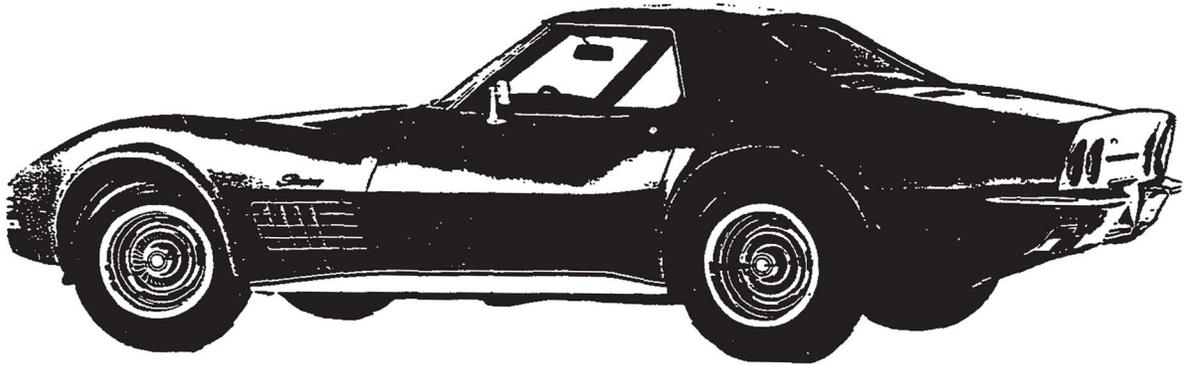


# 1970

## CORVETTE

### SPECIFICATIONS



# 1970 CORVETTE

Production: 10,668 coupe, 6,648 convertible, 17,316 total.

## 1970 NUMBERS

**Vehicle:** 194370S400001 through 194370S417316

• For convertibles, fourth digit is a 6.

**Suffix:** CGW: 454ci, 390hp, at      CTM: 350ci, 300hp, at  
CRJ: 454ci, 390hp, at, ig      CTN: 350ci, 350hp, mt  
CRI: 454ci, 390hp, mt, ig      CTO: 350ci, 350hp, mt, ac  
CTD: 350ci, 300hp, mt      CTP: 350ci, 350hp, mt, ig  
CTG: 350ci, 300hp, at      CTQ: 350ci, 350hp, mt, ac, ig  
CTH: 350ci, 350hp, mt      CTR: 350ci, 370hp, mt, ig  
CTJ: 350ci, 350hp, mt, ac      CTU: 350ci, 370hp, mt, ig  
CTK: 350ci, 370hp, mt, ig      CTV: 350ci, 370hp (ZR1), mt  
CTL: 350ci, 300hp, mt      CZU: 454ci, 390hp, mt

• Some early 1970 models may have 1969 engine codes.

**Block:** 3970010: 350ci, 300hp, 350hp, 370hp  
3963512: 454ci, 390hp

**Head:** 3927186: 350ci, 300hp, 350hp, 370hp      3964290: 454ci, 390hp  
3927187: 350ci, 350hp      3973414: 350ci, 370hp

**Carburetor:** Rochester Q-jet #7040202: 350ci, 300hp, at, fd  
Rochester Q-jet #7040203: 350ci, 300hp, mt, fd  
Rochester Q-jet #7040204: 454ci, 390hp, at  
Rochester Q-jet #7040205: 454ci, 390hp, mt  
Rochester Q-jet #7040207: 350ci, 350hp, mt  
Rochester Q-jet #7040212: 350ci, 300hp, at, sd  
Rochester Q-jet #7040213: 350ci, 300hp, mt, sd  
Rochester Q-jet #7040502: 350ci, 300hp, at, ec  
Rochester Q-jet #7040503: 350ci, 300hp, mt, ec, fd  
Rochester Q-jet #7040504: 454ci, 390hp, at, ec  
Rochester Q-jet #7040505: 454ci, 390hp, mt, ec  
Rochester Q-jet #7040507: 350ci, 350hp, mt, ec  
Rochester Q-jet #7040513: 350ci, 300hp, mt, ec, sd  
Holley R4489A #3972123: 350ci, 370hp, mt, ec  
Holley R4555A #3972121: 350ci, 370hp, mt

**Distributor:** 1111464: 454ci, 390hp      1111493: 350ci, 350hp, ep  
1111490: 350ci, 300hp, ep      1112020: 350ci, 300hp  
1111491: 350ci, 370hp, ig      1112021: 350ci, 350hp

**Alternator:** 1100884: 350ci, 370hp or ac(all)      1100901: 350ci, 300hp  
1100900: 350ci(350hp), 454ci(390hp)

**Ending Vehicle:** Jan 70: 402261      Apr 70: 408314      Jul 70: 417316  
Feb 70: 405183      May 70: 410652  
Mar 70: 407977      Jun 70: 413829

**Abbreviations:** ac=air conditioning, at=automatic transmission,  
ci=cubic inch, ec=evaporative emission control, ep=early production,  
fd=first design, hp=horsepower, ig=transistor ignition, mt>manual  
transmission, sd=second design.

## 1970 FACTS

- Body design for 1970 was updated with fender swells to reduce wheel-thrown debris damage, a problem with 1968-69 models. New fender louvers replaced the four vertical slots of the 1968-69 models.
- Big block displacement increased to 454ci. Small block stayed 350ci, but a new solid-lifter version, the LT1, debuted.
- Interiors in 1970 had subtle refinements, including redesigned seats for additional headroom and easier access to rear storage.

## 1970 OPTIONS

RPO #	DESCRIPTION	QTY	RETAIL \$
19437	Base Corvette Sport Coupe .....	10,668	\$5,192.00
19467	Base Corvette Convertible .....	6,648	4,849.00
—	Custom Interior Trim .....	3,191	158.00
A31	Power Windows .....	4,813	63.20
A85	Custom Shoulder Belts (std with coupe) .....	475	42.15
C07	Auxiliary Hardtop (for convertible) .....	2,556	273.85
C08	Vinyl Covering (for auxiliary hardtop) .....	832	63.20
C50	Rear Window Defroster .....	1,281	36.90
C60	Air Conditioning .....	6,659	447.65
G81	Optional Rear Axle Ratio .....	2,862	12.65
J50	Power Brakes .....	8,984	47.40
L46	350ci, 350hp Engine .....	4,910	158.00
LS5	454ci, 390hp Engine .....	4,473	289.65
LT1	350ci, 370hp Engine .....	1,287	447.60
M21	4-Speed Man Trans, close ratio .....	4,383	0.00
M22	4-Speed Man Trans, close ratio, heavy duty .....	25	95.00
M40	Turbo Hydra-Matic Automatic Transmission .....	5,102	0.00
NA9	California Emissions .....	1,758	36.90
N37	Tilt-Telescopic Steering Column .....	5,803	84.30
N40	Power Steering .....	11,907	105.35
P02	Deluxe Wheel Covers .....	3,467	57.95
PT7	White Stripe Tires, F70x15, nylon .....	6,589	31.30
PU9	White Letter Tires, F70x15, nylon .....	7,985	33.15
T60	Heavy Duty Battery (std with LS5) .....	165	15.80
UA6	Alarm System .....	6,727	31.60
U69	AM-FM Radio .....	14,529	172.75
U79	AM-FM Radio, stereo .....	2,462	278.10
ZR1	Special Purpose Engine Package .....	25	968.95

- A 350ci, 300hp engine, 4-speed wide ratio manual transmission, vinyl interior trim, soft top (conv) or T-tops (cpe) were included in the base price.
- The ZR1 included the LT1 engine, M22 transmission, heavy-duty power brakes, transistor ignition, special aluminum radiator, and special springs, shocks and front and rear stabilizer bars (ZR1s have appeared with and without rear stabilizers). RPOs A31, C50, C60, N40, P02, UA6, U69 and U79 were not available. ZR1's also had metal fan shrouds.
- A ZR2 package like ZR1, but with a 460hp (also listed as 465hp), 454ci engine, was planned and advertised for 1970, but not delivered to retail customers. Suffix was to be CZL for manual, CZN for automatic.
- Custom interior included leather seat trim, wood-grain accents and lower carpet trim on interior door panels, wood-grain accents on console, and special cut-pile carpeting.
- Previously optional tinted glass, Positraction axle, and 4-speed wide ratio manual transmission were included in the 1970 base price.

## 1970 COLORS

CODE	EXTERIOR	SOFT TOP	WHEELS	INTERIORS
972	Classic White	Bk-W-Bg	Silver	B-Bk-Br-G-R-S
974	Monza Red	Bk-W-Bg	Silver	Bk-Br-R-S
975	Marlboro Maroon	Bk-W-Bg	Silver	Bk-Br-S
976	Mulsanne Blue	Bk-W-Bg	Silver	B-Bk
979	Bridgethampston Blue	Bk-W-Bg	Silver	B-Bk
982	Donnybrooke Green	Bk-W-Bg	Silver	Bk-Br-G-S
984	Daytona Yellow	Bk-W-Bg	Silver	Bk-G
986	Cortez Silver	Bk-W-Bg	Silver	B-Bk-Br-G-R-S
991	Ontario Orange	Bk-W-Bg	Silver	Bk-S
992	Laguna Gray	Bk-W-Bg	Silver	B-Bk-Br-G-R-S
993	Corvette Bronze	Bk-W-Bg	Silver	Bk

• Suggested interiors shown. Other combinations were possible.  
 Interior Codes: 400=Bk/V, 403=Bk/L, 407=R/V, 411=B/V, 414=Br/V,  
 418=S/V, 422=G/V, 424=S/L.

Abbreviations: B=Blue, Bk=Black, Bg=Beige, Br=Brown, G=Green,  
 L=Leather, R=Red, S=Saddle, V=Vinyl, W=White.

# POWER TRAINS

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# 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	4.56:1
Turbo-Fire 350 350 Cu.In. V-8 300 HP Standard	4-Spd (2.52:1 low)	All Models		(Econ.)	(Std.)				
	Turbo Hydra-Matic			(Std.)	(Perf.)				
Turbo-Fire 350 350 Cu.In. V-8 350 HP RPO L46	4-Spd (2.52:1 low)	All Models			(Std.)	(Perf.)			
	4-Spd (2.20:1 low)						Std.	Perf.	
Turbo-Fire 350 350 Cu.In. V-8 370 HP RPO LT1	4-Spd (2.52:1 low)	All Models			Econ.	Std.	Perf.		
	4-Spd (2.20:1 low)				Econ.	Std.	Perf.		
	H.D. 4-Spd (2.20:1 low)			Econ.	Std.	Perf.	Spcl.	Spcl.	Spcl.
Turbo-Jet 454 454 Cu.In. V-8 390 HP RPO L55	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.					
Turbo-Jet 454 454 Cu.In. V-8 460 HP RPO L57	4-Spd (2.20:1 low)	All Models		Econ.	Std.	Perf.			
	Turbo Hydra-Matic			Std.	Perf.				

(A) Air conditioning available only with combination, as indicated by parenthesis ( ).

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

## MULTIPLICATION FACTORS

### WITH MANUAL TRANSMISSION

ENGINE	CARBURETION	TRANSMISSION	TOTAL GEAR REDUCTION					AXLE RATIO
			1st	2nd	3rd	4th	Rev	
350 Cu.In. V-8 300 HP Standard	4-Barrel	4-Speed (2.52:1)	8.47	6.32	4.91	3.36	8.70	3.36
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
350 Cu.In. V-8 370 HP RPO LT1	4-Barrel	4-Speed (2.52:1)	8.95	6.67	5.18	3.55	9.19	3.55
		4-Speed (2.20:1)	8.14	6.07	4.70	3.70	8.36	3.70
		H.D. 4-Spd (2.20:1)	7.39	5.51	4.27	3.36	7.59	3.36
454 Cu.In. V-8 390 HP RPO L55	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
454 Cu.In. V-8 460 HP RPO L57	4-Barrel	4-Speed (2.20:1)	7.39	5.51	4.27	3.36	7.59	3.36

### WITH AUTOMATIC TRANSMISSIONS

ENGINE	TRANSMISSION	SELECTOR POSITION	TOTAL TORQUE* MULTIPLICATION	AXLE RATIO
350 Cu.In. V-8 Standard and 454 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	

\*—Axle ratio x transmission ratio

# ENGINE DATA AND RATINGS

## GENERAL DATA

Engine Type		V-8 OHV				
Piston Displacement (Cu.In.)		350			454	
Availability		Standard	RPO L46	RPO LT1	RPO LS5	RPO LS7
Number of Cylinders		Eight				
Bore and Stroke (nominal)		4.00 x 3.48			4.251 x 4.00	
Compression Ratio		10.25:1	11.00:1		10.25:1	11.25:1
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	900	700 (a)	
Compression Press. (PSI) @ Cranking Speed, Engine Hot		150				
Power Plant Mounting		Two front and one rear, compression type				
Measurements	Fan to rear of engine block	30.16			33.97	
	Top air cleaner to bottom oil pan	26.79			27.62	
	Exhaust manifold to generator (width)	27.97			30.00	

(a) 600 for Automatic in drive

## ADVERTISED ENGINE RATING

Engine	350 Cu.In.			454 Cu.In.	
	300 HP	350 HP	370 HP	390 HP	460 HP
Availability	Standard	RPO L46	RPO LT1	RPO LS5	RPO LS7
Gross Brake HP @ RPM	300 @ 4800	350 @ 5600	370 @ 6000	390 @ 4800	460 @ 5600
Gross Torque @ RPM (lb-ft)	380 @ 3200	380 @ 3600	380 @ 4000	500 @ 3400	490 @ 3600

## ENGINE SPEED AND PISTON TRAVEL

Engine	350 Cu.In.				454 Cu.In.			
	4-Speed			Trb/HD (a)	4-Speed		Trb/Hyd	
Rear Axle Ratio	3.36:1	3.70:1 (b)	3.55:1 (c)	3.08:1	3.36:1 (d)	3.08:1 (e)	3.08:1	
Tire Size	F70 x 15B							
Crankshaft Revolutions per Mile	2593.9	2856.4	2740.6	2377.8	2593.9	2377.8	2377.8	
Crankshaft RPM @ MPH	Low	108.9	104.7	115.1	98.3	95.1	99.8	98.3
	Second	81.3	78.1	85.9	58.7	70.9	74.5	58.7
	Third	63.1	60.5	66.7	39.6	54.9	57.9	39.6
	Fourth	43.2	47.6	45.7		43.2	39.6	
	Reverse	112.0	107.6	118.3	82.4	97.7	102.6	82.4
Piston Travel (Ft/Mile)	1504.5	1656.7	1589.5	1379.1	1729.3	1585.2	1585.2	

(a) Available with 300 HP (Base) engine only

(b) Standard ratio for 350 HP (L46) & 370 HP (LT1) engine with 2.20:1 low transmission

(c) Standard ratio for 370 HP (LT1) engine with 2.52:1 low transmission

(d) Standard ratio with 2.20:1 low transmission

(e) Standard ratio 2.52:1 low transmission available with RPO LS5 only

# VEHICLE PERFORMANCE FACTORS

ENGINE	BASE 350 CU.IN. 300 HP	RPO L46 350 CU.IN. 350 HP	RPO LT1 350 CU.IN. 370 HP	RPO L55 454 CU.IN. 390 HP	RPO LS7 454 CU.IN. 460 HP
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## 4-SPEED TRANSMISSION

Performance Weight (pounds)	3586	3597	3577	3768	
Pounds per Gross Horsepower	11.95	10.28	9.67	9.66	
Pounds per Cu.In. Displacement	10.25	10.28	10.22	8.30	
Gross HP per Cu.In. Displacement	.857	1.00	1.06	8.59	
Power Displacement (cu.ft./mile)	262.69	262.69	277.55	312.36	
Displacement Factor (cu.ft./ton mile)	146.51	146.06	155.19	165.79	

## 4-SPEED TRANSMISSION - CLOSE RATIO

Performance weight (pounds)		3597	3577	3768	3641
Pounds per Gross Horsepower		10.28	9.67	9.66	7.91
Pounds per Cu.In. Displacement		10.28	10.22	8.30	8.02
Gross HP per Cu.In. Displacement		1.00	1.06	.859	1.01
Power Displacement (cu.ft./mile)		289.28	289.28	340.75	340.75
Displacement Factor (cu.ft./ton mile)		160.84	161.74	180.87	170.38

## TURBO HYDRA-MATIC

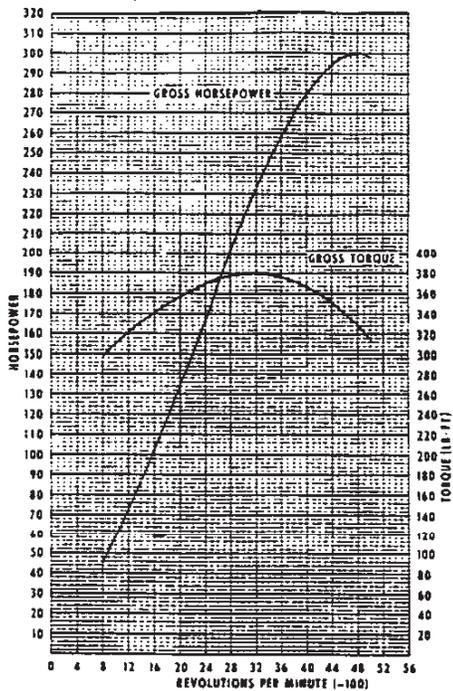
Performance Weight (pounds)	3661			3837	3685
Pounds per Gross Horsepower	12.20			9.84	8.01
Pounds per Cu.In. Displacement	10.46			8.45	8.12
Gross HP per Cu.In. Displacement	.857			.859	1.01
Power Displacement (cu.ft./mile)	240.80			312.36	312.36
Displacement Factor (cu.ft./ton mile)	131.55			162.81	169.76

## GLOSSARY

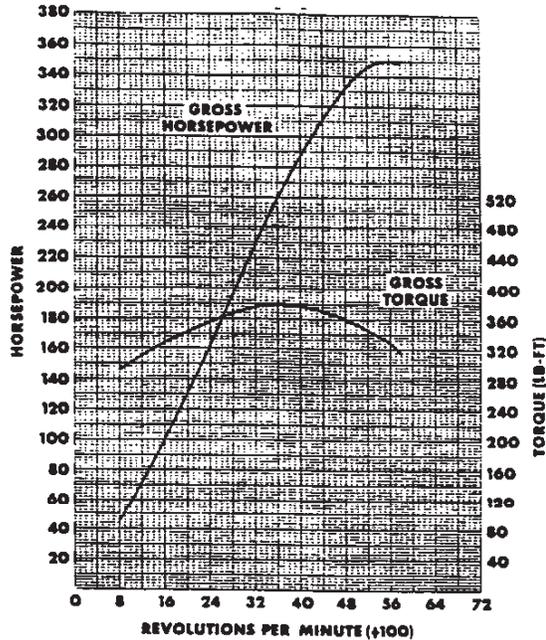
Performance Weight	Curb Weight plus 300 Lb (weight of two 150 lb passengers)
Power Displacement	$\frac{\text{Crankshaft Revs/Mi} \times \text{Piston Displacement}}{2 \times 1728}$
Displacement Factor	$\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

# ENGINE OUTPUT CURVES

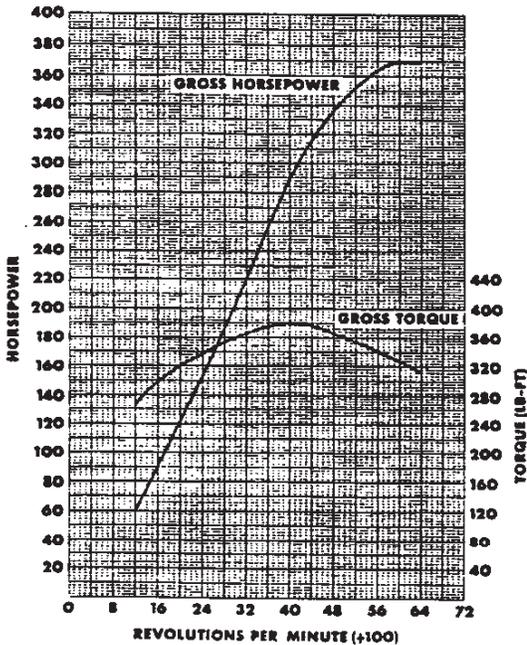
300 HP TURBO-FIRE V-8



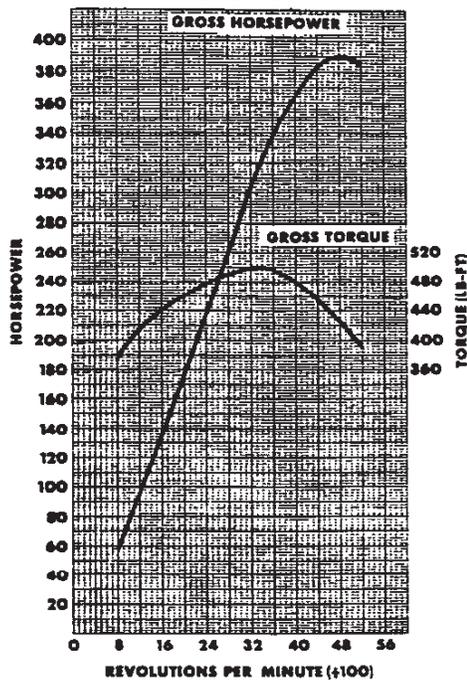
350 HP TURBO-FIRE V-8



370 HP TURBO-FIRE V-8



390 HP TURBO-JET V-8



# PRINCIPAL COMPONENTS

## CYLINDER BLOCK

Material	Cast alloy iron
Bore Diameter	
V8-350 Cu.In.	3.9995-4.0025
V8-454 Cu.In.	4.2496-4.2524
Bore Spacing (Centerline to Centerline)	
V8-350 Cu.In.	4.4
V8-454 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
	Cast aluminum with RPO LS7
Bolt Number	34 (350 Cu.In.); 32 (454 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 & LT1)	4.51 Cu.In.
V8-454 Cu.In. (RPO LS5)	6.31 Cu.In.
V8-454 Cu.In. (RPO LS7)	5.67 Cu.In.

## INLET MANIFOLD

Material	Cast alloy iron
	Cast aluminum with RPO LS7 & LT1
Type	8 port, double deck

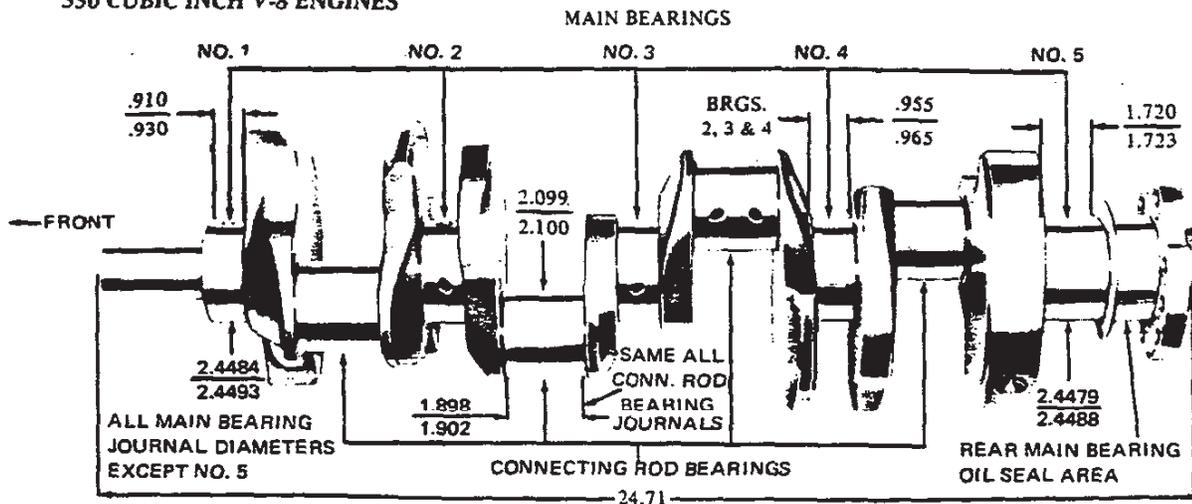
## EXHAUST MANIFOLD

Material	Cast alloy iron
Type	
V8-350 Cu.In.	Dual, 4 port, exhaust emission to a single runner with center takedown collector
V8-454 Cu.In.	Dual, 4 port, extended runners from each port converging to a rear takedown collector
Outlet Diameter (Nominal)	
V8-350 Cu.In.	2.00
V8-454 Cu.In.	2.50

## CRANKSHAFT

Material	
V8-350 Cu.In.	Nodular iron
V8-350 (RPO L46 & LT1)	Forged steel
V8-454 Cu.In.	Forged steel
End Play	
V8-350 Cu.In.	.002-.006
V8-454 Cu.In.	.006-.010
Counter Weights	6
Crank Arm Length	
V8-350 Cu.In.	1.74
V8-454 Cu.In.	2.00
Torsional Damper	Rubber mounted inertia
Timing Gear	Steel; sprocket & chain
Pulley Pitch Diameter	6.64

## 350 CUBIC INCH V-8 ENGINES



# PRINCIPAL COMPONENTS

## MAIN BEARINGS

Material . . . . . Premium aluminum  
 Type . . . . . Precision removable  
 Thrust Against Bearing No. . . . . 5  
 Clearance  
 V8-350 Cu.In. . . . . (No. 1) .0008-.0020;  
 (No. 2, 3 & 4) .0011-.0023; (No. 5) .0017-.0033  
 V8-454 Cu.In. . . . . (No. 1) .0007-.0019  
 (No. 2-3-4) .0013-.0025 (No. 5) .0019-.0035

Dimensions	Theoretical	Effective	Projected
	Inner Dia.	Length	Area
<b>V8-350 Cu.In.</b>			
Bearing No. 1	2.4502	.752	1.8425
Bearing No. 2-4	2.4505	.752	1.8428
Bearing No. 5	2.4508	1.177	2.8846
<b>V8-454 Cu.In. (RPO LS5)</b>			
Bearing No. 1	2.7503	.992	2.7283
Bearing No. 2-3-4	2.7505	.992	2.7285
Bearing No. 5	2.7510	1.2525	3.4457
<b>V8-454 Cu.In. (RPO LS7)</b>			
Bearing No. 1	2.7492	.992	2.7272
Bearing No. 2-3-4	2.7498	.992	2.7764
Bearing No. 5	2.7500	1.2525	3.4444

## CAMSHAFT

Material . . . . . Cast alloy iron  
 Drive . . . . . Sprocket & chain; steel  
 Lobe Lift  
 V8-350 Cu.In.  
 (Base) . . . . . .2600 Inlet; .2733 Exhaust  
 (RPO L46) . . . . . .3000 Inlet; .3067 Exhaust  
 (RPO LT1) . . . . . .3057 Inlet; .3234 Exhaust  
 V8-454 Cu.In.  
 (RPO LS5) . . . . . .2714 Inlet; .2824 Exhaust  
 (RPO LS7) . . . . . .3412 Inlet; .3647 Exhaust  
 Bearings . . . . . 5; steel backed babbitt

## VALVE LIFT

V8-350 Cu.In. (Base) . . . . .3900 Inlet & .4100 Exhaust  
 V8-350 Cu.In. (RPO L46) . . . . .4500 Inlet; .4600 Exhaust  
 V8-350 Cu.In. (RPO LT1) . . . . .4586 Inlet; .4850 Exhaust  
 V8-454 Cu.In. (RPO LS5) . . . . .4614 Inlet; .4800 Exhaust  
 V8-454 Cu.In. (RPO LS7) . . . . .5197 Inlet; .5498 Exhaust

## VALVE TRAIN

Type . . . . . Individually mounted  
 . . . . . overhead rocker arms, push rod actuated  
 Lifters . . . . . Hydraulic  
 V8-350 Cu.In. (RPO LT1) . . . . . Mechanical  
 V8-454 Cu.In. (RPO LS7) . . . . . Mechanical  
 Push Rods  
 Type . . . . . Hollow steel  
 Ends  
 V8-350 (Base) . . . . . Hardened  
 V8-350 Cu.In. (RPO L46 & LT1) . . . . . Hardened  
 . . . . . steel insert on rocker arm ends  
 V8-454 Cu.In. . . . . Hardened steel inserts  
 Rocker Arms  
 Material . . . . . Stamped steel  
 Ratio  
 V8-350 Cu.In. . . . . 1.50:1  
 V8-454 Cu.In. . . . . 1.70:1

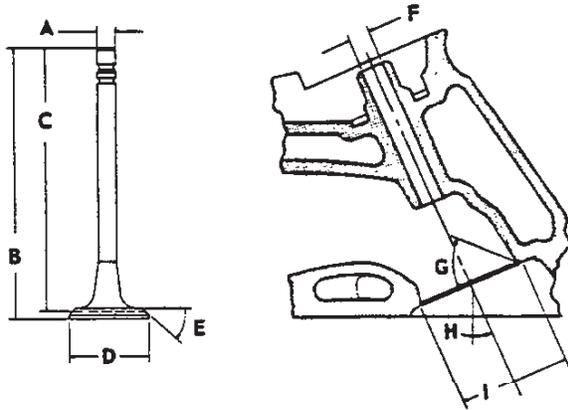
## VALVE SPRINGS

Diameter (I.D.)  
 V8-350 Cu.In. . . . . .868-.884  
 V8-454 Cu.In. (RPO LS5) . . . . . 1.080-1.094  
 V8-454 Cu.In. (RPO LS7) . . . . . 1.070-1.090  
 Installed Length (lb. @ in.)  
 Valves Closed  
 V8-350 Cu.In. . . . . 76-84 @ 1.70  
 V8-454 Cu.In. (RPO LS5)  
 Outer spring . . . . . 69-81 @ 1.88  
 Inner spring . . . . . 26-34 @ 1.78  
 V8-454 Cu.In. (RPO LS7)  
 Outer Spring . . . . . 69-81 @ 1.88  
 Inner Spring . . . . . 37-45 @ 1.78  
 Valves Opened  
 V8-350 Cu.In. . . . . 194-206 @ 1.25  
 V8-454 Cu.In. (RPO LS5)  
 Outer spring . . . . . 228-252 @ 1.38  
 Inner Spring . . . . . 81-99 @ 1.28  
 V8-454 Cu.In. (RPO LS7)  
 Outer Spring . . . . . 181-205 @ 1.32  
 Inner Spring . . . . . 92-110 @ 1.22  
 Free Length  
 V8-350 Cu.In. . . . . 2.03  
 V8-454 Cu.In. (RPO LS5)  
 Outer Spring . . . . . 2.12  
 Inner Spring . . . . . 2.06  
 V8-454 Cu.In. (RPO LS7)  
 Outer Spring . . . . . 2.21  
 Inner Spring . . . . . 2.12  
 Valve Spring Damper  
 V8-350 & 454 (LS7) Cu.In. . . . . Flat steel, 4 coils

# PRINCIPAL COMPONENTS

## VALVES - INLET

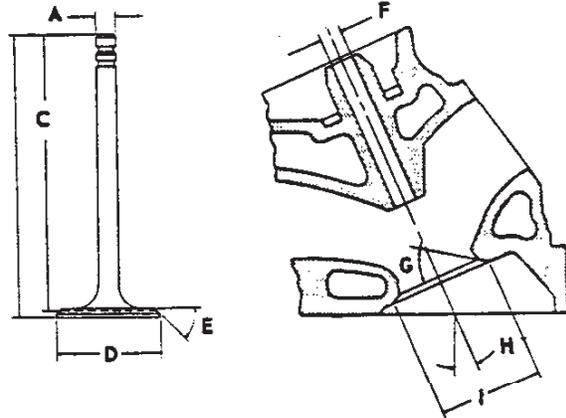
Material	Alloy steel
Coating	
V8-350 Cu.In.	None
V8-454 Cu.In.	Face and head aluminized
Valve Guide Inserts (V8-454)	Cast alloy iron
Valve Seat Inserts (RPO LS7)	High alloy steel



A - Stem Diameter	
V8-350 Cu.In.	3.410-3417
V8-454 Cu.In.	3715-3722
B - Overall Length	
V8-350 Cu.In.	4.870-4.889
V8-454 Cu.In. (RPO LS5)	5.215-5.235
V8-454 Cu.In. (RPO LS7)	5.226-5.251
C - Gage Length	
V8-350 Cu.In.	4.785-4.795
V8-454 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 & LT1)	2.017-2.023
V8-454 Cu.In. (RPO LS5)	2.060-2.070
V8-454 Cu.In. (RPO LS7)	2.185-2.195
E - Angle of Face	45°
F - Guide Diameter	
V8-350 Cu.In.	.3427-.3437
V8-454 Cu.In.	.3732-.3742
G - Angle of Seat	46°
H - Valve Angle	
V8-350 Cu.In.	23°
V8-454 Cu.In.	4°
I - Valve Seat (Cutter) Diameter	
V8-350 Cu.In.(Base)	1.990-2.010
V8-350 Cu.In. (RPO L46 & LT1)	2.020
V8-454 Cu.In. (RPO LS5)	2.150
V8-454 Cu.In. (RPO LS7)-Insert	2.228

## VALVE - EXHAUST

Material	High alloy steel
Coating	
V8-350 Cu.In.	Aluminum face
V8-454 Cu.In.	Face and head aluminized
Valve Guide Inserts (V8-454)	Cast alloy iron
Valve Seat Inserts (RPO LS7)	High alloy steel



A - Stem Diameter	
V8-350 Cu.In.	.3410-.3417
V8-454 Cu.In.	.3713-.3720
B - Overall Length	
V8-350 (Cu.In.(Base)	4.913-4.933
V8-350 Cu.In.(RPO L46 & LT1)	4.891-4.910
V8-454 Cu.In. (RPO LS5)	5.345-5.365
V8-454 Cu.In. (RPO LS7)	5.380-5.405
C - Gage Length	
V8-350 Cu.In.	4.781-4.791
V8-454 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 & LT1)	1.595-1.605
V8-454 Cu.In. (RPO LS5)	1.715-1.725
V8-454 Cu.In. (RPO LS7)	1.875-1.885
E - Angle of Face	45°
F - Guide Diameter	
V8-350 Cu.In.	.3427-.3437
V8-454 Cu.In.	.3732-.3742
G - Angle of Seat	46°
H - Valve Angle	
V8-350 Cu.In.	23°
V8-454 Cu.In.	4°
I - Valve Seat (Cutter) Diameter	
V8-350 Cu.In.(Base)	1.550-1.570
V8-350 Cu.In.(RPO L46 & LT1)	1.600
V8-454 Cu.In. (RPO LS5)	1.625
V8-454 Cu.In. (RPO LS7)-Insert	1.942

# PRINCIPAL COMPONENTS

## PISTONS

<b>Material</b>	
V8-350 Cu.In. (Base)	Cast aluminum alloy
V8-350 Cu.In.(RPO L46 & LT1)	Alum. impact extruded
V8-454 Cu.In. (RPO LS5)	Cast aluminum alloy
V8-454 Cu.In. (RPO LS7)	Alum. impact extruded
<b>Head Type</b>	
V8-350 Cu.In. (Base)	Flat, notched
V8-350 Cu.In. (RPO L46 & LT1)	Domed
V8-454 Cu.In.	Domed
<b>Skirt Type</b> . . . . . Slipper	
<b>Top Land Clearance</b>	
V8-350 Cu.In. (Base)	.0235-.0325
V8-350 Cu.In. (RPO L46 & LT1)	.0305-.0395
V8-454 Cu.In. (RPO LS5)	.0306-.0314
V8-454 Cu.In. (RPO LS7)	.0306-.0394
<b>Skirt Clearance</b>	
V8-350 Cu.In. (Base)	.0007-.0013
V8-350 Cu.In. (RPO L46)	.0020-.0026
V8-350 Cu.In. (RPO LT1)	.0036-.0042
V8-454 Cu.In. (RPO LS5)	.0020-.0028
V8-454 Cu.In. (RPO LS7)	.0058-.0066
<b>Compression Ring Groove Depth</b>	
V8-350 Cu.In.	.2218-.2284
V8-454 Cu.In. (RPO LS5)	.2348-.2412
V8-454 Cu.In. (RPO LS7)	.2373-.2437
<b>Oil Ring Groove Depth</b>	
V8-350 Cu.In.	.2038-.2103
V8-454 Cu.In. (RPO LS5)	.2183-.2247
V8-454 Cu.In. (RPO LS7)	.2133-.2197
<b>Pin Bore Offset</b>	
V8-350 Cu.In. (Base) & 454 (LS5)	.055-.065
V8-350 Cu.In. (RPO L46 & LT1)	On center
V8-454 Cu.In. (RPO LS7)	On center
<b>Compression Height</b>	
V8-350 Cu.In.	1.558-1.562
V8-350 Cu.In.(RPO L46 & LT1)	1.658-1.662
V8-454 Cu.In.	1.641-1.699

