Automobile Manufacturers Association Consolidated Specification Questionnaire

For 1946 Models

Mechanical Details

Name of Maker Buick Motor Division Address Flint, Michigan

DateOctober 31, 1945

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
Valve arrangement In-head.
Valve arrangement In-head. Bore
Cylinder head, cast iron or aluminum
Cylinder sleeve, Yes. No. X. Piston displacement 320.2 Cu. In
Piston displacement
Taxable horsepower
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., 80)
-With Bare Engine-(See Note)
Maximum brake hp 144at
-With Standard Accessories-*
Maximum brake hp 133at
*Those standard accessories needed for normal operation includ- ing fan, generator, starter, air cleaner, muffler, manifolds, fuel and water pumps.
Maximum torque 2000
With bare engine, Ib. ft. 276
With standard accessories,* Ib. ft. 267
Compression Ratio-
Standard 6.6 to 1. Optional
Standard compression pressure -pounds-
At cranking speed 114 At what R.P.M. 140 at 1000 RPM
PISTONS and RINGS
Piston Aluminum Co. of America
Make Bohn Aluminum & Brass Corporation Material Aluminum Alloy
Features-split-sking-inver-struig-ovely sin-plated, aluminum
Features- spin-skirs, mount since, orai, me prasea, auminum oxide finish, auto shermic, V-Bridgo, peraus shromo plats,
etc. Cam ground Turbulator. Top-Trans. Slo
Weight-ounces-without rings, pin or bushing 17.94
Length
Clearance-
Top land
Skirt, 10p 0023 bostom
Note:- Bare engine is without fan and

muffler.

PISTONS and RINGS (cont'd)

Piston ring groove depth-

Oil
No. of oil rings used per piston 2
Width of oil rings
Width of oil ring gap
No. of compression rings used per piston
Width of compression rings . 3/32
Width of compression ring gap
Maximum wall thickness of oil rings 150
Maximum wall thickness of oil rings150 Maximum wall thickness of compression rings
Are ring expanders used, YesNoX

RODS and PINS

Wristpin-	
Material C.D.S. 1115	
Material C.D.S. 1115 Length 3-1/16 Diameter 7/8"	• • • •
Locked in rod, piston or floating . Locked in Rod	• • • •
Clearance in piston	
Clearance in rod	
Connecting rod-	
Length-center to center	
Material H.R.S. 1045	••••
Weight-ounces 35,584	••••
	••••
Crankpin journal- Diameter	
	• • • •
Lower bearing-	
Meterial Babbitt	
Clearance	
End play	
Ship-solid, laminated or none. Solid	
Spun or separate Centrifugal Cast	
Rods and pistons removed from above or below	
CRANKSHAFT	
Material	
Weight-stripped 114.0	
Vibration dampener used-yes or no. Yes	
Type Laminated steel flywheel supporte	d.
	*

on steel leaf springs.

1946 MODEL SPECIFICATIONS

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CRANKSHAFT (cont'd)

Crankshaft counterweights used, number of8
Which main bearing takes thrust Center
Crankshaft end play
Main bearing-
Type: Cast-in or
If slip-in: Removable from below
Necessary to align ream. No Material Steel backed Durex
Clearance .0007"0025"
Shim-solid, laminated or none Solid
Main bearing journal diameter x length- No. 1. 2-9/16 x 1-9/32 No. 2 2-5/8 x 31/32
No. 3 2-11/16 x 1-15/32 No. 4 2-3/4 x 31/32 No. 5 2-13/16 x 2-15/32
No, 6 No. 7
No. 8
No. 9
Crankshaft gear or sprocket Make Link Belt
Material C.D.S. 1112

CAMSHAFT

Camshaft gear or sprocket-	Belt	
Make Cast	Iron 13 M	
Timing chain— Make Link		
	0 "	
	00	

