

CHEVROLET



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1963 FEATURES

This issue outlines new product features and important changes in service procedures for the 1963 Chevrolet, Chevy II, Corvair, Truck and Corvette. This publication can be used to augment the 1963 Shop Manual for each vehicle line.

PART I—CHEVROLET

The 1963 regular Chevrolet line is again grouped in three series; Biscayne, Bel Air, Impala. A total of 13 models are available with either six or eight cylinder engines. All models available in 1962 are continued in 1963 with the exception of the Bel Air Sport Coupe (1537-1637). With the cancellation of the Bel Air Sport Coupe, the Impala Sport Coupe (1747-1847) becomes the only 2 door hardtop available in the Regular Chevrolet line.

The over-all appearance of the Chevrolet series is completely new for 1963. Although the basic body configuration remains unchanged, the new appearance stems from the use of all new body panels below the belt line and restyled front and rear sheet metal. The grille, which is new for 1963, completely fills the front opening, rather than being an insert

1963 CHEVROLET MODEL IDENTIFICATION

Body Style	Biscayne		Bel Air		Impala	
	L-6	V-8	L-6	V-8	L-6	V-8
2-Door Sedan, 6 Pass.	1111	1211	1511	1611		
4-Door Sedan, 6 Pass.	1169	1269	1569	1669	1769	1869
2-Door Sport Coupe* 5 Passenger					1747	1847
4-Door Sport Sedan 6 Passenger					1739	1839
2-Door Convertible* 5 Passenger					1767	1867
4-Door Station Wagon 6-Passenger	1135	1235	1535	1635	1735	1835
4-Door Station Wagon 9-Passenger			1545	1645	1745	1845

*"Super Sport" option available.

between the headlamp assemblies as was the 1962 design. The wider appearance imparted by this design is further enhanced by using separate headlamp doors for each of the four lamps. Parking light and front turn signal lenses on all Chevrolet vehicles are amber



ACCESSORIES

AIR CONDITIONER

The major change to the Chevy II Deluxe air conditioner is the new evaporator case that features more foot room for front seat passengers and a less bulky appearance. Functionally, the system will operate the same as the previous unit.

RADIO

Manual and push-button radios are completely transistorized for improved reliability, smaller chassis size, and faster warm-up time. The new antenna, of four section design, has a hermetically sealed base.

PART III—CORVAIR

The 1963 Corvair line contains 6 models grouped in three series. In addition, the two Greenbrier Sports Wagons are offered as in 1962.

1963 CORVAIR MODEL IDENTIFICATION

Series	Model Number	Body Style
500	527	2-Dr. Coupe, 5-Passenger
700	727	2-Dr. Coupe, 5-Passenger
	769	4-Dr. Sedan, 6-Passenger
Monza 900	927*	2-Dr. Coupe, 4-Passenger
	967*	2-Dr. Convertible, 4-Pass.
	969	4-Dr. Sedan, 5-Passenger
Greenbrier	R-1206**	4-Dr. Sports Wagon, 6-Pass.

*Also available as turbocharged Monza Spyder.

**Custom interior option available.

The 500 series is again limited to a single model. This is the 2-Door Coupe, model number 527. The 700 series is reduced from three to two models by elimination of the 4-Door Station Wagon, model number 735. The Monza (900) series is increased from two to three models by addition of model 967, 2-Door, 4-passenger convertible. This is the same model which was introduced in mid-season 1962. The 4-Door Monza Sedan, model 969, is now classified as a five passenger car because the bucket seats are standard equipment. (Fig. 19).

The basic styling of the previous model is carried forward for all regular Corvair models with identification changes limited to emblems and ornamentation. Sheet metal changes are confined to the elimination of the dual depression below the back window of the 2-door coupe models. All 1963 regular Corvair models are identified by restyled ornamentation on the body

