

GROUP 0

INTRODUCTION — GENERAL INFORMATION

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INTRODUCTION

This manual is divided into major *Groups*, *Sections*, and *Paragraphs* as explained below. The purpose of this arrangement is to bring related subjects closely together in accordance with the usual methods of performing service operations, and consequently to present information in a logical and easily understood order.

Any desired subject in this manual may be

located by reference to the alphabetical index at back of manual.

Any desired subject also may be located by turning to the first page of the appropriate *Group* where contents of the *Group* are listed. Where the *Group* is divided into *Sections* the first page of each *Section* lists the contents of the *Section*.

1. **GROUPS.** The manual is divided into the consecutively numbered major *Groups* shown on the preceding title page. To locate the first page of a *Group*, bend the manual until the black tab on first page of group can be seen in line with the *Group* title on title page.

The first page lists the contents of the *Group*.

2. **SECTIONS.** Large *Groups* are divided into appropriate *Sections* as shown on first page of the group. *Sections* bear the *Group* number and letters A, B, C, etc., in alphabetical order.

The first page of each *Section* lists the contents of section.

3. **PARAGRAPHS.** Each *Group* is divided into appropriate *Paragraphs* which are numbered consecutively within the *Group*, whether or not the group is divided into sections.

Paragraph titles and page numbers are listed on the first page of each *Section* if used, or on first page of the *Group* if sections are not used.

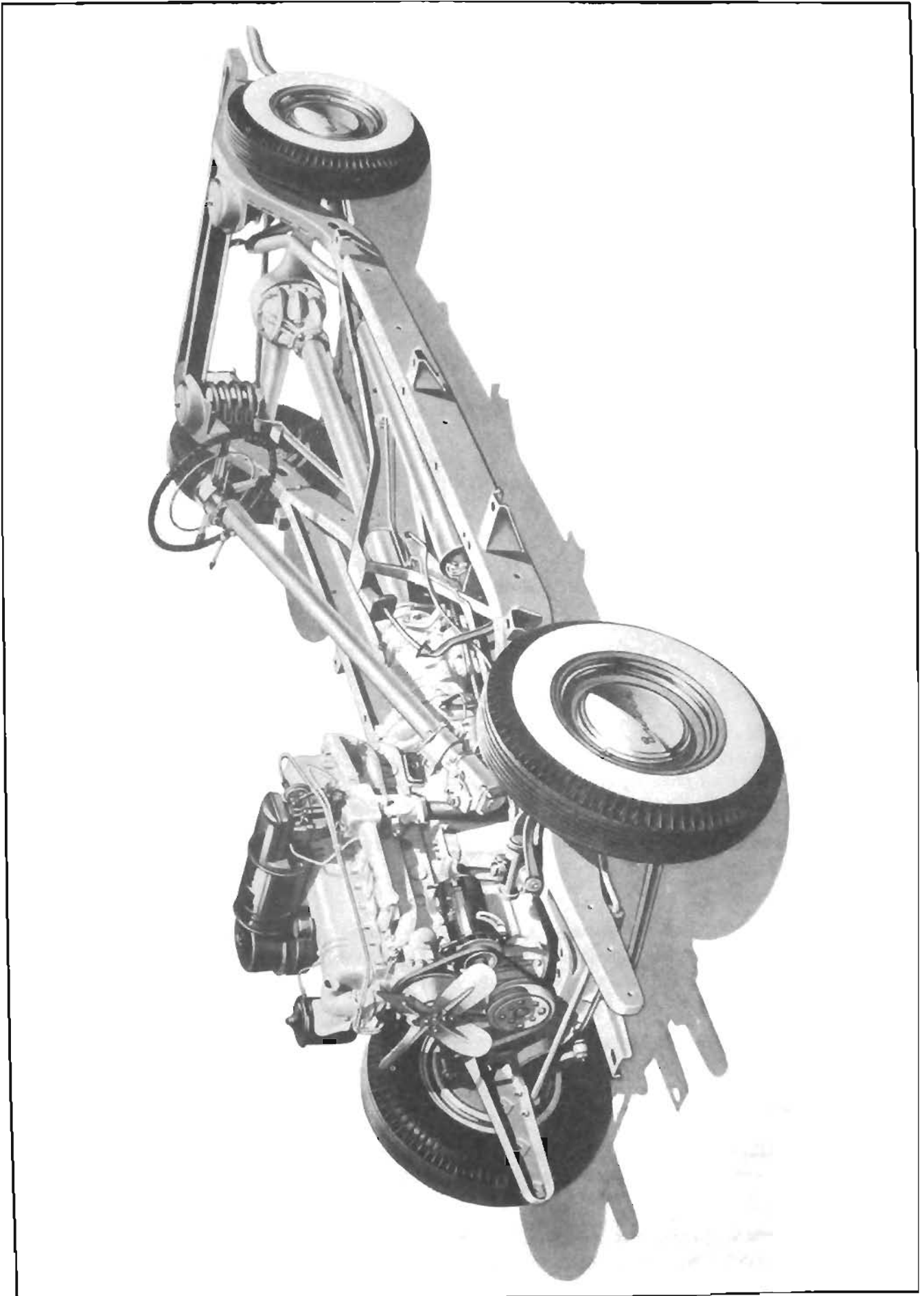
4. **SUB-PARAGRAPHS.** Where necessary for clarity, or distinction between models, *Paragraphs* are divided into appropriately titled *Sub-paragraphs*. These are usually lettered in alphabetical order within the paragraph.

