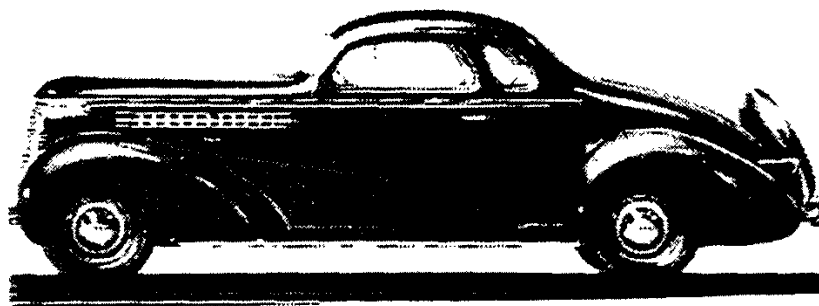


CHEVROLET



1938 Chevrolet. Master Deluxe. sport coupe. HAC

1938

CHEVROLET 1938 SPECIFICATIONS

ISSUED TO

Prepared
by
**CHEVROLET—CENTRAL OFFICE
ENGINEERING DEPARTMENT**
Division of General Motors Corporation
Detroit, Michigan

Lithographed in U. S. A.

MODEL SYMBOLS		
VEHICLE TYPE	MODEL DESCRIPTIONS	SYMBOLS
Passenger Cars	Master Deluxe 112-1/4" Wheelbase DMAS - Abbreviation	HA
	Master 112-1/4" Wheelbase MAS - Abbreviation	HB
	Taxicab 127" Wheelbase TAXI - Abbreviation	O-18
Commercial Type Trucks	Half Ton 112" Wheelbase	Master HC
	3/4 Ton 122-1/4" Wheelbase	Master HD
	One Ton 122-1/4" Wheelbase	Master HE
1-1/2 Ton Utility Type Trucks	131-1/2" Wheelbase Regular tires Single rear wheels	Master TA
	131-1/2" Wheelbase Regular tires Dual rear wheels	Master TB
	131-1/2" wheelbase Extra heavy duty tires Dual rear wheels	Master Special TB
	157" Wheelbase Regular tires Single rear wheels	Master TC
	157" Wheelbase Regular tires Dual rear wheels	Master TD
	157" Wheelbase Extra heavy duty tires Dual rear wheels	Master Special TD
School Bus Chassis	201" Wheelbase Regular tires Dual rear wheels	

10-15-37, 1-21-38 - Taxicab and School Bus Chassis model symbols added.

MODEL SYMBOLS

CHEVROLET 1938 SPECIFICATIONS

9

UNIT SERIAL NUMBERS								
UNITS		PASSENGER CARS			COMMERCIAL TYPE TRUCKS		1-1/2 TON TRUCKS &	
		DELUXE	MASTER	TAXI	HALF TON	3/4 TON	ONE TON	SCHOOL BUS CHASSIS
Vehicle		Vehicle serial numbers for each model start at #1001 and continue in numerical sequence. The number is preceded by model letters as follows: HA 1001, HB 1001, TD 1001, etc. (Taxicab & School Bus serial numbers not announced)						
Engine	Numbers	Engine serial numbers start at #1187822 and continue in numerical sequence. The number is preceded by prefix letters designating the various models and plants as shown below.						
	Flint	No prefix		K	AT		T	
	Tonawanda	B		KB	ATB		TB	
Trans- mission	Numbers	Transmission serial numbers start with #00001 and continue in numerical sequence up to #99999 for each model and plant as indicated by the prefix letters listed below. Each number is preceded by prefix letters indicating the model and plant. When the numbers reach #99999, the numbers start again with #00001 and are preceded by the next alphabetical prefix letter. Examples: SE changes to SF, MV to MW etc. The letters O and Q are omitted.						
	Toledo	Not made here					TC	
	Saginaw	SE		SN	Not made here		Not made here	
	Muncie	MV		Not made	Y		N	
Rear Axle	Numbers	Rear axle serial numbers start at #1004705 at the Gear and Axle plant and at #1001 at Tonawanda, each number being preceded by identifying prefix letters as listed below.					The first axle numbers are TS #66938 at Gear and Axle and TSB 1001 at Tonawanda. When numbers reach TS 99999 and TSB 99999, they start again at TT 1001, TTB 1001, etc.	
	Gear & Axle	No Prefix	C	No Prefix F (Opt.)		No prefix	T	TS HTS optional.
	Tonawanda	B	CB	B FB (Opt.)		B	TB	TSB HTSB optional

SERIAL NUMBER LOCATIONS

VEHICLE SERIAL NUMBER

Stamped on plate under hood on right side of cowl panel. (Taxicab-stamped on top of right side rail behind radiator shell. School Bus-not announced).

