

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
	Century	Series 60
	Super	Series 50
MODEL YEAR: 1957	Roadmaster	Series 70
DATE Nov. 9, 1956		

TABLE OF CONTENTS

General Specifications.....	1	Frame.....	16
Engine.....	2	Front Suspension.....	16
Electrical.....	8	Steering.....	17
Drive Units.....	12	Rear Suspension.....	18
Brakes.....	15	Body.....	19
Index.....	24		

- 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	122.0		127.5		
Tread	59.5 at 0° 50' Camber				
	59.0			61.0	
Maximum Overall Dimensions	208.4		215.3		
	74.8		77.6		
	58.4	58.7	59.4	59.3	
Steering ratio—overall	28.8		19.7		
Turning diameter (curb to curb)	43.2		44.5		
Shipping weight*	4001	4156	4354	4469	
Transmission— (Specify standard, optional, not avail.)	Conventional	Standard			
	Overdrive	None			
	Automatic	Optional			
Axle ratio	Conventional	3.58			
	Overdrive	None			
	Automatic	3.07			
Tire size	**7.10-15	7.60-15		8.00-15	
Engine (DYN.)	Type	90°V			
	No. of cylinders	8			
	Valve arrangement	In-Head			
	Bore and stroke	4.125 x 3.4			
	Piston displacement, cu. in.	364			
	Standard compression ratio	9.5-1		10.0-1	
	Maximum bhp at engine rpm	250 @ 4400		300 @ 4600	
	Maximum torque at rpm	380 @ 2400		400 @ 3200	

*Standard car weight, not including gas and water.

**7.60-15 Tubeless Type Optional

AMA Consolidated Specification Questionnaire

Page 2
Rev. 2-6-57

MAKE OF CAR BUICK MODEL YEAR 1957

MODEL	Series 40	Series 60	Series 50	Series 70
--------------	-----------	-----------	-----------	-----------

ENGINE—GENERAL

Type	V, In-line, other	"V"			
	Angle of V	90°			
No. of cylinders		8			
Valve arrangement		In-Head			
Bore and stroke		4.125 x 3.4			
Piston displacement, cu. in.		364			
Numbering system (front to rear)	L. Bank	2-4-6-8			
	R. Bank	1-3-5-7			
Firing order		1-2-7-8-4-5-6-3			
Compression ratio	Standard Head SYN.	8.0-1	None		
	Optional Head DYN.	9.5-1	10.0-1		
Cylinders	Head	Standard SYN.	Cast Iron		
	Material	Optional DYN.	Cast Iron		
	Sieve—Wet, dry, other, none		None		
Number of mounting points	Front	2			
	Rear	1			
Taxable horsepower	(Dia. ³ x No. Cyl.) 2.5	54.45			
Advertised max. brake horsepower of engine RPM*	Standard-head		300 @ 4600		
	Optional-head DYN.	250 @ 4400	300 @ 4600		
	With fuel (Octane and method)	Standard Head SYN.	Regular	None	
		Optional-head DYN.		Premium	
Max. torque (lb. ft. @ RPM)	Standard head		400 @ 3200		
	Optional head DYN.	380 @ 2400	400 @ 3200		
Recommended idle speed (neutral)		485			

ENGINE—PISTONS

Material	Aluminum Alloy			
Description and finish	Cam Ground - Transverse Slot Divorced Skirt			
Weight (piston only) oz.	22.16			
Clearance	Top land	.003 - .005		
	Skirt	Top	.0008 - .0014	
		Bottom	.0018 - .0034	
Ring groove depth	No. 1 ring	.219 - .211		
	No. 2 ring	.224 - .219		
	No. 3 ring	.229 - .224		
	No. 4 ring	None		

*Corrected as defined by SAE Engine Test Code, with the following standard power consuming accessories: Dynamometer Exhaust Water Pump, Fuel Pump, Oil Pump, Manual Spark Advance, Generator (Not Charging) and Manifold Heat in the "Off" Position.

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL	Series 40	Series 60	Series 50	Series 70
--------------	-----------	-----------	-----------	-----------

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	.077 - .078
	Gap	.015 - .025
	Maximum wall thickness	.206
Oil	Material	Steel
	Coating	None
	Width	.180 - .186
	Gap	.015 - .035
	Maximum wall thickness	.135
Location of expanders		Oil Ring

ENGINE—PISTON PINS

Material		CDS-1118
Length		3.500
Diameter		0.9994 - 0.9997
Type	Locked in rod, in piston, floating, etc.	Pressed in Rod
	Bushing	None
		In rod or piston Material
Clearance	In piston	.0004
	In rod	.0007 - .0015 (Press)
Direction offset in piston		None

ENGINE—CONNECTING RODS

Material		SAE 1141
Weight (oz.)		23.20
Length (center to center)		6.100
Bearing	Material	Steel Backed M400 Aluminum
	Type (cast-in or removable)	Removable
	Effective length	.781
	Clearance	.0002 - .0023
	End play	.005 - .012 (Total For Both Rods)

ENGINE—CRANKSHAFT

Material		SAE 1145
Weight (lb.)		59.00

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL Series 40 Series 60 Series 50 Series 70

ENGINE—CRANKSHAFT (cont.)

