meter for Setting Point Opening Is Not Recommended.

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ELECTRICAL—INSTRUMENTS AND SWITCHES

Speedometer	**Make**	A.C.
	Trip odometer (yes, no)	No / Yes
Charge indicator—type		Ammeter
Temperature indicator—type		Bourdon Tube
Oil pressure indicator—type		Pressure Expansion
Fuel indicator—type		Electric
Ignition switch	**Identify positions in order and circuits controlled**	Center - Ignition and Accessories On. 1st Position Counterclockwise-Ignition & Accessories Off & Locked 1st Position Clockwise - Ignition and Accessories Off-Not Locked
	Provision for illumination	Instrument Lamp In Switch Housing
	Location	Right of Steering Column
	Theft protection type	Metal Shield
Main lighting switch	**Identify positions and lights controlled**	1st Position Out - Park and Tail Lights 2nd Position Out - Head Lights and Tail Lights Fully Counterclockwise - Instrument and Map Lights Off 1st Position Clockwise - Map Lights On. 2nd Position Clockwise - Map Lights and Instrument Lights On. 3rd Position Clockwise - Instrument Lights On*
Other light switches	**Locations and lamps controlled**	
	Dome Lamp	*****
	Trunk Lamp	**Mercury Switch In Lamp
	Glove Compartment	Mechanically Operated By Door
	Parking Brake	*** On Parking Brake Release Bracket
Other switches	**Locations and devices controlled**	
	Directional Signal	Left Side of Steering Column
	Back-Up Lights	***Base of Steering Column****
		On Steering Column Between Dash & Inst. Panel
Windshield wiper	**Make**	Trico
	Type	Vacuum
	Vacuum booster provision	Yes
	Washer provision	Yes
Horn	**Type**	Vibrator
	Number used	2
	Amp draw (each)	Left Horn 9.5 - Right Horn 10.5

* Further rotation clockwise dims instrument lights.
** Optional at Extra Cost Series 40
*** Optional at Extra Cost Series 40-60-50.
**** Series 40-60-50 Dynaflow same as Series 70.
*****

	Manual	Automatic
41D, 46R, 61, 66R	Dome Light	Front Pillars
46C, 66C	Rear of Left Rear Arm Rest	Front Pillars
52-72R	Left Center Pillar	Front & Center Pillars
56R, 76R	Dome Light	Front Pillars
56C, 76C, 100	Rear of Left Rear Arm Rest	Front Pillars

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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.

MODEL	Series 40	Series 60	Series 50	Series 70
Headlamp	2-4400			
Headlamp beam indicator	1-53			
Parking light	2-1034			
Tail light	2-1034			
Stop light	Use Same Bulb as Tail Light			
Direction indicator — Front	Use Same Bulb as Parking Light			
Direction indicator — Rear	2-1073			
Direction indicator — Tell-Tale	2-53			
License plate light	2-67			
Instrument light	4-57			7-57
Ignition lock light	1-57			
Map light	1-89			
Dome light	1-1004			
Clock light	1-57*	1-57		
Radio dial light	1-57*			
Glove compartment light	1-57			
Courtesy light	None			
Trunk compartment light	1-89*	1-89		
Other Back-up Light	2-1073*			2-1073
Brake Indicator	1-57*		1-89*	1-89
Dynaflow Quadrant Light**	**1-53*			1-53

*Accessory at Extra Cost.
**Included in Dynaflow Package.

