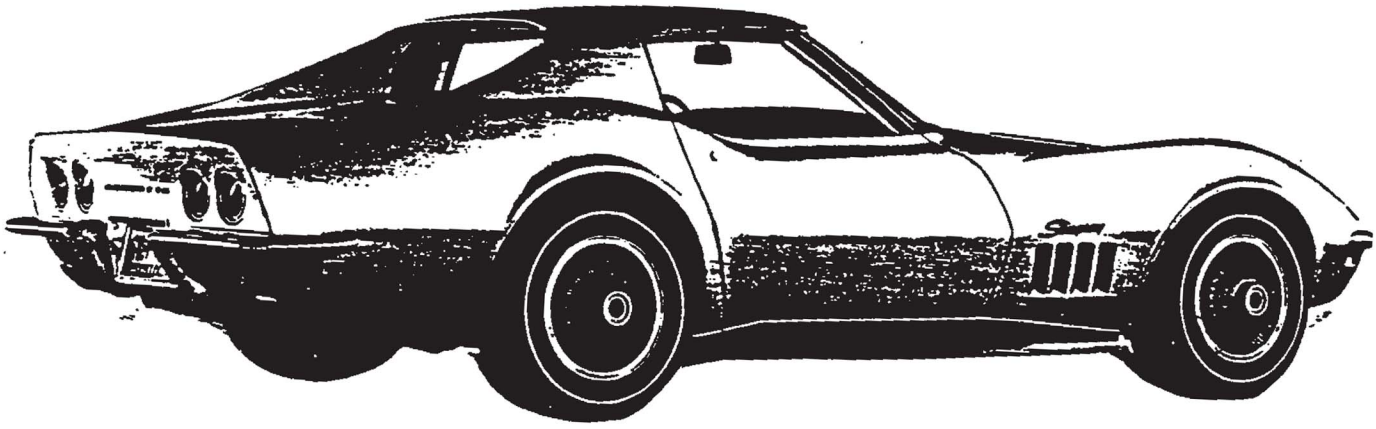
1969

CORVETTE

SPECIFICATIONS



1969 CORVETTE

Production: 22,129 coupe, 16,633 convertible, 38,762 total.

1969 NUMBERS

Vehicle: 194379S700001 through 194379S738762
- For convertibles, fourth digit is a 6.

Suffix:
GC: 350ci, 350hp, mt, ig
GD: 350ci, 350hp, mt, ac, ig
HW: 350ci, 350hp, mt
HX: 350ci, 350hp, mt, ac
HY: 350ci, 300hp, mt
HZ: 350ci, 300hp, at
LL: 427ci, 390hp, at
LM: 427ci, 390hp, mt
LN: 427ci, 400hp, at
LO: 427ci, 430hp, mt
LP: 427ci, 435hp, mt, ah
LQ: 427ci, 400hp, mt
LR: 427ci, 435hp, mt
LT: 427ci, 435hp, mt, hc
LU: 427ci, 435hp, mt, ah, hc
LV: 427ci, 430hp(L88), at
LW: 427ci, 435hp, at, ah
LX: 427ci, 435hp, at
ME: 427ci, 430hp(ZL1), mt
MG: 427ci, 430hp(ZL1), at
MH: 427ci, 390hp, mt, ig
MI: 427ci, 390hp, at, ig
MJ: 427ci, 400hp, at, ig
MK: 427ci, 400hp, mt, ig
MR: 427ci, 430hp(L88), mt
MS: 427ci, uu

Block:
3932386: 350ci, 300hp, 350hp
3935439: 427ci, 390hp, 400hp, 430hp, 435hp
3955270: 427ci, 390hp, 400hp, 430hp, 435hp
3956618: 350ci, 300hp, 350hp
3963512: 427ci, 390hp, 400hp, 430hp, 435hp, lp
3970010: 350ci, 300hp, 350hp, lp

Head:
3919840: 427ci, 435hp, ih
3919842: 427ci, 435hp, ah
3927186: 350ci, 300hp, 350hp
3927187: 350ci, 300hp
3931063: 427ci, 390hp, 400hp
3946074: 427ci, 430hp, ah
3947041: 350ci, 300hp

Carb:
Rochester Q-jet #7029202: 350ci, 300hp, at
Rochester Q-jet #7029203: 350ci, 300hp, mt
Rochester Q-jet #7029204: 427ci, 390hp, at
Rochester Q-jet #7029207: 350ci, 350hp, mt
Rochester Q-jet #7029215: 427ci, 390hp, mt
Holley R3659A #3902353: 427ci, 400hp(fc,rc), 435hp(fc,rc)
Holley R4055-1A #3940929: 427ci, 400hp(cc,mt), 435hp(cc)
Holley R4056-1A #3940930: 427ci, 400hp, cc, at
Holley R4054A #3925519: 427ci, 430hp, fd
Holley R4296A #3955205: 427ci, 430hp, sd

Distributor:
1111490: 350ci, 300hp
1111491: 350ci, 350hp, ig
1111493: 350ci, 350hp
1111927: 427ci, 430hp, ig
1111926: 427ci, 390hp, 400hp
1111928: 427ci, 435hp, ig
1111954: 427ci, 390hp, 400hp, ig

Alternator:
1100825: ac and/or ig
1100833: 427ci, 390hp, 400hp
1100859: 350ci, 300hp, 350hp
1100882: 427ci, 430hp,435hp,ig
1100884: 350ci, 300hp, ac (uu)

Ending Vehicle:

Sep 68: 703041	Feb 69: 717571	Aug 69: 728107
Oct 68: 706272	Mar 69: 720543	Sep 69: 730963
Nov 68: 709159	Apr 69: 721315	Oct 69: 734067
Dec 68: 711742	Jun 69: 723374	Nov 69: 736798
Jan 69: 714695	Jul 69: 725875	Dec 69: 738762

Abbreviations: ac=air conditioning, ah=aluminum heads, at=automatic transmission, cc=center carburetor, ci=cubic inch, fd=first design, fc=front carburetor, hc=heavy-duty clutch, hp=horsepower, ig=transistor ignition, ih=iron head, lp=late production, mt=manual transmission, ps=power steering, rc=rear carburetor, sd=second design, uu=uncertain usage.

1969 OPTIONS

RPO #	DESCRIPTION	QTY	RETAIL $
19437	Base Corvette Sport Coupe	22,129	$4,781.00
19467	Base Corvette Convertible	16,633	4,438.00
—	Genuine Leather Seats	3,729	79.00
A01	Soft Ray Tinted Glass, all windows	31,270	16.90
A31	Power Windows	9,816	63.20
A82	Headrests	38,762	17.95
A85	Custom Shoulder Belts (std with coupe)	600	42.15
C07	Auxiliary Hardtop (for convertible)	7,878	252.80
C08	Vinyl Covering (for auxiliary hardtop)	3,266	57.95
C50	Rear Window Defroster	2,485	32.65
C60	Air Conditioning	11,859	428.70
F41	Special Front and Rear Suspension	1,661	36.90
G81	Positraction Rear Axle, all ratios	36,965	46.35
J50	Power Brakes	16,876	42.15
J56	Special Heavy Duty Brakes	115	384.45
K05	Engine Block Heater	824	10.55
K66	Transistor Ignition System	5,702	81.10
L36	427ci, 390hp Engine	10,531	221.20
L46	350ci, 350hp Engine	12,846	131.65
L68	427ci, 400hp Engine	2,072	326.55
L71	427ci, 435hp Engine	2,722	437.10
L88	427ci, 430hp Engine	116	1,032.15
L89	Aluminum Cylinder Heads with L71	390	832.05
MA6	Heavy Duty Clutch	102	79.00
M20	4-Speed Manual Transmission	16,507	184.80
M21	4-Speed Man Trans, close ratio	13,741	184.80
M22	4-Speed Man Trans, close ratio, heavy duty	101	290.40
M40	Turbo Hydra-Matic Automatic Transmission	8,161	221.80
N14	Side Mount Exhaust System	4,355	147.45
N37	Tilt-Telescopic Steering Column	10,325	84.30
N40	Power Steering	22,866	105.35
P02	Deluxe Wheel Covers	8,073	57.95
PT6	Red Stripe Tires, F70x15, nylon	5,210	31.30
PT7	White Stripe Tires, F70x15, nylon	21,379	31.30
PU9	White Letter Tires, F70x15, nylon	2,398	33.15
TJ2	Front Fender Louver Trim	11,962	21.10
UA6	Alarm System	12,436	26.35
U15	Speed Warning Indicator	3,561	11.60
U69	AM-FM Radio	33,871	172.75
U79	AM-FM Radio, stereo	4,114	278.10
ZL1	Special L88 (aluminum block)	2	4,718.35

• A 350ci, 300hp engine, 3-speed manual transmission, vinyl interior, and soft top (conv) or T-tops (cpe) were included in the base. A82 was a required RPO early, then part of base. M40 cost $290.40 with L71 or L88.

1969 COLORS

CODE	EXTERIOR	SOFT TOP	WHEELS	INTERIORS
900	Tuxedo Black	Bk-W-Bg	Silver	Bk-Bb-G-Gu-R-S
972	Can-Am White	Bk-W-Bg	Silver	Bk-Bb-G-Gu-R-S
974	Monza Red	Bk-W-Bg	Silver	Bk-R-S
976	LeMans Blue	Bk-W-Bg	Silver	Bk-Bb
980	Riverside Gold	Bk-W-Bg	Silver	Bk-S
983	Fathom Green	Bk-W-Bg	Silver	Bk-G-S
984	Daytona Yellow	Bk-W-Bg	Silver	Bk
986	Cortez Silver	Bk-W-Bg	Silver	Bk-Bb-G-Gu-R-S
988	Burgundy	Bk-W-Bg	Silver	Bk-S
990	Monaco Orange	Bk-W-Bg	Silver	Bk

• Suggested interiors shown. Other combinations were possible.

Interior Codes: ZQ4 or std=Bk/V, 402=Bk/L, 407=R/V, 408=R/L, 411=Bb/V, 412=Bb/L, 416=G/V, 417=G/L, 420=S/V, 421=S/L, 427=G/V, 428=G/L.

Abbreviations: Bb=Bright Blue, Bg=Beige, Bk=Black, G=Green, Gu=Gunmetal, L=Leather, R=Red, S=Saddle, V=Vinyl, W=White.

The Corvette Black Book

1953-1993

October 1992

Published by

Michael Bruce Associates, Inc.
Michael Antonick, President
Post Office Box 396
Powell, Ohio 43065

CONTENTS

Michael Bruce Associates, Inc. acknowledges with appreciation the following enthusiasts who contributed their expertise to this and previous editions of the *Corvette Black Book*: Noland Adams, Dan Aldridge, John Amgwert, Pat Baker, Jane Barthelme, Michele Boling, Kent Brooks, Barry Brown, David Burroughs, Steve Dangremond, Dr. M. F. Dobbins, Bob Eckles, the late Sam Folz, John Hibbert, Mike Hunt, Alan Kaplan, Paul Kitchen, Gary Konner, Ralph Kramer and staff, Jim Krughoff, Gary Lisk, Bill Locke, Bob Lojewski, Bob McDorman, Chip Miller, Bill Mock, Brian Pearce, John Poloney, Bill Rhodes, Jeffrey Smith, Mark & Dixie Smith, Lou Vitalle, Jerry Wadsworth, Jerry Welchers and Don Williams. Thanks also to Callaway Engineering, to Mercury-Marine, and to the Chevrolet Motor Division of General Motors Corporation.

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Cover: Photo and design by Mike Antonick. 1963 Corvette owned by Bill Munzer; restored by Bill Munzer and Don Williams.

Printed and bound in the United States of America.

ISBN: 0-933534-35-3

BOOK TRADE DISTRIBUTION BY:
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SECTION 0

GENERAL INFORMATION AND LUBRICATION

CONTENTS OF THIS SECTION

GENERAL INFORMATION

MODEL IDENTIFICATION—CHEVROLET

Series	Model Number		Description
	6-Cyl.	V-8	
Biscayne	15311	15411	2-Door Sedan, 6-Pass.
	15369	15469	4-Door Sedan, 6-Pass.
	15336	15436	4-Door Station Wagon, 2-Seat (Brookwood)
Bel Air	15511	15611	2-Door Sedan, 6-Pass.
	15569	15669	4-Door Sedan, 6-Pass.
	15536	15639	4-Door Station Wagon, 2-Seat (Townsman)
	15546	15646	4-Door Station Wagon, 3-Seat (Townsman)
Impala	16369	16469	4-Door Sedan, 6-Pass.
	16339	16439	4-Door Sport Sedan, 6-Pass.
	16337	16437	2-Door Sport Coupe, 5-Pass.*
	—	16467	2-Door Convertible, 5-Pass.*
	—	16436	4-Door Station Wagon, 2-Seat (Kingswood)
	—	16446	4-Door Station Wagon, 3-Seat (Kingswood)
Impala Custom	—	16447	2-Door Sport Coupe, 5-Pass.*
Caprice	—	16639	4-Door Sport Sedan, 6-Pass.
	—	16647	2-Door Sport Coupe, 5-Pass.*
	—	16636	4-Door Station Wagon, 2-Seat (Estate Wagon)
	—	16646	4-Door Station Wagon, 3-Seat (Estate Wagon)

*4-Passenger when optional bucket front seats specified.

VEHICLE DIMENSIONS—CHEVROLET

Pertinent dimensions for the different models are shown in the following chart.

Model	Sedan	2-Door Sport Coupe	Convertible Coupe	Station Wagon
Length Overall	214.7"	214.7"	214.7"	213.9"
Width Overall (Body)	79.6"	79.6"	79.6"	79.6"
Height Overall	55.8"	54.3"	54.3"	56.7"
Wheelbase	119.0"	119.0"	119.0"	119.0"
Tread-Front	62.5"	62.5"	62.5"	63.5"
Tread-Rear	62.4"	62.4"	62.4"	63.4"
Curb Weight: Approximately 3635 lbs. 4-Door Sedan with L-6 Engine; 3770 lbs. with V-8 Engine.				

MODEL IDENTIFICATION—CHEVELLE

Series	Model Number		Description
	6-Cyl.	V-8	
Nomad	13135	13235	4-Door Station Wagon, 2-Seat
	13136	13236	4-Door Station Wagon, 2-Seat
300 Deluxe	13369	13469	4-Door Sedan, 6-Pass.
	13327	13427	2-Door Pillar Coupe, 5-Pass.
	13337	13437	2-Door Sport Coupe, 5-Pass.
	13335	13435	4-Door Station Wagon, 2-Seat (Greenbrier)
	13336	13436	4-Door Station Wagon, 2-Seat (Greenbrier)
	13346	13446	4-Door Station Wagon, 3-Seat (Greenbrier)
Malibu	13569	13669	4-Door Sedan, 6-Pass.
	13539	13639	4-Door Sport Sedan, 6-Pass.
	13537	13637	2-Door Sport Coupe, 5-Pass. *
	13567	13667	2-Door Convertible, 5-Pass. *
	13536	13636	4-Door Station Wagon, 2-Seat (Concours)
	13546	13646	4-Door Station Wagon, 3-Seat (Concours)
Super Sport	-	13837	2-Door Sport Coupe, 5-Pass. *
Concours Estate Wagon	-	13836	4-Door Station Wagon, 2-Seat
	-	13846	4-Door Station Wagon, 3-Seat
El Camino	13380	13480	2-Door Sedan Pickup, 3-Pass. Deluxe
	13580	13680	2-Door Sedan Pickup, 3-Pass. Malibu
	-	13880	2-Door Sedan Pickup, 3-Pass. Super Sport

*4-Passenger when optional bucket seats are ordered.

VEHICLE DIMENSIONS—CHEVELLE

Pertinent dimensions for the different models are shown in the following chart.

Model	Sedan	2-Door Sport Coupe	Convertible Coupe	Station Wagon	Sedan Pickup
Length Overall	201.8"	197.1"	197.1"	207.1"	207.1"
Width Overall (Body)	75.7"	75.7"	75.7"	75.7"	75.7"
Height Overall	53.3"	52.7"	53.2"	55.2"	54.0"
Wheelbase	116.0"	112.0"	112.0"	116.0"	116.0"
Tread-Front	59.0"	59.0"	59.0"	59.0"	59.0"
Tread-Rear	59.0"	59.0"	59.0"	59.0"	59.0"
Curb Weight. Approximately 3250 lbs. 4-Door Sedan with L-6 Engine 3395 lbs. with V-8 Engine.					

MODEL IDENTIFICATION—NOVA

Model Number			Description
4-Cyl.	6-Cyl.	V-8	
11127	11327	11427	2-Door Sport Coupe, 5-Pass.
11169	11369	11469	4-Door Sedan, 6-Pass.

MODEL IDENTIFICATION—CAMARO

Model Number		Description
6-Cyl.	V-8	
12337	12437	2-Door Sport Coupe, 4-Passenger
12367	12467	2-Door Convertible, 4-Passenger

VEHICLE DIMENSIONS—NOVA

Model	Sedan	2-Door Sport Coupe
Length Overall	189.4"	189.4"
Width Overall (Body)	70.5"	70.5"
Height Overall	53.7"	54.4"
Wheelbase	111.0"	111.0"
Tread-Front	59.0"	59.0"
Tread-Rear	58.9"	58.9"
Curb Weight: Approximately 2920 lbs. 4-Door Sedan with L-4 Engine; 3050 lbs. with L-6 Engine; 3175 with V-8 Engine.		

VEHICLE DIMENSIONS—CAMARO

Model	Sport Coupe	Convertible
Length Overall	184.6"	
Width Overall (Body)	72.3"	
Height Overall	50.8"	
Wheelbase	108.0"	
Tread-Front	59.6"	
Tread-Rear	59.5"	
Weight: Sport Coupe with L6 Engine 2950 lbs.; with V-8 Engine 3105 lbs.		

MODEL IDENTIFICATION—CORVETTE

Model Number	Description
19437	2-Door Sport Coupe, 2-Passenger
19467	2-Door Convertible, 2-Passenger

VEHICLE DIMENSIONS—CORVETTE

Model	Convertible	Sport Coupe
Length Overall	182.1"	
Width Overall (Body)	69.2"	
Height Overall	47.8"	47.8"
Wheelbase	98.0"	
Tread-Front	58.3"	
Tread-Rear	59.0"	
Curb Weight:	3220 lbs. Convertible 3210 lbs. Sport Coupe with Base V-8	

UNIT AND SERIAL NUMBER LOCATIONS

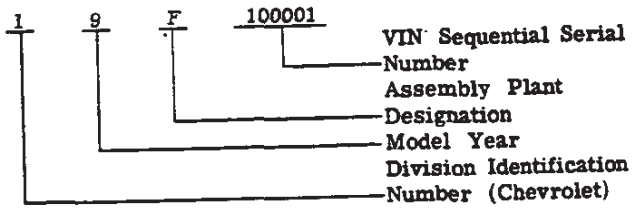
For the convenience of servicemen when writing up certain business papers, such as L. & M.R.'s Product Information Reports, or reporting product failures in any way, we are showing on a chart, the location of various unit numbers. These unit numbers and their prefixes and suffixes are necessary on these papers for various reasons--such as accounting, follow-up on production, etc.

The prefixes on certain units identify the plant in which the unit was manufactured, and thereby permits proper follow-up of the plant involved to get corrections made when necessary.

ENGINE AND TRANSMISSION NUMBER

The Vehicle Identification Number is stamped on the engine and transmission of each vehicle (see chart for location).

Example:



At multi-car plants where more than one Chevrolet series is produced, the VIN sequence numbers will be staggered to eliminate duplication of component identification numbers.

Example:

Los Angeles	VIN Sequence
15000-16000 Series (First Vehicle)	100001
12000 Series (First Vehicle)	500001

VEHICLE COMPONENT SERIAL AND UNIT NUMBER LOCATION

Component	Model	Location
Vehicle Serial Number Plate	All	Top of instrument panel left, front
Body Number, Trim and Point Plate	Chevrolet	Upper right-hand side of dash panel
	Chevelle	Upper left-hand side of dash panel
	Nova	Upper left-hand side of dash panel
	Camaro	Upper left-hand side of dash panel
	Corvette	Upper left-hand door hinge pillar
Engine and Transmission Vehicle Identification Number	4 & 6 Cyl.	On pad at right-hand side of cylinder block at rear of distributor
	8 Cylinder	On pad at front, right-hand side of cylinder block
	3-Spd. (Muncie)	On boss right above filler plug
	4-Spd. (Muncie)	On right side of case at lower rear of cover flange
	3-4 Spd. (Saginaw)	On lower right side of case adjacent to rear of cover
	Powerglide	On left upper flange of converter opening of transmission housing
	Turbo Hydra-matic 350	
	Turbo Hydra-matic 400	
Rear Axle Number	All except Corvette	On right or left axle tube adjacent to carrier
	Corvette	On bottom surface of carrier at cover mounting flange
Delcotron	All	On top drive end frame
Starter	All	Stamped on outer case, toward rear
Battery	All	On cell cover segment, top of battery

Vehicle Serial Number

A typical vehicle serial number tag yields manufacturer's identity, vehicle type, model year, assembly plant and production unit number when broken down as shown in the following chart.

Manufacturer Identity [1]	Body Style [2]	Model Year [3]	Assembly Plant [4]	Unit Number [5]
1	5645	9	F	100025

[1] Manufacturers identity number assigned to all Chevrolet built vehicles.
[2] See Model Identification in this section.
[3] Last number of model year (1969).
[4] F-Flint
[5] Unit numbering will start at 100,001 at all plants.

KEYS AND LOCKS

Four keys (two rectangular head and two oval head) are provided with each vehicle. The rectangular head key operates the ignition switch and front door locks. The oval-head key operates the locks for the glove box and rear compartment lid (spare tire compartment lid lock on Corvette).

PUSHING, TOWING AND LIFTING

Pushing

NOTE: Towing car to start is not recommended due to the possibility of the disabled car accelerating into tow car.

AUTOMATIC TRANSMISSION

Do not attempt to start the engine by pushing the car. Should the battery become discharged, it will be necessary to use an auxiliary battery with jumper cables to start the engine.

CAUTION: To prevent damage to electrical system, never connect booster batteries in excess of 12 volts and connect positive to positive and negative to negative.

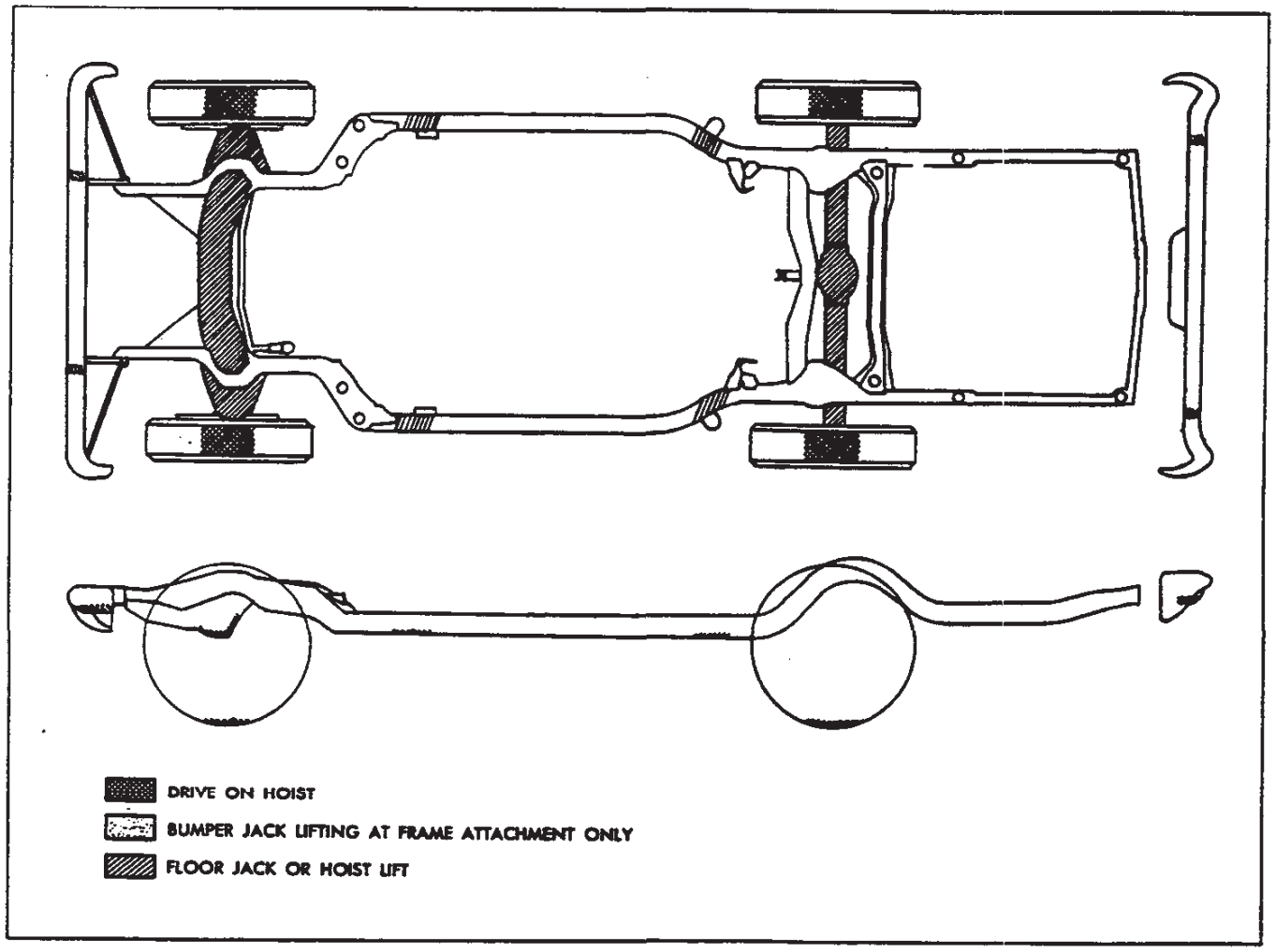


Fig. 1—Vehicle Lifting Points—Chevrolet

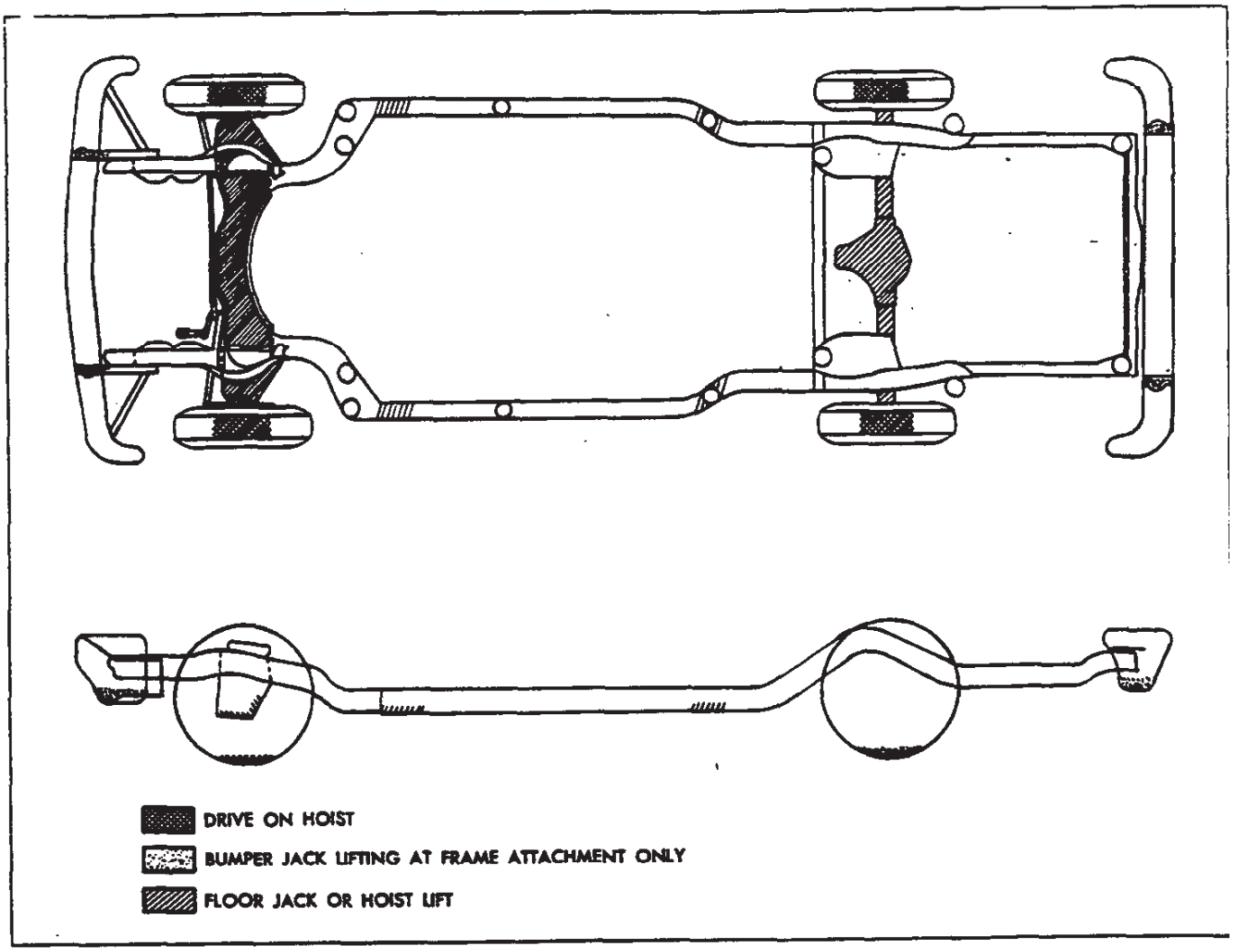


Fig. 2—Vehicle Lifting Points—Chevelle

Manual Transmission

When a push start is necessary turn off all electrical loads such as heater, radio, and if possible, lights, turn on the key, depress the clutch, and place the shift lever in high gear. Release the clutch when your speed reaches 10 to 15 miles per hour.

TOWING

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

However, the drive shaft must be disconnected or the car towed on its front wheels if 1) Tow speeds in excess of 35 MPH are necessary, 2) Car must be towed for extended distances (over 50 miles) or, 3) 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.

TOWING THE CORVETTE

Towing with Rear End Raised (Figure 3 & 4)

Secure steering wheel to maintain a straight ahead position. Connect standard chain hook ends around torque control arms just outboard of shock mounting bracket

Fig. 3—Connect Hooks Outboard of Shock

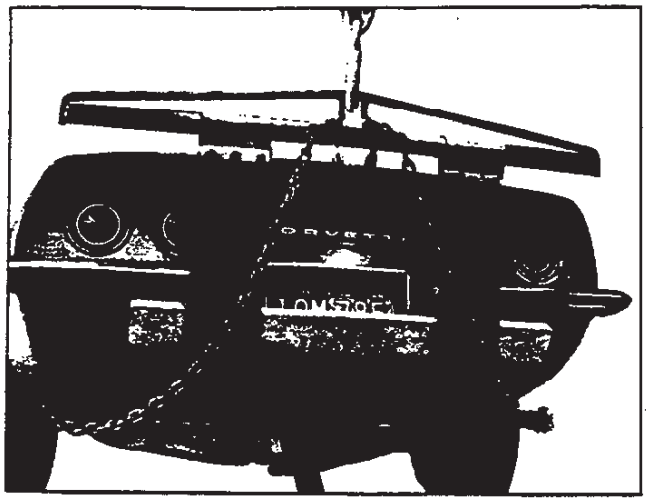


Fig. 4—Attaching Sling Assembly

Wire a 2 inch x 4 inch x 38 inch board securely to the rear bumper vertical bars as shown. Attach chains to lower lifting sling bar so that bar is underneath and just forward of rear valance panel. Slings should be adjusted on upper and lower sling bars so that they bear on bumper vertical bars.

Towing with Front End Raised (Figure 5 & 6)

The vehicle may be towed on its rear wheels with the selector lever in "N" (Neutral) position at speeds of 35 MPH or less under most conditions. The drive shaft must be disconnected if:

1. Tow speeds in excess of 35 MPH are necessary.
2. Car must be towed for extended distances (over 50 miles).
3. Transmission is not operating properly.

Connect standard chain hook ends around opening in front lower control arm near front inner bushing. The chain should be attached to the lower lifting sling bar so that it rests against the front bumper vertical bars.

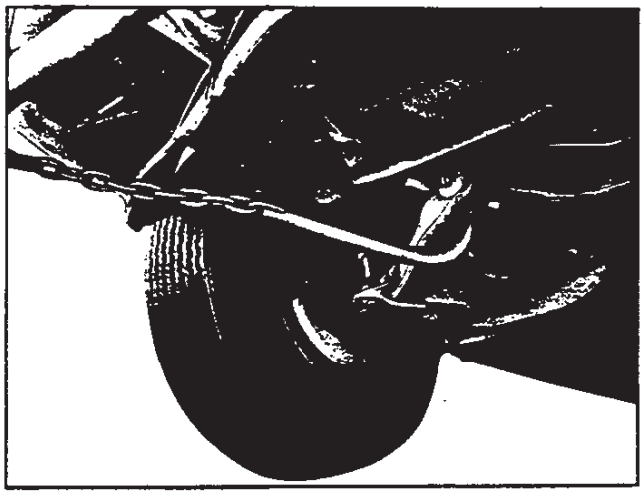


Fig. 5—Placing Hooks through Lower Control Arms

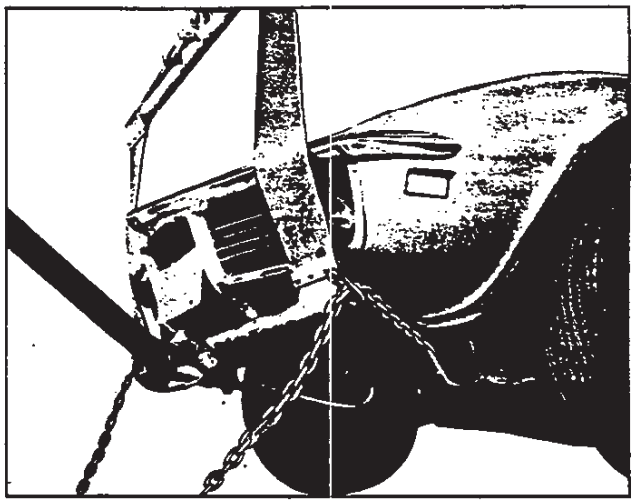


Fig. 6—Rest Lower Sling Bar against Bumper Vertical Bars

IMPORTANT: Due to the body overhang on the Corvette, it is recommended that the front or rear wheel be raised no more than three inches off the ground during towing, unless dollies are used. A height of 3" should provide the needed clearance for any road irregularities while still maintaining the needed clearance between the lowest portion of the body overhang and the ground.

Lifting Car

Many dealer service facilities and service stations are now equipped with a type of automotive hoist which must bear upon some part of the frame in order to lift the vehicle. In Figures 1, 2, 7, 8 the shaded areas indicate areas recommended for hoist contact.

LIFTING THE CORVETTE

Shaded areas in Figure 8 indicate recommended points for hoist or jack contact. When using a single post hoist place hoist on frame side rail behind kickup at front and forward of #3 body mount at rear. When using a twin-post hoist, two methods are recommended.

a. If no rear axle or suspension work is contemplated, use either suspension adapters or drive-on adapters at the front, and drive-on adapters at the rear. If a need for axle work develops, use jack stands beneath the frame side rails on each side and lower rear post.

b. If rear axle work is contemplated, use either suspension adapters or drive-on adapters at the front and frame lift adapters as shown in Figure 9. If frame lift adapters are not available, use jack stands.

NOTE: Wooden blocks, bolted to steel beam shown in Figure 9 are necessary to allow beam to clear exhaust system.

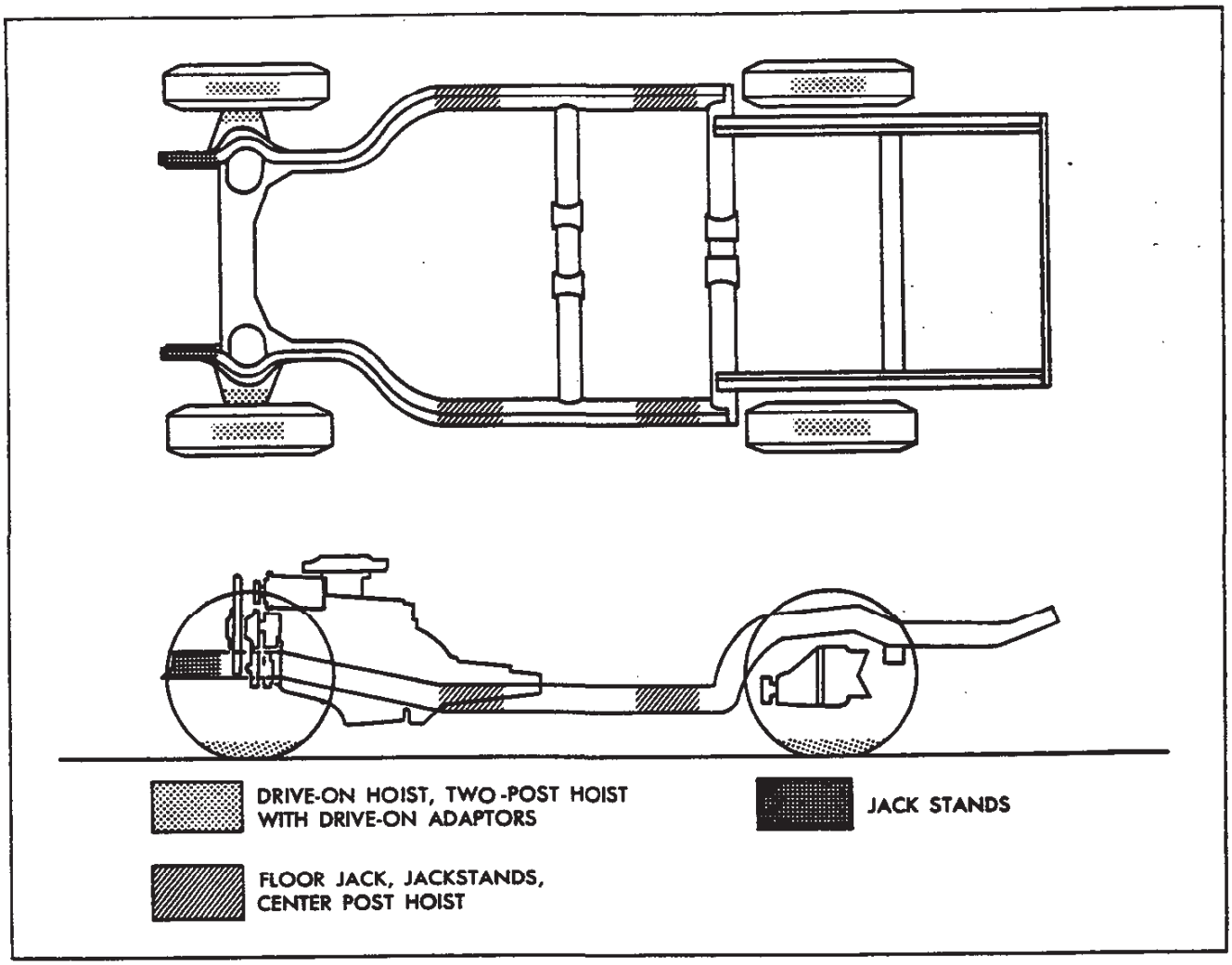


Fig. 8—Vehicle Lifting Points—Corvette

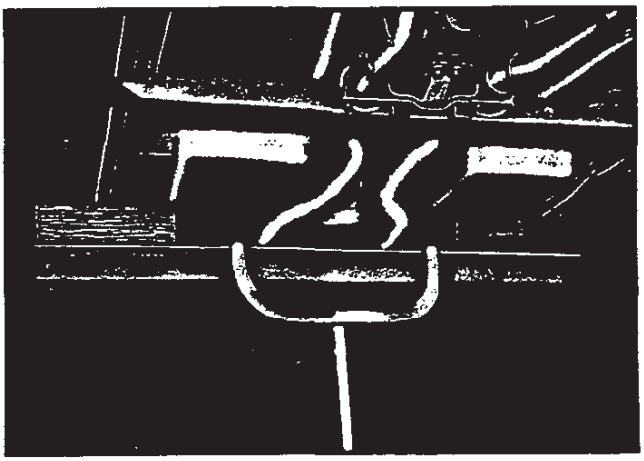


Fig. 9—Frame Lift Adapters—Corvette

LUBRICATION

INDEX

The time or mileage intervals on the following pages are intended as a general guide for establishing regular maintenance and lubrication periods for your car. Sustained heavy duty or high speed operations or operation under adverse conditions may necessitate more frequent servicing.

ENGINE

CRANKCASE CAPACITY

4 Cylinder	4 qt.
6 Cylinder	4 qt.
8 Cylinder (302)	4 qt.
8 Cylinder (307)	4 qt.
8 Cylinder (327)	4 qt.
8 Cylinder (350)	4 qt.
8 Cylinder (396)	4 qt.
8 Cylinder (427) Chevrolet	4 qt.
8 Cylinder (427) Corvette	5 qt.

For 4 Cyl. Add .5 qt. with filter change;
1 qt. for 6 and 8 Cyl. engines.

LUBRICATION

Crankcase oil should be selected to give the best performance under the climatic and driving conditions in the territory in which the vehicle is driven.

During warm or hot weather, an oil which will provide adequate lubrication under high operating temperatures is required.

During the colder months of the year, an oil which will permit easy starting at the lowest atmospheric temperature likely to be encountered, should be used.

When the crankcase is drained and refilled, the crankcase oil should be selected, not on the basis of the existing temperature at the time of the change, but on the lowest temperature anticipated for the period during which the oil is to be used.

Unless the crankcase oil is selected on the basis of viscosity or fluidity of the anticipated temperature, difficulty in starting will be experienced at each sudden drop in temperature.

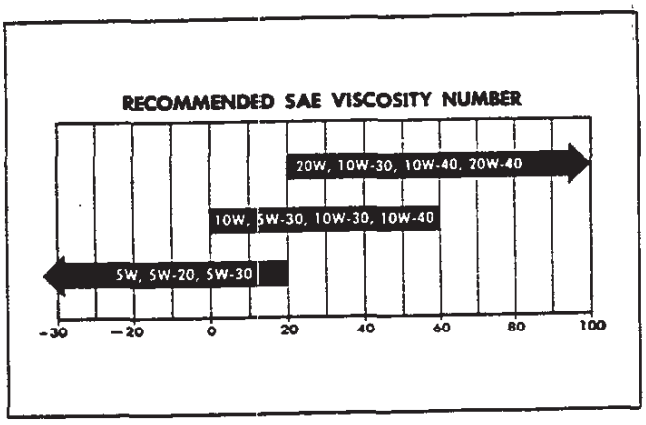
SAE VISCOSITY OILS

SAE Viscosity Numbers indicate only the viscosity or body of the oil, that is, whether an oil is a light or a heavy body oil, and do not consider or include other properties or quality factors.

The lower SAE Viscosity Numbers, such as SAE 5W and SAE 10W which represents the light body oils, are recommended for use during cold weather to provide easy starting and instant lubrication. The higher SAE Viscosity Numbers such as SAE 20 and SAE 20W, which represents heavier body oils, are recommended for use during warm or hot weather to provide improved oil economy and adequate lubrication under high operating temperatures.

Oils are available which are designed to combine the easy starting characteristics of the lower SAE Viscosity Number with the warm weather operating characteristics of the higher SAE Viscosity Number. These are termed "multi-viscosity oils," SAE 5-10W, SAE 5W-20, SAE 10W-20W, and SAE 10W-30.

The following chart will serve as a guide in selecting the proper oil viscosity. In addition to providing proper lubrication, the correct viscosity helps assure good cold and hot starting by reducing friction and thus increasing cranking speed.



- SAE 5W and 5W-20 oils are not recommended for sustained high speed driving.
- SAE 30 oils may be used at temperatures above 60°F.

Types of Oils

In service, crankcase oils may form sludge and varnish and under some conditions, corrosive acids unless protected against oxidation.

To minimize the formation of these harmful products and to assure the use of oil best suited for present day operating conditions, automobile manufacturers have developed a series of sequence tests designed to evaluate the ability of any oil to properly lubricate automobile engines.

It is recommended that only those oils which are certified by their suppliers as meeting or exceeding the maximum severity requirements of these sequence tests (or GM Standard 6041-M) be used in Chevrolet engines. Certified sequence tested oils will be described as such on their containers.

MAINTAINING OIL LEVEL

The oil gauge rod is marked "Full" and "Add Oil." These notations have broad arrows pointing to the level lines. The oil level should be maintained between the two lines, neither going above the "Full" line nor under the "Add Oil" line. DO NOT OVERFILL. After operating vehicle allow a few minutes for oil to return to crankcase before checking oil level.

Check the oil level frequently and add oil when necessary.

ENGINE OIL CHANGE INTERVALS

NOTE: Under prolonged dusty driving conditions, it is recommended that these operations be performed more often.

To insure continuation of best performance, low maintenance cost and long engine life, it is necessary to change the crankcase oil whenever it becomes contaminated with harmful foreign materials. Under normal driving conditions draining the crankcase and refilling with fresh oil every 4 months or every 6000 miles whichever occurs first, is recommended.

It is always advisable to drain the crankcase only after the engine has become thoroughly warmed up or reached normal operating temperature. The benefit of draining is, to a large extent, lost if the crankcase is drained when the engine is cold, as some of the suspended foreign material will cling to the sides of the oil pan and will not drain out readily with the cold, slower moving oil.

CRANKCASE DILUTION

Probably the most serious phase of engine oil deterioration is that of crankcase dilution which is the thinning of the oil by fuel vapor leaking by pistons and rings and mixing with the oil and by condensation of water on the cylinder walls and crankcase.

Leakage of fuel, or fuel vapors, into the oil pan occurs mostly during the "warming up" period when the fuel is not thoroughly vaporized and burned. Water vapor enters the crankcase through normal engine ventilation and through exhaust gas blow-by. When the engine is not completely warmed up, these vapors condense, combine with the condensed fuel and exhaust gases and form acid compounds in the crankcase.

As long as the gases and internal walls of the crankcase are hot enough to keep water vapor from condensing, no harm will result. However, when the engine is run in low temperatures moisture will collect and unite with the gases formed by combustion resulting in an acid formation. The acid thus formed is likely to cause serious etching or pitting which will manifest itself in excessively rapid wear on piston pins, camshaft bearings and other moving parts of the engine, oftentimes causing the owner to blame the car manufacturer or the lubricating oil when in reality the trouble may be traced back to the character of the fuel used, or a condition of the engine such as excessive blowby or improper carburetor adjustment.

Automatic Control Devices to Minimize Crankcase Dilution

All engines are equipped with automatic devices which aid greatly in minimizing the danger of crankcase dilution.

The thermostat, mounted in the cylinder head water outlet, restricts the flow of water to the radiator until a predetermined temperature is reached, thus minimizing the length of time required to reach efficient operating temperature, reducing the time that engine temperatures are conducive to vapor condensation.

A water by-pass is included in the cooling system, utilizing a hole in the front of the cylinder block. This allows a limited circulation of coolant, bypassing the thermostat until thermostat opening temperatures are reached. This system provides a uniform coolant temperature throughout the engine, eliminating localized hot-spots, improving exhaust valve life, provides fast warm-up of lubricating oil and fast temperature rise in the coolant which provides fast heater operation in cold weather.

A thermostatic heat control on the exhaust manifold during the warming up period, automatically directs the hot exhaust gases against the center of the intake manifold, greatly aids in proper vaporization of the fuel.

An automatic choke reduces the danger of raw or unvaporized fuel entering the combustion chamber and leaking into the oil reservoir.

An efficient crankcase ventilating system drives off fuel vapors and aids in the evaporation of the raw fuel and water which may find its way into the oil pan.

CRANKCASE VENTILATION VALVE

VALVE TYPE

Every 12,000 miles or 12 months the valve should be replaced. Connecting hoses, fittings and flame arrestor should be cleaned. At every oil change the system should be tested for proper function and serviced, if necessary.

AIR INJECTION REACTOR SYSTEM (A.I.R.)

The Air Injection Reactor system should have the A.I.R. pump filter serviced and the drive belt inspected for wear and tension every 12 months or 12,000 miles, whichever occurs first. In addition, complete effectiveness of the system, as well as full power and performance, depends upon idle speed, ignition timing, and idle fuel mixture being set according to specification. A quality tune-up which includes these adjustments should be performed periodically to assure normal engine efficiency, operation and performance.

MANIFOLD HEAT CONTROL VALVE

Every 6,000 miles, check valve for freedom of operation. If valve shaft is sticking, free it up with GM Manifold Heat Control Solvent or its equivalent.

OIL FILTER

Change engine oil filter at first engine oil change and every second oil change thereafter.

NOTE: For Vehicles in heavy duty operation involving continuous start-stop or prolonged idling, engine oil should be changed after 2500-3000 miles of operation. The filter should be changed after 5000-6000 miles of operation.

AIR CLEANER

NOTE: Under prolonged dusty driving conditions, it is recommended that these operations be performed more often.

Polyurethane Type—

Every 12,000 miles clean element in solvent, squeeze out solvent, then soak in engine oil and squeeze out excess.

Oil Wetted Paper Element Type—

First 12,000 miles inspect element for dust leaks, holes or other damage. Replace if necessary. If satisfactory, rotate element 180° from originally installed position. Replace at 24,000 miles. Element must not be washed, oiled, tapped or cleaned with an air hose.

If so equipped, replace Bow-Tie filter every 24,000 miles.

FUEL FILTER

Replace filter element located in carburetor inlet every 12 months or 12,000 miles whichever occurs first.

DISTRIBUTOR

4 and 6-Cylinder Engine--Remove distributor cap and rotate lubricator 1/2 turn at 12,000 mile intervals. Replace at 24,000 mile intervals.

8-Cylinder Engine--Change cam lubricator end for end at 12,000 mile intervals. Replace at 24,000 mile intervals.

REAR AXLE AND 3-SPEED 4-SPEED TRANSMISSIONS

The passenger car operates under the most severe lubrication conditions at high speed and requires a hypoid lubricant which will meet this condition.

RECOMMENDED LUBRICANTS

Standard Rear Axles--SAE 90 "Multi-Purpose" gear lubricant.

Positraction Rear Axles--Use special Positraction lubricant.

CAUTION: Straight Mineral Oil gear lubricants must not be used in hypoid rear axles.

Transmissions- -SAE 90 "Multi-Purpose" gear lubricant.

The SAE 90 viscosity grade is recommended for year round use. However, when extremely low temperatures are encountered for protracted periods during the winter months, the SAE 80 viscosity grade may be used.

"Multi-Purpose" Gear Lubricants

Gear lubricants that will satisfactorily lubricate hypoid rear axles have been developed and are commonly referred to as "Multi-Purpose" gear lubricants meeting U.S. Army Ord. Spec. MIL-L-2105B.

These lubricants can also be satisfactorily used in manual transmissions.

CAUTION: With Positraction rear axles use special Positraction lubricant.

"Multi-Purpose" gear lubricants must be manufactured under carefully controlled conditions and the lubricant manufacturer must be responsible for the satisfactory performance of his product. His reputation is the best indication of quality.

Lubricant Additions

The lubricant level in the axle and transmission housings should be checked periodically. (Every 6,000 miles.)

It is recommended that any additions required to bring up the lubricant level be made using the same type lubricant already in the housing.

When checking lubricant level in transmission or rear axle the unit being checked should be at operating temperature. With unit at operating temperature the lubricant should be level with bottom of the filler plug hole. If the lubricant level is checked with the unit cold the lubricant level should be 1/2 inch below the filler plug hole.

Lubricant Changes

The rear axle lubricant does not require changing for the life of the vehicle. If additions are needed, or when refilling the axle after service procedures, use lubricants described above.

Transmission Shift Linkage (Manual and Automatic)

Every 6000 miles or 4 months lubricate shift linkage and on manual transmission floor controls lever contacting faces with water resistant EP chassis lubricant which meets GM Specification 6031M.

Clutch Cross--Shaft

Periodic lubrication of the clutch cross shaft is not required. At 36,000 miles or sooner, if necessary; remove plug, install lube fitting and apply EP CHASSIS LUBRICANT which meets GM Specification GM 6031M.

AUTOMATIC TRANSMISSIONS

NOTE: At first transmission fluid change, it is recommended that the Powerglide and Torque Drive low band be adjusted as specified in Section 7 of this manual.

Powerglide, Torque Drive, and Turbo Hydra-Matic 350

Every 6,000 miles check fluid level on dipstick with engine idling, selector lever in neutral position, parking brake set and transmission at operating temperature. If fluid level is below full mark on dipstick, add small amount of automatic transmission fluid. Recheck fluid level and again add a small amount of fluid if needed to bring level to full mark. DO NOT OVERFILL.

General Motors DEXRON ® Automatic Transmission Fluid, Part numbers 1050568, 69, 70 which has been especially formulated and tested for use in your automatic transmission is recommended. Other Automatic Transmission Fluids identified with the mark DEXRON ® are also recommended.

Every 24,000 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 2 quarts* U.S. measure (1 2/3 quarts* Imperial measure) of fresh fluid for Chevrolet and Chevelle; add one and a half (1 1/2) U.S. measure and (1 1/4 quarts Imperial measure) for Chevy II and Camaro. Operate transmission through all ranges and check fluid level as described above. For Turbo Hydra-Matic 350, add 2.5 quarts U.S. measure (2.0 quarts Imperial measure).

It is not necessary to remove the pan because a drain plug is provided.

Turbo Hydra-Matic 400

Lubrication for the Turbo Hydra-Matic 400 will, except for fluid capacity and filter change listed below, follow the recommendations above. After checking transmission fluid level it is important that the dipstick be pushed all the way into the fill tube.

Every 24,000 miles after removing fluid from the transmission sump, approximately 7 1/2 pints U.S. measure (6 pints Imperial measure) of fresh fluid will be required to return level to proper mark on the dipstick.

Every 24,000 miles the transmission sump strainer should be replaced.

*Except if vehicle is equipped with transmission provided in heavy duty service options. If so equipped, drain converter and sump every 24,000 miles and add approximately 9 quarts U.S. Measure (7 1/2 quarts Imperial Measure) of fresh fluid for Chevrolet and Chevelle and 7 1/2 quarts U.S. Measure (6 1/4 quarts Imperial Measure) for Nova.

CHASSIS

CHASSIS LUBRICATION

For chassis lubrication, consult the lubrication chart. It shows the points to be lubricated and how often the lubricant should be applied.

The term "chassis lubricant" as used in this manual, describes a water resistant EP chassis lubricant which meets GM Specification GM 6031M designed for application by commercial pressure gun equipment.

FRONT WHEEL BEARINGS

It is necessary to remove the wheel and hub assembly to lubricate the bearings. The bearing assemblies should be cleaned before repacking with lubricant. Do not pack the hub between the inner and outer bearing assemblies or the hub caps, as this excessive lubrication results in the lubricant working out into the brake drums and linings.

Front wheels of all passenger car models are equipped with tapered roller bearings and should be packed every 24,000 miles with a high melting point water resistant front wheel bearing lubricant which meets GM Specification GM 6031M whenever wheel and hub are removed.

CAUTION: "Long fibre" or "viscous" type lubricant should not be used. Do not mix wheel bearing lubricants. Be sure to thoroughly clean bearings and hubs of all old lubricant before repacking.

The proper adjustment of front wheel bearings is one of the important service operations that has a definite bearing on safety. A car with improperly adjusted front wheel bearings lacks steering stability, has a tendency to wander or shimmy and may have increased tire wear. The adjustment of these bearings is very critical. The procedure is covered in Section 3 of this manual under Front Wheel Bearings--Adjust.

BRAKE MASTER CYLINDER

Check level every 6,000 miles and maintain 1/4" below lowest edge of each filler opening with GM Hydraulic Brake Fluid Supreme No. 11.

PARKING BRAKE

Every 6,000 miles, apply water resistant lubricant which meets GM Specification GM 6031M to parking brake cable, cable guides and at all operating links and levers.

STEERING GEAR

Manual

Check lubricant level every 36,000 miles. If required, add EP Chassis Lubricant which meets GM Specification GM 6031M. (See Section 9)

Power Steering Pump

On models equipped with power steering gear, check fluid at operating temperature in pump reservoir. Add GM Power Steering Fluid, or, if this is not available, use Dexron ® Automatic Transmission Fluid to bring level to full mark on dip stick.

ELECTRICAL

BATTERY CARE (ENERGIZER)

Every 6000 miles—Clean terminals and oil felt washer.

Check the fluid level in each cell of your battery regularly. The electrolyte level indicator in the cap of one cell will glow if the fluid level is low. In this case each cell should be checked. Keep filled with distilled water to the bottom of the split ring in the vent tube.

DUAL ACTION SAFETY HOOD LATCHES

Every 12,000 miles or 12 months, whichever occurs first, apply Lubriplate or its equivalent to the hood catch and lock plate.

AIR CONDITIONING

Every 6,000 miles check sight glass under the hood, after the system has been in operation for 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 repaired immediately.

BODY LUBRICATION

See Body Service Manual for Body Lubrication. (Except Corvette)

BODY LUBRICATION POINTS (CORVETTE)

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 Strike 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.

