1965 CORVETTE OWNERS GUIDE

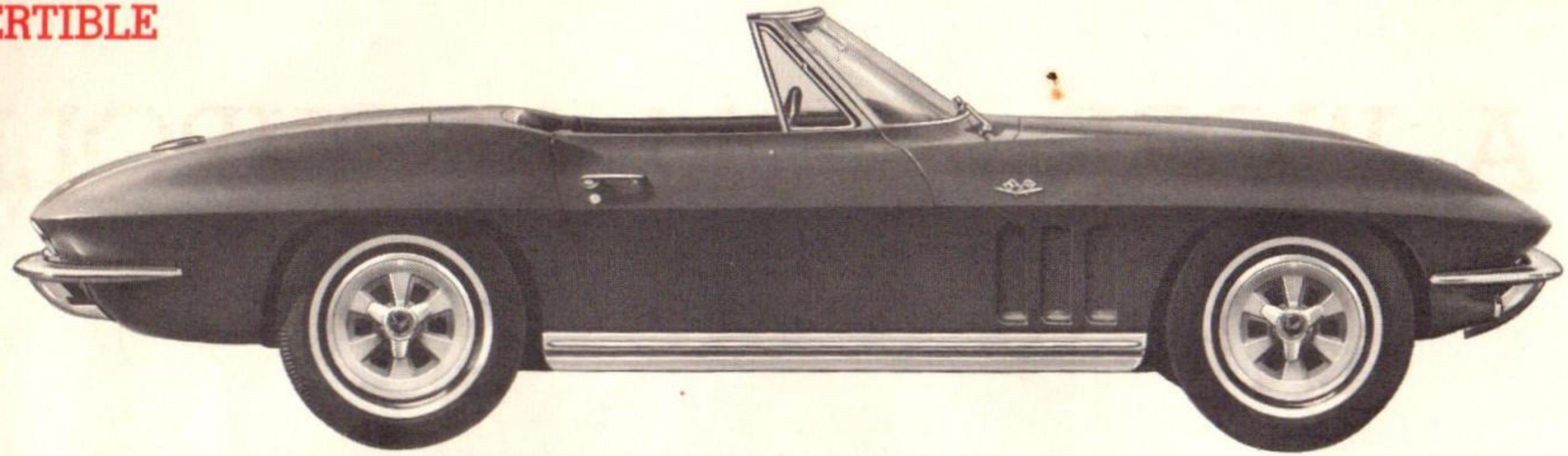
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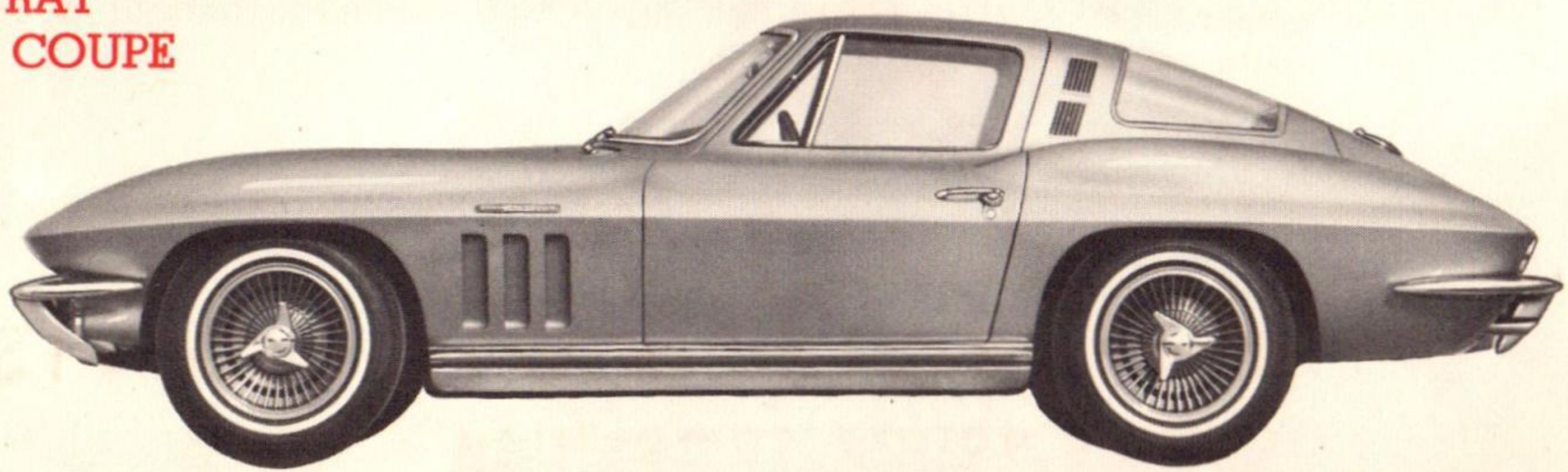
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SECOND EDITION
December, 1964

CORVETTE STING RAY CONVERTIBLE



CORVETTE STING RAY SPORT COUPE



A WORD FROM CHEVROLET . . .

This Owners Guide contains important information regarding the operation and maintenance of your Corvette.

In order to obtain maximum enjoyment and usage from your car, we suggest that you familiarize yourself with the contents of this booklet and follow the recommendations outlined.

Your Chevrolet dealer has the trained personnel and specialized equipment to properly service your Corvette. Have him inspect your car and perform any maintenance or adjustment required.

We would like to take this opportunity to thank you for choosing a Chevrolet product —and assure you of our continuing interest in your motoring pleasure and satisfaction.

CHEVROLET MOTOR DIVISION

GENERAL MOTORS CORPORATION • DETROIT 2, MICHIGAN

The First 1000 Miles

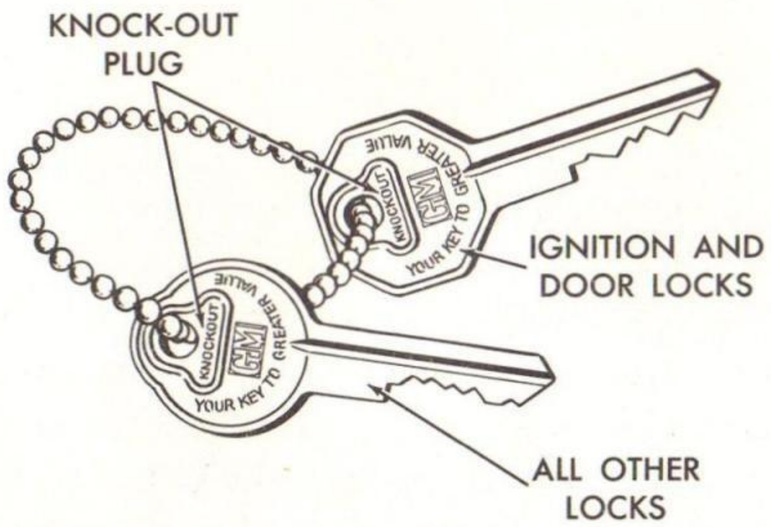
During your first thousand miles of driving, you can, by observing a few simple precautions, contribute greatly to a longer life for your Corvette and add much to its future performance and economy of operation.

It is recommended that your speed during these first one thousand miles be confined to a maximum of 60 mph. However, do not drive for extended periods at any one constant speed, either fast or slow. During this period, avoid full throttle starts and if possible, abrupt stops. The first few hundred miles of driving are especially important to proper brake operation. Gentle braking during this period will allow proper conditioning of the brake linings and result in longer brake life and better brake performance.

It is always best to drive at a reasonable speed until the engine has warmed up. Be particularly careful to maintain the proper oil level in the engine. Check the oil level frequently and, if it becomes necessary to add oil, follow closely the recommendations as to quality and viscosity found in this booklet. Use of the proper engine oil is of great importance to insure maximum performance and economy.

Operating Instructions

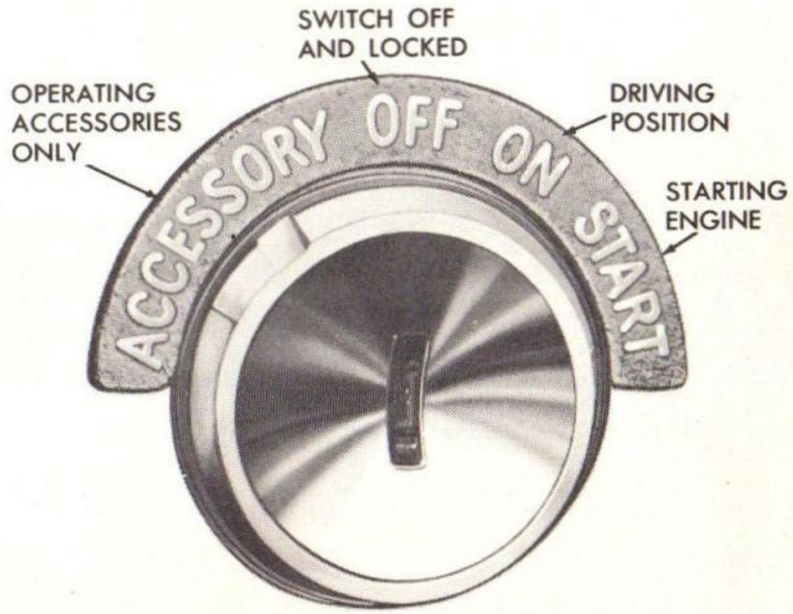
KEYS



The octagonal-end key operates the ignition switch and both door locks of your Corvette. The round-end key operates the instrument panel compartment door and spare tire compartment locks. Record the serial number located on the knockout plug in the key and then discard the plug. Using this number, key makers can make you a new key.

IGNITION SWITCH

The ignition switch has four positions as shown. The key may be removed only when the switch is in the OFF position. Use the ACCESSORY position for operating the accessories when the engine is not running.



CAUTION: Carbon monoxide is a poisonous gas produced by the engine of any car. It is odorless, so you cannot detect its presence. Be safe. Never start or run the engine in a closed garage or park with the windows closed and engine operating.

Starting the Engine

WITH THE POWERGLIDE TRANSMISSION

—Place selector lever in N or P position. The engine will not start when lever is in any other position.

WITH THE MANUAL TRANSMISSION

—Place gearshift control lever in Neutral and hold clutch pedal to the floor.

CARBURETOR EQUIPPED ENGINES

- Initial Start Engine Cold—Depress the accelerator pedal to the floor and fully release (with Hi-Performance engines, if below 0°F, depress pedal twice). Turn the ignition switch to START and hold until the engine starts.
- Engine Hot or in Extreme Cold Weather (0°F or below)—Depress the accelerator pedal part way down and hold while starting.
- Start a "flooded" engine by holding accelerator pedal to the floor while cranking engine.

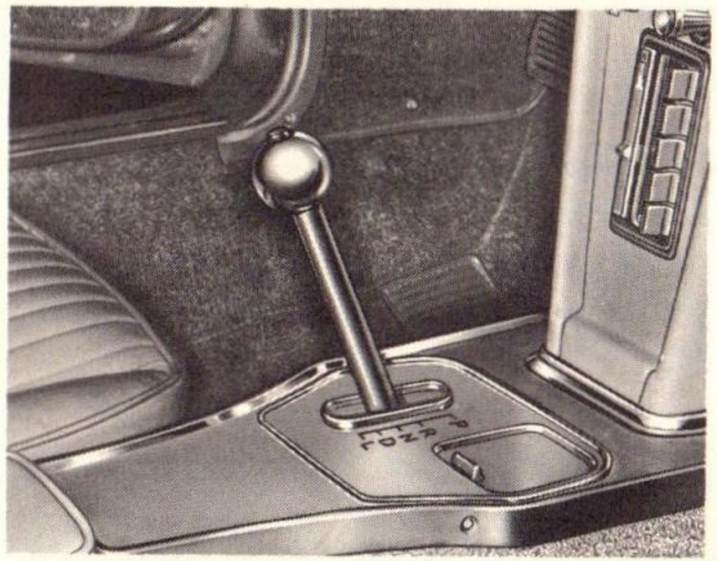
FUEL INJECTION ENGINES

- Engine Cold—Depress accelerator pedal to the floor and fully release to set the automatic choke. With accelerator pedal fully up (starting fuel system is operating), turn the ignition switch to START position and hold until the engine starts. When the engine starts, and runs, depress accelerator lightly. After two or three starts you will become familiar with your vehicle and the best pedal application to start the engine.
- For Quickest Hot Starting—Depress accelerator pedal ½ to fully down while starting. If engine does not start in a reasonable time allow accelerator pedal to return to closed throttle position briefly while cranking.

WARM-UP—Always let the engine idle for a moment or two after starting and drive at moderate speeds for several miles, especially during cold weather.

Driving with the Powerglide Transmission

The optional Powerglide is a completely automatic transmission which replaces the standard clutch and transmission. After starting the engine with the selector lever in "N" (Neutral) or "P" (Park) position, merely select the range desired and depress the accelerator. The transmission will do the rest. The lever may be shifted freely from "N" (Neutral) to "D" (Drive). Press lightly on the shift lever button (located on top of the shift handle) as you shift into or out of "L" (Low) or "R" (Reverse). Depress this button fully when shifting to and from "P" (Park). Exercise care in depressing the button to prevent unintentional shifts to Park, Low or Reverse.



P—PARK	Use only when car is stopped.	Car parked
R—REVERSE	For backing car—from stop.	Normal driving range
N—NEUTRAL	For standing—brakes applied.	
D—DRIVE	For all forward driving—step hard on accelerator for extra acceleration below 45 mph.	
L—LOW	For hard pulling at low speeds and climbing or descending steep grades. Shift to L only below 40 mph.	Sand, snow, mud and steep grades

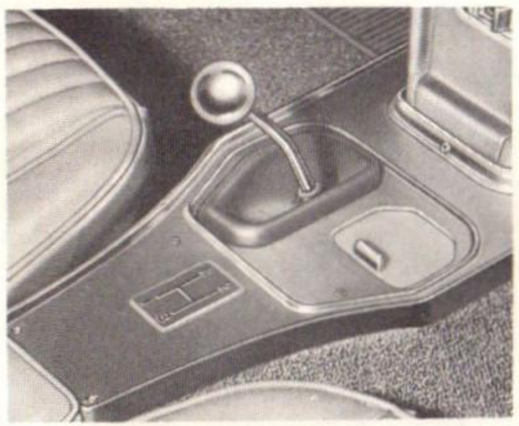
POWERGLIDE DRIVING CAUTIONS

- Do not accelerate engine in L, D, or R with the brakes engaged. This can cause damage by overheating transmission.
- Do not hold car on an upgrade by accelerating engine. Use brakes.
- Do not use Low position except for hard pulls at low speed or down-hill braking at speeds below 40 MPH.
- Do not shift into Reverse or Park before coming to a complete stop.
- Always engage parking brake when parked.