5. **PAGE AND ILLUSTRATION NUMBERS.** Pages and illustrations are numbered consecutively within each *Group*. The number consists of the *Group* number followed by the *Page* or *Figure* number. Page numbers are printed in the upper *outer* corners of all pages. The small folio numbers at inner edges of pages are for printer's use only and are not used for reference in the manual.

6. **CROSS REFERENCES.** All references to information in other parts of manual are made by *Paragraph Number*, to avoid the necessity of first referring to the alphabetical index for location. Paragraph references are usually given in parentheses, for example: (par. 6-15) refers to the 15th paragraph in *Group* 6, "Chassis Suspension".

7. **SERVICE BULLETIN REFERENCE.** Space is provided on first page of each *Section* (or single section *Group*) for insertion of a reference to any B.P.S. bulletin which relates to the subjects covered by the section.

8. **SPECIAL TOOLS.** Unless otherwise indicated, all special tools identified by tool numbers in the manual are available through Kent-Moore Organization, Inc., General Motors Building, Detroit 2, Michigan.



Series 40 Chassis

1951 CAR MODELS

Model	Designation	Wheel-Base	Illustrated on Page No.
	SPECIAL—Series 40 (Dynaflow Drive optional)		
41	4-Door 6-Passenger Tourback Sedan	121 ½"	1-12
41D	4-Door 6-Passenger Deluxe Tourback Sedan	121 ½"	1-12
45R	2-Door 6-Passenger Riviera	121 ½"	2-37
46	2-Door 3-Passenger Tourback Coupe	121 ½"	2-50
46C	2-Door 6-Passenger Convertible Coupe	121 ½"	3-9
46S	2-Door 6-Passenger Tourback Coupe	121 ½"	3-16
48	2-Door 6-Passenger Tourback Sedan	121 ½"	4-57
48D	2-Door 6-Passenger Deluxe Tourback Sedan	121 ½"	4-86

NOTE: References to Series "44" have been crossed out where printed, because this series was eliminated after the type was set but before 1951 production started.

