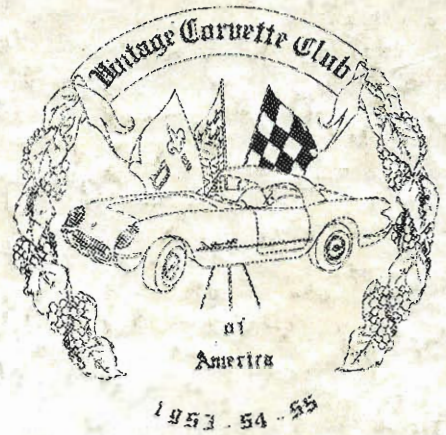
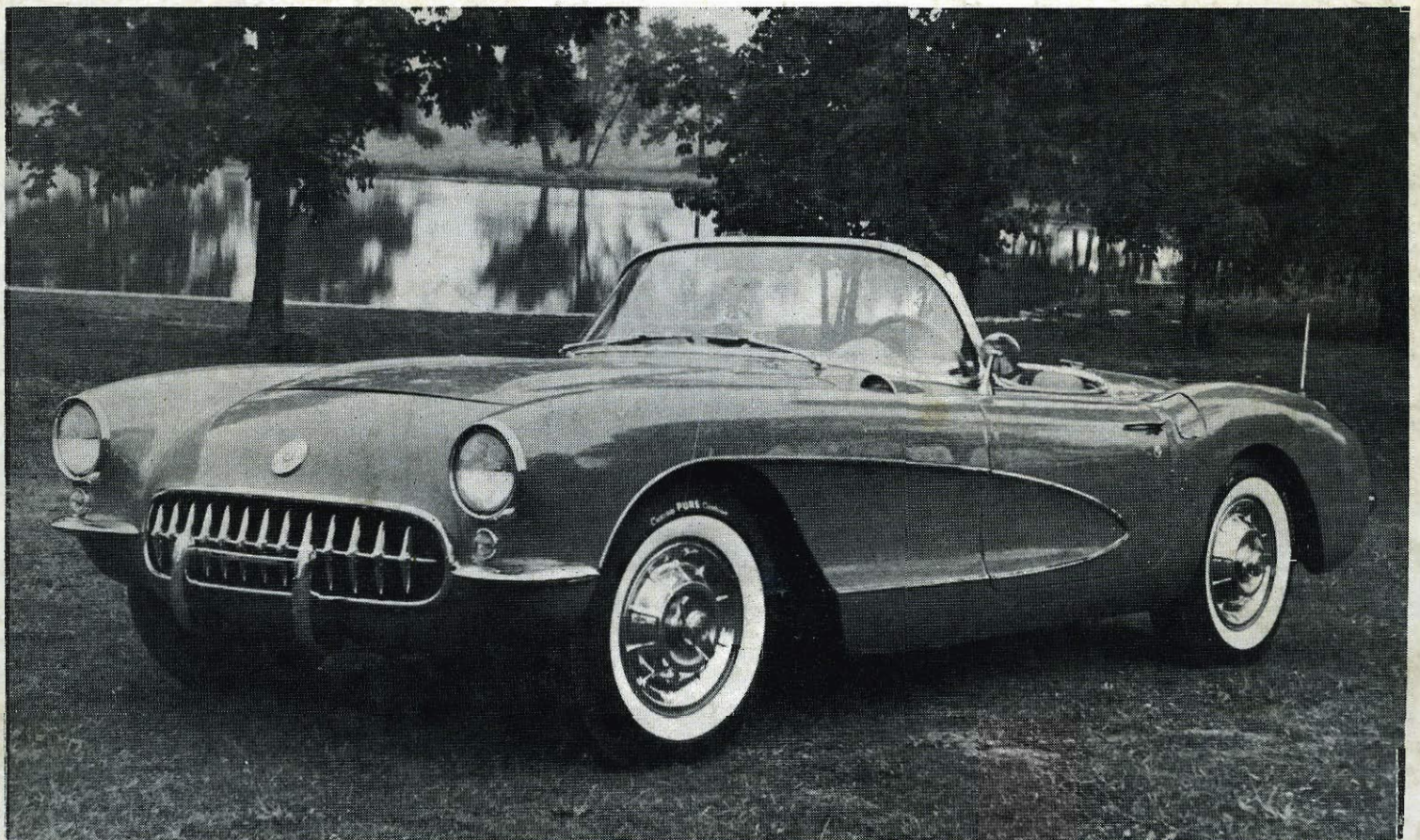


# Blue Flame Special



VOLUME 3 NO. 2  
JUNE - AUG. 1971



Vintage Corvette Club of America



# Vintage Corvette Club of America

2359 W. Adams  
Fresno, Calif. 93706

Blue Flame Special Newsletter is printed quarterly by the Vintage Corvette Club of America, a non-profit organization open to all Corvette enthusiasts. Membership fees as follows: Regular membership (ownership of a 1953-55 Corvette) - \$10.00 per year: Associate membership (ownership of a 1956 through present Corvette or anyone interested in Vintage Corvettes) - \$10.00 per year. Membership fees: Third Class Mailing, \$10.00; First Class, \$12.00 and Air Mail, \$14.00.

## NOTICE

Permission to reproduce all or any part of this newsletter must be obtained in writing from the Vintage Corvette Club of America. Also, use of the names on the roster for any purposes other than official club business is strictly prohibited.

All correspondence regarding the Vintage Corvette Club of America should be mailed to 2359 W. Adams, Fresno, California, 93706.

Editors: Ed and Jean Thiebaud  
Photography: Ed Thiebaud, James & Pat Lindamood & members  
Articles: Ed and Jean Thiebaud & Members  
Preparation: Ed and Jean Thiebaud



We have a newsletter name: "Blue Flame Special," submitted by our Secretary, Jean Thiebaud. The name Blue Flame Special was written in white letters on the blue-green six-cylinder engine valve cover on the early Corvette models.

--Ed Thiebaud



Our cover photo this issue features a 1956 Corvette - E56S001461 owned by James and Pat Lindamood of 2052 25th Street Cuyahoga Falls, Ohio 44223. They purchased the car in 1964 from an elderly gentleman in Atlanta, Georgia. It is Venitian Red, 40,000 original miles with the 225 H.P. (2-4 barrel) carter carburetors and 265 cubic inch engine, powerglide transmission. Color is Venitian Red exterior with the Venitian Red interior. Pat recently wrote with a sad tone that she and Jim had recently sold the car. Also included in this newsletter will be some additional photos of their car for those members who wish to get a closer look at an all original 56.

## Editor's Notes

### REGIONALIZATION

Thanks to all of you members who have responded to our Regionalization call. As we mentioned in Volume 2 No. 4, we are going to give it a try and see what happens, win, lose or draw.

I have received many letters of inquiry on what will be expected of a regional representative and what are their responsibilities. Let me say in answer to that question: You play it by the "seat of your pants" and do the best you can for your region. We are not going to sit here in Fresno and try to draw up a 50 page rule book on dos and don'ts, with by-laws and constitutions by the pages because we all get enough of that rule book type thing in our everyday lives.

There are a few primary objectives a regional representative should realize are his responsibility: (1) to coordinate and put on a Vintage Corvette Concours d'Elegance annually at the time of year when his region has the best weather permitting. Headquarters will supply the reps upon request with concours rules, classes and waivers. Probably the place we need more emphasis than anything else is that all entrants, participants, judges and spectators must pass thru or by a control table or desk and sign a waiver relieving the Vintage Corvette Club of America and the local region of all liabilities during any concours held. Main reason for this is that we are not large enough to worry about insurance to cover all events and must be protected in this manner. If your next question is, how could anyone get hurt in a concours? Answer: Someone leaves an emergency brake off and a car accidently rolls into someone causing injury, etc.

Between Volume 3, No. 2 and Volume 3, No. 3 we at headquarters will work up a set of concours rules based on judging on a points system and classes. My ideas on classes is having a stock class 1953-55 Corvettes a custom class 1953-55, for those who have customized their cars, and a street stock class and trailered stock class for those who trailer to the meets. Street stock is for those who drive to the meet. Also for you Associate Members (without whom we would not have much of a club, size wise), we will have classes for solid axle Corvettes 1956-62 and also for Stingrays 1963 thru present day Corvettes. We don't want to get too bogged down in too many specific classes to start with, but classes can be added as requests are made. Send in your ideas.

Some of our Regional Reps were selected because they showed an interest in writing and requesting the job, and a few were selected because of their vast knowledge in regards to Vintage Corvettes, not only in just owning one but also in super-fine full restoration jobs they have done themselves. Anyone who is listed as a Rep or Chapter head may resign by letter to Headquarters if for some reason they feel they no longer want the job.

Another suggestion is that the Reps and Chapter heads keep a fairly current card file or roster on who is in their Region or Chapter. In regards to meetings, this is up to you Reps. If you want a monthly, bi-monthly, quarterly, semi-annual or annual meeting just put out the word on post cards etc. Keep in touch.

Regions and Chapters have been established as follows: Refer to Volume 2 No. 4 for further breakdown.

#### SOUTH CENTRAL REGION

REGIONAL REPRESENTATIVE: Mike Farley  
P.O. Box 4375  
Waco, Texas 76705  
E54S004115 - 253

LONGVIEW CHAPTER: William B. Lancaster  
818 N. Charlotte Dr.  
Longview, Texas 75601  
E54S002300 - 4

#### NORTH CENTRAL REGION

REGIONAL REPRESENTATIVE: Ben E. Malan  
312 Godfrey  
South Lyon, Mich. 48178  
E55S001144 - 6

#### CENTRAL REGION

REGIONAL REPRESENTATIVE: Tim A. Novak  
Spillville, Iowa 52168  
E54S002206 - 61

#### SOUTHEAST REGION

REGIONAL REPRESENTATIVE: Charley & Judy Myers  
700 So. State  
Jackson, Miss. 39201  
E53F001060 - 310

#### CANADIAN REGION

REGIONAL REPRESENTATIVE: Eric M. Daly  
51 Ternhill Cres.  
Don Mills, Ontario, Canada  
E54S003988 - 55

## Editor's Notes

### NORTHWEST REGION

REGIONAL REPRESENTATIVE: Joe & Donna Bridgeman  
2838 W. Lake Samm.  
Pkwy, N.E.  
Redmond, Wash. 98052  
E54S001602 - 2

### CENTRAL WEST REGION

REGIONAL REPRESENTATIVE: Noland Adams  
15423 "B" St.  
Kerman, Calif. 93630  
E53F001284 - 127

EL MONTE CHAPTER: William Keith Rush  
9830 E. Rush St.  
So. El Monte, Calif. 91733  
E54S001178 - 391

WALNUT CREEK CHAPTER: William C. "Bill" Allen  
21 Carisa Ct.  
Walnut Creek, Calif. 94596  
E54S001636 - 362

### GEAR SHIFT KNOBS

Still attempting a reproduction on gear shift knobs. Thanks for your everlasting patience.

### TAIL LIGHT LENSES

Use 1954 Buick tail light lenses with bezel if you can't get the original lenses.

### CHROMEPLATING

DO NOT let your local chromeplating shop dip in his acid tank the following pieces of chrome: trunk ring around trunk license plate; top deck strikers; windshield corner post (heavy piece) left and right side. In other words, if the piece of chrome is of a type of pot metal material instead of steel, it will almost melt away in the acid tank.

### 1954 & 1955 DRIVE LINE REPLACEMENT

Dave Milburn of Corvallis, Oregon has been extremely successful in converting a 1956-62 powerglide drive line for use in a 1954. Dave cuts 3/4" off the drive line on the spline end and it fits up fine. He has also done some modifying on 1954-55 Buick hubcaps to where they look quite similar to the 1954 Corvette hubcaps. Pictured in this issue.

### JACKET PATCHES

A new supply of jacket patches is finally on its way. We have been notified to expect delivery within 45 days.

### 1953 ENGINE COLORS

Noland Adams of Kerman, California sent us the following information obtained from a most reliable source: the blue paint on the 1953 Corvette engine was the same blue paint the club offers for sale. The color of the decal on the rocker cover was white. The chrome parts were three air cleaners and one reservoir water tank.

### LET US KNOW

The 1971-72 Membership Roster will be sent to the printer in September. If your name, address or serial number is not correct in the current roster or addendum, let us know now or forever hold your peace (until next year anyway).

### SOUTH CENTRAL REGION NEWS

By Mike Farley

Received recent news from Mike on the Grand American Series, American Hot Rod Association Races. Mike just returned from Baton Rouge, La. Mike raced and set the following record; Formula #1 Sports Class X/B A.H.R.A. Mike turned a 11:09 in his (a bit more than stock) 1968 fully-prepared Corvette. He has also put his stock 1954 show car and 1955 stocker thru the local drag meets at a powder-puff pace and picked up a couple of extra trophies. He reports the Grand American Series of the A.H.R.A. Races hold ten meets per year. They will be held in Denver, Colo., Marion, Ohio, York, Pa., and Dallas, Texas.

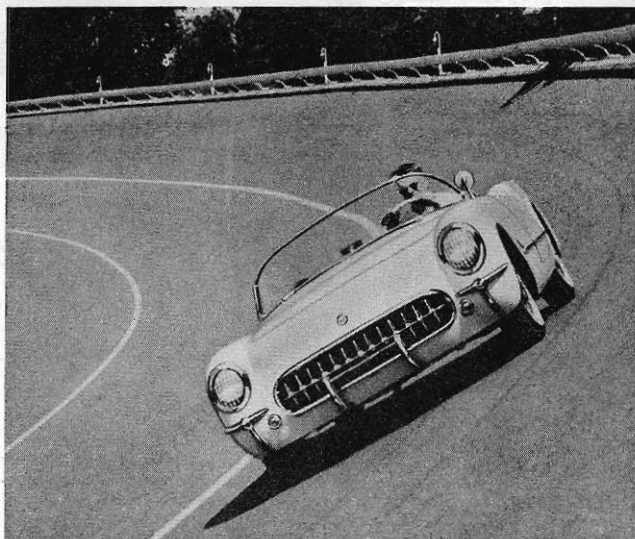
### LE CERCLE CONCOURS D'ELEGANCE

Le Cercle Concours d'Elegance will present its August Concours this year on Sunday, August 29th at the Hollywood Bowl. The winners will parade across the stage to receive their trophies. There will be television coverage and music during the Concours and at the awards ceremony. The entrance fee will be \$5.00, and three trophies per Class or Club Entry will be given. Each participant will receive a program and a dash plaque. Contact Mr. M. L. Bud Cohn, 9476 Readcrest Dr., Beverly Hills, Calif. 90210, phone 384-0119.



## *Agile performance*

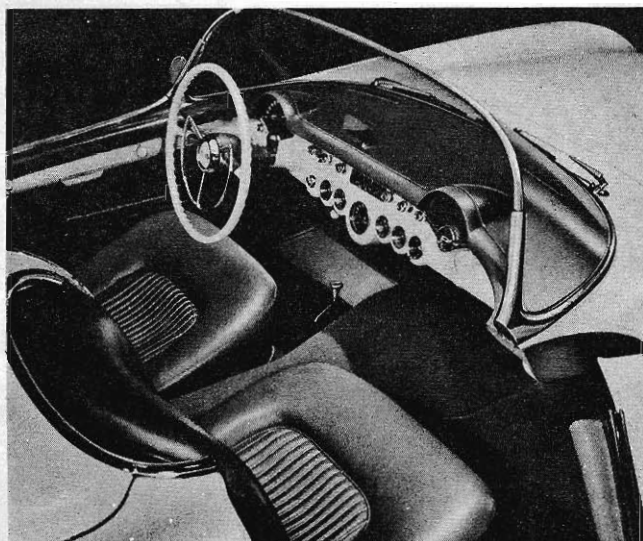
For swift acceleration, hill climbing, and cruising, there's nothing quite like the Chevrolet Corvette—and it handles like a dream. To make it swift, Chevrolet engineers combined great engine power with light car weight. As the result, the engine must pull only 21 pounds per horsepower. Contributing to the Corvette's swiftness, too, is the light wind resistance of its low, streamlined, plastic body. Short length (only 14 feet) and easy steering simplify maneuvering in traffic and parking. A very low center of gravity, outrigger type rear springs, and broad wheel treads stabilize the car and allow fast "cornering." Extra-large brakes insure smooth, positive stops. Balanced suspension provides a level, comfortable ride, and gives you a safer, more certain "feel" of the road. Response of the car to your control is always immediate and positive.



## *Sensational styling*

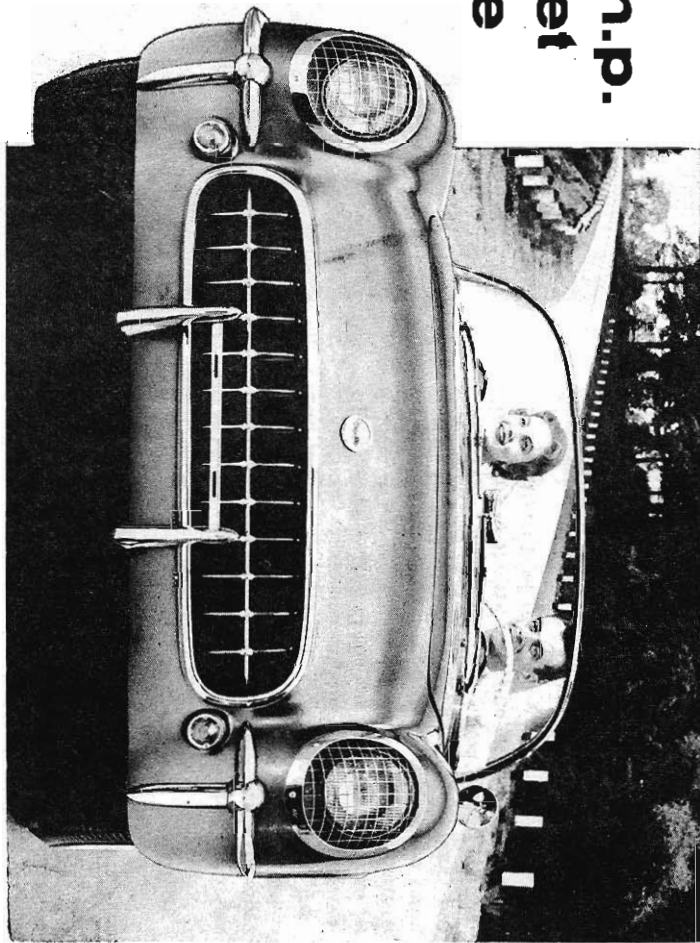
The low-set Corvette body expresses the swiftness that is so dramatically demonstrated by the car's performance. Taking full advantage of the new body material—glass-fiber reinforced plastic—Chevrolet engineers have created a sports car body in which all contours are smoothly

streamlined. There are no disturbing projections. The license plate and headlights are recessed and all hinges are concealed. Adding to the fleet appearance are the chrome-bound, wrap-around windshield, jet-type rear fenders, and sunbursts of chrome in the full-size wheel disks. A new kind of styling, too, is apparent in the chrome radiator grille, bumperettes, and moldings that protect the fenders and rim of the cockpit.