TRANSMISSION SERIAL NUMBER

Passenger cars & Commercial Type Trucks-Stamped on milled surface of case at rear edge of cover.

1-1/2 Ton, School Bus Chassis & Commercial Type Trucks with 4-speed transmission-Stamped on milled surface on back of case, left hand side.

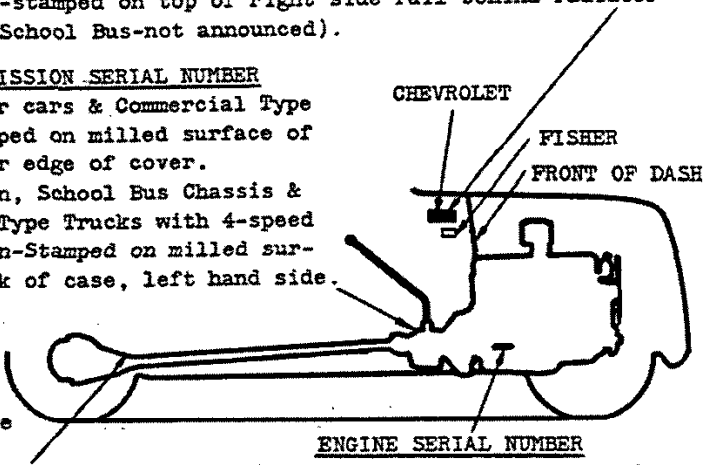
REAR AXLE SERIAL NUMBER

Passenger Cars & Commercial Type Trucks-Stamped on front upper surface (rough) of differential carrier.

1-1/2 Ton & School Bus Chassis-Stamped on center upper surface (rough) of differential carrier.

ENGINE SERIAL NUMBER

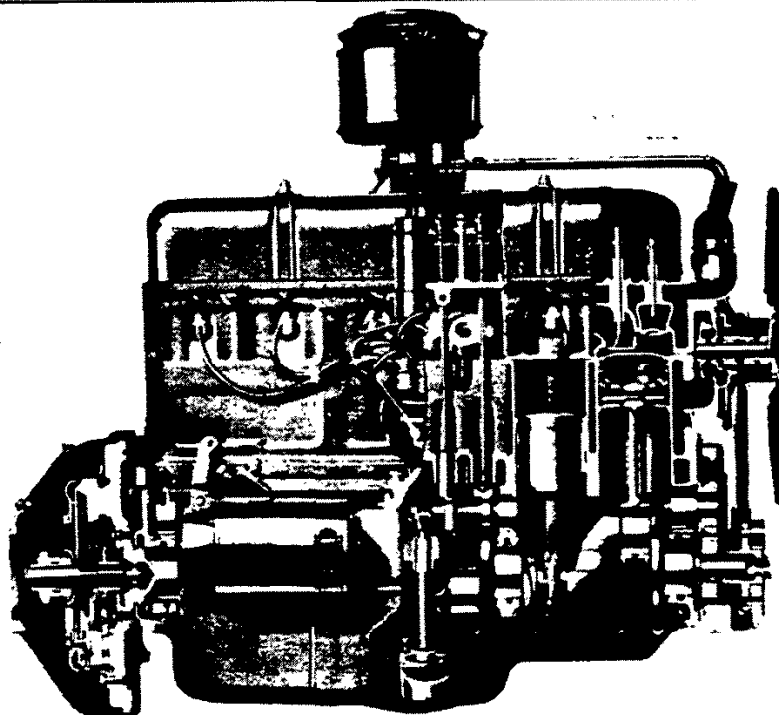
Stamped on milled pad on crankcase to rear of distributor on right side of engine.