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	25 @ 3 Min. C.B. (a)			
Headlamp beam indicator	Same as (a)			
Parking light	Same as (a)			
Tail light	Same as (a)			
Stop light	SFE-9 (b)			
Direction indicator	Same as (b)			
License plate light	Same as (a)			
Instrument light	Same as (a)			
Ignition light	Same as (a)			
Map light	Same as (a)			
Dome light	SFE-20 (c)			
Clock	*AGA-2	AGA-2		
Clock light	*Same as (a)	Same as (a)		
Radio	*7.5 Special			
Glove compartment light	AGA-2			
Courtesy light	None			
Trunk compartment light	*Same as (c)	Same as (c)		
Other BRAKE INDICATOR	*SFE-9 (d)			SFE-9 (d)
HEATER & BLOWER	*SFE-9			
Back-Up Lamps	*Same as (d)			Same as (d)
Cigar Lighter	Special			
Antenna Motor	*AGC-15			

*Electric Window & Seat Controls - 40 C.B.
Air Conditioner *20-SFE Blower: 2-AGA Temp. Control
Vacuum Brake Booster SFE-14 Fuse*

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MODEL			Series 40	Series 60	Series 50	Series 70
DRIVE UNITS—CLUTCH (PEDAL OPERATED)						
Make			Buick			None
Type (dry or wet plate)			Dry Plate			None
In combination with fluid coupling (yes, no)			No			None
Semi-centrifugal (yes, no)			No			None
Type pressure plate springs			Crown Spring	Coil Spring		None
Total plate pressure (lb.)			1350	1680		None
No. of clutch driven discs			One			None
Clutch facing	Material		Woven			None
	Inside diameter		6	6.5		None
	Outside diameter		10	10.5		None
	Total eff. area (sq. in.)		100.6	106.8		None
	Thickness		125 ± .003			None
	Number required		Two			None
	Engagement cushioning method		Spring			None
	Release bearing	Type	Ball			None
		Method of lubrication	Sealed			None
	Torsional damping	Method (springs, other)	Spring			None
		Frict. mat.	Woven Material			None
DRIVE UNITS—TRANSMISSIONS						
Conventional (std. or opt.)			Standard			None
Conventional with overdrive (std. or opt.)			None			
Automatic (std. or opt.)			Optional			Standard
DRIVE UNITS—CONVENTIONAL TRANSMISSION						
Number of forward speeds			Three			None
Transmission ratios	In first		2.67	2.3933		None
	In second		1.66	1.5259		None
	In third		1.00	1.00		None
	In fourth		None			None
	In reverse		3.02	2.534		None
Constant mesh gears in 2nd (yes, no)			Yes			
Spur gear used in (indicate speeds)			None			None
Helical gears used in (indicate speeds)			All			None
Synchronous meshing in 2nd and 3rd gears (yes, no)			Yes			None

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DRIVE UNITS—CONVENTIONAL TRANSMISSION (cont.)

Lubricant	Capacity (pt.)		1.75	2.50		None
	Type recommended		"Multi-Purpose" Gear Lubricant			None
	SAE viscosity number	Summer	SAE 90			None
		Winter	SAE 90			None
		Extreme cold	SAE 90			None

DRIVE UNITS—CONVENTIONAL TRANSMISSION WITH OVERDRIVE

For transmission data see conventional transmission section

Overdrive	Type (planetary or other)			None
	If planetary, No. of pinions			
	Manual lockout (yes, no)			
	Downshift accelerator control (yes, no)			
	Minimum cut-in speed			
	Gear ratio			
	Lubricant	Capacity (O.D. only)	Filler	
		Separate filter (yes, no)		
		Type recommended		
		SAE viscosity number	Summer	
			Winter	
			Ext. cold	

DRIVE UNITS—AUTOMATIC TRANSMISSION

Trade name	*Twin Turbine Dynaflow
Type (fluid coupling with gears, torque convertor with gears, other)	Torque Converter With Gears
Manual selector positions, left to right (show symbols and define, e.g., N- Neutral)	P-Park N-Neutral D-Drive L-Low R-Reverse
List gear ratios in each drive position (range)	D - 1x Converter Ratio L - 1.82 x Converter Ratio R - 1.82 x Converter Ratio
Shifting within drive position range by accelerator control and speed limiting governor (yes, no)	No
By governor—forced shift (yes, no)	No
Downshift of gears in high range possible up to (mph)	Manual Downshift Not Recommended Over 40 M.P.H.