Driving with Manual Transmissions

Corvette manual shift transmissions are controlled by the shift lever located on top of the floor tunnel. You will find the shift pattern for your transmission pictured on a plate just behind the shift lever. During acceleration, always shift into the next higher gear before the engine begins to overspeed; and when slowing down, shift into the next lower gear before the engine "lugs" or labors.

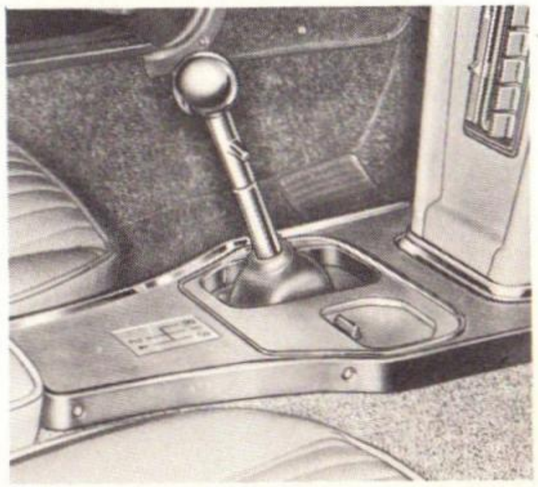
Do not "ride" the clutch. Depress the pedal only when actually shifting the transmission and then clear to the floor. Use your brakes rather than the clutch pedal to hold your Corvette on a hill.



THREE-SPEED TRANSMISSION

The Corvette three-speed synchromesh transmission is designed to provide high performance under ordinary driving conditions as well as during high speed operation. Gear ratios were selected to keep the engine operating in its high output range as consistently as possible and permit upshifting and downshifting between second and third speed at high speeds.

FOUR-SPEED TRANSMISSION



The optional four-speed fully synchronized transmission has closely spaced ratios that make it possible to accelerate with a minimum loss of engine rpm at the shift points. Since all forward speeds are synchronized the transmission can be used to assist in deceleration by downshifting in the third-second-first sequence.

If desired, the shift linkage may be adjusted to allow "short stroke" shift lever operation. See your Chevrolet dealer.

REVERSE SHIFT—Lift up on the release handle just below the shift lever knob when shifting into reverse gear.

Downshifting with Manual Transmissions

If you wish to shift from one gear to the next synchronized gear immediately lower in ratio, avoid dangerously overspeeding the engine by downshifting as follows:

1. **Watch the Tachometer**—During downshift operations your tachometer will aid you in keeping the engine speed within safe limits. After you become familiar with your Corvette you'll know at what rpm each downshift may be safely made.

2. Double-clutching reduces strain on engines and transmissions. The usual method of double-clutching is:

   Let up on the throttle, disengage the clutch, shift into neutral, and engage the clutch. Almost simultaneously, speed up the engine, disengage the clutch, shift into the next lower gear and re-engage the clutch while depressing the throttle. With practice, this procedure becomes almost second nature.

Driving with Positraction

The positraction rear axle will give you constant driving force on both rear wheels, especially helpful in the winter and during other slippery driving conditions which might stop a conventionally equipped vehicle. During turns, the positraction axle applies the major driving force to the inside rear wheel thus improving stability and cornering. Normal light throttle application will supply maximum traction. When starting with one rear wheel on an excessively slippery surface, slight application of the parking brake may be necessary momentarily to gain maximum traction.

Driving with Power Steering

The optional power steering supplies about 80% of the effort needed to turn the front wheels while the engine is running. Should the engine stop or the power steering cease functioning the regular steering mechanism will allow you to safely guide your Corvette.

Pushing and Towing Tips

PUSHING CAR TO START

Should it ever become necessary to start the engine by pushing the car (towing to start is not recommended as car being towed may accelerate into tow car), proceed as follows:
Turn off all electrical loads such as radio, heater and, if possible, lights until the engine starts.

MANUAL TRANSMISSION—Turn ignition switch to "on." Place shift lever in high (3rd on 3-speed transmissions, 4th on four-speed) and depress clutch. When car reaches 25-30 miles per hour, slowly release clutch to start engine.

POWERGLIDE TRANSMISSION – Turn ignition switch to "on" and place selector lever in "N." When car reaches a speed of 25-30 mph, place the selector lever in "L." When engine starts, place selector lever in "D."

TOWING A DISABLED CAR

If your Corvette must be towed, the following precautions must be observed:

The car may be towed safely on its rear wheels with the selector lever in "N" (Neutral) position at speeds of 35 miles per hour or less under most conditions.

However, the drive shaft must be disconnected or the car towed on its front wheels if

- Tow speeds in excess of 35 mph are necessary.
- Car must be towed for extended distances (over 50 miles) or,
- Transmission is not operating properly.

If car is towed on its front wheels, the steering wheel should be secured to maintain a straight ahead position.

USE OF TIRE CHAINS AND SNOW TIRES

Do not use tire chains on the rear wheels of your Corvette. Clearance between tire and wheelhouse is insufficient to permit operation with chains installed.

Many tire manufacturers market tires for the Corvette which have specialized tread designs for mud and snow use.

Clutch and Steering Adjustments

Your Chevrolet dealer can make these adjustments for you:

• A linkage adjustment to reduce clutch pedal travel to permit fast release and more rapid gear shifting; • An adjustment to move the steering wheel forward or rearward; • A linkage adjustment to permit "faster" steering response.

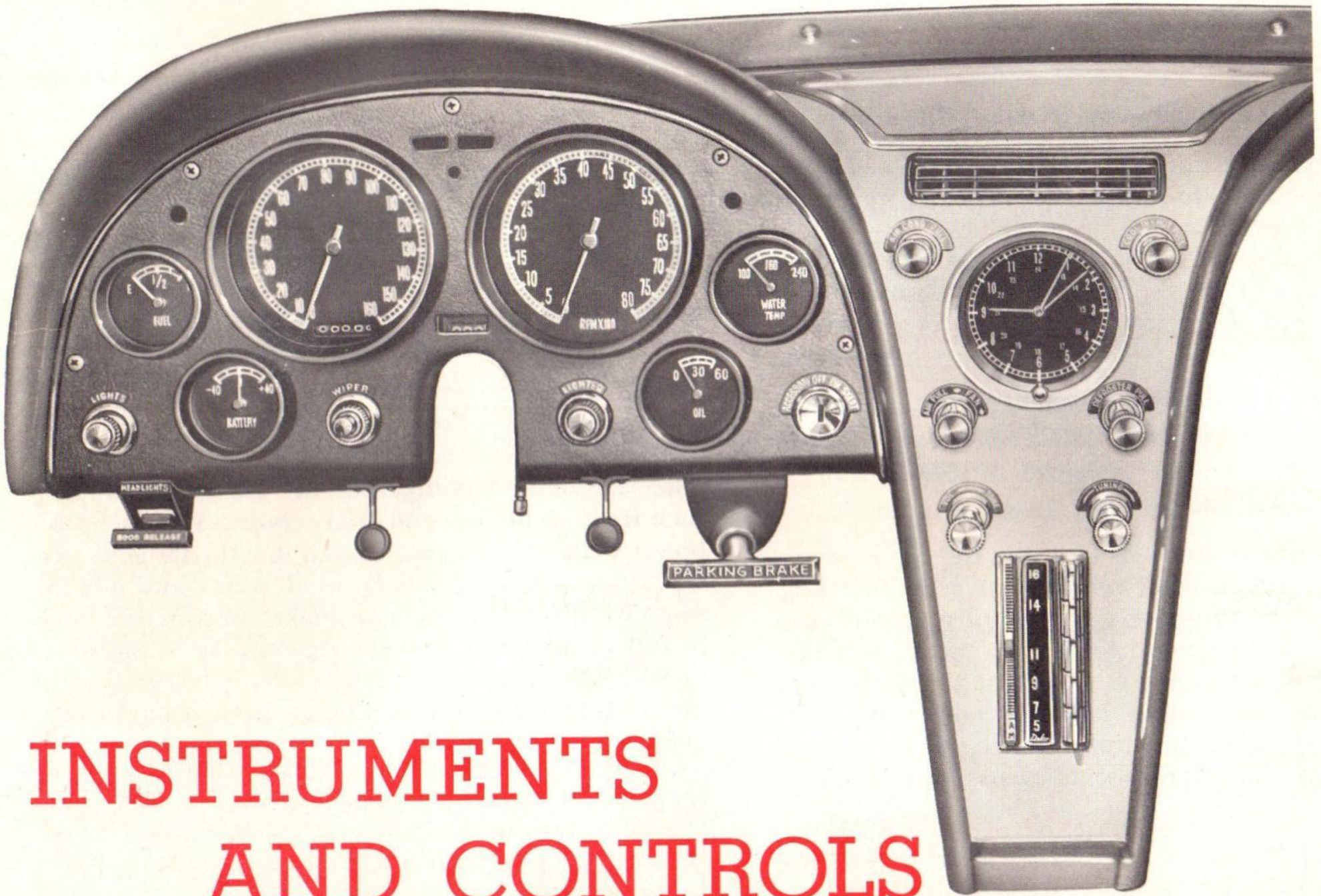
TRAILERS and their EFFECT on CAR OPERATION

The Corvette is designed primarily for passenger conveyance. However, it is well known that many owners do pull trailers and have experienced very satisfactory service.

When a trailer is attached to a car, the car becomes not only a load-carrying vehicle, but a load-pulling vehicle. The demands of this type of operation are very different from those for which the automobile is primarily designed and may present problems, such as spring and tire loading, braking, cooling, lighting, and steering. However, careful driving practices will better satisfy the requirements of trailer hauling.

If in the opinion of the manufacturer a part or component of a motor vehicle has been adversely affected by misuse of the vehicle with trailer loads, such part or component will not be covered by the manufacturer's warranty.

The size of and equipment for trailers, including such items as hitches and safety chains, brakes, lights, power-weight ratios and over-all length, are generally subject to safety regulations in all states, and it is the responsibility of the user to make certain that he is in full compliance with the regulations of the states in which he plans to operate with a trailer and of the Interstate Commerce Commission, if applicable, before doing so. Further, when operating a car with a trailer attached, the driver must realize that the performance, steering characteristics, and braking distance of his car have been altered, and that he must exercise greater caution to safely handle his car and trailer.



INSTRUMENTS AND CONTROLS



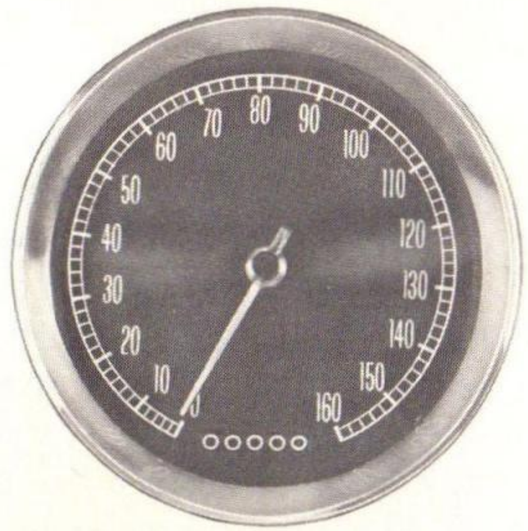
TACHOMETER

Three different tachometers are used in the Corvette, depending upon the engine option installed in the vehicle. Corvette 250 hp and 300 hp engines are equipped with a tachometer which has an orange zone from 5000 to 5300 rpm (indicating valve float area), and a red zone from 5300 to 5500 (indicating maximum permitted rpm).

The Corvette 350 hp engine is equipped with a tachometer which has the orange zone from 5700 to 6000 rpm and the red zone from 6000 to 6200 rpm.

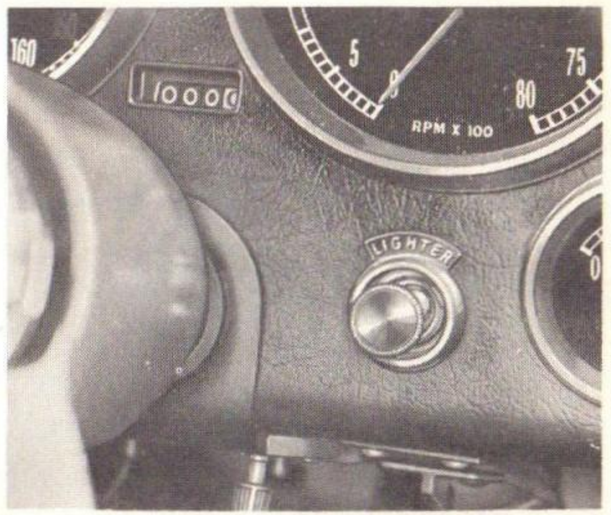
The tachometer supplied with the Corvette 365 hp and 375 hp engines has an orange zone at 6300 to 6500. Don't permit the pointer to enter the red zone beyond 6500 rpm.

SPEEDOMETER AND ODOMETER



The speedometer, indicating the forward speed of your Corvette in miles per hour, is calibrated to a maximum of 160. The odometer registers total accumulated vehicle mileage and is useful in keeping track of lubrication and maintenance intervals.