10-15-37, 1-21-38 - Taxicab and School Bus data added; Truck engine prefix letters revised.

UNIT SERIAL NUMBERS

ENGINE GENERAL DATA



ITEM		PASSENGER CARS			TRUCKS						
		MASTER	MASTER	TAXI-	HALF	3/4	ONE	1-1/2 TON		SCHOOL	
		DELUXE		CAB	TON	TON	TON	+ S.W.	+D.W.	BUS	
Type		Valve-in-head									
Cylinders		Six in line-Cast en bloc									
Bore x Stroke		3-1/2" x 3-3/4"									
Compression ratio		6.25:1									
Horse-power	Taxable H.P.	29.4									
	Max. B.H.P.	85 at 3200 RPM					78 at 3200 RPM				
	Max. B.H.P./cu.in. disp.*	.393					.360				
Torque	Maximum *	170 ft.lbs.									
	RPM at Max. torque *	900-2000					850-1550				
Engine speeds	Maximum	4000 RPM									
Max. B.M.E.P.*	Max. with governor	No governor					1400-3000 RPM				
		116 lbs./sq.in. at 1550 RPM									
dis- place- ment	Total	216.5 cu.in.									
	P.D./ton mile (cu.ft.)	113.27@	102.2@	- - -	87.4	71.6	58.1	56.0	47	- - -	
	P.D./car mile (cu.ft.)	197.4@	174.3@	- - -	192.2	186.3	168.6	212.6	218.8	- - -	
	Gross wgt. for computation	3485#@	3410#@	- - -	4400#	5200#	5800#	7600#	9300#	- - -	
	Car wgt./cu.in. disp. X	13.46#	13.12#	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
Engine RPM/mile per hour		52.5	46.33	51.11	49.60	44.82	56.55	58.17	64.23		
Engine revs./mile in high		3150	2780	3067	2976	2689	3393	3490	3854		
Piston travel in high, ft./mile		1969	1737	1917	1860	1681	2121Y	2181Y	2409		
Weight (dry)	Engine complete	546.5#			554#	562.25#					
	Power plant complete**	590#			600.5#	608.75#		654#			

* - Engine tests are made on the dynamometer less accessories at 60° F according to SAE standard tests.
 X - Sedan shipping weight. Y - With 5.428 rear axle gear ratio. @ - Passenger car weights are based on Sedan curb weights plus 450# for passengers. +S.W. - Regular single wheels. D.W. - Regular dual wheels.
 ** - Power plant weight includes engine, clutch and complete transmission.

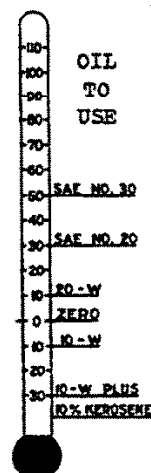
10-15-37, 1-21-38 - Taxicab and School Bus added.

ENGINE

LUBRICATION SYSTEM

Type Pressure, pressure stream and splash.
 MAIN BEARING lubrication Direct pressure. Oil is pumped through drilled passages in cylinder case to main bearings.
 CAMSHAFT BEARING lubrication Direct pressure through passages from main brgs.
 TIMING GEAR lubrication Gravity feed from camshaft front bearing overflow.
 CONN. ROD BRG. lubrication By dippers at low speeds. By pressure streams at high.
 CYLINDER BORE lubrication Splash
 PISTON PIN lubrication Splash
 VALVE MECHANISM lubrication ... Pressure. Pipe from low pressure side of distributor carries oil to valve rocker arms, springs,

valve stems and push rod upper ends.
 WATER PUMP lubrication Permanently lubricated, sealed ball bearing.
 Oil pump type Gear
 Oil pump drive From camshaft
 Normal oil pressure 13.5# @ 2621 RPM
 Oil pressure relief valve opens at 75#
 Oil cleaner type Screen with by-pass on intake side of oil pump.
 Oil drain type Plug in side of oil pan.
 Crankcase ventilator type Suction
 Oil filler Combined with ventilator
 Oil screen area 18.3 sq.in.
 Oil level gauge type Rod
 Oil pan capacity (dry) 5-1/2 quarts
 Oil pan capacity (for refill) 5 quarts