VALVES

INTAKE VALVE-
Make
Material
Overall length . 5-1/4.
Actual overall diameter of head
Minimum port diameter <u>1-3/8</u> Angle of seat <u>45</u> °
ls valve seat an insert? . No
Stem diameter
Stem to guide clearance
Liff
Spring pressure and length-

	1000		
•	416	-	
~	••	•	_

VALVES (cont'd)

With valve closed-ib
With valve open-16
Length out of engine-ins2-11/32
Inner-
With valve closed-1b
With valve open-16, 51 ins. 1-5/16
Length out of engine-ins. $1-29/32$
Length out of engine-sas
EXHAUST VALVE-
Mete Thompson or Rich
Material X.C.R. or 2112
Overall length
Actual overall diameter of head
Minimum port diameter
Angle of seat
ls valve seat an insert?
Stem diameter •3715 Stem to guide clearance •0021 to •0039
Stem to guide clearance
Lift
Spring pressure and length-
Outer-
With valve closed-16. 32 ins. 1-15/16
With valve open-16, 77. ins. 1-19/32
Length out of engine-ins. 2-11/32
Inner-
With valve closed-16, 20 ins. 1-21/32
With valve open-16
Length out of engine—ins. $1-29/32$
Operating tappet clearance (hot or cold)—intake .015 hot
Operating tapper clearance (not or cold)-milake
Tappet clearance for valve timing-intake
Operating tappet clearance (hot or cold)-exbaust015hot.
Tappet clearance for valve timing—exbaust
Hydraulic valve lifters-yes or no No
Valve timing-
Intake opens 14 degrees BUDC piston travel inches
Intake closes
Exhaust opens . 56 " BLDC " "inches
Exhaust closes . 25 " AUDC " " inches
Yalve Timing Marks-on Flywheel, Vibration Damper, None None
the second

LUBRICATION

Lubricating syst	om type-pressure	or splasb	Pressure
Oil pressure to	294 200		
Main heari	DOS-445 OF #0	Yes	

	168
Connecting rods-yes or no	Yes
Wristpins-yes or no	No
Camshaft bearings-yes or no	Yes
Tappets-yes or no	No

LUBRICATION (cont'd)

Timing gear or chain lubrication—posis	tive or splash. Positive
Oil pump type Gear	
Oil grade recommended-SAE viscosi	
Not lower than 32°F. As low as plus 10°F	.20W. or .SAE. 20 20W
As low as minus 10°	
Below minus 10°F.	10W / 10% kerosene
Normal oil pressure-Ibs. at M.P.H	45 at 35 M.P.H.
Pressure at which relief valve opens .	
Capacity of oil reservoir-quarts, dry	8
Oil pressure gauge makeA.	,C ,
Oil reservoir level gauge type	Stick
Floating type oil intake-yes or no	Yes
Externe! oil filter make	None
Other type of oil cleaner	None
Oil cooler make	
Chassis lubrication-Make	

FUEL

Gesoline tank-capacity
Fuel feed-
Type-vacuum tank, electric pump, gravity vacuum pump or camshaft pump Canshaft pump
Carburator_
Make Stromberg or CarteModelAAV-26. or WCD
Number used <u>1 0095</u> Size <u>1-1/4</u> "
Тура—
Up or down draft DOWN Single or dual Dual
Intake menifold heat control-manual, automatic or noneAutomatic Automatic choke, make Stromberg. or Model
Air cleaner-intake silencer make Carter A.C.
Type-dry felt; oil bath; oil coated fibre Oil. bath
Heavy Duty type—Make Model
Muffler make
Muffler make Teil pipe diameter 21

COOLING

Water pump-	
Type Centrifugal Ball Bearing-Spring 1	oaded
Drive Single Belt	seal
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	
Rediator core-	
Type Vee Cellular	
Make Harrison	

COOLING (cont'd)

