1966

ENGINEERING FEATURES OF CHEVROLET TRUCKS

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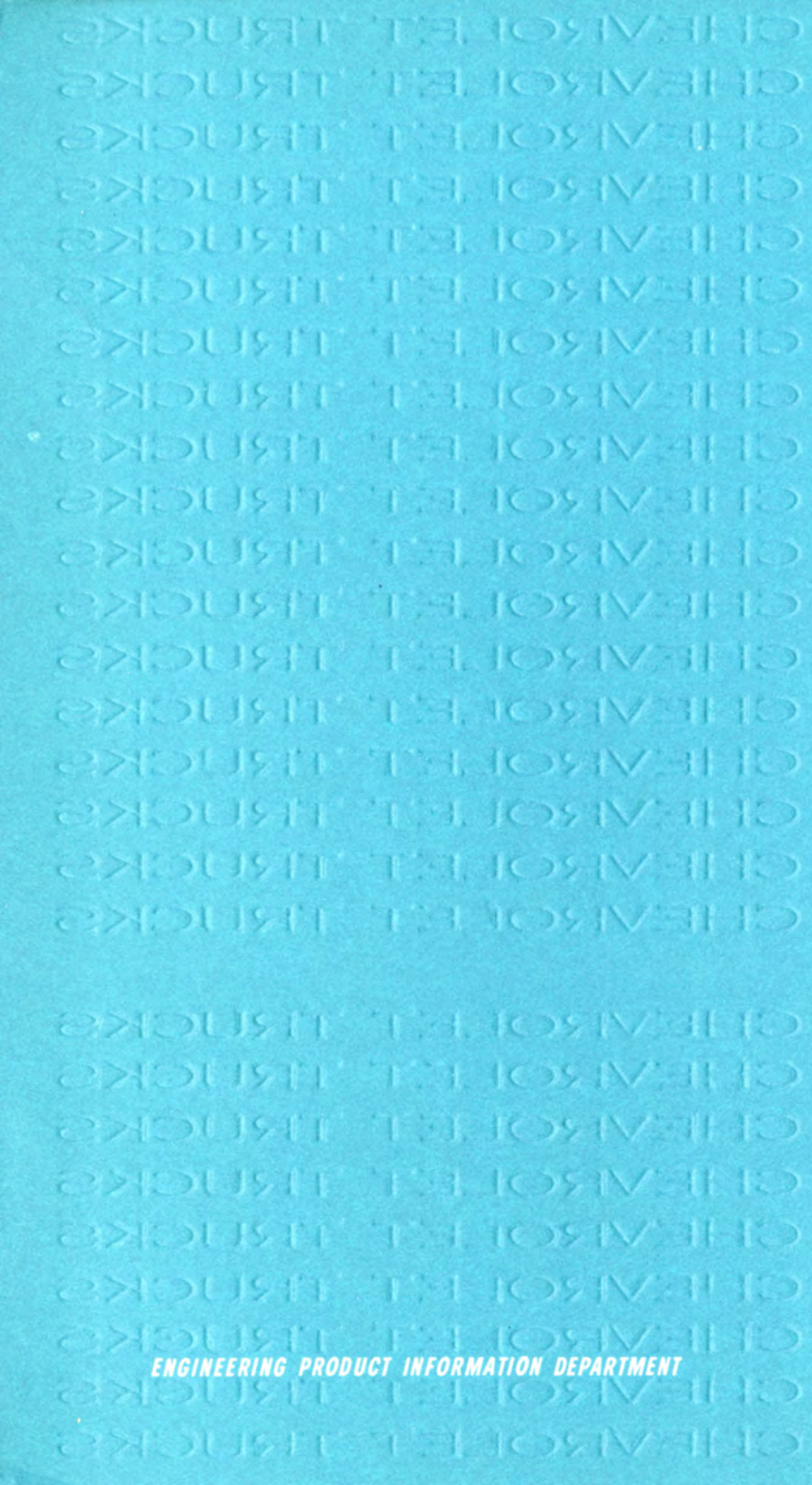


ENGINEERING PRODUCT INFORMATION DEPARTMENT

OCTOBER, 1965

1966 CHEVROLET TRUCK ENGINEERING FEATURES

THE 1966 CHEVROLET TRUCK STORY

Among the exacting demands of an ever expanding truck market are the requirements of specialized vehicle capability and a high return on the customer investment in terms of outstanding utility and durability. Keen competition, the necessity of minimal warranty costs, and the inherently lengthy nature of final vehicle evolution make mandatory far-sighted and exacting design programs.

For 1966, in addition to the many new features reflective of its dynamic engineering policy, Chevrolet presents a new line of heavyweight trucks with GCW ratings up to 65,000 pounds. These new models, identified as the 70,000 and 80,000 Series, are the largest Chevrolet units ever built and extend the market penetration into the 3-ton category. The new series, available with both gasoline and diesel power, accounts for 101 of the total of 366 models on 35 wheelbases offered at the start of the 1966 production.

Conventional cab models in the new 70,000 and 80,000 Series feature all-new short-cab and front end sheet metal design for a standard 92-inch Bumper-to-Back-of-Cab dimension. El Camino models, too, boast a new appearance, both on the inside and outside. Most other models incorporate newly-styled seat trim and identification

plates, as well as new exterior colors. Chevy-Van interiors are color-keyed to the exterior.

Many special-feature items which formerly were available at extra-cost are standard in 1966, depending upon the model type; these include seat belts, 2-speed windshield wipers with washers, additional rear view mirrors, and backup lamps. Non-reflective paints are used to finish most instrument panel structures, and all windshield wiper arms and blades have a finish which eliminates glare.

There are 25 engines with different power ratings in the 1966 engine line-up; 17 are gasoline units and 8 are diesels. Of the total, 15 are continued and 10 are new for 1966. In addition to a new 250 cubic inch displacement L-6 gasoline engine, two new 366 cubic inch V-8 gasoline units are offered in the Series 10 through 80 category. New 401 and 478 cubic inch V-6 gasoline engines as well as two new 637 cubic inch V-8 diesel engines are offered for the 70,000 and 80,000 Series. In the El Camino, a new 275-gross horsepower 327 cubic inch V-8 and two new 396 cubic inch V-8's are made available.

The 1966 chassis program includes important additions and revisions. A new, fully-synchronized 3-speed transmission is released as standard equipment for the El Camino and the Chevy-Van, and a new heavy-duty 3-speed unit, also fully-synchronized, is released optionally for the El Camino. Additionally, a new RPO 3-speed automatic transmission — the Turbo Hydra-Matic — is made available for Series C-P20, C-P30, and C-S50; a new, fully-synchronized overdrive transmission option replaces the existing unit for Series C10; and a new Spicer 5-speed transmission with 6 and 8-bolt power take-off openings replaces the unit currently standard for Series 80 and optional for Series 60.

Greater ratio selectivity and increased durability are afforded with a new RPO Chevrolet 15,000 pound capacity 2-speed rear axle for Series 50 and 60 and a 17,000 pound capacity 2-speed RPO unit with electric shift for Series 60.

Brake lines are improved on all models, and self-adjusting front and rear brakes are released as standard equipment for Series 50 and 60. Both standard and RPO hydraulic-with-vacuum power assist braking systems are revised for improved performance and reduced maintenance.

New features of the 1966 Chevrolet Truck Program, including the more important 1965 interim items, are detailed in the following pages.

E. J. Premo

CHIEF ENGINEER

SERIES 10-80

SERIES 70-80,000

CHEVY-VAN

EL CAMINO

SERIES AND MODELS

260 *different models*

21 *wheelbases*

24 *basic model types*

44 *basic series*

Of the 366 truck models offered by Chevrolet in 1966, a total of 260 on 21 wheelbases are regular line models which comprise the 10 through 80 Series. All 260 models are carried forward from 1965. To achieve standardization with the numeric symboling of other Chevrolet square-front parcel delivery vans, the Step-Van 7 is identified in 1966 as Model P1335 rather than as Model P1345.

Twenty-four basic model types in 44 basic series again are offered. The largest concentration of continued models is in the Medium-Duty category (Series 50, 60, 60S) which totals 127 units; next largest is the Heavy-Duty category (Series 60H and 80) with a total of 72 units; 61 units make up the Light-Duty category (Series 10, 20, 30, 30S).

Base GVW rating for Series C-D-L-N-P-Q-T50 models is upgraded from 10,000 pounds to 10,500 pounds with no equipment change. Other Medium-Duty GVW ratings remain unchanged.

Fifty-nine models are deleted from the 1966 regular truck line-up through introduction of the new high-tonnage Series 70,000 and 80,000 models. Deleted models formerly comprised Series A60, A80, E80, N80, Q80, V80, and W80.

SERIES AND MODELS

Model Type	Series	Total
12 TANDEM AXLE CHASSIS MODELS		
Conventional Cab, Gas Engine	M60-80	6
Conventional Cab, Diesel Engine	V60; X60	6
12 FOUR-WHEEL DRIVE CHASSIS MODELS		
Conventional Cab, Gas Engine	K10-20	3
Conventional Cab and Stepside Pickup Box, Gas Engine	K10-20	3
Conventional Cab and Fleetside Pickup Box, Gas Engine	K10-20	3
Panel Body, Gas Engine	K10	1
Suburban Body, Gas Engine	K10	2
20 FORWARD CONTROL CHASSIS MODELS		
Chassis Only, Gas Engine	P10-20-30-50	9
Square-Front Van, Gas Engine	P10-20-30	5
Round-Front Van, Gas Engine	P20-30	6
7 SCHOOL BUS CHASSIS MODELS		
Flat Face Cowl, Gas Engine	S50-60-60H	7

209 CONVENTIONAL CHASSIS MODELS

Model Type	Series	Total
Conventional Cab, Gas Engine	C10-20-30S-30-50-60S-60-60H-80	31
Conventional Cab, Diesel Engine	D50-60-60H; Q50-60-60H	43
Conventional Cab and Stepside Pickup Box, Gas Engine	C10-20-30S-30	5
Conventional Cab and Fleetside Pickup Box, Gas Engine	C10-20	3
Panel Body, Gas Engine	C10-30S-30	3
Suburban Body, Gas Engine	C10	2
Conventional Cab, Platform, and Stake Rack Gas Engine	C20-30S-30-50	5
Flat Face Cowl, Gas Engine	C10-20-30S-30-50-60S-60-60H	17
Windshield Cowl, Gas Engine	C10-20-30S-30-50-60S-60-60H	17
Tilt-Cab, Gas Engine	T50-60S-60-60H-80	24
Tilt-Cab, Diesel Engine	N50-60-60H; Y60-60H; U80	37
Low Cab Forward Body, Gas Engine	L50-60S-60-60H-80	21
Low Cab Forward Body, Platform, and Stake Rack - Gas Engine	L50	1

SERIES IDENTIFICATION

New series designation plates are employed for all conventional Series 10 through 80 Chevrolet trucks except Step-Vans and Tilt-Cabs. Located on the front fenders, as shown above, the new plates feature the Chevrolet emblem and base series number for ready identification of product as well as model category. The plates are chromed in both satin and bright finishes and highlighted with blue paint for the emblem field and red paint for the series number background. Plates for diesel models are slightly larger than the plates for gasoline models to accommodate the word DIESEL, thus eliminating the former separate diesel engine designation plate. Black paint fill is used for the depressed lettering. Series numeral styling is depicted at the right.

10

20

30

50

60

80

STYLING AND BODY

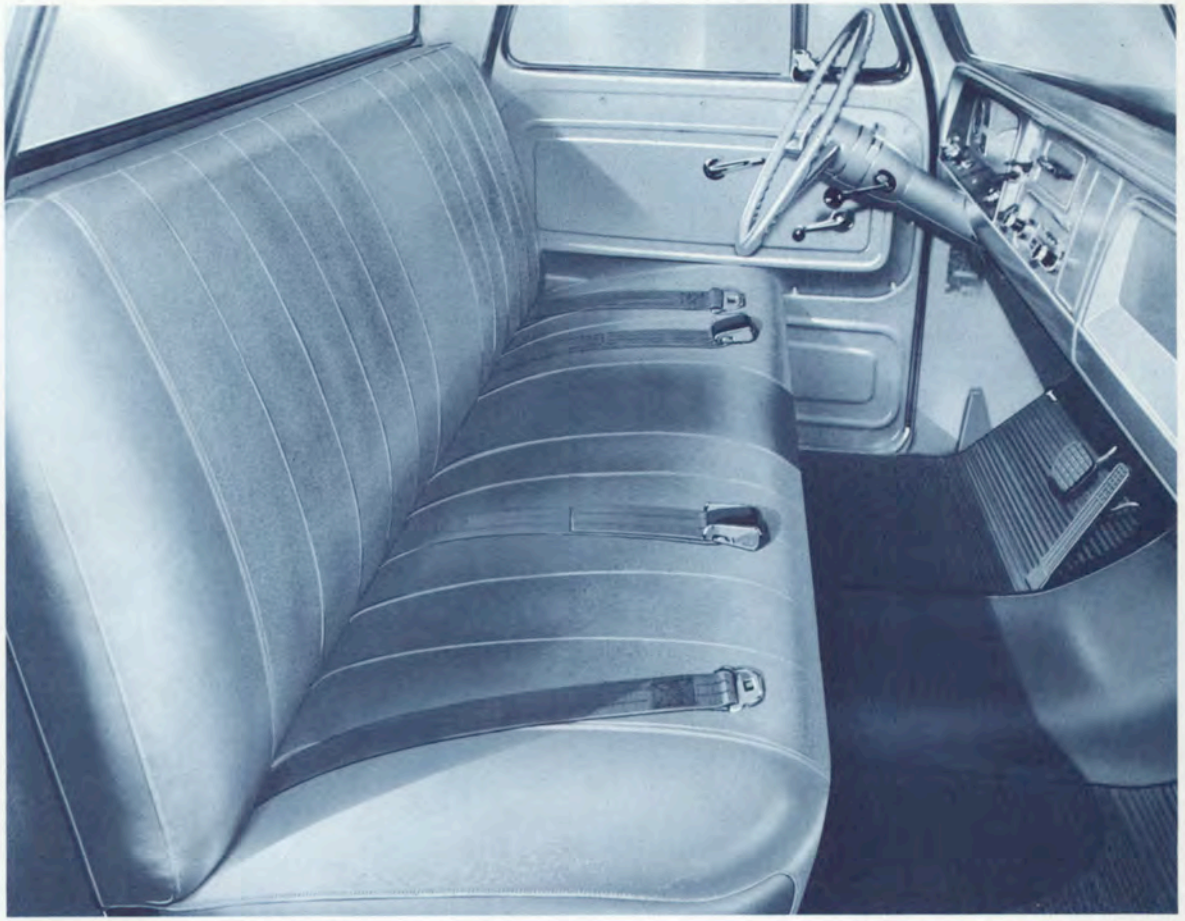
Styling and body aspects of conventional Series 10 through 80 Chevrolet trucks are generally unchanged for 1966, with new exterior colors, new seat trims, new designation plates, and new standard equipment items such as seat belts constituting for most models the main new features. New steering wheels are released in RPO Z61 and for all Series C10 models; also, the dispatch box door nameplate formerly included in RPO Z61 is released as a standard item for all conventional models.

NEW COLORS. Four new exterior paint colors replace four former colors, continuing the availability of 15 solid colors and 13 two-tone color combinations.

The new colors are: Light Green, Dark Aqua, Silver, and Saddle; these colors replace, respectively, the former Light Green, Maroon, Light Yellow, and Fawn. Metallic enamel is used for the new Dark Aqua, Silver, and Saddle colors. Thus, with the carryover Turquoise metallic enamel, four metallic paints are offered in 1966.

NEW PRODUCTION SEAT TRIM. All-vinyl trim of new design is featured for production seats except those for Tilt-Cabs, Step-Vans, and Series Q50,60 models. Textured vinyl is employed for facings and coverings, but the coverings have a different texture pattern and are distinctively embossed. Seat trim color is Medium Fawn, with the same tonal value used for facings and coverings.

NEW STEERING WHEEL. Models in Series C10 feature a new, dual-spoke steering wheel with a diameter of 16.50 inches, which replaces the former 17-inch diameter unit. The horn button cap is chrome-plated and carries the Chevrolet emblem.



PRODUCTION INTERIOR

DISPATCH BOX DOOR NAMEPLATE. Formerly included in RPO Z61, the dispatch box door nameplate carrying the Chevrolet name is released as standard equipment for all conventional models. Paint treatment is changed from Black with White lettering to Silver Gray with Black lettering.

NEW SPECIAL FEATURE ITEMS. The standard equipment offering for conventional Series 10 through 80 models is expanded with the release of a number of special feature items including seat belts; right hand outside rear view mirrors or inside rear view mirrors to supplement existent left hand outside units; 2-speed electric windshield wipers with matte-finished chromed parts to replace existent single-speed units; windshield washers; and backup lamps. Applicability of this equipment varies with the model type, as outlined on the next page.

Seat belts are offered as standard equipment for all models except Step-Vans, Forward Control Chassis, Windshield Cowls, and Flat Face Cowls. Previously, this standard feature was applicable only to the Suburban Carryall front seat. One seat belt unit is released for single seats such as the Panel driver's seat, and two units are released for bench-type seats such as those used in Conventional Cab and Pickup models. Seat belt design is identical to the 1965 accessory unit; belt color, including the buckle, is Fawn for coordination with the interior color.

Rear seat belts, identical in design and color to front seat belts, are released as standard equipment for the Suburban Carryall standard rear seat of 3-passenger capacity; two seat belt units are provided.

Outside rear view mirrors for the right hand vehicle side, which supplement existing left hand units, are released as standard equipment for all Series 10,20,30 models except Fleetside Pickups, Stepside Pickups, and Suburban Carryalls. Formerly RPO equipment, the right hand units match the design and color of the left hand mirror. RPO right hand units remain available for excepted models.

Inside rear view mirrors of the shatterproof-type, which supplement the rearward visibility afforded with the retained left hand outside rear view mirror, are released as standard equipment for Fleetside Pickups, Stepside Pickups, and Suburban Carryalls. Mounted centrally at the windshield header, the new mirrors are essentially the same as those released for passenger cars.

Two-speed electric windshield wipers with washers, formerly an RPO item, are released as standard equipment for all models with windshields except Step-Vans, replacing the former single-speed electric wipers without washers. In Step-Van applications, only washer equipment is provided as 2-speed electric wipers or variable-speed vacuum wipers currently are standard. Wiper arms and the metal portions of the wiper blades have a matte rather than a bright chrome finish in all applications, thus effectively reducing glare by eliminating reflections.

Backup lamps, formerly an accessory item, are released as base equipment for Fleetside Pickups, Stepside Pickups, Panels, Suburban Carryalls, Step-Vans, and Platform and Stake Rack models.

Non-gloss paint is used for the instrument panel and related components of all body types except Step-Vans and Flat Face Cowls, changing paint color to Dark Fawn from Medium Fawn; also, the instrument cluster bezel color for conventional models is changed from Charcoal to Silver.

NEW STEERING WHEEL, SERIES C10

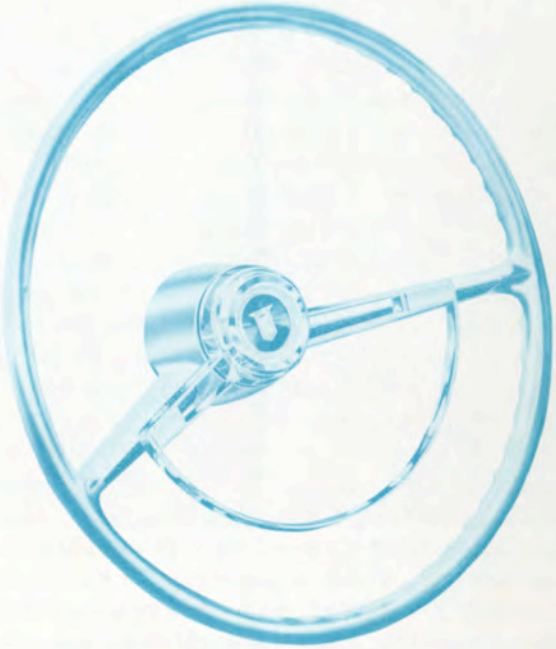
NEW INSTRUMENT CLUSTERS, identical to the dual units used for Flat Face Cowl models, are released for all Forward Control Chassis and Step-Van models, cancelling the former single cluster with warning lights. Use of the Flat Face Cowl clusters for these models affords more positive instrumentation by providing an ammeter, water temperature gauge, and oil pressure gauge instead of the warning lights previously used.

OPTIONAL EQUIPMENT CHANGES. In RPO Z61 (Custom Appearance Equipment), a new paint treatment is featured for the front door access panels. The access panels continue to be 2-toned with Off-White paint, but only the depressed portion surrounding the raised central area is painted Off-White in 1966. Additionally, a new dual-spoke steering wheel assembly is featured in RPO Z61. The assembly is comprised of a 16.50-inch diameter hub and spoke unit, semi-circle horn button ring unit, and decorative horn button cap. Paint treatment of the hub and spoke unit is unchanged with Medium Fawn used in all applications. Carried on the chrome-plated ring unit is a decorative cap featuring a shield with integral Chevrolet emblem. Gold paint is used to decorate the shield and Black paint fill is used in the concentric circles surrounding the shield. Deleted through release as a base item is the dispatch box door nameplate.