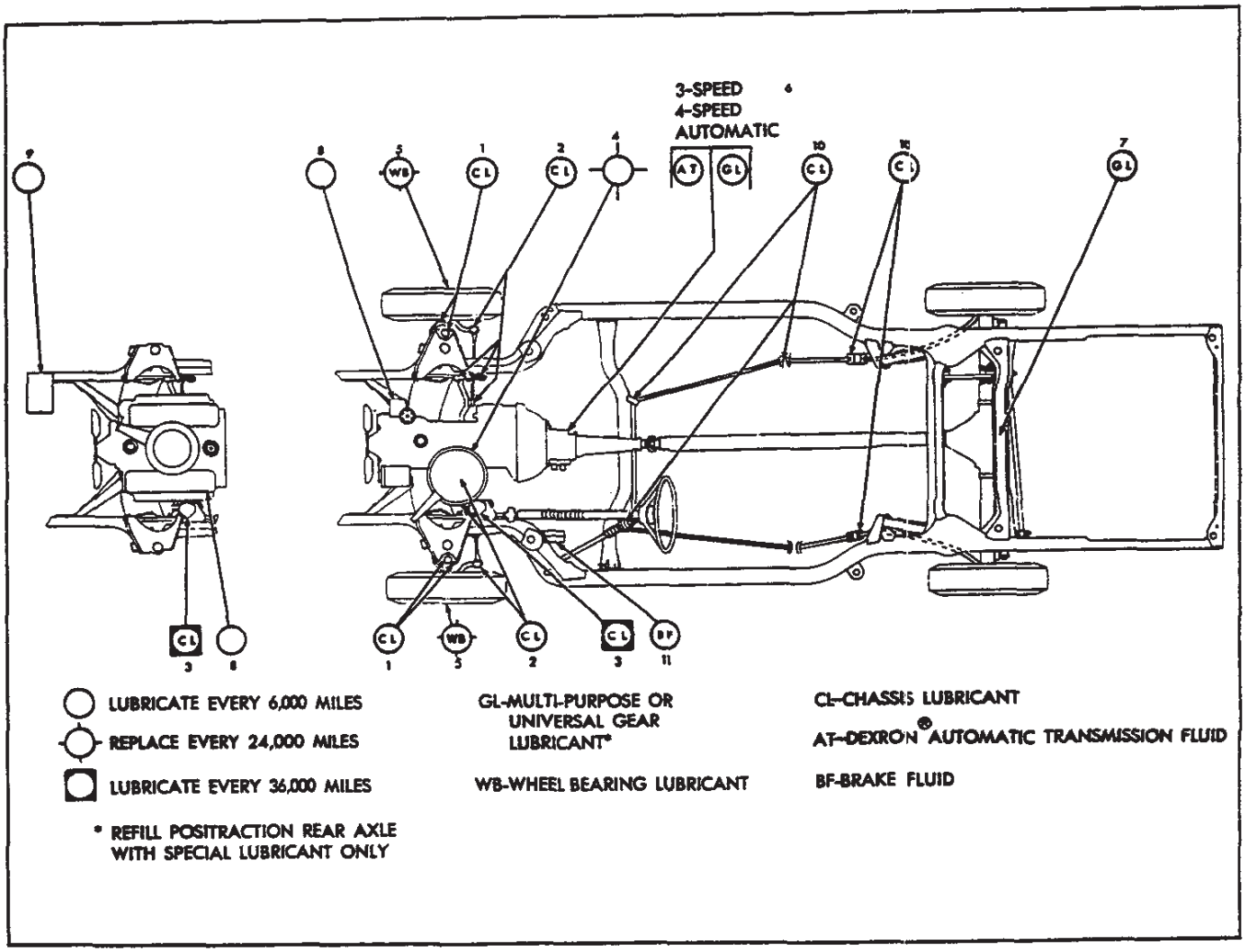


Fig. 10—Lubrication Diagram—Chevrolet

1. Front Suspension
2. Steering Linkage
3. Steering Gear
4. Air Cleaner
5. Front Wheel Bearings
6. Transmission
7. Rear Axle
8. Oil Filter
9. Battery
10. Parking Brake
11. Brake Master Cylinder

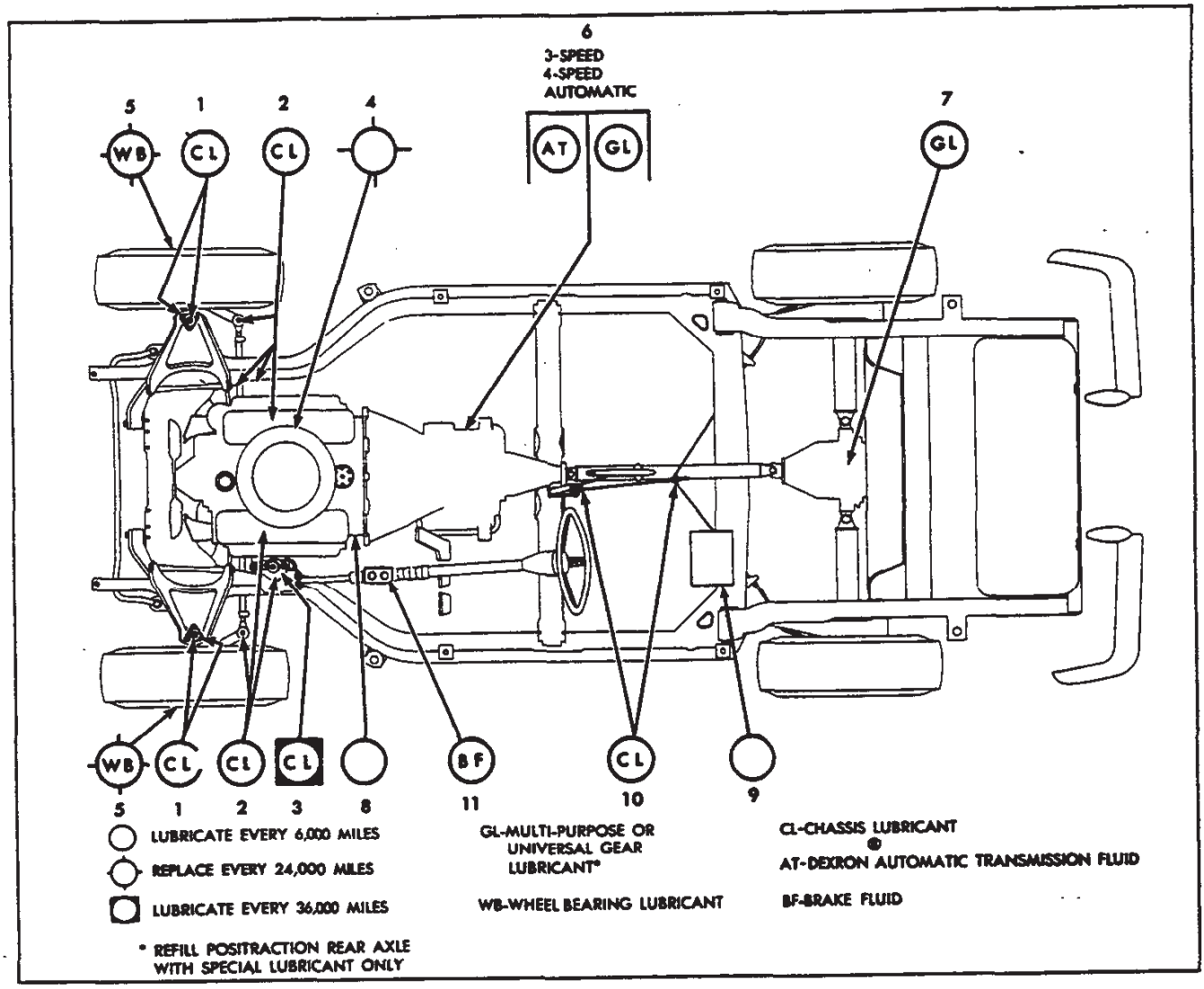


Fig. 13—Lubrication Diagram—Corvette

1. Front Suspension
2. Steering Linkage
3. Steering Gear
4. Air Cleaner
5. Front Wheel Bearings
6. Transmission
7. Rear Axle
8. Oil Filter
9. Battery
10. Parking Brake
11. Brake Master Cylinder

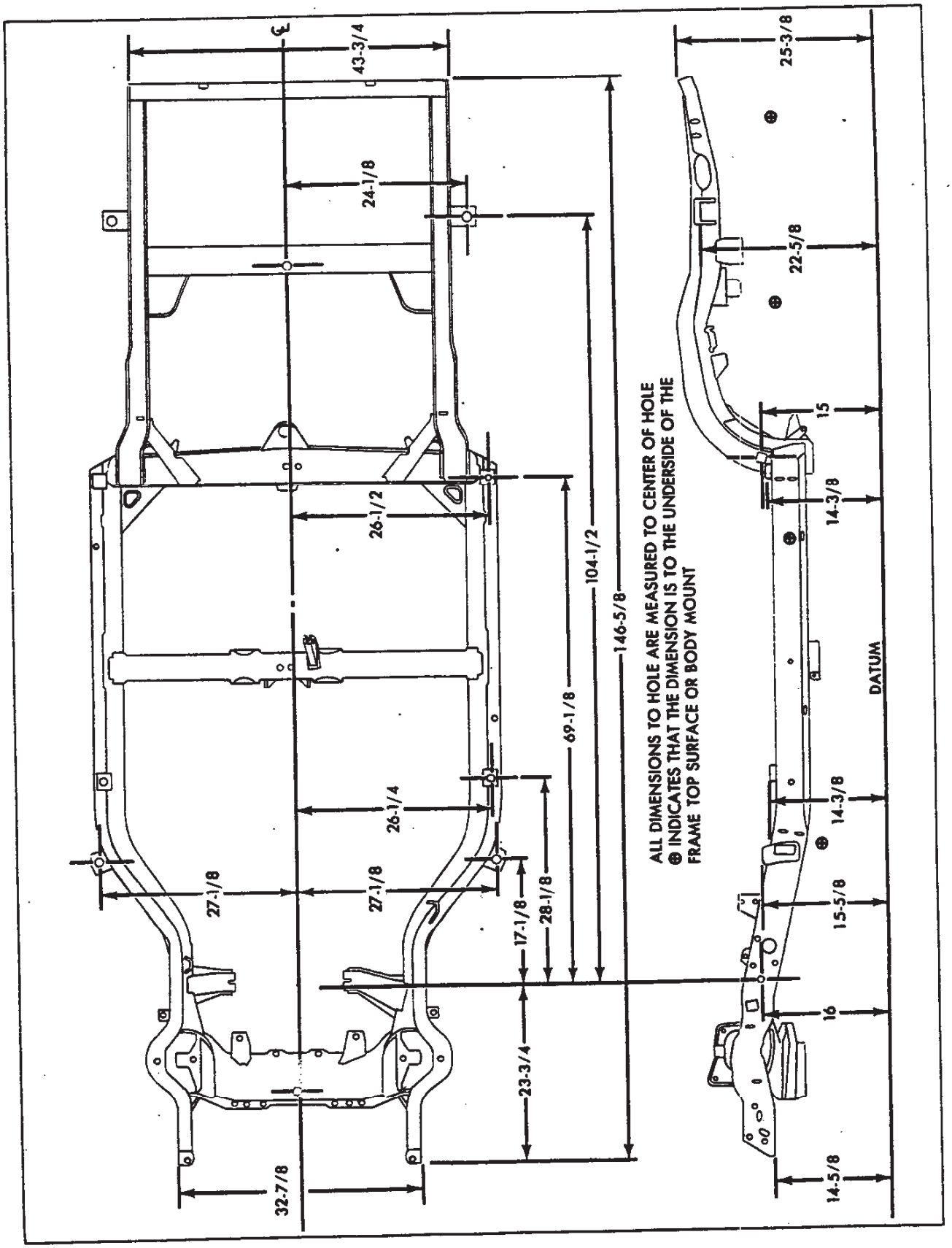


Fig. 4—Frame Dimension—Corvette

BODY MOUNTS

The various type of body mounts and their application are shown in Figures..5 and 6. Torque specifications are listed in the following chart.

Model	Mount	Torque
Chevrolet	Radiator Support to Frame	35 ft. lbs.
	#1 thru #7	35 ft. lbs.
Chevelle	Radiator Support to Frame	35 ft. lbs.
	#1 thru #7	35 ft. lbs.
Camaro Chevy II	#1	35 ft. lbs.
	#2 and #3	80 ft. lbs.
Corvette	All	45 ft. lbs.

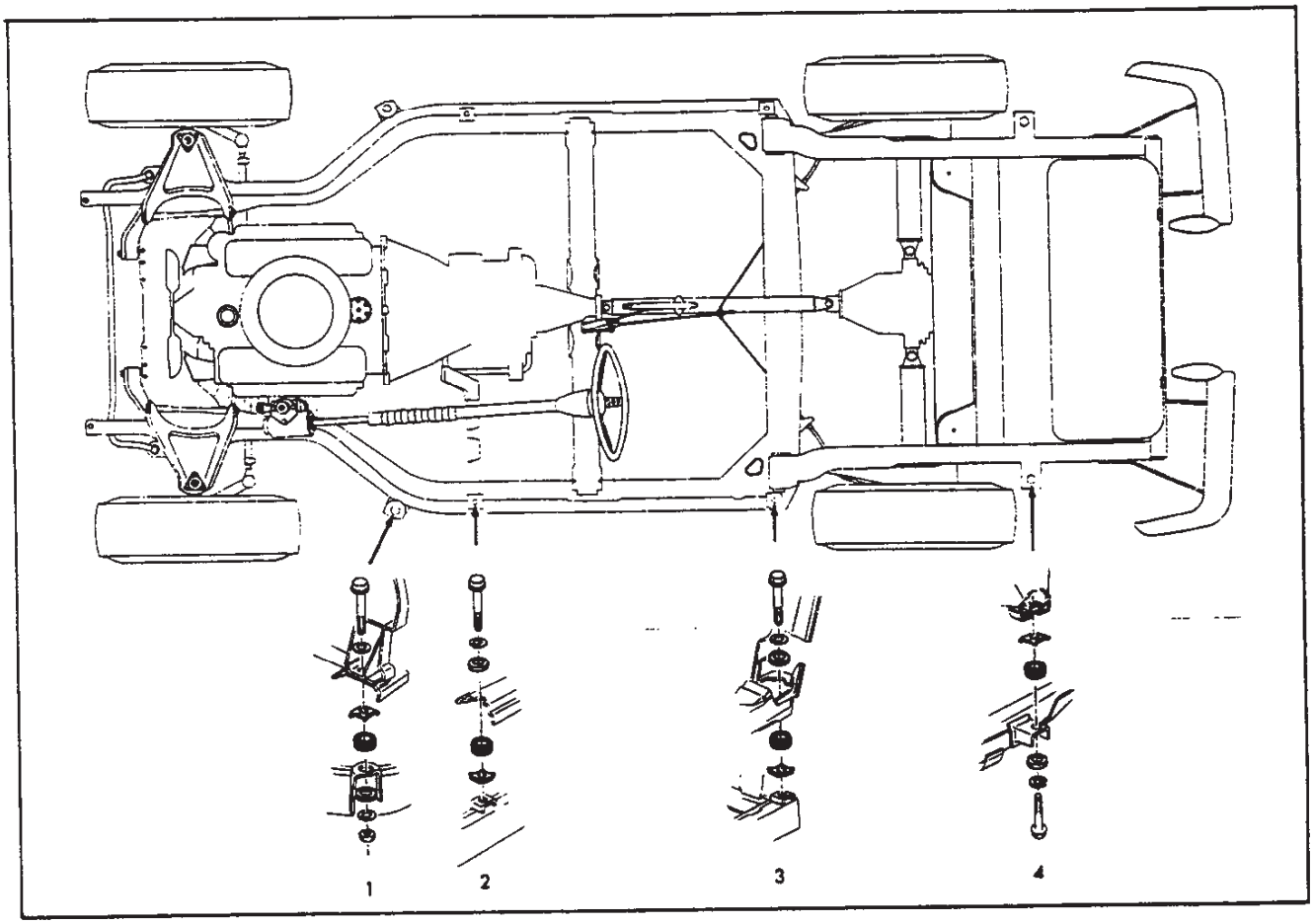


Fig. 5—Body Mount Application—Corvette

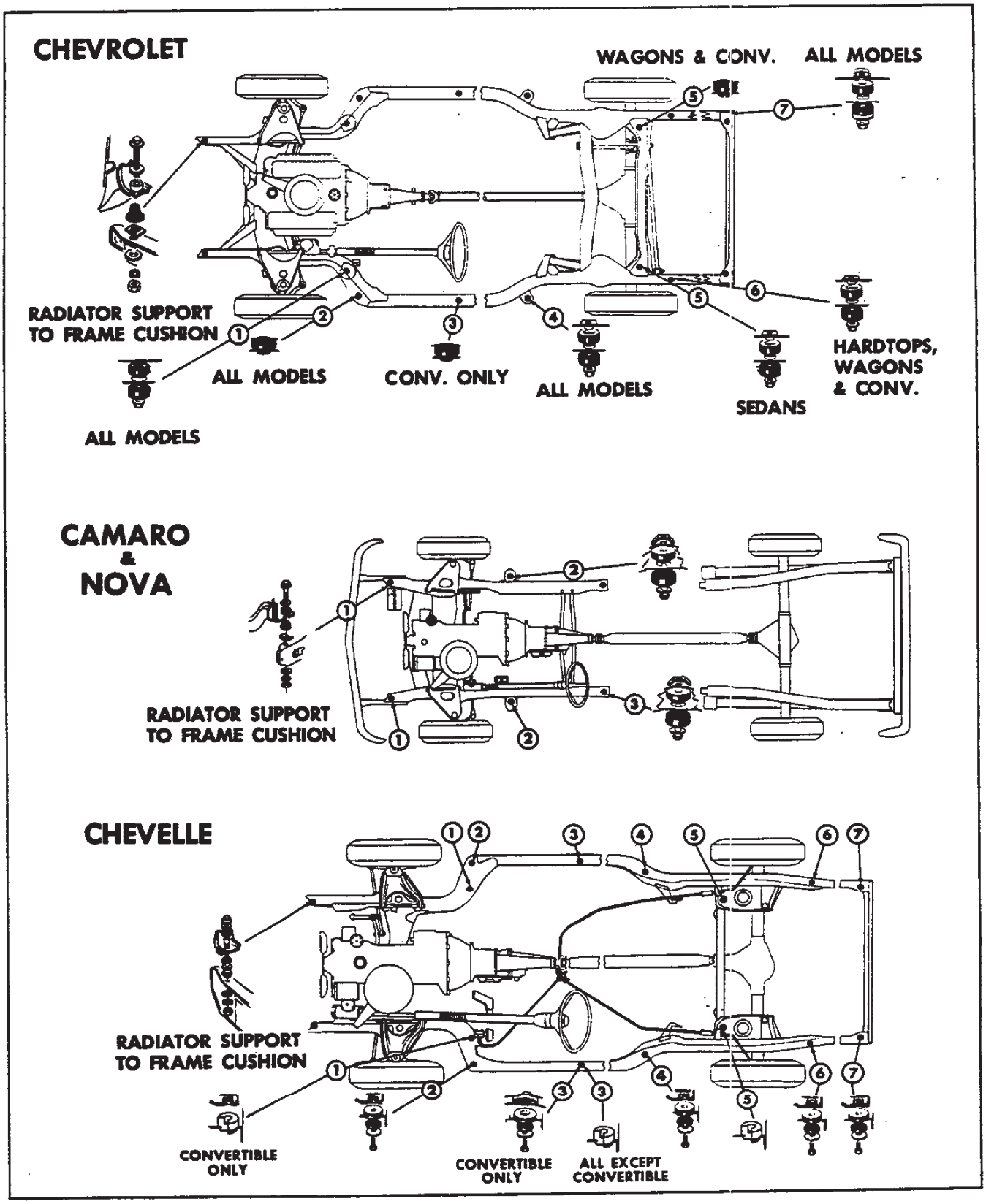


Fig. 6—Body Mount Application—Chevrolet, Chevelle, Camaro and Nova

SECTION 1B
CORVETTE BODY

INDEX

GENERAL DESCRIPTION

A structural network of steel makes up the frame of the Corvette body (See Figure 1). Combined with fiber glass reinforced plastic body panels, the steel plastic unit displays properties of increased torsional rigidity and greater beaming strength.

There are two body styles available—the regular convertible with a folding top or removable hardtop, and the new coupe series that features removable roof panels. On convertible model base equipment, either top is standard and both are optional.

MAINTENANCE AND REPLACEMENTS

FRONT END

ADJUSTMENTS

(Refer to Figure 2)

Adjustments should be made in order—hood position first, followed by catch adjustments.

Hood

The position of the hood in relation to the hood body opening and fender surfaces is determined by the position of the hinges and position and adjustment of catch and bumpers.

The fore and aft adjustment of the hood is performed by

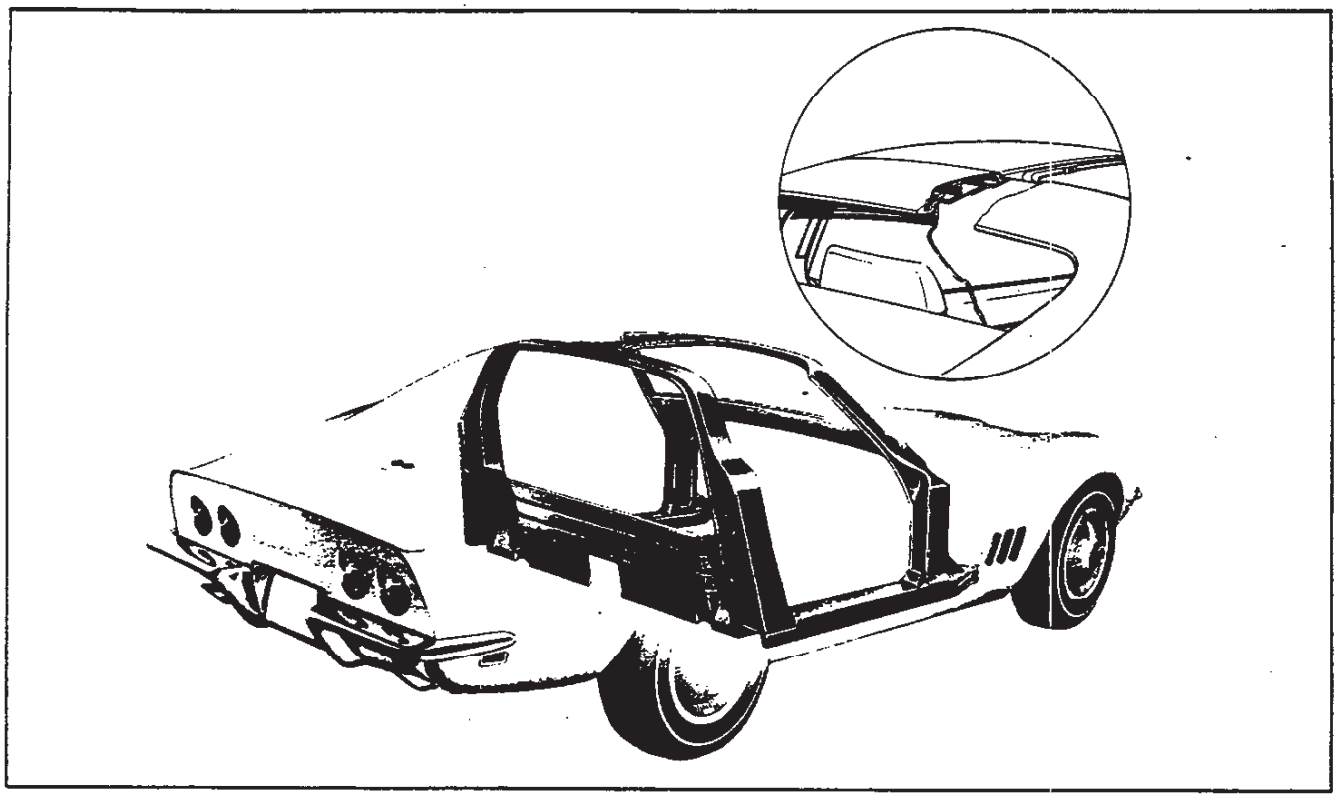


Fig. 1—Steel Reinforcing Members

loosening the hinge retaining bolts (lower) and moving the hood to the limit of slotted holes in hinge strap.

The upper surface of hood may be brought flush with adjacent surfaces by shimming under hinges and adjusting bumper screw and catch bolt engagement. Figure 3 indicates specified spacing.

Entrance of catch bolt into the plate may be adjusted by loosening two (2) catch bolt mounting screws to allow movement of bolt assembly.

Synchronization of catch release may be made by adjusting the cable retainer located at left hand catch bolt assembly.

HOOD ASSEMBLY

Removal

1. If hood is to be reinstalled, scribe a line around hood hinge upper strap as shown in Figure 4.
2. With aid of helper to support hood, remove screws that retain hinge straps and support assembly to hood. If hinges are removed from vehicle, note number of shims under each hinge.

Installation

In replacing original hood, align hinge with scribe marks made on removal, and install retaining screws removed from hinges and support.

If adjustment is required, proceed as outlined in this section under Adjustments—Hood—Hood Catch.

HOOD PROP

Retention Feature

When extended under hood service operations are anticipated, the hood, prop track and slide should be secured by placing a 1/4 inch bolt and nut through the existing hole. This will prevent accidental closing of the hood.

FRONT EMBLEM

Front emblem including flags, numbers, and molding inserts, are retained by special nuts which may be reached by raising hood.

FENDER SCRIPT

Above the front fender louvers the script "Stingray" will be fastened with adhesive.

COWL AREA TRIM

Figure 5 illustrates the mounting and location of instrument panel pads and side trim panels.

Removal

The right-hand dash pad, instrument panel pad and assemblies are removed by:

1. Remove two mounting screws on the outboard flange.
2. Remove two screws at inner flange of center cluster panel.

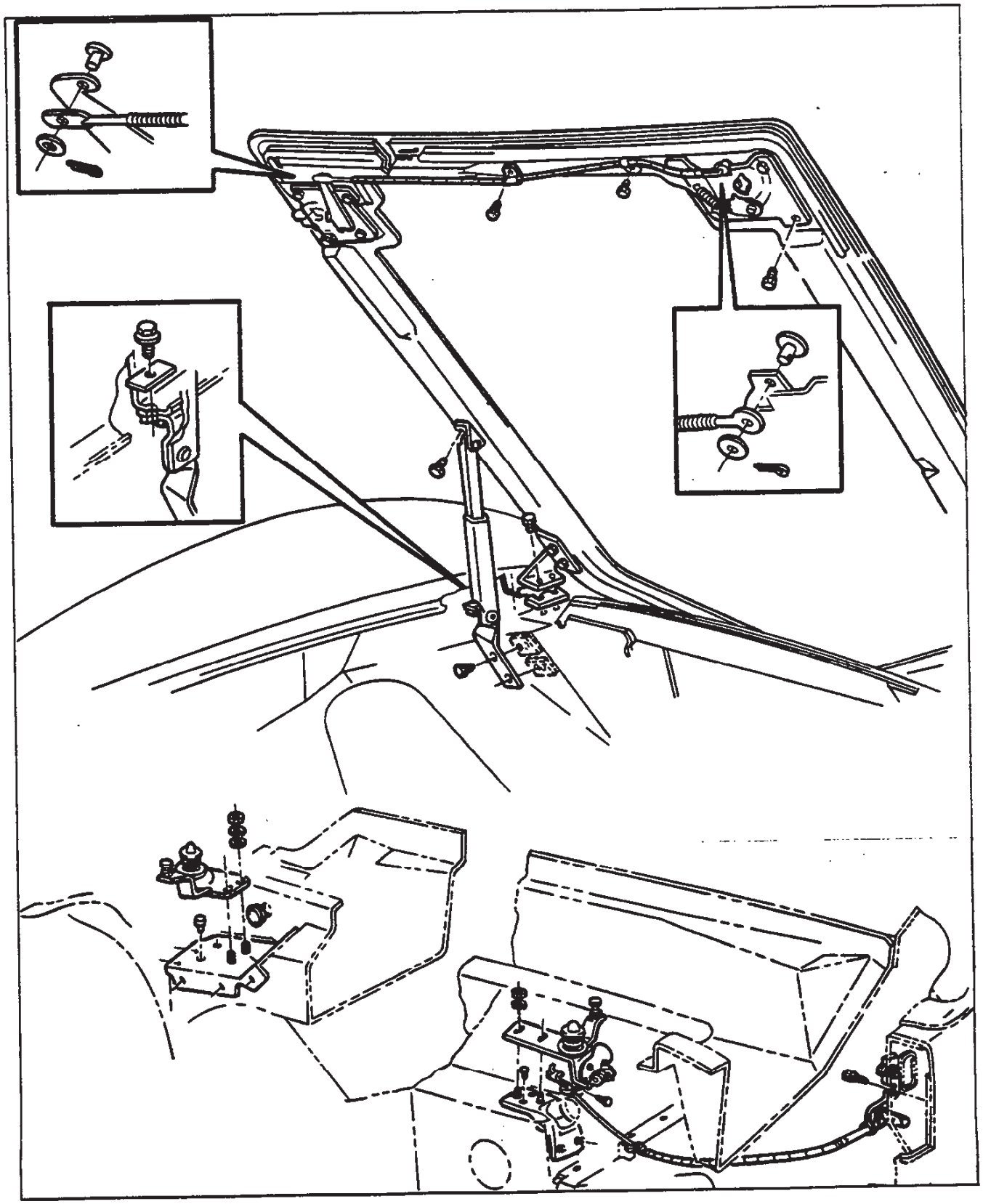


Fig. 2—Hood Hinge and Catch

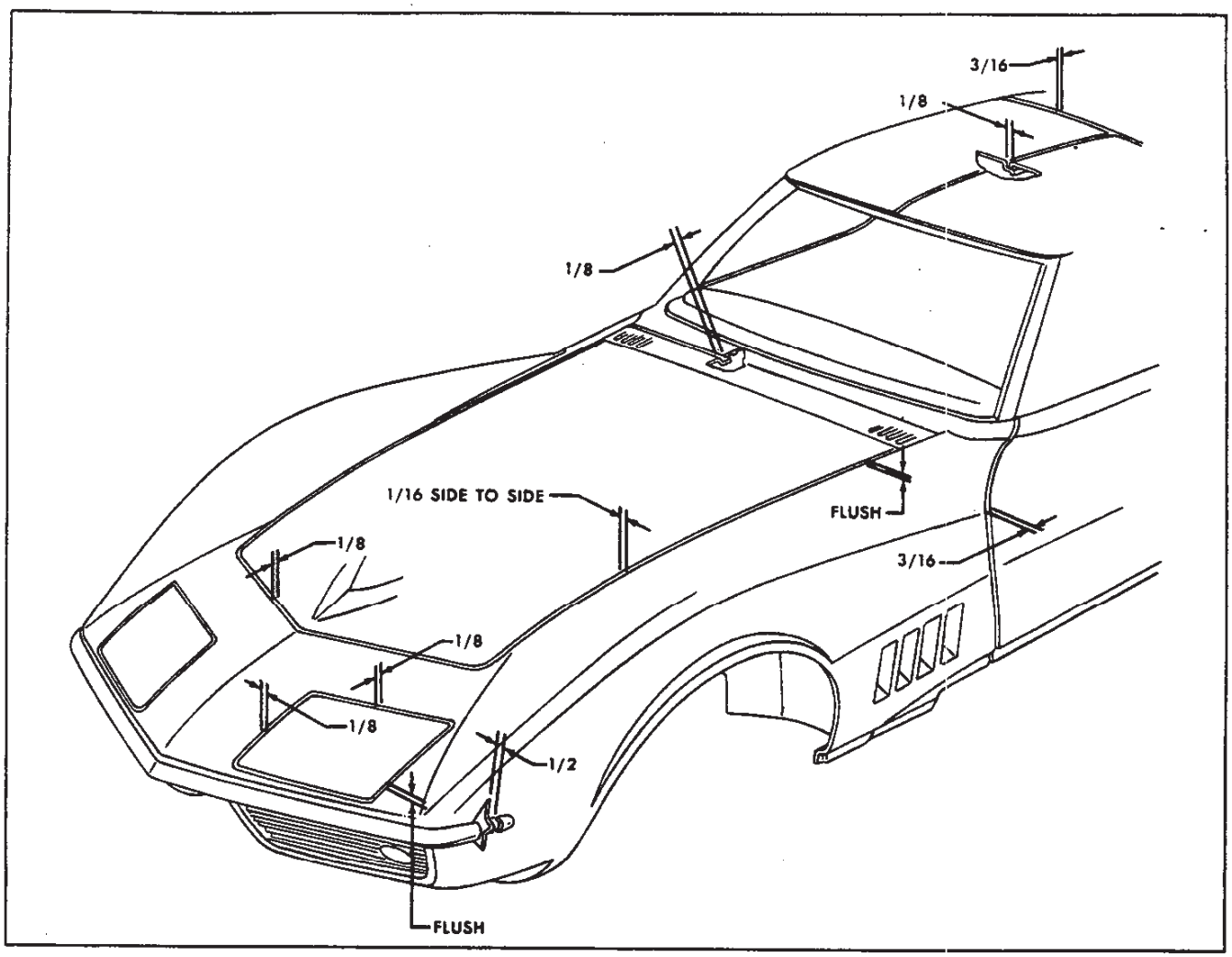


Fig. 3—Hood Spacing

Fig. 4—Scribing Line Around Hood Hinge

3. Pull pad outward to release special plastic retaining clips along top of panel.
4. Pull pad upward to release spring clip at top of trim side panel.

Cowl ventilator and kick panel is removed by:

1. Loosen four (4) screws securing sill plate enough to release force on kick panel.
2. Remove one (1) screw at center of kick panel.
3. Lift out panel with a force in the rearward direction.
4. For installation, follow above steps in reverse order. Side trim panels (left and right) can now be lifted out by pulling downward to release spring clip at front console assembly, after removing screw.

Console Assembly

(Refer to Figure 6)

Because of overlap design, it is necessary that the rear console assembly be first removed or sufficiently loosened before the front console assembly can be removed. Steps for removing the console assemblies are in the following sequence:

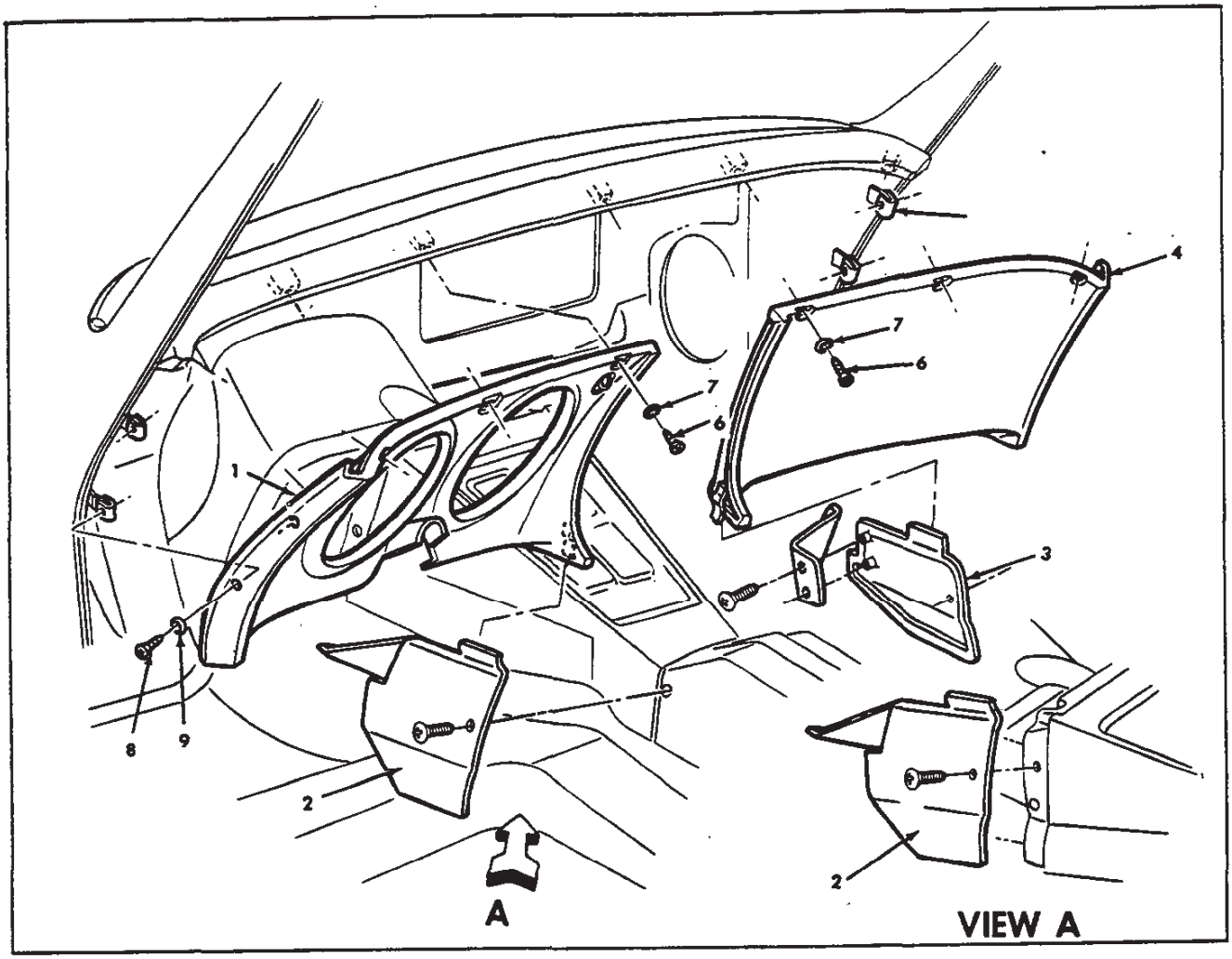


Fig. 5—Cowl Area Trim

1. Instrument Panel Pad L. H.
2. Side Trim Panel L. H.
3. Side Trim Panel R. H.
4. Dash Panel Pad R. H.
5. "J" Nut
6. Screw
7. Special Washer
8. Screw
9. Special Washer

1. Disconnect battery ground cable.
2. Open storage compartment, glove box, and battery lids.
   a. Remove storage compartment interior.
   b. Remove lid hinge screws [total of nine, three (3) per lid].
   c. Remove eight (8) screws on periphery of compartment lid trim plate.
   d. Remove trim plate, lids and glove compartment interior as an assembly.
3. Remove bolt at rear portion of console. Access bolt through opening created in step 2. Remove four (4) screws [two (2) per side] on side of rear portion of console.
4. Lift console. Disconnect electric window switch connectors. Continue raising console while moving it rearward to allow parking brake handle seal to slide out of slot. Remove rear portion of console from vehicle.
5. Service parking brake mechanism as outlined in Section 5 of this Manual or replace concerned power window switch(s).
6. Having first disassembled heater and side vent controls, shift knob assembly, boot assembly, and trim plate, remove front console assembly by carefully pulling rearward and upward (fig. 7).
7. Reverse steps 1-6 on installation, making sure seal is properly installed in its slot before finalizing the installation.

Under Dash Brace Rods (Figure 8)

Convertible style bodies have added reinforcements beneath the dash; two on the right and three on the left

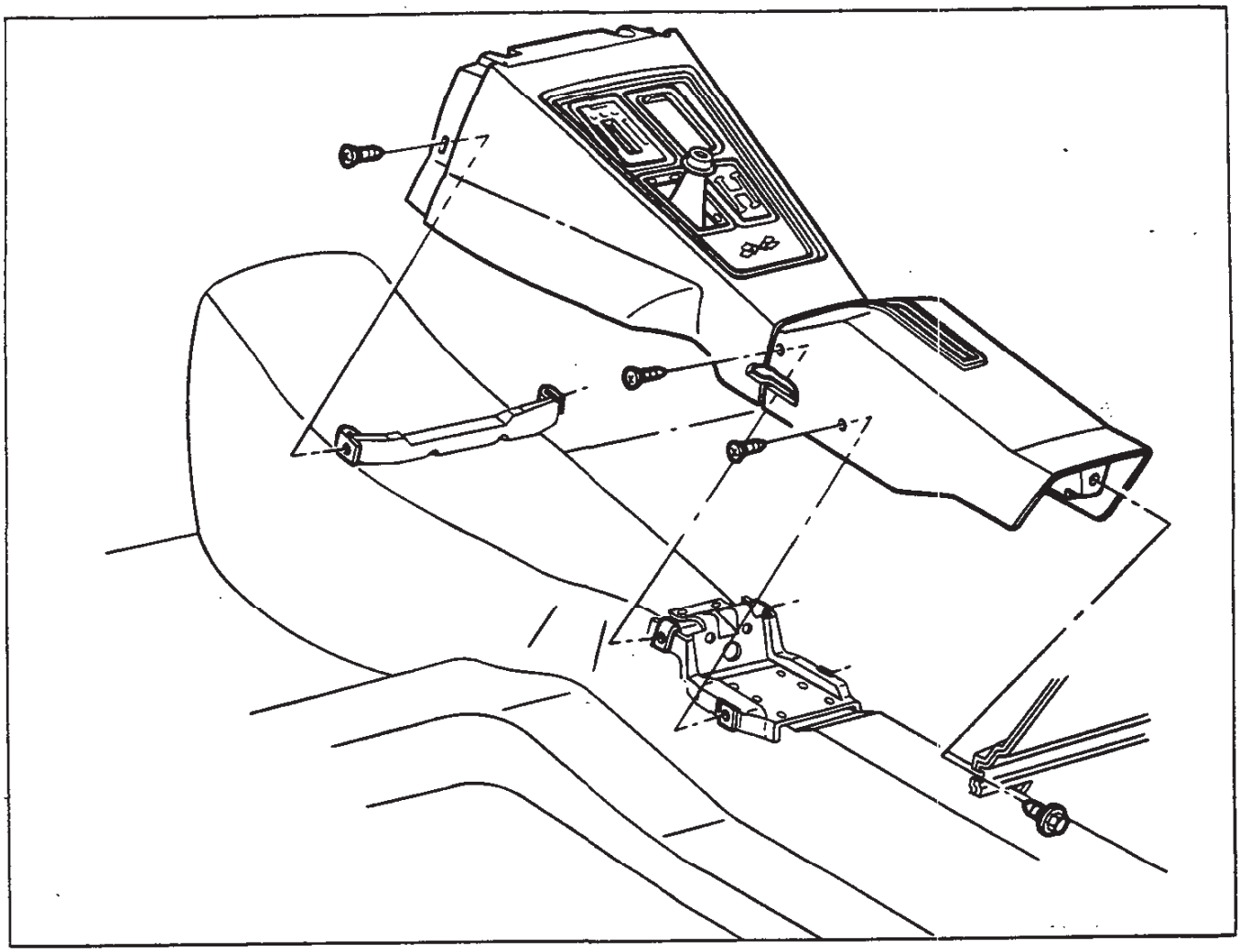


Fig. 6—Front and Rear Console Assemblies

side. The brace rods are bolted into place from the cowl area towards the center of the vehicle.

If the heater core or radio are to be removed, the right-hand under dash braces must be removed first. See Figure 8 for assembly sequence.

REAR VIEW MIRROR

Outside

Removal

The outside rear view mirror is removed from the door by removing the allen head set screw located on the outboard side of the mirror support. (See Figure 9). Mounting assembly is removed by removing two screws to body (fig. 9).

Installation

Mirror may be installed by following removal procedures in reverse order.

Inside

Installation of inside mirror is illustrated in Figure 10. Tension of mirror stud is increased by tightening adjusting screw.

SUN VISOR

Attachment of sun visor assembly to windshield header is made as shown in Figure 10. Turning of adjusting screw clockwise increases friction.

WINDSHIELD

The windshield installation incorporates a synthetic self-curing rubber adhesive caulking compound that adheres to both glass and pinchweld frame in place of the rubber channel that was formerly used. Applied to the glass while in a soft state, the material begins to cure soon after exposure to air. It is therefore essential that installation of glass into body opening quickly follow application of material to glass. It is recommended to use the materials provided in a kit from your authorized dealer which consists of:

a. One tube of Adhesive Caulking Material.
b. Pressure Sensitive Adhesive Sealing Strip.
c. Steel Music Wire (.020" diameter).
d. Adhesive Caulking Primer.

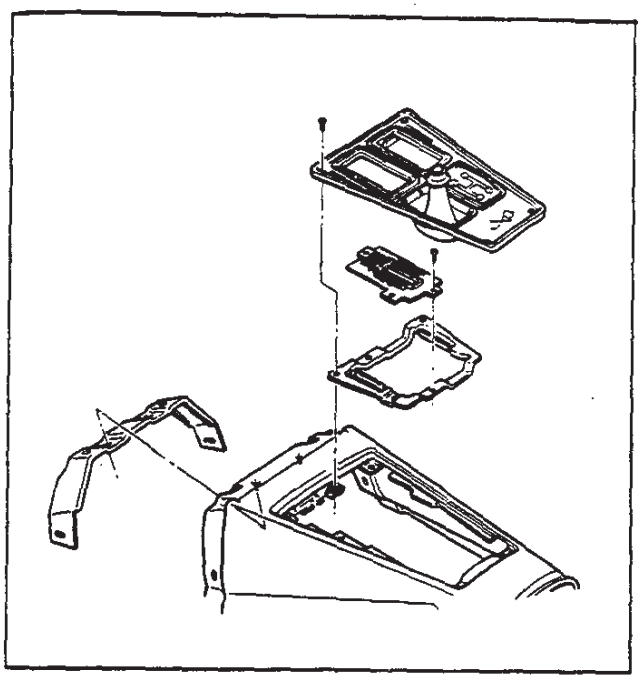


Fig. 7—Front Console Assembly

Additional materials required:

a. Caulking gun
b. Two pieces of wood for wire handles.
c. Black weatherstrip adhesive.
d. Rubber glass spacers.

Removal

(Refer to Figure 11 for parts identification.)

1. Set windshield wiper access door in open position.
2. Remove windshield wiper arms.
3. Remove weatherstrips (L and R) from frame by removing mounting screw, prying from channel, and carefully pulling downward.
4. Remove lower corner reveal moldings (L and R) by removing two (2) screws located at end flanges to fender, and carefully prying out from retaining clips.
5. Remove side retainer moldings (L and R) by removing three (3) screws to frame.
6. Remove side reveal molding (L and R) by removing one (1) remaining screw.
7. After indexing molding and header rail with tape to insure proper reinstallation, remove upper reveal molding by carefully prying out at corner with screw driver and then pulling out remainder by hand.
8. Secure one end of steel music wire to piece of wood for handle. Insert other end through caulking material at lower corner of windshield; then secure end of wire to another piece of wood (fig. 12).
9. With the aid of helper, carefully cut through caulking material (using a sawing motion) with the steel wire; up side of windshield, across top, down opposite side, and across bottom.
10. Remove old glass from windshield opening.
11. Using a sharp scraper or wood chisel, remove adhesive caulking material from pinchweld flange.

NOTE: It is not necessary to clean off all the old caulking material completely from windshield frame; however, there should not be any loose pieces of caulking material left in the opening.

12. Check all upper reveal molding retaining clips for damage (4 clip assemblies required). Replace those that are bent or distorted.
13. Using weatherstrip adhesive, cement rubber spacers at bottom, sides, and top of window opening. The step-type spacers are used at bottom, the flat type are used at the top, and at the sides, window opening as shown in Figure 13.
14. Using suction cup holders, position replacement glass in body opening. Carefully check relationship of glass to body pinchweld completely around opening. The overlap of glass to body pinchweld and retaining flanges should be equal with a minimum overlap of 3/16". Where necessary, position shims under the lower spacers to obtain required overlap of glass to body upper and lower flanges.
15. After proper glass to pinchweld relationship has been attained, mark position with grease pencil on glass and windshield pillar.
16. Remove glass from body opening and place on protected surface.
17. Clean inside edge surface of glass so that glass is free of any foreign material (oil, grease, etc.). By first peeling off paper backing, apply pressure sensitive sealing strip approximately 1/4 inch from edge of inside surface of glass completely around glass. Then apply a film of silane primer to inside edge surface completely around glass; also apply silane primer to sealing surface of windshield frame.
18. Cut off painted portion of cartridge nozzle along edge of paint line.
19. Mix adhesive caulking material and accelerator thoroughly according to directions on container.

NOTE: Once caulking material is mixed, there will be approximately 35 minutes of working time with the material. Subsequent steps should be performed immediately after caulking material is mixed.

20. Place caulking material in cartridge.
21. Carefully apply a smooth continuous bead of caulking material on inside surface of glass next to edge completely around glass (fig. 14). Caulking material should be approximately 1/4 inch wide at the base and form a pyramid 3/8 inch high. If during application the pyramid collapses, wait about 2-3 minutes for material to set up. If an air bubble is encountered in material, back up the applicator and apply sufficient material to fill void and to dispense the bubble before continuing.
22. The reveal molding clips are self-sealing and do not require sealing before installing glass.
23. With aid of helper, lift glass and carefully position glass on spacers, matching up marks on glass and frame.
24. Press glass lightly to set caulking material to windshield opening flanges. Paddle material where necessary to insure proper seal.
25. Water test windshield immediately using a cold

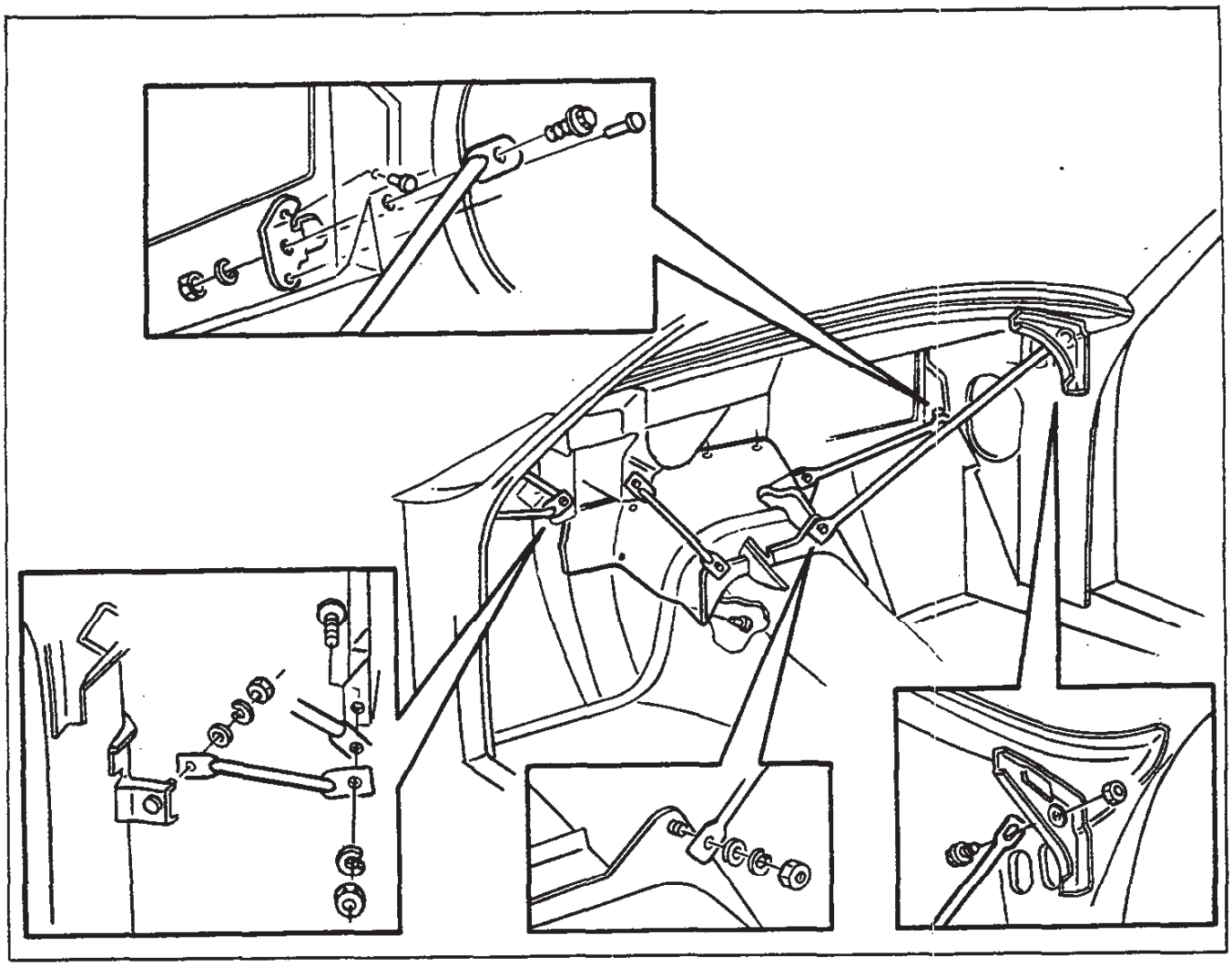


Fig. 8—Under Dash Braces

water spray. If any water leaks are encountered, use flat bladed screw driver or stick, and paddle caulking material into leak point to correct leak. Correction of leak is usually more effectively performed by paddling material from inside the body.

CAUTION: DO NOT RUN A HEAVY STREAM OF WATER DIRECTLY ON CAULKING MATERIAL WHILE THE MATERIAL IS STILL SOFT.

26. Install previously removed hardware and trim in the following order: upper reveal molding, side reveal molding, side retainer molding, lower corner reveal molding, and windshield pillar weatherstrip.

COWL VENTILATOR ASSEMBLY

The following procedure includes either the left or right-hand side. Refer to Figure 15.

Adjustment

Turn plastic adjustment link, located at middle of control cable underneath dash panel, in order to attain desired adjustment. Ventilator valve should be completely closed when knob is at forward position.

Removal

1. Remove cowl kick panel.
2. Disengage control cable fastened to bracket by screw.
3. Remove knob assembly retaining screw.
4. With console trim plate lifted out, remove nut retaining guide.
5. Remove screw retaining cable at inside front of console assembly.
6. Disassemble control mechanism.
7. Remove cable assembly by disconnecting at adjusting link and pulling through.

Installation

Install vent assembly following removal procedure in

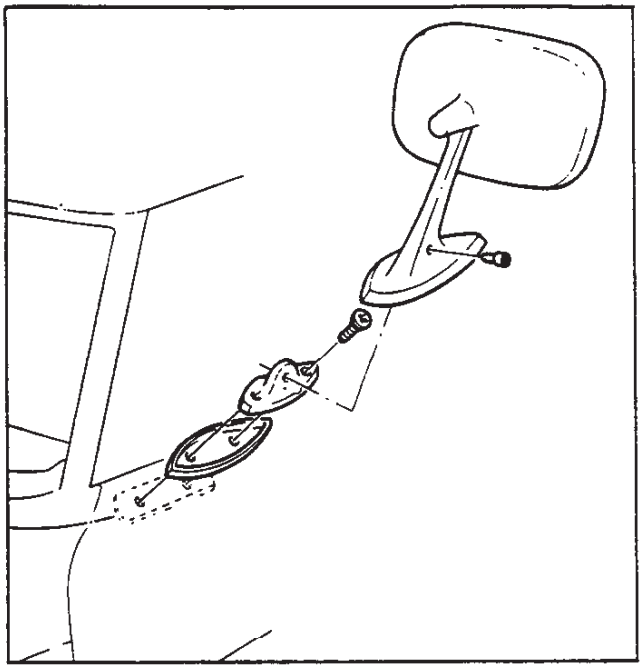


Fig. 9—Outside Rearview Mirror

reverse order. Check operation and adjust accordingly.

DOORS

ADJUSTMENTS

Door Lock Striker

The door lock striker consists of a single metal bolt and washer assembly that is threaded into a tapped, floating cage plate located in the body lock pillar. With this design, the door is secured in the closed position when the door lock fork-bolt snaps over and engages the striker bolt.

1. To adjust striker up or down, or in or out, loosen striker bolt and shift striker as required, and then tighten striker.
2. To determine if striker fore or aft adjustment is required, proceed as follows:
   a. Make certain door is properly aligned.
   b. Apply modeling clay or body caulking compound to lock bolt opening as shown in Figure 16.
   c. Close door only as far as necessary for striker bolt to form an impression as shown in Figure 16.

CAUTION: DO NOT CLOSE DOOR COMPLETELY. COMPLETE DOOR CLOSING WILL MAKE CLAY REMOVAL VERY DIFFICULT.

   d. Measure striker impression as follows:
   Striker head should be centered fore and aft as shown; however, some tolerances are allowed. In this alignment, it is important that minimum dimensions as outlined in Figure 16 be strictly maintained. The following spacers are available as service parts and can be used individually or in combination to achieve the specified alignment:
   5/64" Spacer
   5/32" Spacer
   1/4" Spacer
   5/16" Spacer

If check indicates need for emergency spacers, proceed as follows:

1. Mark position of striker on body lock pillar using a pencil.
2. Insert a 5/16" wrench into hex-head fitting in head of striker bolt and remove striker.
3. To install, reverse removal procedure. Make certain striker is positioned within pencil mark.

IMPORTANT: Whenever a door has been removed and reinstalled or realigned, the door should not be closed completely until a visual check is made to determine if lock fork-bolt is correctly engaging with striker.

DOOR WINDOW ADJUSTMENT (Figure 17)

In order to perform any of the adjustments listed below, the door trim panel must be removed.

Window Tilted

1. Loosen two bolts (A) and adjust by rotating glass until a constant distance is gained between front edge of glass and the windshield pillar. Retighten bolts A.

Window Rolls Up Too Far

2. Loosen front and rear stop screws (B). Roll glass up until it properly seats in roof weather strip. Move front and rear stops until they contact window rollers. Retighten screws (B).

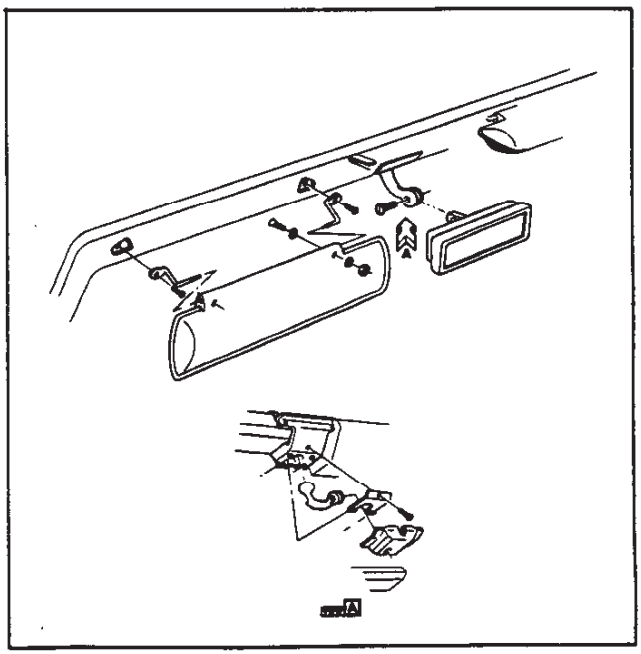


Fig. 10—Sun Visor and Inside Rearview Mirror

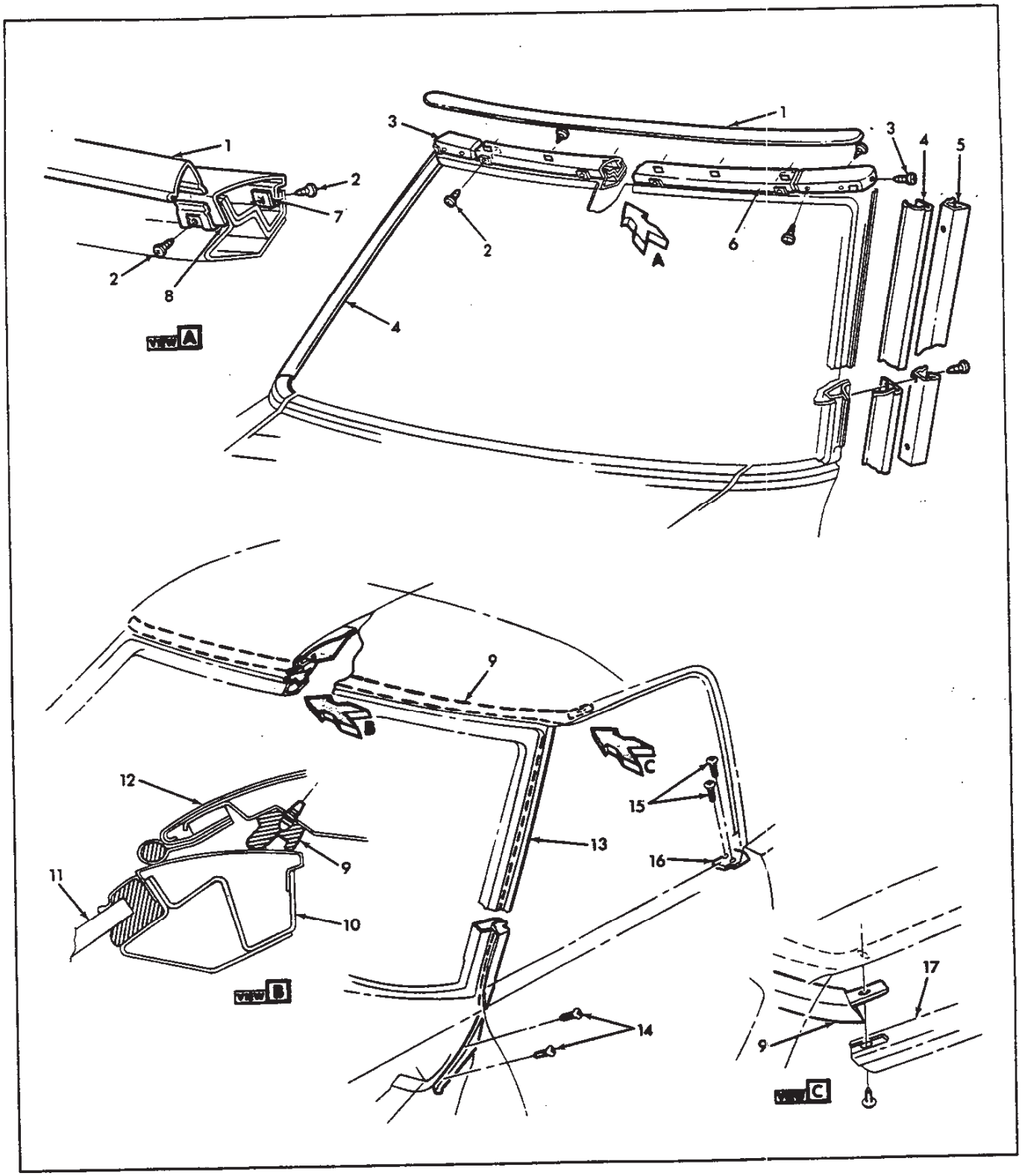


Fig. 11—Windshield Moldings and Weatherstrips

1. Header Molding
2. Screw
3. Header Corner
4. Reveal Molding
5. Retainer Molding
6. Upper Retainer Molding
7. Nut
8. Clip
9. Front Weatherstrip
10. Windshield Header Assembly
11. Windshield Glass
12. Folding Top Assembly
13. Windshield Pillar Weatherstrip
14. Screw
15. Screw
16. Weatherstrip
17. Front Rail Weatherstrip

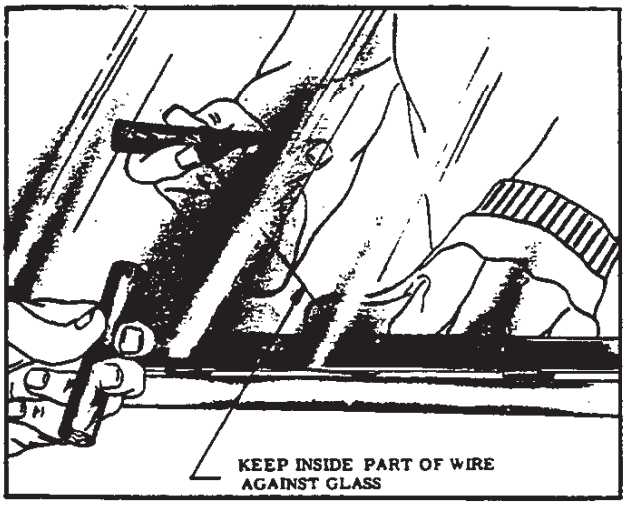


Fig. 12—Removing Old Glass From Opening

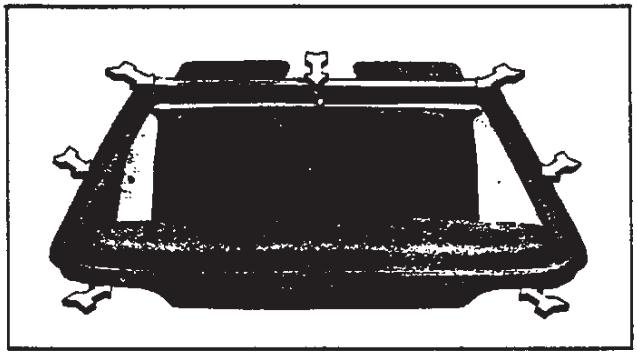


Fig. 13—Windshield Rubber Spacers

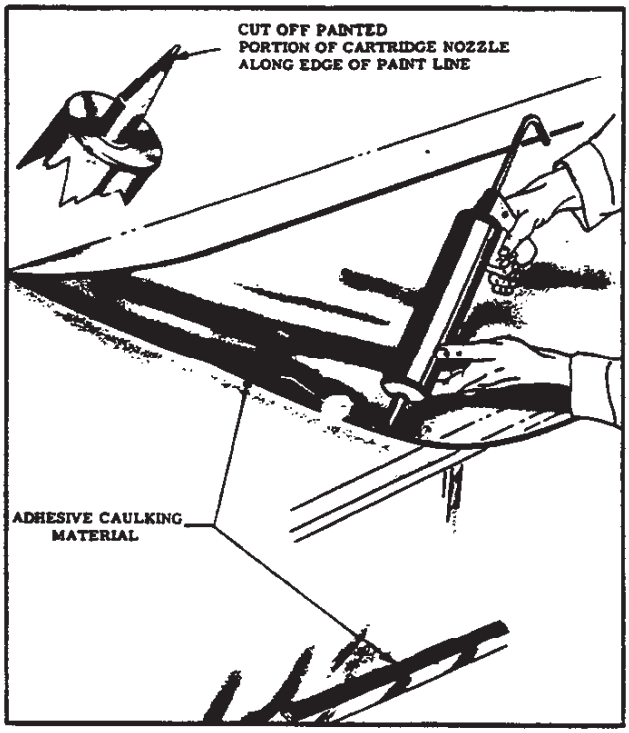


Fig. 14—Applying Caulking Material to Glass

Gap Between Window Forward Edge and Windshield Pillar Too Large or Small

3. Loosen three bolts (C) and nut (F). Move glass towards windshield pillar weather strip until it properly seats in the stripping. Retighten bolts (C) and nut (F).

