

AUTOMOBILE MANUFACTURERS ASSOCIATION CONSOLIDATED SPECIFICATION QUESTIONNAIRE

MAKE OF CAR: Buick	MODEL NAME	SYMBOL
COMPANY: Buick Motor Division General Motors Corporation Flint, Michigan	Special	Series 40
	Super	Series 50
	Roadmaster	Series 70
MODEL YEAR: 1952	DATE 11-19-51	

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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 50	Series 70	
Wheelbase	121.5	125.5	126.2 130.2	
Tread	Front 59.1			
	59.0	Rear 62.2		
Maximum Overall Dimensions	Length (L-103)	204.8	206.2 210.2 211.0 215.0	
	Width (W-103)	76.7	80.0	
	Height (H-101)	63.4	61.2	62.8 61.7 63.2
Steering ratio—overall	24 - 1		29 - 1	
Turning diameter (curb to curb)	38.5 39.5	41.5	41.8 43.0	
Shipping weight*	N. A.			
Transmission— (Specify standard, optional, not avail.)	Conventional	Standard		
	Overdrive	-----		
	Automatic	Optional		
Axle ratio	Conventional	3.9		
	Overdrive	-----		
	Automatic	3.6		
Tire size	7.60 - 15		8.00 - 15	
Engine	Type	In Line		
	No. of cylinders	8		
	Valve arrangement	In Head		
	Bore and stroke	3.187 x 4.125		
	Piston displacement, cu. in.	263.3		
	Standard compression ratio	6.6 - 1	6.9 - 1	7.5 - 1
	Maximum bhp at engine rpm	120 @ 3600	124 @ 3600	170 @ 3800
Maximum torque at rpm	215 @ 2000	220 @ 2000	280 @ 2400	

*Standard car weight, not including gas and water.

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ENGINE—GENERAL

Type	V, In-line, other Angle of V	In Line	
No. of cylinders		8	
Valve arrangement		In Head	
Bore and stroke		3.187 x 4.125	3.437 x 4.312
Piston displacement, cu. in.		263.3	320.2
Numbering system (front to rear)	L Bank R Bank	-----	
Firing order		1-6-2-5-8-3-7-4	
Compression ratio	Standard Head Optional Head **	6.6 - 1	7.2 - 1
Cylinders	Head Material Sleeve—Wet, dry, other, none	Cast Iron ----- None	
Number of mounting points	Front Rear	Two One	
Taxable horsepower	(Dia. ² x No. Cyl.) 2.5	32.51	37.81
Advertised max. brake horsepower at engine RPM*	Standard head	120 @ 3600	170 @ 3800
	Optional head ***	128 @ 3600	
	With fuel (Octane and method)	74 Motor	80 Motor
Max. torque (lb. ft. @ RPM)	Standard head	215 @ 2000	280 @ 2400
	Optional head ***	225 @ 2000	
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.		13.44	17.94
Clearance	Top land	.023	
	Skirt	Top	.0018
		Bottom	.0012
Ring groove depth	No. 1 ring	.165	
	No. 2 ring	.165	
	No. 3 ring	.165	
	No. 4 ring	.165	

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

** Ratio when Dynaflo transmission is installed on Series 40 & 50.

*** Horsepower, octane number, & torque when Dynaflo transmission is installed on Series 40 & 50.

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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.	Oil		
No. rings above piston pin	Four			
Compression	Material	Cast Iron		
	Coating	Lubrite Type		
	Width	.094		
	Gap	.015		
	Maximum wall thickness	.155		.165
Oil	Material	No. 3 Cast Iron, No. 4 Steel		
	Coating	Lubrite Type		
	Width	.187		
	Gap	No. 3 .015	No. 4 .0019	No. 3 .015, No. 4 .0017
	Maximum wall thickness	No. 3 .142	No. 4 .149	No. 3 .155, No. 4 .164
Location of expanders	None			

ENGINE—PISTON PINS

Material		C.D.S. 1115		
Length		2.688		3.062
Diameter		.8127		.8747
Type	Locked in rod, in piston, floating, etc.	Locked in rod		
	Bushing	In rod or piston	None	
		Material		
Clearance	In piston	.0003		
	In rod	-----		
Direction offset in piston		right		None

ENGINE—CONNECTING RODS

Material		1145 Forged Steel		
Weight (oz.)		28.096		36.272
Length (center to center)		7.375		8.25
Bearing	Material	Durex 100A		
	Type (cast-in or removable)	Removable		
	Effective length	1.030		1.306
	Clearance	.0011		
	End play	.007		

ENGINE—CRANKSHAFT

Material		1145 Forged Steel		
Weight (lb.)		93.0		116.4

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ENGINE—CRANKSHAFT (cont.)