* Optional At Extra Cost on Series 40, 60, & 50.

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MAKE OF CAR BUICK **MODEL YEAR** 1954

MODEL			Series 40	Series 60	Series 50	Series 70

DRIVE UNITS—AUTOMATIC TRANSMISSION (cont.)

Torque convertor	Number of elements		4			
	Max. ratio at stall at engine rpm		2.45 @ 1700			
	Mechanical lockup	Provided (yes, no)	No			
		Speed range	None			
		Releases at (speed range, mph)	None			
	Type of cooling (forced air, oil cooler and type, other)		Water Cooled			
	Anti-creep device (yes, no)		No			
Lubricant	Capacity—refill (pt.)		20			
	Type recommended		**			
	Grade	Summer	Type "A"			
		Winter	Type "A"			
		Extreme cold	Type "A"			

DRIVE UNITS—PROPELLER SHAFT

Number used			One		
Type (exposed, torque tube)			Torque Tube		
Outer diameter x length* x wall thickness	Conventional trans.		2.62 x 60.9 x .065	2.62 x 64.9 x .065	None
	Overdrive trans.		None		
	Automatic trans.		2.62 x 60.9 x .065	2.62 x 64.9 x .065	
Intermediate bearing	Type (plain, anti-friction)		None		
	Lubri. (fitting, prepack)		None		
Universal joints	Make		Saginaw or Spicer		
	Number used		One		
	Type (ball and trunnion, cross, other)		Cross		
	Bearing	Type (plain, anti-friction)	Steel Bushing		
		Lubric. (fitting, prepack)	Lubricated Automatically By Transmission Lubricant		
Drive taken through (torque tube or arms, spring)			Torque Tube		
Torque taken through (torque tube or arms, springs)			Torque Tube		

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

** Automatic Transmission fluid type A, - must be identified by AQ-ATF number embossed in can or special Buick oil for Dynaflow Drive.

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MODEL			Series 40	Series 60	Series 50	Series 70
DRIVE UNITS—REAR AXLE						
Type (semi-floating, other)			Semi-Floating			
Gear type (hypoid, other)			Hypoid			
Gear ratio and No. of teeth	Conventional trans.		3.9(11-43)			None
	Overdrive trans.		None			
	Automatic trans.		3.6(12-43)	3.4(12-41)		
Pinion adjustment (shim, other)			Shims			
Pinion bearing adj. (shim, other)			None			
Lubricant	Capacity (pt.)		4.5			
	Type recommended		*Hypoid Lubricant - GM 4655M only, for complete fill			
	SAE viscosity number	Summer	90			
		Winter	90			
		Extreme cold	*80 GM 4654M			
DRIVE UNITS—WHEELS						
Type (disc, other)			Disc			
Rim (size and flange type)			15 x 6L			
Attachment	Type (bolt or stud)		Bolt			
	Circle diameter		5.000			
	Number and size		Five - .562			
DRIVE UNITS—TIRES						
Size and ply rating	Standard		7.60 x 15 4 Ply			8.00x15 4 Ply
	Optional		None			
Rev/mile at 30 mph			725.3	724.7	730.2	717.3
Inflation press. (cold)	Front		24			
	Rear		24			
BRAKES—SERVICE						
Type			Hydraulic - Internal Expanding			
Booster type			Optional***			
Effective area (sq. in.)			184.6	207.5		219
Percent brake effectiveness—rear			47			
Drum	Diameter	Front	12			
		Rear	12			
	Type and material		Cast Iron			

* M.P. Hypoid May Be Used for Make-Up.

*** On Dynaflow Equipped Cars Only.

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MODEL	Series 40	Series 60	Series 50	Series 70

BRAKES—SERVICE (cont.)