Vibration damper type		Rubber Absorption	
End thrust taken by bearing (No.)		Five	
Crankshaft end play		.004 - .008	
Main bearing	Material	Steel Backed - Front Four M400 - Rear Durex 100A	
	Type (cast-in or removable)	Removable	
	Clearance	.0005 - .0025	
	Journal dia. and bearing effective length	No. 1	2.4985 x .804
		No. 2	2.4985 x .804
		No. 3	2.4985 x .804
		No. 4	2.4985 x .804
		No. 5	2.4985 x 1.105
No. 6		None	
No. 7		None	
Direction offset from cyl. bore		None	
Connecting rod crankpin journal diameter		2.2495	

ENGINE—CAMSHAFT

Material		Cast Alloy Iron	
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 Offseat
	Exhaust	.004 Offseat
Timing marks on fly-wheel, damper, other		Harmonic Balancer

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL	Series 40	Series 60	Series 50	Series 70
-------	-----------	-----------	-----------	-----------

ENGINE—VALVE SYSTEM (cont.)

Timing	Intake	Opens (°BTC)	25		34	
		Closes (°ABC)	77		83	
	Exhaust	Opens (°BBC)	65		76	
		Closes (°ATC)	37		41	
Intake	Material		Nickel - Chrome Alloy Steel			
	Overall length		4.704			
	Actual overall head dia.		1.875			
	Angle of seat		45°			
	Seat insert material		None			
	Stem diameter		.3720			
	Stem to guide clearance		.003			
	Lift		.423			
	Outer spring press. and length	Valve closed (lb. @ in.)	39.5 - 44.5 1.530			
		Valve open (lb. @ in.)	93 - 99 1.110			
	Inner spring press. and length	Valve closed (lb. @ in.)	23 - 28 1.620			
		Valve open (lb. @ in.)	63 - 69 1.200			
	Exhaust	Material		MS-201A, 2155N or EMS-31		
		Overall length		4.704		
Actual overall head dia.		1.437				
Angle of seat		45°				
Seat insert material		None				
Stem diameter		.3705				
Stem to guide clearance		.004				
Lift		.423				
Outer spring press. and length		Valve closed (lb. @ in.)	39.5 - 44.5 1.530			
		Valve open (lb. @ in.)	93 - 99 1.110			
Inner spring press. and length		Valve closed (lb. @ in.)	23 - 28 1.620			
		Valve open (lb. @ in.)	63 - 69 1.200			

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		Drip From Front Camshaft Bearing
	Cylinder walls		Splash and Nozzle

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL	Series 40	Series 60	Series 50	Series 70
--------------	-----------	-----------	-----------	-----------

ENGINE—LUBRICATION SYSTEM (cont.)

Oil pump type		Gear
Normal oil pressure (lb. @ rpm)		40 @ 1600
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.)		5
Oil grade recommended (SAE viscosity and temperature range)	Anticipated Temp. Not Lower Than +32°F	SAE Viscosity 20 W or 20
	Not Lower Than -10°F	SAE Multi-Viscosity 10W - 30 or 10W - 20
	Below -10°F	10W 5W - 10W or 5W - 20
Oil type recommended		DG or MS

ENGINE—FUEL SYSTEM

Recommended fuel	Standard-head Syn.	Regular		None
	Optional-head Dyn.			Premium
Fuel Tank Capacity (gals.)				20.0 Minimum
Fuel Tank Filler Location				Rear of Car
Fuel Filter Type				Wire Cloth
Fuel Filter Location				Tank
Fuel pump Type (elec. or mech.)				Mechanical
Fuel pump Location				Right Side of Engine - Near Front
Fuel pump Pressure range				6-1/2 P.S.I. Maximum
Fuel pump Vacuum booster (std., optl., none)				Standard (On Oil Pump)
Carburetor	Make	Carter - Strom.		Carter - Rochester
	Model number	WGD - WW		AFB - 4GC
	Number used			One
Carburetor Type	Downdraft, side inlet, other			Down Draft
	Single or dual	2 Bbl.		4 Bbl.
Carburetor Intake manifold heat control (manual, auto., none)				Automatic
Carburetor Automatic choke type (integral, other)				Integral
Carburetor 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	Dual
Muffler type (rev. flow, str. thru, sep. resonator)		Reverse Flow Muffler	Rev. Flow & Sep. Resonator
Exhaust pipe dia.	Branch	*2" O.D.	
	Main	2-1/4" O.D.	2" O.D.
Tail pipe diameter		2" O.D.	2" O.D.

* Dual Exhaust System Available as Optional Equipment.