Vibration damper type		Laminated steel flywheel supported on steel leaf springs		
End thrust taken by bearing (No.)		three		
Crankshaft end play		.006		
Main bearing	Material	Steel Backed Durex - 100A		
	Type (cast-in or removable)	Removable		
	Clearance	.0013		
	Journal dia. and bearing effective length	No. 1	2.562 x 1.266	2.562 x 1.281
		No. 2	2.562 x 1.031	2.625 x .969
		No. 3	2.562 x 1.547	2.687 x 1.469
		No. 4	2.562 x 1.031	2.750 x .969
		No. 5	2.562 x 1.781	2.812 x 2.469
No. 6		-----	-----	
No. 7		-----	-----	
Direction offset from cyl. bore		right	None	
Connecting rod crankpin journal diameter				

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	49	50
		Width	.812	
Pitch		.500		

ENGINE—VALVE SYSTEM

Hydraulic lifters (yes, no)		*No	Yes
Special provision for valve rotation (intake, exhaust)		None	
Rocker ratio		1.5 - 1	
Operating tappet clearance (indicate hot or cold)	Intake	.015 hot	None
	Exhaust	.015 hot	None
Tappet clearance for timing	Intake	.004 off seat	
	Exhaust	.004 off seat	
Timing marks on fly-wheel, damper, other		None	

* Yes when car is equipped with Dynaflo Transmission.

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ENGINE—VALVE SYSTEM (cont.)

Timing	Intake	Opens (°BTC)	13		14	
		Closes (°ABC)	68		71	
	Exhaust	Opens (°BBC)	55		56	
		Closes (°ATC)	22		25	
Intake	Material		Nickel - Chrome Alloy Steel			
	Overall length		5.109		5.25	
	Actual overall head dia.		1.531		1.781	
	Angle of seat			45°		
	Seat insert material		-----			
	Stem diameter		.3720			
	Stem to guide clearance		.0025			
	Lift		.348			
	Outer spring press. and length	Valve closed (lb. @ in.)	29.5 - 34.5 1.938		49 - 55 1.938	
		Valve open (lb. @ in.)	74 - 80 1.594		96 - 104 1.594	
	Inner spring press. and length	Valve closed (lb. @ in.)	17.5 - 22.5 1.656		22 - 26 1.660	
		Valve open (lb. @ in.)	48 - 54 1.313		49 - 55 1.320	
	Exhaust	Material		XCR or 2112 N Nickel Alloy Steel		
		Overall length		5.109		5.25
Actual overall head dia.		1.344		1.437		
Angle of seat			45°			
Seat insert material		-----				
Stem diameter		.3714				
Stem to guide clearance		.0030				
Lift		.348				
Outer spring press. and length		Valve closed (lb. @ in.)	29.5 - 34.5 1.938		49 - 55 1.938	
		Valve open (lb. @ in.)	74 - 80 1.594		96 - 104 1.594	
Inner spring press. and length		Valve closed (lb. @ in.)	17.5 - 22.5 1.656		22 - 26 1.660	
		Valve open (lb. @ in.)	48 - 54 1.313		49 - 55 1.320	

ENGINE—LUBRICATION SYSTEM

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

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ENGINE—LUBRICATION SYSTEM (cont.)

Oil pump type	Gear		
Normal oil pressure (lb. @ mph)	35 @ 35		
Oil pressure gage type (electric or mechanical)	Electrical		
Type oil intake (floating, stationary)	Floating		
Oil filter type (full flow, partial flow)	Full Flow to Rocker Arms		
Capacity of crankcase, less filter—refill (qt.)	5.5	7	
Oil grade recommended (SAE viscosity and temperature range)	Not lower than 32°F. - 20W. As low as minus 10°F. - 10W. Below minus 10°F. - 5W or 10W + 10% Kerosene		
Oil type recommended			

ENGINE—FUEL SYSTEM

Recommended fuel	Standard head	Regular	Premium	
	Optional head... *	Premium	-----	
Fuel tank, capacity (gal.)		19		
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	AAUVB - 267 or WCD - 882S	**LAUV - 267	
	Number used	One		
	Type	Downdraft, side inlet, other	Downdraft	
		Single or dual	Dual	4-Barrel
	Intake manifold heat control (manual, auto., none)		Automatic	
	Automatic choke type (integral, other)		Integral	
	Air cleaner type	Standard	Heavy duty oil bath - cleaner and flame arrester	
	Optional	-----		