	SUPER—Series 50 (Dynaflow Drive optional)		
51	4-Door 6-Passenger Tourback Sedan	121 ½"	5-8
52	4-Door 6-Passenger Riviera Sedan	125 ½"	5-24
56C	2-Door 6-Passenger Convertible Coupe	121 ½"	—
56R	2-Door 6-Passenger Riviera	121 ½"	5-24
56S	2-Door 6-Passenger Jetback Sedanet	121 ½"	5-24
59	4-Door 6-Passenger Estate Wagon	121 ½"	10-52
	ROADMASTER—Series 70 (Dynaflow Drive standard)		
72R	4-Door 6-Passenger Riviera Sedan	130 ¼"	10-100
76C	2-Door 6-Passenger Convertible Coupe	126 ¼"	10-100
76R	2-Door 6-Passenger Riviera	126 ¼"	10-100
79	4-Door 6-Passenger Estate Wagon	126 ¼"	12-8

GENERAL SPECIFICATIONS

Items	Series 40	Series 50	Series 70
Wheelbase	← See Car Models, above →		
Tread—Front	59.1"	59.1"	59.1"
Tread—Rear	59.0"	62.2"	62.2"
Length Over Bumpers, except 52 & 72R	204.8"	206.2"	211"
Models 52 & 72R		210.2"	215"
Width Over-all at Widest Point	76.7"	80"	80"
Height Over-all, Roof to Road, at Curb Weight	65.3"	64.8"	65.2"
Front Overhang (C. L. of Wheels to Front of Bumper)	33.5"	34.2"	34.2"
Rear Overhang (C. L. of Wheels to Rear of Bumper)	49.8"	50.5"	50.5"
Ground Clearance, at Normal Load:			
Steering Tie Rod, at Pitman Arm	7.34"	7.34"	7.90"
Lower Crankcase	6.94"	6.94"	7.90"
Flywheel Lower Housing	7.12"	7.12"	7.32"
Frame Side Rail, Lowest Point	6.80"	6.82"	7.28"
Rear Axle Housing, Center	7.76"	7.76"	8.26"
Gas Tank	8.80"	8.62"	9.10"
Tail Pipe, Rear End	9.76"	9.60"	10.10"

CAR AND ENGINE SERIAL NUMBERS

The car serial number is on a plate attached to the body on left front door hinge pillar and is also stamped on the left frame side rail near brake master cylinder. The first digit of serial number indicates where car was built: 1=Flint, 2=Southgate, 3=Linden, 4=Kansas City, 5=Wilmington, 6=Atlanta, 7=Framingham.

The engine serial number is stamped on a boss on right side of crankcase below push rod cover—forward of distributor on Series 40-~~44~~-50 and near rear of crankcase on Series 70. The last digit of engine number indicates the series: 4=Series 40-~~44~~, 5=Series 50, and 7=Series 70. A stamped dash (—) about ¼" long directly following the engine serial number indicates a .010" O.S. production engine.

PRODUCT REPORT

Product Report Form S-758-5 is furnished to all Buick Dealer Service Departments to enable them to report product difficulties. These forms should be filled out in *triplicate* and forwarded to Zone Offices each week. Zone Offices forward the reports to the factory where the Engineering and Inspection departments analyze them and use the information to improve product quality.

Unless a Product Report is made on *every product difficulty each time it occurs* it is impossible for the factory analysis to be correct and valuable time will be lost in effecting a correction. Dealer Service Departments are repaid indirectly for time spent on these reports since they enable the factory to build the product so as to require the minimum of service when cars are received by the dealer. Dealer Service Department cooperation in supplying Product Reports is definitely appreciated by the factory.