Brake lining	Bonded or riveted				Riveted		
	Primary	Material			Moulded Extruded		
		Size (length x width x thickness)	Front wheel	10.094 x 2.25 x .187			10.094 x 2.50 x .250
			Rear wheel	10.094 x 1.75 x .187	10.094 x 2.25 x .187		
		Segments per shoe		One			
	Secondary	Material		Moulded Extruded			
		Size (length width x thickness)	Front wheel	12.969 x 2.25 x .187			12.969 x 2.50 x .250
			Rear wheel	12.969 x 1.75 x .187	12.969 x 2.25 x .187		
		Segments per shoe		One			
Wheel cylinder bore	Front			1.12			
	Rear			1.0			
Master cylinder bore				1.0			
Available pedal travel				7.5			
Line pressure at 100 lb. pedal load				600			
Shoe clearance adjustment				.015			

BRAKES—PARKING

Type of control		Step On - Left Foot Operated
Location of control		Left Side Cowel Panel
Operates on		Rear Service Shoes
If separate from service brakes	Type (internal or external)	None
	Drum diameter	None
	Lining size (length x width x thickness)	None

FRAME

Type and description	Double Drop, Channel X Center Cross Member, Box Type Front Cross Member.

FRONT SUSPENSION

Type and description	Independent With Coil Springs

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MODEL	Series 40	Series 60	Series 50	Series 70

FRONT SUSPENSION (cont.)

	Type	Coil		
	Material	High Carbon Silicon Manganese Steel 9260		
Spring	Size (length x width x No. leaves or coil I.D.)	15.0 x .660 x 4.047	15 x .670 x 4.047	15 x .680 x 4.047
	Spring rate (lb. per in.)	350	360	
	Rate at wheel (lb. per in.)	92	95	
	Normal load (lb. @ rated length)	1085 @ 9.50	1140 @ 9.50	1175 @ 9.50
Shock absorbers	Manufacturer	Delco		
	Type (direct or lever)	Direct		
	Piston diameter	1"		
Stabilizer	Type (link, linkless, frameless)	Link Type Mounted In Rubber		
	Material	SAE 1065		

STEERING

Type used (Standard or optional)		Mechanical	Standard		None
		Power	Optional*		Standard
Wheel diameter			18		
Turning diameter	Outside front	Wall to wall (r. & l.)	44.5 Right - 44.6 Left	45.5 Right - 45.5 Left	
		Curb to curb (r. & l.)	42.8 Right - 42.9 Left	43.0 Right - 43.0 Left	
	Inside rear	Wall to wall (r. & l.)	Not Available	Not Available	
		Curb to curb (r. & l.)	Not Available	Not Available	
Inside wheel angle with outside wheel at 20°			22.5°		
Mechanical	Gear	Type	Ball Bearing Worm and Nut		None
		Make	Saginaw		None
		Ratios: Gear	23.6		None
		Ratios: Overall	26.7		None
	No. wheel turns		4.5		None
Power	Type		Hydraulic*		
	Make		Saginaw		
	Trade name		Buick Power Steering		
	Gear	Type	Ball Bearing Worm and Nut		
		Ratios: Gear	21.3:1		
		Ratios: Overall	24.1:1		
	Pump driven by		Belt		
	Overall torque ratio		Variable		
	Number wheel turns		5		
Linkage	Type		Parallel Drag Link		
	Location (front or rear of wheels)		Rear		
	Drag link (trans. or long)		Transverse		
	Tie rods (one or two)		Two		

*Optional On Series 40, 60, and 50 Dynaflow Equipped Cars Only.

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MODEL	Series 40	Series 60	Series 50	Series 70

STEERING (cont.)