Glass Too Far Outboard or Inboard

4. Loosen bolts (D & E) and nuts (F). Back off adjusting screws (G). Move top edge of glass inboard

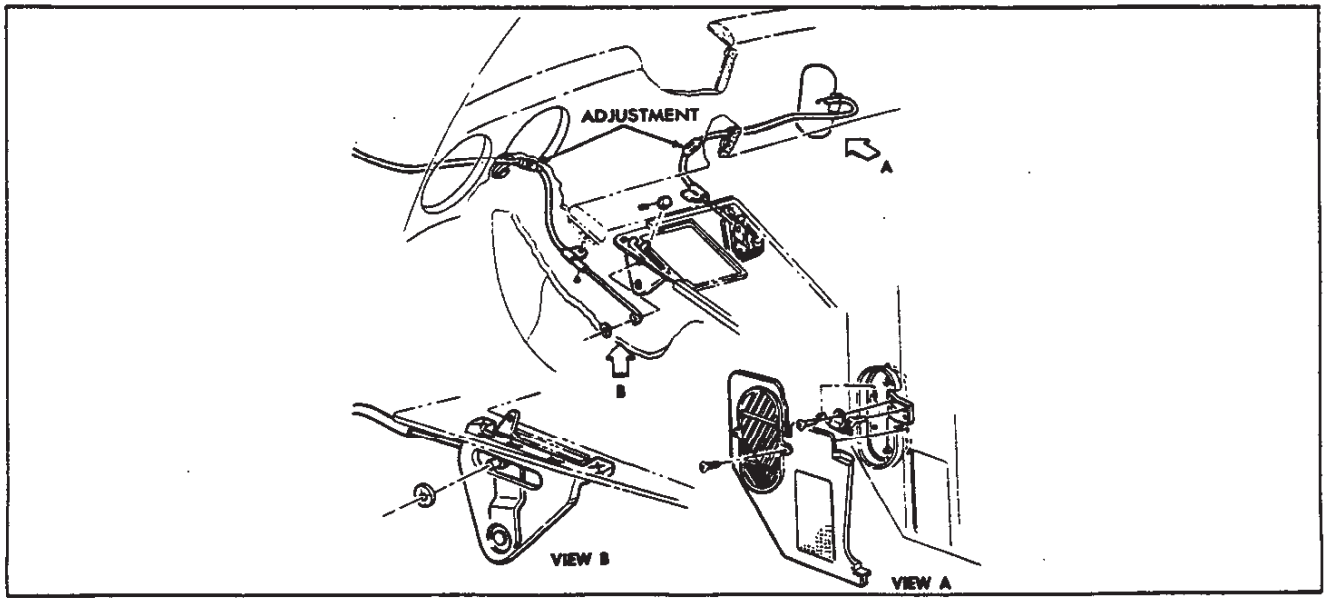


Fig. 15—Cowl Ventilator and Controls

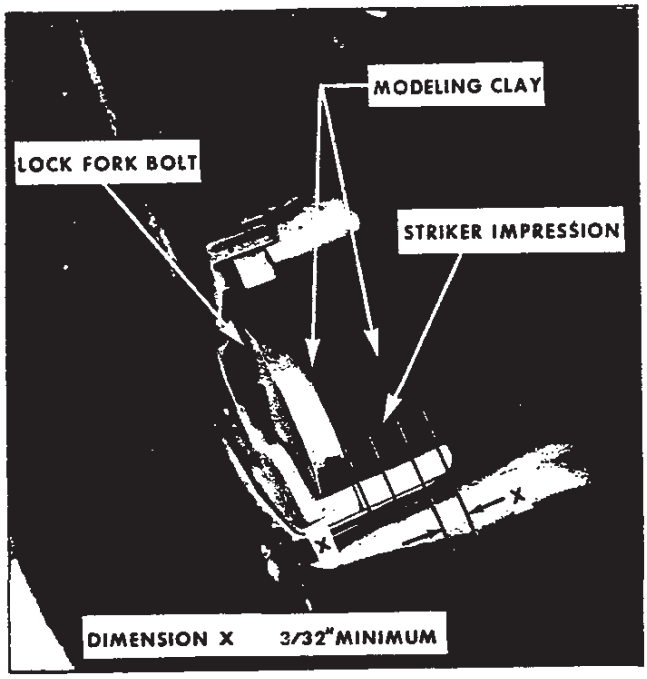


Fig. 16—Checking Adjustment of Striker

until it is properly seated against roof rail weatherstrip. Tighten bolts (D). Move felt weatherstrip against window. Tighten bolts (E). Turn adjusting screws (G) so that the inner nylon pads are in light contact with wedges. Tighten nuts (F).

Window Rolls Down Too Far

5. Loosen screw (H) and roll glass down until top edge is flush with outer panel. Move stop to contact window roller. Retighten screw (H).

If a complete door window adjustment is needed, fully adjust window by following all the steps given above in the order given.

Door Hinges

(Refer to Figure 18)

The position of the door assembly in the body opening is determined by the striker position previously described, and the position of the door on the hinge rear straps. The position of the door is adjusted by sliding the door fore and aft to the limit of the slotted holes in hinge pillar; in and out adjustment is done by installation and removal of shims located between hinge pillar and front straps of hinges; up and down position is determined by adjustment of rear hinge straps in slots of inner door panel. To adjust door, proceed as follows:

1. Remove door trim panel as outlined in this section.
2. Remove lock striker bolt after first scribing line on lock pillar surface following circular flange. This enables proper installation position.
3. For up-and-down adjustment, remove hinge cover (2 screws) for access to upper hinge retaining screws.

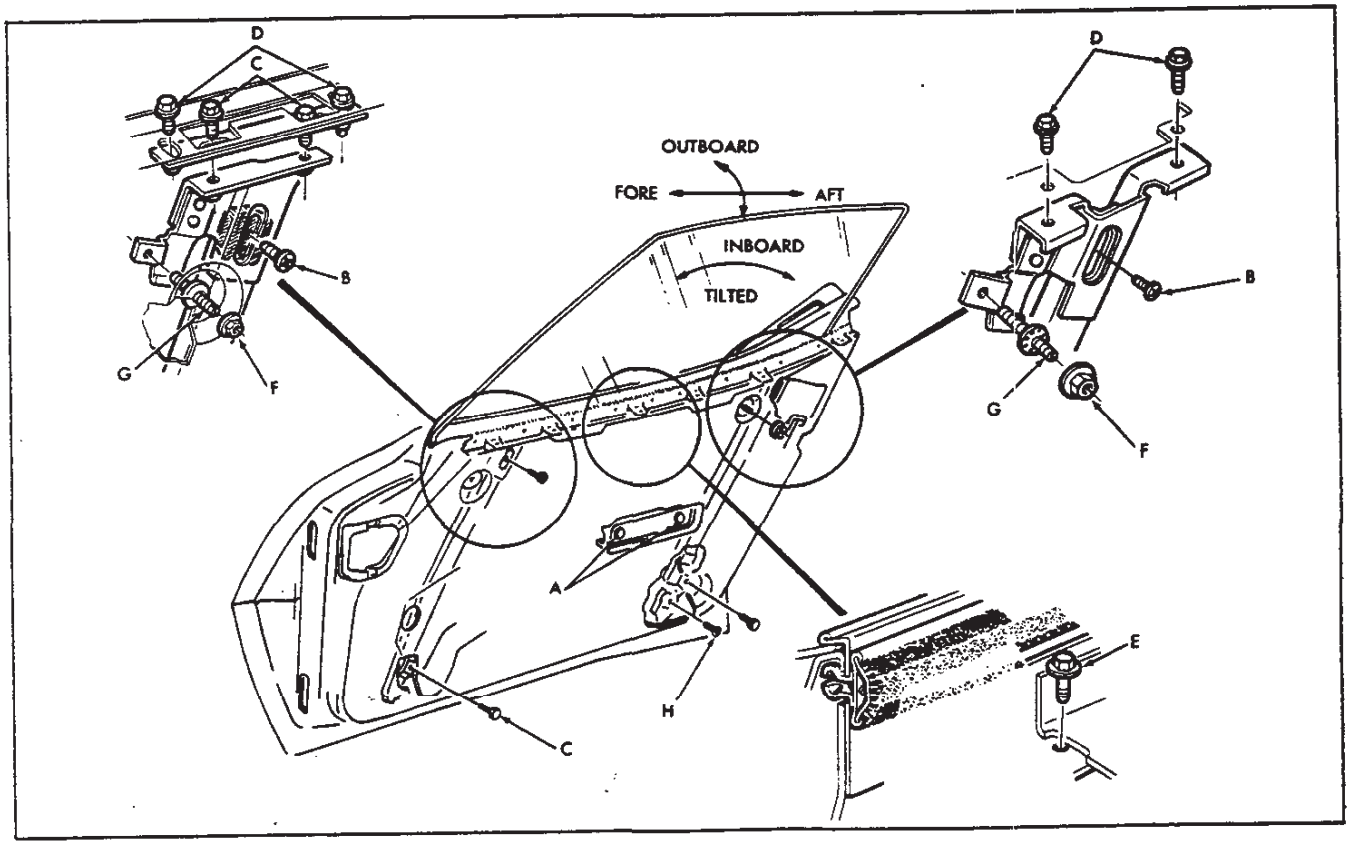


Fig. 17—Door Glass Adjustments

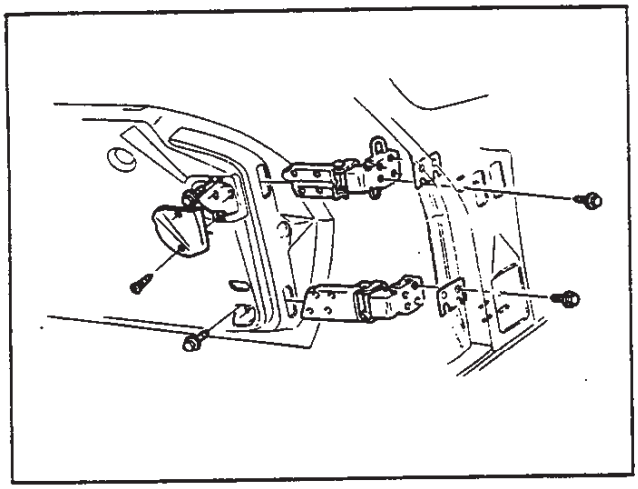


Fig. 18—Side Door Hinges

4. For in-and-out, and fore-and-aft adjustment, it is necessary to first remove instrument panel (left door only), right dash pad (right door), cowl kick panel, air inlet duct, and radio speaker, in order to gain access to hinge retaining screws.
5. Adjust door as required. (Do not allow doors to hang on one hinge without support.)
6. Install previously removed striker assembly, trim pads and panels and lubricate door hinges with lubriplate or equivalent.

NOTE: After performing any door adjustment, the window and lock pillar should be checked for alignment and adjusted as necessary. Do not slam door after adjustment without first checking the door lock and striker engagement. An adjustment may be necessary.

TRIM PANEL AND INSIDE HANDLES

(Refer to Figure 19)

1. Using Tool J-7797, remove clips retaining window crank and lock control as shown in Figure 20.

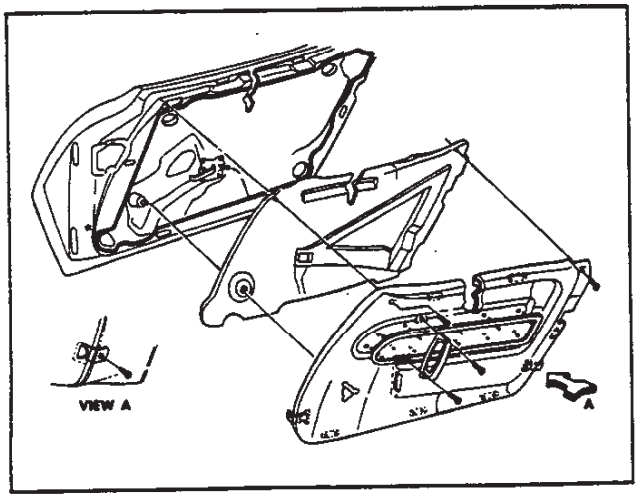


Fig. 19—Door Trim Panel Assembly

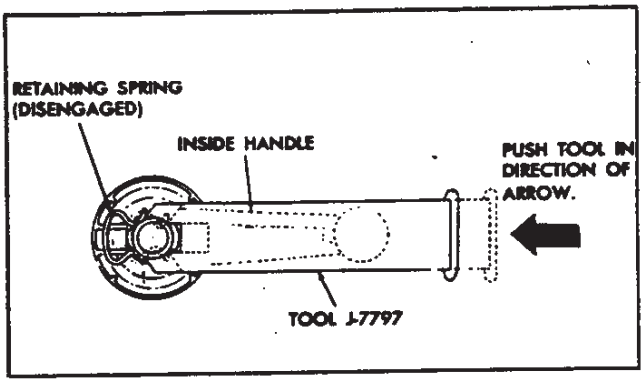


Fig. 20—Removing Window Crank With J-7797

2. Remove four (4) screws securing trim panel located at inside corners of inner door panels.
3. Remove trim panel by carefully prying out at plastic fastener clips located around perimeter of panel.
4. Remove door lock handle by removing one (1) screw and sliding handle forward (fig. 21).
5. Remove formed plastic cover by peeling along edge at adhesive bead.
6. For installation follow above steps in reverse order making sure trim panel is properly aligned.

DOOR LOCK AND REMOTE CONTROLS

For parts identification, refer to Figure 21.

Removal

1. Raise window fully up.
2. Remove door trim panel as outlined in this section.
3. Disengage upper control rod assembly by removing, first, plastic guide clip, releasing carburetor type clips at both ends, and removing rod through access hole.
4. Disengage lock control rods by releasing clips at both ends and lifting outward.
5. Remove remote control assembly by removing four (4) screws to inner door panel.
6. Remove "crank link" (intermediate pivot) by removing two (2) screws to inner panel.
7. Remove door lock by removing three (3) screws and lifting assembly out through access hole.

Installation

For installation, follow preceding steps in reverse order. After assembly of lock mechanism, adjust linkage for proper operation, by removing clip and turning threaded rods. All components should be lubricated before installation.

WEATHERSTRIP

Figure 22 illustrates weatherstrip mounting location on door. When installing new weatherstrip, all dirt, loose paint and old cement must be removed to ensure a good bond. Use only high quality cement designated by the manufacturer as being suitable for weatherstrip application.

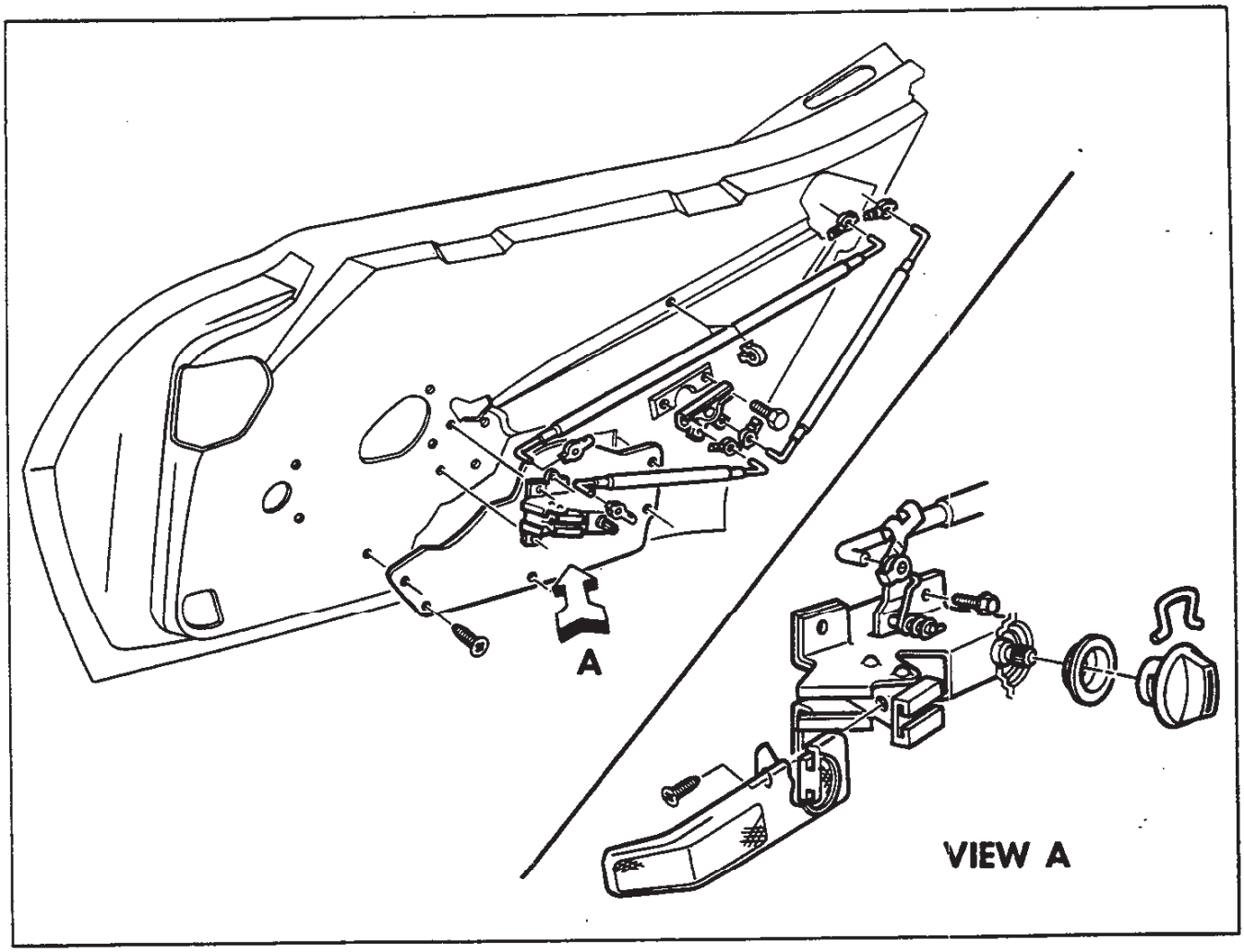


Fig. 21—Door Lock and Remote Control

WINDOW OUTER SEAL ASSEMBLY (Fig. 23)

1. Lower window all the way down.
2. Remove trim panel.
3. Remove two (2) screws one located at each end of seal (fig. 23).
4. Carefully pry out at six (6) retaining clips.
5. Lift seal assembly outward and upward.
6. For installation, secure clips and install the two screws.

WINDOW ANTI-RATTLE (Fig. 23)

1. Lower window
2. Remove trim panel
3. Remove hex head screw
4. Fish anti rattle through access
5. Install anti-rattle through access. Adjust, install trim.

WINDOW GLASS

Removal

1. Remove door trim panel as outlined in this section.
2. Remove window outer seal assembly as outlined in this section.
3. Position window all the way up to line up two (2) sash screws through access holes.
4. Remove two (2) sash screws on horizontal guide channel while holding nut with other hand (fig. 24).
5. Disengage stop by removing one (1) Phillips head screw at top of channel assembly.
6. Adjust front and rear channel assemblies to extreme outboard position to allow ample clearance for window removal.
7. Carefully pull window upward making certain to clear roller assemblies through opening in inner door panel.

Installation

If replacement glass is necessary, disassemble two (2) pads and fasteners, and frame assembly by removing three (3) mounting bolts through glass (fig. 25). Mount frame assembly and pads onto new glass before installation into door.

The following steps are necessary for installation:

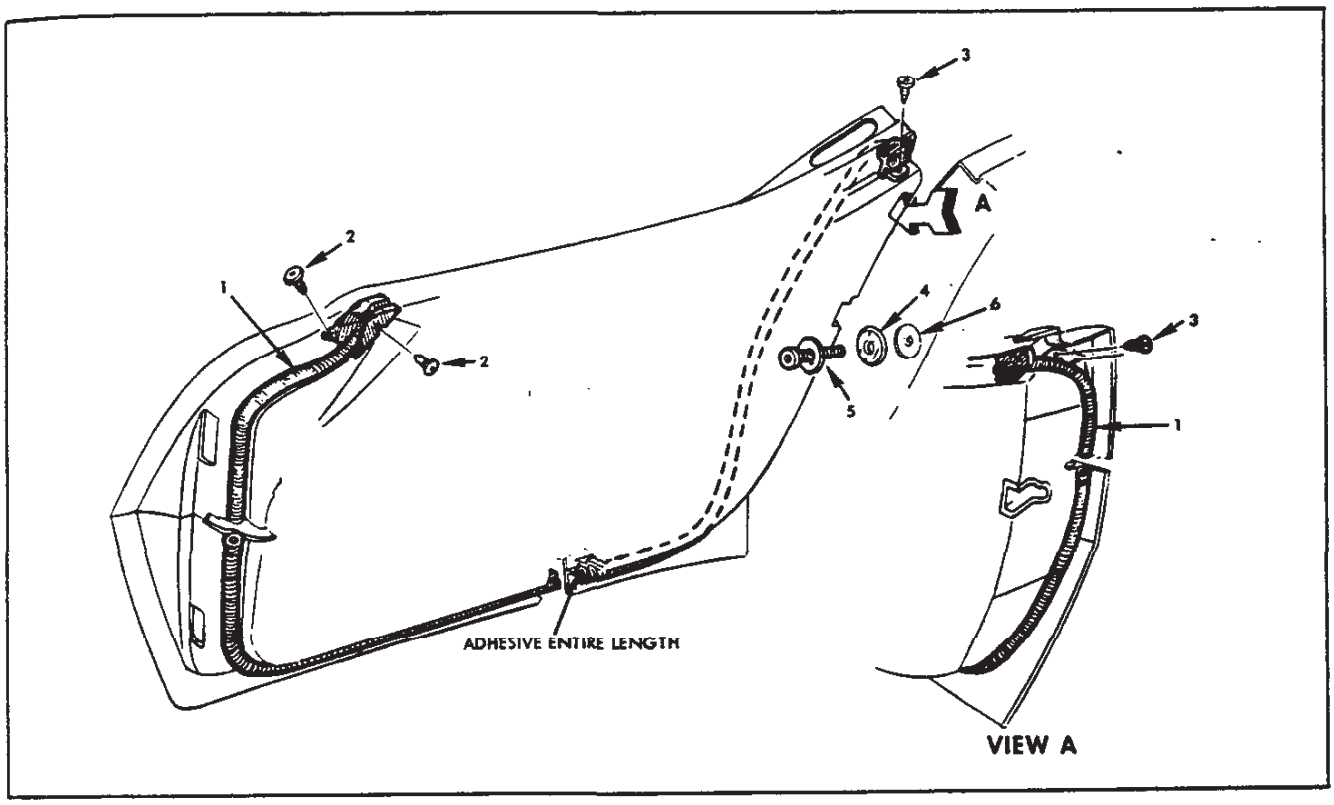


Fig. 22—Door Weatherstrip

1. Weatherstrip
2. Screw
3. Screw
4. Spacer
5. Striker
6. Lock Pillar

1. Insert glass in door pocket with convex curvature towards outside of vehicle.
2. Install and tighten (2) sash bolt and nut assemblies through horizontal guide channel and glass frame.
3. Adjust front and rear channels to proper in and out position.
4. Install inner window seal, and door trim panel.

GLASS RUN CHANNELS

Removal

For parts identification, refer to Figure 26. Removal *of either front or rear channel involves* the following steps.

1. Remove door trim assembly as outlined in this section.
2. Remove window glass assembly as outlined in this section.
3. Remove retaining screw at lower end of channel and two (2) screws retaining channel to top surface of door inner panel.
4. Remove two (2) screws retaining stationary horizontal guide channel.
5. Remove nut from adjusting stud.
6. Adjust stud to extreme clockwise position to allow proper removal clearance.
7. Carefully lift channel through upper slot as shown in Figure 27 making certain to clear opening.

Installation

1. Position run channel in door and install retaining bolts loosely.
2. Install window glass as outlined in this section.
3. Make necessary adjustments to channel as outlined under Doors - Adjustments - Door Windows. Replace door trim panel.

WINDOW REGULATOR—MANUAL

For parts identifications refer to Figure 28.

Removal

1. Remove trim panel as outlined in this section.
2. Position window all the way up.
3. Remove two (2) sash bolt and nut assemblies retaining window glass.
4. Remove two (2) screws securing stationary horizontal channel.
5. Remove window crank housing by removing three (3) screws.
6. Remove crank shaft, pin and washer spring.
7. Remove two (2) screws located adjacent to spring opening retaining regulator.
8. Remove lower bolt securing front glass channel.
9. Remove nut securing adjusting stud, and adjust front channel outward to provide adequate clearance for window regulator removal.
10. Collapse regulator linkage to elongated position.

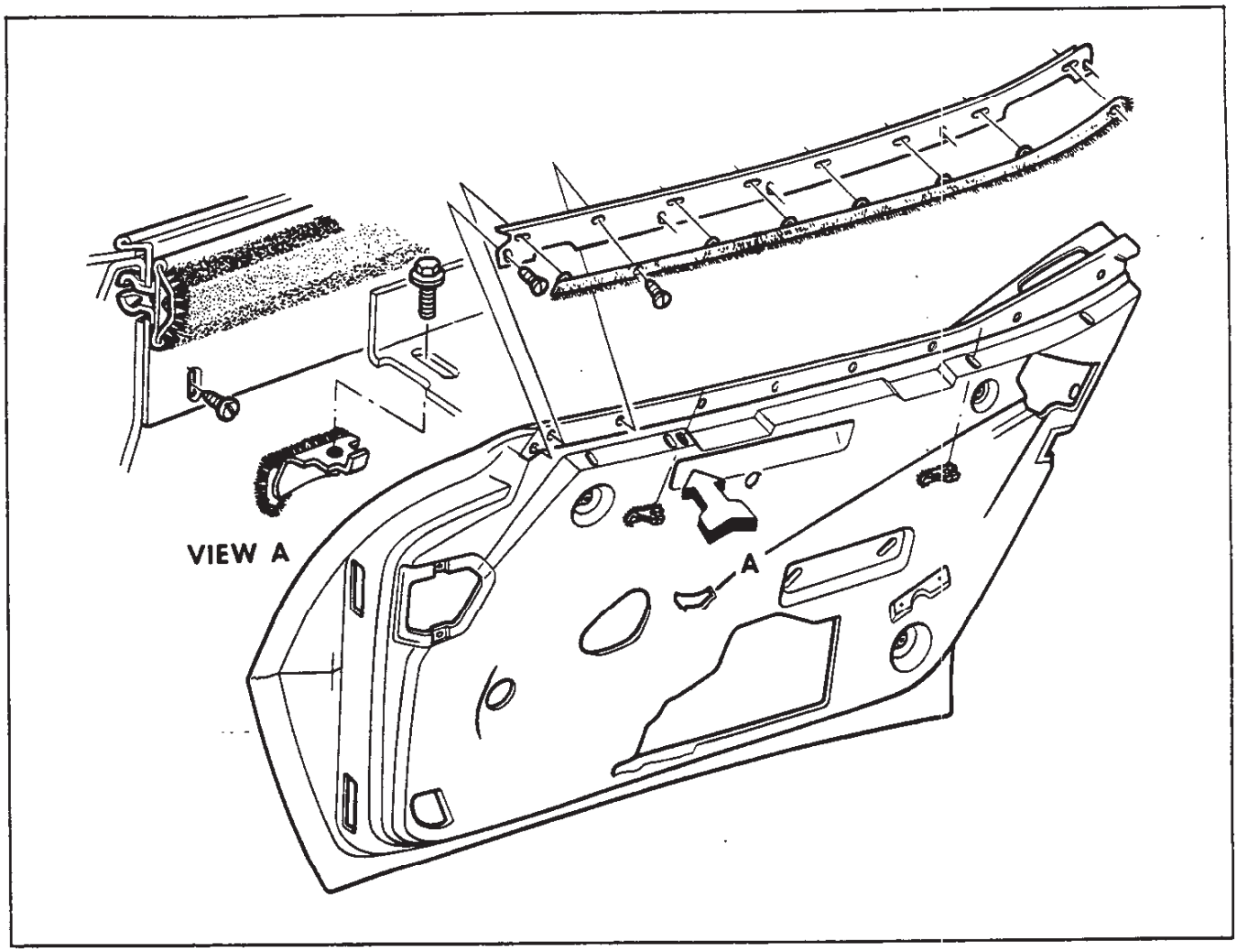


Fig. 23—Window Glass Seals and Molding

Fig. 24—Removing Sash Screws

11. While depressing front channel outward, slide regulator assembly forward and rearward to remove through access hole as shown in Figure 29.

Installation

Regulator may be installed by following removal procedure in reverse order. Always lubricate all guide rails and rollers when regulator is disassembled. Test regulator thoroughly before installing door trim panel. Adjust window as outlined in this section.

WINDOW REGULATOR—POWER

In the case that window will not operate, check electrical connections first. Figure 30 illustrates location of junctions, switches, and circuit breaker.

Removal

Perform Steps 1 through 12 following Window Regulator—Manual Removal. Note that electrical connectors must be removed from motor before performing any operation on regulator. Figure 30 illustrates location of regulator on door and wiring.

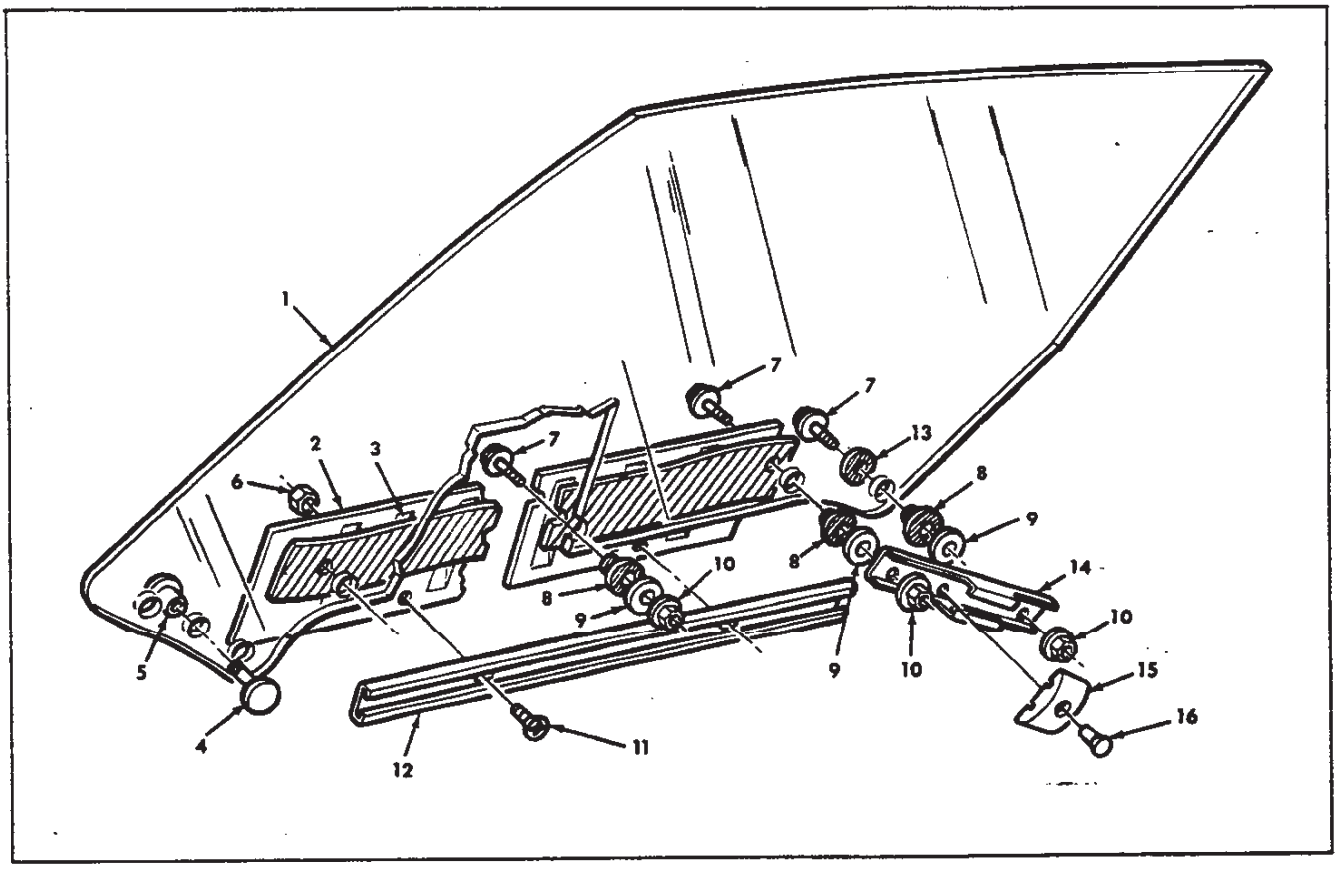


Fig. 25—Glass and Frame Assembly

1. Glass	5. Pad	9. Washer	13. Washer
2. Frame	6. Nut	10. Nut	14. Cam Idler
3. Filler	7. Bolt	11. Screw	15. Pad
4. Fastener	8. Bushing	12. Channel	16. Rivet

Disassembly

NOTE: Do not attempt to remove motor from regulator until the following operations are performed. Arm is spring-loaded and should be locked in position when motor is removed. Refer to Figure 31.

1. Place regulator assembly in vise.
2. Using jumper leads to 12 volt DC source, operate motor until semi-circular hole in sector gear centers over one of two weld nuts on mounting plate.
3. Screw a 1/4" - 20 x 1" bolt into weld nut so that end passes through hole in sector gear. It may be necessary to enlarge hole in gear slightly with file or drill. Install nut on bolt to lock arm position.

Installation

Be sure lock bolt is removed if regulator has been disassembled.

1. Install lubricated regulator assembly and guide rails in reverse order of removal.
2. Install window as outlined in this section.
3. Making sure connectors are securely installed on motor, test operation of window thoroughly.
4. Install door trim panel and control handles as outlined in this section.

OUTER HANDLE AND LOCK CYLINDER (Fig. 32)

Removal

1. Remove trim pad.
2. Remove lock water shield.
3. Remove handle assembly by first removing (3) three screws retaining lock.
4. Remove (2) nuts attached to handle assembly studs and raise handle assembly after prying pivot link clip loose.
5. Remove lock cylinder by repeating step (2) above then removing 2 clips on rear of cylinder.

Installation

1. If required, install new lock cylinder seal with assembly replacement.
2. Position handle assembly and tighten retaining nuts.
3. Slide lock back into place and secure with (3) three screws.
4. Carefully check operation of door lock, handle and cylinder.
5. Install lock water shield, using foam pressure tape as seal.
6. Install door trim panel as outlined in this section.

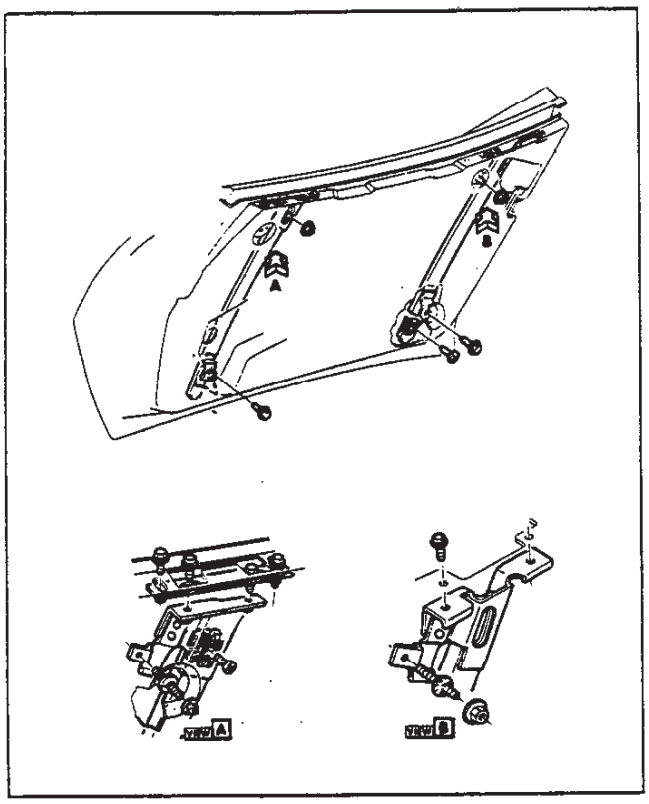


Fig. 26—Window Run Adjustment Points

HINGES—DOOR ASSEMBLY

(Refer to Figure 33)

Removal

1. Remove door trim panel as outlined in this section.
2. Remove hinge access cover from door inner panel.
3. For lower hinge removal, remove door sill plate, cowl kick panel, and radio speaker.
4. For access to upper hinge attaching screws, remove lower mast jacket cover and instrument panel pad (left side), or dash panel pad (right side), and air inlet ducts.
5. If entire door is to be removed and door has electric power window, disconnect and remove wiring between hinge pillar and door.
6. If hinge is to be replaced in same position, scribe around inner strap on door panel and record number of shims found between hinge strap and door panel.
7. Remove bolts retaining hinge to door. DO NOT ALLOW DOOR TO HANG UNSUPPORTED ON ONE HINGE.
8. Remove bolts retaining hinge to body.

Installation

1. If door assembly has been removed from car, scribe around lock striker as explained under Adjustments—Door Lock Striker, and remove striker from lock pillar.
2. Install hinges, replacing same number of shims removed, and aligning door hinge straps with marks scribed at disassembly.
3. As necessary, perform door adjustments as outlined in this section.
4. If door is equipped with power window, reinstall wiring.
5. Replace all trim and panels removed during disassembly.

REAR QUARTER

DOOR SILL PLATE AND MOLDING

Figure 34 illustrates assembly details of both the door sill plate and molding. The sill plate, which retains the carpet, the cowl trim kick panel, and lock pillar front edge trim, is mounted to the body by four (4) screws.

The upper molding is replaced by removing seven (7) screws; the lower molding is replaced by first removing the upper molding and then removing five (5) screws and four (4) nuts at face of molding.

UNDERBODY STORAGE COMPARTMENT

Located directly behind the front seats, the underbody storage compartment assembly is divided into three separate storage areas.

Refer to Figure 35.

1. Remove right hand box by opening lid, and lifting box upward.
2. Unfasten storage assembly by removing eight (8) screws along inner flange of frame and lower strap of door hinges.
3. Remove assembly from underbody by lifting upward.
4. Doors are removed from assembly by removing three (3) screws (outer doors) and two (2) screws (center door) at upper hinge strap.
5. Center storage compartment box is removed by removing seven (7) screws located around inside top edge of box.
6. For installation, follow above steps in reverse order.

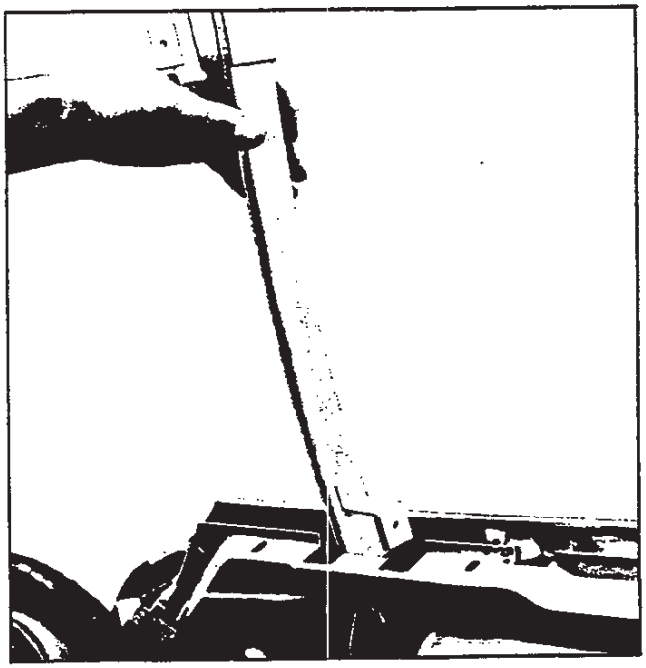


Fig. 27—Removing Front Glass Channel

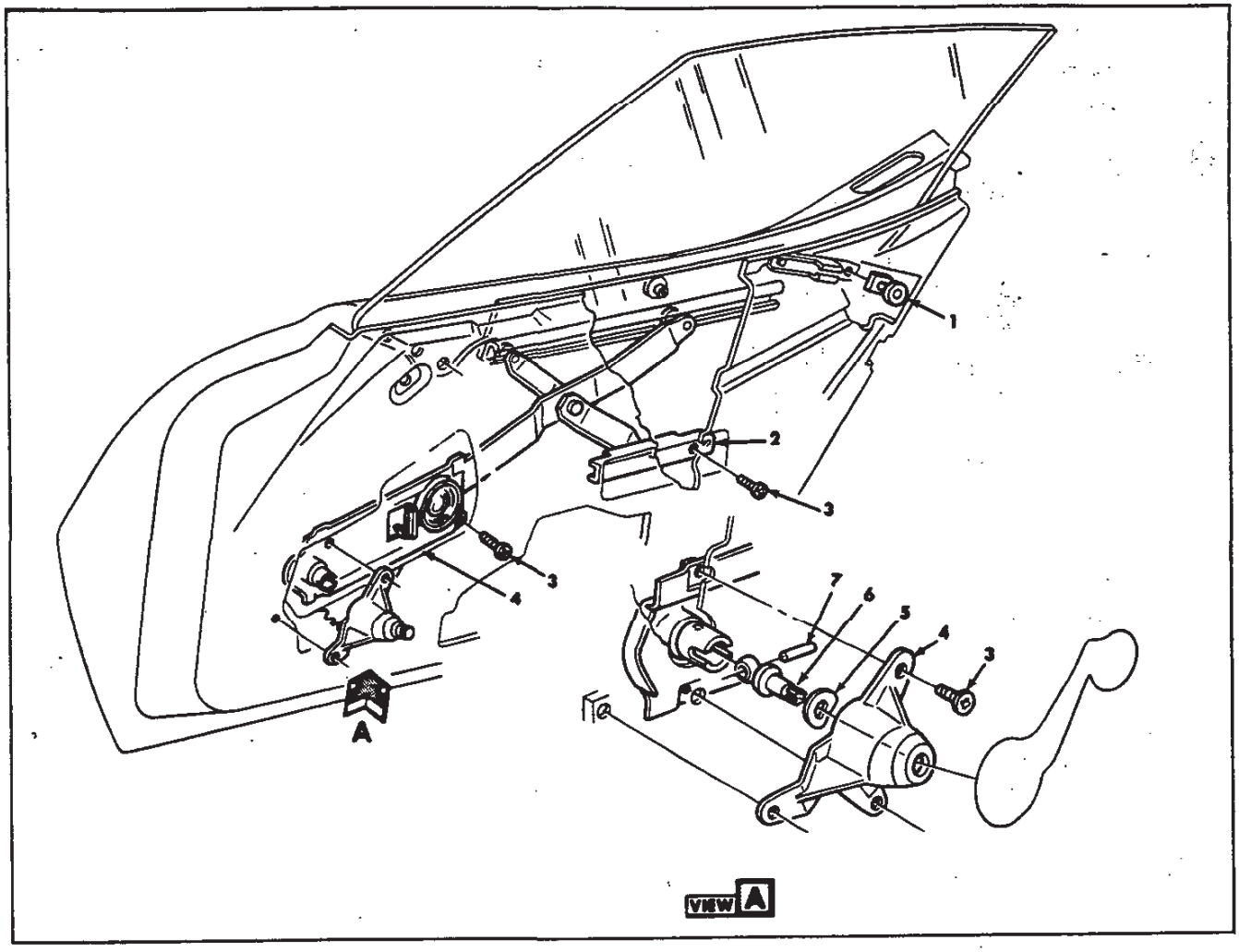


Fig. 28—Manual Window Regulator

1. Roller and Slide Assembly
2. Channel Assembly
3. Screw
4. Housing
5. Washer-Spring
6. Shaft
7. Pin

REAR END

FOLDING TOP COMPARTMENT LID

(Refer to Figure 36 for parts identification.)

Adjustment

Hinges

The folding top compartment lid should be adjusted so that, in the closed position, the surface of the lid is flush with surrounding body surfaces, and space between lid edge and body is 1/16" to 3/16" at sides and 3/16" to 1/4" at rear. Whenever lid position is changed on hinges, lock engagement must be inspected and adjusted if necessary. Adjust hinge position as follows:

1. Scribe a line on lid surface following contour of hinge strap. This line will assist in observation of lid movement during adjustment (fig. 37).
2. To raise or lower top surface of lid, add or remove hinge shims as required.

Lock

Lock engagement is adjusted as follows:

1. Lock striker is adjusted in and out to the extent of slotted mounting holes.
2. Release of lock is adjusted by loosening lock assembly retaining bolts and moving lock fore and aft to the limit of slotted holes in lock base.
3. After adjustment, lock release should be tested and readjusted as required.

Hinges

Removal

1. Scribe around hinge as shown in Figure 37.
2. Hinge is removed as an assembly by opening top compartment lid fully, and removing three (3) retaining screws. Note number of shims found between hinge frame and compartment floor.
3. Remove spring from hinge assembly by closing top compartment lid as far as possible and inserting

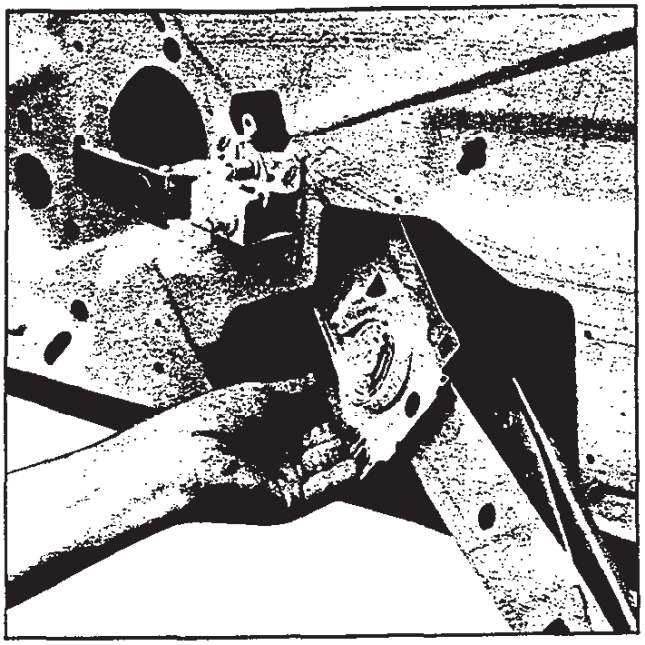


Fig. 29—Removing Window Regulator

Tool J-9559 between expanded coils in spring. Opening top compartment lid fully allows removal of spring as shown in Figure 38.

4. Directly after spring is removed, insert long bolt supplied with J-9559 through holes in end of tool through the spring, and install nut on bolt.

Spring may be removed from J-9559 or J-9559 may be installed in a new spring, by the following method:

1. Place a closed 6 or 8 inch "C" clamp in vise or fasten it to a bench top anchored to floor.
2. Hook one end of spring in clamp and the other end in hook of chain hoist, or "cherry picker", as shown in Figure 39.
3. Elongate the spring enough to allow insertion of J-9559. Install through bolt if spring is not to be installed on hinge immediately.

Installation

1. Install same number of shims as removed or, if repairing collision damage, etc., position hinge in compartment, install upper mounting screws, fill gap between floor and hinge frame with shims and install lower mounting screw.
2. If spring has been removed from hinge, install spring in J-9559 and place spring on hinge with compartment lid raised; closing lid releases J-9559 for removal. Upper end of spring should rest in the one of three notches yielding best lid operation. Approximately three pounds force is necessary to close lid.

Top Lock

1. For locks on either side, remove rod mounting clamps by removing one (1) hex screw.
2. Remove two (2) nut-washer assemblies.
3. After disassembling lock from mounting studs, carefully remove cover and gasket from compartment lid.
4. For installation, follow above steps in reverse order. Test lock and control mechanism for proper operation.

Lock

Removal

1. Remove rod mounting clamps. Remove retainer from control rod assembly and disengage rod from control.
2. Scribe a mark on lid along outer contour of lock assembly.
3. Remove three (3) lock assembly retaining screws and remove lock from compartment lid.

Installation

1. Place lock assembly on compartment lid aligned with scribed line and install retaining screws.
2. Install end of rod in control assembly and fasten retainer securely.
3. Test operation of lock thoroughly, and adjust if necessary as outlined in this section.

Control

Removal

1. Remove inner mounting clamps from both cables, and disengage rods from control by removing retainers.
2. Remove four (4) mounting screws and remove control from compartment lid.

Installation

1. Position control on compartment lid and install mounting screws.
2. Install ends of rods in control and fasten securely with retainers.
3. Engage push rod with retainer.
4. Test operation of locks and adjust if necessary.

GAS TANK DOOR AND REAR TRIM

Figure 40 illustrates installation details of gas tank door, letter trim, and tail pipe bezel.

Gas tank door assembly and bezel are replaced by removing sheet metal screws located around inner surface of bezel.

The holding force of door latch mechanism is adjusted by removing assembly and turning individual lock pins with allen head wrench.

Trim letters are retained by special nuts accessible from underneath vehicle.

REAR FILLER PANEL

1. Remove rear license plate and housing as explained in Section 14.
2. Remove tail pipes from mufflers.
3. Remove eight (8) mounting screws retaining filler panel to body (fig. 40).
4. For installation, follow above steps in reverse order.

SPARE TIRE MOUNT

Refer to Figure 41.

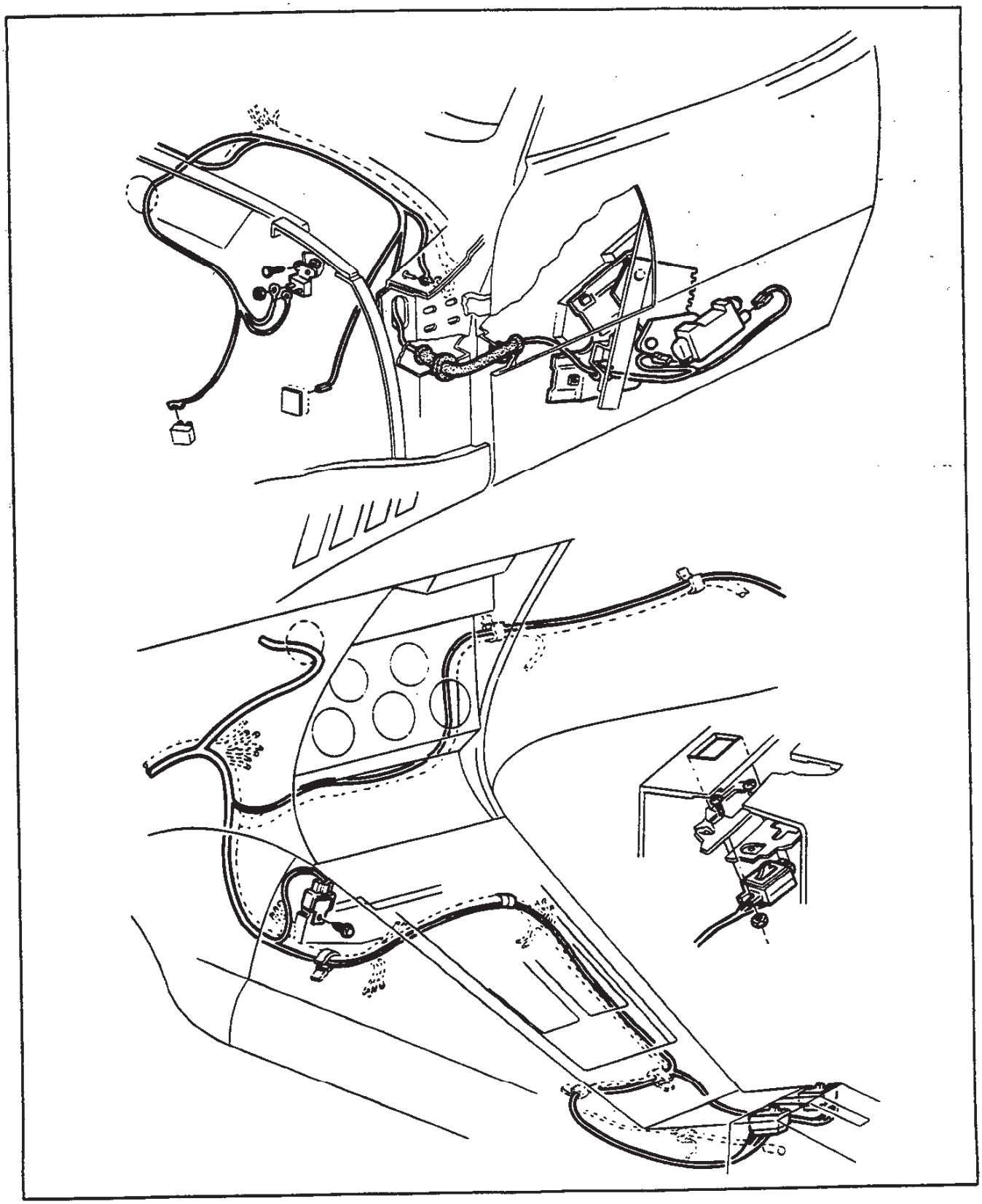


Fig. 30—Power Window Regulator Wiring

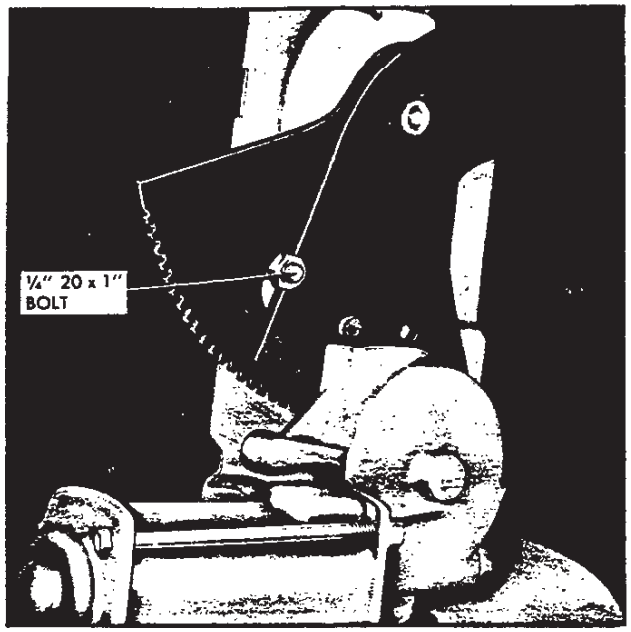


Fig. 31—Locking Arm in Place

Removal

1. Remove spare tire as outlined in Owner's Manual.
2. Loosen pivot bolt lock nuts and turn pivot bolts out of weld nuts in crossmember.
3. Remove two (2) screws retaining swivel bolts assembly to body.
4. Remove four bolts holding cover assembly to body.

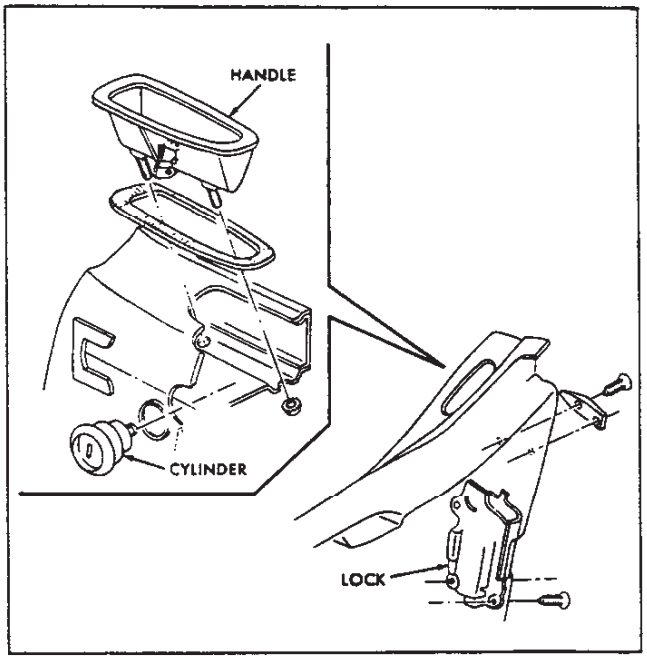


Fig. 32—Door Handle and Lock Cylinder

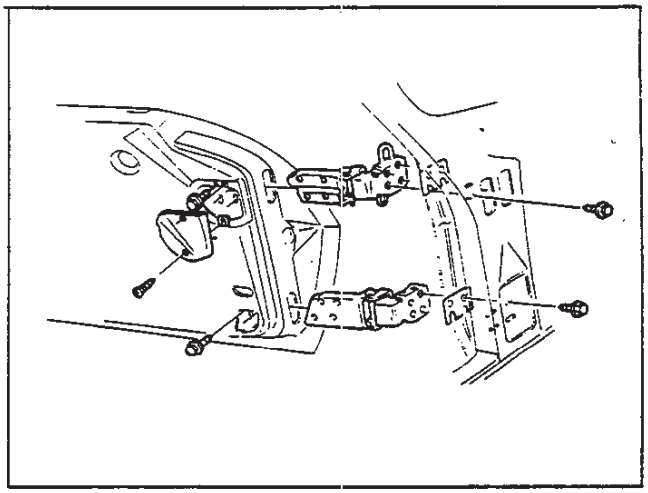


Fig. 33—Side Door Hinges

Installation

Installation is made by following removal procedure in reverse order. Before installation swivel bolt assembly, coat nut and bolt threads with chassis grease.

REAR PLENUM DRAIN (Fig. 42)

The coupe rear plenum drain assembly is located in the left rear quarter of the vehicle. The exterior mounted drain shield is located in the left rear wheelhouse.

Replacement of Drain Hose

1. Remove interior quarter trim panel as outlined further in this section.
2. Loosen clamp on drain hose.
3. Remove and replace drain hose.
4. Install clamp on hose at rear plenum.
5. Reinstall quarter trim panel in the reverse order of removal.