RPO Z62, Custom Comfort and Convenience Equipment, features new seat trim

STYLING AND BODY

CUSTOM INTERIOR



NEW CUSTOM STEERING WHEEL

comprised of woven fabric and textured vinyl. Medium Fawn is used as the facing and bolster color as well as the main covering color in all applications. A White textured vinyl insert enhances the backrest. Medium Fawn also is used for the vinyl-covered left hand armrest released in RPO Z62.

The above items noted as changed in RPO's Z61 and Z62 also are changed in RPO Z81, Custom Camper Equipment. In addition, a new nameplate is featured in RPO Z81; this plate is the new production series designation plate with the numeral insert removed and replaced with another insert reading "Custom Camper"; the chrome lettering is carried on a Black field. Other body and styling aspects of RPO Z81 are continued except for the deletion of 2-speed windshield wiper and washer equipment as a result of its release as base equipment.

Receiver assemblies for both RPO U60 and accessory manual radios are revised for improved durability with the use of silicon rather than germanium transistors. The silicon transistor material has the advantage of greater reliability than the former germanium material, affording the aforementioned durability increase.

Seat belts are included in all 1966 seat options except RPO Z52, Full-Foam Seat, and RPO A55, Level-Ride Seat, where the standard seat belt arrangement can be utilized. Belt units provided with optional seats are identical in design and color to the standard units.

New all-vinyl trim identical to that of the new regular production trim is released for RPO A57, One-Passenger Auxiliary Seat (Panels); RPO A59, Supplementary Seat (Suburbans); and RPO Z52, Full-Foam Seat (Cabs). The new Custom seat trim also is employed for RPO A59 when used with RPO Z62, Custom Comfort and Convenience Equipment.

Backup lamps are released in 1966 as part of RPO E56 (Platform and Stake Rack Equipment) and RPO E57 (Platform Equipment) for conformity with the usage of backup lamps on base Platform and Stake Rack models. The units are identical in appearance to the base units.

The method of mounting RPO and accessory outside rear view mirrors of the West-Coast type is revised in 1966 to obtain either an adjustment feature for clearance purposes or improved rearward visibility under all conditions. Both Junior and Senior versions of the West-Coast mirror are affected, except the Senior West-Coast mirror for Tilt-Cabs.

In all painted Junior West-Coast mirror applications, including RPO Z81 (Custom Camper Equipment), the mounting arm is revised to place the mirror head further outboard of the vehicle, thus improving rearward visibility when wide bodies such as camper units are utilized. This revision, of course, appreciably affects appearance.

NEW CUSTOM CAMPER NAMEPLATE

Appearance also is affected in respect to the Senior West-Coast mirror. Though mounting arms are revised, the essential feature gained is the incorporation of an adjustment at the top pivot point of the mirror head which permits the mirror head to be easily swung away from its normal position to obtain clearance in close-quarter situations. The adjustment is lockable.

In addition to the above, a new 5-inch diameter chrome-plated outside rear view mirror of the short, fixed arm type is released as an accessory for Panels and Suburban Carryalls. The unit is identical to the standard mirror released in 1965 for Model G1236, Deluxe Sportvan.

Several body options and accessories are discontinued in 1966. All Less Seat Belt options (RPO's A48, A62, A63) are discontinued, making standard seat belts mandatory equipment. Additionally, Custom Rear Seat Belt Equipment (RPO A64) is discontinued through the release of standard seat belts for the Suburban Carryall standard rear seat as well as the release of seat belts as a part of RPO A59 (Supplementary Seat). Accessory seat belts are discontinued due to the release of belt units with standard and optional seats.

RPO C14, 2-Speed Windshield Wiper and Washer Equipment, is discontinued through release of this equipment as a base item on all windshield models. Accessory windshield washers also are discontinued.

Accessory backup lamps are discontinued in 1966 through their release as a base item for Panels, Pickups, Suburban Carryalls, Step-Vans, and Stake Rack models.

ENGINES

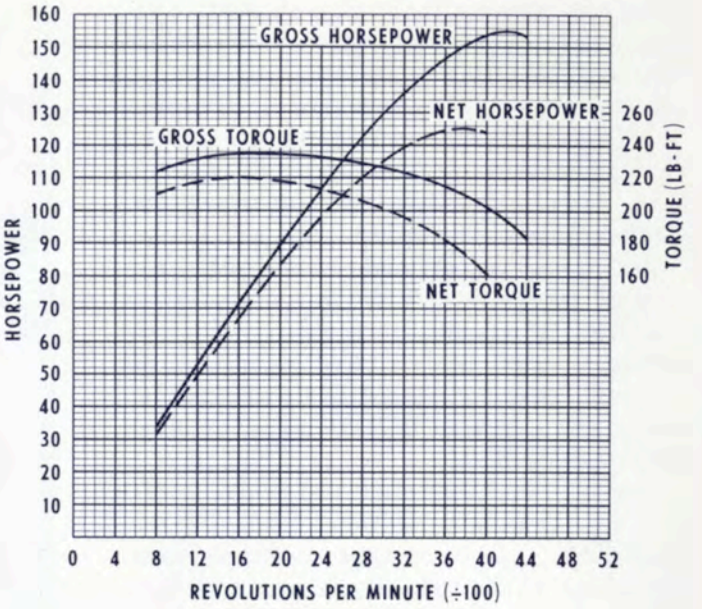
The engine program for the 1966 Series 10 through 80 models incorporates several important modifications. The most significant change involves the replacement of the 348 and 409 cubic inch displacement engines with two new 366 cubic inch units. Also, the displacement of the 230 cubic inch engine is increased to 250 cubic inches, with a longer stroke. The 230 cubic inch engine for Series P10 models, as well as the 283, 292, and 327 cubic inch gasoline units are continued unchanged.

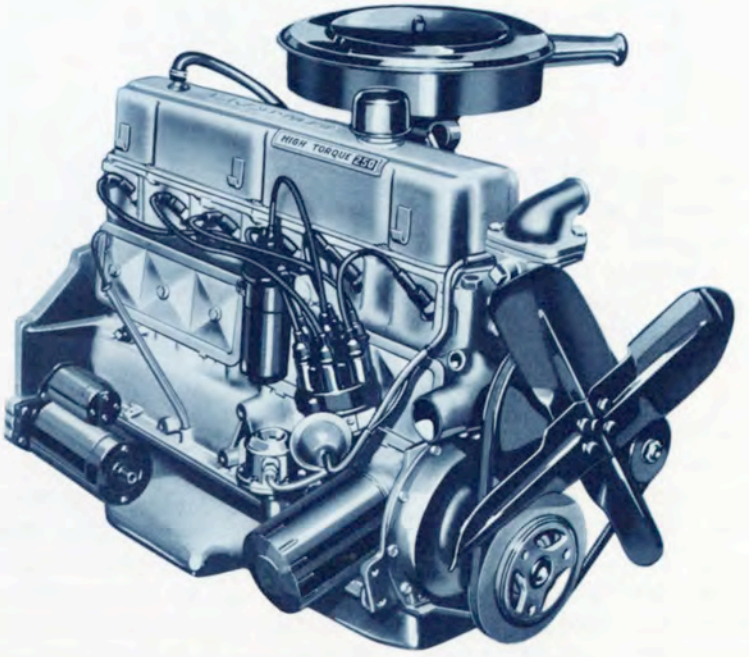
Other changes in the gasoline engine line-up include the discontinuance of the 153 cubic inch L-4 as base equipment on P10 models, to be replaced with the 194, L-6 version. Also, the 327 cubic inch, 220 horsepower V-8 engine, introduced in mid-season 1965 for Series C20-30 models, also becomes available for Series C10 vehicles in mid-season 1966.

High Torque 3-53N, 4-53N, 6V-53N diesel engines and Torq-Flow D351, D478, DH478 diesel engines are continued with no change in design, or in applicability for Series D-N-Q50; D-N-Q-V-X-Y60; U80.

NEW 250 CUBIC INCH L-6. A smoother operating, more powerful 250 cubic inch 6-cylinder engine replaces the 230 cubic inch engine in all standard applications. Maximum output is increased 15 horsepower and 15 pounds-feet torque; and, with an engine assembly weight increase of only eleven pounds, horsepower per pound of engine weight is more favorable.

The new engine is based on the design and construction of the 230 L-6, with exterior appearance and dimensions nearly identical. The larger displacement is obtained by increasing piston stroke to 3.53 from 3.25 inches. Reducing the piston compression height to 1.66 inches com-





NEW HIGH TORQUE 250 L-6 ENGINE

ENGINE	SERIES APPLICATION	CARB.	COMP. RATIO	GROSS		NET	
				HP-RPM	TORQUE-RPM	HP-RPM	TORQUE-RPM
194 L-6	STD: P10 OPT: None	1-Bbl.	8.50	120 @ 4400	177 @ 2400	95 @ 4000	155 @ 2000
230 L-6	STD: None OPT: P10	1-Bbl.	8.50	140 @ 4400	220 @ 1600	120 @ 3600	205 @ 1600
250 L-6	STD: CK10,20; C30; P20,30,50; CLST50 OPT: None	1-Bbl.	8.50	155 @ 4200	235 @ 1600	125 @ 3800	220 @ 1600
283 V-8	STD: None OPT: CK10,20; C30; CLT50	2-Bbl.	9.00 (*)	175 @ 4400	275 @ 2400	145 @ 4200	245 @ 2000
292 L-6	STD: CLMT60; CLT60H; S62,64,67,67H OPT: CK10,20; C30; P20,30,50; CLST50	1-Bbl.	8.00	170 @ 4000	275 @ 1600	153 @ 3600	255 @ 2400
327 V-8	STD: S69, 69H OPT: CLMT60; CLT60H; S62, 64, 67, 67H	2-Bbl.	8.00	185 @ 4400	305 @ 2000	158 @ 4000	280 @ 2000
327 V-8	STD: None OPT: C10, 20, 30 (#)	4-Bbl.	8.50	220 @ 4400	320 @ 2800	177 @ 4000	283 @ 2400
366 V-8	STD: None OPT: CLMST60; CLST60H	2-Bbl.	8.00	220 @ 4400	345 @ 2400	(Not available.)	
366 V-8	STD: CLMT80 OPT: CLMST60; CLST60H	2-Bbl.	8.00	220 @ 4000	345 @ 2400	185 @ 4000	315 @ 2200
3-53N Diesel	STD: D50 OPT: None	N45 Inject.	21.00	94 @ 2800	205 @ 1500	86 @ 2800	201 @ 1500
4-53N Diesel	STD: DXY60 OPT: None	N45 Inject.	21.00	130 @ 2800	278 @ 1800	120 @ 2800	270 @ 1800
6V-53N Diesel	STD: U80 OPT: None	N45 Inject.	21.00	195 @ 2600	447 @ 1400	185 @ 2600	439 @ 1400
D351 Diesel	STD: NQ50 OPT: None	---	17.50	130 @ 3200	234 @ 2000	118 @ 3200	223 @ 2000
D478 Diesel	STD: NQV60 OPT: None	---	17.50	150 @ 3200	275 @ 2000	134 @ 3200	266 @ 2000
DH478 Diesel	STD: None OPT: NQV60	---	17.50	170 @ 3200	310 @ 2000	155 @ 3200	298 @ 2000

* - 8.50 for Series 50

\# - Available mid-season 1966 in C10 applications.

250 ENGINE 12-WEIGHT CRANKSHAFT

pensates for the lengthened stroke, while a shallow sump in the piston head maintains the 8.5-to-1 compression ratio.

The 250 cubic inch displacement engine features a crankshaft with a total of 12 counterweights. This design results in a twofold benefit. It produces unprecedented six-cylinder operational smoothness, and minimizes main bearing edge-loading to substantially improve bearing and crank journal durability.

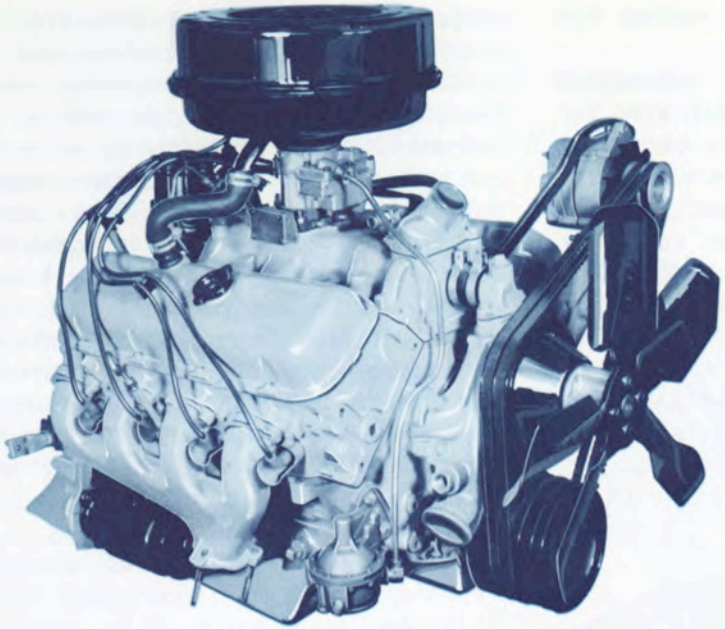
Cylinder bore scuffing is reduced and engine durability improved with the use of a new piston top compression ring which is channeled and filled with molybdenum. Pistons are reinforced with new struts for increased durability, and narrower piston rings reduce friction.

In addition to a new higher lift camshaft, stiffer valve springs are used in keeping with the larger engine displacement. Cylinder heads, which are common to the 230 and 292 L-6 engines, are continued but with cooling improved by extending the water jacket outward to include the full-length of all exhaust ports. To guard against oil leakage, the rocker cover is contoured to increase gasket compression between attaching bolts, and a semi-cured rubber-coated gasket assures a positive seal to the rocker cover flange.

Generator cooling is improved through use of a new fan integral with a stamped drive pulley. Ignition equipment is unchanged, but with a new distributor timer and spark advance curve to adapt to the new piston travel and higher lift camshaft.

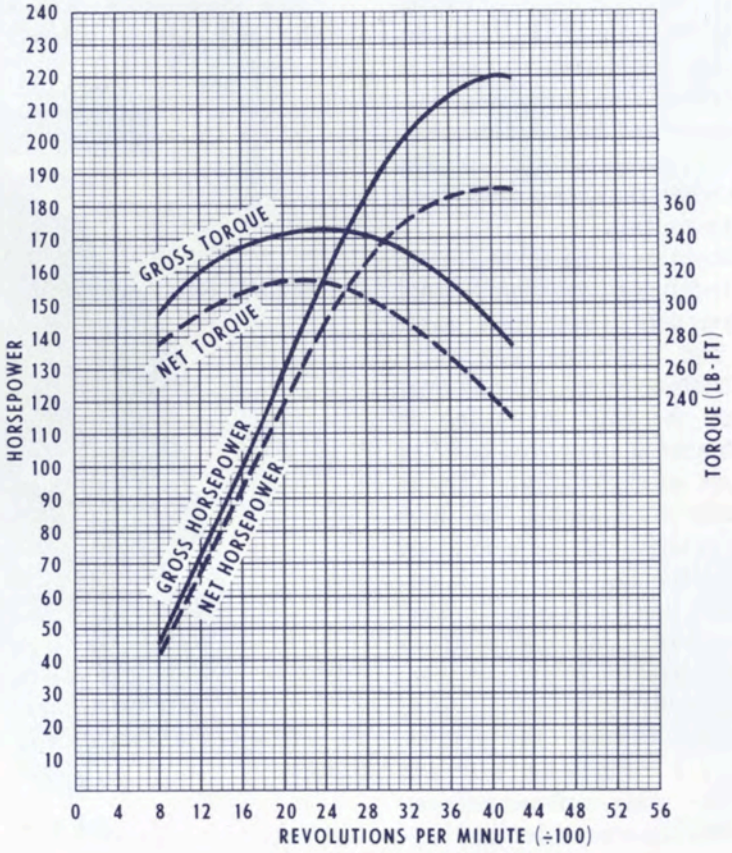
Air cleaner dirt capacity is increased to permit an inspection interval increase to 12,000 miles from 6000 miles. Light-duty truck models (except Series P20,30) continue to use the oil-wetted paper element cleaner with an oil bath cleaner available optionally. Though an oil-bath cleaner remains released for Series P20, 30, 50 models, the unit is new and is engine-mounted. This unit also is released for Series T50 models. Series C-S50 models have a new 2-stage air cleaner which replaces the former oil-bath cleaner; it is basically an oil-wetted paper secondary element with a wrap of oil-wetted polyurethane as the primary element. Series L50 models continue to use an oil-bath cleaner and the heavy-duty dust package (RPO K46) is continued for Series C50.

Carburetors and velocity-type governors are continued in type, but with calibration changes as necessary to adapt to the new displacement and power increase.



NEW 366 CUBIC INCH V-8 ENGINES. Two completely new 366 cubic inch displacement engines are introduced in 1966, a basic unit for medium-duty operation and a heavy-duty version for increased power and maximum durability. The medium-duty engine, available in mid-season 1966, is offered optionally for Series 60 models; the heavy-duty engine, also optional for Series 60 models, is base equipment for Series 80. The medium-duty engine to be offered has a lower maximum net power rating and does not have certain premium quality components which are required for maximum durability in heavy-duty operations.

Utilizing the most up-to-date design concepts and technological advances, the new heavy-duty 366 V-8 engine features high volumetric efficiency and special components for high-speed and high-torque



HEAVY-DUTY ENGINE PERFORMANCE

durability. Cylinder bore is 3.9375 inches, while stroke is 3.76 inches. Compression ratio is 8.0-to-1. Size and weight are approximately the same as the former 348 V-8.

The new cylinder block is a short and highly-rigid structure of high chromium iron; it is similar to the former 348 block, but does not contain combustion chambers. Block height is sufficient to accommodate the 4-ring pistons, and cylinder walls are substantially strengthened by a 25 percent increase in thickness over the 348 design. Lower block structure is made stronger than in previous designs by increasing bulkhead thickness above each bearing support. New wide-base bearing caps, together with the stronger bulkheads, provide greater crankshaft support and firmer clamping. Superior crankshaft clamping is featured by the use of four, rather than, two hold-down bolts for each bearing cap.

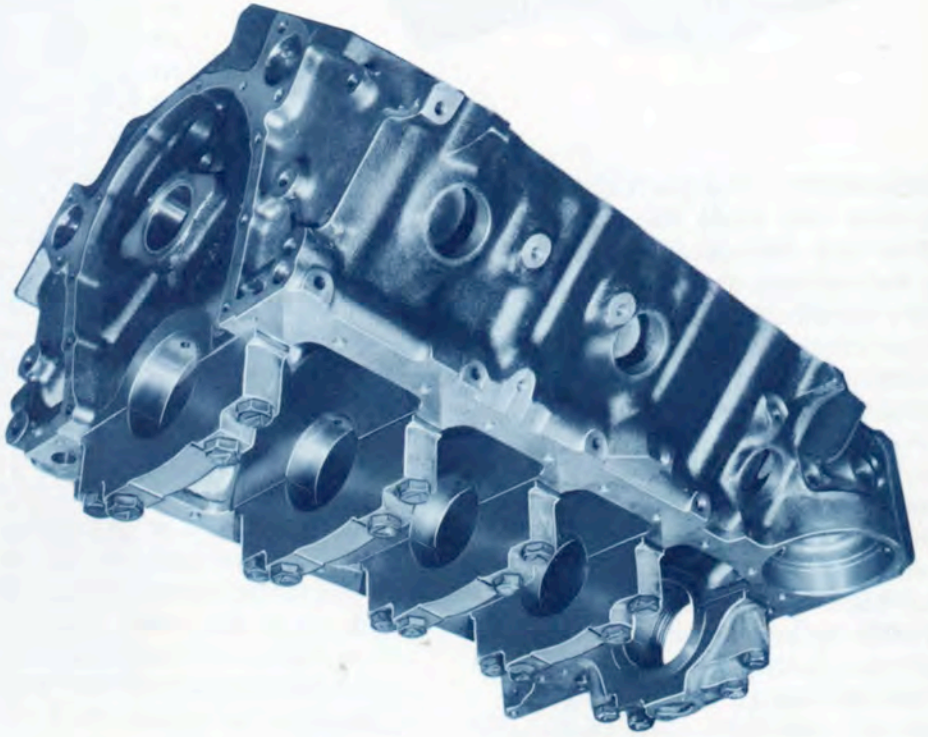
The sturdy 5-main bearing forged-steel crankshaft has induction-hardened main and crankpin journals. Improved main and connecting rod bearings are used. The micro-thin babbitt layer, placed over the tough major bearing structure of aluminum alloy, features improved bearing conformability and embedability. This is accomplished while maintaining the high unit load characteristics of the combined bearing surfaces necessary for truck engines. Through the use of larger journal diameters, main bearing effective areas are increased 10 percent and the crankshaft thrust bearing surface is increased 12 percent over the former 348 engine.

Cylinder heads are completely new and feature many valve train refinements as well as individually-spaced inlet and exhaust ports. Combustion chambers are located in the cylinder heads instead of in the cylinder block as in the former 348 engine.

The modified wedge-type combustion chambers have a larger quench area for cooling the charge and a more centrally-located spark plug for a more uniform flame propagation. Being compact, the ratio of chamber surface to chamber volume is reduced for improved thermal efficiency. Another benefit of the compact chamber is that less piston surface area is exposed to the high temperatures of combustion; consequently, less heat need be dissipated through the piston head.

For maximum volumetric efficiency, inlet and exhaust ports must be as direct as possible; be consistent with surrounding component design requirements; and have minimum change in shape. Inlet and exhaust port configuration, as well as inlet and exhaust valve positioning, are worked out with extreme care to produce optimum induction and exhaust flow characteristics.

