

1949

Automobile Manufacturers Association Consolidated Specification Questionnaire

Mechanical Details

Make of Car.....Oldsmobile.....Model.....Futuramic "98"
 Oldsmobile Division
 Name of Maker.....General Motors Corporation.....Address.....Lansing, Michigan
 Date.....9-14-48

NOTE: (1) Subject to Correction: It is understood that the following data are subject to correction in the case of cars not in production at the time this compilation was requested.

(2) Only standard equipment included in Factory Delivered price should be included in this questionnaire.

ENGINE

No. of cylinders.....8
 Valve arrangement.....Valve-in-Head
 Bore.....3-3/4".....Stroke.....3-7/16
 Cylinder head, cast iron or aluminum.....Cast Iron
 Cylinder sleeve, Yes.....No.....No
 Piston displacement.....303.73 cu. in.
 Taxable horsepower.....45.0
 Horsepower rating—

To be based on actual performance corrected to 60°F. at sea level (barometric pressure 29.92 inches of mercury) with standard fuel. (Octane No. of fuel.....79 A.S.T.M. & 86 Research

—With Bare Engine—

Maximum brake hp.135.....at.....3600.....R.P.M.

—With Standard Accessories—*

Maximum brake hp.129.....at.....3600.....R.P.M.

*Those standard accessories needed for normal operation including fan, generator, starter, air cleaner, muffler, manifolds, fuel and water pumps.

Maximum torque—

With bare engine, lb. ft.263.....at.....1800.....R.P.M.

With standard accessories,* lb. ft.255.....at.....1800.....R.P.M.

Compression Ratio—

Standard.....7.25.....Optional.....

Standard compression pressure —pounds—

At cranking speed.....136#

At what R.P.M.183# @ 1000 R.P.M.

PISTONS and RINGS

Piston

Make.....Own
 Material.....Aluminum Alloy
 Features—split skirt, invar strut, oval, tin-plated, aluminum oxide finish, auto-thermic, V-Bridge, porous chrome plate, etc. Auto-thermic, Cam Grnd., Tin plate, Steel strut.
 Weight—ounces—without rings, pin or bushing.....19.88.oz.
 Length.....4"
 Clearance—
 Top land......032".....to......036"
 Skirt, top......0005"—.0015"bottom......0005"to.0010"

PISTONS and RINGS (cont'd)

Piston ring groove depth—

Oil......193".....Compression......200"

No. of oil rings used per piston.....One

Width of oil rings.....3/16"

Width of oil ring gap......008" to .016"

No. of compression rings used per piston.....Two

Width of compression rings.....5/64"

Width of compression ring gap......008" to .016"

Maximum wall thickness of oil rings......163"

Maximum wall thickness of compression rings......187"

Are ring expanders used, Yes.....No.....No

RODS and PINS

Wristpin—

Material.....S.A.E. 1117 Mod. Steel

Length.....3.011".....Diameter......9805"

Locked in rod, piston or floating.....Full Floating

Clearance in piston......0002 loose to .0000

Clearance in rod......0003" to .0005" loose

Connecting rod—

Length—center to center.....6.625"

Material.....GM X-1335 Steel

Weight—ounces.....29.54.oz.

Crankpin Journal—

Diameter.....2 1/4".....Length.....2"

Lower bearing—

Material.....Durex 100-A with GM 4167-M Babbitt Overlay.

Clearance......0009" to .0029"

End play......002" to .011"

Ship—solid, laminated or none.....None

Spun or separate.....Separate

Rods and pistons removed from above or below.....Above

CRANKSHAFT

Material.....S.A.E. 1145 Mod. Steel

Weight—stripped.....60#

Vibration dampener used—yes or no.....Yes

Type.....Spring

Make of Car. Oldsmobile Model Futuramic "98" Date 9-14-48

CRANKSHAFT (cont'd)

Crankshaft counterweights used, number of. 6
Which main bearing takes thrust. Rear
Crankshaft end play .004" to .008"

Main bearing—

Type: Cast-in or Slip-in Yes
If slip-in: Removable from below. Yes
Necessary to align ream. No

Material Durex 100 A with GM 4167 Babbitt
Clearance overlap .0005" to .003"

Shim—solid, laminated or none None

Main bearing journal diameter x length—

No. 1. 2-1/2" x 1-3/32"
No. 2. 2-1/2" x 1-1/8"
No. 3. 2-1/2" x 1-1/8"
No. 4. 2-1/2" x 1-1/8"
No. 5. 2-5/8" x 1.880"
No. 6.
No. 7.
No. 8.
No. 9.