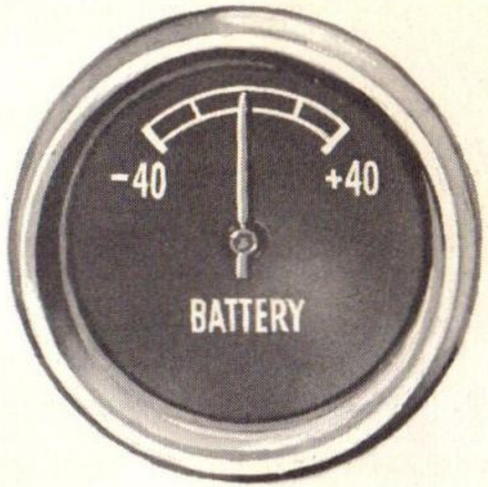
TRIP ODOMETER

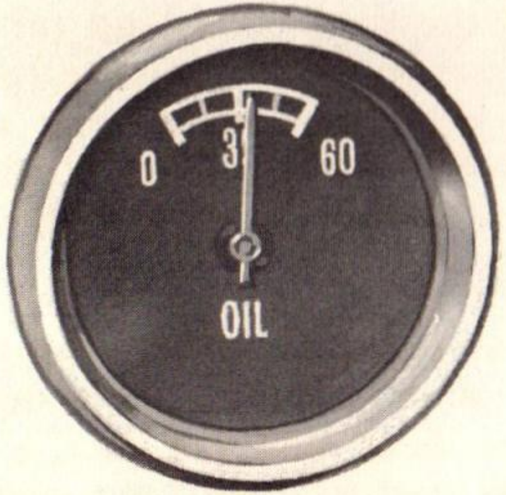


The trip odometer may be reset to zero by means of the knurled knob extending beneath the instrument cluster to the right of the steering column. This instrument may be used to record trip mileages as well as during sports car rallies.

The ammeter shows the rate at which the battery is being charged or discharged. The Delcotron charging system is equipped with a regulator which controls the charge according to battery requirements. When the Delcotron generator is supplying more than the current demand, the ammeter will show the charging rate while a discharge will be shown if the current demand is more than the Delcotron output. With the battery fully charged, the charging rate will be low, thus giving an indication of battery condition.

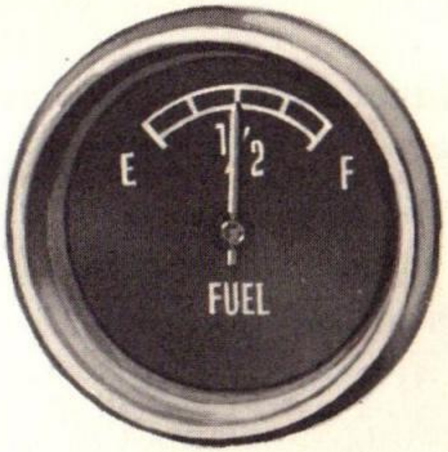
AMMETER





OIL PRESSURE GAUGE

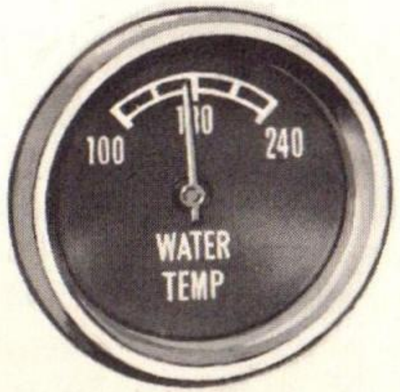
The oil pressure gauge indicates the pressure at which oil is being delivered to the various parts of the engine requiring lubrication. Pressures registered by the gauge may vary according to outside air temperatures or weight of oil being used. Oil pressure of a cold engine being operated at a given speed will be somewhat higher than when the engine is at normal operating temperature at the same speed. Prolonged high speed operation on a hot day at the given speed will result in somewhat lower oil pressure readings. Readings of 30 to 40 psi may be considered normal during moderate road speeds of 35 to 40 mph with the engine at proper operating temperature. Gauge readings which are consistently high or low under these conditions may indicate lubrication system and/or engine malfunctions.



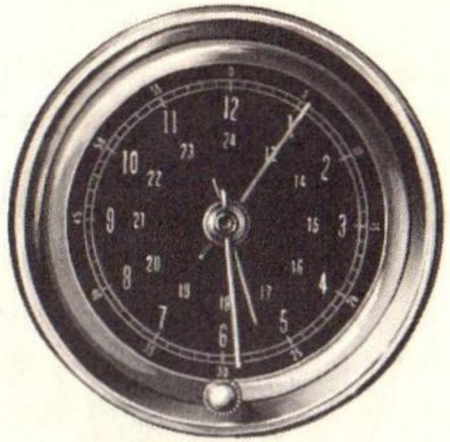
FUEL GAUGE

The electrically operated fuel gauge will indicate the level of fuel in the tank when the ignition switch is turned on. When the ignition switch is turned off, the needle will not necessarily return to the empty mark.

TEMPERATURE GAUGE



Showing engine coolant temperature, gauge readings will vary with air temperature and operating conditions. Hard driving or prolonged idling in very hot weather may produce above normal readings. The ignition switch must be on for accurate readings.



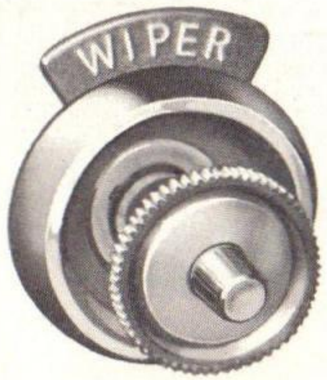
CLOCK

Resetting the clock provides automatic regulation providing there is an error, either fast or slow, of at least 3 minutes. No regulation will be introduced if the clock is reset for an error of less than 3 minutes. When resetting, pull out the small knob and turn in the direction in which you wish to set the hands—clockwise if the clock is slow, counterclockwise if the clock is fast. Do not move the hands past the correct time. Your clock should be cleaned and oiled periodically.

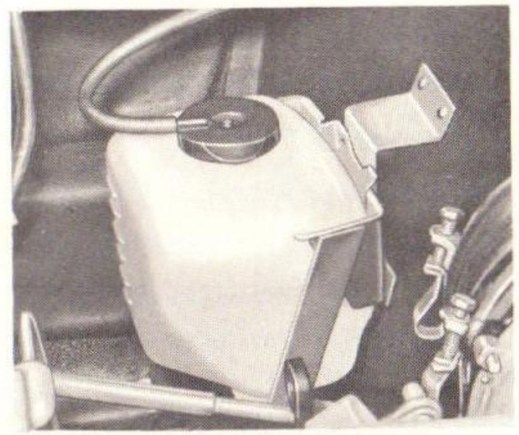
COURTESY LIGHTS

The courtesy lights beneath the outer ends of the dash panel, as well as the Sport Coupe dome light and the Convertible rear compartment light, will come on when either door is opened. They may also be lighted by turning the headlight switch fully counterclockwise past the slight resistance.

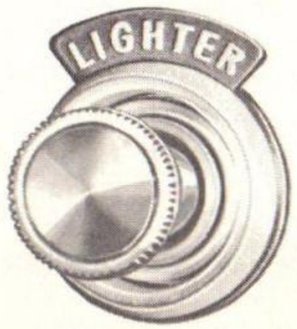
WINDSHIELD WIPER AND WASHER



Turn the windshield wiper knob clockwise; to the first detent for slow speed and all the way for high speed operation. The button located in the center of the wiper control knob operates the windshield washer. Pressing this button will squirt a quantity of fluid on the windshield and, at the same time, will automatically start the windshield wipers. The wipers must be turned off manually. Keep the water container beneath the hood filled at all times. Add GM Windshield Washer Solvent to the jar to aid in cutting road film and grease. This solvent is recommended for use at all times except when the temperature falls below freezing. During periods when temperatures of freezing or below can be expected, use GM Windshield Washer Anti-freeze in the washer jar and prewarm the windshield with the heater defrosters before using the washer. Fill the washer jar only ¾ full in winter to allow for expansion if the temperature should fall low enough to freeze solution.



CIGARETTE LIGHTER



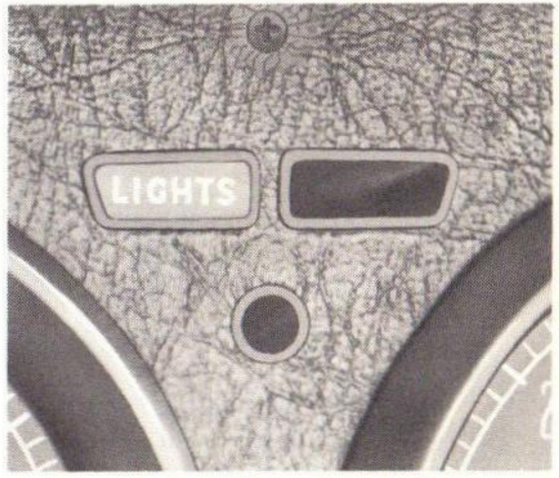
The lighter, located on the instrument panel so as to be accessible to both driver and passenger, should be pushed "in" to operate. After it has become heated and ready for use, it will snap out.

The retractable dual headlights contribute much to the long, low appearance of your Corvette and also serve to protect the headlights when not in use. Two switches are necessary for headlight operation.

- Pull the ***light switch knob*** out to its first stop to operate the parking lights, tail lights and instrument panel lights, fully "out" to substitute headlights for parking lights. Regulate the intensity of the instrument panel lights by rotating the knob; turn fully counterclockwise past the "detent" position to turn on the interior lights.
- Move the ***headlight motor switch*** toward you to rotate the headlamp assemblies into the open position. The headlamps may be left in the open position even with the lights turned off. To close the assemblies move the switch away from you.

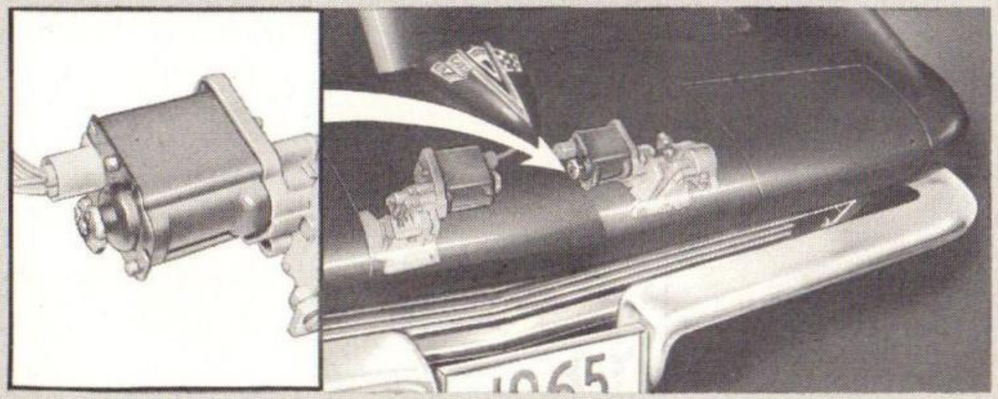
LIGHT SWITCH AND HEADLIGHT MOTOR SWITCH





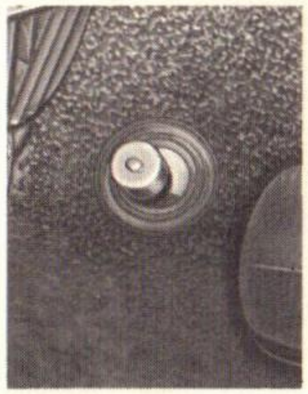
- A flashing red "LIGHTS" indicator on the instrument panel, gives warning whenever the headlights are turned on but not fully opened.

OPERATING HEADLIGHTS MANUALLY



Each headlamp assembly may be opened manually, if necessary, as follows:

- Raise the hood and, reaching under the body panel, turn the wheel disc on the headlamp door motor in the direction you wish the door to move. Continue until the door is fully open or closed.
- See your Chevrolet Dealer as soon as possible.



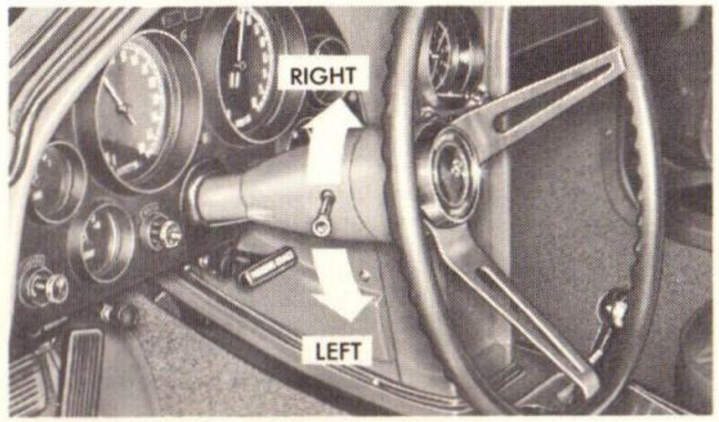


HEADLIGHT BEAM SWITCH

The headlight high beam switch, located at the left side of the toeboard, is used for selection of either high or low headlight beams. The red high beam indicator light in the instrument panel will remind you when the "brights" are being used. Remember to "dim" the lights when approaching oncoming traffic and when overtaking other vehicles.

TURN SIGNAL

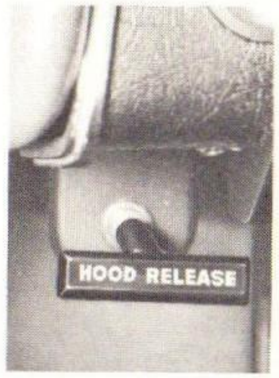
Move the lever on the steering column up or down to indicate a right or a left turn. The amber front parking light, the red stop lights and the proper green indicator light in the instrument cluster will flash to indicate the direction of the turn. The lever will normally return to neutral; but in the event of a wide gradual turn this may not happen and you may need to turn off the signal manually.



LIGHTING SYSTEM TROUBLE CHECKS

- Headlamps which flicker on and off rapidly indicate an overload condition which should be corrected immediately by your Authorized Chevrolet Dealer.
- If, when signaling a turn, the indicator light comes on but does not flash in one direction, check for a burned out front turn signal bulb or stoplamp bulb on that side.
- If the indicator lights come on and stay on when signaling a turn in either direction and no clicking is heard, replace the flasher. A three-bulb flasher must be used.
- If the flasher clicks but the dash indicator light does not operate, replace the indicator bulb.