BUICK S-758-5		PRODUCT REPORT		
DEALER _____				
DATE _____		ZONE _____		
COMPLAINT— DO NOT LIST MORE THAN ONE TYPE. (STATE CAUSE IF POSSIBLE)				
WHAT WAS THE REMEDY (IF ANY)				
DO YOU NEED ADDITIONAL SERVICE INFORMATION ON THIS?				
ENTER BELOW THE INFORMATION ON EACH CAR ON WHICH THIS CONDITION HAS BEEN FOUND.				
SERIAL NUMBERS	ENGINE NUMBERS	BODY NUMBERS	MODEL AND SERIES DESIGNATION	MILEAGE
SIGNED _____				
DETAILED DESCRIPTION OF BOTH COMPLAINT AND CORRECTION WILL DEFINITELY ASSIST THE FACTORY IN IMPROVEMENT OF THE PRODUCT. USE OTHER SIDE FOR DETAILS IF MORE SPACE IS NECESSARY.				

MANUFACTURER'S WARRANTY

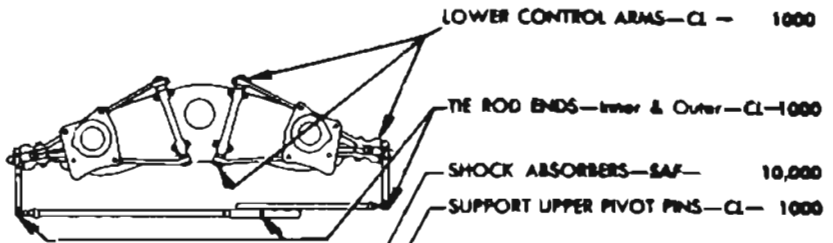
It is expressly agreed that there are no warranties, expressed or implied, made by either the Dealer or the Manufacturer on the Buick motor vehicles, chassis or parts furnished hereunder, except the Manufacturer's Warranty against defective materials or workmanship as follows:

"The Manufacturer warrants each new motor vehicle, including all equipment or accessories (except tires) supplied by the Manufacturer, chassis or part manufactured by it to be free from defects in material and workmanship under normal use and service, its obligation under this warranty being limited to making good at its factory any part or parts thereof which shall, within ninety (90) days after delivery of such vehicle to the original purchaser or before such vehicle has been driven 4,000 miles, whichever event shall first occur, be returned to it with transportation charges prepaid and which its examination shall disclose to its satisfaction to have been thus defective; this warranty being expressly in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on its part, and it neither assumes nor authorizes any other person to assume for it any other liability in connection with the sale of its vehicles.

"This warranty shall not apply to any vehicle which shall have been repaired or altered outside of an authorized Buick Service Station in any way so as in the judgment of the Manufacturer to affect its stability and reliability, nor which has been subject to misuse, negligence or accident.

The Manufacturer has reserved the right to make changes in design or add any improvements on motor vehicles and chassis at any time without incurring any obligation to install same on motor vehicles and chassis previously purchased.

CAPACITIES	SERIES	
	40-50	70
Cooling System With Heater—Qts.	13 1/2 (*15)	19 1/2
Without Heater —Qts.	12 (*13 1/2)	18
	**With Dynaflo Drive	
Crankcase—Refill —Qts.	5 1/2 (**7)	7 (**8 1/2)
	**With Dry Oil Filter	
Gas Tank—Gallons	19	19
Rear Axle—Pts.	4	4
Steering Gear —Ounces	13	17
Synco-Mesh Trans- mission—Pts.	1 1/2	
Dynaflo Transmis- sion—Qts.	8 1/2	10