Crankshaft gear or sprocket—

Make Link Belt
Material S.A.E. 1141 Steel

CAMSHAFT

Camshaft gear or sprocket—

Make Link Belt
Material 1X Cast Iron

Timing chain—

Make Link Belt
Number of links 48
Width 27/32"
Pitch .500"

VALVES

INTAKE VALVE—

Make Various
Material S.A.E. 3140 Steel
Overall length 4.855"
Actual overall diameter of head 1-3/4"
Minimum port diameter 1-7/16"
Angle of seat 45°
Is valve seat an insert? No
Stem diameter .3425-.3417
Stem to guide clearance .00175" to .00355"
Lift .222
Spring pressure and length—
Outer—

VALVES (cont'd)

With valve closed—lb. 65# ins. 1.777
With valve open—lb. 140# ins. 1.447
Length out of engine—ins. 2-3/32"
Inner—
With valve closed—lb. ins.
With valve open—lb. ins.
Length out of engine—ins.

EXHAUST VALVE—

Make Various
Material Silchrome XCR Steel
Overall length 4.8435"
Actual overall diameter of head 1.469"
Minimum port diameter 1-1/4"
Angle of seat 45°
Is valve seat an insert? No Material
Stem diameter .3938-.3930
Stem to guide clearance .00225" to .00405"
Lift .222
Spring pressure and length—
Outer—
With valve closed—lb. 65# ins. 1.777
With valve open—lb. 140# ins. 1.447
Length out of engine—ins. 2-3/32"
Inner— None
With valve closed—lb. ins.
With valve open—lb. ins.
Length out of engine—ins.

Operating tappet clearance (hot or cold)—intake None
Tappet clearance for valve timing—intake None
Operating tappet clearance (hot or cold)—exhaust None
Tappet clearance for valve timing—exhaust None
Hydraulic valve lifters—yes or no Yes

Valve timing—

Intake opens 14 degrees BUDC piston travel 0.060 inches
Intake closes 50 " ALDC " 2.94 inches
Exhaust opens 50 " BLDC " 2.97 inches
Exhaust closes 14 " AUDC " 0.068 inches
Valve Timing Marks—on Flywheel, Vibration Damper, None None

LUBRICATION

Lubricating system type—pressure or splash Pressure
Oil pressure to—
Main bearings—yes or no Yes
Connecting rods—yes or no Yes
Wristpins—yes or no Yes
Camshaft bearings—yes or no Yes
Tappets—yes or no Yes

Make of Car.....Oldsmobile.....Model Futuramic "98".....Date 9-14-48

LUBRICATION (cont'd)

Timing gear or chain lubrication—*positive or splash* Positive...
 Oil pump type Gear...
 Oil grade recommended—*SAE viscosity and temperature range*—
 ...See Lubrication Chart...
 Normal oil pressure—*lbs. at M.P.H.* 40# at 30 M.P.H.
 Pressure at which relief valve opens 40#
 Capacity of oil reservoir—*quarts, dry* 5...*refill* 5...
 Oil pressure gauge make A.C.
 Oil reservoir level gauge type Dip Stick
 Floating type oil intake—*yes or no* No
 External oil filter make None
 Other type of oil cleaner None
 Oil cooler make None
 Chassis lubrication—*Make* Various

FUEL

Gasoline tank—*capacity* 18 Gallons
 Fuel feed—
 Type—*vacuum tank, electric pump, gravity vacuum pump or camshaft pump* Camshaft Pump
 Make A.C. Model
 Carburetor—
 Make Various Model
 Number used 1
 Size 1-7/16"
 Type—
 Up or down draft Down Single or dual Dual
 Intake manifold heat control—*manual, automatic or none* Automatic
 Automatic choke, make Various Model
 Air cleaner—*intake silencer make* A.C.
 Type—*dry felt; oil bath; oil coated fibre* Oil Coated Metal Ribbon
 Heavy Duty type—*Make* None Model
 Muffler make Hayes & Walker
 Tail pipe diameter 2"