## *Luxurious comfort*

In the spacious Corvette cockpit, you're surrounded by all the luxuries you want in a sports car. Form-fitting seats with foam rubber cushions are smartly upholstered in leather-grained vinyl. The driver's seat is adjustable. Stowage pockets are built in the doors and the carpet is backed by soft sponge rubber. The steering wheel is equipped with horn blowing ring and direction signal lever. The Powerglide selector lever is below your right hand. Controls and instruments, including a tachometer, are arrayed before you. The windshield has dual wipers, defroster slots, and a washer, while inside and outside mirrors provide views to the rear. For extra ventilation, there is a screened cowl ventilator. Ash receptacles, cigarette lighter, electric clock, and courtesy light are standard; the favorite-station, signal-seeking radio and recirculating heater are extra-cost accessories.



A brilliant new edition  
of America's most popular  
production sports car

# Corvette Chevrolet New 195-h.p.

## S P E C I F I C A T I O N S

### POWER-PACKED CHASSIS

**ENGINES**—Choice of 195-h.p. "Turbo-Fire V8" with 4-barrel carburetor; or 165-h.p. "Blue-Flame" Six with 3-side-draft carburetors. Valve-in-head design, 8:1 compression ratio, high-lift camshaft, dual exhaust system, shielded ignition.

**TRANSMISSION**—Powerglide Automatic Transmission. Floor-mounted selector lever.

**DRIVE LINE**—Hotchkiss drive. Hypoid axle: 3.55:1 with Powerglide Automatic Transmission.

**TIRES**—Five 6.70-15 tubeless tires.

**STEERING**—Anti-friction gear, 16 to 1 ratio; balanced linkage. Nearly vertical, 17 $\frac{1}{4}$ " two-spoke steering wheel.

**BRAKES**—Hydraulic, 11" self-energizing brakes; bonded linings. Pull-handle parking brake.

**SUSPENSION**—Independent front suspension, ride stabilizer. Four-leaf rear springs, outrigger mounted. Direct double-acting shock absorbers.

**FRAME**—Extra-rigid X-member-braced box girder frame.

**FUEL TANK**—Capacity: 17 gal. Concealed side filler.

### LIGHTWEIGHT BODY

**BODY**—2-passenger, open-cockpit body of glass-fiber-reinforced plastic; light, strong, durable, quiet, rustproof, and easy to repair. Wide doors with inside release.

**COMPARTMENTS**—Front-hinged hood with automatically latching support. Large luggage locker with spare-wheel well under floor, and lockable counterbalanced lid. Concealed well for top in rear deck behind seats. Saddle-covered door pockets.

**WINDOWS AND TOP**—Chrome-bound, one-piece, curved safety plate glass windshield; 53-degree slant. Removable chrome-bound plastic side windows with ventpanes. Manually adjusted fabric top with plastic rear window.

**COLORS**—Exterior: Polo White or Pennant Blue. Cockpit: Sportsman Red or Beige seat and side wall upholstery; red- or blue-crowned white instrument panel; red or beige carpet. Luggage Locker: Sportsman Red or Beige. Top: Tan.

★ ★ ★

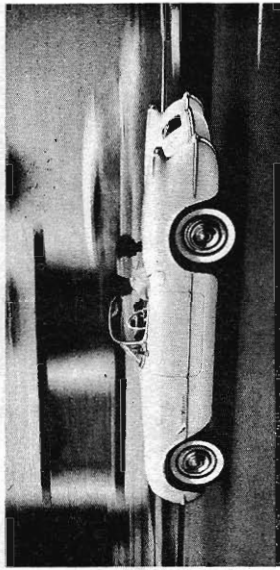
**CAR DIMENSIONS**—Wheelbase, 102". Length, 167". Height, 33" at door top. Road Clearance, 6". Width, 70". Tread, 57" front, 59" rear.

All illustrations and specifications contained in this literature are based on the latest product information available at the time of approval. The right is reserved to make changes at any time without notice in price, color, materials, equipment, specifications, and model, and also to discontinue model.

CHEVROLET MOTOR DIVISION, GENERAL MOTORS CORPORATION, DETROIT 2, MICHIGAN

LITHO IN U.S.A.

## New precision of command . . .



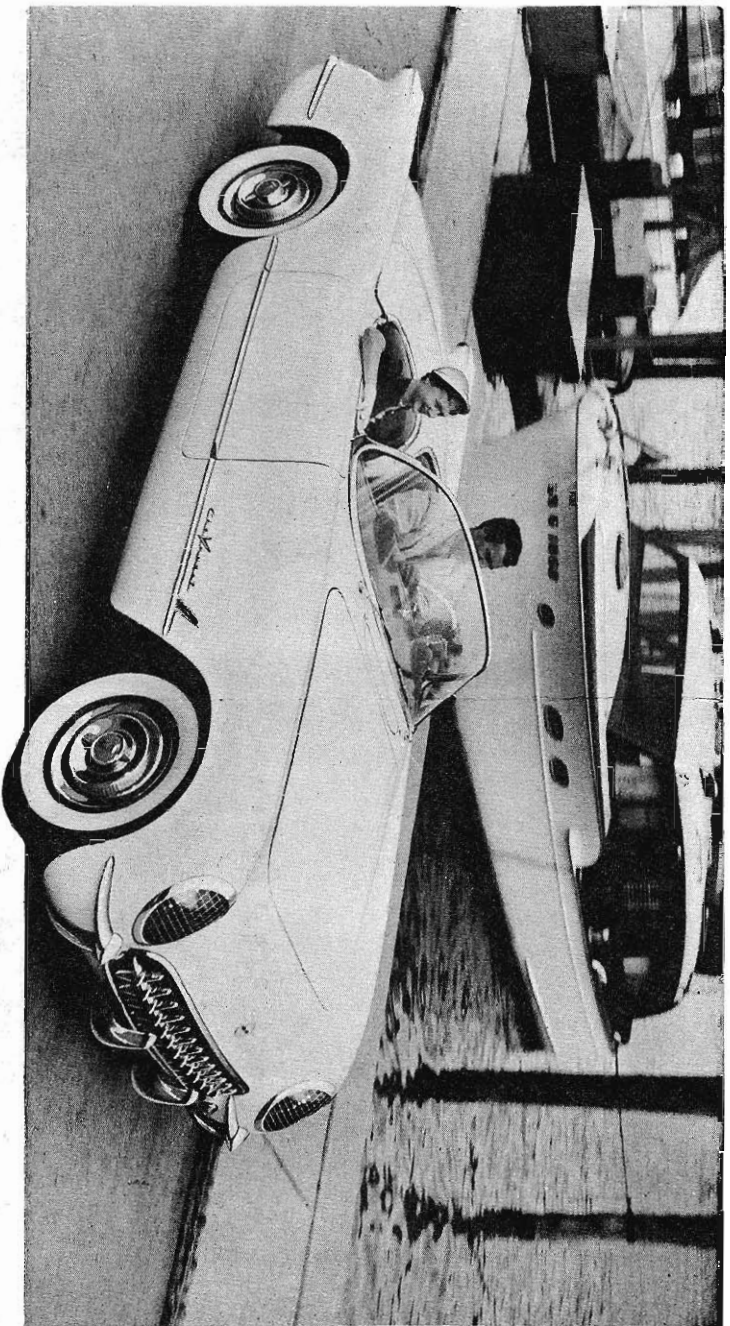
effortless ease in traffic with the smoother Powerglide automatic.

The new Corvette blends sports car suspension and vivid acceleration with the quicksilver smoothness of an improved and specially modified Powerglide automatic transmission. Teamed with either the special Corvette version of the Chevrolet "Blue-Flame" 155-h.p. six, or the new "Turbo-Fire V8" (with horsepower boosted to 195 in the Corvette), Powerglide offers a superbly balanced rear axle ratio for all road conditions and split-second shifts between ranges. In the sports car tradition, it has a central floor-mounted range selector of the Safety-Shift pattern that permits manual selection of Low Range at the driver's will.



THE SLEEK REAR DECK of the Corvette conceals a generous luggage compartment—far more spacious than most sports cars. The spare tire is in a well under the floor; the radio antenna is built into the deck lid.

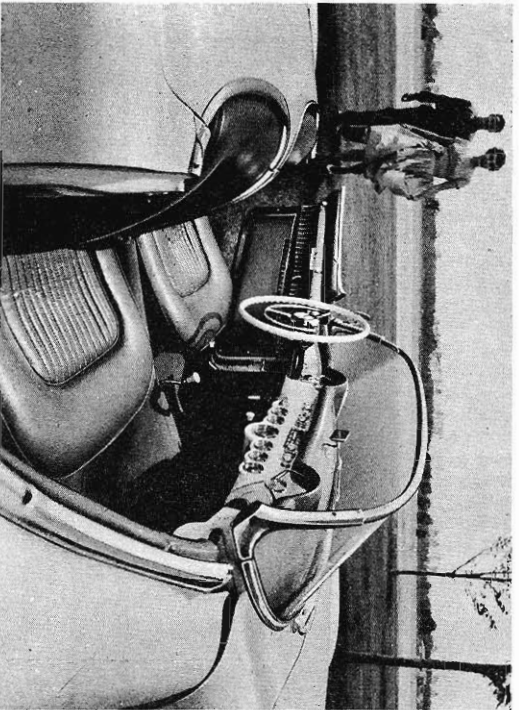




## Real driving comfort . . . the Corvette way!

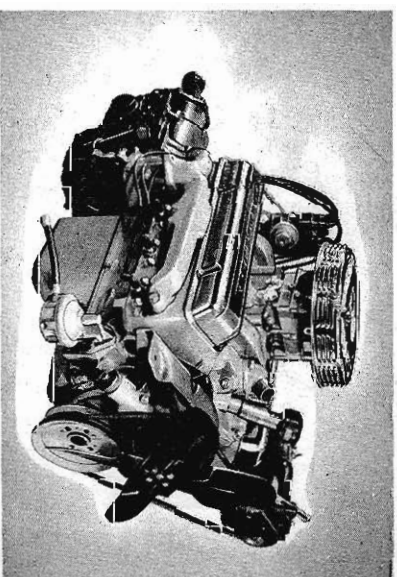
**SECURITY AND LUXURY** for driver and passenger are the keynotes of the snug Corvette cockpit. Individual bucket seats have form-fitting foam rubber cushions. The floor is covered in soft carpeting, backed by sponge rubber. Large pockets and ash trays in doors also serve as arm rests. Beautifully balanced instrument panel includes key-turn starter, electric clock, tachometer, hooded radio speaker.

**POTENT "BLUE-FLAME"** 6 engine, with three side-draft carburetors, 8 to 1 compression ratio, and overhead valves, puts a flashing 155 horsepower under the throttle. It has a dual exhaust system, efficient cooling and lubrication, and a shielded electrical system . . . plus Chevrolet's traditional six-cylinder economy of operation and maintenance.



## A cyclone of power with the new 195-h.p. V8 engine

A breath-stopping surge of power that surpasses anything you have ever imagined—that's the story of the Corvette's new 195-h.p. V8 engine. Here is a "dream" power-plant . . . ultra-compact, free-breathing, super-efficient, the most modern valve-in-head V8 engine in the world . . . and it can be serviced by any Chevrolet dealer. Dual exhausts, a four-barrel carburetor, 8 to 1 compression ratio, and a high-lift camshaft squeeze latent energy out of every drop of gasoline . . . and careful counter-balancing of the entire engine *after assembly* keeps it smooth as a jet of steam.



## Geared-to-the-road stability

The Corvette is a sports car . . . not a scaled-down convertible. At any speed it offers a sense of security, an inherent balance that is astonishing. Low-slung, with a center of gravity only 18 inches above the pavement, its outrigger rear springs and broad-based front tread let it cling to the road like a cat. The steering gear has 16 to 1 ratio for instant response. Its big 11-inch brakes have bonded linings and a grip that would stop a truck. Everything is designed to give the absolute, precise command that only the driver of a true sports car can know.

## ITEMS FOR SALE

### CLUB ITEMS OFFERED FOR SALE

1. Carburetor kits — new \$8.00 each p/p — 1954.
2. Carburetor kits — new \$6.50 each p/p — 1955 — 265 V-8.
3. Owner's Manuals 1953-55 — reproduction — \$7.50 each p/p.
4. Back issues of Newsletters — first three issued — \$1.00 each, Vol. 2, No. 1, No. 2, No. 3, & No. 4 — \$2.00 each p/p.
5. New outside mirrors — \$11.00 each p/p.
6. Park Lights: A. Lenses — \$2.50 each p/p.  
B. Doors (chrome piece) — \$2.50 each p/p.  
C. Gaskets — \$.75 each p/p.
7. New original windshield — \$175.00 plus postage & insurance.
8. New windshield rubber gaskets — \$10.00 each p/p.
9. Rear license plate covers — exact duplication — \$15.00 p/p insured.
10. New front bumper (lic. plate hangs between this bumper) — \$14.00 each p/p.
11. Original large open-mouth windshield washer jar for passenger side mount of engine compartment — \$4.00 each p/p.
12. Chrome word Chevrolet for right & left front fender — \$4.00 each p/p.
13. New horn ring without horn plastic button — \$10.75 each p/p.
14. One quart of Chevrolet engine blue heat resistant paint — \$5.00 each.
15. One quart of Chevrolet red upholstery paint for entire upholstery, including carpets, seats, door panels, etc. \$7.00 each p/p.
16. New "stop light" brake switches, fits under dash — \$2.75 each p/p.
17. Reproductions of Red original side curtain bags with the passenger car headliner material used as a divider between side curtains while in bag — also two original chrome turn buckles to attach it to inside trunk area — \$17.50 each p/p.
18. Original (patterned in configuration) trunk mat reproduction made out of red loop pile carpet with red leatherette sewn around perimeter for trim work — \$22.00 each p/p.
19. Weather stripping for trunk, under top deck, doors & hood, 162" long — \$10.00 p/p.
20. Eight piece master cylinder brake rebuild kit — \$7.00 each p/p.
21. Original right & left door handle knobs — white — \$3.50 each p/p.
22. Original left & right side curtain release knobs — white — \$2.50 each p/p.
23. New original distributor with side tachometer drive — \$70.00 each plus postage & insurance.
24. New original gas feed pedals — \$3.50 each p/p.
25. New factory carburetor idle adjusting screws — \$1.50 each p/p.
26. New rubber transmission mount (2 bolt hole), fits between trans. and cross brace unit — \$6.00 each p/p.
27. Lower seating strip (rubber) used around bottom of the plastic on hardtops and any other custom made Vintage hard tops. \$1.75 per ft.
28. Chrome ash tray with flip lid, fits into arm rest 1953-55, also fits into tunnel for 1956-62 — \$5.50 each p/p.
29. Chrome ring around ash tray, square pattern fits into arm rest — \$1.00 each p/p.
30. New radiator hose — top — \$3.50 each p/p.
31. New chrome reproduction head lamp screens, exactly like original — \$25.00 per pair plus postage & insurance.

32. Beautiful reproduction of original ignition shielding done in fibreglass — top — \$25.00, bottom half — \$25.00 plus postage & insurance.
33. 1953-55 Corvette rocker arm cover decals, exact reproduction. 1953 — \$6.00, 1954 — \$5.00 each p/p.



### PARTS FOR SALE

1. FOR SALE: 1953-55 Corvette Parts: Hardtop — \$250.00/offer. Many exterior parts, will trade any or all for parts I need.

Noland Adams, 15423 "B" St., Kerman, Calif. 93630, 846-8928.

1. FOR SALE: "Dream Car" Series Key ring — regular \$3.95, only \$3.00 to Corvette Club members. These keys were made in 1954 and have two blanks that fold into a gold case. On the case is an enamelled picture of the 1954 Corvette. Don't miss out on these collectors items as supplies are limited.

Frederick J. Roth, 3148 Carlton Dr., Thousand Oaks, Calif. 91360.

1. FOR SALE: I have hundreds of 1953-55 Corvette parts, seats, manifolds, fiberglass panels, new & used grill parts, new choke cables — with knob, hubcaps, etc. State your needs.

Jerry L. Brewster, Route 2, Bastrop, La. 71220.

### FOR SALE:

1. 3 sets side curtains.
2. 1 set side curtains for parts.
3. Right & Left outside horizontal rear bumpers.
4. 3 rear center bumpers.
5. 2 complete sets grill teeth used.
6. Front & rear chrome bullets, also horizontal front & rear.
7. 3 used sets intake & exhaust manifolds with 3 carbs.
8. 2 sets '56 hubcaps.
9. One chrome expansion radiator tank (1954).
10. Wrecked 1954 parts — windshield frame, all dash equipment, both doors, top deck, trunk, etc.
11. One pair used headlight rings.
12. One pair new headlight rings.
13. 2 sets used tail light lens with chrome bezel.
14. Used '56-62 grey steering wheel, one 1957 Venitian Red steering wheel.
15. Used horizontal grill bar.
16. 2 sets hubcaps 1953-55.
17. One original steering wheel (no button).
18. One exhaust manifold.
19. One Plasticon hardtop — good condition.
20. One 1954 Valve cover.
21. Speedometer, tach & chrome expansion tank.
22. Four complete headlight buckets with chrome ring & screen.
23. One complete set 1953-55 seats, also '59 seats.
24. Seven 1954 partially complete parts cars, trunk, rear fenders, complete cash, hoods, grills, tops.
25. Two soft tops — 1953-55.
26. One '56 & one '57 parts cars, fairly complete.