Because of Chevrolet's independent ball-stud rocker arm arrangement and the individual inlet and exhaust port design of the new heads, it is possible to tip the inlet valve toward the inlet port. The result is an unrestricted inlet port of fairly uniform cross-section, which reduces the change of direction the fuel-air mixture must make to enter the combustion chamber. In the



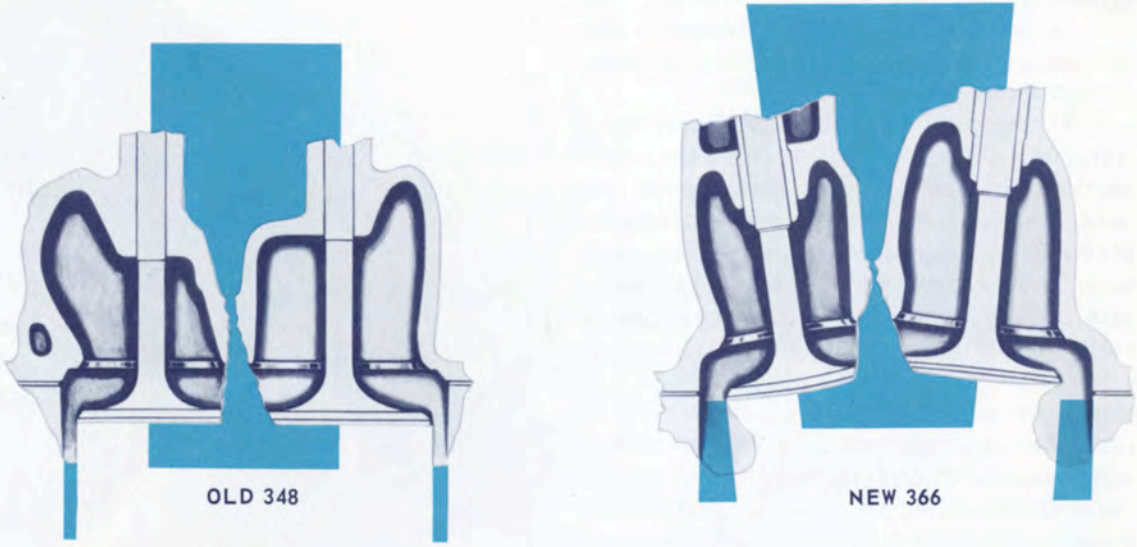
CYLINDER BLOCK WITH BEARING CAPS

new head configuration, the inlet port has been favored; however, utilizing the design latitude afforded by the individual valve train system, the exhaust valve is tipped away from the inlet valve toward its port. Taking advantage of the tilted exhaust valve, the exhaust port is designed with a greater radius, producing a more gradual direction change with an unrestricted uniform cross-section throughout its shortened length.

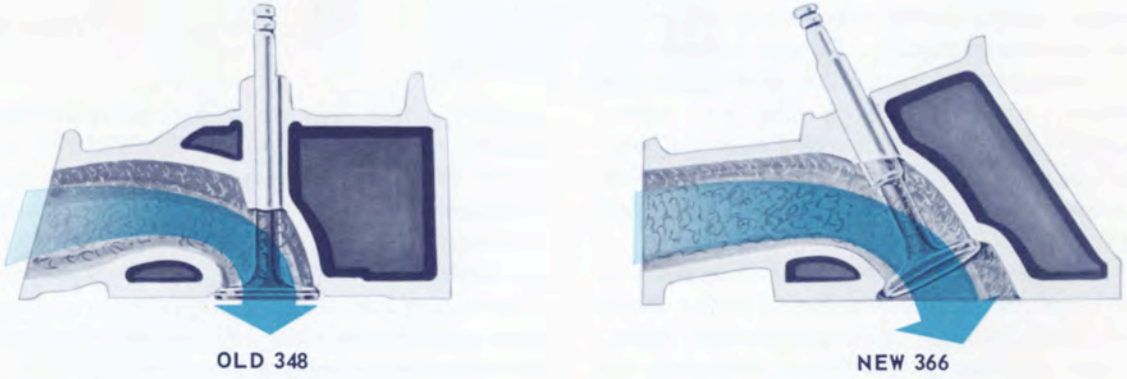
Individual porting of the new heads and the versatility of an independent rocker arm system make it possible to derive still another benefit. Inlet and exhaust valves within the same combustion chamber are tilted away from each other along the engine longitudinal axis, as well as the transverse axis. This causes the valve head to move away from the adjacent cylinder wall, as the valve opens, instead of paralleling it. Unshrouding the valves in this manner is an additional improvement to incoming and outgoing gas flow, increasing further the volume of combustible mixtures drawn into the cylinders for each engine cycle.

Generous cooling passages have been cored around all spark plugs, valves, and valve guides. Valves are so arranged in the combustion chamber that no two exhaust valves are adjacent. Consequently, no exhaust ports are siamesed, and the heat of combustion is more uniformly distributed.

The low-inertia valve operating system is continued from the 348 V-8 engine with hydraulic valve lifters, straight-wound helical valve springs with flat wire interference dampers, stamped steel rocker arms mounted on individual studs, exhaust valve rotators, and tubular push rods. Push rods are larger in diameter for increased stiffness and welded-on hardened ball ends improve durability. Hardened guide plates,



REDUCED VALVE SHROUDING



IMPROVED INLET VALVE PORTING

ENGINES

located near the push rod upper ends, assure excellent alignment at all speeds.

The cast alloy iron camshaft is supported in five bearings and gear-driven from the crankshaft for precise valve timing. The cam lobes and fuel pump eccentric are induction-hardened and treated with a wear-resistant compound.

A 4-ring piston for improved sealing is featured in the new engine. With the combustion chamber located entirely in the head, the piston roof is flat-topped and perpendicular to the bore. As on the 348 cubic inch V-8 engine, pistons are heavy-duty, cam-ground, plated, aluminum castings of solid slipper skirt design with autothermic expansion control. All piston rings are phosphate-coated for added resistance to corrosion and retention of oil. The top compression ring face is channeled and molybdenum-filled; the middle and bottom compression ring faces are lightly chrome-plated. The oil ring is chrome-plated cast iron with a coil spring expander. This combination of rings is matched to provide superior sealing and, with the hard-faced surfaces, lower friction losses with good durability.

As compared to the 348 V-8 engine, critical areas of the connecting rod lower ends are strengthened. Longer cap attaching bolts permit extension of bolt bosses upward, and reinforcing ribs are added between the connecting rod flange and bolt boss head. These ribs and the longer bolt bosses increase metal thickness in high stress areas.

The full-pressure lubrication system is contained wholly within the cylinder block and head castings with no external lines. Similar to that of the 348 V-8 engine, oil is supplied by the oil pump through the 2-quart, full-flow oil filter to the main oil gallery which extends along the lower left corner of the cylinder block. Oil from the main gallery is routed through diagonal passages in the cylinder block to vertical passages in the bulkheads which connect crankshaft main and camshaft bearings. Connecting rod oiling is supplied by drilled passages through the crankshaft arm from the main to connecting rod journals.

Featured for the oil pump are greater durability, increased output, and smoothness of operation. A system of hydrostatically balancing the oil pump drive gear is used to relieve the bending moment ordinarily imposed upon the drive shaft by the differential of oil pressure.

The new, large-capacity oil inlet screen and tube are constructed with minimum restriction, and provide a direct flow path to the pump inlet chamber. This eliminates the possibility of oil cavitation, which under severe conditions may cause erratic dis-

FOUR-RING PISTON

tributor operation and wear due to vibrations projected through the pump drive shaft. While gear diameters are unchanged, the number of drive and driven gear teeth are increased, thus lowering pump pressure pulses.

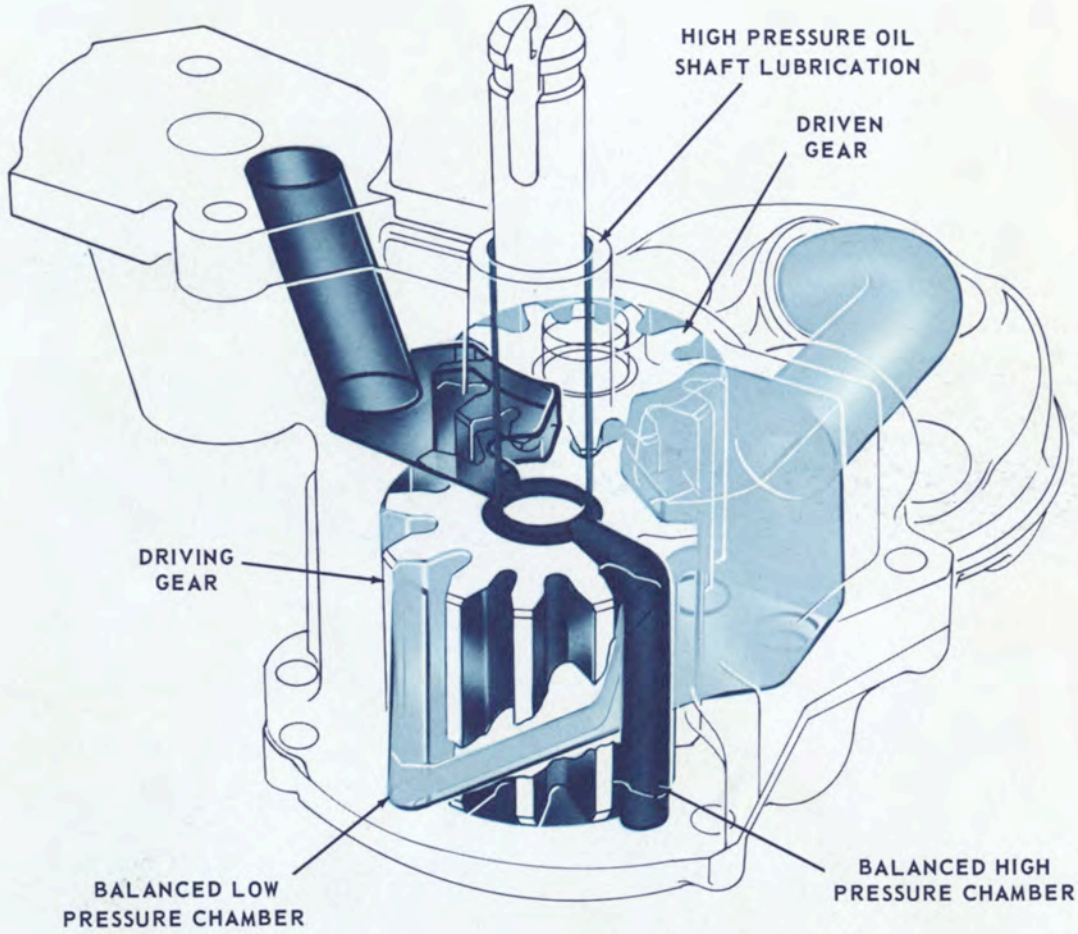
Full-length water jackets around the cylinder bores, generous cooling passages in the cylinder block as well as in the heads, short exhaust ports, and a high-capacity compact water pump are some of the cooling system features of the new engine. Efficiency of engine design in general is such that heat rejection to the cooling system is relatively low.

Basically, a series flow cooling system is used. The direction of coolant flow is from the front of each cylinder bank to the rear, then upward into the cylinder heads and forward to the thermostat outlet.

The compact and highly efficient water pump features greater output with less power absorption. A smaller diameter rotor is used, with short runners and larger outlets to each cylinder bank.

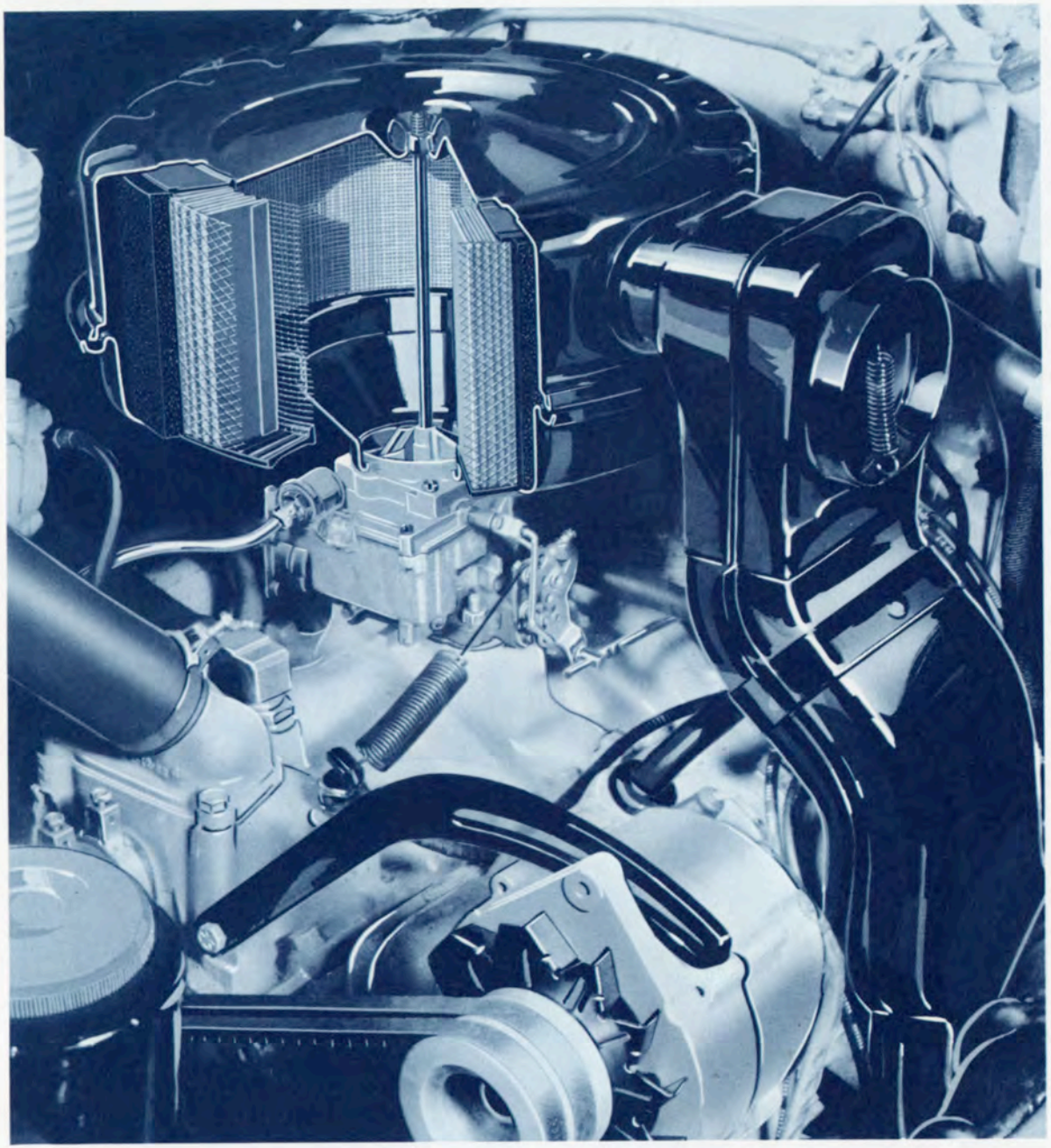
Because of wider passages through the cylinder block and heads and the more efficient water pump, coolant flow through the system is increased by approximately 5 percent. The tube-and-center radiator previously used with the 409 V-8 engine and a 6 x 18-inch fan add the cooling capacity necessary for increased heat rejection.

The engine electrical system is basically the same as previous heavy-duty truck V-8 engines. Durability of ignition wires is improved through use of heat-resisting jacketing material with high dielectric strength which remains flexible under all operating temperatures. Sheet metal heat shields and silicone rubber boots provide protection to the spark plugs which are in close proximity to the exhaust manifold.



HYDROSTATICALLY-BALANCED OIL PUMP

ENGINES



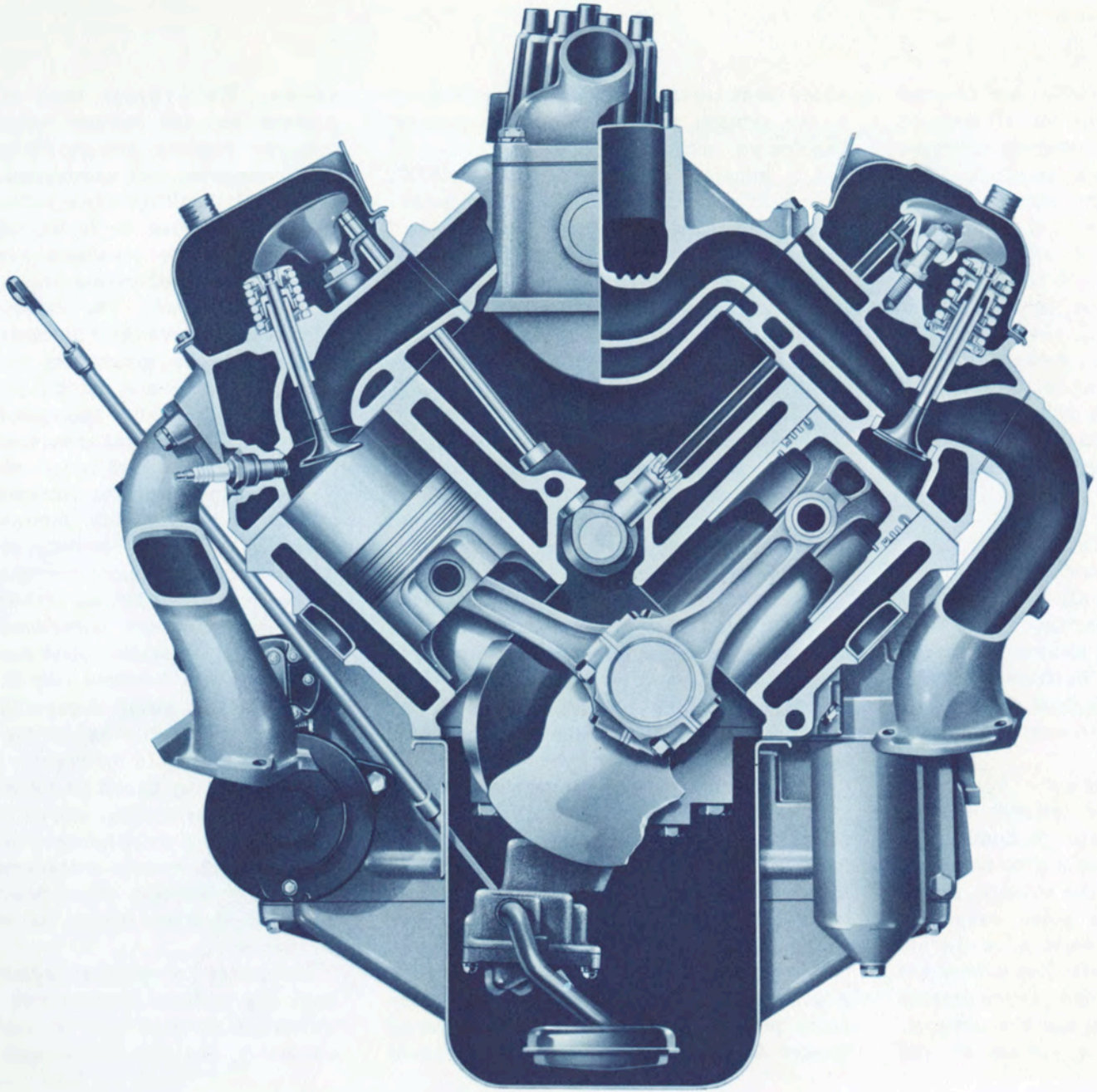
TWO-ELEMENT AIR CLEANER

A complete transistor ignition system is available as a Regular Production Option. In addition to producing a hotter and more uniform spark at high speeds, the new system can provide greater ignition reliability and component durability.

A new 2.50-inch dual exhaust system, previously available only with the 409 V-8 engine, provides minimal back pressure and reduced sound level. An improved durability feature of the system is a new method of pipe attachment to the exhaust manifold and a longer stainless steel pipe liner. Clamping pressure is maintained and pipe corrosion is reduced. Dual offset mufflers with aluminized tubes and baffles are carried forward from the previously-offered 409 cubic inch V-8 engine option.

A permanently-sealed fuel pump of simplified design and improved durability is used. The large pump diaphragm increases pump displacement approximately 50 percent. This greater displacement maintains uniform fuel flow to the carburetor without the need of a separate pulsator diaphragm. In addition to permitting simplification of the pump, increased displacement improves hot weather engine operation by more rapidly disposing of hot fuel vapors.

A downdraft 2-barrel Rochester carburetor and vacuum-spinner governor is provided for maximum operating economy. Additionally, a new air induction system is used. The air cleaner is a 2-element unit with greater efficiency and capacity than the previous oil-bath cleaner. The primary element is an oil-wetted polyurethane band wrapped around a secondary oil-wetted paper element. Air inlet temperature is controlled by a thermostatic valve which automatically selects warmed air from an exhaust manifold heat stove or cooler air from the engine compartment.



FRONT CROSS SECTION OF NEW 366 V-8 ENGINE

ENGINES

OTHER ENGINE CHANGES. Air cleaner dirt capacity is increased for all engines to permit an inspection interval increase to 12,000 miles. Though an oil-bath air cleaner remains released for Series P10 models, the unit is new and is engine-mounted rather than chassis-mounted. Oil capacity is increased to one-quart. This unit also is used on Series T50 and 60 models. Usage of the 2-stage paper and polyurethane air cleaner, released for the 250 L-6 and 366 V-8 engine, is extended to the base 283 V-8 and 292 L-6 engines in Series C-M-S60 and C-S50 models; the previous standard oil-bath air cleaner is optional.