COOLING SYSTEM

ITEM		PASSENGER CARS		TRUCKS		HEAVY DUTY CORE	
		MASTER DELUXE	MASTER & TAXICAB	HALF, 3/4 & ONE TON	1-1/2 TON & SCHOOL BUS	3/4, ONE, 1-1/2 & SCHOOL BUS	
Cooling system capacity		14 quarts				16	
Radiator core	Make and type		Harrison, ribbed cellular				
	Material		All copper				
	Size		.222"x.556"x2"	.25"x.556"x2"	.25"x.560"x2"	.20"x.560"x2"	.20"x.560"x3"
	Exp. core area		368.5 sq.in.		405 sq.in.		
	Fan shroud		None				Yes
Radiator hose	Type		Conventional rubber. Outlet consists of two hose joined by steel tube.				
	Location	Inlet	From cylinder head to core				
		Outlet	From core to water pump				
	Size	Inlet	1-1/4" I.D. x 5-5/8" long	1-1/4" I.D. x 6-1/4" long			
	Outlet	UPPERHOSE: 1-1/2" I.D. x 2-3/4". LOWERHOSE: 1-1/2" I.D. x 5".					
Water thermostat	Make and location		Harrison - In cylinder head outlet.				
	Type		Bellows operating poppet valve				
	Valve action		Valve starts to open at 140°-145° F. and is fully open at 170° F., 29" Hg. barometric pressure.				
Engine fan	Type		Four staggered blades				
	Diameter		15-3/4"	16-1/4"			
	Fan pulley		28° V - 4-21/64" diameter				
	Ratio to Eng. Speed		1.393:1				
	Core clearance		9/16"				
	Fan belt	Make	Various				
		Material	One piece vulcanized fabric				
Size		11/16" max. width x 42-7/8" around outside					
Water pump	Type and drive		Centrifugal - By fan belt				
	Location		On front of cylinder and case				
	Capacity		47 gallons per minmte @ 4000 engine RPM				
	Impeller type		Vane				
	Bearing	Type	Double row ball, sealed				
		O.D.	1.1806"-1.1811"				
		Length	1-21/32"				
	Seal	Material	Graphite impregnated bakelite and fabric composition				
Adj.		Automatic - By spring tension					

10-15-37, 1-21-38 - Water Pump data revised. Taxicab and School Bus added.

ENGINE

CHEVROLET 1938 SPECIFICATIONS

46

FUEL SYSTEM

FUEL PUMP

Make AC
 Model AP
 Type Mechanical
 Drive From camshaft
 Arm throw at camshaft 1/4"
 Inlet and outlet air dome Yes
 Fuel filter Screw on dome

AIR CLEANER

Make AC
 Type Combined with silencer & flame arrester

FUEL MIXTURE

Heated..... Yes. Passes through manifold heat chamber, automatically controlled by thermostat on manifold.

CARBURETOR

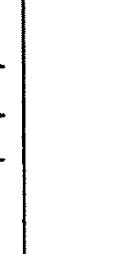
Make and model Carter W1
 Type Single adjustment, down-draft
 Size 1-1/4"
 Accelerator pump Yes
 Float level When closed, top of float measures 3/8" below finished surface of cover.

FUEL GAUGE

Make AC
 Type Electric

OCTANE SELECTOR

Type Manual
 Range 20° Vernier

FUEL TANK	PASSENGER CARS		TRUCKS					
	Chassis, Spt. Sedan, Coa., Spt. Coupe, Sed., Town Sed., Taxi, Cabriolet	Business Coupe, Master-Sedan Delivery	HALF TON		3/4 TON & ONE TON		SCHOOL BUS & 1-1/2 TON	
			Chassis and Cowl, Panels, Canopy Exp., Carryall Suburban	Chassis and Cab, Pickup truck	Chassis and Cowl, Panel truck	Chassis and Cab, Stake and Pickup truck	School Bus & 1-1/2 Ton Chassis and Cowl	1-1/2 Ton Chassis & Cab, Pickup, Panels, Stakes
Location								
Mounting	Suspended in chassis between two rear cross members.	Clamped to underbody below floor just behind seat	Clamped to right side rail ahead of rear fender	Clamped to cab floor directly under cab seat	Clamped to right side rail ahead of rear fender	Clamped to cab floor directly under cab seat	3-point mounting to frame below seat position	Clamped to body floor directly under seat
Type	Two stamped pans, seam-welded together							
Capacity	14 gallons	18 gallons	16 gallons	18 gallons				
Filler Location	Outside on right rear fender	Outside before right fender	Outside behind right side door	Outside at cab right rear corner	Outside behind panel right door	Outside at right rear cab corner	At right side of chassis	Outside at right rear cab corner