Ed Thiebaud, 2359 W. Adams, Fresno, Calif. 93706, (209) 266-2153.



## CARS & PARTS FOR SALE OR TRADE OR WANTED

### PARTS WANTED

For 1954 Corvette:

1. Trunk lock.
2. New ignition switch.
3. Vertical front bumper moldings.

Terry Labatt, 5980 Ivy Lane, Minnetonka, Minn. 55343.

1. WANTED: Two 1967 Corvette seats.

Tim Novak, Spillville, Iowa 52168.

For 1954 Corvette:

1. R.H. tail pipe G.M. #3706230.
2. R.H. Exhaust pipe, G.M. #3706226.

A. Dane, 1815 Berkeley Rd., Highland Park, Ill. 60035, (312) 831-2422.

For 1957 Corvette:

1. Shop & Owner's Manuals.
2. Exhaust pipe bezels.
3. Original upholstery material or parts.

Frank H. Tomlinson, Jr., 6134 Reach St., Philadelphia, Pa. 19111.

1. WANTED: Clean 61-62 hardtop. Prefer red on red. Will consider any clean items.

W. H. Syblon, 6201 Pembroke, Bakersfield, Calif.

1. WANTED: '57 Corvette fuel injection system - good condition or restored. Need wire wheels for '53 Corvette.

Allen Woodall, Jr., Box 1640, Columbus, Ga. 31902, (404) 561-2857 Nights.

Wanted for 1959 Corvette:

1. New dash pad & cover, black.
2. Heater control knobs & window riser handles.
3. Radio speaker grill trim ring.
4. Radio antenna.

Jesse Meeker, 133 South St., Danbury, Conn. 06810.

PARTS WANTED: (ORIGINAL FACTORY) for 1953, 1954 & 1955 Corvette:

1. Bubble clear plastic top (Price open - try me.)
2. Bullet type air cleaners.
3. Plastics hardtops.
4. Wheel covers.
5. Ignition shieldings.
6. Owners Manual.
7. Jack.
8. Steering wheel.
9. 1953 supercharger unit.
10. Distributor.
11. 1953 Valve cover.
12. (3) new triple carburetors, intake & exhaust manifold.
13. Convertible or hardtop tie downs (front & rear).
14. Front license plate bar & guards.
15. Original radio plus rim & knobs.
16. All center grill teeth.
17. Exhaust pipe extensions.
18. Inside & outside mirror.
19. 1955 pair side curtains or just passenger side, side curtain.
20. Original upholstery materials or any other parts I might need in restoration program.
21. Call COLLECT 601-948-4444, or 601-354-3662.

Charley Myers, 700 So. State, Jackson, Mississippi 39201.

### CARS FOR SALE

1. FOR SALE: 1954 Corvette: Trophy winner. Marina Blue, white top, original 6 cyl., 3-speed, like new inside and out, custom upholstery in trunk. Keystone mags, asking \$2,200.00.

Ronald Sell, 430 Oleander Ln., Eau Gallie, Fla. 32935 (305) 254-1651.

1. FOR SALE: Finances force sale of complete 1954 Corvette. In good condition—\$1,200.00. Most mechanical parts new or rebuilt. Also for sale—3 complete carbs. — \$1.00 each; one "261" 6 cyl. short block — \$50.00; grill teeth — complete set — \$35.00.

Robert C. Freeman, 5 Woodland Dr., Hampden, Mass. 01036.

1. FOR SALE: 1954 Corvette, E54S001953. Red with red interior, 59,000 original miles, both tops, have most original parts, very good condition. Pictured in Vol. 2, #4 "Blue Flame Special." Price \$2,250.00.

James E. Gray, 545 E. Minahan St., Napa, Calif. 94558, (707) 255-3134.

### CARS FOR SALE - NO MISPRINT - MAKE OFFER

1. 1955 "T" Bird, hardtop, beauty.
2. (2) 1956 "T" Birds, porthole top, continental kits & skirts.
3. 1957 "T" Bird, beautiful white & hardtop.

Charley Myers, 700 So. State, Jackson, Miss. 39201, 601-948-4444.

### CARS FOR SALE:

1. 1953 Serial #157 needs restoring — \$1250.00
2. 1953 Serial #286 needs restoring — \$1750.00
3. 1954 Original, new Polo white paint, mechanically good — \$1850.00
4. 1954, no motor or trans., Venitian Red — \$500.00
5. 1954, no motor or trans., red, perfect body — \$600.00.
6. 1954, new tires, all original, 6 cyl., powerglide, 3 carbs., soft top, black exterior, red interior with black seats — \$1050.00.
7. 1954 Corvette, red exterior, all original, 6 cyl. 3 carbs., powerglide, needs full restoration — \$750.00.
8. 1954, partially complete, black with black interior, orig. 6 cyl. engine with 3 carbs., powerglide (motor has been removed from car), original side curtains, needs some body chrome — \$950.00.
9. 1955 Bronze with beige interior, original V-8, powerglide, soft & Plastics hardtop, excellent condition — \$2,500.00.
10. 1962 Corvette — out of our collection. Reason for selling — purchased car to improve color combination for collection. Immaculate one-owner. Original carpets seat covers, factory paint. White with black interior. 327 engine, 4-speed, like brand new — \$3,250.00.

Ed Thiebaud, 2359 W. Adams, Fresno, Calif. 93706, 209-266-2153.

### CARS WANTED

1. WANTED: 1953 Corvette, just body or parts, but prefer original body (not customized) but can be restored or non-restored. Call COLLECT 601-948-4444 or 601-354-3622.

Charley Myers, 700 S. State, Jackson, Mississippi 39201.

## PARTS



1. WANTED: 1954 Corvette, body or parts (wrecked or not).  
Call COLLECT 601-948-4444 or 601-354-3622.  
Charley Myers, 700 S. State, Jackson, Mississippi 39201.

1. WANTED: 1955 Corvette, V-8 original preferred or  
parts to restore with. Call COLLECT 601-948-4444  
or 601-354-3622.  
Charley Myers, 700 S. State, Jackson, Mississippi 39201.

### WANTED:

1. 1958 Corvette, all original preferred.
  2. 1960 Corvette, all original preferred.
  3. 1963 Corvette, fastback coupe (original).
  4. 1964, 1965, 1966, 1967, fastback coupe (original) with  
factory air, power steering, & power brakes, electric  
windows.
  5. 1968 Corvette, any style, air, power steering.
  6. 1969 Corvette, any style, air, power steering.
  7. New dash pads for 1958 thru 1962 models, any color.
- I WILL BE WILLING TO PAY A REASONABLE FINDER'S  
FEE TO ANYONE LOCATING THE ABOVE UNITS THAT  
I BUY. EVEN IF FROM A DEALER. CALL COLLECT  
601-948-4444 or 601-354-3622.

Charley Myers, 700 S. State, Jackson, Mississippi 39201.

## S.C.C.A. RACING WITH THE REAL MCCOY



The 1953 Corvette pictured above is owned by Mickey Sweezey of Castro Valley, California. The car is a three-speed, six-cylinder engine, with no positraction. Mickey qualified for his S.C.C.A. license in it in 1959. His first race was in Reno, Nevada in September, 1959. He placed first in his class against a 1959 Corvette, 283, four-speed fuel injected, rated 315 h.p. His second race was in Vacaville, California. All drivers were in one class. The car completed the race with all the V-8's dropping out because of over-heating problems.

Mickey then purchased a 1957 Corvette from Bob Bondurant. Jerry Austin was the original driver of the car which was originally purchased in Los Angeles from a Chevrolet dealer. This fuel-injected Corvette was one of the very few factory-prepared Corvettes for racing by Chevrolet.

By the way, Mickey still owns both of these cars, along with several other beautiful Corvettes.



June 24, 1971

Vintage Corvette Club of America  
2359 West Adams  
Fresno, California 93706

Gentlemen:

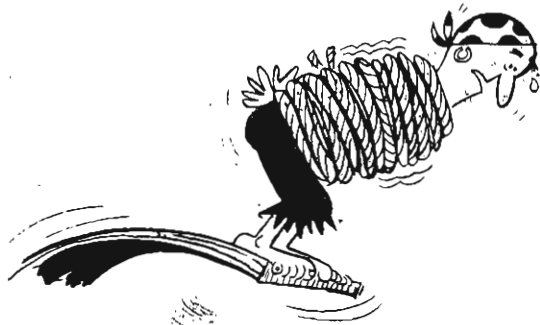
Volume 3 Number 1 of your "Blue Flame Special" contains incorrect information. Apparently you were quoting misinformation obtained from "Corvette News". Bell Helicopter had nothing to do with the bubble top. The twenty clear plastic Corvette tops were built by our firm. The project was started in '63 at the request of Mr. R.W. Kettering and #1 was developed to fit his car. Approximately half of the production was made of a green tint acrylic.

The enclosed photo shows a pair of tops installed at our shop which was then on Midway Airport.

Let us know if there is any further correct information you may need.

Very truly yours,

*Wm. H. Chaffee*  
Wm. H. Chaffee,  
President

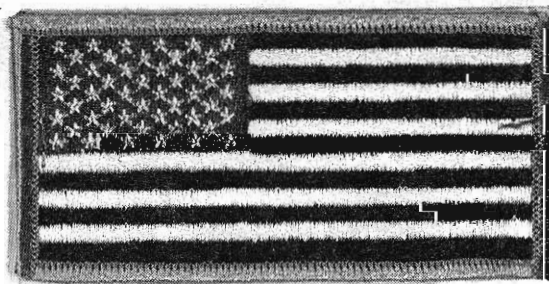


**We Goofed**



## JACKET PATCHES

CLUB PATCHES FOR SALE  
\$1:00 EACH

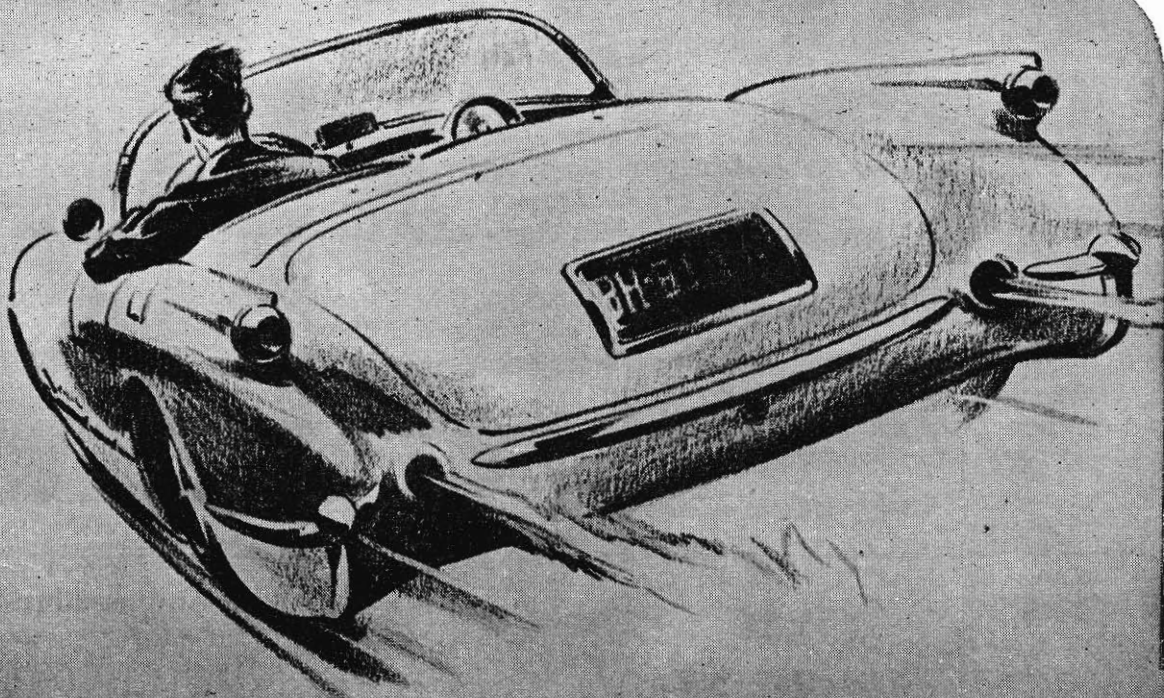


# ENGINE TYPE DESIGNATIONS

By Kieth Myers  
1409 Valley Stream Road  
Bel Air, Ma 21014

We thank Kieth for submitting the following information on engine numbers which you Corvette owners will find on the end of your Corvette motor serial numbers located on the forward side of the passenger side of the engine compartment engine block. This information can tell a person what type engine the car was equipped with when it left the factory. For example my 58 Corvette show car engine serial No. is (F226 CU) and the car is all original with original 27,000 miles on it. I purchased it from original owner who told me it had Dual 4BC & high lift cam, manual shift etc. But had I purchased it from 3rd or 4th owner I could have used this handy reference chart to tell me what engine was in the car. Also the F means the motor was from Flint, Michigan and the 226 means the motor was made on the 226th day of 1958 and the last 2 letters are engine type CU meaning solid lifters. By the way the above combination in 1958 was the 270 H.P. 283 C.I. engine - only thing hotter was Ramjet F.I. 290 H.P.

	1958 to			1965 w/air 1965			1965 condt. w/air w/air		
	1956	1957	1961	1962	1963	1964			
Manual Trans.	GR								
Powerglide	FG	FH	DG	SC	SC	SC	SK	HO	HQ
Manual Trans. & 4BC		EF	CQ	RC	RC	RC	RP	HE	HI
Dual 4BC (Manual)		EH	CT	QB					
Dual 4BC & HiLift Cam. (Manual)		EG	CU						
Powerglide & Dual 4BC	FG	DJ							
Manual & Fuel Inj.		EM	CR	RF	RF	RF		HG	
Manual & Fuel Inj. & HiLift Cam.		EL	CS						
Powerglide & Fuel Inj.		FK	DH						
Manual & Hi Perf.				RD	RD	RD	RQ	HF	HJ
Manual & Spec. Hi Perf.				RE	RE	RE	RR	HH	HK
Powerglide & Hi Perf.				SD	SD	SD	SL	HP	HR
Transistor Ignition						RT	RU	HL	HM
Transistor & Fuel Inj.						RX		HN	
All Hydraulic Lifters HT, HV, HU, HW									
396 Engine IF									



## "Loaded for bear"

There's mighty potent ammunition under the hood of the new Corvette—for now the "Blue-Flame" 6 is joined by a very special 195-h.p. version of the astonishing Chevrolet V8 engine!

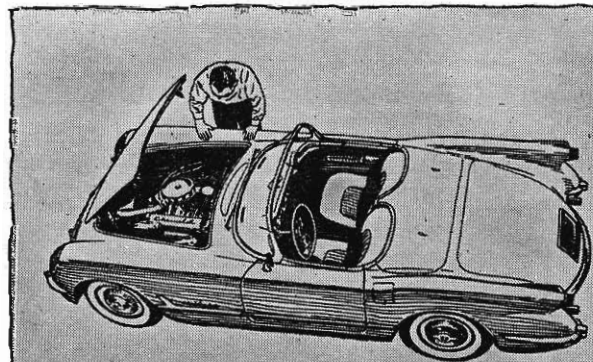
This is the engine sports car drivers have been waiting for—compact, low in weight, ultra-rigid, with all the inherent virtues of Chevrolet's three-inch stroke, massive crankshaft, and short manifolds. And when you add an almost pressure-free dual exhaust system, a high-lift camshaft and four-barrel carburetor, you get *GO* in great big capital letters!

How does it go? Like "The Ride of the Valkyries," the takeoff of a V-2 rocket, the plunge down the Cresta bobsled run—all wrapped up in one! You *never* felt anything like this sheer triumphant surge of power . . . or the way the V8 Corvette cruises, as effortlessly as a flame burns.

Even if you have known the Corvette before . . . if you have tested its rock-solid

stability on curves, its polo-pony compactness, its fantastic grip on the road, and its hairline 16 to 1 steering . . . the V8 version will stun you. But if you have never driven any Corvette, then you are to be envied. You have an experience coming—a singing jubilation that will tingle in your memory all the rest of your life!