ENGINE—EXHAUST SYSTEM

Muffler type (reverse flow, straight through)	Straight Through		
Exhaust pipe diameter	2	2	2.25
Tail pipe diameter	2		

* Optional compression ratio is used when equipped with Dynaflo Transmission on Series 40 & 50.
 ** Carter WCFB - 894S

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ENGINE—COOLING SYSTEM

Type (pressure system, atmospheric, other)		Pressure System	
Radiator cap relief valve press.		7 Pounds	
Circulation thermostat	Type (choke, bypass)	Bypass	
	Starts to open at	148 - 155°F.	
Water pump	Type (centrifugal, other)	Centrifugal	
	Number of pumps	One	
	Drive (V-belt, other)	V-belt	
	Bearing type	Roller	
By-pass recirculation type (internal, external)		External	
Radiator core type (cellular, tube and fin)		Vee Cellular	
Cooling system capacity	With heater (qt.)	*** 13.5	19.5
	Without heater (qt.)	**** 12	18
Water jackets full length of cylinder (yes, no)		No	
Water all around cylinder (yes, no)		Yes	
Radiator hose	Lower	Number and type (molded, straight)	Elbow Type
		Inside diameter and length	Dia. 1.562
	Upper	Number and type (molded, straight)	Elbow Type
		Inside diameter and length	Dia. 1.562
	By-pass	Number and type (molded, straight)	Straight
		Inside diameter and length	Dia. .75
Drive belts	Fan	Number used	*One
		Angle of V	**
		Outside length	**
		Width	.380
	Generator *	Angle of V	*
		Outside length	-----
Fan	Number of blades and spacing	4	5
		Uneven	Uneven
	Diameter	18	
	Ratio—fan to crankshaft revolutions	.90 - 1	
	Bearing type	Fan and Water Pump Bearing Shown Above	

- * One belt is used for both fan and generator.
- ** Designed to fit pulleys.
- *** 15 when equipped with Dynaflo Transmission.
- ****13.5 when equipped with Dynaflo Transmission.

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ELECTRICAL—SUPPLY SYSTEM

Battery	Make		Delco Remy		
	Model		15E6W	17E6W	
	SAE designation		2E		
	Location		Right side on Frame - Under Hood.		
Terminal grounded		Negative			
Generator	Make		Delco Remy		
	Model		1102779		
	Type		Shunt		
	Ratio—Gen. to Cr/s rev.		2.14 - 1		
Regulator	Make		Delco Remy		
	Model		1118729		
	Type		Voltage and Current Control		
	Cutout relay	Closing voltage @ generator rpm.		5.9 - 6.7 @ 400	
		Reverse current to open		-1 to -6	
	Regulated	Voltage		7.2 to 7.7	
		Current		45 - 51	
	Min. Gen. rpm required		2400 hot		
	Voltage test conditions	Temperature		150°F.	
		Load		Run 15 min. at 8-10 Amps.	
Other					

ELECTRICAL—STARTING SYSTEM

Starting motor	Make		Delco Remy		
	Model		1107097	1107981	
	Rotation (drive end view)		Clockwise		
	Engine cranking speed		90 R.P.M.		
	Test conditions				
	Lock test	Amps		525	600
		Volts		3.37	3.0
		Torque (lb. ft.)		12	16
	No load test	Amps		65	65
		Volts		5.67	5.67
RPM (min.)		5000	5500		
Motor control	Switch (solenoid, manual)		Solenoid		
	Starting procedure		<ol style="list-style-type: none"> 1. Turn on Ignition. 2. Depress accelerator pedal. 		

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ELECTRICAL—STARTING SYSTEM (cont.)

Motor drive	Engagement type		Overrunning clutch	
	Pinion meshes (front, rear)		Front	
	Number of teeth	Pinion	9	
		Flywheel	146	156
Flywheel tooth face width		.545	.670	

ELECTRICAL—IGNITION SYSTEM

Coil	Make		Delco-Remy	
	Model		1115328	
	Amps	Engine stopped	4.5	
		Engine idling	2.5	
Distributor	Make		Delco-Remy	
	Model		1110832	
	Spark advance data (at distributor shaft)	Centr. advance start (rpm)	0° @ 400 - 480	
		Centr. advance max. deg. @ rpm	24 - 28 @ 3350	
		Vacuum advance start (in. Hg.)	5 - 7	
		Vac. adv. (max. deg. @ in. Hg.)	12 - 16 @ 12 - 13.5	
	Breaker gap (in.)		.0125 - .0175	
	Cam angle (deg.)		*	
Breaker arm tension (oz.)		19 - 23		
Timing	C/S deg. @ rpm		4 BTC	6 BTC
	Mark location		Flywheel	
	Cylinder numbering system (see page 2)		-----	
	Firing order (see page 2)		1-6-2-5-8-3-7-4	
Spark plug	Make and model		A.C. 46X	
	Thread (mm)		14	
	Tightening torque (lb. ft.)		25	
	Gap		.023 - .028	
Cable	Conductor type		Stranded Copper	
	Insulation type		Neoprene	
	Spark plug protector		Sheet Metal Cover	