Cooling system— <i>capacity, quarts</i>
Water all around cylinder-yes or no Yes
Lower radiator hose- Inside diameter
Upper radiator hose- Inside diameter 1-9/16" Length Elbow.type
Fan belt- Make Various
Angle of vee
Length, outside Width, maximum
Fen-
Make Hayes Industries, No. of Blades 4
IGNITION
Ignition units—
Make Delco. Remy Model
Manual or octane selector, degrees advance
Maximum contrifugal advance crankshaft, degrees
at
Inches of Mercury Necessary to operate Vacuum Advance (Plus or minus 1 inch) 6. to start; 12. for full travel
Maximum Vacuum advance crankshaft, degrees. 10-12
Breaker gap 015 Breaker arm tension 19-23
Cam angle
Timing-Breaker points open 6 degrees crankshaft rotation
or
with octane selector in the
Timing mark location-flywheel, vibration dampener or none. Flywheel
Firing order
Amperage draw of ignition coil-
With engine stopped4-1/2
With engine idling
Spark plug-

Shark bind-									
Thread-1	0 m.m.,	14 m.m.	or 18	m.m.	.14	. MM	 	 	
Make	. A.C.			Mode	۱	48	 	 	
Gap		,025					 	 	
Ignition cable	make		acka	ard.			 	 •••	

BATTERY

Make Delco Remy	
Capacity-amepere bours 120	
Number of plates per cell	
Bench charging rate-	If gassing
	Finish not more than 7
Which battery terminal is grounded Location of battery Under	Negative
Location of battery Under	hood

STARTING MOTOR

Make Delco Remy	Model	1107929
Normal engine cranking speed	90	
Brush spring tension	26 oz,	
Lock test-		
Amperage draw	600	
Volts		
Torque in pounds feet	16	
No load test-		
Amperage draw	65	
Volts	R.P.M	5500
Type of drive-Bendin on sliding	gear with on	verrunning clutch
Starting device-Solenoid, manual	d, etc. So	lenoid
Starter operation-check items rec	uired to start	engine
I. Turn on ignition	\$	
2. Depress starter pedal		
3. Depress accelerator pedal	Yes	
4. Depress clutch pedal		
5. Operate button on dash		
6. Pull out throttle		
Starting motor pinion meshes from	t or rear	Front
No. of testh in flywheel		
Face width of flywheel teeth	3/64	
Geer ratio between starter ermetu	re and flywhe	

GENERATOR

Make Delco Remy Model 1102668
Type-third brush, shunt, etc. Shunt
Brush spring tension
Current regulator, voltage regulator or current and
voltage control unit .Current & voltage
Maximum controlled charging rate
Temperature Hot or cold
Amperes
Yoltage
R.P.M. 2400 app.
Cutout relay-
Voltage at closing 6.2-6.7
Amperes to open, reverse current .0-4 dis. Air gep .018"022"
Air gap
Voltage regulator-
Volts
Temperature .150° F.
Air gap
Current regulator-
Amperes
Temperature . 150° F.
Air gap
Car speed for maximum charging rate
Ammeter or charge indicator make

LAMPS

Lighting switch make Delco Remy
Are tail and dash lights in entire
Headlights- MakeGuide Lamp Location-in fender, in caswalk, or radiator shell . In. fender Parking or fender light make Guide Lamp.
Tail and stop light make Guide Lamp
Horn- Type-vibrator or motorVibrator No. used 2 Make Delco Remy
Amperage draw of each Left-18 Right-20
CLUTCH
Mate Buick(Disc by Long or Borg & Beck)
Drive type- Direct to flywheel face Yes Through fluid flywheel No
Semi-centrifugal
Power operated unit-make None
Vibration insulation or neutralizer-fabric,
rubber blocks or springs
No. of clutch driving discs One & flywheel
No. of clutch driven discs One
Clutch facing-
Materiel-woven or moulded asbestos, cork. Woyen Inside diameter 6-1/2" Outside diameter 10-1/2"
Thickness
No. required