## PISTON PINS

<b>Material</b> . . . . . Chromium steel	
<b>Length</b>	
V8-350 Cu.In.	2.990-3.010
V8-454 Cu.In. (RPO LS5)	2.930-2.950
V8-454 Cu.In. (RPO LS7)	2.924-2.928
<b>Diameter</b>	
V8-350 Cu.In.	.9270-.9273
V8-454 Cu.In.	.9895-.9898
<b>Clearance in Piston</b>	
V8-350 Cu.In. (Base)	.00015-.00025
V8-350 Cu.In. (RPO L46 & LT1)	.00045-.00055
V8-454 Cu.In. (RPO LS5)	.00030-.00040
V8-454 Cu.In. (RPO LS7)	.00045-.00055
<b>Pin Mounting</b> . . . . . Locked in rod by shrink fit	

## VALVE TIMING (Crankshaft Degrees)

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

V8-350 Cu.In. - RPO L46	Excluding Ramps
<b>Inlet Valve (opens with .020 lash)</b>	
Opens - BTC	52°
Closes - ABC	114°
Duration	346°
<b>Exhaust Valve (opens with .025 lash)</b>	
Opens - BBC	98°
Closes - ATC	62°
Duration	340°

V8-350 Cu.In. - RPO LT1	Excluding Ramps
<b>Inlet Valve (opens with .020 lash)</b>	
Opens - BTC	42°40'
Closes - ABC	94°20'
Duration	317°
<b>Exhaust Valve (opens with .025 lash)</b>	
Opens - BBC	112°50'
Closes - ATC	53°23'
Duration	346°13'

V8-454 Cu.In. (RPO LS5)	Excluding Ramps
<b>Inlet Valve (Zero lash)</b>	
Opens - BTC	56°
Closes - ABC	114°
Duration	350°
<b>Exhaust Valve (Zero lash)</b>	
Opens - BBC	110°
Closes - ATC	62°
Duration	352°

V8-454 Cu.In. (RPO LS7)	Excluding Ramps
<b>Inlet Valve (opens with .020 lash)</b>	
Opens - BTC	62°
Closes - ABC	105°
Duration	347°
<b>Exhaust Valve (opens with .020 lash)</b>	
Opens - BBC	106°
Closes - ATC	73°
Duration	359°

# PRINCIPAL COMPONENTS

## 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 & LT1)	Molybdenum inlay
V8-454 Cu.In.	Molybdenum inlay
Width	
V8-350 Cu.In. (Base)	.0775-.0780
V8-350 Cu.In. (RPO L46 & LT1)	.0770-.0775
V8-454 Cu.In. (RPO LS5)	.0770-.0775
V8-454 Cu.In. (RPO LS7)	.0620-.0625
Wall Thickness	
V8-350 Cu.In.	.190-.200
V8-454 Cu.In.	.202-.212
Gap	.010-.020
	.015-.025 for RPO LS7

## 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 V8-454 LS5; straight edge for LS7)
Face	Tapered; Barrel for RPO LS7
Coating	
V8-350 Cu.In. (Base)	Wear resistant
V8-350 Cu.In. (RPO L46 & LT1)	Chrome plate
V8-454 Cu.In. (RPO LS5)	Chrome plate
V8-454 Cu.In. (RPO LS7)	Molybdenum inlay
Width	
V8-350 Cu.In. (Base)	.0770-.0775
V8-350 Cu.In. (RPO L46 & LT1)	.0775-.0780
V8-454 Cu.In. (RPO LS5)	.0770-.0775
V8-454 Cu.In. (RPO LS7)	.0620-.0625
Wall Thickness	
V8-350 Cu.In.	.190-.200
V8-454 Cu.In.	.202-.212
Gap	
V8-350 Cu.In. (Base)	.013-.025
V8-350 Cu.In. (RPO L46 & LT1)	.013-.028
V8-454 Cu.In. (RPO LS5)	.010-.020
V8-454 Cu.In. (RPO LS7)	.015-.025

## 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
V8-454 Cu.In.	.1870-.1890
Wall Thickness	
V8-350 Cu.In.	.150-.156
V8-454 Cu.In.	.137-.143
Gap	
V8-350 Cu.In.	.015-.055
V8-454 Cu.In.	.010-.030
Rail Coatings	Chrome plated

## CONNECTING RODS

Material	Drop forged steel
Length (center to center)	
V8-350 Cu.In.	5.695-5.705
V8-454 Cu.In.	6.130-6.140

## CONNECTING ROD BEARINGS

Material	Premium aluminum
Type	Precision removable
Clearance	
V8-350 Cu.In.	.0007-.0027
V8-454 Cu.In. (RPO LS5)	.0009-.0025
V8-454 Cu.In. (RPO LS7)	.0014-.0034
Theoretical I.D.	
V8-350 Cu.In.	2.1019
V8-454 Cu.In. (RPO LS5)	2.2012
V8-454 Cu.In. (RPO LS7)	2.2019
Effective Length	
V8-350 Cu.In.	.797
V8-454 Cu.In.	.847
End Play	
V8-350 Cu.In.	.008-.014
V8-454 Cu.In.	.015-.023

## FUEL SYSTEM

**FUEL TANK**  
 Capacity (Gal) . . . . . 20 (approximately);  
 18 for California usage.  
 Location . . . . . In body cavity at rear of deck area  
 Filler Location . . . . . Center of rear deck area

**FUEL FILTERS, DUAL**  
 In Fuel Tank . . . . . Mesh strainer  
 Carburetor Inlet . . . . . Paper  
 V8-454 Cu.In. (addition) . . . . . In-line paper  
 element with vacuum return fuel line

**FUEL PUMP**  
 Type  
 V8-350 (Base & L46) & 454 (LS5) . . . . . Deep cover  
 with vapor return lines.  
 V8-350 (LT1) & 454 (LS7) . . . . . 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 (Base & L46) & 454 (LS5) . . . . . Dual snorkel,  
 chrome plated.  
 V8-350 (LT1) & 454 (LS7) . . . . . Full circle  
 intake, chrome plated.  
 Filter Element . . . . . Oil-wetted paper

**CHOKE**  
 Type . . . . . Automatic

**CARBURETORS**  
 Make & Type  
 V8-350 Cu.In. (Base & RPO L46) . . . . . Rochester,  
 Quadrajets  
 V8-350 Cu.In. (RPO LT1) . . . . . Holley, 4-barrel  
 V8-454 Cu.In. (RPO LS5) . . . . . Rochester, Quadrajets  
 V8-454 Cu.In. (RPO LS7) . . . . . Holley, 4-barrel  
 SAE Flange Size . . . . . 1.50  
 Throttle Bore  
 V8-350 Cu.In. (Base & L46)  
 Primary . . . . . 1.38  
 Secondary . . . . . 2.25  
 V8-350 Cu.In. (RPO LT1)  
 Primary & Secondary . . . . . 1.69  
 V8-454 Cu.In. (RPO LS5)  
 Primary . . . . . 1.38  
 Secondary . . . . . 2.25  
 V8-454 Cu.In. (RPO LS7)  
 Primary & Secondary . . . . . 1.69  
 Venturi  
 V8-350 Cu.In. (Base & L46)  
 Primary . . . . . 1.04  
 Secondary . . . . . .625  
 V8-350 Cu.In. (RPO LT1)  
 Primary . . . . . 1.38  
 Secondary . . . . . 1.44  
 V8-454 Cu.In. (RPO LS5)  
 Primary . . . . . 1.04  
 Secondary . . . . . .625  
 V8-454 Cu.In. (RPO LS7)  
 Primary . . . . . 1.38  
 Secondary . . . . . 2.25  
 Secondary Throttle Actuation . . . . . By linkage  
 approximately when primary valves are opened  
 half between closed and open

## EXHAUST AND VENTILATION SYSTEM

**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 . . . . . 17.00  
 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. & WALL THICKNESS**  
 Front Pipes  
 V8-350 Cu.In. (Base & L46) . . . . . 2.00 x .067-.081  
 V8-350 (LT1) & 454 Cu.In. . . . . 2.50 x .072-.092  
 Rear Pipes - Laminated  
 V8-350 Cu.In. (Base & L46) . . . . . 2.00 x .072-.092  
 V8-350 (LT1) & 454 Cu.In. . . . . 2.50 x .084-.104

**TAIL PIPES**  
 Type . . . . . Two inch tube with rectangular  
 chrome plated extensions.

**EXHAUST EMISSION CONTROLS**  
 Positive Crankcase Ventilation . . . . . Utilizes  
 manifold vacuum to draw off engine crankcase  
 vapors through a metered PCV valve and  
 ultimately to the intake system for engine  
 reburn  
 Controlled Combustion System (except RPO LT1 & LS7)  
 Increases combustion efficiency through leaner  
 carburetor adjustments and revises distributor  
 calibration  
 Transmission Controlled Spark . . . . . Retards engine  
 spark advance by eliminating vacuum advance  
 in all forward gears except Hi-gear.  
 Air Injection Reactor . . . . . (RPO LT1 & LS7)  
 Air pump injects air into exhaust manifold  
 which burns unburned portion of exhaust  
 fumes.

# LUBRICATION SYSTEM<sup>e</sup>

## 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
V8-454 Cu.In.	Top center of right rocker cover

## OIL PUMP

Type	Gear
Normal Oil Pressure	
V8-350 Cu.In.	40 PSI @ 2000 RPM
V8-454 Cu.In.	40 PSI @ 2000 RPM
Intake Type	Fixed
Capacity (GPM @ Eng. RPM)	
V8-350 Cu.In.	4.3 @ 2000
V8-454 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
V8-454 Cu.In.	Right side, center, direct to oil pan

## OIL PAN CAPACITY (Quarts)

Refill	
V8-350 Cu.In.	4.0
V8-454 Cu.In.	5.0
Refill with Filter Change	
V8-350 Cu.In.	4.5
V8-454 Cu.In.	5.5

## OIL FILTER

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

## LUBRICANT GRADES AND TEMPERATURES

20°F and Above	20W, 10W-30, 10W-40, 20W-40
0°F to 60°F	10W, 5W-30, 10W-30, 10W-40
Below 20°F	5W, 5W-30, 5W-30

## 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

# COOLING SYSTEM

## GENERAL

Type	Liquid, pressurized
V8-350 Cu.In.	Internal by-pass
V8-454 Cu.In.	External by-pass
Capacity (with Heater)	
V8-350 Cu.In. (Base & RPO L46)	15 Qts.
V8-350 Cu.In. (RPO LT1)	18 Qts.
V8-454 Cu.In.	22 Qts.

## RADIATOR

Type	
V8-350 Cu.In. (Base)	Aluminum, cross-flow
V8-350 (L46 & LT1) & 454	Copper-brass, cross-flow
Core Constant and Thickness	
Distance between Fins	
V8-350 Cu.In.	.18
V8-350 Cu.In. (RPO L46 & LT1)	.16
V8-454 Cu.In. (RPO LS5)	.16
V8-454 Cu.In. (RPO LS7)	.18
Distance between Tubes	
	.55
Thickness of Core	
V8-350 Cu.In.	2.88
V8-350 Cu.In. (RPO L46 & LT1)	2.70
V8-454 Cu.In. (RPO LS5)	2.70
V8-454 Cu.In. (RPO LS7)	2.88
Frontal Area (Sq.In.)	
V8-350 Cu.In.	315
V8-350 Cu.In. (RPO L46 & LT1)	441
V8-454 Cu.In. (RPO LS5)	467
V8-454 Cu.In. (RPO LS7)	467

## SURGE TANK (350 Cu.In. Base engine only)

Location	Right side engine compartment connected by hoses 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
Fan Cutout	Thermomodulated fluid coupling

## THERMOSTAT

Type	Pellet
Begins to Open at	
All engines but V8-350 (RPO LT1)	192°-198°
V8-350 Cu.In. (RPO LT1)	177°-183°
Fully opened at	
All engines but V8-350 (RPO LT1)	227°
V8-350 Cu.In. (RPO LT1)	202°
Thermostat By-Pass Hose (V8-454)	.745 I.D.

## RADIATOR HOSE

Outlet, Lower (Radiator to Water Pump)	
V8-350 Cu.In.	1.75 I.D.
V8-454 Cu.In.	1.88 I.D.
Inlet, Upper (Thermostat Housing to Radiator)	
V8-350 Cu.In.	1.50 I.D.
V8-454 Cu.In.	1.50 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.	54.25
V8-350 Cu.In. (RPO L46 & LT1)	52.75
V8-454 Cu.In.	53.75
Fan and Water Pump Belt	
V8-350 Cu.In.	35.14
V8-350 Cu.In. (RPO L46 & LT1)	32.46
V8-454 Cu.In.	31.86
Width	.380

## WATER PUMP

Type	Centrifugal
Capacity (GPM @ Engine RPM)	
V8-350 Cu.In.	23 @ 2000
V8-454 Cu.In.	25 @ 2000
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

Type . . . . . Sealed side terminal  
 Voltage . . . . . 12  
 Cranking Power @ 0° F  
 V8-350 Cu.In. . . . . 3250 watts  
 V8-454 Cu.In. . . . . 3750 watts  
 Total number of plates  
 V8-350 Cu.In. . . . . 78  
 V8-454 Cu.In. . . . . 90  
 Capacity (SAE) @ 20 hr. rate  
 V8-350 Cu.In. . . . . 62 amp. hr.  
 V8-454 Cu.In. . . . . 80 amp. hr.  
 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 . . . . . Micro-circuit unit, integral with generator  
 Voltage Regulator  
 Voltage . . . . . 13.8-14.8 @ 85° F

## STARTING SYSTEM

### STARTING MOTOR

Rotation (Drive End View) . . . . . Clockwise  
 Test Conditions . . . Engine at operating temperature  
 No Load Test  
 Amps . . . . . 65-100 (350); 70-99 (454)  
 Volts . . . . . 10.6  
 RPM . . . . . 3600-5100 (350); 7800-12000 (454)  
 Motor Drive  
 Engagement . . . . . Solenoid  
 Pinion Meshes at . . . . . Rear  
 Pinion Tooth No. . . . . 9  
 Flywheel Tooth No. . . . . 153; V8-454 - 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 & L46) . . . . . ACR44  
 V8-350 Cu.In. (RPO LT1) . . . . . ACR43  
 V8-454 Cu.In. (RPO LS5) . . . . . ACR43T  
 V8-454 Cu.In. (RPO LS7) . . . . . ACR43XL  
 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	V-8	V-8	V-8	V-8
	350 Cu.In. Standard 300 HP	350 Cu.In. RPO L46 350 HP	350 Cu.In. RPO LT1 370 HP	454 Cu.In. RPO LS5 390 HP	454 Cu.In. RPO LS7 460 HP
Model	1111490	1111493	1111491	1111464	1112026
Type	Single breaker		Transistorized Magnetic Pulse	Single breaker	Transistorized Magnetic Pulse
Cam Angle	29-31			28-30	
Breaker Gap	.019 (new)		.019 (new)		
Breaker Arm Tension	19-23 oz.		28-32 oz.		
Centrifugal Advance Begins (RPM)	900	1150	1000	1085	1000
Max Degrees @ RPM	30 @ 5100	26 @ 5000	26 @ 5000	22 @ 3200	21 @ 2300
Vacuum Advance Begins (In. Hg)	8.00	8.00	8.00	7.00	
Max Degrees @ In. Hg	19 @ 17	19 @ 17	15 @ 15.5	12 @ 12	
Timing (Initial Design Setting)	4 BTC @	8 BTC @	8 BTC @	6 BTC @	8 BTC @
Crankshaft Degrees @ RPM (with vacuum spark line disconnected)	700 Manual 600 Automatic	750 Manual Only	900 Manual Only	700 Manual 600 Automatic	700 Manual 600 Automatic
Timing Mark Location	Torsional Damper				

# TRANSMISSIONS

## TURBO HYDRA-MATIC

General Data	Type		Automatic hydraulic torque converter with compound planetary gear system - three forward speeds and reverse.
	Selector lever	Location	Floor mounted
		Operation	Actuates controls by a hydraulic system from pressurized gear type pump
		Quadrant pattern	P-R-N-3-2-1
	Parking Lock	Type	Locking pawl
		Operation	Applied by selector lever through manual linkage
	Method of cooling		Water
	Flywheel assembly		Steel stamping with welded on ring gear
Oil pressure pump		Supplies hydraulic pressure from an engine driven gear type pump	
Hydraulic System	Type		Steel spool
	Valves	Manual	Establishes range of transmission operation
		Pressure Reg.	Controls main line pressure
		Shift (1-2)	Controls oil pressure for transmission shift from 1-2 or 2-1
		Shift (2-3)	Controls oil pressure for transmission 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
	Pressure (1) Idle (a)	3	70
		2	150
		1	150
Reverse		107.5	
Converter Assembly	Pump (Drive member)		Multivane type, sheet metal blade spot welded to steel pump housing that is an integral part of the converter housing
	Turbine (Driven member)		Steel axial flow blades assembled between inner & outer steel shells
	Stator assembly		Aluminum multivane type blades mounted on a one way (overrunning) roller clutch
	Stall ratio		2.10
	Stall speed (RPM)		2110
	Diameter (nominal)		12.20
Planetary Gear Set	Reaction carrier assembly		4 steep pinion gears
	Output carrier assembly		4 steel pinion gears
	Front band		Circular steel with organic lining
	Rear band		Double wrap circular steel
	Range	D (2.48 1st)	2.48:1 - 1.48:1 - 1.00:1
		L2 (1.48 2nd)	2.48:1 - 1.48:1
		L1 (1.00 3rd)	2.48:1
R (2.08 Reverse)		2.08:1	
Servo Unit		Piston with release spring and inner cushion spring	
Case		Aluminum	
Clutches	Type		Three, multiple disk
	Material	Drive plates	Steel with bonded organic facings
		Driven plates	Flat steel
	Forward Clutch		5 each drive & driven plates
	Direct clutch		5 each drive & driven plates
	Intermediate clutch		3 each drive & driven plates
Release spring		Radial row steel coil	
Torque Multiplication	Drive (maximum)		5.21:1 to 1.00
	Low 2		5.21:1 to 1.48
	Low 1		5.21:1 to 2.48
	Reverse		4.37:1 to 2.08
Governor	Type		Cross-axis centrifugal
	Operation		Regulates a pressure proportional to car speed which acts upon the (1-2) (2-3) shift and modulator valves
Lubricant	Type		A suffix A
	Capacity (pints)	Dry	22
		Refill	8

(1) 450 RPM input @ 25 in. Hg. vacuum

# CLUTCHES AND TRANSMISSIONS

## CLUTCHES

Engine	Type	V8-350 Cu.In.			V8-454 Cu.In.	
	Availability	Standard	RPO L46	RPO LT1	LS5 & LS7	
Clutch for		4-Speed				
Type		Single dry disc centrifugal				
Clutch cover & pressure plate	Eff. plate load, lbs.	2450-2750				
	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	11.00			
		ID	6.50			
		Total area sq. in.	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		4-Speed RPO M20		4-Speed RPO M21 & M22		
Engine	Type	V8-350 Cu.In.	V8-454 Cu.In.	V8-350 Cu.In.	V8-454 Cu.In.	
Application	Availability	Base, L46 & LT1	LS5	L46 & LT1	LS5 & LS7	
Case material		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 forward gears				
	Sliding gears	Reverse				
	Ratios	First	2.52		2.20	
		Second	1.88		1.64	
Third		1.46		1.27		
Fourth		1.00		1.00		
Reverse		2.59		2.26		
Lubricant	Type	Meeting Military Specification MIL-L-2105-B				
	Capacity (pts)	3				
Extension	Material	Aluminum				
	Oil Seal	Steel encased double seal of spring loaded rubber or felt				

# CHASSIS

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# 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 travel (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: 454 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-drive 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	61.8
3931825	B			138.75	.618	3.80	9.99 @ 1540	284	71.8

Engine	350 Cu.In. V-8	454 Cu.In. V-8
Model	19400	19400
Reference	A	B

# STEERING, DRIVELINE, WHEELS AND TIRES

## 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

### 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 propeller shaft  
 Number used . . . . . One  
 Diameter (OD)

Manual . . . . . 2.0  
 Turbo Hydra-Matic . . . . . 2.0

### Length (L of U-joints)

Manual . . . . . 29.90  
 Turbo Hydra-Matic . . . . . 29.50

### Wall thickness

Manual . . . . . .120  
 Turbo Hydra-Matic . . . . . .095

### 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 8.00

## TIRES

Construction . . . . . Nylon - 2-ply  
 Size and ply rating . . . . . F70-15B-4PR

### Specifications

Static Loaded Radius . . . . . 12.6

Loaded rev/mi @ 45 MPH . . . . . 772

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

### Recommended inflation, all tires, psi

Cold . . . . . 24

Hot . . . . . 30

# 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 . . . . . 8.375  
 Type . . . . . Military Spec, MIL-L-2105-B  
 Viscosity . . . . . SAE80  
 Filler plug . . . . . 1-3/8 hex, 1-20 AN thread  
 Capacity (pts) . . . . . 4.0

## 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
4.56	41,9

## 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

## SHOCK ABSORBERS

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

## STRUT

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

## STABILIZER BAR (454 V8)

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

# BRAKES

## SERVICE BRAKES (Regular Production)

Type	4-wheel hydraulic caliper disc brakes; dual-circuit brake system, pressure differential and parking brake warning light
Line pressure; psi, @ 100 lb pedal load	576
Braking ratios	
Pedal	5.23
Hydraulic	43.3
Overall	196.0
Distribution of braking effort	Front 65.0
Brake disc	
Construction	Double faced disc spaced by integrally cast radial cooling passages
Material	Cast iron
Diameter, front & rear	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.)	86.3
Master cylinder	
Piston diameter	1.00
Piston travel (with available pedal travel)	1.10
Wheel cylinders	
Number	4 per wheel
Piston diameter	
Front	1.875
Rear	1.375
Foot pedal travel	5.75

## PARKING BRAKE

Type	Drum; cast integral with each rear rotor. Internal expanding shoes, 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

# BULBS AND LAMPS

BULBS AND LAMPS	NUMBER REQUIRED AND TRADE NUMBER	CANDLE POWER PER LAMP
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
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	2-1895	2
Heater or air conditioning control	1-1816	2.5
Instrument cluster	12-1895	2
License plate rear	1-97	4
Parking		
Park		3
Turn	2-1157	32
Parking brake alarm & warning light	1-1895	2
Radio	1-1893	2
Compartment Storage Box	1-1895	2
Side Marker - Front	2-168	3
Side Marker - Rear	2-168	3
Spot lamp, portable	1-4416	30W
Tail		
Stop and turn		32
Tail	2-1157	3
Underhood	1-93	15

## FUSES AND CIRCUIT BREAKERS

CIRCUIT	TYPE PROTECTION	LOCATION AND CIRCUIT*
Air conditioning	AGC 25 fuse	In line
Air conditioning lamp	AGC 25 fuse	Fuse panel (f)
Back-up lamps	AGC 4 fuse	Fuse panel (d)
Cigarette lighter	AGC 20 fuse	Fuse panel (b)
Cigarette lighter lamp	AGC 20 fuse	Fuse panel (c)
Clock	AGC 4 fuse	Fuse panel (d)
Clock lamps	AGC 20 fuse	Fuse panel (c)
Courtesy lamps	AGC 4 fuse	Fuse panel (d)
Defogger, rear window	AGC 20 fuse	Fuse panel (c)
Direction signal indicator lamp	AGC 20 fuse	Fuse panel (d)
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)
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

# DIMENSIONS AND WEIGHTS

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# INTERIOR DIMENSIONS:

## LENGTHS

CODE	DESCRIPTION	19437 COUPE	19467	
			SOFT TOP	HARDTOP
H30	H point to heel point		6.6	
H37	Headlining to roof height	0.7	0.9	
H54	D point to tunnel		4.0	
H58	H point rise		0.4	
H61	Effective headroom	36.1	37.1	36.0
H67	Depressed floor covering thickness		0.2	
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)		106.3	
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
H27	Interior body, M/M @ C/LO	40.0
H32	Seat cushion deflection	2.2
H50	Upper body opening to ground	43.6
W3	Shoulder room	47.9
W5	Hip room	48.8
W16	Seat width (each seat)	18.5
L14	Seat back thickness	3.7
L18	Entrance foot clearance	14.5

## VISION AND CONTROL

H6	H point to W/S bottom DLO	19.8
H13	Steering wheel thigh clearance	4.3
H18	Steering column angle (degrees) horizontal	14.1
H25	Belt height	17.5
H49	H point to top of steering wheel	1.0
W7	Steering wheel center to car centerline	12.7
W9	Steering wheel maximum O.D.	15.0
W122	Tumble-home (degrees)	26.5
L7	Steering wheel torso clearance	12.6
L13	Brake pedal knee clearance	24.5
L52	Brake pedal to accelerator	3.9

## EXTERIOR DIMENSIONS

### LENGTHS

CODE	DESCRIPTION	19437 COUPE	19467	
			SOFT TOP	HARDTOP
L101	Wheelbase		98.0	
L102	Tire size (standard)		F70-15	
L103	Overall length		182.5	
L104	Overhang - front		40.6	
L105	Overhang - rear		43.9	
L123	Body upper structure 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	
L30	Vertical O line to actual front of dash		-1.7	

### WIDTHS

W101	Tread - front	58.7
W102	Tread - rear	59.4
W103	Maximum overall width of car (W106)	69.2
W106	Front fender overall width	69.0
W107	Rear fender overall width	68.8
W120	Overall car width, front doors open	107.4

### HEIGHTS

CODE	DESCRIPTION	19437	19467
H101	Overall height (design)	47.8	47.9
H102	Front bumper to ground		20.3
H104	Rear bumper to ground		19.3
H111	Rocker panel to ground - rear		7.1
H112	Rocker panel to ground - front		7.3
H114	Hood at rear to ground		26.6
H115	Step height - front (design)		13.1
H122	W/S slope angle (degrees)		57.0
H125	Headlamp to ground		25.4
H126	Tail lamp to ground		27.1
H130	Step height - front (curb)		13.7
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	5.7	
H149	Oil pan to ground	4.8	
H150	Flywheel housing to ground	5.2	
H151	Frame to ground	5.4	
H152	Exhaust system to ground	4.8	4.5
H153	Rear axle to ground	6.0	
H155	Tire well to ground	5.1	
H156	Minimum ground clearance	4.8	4.5

# VEHICLE WEIGHTS

## CORVETTE

Model Symbol	VEHICLE TYPE	SHIPPING WEIGHT			CURB WEIGHT		
	Description	Front	Rear	Total	Front	Rear	Total
19437	2-Door Sport Coupe	1620	1560	3180	1598	1687	3285
19467	2-Door Convertible	1598	1598	3196	1574	1725	3299

**SHIPPING WEIGHT:** Weight of basic vehicle with regular equipment, including grease, oil, engine coolant to capacity and (3) gallons of gasoline.

**CURB WEIGHT:** Shipping weight plus gasoline to capacity.

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
C60	Air Conditioning	With 300 HP engine & 3-spd. trans. & 350 HP eng.	+ 88
		With 300 HP engine & auto. trans.	+ 78
		With 390 HP engine & 4-spd. trans.	+ 99
C07	Auxiliary top	With folding top only	+ 53
A31	Power windows		+ 10
J50	Power brakes		+ 10
--	350 cu. in. V8 engine	With Turbo Hydra-Matic transmission	+ 85
L46	350 cu. in. V8 engine (350 HP)	With 4-speed transmission	+ 16
LT1	350 cu. in. V8 engine (370 HP)	With 4-speed transmission	+ 16
LS5	454 cu. in. V8 engine (390 HP)	With 4-speed transmission	+178
		With Turbo Hydra-Matic transmission	+229
LS7	454 cu. in. V8 engine (460 HP)	With H.D. 4-speed transmission	+ 81
		With Turbo Hydra-Matic transmission	+134
N40	Power steering	With 300 HP engine	+ 23
		with 350 & 370 HP engine	+ 25
		With 390 HP engine	+ 29
P02	Deluxe wheel covers		+ 18
U69	Radio, AM/FM Push Button	With 350 cu. in. engine	+ 16
		With 454 cu. in. engine	+ 13

# BODY

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## 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.

## EXTERIOR-INTERIOR COLORS

MODELS		TRIM	INTERIOR COLORS AND RPO NUMBERS					
			Black	Saddle	Red	Bright Blue	Green	Brown
37	67	Vinyl	Prod.	418	407	411	422	414
37	67	Deluxe *	403	424	-	-	-	-

RPO	EXTERIOR COLOR	Black	Saddle	Red	Bright Blue	Green	Brown
10	Classic White	X	X	X	X	X	X
14	Cortez Silver	X	X	X	X	X	X
15	Laguna Gray	X	X	X	X	X	X
26	Mulsanne Blue	X			X		
27	Bridgehampton Blue	X			X		
44	Donnybrooke Green	X	X			X	X
51	Daytona Yellow	X				X	
62	Ontario Orange	X					
72	Monza Red	X	X	X			X
77	Marlboro Maroon	X	X				X

**Convertible folding top colors:**

- Black - Production
- White - RPO
- Sandalwood - RPO

**RPO C08 Vinyl Roof Option - removable hardtop only.**

- Black - pebble grain

(\* ) - Includes leather seat trim, special cut pile carpeting on floor and lower door side walls. Wood grain insert on floor console. Wood grain insert with bright die cast molding on door side wall.

# 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 . . . . . Astro Ventilation 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.

GRILLE . . . . . Dic cast aluminum chrome plated.

## SEATS

Type and construction . . . . . Bucket with integral head restraints; leather grained vinyl covering over polyurethane padding. Leather Optional

## WINDSHIELD WIPERS

Type . . . . . Concealed, dual, two-speed. electric vacuum operated cowl panel; integral washers provided in wiper arms.

## HEADLIGHTS

Type . . . . . Dual, retractable, with headlamp washers standard equipment. Headlamp door retraction system vacuum operated.

## 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

LOCATION	MODELS	
	37	67
Windshield	977.4	
Door window	800.8	
Back window	392.5	418.0*
Total area (sq.in.)	2170.7	2196.2*

Windshield – Laminated safety plate (tinted)  
 Doors and Removable Rear Window on hardtop – solid safety plate (tinted).  
 Rear window on convertible – vinyl plastic.  
 (\*) Removable auxiliary top – 620.1; total – 2398.3.

# GENERAL

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## **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	Assembly Plant (St. Louis)	Unit Number (1st Unit)
19437	0	S	400001

Thus: The 1st model built at St. Louis would be serial number 194370S400001

### ASSEMBLY PLANTS

S - St. Louis

Starting unit number . . . . . 400001 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 1970	Production <sup>o</sup> Month & Date
RT	S (Muncie)	0	E01D*
RT	3-Speed	V-8 engine	S - Muncie
WO	4-Speed	V-8 engine	R - Muncie
CK	Turbo Hydra-Matic	V-8 engine	-- 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.

<sup>o</sup>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: F1210CTL

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

#### 350 Cubic Inch 8-Cylinder

CTL - Regular engine, 3-speed & 4-speed, 4-bbl. carb.  
 CTM - Regular engine, Turbo Hydra-Matic

#### 350 Cubic Inch 8-Cylinder (RPO L46)

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

#### 350 Cubic Inch 8-Cylinder (RPO LT1)

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

#### 454 Cubic Inch 8-Cylinder (RPO LS5)

CZU - Optional engine, 4-speed, 4-bbl. carb.  
 CGW - Optional engine, Turbo Hydra-Matic

#### 454 Cubic Inch 8-Cylinder (RPO LS7)

CZL - Optional engine, 4-speed, 4-bbl. carb.  
 CZN - 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

Location, Identification Number

Bottom left or right of axle tube adjacent to carrier housing.

See Power Train Section for additional information.

# EXTERIOR EQUIPMENT

## STANDARD EXTERIOR EQUIPMENT

FRONT	AERO COUPE 19437	CONVERTIBLE 19467
Radiator Grille - Die Cast Chrome Plated Aluminum	X	X
Parking Lamps - Clear 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 Louver - Body Color Die Cast Aluminum—Chrome Accented	X	X
Front Fender Nameplate, "Stingray" Script	X	X
Outside Rear View Mirror	X	X
Rocker Panel Molding, Bright	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	X	X
Gas Tank Filler Door Emblem, Cross 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

# INTERIOR EQUIPMENT

## STANDARD INTERIOR EQUIPMENT

ROOF AND PILLARS	AERO COUPE 19437	CONVERTIBLE 19467
Molded Headlining, Padded with Sun Visor Pockets	X	-
Windshield Pillars, Padded	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, Bright Frame	X	-
Door Jamb Light Switch	X	X

## SEATS AND FLOOR COVERING

Bucket Seats - All Vinyl with Integral Head Restraints	X	X
Passenger and Stowage Compartment Floor Carpet with Sound Blanket	X	X
Seat Back Latch, Bright	X	X
Seat Adjuster Handle, Bright	X	X
Seat Belts (2), Bright Buckles (Mini-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
Roof Panel Stowage Vinyl Bag and Tie-Down Straps, Color-Keyed	X	-

## DOOR AND QUARTER PANEL

Molded Door Trim Panel with Stitching and Built-In Armrest	X	X
Door Assist Handle - 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 Applique	X	X
Door Locks - Free Wheeling	X	X
Window Control Handle-Bright, Plastic Knob	X	X

# INTERIOR EQUIPMENT

## STANDARD INTERIOR EQUIPMENT

INSTRUMENT PANEL, CONSOLE AND STEERING WHEEL	AERO COUPE 19437	CONVERTIBLE 19467
Instrument Panel Pad - Trim Color- With Stitching	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 Plastic White Letters "Close"	X	X
Shift Quadrant- Black With Bright Lettering	X	X
Floor Center Console and Trim Plate- Padded, Morocco Finish	X	X
Shift Lever Leather Boot	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- 5-Position Painted	X	X
Center Cluster, Morocco Finish	X	X
Center Cluster "Corvette" Nameplate	X	X
Floor Console - Vinyl Grain Covered	X	X

### GLASS

Windshield, Laminated Safety Plate (Tinted)	X	X
Door Windows with "Astro-Ventilation" Monogram, Safety Solid Plate (Tinted)	X	X
Removable Rear Window, Safety Solid Plate (Tinted)	X	-
Rear Window, Vinyl Plastic	-	X

## EXTRA COST EQUIPMENT

EQUIPMENT	RPO	ACC	MODELS
<b>Air Conditioning</b>			
Four-Season . . . . .	C60		19400
Alarm-System, Audio . . . . .	UA6		19400
Axle ratios (See Power Train Section)			
Belts, Deluxe Shoulder, Front . . . . .	A85		19467
Compass, Auto . . . . .		ACC	19400
Defogger, Rear Window (Forced Air) . . . . .	CS0		19400
Engines (See Power Train Section)			
Evaporative Emission Control (California only) . . . . .	NA9		19400
<b>Fire Extinguisher</b>			
Dry Chemical Extinguisher . . . . .		ACC	19400
Recharge Kit . . . . .		ACC	19400
Highway Emergency Kit . . . . .		ACC	19400
Lock, Gas Cap . . . . .		ACC	19400
Luggage Carrier, Deck Lid . . . . .		ACC	19400
Mats Floor, Vinyl Twin . . . . .		ACC	19400
<b>Power Assists</b>			
Power Brakes . . . . .	J50		19400
Power Disc Brakes, Heavy Duty . . . . .	J56		19400
Power Steering . . . . .	N40		19400
Power Windows . . . . .	A31		19400
<b>Radio Equipment</b>			
AM-FM Pushbutton Radio . . . . .	U69	ACC	19400
AM-FM Stereo Radio . . . . .	U79	ACC	19400
Rear FM Antenna . . . . .		ACC	19400
FM Stereo Multiplex . . . . .		ACC	19400
Roof Cover, Vinyl . . . . .	C08		19467
Seat, Child Safety . . . . .		ACC	19400
Spotlight, Portable . . . . .		ACC	19400
Steering Wheel, Tilt Telescopic . . . . .	N37		19400
Suspension, Special Purpose Front and Rear . . . . .	F41		19400
<b>Tires</b>			
F70-15-4pr tire-special nylon-white lettering . . . . .	PU9		19400
F70-15-4pr tire-special nylon-white stripe . . . . .	PT7		19400
Tissue Dispenser and Litter Box . . . . .		ACC	19400
<b>Tops</b>			
Auxiliary . . . . .	C07		19467
Convertible (Colors - Black, White & Sandalwood) . . . . .	C05		19467
<b>Transmissions</b>			
4-Speed, Close Ratio . . . . .	M21		19400
Heavy duty 4-speed transmission . . . . .	M22		19400
3-Speed Automatic, Turbo Hydra-matic . . . . .	M40		19400
Wheel Cover, Deluxe . . . . .	P02	ACC	19400

# AIR CONDITIONING

## 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

# SECTION 0

## GENERAL INFORMATION AND LUBRICATION

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### GENERAL INFORMATION

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### MODEL IDENTIFICATION

Series	Model Number		Description
	6-Cyl.	V-8	
Biscayne	15369	15469	4-Door Sedan, 6-Pass.
Brookwood	—	15436	4-Door Station Wagon, 2-Seat
Bel Air	15569	15669	4-Door Sedan, 6-Pass.
Townsmen	—	15636	4-Door Station Wagon, 2-Seat
	—	15646	4-Door Station Wagon, 3-Seat
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.
Kingswood	—	16436	4-Door Station Wagon, 2-Seat
	—	16446	4-Door Station Wagon, 3-Seat
Impala Custom	—	16447	2-Door Sport Coupe, 5-Pass.
Caprice	—	16639	4-Door Sport Sedan, 6-Pass.
	—	16647	2-Door Sport Coupe, 5-Pass.
Kingswood Estate	—	16636	4-Door Station Wagon, 2-Seat
	—	16646	4-Door Station Wagon, 3-Seat
Nomad	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.
Greenbrier	13336	13436	4-Door Station Wagon, 2-Seat
	—	13446	4-Door Station Wagon, 3-Seat
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.*
Concours	13536	13636	4-Door Station Wagon, 2-Seat
	—	13646	4-Door Station Wagon, 3-Seat
Monte Carlo	—	13857	2-Door Custom Coupe, 5-Pass.*
	—	13867	2-Door Convertible, 5-Pass.*
Concours Estate	—	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
Nova	4-Cyl.		
	11127	11327	2-Door Sport Coupe, 5-Pass.
	11169	11369	4-Door Sedan, 6-Pass.