AIR INJECTION REACTOR SYSTEM. RPO K14, Air Injection Reactor System, is new for 1966, and is used on all 1/2-ton trucks sold in the State of California. The system conforms to the criteria determined by the State of California, and performs specifically to reduce hydrocarbon and carbon monoxide emissions to allowable California standards.

The Air Injection Reactor System is integral on all base and optional engines used in Series 10 models. It consists of modifications to the basic engine design to inject air directly into the exhaust ports; by injecting air at this point, oxygen is provided to support combustion of the hot exhaust gases and oxidize hydrocarbons and carbon monoxide to produce carbon dioxide and water. Also, cooling and exhaust systems are modified to compensate for the added heat rejection imposed by adding air to the exhaust ports. The system does not require unusual maintenance.

Air injected into the exhaust manifold reaction area is provided by a semi-articulated vane-type pump which is belt driven from the crankshaft pulley. Air volume is relative to engine speed and is determined by a crankshaft-to-pump pulley ratio of 1.25-to-1 for all engines. Pump displacement is 19.3 cubic inches, and the pump operates in an approximate range of 10 to 50 cubic feet per minute.

Engine air cleaners are modified to provide an air inlet tube to the air pump. Base and optional oil-bath air cleaners are increased in capacity to control oil pull-over, and paper-element air cleaners, where used, are continued.

Check valves, one on 6-cylinder and two on 8-cylinder engines, are used to prevent back-flow of exhaust which could occur when the air pump pressure relief valve is opened, or in the event of drive belt or pump failure. The pressure relief valve is a plate-type valve inserted into the discharge side of the air pump. It reduces air flow by venting the discharge to atmosphere at vehicle speeds of approximately 55 miles per hour. Reduced volume of air to the exhaust manifold reaction area controls exhaust system temperatures and pressures.

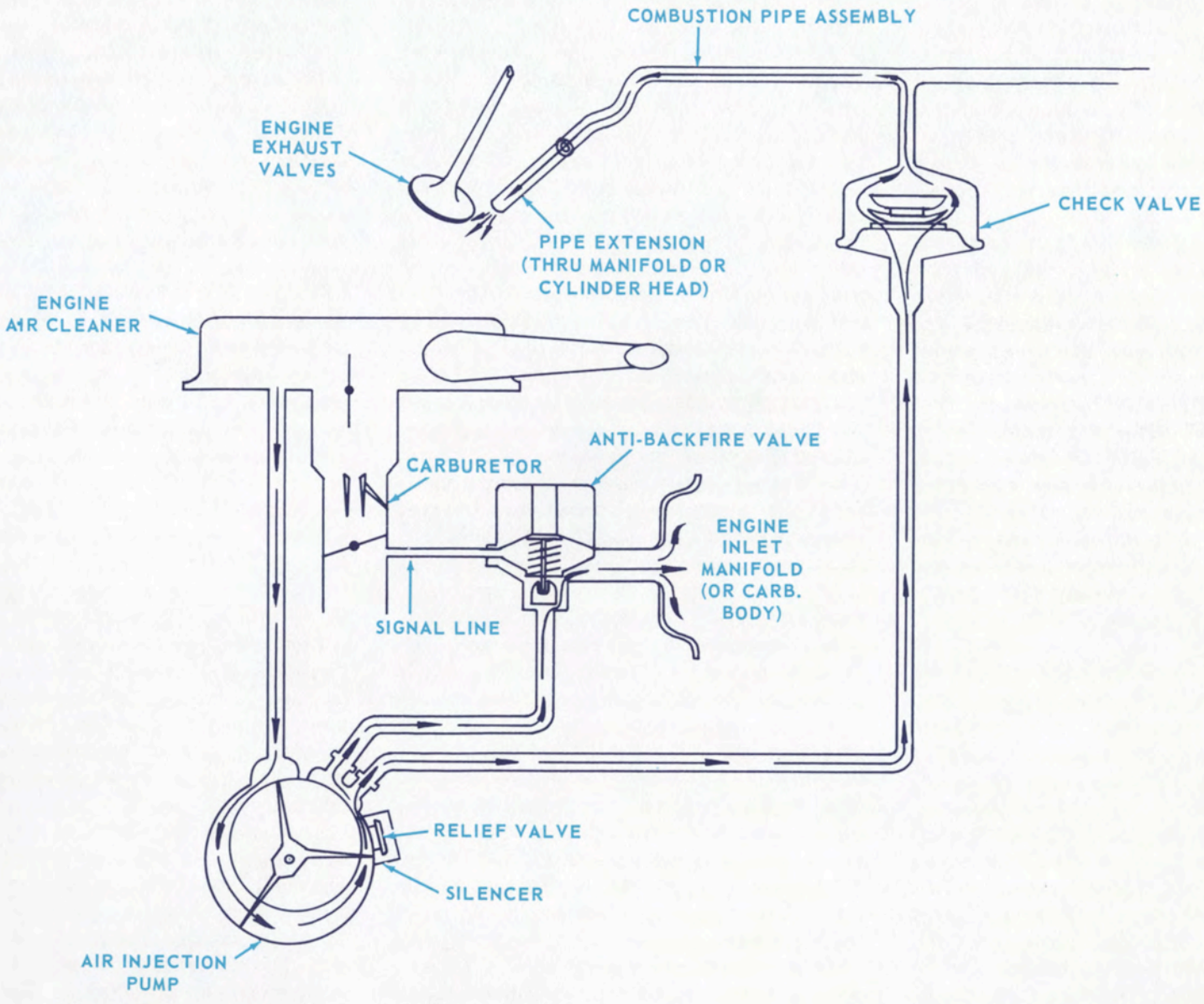
A combustion pipe assembly distributes a continuous flow of air through stainless steel pipe extensions which are directed toward the exhaust side of the exhaust valves. The cylinder head of 6-cylinder engines and the exhaust manifolds of 8-cylinder engines are modified to receive the combustion pipe extensions.

The anti-backfire valve adds air directly to the carburetor or to the inlet manifold to assure more complete combustion in periods of deceleration when the mix is usually fuel-rich. The valve is vacuum-actuated. With the throttle closed, pressure drop causes a diaphragm to unseat the pump air valve and admit air to the inlet manifold. The valve incorporates a pressure control device that delays closing and prevents rapid oscillation of the valve.

The carburetor is calibrated for an air rather than fuel-rich mixture and idle speed is increased for reduced emissions. Also, the vacuum port for distributor advance is closed by the throttle valve at idle for maximum retardation. Ignition distributors produce additional retard of the centrifugal advance unit at idle. This provides a 5- to 10-degree retarded idle ignition timing. Normal timing is restored at engine speeds in the vicinity of 1200 rpm.

Engine idling speed is increased to 600 rpm with Powerglide, and to 700 rpm with manual shift transmissions. Higher idling speeds which reduce emissions also provide better cooling. Heat rejection, due to retarded ignition timing, is substantially increased.

Durability of exhaust systems for all base and optional engines with RPO K19 is increased through use of stainless steel exhaust pipes, mufflers, and tail pipes.


COMBUSTION PIPE ASSEMBLY
ENGINE EXHAUST VALVES
CHECK VALVE
PIPE EXTENSION (THRU MANIFOLD OR CYLINDER HEAD)
ENGINE AIR CLEANER
ANTI-BACKFIRE VALVE
CARBURETOR
ENGINE INLET MANIFOLD (OR CARB. BODY)
SIGNAL LINE
RELIEF VALVE
SILENCER
AIR INJECTION PUMP

CHASSIS

The Chevrolet chassis program for 1966 is basically unchanged. However, it includes several important additions and refinements which contribute to overall quality and improved durability in the product.

Greater ratio selectivity and increased durability are afforded with a new RPO Chevrolet 15,000 pound capacity 2-speed rear axle for Series 50 and 60 and a 17,000 pound capacity 2-speed RPO unit for Series 60. All Eaton heavy-duty rear axles feature new, lighter weight housings and better durability.

Improved brake lines are featured for all models, and self-adjusting front and rear brakes are released as standard equipment for Series 50 and 60. Both standard and RPO hydraulic-with-vacuum power assist braking systems are revised for improved performance and reduced maintenance.

A new 3-speed automatic transmission is released as an RPO for Series CP20, CP30, and CS50 models; a new overdrive transmission replaces the existing RPO unit for Series C10 models; and a new Spicer 5-speed transmission replaces the existing unit which is standard for Series 80 and RPO for Series 60.

NEW 2-SPEED REAR AXLES. Improved durability, longer life, and greater ratio selectivity are provided by Chevrolet's new 15,000 and 17,000 pound capacity 2-speed rear axles. Evolutionary in design, the new units incorporate significant improvements over their 1965 counterparts. Basic design concepts, retained and proven in previous models, include: Quiet hypoid gearing; a single set of gears for high range reduction; straddle mounting of the drive pinion; staked, steel-backed bronze planetary pinion gear bushings; and synthetic rubber drive pinion oil seals. Shifting is again accomplished for the 15,000-pound unit through vacuum for gasoline engine installations and electrically for diesel applications. However, an electric shift is now standard for all 17,000-pound axle installations whether gasoline or diesel.

Various ratios are available to suit both gasoline and diesel engine applications. The ring gear diameter is increased from 12.75 to 15.0 inches, while tapered roller bearings replace barrel roller units at the differential side bearing and wheel bearing locations. Tapered roller bearings provide maximum durability for a given size as compared to other bearing types. A redesigned shifter sleeve reduces stresses and eliminates vibration through its larger cross-sectional size. The welded differential cover attachment not only eliminates the sealing problems inherent in the former bolted-with-gasket arrangement, but also contributes to the overall housing strength. Two washer-shaped magnetic chip collectors are attached by adhesive to raised protrusions or "dimples" on the differential cover inner surface. A sheet metal lubrication trough, positioned by two bolts, directs oil from the ring gear to the adjacent differential side bearings and back through the entire gearset.

Tapered roller bearings replace barrel roller wheel bearings at the hub end of the 15,000 pound unit. The 17,000 pound axles continue to use tapered roller bearings in this application, but are revised to include a splined axle shaft-to-hub attachment which replaces the former bolted arrangement. Both the 15,000 and 17,000 pound capacity units also incorporate synthetic rubber oil seals at the hub end. This material, as compared to the replaced leather type, is less susceptible to shrinkage and temperature variations. Except for differences in housing section size, as well as in hubs, both the 15,000 and 17,000 pound capacity rear axles are similar in component size and design. The higher rated unit utilizes a housing section thickness of 0.375-inch as compared to 0.360-inch for the 15,000 pound axle.

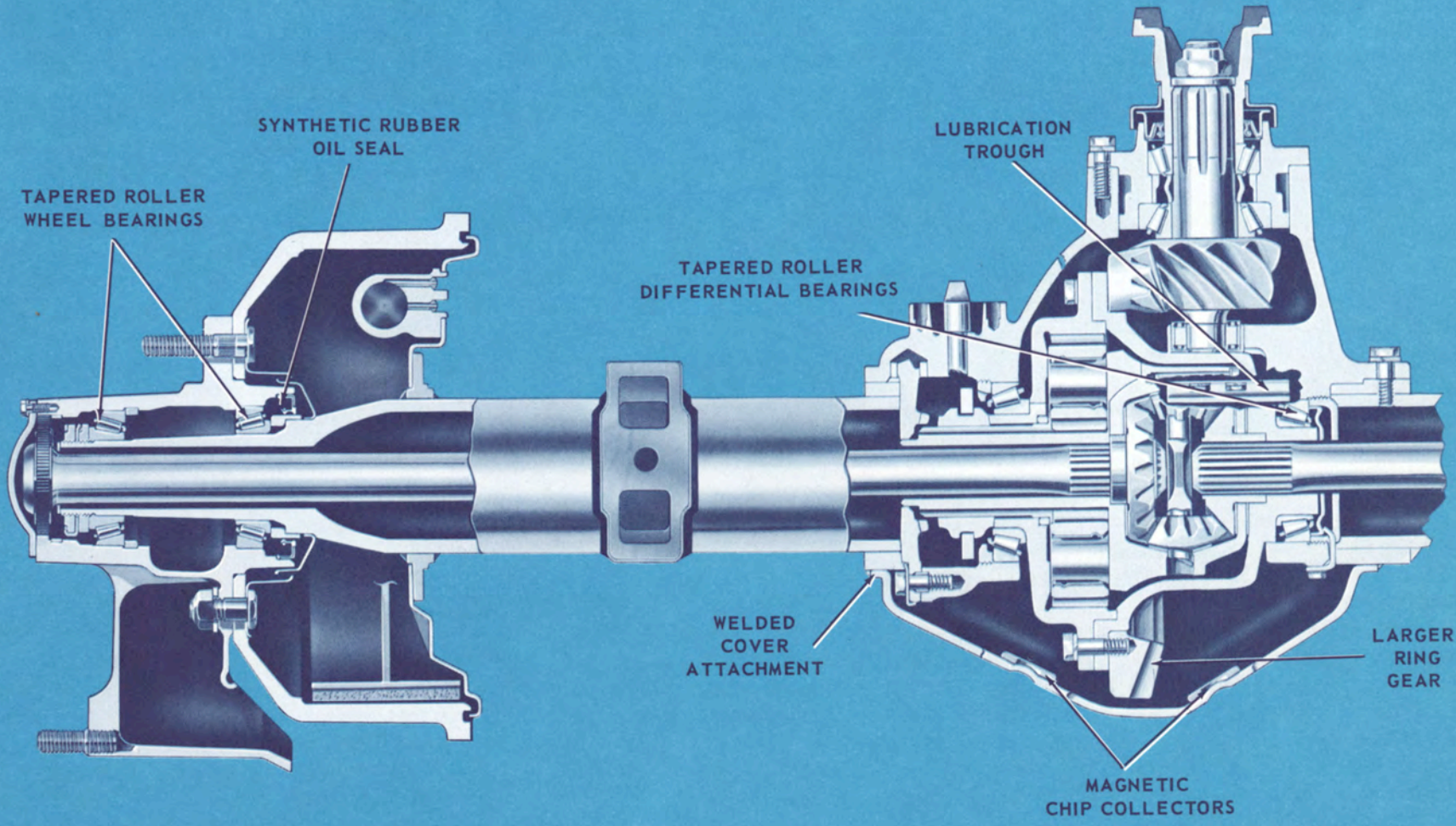
Because of the increased durability and extended ratio availability of the new 1966 Chevrolet 17,000 pound 2-speed rear axles, similar capacity Eaton 2-speed units are no longer required and, therefore, are cancelled for all gasoline models and diesel-powered vehicles except Series N-Q60.

IMPROVED EATON REAR AXLES. All Eaton heavy-duty rear axles feature new, lighter weight housings and improved drive pinion seals. In addition, some models incorporate larger diameter ring gears for greater durability. These changes are complemented by an improved lubrication system for the differential assembly and bearings.

Heavy rib areas and excessive metal thicknesses are eliminated in the new differential carrier casting design, resulting in a smoother, cone-shaped outer surface. Although the new castings contain sufficient metal where strength is required, weight savings of from 30 to 68 pounds are realized. Welded differential covers contribute further to overall housing strength while eliminating completely the possibility of lubricant leakage.

Double-lipped drive pinion seals of polyacrylite synthetic replace the leather seal and felt washer combination previously used. Longer life and greater resistance to moisture and contaminants are gained through this product improvement.

A scraper of steel-reinforced nitrile synthetic provides improved lubrication



NEW CHEVROLET 2-SPEED REAR AXLE DESIGN

CHASSIS

for the differential assembly and bearings. The scraper, screw-mounted to the inside of the carrier, is positioned to collect oil from the surface of the rotating gear support case. Oil is channeled to the right hand differential bearing, then through the differential and planetary unit to the left hand differential bearing, then back to the reservoir. Because oil is collected over a greater width and from a revolving component of lesser diameter, more lubricant is available for the differential bearings.

Eaton single and 2-speed, 18,500 pound rear axles also feature a larger diameter ring gear for gasoline engine applications. The 16.5-inch diameter, replacing the former 16-inch size, provides increased reserve to suit the new 366 cubic inch gasoline engines.

OTHER AXLE IMPROVEMENTS. A new venting arrangement for Series C-K-P10 front and rear driving axles reduces the possibility of lubricant contamination. A rubber hose, attached to a fitting at the former vent location, is routed into the frame area and positioned so as to avoid dirt and water entry.

Series 10 rear axles are further improved to include a new type drive pinion bearing spacer. The new collapsible spacer is of increased length and is positioned between the front and rear pinion bearings. Formerly, the spacer was located between the front bearing and an undercut on the drive pinion stem. The elimination of this undercut contributes to greater overall drive pinion durability. With the addition of synthetic rubber drive pinion oil seals to the 5200, 7200, and 11,000 pound units, all Chevrolet Series 20 through 60H rear axles now feature this product improvement. Chevrolet 11,000 and 13,500 pound capacity rear axles also feature the welded differential cover attachment.

IMPROVED BRAKE LINES. Hydraulic brake lines are improved for all 1966 Chevrolet trucks. Fore and aft tubing, used on light-duty models, is increased in diameter from 0.1875 to 0.250-inch with a corresponding gain in wall thickness (0.028-inch replaces 0.022-inch). The increased diameter and larger wall thickness promote greater durability by virtue of their higher bursting point. While the transverse tubing on light-duty models and all tubing on medium and heavy-duty models retain their previously used sizes, all brake lines throughout the model line-up feature terne-coating with a greater tin content for better corrosion resistance.

NEW REAR BRAKE SIZE. A 15x5-inch rear brake size is released as standard equipment for Series S67 and S69 models, replacing the former 15x4-inch units. The 15x5-inch rear brake is similar in design to the 15x4-inch component, but provides approximately 65 additional square inches of lining area. The 15x4-inch rear brakes are retained in all other 15,000 pound single-speed rear axle applications, but the larger brake size is available as an RPO. The 15x5-inch rear brake size also is released for the RPO Chevrolet 15,000 pound 2-speed rear axle, eliminating the former 15x4-inch units.

SELF-ADJUSTING BRAKES. With applicability extended to Series 50 and 60, all Chevrolet light and medium-duty trucks feature self-adjusting brakes, both front and rear, as base equipment in 1966. Series 50-60 models, equipped with the standard 14x2.5 front and either the 15x4 or 15x5 rear sizes now incorporate the self-adjusting feature, resulting in reduced maintenance and better pedal response. Medium-duty trucks equipped with larger brake options and all heavy-duty vehicles continue to utilize the manual form of adjustment.

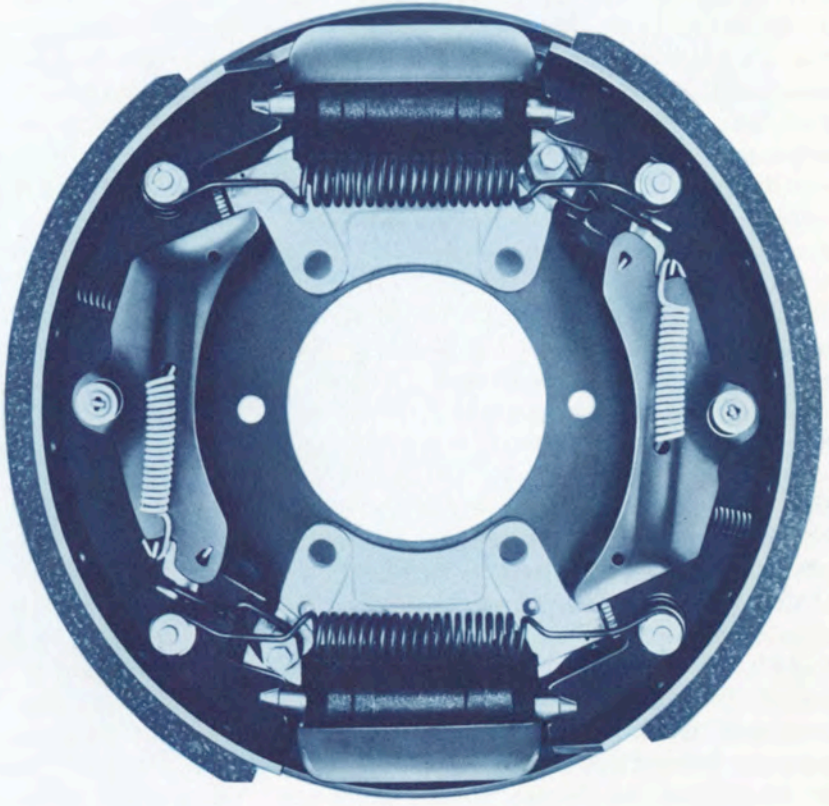
Front brake adjusters are similar in design to previous applications, with the mechanism functioning automatically during reverse stops, but only when the brakes require adjustment. Dual wheel cylinder rear brakes, however, incorporate actuating levers which are attached to each brake shoe and are so formed as to have the end located in contact with each adjusting star wheel. Rear brake shoe adjustment also takes place when the brakes are applied with a firm pedal effort while the vehicle is in reverse motion, causing movement of the shoes in relation to the backing plate. This moves the actuator arm which turns the star wheel, thus lengthening the adjusting screw assembly. Each individual brake application duplicates this action which adjusts the shoes until clearance between the lining and drum is within proper limits when the movement of the shoes will not be sufficient to move the star wheel another notch. The actuator will then ineffectively slide back and forth a distance less than that between notches of the adjusting wheel.