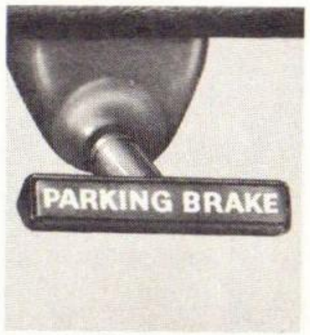
HOOD RELEASE

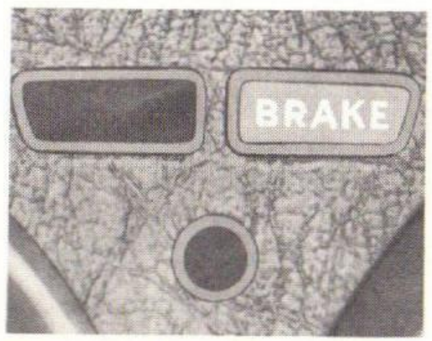




Pull the hood release handle out to release the hood lock and then raise the hood manually until it locks in the open position. With the hood in this position, insert a bolt through the hood prop hole and secure with a nut to prevent the hood from being accidentally released. Before closing, remove the safety nut and bolt and lift up on the hood panel to unlock the support mechanism, then lower and close firmly.

PARKING BRAKE





To apply the parking brake, pull straight out on the T-shaped handle. To release, turn the handle slightly and push in. The red "BRAKE" warning light in the instrument cluster will remain on when the brake is applied and the ignition key is on.

POWER BRAKES—Optional power brakes make use of engine vacuum to help you bring your car to a stop with much less braking effort than needed with regular brakes. Should the engine stall, a vacuum reserve supplies three power assisted stops, after which additional foot pressure will be needed for brake response.

TELESCOPING WHEEL



The optional telescoping wheel provides a maximum adjustment of approximately three inches and can be quickly repositioned to suit the need of the individual driver for improved visibility and comfort.

Release the telescoping wheel by rotating the outer bezel on the horn button in a counter-clockwise direction. Push down or pull up on the steering wheel to locate the wheel at the desired position. Then lock the wheel by turning the outer horn bezel in a clockwise direction.

HEATER AND DEFROSTER





Two knobs allow full control of your Corvette Heater.

AIR-PULL-DEF—This control supplies outside air to the Heater when pulled out to the "detent" position and diverts the air-flow to the defroster duct when pulled fully out. This knob must be pulled out to "detent" or further before operating the heater.

FAN-TEMP-PULL—Heater output air temperature is regulated as this knob is pulled out. Maximum heat is obtained in the fully out position. Rotate the knob to obtain low, medium or high fan speed.

HEATER OPERATING TIPS

- Always brush snow from the air inlet in front of the windshield before operating the heater.
- If less than maximum heat is desired, operate FAN on low or medium speed and regulate the air temperature by moving the FAN-TEMP-PULL knob partially in.
- Operate the heater for several minutes before turning on the defroster. This will clear the system of moisture and help prevent windshield fogging.

VENTILATION DURING WARM WEATHER



- Air vents in each side panel, operated by vent knobs on either side of the steering column, admit outside air from the vent grille in the cowl. The right hand vent knob is not present when vehicle has air conditioning. .

- Pull AIR-PULL-DEF knob to detent or fully open, to admit outside air through the heater.

- Additional ventilation is available on sport coupe models by means of luggage compartment exhaust fan. To open the vent chamber, pull the control knob located next to the left air vent control to the first detent position. Further movement operates the 3-speed blower. This fan will not operate when the heater fan is being used.

4-SEASON AIR CONDITIONER OPERATION



HEATING

AIR-PULL-FAN—Pull this knob fully out and rotate the knob to obtain low, medium or high fan speed.

AIR COND-PULL—Keep this knob fully in.

COOL IN-HOT PULL—Vary this knob as required to regulate the air temperature. Fully out provides maximum output temperature.

DEF—Pull knob fully out for maximum defrosting.

COOLING

AIR-PULL-FAN—Push knob fully in for re-circulation of inside air. Vary knob setting to provide a mixture of outside and recirculated air. Rotate the knob to obtain medium or high fan speed.

AIR COND-PULL—Pull this knob fully out.

COOL IN-HOT PULL—Keep this knob fully in for maximum cooling. Output air temperature may be regulated by pulling the knob as desired.

DEF—Keep this knob fully in.

AIR CONDITIONER OPERATING TIPS

During the first few minutes of operation open a window to let out hot air, then close the window.

Rotate the three dash outlets to direct cooled air. Close center outlet by rotating the deflector all the way.

Close the side outlets by means of the knobs below and several inches inboard of the outlets.

Rotate covers, located about six inches inboard of the shut off knobs, to provide additional cooled air for your feet.

For maximum cooling under extreme heat conditions, push AIR-PULL-FAN knob fully in.

For cooling under moderate temperatures, pull AIR-PULL-FAN knob out to detent.

For cooling under mild temperatures pull AIR-PULL-FAN knob fully out.

RUN THE SYSTEM FOR FIVE MINUTES EVERY WEEK TO LUBRICATE SEALS AND MOVING PARTS.



AM/FM RADIO

The optional fully transistorized radio provides both standard AM reception and clear static-free FM broadcasts. FM stations may be received as far as 60 miles from the sending station, depending upon the power of the station and the existing terrain. In fringe areas where FM signals are weak, it may be possible to manually retune the radio to maintain peak reception. If not, retune to a closer or stronger FM station or switch to AM operation.

● **AM-FM SELECTION**—To select AM or FM reception, move the slide bar, located to the left of the dial, up and down until the letters "AM" or "FM" are fully exposed.

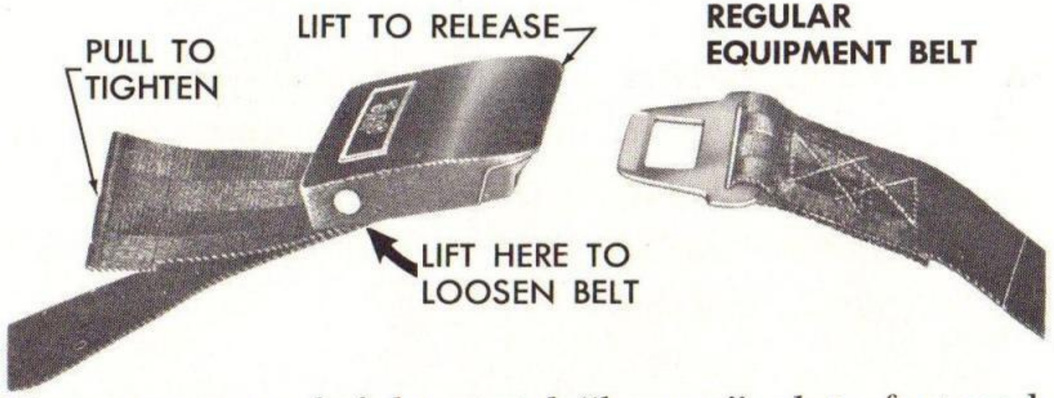
● **PUSH BUTTON TUNING**—To preset these push buttons: Turn on the radio, set the AM-FM selector bar to the desired band, pull the push button straight out as far as it will go, tune in the desired station manually, and then push the button all the way in. Set each push button in the same manner.

● **MANUAL TUNING**—The left hand control knob serves as the "on-off" switch and volume control. Turn the wing knob at the base of this control to adjust for tone quality. The right hand control knob is the manual station selector.

● **POWER ANTENNA**—Maximum FM reception is obtained with the antenna extended to 31 inches. For best AM reception the antenna should be fully extended.

SEAT BELTS—Fasten your seat belt by pushing the metal catch into the buckle until it "snaps" into place. Tighten the belt until comfortably snug by pulling on the loose end extending from the buckle. *Do not wear the belt loosely.* Loosen by turning the entire buckle outward. Lift up the buckle lever to unlatch and release the belt. *Never buckle an individual seat belt around more than one person.*

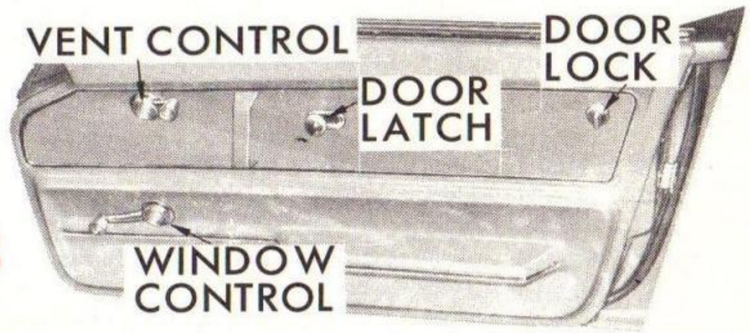
It is recommended that the optional Chevrolet seat belt retractors be used on the outboard belt half only. When buckling the belt be sure it is fully extended *so there is no webbing wound around the retractor drum,* then make the adjustment for proper fit at the buckle.



For stowage, a bright metal "keeper" plate fastened to the tunnel console provides twin tongues to slip the seat belt buckles on.

Clean the belts, without removing from the car, with a stiff bristle brush using a detergent recommended for nylon. *Never bleach or dye seat belts.*

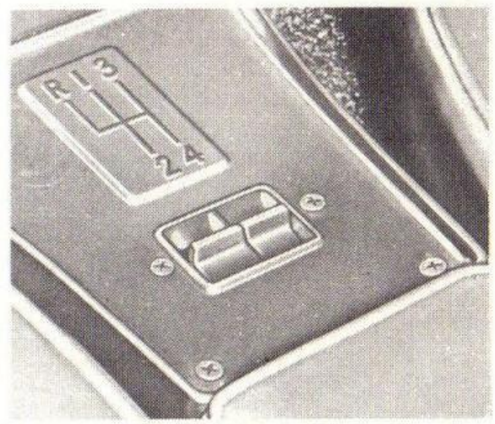
DOORS, WINDOWS AND LOCKS



Lock and unlock the doors from inside your Corvette by turning the bezel clockwise to lock and counterclockwise to unlock.

Both doors of your Corvette may be locked and unlocked from the outside by means of the ignition key.

Open the doors from outside by means of the push button type door handles and from inside by pulling rearward on the ball type handle.



Crank type handles allow the side windows and the vent windows to be operated. Operating switches for the optional power windows are located at the rear of the floor tunnel trim plate.

SEAT ADJUSTMENT—The seat adjuster control handle is located at the right front corner of the seat. Turn the handle clockwise to free the seat. After adjusting the seat, release the handle to lock seat into place.

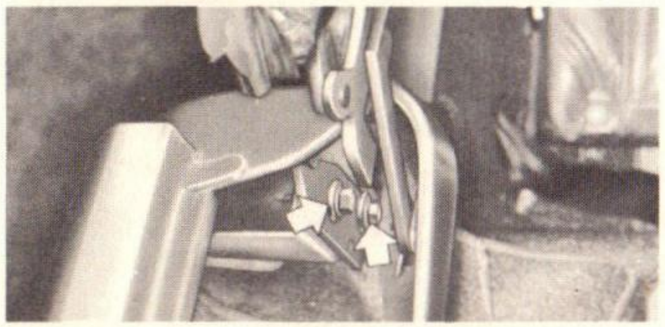
GLOVE BOX—Lock and unlock the glove box door with the round-end key. Press and release button to open the door. When open, the door provides a convenient table for cups or glasses. A cutout portion in the glove box hood forms a convenient assist handle.

REAR COMPARTMENT

Tilt the seatbacks forward to reach the ample luggage space. In the convertible style Corvette the folding top is also carried in this area, but it may be completely and easily removed if desired. In addition, a removable cover on the floor of the luggage compartment provides hidden stowage for small articles, tools, and the auto jack and handle.

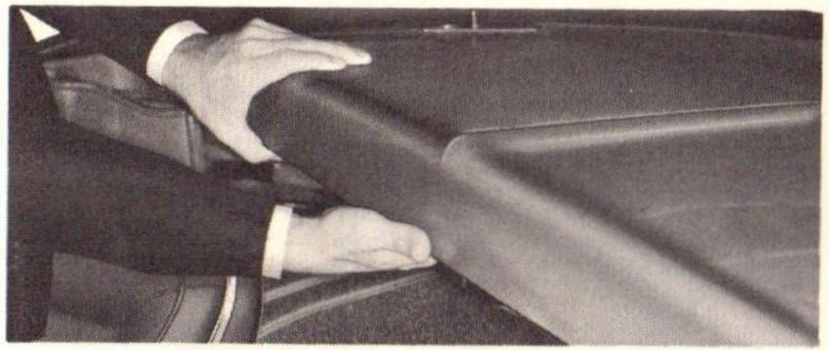


REMOVAL OF THE FOLDING TOP

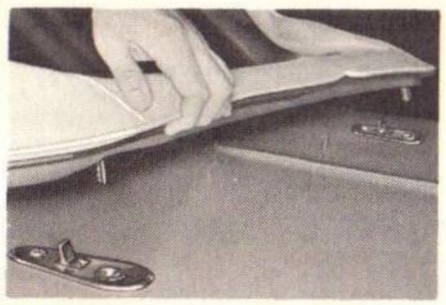


- Use a pencil to outline the folding top mounting plates so that they may be reinstalled in exactly the same location. Then remove the two mounting bolts from each side shown in the illustration to the left.
- Carefully remove the folding top from the car.
- Use the penciled outlines to locate the mounting plates in exactly the same position when replacing the top.

Operation of the Corvette Tops







FOLDING TOP

- **To raise the top:** The rear compartment lid unlocking handle is located beneath the center of the lid. Pull it toward you to unlock and raise the lid.
- Swing the folding top out. Hook the front latches to the windshield header, but leave them loose. Then close the compartment lid.
- Snap the rear bow retainers into place in the lid receptacles.
- Lock the windshield header latches.
- **To lower the top:** Unlock the header latches, release the rear bow by means of the retainer release levers and fold it forward. Open the rear compartment lid, and after unlatching the header latches, fold the top into the rear compartment, being certain that the header latches lie flat and close the lid.

HARD TOP

The optional hard top is attached at six points, all reached from within the car. Free all attachment points before removing top:

- the two header latches.
- the two nuts securing the rear bow attaching studs.
- the two mounting tab attaching bolts, located below the lower front corners of the rear window.