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL	Series 40	Series 60	Series 50	Series 70
--------------	-----------	-----------	-----------	-----------

ENGINE—COOLING SYSTEM

Type (pressure system, atmospheric, other)		Pressure System	
Radiator cap relief valve press.		15 15 #	
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	
By-pass recirculation type (internal, external)		Internal By-Pass	
Radiator core type (cellular, tube and fin)		Tube and Center	
Cooling system capacity	With heater (qt.)	18.0	
	Without heater (qt.)	16.5	
Water jackets full length of cylinder (yes, no)		No	
Water all around cylinder (yes, no)		Yes	
Radiator hose	Lower	Number and type (molded, straight)	Molded
		Inside diameter and length	1-9/16
	Upper	Number and type (molded, straight)	Molded
		Inside diameter and length	1-9/16
	By-pass	Number and type (molded, straight)	None
		Inside diameter and length	None
Drive belts	Fan	Number used	One
		Angle of V	38°
		Outside length	53
		Width	.380
	Generator	Angle of V	38°
		Outside length	Common With Fan
		Width	.380
Fan	Number of blades and spacing		Four Blades - 76° x 104°
	Diameter		18"
	Ratio—fan to crankshaft revolutions		.92-1
	Bearing type		Sealed - Water Pump

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL	Series 40	Series 60	Series 50	Series 70
--------------	-----------	-----------	-----------	-----------

ELECTRICAL—SUPPLY SYSTEM

Battery	Make and Model		Delco-Remy
	Voltage Rtg. & Plates/cell		12 Volt - 11 Plate
	SAE Designation & Amp Hr. Rtg		70
	Location		Left Fender Skirt - Under Hood
	Terminal grounded		Negative
Generator	Make		Delco-Remy
	Model		1102066
	Type		Shunt
	Ratio—Gen. to Cr/s rev.		2.4
Regulator	Make		Delco-Remy
	Model		1119168
	Type		Voltage and 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	14.0 - 15.0 Adjust to 14.5
		Current	32.0 - 38.0 Adjust to 35.0
	Min. Gen. rpm required		2600 (Hot)
Voltage test conditions	Temperature	150°F	
	Load	Run 15 Minutes at 1-10 Amps	
	Other	Battery Must Be in Circuit for Voltage Check	

ELECTRICAL—STARTING SYSTEM

Starting motor	Make		Delco-Remy
	Model		1107667
	Rotation (drive end view)		Clockwise
	Engine cranking speed		160 RPM (Approximately)
	Test conditions		Engine at Operating Temperature
	Lock test	Amps	330-395
		Volts	3.5
		Torque (lb. ft.)	N.A.
No load test	Amps	91	
	Volts	10.6	
	RPM (min.)	3240	
Motor control	Switch (solenoid, manual)		Solenoid
	Starting procedure		<ol style="list-style-type: none"> 1. Turn on Ignition. 2. Depress Accelerator Pedal. <p style="margin-top: 10px;">Note: Transmission Selector Lever Must Be in Neutral or Park Position on Dynaflo Equipped Cars.</p>

AMA Consolidated Specification Questionnaire

MAKE OF CAR **BUICK** **MODEL YEAR** **1957**

MODEL	Series 40	Series 60	Series 50	Series 70
--------------	-----------	-----------	-----------	-----------

ELECTRICAL—STARTING SYSTEM (cont.)

Motor drive	Engagement type		Solenoid With Over-Running Clutch
	Pinion meshes (front, rear)		Front
	Number of teeth	Pinion	9
		Flywheel	166
Flywheel tooth face width		.573	

ELECTRICAL—IGNITION SYSTEM

Coil	Make		Delco-Remy
	Model		*1115100
	Amps	Engine stopped	4.5
Engine idling		2.5	
Distributor	Make		Delco-Remy
	Model		1110870
	Spark advance data (at distributor shaft)	Centr. advance start (rpm)	225 to 400
		Centr. advance max. deg. @ rpm	12 to 14.5 @ 1875
		Vacuum advance start (in. Hg.)	6.5 to 8.5
		Vac. adv. (max. deg. @ in. Hg.)	9 to 10.5 @ 14
	Breaker gap (in.)		.0125 - .0175
	Cam angle (deg.)		30°
Breaker arm tension (oz.)		19 - 23	
Timing	C/S deg. @ rpm		5 BTC
	Mark location		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		AC-Type 44
	Thread (mm)		14
	Tightening torque (lb. ft.)		25
	Gap		.030 - .035
Cable	Conductor type		4000 Ohm/Ft. Resistance Cable
	Insulation type		Neoprene
	Spark plug protector		Neoprene Boot

ELECTRICAL—SUPPRESSION

Description	4000 Ohm/Ft. Spark Plug Wires and Coil To Distributor Wire. Coil .33 MFD Condenser. Generator .33 MFD Condenser. Voltage Regulator .50 MFD Condenser.
--------------------	--

*To Be Used In Series With Resistance Unit #1931614.

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL	Series 40	Series 60	Series 50	Series 70
--------------	-----------	-----------	-----------	-----------

ELECTRICAL—INSTRUMENTS AND SWITCHES

Speed-ometer	Make	A. C.
	Trip odometer (yes, no)	Yes
Charge Indicator—type		Ammeter
Temperature indicator—type		Mechanical - Bourdon Tube
Oil pressure indicator—type		Mechanical - Bourdon Tube
Fuel indicator—type		Electrical
Ignition switch	Identify positions in order and circuits controlled	Center - Ignition, Stop Lights - Direction Signals, Back-Up Lights and Power Windows "On" Rotated Counter-clockwise - "Off" and Locked Rotated Clockwise - "Off" and Unlocked
	Provision for illumination	Yes
	Location	Right of Steering Column
	Theft protection type	Shield With Theft-Proof Screws
Main light-ing switch	Identify positions and lights controlled	1st Position Out - Park and Tail Lights 2nd Position Out - Headlights and Tail Lights Fully Counter-clockwise - Instrument Lights on Bright. Rotating Switch Knob - Clockwise Dims Instrument Lights. Full Clockwise Instrument Lights Off.
	Locations and lamps controlled	Dome Lamp Trunk Lamp Glove Compartment Parking Brake
Other light switches		*** *Mercury Switch in Lamp Mechanically Operated by Door **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 **Steering Column Between Dash and Instrument Panel
	Windshield wiper	Make Trico Type Vacuum Vacuum booster provision Yes Washer provision **Yes Yes
Horn	Type	Solenoid
	Number used	2
	Amp draw (each)	Left Horn 9.5 - Right Horn 10.5