\*4-Passenger when optional bucket seats are ordered.

**VEHICLE DIMENSIONS**

**BISCAYNE, BROOKWOOD, BEL AIR, TOWNSMAN, IMPALA,  
KINGSWOOD, IMPALA CUSTOM CAPRICE, KINGSWOOD ESTATE**

Model	Sedan	2-Door Sport Coupe	Convertible Coupe	Station Wagon
Length Overall . . . . .	215.9"	215.9"	215.9"	216.7"
Width Overall (Body) . . . . .	79.6"	79.6"	79.6"	79.6"
Height Overall. . . . .	55.5"	54.7"	54.6"	56.2"
Wheelbase . . . . .	119.0"	119.0"	119.0"	119.0"
Tread-Front. . . . .	62.5"	62.5"	62.5"	63.5"
Tread-Rear . . . . .	62.5"	62.5"	62.5"	63.4"
Curb Weight: Approximately 3738 lbs. 4-Door Sedan with L-6 Engine; 3882 lbs. with V-8 Engine.				

**NOMAD, 300 DELUXE, GREENBRIER, MALIBU, CONCOURS,  
CONCOURS ESTATE WAGON, EL CAMINO**

Model	Sedan	2-Door Sport Coupe	Convertible Coupe	Station Wagon	Sedan Pickup
Length Overall . . . . .	201.2"	197.2"	197.2"	207.2"	207.1"
Width Overall (Body) . . . . .	75.4"	75.4"	75.4"	75.4"	75.7"
Height Overall . . . . .	53.5"	52.8"	53.2"	54.4"	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 3297 lbs. 4-Door Sedan with L-6 Engine 3430 lbs. with V-8 Engine.					

**MONTE CARLO**

Model	Custom Coupe	Convertible
Length Overall . . . . .	205.8"	
Width Overall (Body) . . . . .	75.6"	
Height Overall . . . . .	52.9"	
Wheelbase . . . . .	116.0"	
Tread-Front. . . . .	59.0"	
Tread-Rear . . . . .	59.0"	
Weight: Custom Coupe 3564 lbs.		

**NOVA**

Model	Sedan	2-Door Sport Coupe
Length Overall . . . . .	189.4"	189.4"
Width Overall (Body) . . . . .	70.5"	70.5"
Height Overall. . . . .	53.9"	52.5"
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; 3028 lbs. with L-6 Engine; 3169 with V-8 Engine.		

**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 . . . . .	182.5"	
Width Overall (Body) . .	69.2"	
Height Overall . . . . .	47.9"	47.8"
Wheelbase. . . . .	98.0"	
Tread-Front . . . . .	58.7"	
Tread-Rear . . . . .	59.4"	
Curb Weight:	3220 lbs. Convertible	
	3210 lbs. Sport Coupe	
	with Base V-8	

**SERIAL NUMBERS**

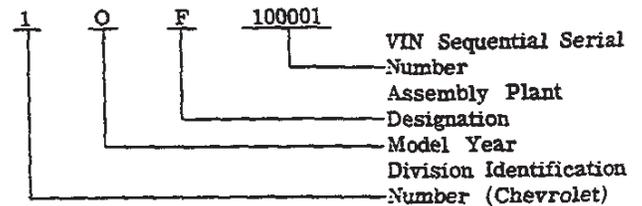
For the convenience of servicemen when writing up certain business papers, such as Warranty Claims Product Information Reports, or reporting product failures in any way, we are showing on a chart, the location of various unit numbers. These unit numbers and their prefixes and suffixes are necessary on 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)	000001
13000 Series (First Vehicle)	100001

**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 Paint Plate	15-16000 Series 13000 Series 11000 Series 19000 Series	Upper right-hand side of dash panel Upper left-hand side of dash panel Upper left-hand side of dash panel Upper left-hand door hinge pillar
Engine and Transmission Vehicle Identification Number	4 & 6 Cyl.  8 Cylinder 3-Spd. (Muncie) 4-Spd. (Muncie) 3-4 Spd. (Saginaw) Powerglide Turbo Hydra-matic 350 Turbo Hydra-matic 400	On pad at right-hand side of cylinder block at rear of distributor On pad at front, right-hand side of cylinder block On boss above filler plug On right side of case at lower rear of cover flange On lower right side of case adjacent to rear of cover On left upper flange of converter opening of transmission housing
Rear Axle Number	All except Corvette Corvette	On right or left axle tube adjacent to carrier 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



Fig. 3—Connect Hooks Outboard of Shock Bracket

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.

#### 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. 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.

#### LIFTING VEHICLES

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

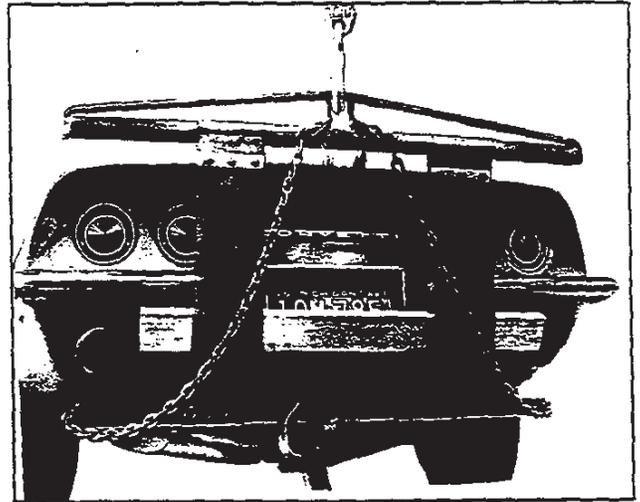


Fig. 4—Attaching Sling Assembly

vehicle. In Figures 5 through 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-in 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.

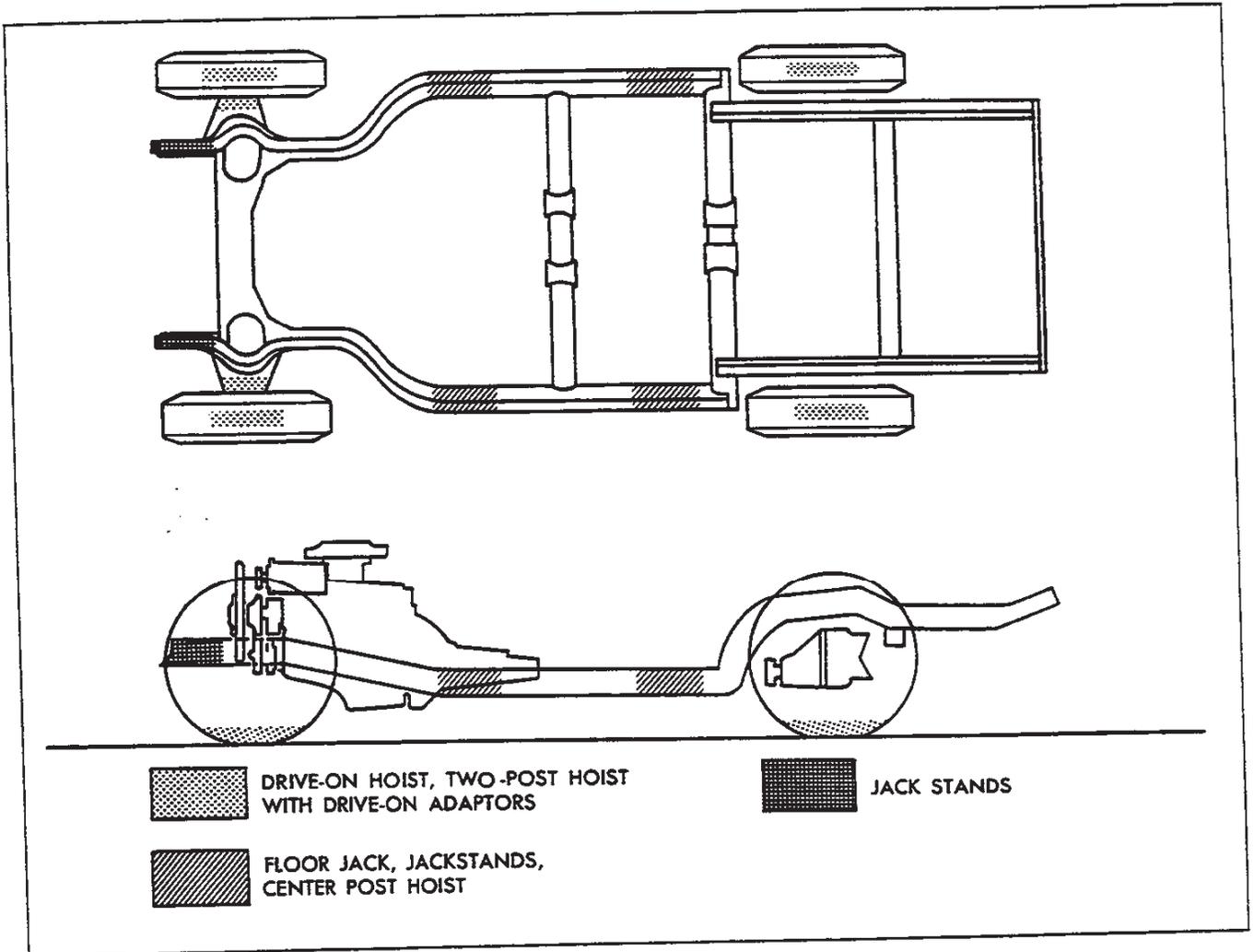


Fig. 8—Vehicle Lifting Points—19000 Series

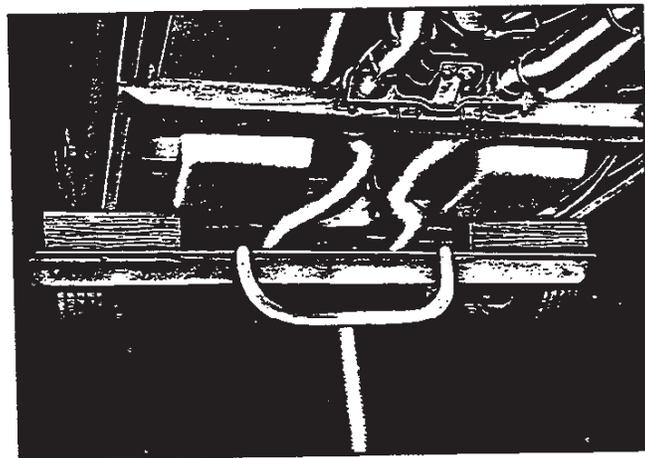


Fig. 9—Frame Lift Adapters—19000 Series

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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 (350) . . . . .	4 qt.
8 Cylinder (400) . . . . .	4 qt.
8 Cylinder (396) . . . . .	4 qt.
8 Cylinder (454) . . . . .	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.

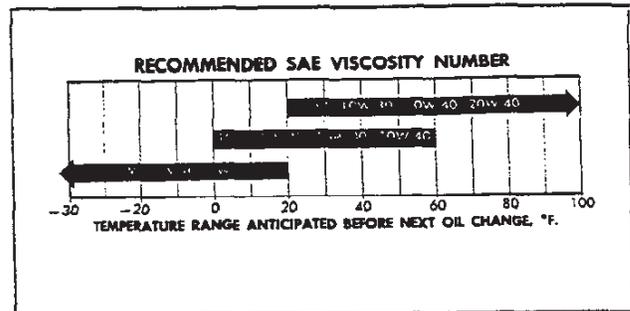
### SAE VISCOSITY OILS

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. In certain types of service including trailer hauling, extensive idling, short trip operation at freezing temperatures (engine not thoroughly warmed-up), or in commercial use, such as taxicab, limousine or patrol car service, the oil change interval should not exceed 2 months or 3,000 miles, whichever occurs first.

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.

## POSITIVE CRANKCASE VENTILATION VALVE

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.) CONTROLLED COMBUSTION SYSTEM (C.C.S.)

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 either system, as well as full power and performance, depends upon idle speed, ignition timing, and idle

## LUBRICATION 0-12

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.

### GM EVAPORATION CONTROL SYSTEM

Every 12 months or 12,000 miles (more often under dusty conditions) the filter in the base of the canister must be replaced and the canister inspected.

### 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.

#### Crankcase Ventilation Filter (Located Within Air Cleaner)

If so equipped, inspect at every oil change and replace if necessary. Replace at least every 24,000 miles; more often under dusty driving conditions.

### FUEL FILTER

Replace filter element located in carburetor inlet every 12 months or 12,000 miles whichever occurs first, or, if an in-line filter is also used, every 24,000 miles. Replace in-line filter every 24,000 miles.

### 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 80 or SAE 80-90 "Multi-Purpose" gear lubricant meeting requirements of U.S. Army Ordnance Spec. MIL-L-2105B.

Positraction Rear Axles--Use special Positraction lubricant.

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

Manual transmissions--SAE 80 or SAE 80-90 "Multi-Purpose" gear lubricant meeting requirements of U.S. Army Ordnance Spec. MIL-L-2105B.

#### "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 has been especially formulated and tested for use in the automatic transmission. Other Automatic Transmission Fluids identified with the mark DEXRON® are also recommended.

Every 24,000 miles (every 12,000 miles if vehicle is driven extensively in heavy city traffic during hot weather; or is in commercial use, such as a taxicab, limousine or patrol car service, where the engine idles for long periods or is used to pull a trailer) remove fluid from the transmission sump and, in Powerglide 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 Nova (Powerglide and Torque Drive). 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.

\*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.

### 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 filter should be replaced.

## 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. On units equipped with disc brakes, use wheel bearing lubricant GM Part No. 1051195 or equivalent. This is a premium high melting point lubricant.

**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 or equivalent.

### 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

The steering gear is factory-filled with steering gear lubricant. Seasonal change of this lubricant should not be performed and the housing should not be drained - no lubrication is required for the life of the steering gear.

Every 36,000 miles, the gear should be inspected for seal leakage (actual solid grease - not just oily film). If a seal is replaced or the gear is overhauled, the gear housing should be refilled with #1051052 (13 oz. container) Steering Gear Lubricant which meets GM Specification GM 4673M, or its equivalent.

**NOTE:** Do not use EP Chassis Lube to lubricate the gear. DO NOT OVER-FILL the gear housing.

### 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.

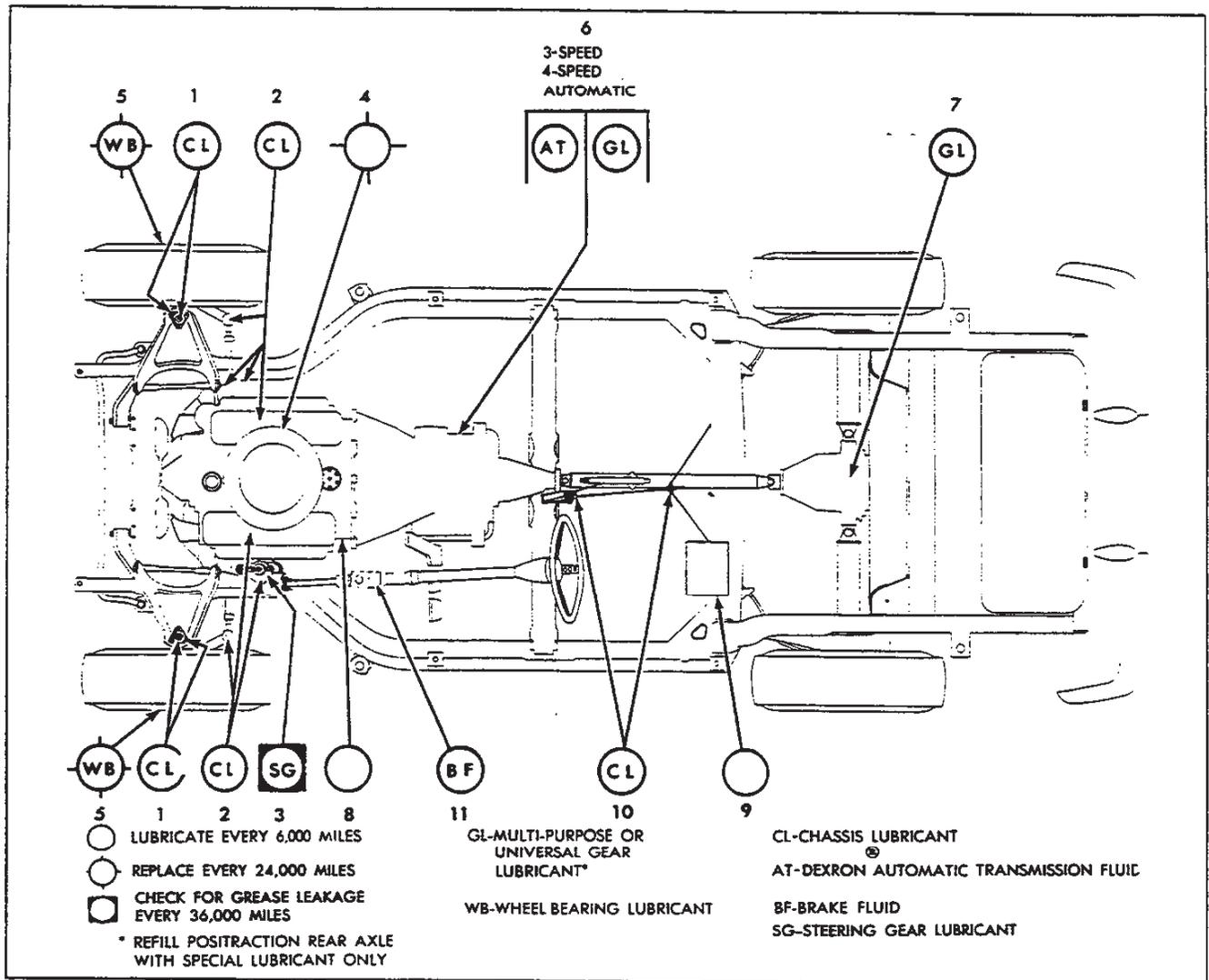


Fig. 13—Lubrication Diagram—19000 Series

- 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

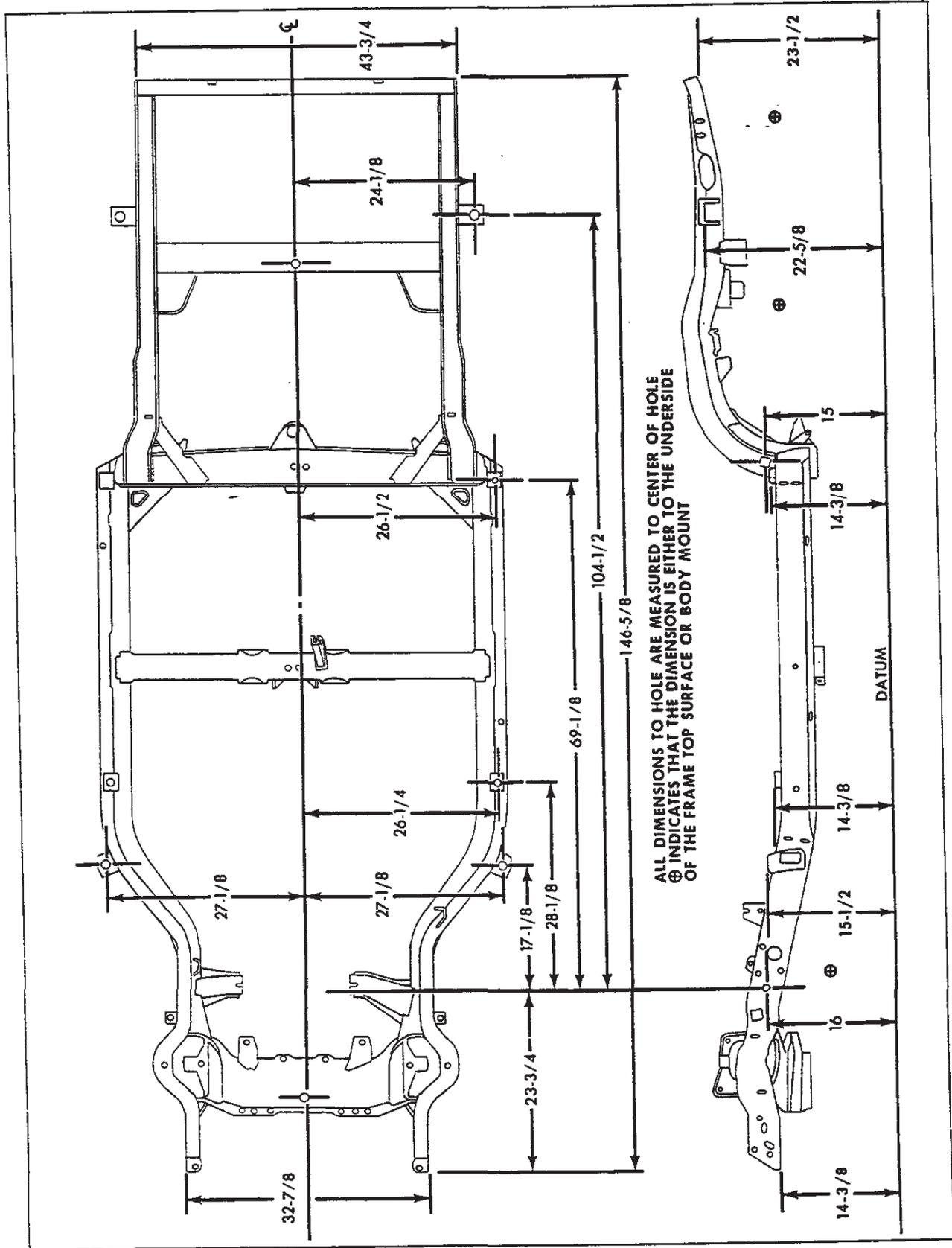


Fig. 5—Frame Dimensions—Corvette

**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 & 119" W.B. Sta. Wgn.	Radiator Support to Frame	35 ft. lbs.
	#1 thru #7	35 ft. lbs.
Monte Carlo, Chevelle & 116" W.B. Sta. Wgn.	Radiator Support to Frame	35 ft. lbs.
	#1 thru #7	35 ft. lbs.
Nova	#1	35 ft. lbs.
	#2 and #3	80 ft. lbs.
Corvette	All	45 ft. lbs.

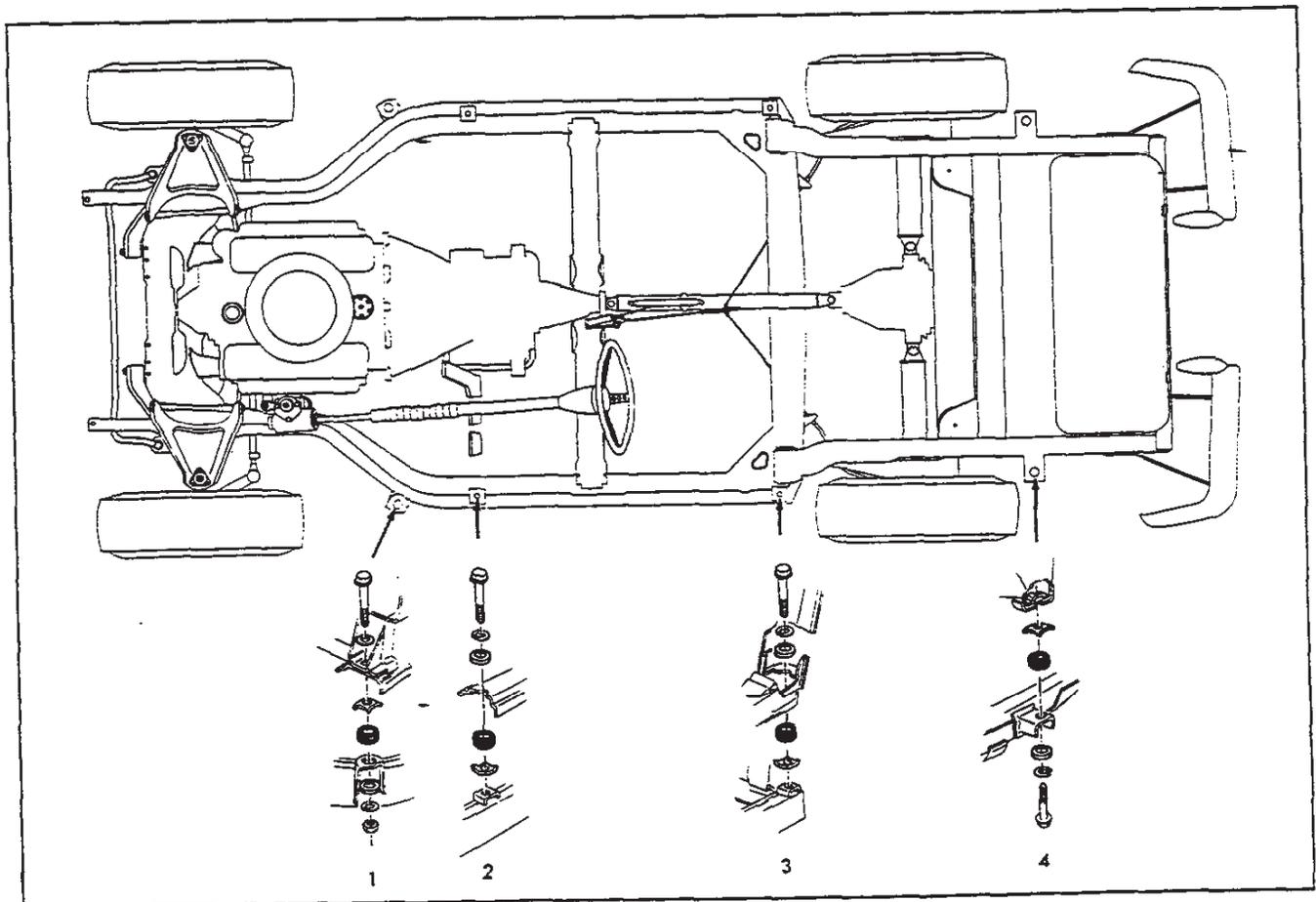


Fig. 6—Body Mount Application—Corvette

# SECTION 1B

## CORVETTE BODY

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## 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

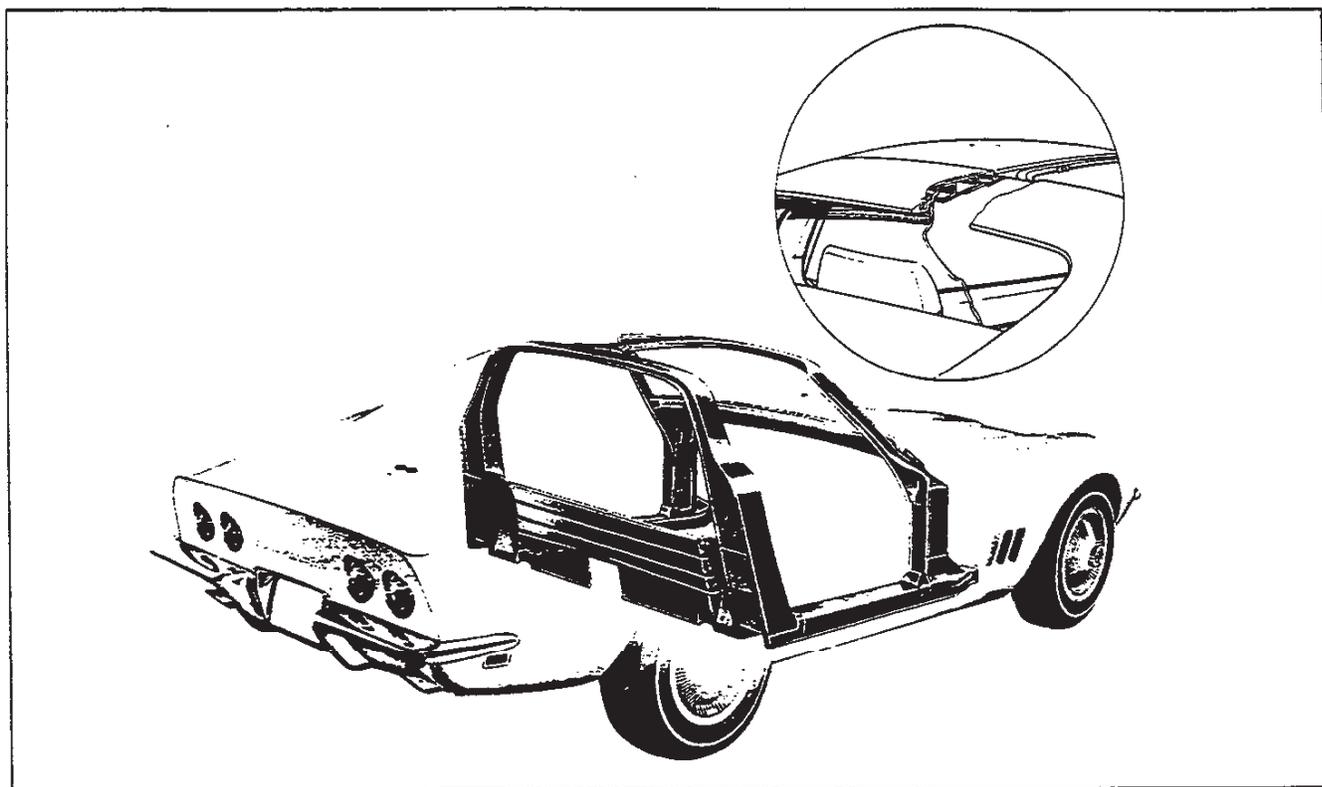


Fig. 1—Steel Reinforcing Members

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.