EXHAUST SYSTEM

ITEM	PASSENGER CARS	TRUCKS
Muffler type	Diffusion and resonance (5 tube reverse flow)	Baffle
Diameter x length	6-1/16" x 18"	5" x 20-1/2"
Muffler mounting	Single point rubber	Single point
Exhaust pipe diameter	1-7/8"	
Tail pipe diameter	1-3/4"	1-1/2"

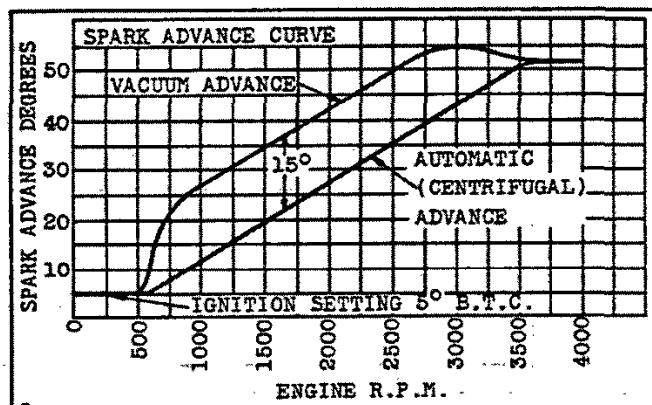
10-15-37, 1-21-38 - Taxicab and School Bus added.

ENGINE

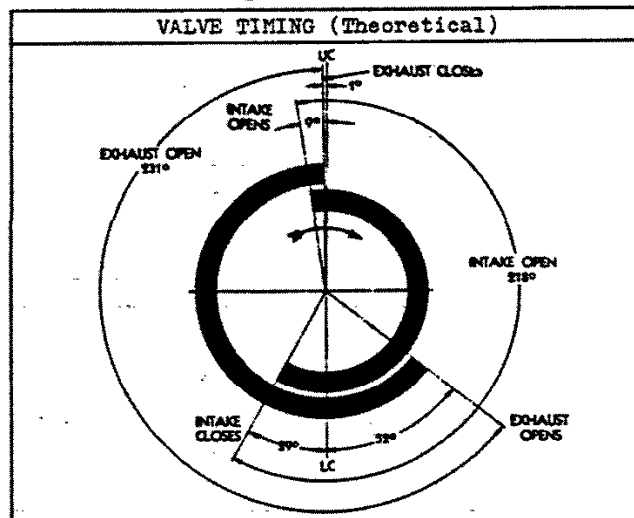
ENGINE ELECTRICAL SYSTEM										
GENERATOR		PASSENGER CARS			TRUCKS					
		MAS. DELUXE	MASTER	TAXI	HALF TON	3/4 TON	1 TON	1-1/2 TON	S. BUS	
Make		Delco-Remy								
Model		#1100004			#948-R					
Ventilated by		Fan built into generator pulley								
Driven by		"V" belt								
Generator pulley	Type	28° V								
	Diameter	3-11/32"								
Speed ratio-generator to engine		1.80:1								
Amperes -cold	Lights off	26-30			15					
	Lights on	26-30			18-21					
Maximum charging rate-cold	Voltage	8			8.2					
	RPM	3400			2600					
Car speed MPH	36.0	40.8	36.9	28.3	28.9	32.3	25.5	22.5		
Amperes -hot	Lights off	25-28			14					
	Lights on	25-28			15-18					
Maximum charging rate-hot	Voltage	8			8.1					
	RPM	3600			2800					
Car speed MPH	38.1	43.2	39.1	30.5	31.1	34.8	27.5	24.2		
Thermostat		None								
Field fuse		None								
Voltage regulator type		Vibrator			None					
Rated voltage		6-8								
Brush tension		14-18 oz.								
Rotation (Drive end)		Clockwise								
Bearings	Commutator end	Bronze bushing								
	Drive end	Ball								
Cut-out	Voltage at closing	6.5-7.0			7.2					
	Armature speed	800 RPM								
	Car speed at closing MPH	8.48	9.60	8.69	8.71	8.89	9.94	7.86	6.92	
	Amperes to open	0-3.0			1.5					