True, you risk spoiling yourself for every other kind of car. But why not phone your Chevrolet dealer, now, and set up a date with the new V8? . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

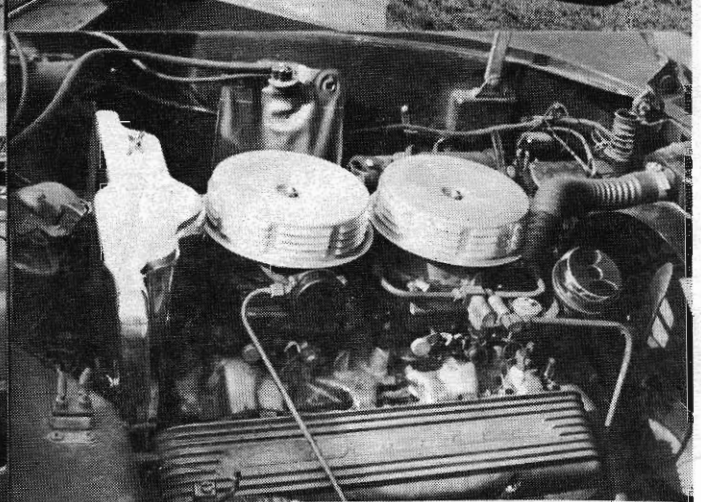
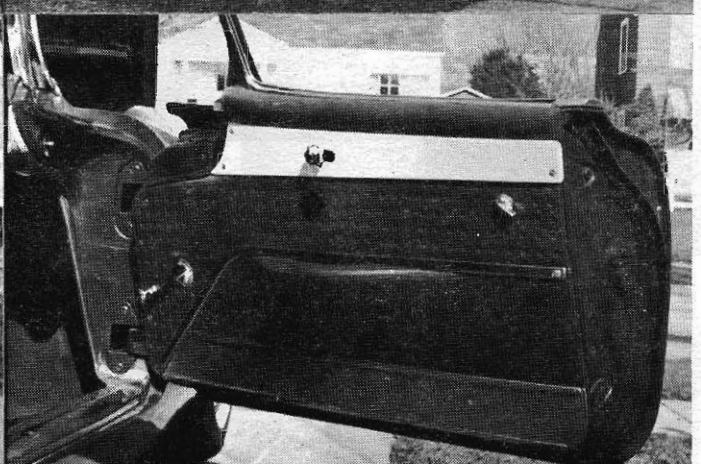
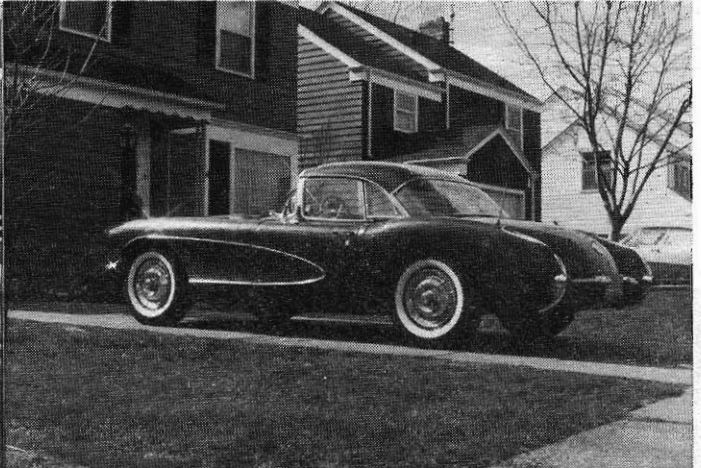


# CHEVROLET CORVETTE



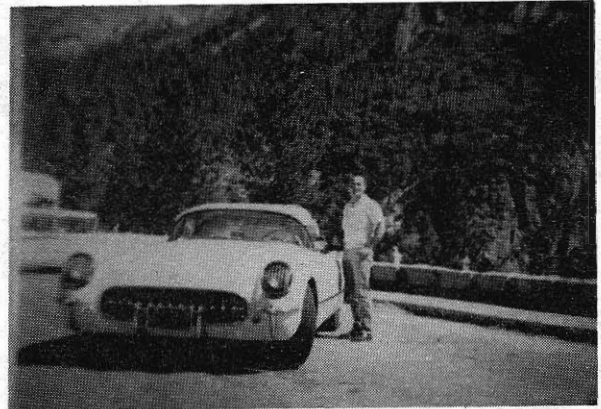
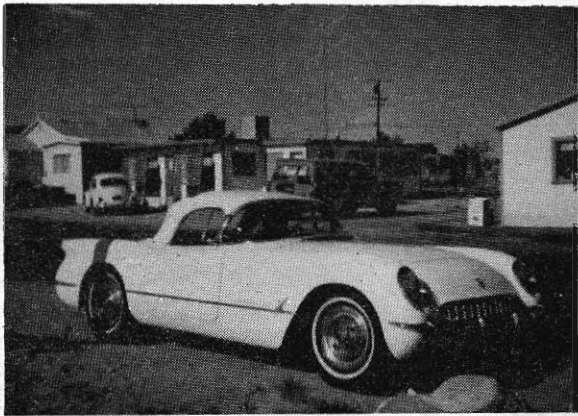
## COVER CAR

PAT & JAMES LINDAMOOD 56 COVER CAR WAS RECENTLY PURCHASED BY IRVING ROTHMAN, P.O. BOX 323, TOMS RIVER, N.J.





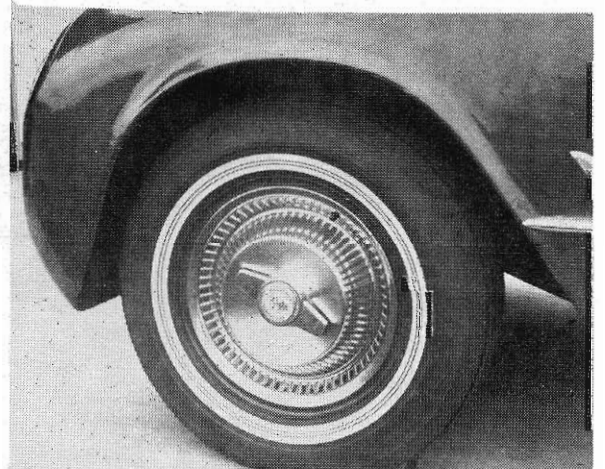
Submitted by Pat Lindamood, with following comment: This post card is still being used daily by "THE TREVERS" one short block from Florida's finest ocean beach, 552 N. Birch Road, Ft. Lauderdale, Florida 33304. Although we're not too sure of the identity of the two cars in the rear we know what the first one is.



James Gray, Bakersfield, Calif., took these pictures during a recent west coast high mountain tour, including the high Sierras and Yosemite Valley.

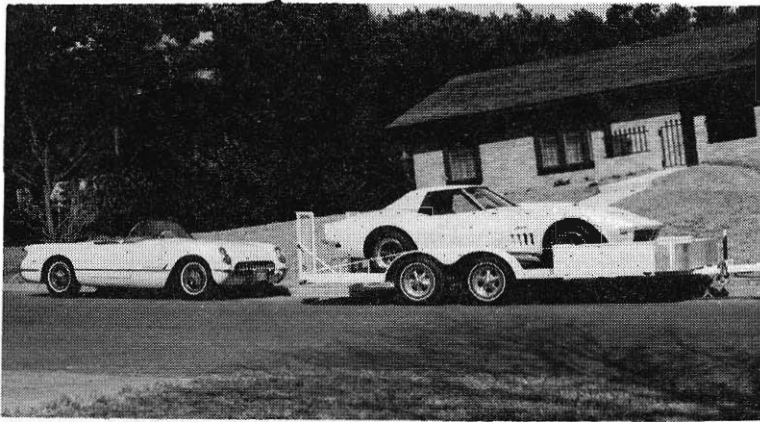


Mr. & Mrs. Dave Milburn of Curvallis, Oregon, standing behind George Cambell's red '54 and in front of their '54 Corvette.



Look again — above picture is Dave Milburn's ingenious conversion of a 1954-55 Buick hubcap to a Corvette cap. The perimeter lines are added red tape and the center emblem is 56-62 Corvette hubcap hardware.





Mike Falley's A.H.R.A. 1968 Record setting Corvette, quartermile 11:09 sec., trailed by his '54 Powder Puff winner; Waco, Texas.



John Vass, Birmingham, Mich. prize E53F001155 for those of you who remember was the first vintage Corvette fully restored by G.M. a few years ago. John is also an employee of General Motors and may be of help to those in his area.



Mr. & Mrs. Mickey Swezey from Castro Valley, Calif., sporting a bit later model than the car he qualified for in SGGa racing which was a 1953 Corvette. Between Mickey and his dad they own one Corvette for every major body change, 1953, 1957, 1960, 1963, & 1968.



Jim Simlick & Family, Ledford, Conn.

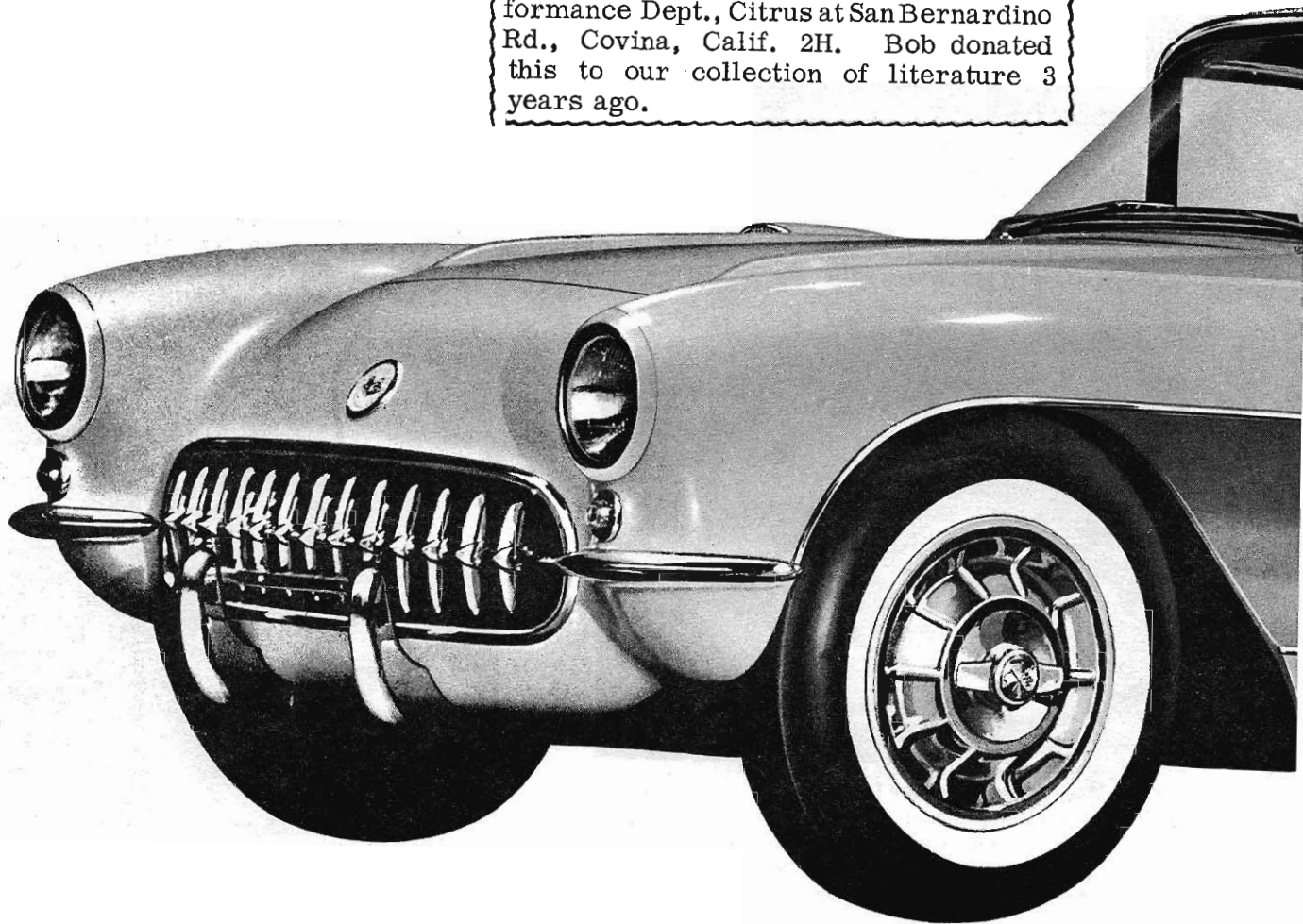


Above photos by D. Michael Foutch, Flint Michigan. Photos of E53F001255, fully restored by GM after E53F001155. Above car on permanent display at Sloan Museum, Flint, Mich.



# CORVETTE MODEL 2934

The "1956 Corvette Engineering Achievements" 24 page booklet was distributed to Chevrolet dealers a few months prior to delivery of the 1956 Corvette to Chevrolet dealerships. We will start with this issue and run it on a continued basis. Thanks to Bob Wingate of Clippinger Chevrolet, High Performance Dept., Citrus at San Bernardino Rd., Covina, Calif. 2H. Bob donated this to our collection of literature 3 years ago.

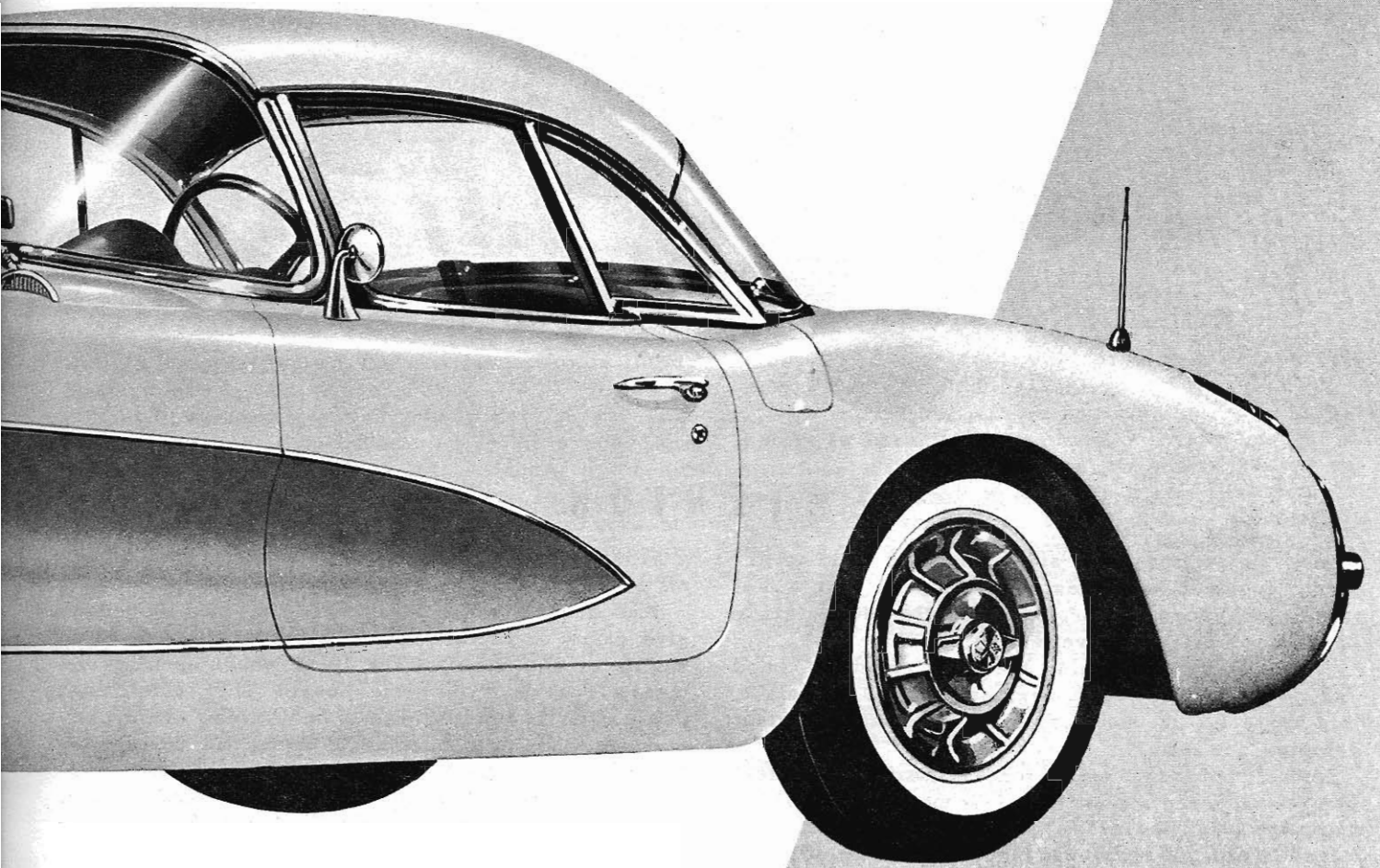


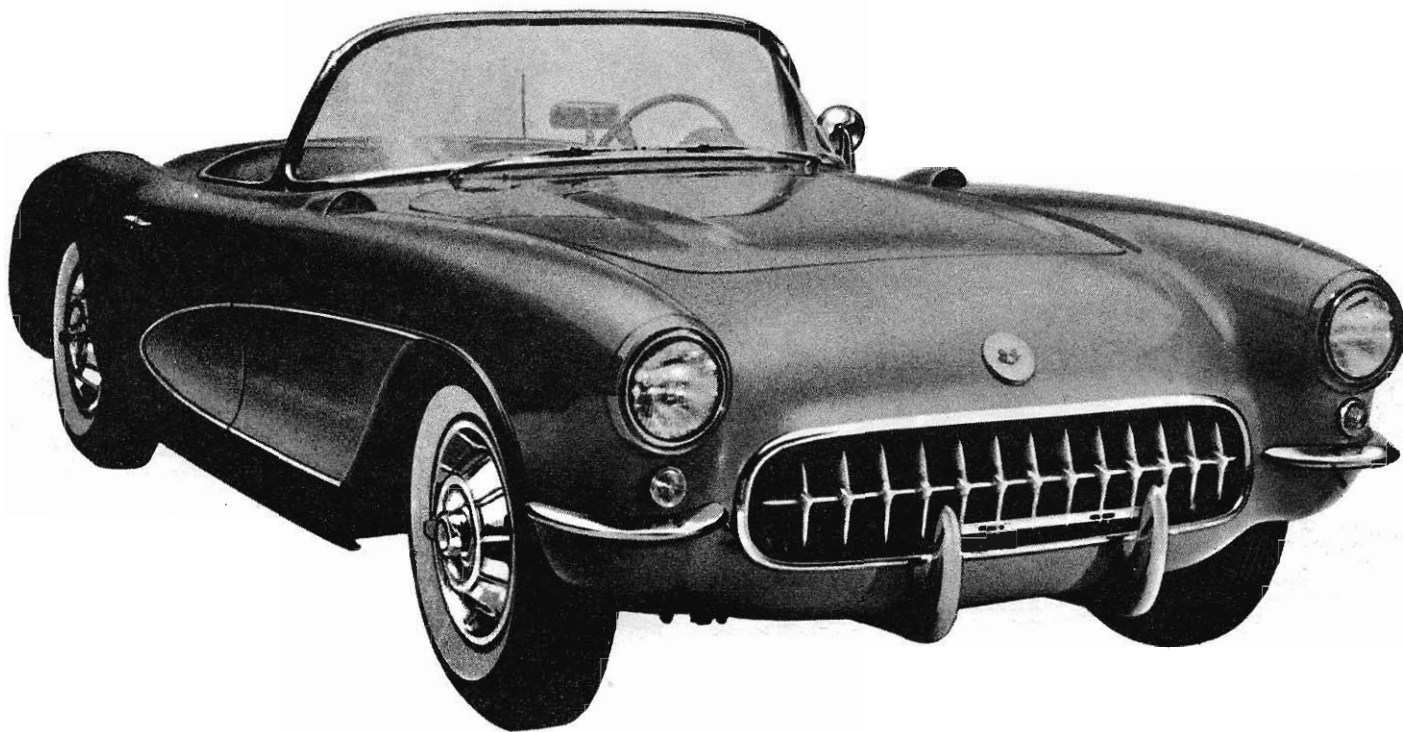
The Chevrolet Corvette for 1956 is a new and challenging car, with numerous styling changes as well as many new luxury and convenience features. A more powerful V-8 engine, a new three-speed transmission, and a new rear axle comprise the power combination.