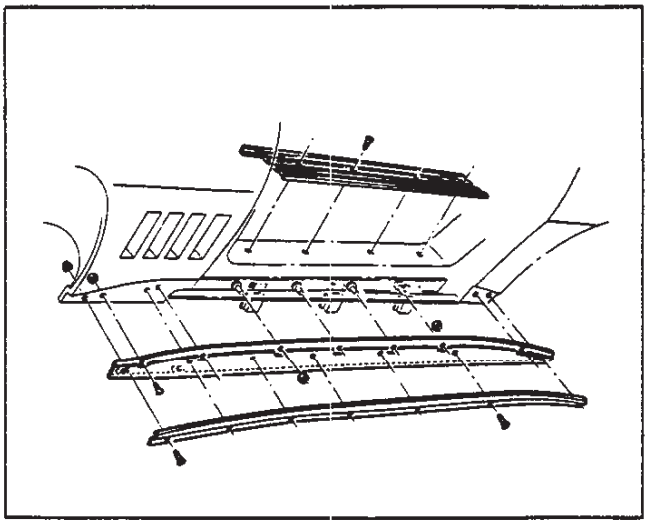


Fig. 34—Sill Plate and Trim Molding

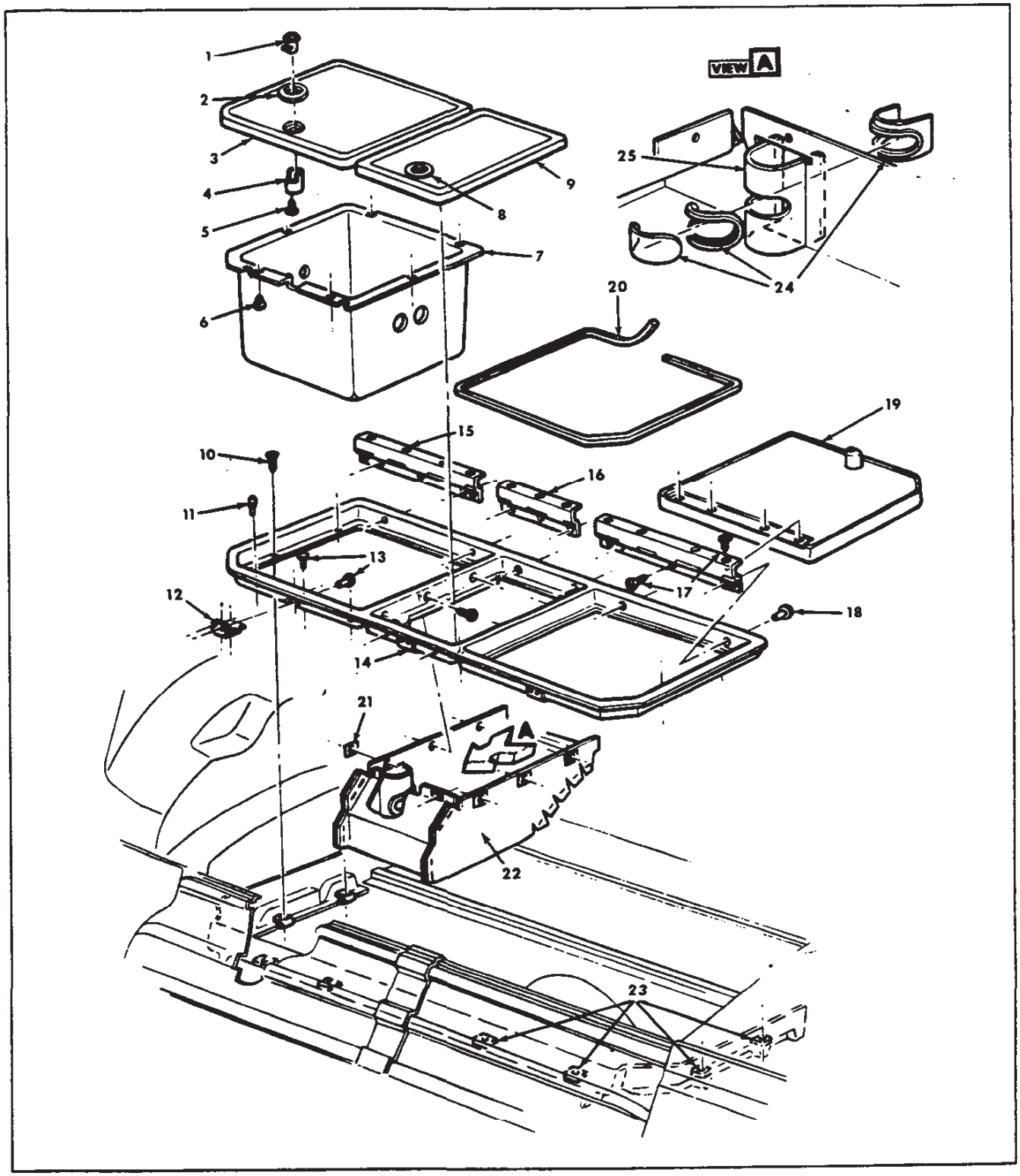


Fig. 35—Under Body Storage Compartment

1. Cylinder and Case Assembly
2. Escutcheon
3. Door
4. Retainer
5. Screw
6. Bumper
7. Cover
8. Cylinder and Case Assembly
9. Center Door
10. Screw
11. Bumper
12. Striker
13. Rivet
14. Striker
15. Hinge
16. Hinge
17. Screw
18. Rivet
10. Door
20. Seal
21. Nut
22. Center Compartment
23. Spring Nut
24. Lens Assembly
25. Shield

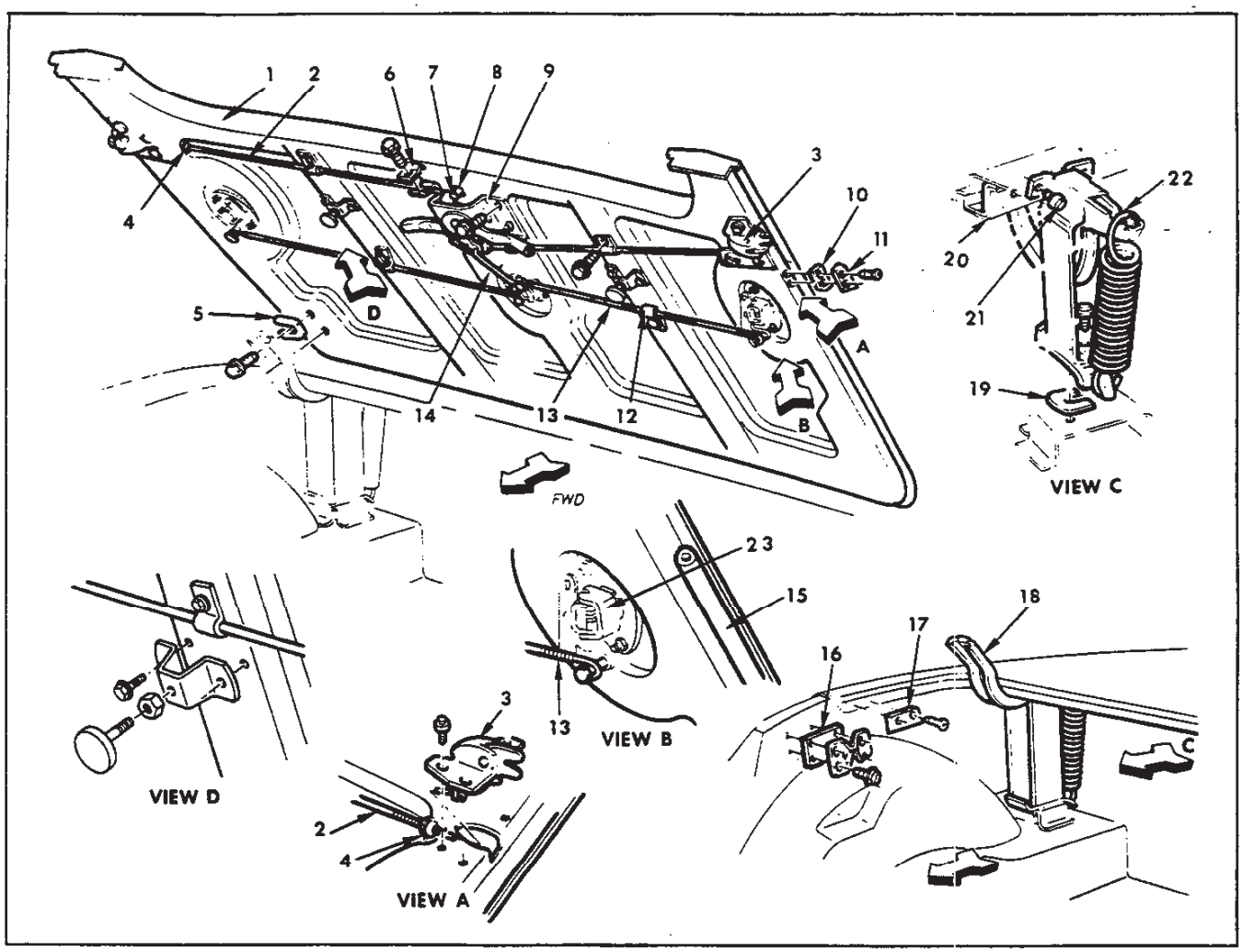


Fig. 36—Folding Top Lid Assembly

1. Lid Assembly
2. Cable
3. Lock Assembly
4. Grommet
5. Shim
6. Clamp
7. Screw
8. Stop
9. Control Assembly
10. Spacer
11. Plate
12. Clip
13. Rod
14. Rod
15. Weatherstrip
16. Spacer
17. Plate
18. Hinge Assembly
19. Shim
20. Body Upper Panel
21. Screw—Lock Washer Assembly
22. Spring
23. Top Lock

RUGS AND INTERIOR TRIM

CLEANING SOFT TRIM

Procedure for Cleaning Folding Top Material

The top should be washed frequently with neutral soap suds, lukewarm water and a brush with soft bristles. Rinse top with sufficient quantities of clear water to remove all traces of soap.

If the top requires additional cleaning after using soap and water, a mild foaming cleanser can be used. Rinse the whole top with water; then apply a mild foaming type cleanser on an area of approximately two square feet. Scrub area with a small soft bristle hand brush, adding water as necessary until the cleaner foams to a soapy consistency. Remove the first accumulated soilage with a cloth or sponge before it can be ground into the top material. Apply additional cleanser to the area and scrub until the top is clean. Care must be exercised to keep the cleanser from running on body finish as it may cause streaks if allowed to run down and dry.

Procedure for Cleaning Coated Fabrics

Care of genuine leather and coated fabrics (includes vinyl coated formed headlining) is a relatively simple but important matter. The surface should be wiped occasionally with a dry cloth, and whenever dirt accumulates, the following cleaning instructions should be used:

Fig. 37—Marking Hinge Position

1. Lukewarm water and a neutral soap should be used. Apply a thick suds, worked up on a piece of gauze or cheesecloth, to the surface.
2. The operation should be repeated, using only a damp cloth and no soap.

Fig. 38—Removing Hinge Spring

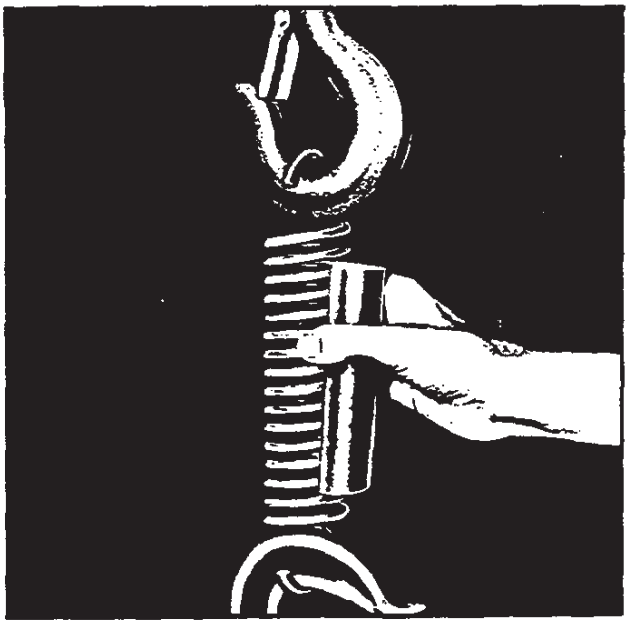


Fig. 39—Installing Tool J-9559 in New Spring

3. The surface should then be wiped dry with a soft cloth.

Polishes and cleaners used for auto body finishes, volatile cleaners, furniture polishes, oils, varnishes or household cleaning and bleaching agents should never be used.

Procedure for Cleaning Carpet

Thoroughly brush or vacuum the floor carpet. In many

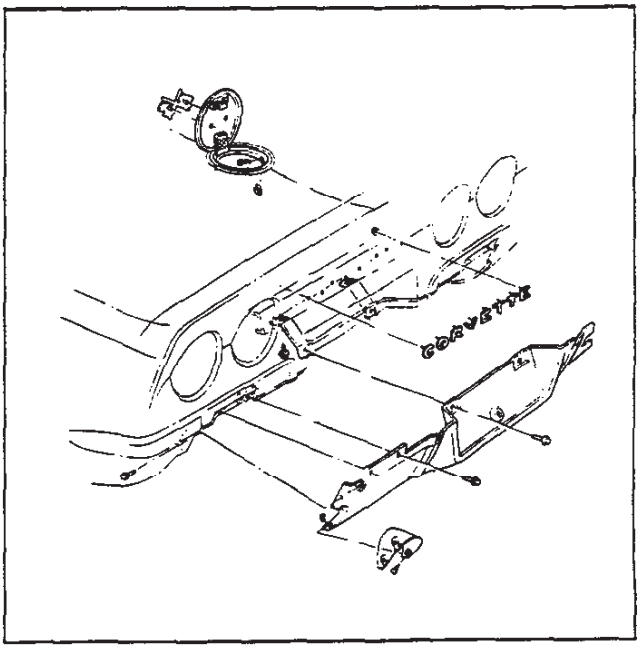


Fig. 40—Gas Tank Door and Rear Trim

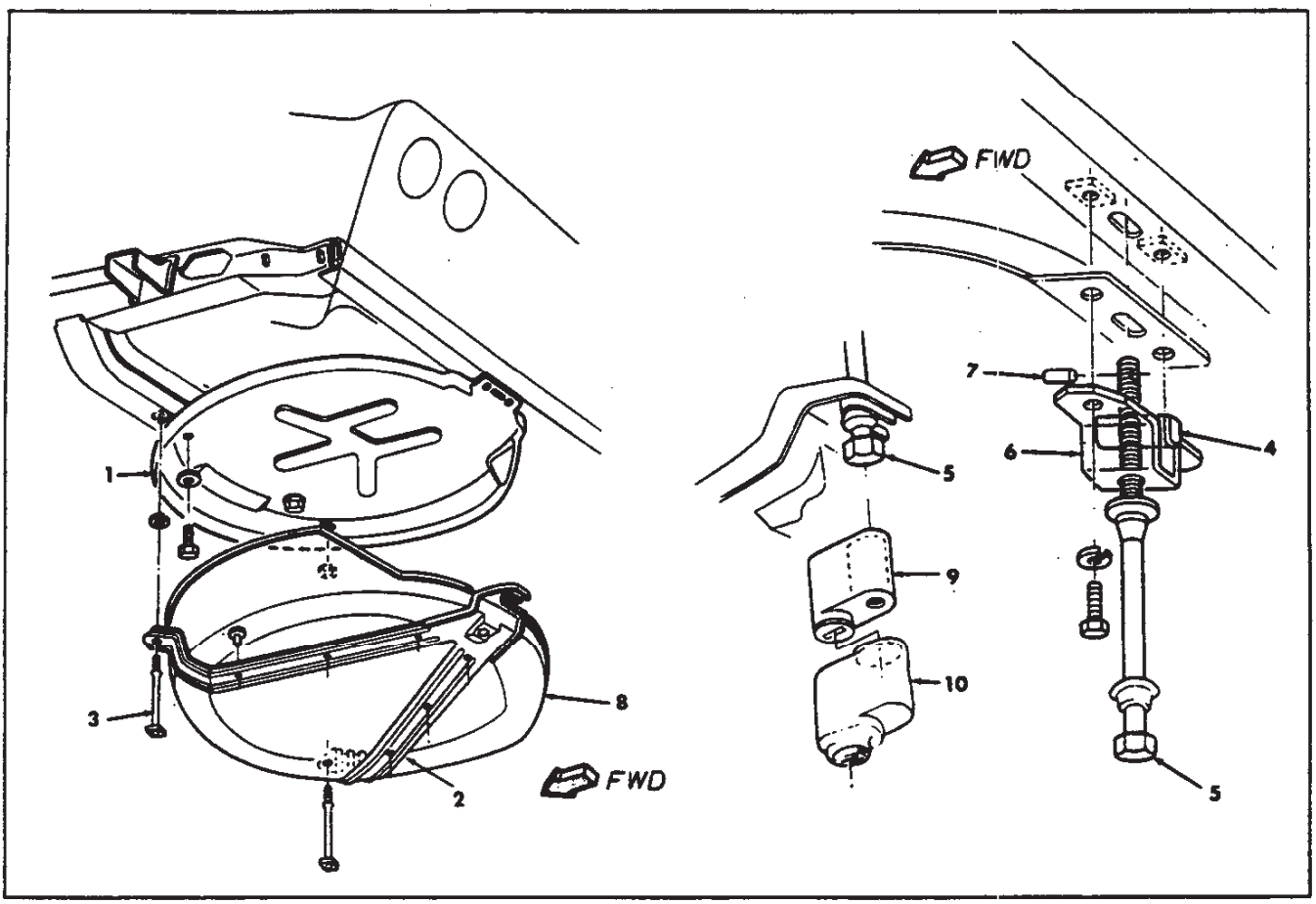


Fig. 41—Spare Tire Mount

1. Cover
2. Strap Assembly
3. Strap Assembly Pivot Bolt
4. Swivel Bolt Nut
5. Swivel Lock Bolt
6. Swivel Bolt Bracket
7. Swivel Bolt Pin
8. Tray
9. Lock Case
10. Lock Cover

instances the floor carpet may require no further cleaning. If the carpet is extremely soiled remove carpet from car and thoroughly vacuum to remove loose dirt; then with a foaming type upholstery cleaner, clean approximately one (1) square foot of carpet at a time. After each area is cleaned, remove as much of the cleaner as possible with a vacuum cleaner. After cleaning the carpet use an air hose to "fluff" the carpet pile, then dry the carpet. After the carpet is completely dried, use an air hose to again fluff the carpet pile.

NOTE: If the carpet is not extremely soiled, it may be cleaned in the car by applying a small amount of foaming type upholstery cleaner with a brush.

Carpets and Covers—All Models

Removal of front compartment carpeting will require removal of sill plates and loosening of console trim; service of these items is covered in this section under Front End-Cowl Area and Console Trim.

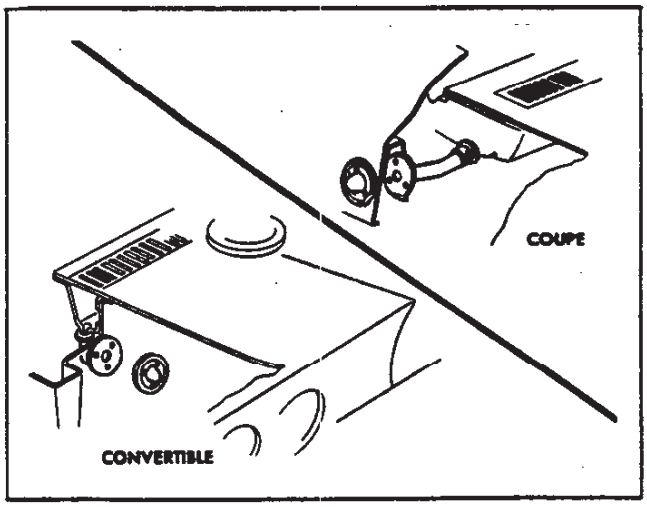


Fig. 42—Rear Plenum Drain

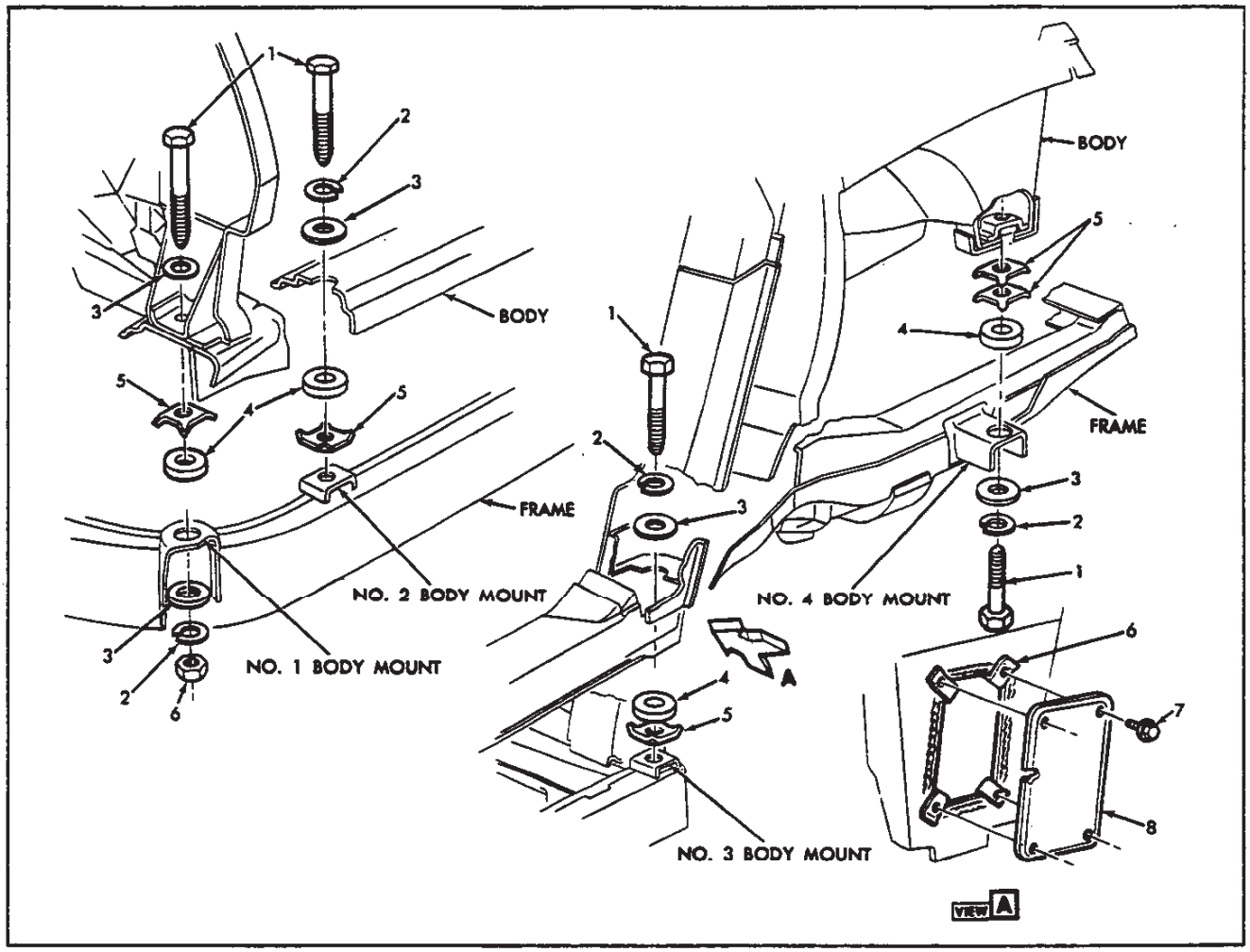


Fig. 43—Body Mounts

1. Bolt
2. Lockwasher
3. Washer
4. Spacer
5. Shim
6. Nut
7. Screw
8. Access Cover

In areas where carpeting is to be cemented, proceed as follows:

1. Remove all old carpeting, jute, etc. which may adhere to floor after original carpet is pulled up.
2. Apply 3M-1711 cement or equivalent, following directions furnished with package. Be sure floor is reasonably clean and dry before applying cement.

SEATS

Removal

1. Remove bolt retaining each forward support to floor.
2. Fold seat back forward.
3. Loosen two bolts retaining each seat hold-down bracket.
4. Move seat forward and out of brackets.

Adjustment

Height of seats is adjustable at both front and rear by means of shims or washers.

Angle of seat backrest may be changed by adjusting stops located on lower edge of seat back.

BODY MOUNTING

Figure 43 illustrates underbody attachment-to-frame body mounting brackets. Shims which are shown on rear crossmember are cemented in place.

The torque of all body mounting bolts should be checked periodically as an aid to preventing annoying squeaks and rattles. All bolts shown in Figure 43 should be torqued 40 to 50 lb. ft.

BODY REPAIRS

GENERAL INSTRUCTIONS

The following gives information necessary for repair of collision damage and performance of general maintenance on Corvette bodies. Included here is information dealing with availability of repair panels, general installation procedures for installing panels and repairing damage to the body.

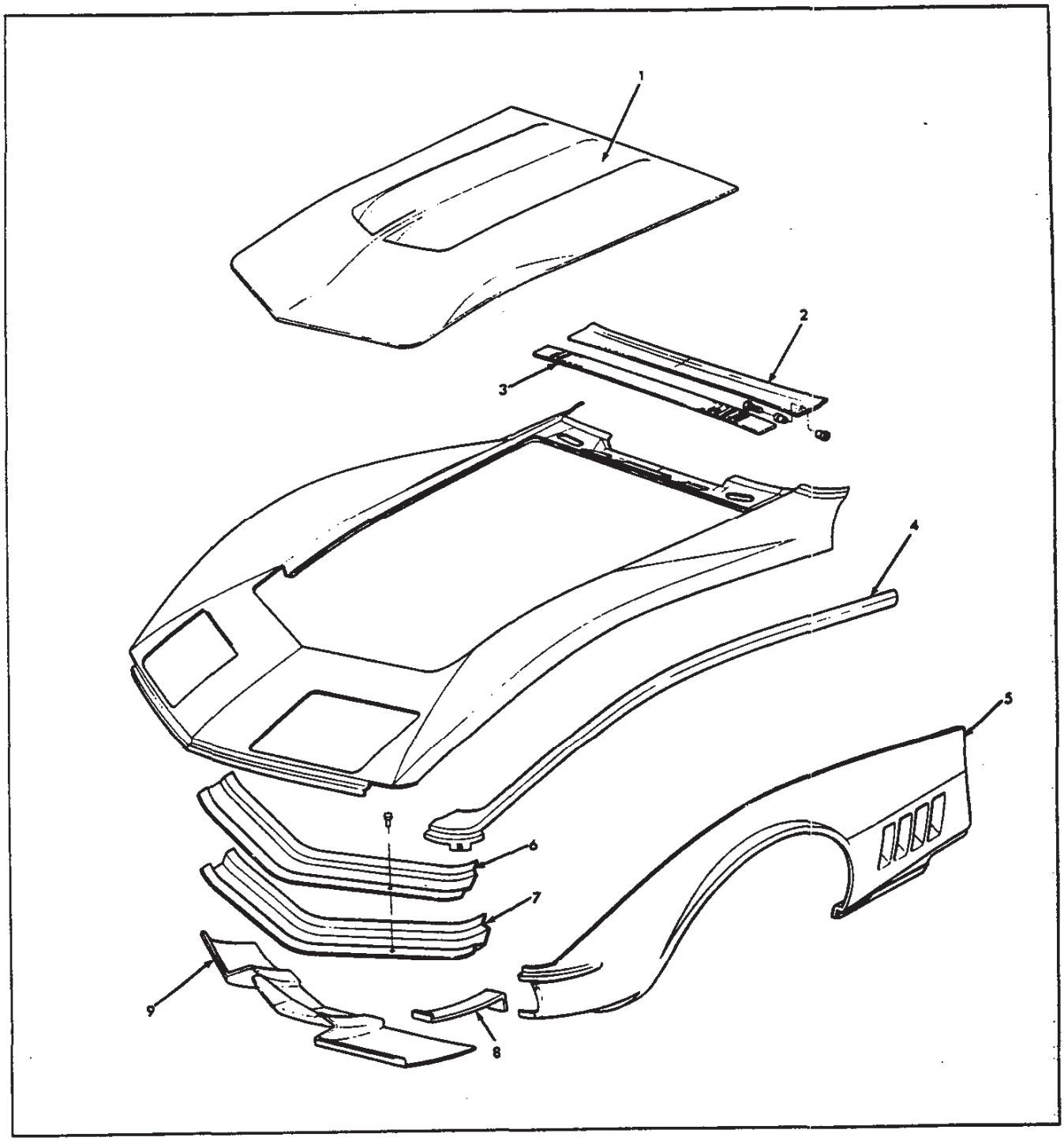


Fig. 44—Front Body Construction

1. Panel—Hood
2. Panel—Access Door
3. Panel—Grille
4. Bonding Strip—Front Fender Upper to Lower
5. Panel—Front Fender Lower Rear
6. Reinforcement—Front Fender
7. Reinforcement—Front Fender
8. Bonding Strip—Front Fender Lower Front to Rear
9. Panel—Radiator Grille Lower

Repair of fiber glass reinforced plastic bodies can be a relatively easy matter if precautions are observed. In cases where welding must be done on steel parts which are installed on body, do not allow flame or welding heat to come into direct contact with plastic body panels. The general area around the welding operation

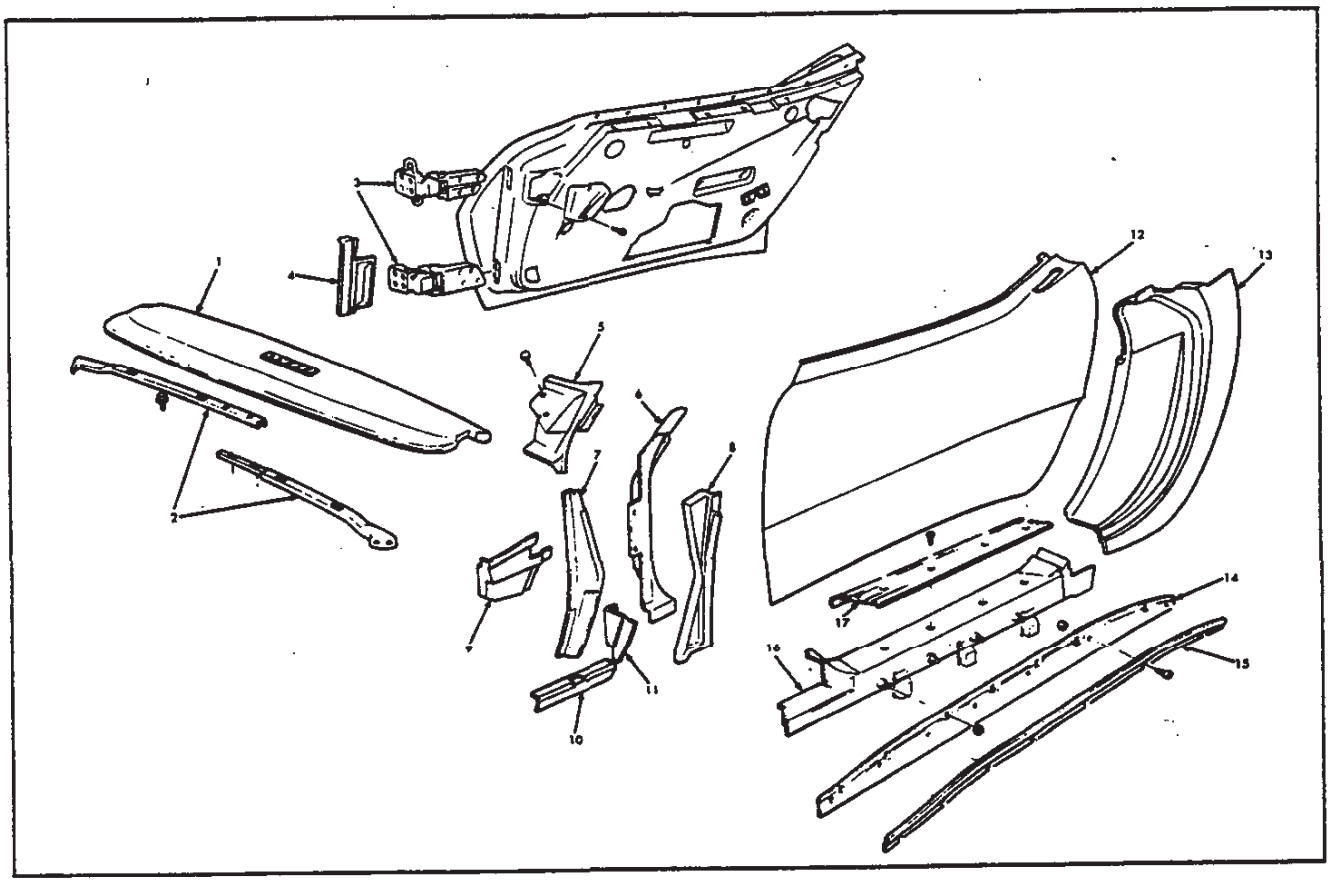


Fig. 45—Center Body Construction

1. Pad—Instrument Panel
2. Reinforcement—Instrument Panel
3. Door Hinge Assembly
4. Panel—Plenum Side Extension
5. Bonding Strip—Lower Outer Windshield
6. Pillar—Body Hinge
7. Plenum Side Panel
8. Dash Extension Panel
9. Sill Inboard Extension
10. Plenum Side Panel Extension
11. Filler Panel
12. Panel—Side Door Outer
13. Pillar Assembly—Door Lock
14. Molding
15. Molding—Upper
16. Door Sill
17. Sill Plate

should be protected with wet asbestos or any other like method (several thicknesses of aluminum foil makes an excellent heat shield if out of the way of direct flame).

Straightening of steel parts while still in body must be done with care. When applying hydraulic jacks or like equipment which operates by exerting force, bear in mind that the part being used to brace the stationary end of tool must be able to withstand such usage and that fiber glass parts, though tougher than steel, will not yield or "take a set" as with steel parts, so they cannot be "straightened". If poor alignment exists due to collision or other physical damage, check steel reinforcements in cowl and sill areas with care.

Tracing line of damaging force and checking body carefully for broken bonds and cracks before, during and after repairs will pay off repeatedly.

Small cracks and faults in bonds and panels will usually grow larger if left unattended.

REPAIR PANELS

Body repair panels are illustrated in Figures 44 through 47. Those shown are typical of panels which are available through Chevrolet parts sources. Procedures which may be used for installing panels are explained in the following paragraphs.

Figure 48 illustrates various bonds which will be encountered during repair procedures.

PRECAUTIONS

Creams are available to protect the skin from a condition known as occupational, or contact dermatitis. This common type of dermatitis is not contagious. Improved resin formulas in the approved kits have almost eliminated skin irritation. Cream is supplied with the kit for persons who may have a tendency toward skin irritation from the resins or dust.

The application of these creams is recommended whenever the Resin Kit materials are used. Generally, the cream is not required when the plastic solder kit is being used. Directions for using the cream is as follows:

1. a. Wash hands clean. Dry thoroughly.
   b. Squeeze about 1/2 inch (or 1/2 teaspoonful) of #71 cream into palm of hand.
   c. Spread evenly and lightly until cream disappears.

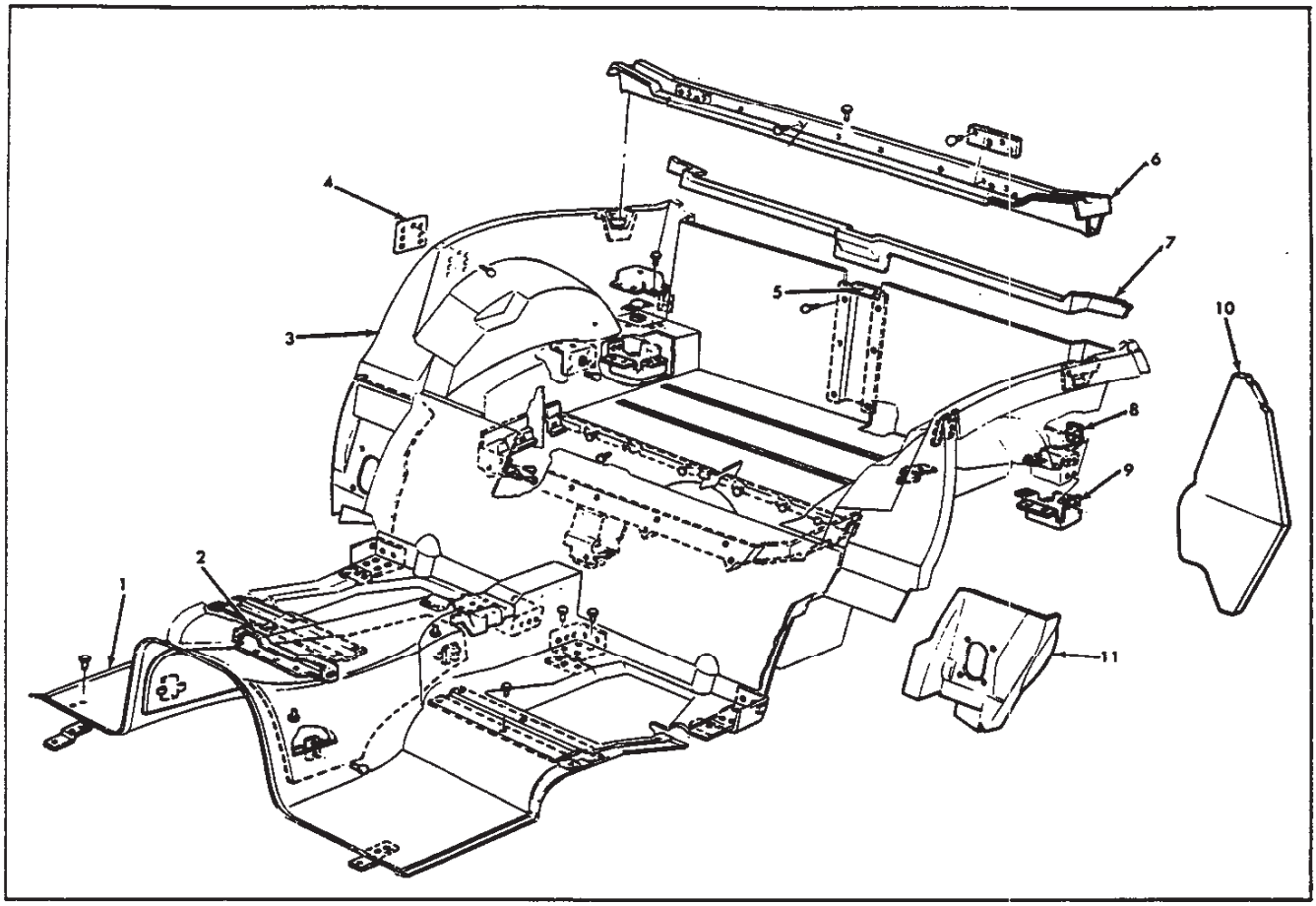


Fig. 46—Under Body Construction

1. Panel—Underbody
2. Support—Console
3. Panel—Wheel Housing Closing—Right Hand
4. Lid Lock Striker Anchor
5. Reinforcement
6. Support—Body Rear
7. Panel—Underbody Closing
8. Reinforcement—Folding Top Hinge Support (19467)
9. Reinforcement—Body Bolt
10. Shield—Rear Quarter
11. Panel—Body Lock Pillar

Work cream into cuticle, between fingers and around wrists.

d. Apply second coat, repeating Steps b and c.
e. Hold hands briefly under cold running water to set cream.

2. Remove resin mixture from hands as soon as possible and imperatively before mixture starts to gel. This can be observed by the action of the material being used. Resin may be removed with lacquer thinner by washing in soap and water.
3. Respirators are recommended when grinding. Also some minor skin irritation from glass and powdered cured resin may be evident. Washing in cold water will help to minimize.
4. Use a belt sander with a vacuum attachment for dust control whenever possible.
5. Resin mixtures may produce toxic fumes and should be used in well ventilated areas.
6. Be careful not to get any resin material on clothing.
7. Use the right materials for the job. It is important to use the approved kits because other materials available may not meet the required engineering and safety standards.
8. Keep materials, utensils and work area clean and dry. These repairs involve chemical reactions, and dirt or moisture may upset the chemical balances and produce unsatisfactory results.
9. Before starting repair operations, look for hidden damage by applying force around the damaged area, looking for hairline cracks and other breakage. Check for minor damage at other points in the vehicle such as around exhaust pipes, grille, headlamps and points of wear. Early repair of minor damage may prevent major repair later.

PLASTIC SOLDER KIT

The Plastic Solder Repair Kit is used for minor repairs on the Corvette body. These materials will produce an easy, quick and lasting repair in the case of small cracks, surface imperfections and small holes.

1. Use paint remover or power sander, and remove

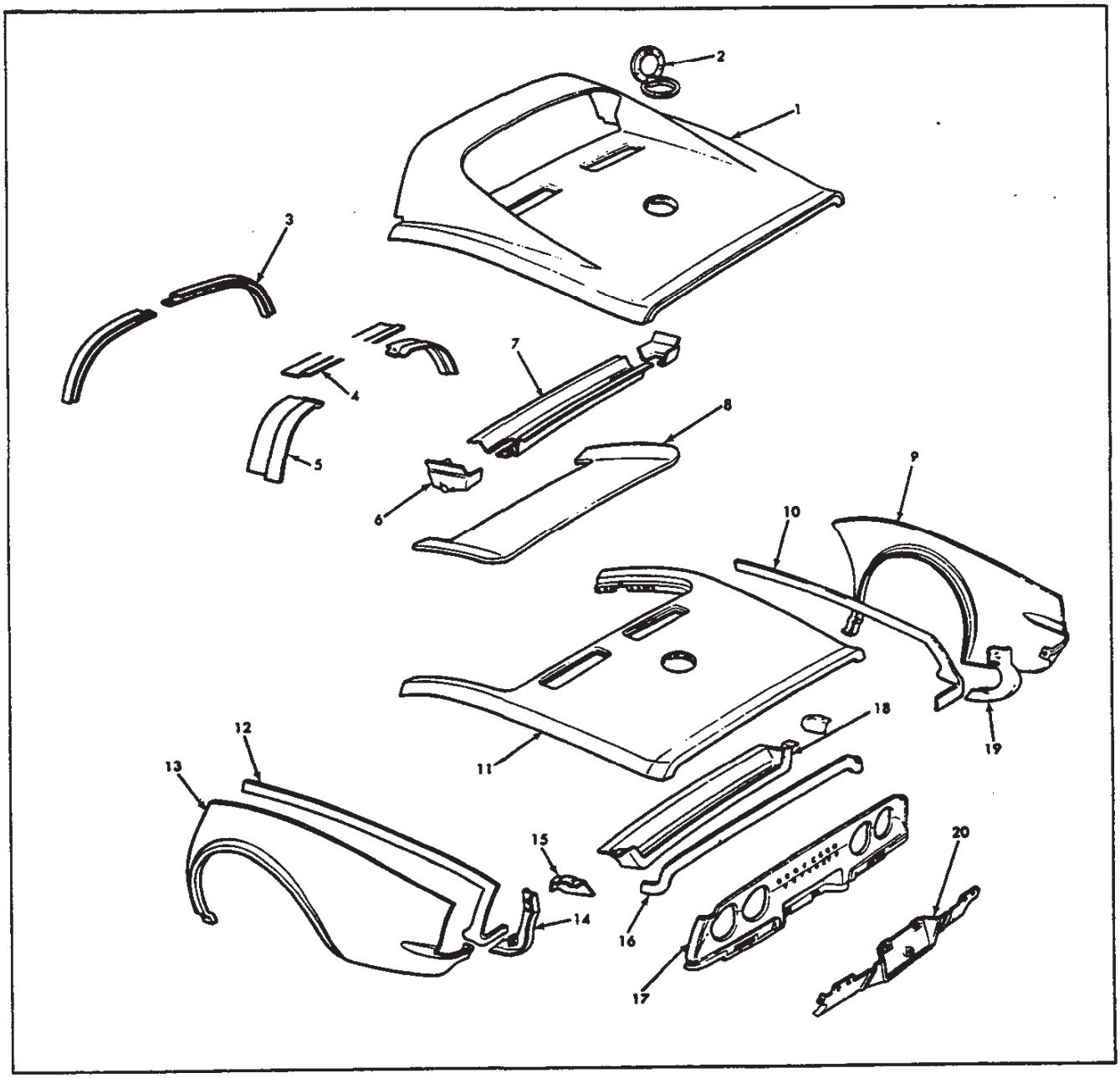


Fig. 47—Rear Body Construction

1. Panel—Body Rear Upper
2. Bezel—Fuel Tank Filler Door
3. Reinforcement Roof—Right Hand
4. Panel—Rear Roof Inner Center—Left Hand
5. Panel—Rear Roof Inner Rear—Left Hand
6. Extension—Body Rear Upper Panel
7. Support—Body Rear Upper Panel
8. Lid—Folding Top Compartment
9. Panel—Rear Quarter—Right Hand
10. Bonding Strip—Body Rear Upper Panel to Quarter Panel—Right Hand
11. Panel—Body Rear Upper
12. Bonding Strip—Body Rear Upper Panel
13. Panel—Rear Quarter—Left Hand
14. Bonding Strip—Body Lower Panel to Quarter Panel—Left Hand
15. Support—Body Rear Upper Panel
16. Bonding Strip—Body Rear Upper
17. Body Rear Lower Panel
18. Support—Body Rear Upper Panel
19. Shield—Rear Quarter Splash
20. Panel—Rear Filler

finish from damaged area. Carefully inspect for other areas requiring repair.

2. Mix the materials (fig. 49).
3. Apply the material, using a putty knife or rubber squeegee, Figure 50. Work the material into the repair and build the material up to the desired

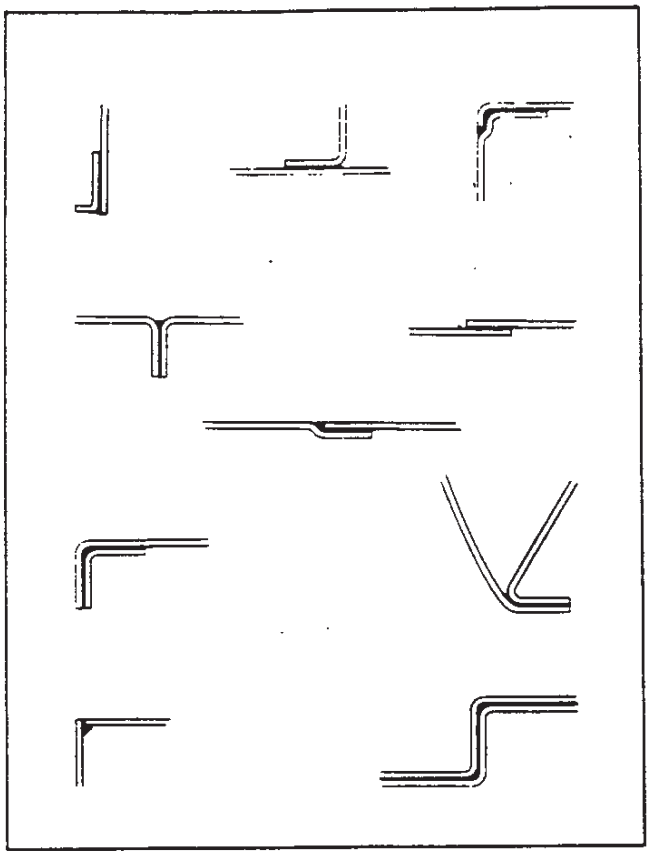


Fig. 48—Typical Body Bonds

contour. For deep filling and on vertical surfaces, several layers may be used, each about 1/2" thick.

4. Finish the repair by grinding, sanding and painting in the usual manner, Figure 51.

RESIN KIT

The Resin Repair Kit, for major repairs, contains resin, hardener, Thixatrope, fiberglass cloth, protecting creams and mixing utensils. Repairs such as torn panels and separated joints require the adhesive qualities of the resin and the reinforcing qualities of the glass fibers.

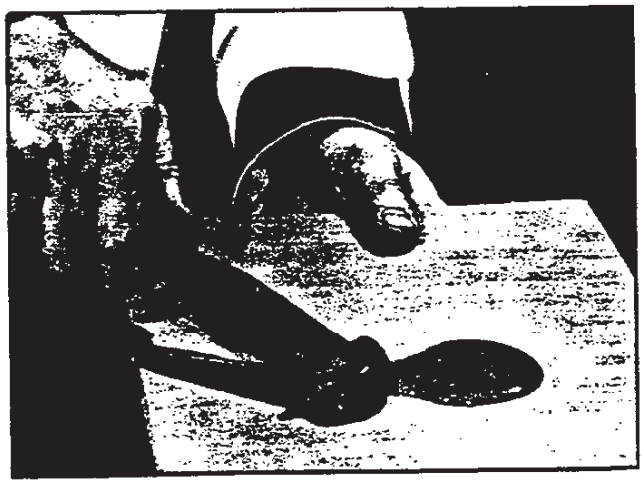


Fig. 49—Mixing Plastic Solder Material

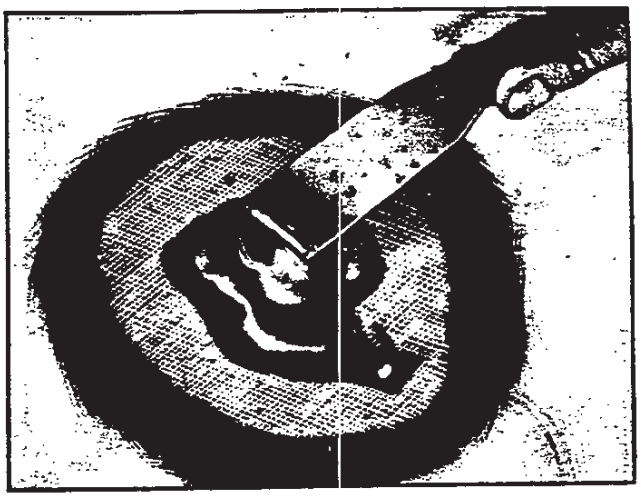


Fig. 50—Applying Plastic Solder

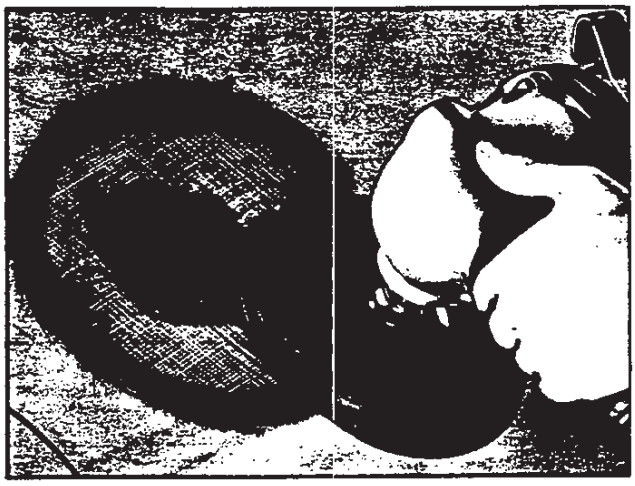


Fig. 51—Finishing Plastic Solder Repair

Fig. 52—Grinding "V" at Damaged Area

Fig. 53—Applying Resin Mixture to Fiberglass

The following procedure is basic for repairing any plastic (fiberglass component or panel).

1. Look for hidden damage. Apply force by hand around the damaged area.
2. Use paint remover and remove finish from around damage area. Inspect area again for signs of other damage.
3. Grind or file the damaged area to form a "V" at the broken or cracked portion. Side of "V" should have a shallow pitch for maximum bonding surface. A belt sander with a vacuum attachment will minimize the dust problem, Figure 52.
4. If rear of damage is accessible, use a button-type repair. Clean back of area to permit the use of laminate (resin-saturated glass-cloth) on both sides of damaged area.
5. Cut fiberglass cloth to size. Make certain a minimum of five layers is cut for the average repair.
6. Mix resin and hardener, 1 part hardener to 4 parts resin. Add Thixatrope to the mix to give the mix body and reduce the "runniness" of the material.

   CAUTION: Cleanliness is most important. Be certain all containers are dry and clean and the resin and hardener cans are kept closed when not in use. Do not use waxed cups for mixing and do not allow resin to enter hardener can or vice versa.

7. Saturate layers of fiberglass (fig. 53). Place laminate over damage area. Smooth out wrinkles, and make sure general contour of area is maintained, Figure 54.
8. Apply heat to repair area. Heat lamps are recommended, used at least 12" away from repair. Allow 15 to 20 minutes curing time. Trim repair to shape at gel stage.
9. After the repair is cured, grind, file or sand to contour. Files other than body files may be more suitable. A belt sander with a vacuum cleaner attachment will minimize the dust problem. Feather edge and finish sand.

   NOTE: After Resin Repair, small pits or irregularities may appear in finished surface. Imperfections should be repaired using the Plastic Solder Repair Kit.

Fig. 54—Applying Laminate to Body

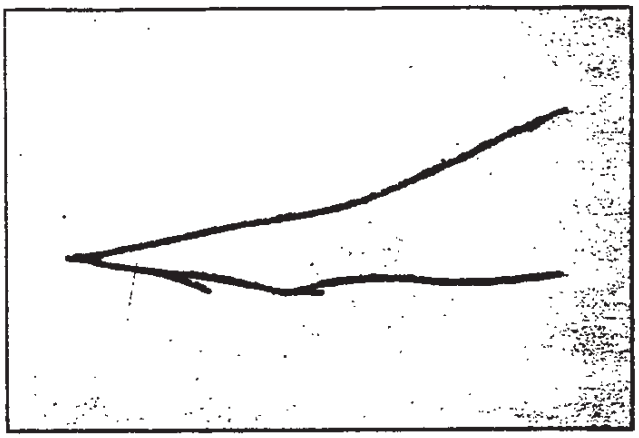


Fig. 55—Typical Scratched Panel

SPECIFIC REPAIRS

Scratched Panels, Spot Refinishing

In many instances, a scratched panel will involve only a paint refinishing job. Figure 55 shows the top of a fender panel which has been scratched through to the plastic.

Fig. 56—Repair Area Finish Sanded

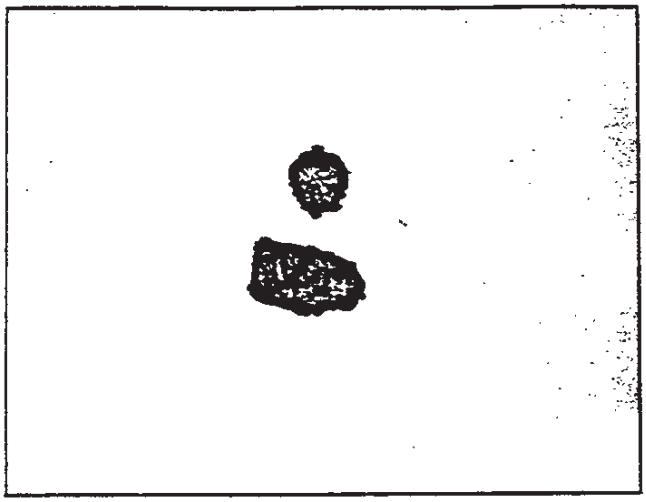


Fig. 57—Typical Pitted Panel

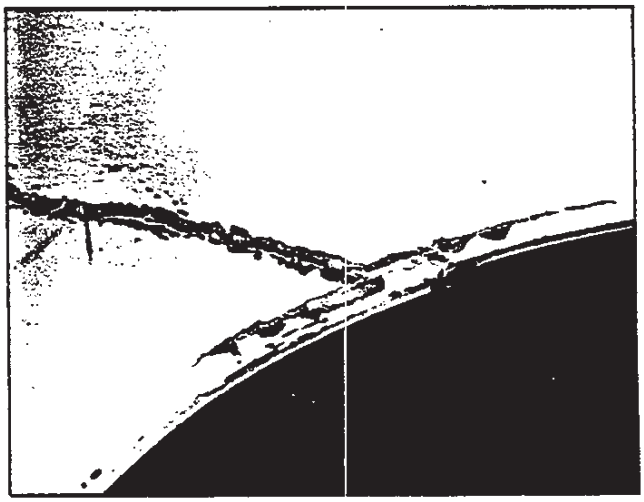


Fig. 58—Typical Cracked Panel

1. Remove all paint down to the plastic from the area surrounding the scratch with Lacquer Removing Solvent.
2. Featheredge the repair area with No. 220 wet or dry sandpaper and finish block sand with No. 320 wet or dry paper, Figure 56.

   CAUTION: Do not sand too deeply into fiberglass mat. Should it be necessary to cut fairly deep into the glass mat use the repair procedure suggested for dents and pits in plastic panels.
3. Clean up repair area using Prep-Sol or equivalent, then finish the clean-up with a tack rag.
4. Protect surrounding panels by masking before performing paint refinishing operations. Use only non-staining type masking tapes on Corvette plastic body.
5. Refinish panel as described in paint refinishing portion of this manual.

Dents or Pits in Panels, Cracks in Glaze Coat

Figure 57 shows a panel which has received a heavy glancing blow, resulting in an indentation or large pit in the panel. The following procedure is advised for a repair of this type of damage. Cracks in the glaze or finish coat of plastic and paint may also use this procedure.

NOTE: This repair may be used wherever the damage is not extensive and the plastic is not pierced, but the damage area does require a plastic build-up.

1. Remove paint down to the plastic from area surrounding the damage with Lacquer Removing Solvent, or its equivalent.
2. Scuff area surrounding damaged area to provide a good bonding surface.
3. Clean up work area with Prep-Sol then use tack rag for finish clean-up.
4. Use the Plastic Solder Repair (previously described) to fill the imperfections.
5. Feather-sand damaged area with No. 220 sandpaper and finish sand with No. 320.
6. Prepare repair area for paint refinishing operation.

Cracked Panels

NOTE: For best results, temperature should be at least 70°-75°F.

1. In the case of a cracked panel, such as shown in Figure 58, cut along the break line with a hacksaw blade and remove broken portion of the panel.
2. Remove the paint down to the plastic from both portions of the panel with a Lacquer Remover or equivalent.
3. Remove dirt and deadener thoroughly, back approximately 2 to 3 inches from the fracture, on the under side of both portions of the panel. Also, remove paint and scuff area clean to provide a good bonding surface.
4. Remove all cracked and fractured material along the break. Bevel the attaching edges of the panels at approximately a 30° angle with a file or grinder and scuff plastic surfaces along edges of break.

NOTE: Mask surrounding panels using a non-staining masking tape.

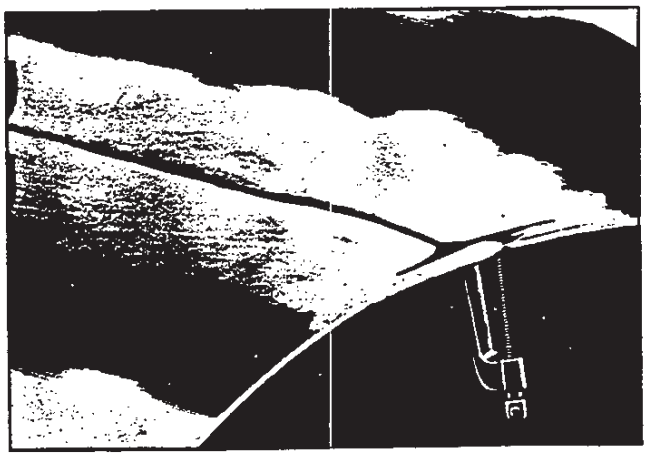


Fig. 59—Cracked Panel Preparation

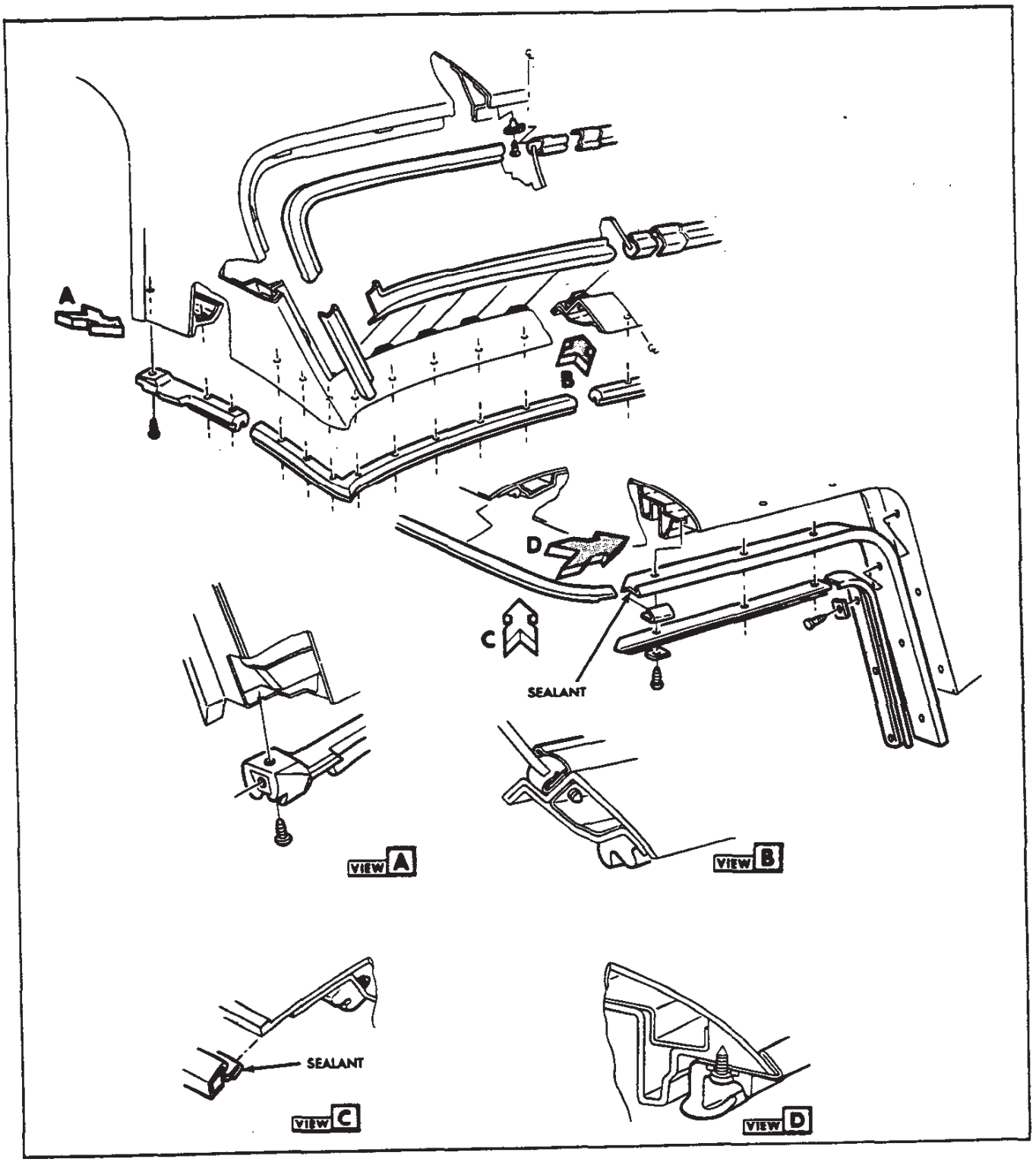


Fig. 60—Molding and Weatherstrip (Convertible Hardtop)

5. Use "C" clamps to align panel portions allowing approximately 1/8" between the panels or as necessary to provide proper alignment of panels, Figure 59.