**Optional at Extra Cost on Series 40, 60 and 50.

*** 41, 43, 46R, 63, 66R 46C, 66C 73, 66R 53, 56R 56C, 76C 52, 72	<u>Manual</u> Dome Light Above Left Rear Arm Rest Side Roof Rail in Lamp Dome Light Above Left Rear Arm Rest Dome Light	<u>Automatic</u> Front Pillars Front Pillars Front Pillars Front Pillars Front Pillars Front Pillars
---	---	--

*Optional at Extra Cost on Series 40.

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL	Series 40	Series 60	Series 50	Series 70
--------------	-----------	-----------	-----------	-----------

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	2-5400 (Guide T3)		
Headlamp beam indicator	1-53		
Parking light	2-1034		
Tail light	2-67		
Stop light	2-1073		
Direction indicator	Front	Use Same Bulb As Parking Light	
	Rear	Use Same Bulb As Stop Light	
	Tell-Tale	2-53	
License plate light	2-67		
Instrument light	5-57		
Ignition lock light	1-53		
Map light	None		
Dome light	1004 or 90		
Clock light	*1-57		1-57
Radio dial light	1-57		
Glove compartment light	1-57X		
Courtesy light	None		
Trunk compartment light	*1-89		1-89
Other Back-Up Lights		*2-1073	2-1073
Brake Indicator		*1-89	1-89
Dyn. Selector Light		**1-53	
Heater Control & Air Cond.	2-57		
Light Switch	1-57		

ELECTRICAL—FUSE & CIRCUIT BREAKER DATA *Accessory at Extra Cost **Incl. With Series 40 Dynaflo

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	22 @ Min. C. B. (a)		
Headlamp beam indicator	(a)		
Parking light	(a)		
Tail light	(a)		
Stop light	10 AGC (b)		
Direction indicator	(b)		
License plate light	(a)		
Instrument light	(a)		
Ignition light	(a)		
Map light	None		
Dome light	*SFE-20 (c)		
Clock	*2 AGA		2 AGA
Clock light	* (a)		(a)
Radio	*7.5 Special		
Glove compartment light	2 AGA		
Courtesy light	None		
Trunk compartment light	* (c)		(c)
Other Brake Indicator	*10 AGC (d)		10 AGC (d)
Heater	SFE-20		
Back-Up Lights	(d)		
Cigar Lighter	Special		
Antenna Motor	*15 AGC		
Electric Window & Seat Control	*40 CB		
Air Conditioner Controls	*5 AGC		

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL	Series 40	Series 60	Series 50	Series 70
-------	-----------	-----------	-----------	-----------

DRIVE UNITS—CLUTCH (PEDAL OPERATED)

Make		Long Mfg.	None	
Type (dry or wet plate)		Dry Plate	None	
In combination with fluid coupling (yes, no)		No	None	
Semi-centrifugal (yes, no)		Yes	None	
Type pressure plate springs		Coil	None	
Total plate pressure (lb.)		1845	None	
No. of clutch driven discs		One	None	
Clutch facing	Material	Woven	None	
	Inside diameter	7.00	None	
	Outside diameter	11.00	None	
	Total eff. area (sq. in.)	113.00	None	
	Thickness	.125	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	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	2.153	None
	In second	1.373	None
	In third	1.00	None
	In fourth		None
	In reverse	2.279	None
Constant mesh gears in 2nd (yes, no)		Yes	None
Spur gear used in (indicate speeds)			None
Helical gears used in (indicate speeds)		All	None
Synchronous meshing in 2nd and 3rd gears (yes, no)		Yes	None

* Available at Extra Cost

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL Series 40 Series 60 Series 50 Series 70

DRIVE UNITS—CONVENTIONAL TRANSMISSION (cont.)

Lubricant	Capacity (pt.)		2.50		None
	Type recommended		Multi-purpose		None
	SAE vis- cosity 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					
	Lubri- cont	Capacity (O.D. only)				
		Separate filter (yes, no)				
		Type recommended				
		SAE vis- cosity number	Summer			
Winter						
		Ext. cold				

DRIVE UNITS—AUTOMATIC TRANSMISSION

Trade name	*Dynaflo
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 - 1 x 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)	**Yes
By governor—forced shift (yes, no)	No
Downshift of gears in high range possible up to (mph)	***

* Optional at Extra Cost on Series 40.

** Stator Blades Shift at Full Throttle Position to High Angle.

*** Manual Downshift From Drive to Low Not Recommended Over 40 MPH.

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL Series 40 Series 60 Series 60 Series 70

DRIVE UNITS—AUTOMATIC TRANSMISSION (cont.)