TRANSMISSION

Transmission-
Make Own Model Series 70
No. of forward speeds
Manual shift-yes, no
Automatic or auxiliary shifting mechanism-yes
If yes, Make
Typs-centrifugal, vacuum, electric or bydraulic
Automatic overdrive-
Make
Oil capacity-pints
Oil grade recommended-S.A.E. viscosity
Summer Winter
Geer ratio in high-standard 5-passenger
4-door sedan Direct
Transmission ratio—
In overdriveIn second .1.53-1
In third
In low . 2.39-1 In reverse .2.53-1

TRANSMISSION (cont'd)

Constant mesh gears on second	Yes
Spur or helical gears-	
For second speed	Helical
For first speed	
For reverse sneed	1
For all speeds	" Yes
Transmission oil—	
Capacity-pints	2–1/2
Grade recommended—S.A.E. v.	iscosity
Summer	Winter
Universal joints	******
Number used One	Metal with
Type-metal with anti-friction	Metal with
bearing or metal with t	lain bearing plain bearing ssion lubricant
Drive taken through springs, torque radius rodsTorque	arm, torque tube or tube
Torque taken through springs, to tube or radius rods	rque arm, torque Forque tùbe

REAR AXLE

Rear axle	-
	Own Model
Туре	-Semi, full or three-quarter floating Semi-floating
Minimum	road clearance under center of rear axle <i>—tires inflated</i>
Rear axle	oil-
Capa	city-pints
	e and type recommended—S.A.E. viscosity
	Summer
Type of g	pearing-spiral bevel, worm, hypoid
Gear rati Opti	io-standard 5-passenger 4-door sedan4.1-1 onal gear ratiosNone
	of teeth-
la ri	ng gear
How is p	inion adjusted-screw or shims Shims
How is p	inion bearing adjusted-screw or shims None
Are pinio	n bearings carried in sleeve
Backlash	between pinion and ring gear .006"to

TIRES and WHEELS

Tires-Make U.S., Firestone and Goodrich Size 15 x 7.00 Transmission and Rear Axie Commended Lubricant^{Lud} capacity (oz.)-front 157 CC For temp. above minus 10°F. use SAE 90 all purpose gear lubricant. For temp. below minus 10°F. use SAE 80 all purpose gear lubricant. *- For winter driving add 2 lbs. to above tire pressures.

SPRINGS

FRONT SPRING-

Independent or conventional suspension Independent
Type-coil, semi-elliptic, transverse, torsionCoil
Make
Material Steel 9260
Torsional stabilizer at front Yes
lf leaf-
LengthWidth
Number of leaves—5-passenger, 4-door seden
Are radius rods used on axle
If coil—
Free length 14-3/8"
Length under curb weight .10 ¹¹

REAR SPRING-

Coil Carina Suan	
Independent or conventional suspension Coil. Spring. Susp	•
Type-coil, semi-elliptic, transverse, torsion. Coil	
Make Own	
Material Steel 9260	
Torsional stabilizer at rear NO	
lf leaf-	
Length	
Number of leaves-5-passenger, 4-door sedan	
Spring leaves lubricated with	
Spring cover, Yes	
Spring shackles—	
Front-Type	
Rear-Type	
Spring bolts-	
Туре	
If coil Free length <u>18-1/4"</u>	
Length under curb weight 10"	
Rate for above 125pounds per inch	į.
Shock absorbers-	
Make Delco	
Type, one way with lever, two way with lever, or direct acting Front Two way with lever	
Rear Two way with lever	
canEluid capacity (oz.)-front . 1.57. CC	
wasse seen lubud south	

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Make of Car Buick Model Series 70 Roadmaster Date October 31, 1945

STEERING

Steering gear—
Type Ball Bearing Worm and Nut
Make Saginaw Model Series 70 Ratio 19.8-1
Lubricant recommended Steering gear lubricant
Steering wheel diameter
Drag link longitudinal or transverse None
Tie rod—one or two
Is intermediate steering arm used
Number of turns of steering wheel for full left to right swing of wheels
Car turning radius-feet-right, left or both Rt . 21. 35 1-21. 35
Caster-degrees 3/8 t 3/8 to
Camber-degrees or 1/8. Rev. inches
Tonin-inches U to 1/10
Grosswise inclination of kingpin-degrees $4-1/8$ at $1/2^{\circ}$ camber
Front axie-
Make
Section type—I-beams, tubular or none
End type-Elliott or reverse Elliott