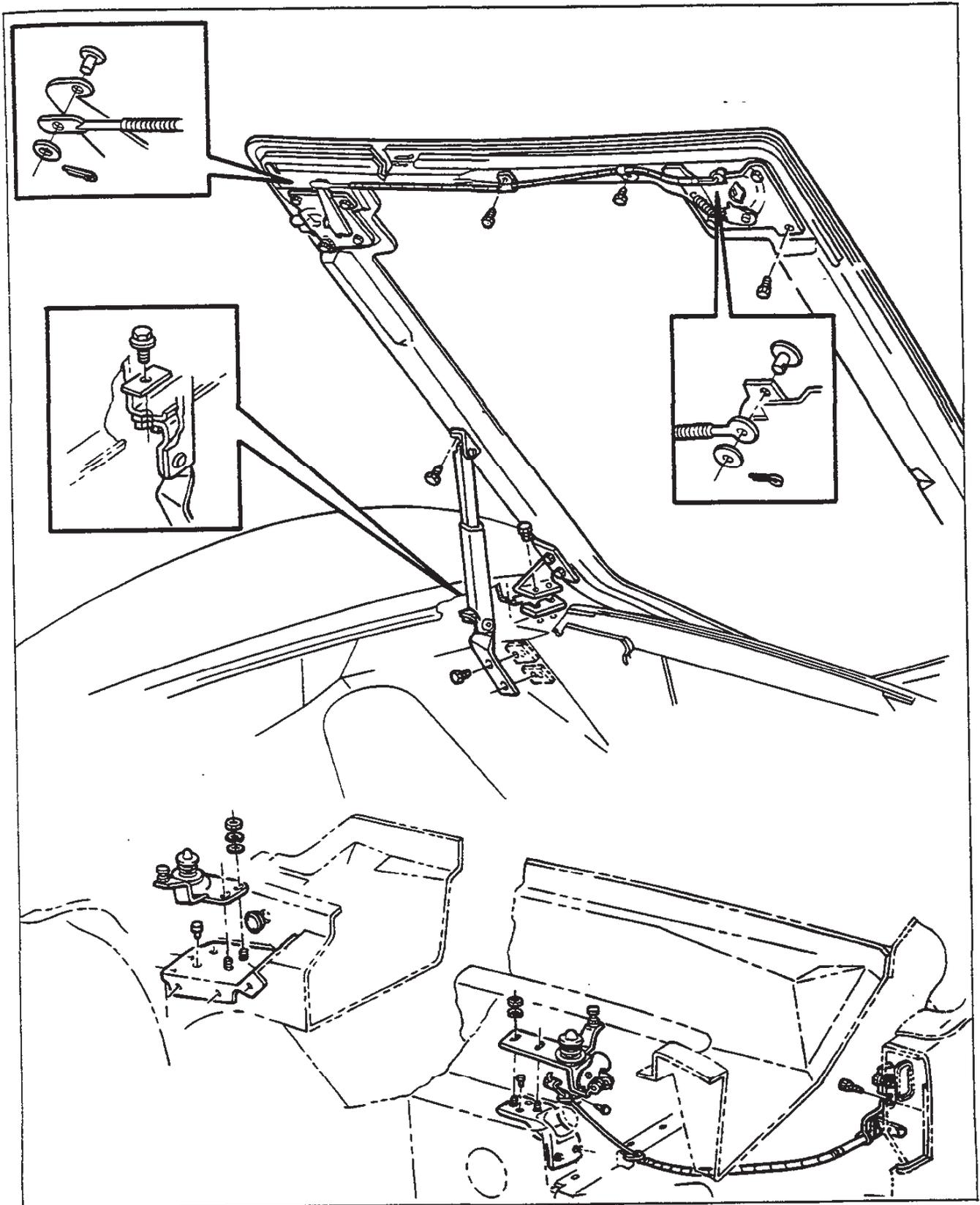


Fig. 2—Hood Hinge and Catch

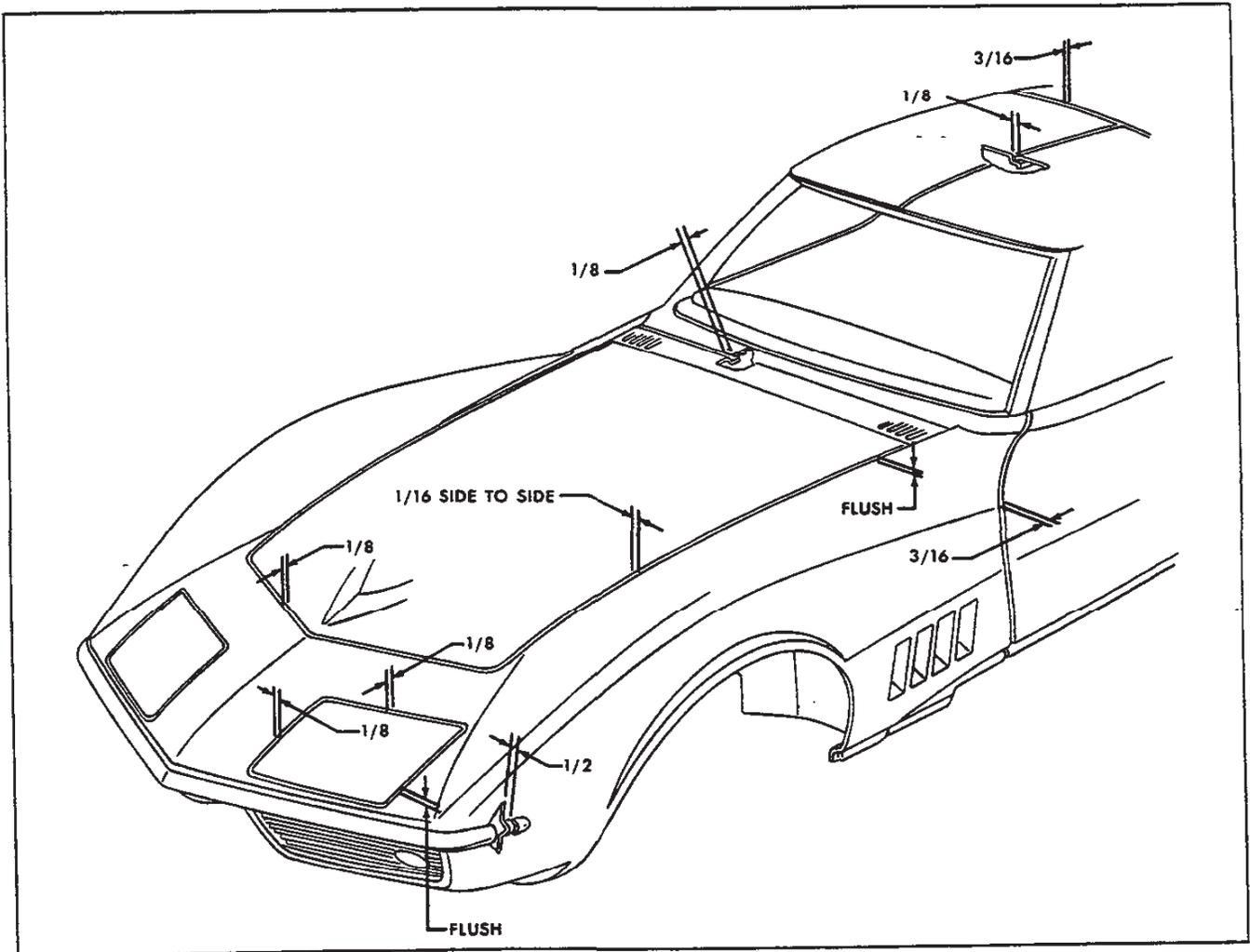


Fig. 3—Hood Spacing

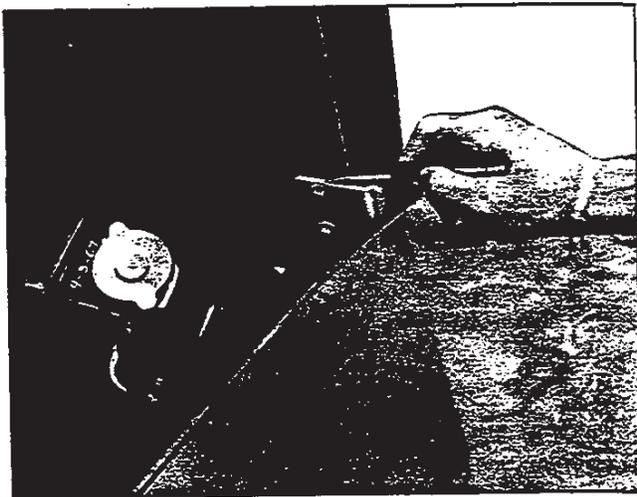


Fig. 4—Scribing Line Around Hood Hinge

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:

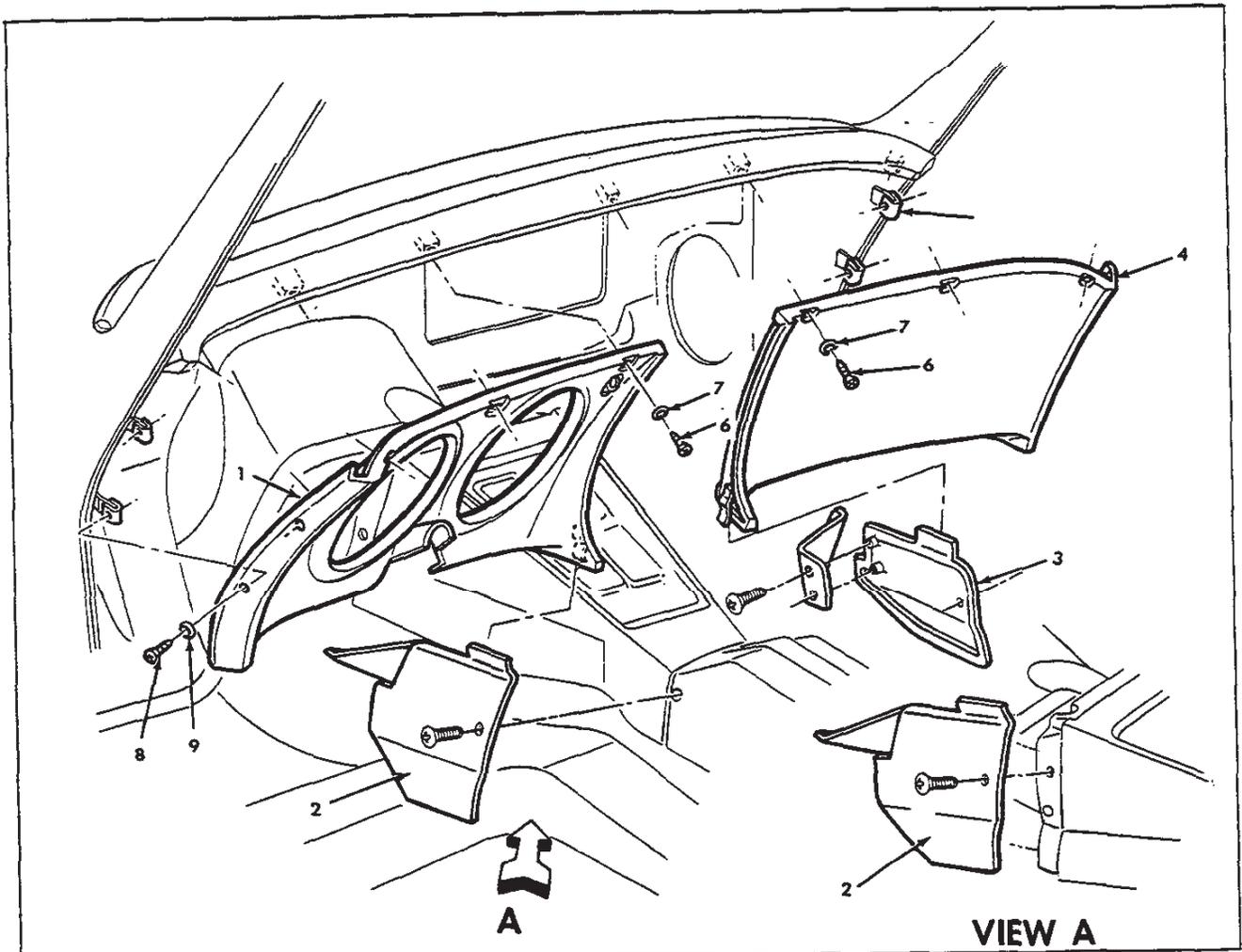


Fig. 5—Cowl Area Trim

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

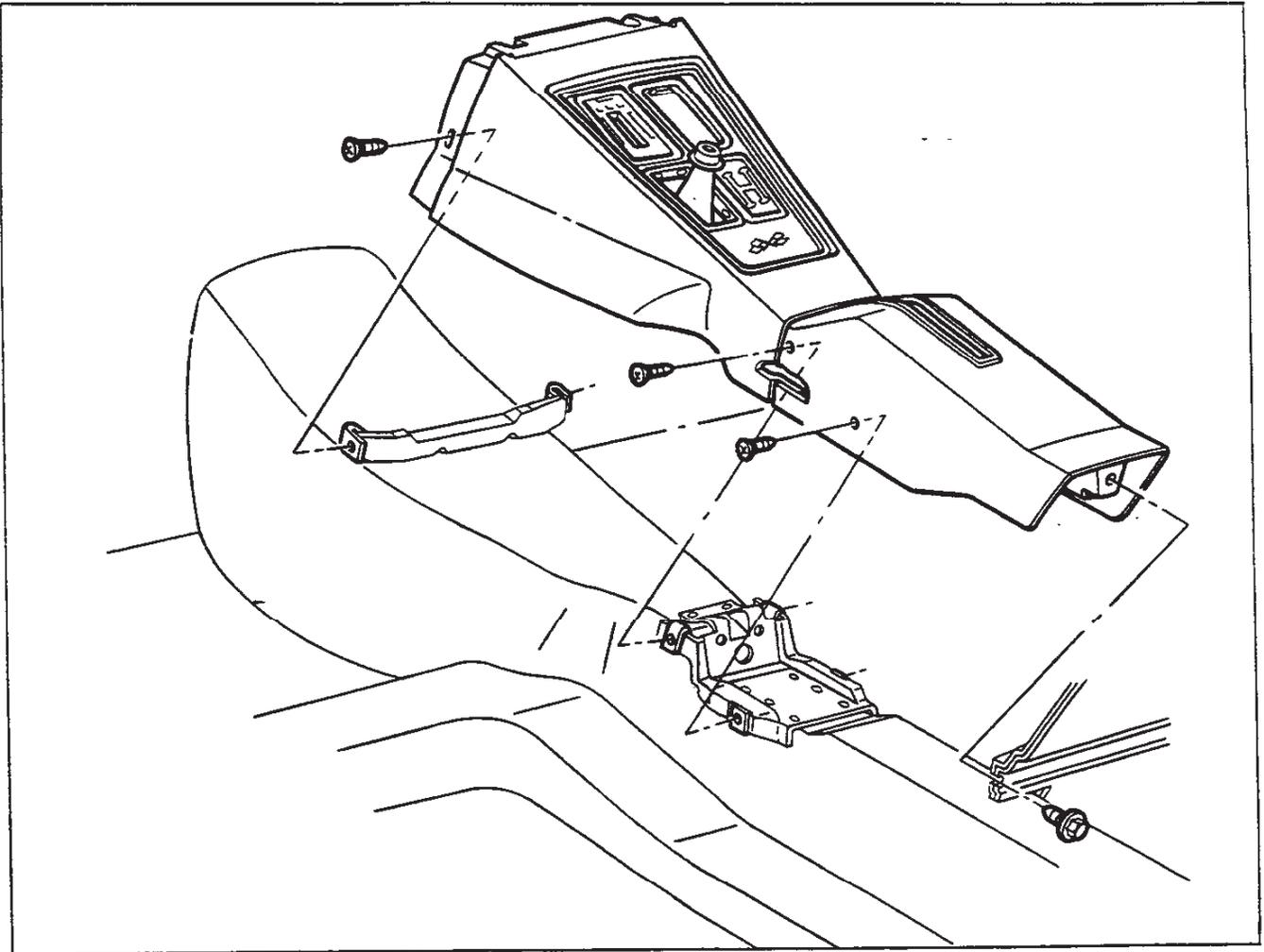


Fig. 6—Front and Rear Console Assemblies

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.

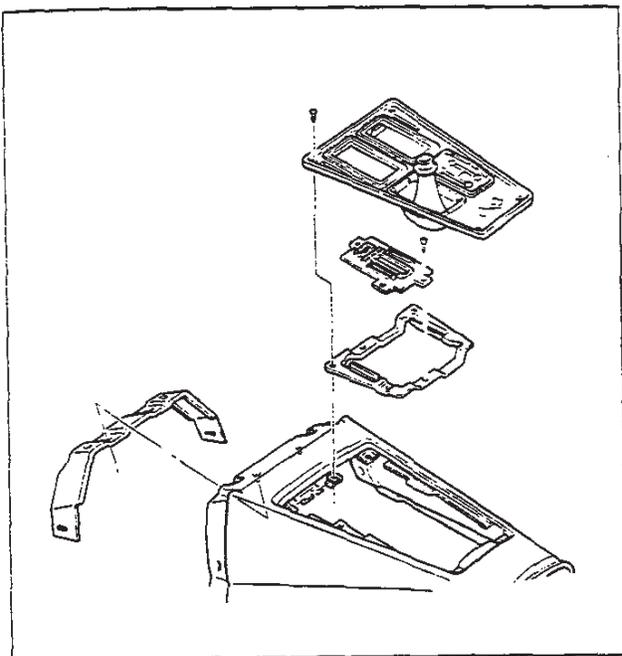


Fig. 7—Front Console Assembly

## 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

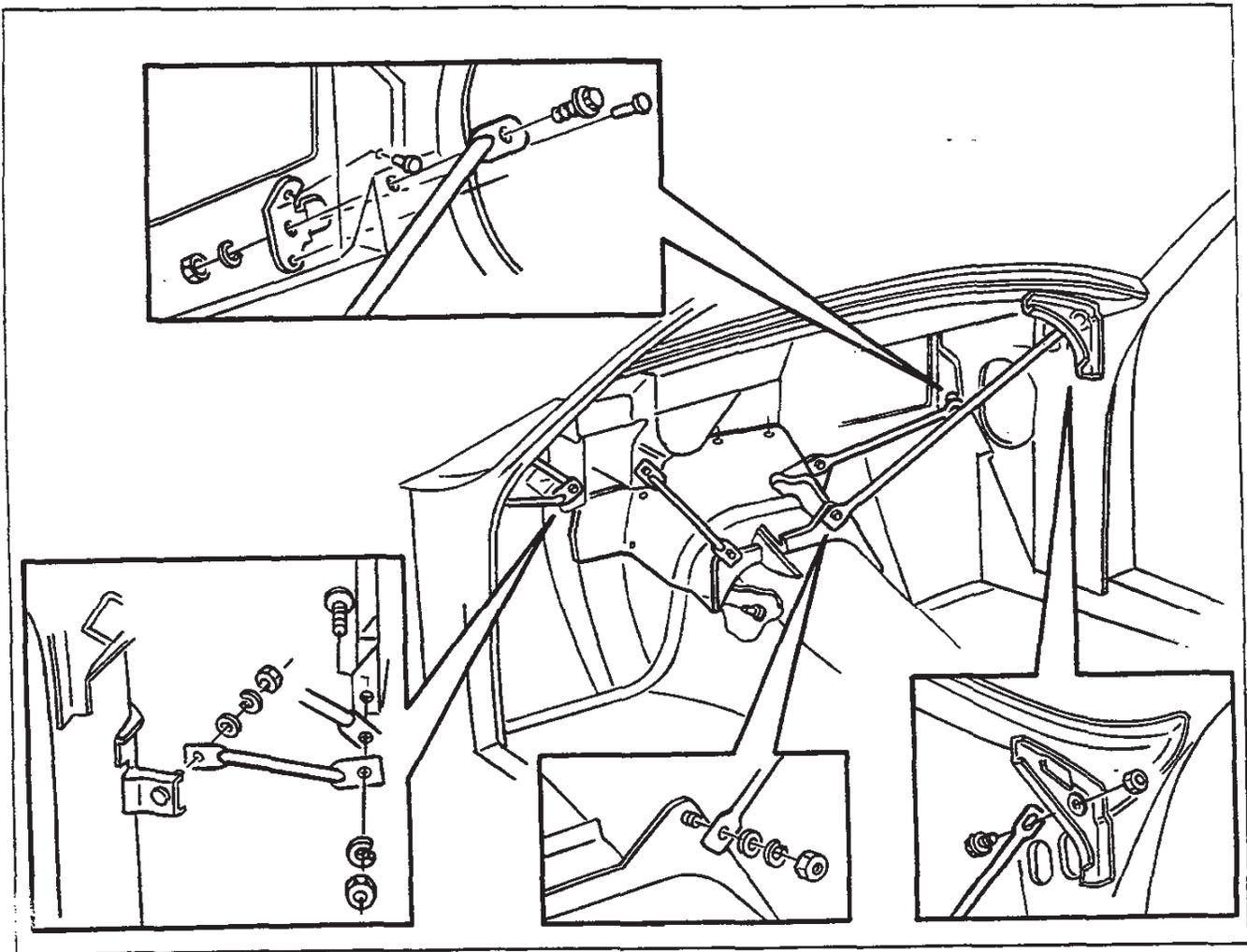


Fig. 8—Under Dash Braces

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

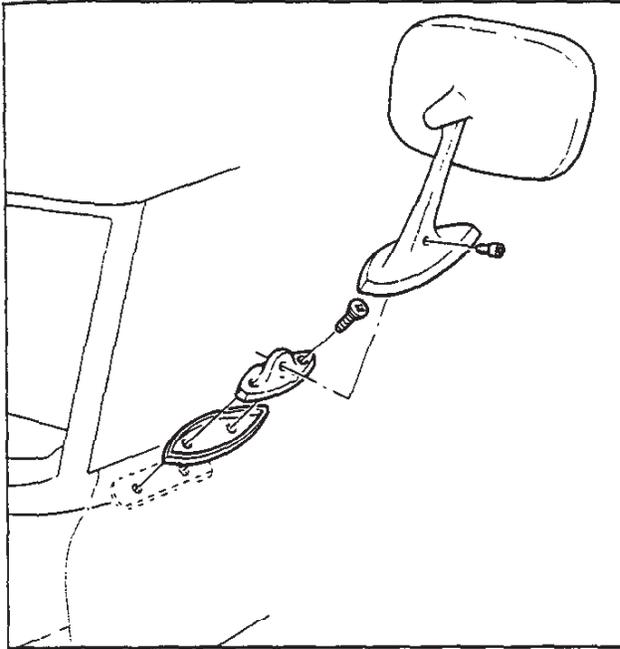


Fig. 9—Outside Rearview Mirror

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).

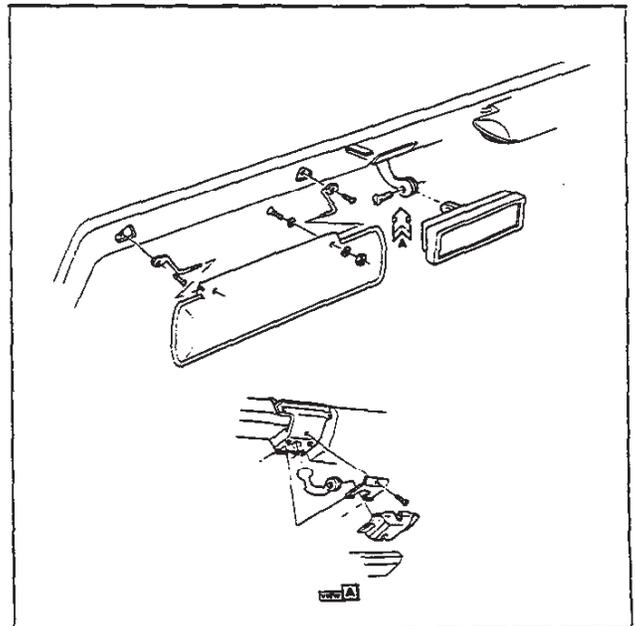


Fig. 10—Sun Visor and Inside Rearview Mirror

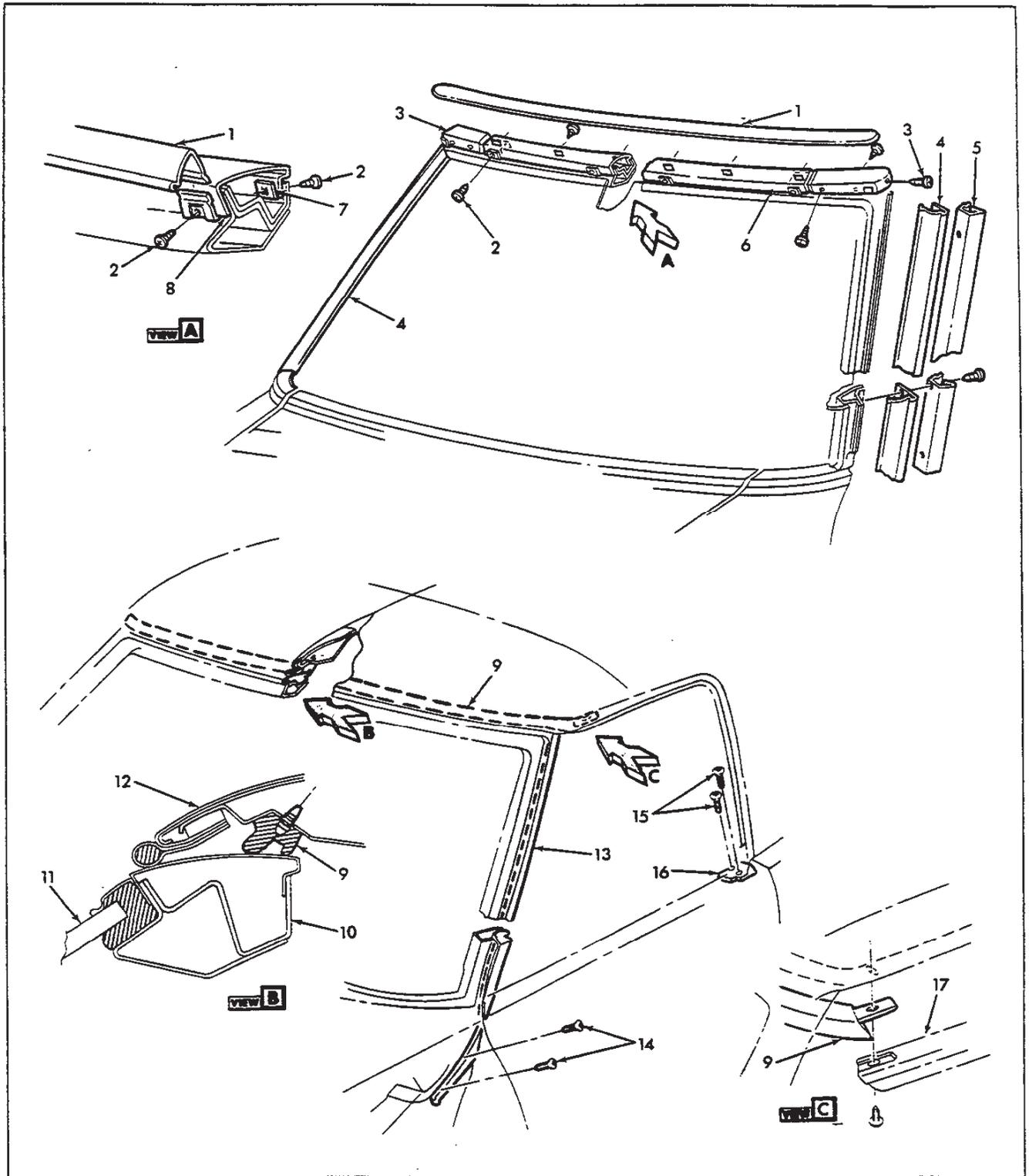


Fig. 11—Windshield Moldings and Weatherstrips

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

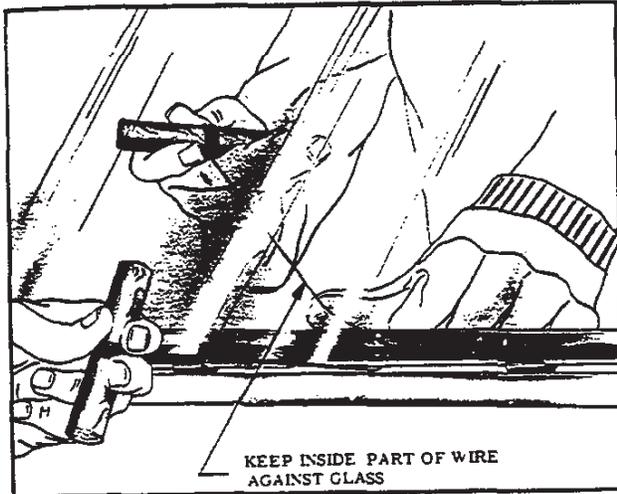


Fig. 12—Removing Old Glass From Opening

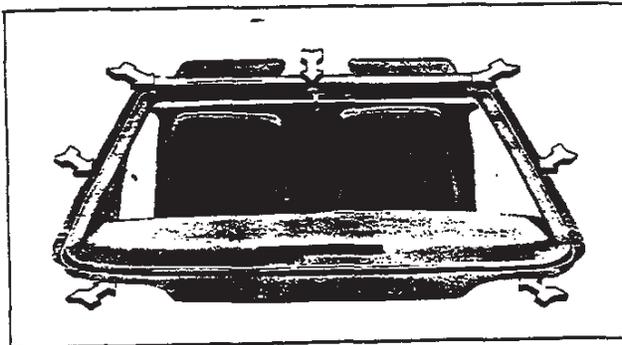


Fig. 13—Windshield Rubber Spacers

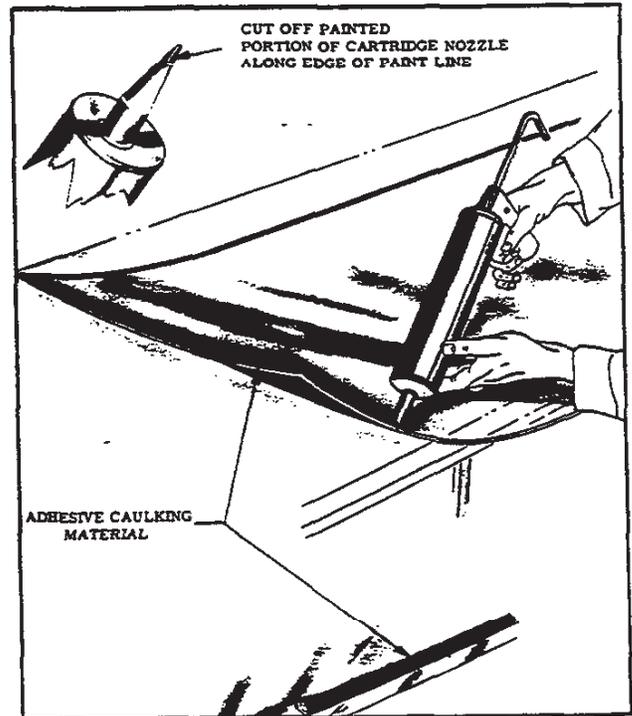


Fig. 14—Applying Caulking Material to Glass

#### 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

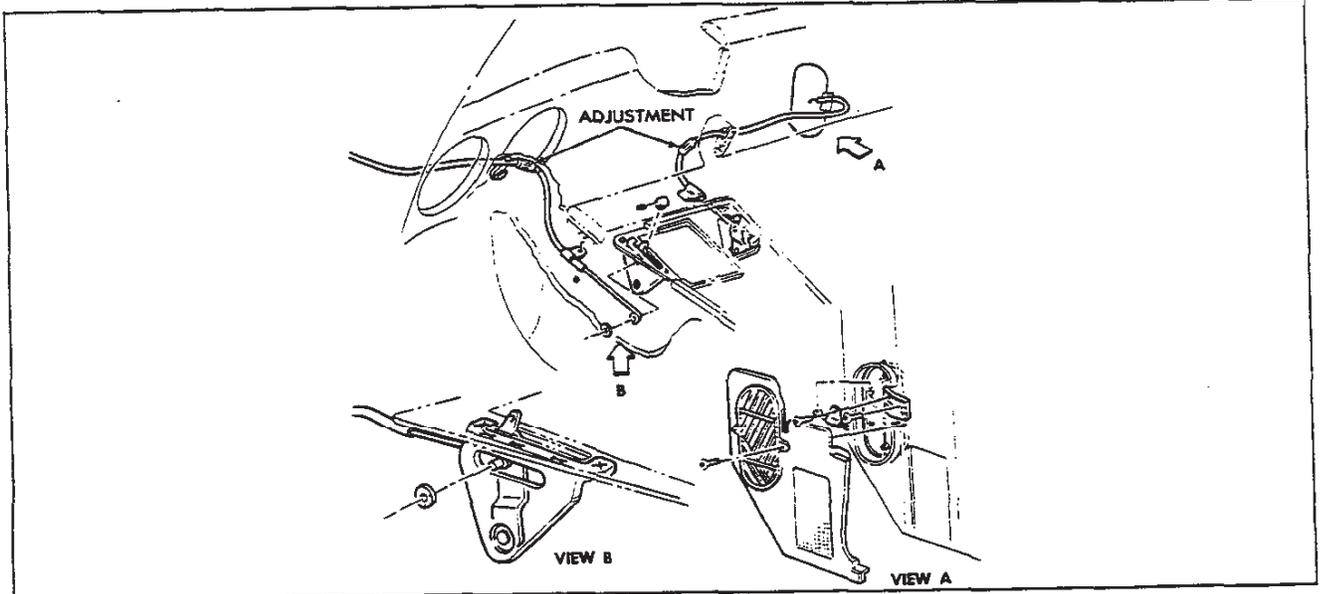


Fig. 15—Cowl Ventilator and Controls

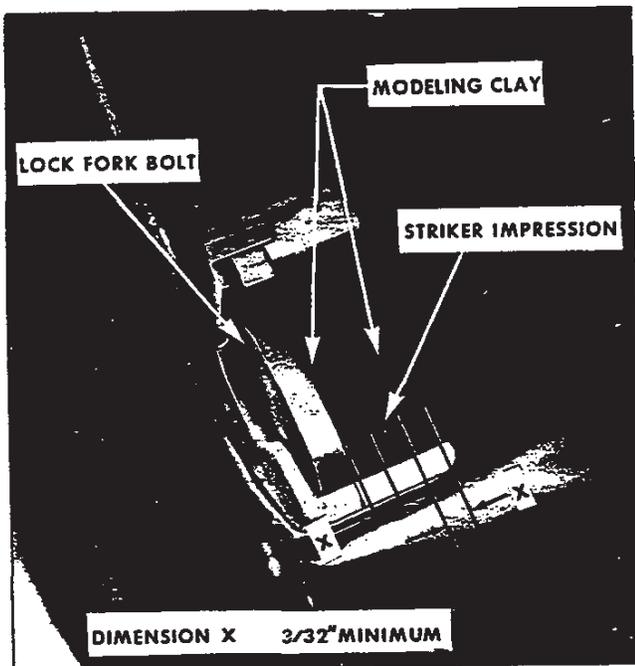


Fig. 16—Checking Adjustment of Striker

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

- 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:

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

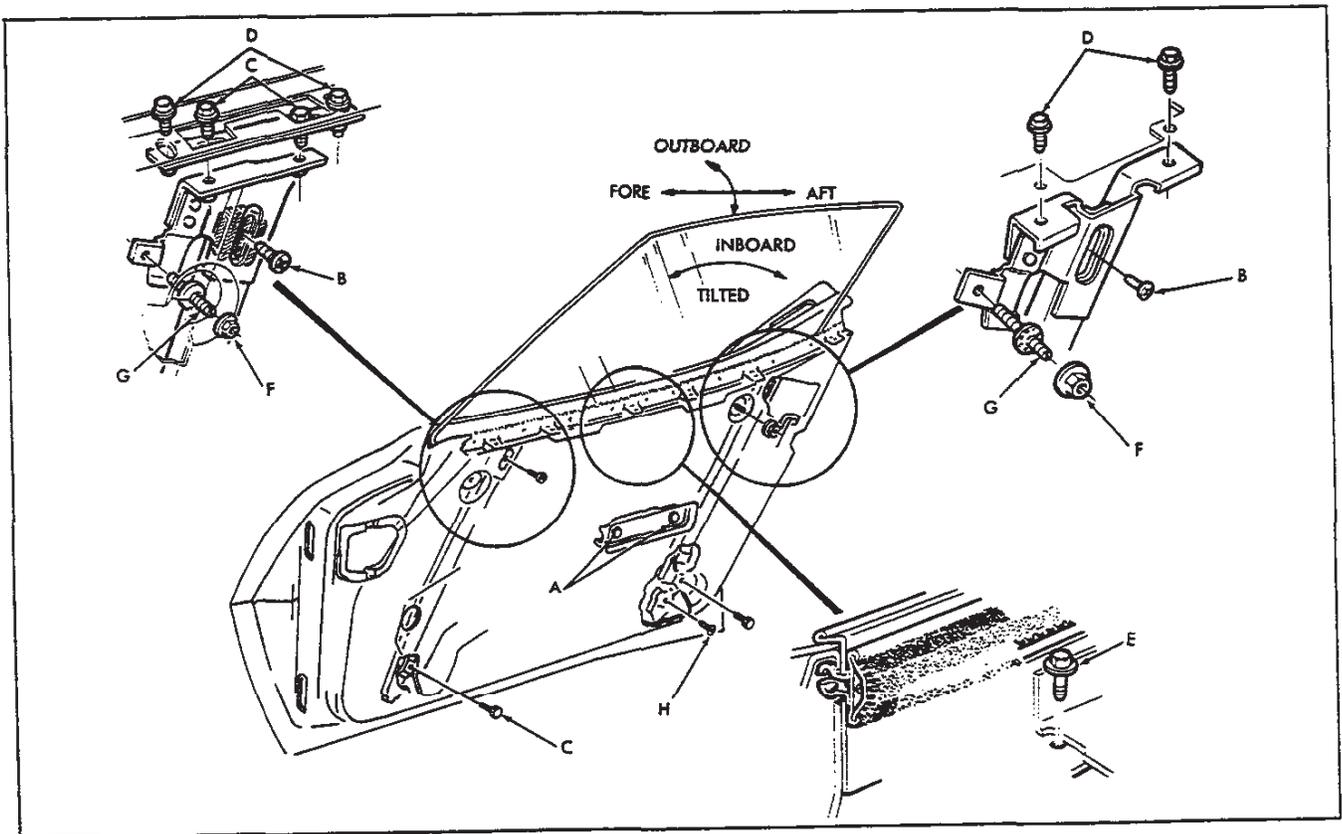


Fig. 17—Door Glass Adjustments

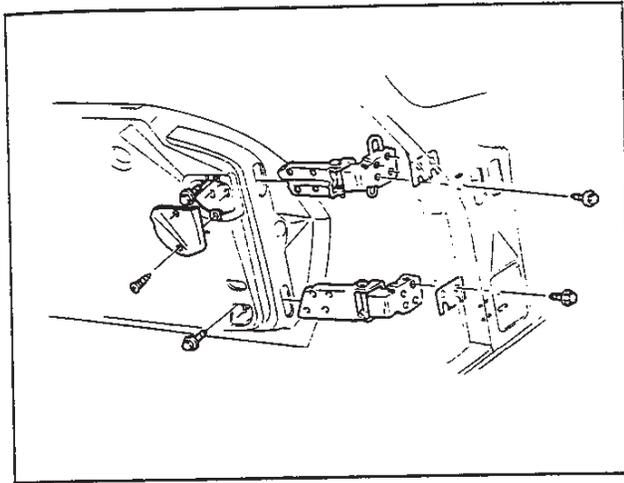


Fig. 18—Side Door Hinges

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.