Outwardly, areas extensively restyled include front and rear fenders, hood and side panels. A power-operated convertible top and a removable plastic hardtop with wrap-around rear window are available for 1956.

The interior reflects changes in seat and sidewall trim, a racing-type steering wheel and new transmission control. Lowering side windows, with optional power window lifts, and swing-out door hinges provide greater convenience and make possible improved door sealing.

A more powerful 265 cubic inch V-8 engine with four-barrel carburetor is the result of new high compression cylinder heads and new exhaust manifolds. Optional dual four-barrel carburetors, when added to this improved engine, provide a gross horsepower of 225. As regular equipment, a new three-speed transmission with numerically low, closely stepped ratios and a new rear axle are provided for use with the more powerful engines.





## EXTERIOR

A new fenderline, new side panel and hood treatment, together with restyled bumpers and wheel trim disks account for the basically new exterior appearance of the Corvette for 1956.

As in previous models, the body, fenders, hood and deck lid are of fiberglass. Light in weight, this material is non-corrosive and has excellent damping qualities.

Redesigned bright metal fender guards, elliptical in section, wrap around either front fender corner, complementing the grille and guards which are retained from the previous model. The headlights, relocated to an extreme forward position on the redesigned fenders, figure more prominently in the front view. The headlights are of the same improved sealed beam design as used in the 1956 conventional passenger car. Parking lights are in a new position, directly beneath the headlights.

A new hood, hinged at the front as in the previous model, features two elongated windsplits which taper rearward. The new hood emblem, almost four inches in diameter, has a gold Vee added beneath the Corvette crossed flags.

More upright, the bright metal windshield frame accommodates the increased glass height and more vertical angle of windshield slope. The sides of the windshield frame are designed so that the vertical channels for the lowering side windows fit flush when the doors are closed.

Bright metal wheel disks are full-diameter, with spoke-like radial embossments surrounding the hub area. Simulated at the center of the disk is a bright knock-off hub with black crossed flags and the words "Chevrolet Corvette" on a brushed circular plaque. A circular depression, to the rear of the hub, has

a brushed finish to contrast with the bright knock-off lugs.

The decorative molding used on the 1955 body side panel is replaced by a wide depression which begins at the rear of the front wheel opening and tapers rearward into the door. This side panel depression is painted either body color or in contrasting tones to harmonize with overall color, and is outlined by a narrow chrome molding which continues over the wheel opening to the front bumper.

Front and rear fenders are redesigned to render an entirely new Corvette profile.

The front fender is higher and projects farther forward, and the outer circumference of the headlight bezel which is chrome plated, further extends the fenderline. A simulated air scoop, with bright metal grille, is located on either front fender, just ahead of the windshield. The addition of push-button type door handles and key locks is apparent on the door panels.

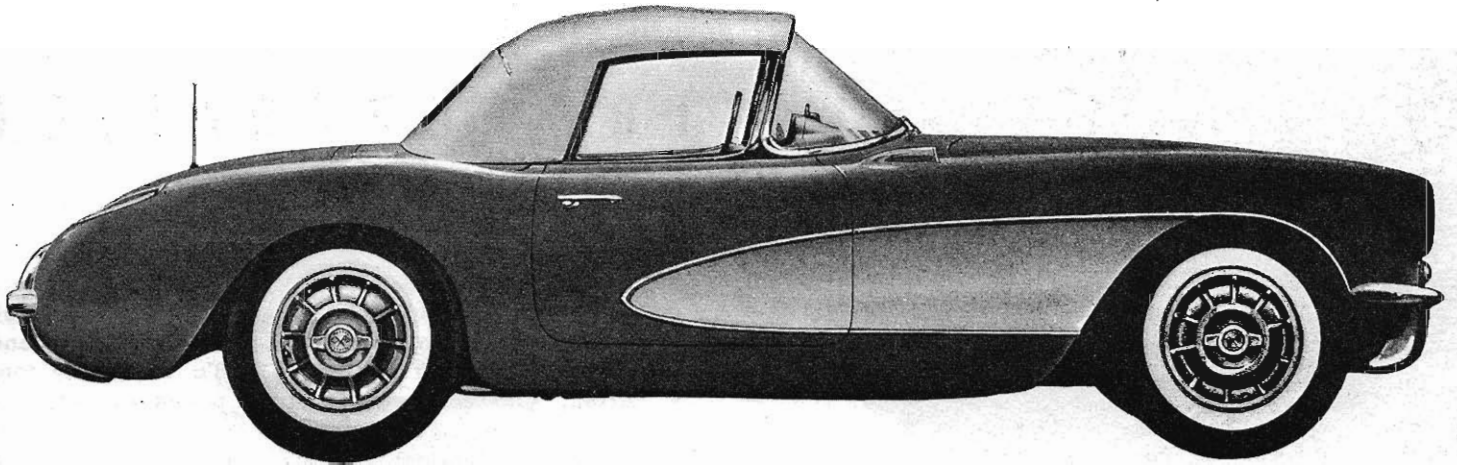
Fin-like rear fender projections of previous models are eliminated, the rear fender approximating the contour of the rear deck lid. The gasoline filler door remains in the same position on the rear fender, immediately to the rear of the door.

New in contour, front and rear wheel openings rake back at the trailing edge. The flare which formerly framed the wheel opening is eliminated.

New vertical bumpers follow the contour of the rear fenders. Spinner-like projections in the bumpers house the tail pipes, and help to direct exhaust gases away from the body.

A chrome recess at the crown of each rear fender houses the new conical tail light, which is surrounded by a narrow red reflex band. The radio





antenna is mounted on the left fender immediately forward of the tail light.

The license plate, formerly located in a recess in the rear deck lid, is lowered to an exposed position, just below the deck lid. License lights are built into spinners which flank the license plate. Horizontal guards originating at these spinners end just short of either fender. An emblem, carrying the same design as that used on the hood, is centered on the rear deck lid. The lock cylinder is relocated to a position beneath the emblem.

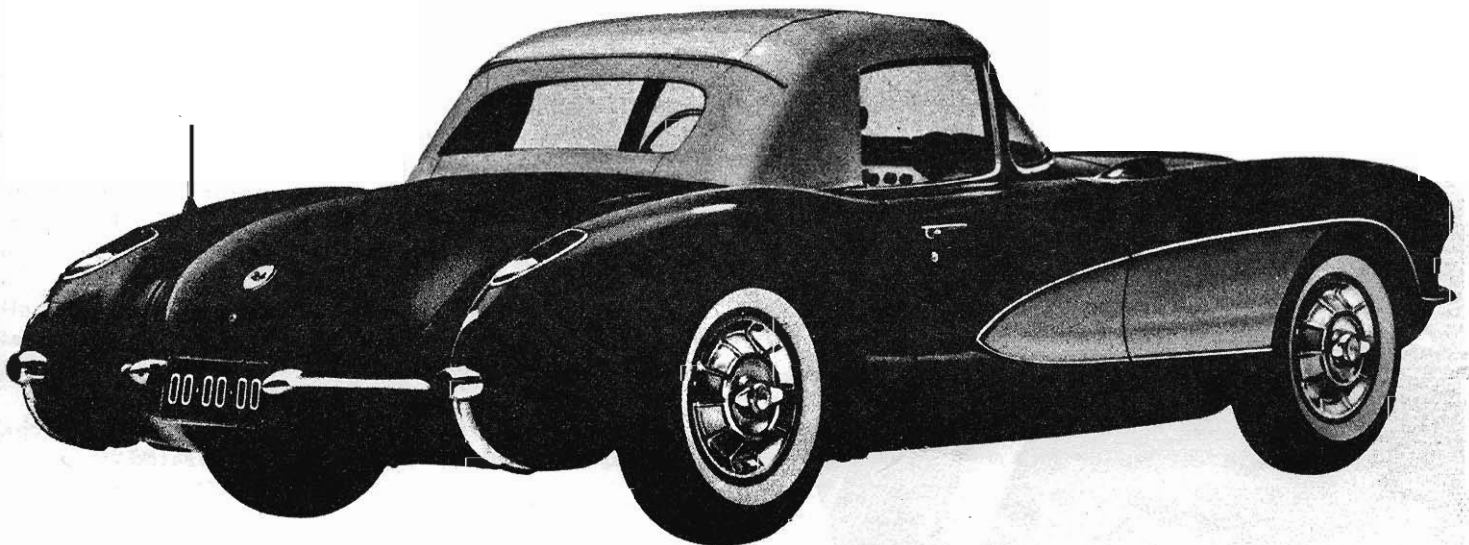
Either the manually operated convertible top or plastic hardtop can be obtained as regular equipment. Mechanism for power operation of the folding top is available at extra cost.

Although the redesigned convertible top is virtually the same height as its predecessor, it is flatter in profile. Reshaped side window openings and a wider, higher rear window together with the

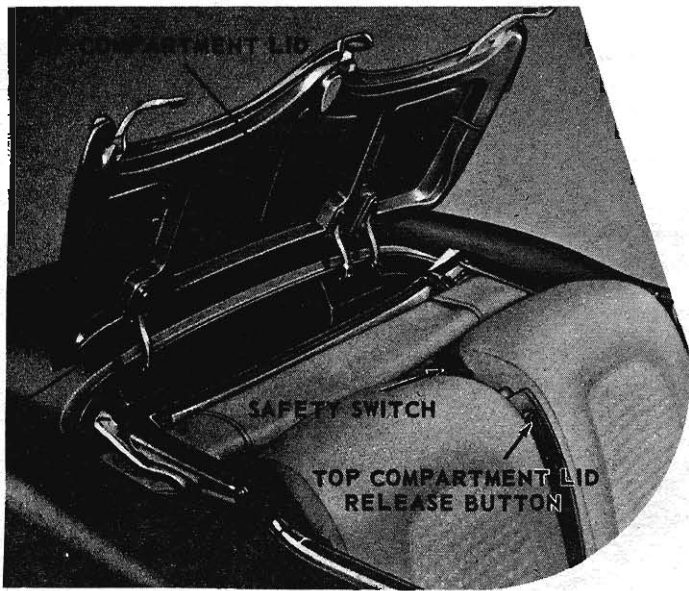
more expansive windshield provide a 7.7 per cent increase in total glass area.

The removable plastic hardtop, available in body color, is attractively trimmed in bright metal, and provides a glass area approximately 37 per cent greater than that of the 1955 convertible top. The hardtop features fixed rear quarter windows and wrap-around rear window, and the headlining is of waffle-pattern vinyl corresponding to seat and side-wall trim.

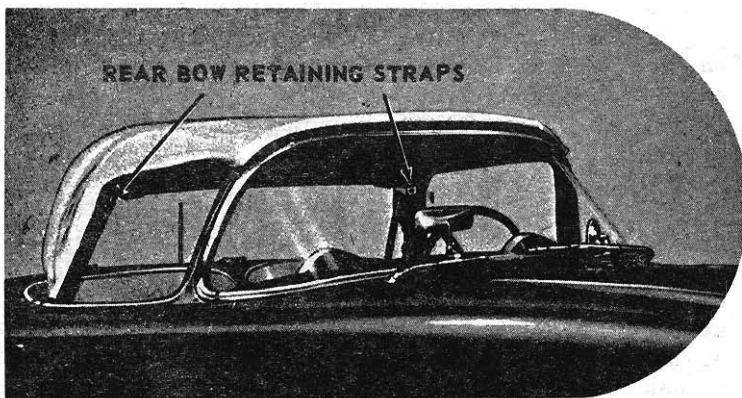
Overall height with the convertible top and hardtop is 51.1 and 51.0 inches respectively. Both of the new tops decrease slightly from the previous height of 51.3 inches. Corvette overall width is decreased to 70.5 inches from 72.2 due to the new fender and side panel treatment. License light housings at the rear increase overall length to 168 from 167 inches. Front and rear treads are unchanged and the Corvette wheelbase remains 102 inches.



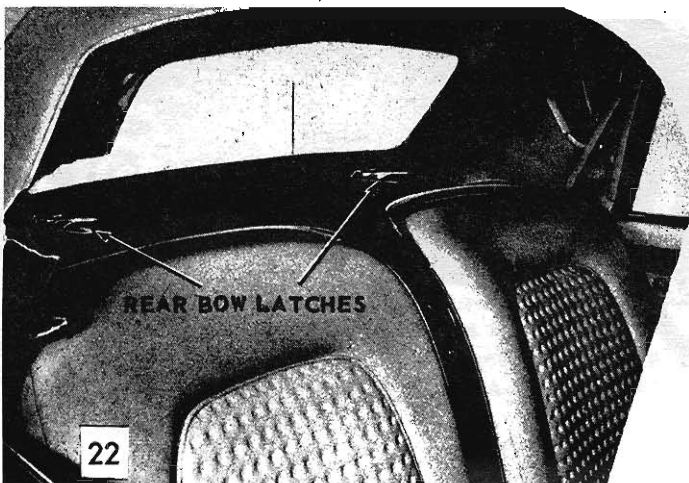
# CONVERTIBLE TOP OPERATION



Optional power equipment consists of an electro-hydraulic unit, comprised of a motor, a pump and three hydraulic lift cylinders. To raise the top, a button, located just above the package compartment, is depressed just above the package compartment, is depressed to release the safety catch on the top compartment lid. The control knob, located beneath the instrument panel, is then pushed in, actuating the electric motor. Hydraulic pressure transmitted to a lift cylinder raises the top compartment lid.



When the top compartment lid completes its upward travel, hydraulic pressure is routed to the lift cylinders which raise the top and finally to the original cylinder which closes the top compartment lid. Straps at either side of the convertible top are unfastened, allowing the rear roof bow to fall in place.



Bright metal latches are engaged at the top front header and rear compartment lid, completing the operation. To lower the top, latches are released front and rear, the rear roof bow is lifted and secured, and the folding top release button is depressed to release the safety switch. The control knob is pulled out, initiating the lowering operation which is the reverse of that already described. The safety catch on the top compartment lid is easily secured by hand pressure. A mechanical safety switch is provided so that when the rear deck lid is open the top will not operate.

In absence of the optional power operating mechanism, the top can be manually operated.

To be continued....

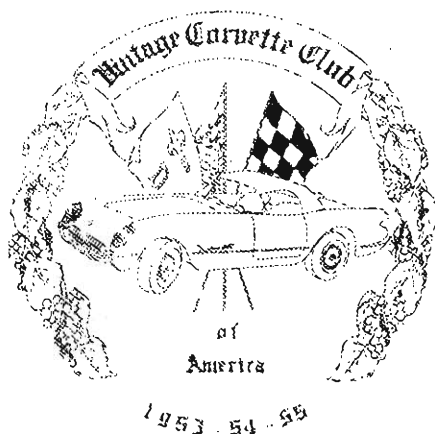
# CLUB ITEMS

Badges are on brass, hand painted in full club colors, then baked in a special process to a hard porcelain finish with two mounting screws behind the badge. Price \$6.50.



JACKET PATCH

The jacket patch is a 9 1/2" diameter round emblem embroidered in ten colors. The design is pictured below. The cost of the patch is \$12.50 each. Due to the great expense of the patch, we could only order a limited supply, so please get your orders in as soon as possible. Please allow one week for delivery.



CORVETTE SIGNAL SEEKER RADIO  
3706551 FOR 1953-54

This is Article Number 5 in a continuation of the whole article.

## CLUB JACKET

The club jackets are light weight white nylon with racing style collar, and a red, white, and blue stripe down the left front. The jackets are \$12.50 each. Please allow one week for delivery. The sizes are as follows:

XS	S	M	L	XL
32	34-36	38-40	42-44	46

## ADVERTISING

Name, address, and phone number will be counted as part of your ad. A \$3.00 fee will be charged for each photograph. Also all ads must be received by 15th of the month prior to publication, i.e., March 15, 1970, June 15, 1970, September 15, 1970, December 15, 1970. Members may advertise their vintage Corvettes or parts at the following rates:

0- 25 words	free
26- 50 words	\$1.00
51- 75 words	\$2.00
75-100 words	\$3.00

# NOTICE

The two articles following the Radio article are taken from Chevrolet Service Manuals and are reproduced here in a beginning series for the benefit of our members.

The first article deals with 'fuel injection' and should be a help to those who find it hard to get service on their system.

The second article is a picture diagram showing the servicing of the 1953-54 Powerglide transmission.

These articles will continue in following issues, so be sure and save each issue to have a complete manual on each.



## SERVICE INSTRUCTIONS FOR SIGNAL SEEKING TUNER

The Signal Seeking Tuner is an electronic and mechanical device incorporated into a conventional auto radio in such a way that change of stations is accomplished electronically by depression of a station selector bar. The mechanical portion of the tuner provides for automatic tuning of the radio from the low to the high frequency end of the broadcast band with a solenoid operated return to the low end of the band after the high frequency limit is reached. The electronic portion of the tuner provides a means whereby the incoming signal from a station stops the tuner on that station. The strength of the signal selected is determined by the setting of a four position control on the radio called the sensitivity control. In the maximum sensitivity setting the tuner will select all stations which are ordinarily listenable, while in the minimum sensitivity position (Fully counterclockwise) the tuner stops only on

strong local stations. This control is effective only while the tuner is seeking and does not affect "on station" sensitivity.