ELECTRICAL—SUPPRESSION

Description	Distributor Coil Generator	10,000 Ohm resistant rotor .33 micro-farad condenser .33 micro-farad condenser
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* Dwell meter for setting point opening is not recommended

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ELECTRICAL—INSTRUMENTS AND SWITCHES

Speed-ometer	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Make</td> <td style="width: 50%;">A. C.</td> </tr> <tr> <td>Trip odometer (yes, no)</td> <td>Yes</td> </tr> </table>	Make	A. C.	Trip odometer (yes, no)	Yes	
Make	A. C.					
Trip odometer (yes, no)	Yes					
Charge indicator—type		A. C. Charge Indicator				
Temperature indicator—type		Bourdon tube				
Oil pressure indicator—type		Bourdon tube				
Fuel indicator—type		Electric - Magnetic				
Ignition switch	Identify positions in order and circuits controlled	Center - Ignition and Accessories on. 1st position counter-clockwise -(Ignition off and 1st position clockwise - Ignition off. locked)				
	Provision for illumination	Map Light				
	Location	Under radio dials				
	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. 1st position counter-clockwise - instrument & map lights off. 2nd position clockwise - map lights on. 3rd position clockwise - map lights and instrument lights on. 4th position clockwise - instrument lights on.				
Other light switches	Locations and lamps controlled					
	Dome Lamp Trunk Lamp Glove Compartment	On dome light Front & rear pillars in door opening *Mercury Switch *Mechanically operated by door				
Other switches	Locations and devices controlled					
	Direction Signal Back up lights	*Left side of steering column **Base of steering column				
Windshield wiper	Make	Trico				
	Type	Vacuum				
	Vacuum booster provision	Yes				
	Washer provision	Yes				
Horn	Type	Vibrator				
	Number used	Two				
	Amp draw (each)	Left horn 17 - 19, right horn 19 - 21				

* Optional at extra cost on Series 40

**Optional at extra cost on Series 40 & 50

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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 - 45 to 35 Watt	
Headlamp beam indicator		1 - 51	
Parking light		2 - 1154	
Tail light		2 - 1154	
Stop light		Use same bulb as tail light	
Direction indicator	Front	Use same bulb as parking lamp - Accessory on Series 40*	
	Rear	2 - 1129*	2 - 1129
	Tell-Tale	2 - 51*	2 - 51
License plate light		1 - 63	
Instrument light		4 - 55	
Ignition lock light		-----	
Map light		2 - 55	
Dome light		1 - 88	
Clock light	1 - 55*		1 - 55
Radio dial light		1 - 55*	
Glove compartment light	1 - 55*		1 - 55
Courtesy light		-----	
Trunk compartment light	1 - 55*		1 - 55
Other			
Back-up Light	2 - 1133*	2 - 1129*	2 - 1129

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		42 @ 3 Min. C.B. (a)	
Headlamp beam indicator		Same as (a)	
Parking light		Same as (a)	
Tail light		Same as (a)	
Stop light		Same as (a)	
Direction indicator	SFE - 14*		SFE - 14
License plate light		Same as (a)	
Instrument light		Same as (a)	
Ignition light		-----	
Map light		Same as (a)	
Dome light		SFE - 30 (b)	
Clock	AGA - 3*		AGA - 3
Clock light		Same as (a)	
Radio		AGA - 15*	
Glove compartment light	Same as (b)*		Same as (b)
Courtesy light		-----	
Trunk compartment light	Same as (b)*		Same as (b)
Other			
Heater & Blower		SFE - 14*	
Back-up Lamps		SFE - 14*	SFE - 14
Cigar Lighter		Special	

* Accessory at extra cost.