Other mechanical improvements of the new 15x4 and 15x5-inch rear brakes include a combination brake shoe hold-down and return spring which, through its concentric design, eliminates brake shoe cocking and irregular lining wear; also, longer lining and brake drum life are afforded with thicker linings.

IMPROVED POWER BRAKE SYSTEMS. Standard and optional vacuum-hydraulic

NEW SELF-ADJUSTING BRAKES

FRONT



REAR

braking systems for medium and heavy-duty trucks are revised for improved performance and reduced maintenance. The basic system concept is changed in that the power cylinders now are required to multiply only hydraulic pressure. The former units multiplied both displacement and pressure and were of the relatively complicated diaphragm-type design. The new "equal displacement system" features a simpler piston-type power cylinder which promotes easier service and facilitates bleeding. Other inherent advantages of the new system include more pedal reserve and automatic shoe adjustment. New, larger main cylinders providing all of the required displacement increase are released with the new system.

AIR BRAKES now include as part of the system a pressure protection valve which

CHASSIS

insures against brake loss in the event of failures to air-controlled auxiliary equipment on the vehicle.

NEW PARKING BRAKE SYSTEM. Series C10-20 models feature a new parking brake system which is similar to that used on the Chevelle passenger car. An improved equalizing arrangement provides better distribution of effort and greater ease of adjustment. The parking brake lever design and location as well as the method of cable attachment at the rear brakes are carried forward without change.

NEW WHITEWALL TIRE DESIGN. All whitewall tire options feature a new 0.60-inch wide sidewall treatment identical to that used on 1966 passenger cars. Shape, construction, and capacity are unchanged.

NEW AUTOMATIC TRANSMISSION. Smooth shifting, operational versatility, and good performance are featured in the new Turbo Hydra-Matic 3-speed automatic transmission released as an option for Series C-P20, C-P30, and C-S50 models. The new design increases to three the number of available truck automatic transmissions, with the Powerglide 2-speed unit continuing to be offered for Series 10-20, while the Allison Automatic 6-speed transmission again is available on Series 60-80.

Three forward speeds and one reverse speed are provided through a 3-element torque converter in combination with a compound planetary gearset. The additional forward gear, as compared to 2-speed automatics, allows better performance with the same axle ratio, or, if a lower numerical ratio is selected, affords improved fuel economy at no sacrifice in performance. A 6-position quadrant on the steering column provides the following operational ranges for Series 20 applications: Park; Reverse(R); Neutral(N); Drive(D); Low Two (L2); and Low One(L1). The Park position is omitted from the steering column quadrant on Series 30 models and from the floor-mounted installation in Series 50 trucks. These vehicles are equipped with a transmission-mounted parking brake, thereby eliminating the need for the Park position.

The transmission automatically upshifts and downshifts through all three forward gears when in the Drive range. Moving the selector lever to L2 locks out third gear entirely, with automatic shifting occurring only between first and second gears. The transmission is locked in first gear when the L1 position is selected. A vacuum modulator, which replaces the conventional mechanical throttle linkage, senses through engine vacuum changes in transmission input torque, controlling shifting schedules and assuring smooth shifts. Transmission downshifts under full throttle conditions are allowed through a detent solenoid which is signalled by a switch on the carburetor. All applications of the new 3-speed automatic are water-cooled for long life and satisfactory operation under both normal and adverse operating conditions.

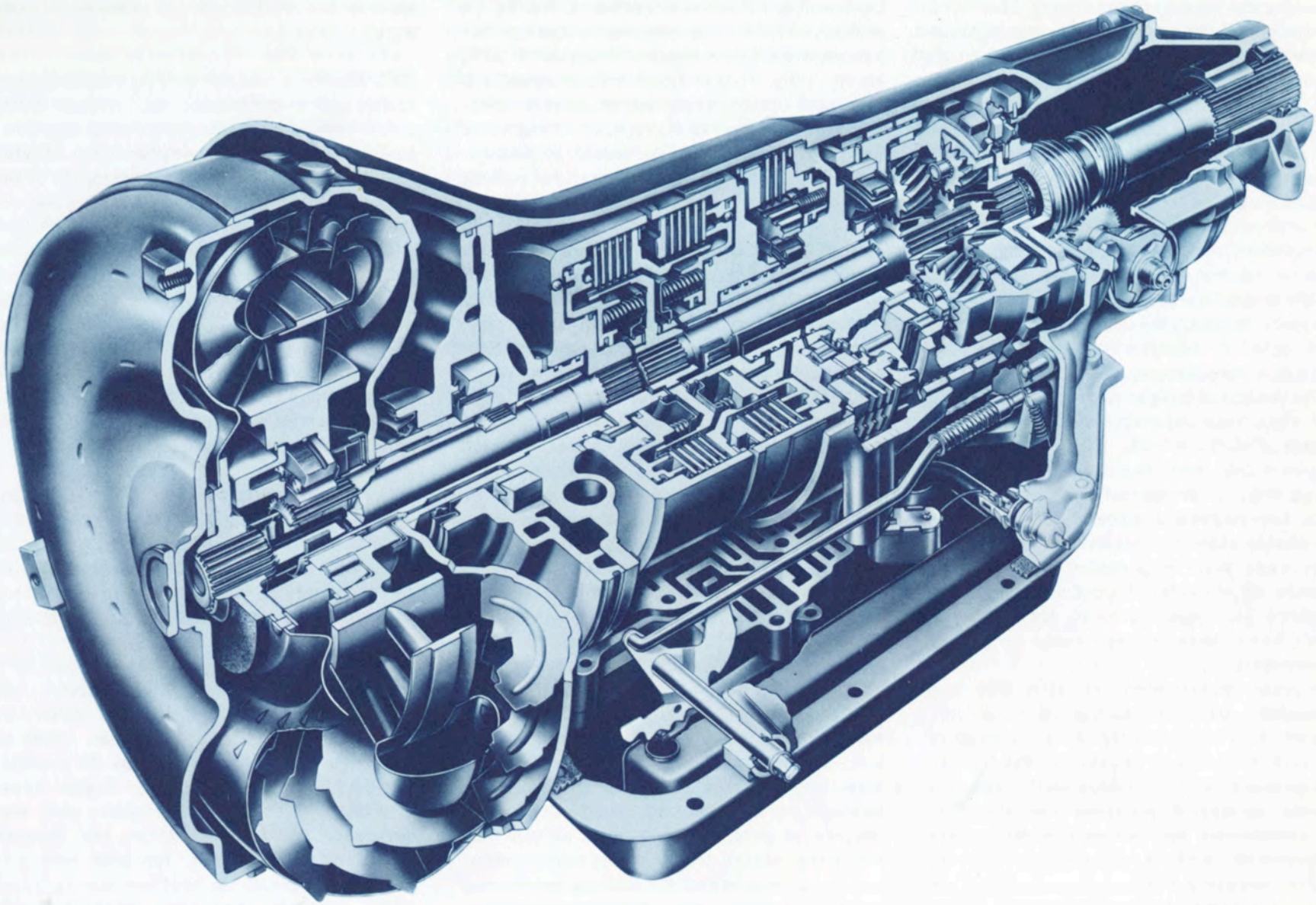
RPO OVERDRIVE TRANSMISSION for Series C10 models is revised to include a new, fully-synchronized main transmission assembly identical to that provided for 1966 passenger cars. Operation and design of the actual overdrive unit itself remain unchanged.

NEW 4-SPEED TRANSMISSION. Two versions of the New Process 435 4-speed transmission are released for Series Q50, Q60, and N60. The 1965 RPO Model 435 is redesignated as Model 435GL to differentiate it from the second RPO version; this latter unit features a new "short-third" design, which is particularly suited for use with 2-speed rear axles.

NEW 5-SPEED TRANSMISSION. Model 3152F replaces Model 3152 in the Spicer 3000 Series of transmissions. The new unit, base equipment for Series 80 and optional for Series 60 trucks, has ratios tailored to suit the new 366 cubic inch engines. In addition to a standard 6-bolt power take-off on the left hand side, the new transmission also provides a heavy-duty, 8-bolt power take-off on the right hand side. Other general design characteristics of the Spicer 3152F unit are similar to the unit it replaces.

OTHER TRANSMISSION CHANGES. Spicer Series 5000 5-speed and Fuller 8-speed transmissions are discontinued in Series 80 gasoline engine applications; availability of these units with diesel engines is unaffected. Furthermore, the Spicer 5831-G 3-speed auxiliary transmission option is cancelled for Series M80 models.

DRIVELINES, SERIES 80. Stub shaft diameters are increased from 1.3750 to 1.5625 inches for Series 80 gasoline engine models. Formerly, only models equipped with certain optional engines and transmissions utilized the larger shaft diameter.



NEW TURBO HYDRA-MATIC TRANSMISSION

INTERIM '65 CHANGES

Many important product improvements and refinements were made during the 1965 model year. Those of major significance which are continued for Series 10 through 80 models in 1966 are discussed below.

BODY. Step-Van fuel tank filler locations are changed on Series P20, 30 models for improved accessibility and increased fuel tank fill rate. Formerly inside the van in the rear riser of the right stepwell, the fuel tank filler is relocated outside the vehicle on the right hand side. Though the fuel tank filler for Series P10 models remains outside the vehicle on the left hand side, it is revised to accommodate automatic fuel pump nozzles.

The standard single-arm left hand outside rear view mirror for Step-Van King Models P2535, P2635, P3535, and P3635 is cancelled and replaced with a new-design mirror incorporating three mounting arms for increased mirror stability. The new design also is released for the optional right hand mirror provided in RPO E32; location is directly opposite that of the standard left hand mirror. (In 1966, the right hand mirror is made standard equipment.)

Overall performance of RPO C60 and accessory air conditioning units is improved with the release of a 16-ampere heater blower motor in place of the former 12.8-ampere motor. Additionally, the 42-ampere generator provided with the RPO air conditioner for Series C50,60 models is replaced with a 55-ampere unit to ensure adequate capacity for meeting the higher electrical loads encountered in the operation of these vehicles. (In 1966, a 61-ampere unit is used.)

FRAME. RPO F02, Special Heavy-Duty Frame, is released as a free option for Series CLT60H and Series CELTU80 models. RPO F02 also is required for Series CELTU80 models when RPO Z77, Heavy-Duty 32,000 Lb. GVW, is specified. The new option, designed for severe operating conditions, is comprised of right and left hand side rails and outer reinforcements made of high-tensile steel, permitting greater payload capacity.

TRANSMISSIONS. RPO M35, Powerglide Transmission, now is available for use with RPO H04, 4.11-to-1 Ratio Rear Axle Equipment. Formerly, the automatic transmission was only obtainable with the base 4.57-to-1 ratio rear axle.

Better fifth gear synchronization is achieved for Spicer 5752 and 5752C 5-speed transmissions with a larger high gear synchronizer cone diameter, complemented with a revised main drive clutch gear. The resultant greater synchronizing surface area also extends component life.

Several design refinements to Chevrolet and Warner 3-speed transmission control linkages result in smoother shift operations, greater reliability, and reduced wear. Essential changes include a stiffer shifter tube assembly return spring for easier shifting; an improved spacer between the shifter tube end and the first and reverse lever to eliminate binding, with improvement resulting from greater surface parallelism and phosphate coating instead of paint; an improved shifter tube adjusting clamp for more positive retention, with improvement resulting essentially from the addition of a retaining bolt assembly; a case-hardened and phosphate-coated shifter tube adjusting ring for reduced wear; and improved control rods to eliminate flexing, with improvement resulting from the use of 0.625-inch diameter tubing instead of 0.4375-inch diameter hard-drawn wire.

DRIVELINES. Light-duty trucks equipped with 2-piece drivelines now include sheet metal splash shields protecting the propeller shaft support bearing. The shields inhibit dirt and water contamination of the support bearing, thereby extending its reliability and life expectancy.

STEERING. Increased front axle durability is afforded Series C-D-L-P-Q-S50 vehicles with new steering knuckles incorporating larger diameter inner bearings and seals. Additionally, new front wheel hubs with larger diameter inner bearings are employed as well as new wheel bearing seals, gaskets, and dust shields.

BRAKES. Addition of an instrument panel "tell-tale" warning lamp to the Emergency Air Brake Equipment options precludes the possibility of driveline damage incurred as a result of the vehicle being driven with the emergency brakes still engaged.

WHEELS AND TIRES. The 7.00-15-6PR tire options are cancelled for Series C-K20 models. In addition, tube-type tires replace similar capacity tubeless units as base equipment for all Series 80 models. The 8.25-20-10PR highway rayon tires, previously available optionally, are now standard equipment, while the former standard 9-22.5-10PR tubeless unit becomes an option. In addition, the 11-22.5-12PR tubeless tire-disk wheel and 11-22.5-12PR tubeless tire-cast wheel options are cancelled.

Additionally, both "highway nylon" and "on-off road" versions of the 10.00-20-

12PR tube-type tires are available optionally for Series M-W80 tandem models. Suitable for high-load, severe-type vocational applications, the new units are in addition to the previously available "highway rayon" 10.00-20-12PR tires.

Balance weights are released for Series 50-60-80 front wheel and tire assemblies to correct a maximum of 50 ounce inches of unbalance, thus minimizing steering wheel disturbance and cab movement. The new balance limit is effected through static balancing at the assembly plants.

ACCESSORIES. A stainless steel Junior West Coast outside rear view mirror is released for Series C-K10,20 and C30 models. The new unit is similar in design to the existing painted unit, but features the use of stainless steel for corrosion-resistance and appearance; also, the mirror head incorporates a non-lockable pivot feature for clearance purposes in close-quarter situations.

Additionally, a new Spare Tire Lock is released for Series C-K10,20; C30; and C-L-S50,60 models. The new unit consists simply of a lock and chain; shortening of the chain is necessary in some applications.

CAMPER OPTION. RPO Z81, Camper Special Equipment, is released for Models C2503, C2504, and C2534. In addition to a special nameplate, which replaces the regular production series designation plate, the option is comprised of the following items: Custom Appearance Equipment, as included in RPO Z61; Custom Comfort and Convenience Equipment, as included in RPO Z62; chrome front bumper and hub caps, as included in RPO V37; Deluxe heater, as included in RPO C42; tinted windshield glass, as included in RPO A11; two-speed windshield wipers and washer, as included in RPO C14 (made standard in 1966); manual radio, as included in RPO U60; Junior West-Coast mirror, L. and R.H., as included in RPO D29; front stabilizer bar, as included in RPO F59; heavy-duty rear shock absorbers, as included in RPO F51; auxiliary rear springs, as included in RPO G60; two 7.50-16-6 front tires (Highway-Rayon-Tube-Type) and two 16x6.00 wheels, as included in RPO R67; two 7.50-16-8 rear tires (Highway-Rayon-Tube-Type) and three 16x6.00 wheels, as included in RPO R68.

SERIES 70-80,000

CHEVY-VAN

EL CAMINO

SERIES AND MODELS

101 *different models*

21 *wheelbases*

7 *basic model types*

15 *basic series*

Of the 366 models offered by Chevrolet in 1966, 101 comprise the new high-tonnage Series 70,000 and 80,000 models. Newest of an already impressive line-up of heavy-duty trucks, they represent a growing commitment on the part of Chevrolet to the heavy-duty truck market.

All of the new models are added to the heavy-duty category, resulting in greatly-increased customer selectivity in this segment of the truck market. In addition to an expanded 2-1/2 ton nominal weight category comprised of both gasoline and diesel models, a new 3-ton category comprised of gasoline models only is offered for the first time. Of the 101 new models, 50 are gasoline engine models and 51 are diesel engine models. GVW's range from 18,500 to 48,000 pounds; GCW's range from 42,000 to 65,000 pounds.

Sixty-eight of the new models are conventional chassis types, while 33 are tandem axle chassis models. Offered for the first time are such new types as a 92-inch Bumper-to-Back-of-Cab (BBC) Conventional Cab/Chassis with either a single or tandem rear axle and a 72-inch BBC Tilt-Cab/Chassis with tandem rear axle.

A new symboling system is employed to identify the various models in the 70 and 80,000 Series. Comprised of both letters and numbers, a 7-unit symbol identifies the Chassis Type, Engine Type, GVW Range, Cab-to-Axle Dimension, and Body and Brake Type. The new symboling is explained on the next page.

SERIES AND MODELS

68 CONVENTIONAL CHASSIS MODELS

Model Type	Series	Total
Conventional Cab, Gas Engine	HM70-80,000	21
Conventional Cab, Diesel Engine	HG-HJ-HV70,000	18
Tilt-Cab, Gas Engine	TM70-80,000	16
Tilt-Cab, Diesel Engine	TG-TJ70,000	13

33 TANDEM AXLE CHASSIS MODELS

Conventional Cab, Gas Engine	JM70-80,000	10
Conventional Cab, Diesel Engine	JG-JJ-JV70,000	20
Tilt-Cab, Gas Engine	WM80,000	3

MODEL NUMBER IDENTIFICATION

Example: HG71003

ALPHA 1 - CHASSIS DESIGNATION

H	Conventional Design for Short Conventional Cab
J	Tandem Axle Design for Short Conventional Cab
T	Conventional Design for Tilt-Cab
W	Tandem Axle Design for Tilt-Cab

ALPHA 2 - ENGINE DESIGNATION

G	Diesel Engine, DH478 V-6
J	Diesel Engine, D637 or DH637 V-8
M	Gasoline Engine, 401 or 478 V-6
V	Diesel Engine, 6V-53N V-6

NUMERIC 1 - GVW RANGE (EXCEPT TANDEMS)

7	18,500 to 27,500 pounds
8	25,500 to 32,000 pounds

NUMERIC 2 & 3 - CAB-TO-AXLE DIMENSION (CA)

10	60-65 inches	19	114-119 inches
12	72-77 inches	20	120-125 inches
13	78-83 inches	21	126-131 inches
14	84-89 inches	22	132-137 inches
16	96-101 inches	23	138-143 inches
17	102-107 inches	25	150-155 inches
18	108-113 inches		

NUMERIC 4 & 5 - BODY AND BRAKE TYPE IDENTIFICATION

03	Cab-Chassis with Hydraulic or Vacuum-Hydraulic Brakes
13	Cab-Chassis with Full Air Brakes

STYLING AND BODY

Body and styling aspects of the new Series 70,000 and 80,000 Tilt-Cab models are for the most part identical to those of continued Tilt-Cab models. A new series numeral plate, however, is released to identify new Series 70,000 models; Series 80,000 models employ the same numeral plate as released for Series 80 Tilt-Cabs.

Entirely new are the body and sheet metal structures, including styling aspects, for the new Series 70,000 and 80,000 Short Conventional Cab models, as discussed below.

SHORT CONVENTIONAL CAB STYLING. Prominent in the overall exterior styling concept of the Short Conventional Cab model is the aerodynamic configuration achieved with the tapered front end, shallow windshield sweep, and cab tumblehome. This configuration not only contributes to a clean appearance, but also serves the practical purposes of keeping windows and mirrors free of mud splash and doors and side windows free from gravel blasting; it also assures good interior ventilation. The clean appearance also is reflected in the radiator grille styling with its single headlamp treatment and central Chevrolet lettering. The radiator grille is painted Off-White; lettering is Black.

Ornamentation consists simply of a chrome Chevrolet emblem with a Red bow-tie field centered on the upper radiator grille filler panel and the new series designation plates on the cowl sides. A left outside rear view mirror of the clamp-on type is provided as standard equipment. The mirror is painted Black as are wheels. The front bumper is painted Off-White.

All interior body metal is painted Fawn, including the instrument panel and all of its related components except the instrument cluster panel. The instrument cluster

NEW CAB AND SHEET METAL STYLING

panel is painted Charcoal; bezels for gauges are painted Silver. Fawn paint also is employed for the vinyl-covered jute headliner and hardboard sunshades. The steering wheel and column are painted Off-White. Black rubber floor mats are utilized for all models.

Standard seat trim is all-vinyl. Models with bench-type seats have seat coverings of Fawn textured vinyl and seat facings of Dark Fawn textured vinyl; models with only a driver's seat employ Dark Fawn textured vinyl for both the seat coverings and the seat facings. Distinguishing Series 80,000 models are soft trim panels of White plastic for the depressed areas of the door inner panels containing the window regulators and door lock remote control handles. Series 80,000 models are further distinguished with a right hand sunshade which matches the left hand unit. RPO packages enhance vehicle interior appearance, comfort, and convenience.

SHORT CONVENTIONAL CAB STRUCTURE. Designed for maximum strength and extended life, the new cab features a perimetric structure for bearing major loads; one-piece door opening structures for positive door alignment; a flat floor panel for elimination of the transmission tunnel; a contoured back panel for trailer clearance; and use of exterior lap joints for better sealing and longer life. Fuel tanks are mounted outside the body, eliminating cab fumes, corrosion, and stress.

Cowl structure is conventional, having no plenum chamber for the cab ventilation system. Ventilation is accomplished through a large, screened center cowl vent actuated through a control atop the instrument panel. Fresh air intake for the heater is through louvers on the right hand cowl side panel; this location minimizes dust and water entry.

The roof panel is ribbed for rigidity, and features integral drain gutters to eliminate the possibility of joint leaks through sealer failure.

In addition to being ribbed to reduce drumming and excessive flexing, the cab rear panel is contoured to provide for maximum trailer ramp angle as well as maximum trailer swing clearance. A single rear window of tempered glass is carried in the panel; RPO side rear windows of tempered glass also are offered.