Torque convertor	Number of elements		5		
	Max. ratio at stall at engine rpm		3.5 @ 2800 3.1 @ 1500	3.5 @ 3000 3.1 @ 1700	
	Mechanical lockup	Provided (yes, no)	No		
		Speed range			
		Releases at (speed range, mph)			
	Type of cooling (forced air, oil cooler and type, other)		Water Cooled		
Anti-creep device (yes, no)		No			
Lubricant	Capacity—refill (pt.)		22		
	Type recommended		**		
	Grade	Summer	A.T.F. Type A		
		Winter	A.T.F. Type A		
Extreme cold		A.T.F. Type A			

DRIVE UNITS—PROPELLER SHAFT

Number used		Two	
Type (exposed, torque tube)		Torque Tube	
Outer diameter x length* x wall thickness	Conventional trans. (Front Shaft Only)	2.683 x 35.24 x .065	None
	Overdrive trans.	None	
	Automatic trans. (Front Shaft Only)	2.683 x 35.24 x .065	2.683 x 40.74 x .065
	Type (plain, anti-friction)	Ball	
Inter-mediate bearing	Lubri. (fitting, prepack)	Packed for Life	
Universal joints	Make		Saginaw Front - Saginaw and Spicer Rear
	Number used		2
	Type (ball and trunnion, cross, other)		Front - Plain Cross; Rear - Needle Bearing Cross
	Bearing	Type (plain, anti-friction)	Front U-Joint - Plain; Rear U-Joint - Anti-Friction
Lubric. (fitting, prepack)		Front - By Transmission; Rear - Packed For Life	
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.

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

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.	3.58 (43-12)	None	
	Overdrive trans.	None		
	Automatic trans.	3.07 (43-14)		
Pinion adjustment (shim, other)		Shim		
Pinion bearing adj. (shim, other)		Shim		
Lubricant	Capacity (pt.)	6		
	Type recommended	Hypoid Lubricant - GM 4655M (90)		
	SAE viscosity number	Summer	SAE 90 Swan Finch GM 4655M	
		Winter	SAE 90 Swan Finch GM 4655M	
	Extreme cold	SAE 90 Swan Finch GM 4655M		

DRIVE UNITS—WHEELS

Type (disc, other)		Disc		
Rim (size and flange type)		15-5.5K	15-6L	
Attachment	Type (bolt or stud)	Bolt		
	Circle diameter	5.00"		
	Number and size	Five 9/16 - 18		

DRIVE UNITS—TIRES

Size and ply rating	Standard	7.10-15 4 Ply	7.60-15 4 Ply	8.00-15 4 Ply
	Optional	7.60-15 4 Ply	None	
Rev/mile at 30 mph		750	735	723
Inflation press. (cold)	Front	24		
	Rear	24		

BRAKES—SERVICE

Type		Hydraulic-Internal Expanding		
Booster type		**		
Effective area (sq. in.)		192.7		204.2
Percent brake effectiveness—rear		47		
Drum	Diameter	Front	12.020	
		Rear	12.020	
	Type and material	Centrifugally Cast - Cast Iron		

*Available at Extra Cost.

**Available at Extra Cost When Dynaflo Is Specified.

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL Series 40 Series 60 Series 50 Series 70

BRAKES—SERVICE (cont.)

	Bonded or riveted				Riveted	
	Primary	Material			Molded - Extruded	
Brake lining			Size (length x width x thickness)	Front wheel	10.094 x 2.25 x .187	
			Rear wheel	10.094 x 2.25 x .187		
	Segments per shoe				One	
		Material			Molded Extruded	
		Size (length x width x thickness)	Front wheel	12.969 x 2.25 x .187		12.969 x 2.50 x .265
			Rear wheel	12.969 x 2.25 x .187		
Segments per shoe				One		
Wheel cylinder bore	Front			1.125		
	Rear			1.00		
Master cylinder bore					1.00	
Available pedal travel					6.75	
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 Cowl 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	Channel Side Bars With "I" Beam X-Member
----------------------	--

FRONT SUSPENSION

Type and description	Ball Joint With Coil Springs
----------------------	------------------------------

AMA Consolidated Specification Questionnaire

Page 17
Rev. 8-53

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL Series 40 Series 60 Series 50 Series 70

FRONT SUSPENSION (cont.)

Spring	Type	Coil		
	Material	9260		
	Size (length x width x No. leaves or coil I.D.)	4.05 I. D.		
	Spring rate (lb. per in.)	390	415	
	Rate at wheel (lb. per in.)	82	88	
	Normal load (lb. @ rated length)	2450 @ 10	2580 @ 10	
Shock absorbers	Manufacturer	Delco		
	Type (direct or lever)	Direct		
	Piston diameter	1"		
Stabilizer	Type (link, linkless, frameless)	Link		
	Material	1065		

STEERING

Type used (Standard or optional)	Mechanical	Standard	None
	Power	*Optional	Standard
Wheel diameter		17.5"	
Turning diameter	Outside front	Wall to wall (r. & l.)	45.7
		Curb to curb (r. & l.)	43.2
	Inside rear	Wall to wall (r. & l.)	26.1
		Curb to curb (r. & l.)	26.7
Inside wheel angle with outside wheel at 20°		Manual - 21°	Power - 22°