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DRIVE UNITS—CLUTCH (PEDAL OPERATED)

Make		Buick		
Type (dry or wet plate)		Dry Plate		
In combination with fluid coupling (yes, no)		No		
Semi-centrifugal (yes, no)		No		
Type pressure plate springs		Sheet Metal Spring		
Total plate pressure (lb.)		1350		
No. of clutch driven discs		One		
Clutch facing	Material	Woven		
	Inside diameter	6		
	Outside diameter	10		
	Total eff. area (sq. in.)	100.6		
	Thickness	.125 ± .003		
	Number required	Two		
	Engagement cushioning method		Springs	
	Release bearing	Type	Ball	
		Method of lubrication	Sealed	
	Torsional damping	Method (springs, other)	Springs	
Frict. mat.		Woven Material		

DRIVE UNITS—TRANSMISSIONS

Conventional (std. or opt.)	Standard	
Conventional with overdrive (std. or opt.)		
Automatic (std. or opt.)	Optional	Standard

DRIVE UNITS—CONVENTIONAL TRANSMISSION

Number of forward speeds		Three	
Transmission ratios	In first	2.67	
	In second	1.66	
	In third	1.00	
	In fourth		
	In reverse	3.02	
Constant mesh gears in 2nd (yes, no)		Yes	
Spur gear used in (indicate speeds)		None	
Helical gears used in (indicate speeds)		All	
Synchronous meshing in 2nd and 3rd gears (yes, no)		Yes	

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DRIVE UNITS—CONVENTIONAL TRANSMISSION (cont.)

Lubricant	Capacity (pt.)		1.75	
	Type recommended		"Multi-Purpose" Gear Lubricant	
	SAE viscosity number	Summer	SAE 90	
		Winter	SAE 90	
Extreme cold		SAE 80		

DRIVE UNITS—CONVENTIONAL TRANSMISSION WITH OVERDRIVE

For transmission data see conventional transmission section

Overdrive	Type (planetary or other)				
	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)			
		Separate filter (yes, no)			
		Type recommended			
		SAE viscosity number	Summer		
Winter					
Ext. cold					

DRIVE UNITS—AUTOMATIC TRANSMISSION

Trade name	*Dynaflow	Dynaflow
Type (fluid coupling with gears, torque converter with gears, other)	Torque Converter with gears	Torque Converter with gears
Manual selector positions, left to right (show symbols and define, e.g., N- Neutral)	Park Neutral Drive Low Reverse	Park Neutral Drive Low Reverse
List gear ratios in each drive position (range)	D 1 x Torque Ratio L 1.82 x Torque Ratio R 1.82 x Torque Ratio	1 x Torque Ratio 1.82 x Torque Ratio 1.82 x Torque Ratio
Shifting within drive position range by accelerator control and speed limiting governor (yes, no)	No	No
By governor—forced shift (yes, no)	No	No
Downshift of gears in high range possible up to (mph)	40	40

* Optional at extra cost.

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DRIVE UNITS—AUTOMATIC TRANSMISSION (cont.)

Torque convertor	Number of elements		Five	Five
	Max. ratio at stall at engine rpm		2.25	2.25
	Mechanical lockup	Provided (yes, no)	No	No
		Speed range	---	---
		Releases at (speed range, mph)	---	---
	Type of cooling (forced air, oil cooler and type, other)		Water Cooled	Water Cooled
Anti-creep device (yes, no)		No	No	
Lubricant	Capacity—refill (pt.)		17	20
	Type recommended		**	**
	Grade	Summer	Type A	Type A
		Winter	Type A	Type A
		Extreme cold	Type A	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	---	
	Overdrive trans.	---		
	Automatic trans.	2.62 x 60.9*** x .065		
Intermediate bearing	Type (plain, anti-friction)	-----		
	Lubri. (fitting, prepack)	-----		
Universal joints	Make		Saginaw or Spicer	
	Number used		One	
	Type (ball and trunnion, cross, other)		Cross	
	Bearing	Type (plain, anti-friction)	Bronze 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 Dynaflo Drive.

***Length on Model 52 and 72R, 64.9.

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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.	*	-----	
	Overdrive trans.	-----		
	Automatic trans.	**	**	
Pinion adjustment (shim, other)		Shims		
Pinion bearing adj. (shim, other)		None		
Lubricant	Capacity (pt.)	Four		
	Type recommended	Hypoid Lubricant		
	SAE viscosity number	Summer	90	
		Winter	90	
		Extreme cold	80	

DRIVE UNITS—WHEELS

Type (disc, other)		Disc	
Rim (size and flange type)		15 x 6L	15 x 6.5L
Attachment	Type (bolt or stud)	Stud	
	Circle diameter	5.000	
	Number and size	Five - .562	

DRIVE UNITS—TIRES

Size and ply rating	Standard	7.60 - 15-4	8.00 - 15-4
	Optional	None	
Rev/mile at 30 mph		727.7	728.2
Inflation press. (cold)	Front	24	
	Rear	24	