6. Cut two pieces of woven glass fiber cloth for backup of sufficient size to overlap the fracture by approximately two inches.

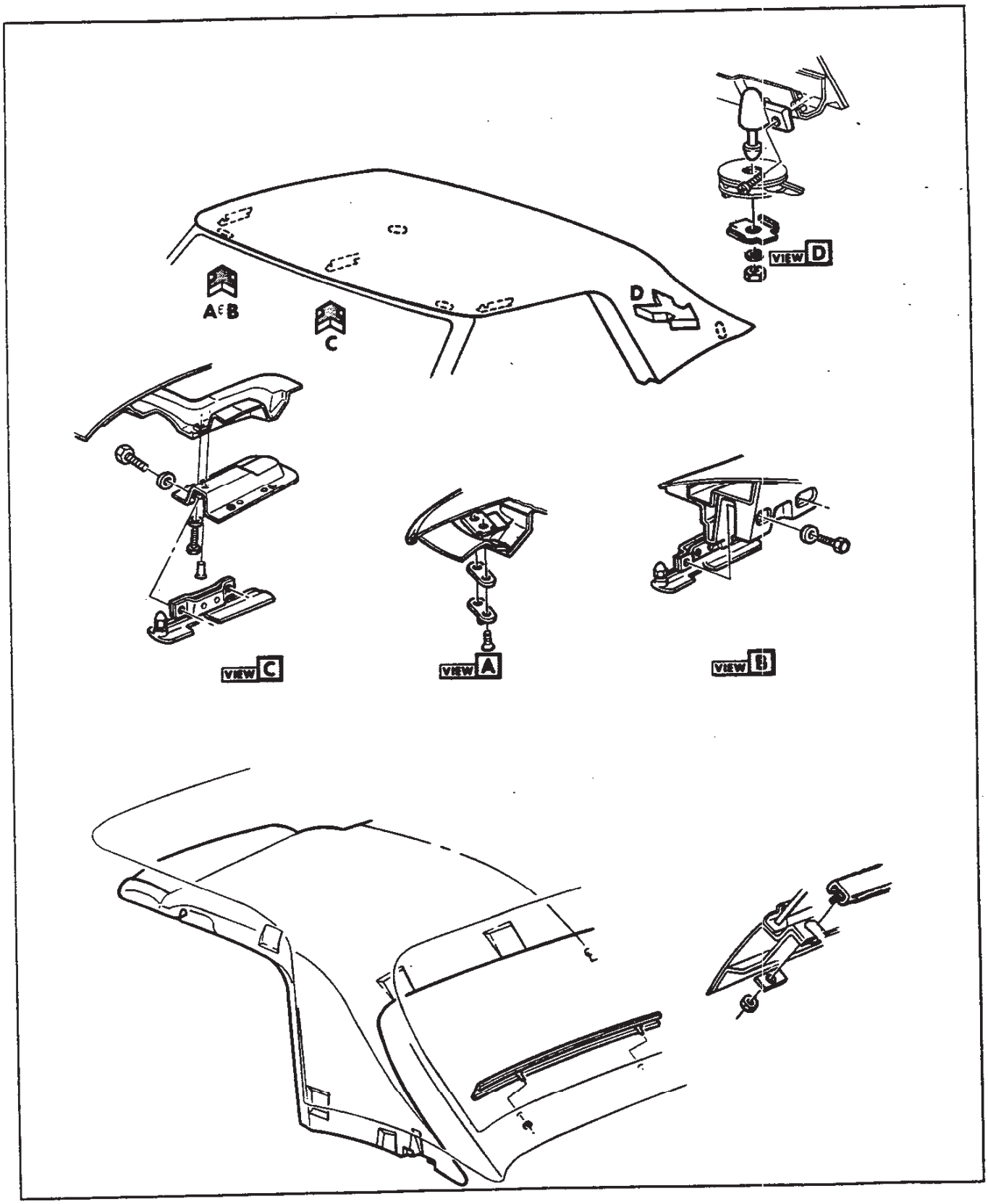


Fig. 61—Top Attachments and Headlining (Convertible Hardtop)

7. Clean up repair area with Prep-Sol, then use tack rag for finish cleanup.
8. Use the Resin Repair Procedure previously described.

NOTE: In some cases it may be advantageous to provide additional reinforcements along a fracture. This may be accomplished by placing glass cloth strips in the panel break before applying the plastic mixture.

Fractured Panels

Sometimes damage will occur to panels where the underside is inaccessible or for reasons of panel contour it is impractical to use back plies of fiberglass cloth. The following repair operations are typical of this type of damage.

1. Prepare the damaged area by grinding or filing all cracked and splintered material away from the fracture.
2. Bevel the edge of the fracture at approximately a 20° angle.
3. Remove paint from area surrounding fracture with Lacquer Solvent, or its equivalent.
4. Scuff surface to provide a good bonding surface. Then, clean up area with Prep-Sol and wipe dry.
5. Protect adjacent panels by masking, use non-staining masking tape.
6. Cut a strip of fiberglass cloth of sufficient size, so the fracture will be lapped from 1 to 2 inches on all sides.
7. Prepare plastic mixture in an unwaxed paper cup. (See Resin Repair Kit procedure.)
8. Impregnate glass fiber cloth by brushing or dipping in plastic mixture. Squeeze excess mixture from cloth.

NOTE: Avoid over-rich plastic areas in the glass cloth, as the strength of the patch is directly proportional to the glass content of the patch.

9. Position plastic impregnated fiberglass over the fracture on the exterior of the panel, lap the break by 1 to 2 inches, and depress into fracture.
10. Carefully work excess plastic out of woven glass by sponging from the center of the break outward.

NOTE: Hold woven glass in place until plastic resin "gels" with Saranwrap or some similar material.

11. Trim excess or loose strands of fiberglass from patch.
12. If low spots exist, prepare another plastic mixture of resin and hardener and mix thoroughly. To this mixture add short fibers cut from glass cloth to give the mixture a putty-like consistency.
13. Liberally apply the plastic mixture with a spatula to fracture and surrounding area. Deposit enough material build-up to allow for filing and sanding operations.
14. Allow the patch to harden.
15. File or grind patch to match the general contour of the panel. Exercise care when performing these operations to avoid gouging the patch or surrounding panel.
16. Use plastic solder as necessary to fill any imperfections.
17. Allow fill to harden, then sand finish preparatory to paint operation.

Panel Replacement

To install a replacement panel, the following method may be used. Various repair panels are available for service. See Repair Panels in general instructions at beginning of this section. These complete panels may be used or sections may be cut to accommodate the type of repair necessary. The panels should be fitted in and all attaching parts installed to insure proper alignment.

To replace panel, proceed as follows:

1. Cut out damaged panel with a hacksaw blade and thoroughly remove all dirt and paint from the underside of the old panel or panels for a distance of approximately 2 to 3 inches back from the attaching line.
2. Remove the paint from the finish side, for a distance of 2 to 3 inches on the panel adjacent to the replacement panel location with lacquer solvent or equivalent.
3. Scuff the surface on both the replacement panel and adjacent panel for a distance of 2 to 3 inches back from the attaching line and wipe clean.
4. Bevel all attaching edges at approximately 30° across the entire thickness of the plastic so a single "V" butt joint will be formed on the finish surface when the pieces are joined. If the replacement panel does not fit closely to the break, reshape to suit.
5. Cut two backup pieces of woven glass fiber cloth to run the entire length of the joint or shorter lengths of fiber cloth may be lapped over entire length of joint, also cut wide enough to lap the junction line on either side by two or three inches.
6. Prepare a sufficient amount of liquid plastic in an un-waxed paper cup by mixing resin with hardener (See Resin Repair procedure).
7. Align replacement panel, then clamp panel in place to form a closed "V" butt joint at the panel junction. When panel cannot be clamped, use 3/16" bolts with large washer on inner and outer of panel to hold panels in alignment or use straps and sheet metal screws.
8. Impregnate backup plies of woven glass cloth with prepared plastic mixture by dipping or brushing. Remove excess plastic from cloth by squeezing.
9. Place impregnated backup plies on underside of panels. If necessary, hold backup plies in place with paper until plastic "gels."
10. Prepare another plastic mixture of resin and hardener and mix thoroughly. To this mixture add cut glass fiber (1/2" lengths) until mixture has a putty-like consistency, or utilize glass cloth.
11. Fill "V" groove with reinforced plastic material or saturated glass cloth. Build up surrounding area with sufficient material to allow for finish operations.
12. Allow patch to harden.
13. File or sand (#80-D sandpaper) to general panel contour.
14. Allow plastic fill to harden, then sand, preparatory to paint operations.

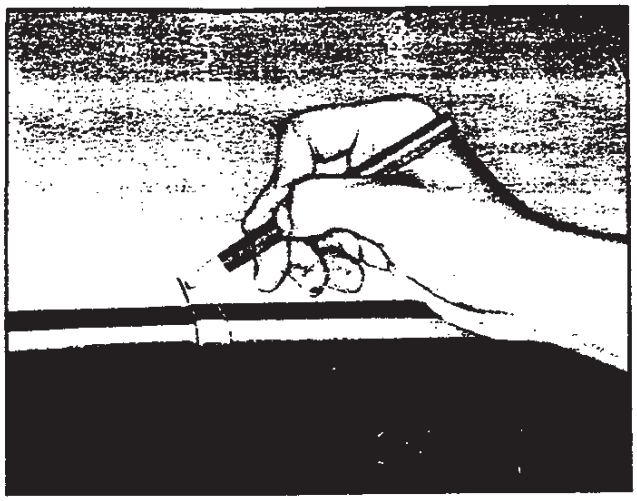


Fig. 62—Marking Molding Position

HARD TOP

CARE AND STORAGE

The outside painted finish of the hard top should be cleaned in the same manner as the rest of the body. The inside headlining should be cleaned as outlined under Cleaning Soft Trim.

When hard top is not in use, it should be stored indoors where it can be kept clean and dry. If stored for a long period of time, keep covered to prevent dirt settling on headlining and outside surface.

REAR WINDOW

Refer to Figures 60 and 61 for parts identification.

Removal

1. Remove hard top from vehicle and place protective covering over headlining.
2. Mark position of right-hand upper reveal molding end (fig. 62) and pry out from retaining clips. Repeat for left-hand and lower molding assemblies.
3. Remove lower (inside) garnish molding by removing four (4) nuts from fixed studs and carefully pulling molding outward.
4. Follow Steps 8 through 13 as outlined in the section entitled FRONT END--WINDSHIELD for removal of glass.

Installation

1. Position replacement glass in opening and carefully check relationship of glass to flange completely around opening. Overlap of glass should be equal with a minimum overlap of 3/16 inches.
2. Where necessary, place shims under lower spaces to obtain required overlap of glass to upper and lower flanges.
3. After proper alignment is attained, mark position on glass and top surface with grease pencil.
4. Follow Steps 16-22 in the section entitled FRONT END--WINDSHIELD for installation of glass.
5. Press glass lightly to set caulking to window opening flanges. Paddle material where necessary to ensure proper seal.
6. Water test immediately using a cold water spray. If water leaks are encountered, use flat bladed screw driver or splint, and from the inside, paddle caulking material into point of leakage.

   CAUTION: DO NOT RUN A HEAVY STREAM OF WATER DIRECTLY ON CAULKING MATERIAL WHILE THE MATERIAL IS STILL SOFT.
7. Install previously removed moldings in reverse order of removal.

TOP ATTACHMENTS

Figure 61 illustrates location and installation of guides and lock mechanisms. With headlining removed as outlined in this section, to adjust left and right hand locks fore and aft, mark original position, loosen two (2) mounting bolts, and move in desired direction. Make certain that lock is engaged in serrations before tighten ing mounting screws.

Up-and-down adjustment is performed by turning hexagonal latch bolts clockwise and counter-clockwise respectively. Header guide pins and rear pin housings are retained by mounting screws located at flanges. Center trim plate is removed by first removing center lock, and then four (4) retaining screws.

HEADLININGS

The headlining assembly is secured to the top by plastic fasteners located around the periphery of the hard top inner panel. The headlining is removed by carefully disengaging fasteners by prying outward with fingers on flat-bladed instrument. After removal from plastic top, the headlining can be disassembled into three parts by removing retaining nuts at inside surface of headlining. For installation, make certain to align headlining to top before engaging plastic fasteners.

WEATHERSTRIP AND DRIP MOLDING

As shown in Figure 60, door window weatherstrip and drip molding are retained by screws to top assembly. Side outer and rear outer weatherstrip are mounted to body at ends by screw and around periphery by special plastic retaining clips. Weatherstrip is replaced by removing two (2) screws and carefully pulling outward at clip location.

Inner forward weatherstrip is replaced by removing mounting screws and disengaging special clips along length of weatherstrip. All drip molding must have pumpable sealer on underside and adhesive applied to weatherstrips.

VINYL COVERING

Removal

1. Remove weatherstrip assemblies.
2. Remove reveal moldings.
3. Prior to removing fabric cover, application of heat to cemented areas will permit easier loosening of cemented edges.

   CAUTION: Apply heat by lamps held 18" (minimum) from fabric only until fabric is warm. If lamps are held too close, or fabric cover is

heated over 200°F, the fabric may loose its grain, blister, or become very shiny.

4. Loosen cemented edges of fabric roof cover.

Installation

1. Wipe roof panel with a Xylol solvent such as 3M Adhesive cleaner or equivalent. Remove or smooth out excess old cement. Apply solvent and allow to soak before rubbing.
2. Where possible, install new cover at room temperature (approximately 72°) to permit easier fitting and removing of wrinkles from the cover assembly.
3. Determine center line of roof panel by marking center points on front of hard top and back window opening. Fold cover lengthwise. Lay cover on roof panel. Determine overhang (approximately 1").
4. Apply nitrile non-staining vinyl trim adhesive (such as 3M Vinyl Trim Adhesive) to the roof panel adjacent to center line of fabric roof cover.
5. Application of nitrile vinyl trim cement should be as thin as possible. An excessive amount of cement may result in trapped solvents (blisters) between fabric cover and roof panel. A mohair roller should be used for thin adhesive application.

   NOTE: If nitrile non-staining cement is not available, neoprene type non-staining weatherstrip cement (3M weatherstrip cement or equivalent) may be used.

6. Apply cement to entire fabric roof cover.

   NOTE: Allow approximately 15 minutes for cement to dry.

7. Fold vinyl cover back to contact adhesive on roof panel. Vinyl cover seam must be parallel to centerline of vehicle.
8. Repeat above steps for opposite side of roof.
9. Use suitable spatula or roller to remove wrinkles and/or bubbles from vinyl cover.
10. Trim excess vinyl around entire top to provide a minimum of 1/2" flange which will be cemented to substructure of removable hardtop with adhesive.
11. Reinstall reveal moldings and weatherstrips.

Vinyl Roof Cover Repairs

Certain types of fabric roof cover discrepancies can successfully be repaired without replacing or removing the cover.

Scuffs or Small Cuts Near Exterior Moldings

If a small cut is present, an attempt should be made to cement the loose ends prior to performing the following:

1. Obtain a scrap piece of fabric roof cover material, or material from a hidden area directly on complaint car (such as under reveal moldings).
2. Using an electric wood burning needle or low heat soldering gun, scrape off an appropriate amount of vinyl from scrap piece of material or from hidden area and immediately apply to scuffed or cut area on car.

   CAUTION: Be certain low heat is maintained to prevent discoloration of cover.

3. Carefully blend applied vinyl to fabric roof cover, utilizing electric needle or soldering gun.

Wrinkles, Blisters and Bubbles

1. Pierce each wrinkle, blister and bubble on fabric roof cover with a small needle.
2. Completely saturate a clean shop towel with water and wring out.
3. Apply cloth to wrinkle or blistered area.
4. Apply a home type laundry iron over shop towel using back and forth strokes until towel is dry. (If iron has heat control settings, control should be set to "wool".)

   CAUTION: Do not continue to use iron after towel has become dry as excess heat may cause permanent damage to vinyl roof cover.

5. Remove towel and inspect area. If slight wrinkles or blisters are still present, perform the following steps:
6. Using a syringe and hypodermic needle filled with clear water, inject sufficient water into wrinkle or bubble to dampen fabric backing.
7. Repeat Steps 2 through 4.

FOLDING TOP

CARE OF THE FOLDING TOP

To avoid water stains, mildew, or possible shrinkage of the top material, do not keep the top folded for extended periods of time if it is damp or water soaked. Permit top to dry out in a raised position before stowing. Also avoid pasting advertising stickers, gummed labels or masking tape on the plastic back window. In addition to being difficult to remove, the adhesive on these stickers may also be injurious to the plastic composition of the window.

Care of Rear Window

The large plastic rear window in the folding top will remain in good condition for the life of the top if given proper care. Due to the texture of the plastic window, it is susceptible to scratches and abrasions; therefore, when cleaning the window, follow the steps outlined below.

1. To remove superficial dust, do not use a dry cloth. Use a soft cotton cloth moistened with water and wipe cross-wise of the window.
2. To wash the rear window, use cold or tepid (not hot) water and a mild neutral soap suds. After washing, rinse with clear water and wipe with a slightly moistened clean soft cloth. A high quality plastic window cleaner is available from Chevrolet parts sources.

   CAUTION: Never use solvents such as alcohol or volatile cleaning agents on the plastic window. These liquids may have a deteriorating effect on the plastic and if spilled, may spot the painted finish on the rear body panels directly below the rear window.

3. When removing frost, snow or ice from the plastic window, DO NOT USE A SCRAPPER. In an emergency, warm water may be used. Use care that the

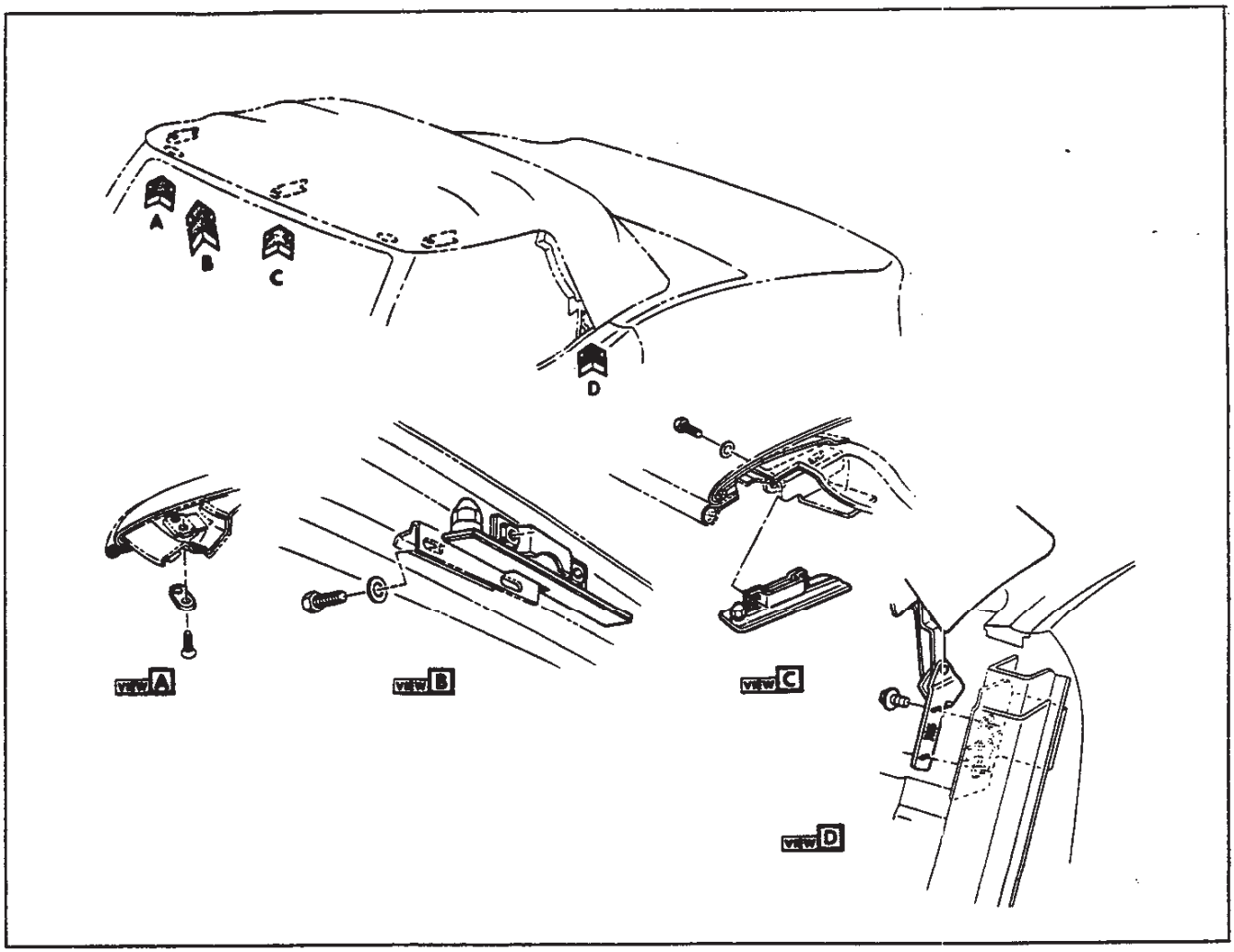


Fig. 63—Folding Top Adjustments

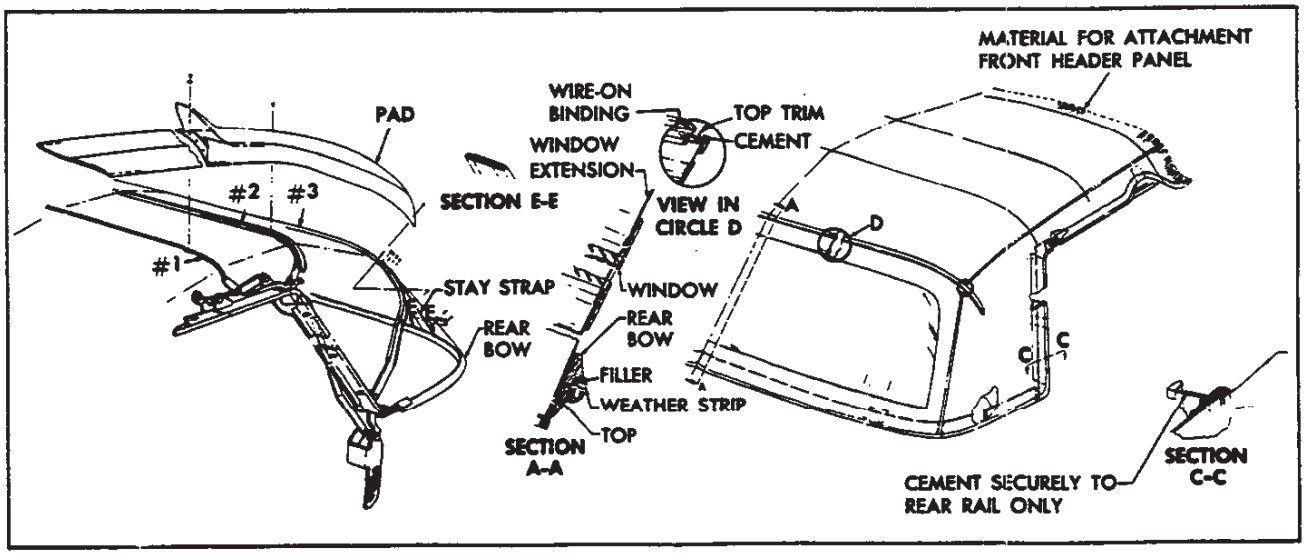


Fig. 64—Folding Top Trim Installation

warm water does not contact the glass windows or windshield.

ADJUSTMENTS

To correct variations in the top fit, adjustments are made at three locations shown in Figure 63. A combination of adjustments may be necessary to correct any given problem, including door and window adjustments which are covered elsewhere in this section.

The folding top adjustments are:

Header

After removing header trim panel, header assembly may be moved fore and aft when the two clamping screws are loosened. This will correct such conditions as header latch guide pin alignment with the holes in the windshield upper frame. Indications of misalignment are loose top trim when top is up and locked, and excessive effort required to engage header locks. Note that it will be necessary to remove side roof rail weatherstrip to gain access to header outer clamping screw. Refer to Weatherstrip portion of this section.

Hinge

The hinges may be moved up and down and fore and aft to the limit of the slotted holes in hinge plate and body. To gain access to hinge, remove rigid plastic trim as explained in Interior Trim portion of this section. Repositioning hinge will correct conditions such as poor top fit at upper and rear edge of windows; faulty fore and aft engagements of rear bow hold-down pins in lock assemblies and loose or over-tight top rear panel when top is raised and properly locked in position.

Rear Bow Hold-Down Locks

Fore and aft adjustment is provided by slotted holes in lock housing. Turning of locating pins adjusts force that holds seal to folding top lid. The hold-down pins may be moved to left or right to center top on body in raised position; thus correcting poor alignment at windows and difficult entry of pins in locks.

TOP ASSEMBLY REMOVAL AND INSTALLATION

The entire top assembly (frame with trim attached) may be removed from vehicle as follows:

1. Raise top, but do not engage header or rear bow locks.
2. Remove rigid plastic trim as outlined in Interior Trim portion of this section.
3. Mark installed position of hinge by scribing outline of hinge plate on lock pillar surface.
4. Remove two screws retaining each hinge to lock pillar and remove top assembly from vehicle.
5. When installing top assembly, carefully match hinge plate with scribed marks on body lock pillar and install screws. If necessary, proceed as outlined under Top Adjustments.

TOP TRIM AND REAR WINDOW ASSEMBLY

The following information deals with removal and installation of the folding top trim and window assembly

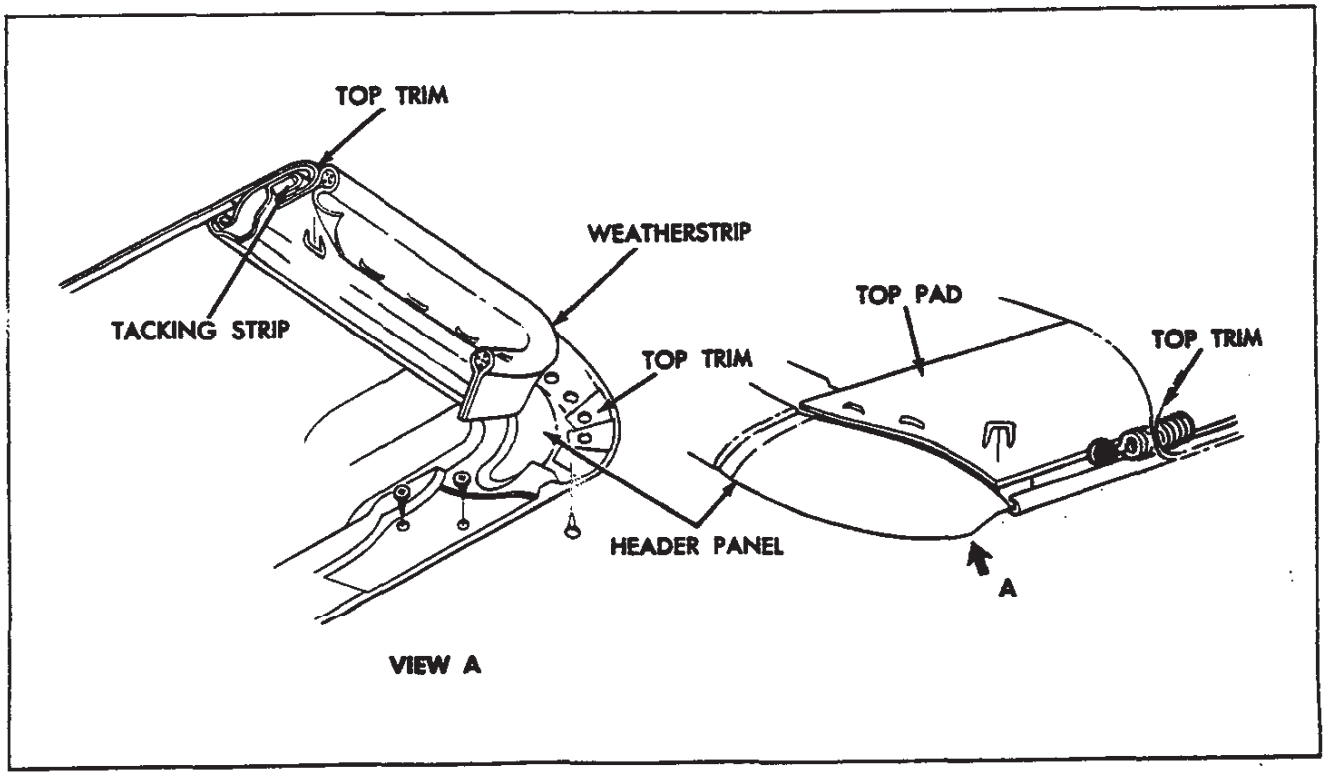


Fig. 65—Trim at Header

complete. Figure 64 may be referred to for parts identifications. Lettered sections (i.e. Section A-A) referred to in the instructions may also be found in Figure 71. Note that the sections are illustrated as they would appear if the parts were cut through on the lettered lines on the top assembly and the cut surface exposed. Arrows indicate direction in which you would have to look in order to see the view shown.

Before old trim assembly is removed, top should be thoroughly adjusted as outlined in this section. As loose parts are removed such as stay straps and pads, their installed positions should be marked as an aid to installation of replacements.

Removal

1. Remove rear side rail window sealing weatherstrip as explained further on in this section; also remove screws from ends of header inner weatherstrip. Note, however, that it is not necessary to remove header weatherstrip entirely and that header strip must be in place during final installation procedures of top trim so that correct tension of installed trim is achieved.
2. Remove tacks securing top and header outer weatherstrip to header (fig. 65).
3. Remove screw securing trim hold cable and spring assembly to header.
4. Pull cemented trim from rear side rail (Section C-C).
5. Remove end caps from wire-on binding; remove tacks securing binding to #3 bow (View F.). See frame and linkage portion for bow identification.
6. Remove staples securing trim to #3 bow.
7. Remove tacks securing upper ends of stay straps to #3 bow. Pads may be removed at this time, if desired. Mark position of pads and straps on head and #3 bow before removal.
8. Disconnect rear bow from top frame assembly. Two screws retain at each side Figure 66.
9. Remove trim-rear bow assembly from vehicle to clean work bench or table.
10. Remove plastic filler from rear bow weatherstrip and pull weatherstrip and trim from rear bow.

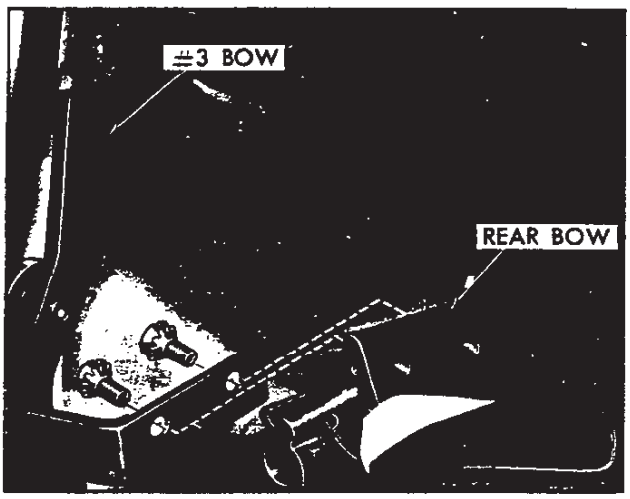


Fig. 66—Rear Bow Retaining Screws

Section A-A shows installed position of these components. Refer also to Figure 67.

Installation

1. Find and mark center of header, #3 bow, rear bow and leading and trailing edges of top trim. Align these marks during installation and recheck their alignment from time to time while installation is in progress, especially during tacking or stapling.
2. Assemble top trim and weatherstrip to rear bow, referring to Section A-A and Figure 67. Note that filler strip locks this assembly together and goes in last. Align center marks.
3. If new pads are required, install at this time, aligning with marks made when old pads were removed. Figure 68 shows pad construction; Figure 69 shows pad installed.
4. Install top trim-rear bow assembly on top frame with four screws removed at disassembly.
5. Lock down rear bow in desired "top up" position. Pull up stay straps and staple or tack to #3 bow (fig. 70).
6. Using a piece of mechanics wire, fish trim hold down cable assembly through top pocket and secure spring cable assembly to header with a screw.
7. Pull leading edge of trim up to header and align center marks. Smooth out fabric and clamp, tack or staple temporarily to header.
8. Draw window extension up to #3 bow, aligning centering marks. Turn an ample amount of fabric under and tack to #3 bow. Apply neoprene trim cement, GM Part #3695016 or equivalent, to area shown in View D of Figure 64. Follow directions on package.
9. Draw roof portion of trim over #3 bow, align marks and tack on staple.
10. Trim off excess material and install wire-on binding

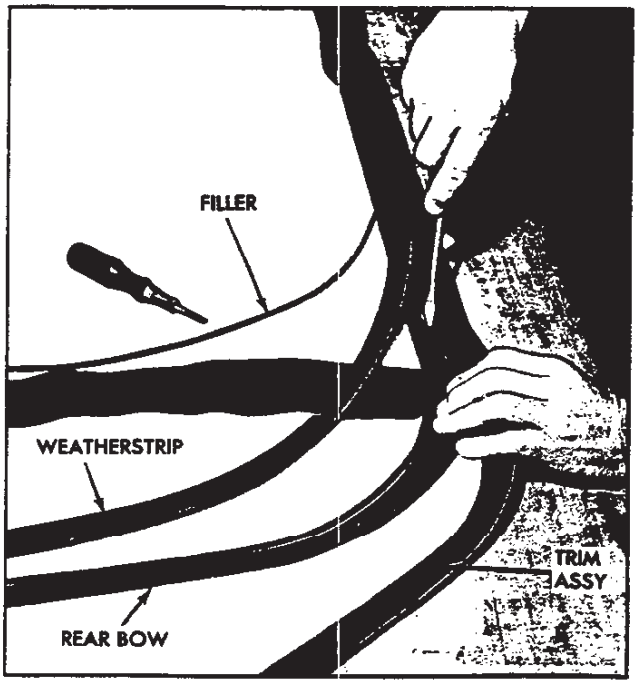


Fig. 67—Installing Trim and Weatherstrip to Rear Bow

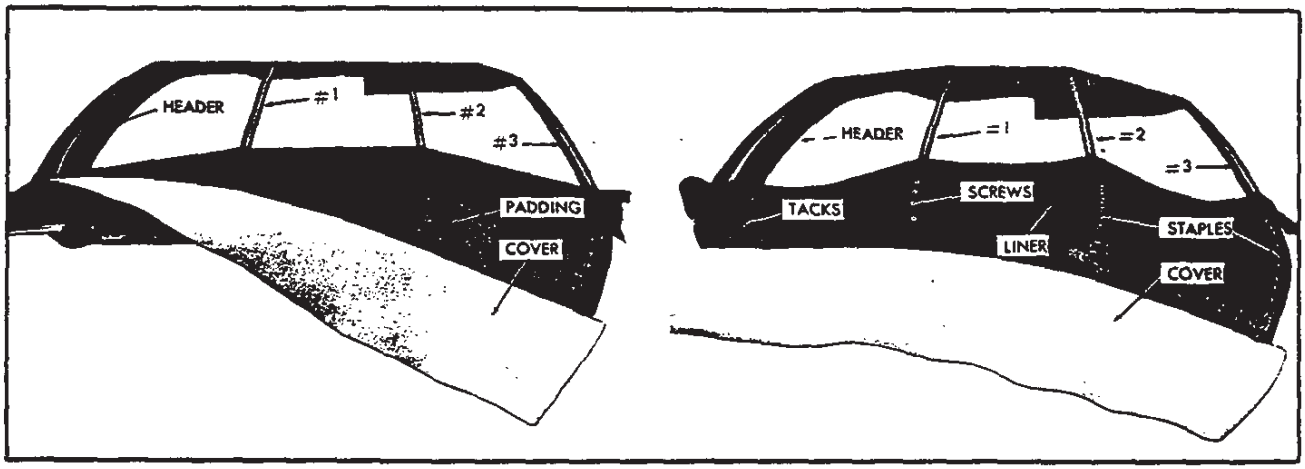


Fig. 68—Pad Construction

as shown in Figure 71 and View D of Figure 64. Install binding caps.

11. Remove temporary clamps or fastenings holding trim to header.
12. With header locked down, pull trim assembly up tight and mark for final installation.
13. Apply trim cement to header and rear side rail.
14. Release header from windshield. Tack or staple trim to header (fig. 65).
15. Apply trim to rear side frame, previously cemented.
16. Install weatherstrips which were removed at disassembly and install retaining screws in header weatherstrip.
17. Install header trim panel.
18. Make any adjustments necessary, following instructions listed under Folding Top—Adjustments.

Fig. 69—Pad Installed

FRAME AND LINKAGE

Figure 72 illustrates construction features of the folding top frame and linkage. Various cross sections in Figure 72 show the pivoting joints and their assembly.

If an operation is being performed which requires removal of folding top trim, follow directions in this section. The entire frame assembly may be removed and replaced as a unit. Follow instructions for Folding Top Trim and Rear Window Assembly and Top Assembly—Removal and Installation.

The pivoting joints should be lubricated with light machine oil once a year. Apply oil sparingly so as not to stain top trim.

WEATHERSTRIP

Side Rail Weatherstrip

Figure 73 illustrates installation of side rail weatherstrip which acts to seal window opening. The weatherstrip is held in place by loose screws which are part of the weatherstrip assembly, and by neoprene base cement which is applied between weatherstrip and side rail surface.

When replacing weatherstrip remove all rust, old cement and foreign material from the surfaces to be cemented, to assure successful bonding. Use only good

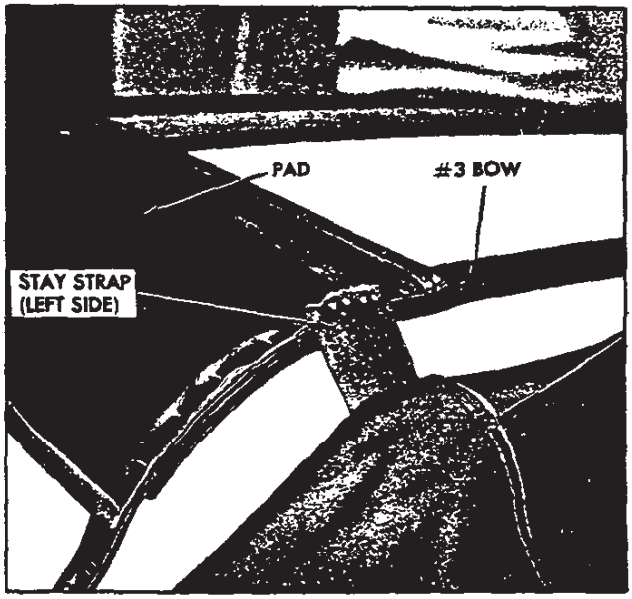


Fig. 70—Installing Stay Strap

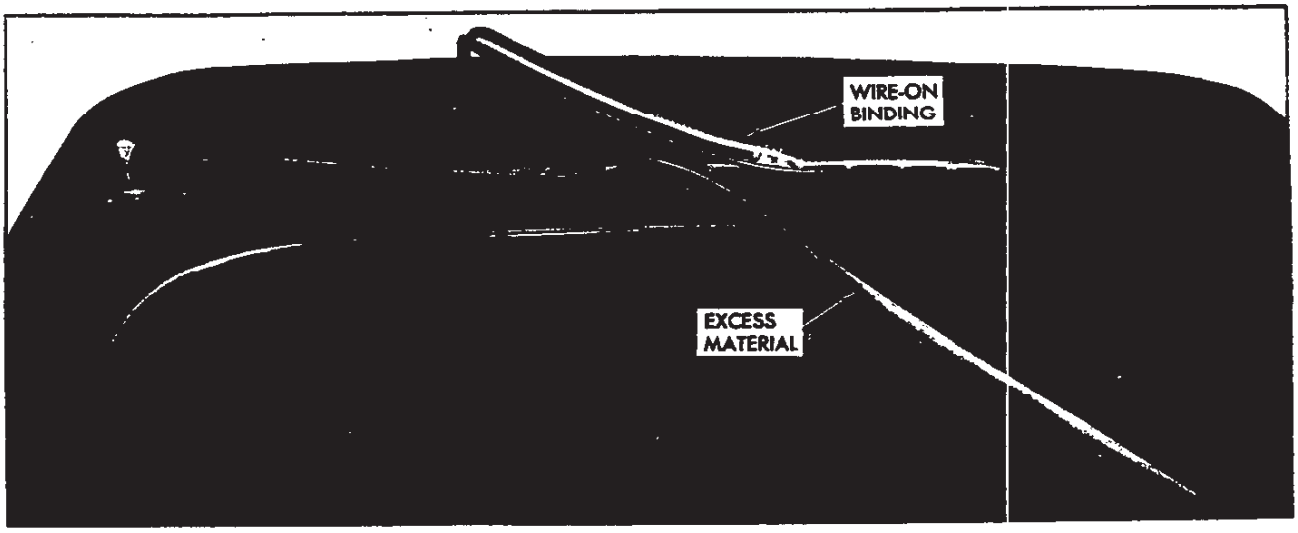


Fig. 71—Installing Binding

quality neoprene cement suitable for weatherstrip application.

Header Weatherstrip

Weatherstrip assembly is retained to the header panel by a combination of studs, and special fasteners as shown in Figure 74 along with neoprene base weatherstrip cement.

SPORT COUPE MODEL 19437

ROOF PANEL ADJUSTMENT (Fig. 75)

Each roof panel is adjusted in relationship to the other

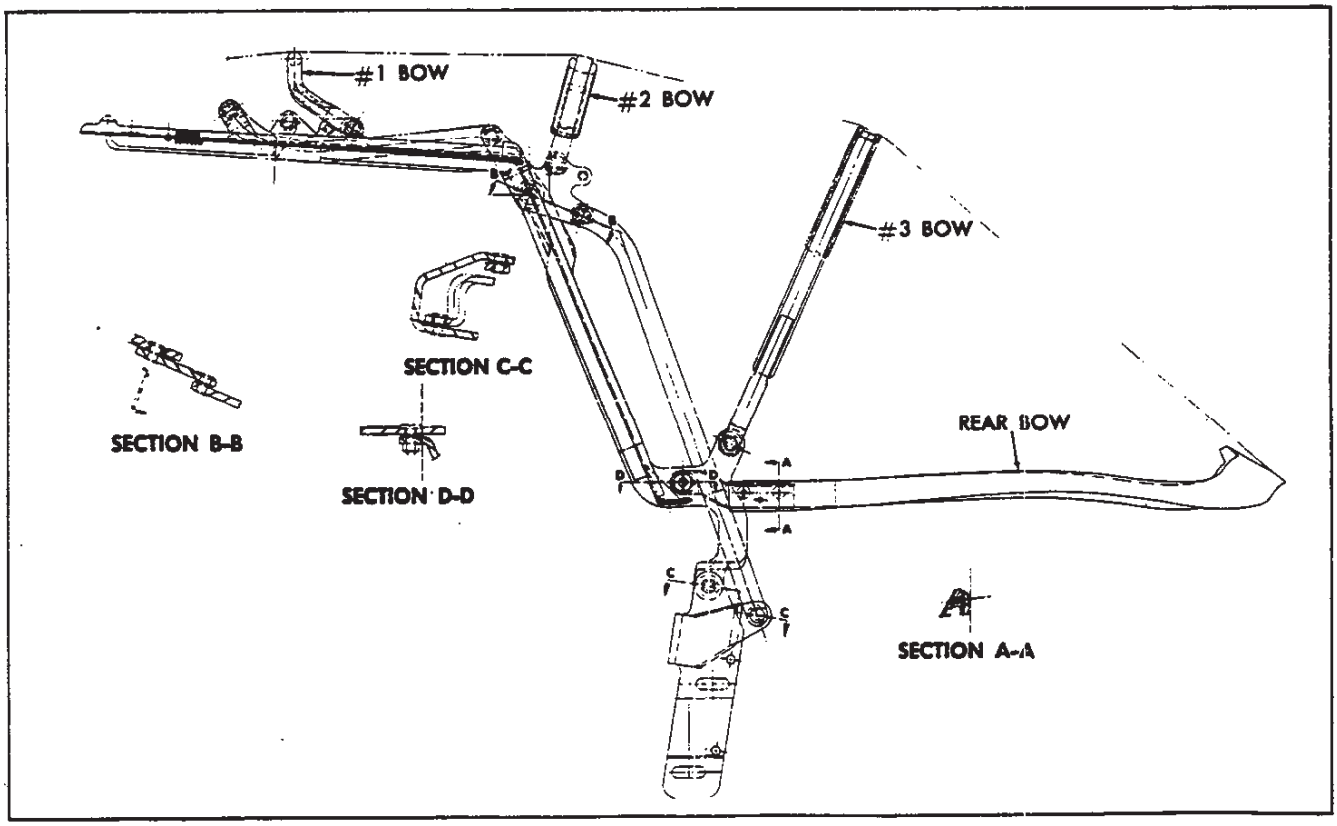


Fig. 72—Top Frame and Linkage

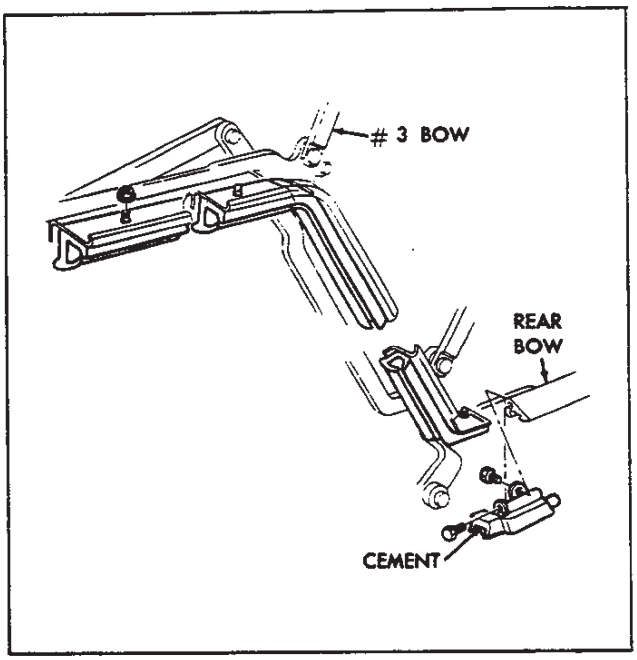


Fig. 73—Side Rail Weatherstrip

and to the header and roof crossover.

Roof panel inner edges are spaced parallel 1/16" to 3/16". The rear edges of the roof panel are spaced 1/8" to 1/4" side to side. The outboard edge of the roof panel to header spacing is determined by the triangular headed pin fastened to the roof crossover. The back edge of the triangular headed pin should measure 1/4" from the plate it screws into.

All latches and adjustments must be loose before starting the roof panel alignments. The only shimming possible is at the center guides.

Adjustment Procedure

1. Remove roof panel and place upside down on a clean soft surface.

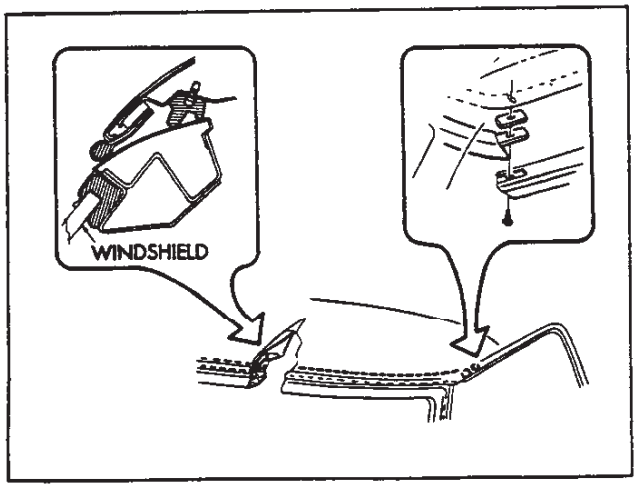


Fig. 74—Header Weatherstrip

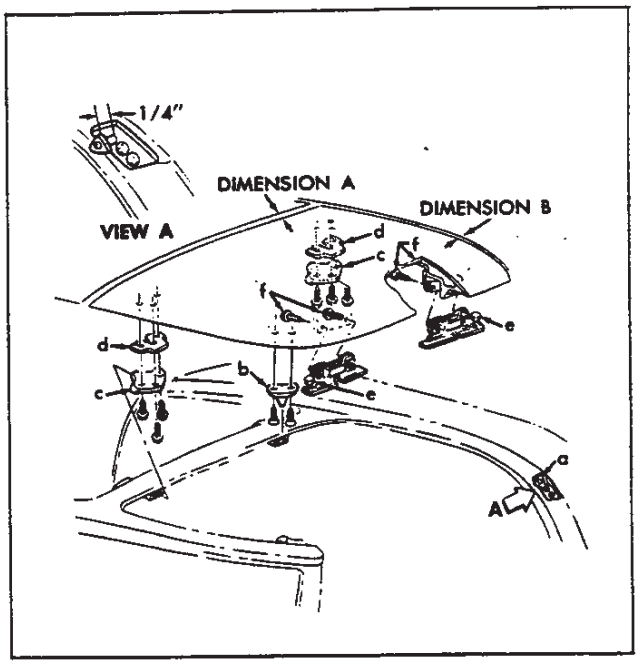


Fig. 75—Roof Panel Alignments

2. Remove screw from each side of headlining panel and gently pry headlining loose from plastic retainers.
3. Loosen screws on underside of roof panel at forward (b) and center guides (c).
4. Repeat steps 1-3 for opposite roof panel.
5. Check dimension of triangular pin (a) on header panel at outer edges of the roof panel attachment locations. Refer to View A.
6. Reinstall roof panels and observe spacing. The roof halves should meet within 1/16"-3/16" in the center (dimension A) and within 1/8"-1/4" to the header (dimension B).

   NOTE: Contour of roof is controlled by shims (d) (no more than 4). It should be noted that the fewer shims used at this location, the more compression on the seating gasket.

7. Once dimensions A and B have been obtained by manipulating each roof panel with respect to one another and the header, tighten the screws securing the center and forward guides in the roof panels.

   NOTE: If compression at the lock locations is needed, adjust bolts (e) accordingly. If point of contact of latch bolt needs adjustment loosen bolts (f) and move latch assemblies fore or aft as necessary.

8. Align headlining with a 3/16" gap all around and push headlining panels upward with firm palm pressure at nylon retainers.
9. Remove panels, make sure all nylon fasteners are engaged and reinstall headlining screws.
10. Reinstall roof panels on vehicle.

Weatherstrip Replacement (Fig. 76)

1. Remove roof panel and place upside down on soft clean surface.

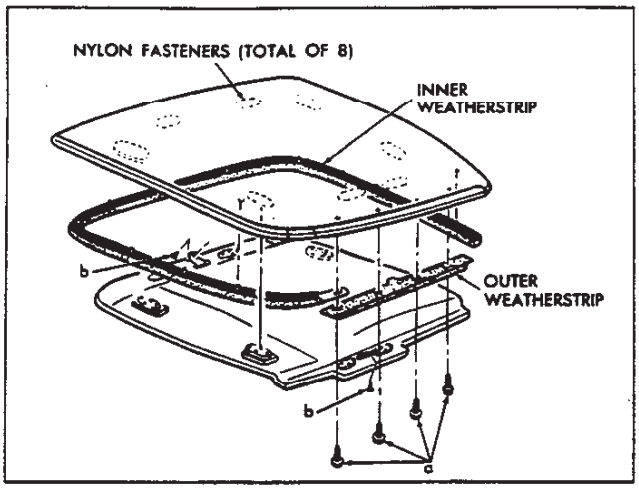


Fig. 76—Roof Panel Weatherstrips

2. Remove four (4) screws (a) retaining outer weatherstrip. Remove weatherstrip.

   NOTE: Butt joints are rubber cemented to inner weatherstrip. Use care when separating.

3. If inner weatherstrip is to be removed, proceed as follows:
   a. Remove screw (b) on each side of headliner panel.
   b. Pry headliner loose from nylon retainers at eight (8) locations. Remove headliner.
   c. Pry out plastic buttons retaining weatherstrip to roof panel. Remove weatherstrip.
4. Clean old sealer off roof panel.
5. If inner weatherstrip was removed, perform the following:
   a. Apply sealer to roof panel along the entire periphery of the roof panel where the inner strip is to lie.
   b. Install new weatherstrip starting at screw attachment end engaging all plastic retainers. Push down along strip to uniformly spread the sealer. Apply rubber cement to butt joint ends.

   NOTE: It may be necessary to cut the rearward end of weatherstrip to have it properly butt against outer weatherstrip.

   c. Reinstall headliner panel.
6. Apply a 3/16" bead of sealer on the roof panel where outer weatherstrip will lie.
7. Apply rubber cement to butt ends of the new outer weatherstrip and reinstall to roof panel with four (4) screws.
8. Reinstall roof panel.

INTERIOR QUARTER PANEL TRIM REMOVAL (Fig. 77)

1. Remove rear window.
2. Gently pry off back window lower garnish molding (f) by pulling lower edge forward, then after unhooking nylon fasteners, lift up.
3. Remove (right or left) rear roof trim panel latch cover (a) secured by screws.
4. Remove (right or left) rear roof trim panel (b).
5. Remove (right or left) quarter trim panel secured by screws.

   NOTE: Four (4) screws retaining forward lip of interior quarter trim panel are removed and installed from inside door jamb.

6. Install interior trim and rear window in the reverse order of removal.

CENTER ROOF REINFORCEMENT TRIM REMOVAL (Fig. 77)

1. Remove both rear roof trim panel latch covers (a)—2 screws each.
2. Remove rear window.
3. Remove both rear roof panels (b) secured by screws.
4. Remove left and right sun visor assemblies. Remove windshield upper garnish molding (c) secured by screws.
5. Remove center roof trim screws. Pull assembly (d) downward to release the attachment stud (e).
6. Install interior trim in the reverse order of removal, then install rear window.

STORAGE TRAY

The storage tray which provides a means of storing rear window assembly when removed from vehicle, is replaced by removing hinge screws at rear body panel. The latch is adjusted by bending for proper engagement.

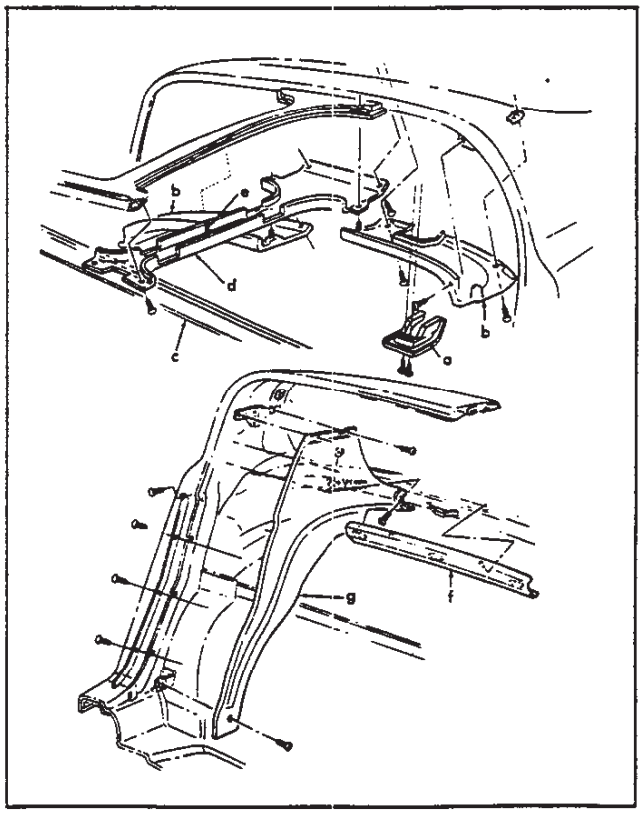


Fig. 77—Interior Quarter Trim

REAR WINDOW

Glass Replacement

To replace rear window glass, the following procedure is recommended.

1. Remove rear window assembly from vehicle and place on bench.
2. Remove lower frame member from old glass and frame assembly.
3. Remove glass from upper frame member and clean out sealer by carefully scraping from groove around entire perimeter of frame.
4. Apply bead of caulking material (polysulfide or equivalent) around slot of both frame components.
5. Insert replacement glass into curved frame member.
6. Assemble frame by aligning lower member with glass.
7. Clean excess caulking material from surface of glass.

Adjustment

The locks and lower receiving plates which determine the holding force are adjusted to the extent of slotted mounting holes to attain an even, adequate seal.

Weatherstrip

The weatherstrip between the rear window assembly and rear body opening is replaced by cementing to rear inner body surface around opening. The weatherstrip is then screwed in place.