COOLING

Water pump—
 Type Sealed Centrifugal
 Drive V-Belt
 Is pump equipped with packing nut No
 Water circulation thermostat make Harrison
 Pressure relief valve—*yes or no* Yes
 By-pass for recirculation—*yes or no* Yes
 Radiator core—
 Type Tubular Vee Cell
 Make Harrison

COOLING (cont'd)

Cooling system—*capacity, quarts* 21-1/2 gts.
 Water jackets full length of cylinders—*yes or no* Yes
 Water all around cylinder—*yes or no* Yes
 Lower radiator hose—
 Inside diameter 1-3/4" Length 14-5/8" Approx.
 Upper radiator hose—
 Inside diameter 1-1/2" Length 11-1/8"
 Fan belt—
 Make Various
 Angle of vee 38°
 Length, outside 39-1/4" Width, maximum 11/16"
 Fan—
 Make Own No. of Blades 4

IGNITION

Ignition units—
 Make Delco Remy Model 1110614
 Manual or octane selector, *degrees advance* 15° *retard* 15°
 Maximum centrifugal advance crankshaft, *degrees* 30°
 at 4500 engine R.P.M.
 Inches of Mercury Necessary to operate Vacuum Advance (Plus or minus 1 inch) 6.5 to 8.5"
 Maximum Vacuum advance crankshaft, *degrees* 20°
 Breaker gap .012-.0175 Breaker arm tension 19-23 oz.
 Dwell—*Cam angle* 22° *B.T.C.* deg.
 Timing—*Breaker points open* 2-1/2° *degrees crankshaft rotation*
 or inches piston travel (after or before) top center with octane selector in the Normal position.
 Timing mark location—*flywheel, vibration dampener or none*
 Firing order 1-8-7-3-6-5-4-2
 Amperage draw of ignition coil—
 With engine stopped 4.5 Amp.
 With engine idling 2.0 Amp.
 Spark plug—
 Thread—10 m.m., 14 m.m. or 18 m.m. 14 M.M.
 Make A.C. Model #44
 Gap .030"
 Ignition cable make G.M.

BATTERY

Make Delco Remy Model 17K4W
 Capacity—*amperes hours* 115 A.H. @ 20 hour rate
 Number of plates per cell 17
 Bench charging rate—
 Start 12.5 Finish 5.25
 Which battery terminal is grounded Negative
 Location of battery Under-Hood

Make of Car.....Oldsmobile.....Model.....Futuramic "98".....Date.....9-14-48

STARTING MOTOR

Make Delco Remy.....Model.....1107956
 Normal engine cranking speed Summer 100 RPM
 Brush spring tension 24-28 oz.
 Lock test—
 Amperage draw600
 Volts3.0
 Torque in pounds feet15
 No load test—
 Amperage draw60
 Volts5.....R.P.M.6000
 Type of drive—Bendix or sliding gear with overrunning clutch
 Starting device—Solenoid, manual, etc. Solenoid
 Starter operation—check items required to start engine
 1. Turn on ignitionX
 2. Depress starter pedal
 3. Depress accelerator pedal
 4. Depress clutch pedal
 5. Operate button on dash X
 6. Pull out throttle
 Starting motor pinion meshes front or rear Front
 No. of teeth in flywheel 145
 Face width of flywheel teeth 3/8"
 Gear ratio between starter armature and flywheel 16.11:1

GENERATOR

Make Delco Remy.....Model.....1102704
 Type—third brush, shunt, etc. Shunt
 Brush spring tension 24 to 28 oz.
 Current regulator, voltage regulator or current and voltage control unit Current & voltage control
 Maximum controlled charging rate
 Temperature 70° - 140°
 Amperes 40 Amp.
 Voltage 8 V.
 R.P.M. 1880 at 70° to 2320 at 140°
 Cutout relay—
 Voltage at closing 6.5
 Amperes to open, reverse current -2
 Air gap .020"
 Voltage regulator—
 Volts 7.3 @ 9 Amp.
 Temperature 150
 Air gap .075"
 Current regulator—
 Amperes 40 Amp.
 Temperature 150°
 Air gap .075"
 Car speed for maximum charging rate 21 MPH and up
 Ammeter or charge indicator make A.C.