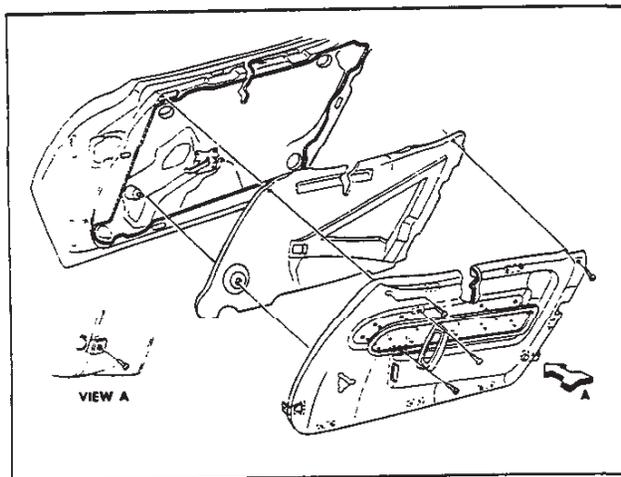


Fig. 19—Door Trim Panel Assembly

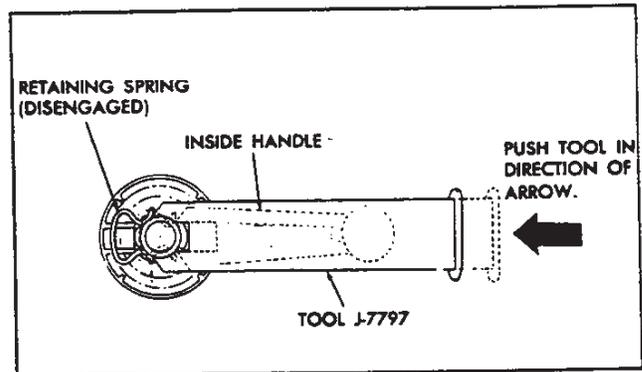


Fig. 20—Removing Window Crank With J-7797

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.

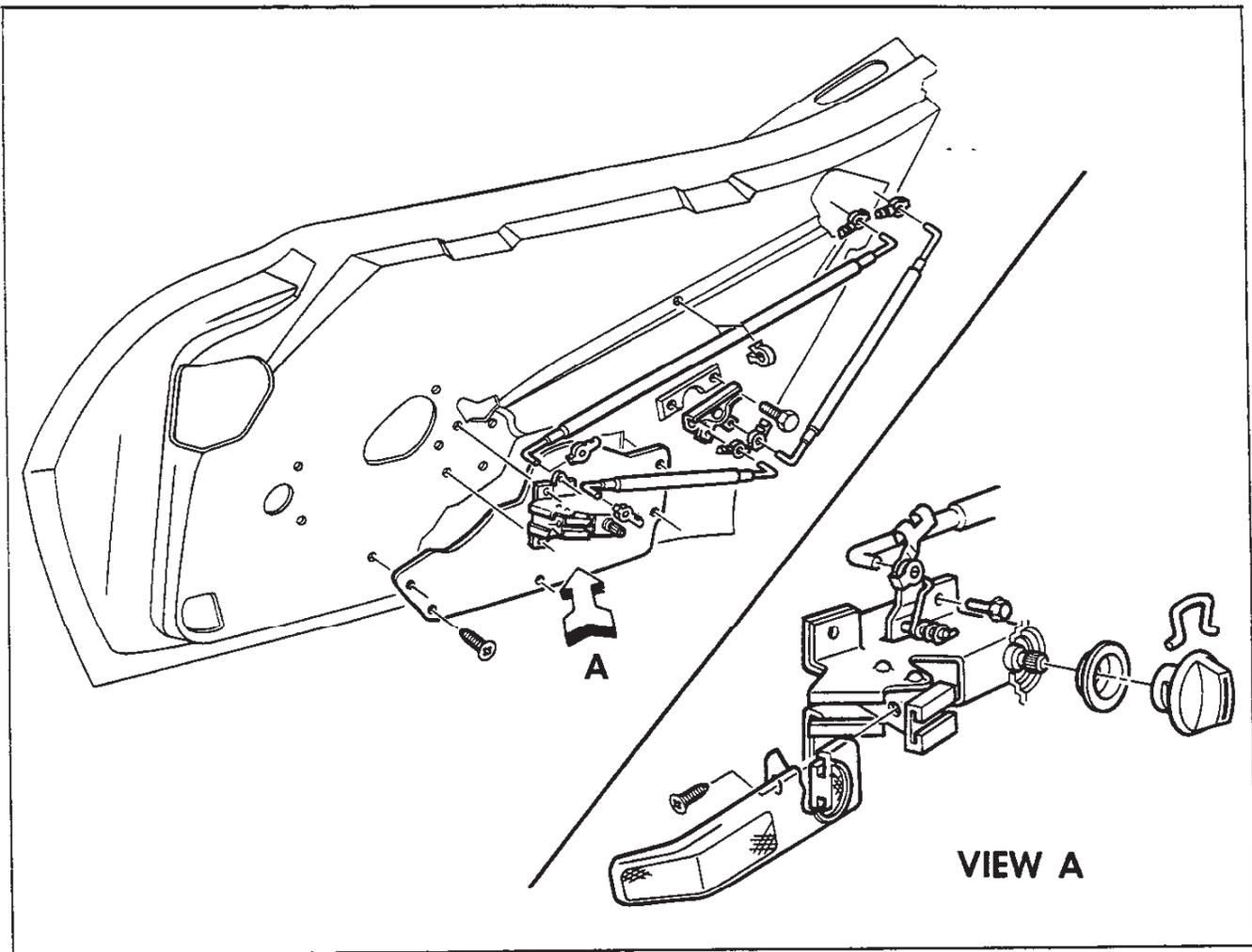


Fig. 21—Door Lock and Remote Control

**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:

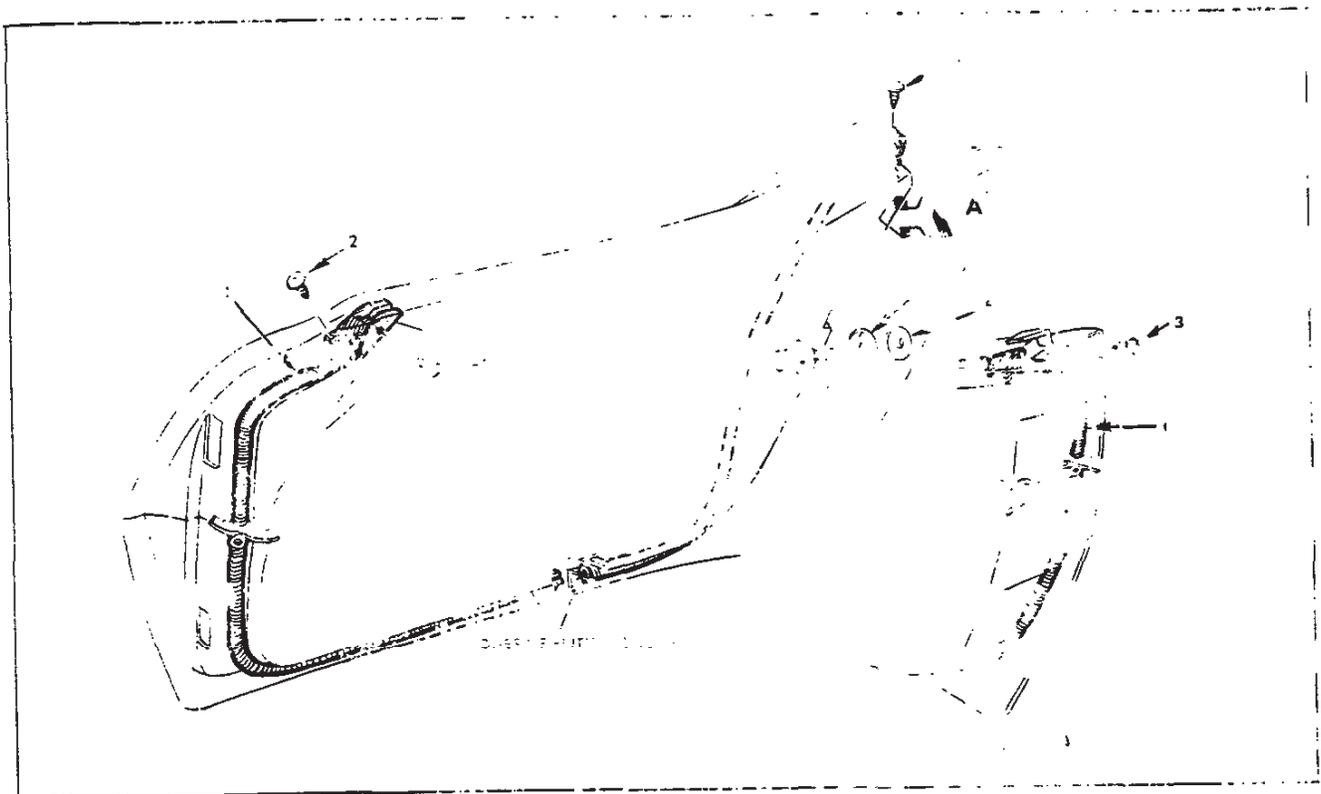


Fig. 26—Door Weatherstripping

- |                  |                               |                    |
|------------------|-------------------------------|--------------------|
| 1. Weather strip | 3. Sash bolt and nut assembly | 5. Door trim panel |
| 2. Screw         |                               |                    |

1. Insert glass in door pocket with lower edge of glass 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 seal door 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 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 Door Adjustments - Door Windows. Replace door trim panel.

### WINDOW REGULATOR - MANUAL

For parts identification, refer to Figure 28.

#### Removal

1. Remove trim panel as outlined in this section.
2. Position window at the top 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 assembly by removing three (3) screws.
6. Remove lock shaft, inner water 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.

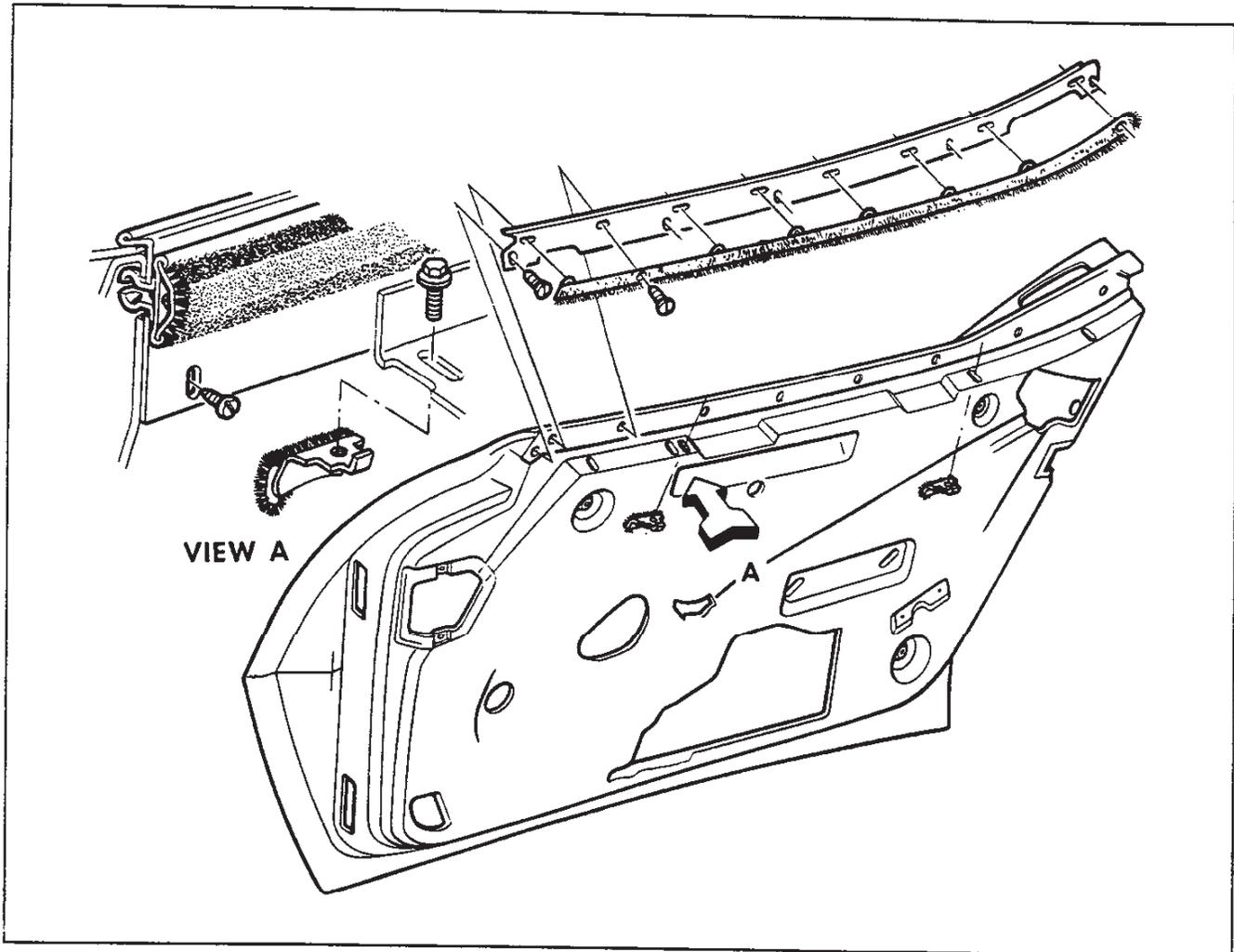


Fig. 23—Window Glass Seals and Molding

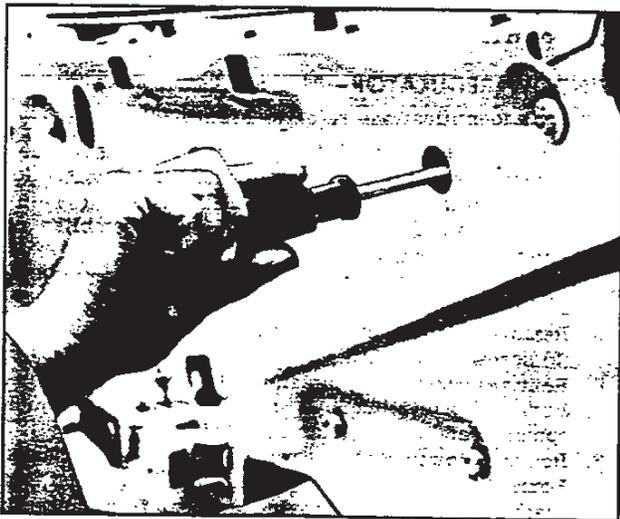


Fig. 24—Removing Sash Screws

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.

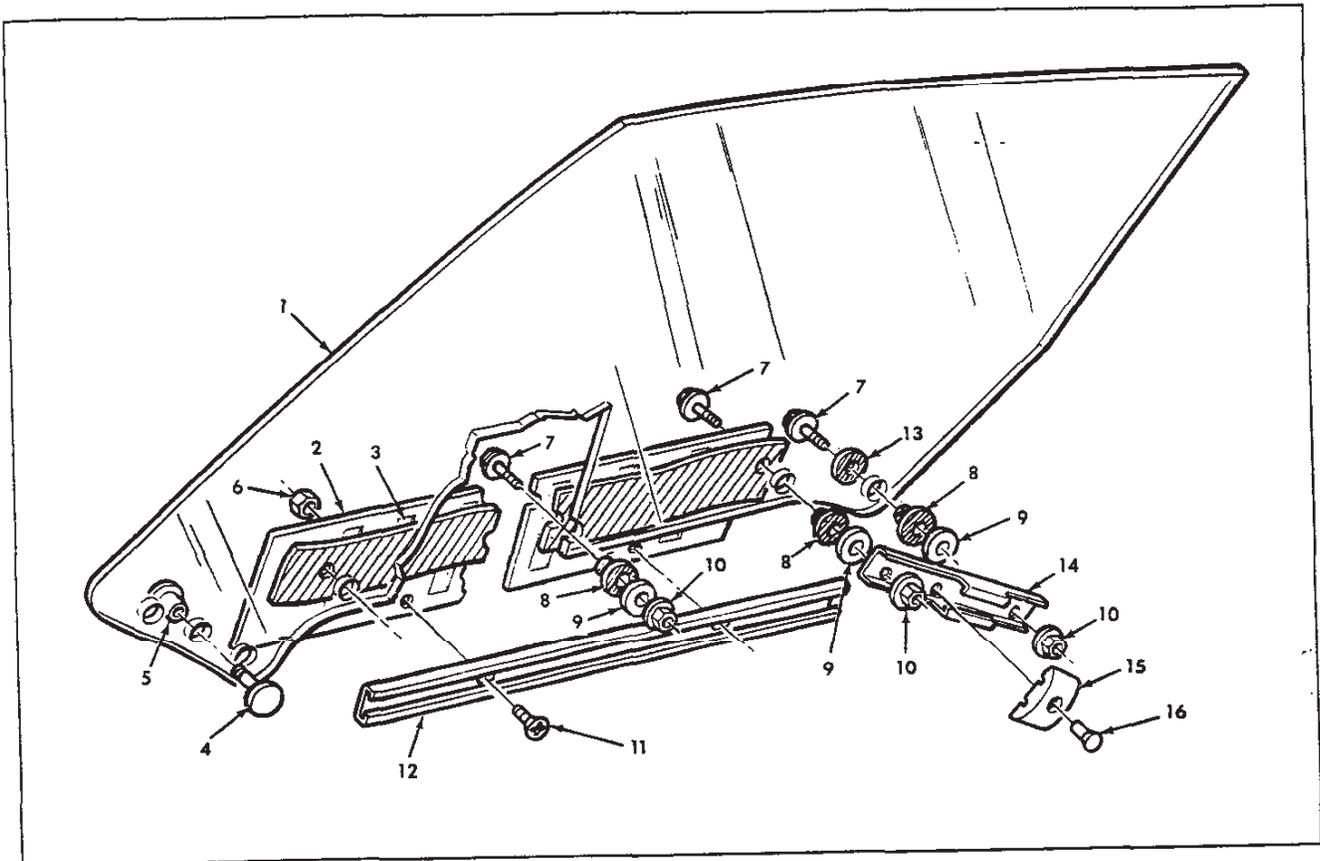


Fig. 25—Glass and Frame Assembly

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.

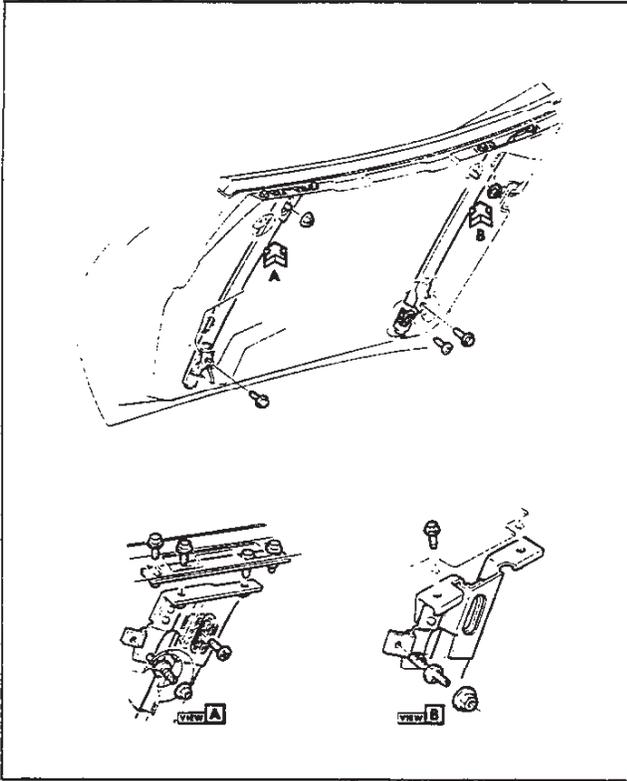


Fig. 26—Window Run Adjustment Points

## 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.

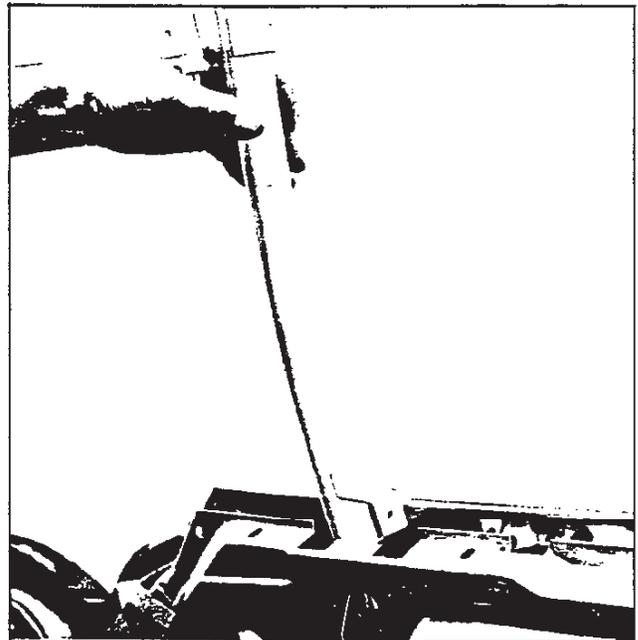


Fig. 27—Removing Front Glass Channel

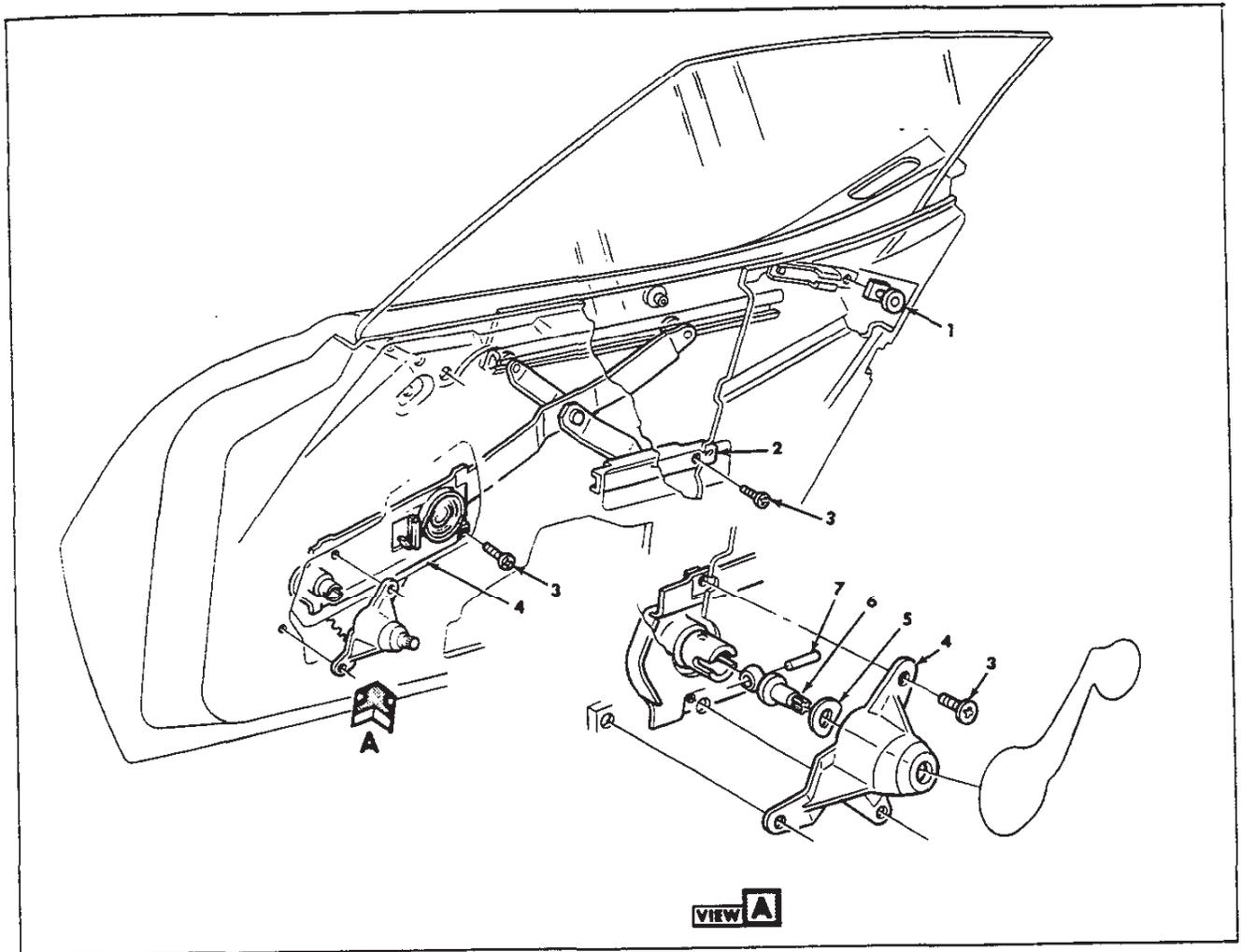


Fig. 28—Manual Window Regulator

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

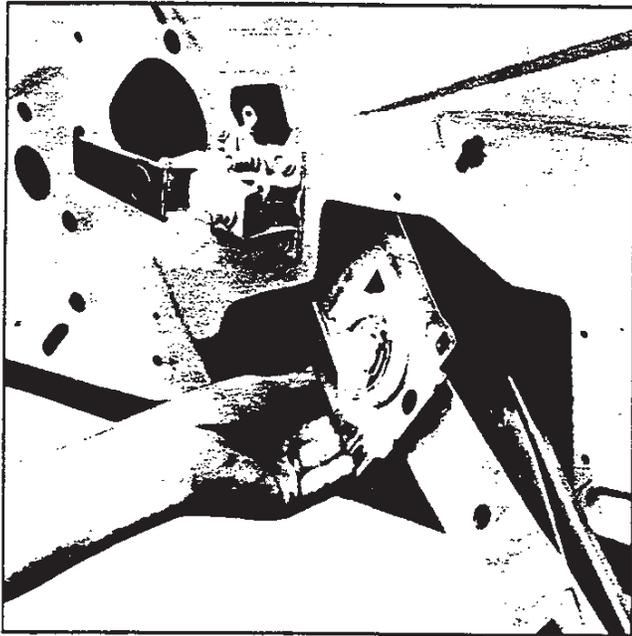


Fig. 29—Removing Window Regulator

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 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.