Kingpin	Inclination at camber (deg.)		0° at $7/8^{\circ}$ Camber
	Diameter		.861 - .862
	Bearings (type)	Upper	Bushing
		Lower	Bushing
		Thrust	Ball
Wheel alignment (range and preferred)	Caster (deg.)		$1/2^{\circ}$ Positive to $3/4^{\circ}$ Negative
	Camber (deg.)		$7/8^{\circ}$ Positive to $5/8^{\circ}$ Negative
	Toe-in (outside tread-inches)		0 to 1/16
Steering knuckle type			Reverse Elliott
Wheel spindle	Diameter	Inner bearing	1.3735 - 1.3740
		Outer bearing	.8426 - .8431
	Thread size		13/16 - 16, LH & RH
	Bearing type		Ball

REAR SUSPENSION

Type				Coil Springs	
Drive and torq. taken through (see page 14)				Torque Tube	
Spring	Type			Coil	
	Material			High Carbon Silicon Manganese Steel 9260	
	Size (length x width x No. leaves or coil I.D.)			19.375 x .560 x 5.5	19.50 x .580 x 5.5
	Spring rate (lb. per in.)			100	115
	Rate at wheel (lb. per in.)			100	115
	Normal load (lb. at rated length)			960 @ 9.562	1070 @ 9.562
	Mounting insulation type			Rubberized Fabric	
	If leaf	No. of leaves		None	
		Covers (yes, no)		No	
		Lubricated (yes, no)		No	
		Inserts	Type and size	None	
			Material	None	
		Shackle (comp. or tens.)		None	
Shock absorbers	Manufacturer			Delco	
	Type (direct or lever)			Lever	
	Piston diameter			1-1/2"	
Stabilizer	Type (link, linkless, frameless)			None	
	Material			None	
Track bar type				Tubular Steel Bar Mounted In Rubber	

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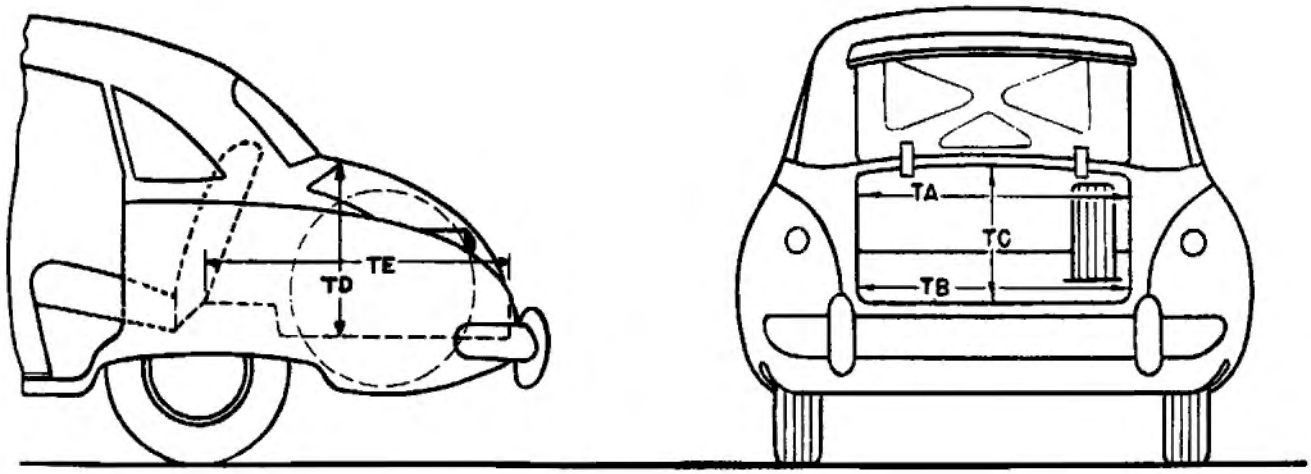
BODY—GENERAL DEFINITIONS

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., HA. 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 15" from center of body.
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° minus the included ramp angle) over which a car can pass without hanging up.