A one-piece windshield is used in Series 70,000 applications; 2-piece units with a divider are used for Series 80,000 models where replacement costs must be considered because of the heavy-duty type operations encountered. Laminated plate glass is used for all windshields. Windshield wipers are of the tandem-type, and utilize a single electric motor mounted on the engine side of the dash for easy servicing. Two-speed wiper motors are standard equipment for all models as are windshield washers. Wiper arms and the metal portions of the wiper blades have a matte finish, thus effectively reducing the possibility of glare.

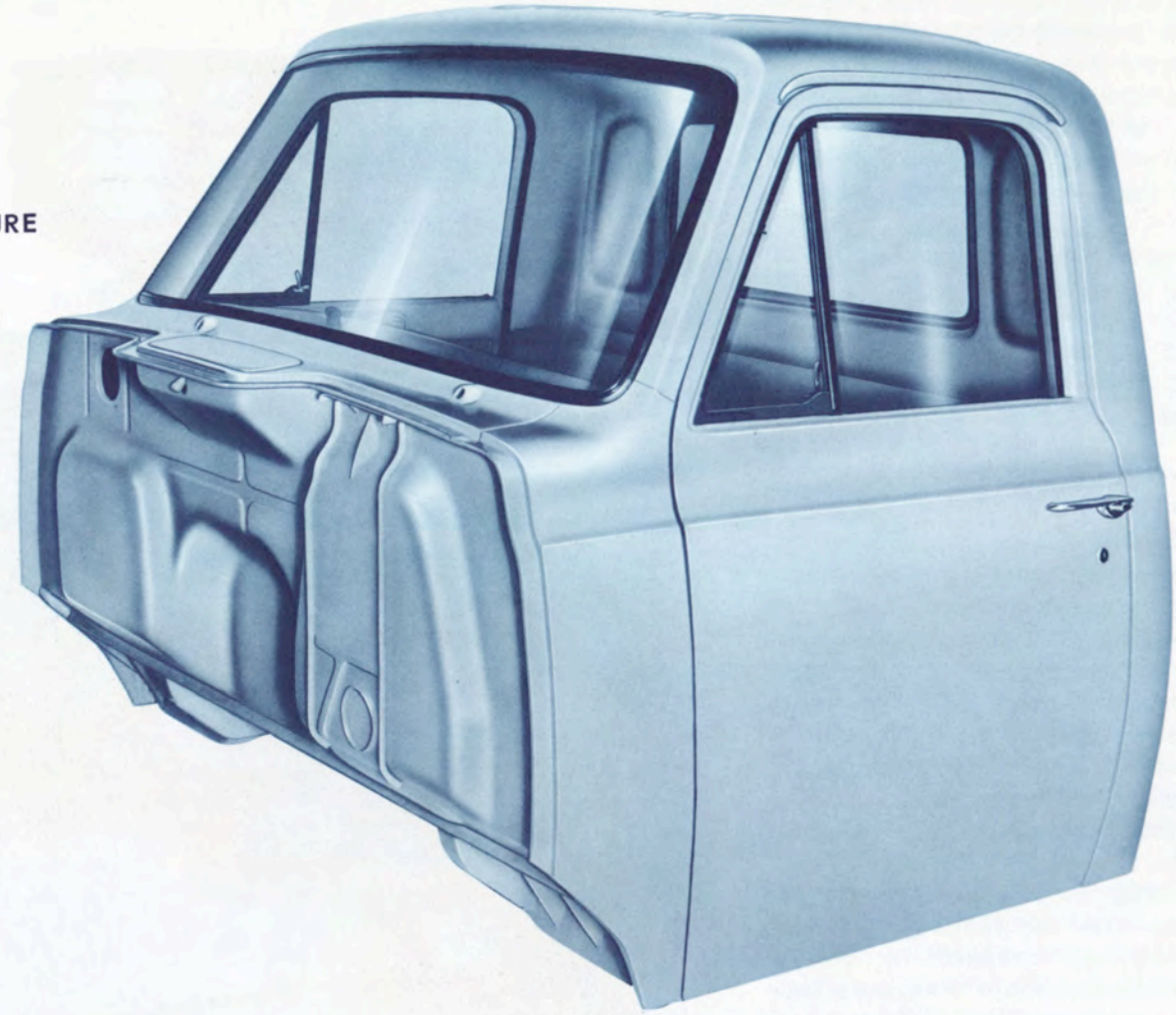
Doors are double-wall constructed for strength, and the inner panel is configured to eliminate drumming. Effective sealing of the doors is afforded with a continuous rubber seal on the door opening frame. Tempered glass is used for the door windows. Door locks are of the fork-type for positive action and minimum slam effort. Inside operation of locks is through a push-pull button on the window reveal molding of both doors. An outside left hand door key lock is standard, while a right hand unit is available as an RPO. Inside door closure handles are provided, eliminating stress on the door latch handles.

A full-width front seat is provided as standard equipment for Series HG-HM-JG-JM70,000 and HM-JM80,000 models. Seat construction is similar to that employed for regular Conventional Cabs, with formed wire springs for the cushion and coil springs for the backrest. The cushion pad is polyurethane foam (full-depth for HM-JM80,000 models); backrest padding is cotton. Trim is all-vinyl; cloth/vinyl trim is available when RPO X57 is specified. A driver's seat, identical to that used in Tilt-Cabs, is employed for Series HJ-HV-JJ-JV70,000. Seat belts are base equipment; two units are provided with bench seats.

Instrument panel gauges are of the air-core type for ruggedness and accuracy. Control knobs are standardized for a neat appearance, and they are identified. An ammeter and oil pressure gauge are offered as production equipment. The fuse block is located on the left hand sidewall of the dispatch box, permitting convenient servicing and trouble-shooting. Illumination is afforded by a light mounted in the dispatch box door; this light also illuminates the cab interior, eliminating the conventional dome lamp.

The cab is mounted at four points outside of the frame side rails, with the rear mounts angled to coincide with the natural roll center of the cab, reducing cab stress and subsequently extending cab life. Compression-type mounts are used at the front in all applications; rear mounts are of the compression type for Series 70,000 models, excepting tandems which utilize semi-shear rear mounts. The latter type mount is used at the rear in all Series 80,000 applications.

NEW CAB STRUCTURE



FRONT END SHEET METAL for new Short Conventional Cab models is completely disassociated from the cab, eliminating any stresses which might result from relative movement between the cab and any one of the sheet metal assemblies. Individual panels are used throughout for easy disassembly and low replacement cost.

Support for the radiator and hood is an extremely rigid torus, or radiator shell, assembly comprised of an inner and outer panel rubber-supported on the frame and retained with two adjustable stay rods. The side-opening hood assembly is comprised of a center panel and two side panels. For wide-open accessibility to the engine compartment, the hood assembly may be lifted by removing bolts attaching the center panel to the torus assembly. Attachment of the center panel to the cowl is free-floating.

Fenders are supported by the bumper, frame, and running boards through brackets. Running boards attach to the frame.

ENGINES

Series 70 and 80,000 models with gasoline engines are powered by the GMC Truck 401 V-6 engine with 2-barrel carburetor. Available optionally for Series 80,000 models only is the GMC Truck 478 V-6 engine with 2-barrel carburetor. Both engines are new to the Chevrolet gasoline engine line-up.

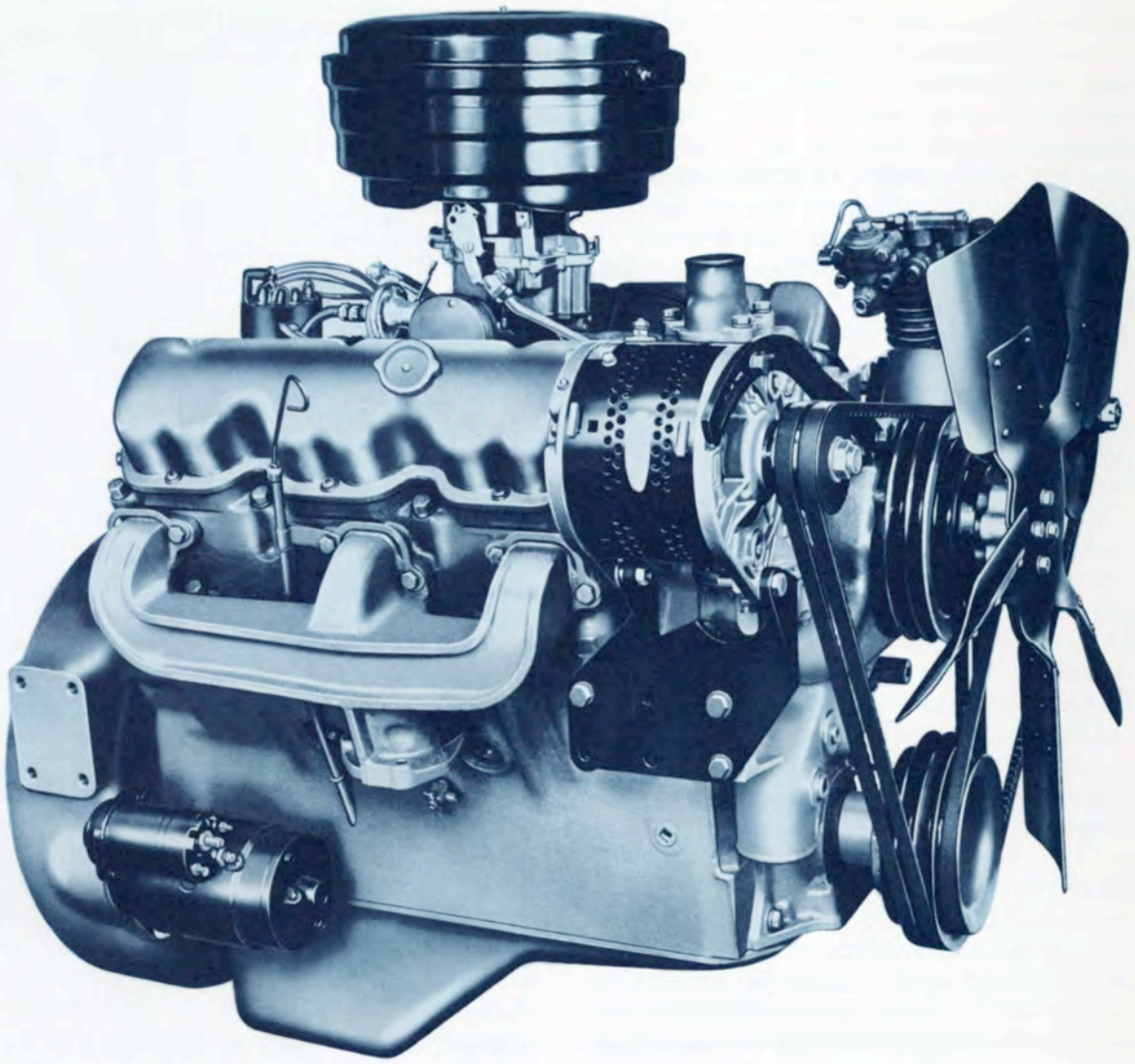
Diesel engine models in the new 70,000 Series are powered by the GMC Truck DH478 V-6 engine, the Detroit Diesel 6V-53N V-6 engine, the GMC Truck D637 V-8 engine, or the GMC Truck DH637 V-8 engine. The latter two engines are new.

GASOLINE ENGINES

The new 401 and 478 cubic inch valve-in-head V-6 gasoline engines are completely modern power plants designed, built, and thoroughly tested for truck operation. Maximum efficiency, economy, and operating life are afforded through the over-square design. The resultant short stroke reduces internal friction to a minimum. Larger cylinder bores, combustion chambers, and valves permit freer breathing and cooler operation.

The two engines are basically of the same design with the 401 engine having a bore and stroke, respectively, of 4.87 and 3.58 inches and the 478 engine a bore and stroke, respectively, of 5.125 and 3.86 inches.

CYLINDER BLOCK AND CRANKCASE. Fine-grain, chrome-nickel alloy iron, cast in one piece, is used for the short, well-proportioned cylinder block and crankcase. Construction features contributing to overall rigidity are a 3-inch dropped skirt below the crankshaft centerline; staggered or offset banks of cylinders; ribs extending



NEW 401 AND 478 V-6 GASOLINE ENGINES

ENGINE	SERIES APPLICATION	CARB.	COMP. RATIO	GROSS		NET	
				HP-RPM	TORQUE-RPM	HP-RPM	TORQUE-RPM
401 V-6	STD: HM,JM,TM70,000 HM,JM,TM,WM80,000	2-Bbl.	7.50	237 @ 4000	372 @ 1600	210 @ 3700	348 @ 1600
478 V-6	OPT: HM,JM,TM,WM80,000	2-Bbl.	7.50	254 @ 3700	442 @ 1400	225 @ 3400	410 @ 1400
6V-53N Diesel	STD: HV,JV70,000	N45 Inject.	21.00	195 @ 2600	447 @ 1400	185 @ 2600	439 @ 1400
DH478 Diesel	STD: HG,TG,JG70,000	---	17.50	170 @ 3200	310 @ 2000	155 @ 3200	298 @ 2000
D637 Diesel	STD: HJ,JJ,TJ70,000	---	17.50	195 @ 2600	450 @ 1800	185 @ 2600	440 @ 1800
DH637 Diesel	OPT: HJ,JJ,TJ70,000	---	17.50	220 @ 2800	458 @ 2000	205 @ 2800	444 @ 2000

several inches below the outer head bolt bosses; oil drain-back bosses extending down the sides of the block; and six head bolt bosses around each cylinder bore. These six bosses are blind-tapped and equally spaced. All bores are completely surrounded by coolant for their full height, assuring uniform expansion, superior heat transfer, low oil consumption, and long life. Bores are honed and lapped to a finish designed for proper lubrication at all operating speeds.

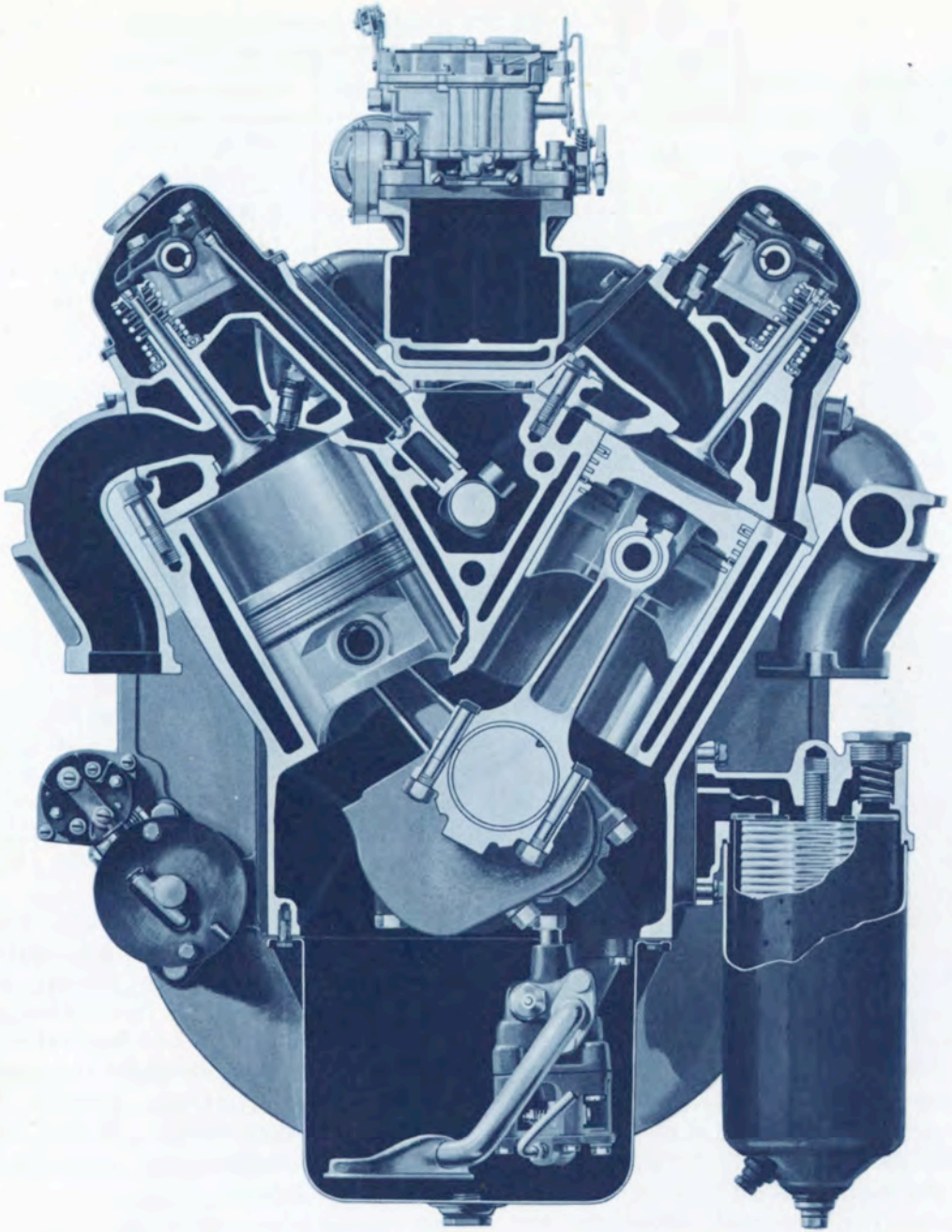
Main bearing caps have an interference fit into broached seats in the block. The thrust bearing cap is doweled in the fore and aft direction, providing positively positioned bearings, correct alignment, and proper clearances.

CYLINDER HEADS are cast of fine-grain, chromium-nickel alloy iron for close control of strength and hardness, contributing to overall freedom from distortion and warpage. Heads are interchangeable between banks.

Fully-machined, wedge-shaped combustion chambers of equal volume are designed to provide rapid burning, increased turbulence, freer breathing, closer regulation of compression ratio, and smoother operation. Short individual intake and exhaust ports contribute to high volumetric efficiency and rapid discharge of exhaust gases. Intake ports are located on the high side of the heads, and exhaust ports are located on the outside of the heads, minimizing heat rejection to the engine and eliminating localized hot spots. For maximum efficiency and faster warm-up, intake manifold pre-heat is supplied by exhaust gases pulsating from one head to the other through a passage cast in the bottom of the intake manifold. Spark plugs are located on the intake manifold side of the heads for on-top accessibility. Spark plug positioning on the high side of the wedge-shaped combustion chamber reduces knocking tendencies.

Valve guides are cast integral with the head and have a long portion completely surrounded by water jacket coolant, assuring rapid heat transfer from valve stems. A very large bridge between valve seats minimizes seat distortion and prevents leakage past the valves. Pressed-in exhaust valve seat inserts of hard nickel-chromium-tungsten-cobalt alloy steel are standard equipment.

CAMSHAFT. The camshaft is of high-strength, electric furnace iron with the



FRONT CROSS-SECTION, NEW V-6 GASOLINE ENGINES

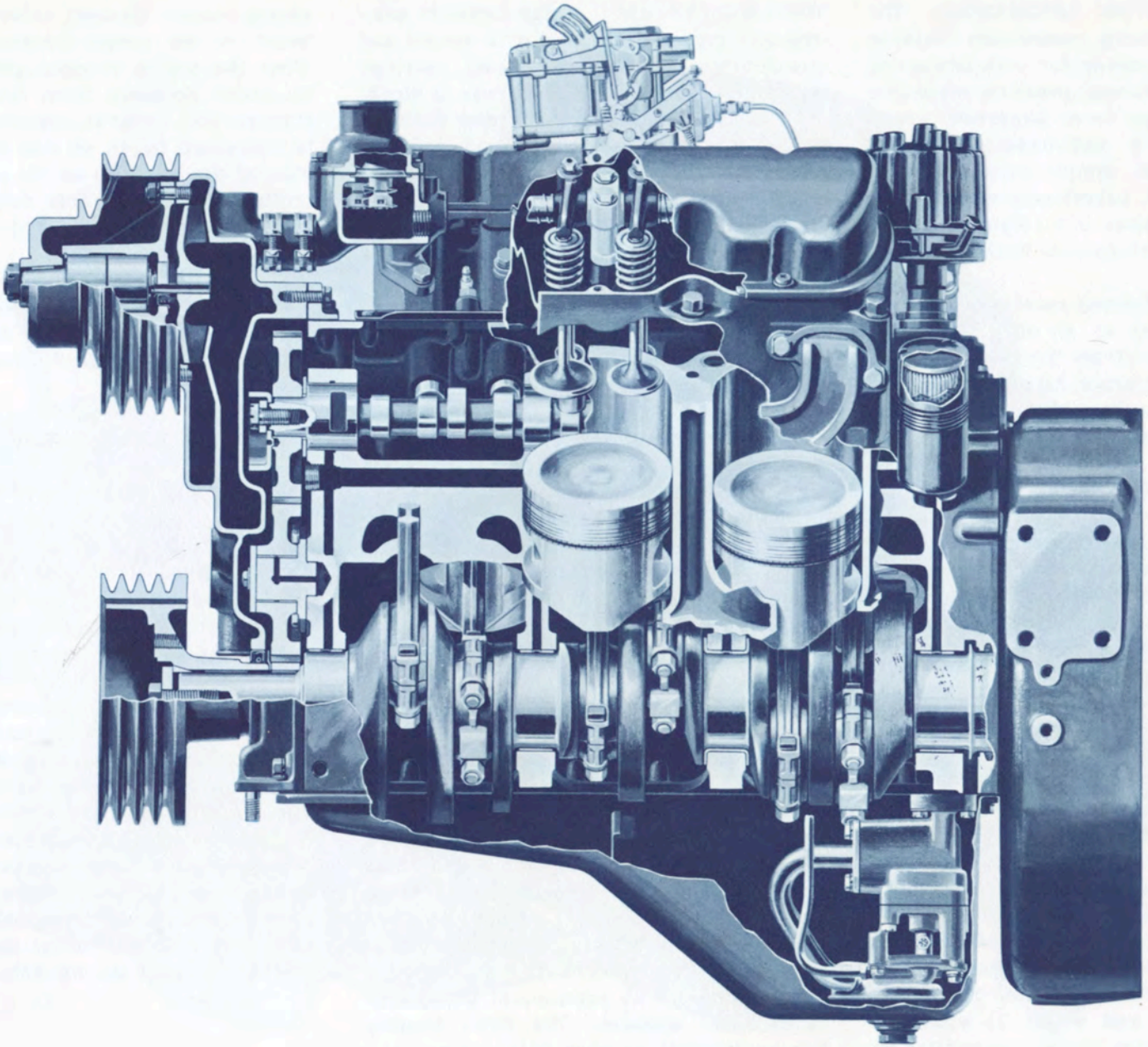
cam lobes hardened and phosphate-coated for wear resistance. Support is afforded with four journals. To avoid excessive cam wear or scuffing caused by the marginal lubrication conditions encountered in engines when first started, the cam lobes dip into a reservoir of oil immediately upon starting.