BRAKES—SERVICE

Type		Hydraulic - Internal Expanding	
Booster type		None	
Effective area (sq. in.)		184.6	219.0
Percent brake effectiveness—rear		47	
Drum	Diameter	12	
	Front	12	
	Rear	12	
Type and material		Cast Iron	

Model	*Synchronesh (40-50 only)		**Dynaflow	
	Standard	Optional	Standard	Optional
41, 41D, 45R, 46, 46S, 48, 48D, 56R, 72R, 76R, 76C	3.9 (43-11)	3.6 (Economy) (47-13)	3.6 (47-13)	3.9 (Performance) (43-11)
46C, 56C, 52	4.1 (41-10)	3.9 (Economy) (43-11)	3.9 (43-11)	3.6 (Economy) (47-13)
59, 79R	4.1 (41-10)	No Option	3.9 (43-11)	No Option

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BRAKES—SERVICE (cont.)

	Bonded or riveted		Riveted		
	Material	Size (length x width x thickness)	Front wheel	Rear wheel	
Brake lining	Primary	Inlite 6456 or Marshall 3320 Moulded Extruded			
			10.094 x 2.25 x .187	10.094 x 2.50 x .250	
			10.094 x 1.75 x .187	10.094 x 2.25 x .187	
		Segments per shoe	One		
	Secondary	Inlite 6472 or Manhattan Raybestos 2320K Moulded Dry Mix			
			12.969 x 2.25 x .187	12.969 x 2.50 x .250	
		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 Control Panel		
Operates on	Rear Service Shoes		
If separate from service brakes	Type (internal or external)	-----	
	Drum diameter	-----	
	Lining size (length x width x thickness)	-----	

FRAME

Type and description	Double Drop, Channel X Center Crossmember, Box Type Front Crossmember
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FRONT SUSPENSION

Type and description	Independent with Coil Springs
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FRONT SUSPENSION (cont.)

Spring	Type	Coil	
	Material	High Carbon Silicon Manganese Steel 9260	
	Size (length x width x No. leaves or coil I.D.)	14.75 x .660 x 4.047	15.0 x .680 x 4.047
	Spring rate (lb. per in.)	360	380
	Rate at wheel (lb. per in.)	93	100
	Normal load (lb. @ rated length)	1040 @ 9.25	1150 @ 9.25
Shock absorbers	Manufacturer	Delco	
	Type (direct or lever)	Lever	
	Piston diameter	1.5	
Stabilizer	Type (link, linkless, frameless)	Link - Mounted in rubber	
	Material	1065	

STEERING

Type used (Standard or optional)	Mechanical Power	Standard	Optional	
Wheel diameter		18		
Turning diameter	Wall to wall	42.0**	44.3**	
	Curb to curb	39.5*	41.8*	
Outside wheel angle with inside wheel at 20°		18° 40'		
Mechanical	Gear	Type	Ball bearing worm and nut	
		Make	Saginaw	
		Ratios	Gear 19.8	23.6
			Overall 24.0	29.0
	No. wheel turns (l. to r.) (l. to r.)		4.5	5.25
Power	Type		Hydraulic	
	Make		Saginaw	
	Trade name		-----	
	Gear	Type	Ball Bearing Worm and Nut	
		Ratios	Gear	21.3
			Overall	26.0
	Pump driven by		Belt	
	Overall torque ratio		-----	
Number wheel turns (l. to r.)		4.85		
Linkage	Type		Haltenberger - Tubular	
	Location (front or rear of wheels)		Rear	
	Drag link (trans. or long)		None	
	Tie rods (one or two)		Two	

* Model 52, 41.5 and Model 72R, 43.0

** Model 52, 44.0 and Model 72R, 45.5

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STEERING (cont.)

Kingpin	Inclination at camber (deg.)		4.25 @ .375
	Diameter		.861 - .862
	Bearings (type)	Upper	Bushing
		Lower	Bushing
Thrust		Ball	
Wheel alignment (range and preferred)	Caster (deg.)		.25 to 1.5 pos.
	Camber (deg.)		.875 Pos. to .625 Neg.
	Toe-in (outside tread-inches)		.062 to .125
Steering knuckle type			Reverse Elliott
Wheel spindle	Diameter	Inner bearing	1.3735 - 1.3740
		Outer bearing	.8426 - .8431
	Thread size		13/16 - 16, L.H. & R.H.
	Bearing type		Ball