MODEL	Series 40	Series 60	Series 50	Series 70

BODY—TRUNK OPENING DIMENSIONS



TA—Width across the top	55.6	58.7
TB—Width across the bottom	53.0	54.6
TC—Diagonal dimension at CL from top of opening to bottom	31.8	34.3
TD—Vertical height of opening (floor to top, inside edge of opening)	23.4	25.2
TE-Max. horizontal depth (forward from vertical projection of inside edge of opening)	46.0	49.0
Position of spare tire stowage	Right Side - Longitudinal, Vertical	
Method of holding lid open	Counterbalanced Spring at Trunk Lid Hinges	

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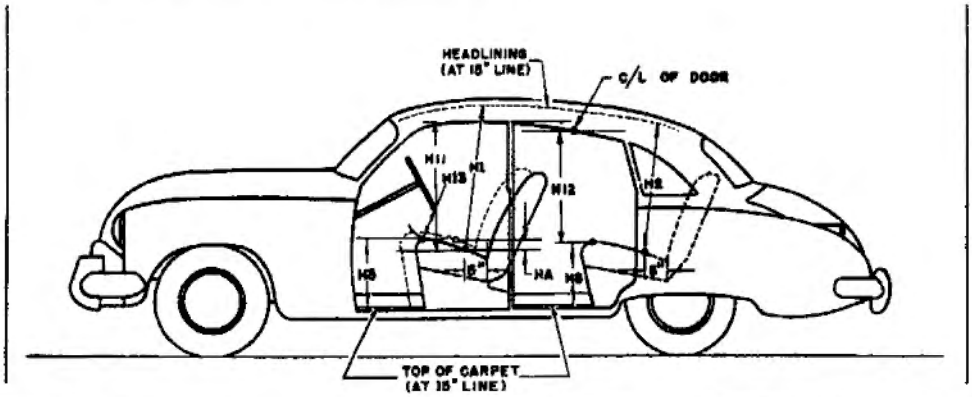
MAKE OF CAR BUICK **MODEL YEAR** 1954

MODEL	Series 40	Series 60	Series 50	Series 70

BODY—HEIGHT DIMENSIONS—INTERIOR



H1. Front headroom—from "A" pt. to headlining at 8° back of vertical on 15" line. (For "A" pt. see note 1, page 19)	35.6	36.6	35.9
H2. Rear headroom—from "A" pt. to headlining at 8° back of vertical on 15" line.	34.D	35.2	35.1
H3. Front seat height to floor carpet on 15" line (front edge of cushion).	12.8	13.5	
H8. Rear seat height to floor carpet on 15" line (front edge of cushion).	12.0	12.6	12.3
H11. Entrance—front—cushion "A" point to bottom windcord vertical.	29.7	30.8	30.2
H12. Entrance—rear—top of cushion to bottom windcord vertical at C/L of rear door.	27.5	29.5	28.9
H13. Steering wheel clearance to seat cushion taken on arc.	5.5	5.1	4.4
HA. Front seat vertical rise at "A" pt. (inches.)	1.2	1.1	

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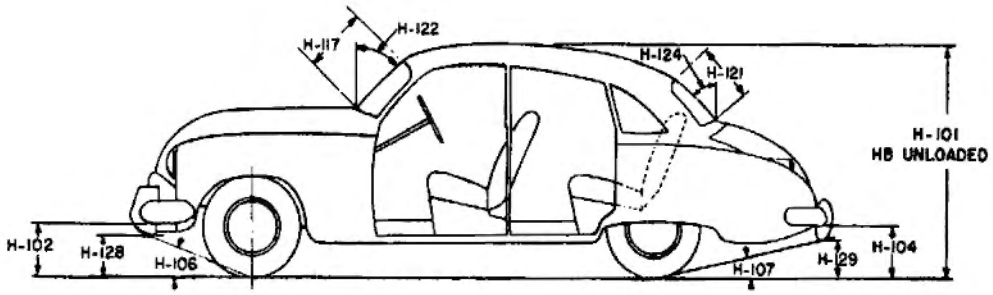
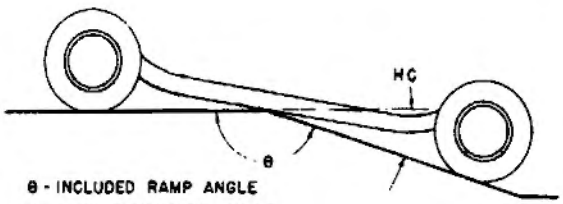
MODEL	Series 40	Series 60	Series 50	Series 70