SPECIAL TOOLS

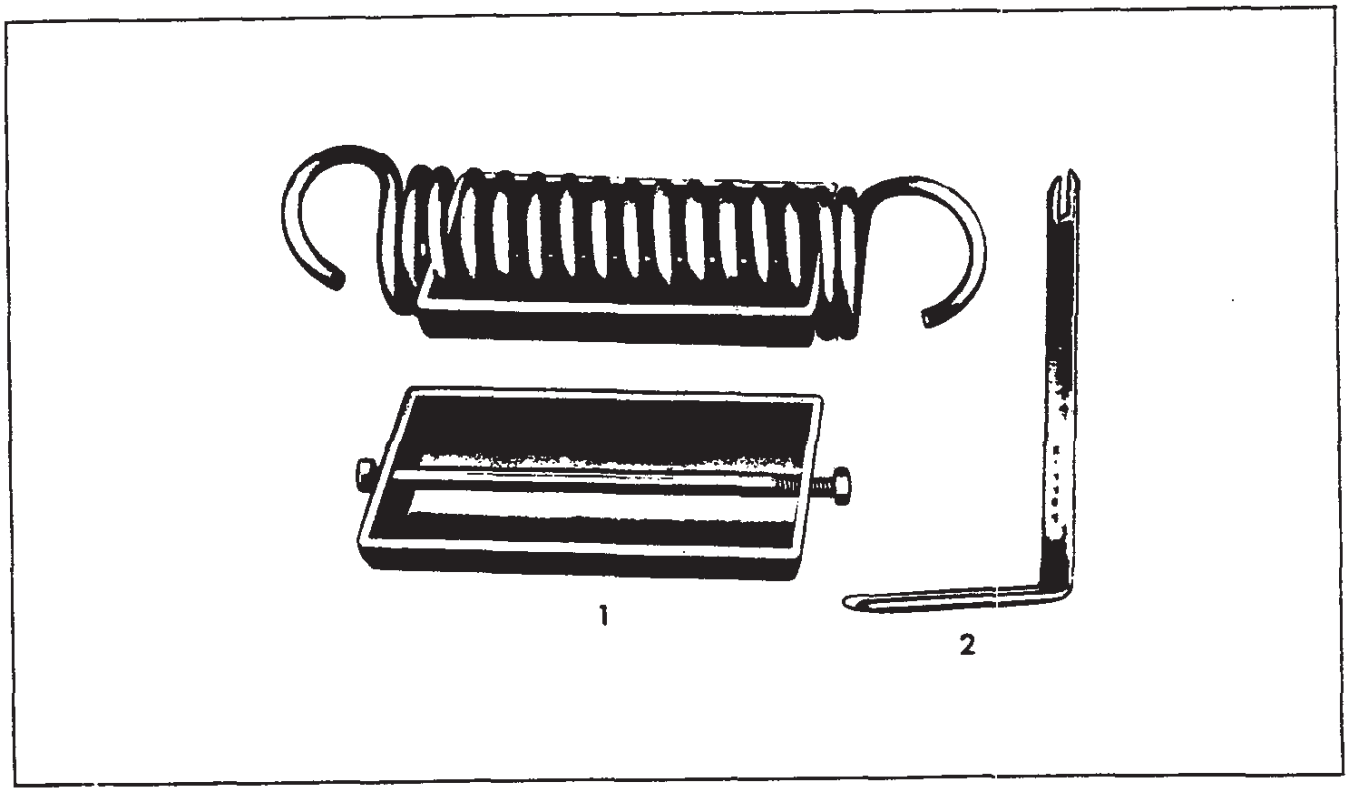
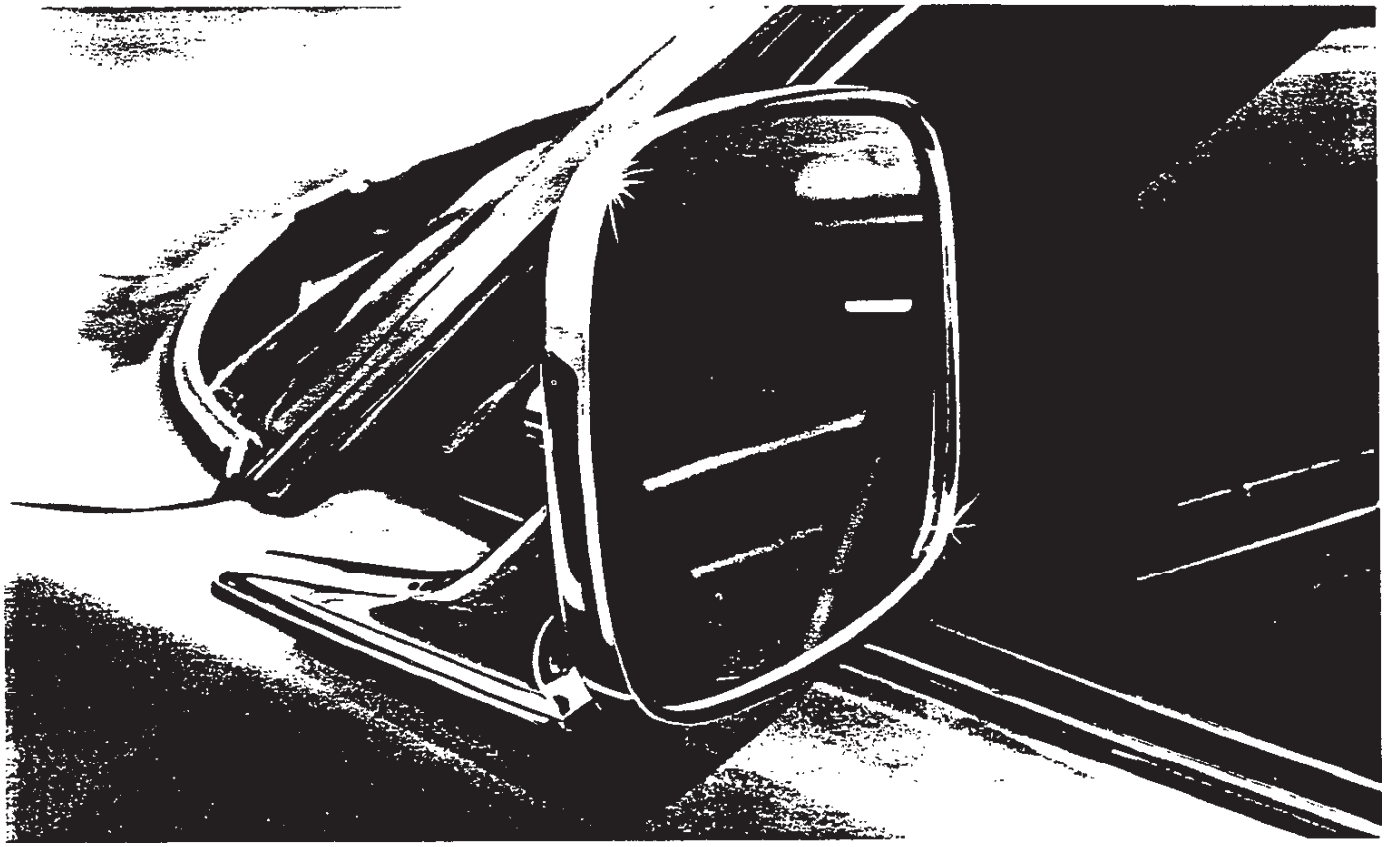
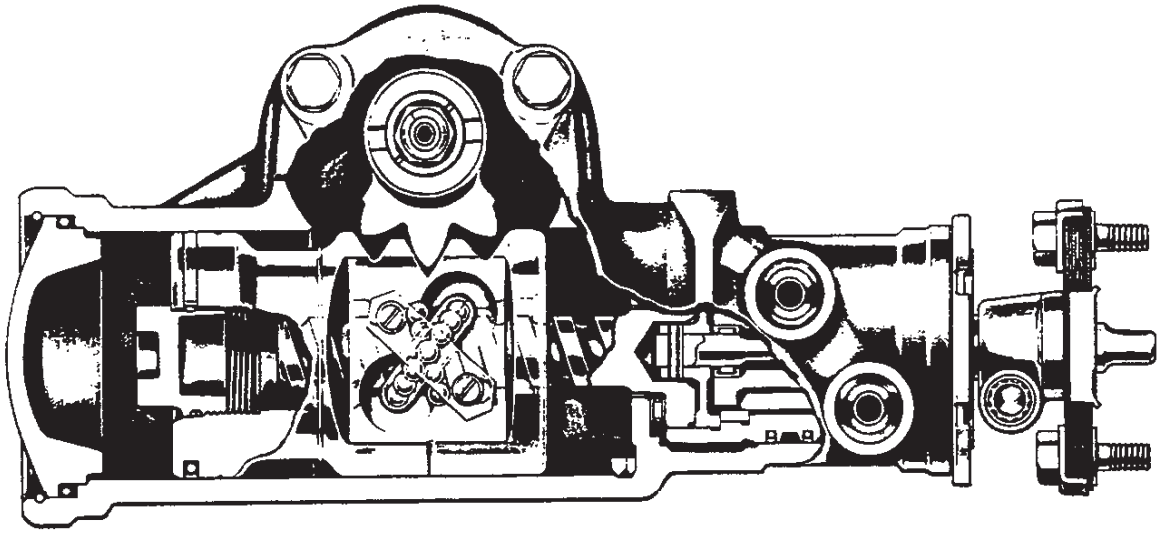


Fig. 78—Special Tools

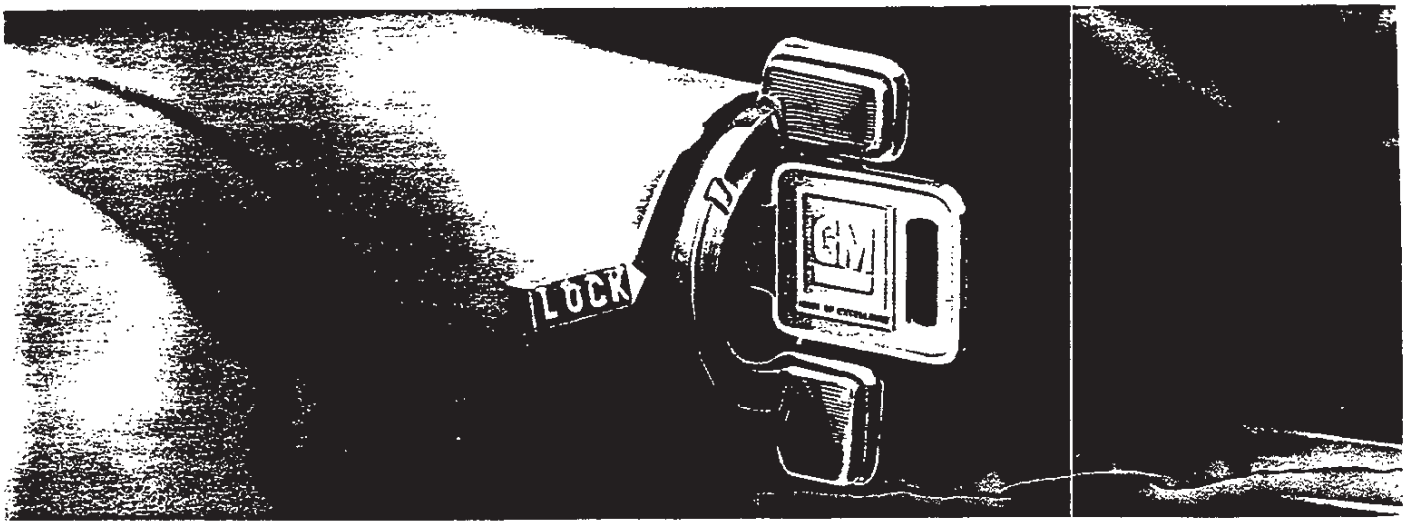
1. J-9559 Hood Spring Tool
2. J-7797 Door Handle Clip Remover

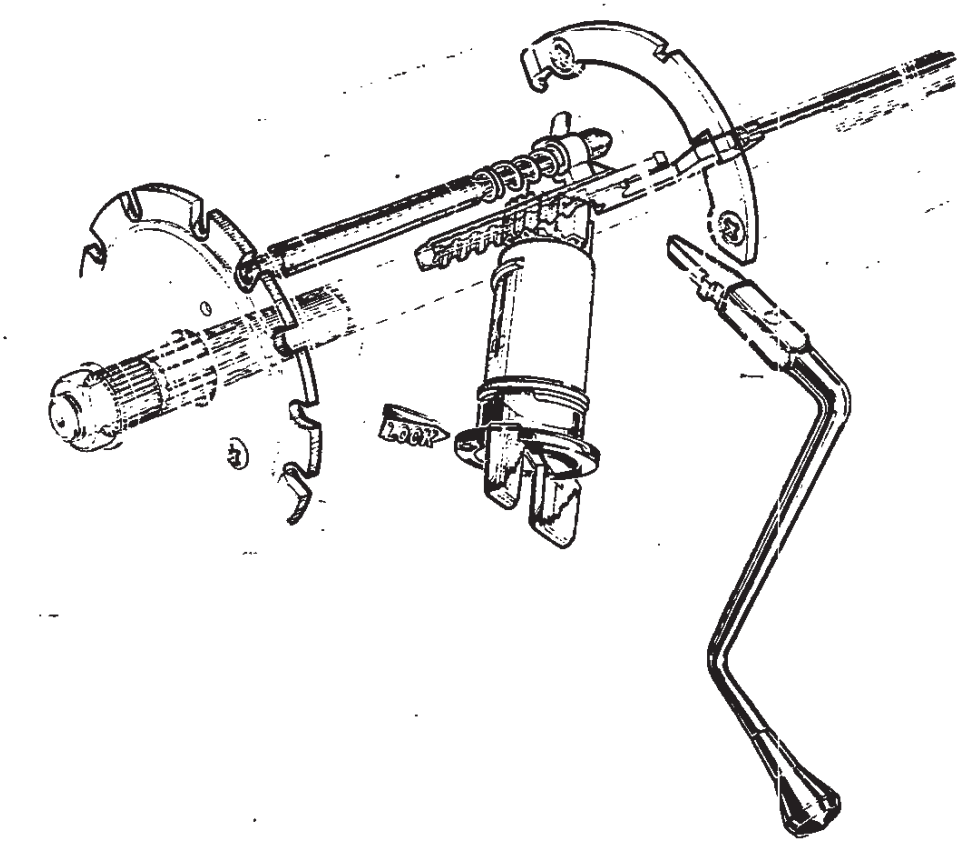
New rectangular outside rearview mirror has larger mirror surface. Standard on all 1969 Chevrolet, Chevelle, Wagon, Camaro and Corvette models.





New variable-ratio power steering available for Caprice, Impala and Camaro models (RPO N40) contributes to more responsive maneuverability in turns as well as easier parking. Steering is quicker and requires fewer turns without any increase in steering effort or change in straight-ahead road feel.

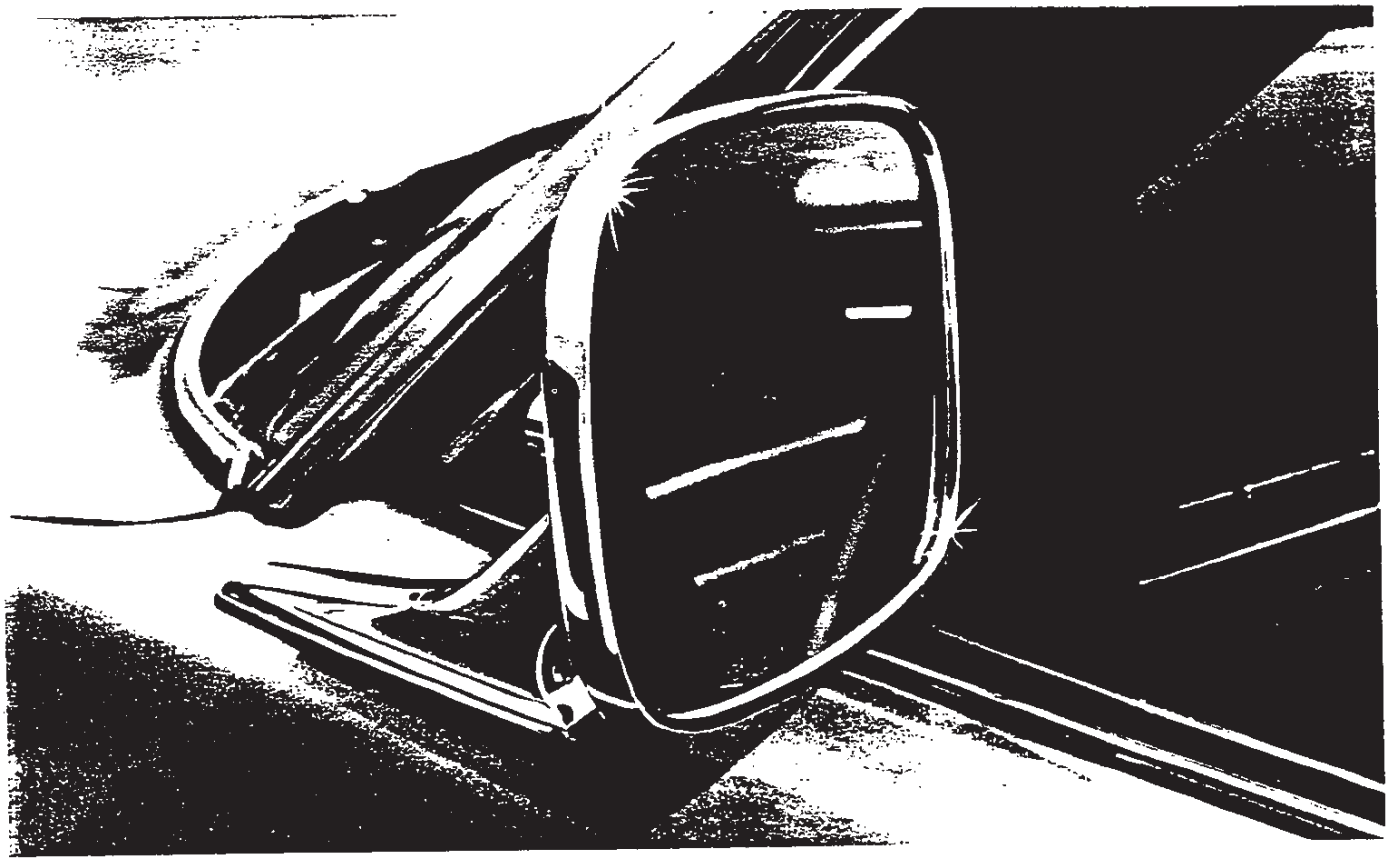


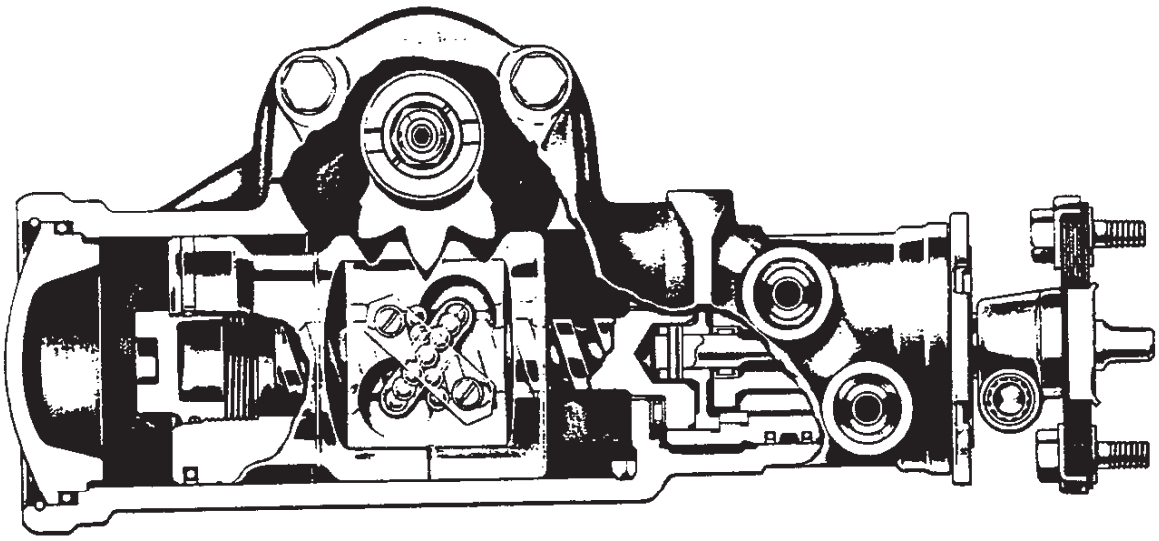


New anti-theft lock system is standard on all 1969 Chevrolet, Chevelle, Wagon, Camaro, Chevy Nova and Corvette models. Mechanism in steering column locks ignition, steering wheel and transmission selector simultaneously. New key design with larger head is easier to operate. Anti-theft key alarm on all 1969 models sounds a warning buzzer whenever driver's door is opened unless key is removed or ignition is On.

New starter safety switch included with all 1969 transmissions (except Corvair manual-shift) permits the starter to operate only when the automatic transmission is in Neutral or Park or when the clutch pedal is depressed on manual-shift cars.

New rectangular outside rearview mirror has larger mirror surface. Standard on all 1969 Chevrolet, Chevelle, Wagon, Camaro and Corvette models.





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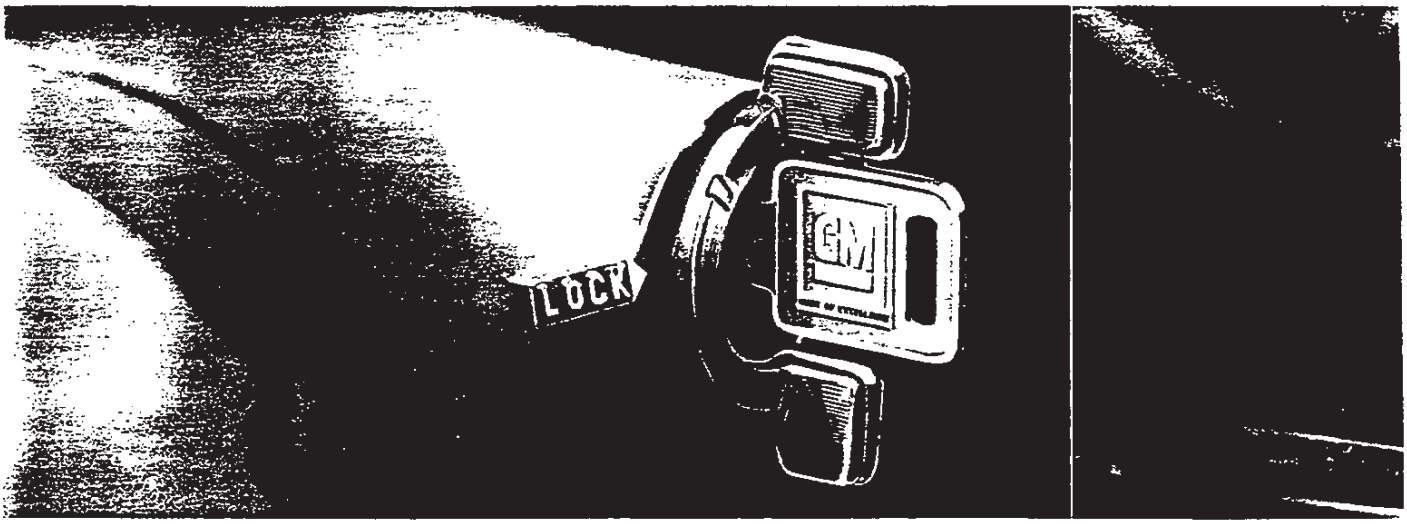

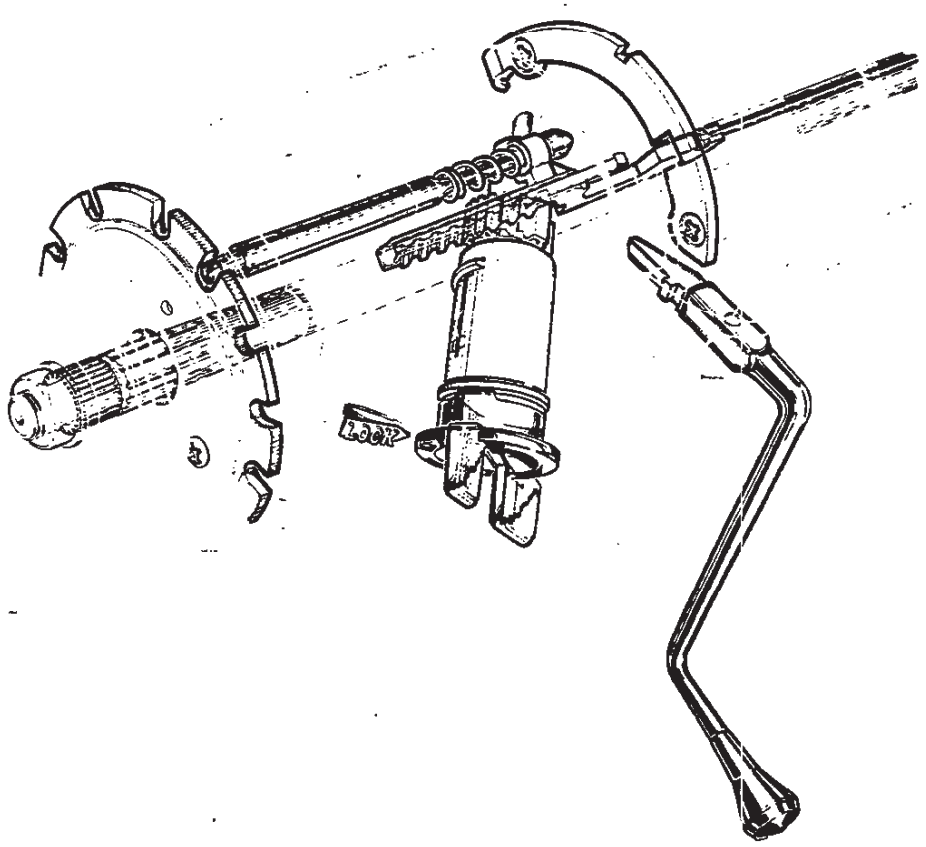

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3-Speed Full Synchro	Std	300-hp V8
4-Speed Full Synchro	M20	300-hp V8 350-hp V8 390-hp V8 400-hp V8
4-Speed Close-Ratio	M21	350-hp V8 390-hp V8 400-hp V8 435-hp V8
Turbo Hydra-matic	M40	300-hp V8 390-hp V8 400-hp V8 435-hp V8

SPECIFICATIONS

Wheelbase		98.0
Length (overall)		182.5
Width (overall)		69.0
Height (overall): Coupe		47.8
Convertible		47.9
Tread: Front		58.7
Rear		59.4
Interior Room:	Coupe	Convertible
Head Room	36.2	37.1
Leg Room	43.0	43.0
Hip Room	42.8	42.8
Shoulder Room	46.9	46.9
Entrance Height	29.0	29.0
Luggage Area (cu ft): Total	NA	NA
Usable	NA	NA
Tire Size: Sport Coupe and Convertible		F70 x 15
Turning Diameter (feet): Curb-to-curb		39.9
Wall-to-wall		NA
Steering Ratio (overall): Standard		20.2:1
Special Fast		17.6:1
Power		17.6:1
Curb Weight (lbs): Coupe		3245
Convertible		3250

CORVETTE COUPE AND CONVERTIBLE

Standard All-Vinyl Trim

		INTERIOR TRIM					
		Black	Bright Blue	Green	Red	Gunmetal	Saddle
Bucket Seat		ZQ4	411	427	407	416	420
EXTERIOR COLOR	CODE						
Tuxedo Black	900	X	X	X	X	X	X
Can-Am White	972	X	X	X	X	X	X
Monza Red	974	X			X		X
LeMans Blue (Brt)	976	X	X				
Fathom Green (Dk)	983	X		X			X
Daytona Yellow	984	X					
Cortez Silver	986	X	X	X	X	X	X
Burgundy	988	X					X
Riverside Gold	980	X					
Monaco Orange	990	X					

CORVETTE COUPE AND CONVERTIBLE

'Optional Leather Seat Trim

		INTERIOR TRIM					
		Black	Bright Blue	Green	Red	Gunmetal	Saddle
Bucket Seat		402	412	428	408	417	421
EXTERIOR COLOR	CODE						
Tuxedo Black	900	X	X	X	X	X	X
Can-Am White	972	X	X	X	X	X	X
Monza Red	974	X			X		X
LeMans Blue (Brt)	976	X	X				
Fathom Green (Dk)	983	X		X			X
Daytona Yellow	984	X					
Cortez Silver	986	X	X	X	X	X	X
Burgundy	988	X					X
Riverside Gold	980	X					X
Monaco Orange	990	X					

'Optional at extra cost.

Black vinyl cover (RPO C08) available for removable hardtop
Convertible folding top available in choice of Black or White.

Model	List Price	Factory D&H	Mfr's Sgt'd Dlr NVPC*	Mfr's Sgt'd Retail★	Dest'n Charge	Total
Corvette						
• 19437 Coupe	$4479.00	$244.00	$40.00	$4763.00		
• 19467 Convertible	4153.00	227.00	40.00	4420.00		

• Until further advised, changes have been made in standard equipment from the standard equipment shown in Sales literature and catalogs for 1969 passenger car models. For pricing purposes add the prices for the following option to the model prices shown above.

Hood Restraints A82 List $17.00 D & H $.95 Total $17.95

* Manufacturer's Suggested Dealer New Vehicle Preparation Charge.

★Does not include state and local taxes, license fees, options or accessories.

POPULAR OPTIONAL EQUIPMENT♦

Description	Opt No.	List Price	Factory D&H	Mfr's Sgt'd Retail Delvr'd»
POWER TEAMS				
Engines:				
350-hp Corvette 350 V8	L46	$125.00	$ 6.65	$131.65
390-hp Corvette 427 V8—Positraction axle required	L36	210.00	11.20	221.20
400-hp Corvette 427 V8—Positraction axle required	L36/L68	310.00	16.55	326.55
435-hp Corvette 427 V8—Positraction axle, and Full-Transistor Ignition System req'd	L71	415.00	22.10	437.10
Transmissions:				
Turbo Hydra-matic—				
With 300-, 390- or 400-hp V8	M40	210.00	11.80	221.80
With 435-hp V8	M40	275.00	15.40	290.40
4-Speed (Wide-Range)—Available with 300-hp, 350-hp, 390-hp and 400-hp V8 engines	M20	175.00	9.80	184.80
4-Speed (Close-Ratio)—Available with all optional V8 engines	M21	175.00	9.80	184.80
Axles:				
Axle, Positraction Rear—2.73 ratio	GS1	44.00	2.35	46.35
3.08 ratio	GS2	44.00	2.35	46.35
3.36 ratio	GS3	44.00	2.35	46.35
3.55 ratio	GS5	44.00	2.35	46.35
3.70 ratio	GS4	44.00	2.35	46.35
4.11 ratio	GS8	44.00	2.35	46.35
4.56 ratio	GS6	44.00	2.35	46.35
POWER ASSISTS				
Brakes, Power	J50	40.00	2.15	42.15
Steering, Power—(Power brakes recom.)	N40	100.00	5.35	105.35
Windows, Power	A31	60.00	3.20	63.20

♦Popular Chevrolet installed options. See latest Chevrolet Price Schedule or Truck Data Book for complete list of optional equipment. »State and local taxes not included.

Description	Opt No.	List Price	Factory D&H	Mfr's Sgt'd Retail Delvr'd»
OTHER OPTIONS				
Air Conditioning, Four-Season	C60	$407.00	$21.70	$428.70
Alarm System, Audio	UA6	25.00	1.35	26.35
Belts, Custom Deluxe Shoulder—*Convertible only—2 front*	A85	40.00	2.15	42.15
Defroster, Rear Window—Coupe only	C50	31.00	1.65	32.65
Exhaust System—Side mounted	N14	140.00	7.45	147.45
Glass, Soft-Ray Tinted—All windows	A01	16.00	.90	16.90
Heater, Engine Block	K05	10.00	.55	10.55
Ignition System, Full-Transistor—Available only with optional V8 engines	K66	77.00	4.10	81.10
Louvers, Front Fender	TI2	20.00	1.10	21.10
Paint, Exteriors—*Solid colors*	....	N.C.	N.C.	N.C.
Radios, Pushbutton—Includes antenna: AM-FM	U69	164.00	8.75	172.75
AM-FM with Stereo	U69/U79	264.00	14.10	278.10
Roof Cover, Vinyl—Black. Available when removable auxiliary hardtop is ordered on Convertible	C08	55.00	2.95	57.95
Speed Warning Indicator	U15	11.00	.60	11.60
Suspension, Special-Purpose Front and Rear—Includes special springs, matching shock absorbers, and special front and rear stabilizer bars. Available with 435-hp V8.	F41	35.00	1.90	36.90
Steering Wheel, Tilt-Telescopic	N37	80.00	4.30	84.30
Top, Auxiliary—Removable hardtop In place of folding top	C07	N.C.	N.C.	N.C.
In addition to folding top	C07	240.00	12.80	252.80
Top, Convertible—White	AA	N.C.	N.C.	N.C.
Black	BB	N.C.	N.C.	N.C.
Beige	DD	N.C.	N.C.	N.C.
Trim Combinations—Genuine Leather seats	..	75.00	4.00	79.00
Wheel Covers	P02	55.00	2.95	57.95

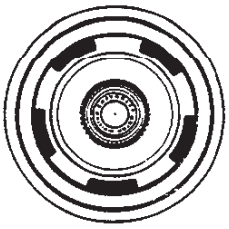
OPTIONAL TUBELESS TIRES—Factory Installed

Replacing F70 x 15 2-ply Special Nylon Blackwall.				
F70 x 15 2-ply White stripe nylon	PT7	30.00	1.30	31.30
F70 x 15 2-ply Red stripe nylon	PT6	30.00	1.30	31.30

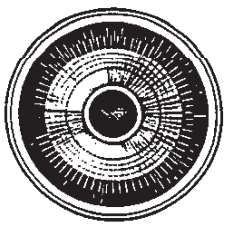
♦Popular Chevrolet installed options. See latest Chevrolet Price Schedule or Truck Data Book for complete list of optional equipment. »State and local taxes not included.

Corvette Exterior Features

- Precision-molded black grille
- Concealed headlights with built-in washers
- Front bumper guards
- White lenses over amber parking/direction signal lights
- Special high-domed hood (427 V8 engine only)
- Bright license plate frames
- Functional front fender louvers
- Windshield molding
- Hide-A-Way windshield wipers with built-in washers
- Full door-glass styling
- Rectangular outside rearview mirror
- Wide-oval F70 x 15 tires and 15 x 8 wheels
- Body sill moldings
- Wheel trim rings and center caps
- Side marker lights—front and rear
- Bright roof drip and rear window molding (Sport Coupe only)
- Flush-mounted door handles
- Removable roof panels and rear window (Sport Coupe only)
- Astro Ventilation outlet grilles on rear deck
- Twin-unit taillights/back-up lights with bright bezels
- Bright exhaust outlet extensions and frames
- Wraparound rear bumper with built-in guards



Standard wheel trim ring and center cap

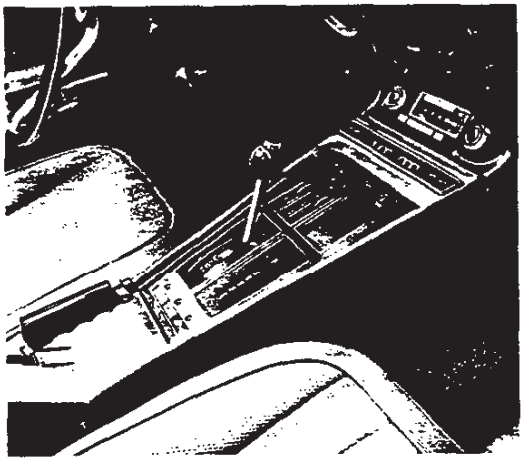


Full wheel cover (RPO PO2)

Corvette Interior Features

- Luxurious all-vinyl bucket seat interior
- Sport-styled steering wheel with black rim and horn button
- Astro Ventilation system with adjustable vent-ports on instrument panel
- Convenient aircraft-type center console
- 7000-rpm tachometer
- Trip odometer
- Ammeter, temperature, fuel and oil pressure gauges
- Light monitoring system alert panels
- Seat belt, door ajar and headlight position indicators
- Electric clock
- Molded door panels with built-in armrests
- Door pull handles
- Convenient map pocket
- Extra-thick foam seat cushions
- Special bright pedal trim
- Courtesy light with automatic door switches
- Cigarette lighter in ashtray on console
- Color-keyed deep-twist carpeting
- Carpeted stowage compartment behind seats
- Fitted stowage cover for removable roof panels

...plus all Corvette standard convenience and security features.

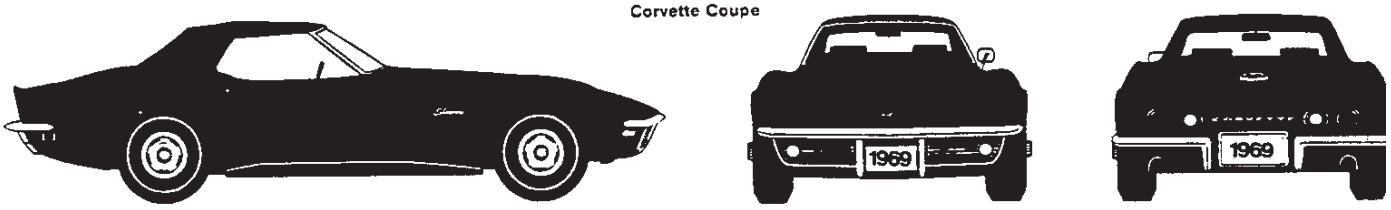


Center console with convenient parking brake control

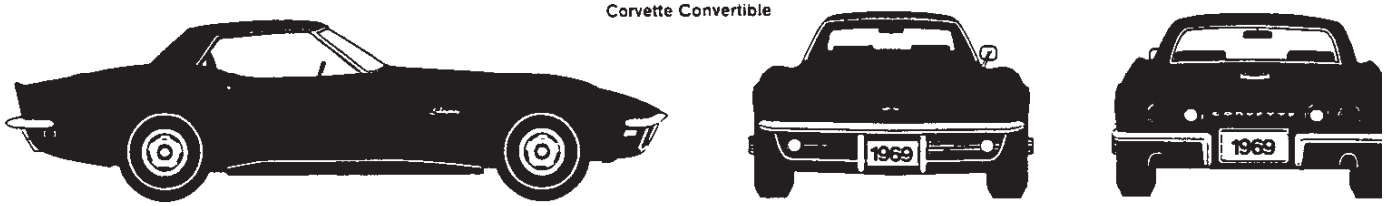
Stingray

EXTERIOR FEATURES AND IDENTIFICATION

Corvette Coupe

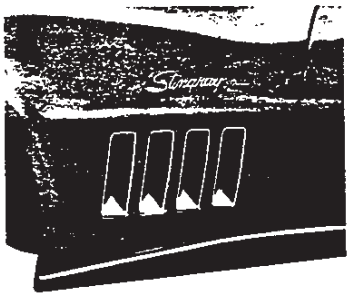


Corvette Convertible



Corvette Convertible with removable hardtop (RPO C07)

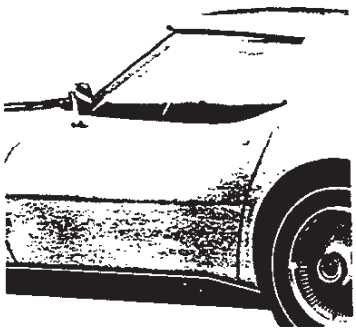
Front fender louver trim (RPO TJ2)



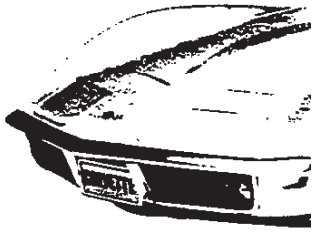
Coupe removable roof panels

Hide-A-Way windshield wipers

Special high-domed hood with 427 V8



Full door-glass styling



Corvette's aerodynamic look features c
cealed headlights with built-in washer

CORVETTE SAFETY AND SECURITY FEATURES FOR '69 INCLUDE . . .

- Energy-absorbing steering column
- Seat belts with pushbutton buckles for *all* passenger positions
- Shoulder belts with pushbutton buckles and special storage provision for driver and right front passenger (except convertible)
- Two front seat head restraints
- Passenger-guard door locks
- Four-way hazard warning flasher
- Dual master cylinder brake system with warning light and corrosion-resistant brake lines
- Folding seat back latches
- Dual-speed windshield wipers and washer
- Dual-action safety hood latch
- Outside rearview mirror
- Back-up lights
- Side marker lights and parking lights that illuminate with headlights
- Energy-absorbing instrument panel, padded sun visors
- Reduced-glare instrument panel top, inside windshield moldings, horn button, steering wheel hub, and windshield wiper arms and blades
- Wide inside day-night mirror with deflecting base
- Lane-change feature in direction signal control
- Safety armrests
- Thick-laminate windshield
- Soft, low-profile window control knobs
- Smooth contoured door and window regulator handles
- Anti-theft ignition key warning buzzer
- Anti-theft ignition, steering and transmission lock
- Starter safety switch on all transmissions
- Tire safety rim
- Safety door latches and hinges
- Uniform shift quadrant
- Snag-resistant steering wheel hardware
- Non-projecting wheel nuts, discs and caps
- Improved fuel tank retention
- Headlight aiming access provision
- Contoured windshield header (except convertible)
- Fail-safe feature on concealed headlights

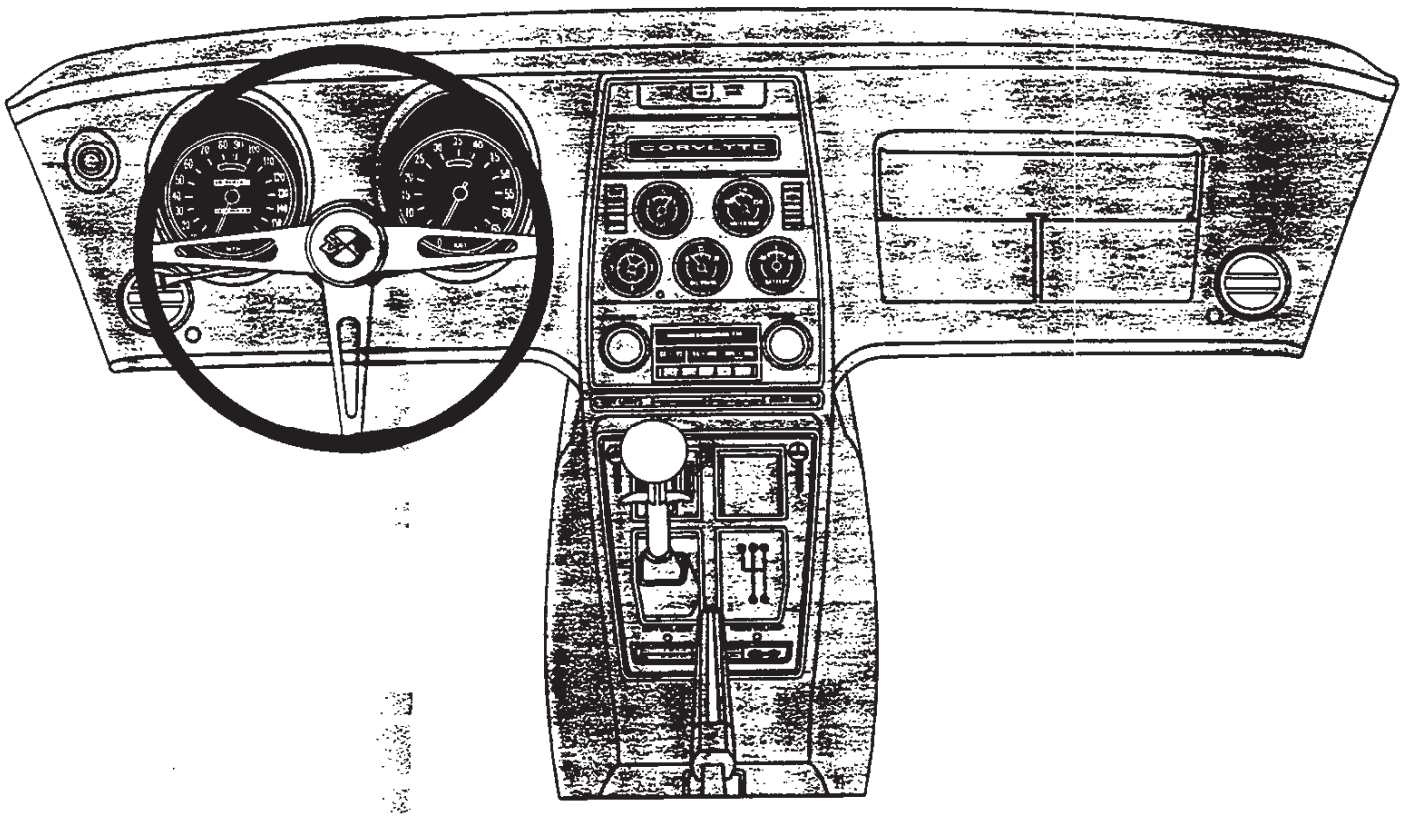
1969 Corvette Color and Trim Choices

	Type of Seat	INTERIOR TRIM COLOR AND CODE											
		Black		Bright Blue		Green		Red		Gunmetal		Saddle	
		Vinyl	Leather	Vinyl	Leather	Vinyl	Leather	Vinyl	Leather	Vinyl	Leather	Vinyl	Leather
Coupe & Convertible	Bucket	ZQ4	402	411	412	427	428	407	408	416	417	420	421

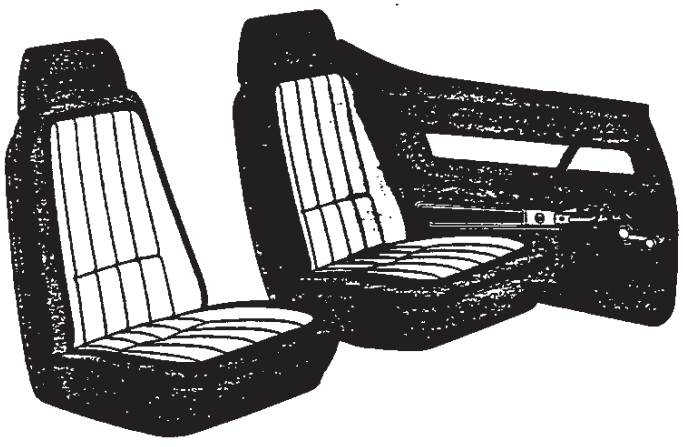
EXTERIOR COLOR	CODE												
Tuxedo Black	900	•		•		•		•		•		•	
Can-Am White	972	•		•		•		•		•		•	
Monza Red	974	•						•				•	
Le Mans Blue	976	•		•									
Monaco Orange	990	•											
Fathom Green	983	•				•						•	
Daytona Yellow	984	•											
Cortez Silver	986	•		•		•		•		•		•	
Burgundy	988	•										•	
Riverside Gold	980	•											

Stingray

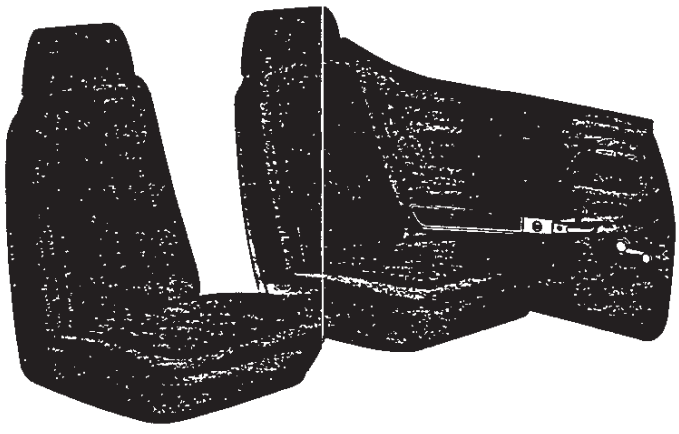
INTERIOR FEATURES AND APPOINTMENTS



Corvette instrument panel includes adjustable vent-ports for Astro Ventilation system and sport-styled steering wheel



All-vinyl bucket seat interior



Ultra-luxurious leather seat trim available at extra cost

1969 Corvette Options and Prices*

Description	PRICE $	$
(300-hp Turbo-Fire 350 V8)		
19437 Corvette Coupe		
19467 Corvette Convertible With manually operated soft top		

* Manufacturer's Suggested Retail Price does not include state and local taxes, license fees, options or accessories.

Description	RPO Number	PRICE $	$
POWER TEAMS			
Engine:			
350-hp Turbo-Fire 350 V8	L46		
390-hp Turbo-Jet 427 V8—Available only when Positraction axle is ordered	L36		
400-hp Turbo-Jet 427 V8—Available only when Positraction axle is ordered	L36/L68		
435-hp Turbo-Jet 427 V8—Available only when Positraction axle and full-transistor ignition system are ordered	L71		
Transmission:			
Turbo Hydra-Matic			
With 350-cu.-in. engines	M40		
With 427-cu.-in. engines	M40		
4-Speed Fully Synchronized (Wide-Range)	M20		
4-Speed Fully Synchronized (Close-Ratio)	M21		
Axle, Positraction Rear:			
2.73 ratio	GS1		
3.08 ratio	GS2		
3.36 ratio	GS3		
3.55 ratio	G95		
3.70 ratio	GS4		
4.11 ratio	GS5		
POWER ASSISTS			
Brakes, Power	J50		
Steering, Power: (Power brakes recommended)	N40		
Windows, Power:	A31		

Vinyl Roof Cover Color Choice (RPO C08)

Available for removable hardtop (RPO C07) in black only with all exterior colors.

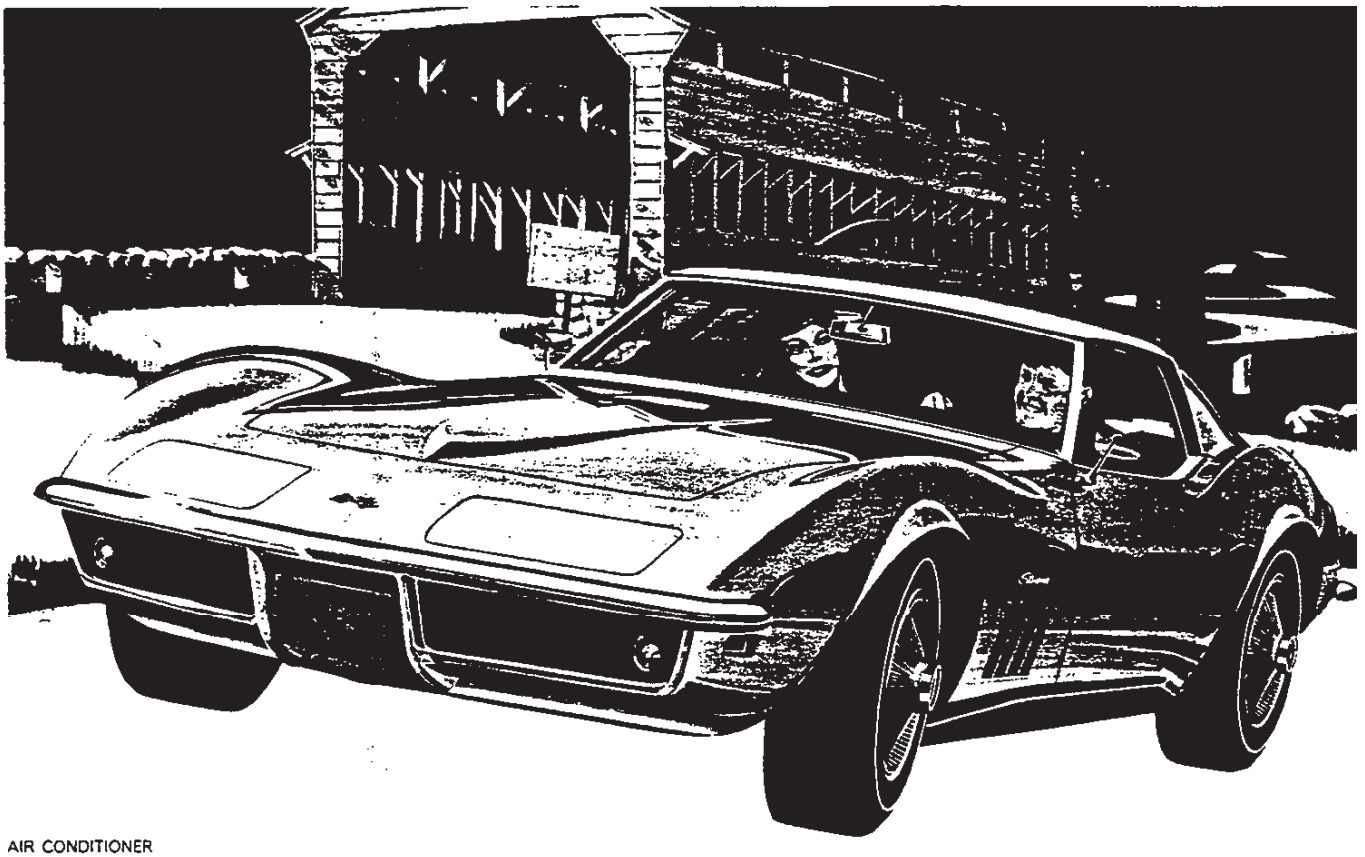
Convertible Top Colors

Choice of white, black or beige convertible top available with all exterior colors.

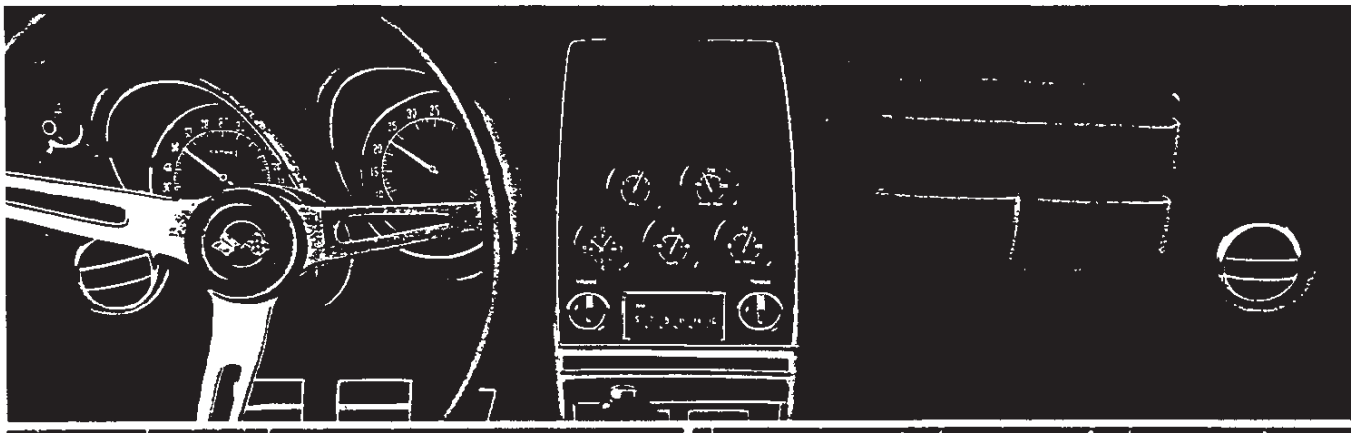
Seat and Shoulder Belt Colors

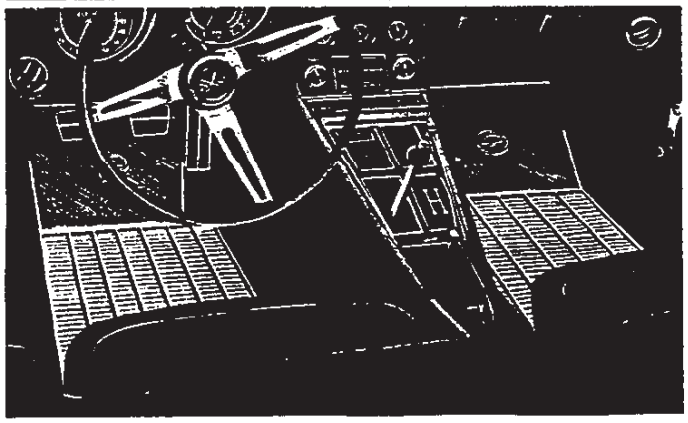
Interior Trim Color	Standard Style Belts*
Black	Black
Blue	Dark Blue
Green	Green
Red	Red
Gunmetal	Gunmetal
Saddle	Saddle

*Color-keyed belts and buckles.

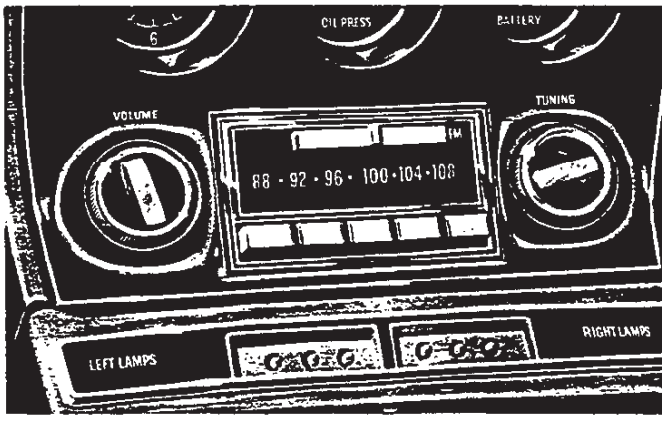


AIR CONDITIONER





CONTOUR FLOOR MATS



AM-FM RADIO

1969 Corvette Options and Prices

Description	RPO Number	PRICE $	PRICE $
OTHER OPTIONS			
Air Conditioning, Four-Season	C60		
Alarm System, Audio	UA6		
Belts, Shoulder Custom Deluxe: (Convertible only) Driver and passenger	A85		
Defroster, Rear Window	C50		
Exhaust System: Side-mounted	N14		
Glass, Soft-Ray Tinted: All windows	A01		
Heater, Engine Block	K05		
Ignition System, Full-Transistor: Available only when optional engine is ordered	K66		
Louver Trim, Front Fender	TJ2		
Radio: (Includes fixed height rear antenna)			
AM-FM pushbutton control	U69		
AM-FM stereo pushbutton control	U69/U79		
Roof Cover, Vinyl: *Black;* Model 19467 with auxiliary top only	C08		
Speed Warning Indicator	U15		
Special Purpose Front and Rear Suspension: Includes special springs, matching shock absorbers and special front and rear stabilizer bars. Available only when 435-hp engine is ordered	F41		
Steering Wheel, Tilt-Telescopic	N37		
Top, Auxiliary: Hard top; Model 19467 only			
In place of folding top	C07		
In addition to folding top	C07		
Top, Folding: Model 19467 only. All tops available with all exterior colors			
Black	BB		
White	AA		
Beige	DD		
Trim Combinations: See Color and Trim section			
Genuine leather seats	...		
All other trims	...		
Wheel Covers: (4)	P02		
FACTORY-INSTALLED REGULAR PRODUCTION TUBELESS TIRES			
Replaces (5) F70-15 Blackwall			
(5) F70-15 Red Stripe	PT6		
(5) F70-15 White Stripe	PT7		

1969 Corvette Engine Specifications

GENERAL SPECIFICATIONS	300-hp Turbo-Fire 350	350-hp Turbo-Fire 350	390-hp Turbo-Jet 427	400-hp Turbo-Jet 427	435-hp Turbo-Jet 427
Displacement	350 cu. in.		427 cu. in.		
Bore and Stroke	4.0" x 3.48"		4.25" x 3.76"		
HP @ RPM	300 @ 4800	350 @ 5600	390 @ 5400	400 @ 5400	435 @ 5800
Torque @ RPM (lbs. ft.)	380 @ 3200	380 @ 3600	460 @ 3600		460 @ 4000
Compression ratio	10.25:1	11.0:1	10.25:1		11.0:1
Carburetion	4-barrel			Triple 2-barrel	
Fuel requirement	Premium				
Camshaft type	General performance	High performance			Special performance
Valve lifters	Hydraulic				Mechanical
Exhaust	Dual				

BASIC DESIGN

Engine type		V8—Valve-in-head			
Exhaust emission control		Air Injection Reactor System			
Cylinder block		Cast alloy iron*			
Cylinder heads		Cast alloy iron with precision-cast wedge-type combustion chambers		Cast alloy iron**	
Crankshaft		Cast nodular iron	Forged alloy steel†		
Main bearings		Steel-backed replaceable insert type (premium aluminum on all except 300-hp V8)			
Pistons		Cast aluminum alloy	Impact-extruded aluminum alloy	Cast aluminum alloy	Impact-extruded aluminum alloy
Piston Rings	Top	Chrome-plated		Molybdenum-inlay	
	Second	Wear-resistant coated		Chrome-plated	
	Oil control	Three-piece (two chromed rails and one spacer-expander)			
Connecting rods		Forged alloy steel		Forged high-alloy steel	
Flywheel		Machined cast alloy iron with manual transmissions, pressed steel with automatic			

FUEL SYSTEM

Intake manifold	Cast alloy iron††	Cast alloy aluminum††
Carburetor type	4-barrel	Triple 2-barrel
Choke	Automatic	
Air cleaner	Oil-wetted paper element	Oil-wetted polyurethane element
Fuel pump	Camshaft-driven mechanical pulsator-type	
Fuel filters	Dual filtration system—paper filter in carburetor, fine-mesh fuel strainer in tank‡	

*Extra-thick bulkheads above each bearing support for greater strength and more rigid crankshaft support.
**With alternately spaced inlet and exhaust valve ports and precision-formed modified-wedge combustion chambers.
†Specially hardened main and connecting rod journals on 435-hp V8.
††8-port design; extra-large ports on optional V8s.
‡Triple filtration system plus vapor return line to fuel tank on 400- and 435-hp V8s. Includes large in-line fuel filter in addition to carburetor and fuel tank filters.