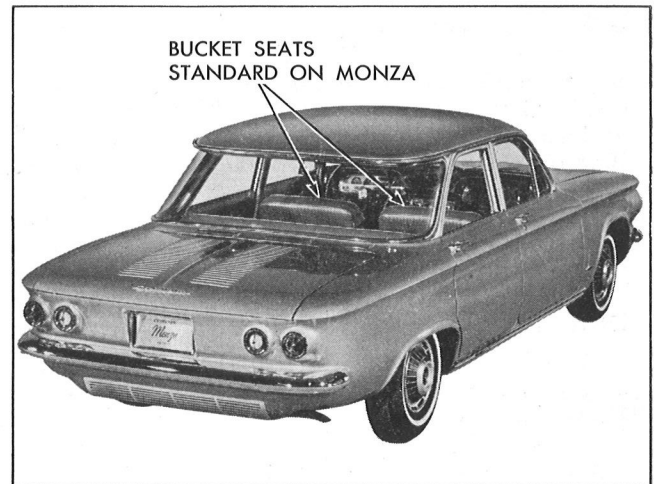


Fig. 19—General Appearance

front panel, black painted accents on the headlamp bezels and new tail light and back-up light bezels and lenses. Series nameplates for the 500 and 700 series are new, as are the body sill mouldings for the 700 and Monza models. New dual simulated air exhaust ports also distinguish the rear view of all Monzas. Both wheel disks and hub caps are carried over from the previous model, however, black painted accents give the wheel disks a fresh new appearance. All models feature new interior styling, including all-vinyl trim for the 500 Series Club Coupe and the Monza Series.

Fifteen exterior colors are available for all models, with eleven two-tone color combinations offered for all except Monza models. (See chart in Part I).

The 1963 Greenbrier exterior and interior appearance differs only in detail from the previous model. The front door nameplate has been restyled, adding "by Chevrolet" below the vehicle name as an integral part of the nameplate. Front parking lamp lenses are amber for increased visibility. All other exterior appointments, including solid and two-tone color combinations are carried over from the previous model. New wheel disks are available as optional equipment. Greenbrier interiors for both deluxe and RPO Custom models features new seat trim styling and materials. Like the regular Corvair, a distinctive new trim plate decorates the instrument cluster. The balance of interior appointments, including sidewall treatment, are unchanged for 1963.

Basically, the chassis of the 1963 Corvair is continued from the previous model. Several significant component improvements, however, make the new Corvair an even more durable, more reliable automobile requiring less frequent service attention.

Door locks for Corvair models will be of the new double-lip type for improved locking and increased safety. The rotating bolt and sliding shoe are retained from the previous lock while the interlocking points are doubled for more positive engagement.

LUBRICATION

A program of reduced maintenance is incorporated for 1963 Corvair and Corvair 95, which is similar to that described in Part I of this booklet for Chevrolet.

The oil change interval recommended for Corvair 95 engines is 4,000 miles or 60 days, whichever occurs first. Engine Oil filter for Corvair 95 is recommended at 4,000 miles or 6 months, whichever occurs first.

Corvair 5-7-900 model lubrication intervals are based on the 6,000 mile interval of the regular Chevrolet line.

BRAKES

All Corvair and Corvair "95" vehicles have self-adjusting brakes of the same basic design as Chevrolet (See Part I). This change is part of the program of improving component parts to make the new Corvair an even more durable, more reliable automobile requiring less frequent service attention. The only difference between the Chevrolet and Corvair production brakes is the size of individual components such as shoes, drums etc.