After carefully removing the hard top, disconnect the rear bow attaching studs from the top and reinstall them, with the seal rings found in the glove box, in the rear deck lid. Secure in place with the attaching nuts. The mounting tab attaching bolts may be stored by threading them into the bolt holes from which they were removed. Store the top, covered, in a clean dry place.
When installing the hard top, be sure all attaching parts are secure.

MAINTENANCE AND LUBRICATION

Your Corvette is capable of providing you with many years of enjoyable, dependable service. However, much of its future beauty and performance capabilities rest with you as its owner. The following pages will guide you in properly caring for the beauty and mechanical maintenance needs of your Corvette. Remember, no one knows the Corvette as well as your Chevrolet Dealer. Regular visits to him will keep your car looking and running its best.

Cleaning The Exterior Of Your Corvette

WASHING YOUR CORVETTE

Your Corvette is finished with General Motors "Magic Mirror" acrylic lacquer. This is a finish of maximum beauty which, in depth of color, gloss retention and durability, is superior to conventional lacquer finishes. The best way to preserve this finish and maintain the original beauty of appearance is to keep it clean. Frequent washing is normally the only requirement to maintain maximum beauty. Wash the car with cold or lukewarm water only and never in the direct rays of the sun or when the painted surfaces are hot. Never use strong soap or chemical detergents. Any cleaning agent should be flushed from the surface promptly and not allowed to dry. Avoid wiping dirt from dry painted surfaces because this may scratch the surface.

POLISHING AND WAXING



Even though the acrylic finish of your Corvette is durable, under certain conditions you may wish to polish or wax your car to provide extra protection. Calcium chloride and other salts, chemicals from factory chimneys and other similar foreign matter may cause damage to any known automobile finish if allowed to remain in contact with the paint film for an excessive length of time. Prompt washing may not always thoroughly remove these deposits especially in areas where exposure conditions are more severe. Your Chevrolet Dealer offers many approved polishes, waxes and tar and road oil removers which will provide maximum protection.

BRIGHT METAL PARTS

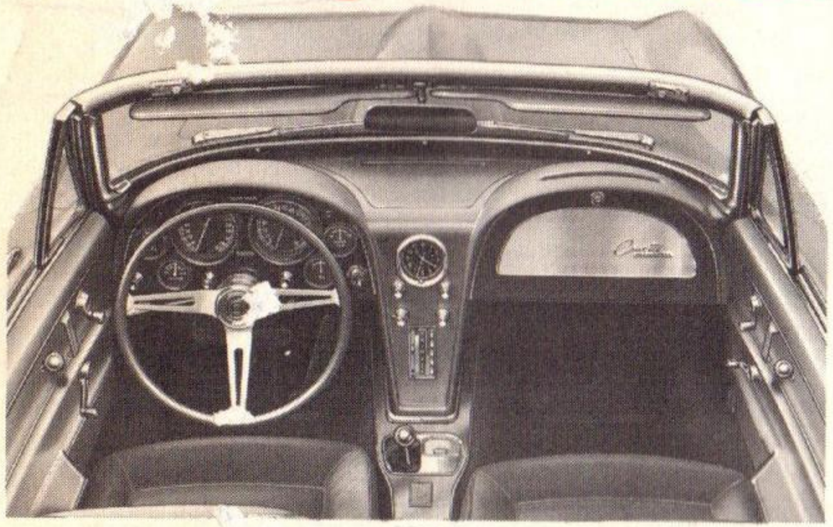
It is recommended that after being thoroughly cleaned with warm water, bright metal parts be given a coating of wax and rubbed to a high polish. This should be repeated as often as necessary. Never scour bright metal parts.

WHITEWALL TIRES

Soap, warm water and a stiff brush will remove normal road dirt from white sidewall tires. Severe curb scrapes may be removed with a fine grade of steel wool. Don't use gasoline, kerosene or similar oil products which might discolor tires.

NOTE: *When purchasing any polish, cleaner or tar and road oil remover for use on your Corvette, make sure that the instructions specifically state that the contents can be used safely on acrylic finishes.*

Cleaning the Inside of Your Corvette



Keep the interior of your Corvette in top shape by cleaning it at regular frequent intervals. Dirt or stains which are allowed to remain may become ground in or set so that they are nearly impossible to remove.

Loose dust and dirt on seats, trim and floor can be removed with a whisk broom or vacuum cleaner. A damp cloth may be used to wipe up any dirt which cannot be so removed. Leather Cleaner may also be used.

Care of Your Corvette Top

FOLDING TOP

Wash your Corvette folding top frequently with neutral type soap suds, lukewarm water and a soft bristle brush and rinse with generous quantities of clear water to remove all traces of soap.

If additional cleaning is required, a mild foaming cleanser can be used. Rinse the entire top with water and apply the cleaner to an area of about two square feet. Scrub with a soft bristle brush adding water sparingly until the cleanser foams to a soapy consistency. Remove the foam with a sponge or cloth. Repeat the procedure on the same area and scrub until clean. Don't let the cleanser run down onto the body finish since this may cause streaking. Clean the entire top in this manner and then rinse the top generously to remove all traces of cleanser.

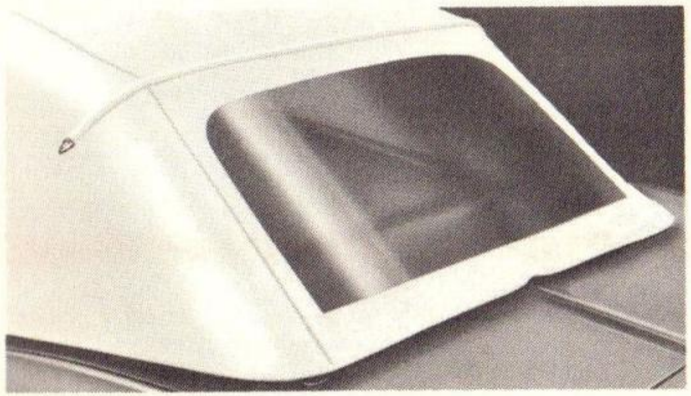
Don't keep the top folded for extended periods of time if it is damp or water soaked. Allow it to dry out in a raised position as soon as possible.

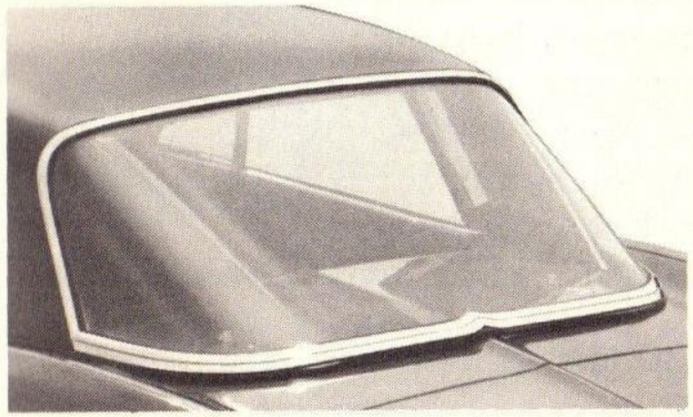
HARD TOP CARE

The optional hard top has the same durable acrylic lacquer finish as the other painted surfaces of your Corvette and may be cleaned, polished and waxed as previously outlined.

The interior headlining may be cleaned in the same manner as the rest of the interior.

When the top is not in use, it should be stored inside in a clean, dry place. If it is to be stored for a long period of time keep it well covered to avoid a build up of dust and dirt on the painted surface or headlining.





PLASTIC WINDOW CARE

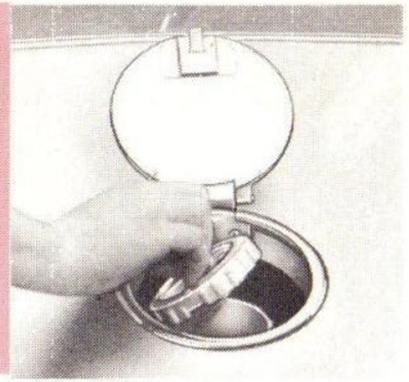
Keep the large plastic rear windows in the Corvette folding top and removable hard top in good condition as follows:

- Remove surface dust with a soft cotton cloth moistened with water and wipe cross-wise of the window.
- With a very dirty window, wash using cold or lukewarm water and a mild neutral soap. Then rinse with clear water and dry with a slightly moistened clean soft cloth.
- Add a final luster to the window by using a plastic window cleaner as directed on the container.
- Do not use alcohol or volatile agents.
- Do not use a scraper to remove snow, ice or frost from the rear window. In an emergency use warm water.

Fuel System Requirements

The high performance V-8 engine in your Corvette is designed to operate efficiently on premium type gasolines. See page 44 for octane requirements. Use of regular grade gasolines in higher performance engines may result in potentially dangerous engine detonation.

In some areas, grades of gasolines may be encountered which result in severe detonation. Should this occur consult an authorized Chevrolet Dealer so that adjustments can be made to eliminate this detonation or reduce it to a safe level. In all cases excessive engine detonation, or knocking, should be avoided in order to prevent possible engine damage.



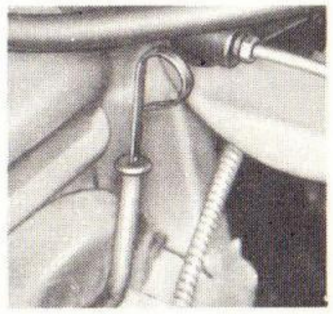
Lift up the Corvette emblem on the rear deck to reach the fuel filler cap. If the cap is lost be sure to replace it with a vented cap.

Oil System Requirements

Lowest Anticipated Temperature	Recommended Single Viscosity Oil	Recommended Multi-Viscosity Oil
32° F.	SAE 20 or 20W	SAE 10W-30
0° F.	SAE 10W	SAE 10W-30
Below 0° F.	SAE 5W	SAE 5W-20

SAE 30 or 10W-30 is recommended when most of the driving is at speeds and/or at temperatures above 90°F. SAE 5W-30 oil may be used when temperatures of 32°F and below are to be expected.

For continued reliability and performance from your Corvette engine, it is recommended that you use an oil which, according to the label on the can, is (1) intended for service MS and (2) passes car makers' tests or meets General Motors Standard GM 4745-M. Follow the accompanying viscosity and change interval recommendations and check the oil level (with engine hot) on the dipstick regularly. Keep oil level between the FULL and ADD marks, by adding oil when level is at or below ADD mark. It is not necessary to keep the level at the FULL mark. DO NOT OVERFILL.

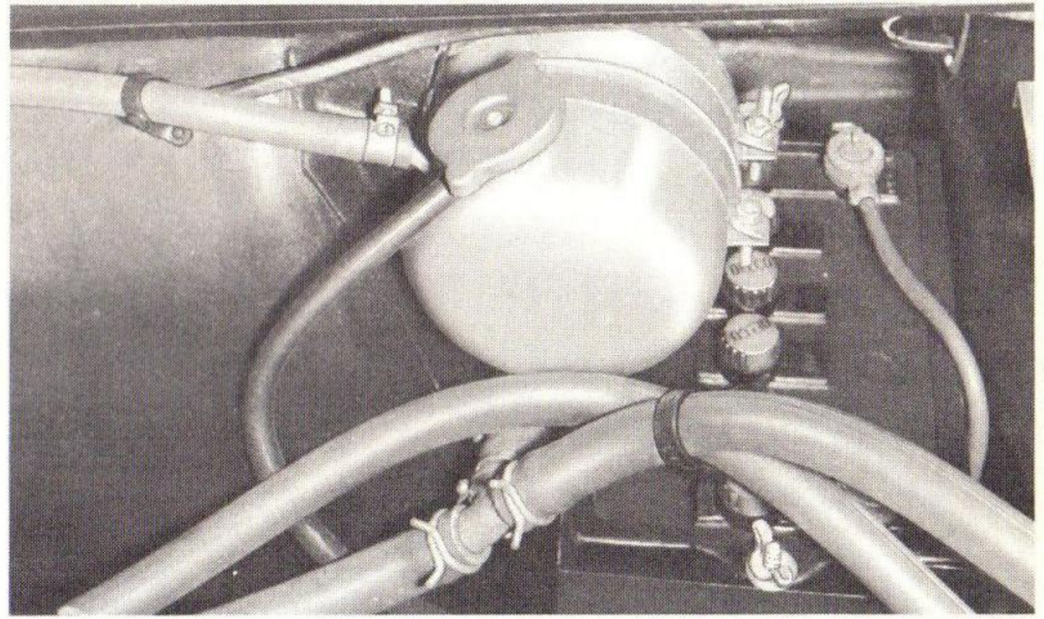


Cooling System Care

Your Corvette engine cooling system is equipped with a 180° thermostat and is designed to operate on permanent type (ethylene glycol) anti-freeze. Non-Permanent type coolants are not recommended since they are not satisfactory for year around use and may not effectively inhibit corrosion of the engine cooling system when used with the quality of water found in some areas.

If the anti-freeze was installed at the factory or if it meets the requirements of General Motors Standard GM 1899-M which contains adequate corrosion protection, it may be left in the cooling system for 24 months or 24,000 miles, whichever occurs first.

Check the coolant level regularly and add water or permanent anti-freeze as required to maintain supply tank half full. Concentration of coolant should be to 0° F. or below to insure sufficient corrosion protection.



Drain and flush cooling system every 24 months. Fill with mixture of permanent type anti-freeze (GM 1899-M or equivalent) and water to provide proper concentration of coolant.

Each fall have your Chevrolet dealer inspect the cooling system to insure that all connections are leakproof and that the anti-freeze content will provide adequate protection in cold weather.

NOTE: *Your Corvette has an aluminum radiator and supply tank. Therefore, when adding anti-freeze, rust inhibitors or cleaners, make certain that they are safe for use with aluminum radiators.*

Check the front of the radiator core occasionally for insects and leaves. Flush them out from the back side of the radiator using a water hose and city water pressure.

RADIATOR CAP

The Corvette cooling system is equipped with a 13 lb. zinc plated steel pressure cap. The cap must be installed tightly. To remove the cap, carefully turn ¼ turn to allow excess system pressure to escape, then turn the cap all the way off. If the engine is overheated, wait for several minutes before removing the radiator cap.