BODY—HEIGHT DIMENSIONS—EXTERIOR





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

H101. Overall height.	60.5	62.4	62.6
HB. Overall height—unloaded.	62.3	64.2	64.4
H102. Front bumper bottom to ground at normal section.	11.6		11.8
H104. Rear bumper bottom to ground at normal section.	11.6	11.4	11.6
H106. Angle of approach—from the tire rolling radius to lowest point on front bumper or guard.	23°	20.5°	21°
H107. Angle of departure—from the tire rolling radius to lowest point on rear bumper or guard.	15°	13.5°	
HC. Ramp breakover angle.*	12.5°	12°	
H117. Windshield DLO-slant height.	18.2	18.8	
H121. Backlight DLO*—Max., slant height.	17.0	17.2	
H122. Windshield slope angle to vertical line on car axis.	44°	47°	
H124. Backlight slope angle to vertical line on car axis.	46°	48°	
H128. Ground to bottom of front bumper guard.	10.9		11.1
H129. Ground to bottom of rear bumper guard.	11.6	11.4	11.6
HD. Min. road clearance (location and dimension). **	6.5		6.7
HE. Min. road clearance at rear axle.	7.7		7.9

*See Notes, page 19.

** Frame Side Rail

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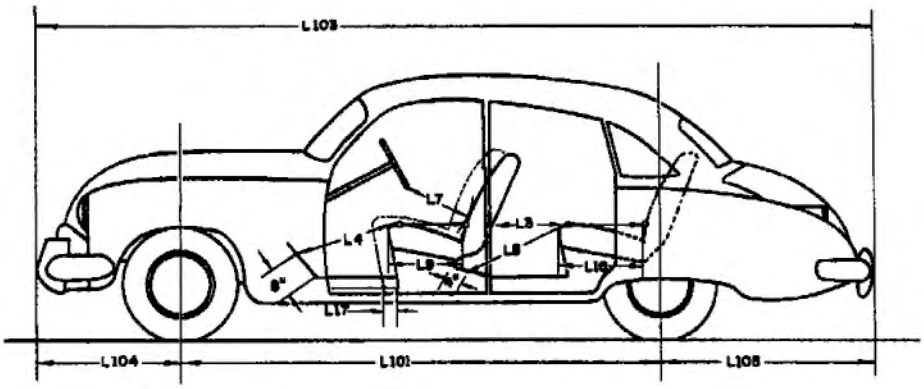
BODY—LENGTH DIMENSIONS



		Series 40		Series 60	Series 50	Series 70
Interior	L3. Rear compartment back of front seat back to rear seat back.	32.4			34.8	35.0
	L4. Leg room—front—diagonal—ball of foot to top of seat to front seat back—15" line.	42.3			43.3	43.4
	L5. Leg room—rear—diagonal—from ball of foot to top of rear seat cushion and to seat back.	41.8		41.4	45.2	45.6
	L7. Steering wheel clearance to seat back taken on arc.	13.6			13.5	
	L9. Front seat depth (front edge to vert. tan. to seat back on 15" line).	18.6			17.5	17.9
	L16. Depth of rear seat (front edge to seat back).	18.9			17.7	17.8
	L17. Total adjustment of front seat at floor.	4.4			4.7	
Exterior	L101. Wheel base.	122			127	
	L103. Overall length (bumper to bumper inc. guards).	206.3			216.8	
	L104. Overhang—front including bumper guards.	35.6			36.3	
	L105. Overhang—rear including bumper guards.	48.7			53.5	