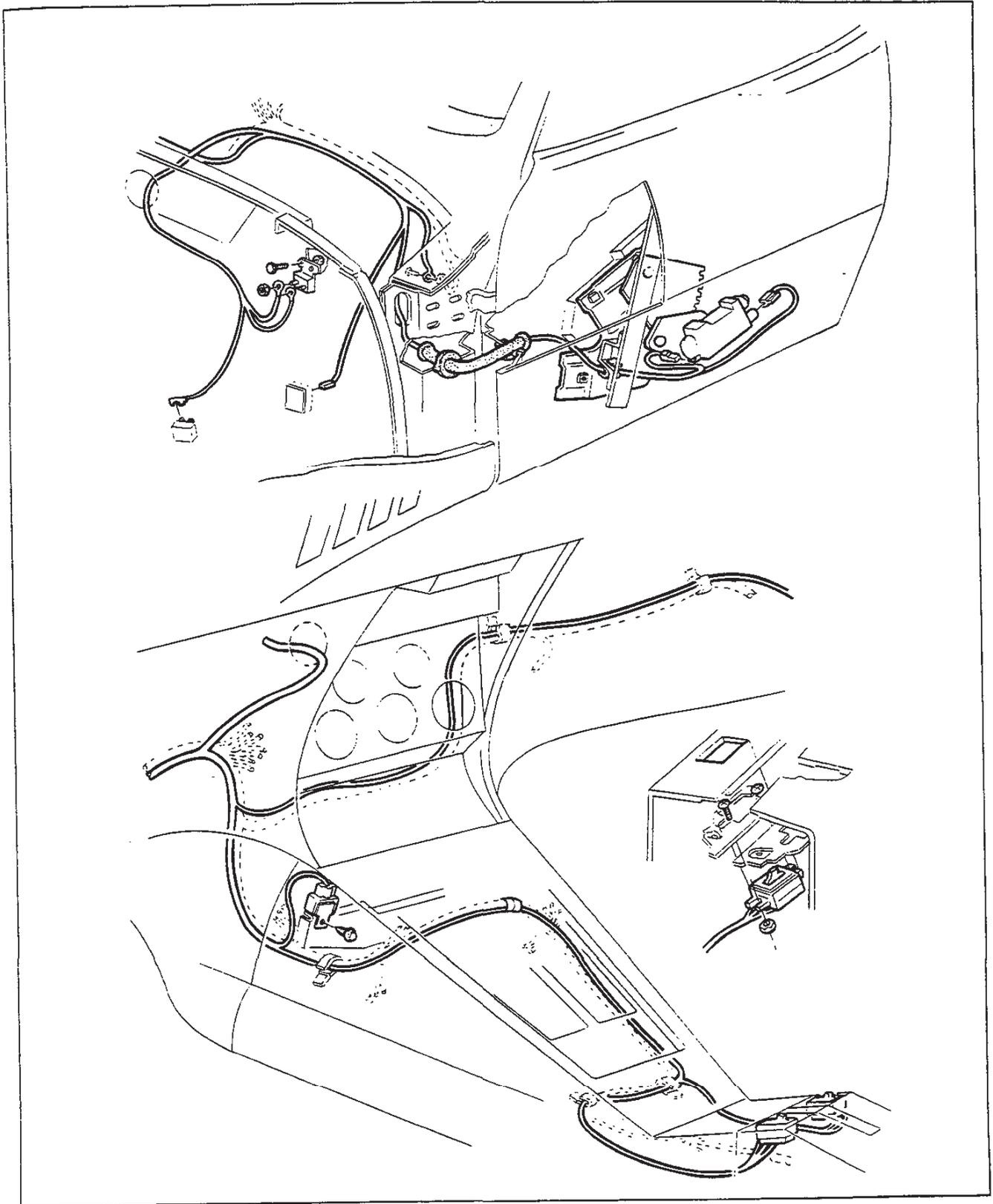


Fig. 30—Power Window Regulator Wiring

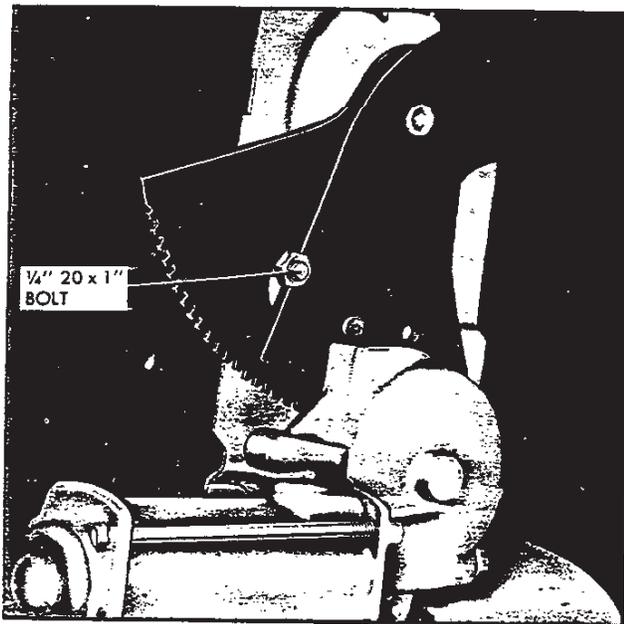


Fig. 31—Locking Arm in Place

**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.

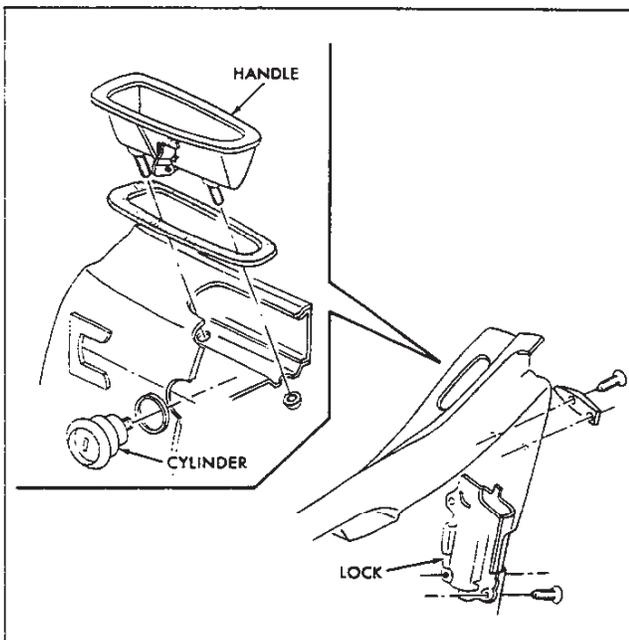


Fig. 32—Door Handle and Lock Cylinder

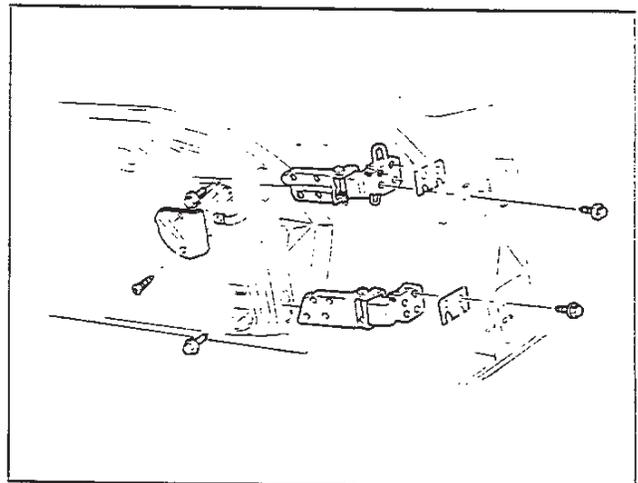


Fig. 33—Side Door Hinges

**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.

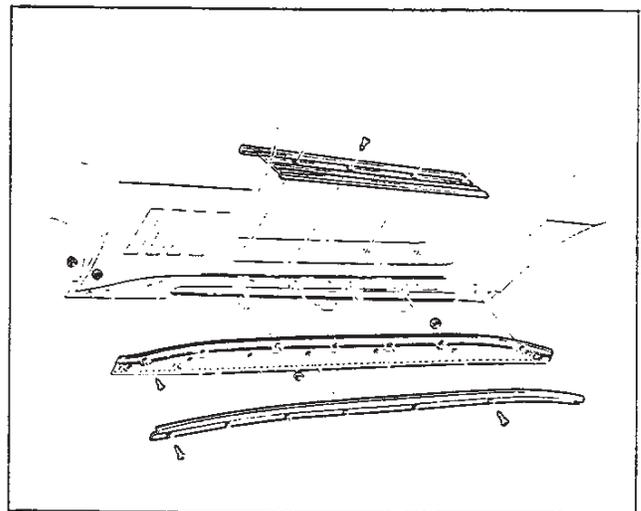


Fig. 34—Sill Plate and Trim Molding

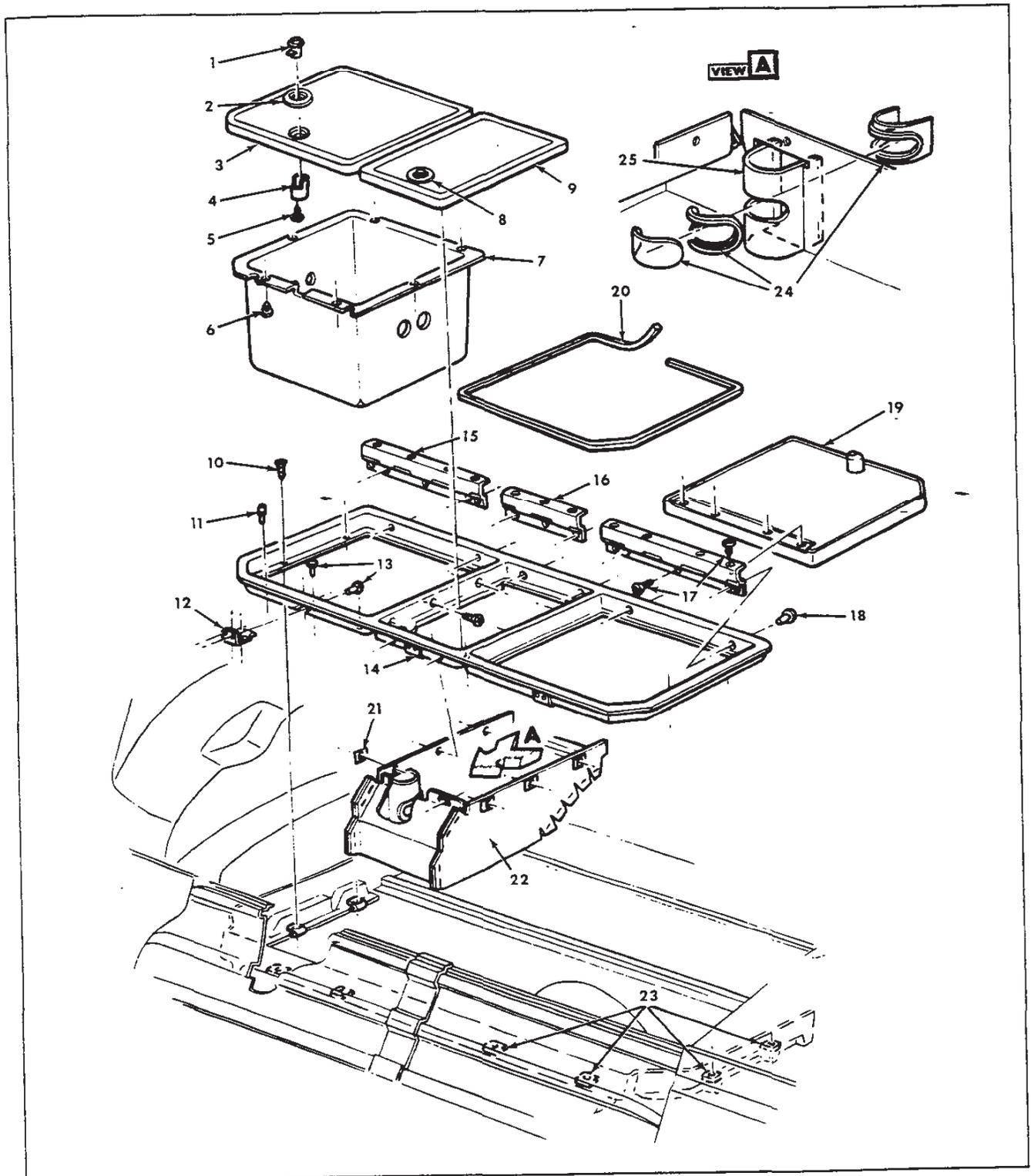


Fig. 35—Under Body Storage Compartment

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

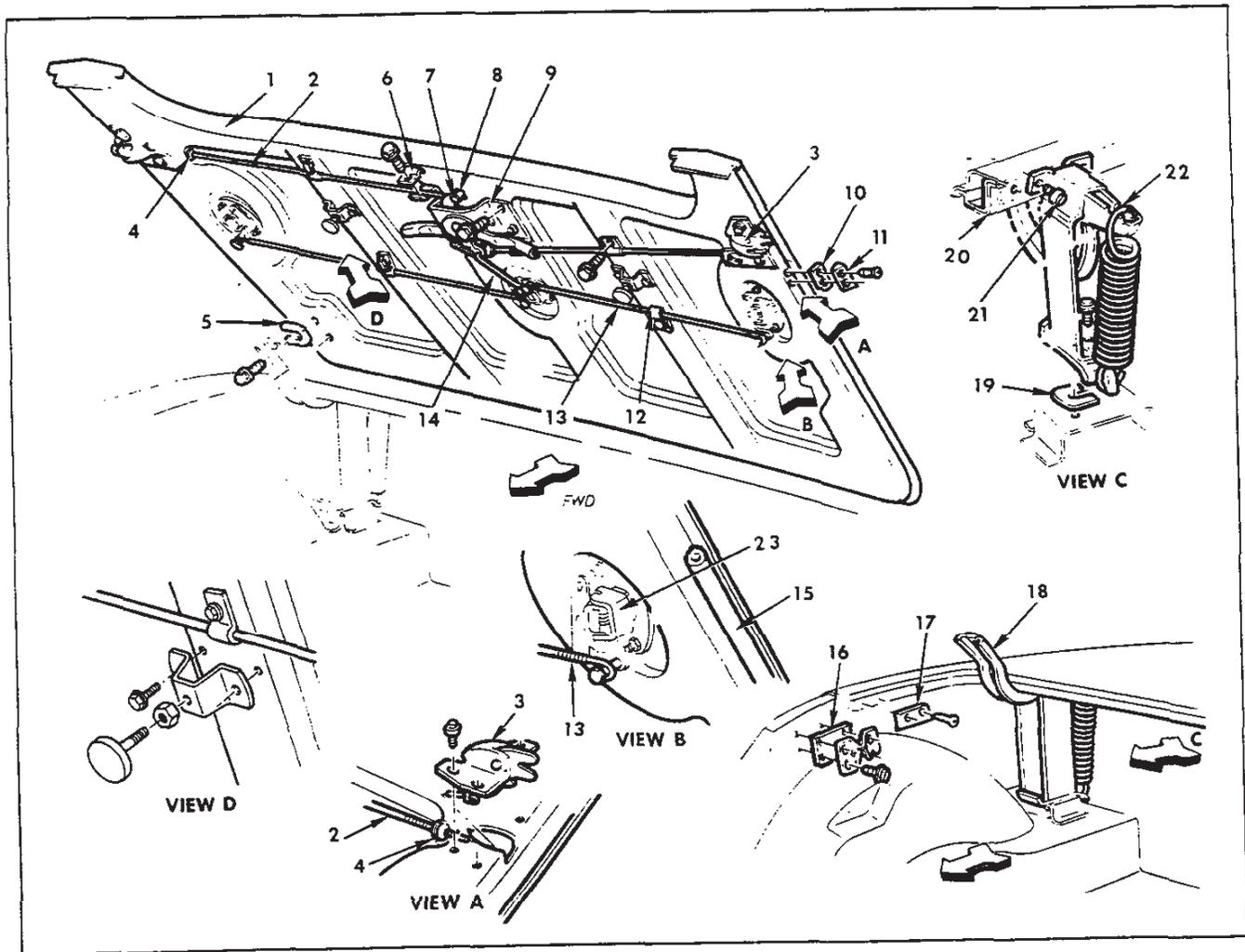


Fig. 36—Folding Top Lid Assembly

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

## 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 cleanser 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:

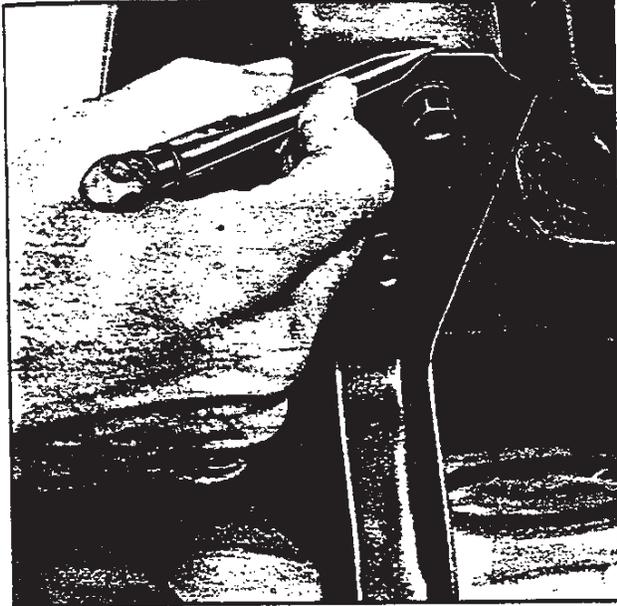


Fig. 37—Marking Hinge Position

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

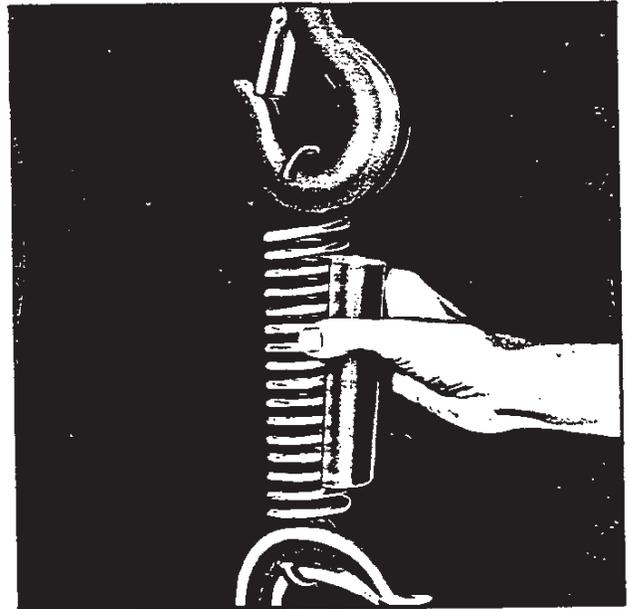


Fig. 39—Installing Tool J-9559 in New Spring

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

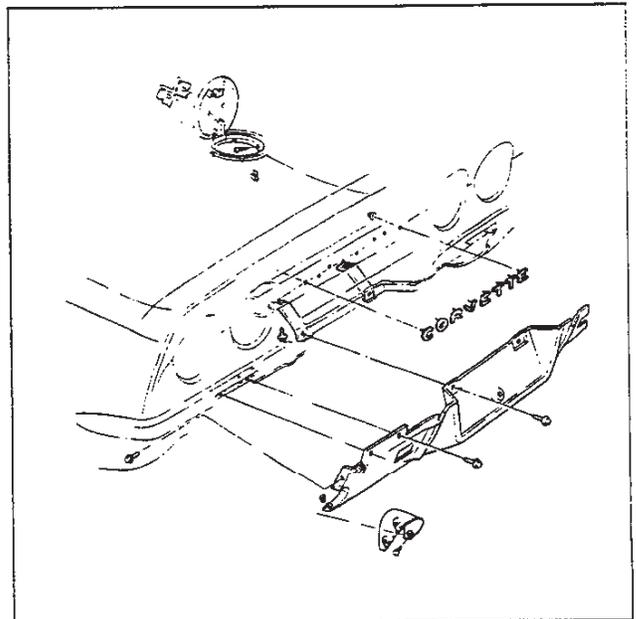


Fig. 40—Gas Tank Door and Rear Trim

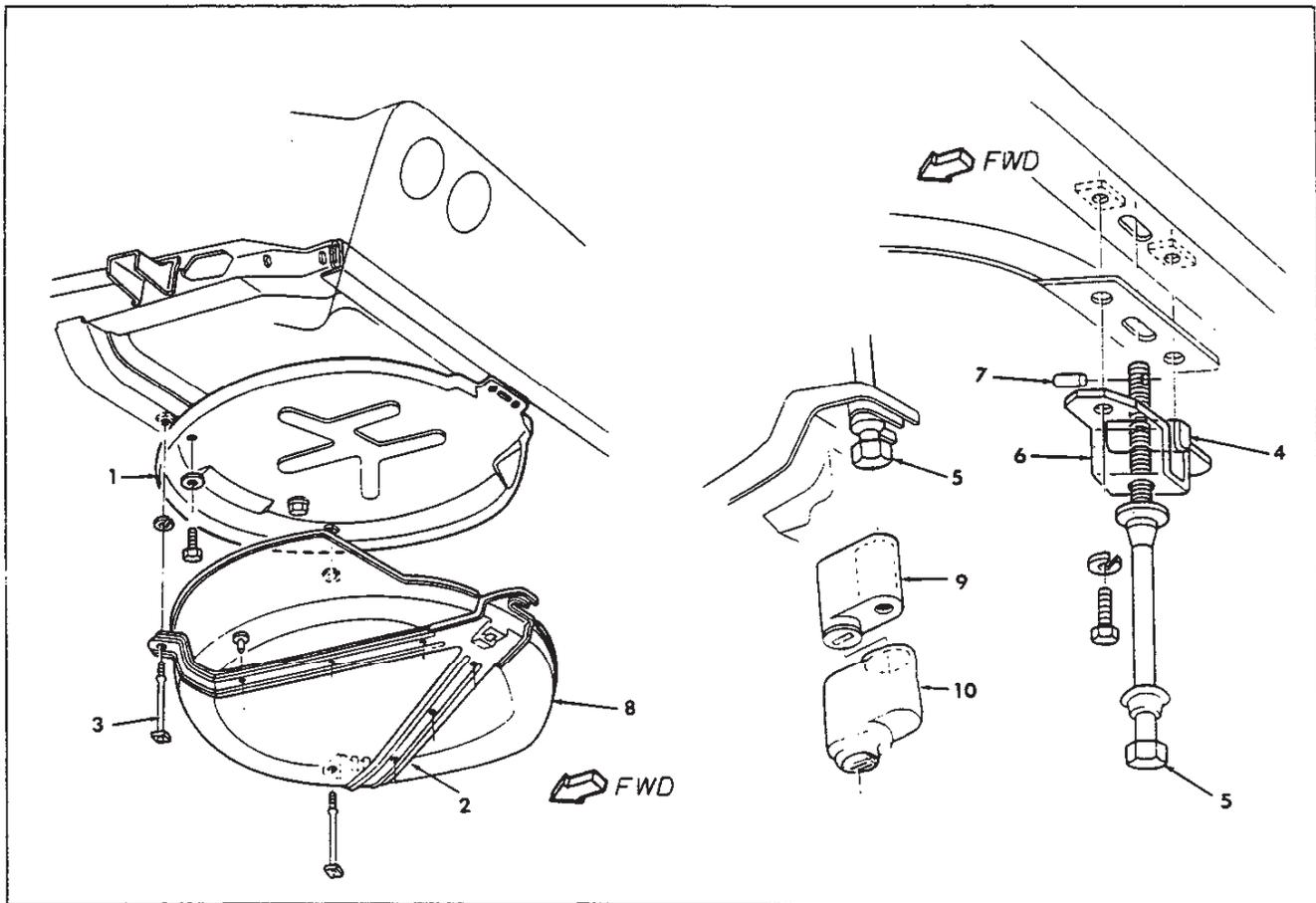


Fig. 41—Spare Tire Mount

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.

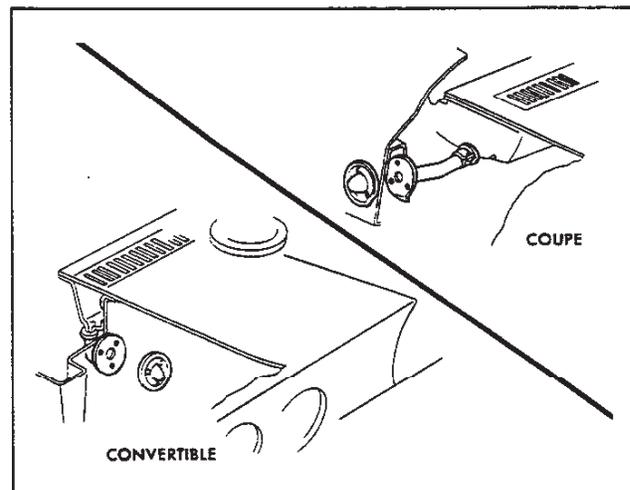


Fig. 42—Rear Plenum Drain

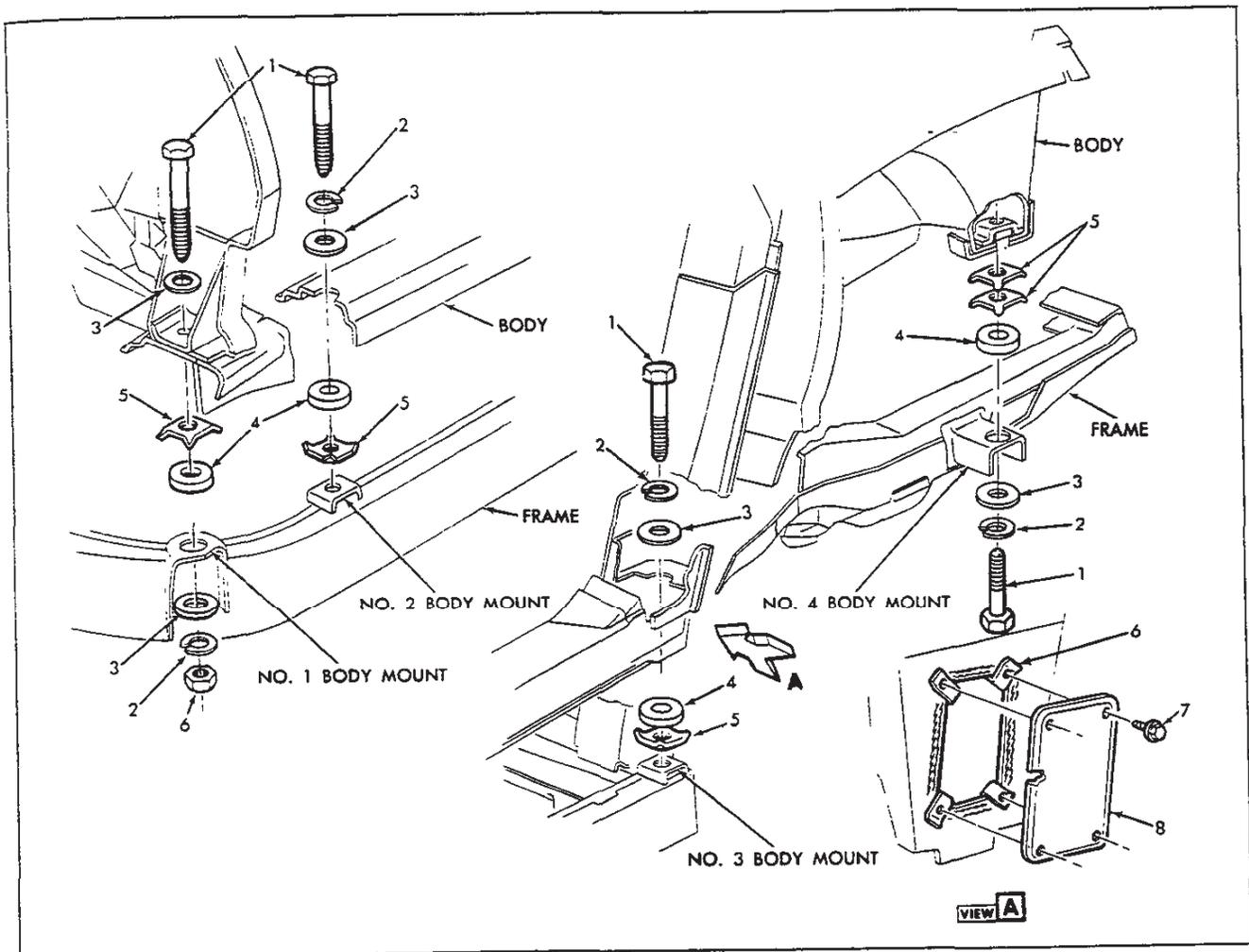


Fig. 43—Body Mounts

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.

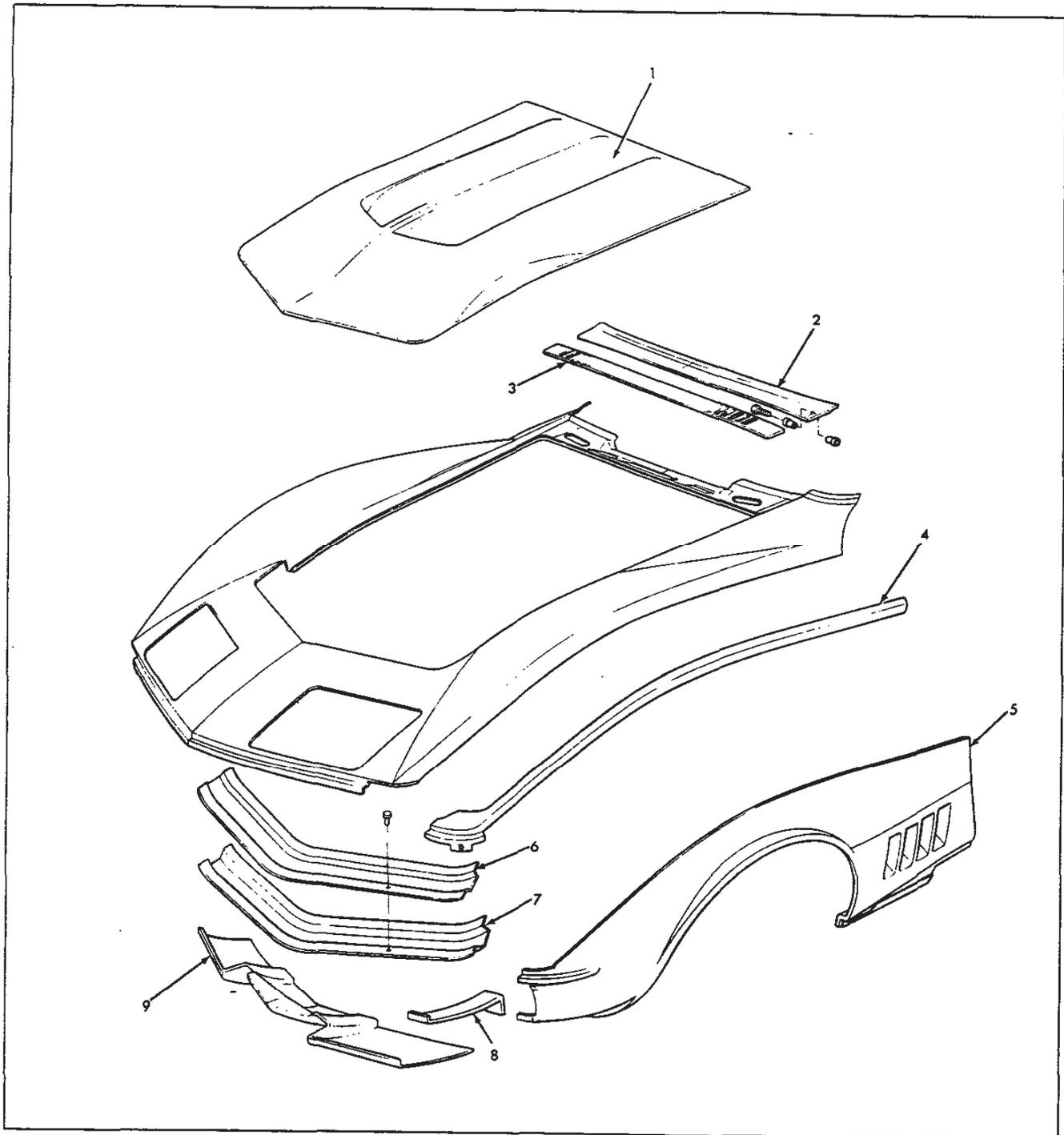


Fig. 44—Front Body Construction

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

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

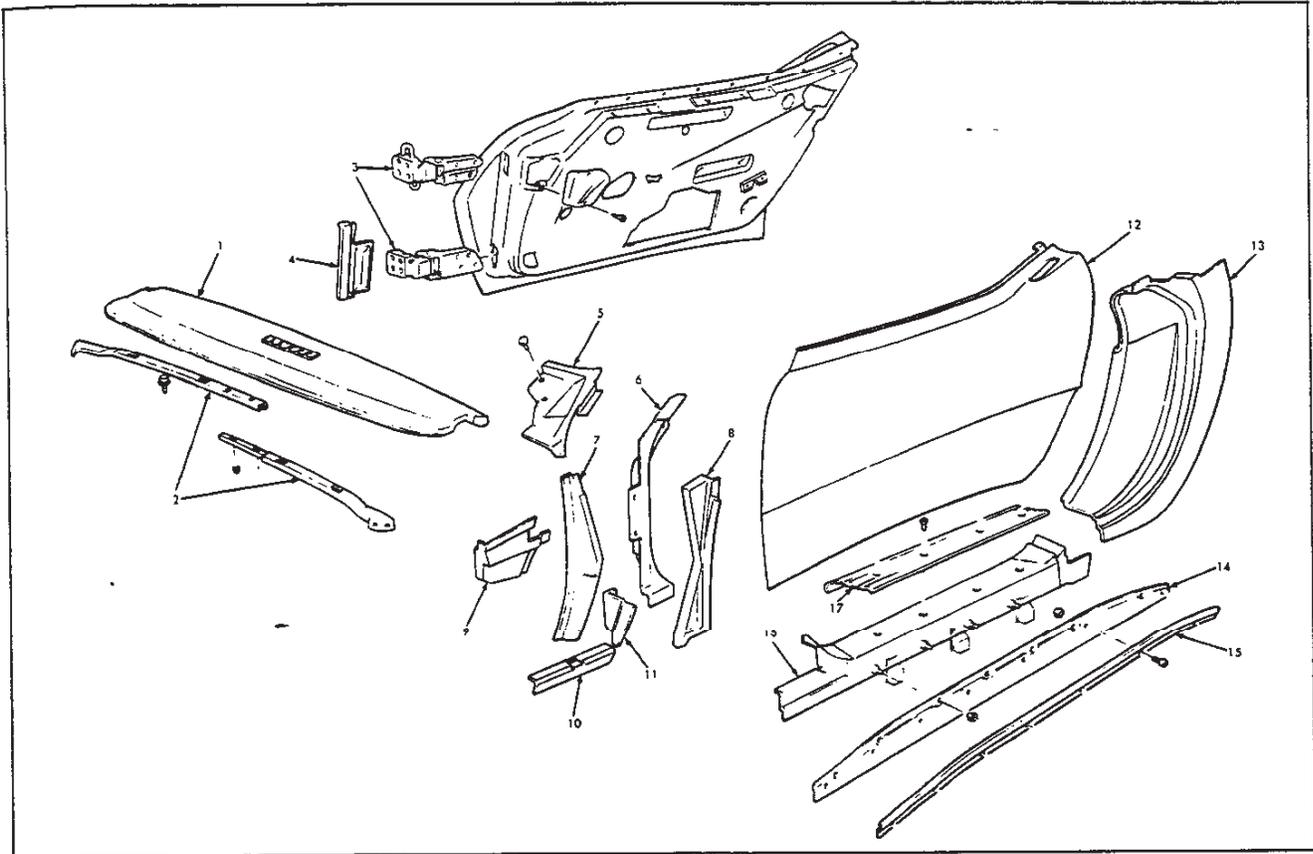


Fig. 45—Center Body Construction

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

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.

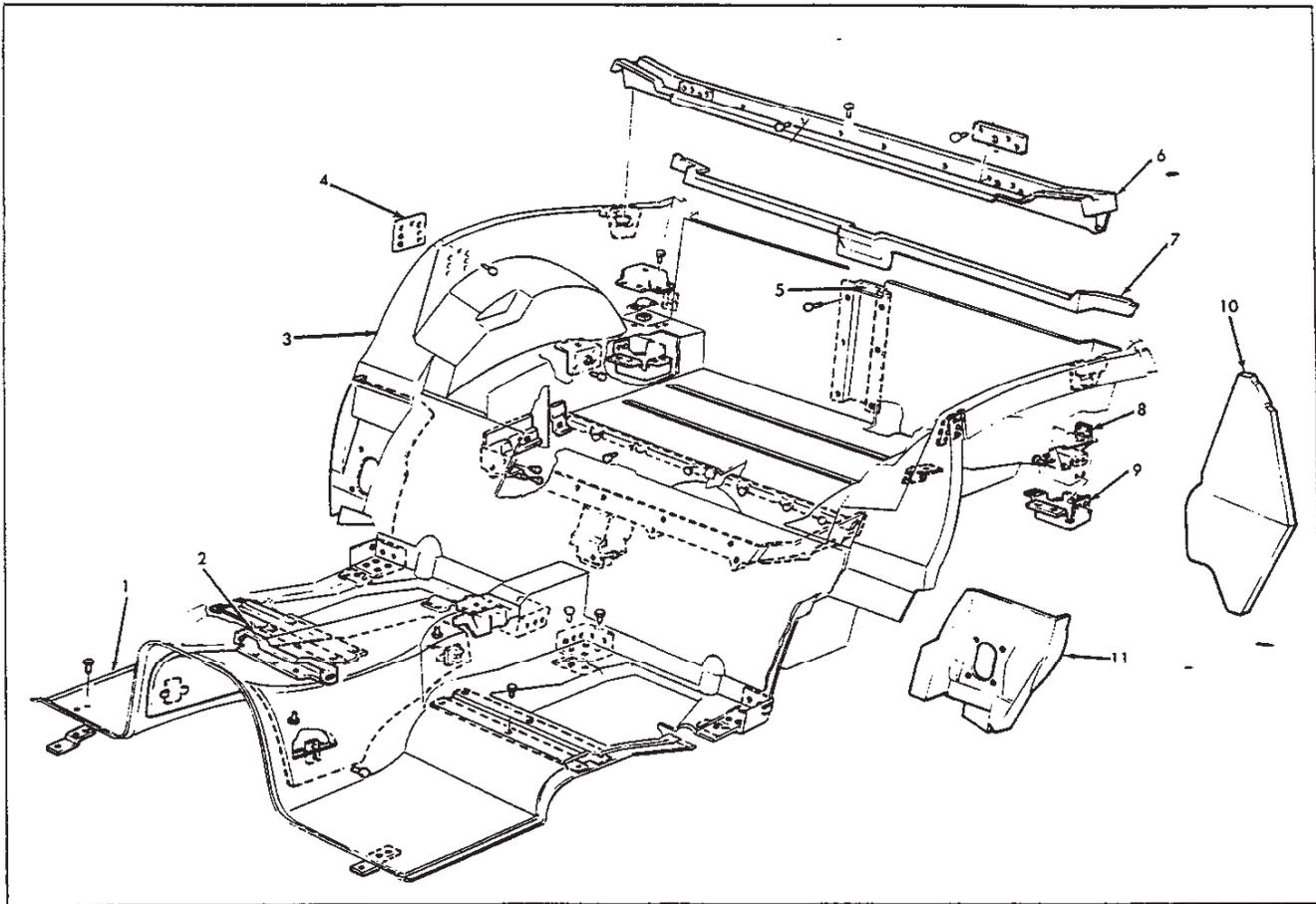


Fig. 46—Under Body Construction

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

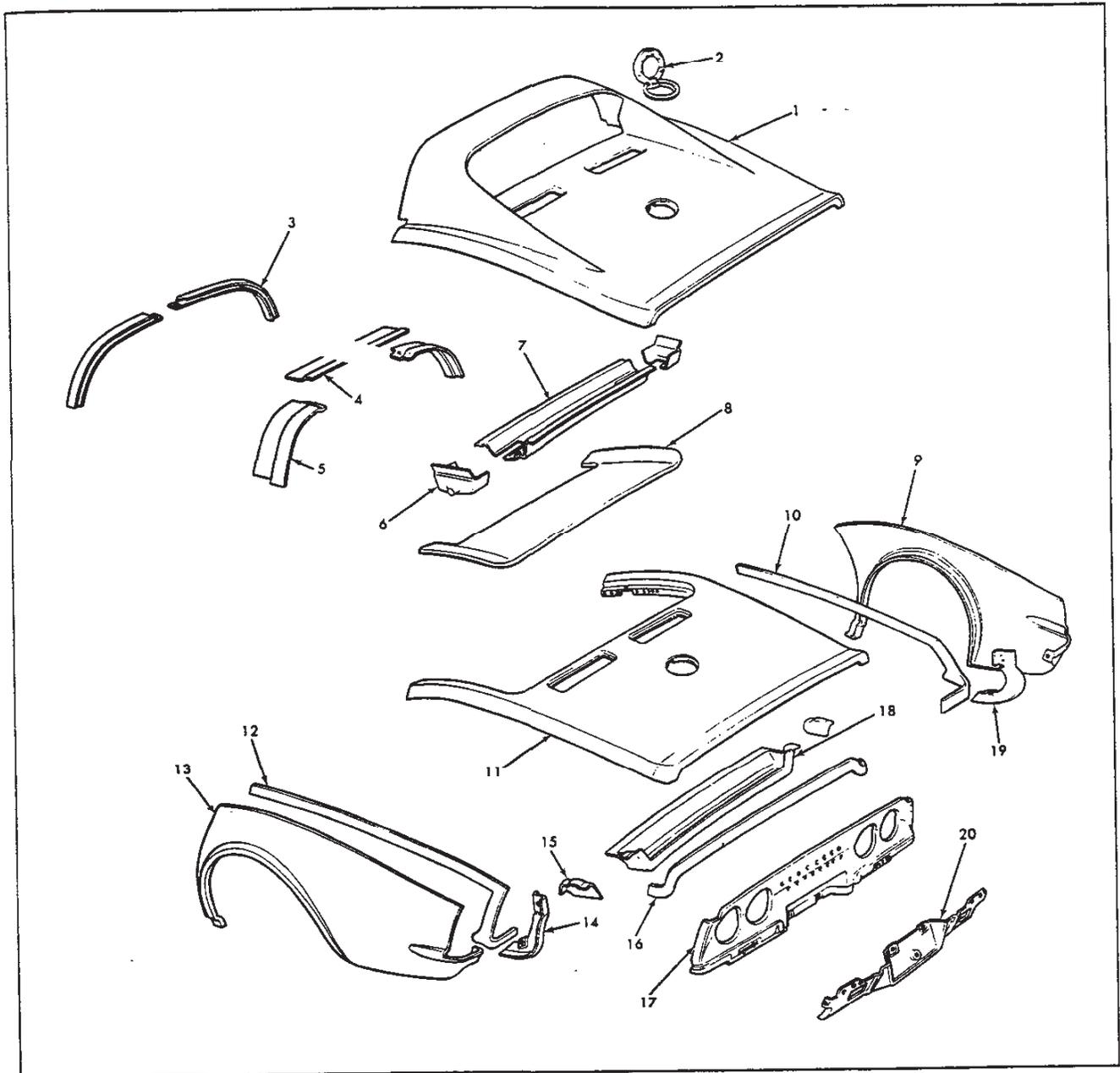


Fig. 47—Rear Body Construction

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

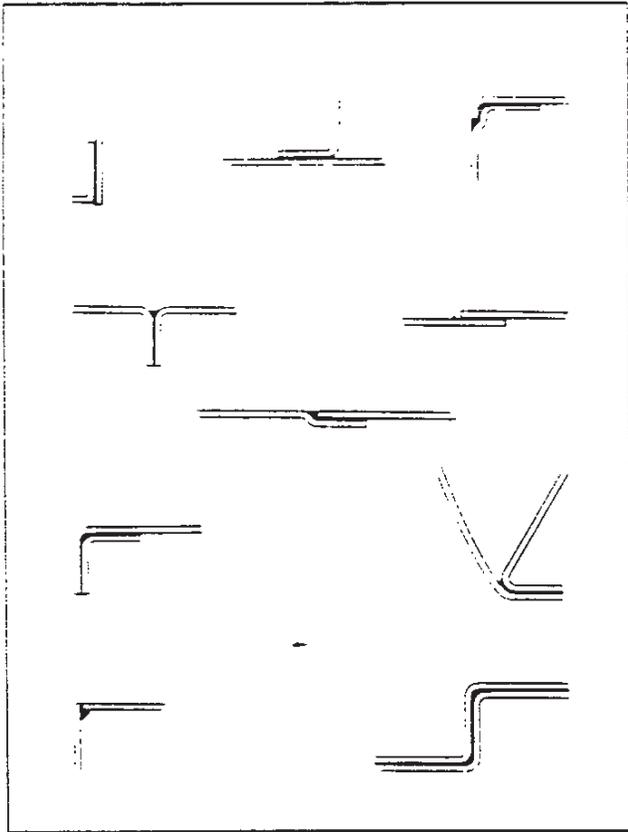


Fig. 48—Typical Body Bonds

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, Thixatropo, fiberglass cloth, protecting



Fig. 49—Mixing Plastic Solder Material

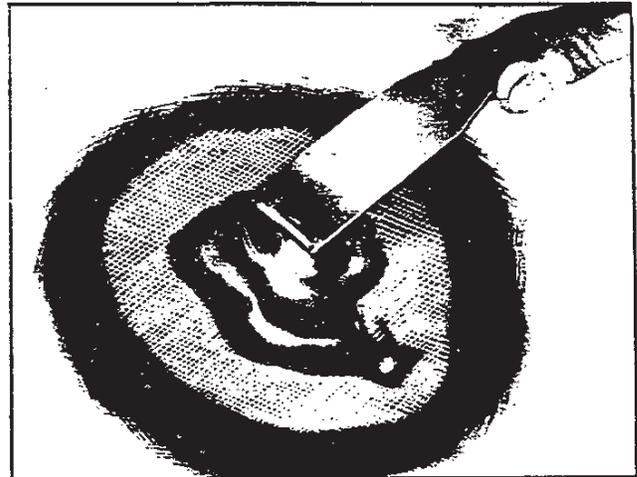


Fig. 50—Applying Plastic Solder



Fig. 51—Finishing Plastic Solder Repair

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.