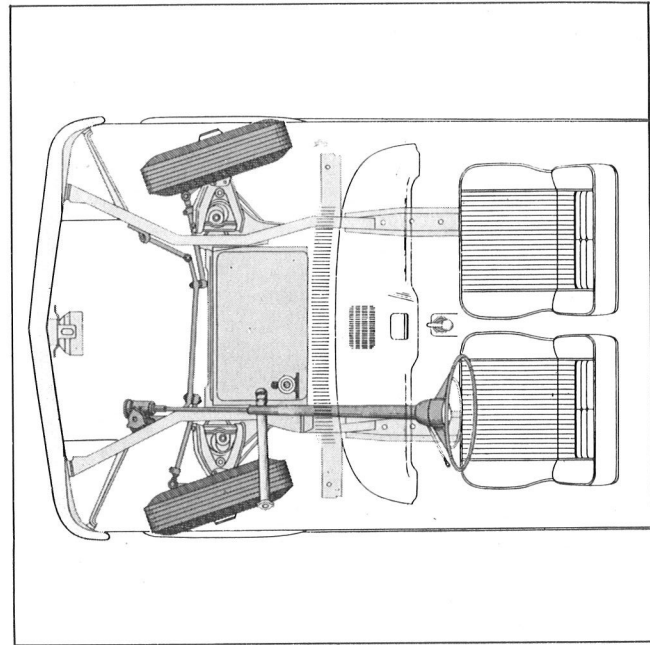


Fig. 20—Steering and Front Suspension

1963 CORVAIR POWER TRAINS

Engine Description	Gross Horsepower ----- Gross Torque	Engine Equipment	Transmissions	Model Application	Rear Axles**		
					Axle Ratio as Standard Equipment	Optional Ratios Available	
						"Special Purpose or Mountain"	"High Performance"
145 Cu. In. Opposed-6 Turbo-Air 145 Bore 3.438" Stroke 2.60" Comp. Ratio 8.0:1*	80 hp @ 4400 rpm*	2-Single Barrel Carburetors	3-Speed	All	3.27:1 (A)	3.55:1 (RPO G95)	3.89:1 (RPO G90)
	128 ft. lbs. @ 2300 rpm		4-Speed				
			Powerglide				
145 Cu. In. Opposed-6 Turbo-Air 145 Comp. Ratio 9.0:1 (RPO L62)	102 hp @ 4400 rpm	2-Single Barrel Carburetors	3-Speed	All	3.27:1 (A)	3.55:1 (RPO G95)	3.89:1 (RPO G90)
	134 ft. lbs. @ 2800-3000 rpm	Special Camshaft	4-Speed				
			Powerglide				
145 Cu. In. Opposed-6 Turbo-Air 145 Comp. Ratio 8.0:1 (RPO L87)	150 hp @ 4400 rpm	Turbo-Supercharger Single Side-Draft Carburetor Special Camshaft	3-Speed	927 967	3.55:1	—	—
	210 ft. lbs. @ 3200-3400 rpm		4-Speed				
Greenbrier 145 Cu. In. Opposed-6 Comp. Ratio 8.0:1	80 hp @ 4400 rpm	2-Single Barrel Carburetors	3-Speed	Greenbrier	3.89:1	—	—
	128 ft. lbs. @ 2300 rpm		4-Speed				
			Powerglide				

*On Monza models with Powerglide Transmission, compression ratio is 9.0:1, and power ratings are 84 HP @ 4400 RPM and 130 ft. lbs. @ 2300 RPM.

**Rear axles with positraction differential (RPO G81) are available in the same gear ratios listed for conventional differentials.

(A) 3.55:1 axle ratio is furnished as standard equipment on vehicles with factory installed air conditioning, unless a 3.89:1 ratio optional axle is specified by the customer.

SUSPENSION

The following are the latest approved suspension alignment specifications for 1963 Corvair and Corvair "95" vehicles. All settings are to be made with the vehicle at curb weight.

Corvair 500-700-900 Series

Front Suspension

Caster	Pos. $2^{\circ} + 0^{\circ} - \frac{1}{2}^{\circ}$
Camber	Pos. $\frac{1}{2}^{\circ} \pm \frac{1}{2}^{\circ}$
Toe-in (total both wheels)	$\frac{1}{4}''$ to $\frac{3}{8}''$
Ball Joint Inclination	$7^{\circ} \pm \frac{1}{2}^{\circ}$

Rear Suspension

Toe-in (total both wheels)	$\frac{1}{8}''$ to $\frac{3}{8}''$
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Corvair "95" Series

Front Suspension

	Greenbrier	Pickup, Panel
Caster... Pos.	$2\frac{1}{4}^{\circ} \pm \frac{1}{4}^{\circ}$	$1\frac{1}{4}^{\circ} \pm \frac{1}{4}^{\circ}$
Camber... Pos.	$\frac{1}{2}^{\circ} \pm \frac{1}{4}^{\circ}$	$0^{\circ} \pm \frac{1}{4}^{\circ}$
Toe-in (total both wheels)	$\frac{1}{16}''$ to $\frac{3}{16}''$	$\frac{1}{16}''$ to $\frac{3}{16}''$
Ball Joint Inclination ...	$7\frac{1}{4}^{\circ} \pm \frac{1}{2}^{\circ}$	$7\frac{1}{4}^{\circ} \pm \frac{1}{2}^{\circ}$

Rear Suspension

Toe-in (total both wheels)	$\frac{1}{16}''$ to $\frac{3}{16}''$	$\frac{1}{16}''$ to $\frac{3}{16}''$
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ENGINE

The engine line-up for Corvair Models is unchanged, however, many improvements are introduced for 1963 to increase component durability and reduce service requirements. A new positive crankcase ventilation system is provided on all engines as standard equipment.