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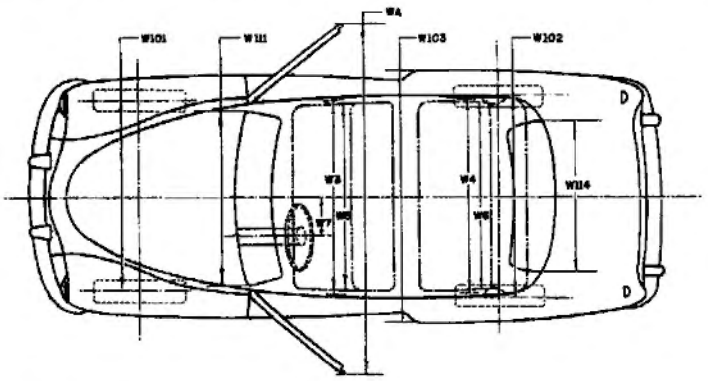
MODEL	Series 40	Series 60	Series 50	Series 70

BODY—WIDTH DIMENSIONS



Interior	**W3.** Front shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	58.2	59.4	
	W4. Rear shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	56.7	58.7	
	W5. Front hip room, at top of seat 5" forward of vert. tan. to seat back.	62.5	64.9	64.7
	W6. Rear hip room, at top of seat 5" forward of vert. tan. to seat back.	62.4	65.7	
	W7. Steering wheel center to center of body.	15.1	16.2	
Exterior	**W101.** Front tread at ground.	59.0		
	W102. Rear tread at ground.	59.0	62.2	
	W103. Max. overall width of car including bumpers or mouldings.	76.6	79.8	
	WA. Max. overall width of car with doors open.	145.8	147.8	
	W111. Windshield DLO, max. width.	61.1	61.0	
	W114. Back window DLO, max. width.	60.0	60.3	

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MODEL	Series 40	Series 60	Series 50	Series 70

BODY—MISCELLANEOUS INFORMATION

Doors hinged (front, rear)	Front	Front			
	Rear	Front			
Type of finish (lacquer, enamel)		Lacquer			
Hood opening (front, side; semi-full, full, half)		Front - Full			
Hood counterbalanced (yes, no)		Yes			
Hood release control (internal, external)		External			
Vent window control method (crank, friction, pivot).		Crank			
Windshield (one piece, two piece; curved, flat)		One Piece - Curved			
Rear window type (one piece, two piece, three piece; curved flat)		One Piece - *Wrap Around			
Windshield glass area		1179.5		1207.7	
Backlight glass area		1045.8		979.5	
Total glass area		3888.4		4048.9	

BODY—TYPES AND STYLE NAMES

Body type, number of passengers, and style names (use letter code shown below followed by passenger capacity and style name e.g., N-6 Ranchwagon)				
	L-6	L-6	L-6	L-6
	J-6	J-6	J-6	J-6
	G-6	G-6	H-6	H-6
	D-6	P-6		
	P-6	L-6 Skylark		

Body type code

A—Coupe—2 door flatback
B—Coupe—2 door notchback
C—Sedan—2 door flatback
D—Sedan—2 door notchback
E—Sedan—4 door flatback (4 windows)
F—Sedan—4 door flatback (6 windows)
G—Sedan—4 door notchback (4 windows)
H—Sedan—4 door notchback (6 windows)
J—Hardtop—2 door
K—Hardtop—4 door
L—Convertible—2 door
M—Convertible—4 door
N—Station wagon—2 door
P—Station wagon—4 door
Q—Combined passenger and utility—2 door
R—Combined passenger and utility—4 door
S—Sedan delivery
T—Limousine

* Except Models, 46C 49, 56C, 66C, 69, 76C, and 100.

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