BRAKES

Foot brakes-
Make Bendix .or. Delco
Type of mechanism, bydraulic or mechanical. Hydraulic
If vacuum booster is standard, state makeNone
Brake lining moulded, semi-moulded or woven— Primary shoe Woven Secondary shoe Moulded
Drum- Material Cast Iron Diameter 12"
Lining- Length per wheel

Minimum road clearance-tires inflated

BRAKES (cont'd)

Width 2-1/4
Clearance-toe
Total foot braking area
Percent braking power on rear wheels
ice brakes or all four service brakes Rear service
Hand brake, if separate from service brake—
Internal or external
Drum diameter
Lining
Length per drum
WidthThickness
Clearance

FRAME and OTHER GENERAL DATA

Frame—
Depth-maximum 6-3/16"
Thickness-maximum
Flange width-maximum ^{2-1/4"}
Wheelbase
Treed-
Front
Rear 62-3/16"
Weight of standard 5-passenger, four-door sedan—
Shipping
Curb
Price of standard 5-passenger, 4-door sedan
First serial number, this series Flint. 14364445
serial number locationUnder hood-stamped on
upper right side of shroud.
Overall length of car-
With bumpers and bumper guards
Overall width of car
Overall height, road to roof with no load

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

and For
Water pump/bearing_
Make or type New Departure 885156
Size or number
Fan bearing—
Make or type
Size or number
Starting motor commutator and bearing-
Mata at time Cast Iron
Make or type Cast Iron Size or number
Size of number
Starting motor drive and bearing- Make or type Oilless Bushing Size or number, 563" x .625" x 3/4" Middle Starting motor atbearing- Oilless Bushing
Make or type
Size or number
Starting motor withoard bearing-
Make or type OIIIESS DUSHING
Size or number
Generator commutator end beering-
Make or typeBushing Size or number
Generator drive end bearing-
Make or type New Departure 3203
Size or number
Transmission main drive gear front pilot bearing-
Make or type New Departure 7109
Size or number
Clutch throwout bearing-
Make or type CTDS-48 BCA
Size or number
Transmission main drive gear rear bearing-
Make or type New Departure 47507-x57
Size or sumber
Transmission main shaft front pilot bearing—
Make or type Roller Size or number 1294780
Transmission main shaft rear bearing- Make or type
Make or type New Departure 42000
Size or number
Transmission countershaft front bearing-
Make or type Roller Size or number 1298445
Size or number 1298445
Transmission countershaft rear bearing-
Make or type Roller Size or number 1298445
Size or number
Transmission reverse idler bearing-
Make or type Bushing

BEARINGS (cont'd)

Size or number 1321609 or 553119
Overdrive shaft rear bearing-
Make or type
Size or number
Overdrive shaft pilot bearing-
Make or type
Size or number
Main shaft extension bearing-
Make or type
Size or number
Rear axle pinion shaft front bearing-
Make or type New Departure
Size or number
Rear axle pinion shaft rear bearing-
Make or type Hyatt
Size or number
Differential right bearing-
Mete or type Bower or Hyatt
Size or number
Differential left hearing-
Make or type Bower or Hyatt
Size or number
Rear wheel inner bearing-
Make or type Hyatt
Size or number
Rear wheel outer bearing-
Make or type
Size or number
Front wheel inner bearing-
Make or type New Departure
Size or number
Front wheel outer bearing-
Make or type New Departure
Size or number
Kingpin upper bearing-
Make or type Split Bushing
Size or number 1266949
Kingpin lower bearing-
Make or type Split Bushing
Size or number 1266949
Kingpin thrust bearing-
Make or type Hoover 3021 or Nice 4984
Size or number