DRAINING AND FILLING THE COOLING SYSTEM

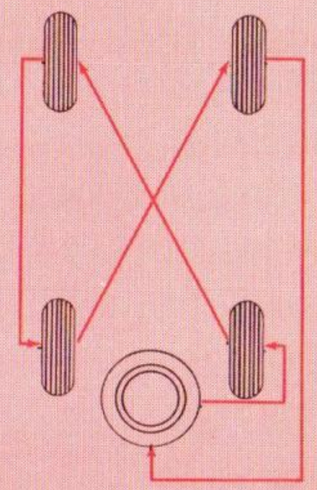
1. Open the drain cock at the bottom of the radiator.
2. Remove the drain plug located on each side of the engine block just above the oil pan and behind the spark plug wire shields.
3. Replace the engine drain plugs and close the radiator drain cock before refilling the radiator.
4. To refill, add coolant until supply tank remains one-half full. Then start engine and add coolant as necessary to maintain normal one-half-full level in supply tank. Recheck when cool and fill to normal level.

Tire Care

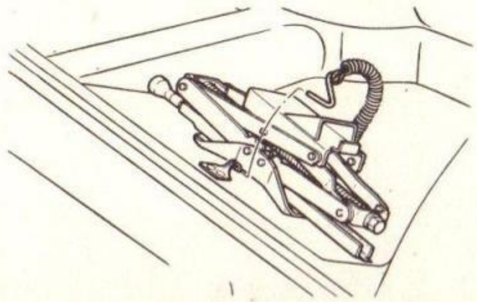
To enjoy maximum service from your tires, keep them inflated to the pressures recommended on page 46.

Regular Corvette tires should not be used for extreme vehicle operation. Special purpose tires are available, if needed, from major tire manufacturers.

Rotate tires as shown every 6000 miles to distribute wear over all five tires. This will help you to obtain maximum service from your tires.

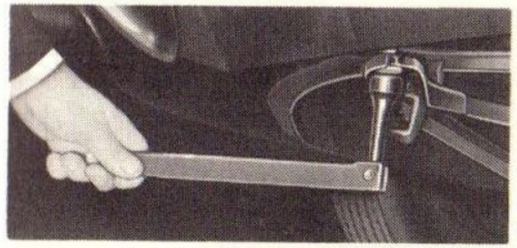


CORVETTE JACK STOWAGE



The Corvette jack is located beneath the removable panel in the rear compartment just behind the driver's seat. A strong spring over the jack and jacking wrench prevents them from bouncing or rattling.

SPARE TIRE STOWAGE





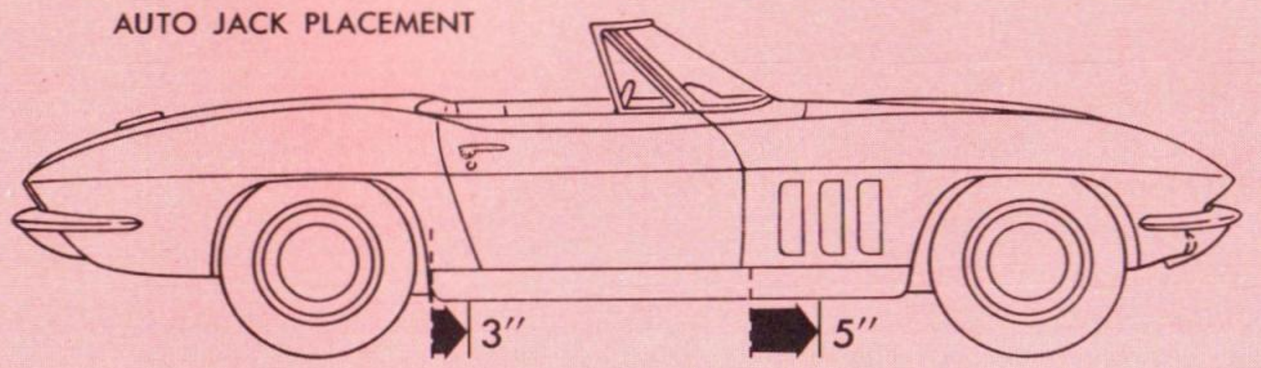


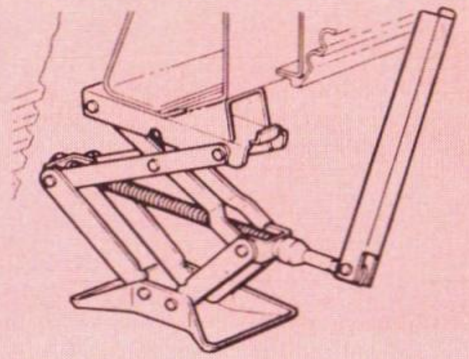


Your Corvette spare tire is located so as to utilize otherwise wasted space but is easily accessible, in the event that you need it. Unlock the spare tire compartment with your ignition key. Then:

- Using the jacking wrench, loosen the spare tire tray bolt until resistance is felt.
- Insert the end of the jacking wrench into the bracket in the spare tire tray. Lift up on the wrench to take the weight off of the bolt and move the bolt to the right and out of its slot in the tray.
- Lower the tray and tire to the ground and remove the jacking wrench.
- Remove the spare tire by pulling it straight back from the car.
- Replace the tire by reversing the above procedure.

AUTO JACK PLACEMENT





CHANGING YOUR CORVETTE'S WHEELS

1. Remove the hub cap by prying off with the finger provided on the end of the jacking wrench.
2. Using the jacking wrench, loosen the wheel nuts about one half turn.
3. Set the parking brake and block diagonally opposite wheel.

   With Powerglide transmission place selector lever in PARK position.

   With manual transmission place the shift lever in:

   FIRST when jacking front wheels.

   REVERSE when jacking back wheels.
4. Position the jack under the car as shown in the illustration above. Be sure that the load rest of the jack contacts the frame as shown.
5. Raise car using the jack until the tire clears the ground.
6. Remove the wheel nuts and wheel, place spare wheel on studs and replace all wheel nuts. Tighten moderately.
7. Lower car until the tire just touches ground, then tighten nuts fully.
8. Lower the car fully, replace hub caps and restow tire, jack and handle.

Quick Take off Wheels

Using the mallet supplied with vehicle knock off locking nut and remove wheel. Left wheel nuts are removed in a counterclockwise direction. Right wheel nuts are removed in a clockwise direction. Install spare wheel indexing adapter nuts to clearance holes in wheel and screw on locking nut. Hand tighten locking nut, then tap with lead hammer until seated. To lock, strike nut eight hard blows with hammer. For further information refer to the instruction card in the glove box.

Recommended Schedule for Periodic Maintenance and Lubrication . . . . . .

The time or mileage intervals on the following pages are intended as a guide for establishing regular maintenance and lubrication periods for your Corvette. Sustained heavy duty or high speed operations or operation under adverse conditions may necessitate more frequent servicing. To determine specific recommendations for conditions under which you use your car, consult your Authorized Chevrolet Dealer.

AIR CONDITIONING

After the first 6,000 miles—have your Chevrolet Dealer check the tightness of all hose clamp connections.

Every 6,000 miles—check sight glass under the hood after the system has been in operation several minutes. Sight glass should be clear but may, during milder weather, show traces of bubbles. Foam or dirt indicate a leak which should be corrected immediately by your Chevrolet Dealer.

Every week—during winter months—run the system for five minutes to insure proper lubrication of the seals and moving parts.

BATTERY

Check the fluid level in each cell of the battery regularly and keep filled with distilled water to the bottom of the split ring in the vent tube of each cell. DO NOT OVERFILL.

Clean the battery terminals and oil the felt washer at each regular oil change.

Check the state of charge regularly, especially in freezing weather when an undercharged battery may freeze and break.

ENGINE OIL

Engine oil should be changed at 60 day or 6,000 mile intervals, whichever occurs first. Under prolonged dusty driving conditions it may be necessary to change the engine oil more often.

For vehicles in heavy duty operation involving continuous start-stop or prolonged idling, engine oil should be changed after 2500-3000 miles of operation.

CRANKCASE VENTILATION

Check at every oil change, more often during dusty driving conditions. If dirty or plugged, clear with suitable drill. Twist drill by hand to remove any sludge or carbon formation.

FAN BELT

Every 6,000 miles inspect fan belt for wear, fraying, cracking and tension. Belt should be retightened only when it deflects more than ½" with moderate thumb pressure applied midway between pulleys.

AIR CLEANER

Every 12,000 miles (more often under dusty or other adverse driving conditions) remove the polyurethane element from its support screen and clean in suitable solvent such as Kerosene. Squeeze out all solvent, then soak in engine oil and squeeze out. Remove excess oil by then squeezing the element in a clean dry cloth.

FLAME ARRESTOR

Inspect and clean the flame arrestor every 12,000 miles with kerosene or a suitable solvent and dry with compressed air.

OIL FILTER

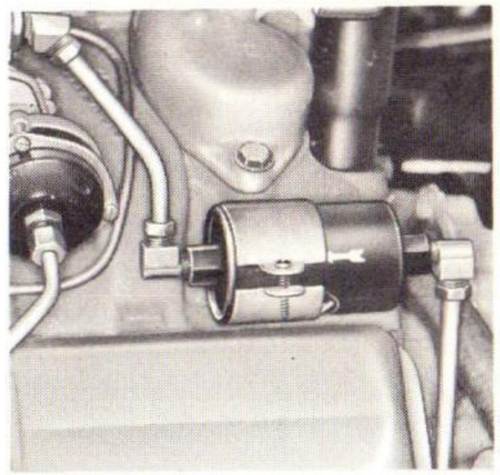
The oil filter should be changed at 6,000 miles or 6 month intervals, whichever occurs first. During prolonged dusty driving conditions the filter should be changed more often.

For vehicles in heavy duty operation involving continuous stop-start or prolonged idling, the filter should be changed after 5000-6000 miles of operation.

DISTRIBUTOR

Change cam lubricator end for end at 12,000 mile intervals—Replace at 24,000 mile intervals.

FUEL FILTER



In-Line Filter—Replace the entire filter every 12,000 miles. To replace: Remove inlet fitting and loosen filter bracket, then turn entire filter to remove. Observe the direction of fuel flow when installing the new filter.

Carburetor Type Filter—This filter is used on the 250 hp engine only. Remove the fuel line and inlet fitting at the carburetor to replace the filter only if carburetor flooding occurs. Do not attempt to clean the filter.

BRAKES

Master Cylinder – Every 6,000 miles – Check fluid level and maintain ¼" below filler opening with GM Hydraulic Brake Fluid, Supreme No. 11.

NOTE: *Power brake models use a dual cylinder unit. Be sure to check both reservoirs.*

Lining—Inspect brake linings periodically. Frequency of inspection will depend on traffic, terrain and the driving habits of the driver.

Parking Brake Cables and Linkage – Every 6,000 miles–Apply lubricant specified in Note 1, page 39.

STEERING GEAR

Every 36,000 miles–Check lubricant level as follows:

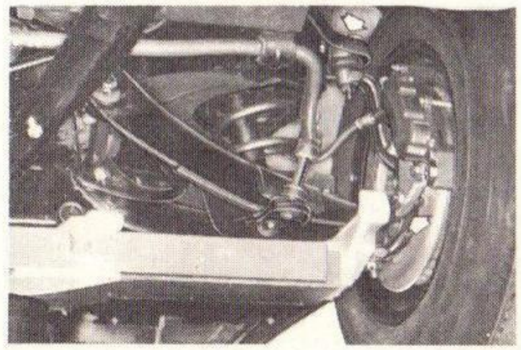
1. Remove the forward and the outboard cover attaching screws.
2. Inject lubricant specified in Note 1, page 39 into the forward cover attaching screw hole until lubricant begins to come out of the outboard screw hole.
3. Replace both screws.

POWER STEERING PUMP

Check fluid level in pump reservoir every 6,000 miles or 6 months. Fill as required with Automatic Transmission fluid "Type A" with AQ-ATF-A mark. Oil should be at operating temperature and wheels in straight ahead position when checking or filling operation is performed to ensure against overfilling.

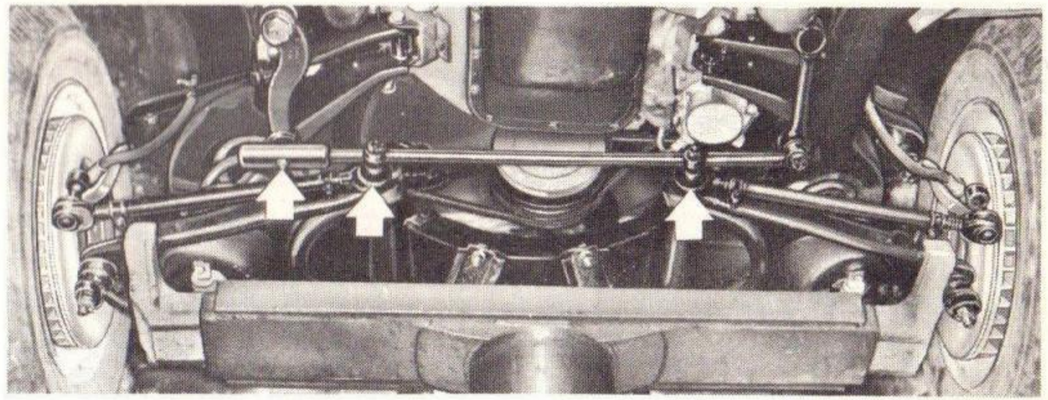
FRONT SUSPENSION

Every 6,000 miles or 6 months, lubricate 4 fittings (2 fittings on each side), with lubricant specified in Note 1, page 39.