Transmissions

TRANSMISSION	ENGINES	TRANSMISSION GEAR RATIOS (:1)				
		1	2	3	4	R
3-SPEED FULLY SYNCHRONIZED (STANDARD)	300-hp V8	2.54	1.50	1.00		2.63
4-SPEED FULLY SYNCHRONIZED (RPO M20)	300-hp V8 350-hp V8 390-hp V8 400-hp V8	2.52	1.88	1.46	1.00	2.59
4-SPEED FULLY SYNCHRONIZED (RPO M21)	350-hp V8 390-hp V8 400-hp V8 435-hp V8	2.20	1.64	1.27	1.00	2.26
TURBO HYDRA-MATIC (RPO M40)	300-hp V8 390-hp V8 400-hp V8 435-hp V8	Drive (maximum) 5.21:1 to 1:1 Low 2 5.21:1 to 1.48:1 Low 1 5.21:1 to 2.48:1 Reverse 4.37:1 to 2.08:1				

Clutches for Corvette 3- and 4-Speed Transmission Power Teams

		300- & 350-hp	390- & 400-hp	435-hp
Type		Semi-centrifugal bent-finger-design diaphragm spring with single dry disc—pearlitic or nodular iron pressure plate (dual dry discs with heavy-duty clutch)		
Disc Facing Material		Premium grade woven asbestos		
Disc Facing Outside Diameter	Standard	11.00"		
	Heavy-Duty*	—		10.00"
Disc Facing Total Area (sq. in.)	Standard	123.70		
	Heavy-Duty*	—		201.06"
Spring Effective Plate Load (lbs.)	Standard	2450-2750		2600-2800
	Heavy-Duty*	—		1400-1600

*RPO MA6—Heavy-Duty Clutch (dual disc). Required with 435-hp V8 and 4-speed transmission when 3.36:1 axle ratio is specified.

Equipment Included With Optional* V8 Engines

Important equipment is included with optional* 350- and 427-cu.-in. V8 engines, supplementing or replacing equipment included with the standard 300-hp 350-cu.-in. V8 engine. Other specialized equipment is also available (see Options and Prices section).

	350-hp Turbo-Fire V8	390-hp Turbo-Jet V8	400-hp Turbo-Jet V8	435-hp Turbo-Jet V8
Special hood		•	•	•
Heavier duty front springs		•	•	•
Heavier duty front stabilizer bar		•	•	•
Heavier duty rear wheel spindle support arms		•	•	•
Rear suspension stabilizer bar		•	•	•
Heavier duty clutch				•
Larger capacity radiator		•	•	•
Dual crankshaft, water pump and fan pulleys	•	•	•	•
Finned aluminum valve rocker covers	•			
Full-transistor ignition system	•	•	•	(a)
Chrome-finish valve rocker cover		•	•	•
Higher performance starting motor		•	•	•
Large in-line fuel filter and vapor return line to fuel tank			•	•

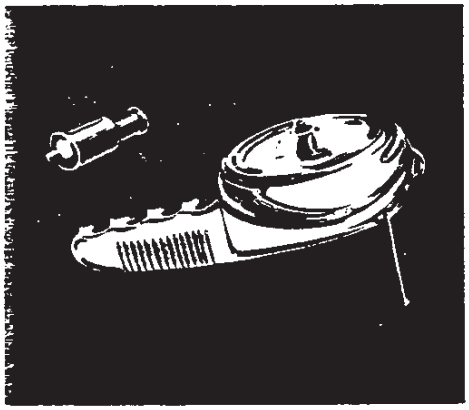
(a) Delcotronic Full-Transistor Ignition System (RPO K66) required added equipment. *Optional at extra cost.

1969 Corvette Power Teams

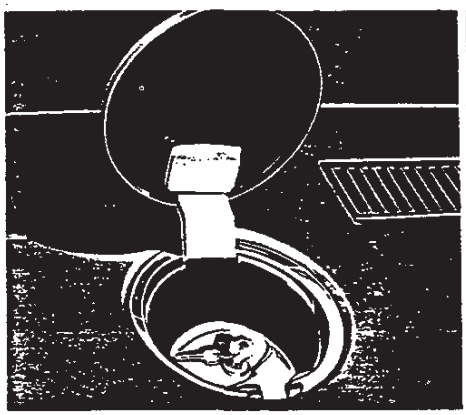
ENGINES / TRANSMISSIONS / AXLE RATIOS

ENGINE	TRANSMISSION	REAR AXLE RATIO MODEL APPLICATION	REAR AXLE RATIO							
			Without Air Conditioning				With Air Conditioning			
			Standard	Economy†	Perform-ance†	Special†	Standard	Economy†	Perform-ance†	Special†
STANDARD ENGINE **300-HP TURBO-FIRE 350** 350-CU.-IN. V8	3-Speed (2.54:1 Low)	All models	3.36:1	3.08:1*			3.36:1	3.08:1*		
	4-Speed (2.52:1 Low)									
	Turbo Hydra-Matic	All models	3.08:1*				3.08:1*			
RPO L46 **350-HP TURBO-FIRE 350** 350-CU.-IN. V8	4-Speed (2.52:1 Low)	All models	3.36:1		3.55:1*		3.36:1		3.55:1*	
	4-Speed (2.20:1 Low)	All models	3.70:1		4.11:1*		3.70:1		4.11:1*	
RPO L36 **390-HP TURBO-JET 427** 427-CU.-IN. V8	4-Speed (2.52:1 Low)	All models	3.08:1*		3.36:1*		3.08:1*			
	4-Speed (2.20:1 Low)	All models	3.36:1*	3.08:1*	3.55:1*	3.70:1*	AIR CONDITIONING NOT AVAILABLE			
	Turbo Hydra-Matic	All models	3.08:1*	2.73:1*			3.08:1*	2.73:1*		
RPO L36/L68 **400-HP TURBO-JET 427** 427-CU.-IN. V8	4-Speed (2.52:1 Low)	All models	3.08:1*		3.36:1*		3.08:1*			
	4-Speed (2.20:1 Low)	All models	3.36:1*	3.08:1*	3.55:1*	3.70:1*	AIR CONDITIONING NOT AVAILABLE			
	Turbo Hydra-Matic	All models	3.08:1*	2.73:1*			3.08:1*	2.73:1*		
RPO L71 **435-HP TURBO-JET 427** 427-CU.-IN. V8	4-Speed (2.20:1 Low)	All models	3.55:1*	3.36:1**	3.70:1*	4.11:1*	AIR CONDITIONING NOT AVAILABLE			
	Turbo Hydra-Matic	All models	3.08:1*	2.73:1*	3.36:1*					

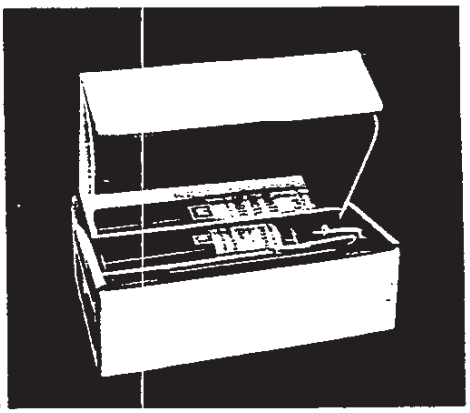
Note: Positraction rear axle available with all axle ratios. †Available at extra cost—see Options and Prices section. *Available as Positraction axle only.
*Heavy-Duty Clutch (RPO MA6) required.



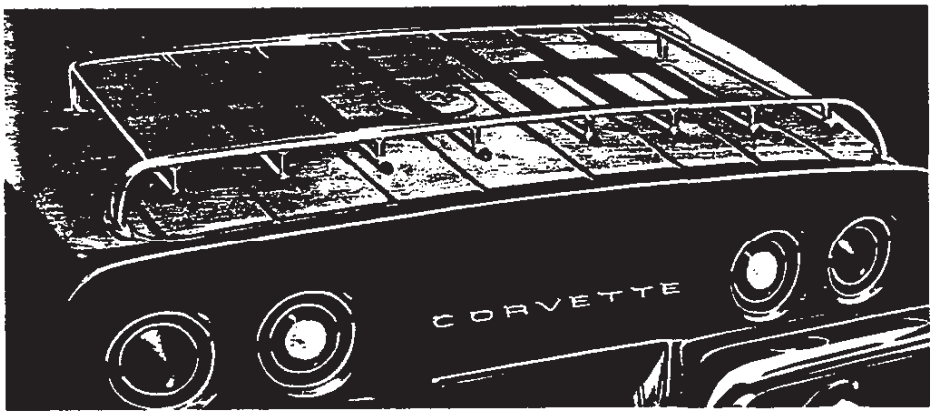
HAND PORTABLE SPOTLIGHT



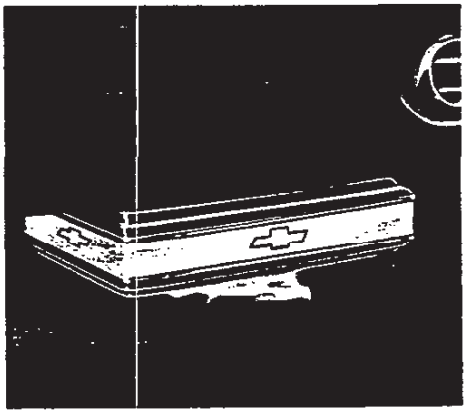
LOCKING GASOLINE TANK CAP



HIGHWAY EMERGENCY KIT



LUGGAGE CARRIER

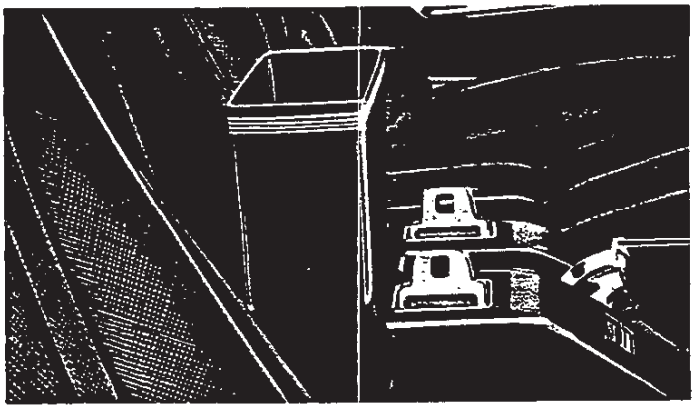


TISSUE DISPENSER

FIRE EXTINGUISHER

GM CHILD SEAT

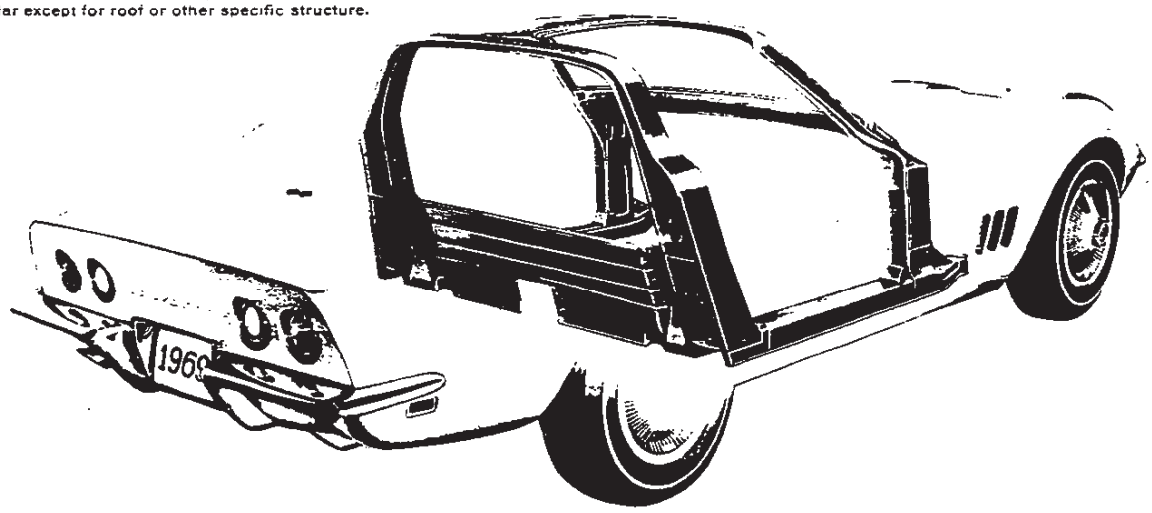
AUTO COMPASS



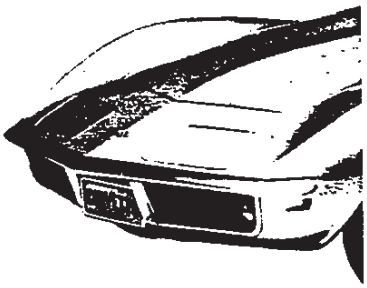
LITTER CONTAINER

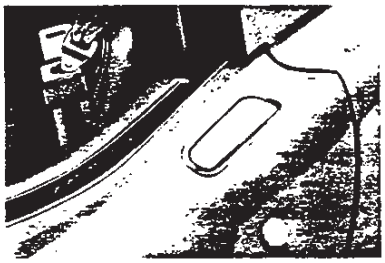
Corvette Body Features

Corvette Coupe steel-reinforced fibergiass body illustrated. Convertible model basically similar except for roof or other specific structure.

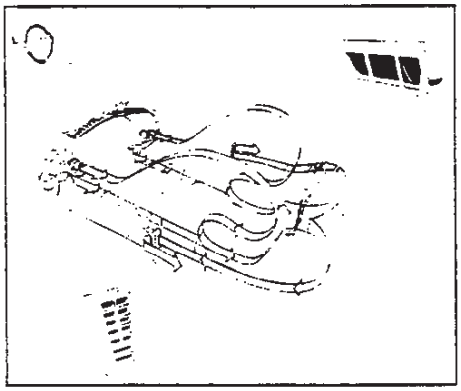


Power-operated retractable dual headlights—controlled by headlight switch on instrument panel—feature built-in washers for convenient cleaning.





Corvette concealed outside door latches.



Astro Ventilation system . . . standard on both models . . . contributes to greater passenger comfort with improved ventilation and air distribution. Pressurized outside air enters the passenger compartment through ball-type vent-ports on the instrument panel and low-level cowl side vents. All four outlets can be adjusted individually to regulate air flow. Interior air flow continues into the passenger compartment and is exhausted through pressure relief valves built into the rear deck.

Spare tire stowage compartment with key lock located in underside of body.

Coupe carpeted interior luggage compartment. Convertible similar except for folding top stowage.

Coupe rear window is easily removed and stored in rear compartment.

Coupe removable roof panels.

1969 Corvette Engine Specifications

VALVE SYSTEM	300-hp Turbo-Fire 350	350-hp Turbo-Fire 350	390-hp Turbo-Jet 427	400-hp Turbo-Jet 427	435-hp Turbo-Jet 427
Type	Valve-in-head with independent operating mechanism for each valve				
Valve guides/seats	Machined in cylinder heads		Pressed-in valve guides; seats machined in heads		
Inlet valves	Alloy steel		Alloy steel with aluminized face and head		
Exhaust valves	High alloy steel with aluminized face		High alloy steel with aluminized face and head		
Rocker arms	Pressed steel with ball and socket mounting				
Push rods	Tubular steel		Tubular steel with hardened ends		Tubular steel with hardened steel insert
Camshaft material	Wear-resistant-coated cast alloy iron				
Camshaft bearings	5—steel-backed babbitt				
Camshaft drive	Chain-driven from crankshaft				

EXHAUST SYSTEM	
Type	Dual 2.0" system
Exhaust manifold/s	*Cast alloy iron 4-port design*
Muffler design and construction	Oval reverse-flow type, rolled lock seam construction
	(A)
Resonators	None

ELECTRICAL SYSTEM		
Battery	12-volt, 63-ampere-hour energizer type	
Generator	42-ampere Delcotron diode-rectifying type with integral micro-switch regulator	
Starter	Positive-engagement high-torque type	
Distributor	Single-breaker type with combination centrifugal and vacuum advance	(B)
Ignition coil	12-volt, hermetically sealed	
Ignition wiring	Non-metallic high-tension cable, neoprene insulated	
Spark plugs	ACR 44 S	ACR 43 N

COOLING SYSTEM		
Type	Pressurized liquid system with full-length water jackets surrounding cylinder barrels	
Radiator	Cross-flow type with 15-lb. pressure cap*	
Radiator frontal area	315 sq. in.	467 sq. in.
Water pump	Centrifugal type with sealed double-row bearing	
Water pump capacity	57 gal./min.	82 gal./min.
Thermostat	Pellet type	
Fan	Temperature-controlled, 5-blade, 17.5" diameter with thermo-modulated clutch drive	
Water pump/fan drive	Single-belt drive from *crankshaft pulley*	Double-belt drive from crankshaft pulley

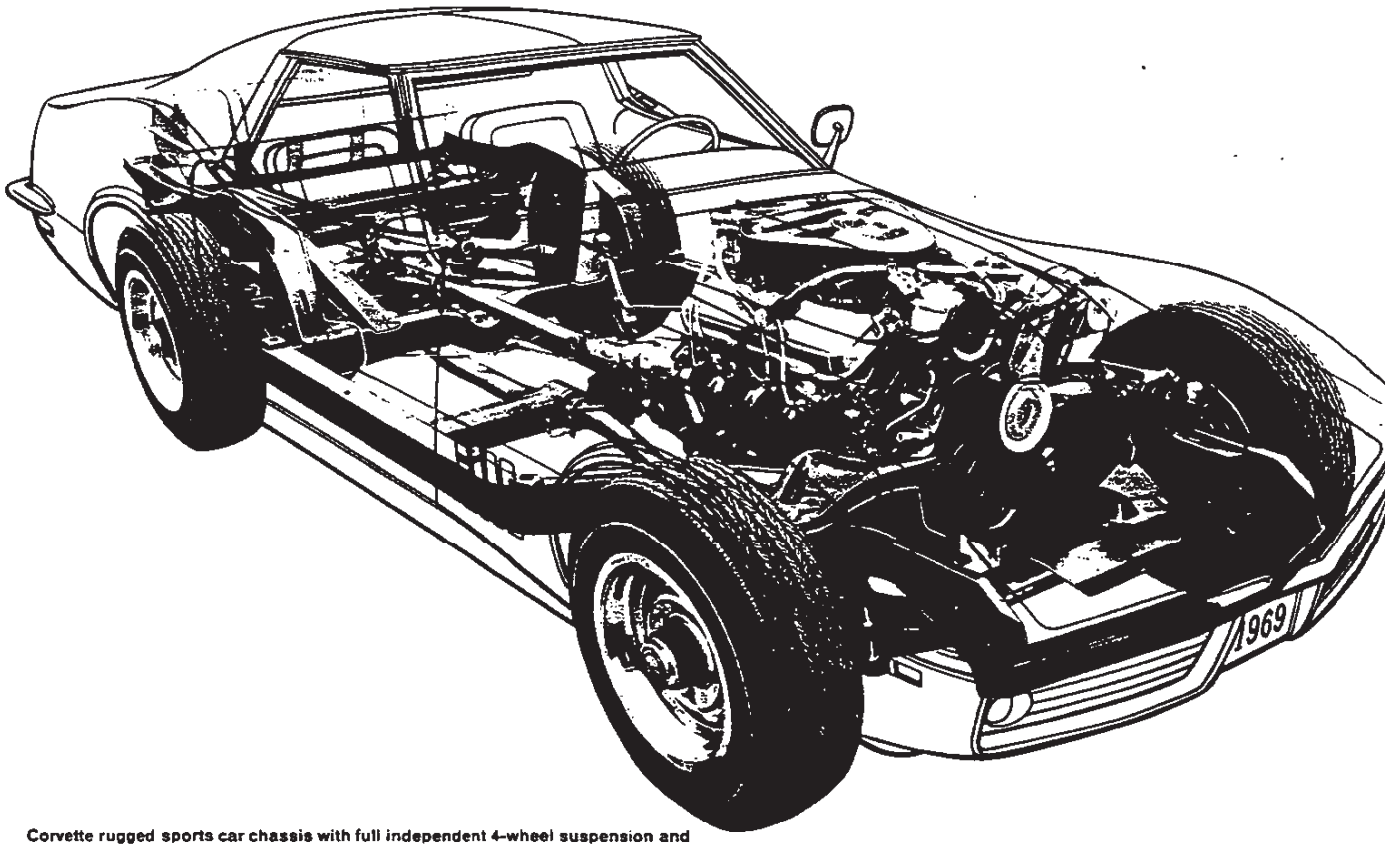
LUBRICATION SYSTEM		
Type	Controlled full-pressure system	
Oil filter	Full-flow throwaway canister type	
Oil pump	Gear type with fixed intake	
Oil pressure (normal)	30-45 p.s.i. @ 1500 r.p.m.	50-75 p.s.i. @ 2000 r.p.m.
Refill capacity (qts.)	4 quarts (5 with filter replacement)	5 quarts (6 with filter replacement)
Crankcase ventilation	Closed-positive type	

*Aluminum cross-flow type radiator with 350-cu.-in. V8s; copper-brass with 427-cu.-in. V8s.

(A) Right side muffler: stainless steel heads and body with aluminized cover. Left side muffler: aluminized heads, interior components and cover. Stainless steel tailpipes.

(B) Full-Transistor Ignition System (RPO K66) required.

Corvette Chassis Specifications



Corvette rugged sports car chassis with full independent 4-wheel suspension and rigid all-welded ladder-type frame.

Frame

All-welded 5-crossmember ladder-type frame with trapezoidal-shaped sidemembers framing passenger area and extending forward forming engine support. Box-section design sidemembers from kickup rearward support axle and suspension.

Front Suspension

Independent coil spring spherical joint suspension with concentric springs and shock absorbers between frame and lower control arms. Built-in anti-dive control and rubber-bushed link-type stabilizer bar. Spherical joints protected by special positive-sealing formed-rubber boots.

Rear Suspension

Independent rear suspension with frame-mounted differential unit, double universal jointed tubular axles, and transverse multi-leaf spring. Differential carrier is mounted to frame by rubber-isolated crossmember. Nine-element transverse leaf spring with hardened and tempered chrome carbon steel leaves bolts solidly to differential carrier and attaches to radius arms with rubber-isolated floating rods. Suspension design permits spring to function as springing member only. Lateral and longitudinal forces imposed by braking, acceleration, and cornering are controlled by radius rods attached to frame-mounted differential and suspension control arms.

Shock Absorbers

Direct, double-acting, sealed-unit hydraulic shock absorbers with special aeration-preventing freon bag in fluid reservoir. Front shock absorbers concentrically located within coil springs and attached to lower control arms and frame crossmember. Rear shock absorbers mounted between wheel spindle supports and frame.

Steering System

Balanced system with relay-type linkage, low-friction Ball-Nut steering gear and energy-absorbing steering column designed Jointed, cushioned coupling at steering gear shaft to help cushion road shock and vibration. Overall steering ratio: standard steering—20.2:1 (linkage may be adjusted for special fast overall steering ratio—17.6:1); power steering—17.6:1. Steering wheel diameter—16 inches. Steering wheel turns stop to stop: standard 3.4, with power steering and special fast ratio—2.9.

Body Structure

- Corrosion-proof fiberglass body . . . lightweight, high-strength, impact-resistant fiberglass construction with fabricated-in steel structural members.
- Integrally bonded cowl structure formed of air ventilation plenum chambers, dash panel and one-piece underbody structure.
- Steel-reinforced body sills, door hinge pillars and lock pillars, plus lateral steel crossmember integrating front pillars. Coupe roof structure features supporting members to enclose the passenger compartment with protective steel framing.
- Contoured windshield header (except convertible)
- *Double-panel door construction with steel door lock and hinge reinforcements.*
- Convertible top folds for stowage beneath double-locking spring-loaded cover panel.
- Double-panel reinforced front-hinged hood with telescoping automatic latch support.
- Roomy inside luggage compartment behind front seats with concealed stowage space for tools and small valuables. Carpeted floor panels in forward end of compartment bridge *drive-line tunnel forming flat load area.* Vertical riser protects seatbacks from possible luggage damage.

Body Mounting

- Coupe body attached to frame at six points with special bolts and double-cushioned rubber mounts. Convertible body is solidly attached to the frame at eight points with four rubber and four hard fiber-composition mounts and special bolts.

Weathersealing

- Flush-mounted windshield bonded to body for more positive sealing.
- Convertible hardtop rear window formed rubber seals.
- Positive-sealing formed rubber Convertible folding top and hardtop seals at windshield, door-glass edges, and at body mounting surfaces.
- Double-sealing removable roof panel weatherseals on Coupe.
- Formed rubber Convertible door weatherseals.

Plus all these quality features

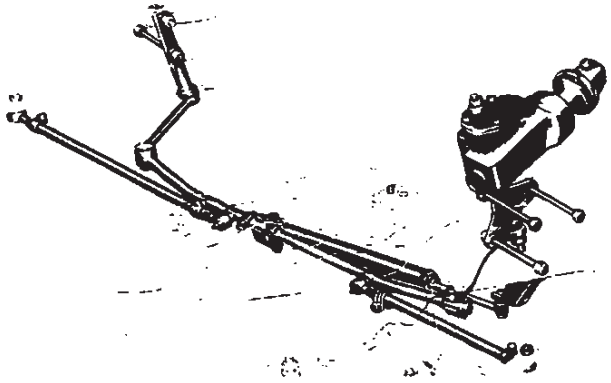
- Energy-absorbing instrument panel with padded upper surface
- Padded sun visors
- *Outside rearview mirror*
- Back-up lights
- Energy-absorbing steering column and wheel
- Lane-change feature incorporated in direction signal
- Wide inside day-night mirror with deflecting base
- Side marker lights—front and rear
- Soft, low-profile window control knobs
- Head restraints
- Seat belt retractors
- Passenger-guard door locks
- Shoulder belts on Coupe
- Thick-laminate windshield
- Removable roof panels and rear window for Coupe
- Door handles shielded by armrests
- Dual-speed electric windshield wipers
- Windshield washer
- Reduced-glare instrument panel and windshield wiper arms and blades
- Safety door latches and hinges
- Hide-A-Way windshield wipers with built-in washer nozzles concealed beneath power-operated cowl panel
- Four-way hazard warning flasher
- Power-operated fail-safe concealed headlights
- Headlight washers
- High-level ventilation system
- Astro Ventilation system and full door-glass styling
- Built-in blended-air heater and defroster system with vacuum-powered air control
- Magic-Mirror acrylic lacquer finish
- Curved solid tempered plate glass side windows
- Tempered solid plate glass Coupe rear window
- Two-key lock system with keyless door locking
- Seat belts with pushbutton buckles
- Concealed outside door handles
- Weather-shielded key locks
- Foam and fiber padded vinyl headlining
- Rear compartment stowage wells
- Scuff-resistant plastic cowl side panels
- Full-view instrument panel and console with aircraft-type instrumentation

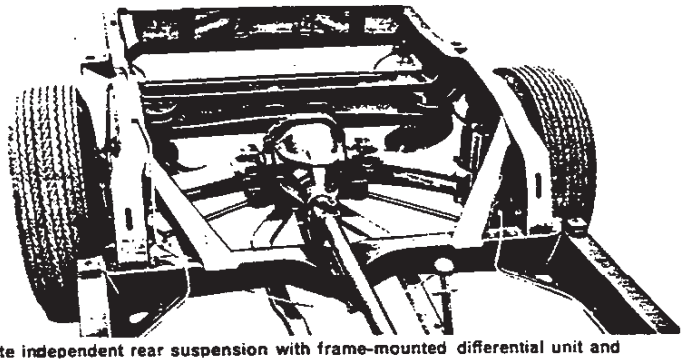
1969 Corvette Specifications

EXTERIOR DIMENSIONS	COUPE	CONVERTIBLE
Wheelbase	98.0	98.0
Length (overall)	182.5	182.5
Width (overall)	69.0	69.0
Height (loaded)	47.8	47.9
Front Tread	58.7	58.7
Rear Tread	59.4	59.4
Road Clearance (min.)	4.9	4.9
INTERIOR ROOMINESS		
Head Room	36.2	37.1
Leg Room	43.0	43.0
Hip Room	48.8	48.8
Shoulder Room	46.9	46.9
Entrance Height	29.0	29.0
LUGGAGE COMPARTMENT		
Total Volume (cu. ft.)	N.A.	N.A.
Usable Luggage Space (cu. ft.)	N.A.	N.A.
GLASS AREA		
Windshield Glass Area (sq. in.)	N.A.	N.A.
Rear Window Glass Area (sq. in.)	N.A.	N.A.
Total Glass Area (sq. in.)	N.A.	N.A.
TIRE SIZE & STEERING SPECIFICATIONS		
Standard Tire Size	F70 x 15	F70 x 15
Turning Diameter—Curb-to-Curb (ft.)	39.9	39.9
Turning Diameter—Wall-to-Wall (ft.)	N.A.	N.A.
Steering Ratio—Standard (overall)	20.2:1	20.2:1
Steering Ratio—Special Fast Ratio (overall)	17.6:1	17.6:1
Steering Ratio—Power (overall)	17.6:1	17.6:1
FUEL CAPACITY & WEIGHT		
Rated Fuel Tank Capacity (gallons)	20	20
Curb weight—Standard V8 (lbs.)	3245	3250
Shipping weight—Standard V8 (lbs.)	3140	3145

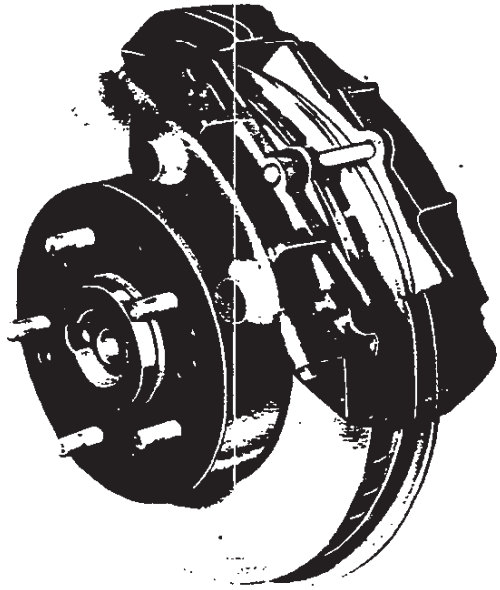
N.A.—Not availal

Relay type steering linkage and low-friction Ball-Race steering gear with rubber-cushioned jointed steering gear shaft coupling.

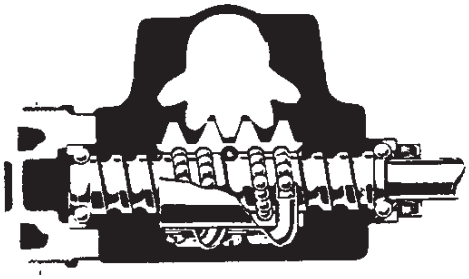




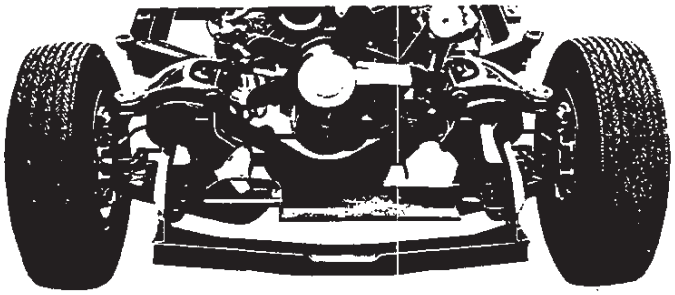
Corvette independent rear suspension with frame-mounted differential unit and nine-element transverse leaf spring.



Self-adjusting Sport-Master caliper-type disc brake.



Ball-Race steering gear.



Corvette independent coil spring spherical joint front suspension with stabilizer bar.

Drive Shaft

Balanced single-unit tubular steel drive shaft with universal joints joining shaft ends to transmission and axle. Heavier-duty drive shaft and universal joints included with Turbo Hydra-Matic transmission.

Rear Axle

Hypoid gear design with 8.375" diameter ring gear and cast iron housing. See Power Teams section for axle ratios available.

Brakes

Self-adjusting 4-wheel caliper-type disc brake system with dual master cylinder and warning light on instrument panel that checks on the parking brake and monitors hydraulic pressure balance when the brakes are applied. Brake disc diameter—11.75". Lining size (length x width x thickness)—5.96" x 2.21" x .41". Total lining area—81.7 sq. in. Woven asbestos composition lining secured to brake shoes. Cast iron brake discs with radial internal fins for rapid heat dissipation. Power Brakes (RPO J50) available. Independent mechanical parking brake system—6.5" diameter internal drum with two shoes and riveted linings at each rear wheel. Console-mounted parking brake control.

Wheels and Tires

Welded steel 15" wheels with brake cooling slots. Rim width—8". F70 x 15 special wide-oval tires standard. All wheels and tires statically balanced for smooth, quiet operation and long tire life. See Options and Prices section for other tires available.

SPECIAL CHASSIS EQUIPMENT—For complete list of special options see Options and Prices section.

HISTORY OF THE 1969 ZL-1

The ZL-1 came off the General Motors assembly line in June, 1969. It was originally ordered as a company car by St. Louis Corvette Plant Engineer George H. Heberling. Mr. Heberling left the company in December, 1969. Heberling's replacement, however, was not the "sports car" type and had the car put up for sale through General Motors at the zone level.

The ZL-1 went to Hechler Chevrolet in Richmond, Virginia.

John Zagos purchased the ZL-1 from Hechler Chevrolet in 1970. Zagos drove the car furiously and dropped a valve the first night he had the car. Zagos returned the car to Hechler for a warranty repair. It was at this time that the engine mysteriously disappeared. Zagos took the replacement engine and installed it in his drag boat. The ZL-1, less engine, sat for almost two years outside Zagos' gas station, before being sold back to Hechler Chevrolet. The car had several owners in the Richmond area before being purchased by Wayne Walker (fourth owner).

In 1976, Wayne Walker, owner of ZIP Products, Mechanicsville, Virginia, had researched the ZL-1 and was aware of the car's value. He began an intensive search for the car and found it just two blocks from his office. Walker purchased the car, and through his friend, John Zagos, acquired some of the original engine pieces and eventually located the original engine block. Walker restored the car completely to factory specifications, had the original engine rebuilt and dyno tested and then took the car to Houston, Texas, for a concours paint job. Wayne Walker's efforts paid off when the ZL-1 was awarded the Bloomington Gold Certificate at the 1981 Bloomington, Ilinois Corvette Coral.

In January, 1986, Wayne Walker sold the car to Edward L. Mueller of Franklin Lakes, New Jersey. Mueller entered the car in the 1988 Bloomington Gold. In September, 1988, Mueller sold the car to Craig Priest, owner of The Vette Smith, in Miami, Florida. Later that year, Richard Joseph Lynn purchased the corvette from Craig Priest. The Government issued its order for warrant of arrest of the corvette in May, 1990.

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GENERAL

MODEL IDENTIFICATION

CORVETTE 19437 SPORT COUPE

MODEL 19437 2-DOOR SPORT COUPE, 2-PASSENGER

CORVETTE 19467 CONVERTIBLE

MODEL 19467 2-DOOR CONVERTIBLE, 2-PASSENGER

SERIAL NUMBERS AND IDENTIFICATION

ONLY BASIC DESIGNATIONS SHOWN

VEHICLE SERIAL NUMBER

8-Cylinder Example:

Model	Model Year 1969	Assembly Plant (St. Louis)	Unit Number (25th unit)
19437	9	S	700025

Thus: The 25th model built at St. Louis would be serial number 194379S700025

ASSEMBLY PLANTS

S - St. Louis

Starting unit number ---------- 700001 and up at each assembly plant regardless of series

Location ---------- Stamped on plate attached to left hand windshield pillar

TRANSMISSION IDENTIFICATION

Example: RJS9E01D

Type Designation	Source Designation	Model Year 1969	Production* Month & Date
RJ	S(Saginaw)	9	E01D*

RJ	3-Speed	V-8 engine	S - Saginaw
WE	4-Speed	V-8 engine	R - Saginaw P - Muncie
--	Turbo Hydra-Matic	V-8 engine	CC - Ypsilanti

Location:

3-Speed & 4-speed ---------- Stamped on right hand side of the case in the upper forward corner.

4-Speed ---------- Stamped on the top right side of the case.

Turbo Hydra-Matic ---------- Nameplate tag on right hand side of the case.

*-Month: E denotes May; 01 denotes 1st day.

-Alpha Characters used in identifying the Calendar Month

A - January	D - April	K - July	R - October
B - February	E - May	M - August	S - November
C - March	H - June	P - September	T - December

*-The letter "D" or "N" following the date numerals indicates day or night shift.

ENGINE IDENTIFICATION

Example: P1210HE

Source Designation	Production* Month & Date	Type Designation
F(Flint)	1210	HY

350 Cubic Inch 8-Cylinder

HY - Regular engine, 3-speed & 4-speed, 4-bbl. carb.
HZ - Regular engine, Turbo Hydra-Matic

350 Cubic Inch 8-Cylinder (RPO-L46)

HW - Optional engine, 4-speed, 4-bbl. carb.

427 Cubic Inch 8-Cylinder (RPO-L36)

LM - Optional engine, 4-speed, 4-bbl. carb.
LL - Optional engine, Turbo Hydra-Matic

427 Cubic Inch 8-Cylinder (RPO-L68)

LQ - Optional engine, 4-speed, 3 x 2-bbl. carbs.
LN - Optional engine, Turbo Hydra-Matic

427 Cubic Inch 8-Cylinder (RPO-L71)

LR - Optional engine, 4-speed, 3 x 2-bbl. carbs. Mechanical Lifters.
LX - Optional engine, Turbo Hydra-Matic

Location:

8-Cylinder engine ---------- Stamped on top front of RH bank of cylinder and case.

* - Month: December, 12; 10th day of December, 10.

REAR AXLE IDENTIFICATION

Example: AK0212W

Type Designation	Production* Month & Date	Source¢ Designation
AK	0212	W (Warren)

Regular axles

AK ----- 3.36 ---------- 3-speed, 4-speed transmission
AS ----- 3.70 ---------- 4-speed transmission

Positraction axles

AL ----- 3.08 --- 3-speed, 4-speed, & Turbo Hydra-Matic transmission
AM ----- 3.36 ---------- 3-speed, 4-speed transmission
AN ----- 3.55 ---------- 4-speed transmission
AO ----- 3.70 ---------- 4-speed transmission
AP ----- 4.11 ---------- 4-speed transmission
AY ----- 2.73 -------- Turbo Hydra-Matic transmission

Location ---------- Bottom left or right of axle tube adjacent to carrier housing

* - Month: February, 02; 12th day of February, 12
¢ - G-Gear & Axle, B-Buffalo, W-Warren.

REGULAR EQUIPMENT—EXTERIOR

STANDARD EXTERIOR EQUIPMENT

		Aero Coupe 19457	Convertible 19467
FRONT	Radiator Grille - Plastic, Black Painted	X	X
	Parking Lamps - Amber Lens	X	X
	License Plate Frame, Bright	X	X
	Retractable Headlamps and Washers, Painted Bezels	X	X
	Hood Emblem, Cross-Flags	X	X
	Windshield Reveal Moldings, Bright and Painted	X	X
	Concealed Windshield Wipers with Integral Washers in Wiper Arms	X	X
	Front Bumper and Grille Guards, Bright	X	X
SIDE	Front Fender and Rear Quarter Marker Lamps	X	X
	Front Fender Louvers	X	X
	Front Fender Nameplate, "Stingray" Script	X	X
	Outside Rear View Mirror	X	X
	Rocker Panel Molding, Bright and Painted	X	X
	Wheel Trim Ring and Hub Cap	X	X
	Roof Drip Molding - Bright	X	--
	Removable Roof Panels	X	--
	Press-Flap Door Opening Handles - Bright	X	X
	Key Locks - Bright	X	X
	Door Belt Bead Molding - Bright	X	X
REAR	Rear End Panel Block Letters "Corvette"	X	X
	Single Outboard Tail Lamps	X	X
	Single Inboard Back-Up Lamps and Reflex	X	X
	Gas Tank Filler Door Emblem, Crossed Flags	X	X
	License Plate Frame and Compartment Bezel, Bright	X	X
	Exhaust Pipe Extensions and Bezels, Bright	X	X
	Air Outlet Grilles, Painted	X	X
	Rear Bumper and Integral Guards	X	X

STANDARD INTERIOR EQUIPMENT

		Astro Coupe 19437	Convertible 19467
ROOF AND PILLARS	Molded Headlining, Padded with Sun Visor Pockets	X	--
	Windshield Pillars, Padded and Painted	X	X
	Sunshades, Padded with Brushed Hardware	X	X
	Rear View Mirror, Padded with Brushed Finish Support	X	X
	Roof Center Strut, Padded with Bright Hardware	X	--
	Top Header Release Latches, Bright	X	--
	Removable Rear Window Frame, Bright	X	--
	Door Jamb Light Switch	X	X
SEATS AND FLOOR COVERING	Bucket Seats — All Vinyl with Head Restraints	X	X
	Passenger and Stowage Compartment Floor, Carpet with Sound Blanket	X	X
	Seat Back Latches, Bright	X	X
	Seat Adjuster Handle, Bright	X	X
	Seat Belts (2), Bright Buckles	X	X
	Shoulder Harness and Retractors (Positive Control)	X	--
	Floor Stowage Compartment — 3-Doors, Carpeted	X	X
	Floor Stowage Compartment Door Trim Rings and Push Buttons — Painted — Bright	X	X
	Body Sill Plates — Bright and Painted	X	X
	Stowage Compartment Rear Wall Courtesy Lamp	X	X
	Vinyl Roof Panel Stowage Bag and Tie-Down Straps, Color-Keyed	X	--
DOOR AND QUARTER PANEL	Molded Door Trim Panel with Built-In Armrest	X	X
	Door Assist Handle — Padded Vinyl	X	X
	Door Remote Control Handle — Chrome and Painted	X	X
	Door Locking Knobs and Escutcheons — Chrome and Painted	X	X
	Door Trim Panel Padded Applique	X	X
	Door Locks — Free Wheeling	X	X
	Window Control Handle — Bright, Plastic Knob	X	X
INSTRUMENT PANEL, CONSOLE AND STEERING WHEEL	Instrument Panel Pad — Trim Color	X	X
	160 MPH Speedometer with Trip-O-Dometer	X	X
	7000 RPM Tachometer	X	X
	Headlamp Rotation and Main Light Switch	X	X
	Windshield Washer and Wiper Control — Black Painted	X	X
	"Astro-Ventilation" Air Outlets and Control Knobs — Bright	X	X
	Instrument Panel Map Pocket — R. H.	X	X
	Electric Clock	X	X
	Ammeter, Temperature, Fuel and Oil Pressure Gauges	X	X
	Headlamp Hi-Beam Indicator	X	X
	Seat Belt, Door Ajar and Headlamp Indicators	X	X
	Hood Release Lever — Black Painted	X	X
	Lamp Monitoring Indicators	X	X
	Rear Compartment Glove Box with Lamp — Carpeted Door	X	X
	Ash Tray and Lighter	X	X
	Parking Brake Warning Light	X	X
	Heater Controls — Thumb Wheel	X	X
	Air Vent Control Knobs — Black Painted, White Letters "Close"	X	X
	Floor Center Console and Trim Plate — Padded, Morocco Finish	X	X
	Floor Center Console Trim Plate "Crossed Flags" Emblem and Engine I.D.	X	X
	Parking Brake Lever — Black — Bright	X	X
	15" Black Vinyl Steering Wheel, Bright Trim	X	X
	Horn Button Cap — Painted, Grained	X	X
	Horn Button Cap Emblem — Bright, Painted	X	X
	Hazard Warning Switch — Bright	X	X
	Turn Signal Indicators and Control Lever — Bright, Painted	X	X
	Steering Column Ignition Switch and Lock — 4-Position Painted	X	X
	Center Cluster Padded Surface, Morocco Finish	X	X
	Center Cluster "Corvette" Nameplate	X	X
	Floor Rear Console — Vinyl Grain Covered	X	X
GLASS	Windshield, Laminated Safety Plate	X	X
	Door Windows with "Astro-Ventilation" Monogram, Safety Solid Plate	X	X
	Removable Rear Window, Safety Solid Plate	X	--
	Rear Window, Vinyl Plastic	--	X

REGULAR PRODUCTION OPTIONS AND DEALER INSTALLED ACCESSORIES

Equipment	RPO / ACC		Models
Air conditioner, Four-Season	C60		19400
Axle ratios			
2.73 ratio	*		19400
3.08 ratio	*		19400
3.36 ratio	*		19400
3.55 ratio	*		19400
3.70 ratio	*		19400
4.11 ratio	*		19400
4.56 ratio	*		19400
Positraction (all ratios)	G81		19400
Brakes, heavy duty	J56		19400
Brakes, power	J50		19400
Carrier, deck lid luggage		ACC	19467
Compass		ACC	19400
Defroster, rear window	C50		19400
Emergency road kit		ACC	19400
Engines			
Aluminum cylinder heads	L89		19400
390 hp Turbo-Jet 427 Cu.In. V-8	L36		19400
400 hp Turbo-Jet 427 Cu.In. V-8	L68		19400
350 hp Turbo-Fire 350 cu.in. V-8	L46		19400
435 hp Turbo-Jet 427 Cu.In. V-8	L71		19400
Engine block heater	K05		19400
Exhaust system, side-mounted	N14		19400
Fire extinguisher		ACC	19400
Fire extinguisher refill cartridge		ACC	19400
Floor mats, clear vinyl twin		ACC	19400
Front fender lower trim grille	TJ2		19400
Glass, tinted window	A01		19400
Horn alarm system	UA6		19400
Ignition, full-transistor	K66		19400
Lock, gas cap		ACC	19400
Mirror, visor vanity		ACC	19400
Radio and rear antenna, push-button AM-FM	U69	ACC	19400
Radio antenna, rear fixed height		ACC	19400
Roof cover, vinyl	C08		19467
Seat, child restraint		ACC	19400
Shoulder harness, deluxe	A85		19400
Speed warning indicator	U15		19400
Spotlight, hand portable		ACC	19400
Steering, power	N40		19400
Steering wheel, tilt and telescopic	N37		19400
Stereo-multiplex	U79		19400
Suspension, special performance front and rear	F41		19400
Tires			
F70-15-4 pr tire-special nylon-red stripe	PT6		19400
F70-15-4 pr tire-special nylon-white stripe	PT7		19400
Tissue dispenser		ACC	19400
Top, auxiliary	C07		19467
Top, folding convertible	C05		19467
Transmissions			
4-speed	M20		19400
4-speed, close ratio	M21		19400
3-speed automatic, Turbo Hydra-Matic	M40		19400
Heavy duty 4-speed transmission	M22		19400
Wheel covers, deluxe	P02	ACC	19400
Windows, power	A31		19400

*Positraction only.

FOUR-SEASON (RPO C60)

Heater integrated; manually controlled by two thumb wheel controls on instrument control panel, plus a 4-speed fan switch. Left thumb wheel uses vacuum supply and electrical switches to operate mode doors and compressor. Right thumb wheel uses bowden cable to temperature door in selector duct assembly.

BASIC COMPONENTS

Evaporator, blower, condenser, receiver-dehydrator, refrigerant (freon) tank, air intake assembly and duct assembly for both systems.

EQUIPMENT (Used in addition to or in place of base equipment)

CHASSIS

Front and Rear Springs	Heavy duty
Rear Axle Ratio - Refer to Power Trains Section	

POWER TRAINS

Fan Blade	7 blade
Crankshaft Pulley	Dual
Water Pump & Fan Pulley	Dual
Compressor & Crankshaft Belt	One
Generator	61 Ampere

DIMENSIONS AND WEIGHTS

INTERIOR DIMENSIONS

FRONT COMPARTMENT

CODE	DESCRIPTION	19437 COUPE	19467 SOFT TOP	19467 HARDTOP
H5	H point to ground			
H30	H point to heel point		6.5	
H37	Headlining to roof height	0.9	0.7	
H54	D point to tunnel			
H58	H point rise		0.4	
H61	Effective headroom	36.2	37.1	36.0
H65	D point differential, side to center			
H67	Depressed floor covering thickness		0.3	
H70	Body zero line to H point (vert.)		7.0	
L17	H point travel		4.5	
L31	Body zero line to H point (horiz.)		44.7	
L34	Maximum effective leg room - accelerator		43.0	
L40	Back angle (degrees)		33.0	
L42	Hip angle (degrees)		107.0	
L44	Knee angle (degrees)		138.0	
L46	Foot angle (degrees)		88.0	
L53	H point to accelerator floor point		36.1	

SEAT AND ENTRANCE

H3	Seat chair height		8.8	
H11	Entrance height		29.0	
H26	Interior body height, M/M @ car centerline	33.4		33.6
H27	Interior body, M/M @ C/LO	40.0		40.2
H32	Seat cushion deflection		2.2	
H50	Upper body opening to ground		43.6	
W1	Hat room			
W3	Shoulder room		46.9	
W5	Hip room		48.8	
W16	Seat width (each seat)		20.0	
L14	Seat back thickness		2.3	
L18	Entrance foot clearance		13.2	

VISION AND CONTROL

H6	H point to W/S bottom DLO	19.8
H13	Steering wheel thigh clearance	4.2
H18	Steering column angle (degrees) horizontal	14.4
H25	Belt height	17.4
H49	H point to top of steering wheel	1.5
H64	H point to W/S upper DLO	
W7	Steering wheel center to car centerline	12.8
W9	Steering wheel maximum O.D.	15.0
W122	Tumble-home (degrees)	62.3
L7	Steering wheel torso clearance	12.4
L13	Brake pedal knee clearance	24.5
L49	H point to W/S upper DLO	
L52	Brake pedal to accelerator	3.1

LENGTHS

CODE	DESCRIPTION	19437 COUPE	19467 SOFT TOP	19467 HARDTOP
L101	Wheelbase	98.0		
L102	Tire size (standard)	F70-15		
L103	Overall length	182.1		
L104	Overhang - front	40.6		
L105	Overhang - rear	43.9		
----	Overall length - less bumpers			
L123	Body upper srucure length at car C/L	55.6		
L127	Body O line to C/L of rear wheels	72.0		
L128	Hood length at centerline	77.5		
L129	Deck length @ car C/L	46.7		
L130	Body zero line to W/S cowl point	13.1		

WIDTHS

W101	Tread - front	58.7		
W102	Tread - rear	59.4		
W103	Maximum overall width of car (W106)	69.0		
W106	Front fender overall width	69.0		
W107	Rear fender overall width	68.8		
W120	Overall car width, front doors open	134.0		

HEIGHTS

H101	Overall height (design)	47.8	47.9
----	Overall height (curb)		
H102	Front bumper to ground		
H104	Rear bumper to ground		
H111	Rocker panel to ground - rear	6.7	
H112	Rocker panel to ground - front	6.7	
H114	Hood at rear to ground		
H115	Step height - front (design)	13.1	
H122	W/S slope angle (degrees)	32.6	
H125	Headlamp to ground		
H126	Tail lamp to ground		
H130	Step height - front (curb)		
H132	Bottom of door to ground - open		
H133	Bottom of door to ground - closed		
H136	Body O line to ground - front	7.6	
H137	Body O line to ground - rear	7.6	
H158	Roof thickness	3.9	
H159	DLO height	11.9	
H160	Body thickness	24.4	

CLEARANCES

H106	Angle of approach (degrees)	22.0
H107	Angle of departure (degrees)	21.0
H147	Ramp breakover angle (degrees)	22.0
H148	Front suspension to ground	
H149	Oil pan to ground	
H150	Flywheel housing to ground	
H151	Frame to ground	
H152	Exhaust system to ground	
H153	Rear axle to ground	
H154	Fuel tank to ground	
H155	Tire well to ground	
H156	Minimum ground clearance (H155)	

VEHICLE WEIGHTS

CORVETTE

Model Symbol	VEHICLE TYPE Description	SHIPPING WEIGHT From	Rear	Total	CURB WEIGHT From	Rear	Total
19437	2-Door Sport Coupe	1600	1540	3140	1575	1670	3245
19467	2-Door Convertible	1575	1570	3145	1545	1705	3250

SHIPPING WEIGHT: . Weight of basic vehicle with regular equipment and grease and oil. Weight of gasoline and water not included.

CURB WEIGHT: Weight of empty vehicle ready to drive. Shipping weight plus the weight of gasoline and water.

For total shipping, and curb, weights of vehicles equipped with the following options, add to, or deduct from, the base vehicle weight (lbs).

RPO	Option		Weight
A31	Power Windows		+ 10
C07	Auxiliary top	W/folding top	+ 52
		less folding top	+ 13
C60	Air conditioning		+ 95
J50	Power brakes		+ 10
J56	Heavy duty brakes		+ 4
K66	Transistor ignition		+ 2
L36	427 Cu.In. V-8 Engine		+ 157
L46	350 Cu.In. V-8 Engine		+ 1
L68	427 Cu.In. V-8 Engine		+ 11
L71	427 Cu.In. V-8 Engine		+ 177
L89	Aluminum cylinder heads		- 73
M20	4-Speed transmission		- 4
M21	4-Speed transmission (C.R.)		- 4
M22	4-Speed transmission (H.D.)		- 3
M40	Turbo Hydra-Matic transmission		+ 62
N14	Side mounted dual exhaust		- 30
N37	Steering wheel, tilt and telescopic		+ 11
N40	Power steering		+ 26
P02	Wheel trim covers		+ 18
U69	Radio, AM/FM push button		+ 16
U79	Radio stereo equipment		+ 6
UA6	Horn alarm system		+ 3

BODY

EXTERIOR PAINT PROCESS

1. PRIMARY SANDING. All body panels and bonded joints that receive acrylic lacquer are dry sanded to prepare surfaces for painting. A filler material, called putty rub, is applied to the entire body to fill minor imperfections.

2. PRIMER. Two coats of primer are applied -- the first red and the second gray -- and are oven baked for 60 minutes at 280 degrees F.

3. WET SANDING. The body is wet sanded to provide a smooth surface for the sealers. Most of the gray primer coat is removed with the red primer acting as a depth signal for the sanding operation. The body is dried to remove all moisture.

4. SEALER. One coat of sealer and one coat of color acrylic lacquer are applied and baked.

5. DRY SANDING. The body is dry sanded to prepare surfaces for the final acrylic lacquer.

6. LACQUERING. Three coats of acrylic lacquer are sprayed on the body to build up the required paint thickness. The paint is "rested" for eight minutes to permit it to partially set up and to remove excess volatile paint vehicle.

7. INITIAL BAKING. The body is oven baked for 30 minutes at 140 degrees F to harden the paint which permits the subsequent operation. Small interior and exterior parts are painted to complete the body paint schedule.

8. FINAL BAKING. To assure a durable, hard, high luster finish the lacquer is oven baked for 45 minutes at 250 degrees F. Reheating the lacquer permits the paint film to soften and allows surface blemishes and sanding scratches to disappear during the thermo-reflow process.

9. FINAL SANDING AND POLISHING. The body is lightly oil sanded and polished to bring painted surfaces to a high luster finish.

CORVETTE

SERIES	MODEL		TRIM	INTERIOR COLORS AND RPO NUMBERS					
	37	67		Black	Saddle	Red	Blue	Green	Gun Metal
19400	X	X	Vinyl	Prod.	420	407	411	427	416
	X	X	Leather	402	421	408	412	428	417

RPO	EXTERIOR COLOR						
900	Tuxedo Black	X	X	X	X	X	X
972	Can-Am White	X	X	X	X	X	X
974	Monza Red	X	X	X			
976	Le Mans Blue	X			X		
990	Hugger Orange	X					
983	Fathom Green	X	X			X	
984	Daytona Yellow	X					
986	Cortez Silver	X	X		X	X	X
988	Burgundy Maroon	X	X				
980	Riverside Gold	X					

Convertible folding top colors:
Black - Production
White - RPO
Beige - RPO

RPO C08 Vinyl Roof Color - removable hardtop only:
Black

BODY CONSTRUCTION AND GLASS AREA

GENERAL
Construction ---------- Uniconstruction: fiber glass reinforced plastic body backboned by a steel cage outlining the passenger compartment. Principal members — underbody, front and rear end assemblies, dash panel and hinge pillars are bonded, riveted, or bolted together and to each other. Hood is plastic with bonded plastic reinforcement. Coupe: two removable roof panels and removable rear window.

DOORS AND LOCKS
Construction ---------- Plastic, double paneled, reinforced with steel at hinge and lock locations. Front hinged.
Door handles ---------- Press-flap handles with fork-type latches. Inside door locking knob on each door, free-wheeling 2-position inside door handles.

HOOD
Operation ---------- Internal release lever. Front hinged with telescoping link on right side. Ratchet-type lock for hold open.

VENTILATION
Type ---------- "Saddlebag" cowl top air inlets channel air to cowl side kick panel outlets controlled by bowden cable and slide type levers mounted in instrument panel center console. Water drainage at base of "saddlebag" plenum chambers.

SEATS
Type and construction ---------- Bucket; leather grained vinyl covering over polyurethane padding.

WINDSHIELD WIPERS
Type ----- Concealed, dual, two-speed, electric vacuum operated cowl panel; integral washer provided.

HEADLIGHTS
Type ---------- Vacuum operated, retractable with washers.

SPARE TIRE
Location ---------- In well under fuel tank; accessible from underside of car. Cover with key lock provided.

TOOLS
Type ---------- Scissors jack, and combination jack handle and lug wrench.
Stowage ---------- In well in luggage area directly behind passenger seat; carpeted door over well.

BODY GLASS VISIBILITY AREA

	MODELS	
LOCATION	37	67
Windshield		
Front door window		
Rear quarter window		
Back window		
Total area (sq.in.)		

CHASSIS

FRAME AND FRONT SUSPENSION

FRAME
Description ---------- All welded, full length, ladder constructed frame with 5 cross-members. Side rails and intermediate cross-members box section; front crossmember box girder section. Eight body mounting points.

FRONT SUSPENSION
Description ---------- Independent, SLA type, coil springs with center mounted shock absorbers, spherical joint steering knuckle pivots.
Wheel trave (design)
Total ---------- 7.84
Jounce ---------- Coupe 3.82 Convertible 3.97
Rebound ---------- Coupe 4.02 Convertible 3.87
Wheel to spring, travel ratio ---------- 1.63

CONTROL ARMS
Description ---------- Reinforced steel stamping with pre-loaded steel encased rubber bushings at pivot.

STEERING KNUCKLES
Description ---------- Forged steel, with integral brake caliper mounting pads and detachable steering knuckle arm
Spindle diameters
Inner bearing ---------- 1.2493-1.2498
Outer bearing ---------- .7492-.7497
Spindle thread size ---------- 3/4-20 NEF-3 (modified)
Wheel bearings
Type ---------- Taper roller

SPHERICAL JOINTS
Type ---------- Ball stud
Upper ---------- Compression
Lower ---------- Compression
Bearing surfaces
Upper ---------- Teflon-coated phenolic
Lower ---------- Teflon-coated phenolic

SHOCK ABSORBERS
Type ---------- Direct, double-acting, hydraulic
Piston diameter ---------- 1.00

STABILIZER BAR
Type ---------- Link
Material ---------- HR steel
Diameter ---------- 350 V-8, .750; 427 V-8, .9375
Bushing material ---------- Rubber

FRONT WHEEL ALIGNMENT (CURB)
Camber (degrees) ---------- P1/4 to P1-1/4
Caster (degrees) ---------- P1/2 to P1-1/2
Toe-in (total) ---------- 3/32 to 5/32
Steering Axis Inclination (degrees) ---------- 6-1/2 to 7-1/2

GENERAL SUSPENSION PROVISIONS
Car leveling ---------- Front stabilizer bar
Anti-dive control --- Angle of front upper control arm

FRONT SPRINGS

Part Number	Ref.	Type	Material	Cut-off Length	Wire Dia.	Inside Dia.	Heights Working (In. @ lbs)	Deflection Rate (lbs per inch) @ Spring	@ Wheel
3931823	A	Coil, R.H. helix	Steel alloy	138.25	.600	3.80	9.99 @ 1395	250	
3931825	B			138.75	.618	3.80	9.99 @ 1540	284	

Engine	327 Cu.In. V-8	427 Cu.In. V-8
Model	19400	19400
Reference	A	B

MANUAL STEERING, regular production

Description ------- Semi-reversible gear with ball-nut driven by recirculating anti-friction bearings, energy absorbing steering column, steering damper attached to relay rod; two-position steering knuckle arm attachment for street and fast ratio steering. Adjustable steering column available optionally.