REAR SUSPENSION

Type	Coil Spring			
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.)	20.25 x .550	19.375 x .560	19.375 x .580
		x 5.5	x 5.5	x 5.5
	Spring rate (lb. per in.)	94	100	110
	Rate at wheel (lb. per in.)	95	107	117
	Normal load (lb. at rated length)	975 @ 9.562	1010 @ 9.562	1100 @ 9.562
	Mounting insulation type			Rubberized Fabric
	if leaf	No. of leaves		
		Covers (yes, no)		
Lubricated (yes, no)				
Inserts		Type and size		
		Material		
Shackle (comp. or tens.)				
Shock absorbers	Manufacturer		Delco	
	Type (direct or lever)		Lever	
	Piston diameter		1.5	
Stabilizer	Type (link, linkless, frameless)		-----	
	Material		-----	
Track bar type			Tubular Steel Bar - Mounted in Rubber	

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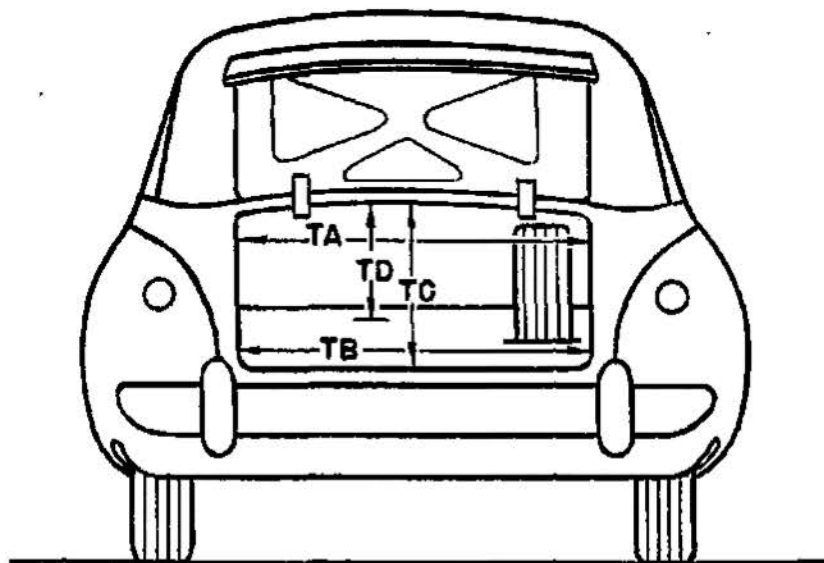
BODY—GENERAL DEFINITIONS

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., NA. 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)—is the supplement of the included ramp angle over which a car can pass without hanging up.

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BODY—TRUNK OPENING DIMENSIONS



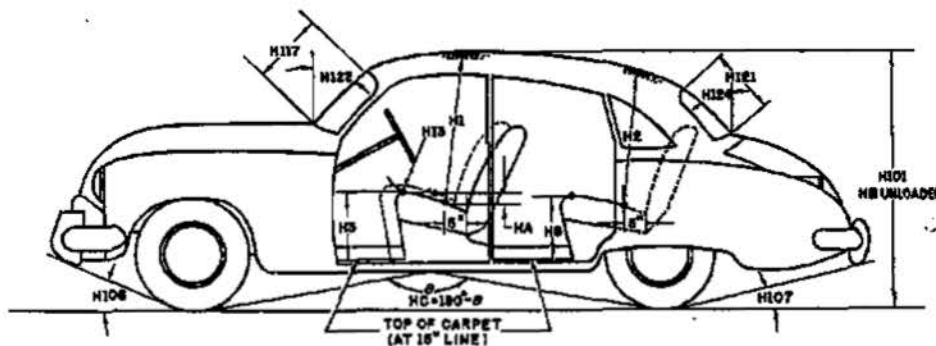
TA—Width across the top	54.6	55.5
TB—Width across the bottom	49.4	49.0
TC—Diagonal dimension at CL from top of opening to bottom	33.5	35.5
TD—Vertical height of opening (floor to top, inside edge of opening)	24.8	25.7
Position of spare tire stowage	Right side, Longitudinal, Vertical	
Method of holding lid open	Counter balanced spring at trunk lid hinge.	