CRANKSHAFT. The crankshaft has four main journals and six connecting rod journals evenly spaced at 60-degree intervals. Drop-forged steel is utilized, and bearing surfaces are induction-hardened. For increased RPM, the 401 crankshaft is cross-drilled. Crankshafts are statically and dynamically balanced. A vibration damper at the forward end of the 478 engine absorbs torsional vibration impulses and protects crankshaft and bearings from stresses.

CONNECTING RODS of I-beam design are used. These are of drop-forged, heat-treated carbon steel. Close rod weight tolerances maintain proper engine balance at all rotating speeds.

PISTONS are heavy-duty, permanent-mold aluminum castings with an integrally-cast steel expansion control band. Cam-ground, tin-plated surfaces provide a finish designed to carry adequate oil for proper lubrication and prevent scuffing. A shallow dish in the top of each piston forms part of the combustion chamber. A continuous steel ring groove insert is employed for the top piston ring.

Four cast iron piston rings are positioned above the piston pin, three for compression and one for oil control. The 4-ring piston provides improved sealing, piston stability, and faster conductance of heat from piston to cylinder walls.



SIDE CROSS-SECTION, NEW V-6 GASOLINE ENGINES

VALVE OPERATING MECHANISM. The rigid valve operating mechanism features positive valve rotation for both intake and exhaust valves. Strong, pearlitic malleable iron rocker arms have hardened, wear-resistant tips. A self-locking adjusting screw allows fast, simple setting of valve lash. Mechanical, barrel-type valve lifters are included. These are rotated by their offset location with respect to the camshaft lobes.

A tubular, hardened-steel rocker arm shaft also serves as an oil gallery with drilled holes for direct pressure lubrication of the rocker arms. Aluminum die-cast brackets bolted to the cylinder head support the rocker arm shaft.

INTAKE AND EXHAUST VALVES. Silchrome XB alloy steel intake valves afford excellent resistance to heat corrosion and wear. Exhaust valves are hard-faced Silchrome XB steel. Exhaust valves have a nickel chrome coating on the combustion chamber side of the valve head. This feature prevents scaling and eliminates exhaust valve-induced pre-ignition.

Contributing to exhaust valve durability is sodium cooling. The partially-filled stem cavity rapidly absorbs heat in the valve head and transfers it through the stem and integral valve guides to the engine coolant. Further protection is given to the exhaust valve stems by extra long valve guides which minimize the stem exposure to burning gases. All these features mean cooler valves and, therefore, better lubrication of valve stems and guides for reduced friction and wear. To withstand the heat and seating action transmitted by exhaust valves, the engines have pressed-in hard steel exhaust valve seat inserts of nickel-chromium-tungsten-cobalt alloy.

COOLING SYSTEM. A high-capacity, centrifugal type water pump with sealed and pre-lubricated, double-row ball bearings forces coolant from front to rear of block, up five transfer holes surrounding the rear cylinder in each bank to the head, and then forward to the front of the head. Total coolant flow travels the full-length of the block, then the full-length of the cylinder head. Cooling passages in the cylinder head direct a large volume of coolant at high velocity around the cast integral valve guides and valve seats, thoroughly scrubbing these areas and reducing the formation of rust and scale which retard heat transfer. Two 180-degree thermostats are used.

Water pumps are built into the cast engine front cover which contains pump inlet, discharge volutes, and outlet passages to the cylinder block. A permanent coolant by-pass from the water outlet manifold to water pump inlet cavity causes the water pump to be supercharged and feeds coolant into the pump inlet under pressure which increases the total flow approximately 100 percent. This by-pass is as large as possible, for satisfactory radiator flow.

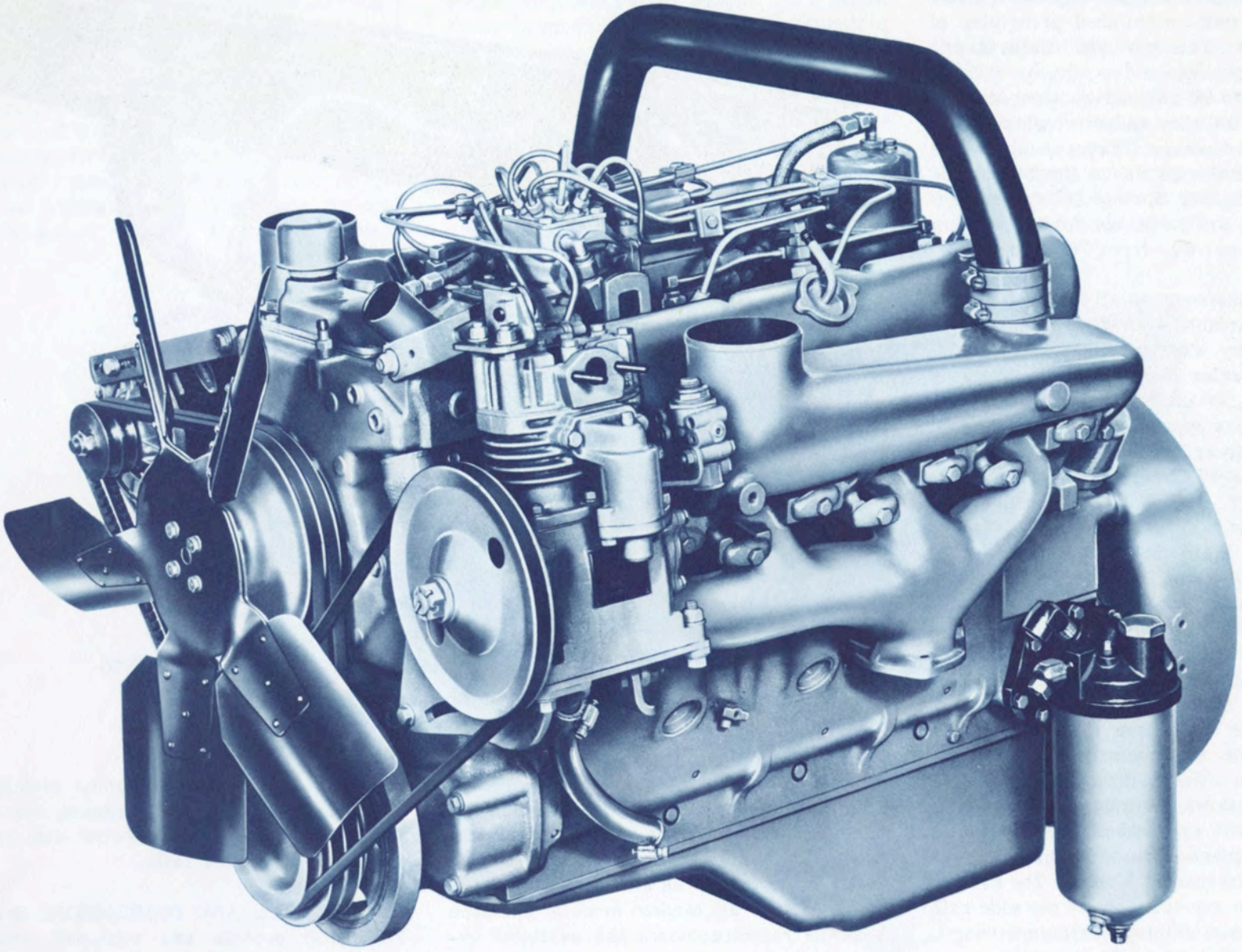
LUBRICATION. Full-pressure lubrication is featured, with high pressure developed by a high-output, rotor-type pump which draws oil through a fixed screen intake assembly. An integral safety relief valve prevents excessive pressure. Oil flows from the pump directly to the full-flow filter mounted on the left hand side of the block. One hundred percent filtration occurs through an economical paper-type replaceable element. The filter housing has an integral by-pass valve to permit a continual flow of oil in the event the filter element becomes clogged.

The oil pump incorporates an adjustable spring-loaded spinner valve which is the heart of the unique hydraulic governor. When the engine reaches governed speed, oil under pressure from the pump passes through the integral spinner valve which is connected by an oil line running out the side of the block to an oil pressure controlled diaphragm. This diaphragm operates the throttle plates and is included in the carburetor assembly.

EXHAUST. A complete dual exhaust system is standard. Mufflers for all models incorporate aluminized steel tubes and baffles.

DIESEL ENGINES

The design and construction of the new D637 and DH637 V-8, diesel engines is basically the same as the DH478 V-6 engine introduced in 1965. Cylinder bore, stroke, displacement and valve operation for each cylinder is the same as in V-6 engines. Since the design concept of the V-6 engines is retained, many components are interchangeable. Reliability and durability of the new units should be comparable to the current V-6 engines. Both D and DH engines are alike excepting the fuel pump. The higher horsepower of the DH engine is obtained by precise calibration of the fuel pump to deliver a greater amount of fuel to the nozzles. Continued with no change but with applicability extended to certain new Series 70,000 diesel models are the DH478 V-6 and the 6V-53N V-6 engines.



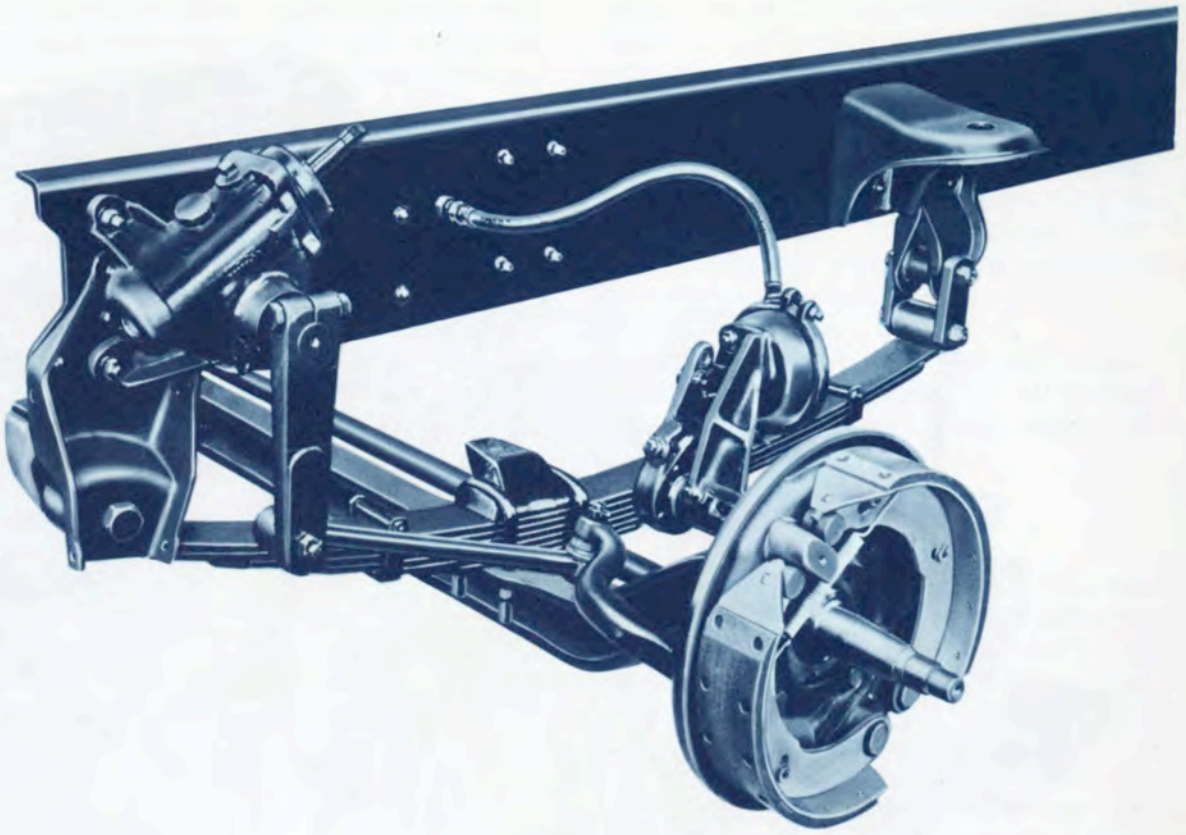
NEW D637 V-8 DIESEL ENGINE

CHASSIS

Series 70-80,000 models feature a durable, capable chassis concept which is a combination of well-established principles of configuration design and field-proven chassis components.

Frames are all channel-section, ladder-type units with size and strength tailored to anticipated usage. Front suspensions in conventional cab usage involve pinned and shackled leaf springs. Tapered leaf springs are available optionally. I-beam capacity extends from 7000 to 16,000 pounds.

The rear suspensions all include a variation of the variable-rate principle. Tandem bogie capacity extends to 38,000 pounds. Single rear axles are available in capacities up to 23,000 pounds. Steering systems and brakes are quite conventional. Eleven different main and two auxiliary transmissions supplied by Chevrolet, New Process, Spicer, Clark, and Fuller constitute the Series 70-80,000 transmission line-up. Seven of the main units are new, and offer good durability, long life, and versatility of operation. Cast-spoke wheels and tube-type tires are provided all models.



FRONT SUSPENSION WITH SINGLE-STAGE, MULTI-LEAF SPRINGS

FRAMES. Models in the new series utilize ladder-type, channel-section frames with constant side rail web thickness. This full-depth side rail construction produces uniform beam strength throughout the frame length, and allows optimum manufacturing versatility. All crossmembers behind the cab are of 2-piece, riveted design, forming, in effect, a fabricated I-beam. The crossmembers are riveted only to the side rail web, thereby maintaining maximum strength of the top and bottom flanges of the rail channel since no holes are required.

Although all frames are similar in appearance, metal gauge, type, rail size, section modulus, and yield strength vary from series to series and with wheelbases, commensurate with the anticipated vehicle usage. Higher strength, heat-treated side rails are provided as standard or optional equipment on all tandem models. Inverted L-shape reinforcements are available optionally for all series.

The number of unused holes in the side rail web, detrimental to frame strength, but normal in frame construction because of common tooling which must anticipate all usages, is reduced. Instead, the air, fuel, and brake line mounts are stud-welded to the frame rails.

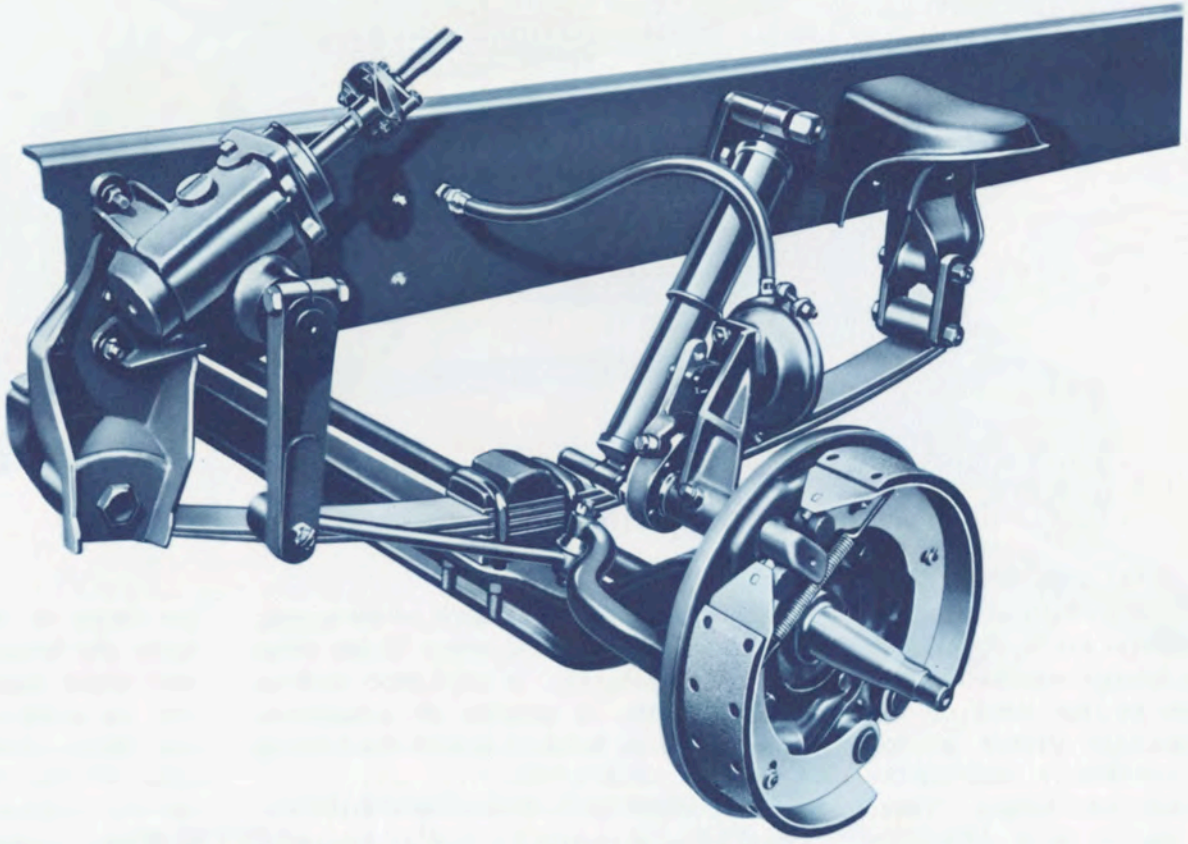
FRONT AXLE AND SUSPENSION. Series 70-80,000 models are equipped with a conventional I-beam, leaf-spring front suspension system, with capacities of 7-9-11-12-15-16,000 pounds. Conventional cab units utilize single-stage, multi-leaf

springs 56 inches long and 3 inches wide which are pinned at the front hanger and shackled at the rear. The axle is located forward of the spring centerline for a compromise of good ride motion, axle control, and braking stability.

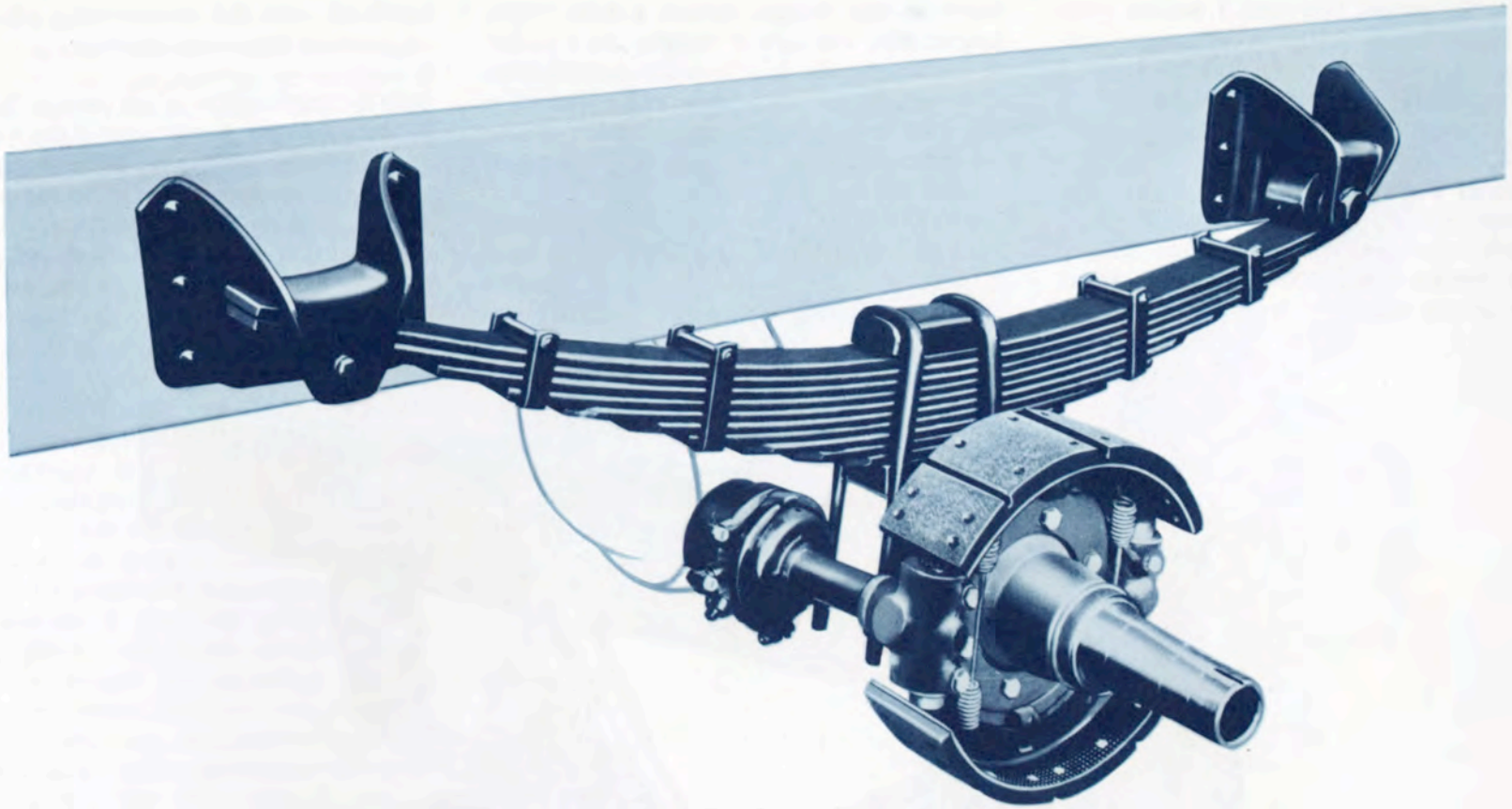
Optional 2-leaf tapered leaf springs are available for all Conventional Cab model standard and optional suspension usage, except Series JM80,000 with the optional 16,000-pound capacity front axle. Advantages of this design include a softer ride, longer life, and lighter weight. As a result of the large reduction in inter-leaf friction, however, shock absorbers are required to maintain comfortable ride motion. These are of the direct, double-acting type, with a diameter of 1.375 inches.