LAMPS

Lighting switch make Delco Remy
 Are tail and dash lights in series No.
 Headlights—
 Make Guide Lamp
 Location—in fender, in catwalk, or radiator shell Fender
 Parking or fender light make Guide
 Tail and stop light make Guide
 Horn—
 Type—vibrator or motor Vibrator No. used 2
 Make Delco Remy
 Amperage draw of each High Note 18 Amp.
 Low Note 20 Amp.

CLUTCH None

Make
 Drive type—
 Direct to flywheel face
 Through fluid flywheel
 Semi-centrifugal
 Power operated unit—make
 Vibration insulation or neutralizer—fabric,
 rubber blocks or springs
 No. of clutch driving discs
 No. of clutch driven discs
 Clutch facing—
 Material—woven or moulded asbestos, cork
 Inside diameter
 Outside diameter
 Thickness
 No. required

TRANSMISSION Hydra-Matic standard on all "98" Models

Transmission—
 Make Own.....Model
 No. of forward speeds 4
 Manual shift—yes, no No
 Automatic or auxiliary shifting mechanism—yes Yes.....no
 If yes, Make Own
 Type—centrifugal, vacuum, electric or hydraulic
 Automatic overdrive—None
 Make
 Oil capacity—pints
 Oil grade recommended—S.A.E. viscosity
 Summer Winter
 Gear ratio in high—standard 5-passenger
 4-door sedan 1:1
 Transmission ratio—
 In overdriveIn second 2.6341 to 1
 In third 1.45 to 1 In fourth 1 to 1
 In low 3.8195 to 1 In reverse 4.3045 to 1

Make of Car Oldsmobile Model Futuramic "98" Date 9-14-48

TRANSMISSION (cont'd)

Constant mesh gears on second
 Spur or helical gears—
 For second speed
 For first speed
 For reverse speed
 For all speeds
 Synchronous meshing and third gears
 Transmission oil—
 Capacity—~~7.5~~ 11 qts.
 Grade recommended—S.A.E. viscosity
 Summer Hydra-Matic Winter Hydra-Matic
 Fluid Fluid
 Universal joints—
 Make Mechanics
 Number used 2
 Type—metal with anti-friction
 bearing or metal with plain bearing
 Lubricated with Permanently
 Drive taken through springs, torque arm, torque tube or
 radius rods Stabilizing Arms
 Torque taken through springs, torque arm, torque
 tube or radius rods Stabilizing Arms

REAR AXLE

Rear axle—
Make Own Model _____
Type—*Semi, full or three-quarter floating* Semi-floating
Minimum road clearance under center of rear
axle—*tires inflated* _____
Rear axle oil—
Capacity—*pints* 3 3/4
Grade and type recommended—*S.A.E. viscosity*
Summer See Lub. Chart Winter _____
Type of gearing—*spiral bevel, worm, hypoid* Hypoid
Gear ratio—*standard 5-passenger 4-door sedan* 3.63:1
Optional gear ratios None
Number of teeth—
In ring gear 40 In pinion 11
How is pinion adjusted—*screw or shims* Shims
How is pinion bearing adjusted—*screw or shims* Nut
Are pinion bearings carried in sleeve No
Backlash between pinion and ring gear .004" to .006"

TIRES and WHEELS

Tires—
Make Various.....
Size ...7.60 x 15..... No. of plies..... 4.....

TIRES and WHEELS (Cont'd)

Inflation pressure—Front ..24#.....Rear..24#.....
Rim—Diameter15".....Width 5.50F
5.50K(Optional)

SPRINGS

FRONT SPRING—

Independent or conventional suspension Independent
Type—coil, semi-elliptic, transverse, torsion... Coil
Make Own
Material GM 9260 M Spring Steel
Torsional stabilizer at front .. Yes
If leaf—
Length Width
Number of leaves—5-passenger, 4-door sedan
Are radius rods used on axle
If coil—
Free length .. 15-1/16"
Length under curb weight .. 9-1/2"

REAR SPRING—

Independent or conventional suspension Conventional.....
Type—coil, semi-elliptic, transverse, torsion.....Coil.....
MakeOwn.....
MaterialGM 9260 M Spring Steel.....
Torsional stabilizer at rearYes.....