Improved materials and processes used in the manufacture of inlet valves for all Corvair engines increase valve durability. All inlet valves use the familiar single land keys and oil seal, however, to meet engine requirements, the valves for the various engines differ in design and material.

The exhaust valves on all except Corvair 95 engines

are provided with four circular grooves and the mating surface of the keys (2 per valve) are provided with four circular beads. When the (4 bead lock) keys are assembled onto the valve they provide a secure interlock and assure rotation of the valve on reaction to torsional force imparted by the spring during engine operation. On Corvair 95 exhaust valves, valve rotators are used together with the familiar single land keys and oil seal. Corvair 95 exhaust valves have a stellite face to provide additional durability.

The turbocharged engine introduced in mid-season 1962, is carried over for 1963 with the following modifications. 1. On crankshaft mains, new M400 bearings replace Bi-metal bearings used in 1962. Connecting rod bearings for 1963 are type M500. 2. The 1963 engine does not have a throttle return check. 3. The 1963 engine is modified as necessary to include positive crankcase ventilation. 4. The 1963 engine will have an "O" ring seal at the air cleaner to carburetor attachment area. There will be no carburetor drain tube. 5. The manifold pressure gauge in the instrument cluster for 1963 is graduated as follows reading left to right -30 0 +20. In the 1962, this gauge read -30 0 +30.

1963 CORVAIR ENGINE SPECIFICATIONS AND TUNE-UP DATA

TURBO-AIR ENGINES 6 Cyl. Horiz. Opposed 145 Cu. In. Displacement	80 HP	84 HP (Monza w/Powerglide)	150 HP Turbocharged Monza Spyder (RPO L87)
		102 HP (RPO L62)	
Gross Torque (Ft.-Lbs.)	128 @ 2300 rpm	(Monza)— 130 @ 2300 rpm (RPO L62)— 134 @ 2900 rpm	210 @ 3300
Compression Ratio	8.0:1	9.0:1	8.0:1
Rated GHP Developed at	4400 rpm		
Bore and Stroke	3.44" x 2.60"		
Firing Order	1-4-5-2-3-6		
Test Compression	130 psi.—(20 psi. max. variation)		
Spark Plugs (Prod.)	AC 46 FF	AC 44 FF	
Gap and Torque	.035"—20-25 ft. lbs.		
Distributor Dwell	31°-34° (33° preferred)		
Point Gap	.019" (New) .016" (Used)		
Point Tension	19-23 oz.		
Engine Normal Idle	500 rpm	600 rpm— w/Synchro. 500 rpm— Auto. (In Drive)	850 rpm
Ignition Timing (BTDC Settings at Normal Idle)	*4°-10° (Synchro.) *13°-18° (Auto. Trans.)	*Range 13°-18° (Prod. set at 13°)	24° (Do not Exceed)
Lifter Adjustment	1 Turn Down from "No Lash"		
Fuel Pressure	4-5 psi @ Idle to 1000 rpm		
Crankcase Capacity	4 Qts. w/o Filter Change—4½ Qts. w/Filter Change		

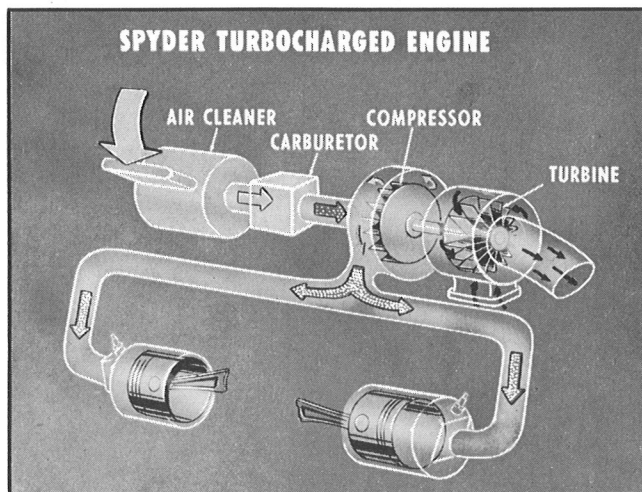


Fig. 21—Turbo-Supercharger—Schematic

*Disconnect vacuum advance line and cap opening at manifold.