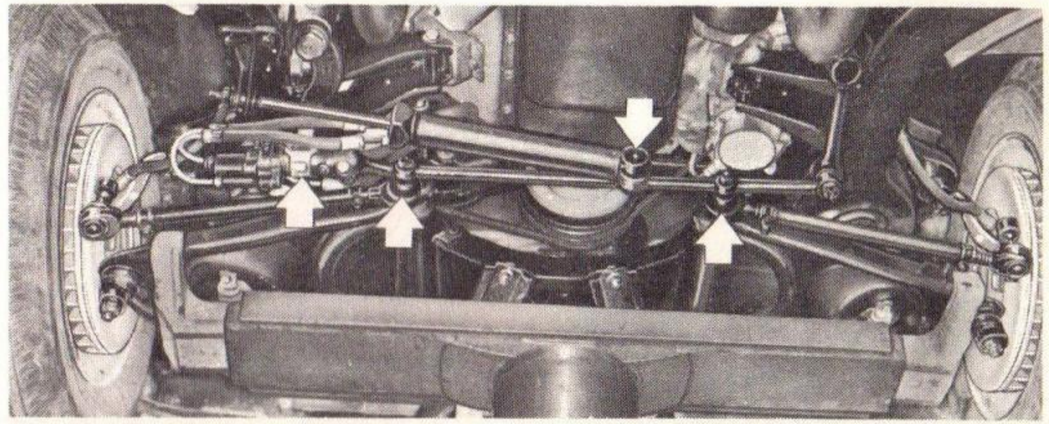


STEERING LINKAGE

Every 6,000 miles or 6 months–lubricate fittings shown below with lubricant specified in Note 1, page 39.



Manual–Fitting at each tie rod end and at relay rod (5 fittings).



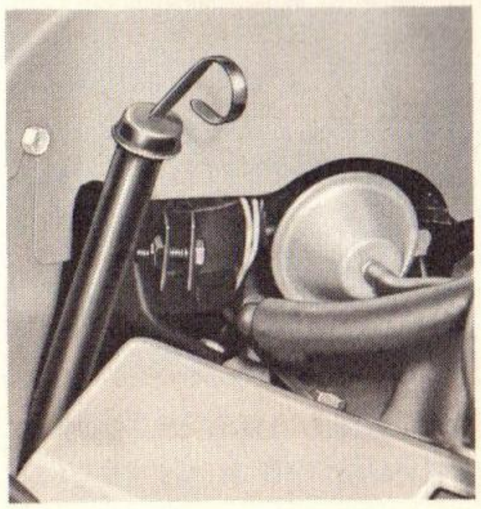
Power–Fitting at each tie rod end and at power steering valve adapter and cylinder (6 fittings).

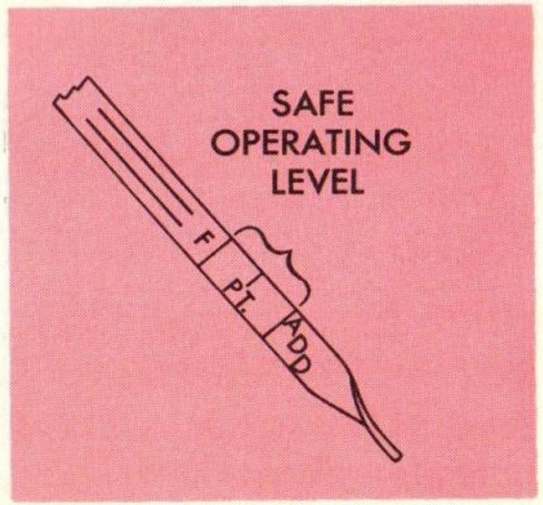
TRANSMISSION

3-Speed and 4-Speed—Every 6,000 miles—Check at operating temperature and fill as necessary to level of filler plug hole with lubricant specified in Note 2, page 39.

Powerglide—Every 6,000 miles—Check fluid level on dipstick with engine idling, selector lever in neutral "N" position, parking brake set and transmission at operating temperature. As required, Add Automatic Transmission fluid "Type A" bearing the mark AQ-ATF, followed by a number and suffix letter "A" to "full" mark on dipstick. DO NOT OVER-FILL.

Lubricate shift linkage with lubricant specified in Note 1, page 39.





Every 12,000 miles (more frequently, depending on severity of service, if vehicle is used to pull trailers, carry full loads during high ambient temperatures, operate in mountainous terrain or operate under other severe conditions)—Remove fluid from the transmission sump and add two (2) quarts of fresh fluid. Operate transmission through all ranges and check fluid level as described above.

CLUTCH

Every 6000 miles—check clutch for free play at pedal. Reset as required. For regular usage set at 1″ to 1½″. For heavy duty usage, set at 1½″ to 2″. Lack of free play will cause clutch slippage.

WHEEL BEARINGS

Every 36,000 miles—Clean and repack front bearings with a high melting point wheel bearing lubricant.

REAR AXLE

Every 6,000 miles—Check and keep filled to level of filler plug hole with lubricant specified in Note 2, page 39.

With Positraction, use only the special Positraction Rear Axle Lubricant available from your Chevrolet Dealer.

CLUTCH CROSS SHAFT

Periodic lubrication of the clutch cross-shaft is not required. At 36,000 miles or sooner, if necessary,

remove plug, install lubrication fitting and lubricate with lubricant specified in NOTE 1 Page 39.

ENGINE TUNE-UP

Every 12,000 miles have engine tune-up operations performed for maximum engine performance.

HEADLAMP REPLACEMENT

Replace individual headlamps as follows:

Open headlamp doors and remove cover panel, disengage spring from retaining ring, then remove two retaining ring attaching screws per lamp indicated below. *Don't disturb the large head adjusting screws.* Pull lamp forward and unplug the electrical connector. Plug in the new lamp and reverse the removal procedure to install.

HEADLAMP AIMING

Improperly aimed headlamps can be dangerous. Periodic headlamp checks for proper aiming and adjustment are strongly recommended. Your Chevrolet Dealer is well equipped to provide such service.

BODY LUBRICATION POINTS

Lubricate the following items when possible.

Hood Latch Mechanism and Hinges—Apply light engine oil to pivot points. Don't oil lock pins or catch plates.

Rear Compartment Lid Release and Hinges—Apply light engine oil.

Side Door Hinge Pins—Apply light engine oil.

Door Lock Rotor and Striker Plate—Apply light engine oil or stainless stick lubricant.

Lock Cylinders—Lubricate with powdered graphite.

Window Regulators and Controls and Door Lock Remote Link—Apply light engine oil.

Gas Tank Filler Cap Hinge—Apply light engine oil.

Weatherstrips and Rubber Bumpers—Coat lightly with a rubber lubricant such as Chevrolet Spray-a-Squeak.

NOTE 1: Lubricate with water resistant EP chassis lubricant.

NOTE 2: Lubricate with SAE 80 or SAE 80-90 Multi-purpose Gear Lubricant meeting requirements of U. S. Ordnance Spec. MIL-L-2105B.

MINOR TROUBLE SHOOTING GUIDE

If your car is performing in the following manner: / Check here in sequence shown for possible causes.	Check Fuel Gauge	Flooded Engine	Poor Fuel Supply	Idle Adjustment	Automatic Choke*	Oil Level and Pressure	Condition of Air Cleaner	Automatic Transmission Selector Lever	Check Spark	Battery and Connections	Generator and Voltage Regulator Connections	Coil and Distributor Leads	Starter Connections	Radiator Water Level	Air Flow Through Radiator Restricted	Fan Belt Condition and Tension Adjustment	Cooling System Thermostat	Thorough Check and Tune-up Suggested*
See Page Number	**15**	**6**	**41**	**42**	**42**	**14 and 30**	**36**	**7**	**43**	**35 and 42**	**42**	**42**	**42**	**31 and 32**	**31**	**36**	**32**	
CAR WILL NOT START:																		
Engine Will Turn Over	1	4	3						5			2						6
Engine Will Not Turn Over								1		2			3					4
CAR WILL START—BUT:																		
Only After Repeated Tries																		1
Stalls in a Few Seconds	1		2	3			4					5						
Stalls When HOT				1	2		3											4
Idles Roughly				1	3		2											4
Engine Overheats														1	2	3	4	
No Oil Pressure Indicated						1												
Ammeter Points to "Zero" or Negative Side										3	2					1		

*See Your Authorized Chevrolet Dealer

MINOR TROUBLE SHOOTING PROCEDURES

The chart on the previous page, and the information on the pages which follow, contains information designed to aid the average driver to discover, and possibly correct, conditions resulting in minor mechanical difficulties in his car. The chart, designed to point out possible solutions to several of the most common automotive malfunctions and point out a logical checking sequence, will lead step by step to the most likely causes and corrective procedures. If, after making the checks and adjustments suggested, the source of the trouble has not been found and corrected, it is strongly recommended that an Authorized Chevrolet Dealer inspect the vehicle and make whatever repairs or adjustments are necessary.

FUEL SYSTEM AND ENGINE

If the ignition switch will cause the engine to "turn over" or "crank" but the car will not start, check Steps A through D below.

NOTE: *If Continual "flooding" of the carburetor is evidenced by a carburetor wet with fuel or black exhaust smoke, perform the operation suggested in paragraph D only.*

(A) The first and most obvious, and one of the most frequently overlooked, items to check when you have difficulty in starting your car is the amount of fuel in the tank. Make it a habit to check the FUEL GAUGE regularly and most especially at a time when the engine will "turn over" but will not start.

(B) If the fuel tank is not empty, you may check further to see whether the fuel is reaching the carburetor. Disconnect the fuel line at the carburetor. Place a jar or cup under the open line and briefly "crank" the engine by means of the starter. If fuel spurts from the fitting, you may assume that the FUEL LINES are clear and the FUEL PUMP is operating properly. If no fuel leaves the line, either the fuel lines, fuel pump or the in-line filter are at fault. See your Authorized Chevrolet Dealer.

(C) Before reconnecting the fuel line to the carburetor, remove the FUEL FILTER from the carburetor inlet and check its condition. If it appears to be clean, replace it and reconnect the fuel line. If the filter appears to be plugged, clean it as well as possible by scraping out the foreign material and cleaning in a solvent. Then reinstall the filter with a new one as soon as possible.

(D) If the fuel seems to be reaching the carburetor properly, the problem may be: an EMPTY CARBURETOR BOWL caused by a "stuck shut" carburetor; a FLOODED CARBURETOR caused by a "stuck open" condition and evidenced by gasoline flowing down the outside of the carburetor; or a stuck CHOKE valve. Remove the air cleaner from the carburetor. Check that the choke valve moves freely and is not stuck. (Don't mistake normal spring tension for a stuck valve.) Tap the side of the carburetor sharply several times with a light tool such as a screwdriver handle or pliers. Replace the air cleaner and attempt to start the engine in the normal manner.

(E) If the car will start but stalls when hot or has a rough idle, you can suspect a faulty IDLE ADJUSTMENT, a malfunctioning AUTOMATIC CHOKE or an extremely dirty and blocked AIR CLEANER ELEMENT. Clean your air cleaner element if necessary.
If the above Fuel System checks and the checks suggested under the Electrical System following do not correct the malfunction, it is recommended that you turn to your Authorized Chevrolet Dealer for further checks, adjustments or repairs.

ELECTRICAL SYSTEM

If, when the ignition key is turned to "Start," the engine will not turn over, you have good reason to suspect electrical trouble.

(F) When there is no response at all to attempts to start the car, check the obvious—your AUTOMATIC TRANSMISSION SELECTOR LEVER must be in Neutral or Park position before the engine can be started. Turning the IGNITION SWITCH rapidly back and forth several times will sometimes correct a poor internal switch contact.

(G) The BATTERY may be discharged. If so, lights will be dim and the horn will have a poor tone if it will blow at all. Usually a garage recharge will be necessary to return the battery to operation. Occasionally, however, a push start and long drive will recharge the battery.

NOTE: *If the battery is determined to be dead, and for no apparent reason, have your Authorized Chevrolet Dealer check the battery, the GENERATOR and the VOLTAGE REGULATOR. GENERATOR trouble should already have been indicated by the ammeter. Never remove Delcotron "BAT" lead without first disconnecting battery ground cable.*

POOR BATTERY CONNECTIONS may be suspected if the car has operated properly a short time before and now not even the horn will operate. Check both ends of both battery cables. If the connections are corroded, a car may sometimes be restored to operation by removing all cable ends, scraping all contacting surfaces clean with a pen knife, and reassembling. If the cables are broken, they must be replaced. The power supply should now be restored unless the battery is dead.

(H) If, however, the lights and horn work properly but the starter will still not turn over, check the STARTER connections. A "click" from the starter solenoid indicates that the wiring to the starter is properly installed. If the wiring seems to be clean and tightly installed, the trouble is probably in the starter itself and should be referred to your Authorized Chevrolet Dealer.

When the engine will "turn over" but will not start, the following items may be checked along with the Fuel System Checks listed previously.

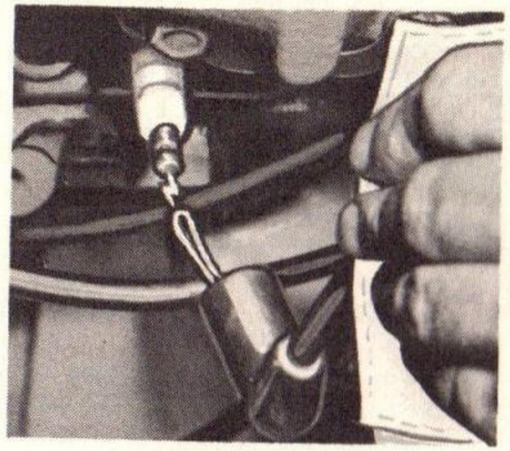
(I) With a clean dry cloth wipe the ceramic portions of the spark plugs dry. In particularly damp or rainy weather dampness may be the cause of not starting, especially when the engine is cold.

(J) Check the cables at the top of the distributor and coil as well as each spark plug cable for tightness.

(K) If the car will still not start, check for spark at the spark plugs in the following manner:

Pull one of the spark plug wires off its spark plug. Insert a short piece of bare wire (such as a bobby pin) between the

rubber cup at the end of the spark plug wire and the tubular metal connector inside of it. *If the spark plug wire is wet or oily, wipe it dry. Wrap a dry handkerchief or facial tissue, folded several thicknesses, around the wire at least three inches back from the end and grasp the wire at this point.* Hold the bare wire about ¼ inch from the bare tip of the spark plug from which you removed the wire or from any part of the engine. When the engine is "turned over" a spark should jump across the ¼ inch space, indicating ample current supply. If no spark jumps, the difficulty is probably caused by a defective ignition part and should be corrected by your Authorized Chevrolet Dealer.



Checking Spark

COOLING SYSTEM

When the car will run but evidences serious overheating on the temperature gauge in the instrument panel, there are several items which may be checked.