System ratios

Steering gear ---------- 16:1

Overall ratio

Street ---------- 20.2:1

Fast ---------- 17.6:1

Turning diameters (ft)

Outside front, wall to wall ---------- 39

Outside front, curb to curb ---------- 37

Inside rear, wall to wall ----------

Inside rear, curb to curb ----------

Number of wheel turns, lock to lock

Street ---------- 3.4

Fast ---------- 2.92

Outside wheel angle with inside wheel

@ 15 degrees ---------- 14.25

@ 20 Degrees ---------- 18.47

@ 34 degrees (limit of turn) ---------- 27.34

Linkage ---------- Parallelogram type, rear of front wheels

Steering wheel

Standard and optional telescoping wheel ------- Deep dished, 16.0 diameter

POWER STEERING, RPO N40

(Same as standard manual steering except as shown)

Description ---------- Hydraulic; pump powered cylinder assisting linkage

Ratios ---------- Gear, 16:1; overall, 17.6:1

Number of wheel turns, lock to lock ---------- 2.92

DRIVELINE

Type ---------- Tubular

Number used ---------- One

Diameter (OD) Manual ---------- 1.995-2.003

Turbo Hydra-Matic ---------- 2.250

Length (C/L of U-joints) Manual ---------- 29.90

Turbo Hydra-Matic --- 29.50

Wall thickness ---------- .092-.097

Universal joints

Type ---------- Cross

Number used ---------- Two

Bearings ---------- Prepack, anti-friction

Drive and torque forces ---------- Through rear suspension control arms

WHEELS (Regular Production)

Type ---------- Short spoke spider

Attachment to hub ----- 5 hex nuts, 7/16-20 UNF 2-B, arranged on a 4.75 diameter bolt circle

Offset ---------- N.28

Rim size ---------- 15 x 7.00

TIRES

Construction ---------- 2 ply

Size and ply rating ---------- F70-15-4PR

Specifications

Static Loaded Radius ---------- 12.6

Loaded rev/mi @ 50 MPH ---------- 776

Capacity (lb @ psi) ---------- 1280 @ 24

Recommended inflation, all tires, psi ---------- 24

REAR AXLE AND SUSPENSION

REAR AXLE

Description ---------- Fixed differential housing hypoid ring and pinion gear set, tubular articulating inner axle shafts and short solid outer shafts with integral drive flange, independently sprung rear wheels
Pinion offset ---------- 1.5
Pinion bearing adjustment ---------- Shim
Hypoid gear *PD* all except 2.73:1 ratio ---------- 8.375
2.73:1 ratio ---------- 8.125
Type ---------- Military Spec. MIL-L-2105-B
Viscosity ---------- SAE80
Filler plug ---------- 1-3/8 hex, 1-20 AN thread
Capacity (pts) ---------- 3.7

RING AND PINION GEARS

Axle Ratio	Tooth Combination
2.73	41,15
3.08	37,12
3.36	37,11
3.55	32,9
3.70	37,10
4.11	37,9

AXLE SHAFTS

Inner ---------- Welded steel tubing with universal joint attachments to short shafts at each end.
Outer ---------- Short, splined high-alloy steel with integral wheel mounting flange
Axle bearings
Type ---------- Inner and outer tapered roller, steel encased rubber bearing seals

REAR SUSPENSION

Description ---------- Full independent with frame-anchored differential. Position of each wheel established by 3 links: tubular axle drive shafts, transverse strut rods, torque control arms. Vertical suspension loads taken by transverse leaf spring. Built-in camber adjustment at strut rod inner ends.
Wheel travel (design height)

	Coupe	Conv.
Total	6.86	6.86
Jounce	2.87	2.76
Rebound	3.99	4.10

Wheel to spring, travel ratio ---------- 0.90:1

SHOCK ABSORBERS

Type ---------- Direct, double-acting, hydraulic
Piston diameter ---------- 1.00

STRUT

Material ---------- Forged steel
Diameter ---------- .75

STABILIZER BAR (427 V-8)

Diameter ---------- .562

REAR WHEEL ALIGNMENT

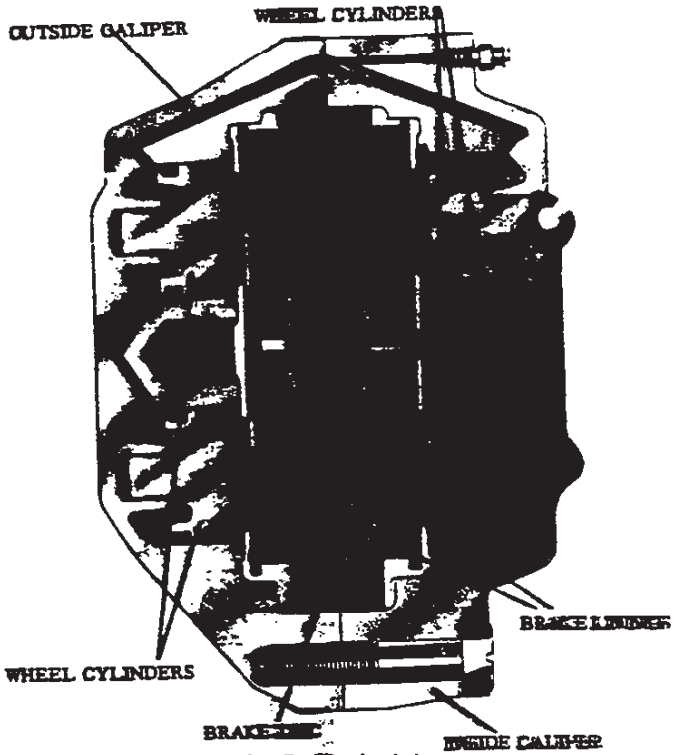
Curb
Camber (degrees) ---------- N1-3/8 to N 3/8
Toe-in (total) ---------- 1/32 to 3/32

TORQUE CONTROL ARMS

Description ---------- Welded steel box construction

REAR SPRING

Type ---------- Variable rate, 9-leaf
Material ---------- Chrome carbon steel, heat treated
Length (developed) between eye centers ---------- 46.36
Width ---------- 2.25
Design load, lb @ -camber ---------- 1360 @ .352
Deflection rate, lb per inch, @ design load
@ Spring ---------- 140
@ Wheel (wheel rate) ---------- 123
Spring liners
Number ---------- 7
Location ---------- Between all leaves except numbers 6 and 7
Material ---------- Polyethylene with graphite



SERVICE BRAKES (Regular Production):

Type	Dual-circuit [illegible] system, pressure differential and warning brake warning light, [illegible] hydraulic caliper disc brakes
Line pressure; psi, [illegible] pedal load	3576
Braking ratios	
Pedal	5.28
Hydraulic	43.7
Overall	836.0
Distribution of braking effort	Front 65.0
Brake disc	
Construction	Double finned disc spaced by [illegible]; rear radial cooling passages
Material	Cast iron
Diameter, front	11.75
Swept drum area, sq. in.	461.2
Brake lining	
Material	Woven asbestos
Size, all segments (L x W x T)	5.96 x 2.21 x .41
Method of attachment	Riveted
Total effective area, sq. in.	78.1
Gross lining area, sq. in.	86.2
Master cylinder	
Piston diameter	1.00
Piston travel (with [illegible] pedal travel)	1.10
Wheel cylinders	
Number	4 per wheel
Piston diameter	
Front	1.375
Rear	1.375
Foot pedal travel	5.75

PARKING BRAKE

Type	Drum; cast integral with each rear rotor. Internal expanding shoe, mechanically actuated
Control	Lever; floor mounted in center console
Drum diameter	6.5
Brake lining	
Number	2 shoes per each rear wheel
Size (L x W x T)	6.78 x 1.25 x .175
Gross lining area (sq. in.)	33.9

PARKING BRAKE

BULBS AND LAMPS

BULBS AND LAMPS	NUMBER REQUIRED AND TRADE NUMBER	CANDLE POWER PER LAMP
Air conditioning	2-1891	2
Back-up	2-1156	32
Cigarette lighter	1-1445	1
Clock	1-1895	2
Courtesy		
Instrument panel	2-631	6
Rear compartment	1-90	6
Direction signal indicator	2-1895	2
Dome	1-212	6
Glove compartment	1-1895	2
Headlamp Outer	2-4002	High beam 37.5W Low beam 55.0W
Inner	2-4001	High beam 37.5W
Headlamp hi-beam indicator	1-1895	2
Headlamp warning indicator	1-257	2
Heater	1-1816	2.5
Instrument cluster	12-1895	2
License plate rear	1-97	4
Parking		
Park	2-1157	3
Turn		32
Parking brake alarm & warning light	1-1895	2
Radio	1-1893	2
Seat Separator Box	1-1895	2
Side Marker - Front	2-194	2
Side Marker - Rear	2-194	2
Spot lamp, portable	1-4416	30W
Tail		
Stop and turn	4-1157	32
Tail		3
Underhood	1-93	15

CIRCUIT	TYPE OF PROTECTION	LOCATION AND CIRCUIT*
Air conditioning	AGC 25 fuse	In line
	AGC 25 fuse	Fuse panel (f)
Air conditioning lamp	AGC 4 fuse	Fuse panel (d)
Back-up lamps	AGC 20 fuse	Fuse panel (b)
Cigarette lighter	AGC 20 fuse	Fuse panel (c)
Cigarette lighter lamp	AGC 4 fuse	Fuse panel (d)
Clock	AGC 20 fuse	Fuse panel (c)
Clock lamps	AGC 4 fuse	Fuse panel (d)
Courtesy lamps	AGC 20 fuse	Fuse panel (c)
Defogger, rear window	AGC 20 fuse	Fuse panel (c)
Direction signal indicator lamp	AGC 20 fuse	Fuse panel (d)
Dome lamp	AGC 20 fuse	Fuse panel (c)
Fuel gage	AGC 10 fuse	Fuse panel (b)
Glove compartment lamp	AGC 20 fuse	Fuse panel (c)
Headlamp hi-beam indicator lamp	15 amp CB	Light switch (g)
Headlamp warning indicator lamp	40 amp CB	Hinge pillar (h)
Headlamps	15 amp CB	Light switch (g)
Heater	AGC 25 fuse	Fuse panel (f)
Heater lamp	AGC 4 fuse	Fuse panel (d)
Ignition switch lamp	AGC 4 fuse	Fuse panel (d)
Instrument cluster lamps	AGC 4 fuse	Fuse panel (d)
License plate, rear	AGC 20 fuse	Fuse panel (a)
Brake warning lamp	AGC 10 fuse	Fuse panel (b)
Parking lamps	15 amp CB	Light switch (g)
Power windows	40 amp CB	Hinge pillar (i)
Radio	AGC 10 fuse	Fuse panel (e)
Radio antenna	AGC 20 fuse	Fuse panel (c)
Radio lamp	AGC 4 fuse	Fuse panel (d)
Rear compartment vent motor	AGC 10 fuse	Fuse panel (f)
Speed warning device	AGC 20 fuse	Fuse panel (c)
Side Marker lamp - Front	AGC 20 fuse	Light switch
Side Marker lamp - Rear	AGC 20 fuse	Light switch
Spot lamp, portable	AGC 20 fuse	Fuse panel (c)
Stop lamps	AGC 20 fuse	Fuse panel (d)
Tail lamps	AGC 20 fuse	Fuse panel (a)
Temperature gage	AGC 10 fuse	Fuse panel (b)
Traffic hazard indicator	AGC 20 fuse	Fuse panel (c)
Windshield wiper	14 amp CB	Switch (j)

* Letter suffix indicates same circuit

POWER TRAINS

POWER TEAM COMBINATIONS

ENGINE	TRANSMISSION	MODEL APPLICATION	AXLE RATIOS (A) 2.73:1	3.08:1	3.36:1	3.55:1	3.70:1	4.11:1
350 Cu.In. V-8 Turbo-Fire 350 300 HP Standard	3-Spd (2.54:1 low) & 4-Spd (2.52:1 low)	All Models		(Econ.#)	(Std.*)			
	Turbo Hydra-Matic			(Std.*)				
350 Cu.In. V-8 Turbo-Fire 350 350 HP RPO L46	4-Spd (2.52:1 low)	All Models			(Std.*)	(Perf.#)		
	4-Spd (2.20:1 low)						(Std.*)	(Perf.#)
427 Cu.In. V-8 Turbo-Jet 427 390 HP RPO L36	4-Spd (2.52:1 low)	All Models		(Std.#)	Perf.#			
	4-Spd (2.20:1 low)			Econ.#	Std.#	Perf.#	Spcl.#	
	Turbo Hydra-Matic		(Econ.#)	(Std.#)				
427 Cu.In. V-8 Turbo-Jet 427 400 HP RPO L68	4-Spd (2.52:1 low)	All Models		(Std.#)	Perf.#			
	4-Spd (2.20:1 low)			Econ.#	Std.#	Perf.#	Spcl.#	
	Turbo Hydra-Matic		(Econ.#)	(Std.#)				
427 Cu.In. V-8 Turbo-Jet 427 435 HP RPO L71	4-Spd (2.20:1 low)	All Models			Econ.#	Std.#	Perf.#	Spcl.#
	Turbo Hydra-Matic		Econ.#	Std.#	Perf.			

(A) Air conditioning available only with combination, as indicated by parenthesis ( ).
* Positraction axles available optionally.
\# Available as positraction only.

Std. - Standard
Econ. - Economy (optional)
Perf. - Performance (optional)
Spcl. - Special (optional)

MULTIPLICATION FACTORS

WITH MANUAL TRANSMISSIONS

ENGINE	CARBURETION	TRANSMISSION	TOTAL GEAR REDUCTION 1st	2nd	3rd	4th	Rev	AXLE RATIO
350 Cu.In. V-8 300 HP Standard	4-Barrel	3-Speed (2.54:1)	8.53	5.04	3.36		8.84	3.36
		4-Speed (2.52:1)	8.47	6.32	4.91	3.36	8.70	
350 Cu.In. V-8 350 HP RPO L46	4-Barrel	4-Speed (2.52:1)	8.47	6.32	4.91	3.36	8.70	3.36
		4-Speed (2.20:1)	8.14	6.07	4.70	3.70	8.36	3.70
427 Cu.In. V-8 390 HP RPO L36	4-Barrel	4-Speed (2.52:1)	7.76	5.79	4.50	3.08	7.98	3.08
		4-Speed (2.20:1)	7.39	5.51	4.27	3.36	7.59	3.36
427 Cu.In. V-8 400 HP RPO L68	3 x 2-Barrel	4-Speed (2.52:1)	7.76	5.79	4.50	3.08	7.98	3.08
		4-Speed (2.20:1)	7.39	5.51	4.27	3.36	7.59	3.36
427 Cu.In. V-8 435 HP RPO L71	3 x 2-Barrel	4-Speed (2.20:1)	7.81	5.82	4.51	3.55	8.02	3.55

WITH AUTOMATIC TRANSMISSIONS

ENGINE	TRANSMISSION	SELECTOR POSITION	TOTAL TORQUE MULTIPLICATION	AXLE RATIO
350 Cu.In. V-8 Standard and 427 Cu.In. V-8	Turbo Hydra-Matic	Drive	16.05:1 - 3.08:1	3.08:1
		Low	16.05:1 - 7.64:1	
		Second	16.05:1 - 4.56:1	
		Reverse	13.46:1 - 6.41:1	

GENERAL DATA

Engine Type		V-8 OHV					
Piston Displacement (Cu.In.)		350			427		
Availability		Standard	RPO L46	RPO L36	RPO L68	RPO L71	
Number of Cylinders		Eight					
Bore and Stroke (nominal)		4.00x3.48		4.251x3.76			
Compression Ratio		10.25:1	11.0:1	10.25:1		11.0:1	
Taxable (SAE) Horsepower		51.2		57.8			
Firing Order		1-8-4-3-6-5-7-2					
Idling Speed (RPM) (in neutral)		700 (a)	750	800 (a)	750(a)	750(a)	
Compression Press. (PSI) @ Cranking Speed, Engine Hot		160	165	160		165	
Lubrication		Full pressure					
Power Plant Mounting		Two front and one rear, compression type					
Measurements	Fan to rear of engine block	30.64		32.14			
	Top air cleaner to bottom oil pan	26.27		27.81			
	Exhaust manifold to generator (width)	29.71		31.04			

(a) 600 for Automatic in drive

ADVERTISED ENGINE RATING

Engine	350 Cu.In.		427 Cu.In.		
	300 HP	350 HP	390 HP	400 HP	435 HP
Availability	Standard	RPO L48	RPO L36	RPO L68	RPO L71
Gross Brake HP @ RPM	300 @ 4800	350 @ 5600	390 @ 5400	400 @ 5400	435 @ 5800
Gross Torque @ RPM (lb-ft)	380 @ 3200	380 @ 3600	460 @ 3600	460 @ 3600	460 @ 4000

ENGINE SPEED AND PISTON TRAVEL

Transmission		350 Cu.In.				427 Cu.In.			
		3-Spd (a)	4-Speed		Trb/Hd(a)	4-Speed			Trb/Hd
Rear Axle Ratio		3.36:1	3.36:1	3.70:1 (b)	3.08:1	3.08:1 (c)	3.36:1 (d)	3.55:1 (e)	3.08:1
Tire Size		F70 x 15							
Crankshaft Revolutions per Mile		2573.8		2834.2	2539.3	2359.3	2573.8	2719.3	2359.3
Crankshaft RPM@MPH	Low	108.9	108.1	103.9	97.5	99.1	94.4	99.7	97.5
	Second	64.3	80.6	77.5	58.2	73.9	70.3	74.3	58.2
	Third	42.9	62.6	59.9	39.3	57.4	54.5	57.6	39.3
	Fourth		42.9	47.2		39.3	42.9	45.3	
	Reverse	112.8	111.1	106.7	61.8	101.8	96.9	102.4	81.8
Piston Travel (Ft/Mile)		1394.1		1535.2	1277.9	1479.0	1612.9	1704.1	1479.0

(a) Available with 300 HP (Base) engine only
(b) Standard ratio for 350 HP (L48) engine with 2.20:1 low transmission
(c) Standard ratio for 390 HP (L36) & 400 HP (L68) engines with 2.52:1 low transmission
(d) Standard ratio for 390 HP (L36) & 400 HP (L68) engines with 2.20:1 low transmission
(e) Standard ratio for 435 HP (L71) engine with 2.20:1 low transmission

VEHICLE PERFORMANCE FACTORS

ENGINE	BASE 350 CU.IN. 300 HP	RPO L46 350 CU.IN. 350 HP	RPO L36 427 CU.IN. 390 HP	RPO L68 427 CU.IN. 400 HP	RPO L71 427 CU.IN. 435 HP
3-SPEED TRANSMISSION					
Performance Weight (pounds)	3545				
Pounds per Gross Horsepower	11.82				
Pounds per Cu.In. Displacement	10.13				
Gross HP per Cu.In. Displacement	.857				
Power Displacement (cu.in./mile)	260.65				
Displacement Factor (cu.in./ton mile)	147.09				
4-SPEED TRANSMISSION					
Performance Weight (pounds)	3541	3542	3698	3709	3718
Pounds per Gross Horsepower	11.80	10.12	9.48	9.27	8.55
Pounds per Cu.In. Displacement	10.12	10.12	8.66	8.69	8.71
Gross HP per Cu.In. Displacement	.857	1.00	.913	.937	1.02
Power Displacement (cu.in./mile)	260.65	260.65	289.56	289.56	335.97
Displacement Factor (cu.in./ton mile)	147.26	147.18	156.60	156.18	154.64
TURBO HYDRA-MATIC					
Performance Weight (pounds)	3607		3759		3770
Pounds per Gross Horsepower	12.02		9.65		8.51
Pounds per Cu.In. Displacement	10.31		8.81		8.83
Gross HP per Cu.In. Displacement	.857		.913		1.02
Power Displacement (cu.in./mile)	238.93		289.56		291.49
Displacement Factor (cu.in./ton mile)	132.52		154.02		180.73

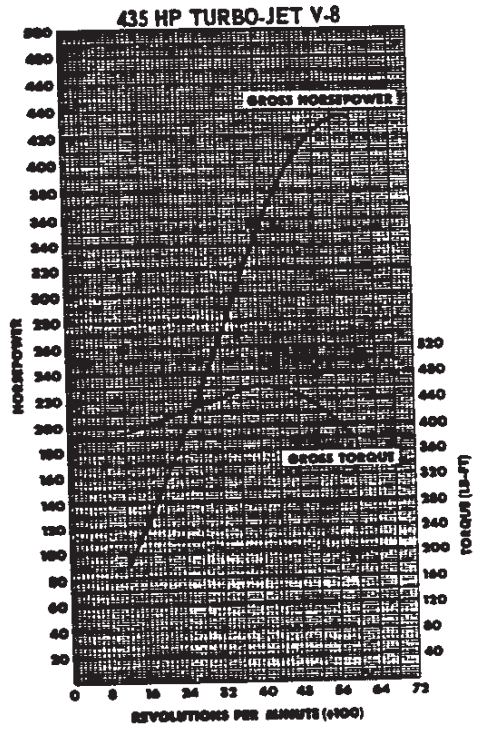
GLOSSARY

Performance Weight	Curb Weight plus 300 Lb (weight of two 150 lb passengers)
Power Displacement	$\frac{\text{Crankshaft Revs/Mi x Piston Displacement}}{2 \times 1728}$
Displacement Factor	$\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

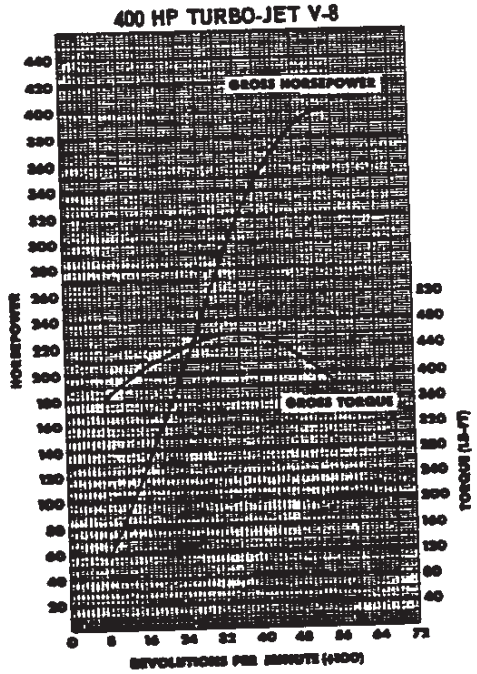
300 HP TURBO-FIRE V-8

TO BE
PROVIDED

435 HP TURBO-JET V-8



400 HP TURBO-JET V-8



The engine output curves represent full throttle performance as obtained from dynamometer test data corrected to standard barometric pressure 29.92 inches of mercury and standard temperature of 60 degrees F.

GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, optimum spark advance, and optimum fuel setting.

NET POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle, except the generator is not charging.

PRINCIPAL COMPONENTS

CYLINDER BLOCK

Material	Cast alloy iron
Bore Diameter	
V8-350 Cu.In.	3.8745-3.8775
V8-427 Cu.In.	4.2495-4.2525
Bore Spacing (Centerline to Centerline)	
V8-350 Cu.In.	4.4
V8-427 Cu.In.	4.84
Number of Bulkheads	5
Water Jackets	Full length around each cylinder
Cylinder Numbering Arrangement (Front to Rear)	
Left Bank	1-3-5-7
Right Bank	2-4-6-8

CYLINDER HEAD

Material	High chrome cast alloy iron
Bolt Number	34 (350 Cu.In.); 32 (427 Cu.In.)
Bolt Size	.4375 dia.; 14 threads/inch

COMBUSTION CHAMBER VOLUME

(Total chamber volume of assembled engine with piston at top center)

V8-350 Cu.In. (Base)	4.83 Cu.In.
V8-350 Cu.In. (RPO L46)	4.51 Cu.In.
V8-427 Cu.In. (RPO L36 & L68)	5.94 Cu.In.
V8-427 Cu.In. (RPO L71)	5.47 Cu.In.

INLET MANIFOLD

Material	
V8-350 Cu.In. (Base & RPO L46)	Cast alloy iron
V8-427 Cu.In.	Cast aluminum alloy
Heat Provision	Exhaust gas crossover at carburetor mounting pad

EXHAUST MANIFOLD

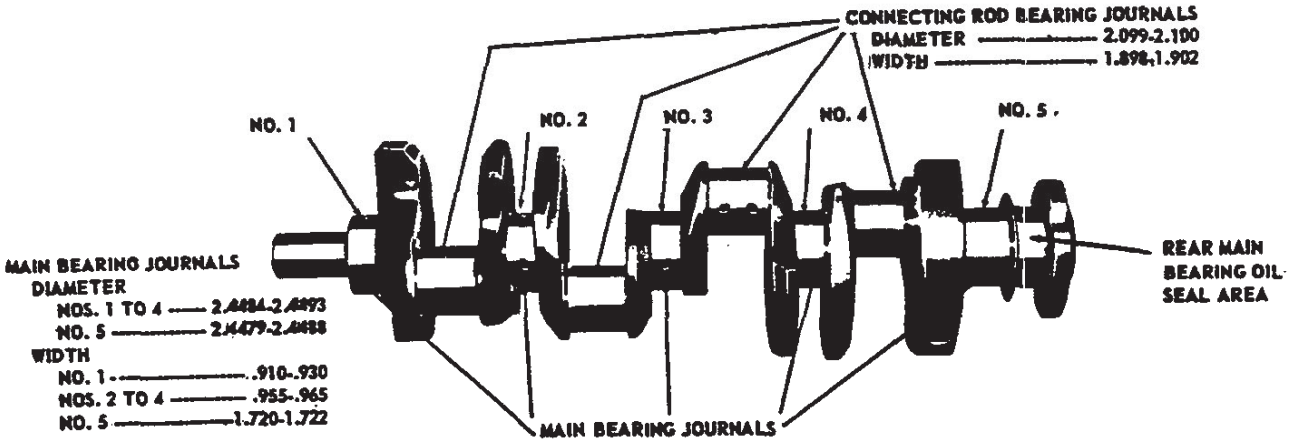
Material	Cast alloy iron
Type	
V8-350 Cu.In.	Dual, 4 port, exhaust emission to a single runner with center takedown collector
V8-427 Cu.In.	Dual, 4 port, extended runners from each port converging to a rear takedown collector
Outlet Diameter (Nominal)	2.50

CRANKSHAFT

Material	
V8-350 Cu.In.	Nodular iron
V8-350 (RPO L46) & 427 Cu.In.	Forged steel Hardened journals on RPO L71
End Play	
V8-350 Cu.In.	.002-.006
V8-427 Cu.In.	.006-.010
Counter Weights	6
Crank Arm Length	
V8-350 Cu.In.	1.74
V8-427 Cu.In.	1.88
Torsional Damper	Rubber mounted inertia
Timing Gear	Steel; sprocket & chain
Pulley Pitch Diameter	6.64

CRANKSHAFT

350 CUBIC INCH V-8 ENGINE



MAIN BEARINGS

Material ---------- Premium aluminum except No. 5 sintered copper nickel backed babbitt
Type ---------- Precision removable
Thrust Against Bearing No. ---------- 5
Clearance
V8-350 Cu.In. ---------- (#1) .0008-.0020; (#2, 3 & 4) .0008-.0024; (#5) .0015-.0031
V8-427 Cu.In. (RPO L36 & L68) - (#1 & 2) .0010-.0020; (#3 & 4) .0010-.0025; (#5) .0015-.0031
V8-427 Cu.In. (RPO L71) ---- (#1-4) .0013-.0025; (#5) .0015-.0031

Dimensions	Theoretical Inner Dia.	Effective Length	Projected Area
V8-350 Cu.In.			
Bearing #1	2.4502	.752	1.8425
Bearing #2-4	2.4505	.752	1.8428
Bearing #5	2.4507	1.177	2.8844
V8-427 Cu.In. (RPO L36 & L68)			
Bearing #1-2	2.7507	.992	2.7287
Bearing #3-4	2.7505	.992	2.7285
Bearing #5	2.7506	1.2525	3.4451
V8-427 Cu.In. (RPO L71)			
Bearing #1-4	2.7505	.992	2.7285
Bearing #5	2.7506	1.2525	3.4451

CAMSHAFT

Material ---------- Cast alloy iron
Drive ---------- Sprocket & chain; steel
Lobe Lift
V8-350 Cu.In. (Base) ---- .2800 Inlet; .2733 Exhaust
V8-350 Cu.In. (RPO L46) - .3000 Inlet; .3067 Exhaust
V8-427 Cu.In. (RPO L36 & L68) ---- .2714 Inlet; .2824 Exhaust
V8-427 Cu.In. (RPO L71) ---- .3057 Inlet & Exhaust
Bearings ---------- 5; steel backed babbitt

VALVE TRAIN

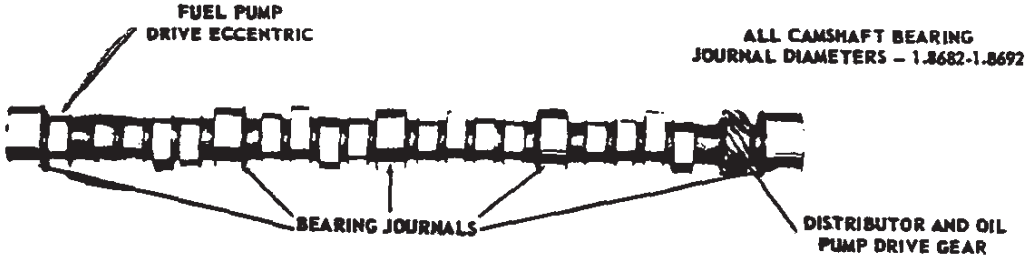
Type ---------- Individually mounted overhead rocker arms, push rod actuated
Lifters ---------- Hydraulic
V8-427 Cu.In. (RPO L71) - Mechanical
Push Rods
Type ---------- Hollow steel
Ends
V8-350 (Base) ---------- Hardened
V8-350 Cu.In. (RPO L46) ------- Hardened steel insert on rocker arm ends
V8-427 Cu.In. ---------- Hardened steel inserts
Rocker Arms
Material ---------- Stamped steel
Ratio
V8-350 Cu.In. ---------- 1.50:1
V8-427 Cu.In. ---------- 1.70:1

VALVE SPRINGS

Diameter (I.D.)
V8-350 Cu.In. ---------- .868-.884
V8-427 Cu.In. ---------- 1.082-1.098
Installed Length (lb. @ in.)
Valves Closed
V8-350 Cu.In. ---------- 76-84 @ 1.70
V8-327 Cu.In. ---------- 94-106 @ 1.88
Valves Opened
V8-350 Cu.In. ---------- 194-206 @ 1.25
V8-427 Cu.In. ---------- 303-327 @ 1.38
Free Length
V8-350 Cu.In. ---------- 2.03
V8-427 Cu.In. ---------- 2.09
Valve Spring Damper
V8-350 Cu.In. ---------- Flat steel, 4 coils
V8-427 Cu.In. ---------- Flat steel, 3.62 coils

CAMSHAFT

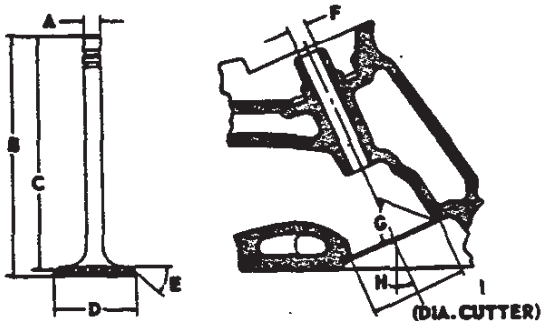
350 CUBIC INCH V-8 ENGINE



PRINCIPAL COMPONENTS—Cont'd.

VALVES - INLET

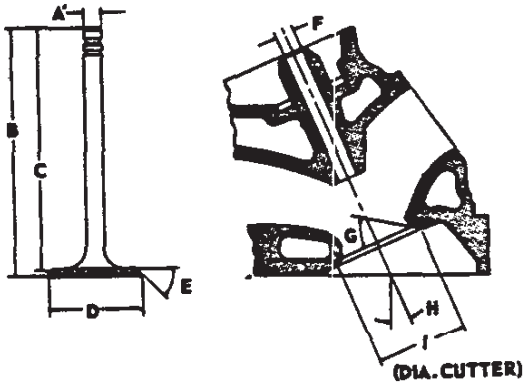
Material	Alloy steel
Coating	
V8-350 Cu.In.	None
V8-427 Cu.In.	Face and head aluminized with chrome flash stem
Valve Guide Inserts (V8-427)	Cast alloy iron



A - Stem Diameter	
V8-350 Cu.In.	.3410-.3417
V8-427 Cu.In.	.3715-.3722
B - Overall Length	
V8-350 Cu.In.	4.870-4.889
V8-427 Cu.In. (RPO L36 & L68)	5.215-5.235
V8-427 Cu.In. (RPO L71)	5.226-5.251
C - Gage Length	
V8-350 Cu.In.	4.785-4.795
V8-427 Cu.In.	5.115-5.125
D - Overall Head Diameter	
V8-350 Cu.In. (Base)	1.935-1.945
V8-350 Cu.In. (RPO L46)	2.017-2.023
V8-427 Cu.In. (RPO L36 & L68)	2.060-2.070
V8-427 Cu.In. (RPO L71)	2.185-2.195
E - Angle of Face	45°
F - Guide Diameter	
V8-350 Cu.In.	.3427-.3437
V8-427 Cu.In.	.3732-.3742
G - Angle of Seat	46°
H - Valve Angle	
V8-350 Cu.In.	23°
V8-427 Cu.In.	4°
I - Valve Seat (Cutter) Diameter	
V8-350 Cu.In. (Base)	1.990-2.010
V8-350 Cu.In. (RPO L46)	2.020
V8-427 Cu.In.	2.150

VALVE - EXHAUST

Material	High alloy steel
Coating	
V8-327 Cu.In.	Aluminum face
V8-427 Cu.In.	Face and head aluminized with chrome flash stem
Valve Guide Inserts (V8-427)	Cast alloy iron



A - Stem Diameter	
V8-350 Cu.In.	.3410-.3417
V8-427 Cu.In.	.3713-.3720
B - Overall Length	
V8-350 Cu.In. (Base)	4.913-4.933
V8-350 Cu.In. (RPO L46)	4.891-4.910
V8-427 Cu.In.	5.345-5.365
C - Gage Length	
V8-350 Cu.In.	4.781-4.791
V8-427 Cu.In.	5.235-5.245
D - Overall Head Diameter	
V8-350 Cu.In. (Base)	1.495-1.505
V8-350 Cu.In. (RPO L46)	1.595-1.605
V8-427 Cu.In.	1.715-1.725
E - Angle of Face	45°
F - Guide Diameter	
V8-350 Cu.In.	.3427-.3437
V8-427 Cu.In.	.3732-.3742
G - Angle of Seat	46°
H - Valve Angle	
V8-350 Cu.In.	23°
V8-427 Cu.In.	4°
I - Valve Seat (Cutter) Diameter	
V8-350 Cu.In. (Base)	1.550-1.570
V8-350 Cu.In. (RPO L46)	1.600
V8-427 Cu.In.	1.625

PISTONS

Material
- V8-350 Cu.In. (Base) -------- Cast aluminum alloy
- V8-350 Cu.In. (RPO L46) -- Aluminum impact extruded
- V8-427 Cu.In. (RPO L36 & L68) - Cast aluminum alloy
- V8-427 Cu.In. (RPO L71) - Aluminum impact extruded

Head Type
- V8-350 Cu.In. (Base) ---------- Flat, notched
- V8-350 Cu.In. (RPO L46) ---------- Domed
- V8-427 Cu.In. ---------- Domed

Skirt Type ---------- Slipper

Top Land Clearance
- V8-350 Cu.In. (Base) ---------- .0235-.0325
- V8-350 Cu.In. (RPO L46) ---------- .0305-.0390
- V8-427 Cu.In. (RPO L36 & L68) ---------- .0306-.0374
- V8-427 Cu.In. (RPO L71) ---------- .0265-.0335

Skirt Clearance
- V8-350 Cu.In. (Base) ---------- .0007-.0013
- V8-350 Cu.In. (RPO L46) ---------- .0020-.0026
- V8-427 Cu.In. (RPO L36 & L68) ---------- .0012-.0020
- V8-427 Cu.In. (RPO L71) ---------- .0040-.0046

Compression Ring Groove Depth
- V8-350 Cu.In. ---------- .2218-.2288
- V8-427 Cu.In. (RPO L36 & L68) ---------- .2348-.2412
- V8-427 Cu.In. (RPO L71) ---------- .2378-.2438

Oil Ring Groove Depth
- V8-350 Cu.In. ---------- .2038-.2103
- V8-427 Cu.In. (RPO L36 & L68) ---------- .2183-.2247
- V8-427 Cu.In. (RPO L71) ---------- .2158-.2178

Pin Bore Offset
- V8-350 (Base) & 427 (RPO L36 & L68) ---------- .055-.065
- V8-350 (RPO L46) & 427 (RPO L71) ---------- On center

Compression Height
- V8-350 Cu.In. ---------- 1.563-1.567
- V8-427 Cu.In. (RPO L36 & L68) ---------- 1.908-1.912
- V8-427 Cu.In. (RPO L71) ---------- 2.068-2.072

PISTON PINS

Material ---------- Chromium steel

Length
- V8-350 Cu.In. ---------- 2.990-3.010
- V8-427 Cu.In. ---------- 2.930-2.950

Diameter
- V8-350 Cu.In. ---------- .9270-.9273
- V8-427 Cu.In. ---------- .9895-.9898

Clearance in Piston
- V8-350 Cu.In. (Base) ---------- .00015-.00025
- V8-350 Cu.In. (RPO L46) ---------- .00045-.00055
- V8-427 Cu.In. (RPO L36 & L68) ---------- .00025-.00035
- V8-427 Cu.In. (RPO L71) ---------- .00030-.00040

Pin Mounting ---------- Locked in rod by shrink fit

VALVE LIFT
- V8-350 Cu.In. (Base) ---- .3900 Inlet & .4100 Exhaust
- V8-350 Cu.In. (RPO L46) -- .4500 Inlet; .4600 Exhaust
- V8-427 Cu.In. (RPO L36 & L68) ---------- .4614 inlet; .4800 Exhaust
- V8-427 Cu.In. (RPO L71) ---- .5197 Inlet & Exhaust

VALVE TIMING (Crankshaft Degrees)

V8-350 Cu.In. - Base	Excluding Ramps	Including Ramps
Inlet Valve (Zero lash)		
Opens - BTC	28°	38°
Closes - ABC	72°	92°
Duration	280°	310°
Exhaust Valve (Zero lash)		
Opens - BBC	78°	88°
Closes - ATC	30°	52°
Duration	288°	320°

V8-350 Cu.In. - RPO L46	Excluding Ramps
Inlet Valve (Zero lash)	
Opens - BTC	52°
Closes - ABC	114°
Duration	346°
Exhaust Valve (Zero lash)	
Opens - BBC	98°
Closes - ATC	62°
Duration	340°

V8-427 Cu.In. - RPO L36 & L68	Excluding Ramps
Inlet Valve (Zero lash)	
Opens - BTC	56°
Closes - ABC	114°
Duration	350°
Exhaust Valve (Zero lash)	
Opens - BBC	110°
Closes - ATC	62°
Duration	352°

V8-427 Cu.In. - RPO L71	Excluding Ramps
Inlet Valve (opens with .024 lash)	
Opens - BTC	44°
Closes - ABC	92°
Duration	316°
Exhaust Valve (closes with .028 lash)	
Opens - BBC	86°
Closes - ATC	36°
Duration	302°

PRINCIPAL COMPONENTS—Cont'd.

COMPRESSION RING - UPPER

Material	Cast alloy iron
Type	Straight edge inside of ring
Face	Barrel
Coating	
V8-350 Cu.In. (Base)	Chrome plate
V8-350 Cu.In. (RPO L46)	Molybdenum inlay
V8-427 Cu.In.	Molybdenum inlay
Width	
V8-350 Cu.In. (Base)	.0775-.0780
V8-350 Cu.In. (RPO L46)	.0770-.0775
V8-427 Cu.In.	.0770-.0775
Wall Thickness	
V8-350 Cu.In.	.190-.200
V8-427 Cu.In.	.202-.212
Gap	.010-.020

COMPRESSION RINGS - LOWER

Material	Cast alloy iron
Type	Inside bevel (top of ring 30 degrees to piston vertical axis for V8-350; 28°-52° for V8-427)
Face	Tapered
Coating	
V8-350 Cu.In. (Base)	Wear resistant
V8-350 Cu.In. (RPO L48)	Chrome plate
V8-427 Cu.In. (RPO L36 & L68)	Wear resistant
V8-427 Cu.In. (RPO L71)	Chrome plate
Width	
V8-350 Cu.In. (Base)	.0770-.0775
V8-350 Cu.In. (RPO L46)	.0775-.0780
V8-427 Cu.In.	.0770-.0775
Wall Thickness	
V8-350 Cu.In.	.190-.200
V8-427 Cu.In.	.202-.212
Gap	
V8-350 Cu.In. (Base)	.013-.025
V8-350 Cu.In. (RPO L46)	.013-.023
V8-427 Cu.In.	.010-.020

OIL CONTROL RINGS

Type	Multi-piece (two rails and one spacer)
Material	
Rails	Steel
Spacer	Alloy steel
Width (assembled)	
V8-350 Cu.In.	.1870-.1890
V8-427 Cu.In.	.1870-.1890
Wall Thickness	
V8-350 Cu.In.	.150-.156
V8-427 Cu.In.	.137-.143
Gap	
V8-350 Cu.In.	.015-.055
V8-427 Cu.In.	.010-.030
Rail Coatings	Chrome plated

CONNECTING RODS

Material	Drop forged steel
V8-427 (RPO L71)	High alloy steel
Length (center to center)	
V8-350 Cu.In.	5.695-5.705
V8-427 Cu.In.	6.130-6.140

CONNECTING ROD BEARINGS

Material	Premium aluminum
Type	Precision removable
Clearance	
V8-350 Cu.In.	.0007-.0027
V8-427 Cu.In. (RPO L36 & L68)	.0009-.0029
V8-427 Cu.In. (RPO L71)	.0014-.0034
Theoretical I.D.	
V8-350 Cu.In.	2.1017
V8-427 Cu.In. (RPO L36 & L68)	2.2014
V8-427 Cu.In. (RPO L71)	2.2019
Effective Length	
V8-350 Cu.In.	.807
V8-427 Cu.In.	.857
End Play	
V8-350 Cu.In.	.009-.013
V8-427 Cu.In.	.017-.021

FUEL—EXHAUST AND VENTILATION SYSTEM

FUEL SYSTEM

FUEL TANK
- Capacity (Gal) ---------- 20 (approximately)
- Location ---------- In body cavity at rear of deck area
- Filler Location ---------- Center of rear deck lid

FUEL FILTERS, DUAL
- In Fuel Tank ---------- Mesh strainer
- Carburetor Inlet ---------- Paper
- V8-350 & 427 (L36) Cu.In. (addition) - In-line paper element with vacuum return fuel line

FUEL PUMP
- Type ---------- Diaphragm
- Drive ---------- Camshaft eccentric
- Location ---------- Lower right front of engine
- Pressure Range (shut off pressure at 1800 RPM)
  - All Engines ---------- 7.50-9.00 PSI at pump outlet

AIR CLEANER
- Type
  - V8-350 & 427 (RPO L36) ---------- Full circle intake, chrome plated
  - V8-427 (RPO L68 & L71) ---------- Triangular shaped, chrome plated
- Filter Element ---------- Oil-wetted paper
  - V8-427 (RPO L68 & 71) ---------- Polyurethane

CARBURETORS
- Make & Type
  - V8-350 Cu.In. ---------- Rochester, Quadrajet
  - V8-427 Cu.In. (RPO L36) ---- Rochester, Quadrajet
  - V8-427 Cu.In. (RPO L68 & L71) ------ Holley, 3 x 2
- SAE Flange Size ---------- 1.50
- Throttle Bore
  - V8-350 & 427 Cu.In. (RPO L36)
    - Primary ---------- 1.38
    - Secondary ---------- 2.25
  - V8-427 Cu.In. (RPO L68 & L71)
    - Primary (No. 1) ---------- 1.50
    - Secondary (No. 2 & 3) ---------- 1.75
- Venturi Diameter
  - V8-350 & 427 Cu.In. (RPO L36)
    - Primary ---------- 1.09
    - Secondary ---------- Air valve
  - V8-427 Cu.In. (RPO L68 & L71)
    - Primary (No. 1) ---------- 1.188
    - Secondary (No. 2 & 3) ---------- 1.375
- Secondary Throttle Actuation ---------- By linkage approximately when primary valves are opened half between closed and open

CHOKE
- Type ---------- Automatic

EXHAUST AND VENTILATION SYSTEM

EXHAUST SYSTEM
- Type ---------- Dual with no resonators

MUFFLERS
- Type ---------- Dual, reverse flow
- Construction ---------- Heads and body joined by rolled lock seam construction
- Shell
  - Right Hand ---------- .036 stainless steel
  - Left Hand ------ .036 sheet steel aluminum coating
- Wrap ---------- .030 indented asbestos sheet
- Cover ---------- .018 sheet steel aluminum coating
- Heads ---------- .060 sheet steel aluminum coating
- Baffles -------- 3; .036 sheet steel aluminum coating
- Length, Body ---------- 17.90
- Width (I.D.) ---------- 9.25
- Height (I.D.) ---------- 5.00

EXHAUST PIPES
- Type ---------- Two piece; front and rear assemblies
- Material ---------- Seamless steel tubing
- Dimensions (O.D.) ---------- 2.00
- Wall Thickness
  - Front Pipes ---------- .067-.081
  - Rear Pipes ---------- .072-.092 laminated

TAIL PIPES
- Material ---------- Stainless steel
- Dimensions (O.D.) ---------- 2.62
- Wall Thickness ---------- .062-.072

ENGINE VENTILATION
- Type ---------- Closed-positive

AIR INJECTION REACTOR EQUIPMENT
- Type ---------- Air injected into exhaust ports crankshaft driven pump

LUBRICATION SYSTEM

GENERAL
- Type ---------- Controlled full pressure
- Main Bearings ---------- Pressure
- Connecting Rods ---------- Pressure
- Piston Pins ---------- Splash
- Cylinder Walls -------- Pressure, jet cross sprayed
- Camshaft Bearings ---------- Pressure
- Valve Lifters ---------- Pressure
- Rocker Arms ---------- Pressure
- Timing Gears --------- Centrifugally oiled from front camshaft bearing
- Oil Pressure Sending Unit ---------- Electric
- Oil Filler
  - Cap ---------- Positive seal
  - Location
    - V8-350 Cu.In. ----- Top rear of left rocker cover
    - V8-427 Cu.In. -- Top center of right rocker cover

OIL PUMP
- Type ---------- Gear
- Normal Oil Pressure (Bench test-no flow conditions)
  - V8-350 Cu.In. ---------- 50-65 PSI @ 2000 RPM
  - V8-427 Cu.In. ---------- 50-75 PSI @ 2000 RPM
- Intake Type ---------- Fixed
- Capacity (GPM @ Eng. RPM)
  - V8-350 Cu.In. ---------- 4.3 @ 2000
  - V8-427 Cu.In. ---------- 6 @ 2000
- Regulator Valve ---------- Opens between 40-45 lbs

OIL DIP STICK - LOCATION
- V8-350 Cu.In. -------- Left side, rear of engine block
- V8-427 Cu.In. --- Right side, center, direct to oil pan

OIL PAN CAPACITY (Quarts)
- Refill
  - V8-350 Cu.In. ---------- 4.0
  - V8-427 Cu.In. ---------- 5.0
- Refill with Filter Change
  - V8-350 Cu.In. (Base) ---------- 5.0
  - V8-427 Cu.In. ---------- 6.0

OIL FILTER
- Type ---------- Full flow, throwaway canister
- Location ---------- Left rear underside of engine
- Capacity ---------- One quart
- By-pass Valve ---------- Opens between 9 to 11 PSI drop in pressure

LUBRICANT GRADES AND TEMPERATURES
- 32° F and Above ---------- SAE20W or SAE10W-30
- 0° F to 32° F ---------- SAE10W or SAE10W-30
- Below 0° F ---------- SAE5W or SAE5W-20
- Alternate ---------- SAE5W-30 can be used at temperatures below freezing

OIL PAN
- Type of Drain Plug ---------- Hex head
- Location ---------- Lower rear face of oil pan sump
- Size Hex Head ---------- .860-.875
- Thread ---------- 1/2-20 UNF 2A
- Length ---------- 0.81
- Diameter ---------- .410-.430

GENERAL
- Type ---------- Liquid, pressurized
- V8-350 Cu.In. ---------- Internal by-pass
- V8-350 Cu.In. (RPO L46)---------- External by-pass
- V8-427 Cu.In. ---------- External by-pass
- Capacity (with Heater)
  - V8-350 Cu.In. ---------- 15 Qts.
  - V8-427 Cu.In. ---------- 22 Qts.

RADIATOR
- Type
  - V8-327 Cu.In. ---------- Aluminum, cross-flow
  - V8-427 Cu.In. ---------- Copper-brass, cross-flow
- Core Constant and Thickness
  - Distance between Fins
    - V8-350 Cu.In. ---------- .18
    - V8-427 Cu.In. ---------- .16
  - Distance between Tubes ---------- .55
  - Thickness of Core
    - V8-350 Cu.In. ---------- 2.88
    - V8-427 Cu.In. ---------- 2.70
  - Frontal Area (Sq. In.)
    - V8-350 Cu.In. ---------- 315
    - V8-427 Cu.In. ---------- 467

SURGE TANK (350 Cu.In. Only)
- Location ---------- Right side engine compartment connected by hosing to top of radiator
- Capacity ---------- 2.3 Qts.
- Fill Requirements --- Half full when weather is cold

RADIATOR CAP RELIEF VALVE
- Opens at ---------- Approximately 15 PSI

FAN
- Number of Blades ---------- 5, staggered
- Diameter ---------- 17.50
- Fan Pulley Pitch Diameter ---------- 7.00
- Drive
  - Type ---------- Thermomodulated fluid coupling
  - Performance at 4000 RPM input -- At 135° and below fan speed 800 to 1800 RPM: at 170°F and below, fan speed 2300-2600 RPM

THERMOSTAT
- Type ---------- Pellet
- Begins to Open at ---------- 192°-198°F
- Fully Opened at ---------- 217°F

RADIATOR HOSE
- Outlet, Lower (Radiator to Water Pump)
  - V8-350 Cu.In. ---------- 1.75 I.D.
  - V8-427 Cu.In. ---------- 1.88 I.D.
- Inlet, Upper (Thermostat Housing to Radiator)
  - V8-350 Cu.In. ---------- 1.50 I.D.
  - V8-427 Cu.In. ---------- 1.50 I.D.

BY-PASS THERMOSTAT HOSE
- V8-427 Cu.In. ---------- .725-.765 I.D.

BELTS; CRANKSHAFT, FAN AND GENERATOR
- Number Used ---------- Two
- Angle of "V" ---------- 38°-42°
- Pitch Line
  - Fan, Generator and Water Pump Belt
    - V8-350 Cu.In. ---------- 54.00
    - V8-427 Cu.In. (RPO L36 & L68) ---------- 53.75
    - V8-427 Cu.In. (RPO L71) ---------- 54.50
  - Fan and Water Pump Belt
    - V8-350 Cu.In. ---------- 35.14
    - V8-427 Cu.In. ---------- 31.86
  - Width ---------- .380

WATER PUMP
- Type ---------- Centrifugal
- Capacity (GPM @ Engine RPM)
  - V8-350 Cu.In. ---------- 57 @ 4400
  - V8-427 Cu.In. ---------- 82 @ 5200
- Bearing ----- Permanently lubricated double row ball
- Drive ---------- Fan belt
- Ratio (Pump to Engine RPM) ---------- .949:1

DRAIN LOCATIONS AND TYPE
- Radiator ---------- Left hand, rear lower face
- Engine Block ---------- Plug; right and left center

ELECTRICAL SYSTEM

SUPPLY SYSTEM
BATTERY
Voltage ---------- 12
Cranking Power @ 0° F ---------- 3250 watts
Total Number of Plates ---------- 78
Number of Cells ---------- 6
Terminal Grounded ---------- Negative
Location ---------- In passenger compartment behind driver

GENERATOR
Type ---------- Diode rectified
Rating
Amps ---------- 42
Volts ---------- 10-15
Drive ---------- By fan belt
Pulley Pitch Diameter ---------- 2.70
Ratio (Gen to Engine Speed) ---------- 2.46:1

REGULATOR
Type ---------- Two unit; vibrator
Voltage Regulator
Voltage ---------- 13.8-14.8 @ 85°F
Field Relay (Combination Light & Field Relay)
Closing Voltage ---------- 1-3 Volts @ 80°F
Location ---------- Right side front engine compartment

STARTING SYSTEM
STARTING MOTOR
Rotation (Drive End View) ---------- Clockwise
Test Conditions -- Engine at operating temperature
No Load Test
Amps ---------- 65-100 (350); 70-99 (427)
Volts ---------- 10.6
RPM ---------- 3600-5100 (350); 7800-12000 (427)
Motor Drive
Engagement ---------- Solenoid
Pinion Meshes at ---------- Rear
Pinion Tooth No. ---------- 9
Flywheel Tooth No. ---------- 153; V8-427.-- 168
Mounting ---------- Bolted to clutch housing

IGNITION SYSTEM
DISTRIBUTORS ---------- Refer to chart below

COIL
Type ---------- 12 Volt
Amperes Drawn
Engine Stopped ---------- 4.0
Engine Idling ---------- 1.8

SPARK PLUGS
Make & Type
V8-350 Cu.In. (Base) ---------- ACR44S
V8-350 Cu.In. (RPO L46) ---------- ACR44
V8-427 Cu.In. ---------- AC43N
Thread Size (mm) ---------- 14
Gap ---------- .033-.038
Torque ---------- 25 lb. ft.

CABLE ---------- Linen core impregnated with electrical conducting material and insulation of rubber with neoprene jacket

DISTRIBUTORS	V-8 350 Cu.In. Base 300 HP	V-8 350 Cu.In. RPO L46 350 HP	V-8 427 Cu.In. RPO L36 390 HP	V-8 427 Cu.In. RPO L68 400 HP	V-8 427 Cu.In. RPO L71 435 HP
Model	1111490	1111493	1111926		1111928
Type	Single Breaker				Transistorized Magnetic Pulse
Cam Angle	28° - 32°				
Breaker Gap	.019 (new)				
Breaker Arm Tension	19 - 23 oz		28 - 32 oz		
Centrifugal Advance Begins (RPM)	900	900	900		900
Max Degrees @ RPM	30 @ 5100	26 @ 5000	26 @ 3800		30 @ 3800
Vacuum Advance Begins (in. Hg)	6.00	7.00	7.00		8.00
Max Degrees @ In. Hg	19 @ 17	12 @ 12	12 @ 12		15 @ 15.5
Timing (Initial Design Setting) Crankshaft Degrees @ RPM (with vacuum spark line disconnected)	4 BTC @ 700 manual 600 auto	8 BTC @ 750 manual only	4 BTC @ 800 manual 600 auto	4 BTC @ 750 manual 600 auto	4 BTC @ 750 manual only
Timing Mark Location	Torsional Damper				

CLUTCHES

Engine	Type		V-8 350 Cubic Inch		V-8 427 Cubic Inch	
	Availability		Regular Production	RPO L46	RPO L36 & L68	RPO L71
Clutch for			3-Speed & 4-Speed	4-Speed	4-Speed	
Type			Single dry disc, centrifugal			
Clutch cover & pressure plate	Eff. plate load, lbs.		2450-7750		2450-2750	2600-2800
	Press. plate matl.		Nodular iron			
	Clutch spring type		Circular plate diaphragm, bent finger design			
	Clutch spring matl.		Heat treated spring steel			
Driven plate	Type		Single disc with two friction surfaces			
	Cushions		Flat spring steel between friction rings			
	Dampers		10 coil springs (5 sets of two)			
	Friction rings	OD	10.34		11.00	
		ID	6.50		6.50	
		Total area sq. in.	101.54		123.70	
		Material	Woven type asbestos			
Flywheel	Ring gear	Material	Heat treated HR steel			
		No. of teeth	153		168	
		PD	12.75		14.00	
		Attachment	Shrink fit			
Bearings	Release	Type	Single row ball			
		Lubrication	None, prepacked			
	Pilot	Type	Bronze bushing			
		Lubrication	None, sintered and oil impregnated			
Controls	Clutch fork		Drop forged steel, pivot mounted on ball			
	Pedal mounting		Pendant, from brace on dash			
	Lubrication		Crossover shaft			
Clutch housing material			Aluminum alloy			

3-SPEED AND 4-SPEED TRANSMISSIONS

Transmission Type			3-Speed	4-Speed RPO M20			4-Speed RPO M21
Engine Application	Type		V8-350 Cu.In.	V8-350 Cu.In.		V8-427 Cu.In.	V8-350 Cu.In. V8-427 Cu.In.
	Availability		Standard	Standard	RPO L46	L36 & L68	RPO L46 L36, L68 & L71
Case material			Cast iron	Aluminum			
Gear Shift	Type		Remote				
	Control		Lever				
	Location		Floor, mounted between seats				
Gears	Type		Helical				
	Material		Forged steel, hardened				
	Synchronization		All forward gears				
	Constant mesh gear		All gears	All forward gears			
	Sliding gears		None	Reverse			
	Ratios	First	2.54	2.52			2.20
		Second	1.50	1.88			1.64
		Third	1.00	1.47			1.27
		Fourth		1.00			1.00
		Reverse	2.63	2.59			2.26
Lubricant	Type		Meeting Military Specification MIL-L-2105-B				
	Capacity (pts)		3				
Extension	Material		Cast iron	Aluminum			
	Oil seal		Steel encased double seal of spring loaded rubber or felt				

TURBO HYDRA-MATIC TRANSMISSION (RPO M40)

GENERAL DATA

Type ---------- Three element automatic hydraulic torque converter with a compound planetary gear set that produces three forward speeds and reverse

Selector Lever

Location ---------- Floor mounted on models using bucket seats

Operation ---------- Actuates automatic controls by a hydraulic system from a pressurized gear type pump

Quadrant Pattern Six positions: P-R-N-3-2-1

External Control Connections

Manual Linkage ---------- Selects desired operating range by means of selector lever

Vacuum Modulator ---------- Senses change in the torque input to the transmission and assures smooth shifts

Detent Solenoid ----- Actuated by electric switch on the carburetor causing the transmission to downshift under full throttle conditions at car speeds below 70 miles per hour

Parking Lock

Type ---------- Locking pawl

Operation ---------- Applied by selector lever through manual linkage

Method of Cooling ---------- Water

TORQUE CONVERTER

Driving Member (Pump) ---------- Multivane type, sheet metal blade, spot welded to steel pump housing that is an integral part of the converter housing

Driven Member (Turbine) ---------- Steel axial flowblades assembled between inner and outer steel shells

Stator Assembly ---------- Aluminum multivane type blades mounted on a one way roller clutch

Stall Ratio ---------- 2.10

Stall Speed (RPM) ---------- 2100

Diameter (Nominal) ---------- 12.20

CLUTCHES

Type ---------- Three, multiple disk

Material

Drive plates ---------- Waved steel with bonded organic facings

Driven plates ---------- Flat steel

Forward clutch ---------- Five each drive and driven plates

Direct clutch ---------- Five each drive and driven plates

Intermediate clutch ---------- Three each drive and driven plates

Release spring ---------- Radial row steel coil

PLANETARY GEAR UNIT
- Front - Reaction carrier assy. ---------- Four steel pinion gears
- Rear - Output carrier assy ---------- Four steel pinion gears

Gear Ratios
- "3" ---------- 2.48:1, 1.48:1, 1.00:1
- "2" ---------- 2.48:1, 1.48:1
- "1" ---------- 2.48:1
- R (Reverse) ---------- 2.08:1

Front Band
- Type ------- One, circumferential steel with organic lining
- Function ---------- Provides engine braking in 2nd gear with selector lever in "2" and "1" range

Rear Band
- Type ---------- Double wrap circumferential steel with organic lining
- Function ---------- Provides engine braking in Lo range 1st gear; also in reverse range the band holds the reaction carrier to apply reverse gear ratio
- Servo units ---------- Piston with return spring and inner cushion spring that activates the bands

LUBRICANT
- Type ---------- A suffix A
- Capacity ---------- 22 pts
- Refill ---------- 8 pts
- Oil cooler ---------- Integral with radiator assembly and connected to transmission by inlet and outlet pipes

HYDRAULIC SYSTEM
- Oil pressure pump ---------- Supplies hydraulic pressure by gear type pump which is engine driven

Pump pressure (450 RPM input @ 25 in. Hg vacuum)
- Park ---------- 70 PSI
- Neutral ---------- 70 PSI
- "3" (First, second, third) ---------- 70 PSI
- "2" (First, second) ---------- 150 PSI
- "1" ---------- 150 PSI
- Reverse ---------- 107.5 PSI

Valves
- Type ---------- Steel spool
- Manual ---------- Establishes range at transmission operation
- Pressure regulator ---------- Controls main line pressure
- Shift (1-2) ---------- Controls oil pressure for trans. shift from 1-2 or 2-1
- Shift (2-3) ---------- Controls oil pressure for trans. shift from 2-3 or 3-2
- Modulator ---------- Regulates line pressure with modulator oil pressure that varies with torque to transmission
- Accumulator --------- To obtain greater flexibility in attaining desired shift curve for various engine requirements

Governor
- Type ---------- Cross-axis centrifugal
- Operation ---------- Regulates a pressure proportional to car speed which acts upon the (1-2) (2-3) shift valves and modulator valve

TORQUE MULTIPLICATION
- "3" (maximum) ---------- 5.21 to 1.00
- "2" ---------- 5.21 to 1.48
- "1" ---------- 5.21 to 2.48
- Reverse ---------- 4.37 to 2.08