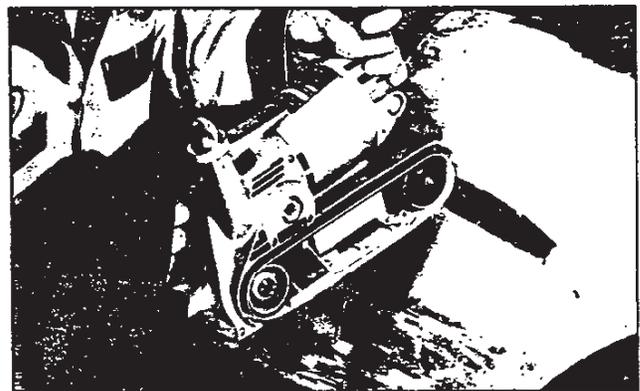


Fig. 52—Grinding "V" at Damaged Area



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 Thixatropo 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



Fig. 54—Applying Laminate to Body

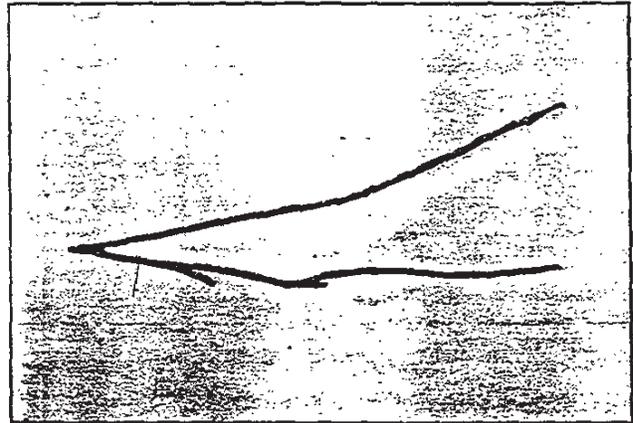


Fig. 55—Typical Scratched Panel

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.

## 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

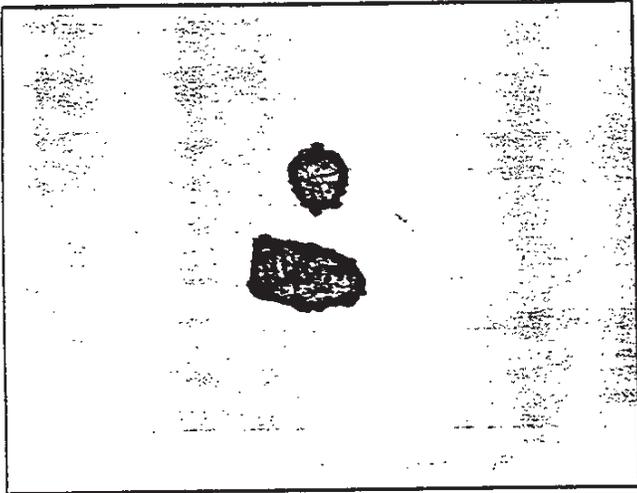


Fig. 57—Typical Pitted Panel

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 fiber-glass 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.

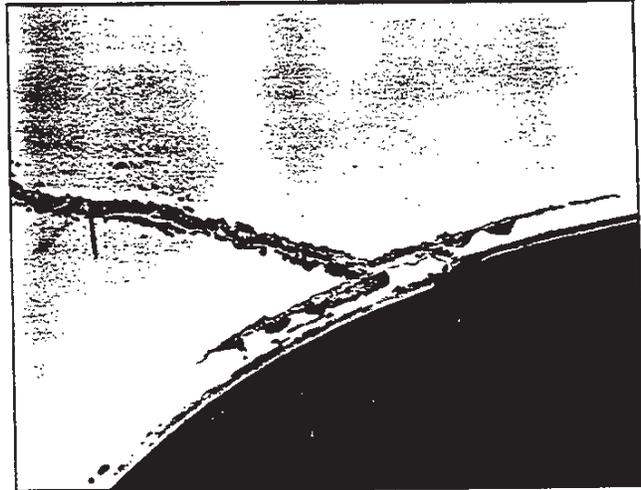


Fig. 58—Typical Cracked Panel

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.

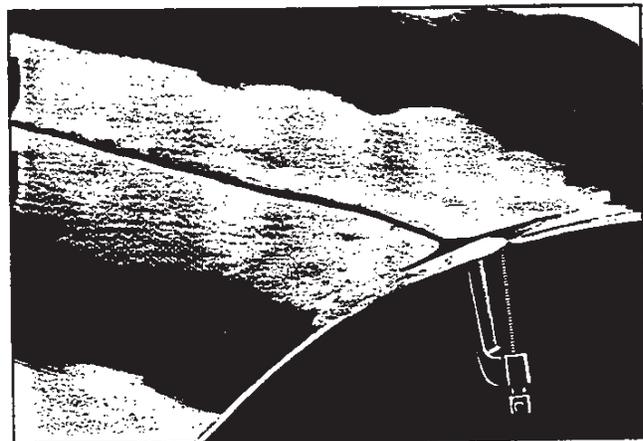


Fig. 59—Cracked Panel Preparation

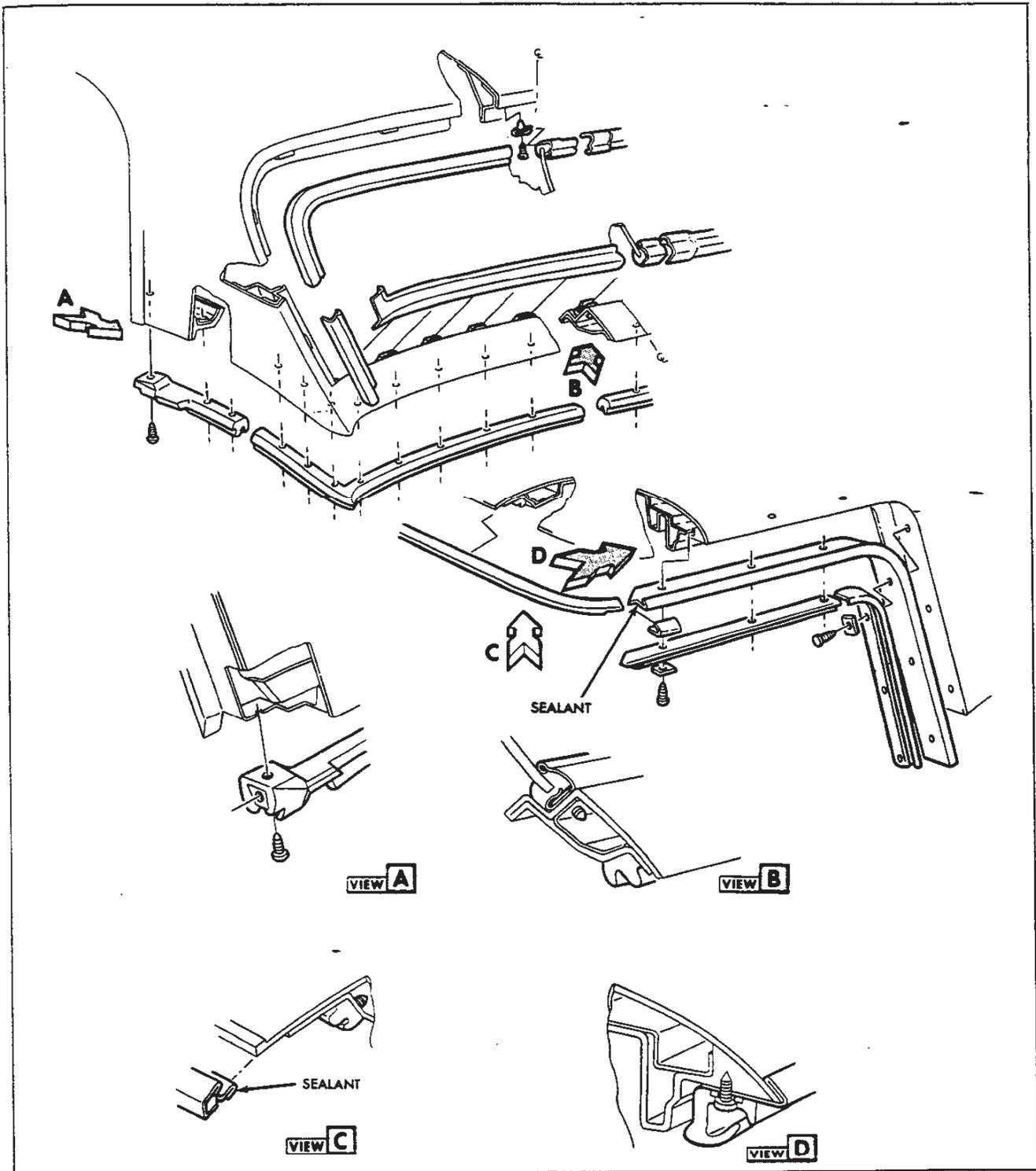


Fig. 60—Molding and Weatherstrip (Convertible Hardtop)

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.

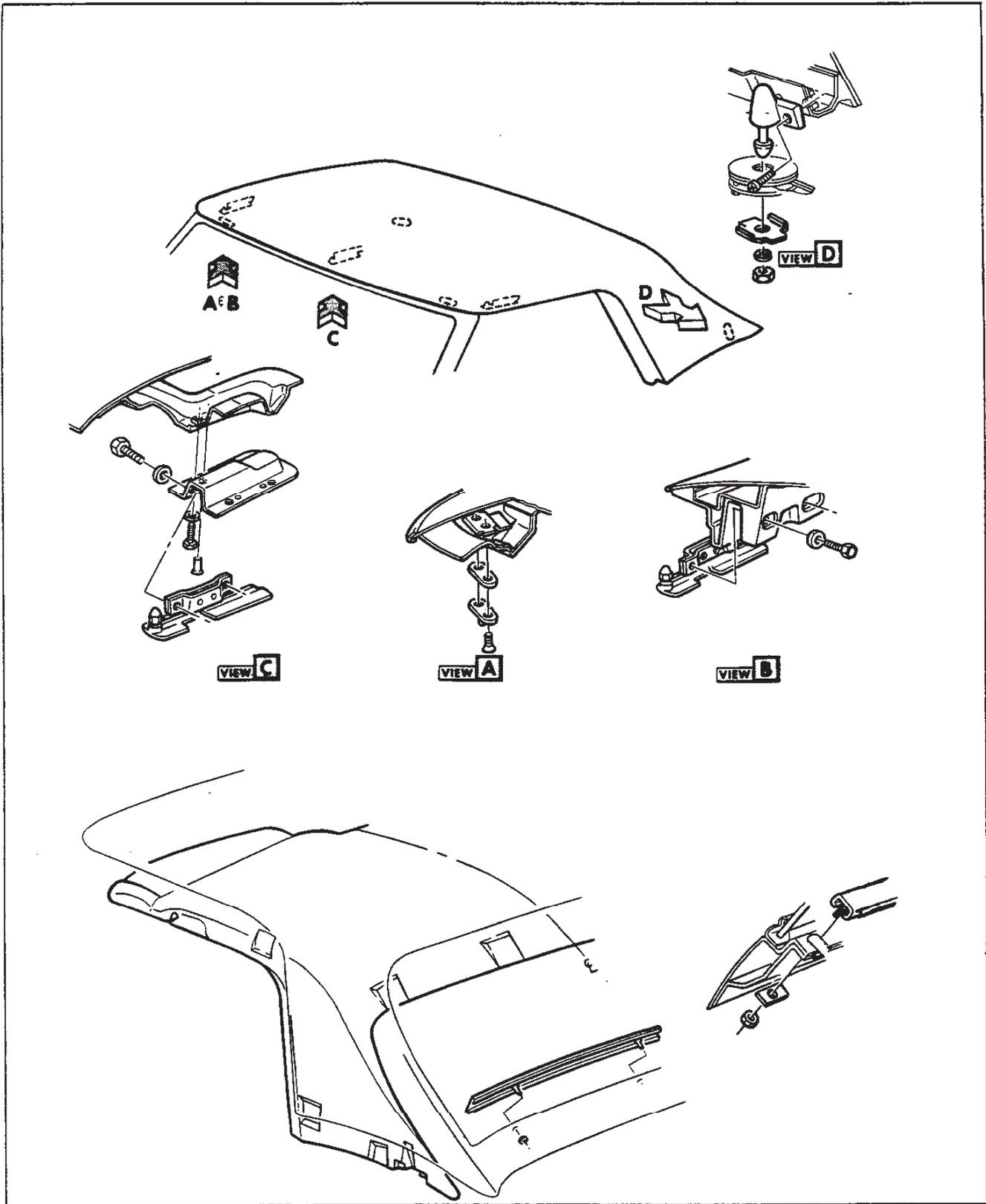


Fig. 61—Top Attachments and Headlining (Convertible Hardtop)

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.

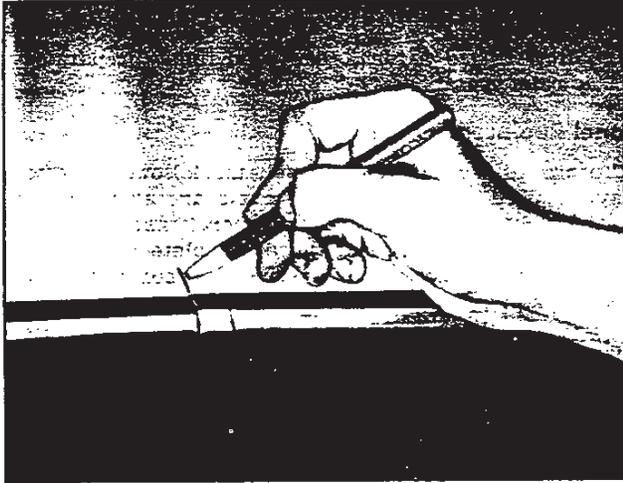


Fig. 62—Marking Molding Position

## 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 tightening 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 lose its grain, blister, or become very shiny.

- Loosen cemented edges of fabric roof cover.

#### Installation

- 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.
- Where possible, install new cover at room temperature (approximately 72°) to permit easier fitting and removing of wrinkles from the cover assembly.
- 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").
- 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.
- 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.

- Apply cement to entire fabric roof cover.

**NOTE:** Allow approximately 15 minutes for cement to dry.

- Fold vinyl cover back to contact adhesive on roof panel. Vinyl cover seam must be parallel to centerline of vehicle.
- Repeat above steps for opposite side of roof.
- Use suitable spatula or roller to remove wrinkles and/or bubbles from vinyl cover.
- 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.
- 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:

- Obtain a scrap piece of fabric roof cover material, or material from a hidden area directly on complaint car (such as under reveal moldings).
- 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.

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

#### Wrinkles, Blisters and Bubbles

- Pierce each wrinkle, blister and bubble on fabric roof cover with a small needle.
- Completely saturate a clean shop towel with water and wring out.
- Apply cloth to wrinkle or blistered area.
- 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.

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

- 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.
- 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.

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

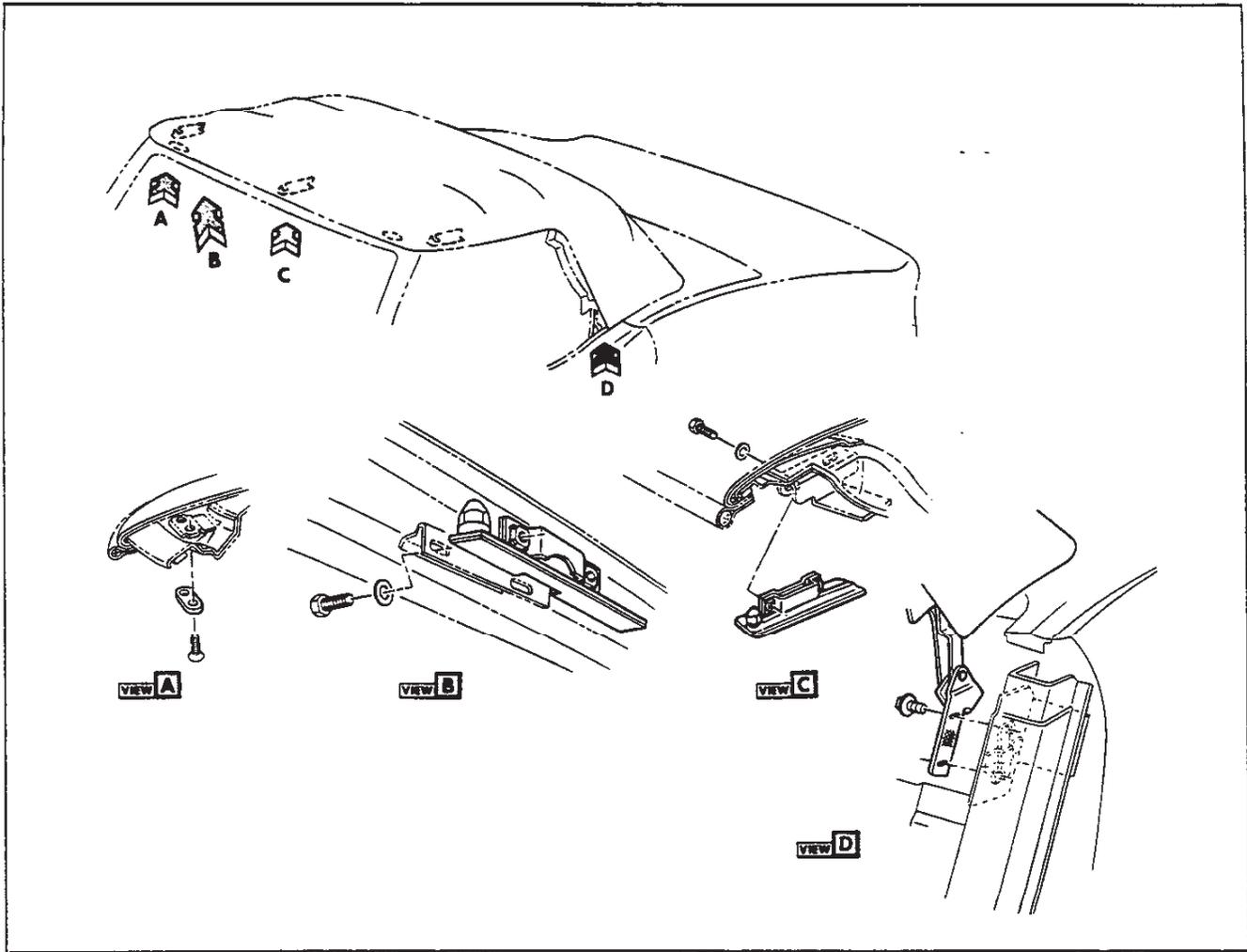


Fig. 63—Folding Top Adjustments

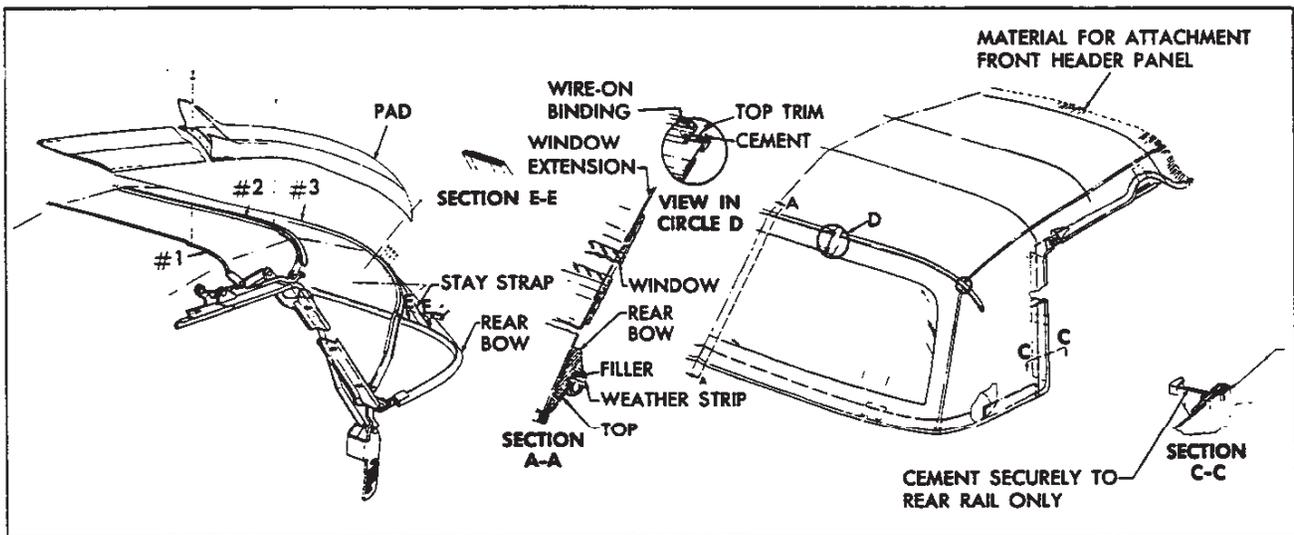


Fig. 64—Folding Top Trim Installation

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

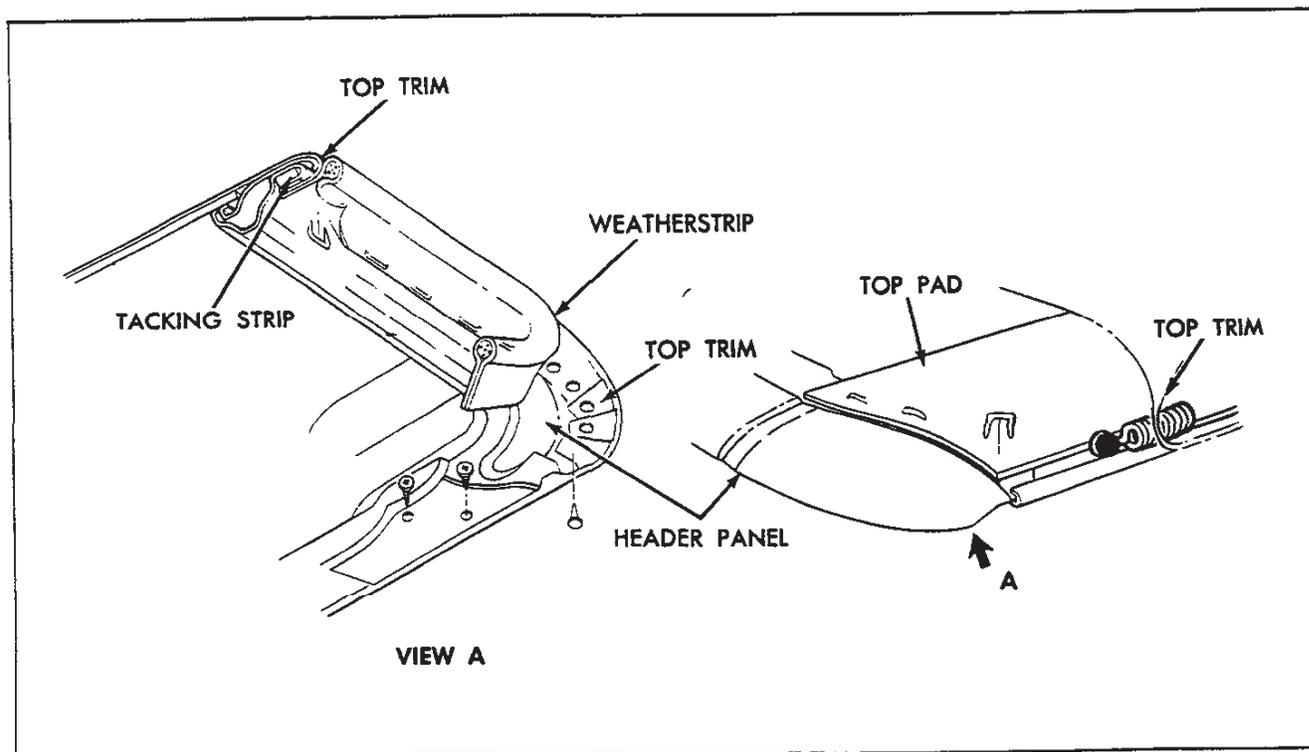


Fig. 65—Trim at Header

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.

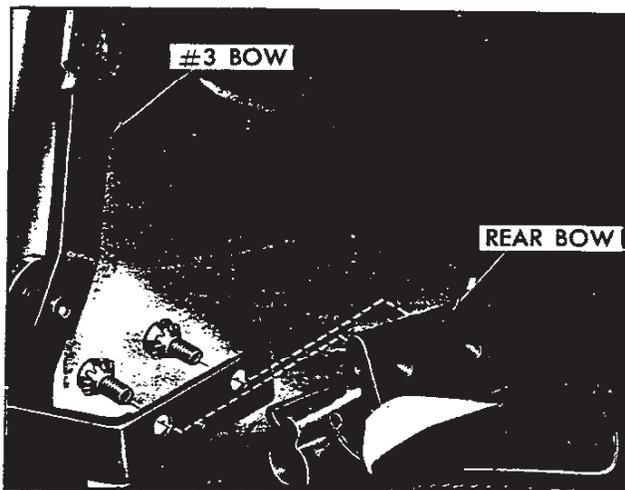


Fig. 66—Rear Bow Retaining Screws

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

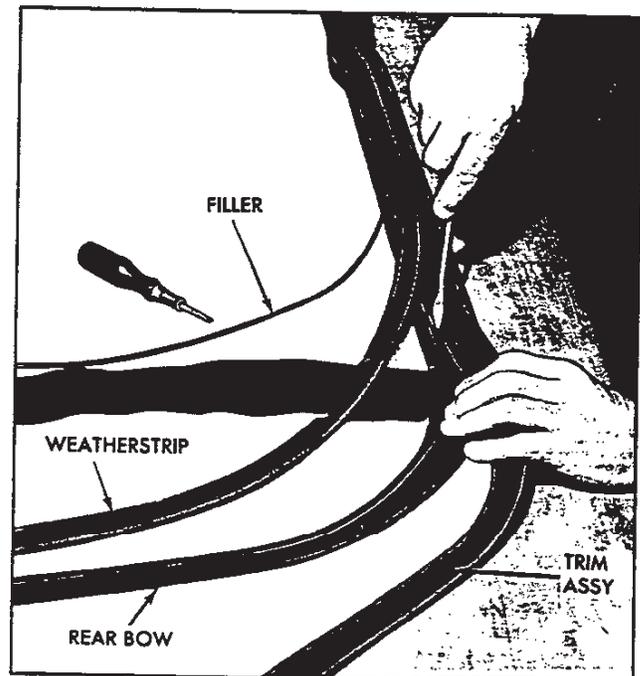


Fig. 67—Installing Trim and Weatherstrip to Rear Bow

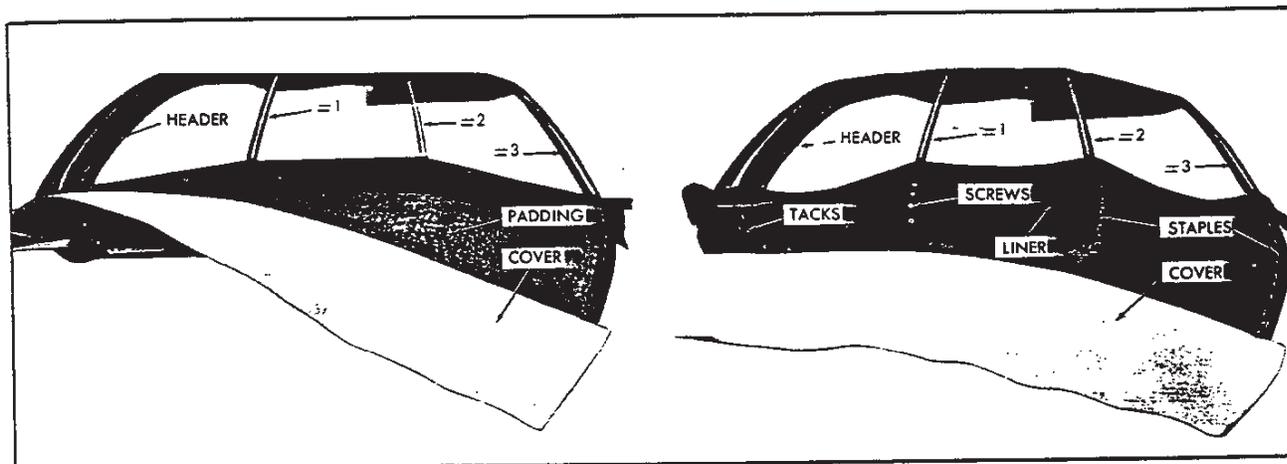


Fig. 68—Pad Construction

- 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.

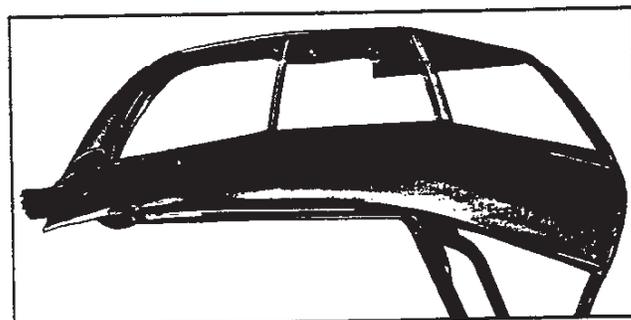


Fig. 69—Pad Installed

## 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

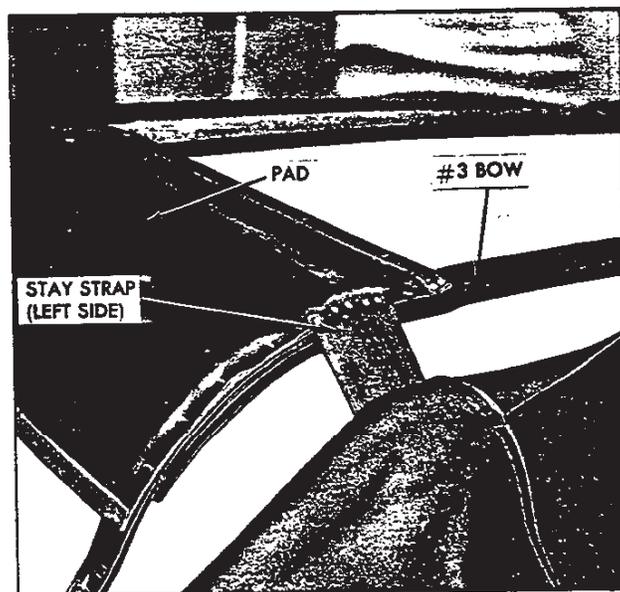


Fig. 70—Installing Stay Strap

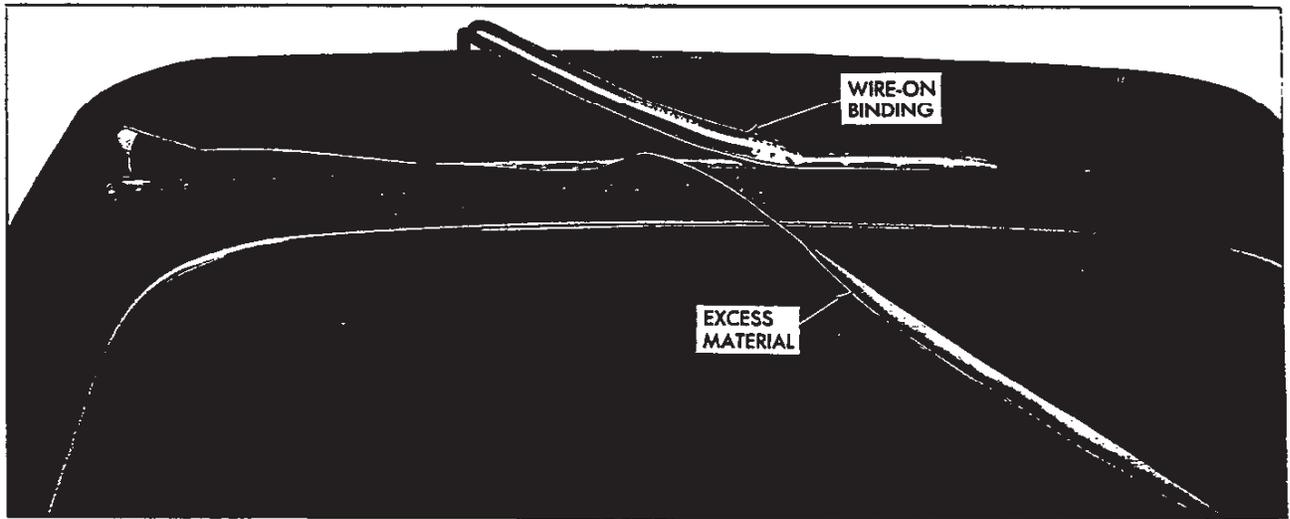


Fig. 71—Installing Binding

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

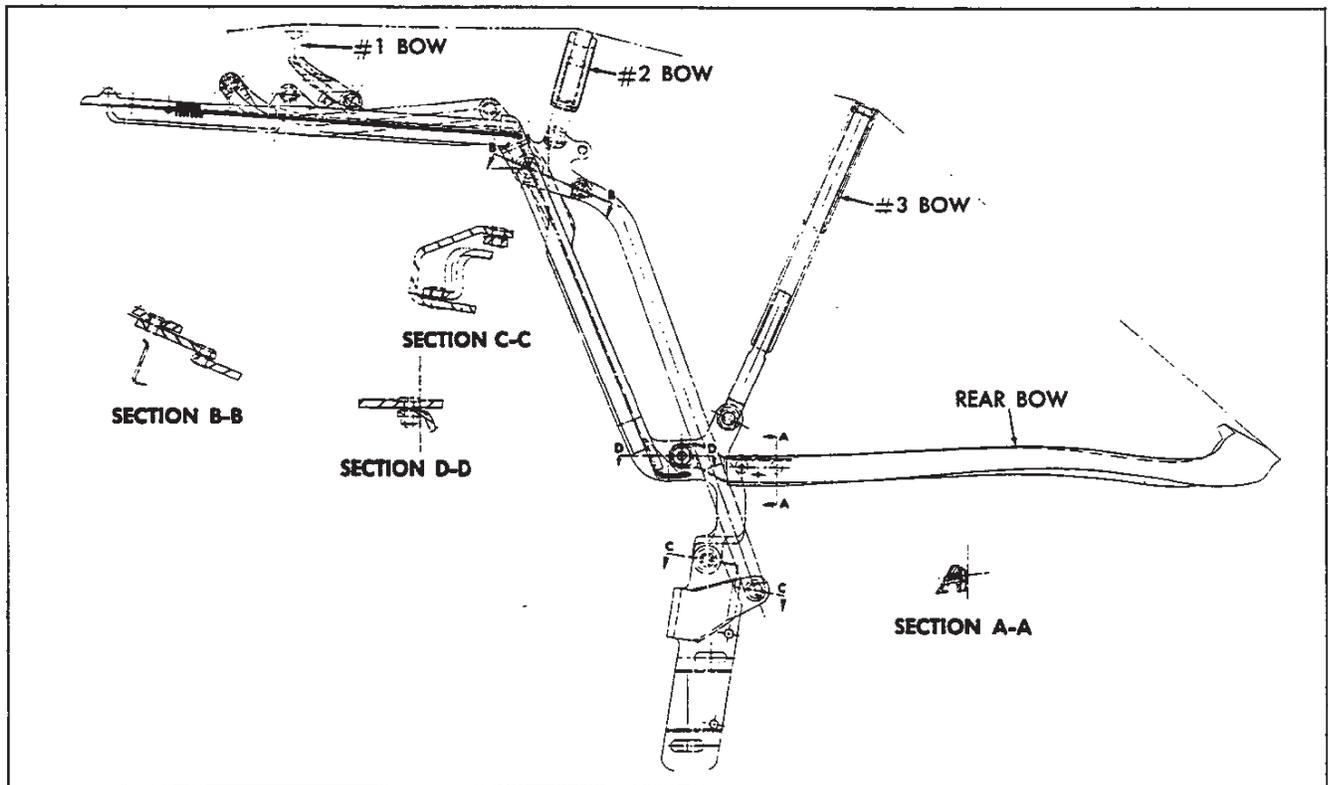


Fig. 72—Top Frame and Linkage

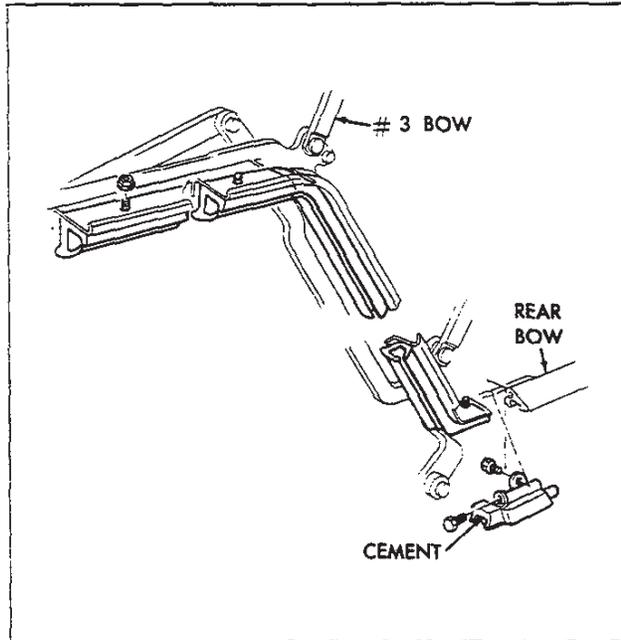


Fig. 73—Side Rail Weatherstrip

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.