The Tuner provides five selector buttons in addition to the station selector bar. Depression of any one button will cause the automatic mechanism to stop on a pre-selected station. The favorite station can be previously selected by the adjustment of a selector tab corresponding to that button.

When a button is depressed the tuning mechanism is started but the radio is rendered inoperative until such time as the tuner reaches the frequency of the pre-selected station. At this point contact is made between the dial pointer and the selector tab restoring normal radio operation so the triggering circuit can automatically stop the tuner on the favorite station. The setting of the sensitivity control has no effect on the tuner stopping sensitivity when using pushbutton tuning.

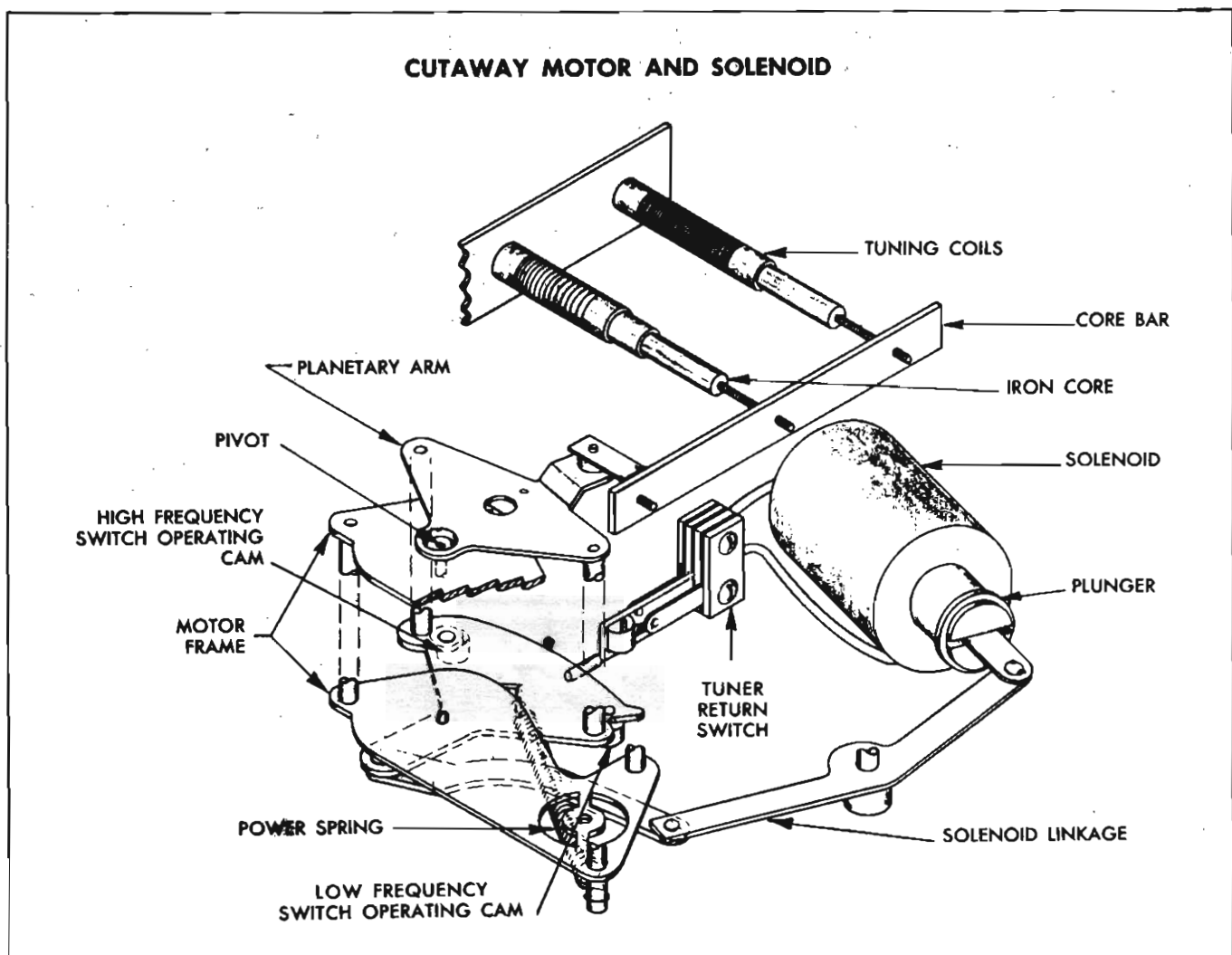


Figure 17

When the station selector bar is depressed, any previously depressed button is mechanically unlatched, returning the circuit to automatic signal seeking tuning conditions.

### THEORY OF OPERATION

The following discussion of the signal seeking tuner covers in general terms the mechanics and electronics involved in this tuner to assist in an intelligent trouble shooting approach.

### MECHANICAL OPERATION

The motive force on the signal seeking sweep of the tuner is provided by a constant speed spring driven gear train which is regulated by a nylon paddle wheel. This paddle wheel is the end gear in the gear train and acts as an air vane governor which tends to keep the speed constant. The entire gear train is stopped or started by the relay arm engaging or disengaging the paddle wheel. The nearly instantaneous return of the pointer and the cocking of the power springs is accomplished by a solenoid which is energized by a cam operated switch. The complete mechanical cycle is developed and outlined below.

### SWEEP AND RETURN CYCLE

One power Spring, which is fastened to the lower plate of the Planetary Arm, pulls this arm around its pivot. The Planetary Arm is linked to the Core Bar. Thus, as the spring contracts and moves the Planetary Arm it also pulls the core bar and its iron cores from the tuning coils thereby changing the tuned frequency of the radio towards the high end of the broadcast band. After the tuner has swept beyond the top broadcast frequency, the High Frequency Switch Operating Cam on the lower Planetary Arm trips the Tuner Return Switch which in turn energizes the Solenoid and this quickly returns the Planetary Arm to its original position with the cores inserted fully into the coils (low frequency) and the power spring is now under maximum tension. As the Planetary Arm returns, the Low Frequency Switch Operating Cam trips the Tuner Return Switch to its original position thus de-energizing the Solenoid and completing the cycle.

### MOTOR AND CONTROL

The Power Spring tends to move the Planetary Arm about its pivot point thereby starting the Planetary Gear. This motion is transferred through the gear train to the Paddle Wheel which acts as an air vane governor keeping the motion at a constant speed. This movement of the Planetary Arm is then controlled by merely freeing

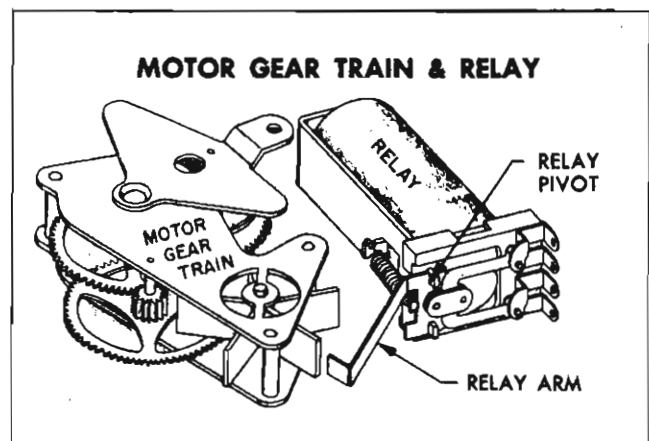


Figure 18

or blocking the Paddle Wheel with the Relay Arm. Thus, the movement of the Planetary Arm which moves the tuning cores is started or stopped by the action of the Relay Arm.

### MANUAL TUNING GEAR OPERATION

Manual tuning is accomplished by turning the Manual Control Shaft which turns the Worm Gear in its bracket. The Worm Gear is meshed with the Manual Drive Gear which in turn is meshed with the Planetary Pinion Gear. During manual tuning the Paddle Wheel is held in place by the Relay Arm and this Pinion Gear is not free to rotate, thus effectively locking the Planetary Arm to the outer edge of the Manual Drive Gear. Therefore as the Manual Drive Gear turns, the Planetary Arm moves in unison with it and varies the frequency of the tuner by varying the position of the iron cores in the tuning coils. Notice that when the set is being tuned automatically and the Paddle Wheel is rotating, the Manual Drive Gear is held securely in place by the Worm Gear while the Planetary Pinion Gear "walks around" the periphery of the Manual Drive Gear thereby causing the Planetary Arm to move and change the position of the tuning cores. See Figure 19.

### POINTER AND CORE BAR LINKAGE

The second power spring is shown in this view. It has a dual purpose, serving both as a power spring and an antibacklash spring. The primary linkage is from the tuner frame to the Lever Arm which is securely staked to the Bell Crank. At the Bell Crank the linkage splits, with one arm linked to the core bar at the extreme left end, and the other arm linked to the pointer. Thus, this spring helps pull the core bar in the high frequency direction when it is free to move and provides a spring loaded linkage between the core bar and the pointer preventing any tendency for backlash.

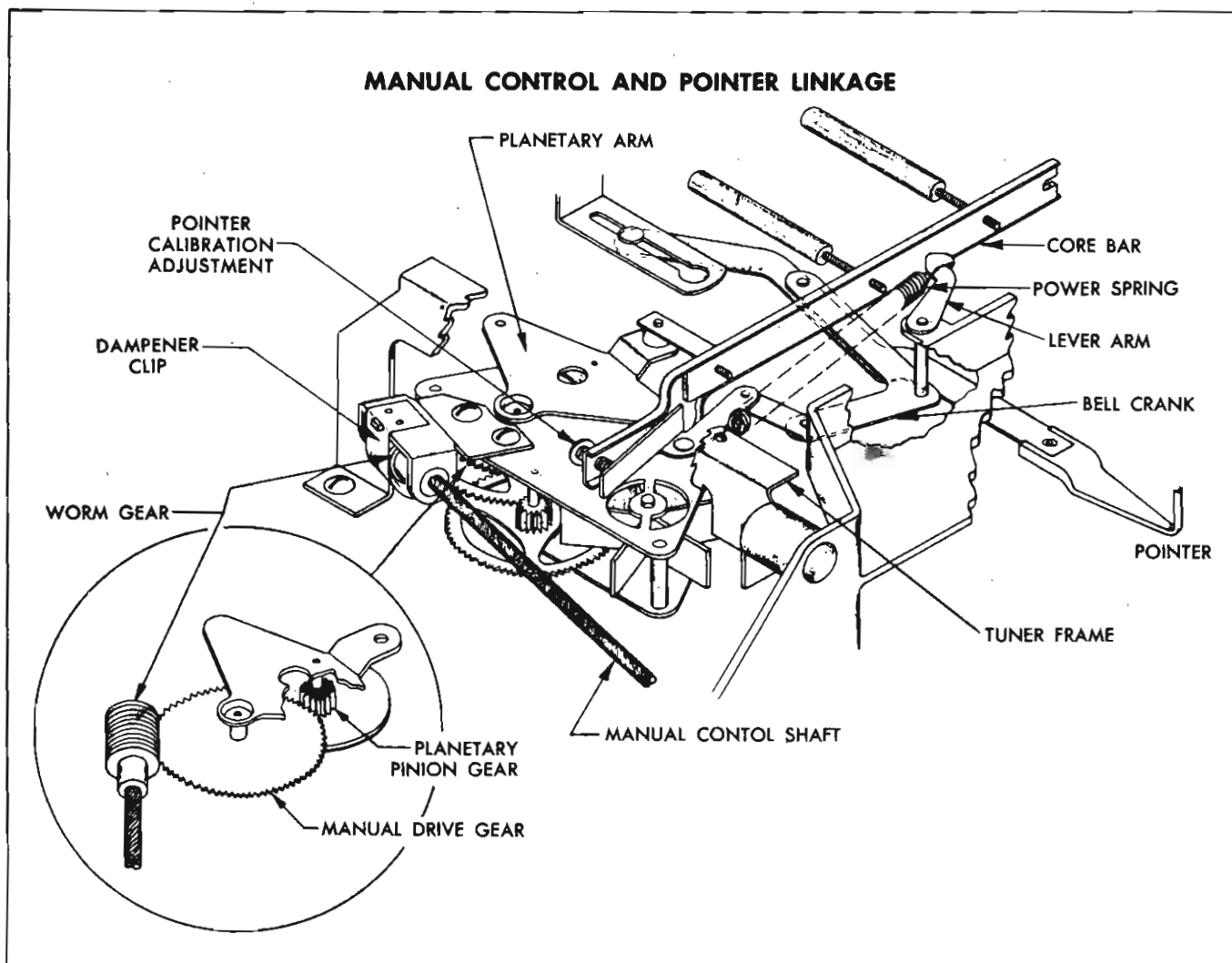


Figure 19

### CLUTCHING OPERATIONS

The Ratchet Pawl and Wheel are used so that the Solenoid can cock the power springs without running the entire gear train in the reverse direction during the return sweep. Notice that the Ratchet also is used when the dial pointer has reached the high end of the band while tuning manually. When the Planetary Arm has reached the end of its tuning arc, the planetary pinion tends to be rotated by the Manual Drive Gear (see Figure 20) and this turns the Ratchet Wheel out of the Pawl and allows the pinion gear to turn freely without exerting further force on the Planetary Arm and thereby eliminates any possible damage to the mechanism.

The purpose of the Friction Disc is to prevent damage to the mechanism when manually tuned past the low frequency stop. This is accomplished because the disc slips before excessive pressure

is exerted when the Pinion Gear tends to rotate the Planetary Gear.

### STATION SELECTOR BAR OPERATION

1. The rear corner of the rocker arm rests on the arm on the end of the latch bar.
2. As the station selector bar is depressed the rocker arm causes the latch bar to move downward.
3. Any button which is in the depressed position will be released as the latch bar moves downward.
4. An arm on the rear of the latch bar moves downward operating the trip arm of the station selector switch causing the tuner to start seeking.



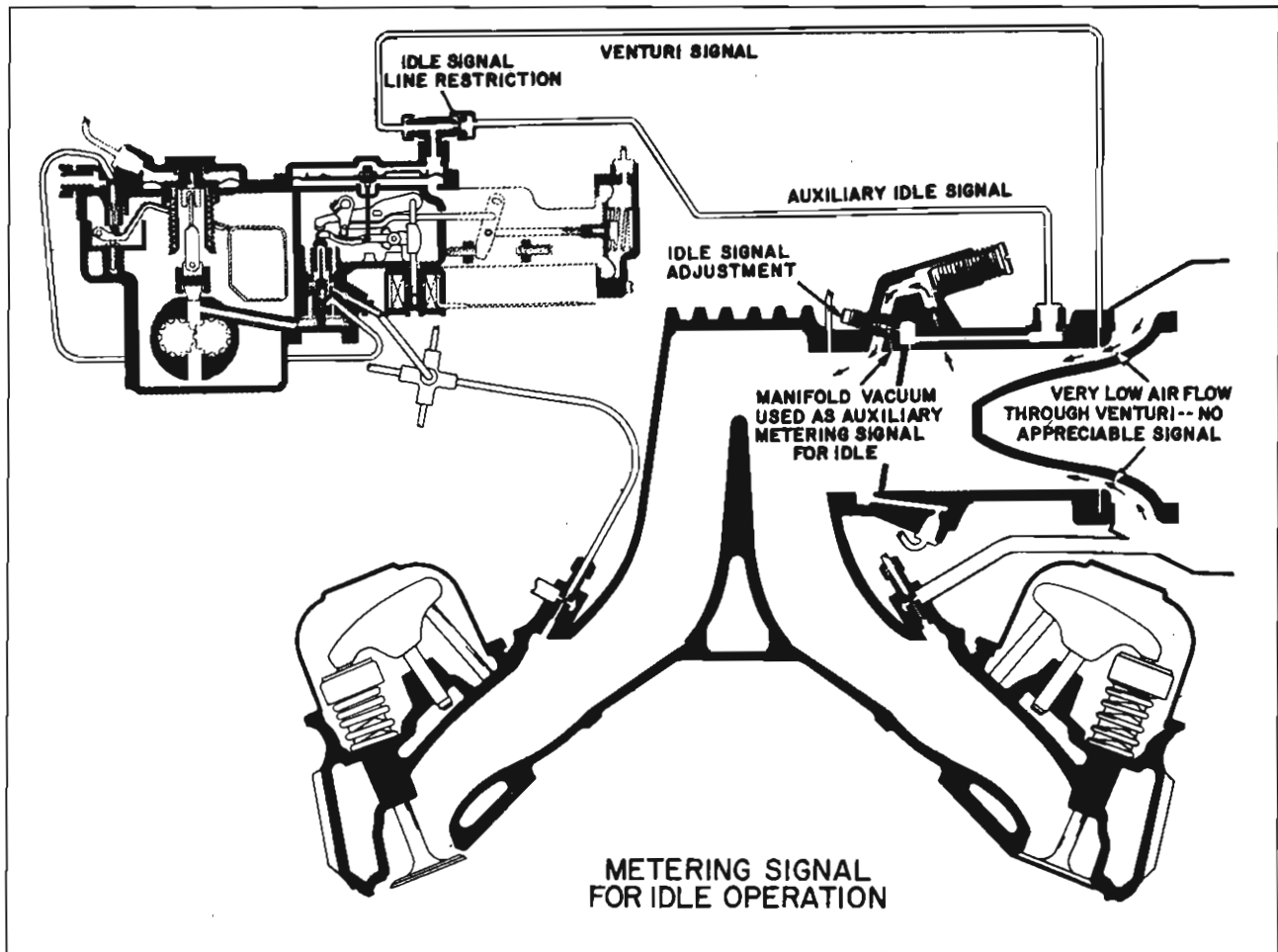


Figure 9

### Idle Fuel Control

The venturi signal is naturally very slight for idle speeds and is made even lower by the fact that only part of the idle air enters the venturi (fig. 9). (The balance enters directly through the nozzles.) Since a higher signal is required to provide the rich mixtures necessary for idle due to exhaust gas dilution and to provide satisfactory response to the throttle from off idle position, the venturi signal must be strengthened and this is done by the addition of a regulated amount of manifold vacuum. Vacuum is applied to this system at the idle needle hole and can be controlled by turning the needle in or out to obtain the best

operation. This auxiliary signal vacuum is transmitted through a tube to a "T" at the main control diaphragm where it passes a restriction and combines with the main venturi signal to operate the control diaphragm. Thus the fuel flow is increased, by increasing the effective venturi signal at the main control diaphragm.