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Make of Car. Buick Model Series 70 Roadmaster Date October 31, 1945

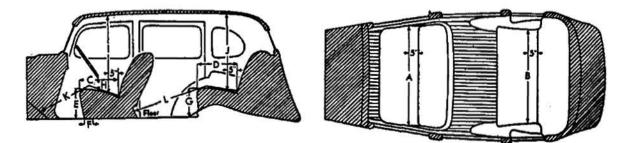
NOTE: (1) List only that equipment which is included in the factory delivered price. Special equipment which is fitted, but not included in the factory delivered price should be listed with its additional price.

(2) Enter on top line your own model name, or series mark corresponding to Standard, DeLuxe or Custom.

	Models					
EQUIPMENT	Stendard	DeLuxe	Custom			
Catalog Designation of Model	Series 70					
Lacquer make	Duco					
Body finish, lacquer or synthetic enamel	Lacquer					
Fonder finish, lacquer or synthetic enamel	Lacquer					
Herdware make	Ternstedt					
Speedometer make						
Gasoline gauge make	A-C					
Thermometer make	AC					
Car lock make	Briggs & Sta	ratton or Delc	Remy			
Car lock operates on ignition or ignition and steering	Ignition					
Clock make	Borg					
Cigar lighter make	Casco					
Safaty glass make	L.O.F.					
Safaty glass type, laminated or tempered		glass				
In windshield	Laminat.ed					
In side windows	Laminated					
In rear window	Tempered					
Bumper make	Std; Steel.S	Sog. Co or . Go	don Mfg. Co.			
Bumper guard make	Guide. Lamp					
Car heater make						
Direction signal make	.Guide Lamp.					
Front-yes or no. Yes Rear-yes or no Yes						
No. of tail lights included						
No. of visors included						
No. of horns included	2					
No. of windshield wipers included	2					
No. of spare tires included						

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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) (door.to.door)	. 62
Width of rear seat cushion, measured 5 inches from back (B)	
Depth of front seat cushion (C)	
Depth of rear seat cushion (D)	
Height of front seat cushion measured 121/2 inches from center line of body (E)	11-7/16
Front seat horizontal adjustment, inches (F)	
Front seat vertical adjustment, inches.	
Height of rear cushion measured 121/2 inches from center line of body (G)	11-3/4
Vertical distance steering wheel and seat cushion (H)	5-7/8
Head room at front seat, measured 5 inches from back(i)	
Head room at rear seat, measured 5 inches from back (J)	34-3/4
Leg room in front seat, measured from 6 inches up on toe board, following contour of seat cushion (K)	42-1/4
Leg room in rear seat, measured from center of foot rest, following contour of seat cushion (L)	
Trunk capacity, cubic fast	
Width of left front pillar on diagonal with door closed	

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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 AND MODEL	BODY TYPE List Types on Ascending Price Scale Beginning with the Lowest Price	Factory Delivered Price Including Federal Tax and Handling Charge	Number of Pass- engers	Wheel- base	Shipping Weight	Seating Arrange- ment Number See Below	Body Make
Roadmaster 76S	Sedonet		6	129		3	Fisher
Roadmaster 71	4-Door Sedan		6	129		4	Fisher
Roadmaster 760	Conv. Coupe		6	129		3	Fisher

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 cer with cushions front and rear plus two auxiliary seets 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.

Make	Body Model	Body Make
Crescant 8-60	Roadster	Fisher
	Phaeton	1
	Two-door sedan	
	Four-door sedan	
	Coupe	Murray
	Coupe with rumble	
	Cabrielet	
Crescent 8-80	Readster	Fisher
	Phaeton	1
	Two-door sedan	
	Four-door sedan	Budd
	Coupe	
	Coupe with rumble	
	Cabrielet	
	Limousine	 Fleetwood
+	Landautet	LeBaron
	- 10	
		_