ELECTRICAL

The D.C. generator system has been retained on Corvaire for 1963. Since this unit is carryover from the past model, there are no revisions to the system.

Windshield wiper and washers are carryover for 1963 with the exception of minor changes. Among these is a new washer pump drive mechanism which is an improvement over the past model types. Specific information pertaining to this drive change will be found in the Chevrolet section.

FUEL AND EXHAUST

The Corvaire muffler for 1963 is similar to the 1962 muffler except that it has an all-aluminized exterior and is made of heavier gauge material. The exhaust pipe is also new due to the use of heavier gauge material.

The fuel system and its components for the 1963 Corvaire will be basically carryover from the past model and incorporates only minor revisions.

PART IV—TRUCK

For 1963, the model line-up consists of 178 models on 19 wheelbases—a decrease of 25 models over the 1962 line-up. This model consolidation is designed to strengthen Chevrolet's competitive position, especially in the medium-duty segment of the market.

The light-duty category remains essentially unchanged, with the following exceptions: Model R1244, the Loadside pick-up in the Corvaire 95 line, is discontinued; two new 157 inch wheelbase cab chassis Models C3803 and C3803S are added.

In the medium-duty category, Series 4 vehicles are discontinued, eliminating eight models from the line-up. Series 50 vehicles, formerly rated at 2-tons, now are rated at 1½ tons, thus eliminating 18 former



Fig. 22—1963 Appearance—50 Series Truck

Series 50S models. In addition, the 121-inch wheelbase medium and heavy-duty vehicles, Models L6103, L6103S, and L6103H are eliminated.

Three new 169 inch wheelbase vehicles, Models L6503, L6503S, and L6503H are added to the line in 1963. The new 169 inch wheelbase Series L65 vehicles broaden LCF coverage between the 145 inch wheelbase Series L63 vehicles and the 175 inch wheelbase Series L66 vehicles.

Changes in the heavy-duty category, in addition to the 2-ton H.D. models mentioned above, consist of eliminating the 121 inch wheelbase vehicles, Models L8103 and E8103, and adding two new school buses, Models S6702H and S6902H.

Two major changes occur in the 1963 GVW ratings: All ratings for Series C10 models are reduced 200 pounds because of front end weight reductions, providing a GVW range from 4100 to 5000 pounds and because of the new 1½ ton nominal rating for Series CL50 models GVW ratings for these models begin at 10,000 pounds and range to a maximum of 16,000.

The power trains this year feature new engines, transmissions and rear axles which will provide optional features not previously available.

Extended lubrication is featured for the Corvaire 95 front suspension system, providing greater component durability and reduced maintenance. The front suspension control arm spherical joints feature new teflon-coated phenolic lined bearing seats and more positive sealing. Lubrication points on all other truck models are the same as in the past.

BODY

New shear-type body mounts replace the former double rubber biscuit mounts at the #2 body mount position for Series C20-30 cabs and pickups and for Series CDLM50-80 cabs. The #1 double rubber biscuit body mounts are retained without change. Cab durability and ride are improved through the lateral

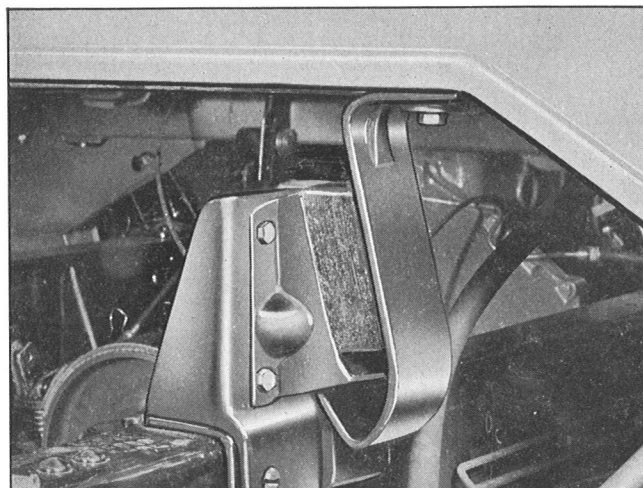


Fig. 23—Shear Type Cab Mounts L50 to 80