As the throttle valve is opened, vacuum is introduced to the system through the off idle signal port and at this point the vacuum is controlled by the restriction in the tube. As the throttle valve continues to open, vacuum at the auxiliary signal ports decreases until there is no noticeable auxiliary signal and the main venturi signal operates the diaphragm.

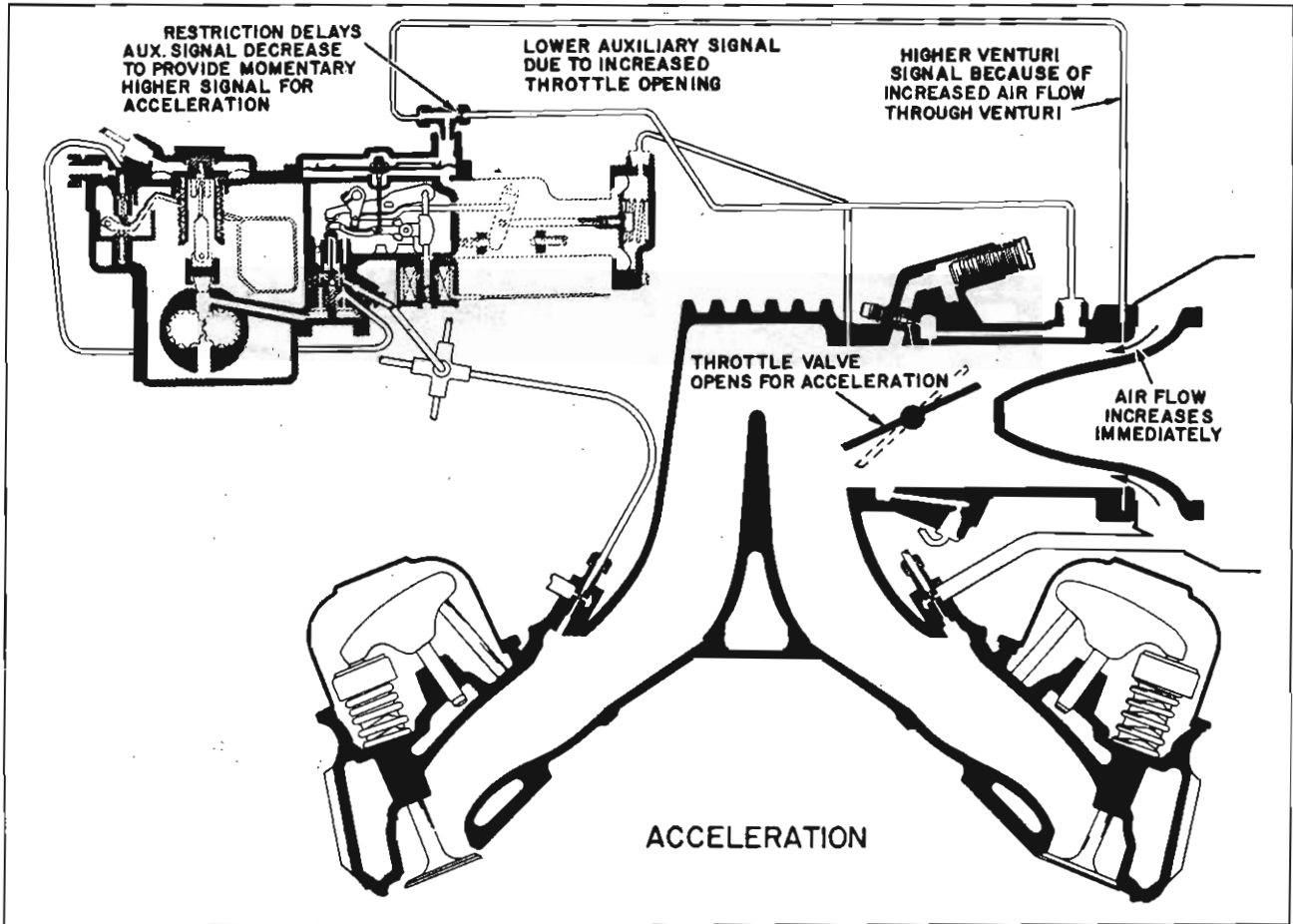


Figure 10

### Acceleration

For acceleration an extra charge of fuel is required to make up for a slight lag in the control system in answering the higher venturi signal (fig. 10). Here again the auxiliary signal system is used. It can be seen that the signal on the fuel control diaphragm at any time will be a combination of the main venturi signal and the auxiliary signal.

As the throttle valve is opened for acceleration the air flow and the main venturi signal increase immediately. Because of the opening of the throttle valve, vacuum on the auxiliary signal system decreases but the decrease is delayed by the restriction in the auxiliary line so that for a short time a higher than ordinary signal is maintained at the control diaphragm, which feeds the necessary extra charge for acceleration.

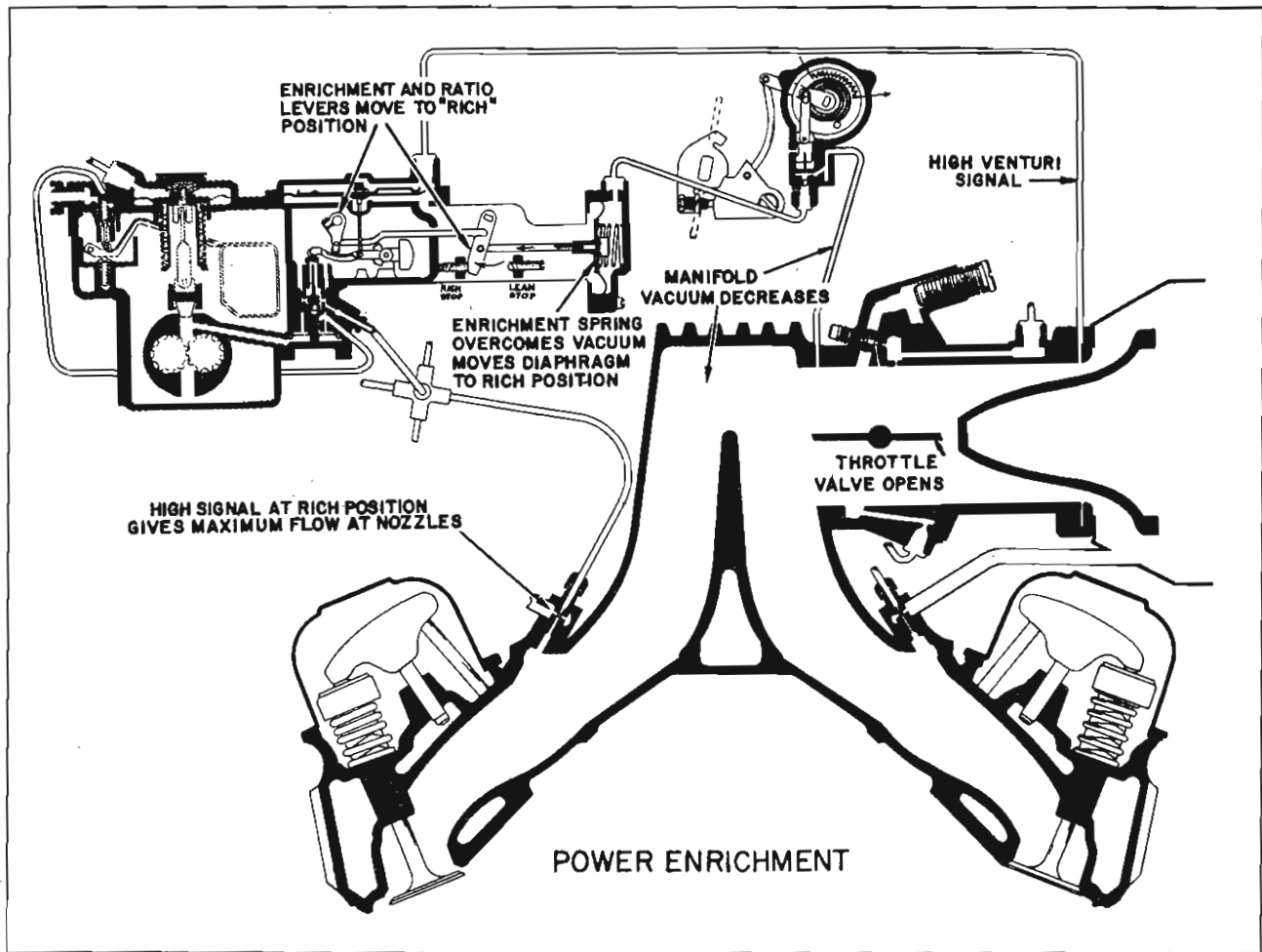


Figure 11

### Power

As was mentioned earlier, the ratio lever in the fuel control linkage system controls the fuel/air mixture, thus for power operation the ratio lever must be moved to its rich position to supply the required richer mixtures for power operation (fig. 11). The ratio lever is connected by a shaft to an outside enrichment lever which in turn is connected by a rod to a diaphragm which is sensitive to manifold vacuum. This diaphragm operates much as the power valve and power piston in a carburetor. When manifold vacuum is high and

main mixtures can be used, the diaphragm is held in the lean position. When power is called for and engine vacuum drops, a calibrated spring moves the diaphragm to the rich position and holds it there until manifold vacuum rises when power is no longer required. To determine the rich and lean ratios there are stops on the fuel meter casting which are adjusted at the factory to provide proper fuel flow to a matched set of nozzles. These stops should not be moved in the field as doing so would require a complete recalibration of the system.



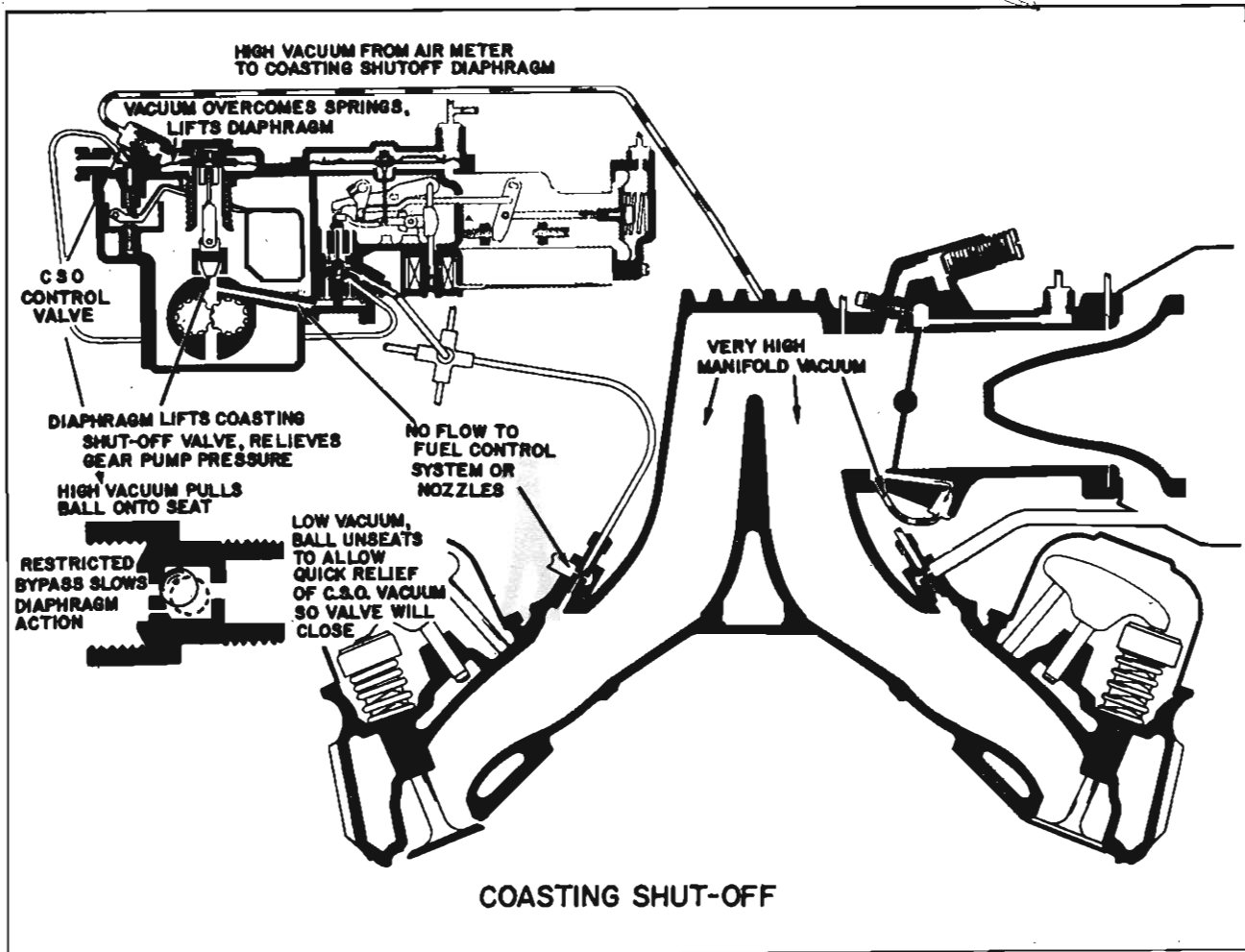


Figure 12

### Coasting Shut-Off

So that fuel flow can be cut off during deceleration a diaphragm controlled coasting shut-off valve is included in the fuel meter (fig. 12), which operates as follows: A heavy calibrated spring holds down a large check valve in the high pressure pump outlet so that under normal driving conditions high pressure fuel is fed to the metering system. The heavy spring is connected to a diaphragm.

In the coasting shut-off diaphragm cover, a combination ball check and restriction fitting controls C.S.O. operation. Whenever there is a high vacuum on the fitting, the ball check is

pulled onto its seat; with the ball on its seat, vacuum reaches the diaphragm through a small drilled hole which by-passes the ball. This restricted hole delays reaction of the diaphragm, so that the C.S.O. valve will operate only during continued deceleration, and is less sensitive to rapid throttle maneuvers. Whenever the throttle valve opens and fuel is needed again, vacuum drops and the ball falls off the seat to relieve diaphragm vacuum and the C.S.O. valve closes immediately so that the gear pump again feeds fuel to the system. The system is calibrated to stop fuel flow during deceleration at vacuums of 22" Hg. and higher.

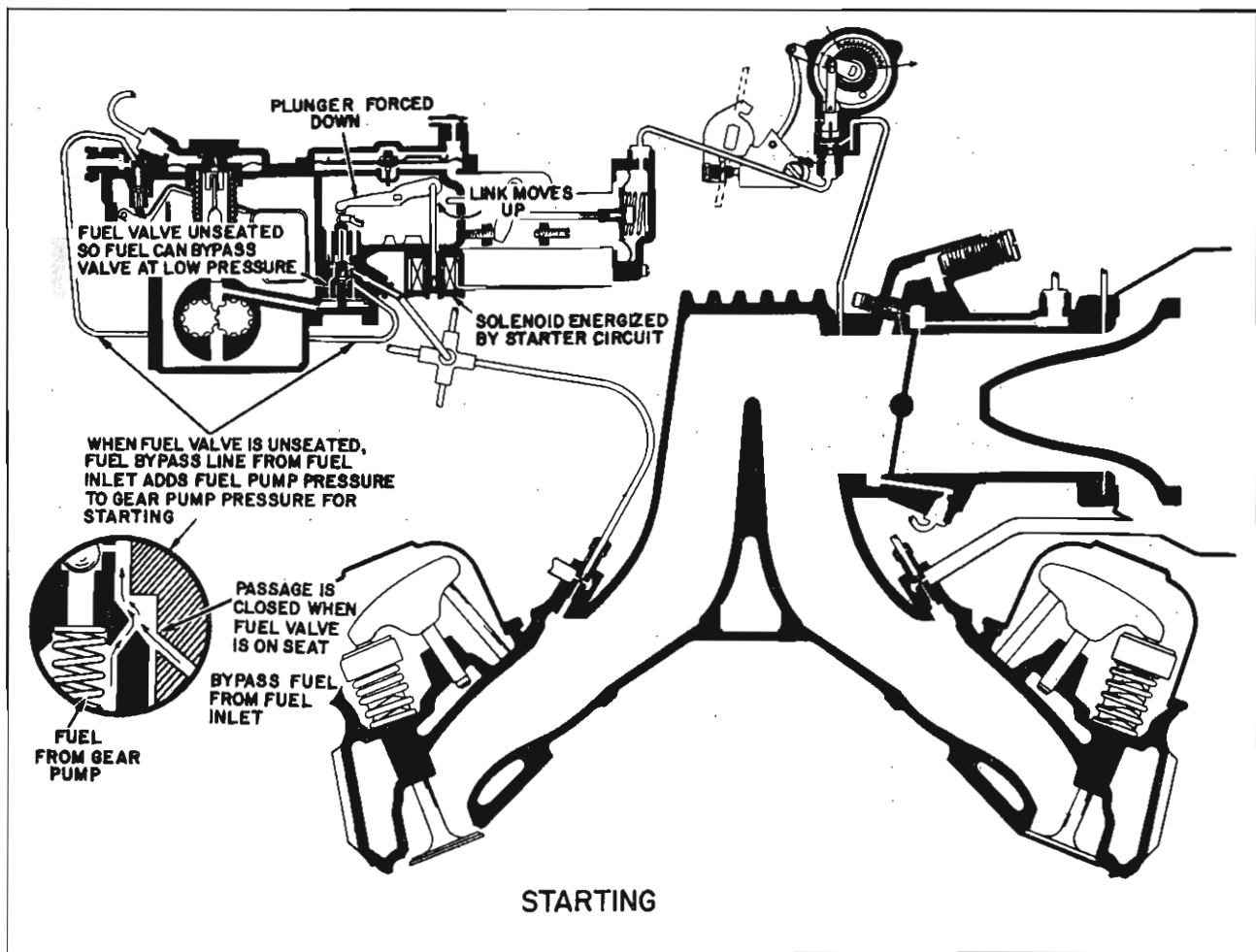


Figure 13

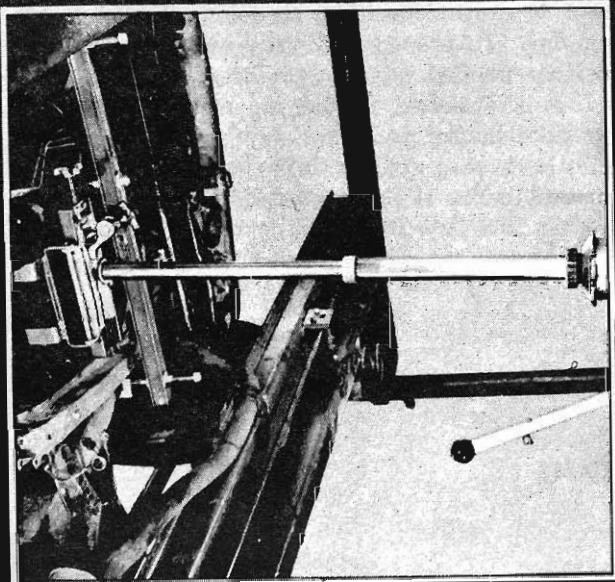
### Starting

At cranking speed there is very little fuel pressure from the gear pump so that special provision must be made to feed sufficient fuel to the nozzle at cranking RPM so that the engine can start (fig. 13). To obtain the maximum amount of fuel at these low pressures, the fuel valve is mechanically forced off its seat so that fuel can by-pass the valve and flow directly to the nozzles. This action is accomplished by a solenoid which is energized by the starting circuit and which operates through linkage to force the spill plunger downward in contact with the fuel valve to force the fuel valve off its seat.