Mechanical	Gear	Type	Recirculating Ball Nut		None	
		Make	Saginaw		None	
		Ratios	Gear	23.6	None	
			Overall	28.8	None	
	No. wheel turns	5		None		

Power		Type	**Hydraulic			
		Make	Saginaw In Line			
		Trade name	Safety Power Steering			
	Gear	Type	Recirculating Ball Nut Integral With Power Piston			
		Ratios	Gear	17.5		
			Overall	19.7		
		Pump driven by	Belt			
		Overall torque ratio	Variable			
	Number wheel turns	4				

Linkage	Type	Parallelogram		
	Location (front or rear of wheels)	Rear of Wheels		
	Drag link (trans. or long) Tie rods (one or two)	Transverse Drag Link-Two Tie Rods		

* Available at Extra Cost.
**Optional at Extra Cost on Series 40 and 60.

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL Series 40 Series 60 Series 50 Series 70

STEERING (cont.)

Kingpin	Inclination at camber (deg.)		7° at 52' 30" Camber
	Diameter		Ball Joint Design
	Bearings (type)	Upper	
		Lower	
Thrust			
Wheel alignment (range and preferred)	Caster (deg.)		1-3/4" Negative
	Camber (deg.)		1/2° Positive
	Toe-in (outside tread-inches)		1/16 - 1/8 in.
Steering knuckle type			Reverse Elliot
Wheel spindle	Diameter	Inner bearing	1.374
		Outer bearing	.843
	Thread size		13/16 - 16 U. N.
	Bearing type		Ball

REAR SUSPENSION

Type			Coil Spring	
Drive and torq. taken through (see page 14)			Torque Tube	
Spring	Type		Coil	
	Material		9260	
	Size (length x width x No. leaves or coil I.D.)		5.5	
	Spring rate (lb. per in.)		112 125	
	Rate at wheel (lb. per in.)		112 125	
	Normal load (lb. at rated length)		900 @ 10 1025 @ 10	
	Mounting insulation type			Laminated Rubber
	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)		Direct	
	Piston diameter		1"	
Stabilizer	Type (link, linkless, frameless)		None	
	Material		None	
Track bar type			Tubular Steel Bar Mounted in Rubber	

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK MODEL YEAR 1957

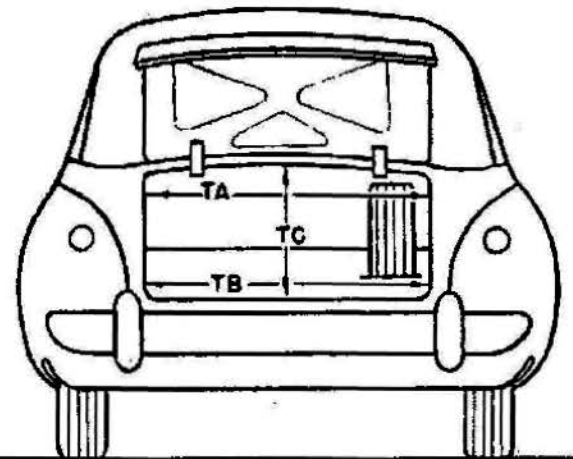
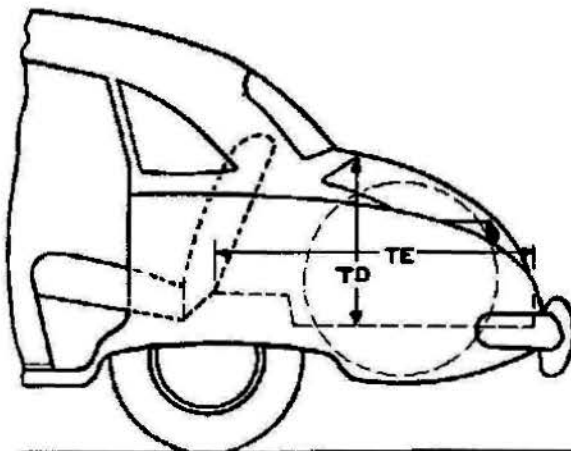
BODY—GENERAL DEFINITIONS

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	46.84	52.82	
TB—Width across the bottom	46.84	52.82	
TC—Diagonal dimension at CL from top of opening to bottom	33.38	36.00	
TD—Vertical height of opening (floor to top, inside edge of opening)	22.68	23.48	23.75
TE—Max. horizontal depth (forward from vertical projection of inside edge of opening)	49.74	50.16	
Position of spare tire stowage	Right Side - Longitudinal - Vertical		
Method of holding lid open	Counterbalance Spring at Trunk Lid Hinges		