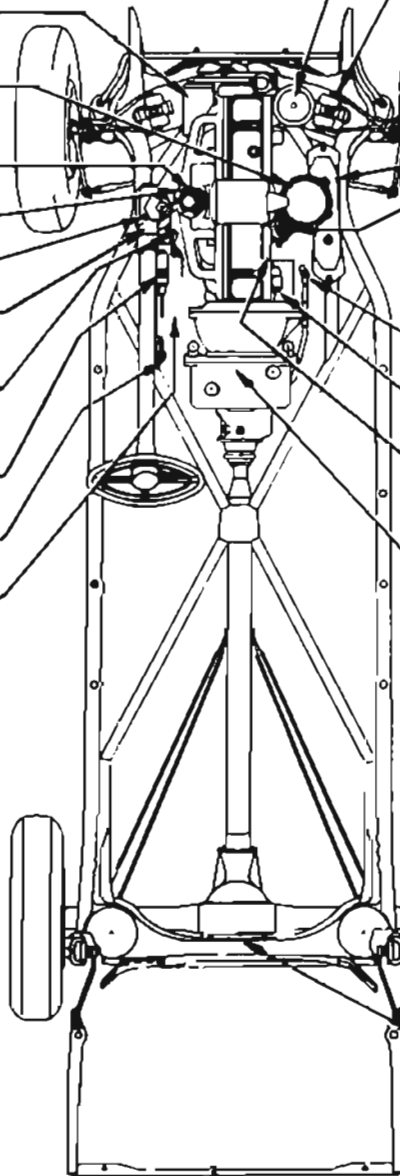


OIL FILTER—Change Element at 1st 1000 & 3000, Then Every 3000

- GENERATOR BEARINGS (2)—EO— 1000
- HEAVY DUTY AIR CLEANER—Wash Element & Reservoir, Renew Oil in Reservoir. Do Not Oil Element —EO, 1 Pt. SAE 50 — 5000
- MANIFOLD VALVE SHAFT—Free Up —GK — 1000
- CARTER CARB. PUMP C'SHAFT—EO—3000
- STEERING GEAR—SGL— 5000
- DYNAFLOW TRANS CONTROL DETENT —LUB— 1000
- TRANSMISSION SHIFT IDLER LEVER PIN —CL— 1000
- BRAKE MASTER CYLINDER—Maintain Level 1/2" to 1" Below Top of Filler Opening —MBF — 1000
- CLUTCH & BRAKE PEDALS—CL— 1000
- CLUTCH RELEASE EQUALIZER—CL— 1000
- CLUTCH LINKAGE—EO—

- STEERING KNUCKLE BUSHINGS —CL— 1000
- FRONT WHEEL BEARINGS—WBL—10,000
- BATTERY—Add Pure Water as Required Do not Over-Fill 1000
- DISTRIBUTOR SHAFT—CL— 1000
- DISTRIBUTOR CAM BEARING WICK, CONTACT ARM PIVOT —EO-10W— 5000
- DISTRIBUTOR CAM—Apply with Cloth —PJ— 5000
- HYDRO-ELECTRIC PUMP MOTOR BEARING —EO— 5000
- DYNAFLOW TRANSMISSION—Check & Maintain Level—DD— 1000
- DRAIN & REFILL—DD— 25,000
- CRANKING MOTOR LINKAGE—Do Not Oil Plunger—EO — 1000
- ENGINE—CHECK OIL LEVEL— 1000
- SYNCO-MESH TRANSMISSION—Maintain at Filler Opening—Flushing & Seasonal Changes Not Recommended —MPG— 1000

LUBRICANTS	
CL	= Chassis Lubricant
DD	= Special Buick Oil for Dynaflo Drive or Automatic Transmission Fluid, Type A (AQ-ATF—)
EO	= Engine Oil
GK	= Graphite & Kerosene
MBF	= Hydraulic Brake Fluid—Delco Super No. 11
LUB	= Lubriplate (or CL)
MPG	= Multi-Purpose Gear Lubricant 12-105B ¹
PJ	= Petroleum Jelly
SAF	= Shock Absorber Fluid—Delco
SGL	= Steering Gear Lubricant (or MPG)
WBL	= Wheel Bearing Lubricant



- REAR WHEEL BEARINGS—WBL—When Retiring Brakes
- SHOCK ABSORBERS—Check & Maintain Level— —SAF— 10,000
- REAR AXLE—Maintain at Filler Opening Flushing & Seasonal Changes Not Recommended —MPG— 1000
- For Complete Refill Use Only Factory Hypoid Gear Lubricant

Figure 1-1—Chassis Lubricare Chart—All Series