If leaf—
LengthWidth
Number of leaves—5-passenger, 4-door sedan
Spring leaves lubricated with
Spring cover, YesNo
Spring shackles—
Front—TypeMake
Rear—TypeMake
Spring bolts—
Type

If coil—
Free length18 1/4"
Length under curb weight10"
Rate for above11.5#pounds per inch

Shock absorbers—
MakeDelco.....
Type, one way with lever, two way with lever, or direct acting
FrontTwo-way with lever.....
RearTwo-way with lever.....
Fluid capacity (oz.)—front 134-140 cc.rear 154-163 cc.

Make of Car.....Oldsmobile.....Model.....Futuramic '98".....Date.....9-14-48

STEERING

Steering gear—

Type.....Worm and Roller
 Make.....Saginaw.....Model.....
 Ratio.....19:1.....
 Lubricant recommended.....See Chart.....
 Steering wheel diameter.....18".....
 Drag link longitudinal or transverse.....Transverse.....
 Tie rod—one or two.....2.....
 Is intermediate steering arm used.....No.....
 Number of turns of steering wheel for full left
 to right swing of wheels.....4 1/4.....
 Car turning radius—feet—right, left or both.....42.0'.....
 Caster—degrees.....0.....to.....3/4.....Neg.....0.....Pos.....
 Camber—degrees or.....inches 1/4.....Neg.....to 3/4.....Pos.....
 Toe-in—inches.....1/16".....to.....1/8".....
 Crosswise inclination of kingpin—degrees.....4° 29' 47".....
 Front axle—
 Make.....None.....Model.....
 Section type—I-beams, tubular or none.....None.....
 End type—Elliott or reverse Elliott.....Reversed Elliott.....
 Minimum road clearance—tires inflated.....8-9/32".....

BRAKES

Foot brakes—

Make.....Various.....
 Type of mechanism, hydraulic or mechanical.....Hydraulic.....
 If vacuum booster is standard, state make.....None.....
 Brake lining moulded, semi-moulded or woven—
 Primary shoe.....Moulded.....
 Secondary shoe.....Moulded.....
 Drum—
 Material.....Cast Iron.....Diameter.....11".....
 Lining—
 Front.....Rear.....
 Length per wheel.....21-5/16.....21-5/16.....

BRAKES (cont'd)

Front Rear
 Width.....2-1/2" 2".....Thickness......221"-.231".....
 Clearance—toe......015".....heel......015".....
 Total foot braking area.....191.7.....
 Percent braking power on rear wheels.....44%.....
 Hand lever operates on—transmission, separate rear brakes, rear service brakes or all four service brakes.....Rear Service.....
 Hand brake, if separate from service brake—
 Internal or external.....
 Drum diameter.....
 Lining—
 Length per drum.....
 Width.....Thickness.....
 Clearance.....

FRAME and OTHER GENERAL DATA

Frame—

Depth—maximum.....5.5/8".....
 Thickness—maximum......135".....
 Flange width—maximum.....2-1/4"-2-3/4".....
 Wheelbase.....125".....
 Tread—
 Front.....58".....
 Rear.....61-1/2".....
 Weight of standard 5-passenger, four-door sedan—
 Shipping.....3892.....
 Curb.....4049.....
 Price of standard 5-passenger, 4-door sedan.....
 First serial number, this series.....499M 1001.....
 Serial number location.....On Body Left front door.....
Pillar.....
 Overall length of car—
 With bumpers and bumper guards.....213".....
 Overall width of car.....78-3/4".....
 Overall height, road to roof with no load.....63-27/32" (5 Pass. load).
 load).

Make of Car.....Oldsmobile.....Model.....Futuramic "98".....Date.....9-14-48.....

NOTE—In giving bearing dimensions, kindly use the following order: inside diameter, outside diameter and width. Where cup and cone bearings are used, give both cup and cone numbers.