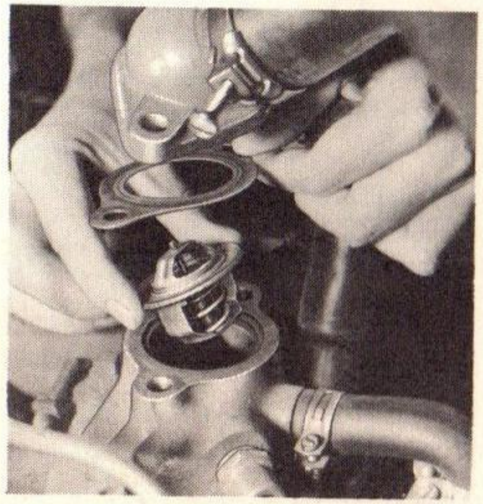
(L) Engine overheating will occur when the OIL LEVEL falls dangerously low. Check the oil level as a matter of course.

(M) Low WATER LEVEL will, of course, cause engine overheating. Determine the cause of the low water level and have it corrected if necessary.

(N) Check the RADIATOR CORE. Clean it if it is plugged with bugs, leaves or other foreign material.

(O) Condition of the FAN BELT is very important, not only for engine cooling but also for proper generator operation. Check the condition of the belt. Replace it if it is worn or frayed. Loosen the generator bolts and move the generator toward the engine to remove and replace the belt. Tighten the belt, whether new or old, by loosening the generator bolts, prying with a bar on the generator until the belt is tensioned properly, then retighten the generator bolts. Proper belt tension is such that, when pressed hard at a point midway between the generator and fan pulleys, the belt will deflect about ½ inch.

(P) Another cause of engine overheating may be an inoperative COOLING SYSTEM THERMOSTAT. If the thermostat should fail in the closed position, it will not permit water to circulate through the system. In such an emergency the thermostat may be removed but should be replaced with a properly functioning thermostat as soon as possible.



Thermostat Installation

TECHNICAL DATA AND SPECIFICATIONS

Serial and Unit Numbers—Stamped on identification plate located on instrument panel brace under glove box.

ENGINE IDENTIFICATION – Stamped on right front engine boss next to water pump.

Engine Name	Cyls.	Bore X Stroke	Comp. Ratio	Disp. (Cu. In.)	Fuel Induction	Exhaust	Torque	Horsepower	Lifters	Trans. *	Octane Req'ment
Corvette	V-8	4″ x 3¼″	10.5	327	4 Bbl.	Dual	350 @ 2800 RPM	250 @ 4400 RPM	Hyd.	1-2-4	99-101
Corvette	V-8	4″ x 3¼″	10.5	327	A.F.B. 4 Bbl.	Dual	360 @ 3200 RPM	300 @ 5000 RPM	Hyd.	1-2-4	99-101
Corvette	V-8	4″ x 3¼″	11.1	327	Holley 4 Bbl.	Dual	360 @ 3600 RPM	350 @ 5800 RPM	Hyd.	1-3	100-102
Corvette	V-8	4″ x 3¼″	11.1	327	Holley 4 Bbl.	Dual	350 @ 4000 RPM	365 @ 6200 RPM	Mech.	1-3	100-102
Corvette	V-8	4″ x 3¼″	11.1	327	Fuel Injection	Dual	350 @ 44-4800 RPM	375 @ 6200 RPM	Mech.	1-3	100-102

* 1. 3-speed 2. 4-speed regular 3. 4-speed close ratio 4. Powerglide

CHASSIS DIMENSIONS

Wheel base ..... 98″
Length (Overall) ..... 175.3″
Width (Overall) ..... 69.6″

Height
- Loaded—Folding Top Up ..... 49.8″
- Loaded—Hard Top ..... 49.3″
- Loaded—Sport Coupe ..... 49.8″

Tread
- Front ..... 56.3″
- Rear ..... 57.0″

ENGINES

Firing Order 1-8-4-3-6-5-7-2
AMA Horsepower—51.2

Distributor: (Point type)
Dwell ..... 28°—32°
Point Gap ..... .016″ used—.019″ new
Breaker Arm Tension ..... 19-23 oz.

Spark Plugs
AC 45 or AC 46—City Driving Only
AC44 (Orig. Equip.) —Town and Country Driving
AC C43 COM—Heavy duty and high output
AC C42-1 COM—Extended and extreme high output
Plug Gap ..... .035″

Engine Timing and Idle Speeds:

250 H.P. Engine	8° BTDC @ 500* rpm
300 H.P. Engine	8° BTDC @ 500* rpm
350 H.P. Engine	10° BTDC @ 650 rpm
365 H.P. Engine	12° BTDC @ 800 rpm
375 H.P. Engine	12° BTDC @ 850 rpm

*475 rpm for Powerglide

NOTE: *The above settings must be made with the vacuum line disconnected and plugged.*

Valve Specifications:

SOLID LIFTERS:

Intake	.030" Clearance
Exhaust	.030" Clearance

HYDRAULIC LIFTERS:

With engine idling, back off adjusting screw until tappet begins to click lightly; then turn screw down one full turn at both intake and exhaust.

FUEL SYSTEMS:

250 H.P. Engine—Carter WCFB 4-Barrel Downdraft Carburetor with Integral Automatic Choke.

300 H.P. Engine—Carter A.F.B. 4-Barrel Downdraft carburetor with Integral Automatic Choke.

350 and 365 H. P. Engine—Holley special 4-Barrel Downdraft Carburetor with Integral Automatic Choke.

375 H.P. Engine—Rochester Continuous Flow Fuel Injection Unit.

TRANSMISSIONS

Three Speed

RATIOS:

First Speed Forward	2.58:1
Second Speed Forward	1.48:1
Third Speed Forward	1:1
Reverse	2.58:1

Four Speed

RATIOS:	Regular	Close Ratio
First Speed Forward	2.56:1	2.2:1
Second Speed Forward	1.91:1	1.64:1
Third Speed Forward	1.48:1	1.28:1
Fourth Speed Forward	1:1	1:1
Reverse	2.64:1	2.27:1

Powerglide

RATIOS:

Maximum Torque Converter	2.10:1
Maximum Overall	3.70:1
Low	3.70 to 1.76:1
Reverse	3.70 to 1.76:1

REAR AXLE

RATIOS:

Three speed	3.36:1
Four speed (Regular)	3.36:1
(Optional)	3.08:1

Four speed (Close Ratio)	3.70:1
Powerglide	3.36:1
Positraction (Available with all Transmissions)	3.36:1
(Available with 4-speed Transmissions only)	3.08:1
(Available with 4-speed Close Ratio Transmission only)	3.55:1, 3.70:1, 4.11:1, 4.56:1.

BATTERY

All models.....12 volt, 66 plate, 61 amp/hr rating.

STEERING

Steering Gear Ratio	16.0:1
Overall Ratio	20.2:1
(with Fast Steering Adjustment)	17.6:1

WHEEL ALIGNMENT

Front	Caster*	Pos. $1\frac{1}{2}° \pm \frac{1}{2}°$
	Camber*	Pos. $\frac{3}{4}° \pm \frac{1}{2}°$
	Toe In (Total)	$\frac{7}{32}''$ to $\frac{11}{32}''$

* (Must be within $\frac{1}{2}°$ of opposite side.)

Rear	Camber	Neg. $\frac{1}{3}° \pm \frac{1}{2}°$
	Toe In (Per Wheel**)	$0''$ to $\frac{1}{16}''$

**Each wheel must be adjusted independently.

TIRES

Size ..... 7.75 (6.70) x 15—4 ply rating—tubeless

Pressures	Cold*	Hot**
Front	22	27
Rear	24	29

*After car has been parked for 3 hours or more or driven less than one mile.

**Pressures can rise as much as 7 pounds above cold figures, depending on loads carried, length of driving and car speed prior to check.

CAPACITIES

Fuel Tank—Std.	20 gallons
Crankcase refill	
250, 300 and 350 h.p. engines	
Without filter	4 quarts
With filter	5 quarts
375 h.p. engines	
Without filter	5 quarts
With filter	6 quarts
Cooling System	
Without heater	18 quarts
With heater	19 quarts
Transmissions	
Three speed	2 pints
Four speed	$2\frac{1}{2}$ pints
Powerglide	9 quarts
Rear Axle	3.7 pints

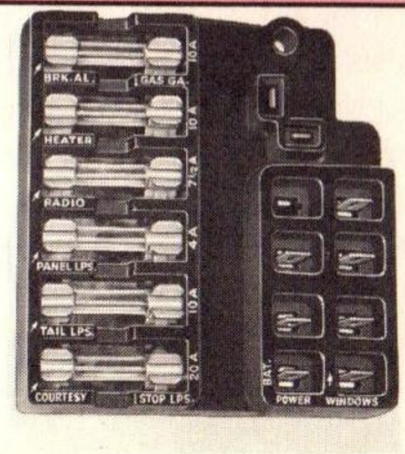
LAMP BULB DATA

	Candle Power	Number
Headlamp—Outer—high	37½ (Watts)	5¾" Sealed Beam
Outer—low	55 (Watts)	
Inner—high	37½ (Watts)	
Headlamp Beam Indicator	1	1445
Parking and Directional Signal	4-32	1157
Tail and Stop-Directional Signal	4-32	1157
Ignition Switch	1	1445
License Plate Lamp	4	67
Back-up Lamp	32	1156
Instrument Panel	3	1816
Electric Clock	3	1816
Courtesy or Dome Lamp	6	90
Radio Dial	3	1816
Cigarette Lighter	1	1445
Parking Brake Alarm Lamp	2	257
Headlamp Motor Warning	2	257
Directional Signal Indicators	3	1816
Glove Box Lamp	3	1893

FUSE AND CIRCUIT BREAKER DATA

Circuit	Ampere Rating	Circuit Breaker or Fuse
Headlamp, Headlamp Beam Indicator, and Parking Light.	15 amp.	Circuit Breaker
Headlamp Door Motors	40 amp.	Circuit Breaker
Power Window Motors	40 amp.	Circuit Breaker
Parking Brake Alarm & Gas Gauge	3AG/AGC 10 amp.	Fuse
Heater	3AG/AGC 10 amp.	Fuse
Radio	3AG/AGC 2.5 amp.	Fuse
Instrument, Radio and Clock Lights	3AG/AGC 4 amp.	Fuse
Tail and Back-up Lamps	3AG/AGC 10 amp.	Fuse
Stop, License and Courtesy or Dome Lamp	SAE 20 amp.	Fuse
Air Conditioning	3AG/AGC 30 amp.	Fuse
High Blower Speed	3AG/AGC 30 amp.	Fuse (In Line)

Fuse Panel—All fuses except the air conditioning blower in-line fuse are in the fuse panel located on the fire wall just above the headlamp beam switch.



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SERVICE LITERATURE *for* CHEVROLET CARS and TRUCKS

The following Chevrolet publications covering the operation and servicing of Chevrolet Vehicles can be purchased by filling out the order form and mailing it with check or money-order payable to Helm Inc.

1965 Shop Manuals

ST-56 **Service Manual** **Price each $4.25**
Applies to Chevrolet, Chevy II and Chevelle. Includes on-the-car adjustments, Maintenance and Overhaul of minor assembles and specifications. (e.g. windshield washers, distributor, etc. Will handle most owner's requirements.)

ST-57 **Overhaul Manual** **Price each $3.50**
Applies to Chevrolet, Chevy II and Chevelle. Includes basic off-the-car overhaul of major assemblies (e.g. engine, transmission, axle, etc.)

ST-58 **Body Service Manual** **Price each $3.50**
Includes all information for Chevrolet, Chevelle, Chevy II and Corvair car bodies.

Available Manuals

	FORM NO.	YEAR	PRICE EA.
CHEVROLET SHOP MANUAL	RS-34	(1949-54)	$4.00
	RS-57	(1955)	4.00
	RS-58	(1956*)	3.00
	RS-60	(1957)	4.00
	RS-62	(1958)	4.00
	S & M-15	(1959-60*)	3.75
	S & M-32	(1961)	4.75
	ST-6	(1962*)	3.00
	ST-18	(1963**)	3.75
	ST-30	(1964 supplement)	3.50
	H-10	(1964 w/'61 for complete cover.)	6.00
CHEVY II SHOP MANUAL	ST-7	(1962)	$4.50
	ST-19	(1963*)	2.25
	ST-31	(1964 supplement)	2.00
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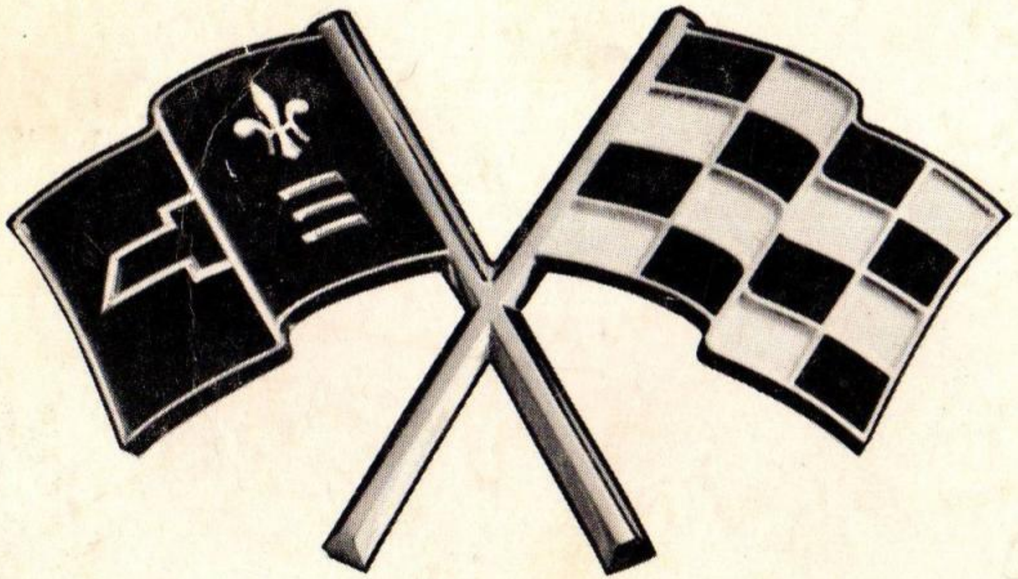
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