IGNITION

Type Separate units, high tension distributor ground return system
 Make & Model Delco-Remy #1110008
 Current source Generator
 Spark control type Full automatic
 Spark advance-vacuum 15°
 -automatic 42° - 50°



Timing spark advance 5° B.T.C.
 Firing order 1-5-3-6-2-4
 Distributor interrupter point opening .018"-.024"
 Distributor bearings material Cast iron



10-15-37, 1-21-38 - Taxicab and School Bus added. Car speed MPH revised. New spark advance chart.

ENGINE

ENGINE ELECTRICAL SYSTEM—Continued

IGNITION - Continued

```

Ignition lock type ..... Armored cable
from coil to dash and lock switch
Condenser make ..... Delco-Remy
Coil location ..... On right side of engine
Coil Amps. drawn - Engine stopped ..... 4.8
                  - Engine idling ..... 2.5
Spark plug-make and size ..... AC 46
    -thread size ..... 14 mm.
    -recommended gap ..... .040"

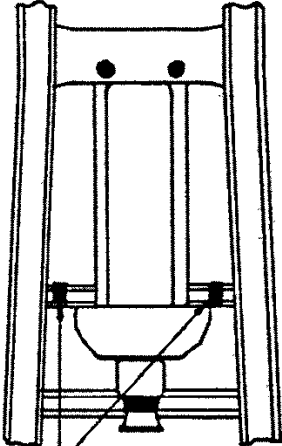
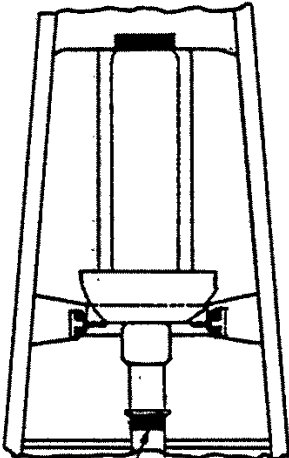
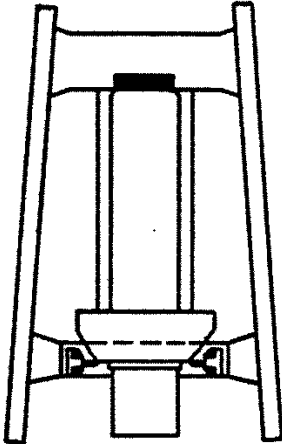
```

STARTING MOTOR

```
Make ..... Delco-Remy
Model ..... 1107001
Type of drive ..... Mechanical
Rotation (commutator end) .... Counter-clockwise
```

Bearings-commutator end	Cast Iron
-drive end ...	Graphite lubricated bushing
Lock test-amperage draw	525
-volts	3.4
-torque	14 ft.lb.
No load test-amperage draw	125
-volts	5.4
-RPM	2500
Pinion meshes	On front of flywheel
Pinion teeth	9
Flywheel teeth	139
Pinion to flywheel ratio	15.44:1
Normal engine cranking speed	65 RPM
Starter	Direct foot-actuated control
Starter to throttle connection	Lug on cross shaft engages accelerator shaft. Pass. cars only.

POWER PLANT MOUNTINGS

PASSENGER CARS	HALF TON TRUCK	3/4, ONE, 1-1/2 T. & SCHOOL BUS
TYPE - 5 POINT RUBBER CUSHION BALANCED  TORQUE REACTION SUPPORTS	TYPE - 4 POINT RUBBER CUSHION BALANCED  BRAKE & DRIVING TORQUE REACTION SUPPORT	TYPE - 3 POINT RUBBER CUSHION BALANCED 

10-15-37, 1-21-38 - Taxicab and School Bus added.

ENGINE