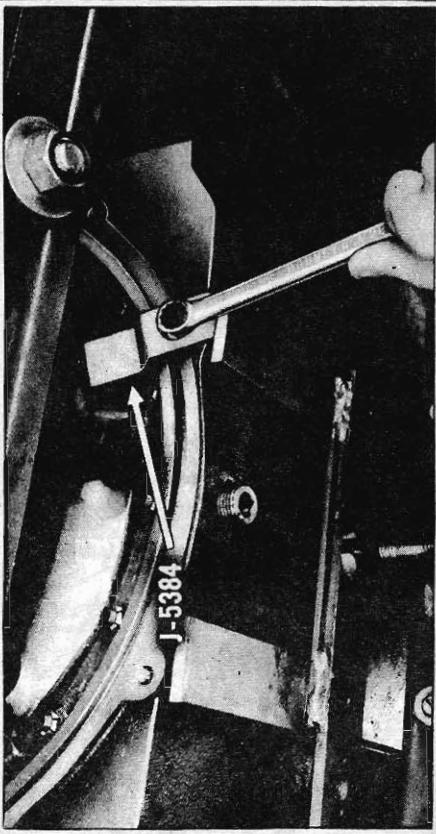
When the fuel valve is forced off its seat, it

uncovers a special by-pass fuel line from the fuel meter intake which delivers fuel pump pressure to the metering chamber to combine with gear pump pressure in supplying sufficient fuel for starting. As soon as the engine has started and the ignition switch is returned to run position, solenoid current is cut off and the fuel valve returns to normal position, shutting off all by-pass fuel flow. To prevent difficulty in starting or any possible flooded engine condition, an unloading device is attached to the air meter. Whenever the accelerator pedal is depressed  $\frac{3}{4}$  to full throttle, a tang actuates a switch which cuts off current to the starting solenoid, thus preventing by-pass fuel flow if unloading is necessary.

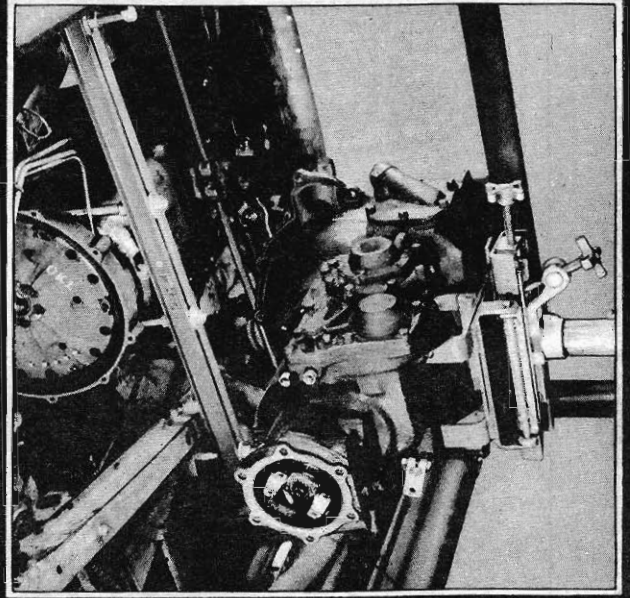
Raise a hydraulic lift stand and transmission adapter under the transmission. Fasten the adapter to the transmission.



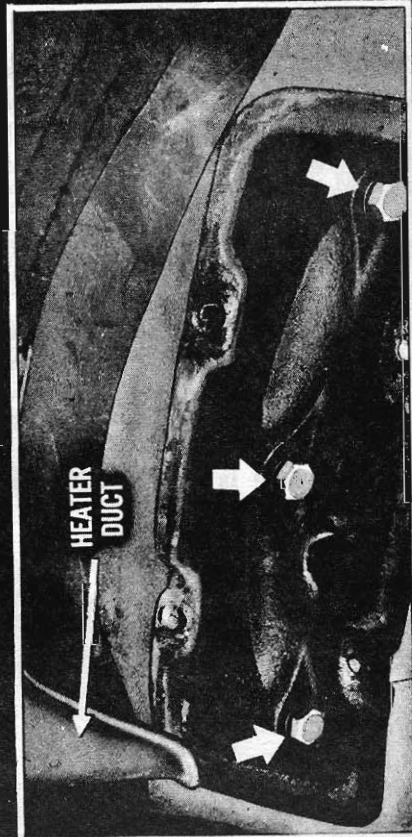
Move the transmission a short distance toward the rear of the car and install the converter holding tool J-5384. This is to prevent the converter from sliding out of the housing.



Lower the transmission on the stand and remove from under the car. This completes the removal of the transmission.

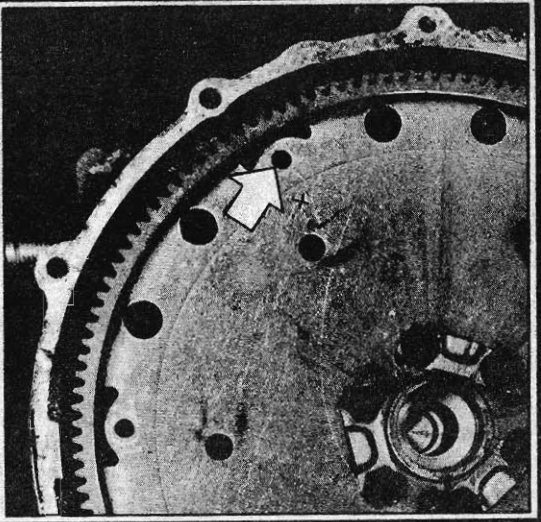


Now remove the three upper transmission housing-to-flywheel housing bolts, working through the toe pan access hole. **NOTE:** Loosen and move the heater duct if necessary.



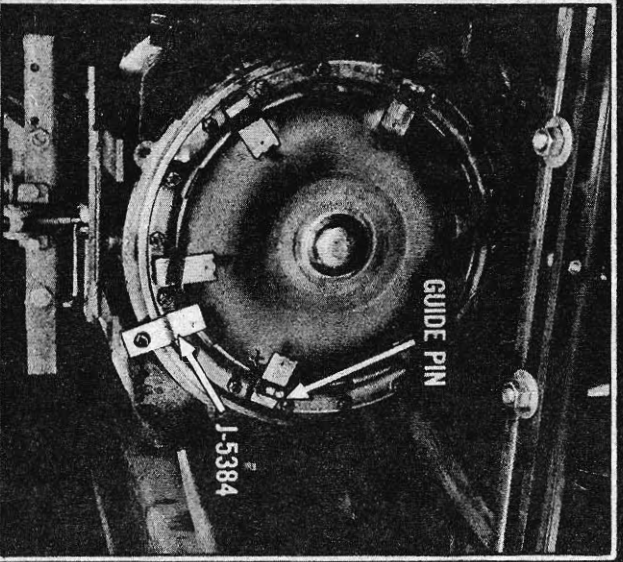


## 4. INSTALLATION

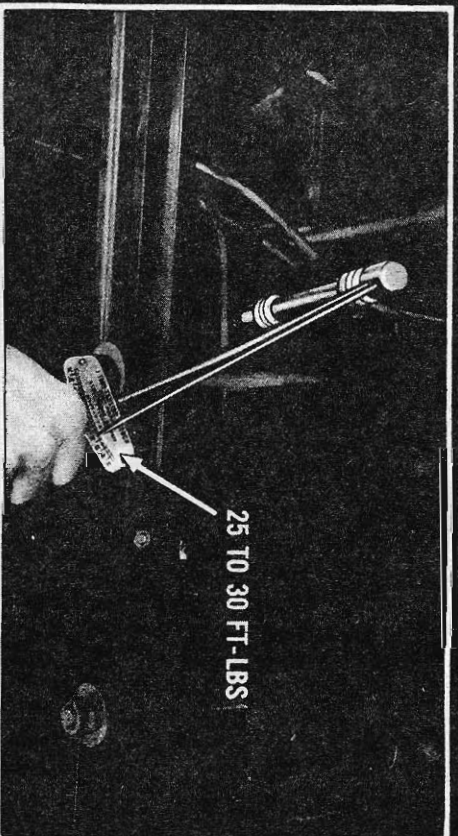


Installation is practically the reverse of removal. The key steps will be illustrated here. First, align the marked hole in the flywheel with the access hole in the flywheel housing.

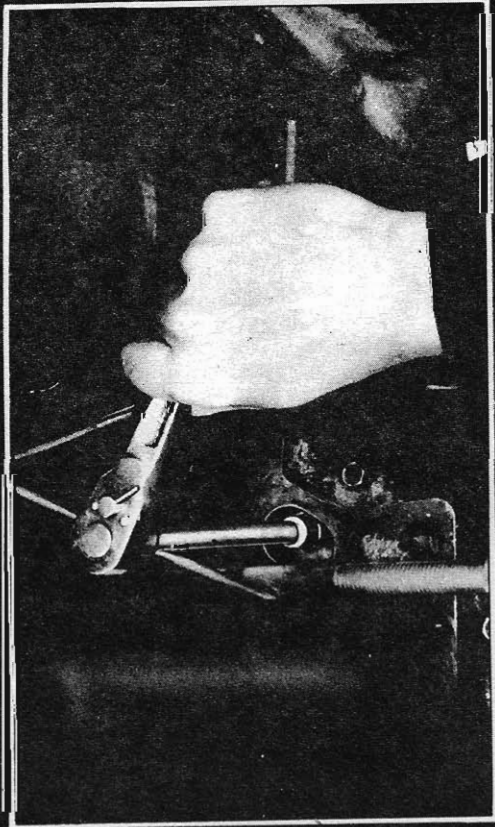
Align the guide pin and the marked hole in the flywheel, and move the transmission into place. **DO NOT** let the converter move forward and disengage the front pump drive lugs.



Install a guide pin in the marked hole in the converter cover. Raise the transmission and locate slightly to the rear of the flywheel housing. Then remove converter holding tool J-5384.

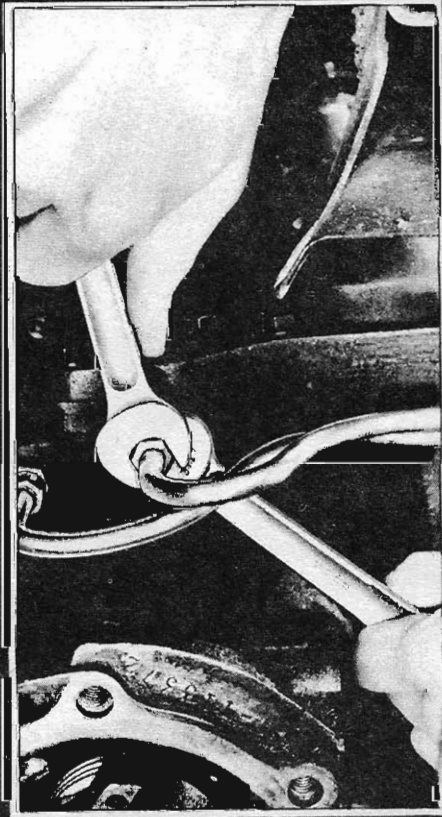


Install the transmission housing-to-flywheel housing attaching bolts and torque to 25 to 30 ft-lbs. **DO NOT** pull the housings together with the bolts.

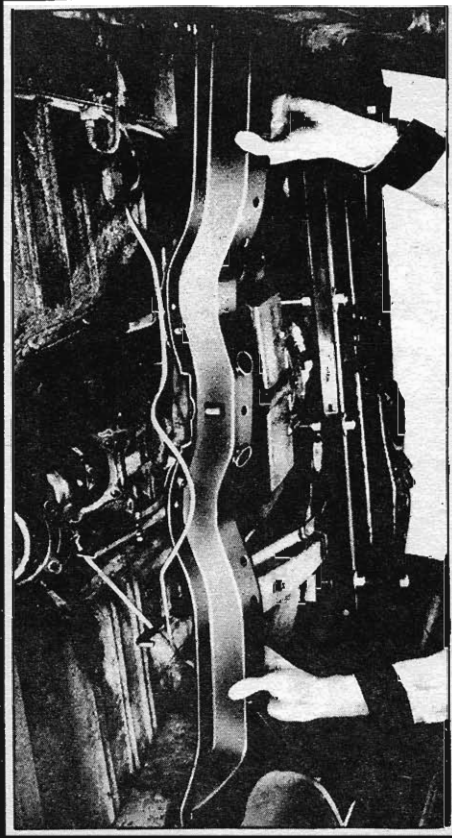


Remove the guide pin, and install the flywheel-to-converter attaching bolts through the access hole.

Continue the installation under the car. Install the manual shift bell-crank on the transmission. Connect long pipe to the modulator. Connect long and short manual shift control rods, low-and-drive valve control rod, and speedometer cable. **NOTE:** Be careful to install the short manual shift control rod with the arrow up.

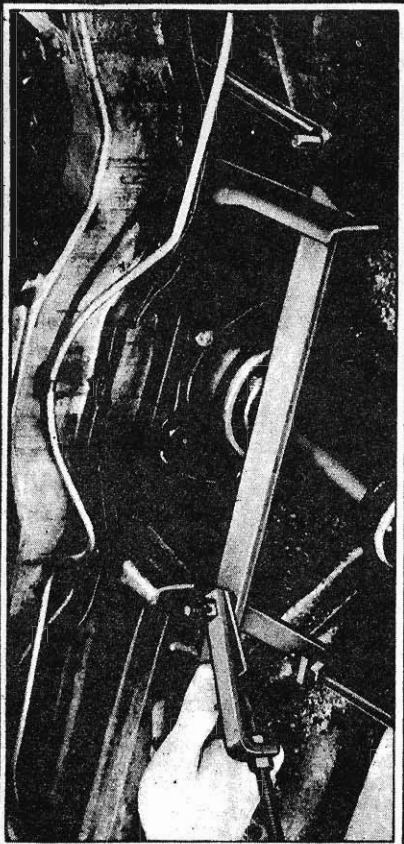


All models except convertibles: Connect the oil cooler pipes and then raise the engine 1½ inches.



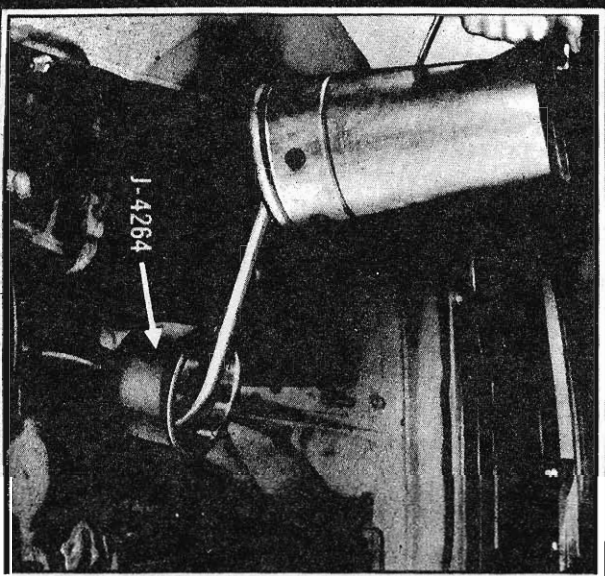
Install the second cross-member, sliding it in from the right side. Then install attaching bolts and tighten securely.

**Convertible models: Connect oil cooler pipes. Install the cross-member and support retainer, and the transmission support assembly. Install the manual shift bell-crank, and connect the long and short manual shift rods, being careful to position the short shift rod with the arrow pointed up. Install the modulator pipe, the low-and-drive valve control rod, and the speedometer cable.**



**All models: Install the hand brake pull rod and cross shaft, and connect the universal joint. Install the transmission support bolts, and then remove the engine support bar and reconnect the exhaust pipe.**

**Adjust the manual shift linkage and throttle linkage. The shift linkage adjustment is the same as for 1950-52 models, and throttle linkage adjustment is described in this film under Adjustments.**



**Put three quarts of Type "A" Automatic Transmission Fluid (identified by an AQ-ATF number) in the transmission. Start engine and fill until fluid is between full and add-one-quart mark on indicator.**