BEARINGS

Water pump bearing—
 Make or typeNew Departure D.R. Ball.....
 Size or number954446.....
 Fan bearing—
 Make or typeNone.....
 Size or number
 Starting motor commutator end bearing—
 Make or typePlain.....
 Size or number
 Starting motor drive end bearing—
 Make or typeNone.....
 Size or number
 Starting motor outboard bearing—
 Make or typeBronze Graphite.....
 Size or number1/2" x 25/32".....
 Generator commutator end bearing—
 Make or typeBronze.....
 Size or number9/16" x 25/32".....
 Generator drive end bearing—
 Make or typeBall Bearing.....
 Size or numberW.D. 3203.....
 Transmission main drive gear front pilot bearing—
 Make or typeDurex.....
 Size or number412562.....
 Clutch throwout bearing—
 Make or typeNone.....
 Size or number
 Transmission main drive gear rear bearing—
 Make or typeNone.....
 Size or number
 Transmission main shaft front pilot bearing—
 Make or typeNone.....
 Size or number
 Transmission main shaft rear bearing—
 Make or typeNone.....
 Size or number
 Transmission countershaft front bearing—
 Make or typeNone.....
 Size or number
 Transmission countershaft rear bearing—
 Make or typeNone.....
 Size or number
 Transmission reverse idler bearing—
 Make or typeNone.....

BEARINGS (cont'd)

Size or number
 Overdrive shaft rear bearing—
 Make or typeNone.....
 Size or number
 Overdrive shaft pilot bearing—
 Make or typeNone.....
 Size or number
 Main shaft extension bearing—
 Make or typeNone.....
 Size or number
 Rear axle pinion shaft front bearing—
 Make or typeTimken or Hyatt.....
 Size or number188963 or 506917.....
 Rear axle pinion shaft rear bearing—
 Make or typeTimken or Hyatt.....
 Size or number188960 or 506920.....
 Differential right bearing—
 Make or typeHyatt or Bower.....
 Size or number179243 or 502970.....
 Differential left bearing—
 Make or typeHyatt or Bower.....
 Size or number179243 or 502970.....
 Rear wheel inner bearing—
 Make or typeNone.....
 Size or number
 Rear wheel outer bearing—
 Make or typeNew Departure Ball.....
 Size or number954172.....
 Front wheel inner bearing—
 Make or typeNew Departure Ball.....
 Size or number909052.....
 Front wheel outer bearing—
 Make or typeNew Departure Ball.....
 Size or number909001.....
 Kingpin upper bearing—
 Make or typeSteel Backed 4035 M Bronze.....
 Size or number231905.....
 Kingpin lower bearing—
 Make or typeSteel Backed 4035 M Bronze.....
 Size or number231905.....
 Kingpin thrust bearing—
 Make or typeHoover Ball.....
 Size or number230679.....

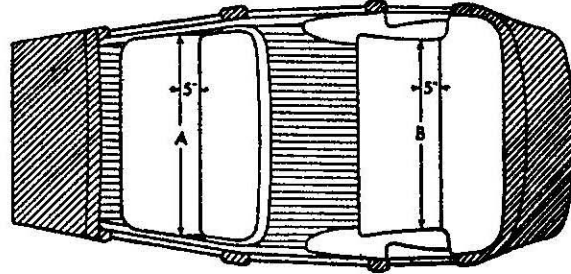
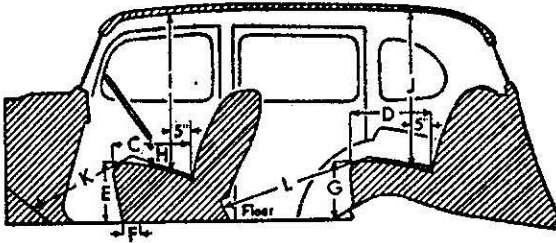
Make of Car.....Oldsmobile..... Model.....Futuramic "98"..... Date.....9-14-48.....

- NOTE: (1)** List only that equipment which is included in the factory delivered price. Special equipment which is fitted, but not included in the factory delivered price should be listed with its additional price.
- (2)** Enter on top line your own model name, or series mark corresponding to Standard, DeLuxe or Custom.