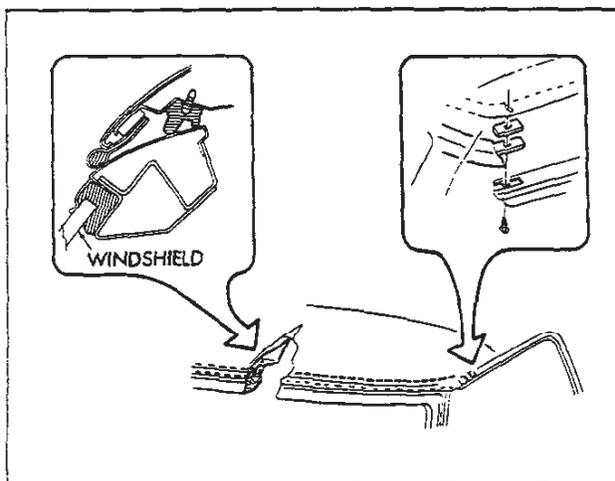


Fig. 74—Header Weatherstrip

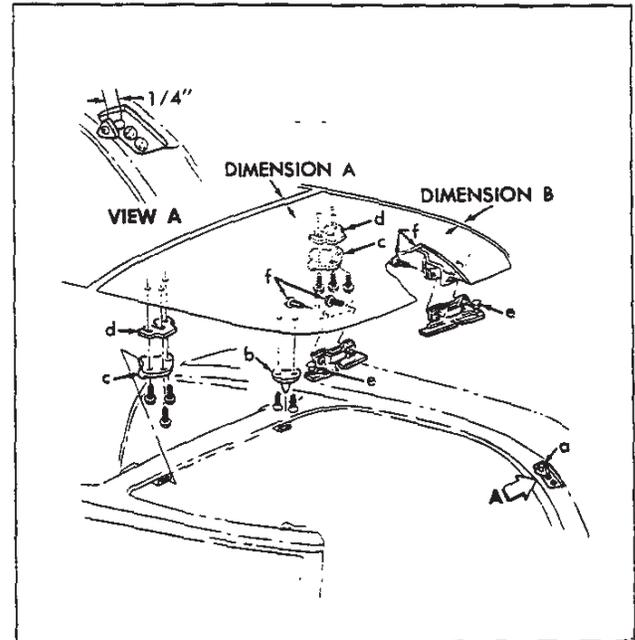


Fig. 75—Roof Panel Alignments

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.

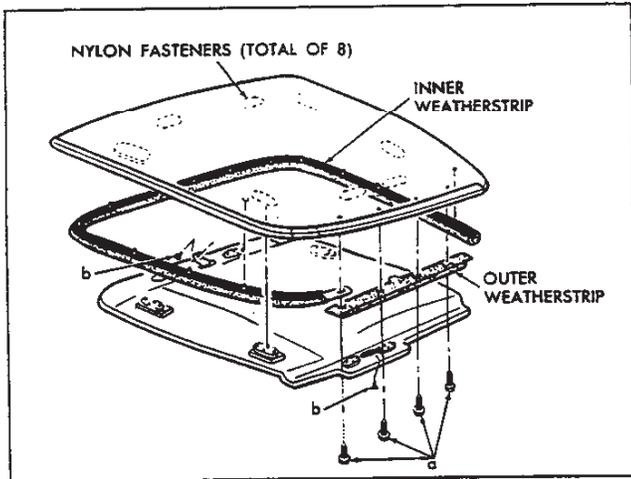


Fig. 76—Roof Panel Weatherstrips

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.

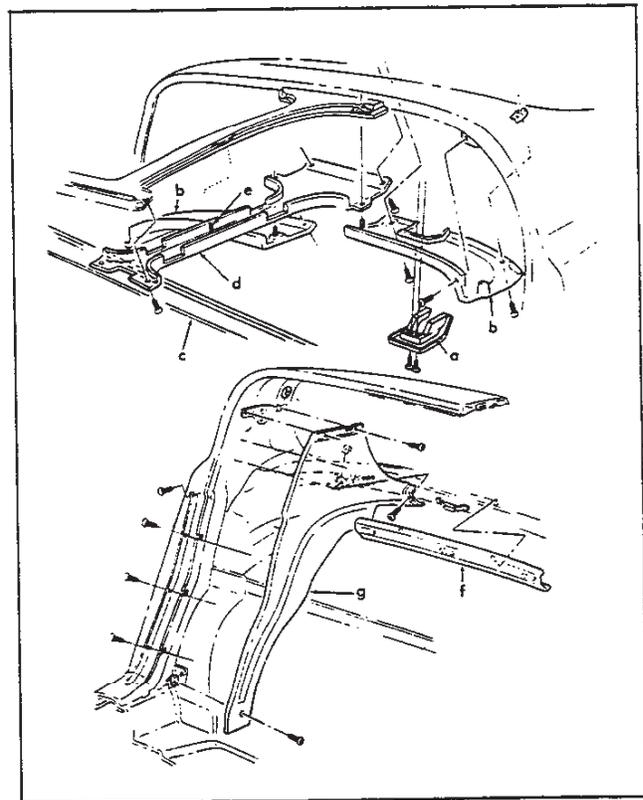


Fig. 77—Interior Quarter Trim

## 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

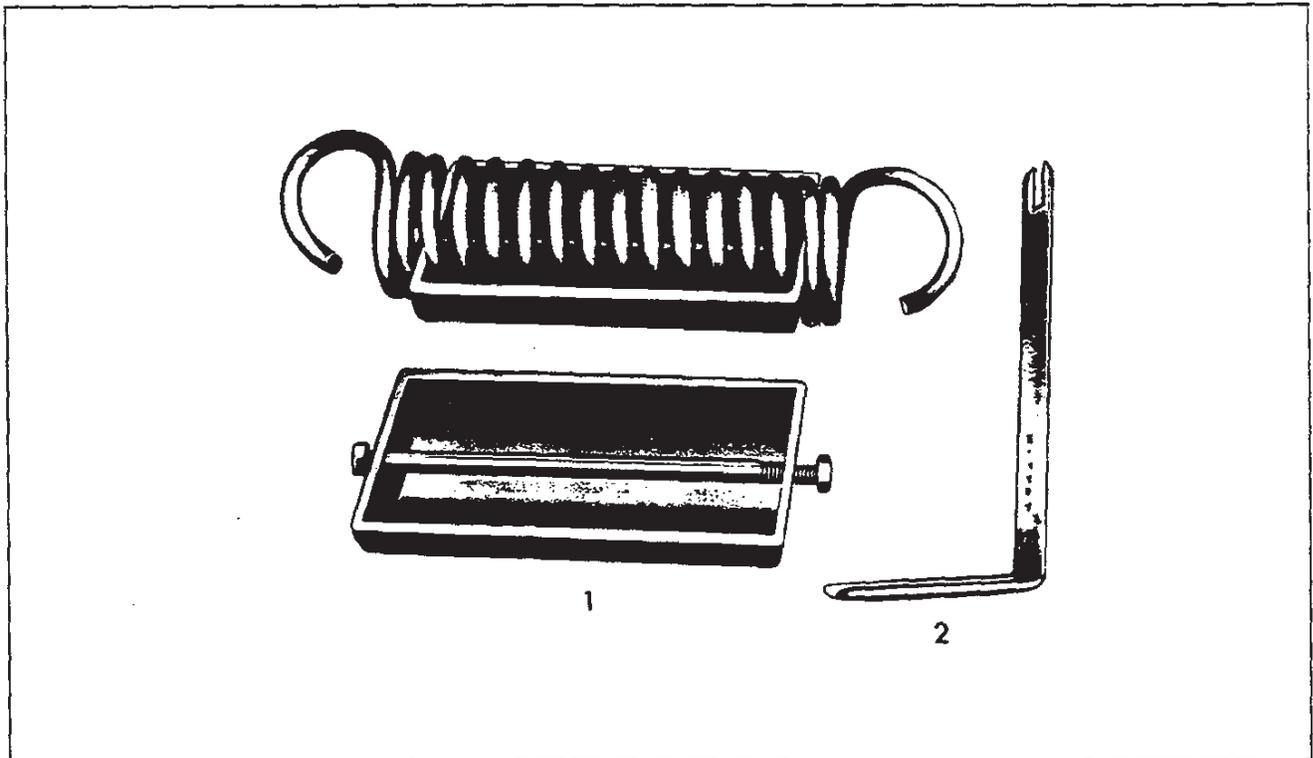


Fig. 78—Special Tools

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

All Corvette engines for 1970 have transmission-controlled spark advance for improved emission control. New slim-line gasketless spark plugs for Turbo-Jet V8 engine. High-performance and special-performance camshafts and mechanical valve lifters as listed.

**300-hp Turbo-Fire 350 V8, standard.** Four-barrel carburetor, premium fuel, general-performance camshaft. Compression ratio—10.25:1. Hydraulic valve lifters. Transmissions: 4-Speed, Turbo Hydra-matic.

**350-hp Turbo-Fire 350 V8, extra cost.** Four-barrel carburetor, premium fuel, high-performance camshaft. Compression ratio—11.0:1. Hydraulic valve lifters. Transmissions: 4-Speed.

**370-hp Turbo-Fire 350 V8, extra cost. NEW.** Four-barrel carburetor, premium fuel, special-performance camshaft. Compression ratio—11.0:1. Mechanical valve lifters. Transmissions: 4-Speed.

**390-hp Turbo-Jet 454 V8, extra cost. NEW.** Four-barrel carburetor, premium fuel, high-performance camshaft. Compression ratio—10.25:1. Hydraulic valve lifters. Transmissions: 4-Speed, Turbo Hydra-matic.

**400-hp Turbo-Jet 454 V8, extra cost. NEW.** Large four-barrel carburetor, premium fuel, high-performance camshaft. Compression ratio—11.25:1. Mechanical valve lifters. Transmissions: 4-Speed, Turbo Hydra-matic.

**Transmissions:** 4-Speed, standard. Wide range, fully synchronized. Console-mounted shift lever. Gear ratios: first—2.52:1, second—1.88:1, third—1.47:1, fourth—1.00:1. Also available in close ratio version: first—2.20:1, second—1.64:1, third—1.27:1, fourth—1.00:1 (close ratio not available with 300-hp engine; wide range not available with 460-hp engine). Turbo Hydra-matic, extra cost. Console-mounted shift. Can be shifted manually through three forward ranges, or left in "drive" for automatic shifting.

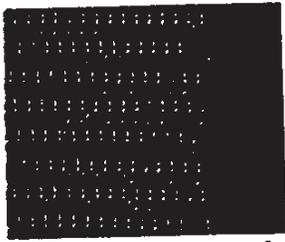
**For performance:** Special-purpose engine, suspension and chassis components, such as a special power brake system, are included with specific engine/transmission option packages.

**Auxiliary removable hardtop (convertible).** Black vinyl roof covering for auxiliary hardtop. Wheel covers. Shoulder belts and retractors (convertible). Rear-window defroster. Four-Season air conditioning. Tilt-telescopic steering wheel. AM/FM pushbutton radio. AM/FM/Stereo pushbutton radio. Power brakes. Power steering. Power windows. White-lettered tires. White-stripe tires. Audio alarm system.

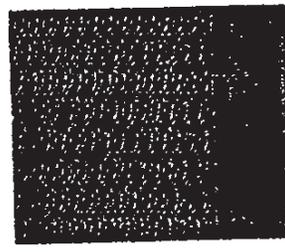
New: Corvette for '70 accentuates its aerodynamic look. There's a bright new precision-cast grille, new bright accents on fender side louvers, and new stainless steel body sill moldings.

Also new for '70: New wider flared wheel openings front and rear. New improved windshield wiper cowl panel operation. New faster headlight positioning control. New improved hood locking system. New improved door latching system for convertible. New parking lights. New side marker lights, front and rear. New rectangular exhaust pipe extensions. New instrument cluster. New high-back bucket seats with built-in head restraints.

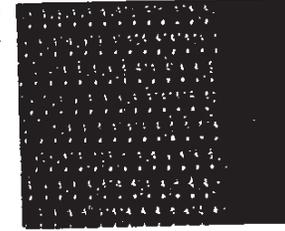
Others you'll like: Steel-reinforced fiberglass body. High-rise fenders with functional louvers. Power-operated retractable dual headlights. Front and rear air spoilers. Removable roof panel sections and rear window (coupe). Concealed outside door handles. Keyless door locking. Full door-glass styling without ventipanes. Hide-A-Way windshield wipers with integral washers (under power-operated cowl panel). Twin rear-deck air exhaust grilles. Wheel trim rings and center caps. Four-wheel disc brakes—self-adjusting. Positraction rear axle. All-welded ladder-type frame. Dual master cylinder brake system with warning light. Wide 15 x 8-inch wheels with safety rims. P'70 x 15 wide-oval tires. Ball-race steering. Side-terminal energizer-type Delco-eye battery. Aircraft-type instrumentation. Astro Ventilation. Folding seat back latches. Seat belt retractors. Center console. Day-night inside rearview mirror. Console-mounted parking brake control. Sport-styled steering wheel. Tachometer. Trip odometer. Rally-type electric clock. Ammeter, oil pressure, fuel, temperature gauges. Courtesy light with automatic door switches. Light monitoring system. Tinted glass. Suspended accelerator pedal. Rear compartment stowage wells. Warning lights for door and seat belts. Delcotron generator with integral micro-switch regulator.



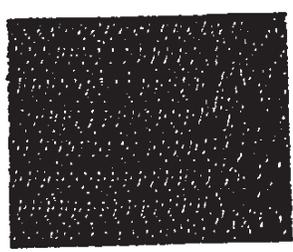
\*Black



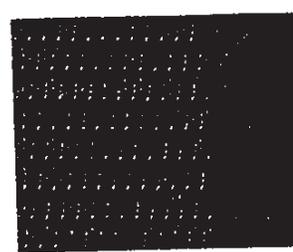
\*Saddle



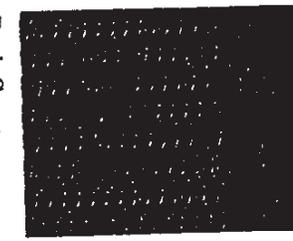
Red



Blue



Dark Brown



Dark Green

\*Also available with leather seat trim in Custom Interior option described below.

**Standard:**

All-vinyl bucket-seat interior luxury for the '70 Corvette comes in six color choices: black, saddle, red, blue, dark brown, dark green.

**Custom interior:**

A new Custom Interior option in black or saddle, includes leather seat trim, plush cut-pile carpeting, special door trim with carpeted lower panels, plus wood-grain accents on doors and console.

**Classic White**



Mulsanne Blue



Bridgehampton Blue



Donnybrook Green



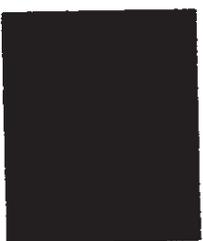
Laguna Gray



Marlboro Maroon



Ontario Orange



Monza Red



Cortez Silver

Daytona Yellow

Choice of 10 exterior colors for '70: • Mulsanne Blue • Bridgehampton Blue • Donnybrook Green • Laguna Gray • Marlboro Maroon • Ontario Orange • Monza Red • Cortez Silver • Classic White • Daytona Yellow.

Convertible soft top available in white, black or sandalwood with any exterior color.



# CORVETTE

## V8 MODELS (300-hp Turbo-Fire 350 V8)

MODEL NUMBER	DESTINATION GROUP NO.	MFR'S SUGGESTED RETAIL PRICE*
Corvette		
Coupe 19437	42	\$5192.00
Convertible 19467	42	4849.00

With manually-operated folding top

### DESTINATION CHARGE:

GROUP 42

DESCRIPTION	RPO NUMBER	MFR'S SUGGESTED RETAIL PRICE
-------------	------------	------------------------------

### POWER TEAMS

#### Engines:

**350-hp Turbo-Fire 350.** Available only when standard 4-Speed wide-range or 4-Speed close-ratio transmission is ordered. . . . . **L46** \$158.00

**370-hp Turbo-Fire 350.** Available only when standard 4-Speed wide-range or 4-Speed close-ratio transmission is ordered. Includes full-transistor ignition system. . . . . **L71** 447.65

**390-hp Turbo-Jet 454.** Available only when standard 4-Speed wide-range, 4-Speed close-ratio or Turbo Hydra-matic transmission is ordered. Includes HD battery. . . . . **L55** 289.65

**460-hp Turbo-Jet 454.** Available only when 4-Speed close-ratio, 4-Speed special close-ratio or Turbo Hydra-matic transmission is ordered. Includes HD battery, full-transistor ignition system, aluminum cylinder heads, special hood and ornamentation. . . . . **L57** ---

#### Transmissions:

**Turbo Hydra-matic:**  
 With 300-hp or 390-hp engine. . . . . **M40** N.C.  
 With 460-hp engine. . . . . **M40** 95.05

**4-Speed (Close-Ratio)** . . . . . **M21** N.C.  
**4-Speed (Special Close-Ratio)** Available only when 460-hp engine is ordered. . . . . **M22** 95.05

**Axle, Positraction Rear:**  
 Economy Ratio. . . . . **Z08** 12.65  
 Performance Ratio. . . . . **Z09** 12.65

(Continued of Page 43) N.C.—No charge

DESCRIPTION	RPO NUMBER	MFR'S SUGGESTED RETAIL PRICE
-------------	------------	------------------------------

3.70 Ratio. . . . . **YE1** \$12.65  
 4.11 Ratio. . . . . **YE2** 12.65  
 4.56 Ratio. . . . . **YE3** 12.65

### POWER ASSISTS

**Brakes, Power** (Power brakes recommended) . . . . . **J50** 47.40  
**Steering, Power** (Power brakes recommended) . . . . . **N40** 105.35  
 Not available when 370-hp engine is ordered. . . . . **A31** 63.20  
**Windows, Power** . . . . . **A31**

### OTHER OPTIONS

**Air Conditioning, Four-Season:** Available only when 4-Speed wide-range transmission with standard, 350-hp or 390-hp engine or Turbo Hydra-matic transmission with standard or 390-hp engine is ordered. . . . . **C60** 447.65  
**Alarm System, Audio** . . . . . **UA6** 31.60  
**Battery, Heavy-Duty:** Included when 390-hp or 460-hp engine is ordered. . . . . **T60** 15.80  
**Belts, Shoulder Custom Deluxe:** (Convertible only) . . . . . **A85** 42.15  
**Driver and passenger** . . . . . **C50** 36.90  
**Defroster, Rear Window** . . . . . **U69** 172.75  
**Radio:** (Includes fixed height rear antenna) . . . . . **U69** 172.75  
**AM-FM pushbutton control** . . . . . **U69/U79** 278.10  
**AM-FM stereo pushbutton control** . . . . . **U69/U79**

**Roof Cover, Vinyl:** Black; Convertible with auxiliary top only. . . . . **C08** 63.20  
**Steering Wheel, Tilt-Telescopic** . . . . . **N37** 84.30  
**Top, Auxiliary:** Hard top; Convertible only . . . . . **C07** 273.85  
**Top, Folding:** Convertible only. All tops available with all exterior colors

Black. . . . . **BB** N.C.  
 White. . . . . **AA** N.C.  
 Santalwood. . . . . **EE** N.C.

**Trim, Custom:** Includes leather seat trim, special cut pile carpeting, door trim panels with wood-grained accents and lower carpeting plus console with wood-grained accents. . . . . **P02** 158.00  
**Wheel Covers:** Special. . . . . **P02** 57.95

**FACTORY-INSTALLED REGULAR PRODUCTION TUBELESS TIRES**  
 Replaces (5) F70 x 15 Special Nylon Blackwall  
 (5) F70 x 15 Special Nylon White Lettered Blackwall. . . . . **P19** 33.15  
 (5) F70 x 15 Special Nylon White Stripe. . . . . **PT7** 28.10

N.C.—No charge

(Continued of Page 43)

1970 Corvette

Coupe	V8
Convertible	1943
	1946

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## NEW CORVETTE FEATURES FOR 1970 . . .

- New bright precision-cast grille with new larger parking/turn signal lights
- New body sill moldings
- New wider flared wheel openings front and rear
- New rectangular exhaust outlets with bright accents
- New side marker lights front and rear
- New taillight and back-up light styling
- New interior trim styling and colors
- New high-backed slim-tapered bucket seat styling with integral head restraints
- New unutilized seat and shoulder belt buckle design
- New Custom interior option
- Tinted glass now standard in all windows
- New 370-horsepower 350-cu.-in. V8 option
- New large displacement 454-cu.-in. V8 option rated 380 horsepower with quiet hydraulic valve lifters and 10.25:1 compression ratio
- New top-output 460-hp includes aluminum cylinder heads, special camshaft with mechanical lifters, and 11.0:1 compression ratio
- 4-Speed fully synchronized transmission standard equipment
- Positraction rear axle standard with choice of ratios available
- Special high-domed hood included with 370-, 390- and 460-hp engines
- New improved windshield wiper cowl panel operation
- Faster headlight positioning control
- New improved hood locking system
- Improved door latching system for Convertible
- Side-terminal energizer battery

## Safety and security features . . .

### Occupant Protection Features

- Seat belts and shoulder belts (except Convertible) with pushbutton buckles and retractors—driver and passenger
- Built-in head restraints
- Energy-absorbing steering column
- Passenger-guard door locks
- Safety door latches
- Energy-absorbing padded instrument panel
- Thick-laminate windshield
- Padded sun visors
- Safety armrests
- Safety steering wheel

### Accident Prevention Features

- Side marker lights and reflectors
  - Parking lights that illuminate with headlights
  - Four-way hazard warning flasher
  - Back-up lights
  - Lane-change feature in direction signal control
  - Windshield defroster, washers and dual-speed wipers
  - Wide-view inside day-night mirror (vinyl-edged, shatter-resistant glass and deflecting support)
  - Outside rearview mirror
  - Tire tread wear indicators
  - Dual master cylinder brake system with warning light
  - Starter safety switch
- ### Anti-Theft Features
- Anti-theft ignition key warning buzzer
  - Anti-theft steering column lock
- ### Traditional quality features . . .
- Dramatic aerodynamic styling with long sloping hood and short rear deck with flared air spoiler

- Power-operated retractable dual headlights with built-in headlight washers
- High-rise fenders with functional louvers
- Unique Coupe roof styling with removable roof panel sections and rear window
- Removable hardtop styling for Convertible
- Concealed outside door handles
- Full door-glass styling without ventipanes
- Flush-mounted windshield wipers hidden beneath power-operated cowl panel
- Twin rear deck air exhaust grilles
- Bright license plate frames
- Wheel trim rings and center caps
- Instrument panel and console with aircraft-type instrumentation
- Astro Ventilation with adjustable vents in instrument panel
- Console-mounted parking brake control
- Deep-twist floor carpeting
- All-vinyl interior trim
- Special sport-styled steering wheel
- Tachometer
- Separate trip odometer
- Rally-type electric clock
- Ammeter, oil pressure, fuel and temperature gauges
- Vinyl-covered molded headlining on Coupe
- Courtesy light with automatic door switches
- Light monitoring system standard with indicators built into console
- Rear compartment stowage wells
- Warning lights for seat belt and door ajar
- Armrests designed to shield door handles and lock buttons
- Efficient valve-in-head engine design
- Positive-shift starter
- Automatic choke

- Controlled pressure lubrication system with full-flow oil filter
- Full dual exhaust system
- Exhaust emission control system standard on all engines
- Suspended accelerator pedal with cable-type linkage
- High-output Delcoiron generator
- High-capacity energizer-type battery
- Magic-Mirror acrylic lacquer finish
- Steel-reinforced fiberglass body
- Curved side windows
- Built-in blended-air heater and defroster system
- Carpeted luggage compartment behind front seats
- Color-matched seat belts
- Keyless door locking
- Concealed Convertible top stowage
- Separate spare tire stowage with key lock
- Front lower air spoiler
- Rear deck air spoiler
- Full independent suspension system
- Disc brakes at all four wheels
- Rugged all-welded ladder-type frame
- Wide 15" x 8" wheels
- F70 x 15 wide-oval tires
- Precise Ball-Race steering
- Tire safety rim
- Built-in control of acceleration and braking forces
- Rayon-reinforced front and rear brake hoses
- 6000-mile or four-month chassis lubrication
- Rubber-mounted front stabilizer bar

Interior Trim

models	seat style	vinyl	Black leather	Blue vinyl	Brown vinyl	Green vinyl	Red vinyl	Saddle vinyl	leather
Coupe & Convertible	bucket	400	403	411	414	422	407	418	424

Exterior Colors

	code								
Mulsanne Blue	28	•		•					
Bridgethampton Blue	27	•		•					
Dorothybrooke Green	44	•			•	•		•	
Laguna Gray	15	•		•		•	•	•	
Marlboro Maroon	77	•			•			•	
Ontario Orange	62	•					•		
Monza Red	72	•					•	•	
Cortez Silver	14	•		•		•	•	•	
Classic White	10			•		•	•	•	•
Daytona Yellow	51	•				•			

8 / Corvette color and trim

**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 sandalwood convertible top available with all exterior colors.

**Seat and Shoulder Belt Colors**

Interior trim color	belt colors
Black	Black
Blue	Dark Blue
Green	Green
Red	Red
Brown	Dark Brown
Saddle	Saddle

Engines, Transmissions and Axle Ratios

engines	transmissions and postraction rear axle ratios								
	std.	4-speed (2.52:1 low) econ.* part.*	spec.*	std.	4-speed (2.20:1 low) econ.* part.*	spec.*	std.	Turbo Hydra-matic econ.* part.*	spec.*
Standard V8 300-hp Turbo-Fire 350 V8	3.36	3.08					3.08		3.36
(RPO L46) 350-hp Turbo-Fire 350 V8	3.36		3.55	3.70		4.11			
(RPO LT1) 370-hp Turbo-Fire 350 V8	3.55	3.36	3.70	3.70	3.55	4.11			
(RPO LS6) 390-hp Turbo-Jet 454 V8	3.08		3.36	3.36	3.08	3.55	3.70	3.08	2.73
(RPO LS7) 460-hp Turbo-Jet 454 V8				3.36	3.08	3.55		3.08	3.36

\*Optional at extra cost.

Equipment Included With Optional\* V8 Engines

Important equipment is included with optional\* V8 engines, supplementing or replacing equipment included with the standard V8. Other specialized equipment is also available.

	350-hp Turbo-Fire 350	370-hp Turbo-Fire 350	390-hp Turbo-Jet 454	460-hp Turbo-Jet 454
Special high-domed 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 water pump and fan pulleys		*	*	*
Flined aluminum valve rocker covers		*	*	*
Full-transistor ignition system		*	*	*
Chrome-finish valve rocker covers			*	*
Higher performance starting motor			*	*
Aluminum cylinder heads			*	*
Heavier duty battery			*	*

\*Optional at extra cost.

# 10 / Corvette power teams

Transmissions

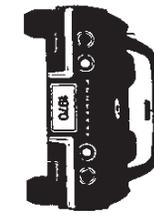
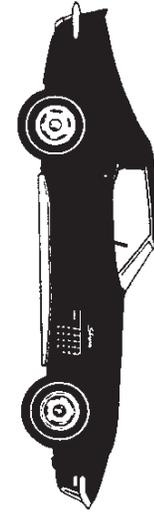
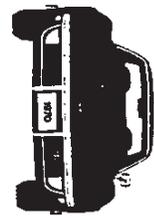
	engine	transmission gear ratios (:1)				shift selector location
		1	2	3	4	
4-Speed Fully Synchronized (Standard)	300-hp V8 350-hp V8 370-hp V8 390-hp V8	2.52	1.88	1.46	1.00	R •
4-Speed Fully Synchronized (RPO M21)	350-hp V8 370-hp V8 390-hp V8 460-hp V8	2.20	1.64	1.27	1.00	•
Turbo Hydra-matic (RPO M40)	300-hp V8 390-hp V8 460-hp V8	Drive (maximum)—5.21:1 to 1:1 Low 2—5.21:1 to 1.46:1 Low 1—5.21:1 to 2.46:1 Reverse—4.37:1 to 2.08:1				•

Clutches for Corvette 4-Speed Transmission Power Teams

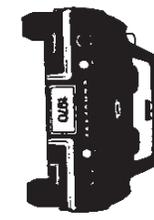
type	300- & 350-hp	370- & 390-hp	460-hp
	Semi-centrifugal bent-finger-design diaphragm spring with single dry disc—pearlitic or nodular iron pressure plate		
Disc Facing Material	Premium grade woven asbestos		
Disc Facing Outside Diameter	11.00		
Disc Facing Total Area (sq. in.)	123.70		
Spring Effective Plate Load (lbs.)	2450-2750	2600-2800	

*Stinson*

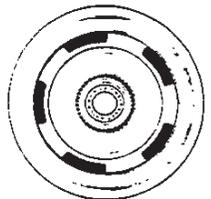
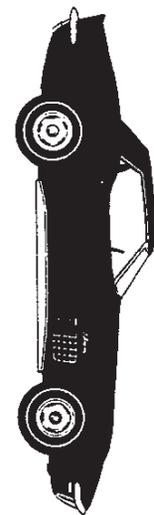
Corvette Coupe



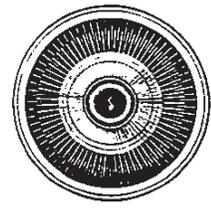
Corvette Convertible



Corvette Convertible  
with optional removable hardtop (RPO C01)



Corvette standard wheel trim  
ring with center cap



Optional Corvette  
full wheel cover (RPO P02)

# 12 / Corvette exterior features

Corvette Exterior Features

	Coupe	Convertible
Precision-cast bright grille	•	•
Concealed headlights with washers	•	•
Front bumper guards	•	•
White lenses over amber parking/direction signal lights	•	•
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	•	•
Flush-mounted door handles	•	•
Removable roof panels and rear window	•	•
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	•	•
Bright outlined front fender louvers	•	•

Corvette Interior Features

	Coupe	Convertible
Sports-styled steering wheel with black rim	•	•
Bright-accented Corvette horn button emblem	•	•
Adjustable Astro Ventilation vent-ports	•	•
Convenient aircraft-type center console	•	•
7000-rpm tachometer	•	•
Anti-theft steering column lock	•	•
Illuminated heater control panel	•	•
Separate trip odometer	•	•
Ammeter, temperature, fuel and oil pressure gauges	•	•
Light monitoring system alert panels	•	•
Seat belt, door ajar and headlight position indicators	•	•
Electric clock with sweep second hand	•	•
Cigarette lighter in console ashtray	•	•
Console-mounted parking brake control	•	•
Headlight high-beam indicator	•	•

14 / Corvette interior features

Corvette Interior Features

	Coupe	Convertible
Luxurious all-vinyl interior styling	•	•
High-backed slim-tapered bucket seats	•	•
Upright seat and shoulder belt buckle design	•	•
Tinted glass in all windows	•	•
Molded door panels with built-in armrests	•	•
Full door-glass styling and Astro Ventilation	•	•
Folding seat back latches	•	•
Custom Deluxe color-matched seat belts	•	•
Handy map and storage pockets	•	•
Glare-resistant padded instrument panel and sun visors	•	•
Parking brake and brake system warning light	•	•
Seat belt retractors	•	•
Deep-twist color-keyed floor carpeting	•	•
Vinyl-covered molded headlining	•	•
Courtesy lights with automatic door switches	•	•
Suspended accelerator pedal	•	•
Carpeted rear compartment storage wells	•	•
Day-night inside rearview mirror	•	•
Door pull handles	•	•
Black-accented hood release handle	•	•
Special bright pedal trim	•	•
Removable roof panels and rear window	•	•
Bright seat adjustment handle	•	•
Vinyl plastic rear window	•	•

**Exterior Dimensions**

	Sport 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

**Interior Roominess**

Head room	37.2	38.3*
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**

Usable luggage space (cu. ft.)	6.1	5.0
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\*With removable hardtop—37.1

**Glass Area**

	Sport Coupe	Convertible
Windshield glass area (sq. in.)	977.4	977.4
Rear window glass area (sq. in.)	392.5	418.0
Total glass area (sq. in.)	2170.7	2196.2

**Tire Size & Steering Specifications**

Standard tire size	F70 x 15	F70 x 15
Turning circle—curb-to-curb (ft.)	37.0	37.0
Turning circle—wall-to-wall (ft.)	39.0	39.0
Steering ratio—std. (overall)	20.2:1	20.2:1
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.)	3290	3304
Shipping weight—standard V8 (lbs.)	3184	3196

**16 / Corvette specifications**