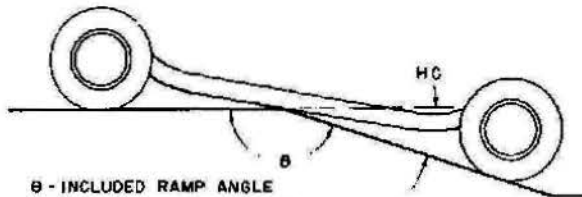
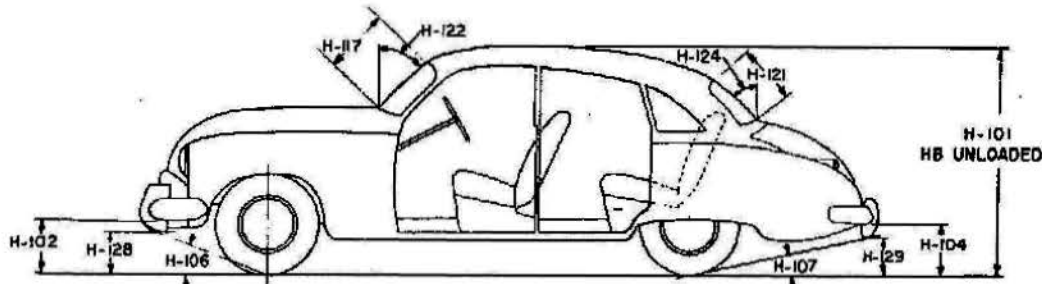
AMA Consolidated Specification Questionnaire

Page 20-A
Rev. 8-53

MAKE OF CAR BUICK MODEL YEAR 1957

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.	58.4	58.7	59.4	59.6
HB. Overall height—unloaded.	60.1	60.4	61.0	61.0
H102. Front bumper bottom to ground at normal section.	10.3	10.5	10.3	10.6
H104. Rear bumper bottom to ground at normal section.	10.4	10.7	10.5	10.7
H106. Angle of approach—from the tire rolling radius to lowest point on front bumper or guard.	20° 15'	20°	20° 10'	20° 30'
H107. Angle of departure—from the tire rolling radius to lowest point on rear bumper or guard.	13° 50'	14° 15'	13° 35'	14° 45'
HC. Ramp breakover angle.*	2° 45' 11° 48'	12° 12'	8° 11° 48'	8° 12' 12° 2'
H117. Windshield DLO—slant height.	20.7		21.2	
H121. Backlight DLO*—Max. slant height.	16.7		17.8	
H122. Windshield slope angle to vertical line on car axis.	47.3°		47°	
H124. Backlight slope angle to vertical line on car axis.	54° 15'		52° 15'	
H128. Ground to bottom of front bumper guard.	10.1	10.3	10.1	10.3
H129. Ground to bottom of rear bumper guard.	None			
HD. Min. road clearance (location and dimension).	6.3	6.6	6.5	6.7
HE. Min. road clearance at rear axle.	7.4	7.6	7.7	7.9

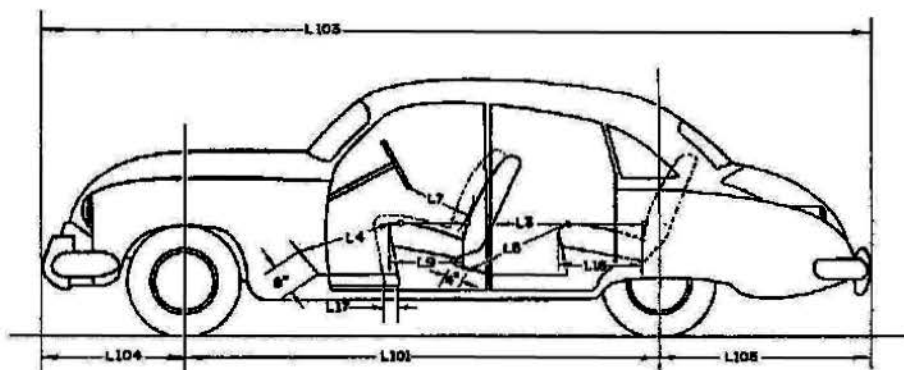
*See Notes, page 19.

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

MODEL	Series 40	Series 60	Series 50	Series 70
--------------	-----------	-----------	-----------	-----------

BODY—LENGTH DIMENSIONS



Interior	L3. Rear compartment back of front seat back to rear seat back.	31.7	35.5	35.6
	L4. Leg room—front—diagonal—ball of foot to top of seat to front seat back—15° line.	43.4	43.3	44.0 43.6
	L5. Leg room—rear—diagonal—from ball of foot to top of rear seat cushion end to seat back.	42.4	42.3	45.0
	L7. Steering wheel clearance to seat back taken on arc.	14.0	14.1	13.6
	L9. Front seat depth (front edge to vert. tan. to seat back on 15° line).	17.8		17.7
	L16. Depth of rear seat (front edge to seat back).	18.5	17.6	18.0
	L17. Total adjustment of front seat at floor.	5.5		
Exterior	L101. Wheel base.	122.0	127.5	
	L103. Overall length (bumper to bumper inc. guards).	208.5	215.3	
	L104. Overhang—front including bumper guards.	34.5	34.7	
	L105. Overhang—rear including bumper guards.	52.0	53.1	