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BODY—HEIGHT DIMENSIONS



	35.5	36.3	35.5
	35.0	35.6	34.8
Interior	13.5	11.6	12.6
	16.9	11.6	12.6
	5.2	4.9	3.9
		.25	
	63.4	62.8	63.2
	65.3	64.8	65.1
	22.8°	21.7°	22.8°
		14.7°	15.5°
	166°	166.5°	166.1°
Exterior	15.4		16.8
	15.8		14.0
	45°	48.5°	48.5°
		46°	
	6.8		7.3
	Frame Side Rail		Frame Side Rail
	7.8		8.3

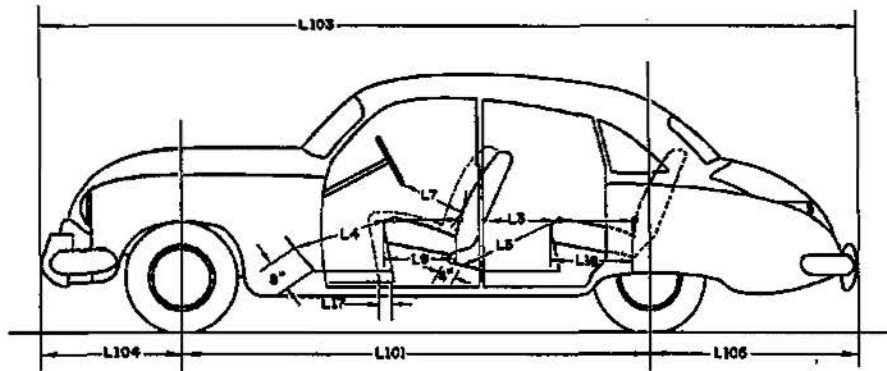
*See Notes, page 19.

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BODY—LENGTH DIMENSIONS



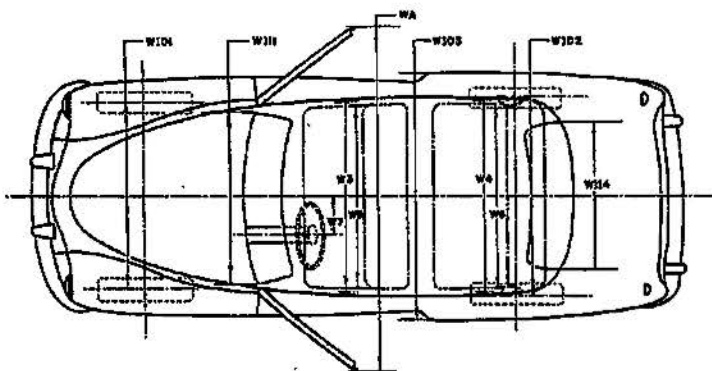
Interior	L3. Rear compartment back of front seat back to rear seat back.	33.0	35.4	34.0
	L4. Leg room—front—diagonal—ball of foot to top of seat to front seat back—15" line.	43.1	43.2	44.3
	L5. Leg room—rear—diagonal—from ball of foot to top of rear seat cushion and to seat back.	41.5	43.1	42.0
	L7. Steering wheel clearance to seat back taken on arc.	13.6	13.4	14.3
	L9. Front seat depth (front edge to vert. tan. to seat back on 15" line).	18.1	17.5	17.2
	L16. Depth of rear seat (front edge to seat back).	18.5	17.9	17.6
	L17. Total adjustment of front seat at floor.		4.0	
Exterior	L101. Wheel base.	121.5	125.5	130.2
	L103. Overall length (bumper to bumper inc. guards).	204.8	210.2	215.0
	L104. Overhang—front including bumper guards.	33.5	34.2	
	L105. Overhang—rear including bumper guards.	49.8	50.5	

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BODY—WIDTH DIMENSIONS



	W3. Front shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	57.5	58.3	
	W4. Rear shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	56.8		
Interior	W5. Front hip room, at top of seat 5" forward of vert. tan. to seat back.	63.1	64.5	64.1
	W6. Rear hip room, at top of seat 5" forward of vert. tan. to seat back.	63.4	64.8	64.3
	W7. Steering wheel center to center of body.	15.5		
	W101. Front tread at ground.	59.1		
	W102. Rear tread at ground.	59.0	62.2	
	W103. Max. overall width of car including bumpers or mouldings.	76.7	80.0	
Exterior	WA. Max. overall width of car with doors open.	141	142.2	
	W111. Windshield DLO, max. width.	55.0	55.7	
	W114. Back window DLO, max. width.	57.0	55.8	

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BODY—TYPES

Body types and number of passengers. (Please use the letter code shown below followed by the number of passengers, e.g. A-6.)	B-3		
	B-6		
	D-6		
	G-6		
			H-6
		J-6	
		I-6	
		P-6	

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 |
|--|---|

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)		Side - Full
Hood counterbalanced (yes, no)		No
Hood release control (internal, external)		Internal
Windshield (one piece, two piece; curved, flat)		One Piece - Curved*
Rear window type (one piece, two piece, three piece; curved, flat)		Three Piece - Curved**

* Except Models 41, 46, 46S, and 48; Two Piece-Curved.

** Except Models 46, 46C, 46S, 56C, 59, 76C, and 79R; One Piece-Curved.

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