EQUIPMENT	Models		
	Standard	DeLuxe	Custom
Catalog Designation of Model	"98"	"98" .....	.....
Lacquer make	Various	Various .....	.....
Body finish, <i>lacquer or synthetic enamel</i>	Lacquer	Lacquer .....	.....
Fender finish, <i>lacquer or synthetic enamel</i>	Lacquer	Lacquer .....	.....
Hardware make	Ternstedt	Ternstedt .....	.....
Speedometer make	A.C.	A.C. ....	.....
Gasoline gauge make	A.C.	A.C. ....	.....
Thermometer make	A.C.	A.C. ....	.....
Car lock make	Various	Various .....	.....
Car lock operates on <i>ignition or ignition and steering</i>	Ignition	Ignition .....	.....
Clock make <i>mechanical or electrical</i>	None	Electric .....	.....
Cigar lighter make	Various	Various .....	.....
Safety glass make	L.O.F.	L.O.F. ....	.....
Safety glass type, <i>laminated or tempered</i> .....	.....	.....	.....
In windshield	Laminated	Laminated .....	.....
In side windows	Laminated	Laminated .....	.....
In rear window	Tempered	Tempered .....	.....
Bumper make	Own.....Chapin	Own.....Chapin .....	.....
Bumper guard make	Brown-Lipe	Brown-Lipe .....	.....
Car heater make Type	None	None .....	.....
Direction signal make	Guide	Various .....	.....
Front—yes or no Rear—yes or no	Yes .. Yes ..	Yes .. Yes ..	.....
No. of tail lights included	2	2 .....	.....
No. of visors included	2	2 .....	.....
No. of horns included	2	2 .....	.....
No. of windshield wipers included	2	2 .....	.....
No. of spare tires included	1	1 .....	.....

Make of Car.....Oldsmobile.....Model ..Futuramic "98".....Date ..9-14-48.....

BODY DIMENSIONS (Five-Passenger, Four-Door Sedan)



INTERIOR

All interior body dimensions taken with front seat in its rear position

Width of front seat cushion, measured 5 inches from back (A)	63.5/8"
Width of rear seat cushion, measured 5 inches from back (B)	52.1/8"
Depth of front seat cushion (C)	18
Depth of rear seat cushion (D)	19.7/16
Height of front seat cushion measured 12 1/2 inches from center line of body (E)	12.13/32
Front seat horizontal adjustment, inches (F)	4.7/16
Front seat vertical adjustment, inches	1/4"
Height of rear cushion measured 12 1/2 inches from center line of body (G)	13.3/16"
Vertical distance steering wheel and seat cushion (H)	5.3/8"
Head room at front seat, measured 5 inches from back (I)	36.1/8"
Head room at rear seat, measured 5 inches from back (J)	34.15/16"
Leg room in front seat, measured from 6 inches up on toe board, following contour of seat cushion (K)	42.13/16"
Leg room in rear seat, measured from center of foot rest, following contour of seat cushion (L)	42.7/16"
Trunk capacity, cubic feet	9.5 cu. ft.
Width of left front pillar on diagonal with door closed	3.75

Make of Car.....Oldsmobile.....Model.....Futuramic "98".....Date.....9-14-48

BODY DETAIL AND EQUIPMENT FORMS

DIRECTIONS

Only standard equipment included in the Factory Delivered price shown in column 3 should be listed on this sheet. Please arrange body types in an ascending price scale with the lowest priced type at the top and the highest priced type at the bottom.

IMPORTANT—To save your time, where an item is common to several types, use arrows to indicate the fact as shown in diagrams.

Standard abbreviations may be used where space limitations make this necessary. Where sub-headings such as those shown in column for Body Make are identified with numerals, these numerals may be used in filling in form.

Make	Body Model	Make	Body Make
Crescent 8-50	Roadster		Fisher
↓	Phaeton		↓
	Two-door sedan		Murray
	Four-door sedan		↓
	Coupe		Fisher
↓	Coupe with rumble		↓
	Cabriolet		Sudd
Crescent 8-50	Roadster		↓
↓	Phaeton		Fleetwood
	Two-door sedan		LeBaron
	Four-door sedan		
	Coupe		
	Coupe with rumble		
	Cabriolet		
	Limousine		
↓	Landaulet		

[illegible]

SEATING ARRANGEMENT NUMBERS

- 1—Two-door car with no rear seat.
- 2—Two-door car with rumble seat.
- 3—Two-door car with conventional rear cushion.
- 4—Four-door car with cushions front and rear.
- 5—Four-door car with cushions front and rear plus two auxiliary seats folding into front seat back.
- 6—Two-door car with two opera seats folding into sides of body.
- 7—Two-door car with two opera seats folding into rear of body.
- 8—Two-door car with one opera seat folding into rear of body and other seat stationary.
- 9—Two-door car with rear stationary seat for one passenger.