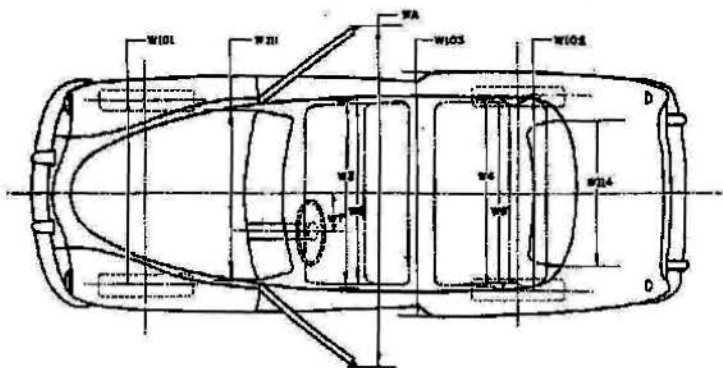
AMA Consolidated Specification Questionnaire

Page 22
Rev. 2-6-57

MAKE OF CAR BUICK MODEL YEAR 1957

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.	56.9	59.0	
	W4. Rear shoulder room, at garnish moulding height or nearest interference 5° forward of seat back.	56.0	57.1	
	W5. Front hip room, at top of seat 5° forward of vert. tan. to seat back.	62.5	65.5	65.3
	W6. Rear hip room, at top of seat 5° forward of vert. tan. to seat back.	62.2	65.0	64.8
	W7. Steering wheel center to center of body.	15.3		
	W101. Front tread at ground.	59.5		
Exterior	W102. Rear tread at ground.	59.0	61.0	
	W103. Max. overall width of car including bumpers or mouldings.	74.8	77.6	
	WA. Max. overall width of car with doors open.	147.6 Sedan 159.6 Coupe	150.4 Sedan 161.4 Coupe	
	W111. Windshield DLO, max. width.	60.8	62.4	
	W114. Back window DLO, max. width.	58.9	60.8	

AMA Consolidated Specification Questionnaire

Page 24

INDEX

SUBJECT	PAGE	SUBJECT	PAGE
Battery.....	8	Kingpin.....	18
Belts, drive.....	7	Lamp bulbs.....	11
Body		Linings—clutch, brake.....	12, 16
General Body Information.....	19, 23	Lubrication.....	5, 6, 13, 14, 15
Height dimensions.....	20	Muffler.....	6
Length dimensions.....	21	Overdrive.....	13
Overall dimensions.....	1	Piston pins.....	3
Trunk opening dimensions.....	19	Pistons.....	2
Width dimensions.....	22	Propeller shaft.....	14
Types.....	23	Radiator, radiator hoses.....	7
Brakes		Rear axle.....	1, 15
Parking.....	16	Rims.....	15
Service.....	15, 16	Rings.....	3
Camber.....	18	Shock absorbers	
Camshaft.....	4	Front.....	17
Capacities		Rear.....	18
Cooling system.....	7	Spark plugs.....	9
Fuel tank.....	6	Springs	
Lubricants		Front.....	17
Crankcase.....	6	Rear.....	18
Overdrive.....	13	Valve.....	5
Transmissions.....	13, 14	Stabilizer	
Rear axle.....	15	Front.....	17
Carburetor.....	6	Rear.....	18
Caster.....	18	Starting motor.....	8
Choke, automatic.....	6	Steering.....	1, 17, 18
Circuit breakers.....	11	Suppression.....	9
Clutch (pedal operated).....	12	Suspension	
Coil, ignition.....	9	Front.....	16, 17
Connecting rods.....	3	Rear.....	18
Cooling system.....	7	Switches.....	10
Crankshaft.....	3, 4	Tailpipe.....	6
Cylinders, cylinder head.....	2	Timing, engine.....	4, 5, 9
Distributor.....	9	Tires.....	1, 15
Electrical System.....	8, 9, 10, 11	Toe-in.....	18
Engine		Torque converter.....	14
Bore and stroke, displacement.....	1, 2	Torque, maximum.....	1, 2
Compression ratio.....	1, 2	Transmission	
Firing order, cylinder numbering.....	2, 9	Automatic.....	13, 14
General information.....	1, 2	Conventional.....	12, 13
Lubrication.....	5, 6	Conventional with overdrive.....	13
Type.....	1, 2	Ratios.....	12
Exhaust system.....	6	Types.....	1, 12, 13
Fan.....	7	Tread.....	1, 22
Frame.....	16	Turning diameter.....	1, 17
Fuel.....	6	Universal joints.....	14
Fuel pump.....	6	Valves, intake and exhaust.....	4, 5
Fuel system.....	6	Voltage regulator.....	8
Fuses.....	11	Water pump.....	7
Generator.....	8	Weight, shipping.....	1
Horns.....	10	Wheel alignment.....	18
Horsepower		Wheelbase.....	1, 21
Maximum brake.....	1, 2	Wheels.....	15
Taxable.....	2	Wheel spindle.....	18
Ignition system.....	9	Windshield wiper.....	10
Instruments.....	10		

AMA Consolidated Specification Questionnaire

MAKE OF CAR BUICK **MODEL YEAR** 1957

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)		1-Piece, Curved	
Rear window type (one piece, two piece, three piece; curved, flat)	3- Piece	1-Piece	
Windshield glass area	1356.9	1412.1	
Backlight glass area	1000.4	1120.5	
Total glass area	3872.3	3826.8	3949.6

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)	G-6			
	K-6	K-6	K-6	K-6
	L-6	L-6	L-6	L-6
	J-6	J-6	J-6	J-6
	D-6			
	P-6	P-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)
- M—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