Series 70,000 Tilt-Cab models employ 2-stage, variable-rate springs, identical to the 1965 design for similar capacity vehicles. Series 80,000 Tilt-Cabs are equipped with the conventional pinned and shackled single-stage springs.

REAR SUSPENSION of all Series 70-80,000 models employ variations of the variable-rate spring principle to accomplish a combination of optimum ride and carrying capacity. Rear axles, single and 2-speed, are available in capacities of 17,000; 18,500; 22,000; and 23,000 pounds. Spring capacities are tailored to axle ratings.



FRONT SUSPENSION WITH RPO 2-LEAF TAPERED SPRINGS

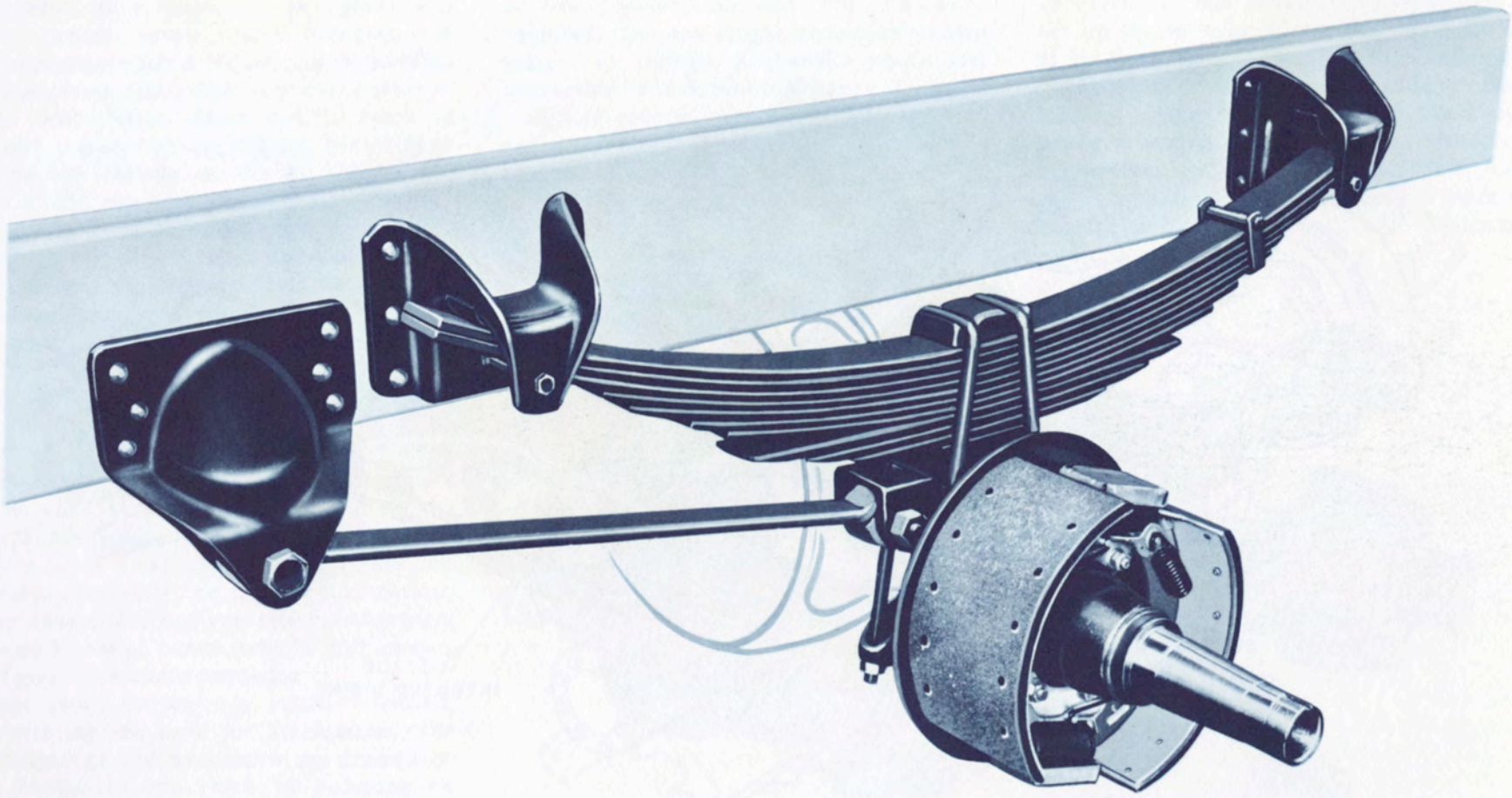


REAR SUSPENSION, CONVENTIONAL CAB WITH 17,000-POUND REAR AXLE

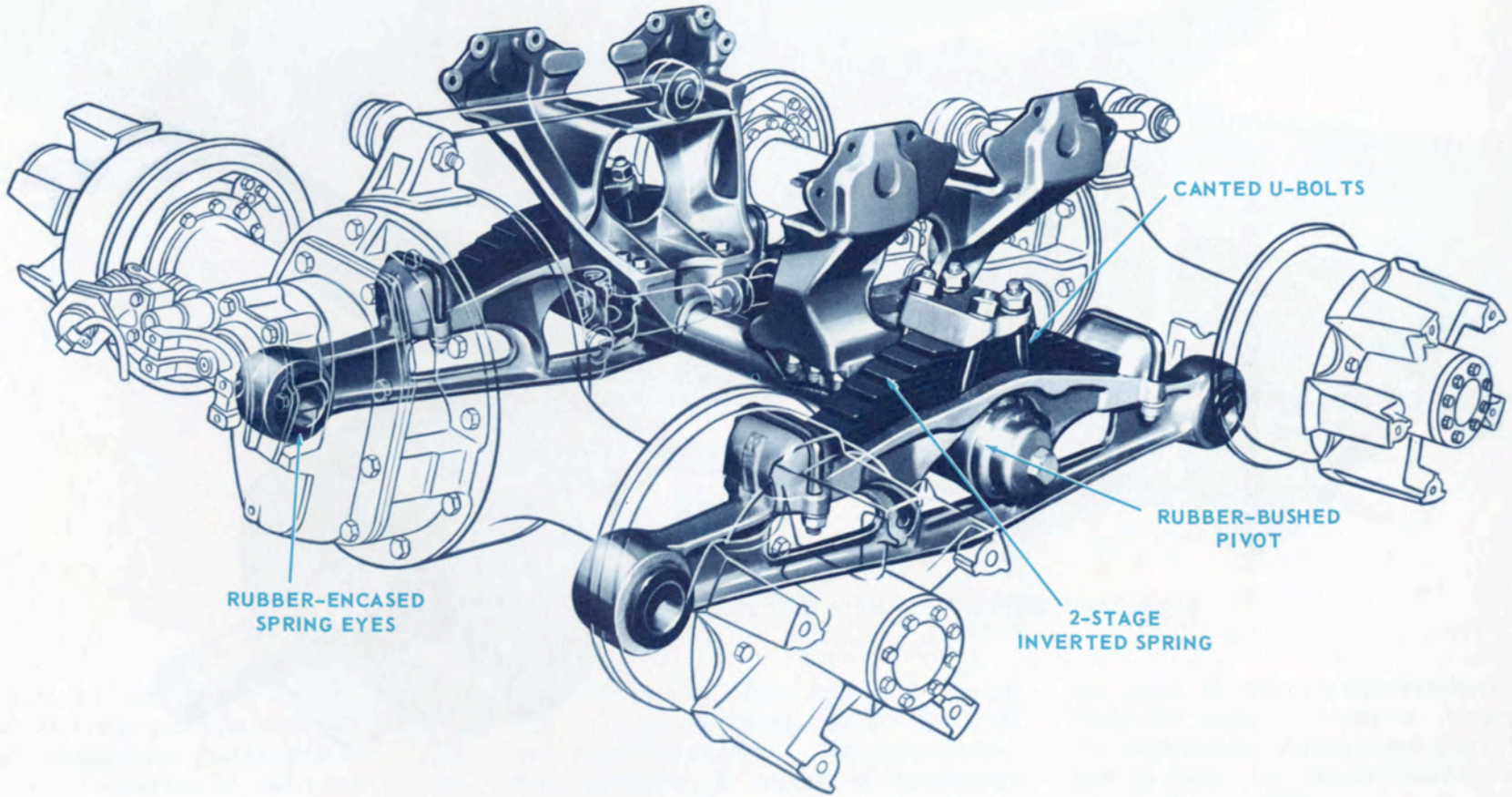
Conventional Cab models with the 17,000-pound capacity rear axle are equipped with a new suspension design which is quite similar in function to that used on the front. The springs are pinned at the front hanger, but are free to slide on the cam of the stamped rear hanger. Thus, the spring rate varies with deflection and the resultant changes in the usable length of the spring.

Tilt-Cab rear suspension design is continued from 1965. Both ends of the spring pile ride on contoured cams of the front and rear hangers. A leaf-type control arm provides a degree of suspension alignment, and helps to absorb the braking and acceleration forces.

New conventional cab models with 18,500-pound or larger capacity rear axles employ a new suspension design which is basically a refinement of the Tilt-Cab version. The spring pile ends are also free to slide on the cams of the stamped brackets which form the hangers. However, in place of the radius leaf, a fabricated steel radius rod is used to transfer driving torque and brake reactions to the frame. The ends of the radius rod are pinned to special brackets on the axle and frame side rail. Advantages of this version over the radius leaf-type include decreased axle windup, with resultant increases in suspension durability.



REAR SUSPENSION WITH RADIUS ROD
CONVENTIONAL CAB WITH REAR AXLES OF 18,500 POUNDS AND UP



RPO PAGE AND PAGE TANDEM REAR SUSPENSION

TANDEM REAR SUSPENSION. A new suspension system, the Hendrickson RU340, is provided as standard equipment on Conventional Cab models with a tandem rear axle. This unit is basically similar to the existing RT320 version, which is continued on Tilt-Cab models, but is lighter and uses lighter weight frame brackets and an improved method of clamping the saddles to the cross tube. The new suspension is used with Eaton axles and is rated at 30,000 pounds on the 70,000 Series, and at 34,000 pounds on the 80,000 Series. The RT320 component retained on Tilt-Cab models is rated at 34,000 pounds.

Another suspension, the Hendrickson RT365 rated at 38,000 pounds, is available optionally for all models. It is similar in design to the other two units, but utilizes heavier components and is used only with Rockwell axles.

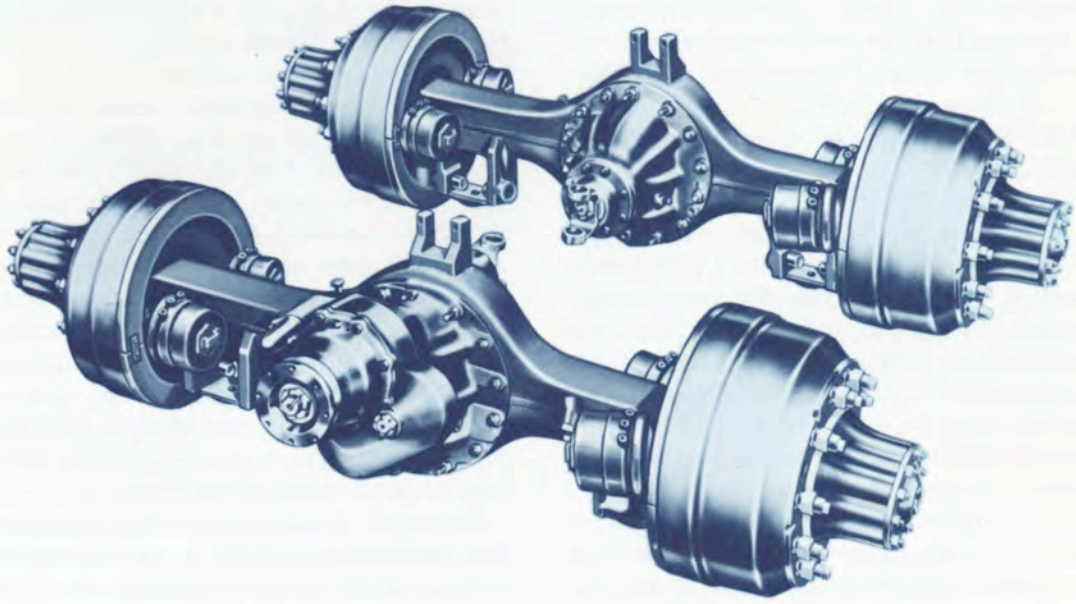
Also available optionally on the 70,000 and 80,000 Series is a Page and Page suspension. As the Hendrickson RU340, it is also rated at 30,000 pounds on the 2-1/2 ton models, and at 34,000 pounds on the 3-ton versions. Features of this unit include relatively low weight, lubrication-free usage, 2-stage variable rate springs, canted U-bolts, lower vehicle roll center, and good ride characteristics.

All pivot points are rubber encased, eliminating the need for lubrication. The leaf springs are secured to the cross tube by canted U-bolts which, by reducing the length of the spring seat, allow a greater active spring length. The ends of the spring are encased in rubber in the cups which attach them to the walking beam, and ride on hardened cams which provide the variable rate action. The suspension is securely attached to the frame through two large saddles. The inverted spring design eliminates frame-mounted spring hangers.

ROCKWELL REAR AXLES. New to the Chevrolet line is the optional Rockwell 38,000 pound, heavy-duty bogie for Series 80,000 Conventional and Tilt Tandem vehicles. The new single-reduction tandem bogie unit offers Rockwell's traditional operational and durability features.

Hypoid gearing promotes quiet operation and long life and allows the use of high numerical axle ratios. Axle shafts of special carbon steel undergo special manufacturing processes for increased toughness. A generous number of splines, enveloped by the differential side gear hub, decreases individual spline load.

Rectangular-shaped, hot-forged steel housings withstand repeated load and road shocks, stresses and strains caused by acceleration, and severe twisting stresses set up by the brakes stopping heavy loads at high speeds. A welded-on steel bowl cover reinforces the housing and prevents leaking. Upset-forged steel spindles and brake mounting flanges are electronically butt-welded to the housing to form one integral unit. Reinforced support rings resist carrier leg spread and minimize



RPO ROCKWELL TANDEM BOGIE

deflection of gear carrier parts. The heavy carrier mounting flange provides additional rigidity and greater thread engagement for carrier attaching studs.

The in-line arrangment of the two bogie axles eliminates compound working angles and reduces driveline wear and maintenance. Also, all four axle shafts are identical and, therefore, interchangeable. The driver-controlled inter-axle differential can be locked out any any speed. When engaged, it divides torque evenly between the axles and compensates for any difference of speed. However, when rugged or slippery conditions exist, the driver, through a switch, can lock out the inter-axle differential and obtain straight-through maximum drive for optimum traction.

EATON REAR AXLES are available throughout the line-up. The single-speed 17,000 pound unit is used as base equipment for the new Short Conventional and Tilt-Cab vehicles equipped with the DH478 engine. Single or 2-speed designs of 18,500 pound capacity are provided as standard equipment for the remaining Conventional and Tilt-Cab models along with single and 2-speed options of up to 23,000 pounds capacity. The Eaton 30,000 pound bogie is base equipment for all gasoline and diesel engine-powered Tandem models except Series JM-WM80,000. These latter vehicles receive the 34,000 pound bogie which is optional on the remaining Tandem models.

All Eaton axles utilize spiral bevel pinion and ring gear sets with large tooth face areas and thick cross-sections for high strength and long wear. Ring and pinion alignment is maintained by a thrust pad. The pinion is straddle-mounted between dual, opposed, tapered-roller bearings at the front and a straight-roller outboard bearing at the extreme rear end. All gears are accurately machined of alloy steel, carburized and hardened for durability. Lightweight housings have welded differential covers, which contribute to overall housing strength while eliminating possible lubricant leakage.

BRAKES. Vacuum-hydraulic and full-air brake models are available for most Series 70,000 models. All Series 80,000 vehicles, plus Series 70,000 trucks powered with the D637, DH637, or 6V-53N engines are released only as full-air brake models. Air-hydraulic brakes are not used in any application.

Trucks with hydraulic systems utilize Wagner-designed front and rear brakes and "equal-displacement" type vacuum power assist systems as standard equipment. Booster size is dependent upon the particular axle application.

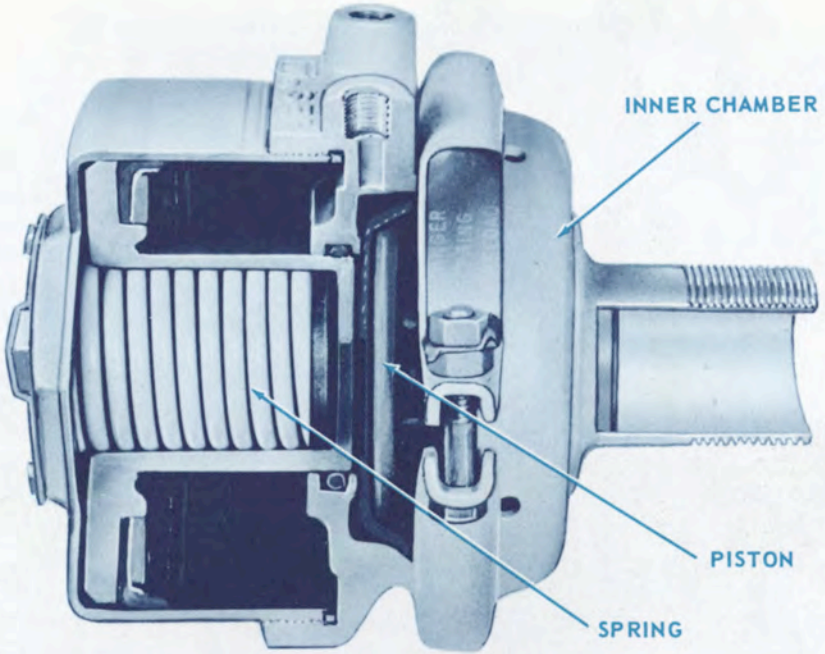
Full-air brake models utilize the S-cam design at the front and either S-cam or wedge-type units at the rear. The wedge-type rear brakes, released for use with the Short Conventional, single or dual rear axle, gasoline or diesel vehicles, usually include a slightly smaller lining size as compared to a similarly rated S-cam installation. The more uniform lining-to-drum-surface contact and pressure characteristics of the wedge-type design allow the use of a smaller lining with no loss in brake effectiveness.

Exterior brake component location is standardized for all Short Conventional Cab models along the left frame rail behind the cab step area. Installed in this location is the brake booster system for vacuum brake models and the service-emergency reserve tanks for air brake-equipped vehicles. The common location allows maximum standardization of piping and fittings and ready access. The close proximity of the air tanks to the brake controls and diaphragms eliminates the need for relay valves, except on Tandems.

Vehicles equipped with full-air brakes may also be ordered with optional emergency systems. S-cam type rear brake installations utilize the DD-3 Safety Actuator arrangement similar to that previously available in regular Chevrolet models. In this design, the conventional rear single-diaphragm air brake chambers are replaced by double-diaphragm, 3-way action units. The DD-3 chambers not only assure extra braking reserve during emergency conditions, but also eliminate the necessity of a separate transmission parking brake and linkage.

The Rockwell Fail-Safe emergency system is available only in combination with Stopmaster wedge-type rear brakes. The Fail-Safe units serve a dual-function role: They act as an air-released, spring-applied parking brake as well as an emergency braking system in the event of service brake failure.

The Fail-Safe brake assembly consists of an inner and outer chamber. The inner chamber, containing a diaphragm and diaphragm plate rod, acts as the service brake chamber and operates in the same manner. A spring-loaded piston in the outer chamber acts against the service brake chamber diaphragm plate rod. During normal operation, constant air pressure is applied to the outer chamber which, acting on the piston, holds the spring compressed. When air pressure is released from the outer chamber by pulling out the parking brake control knob, spring pressure forces the piston toward the service brake chamber.

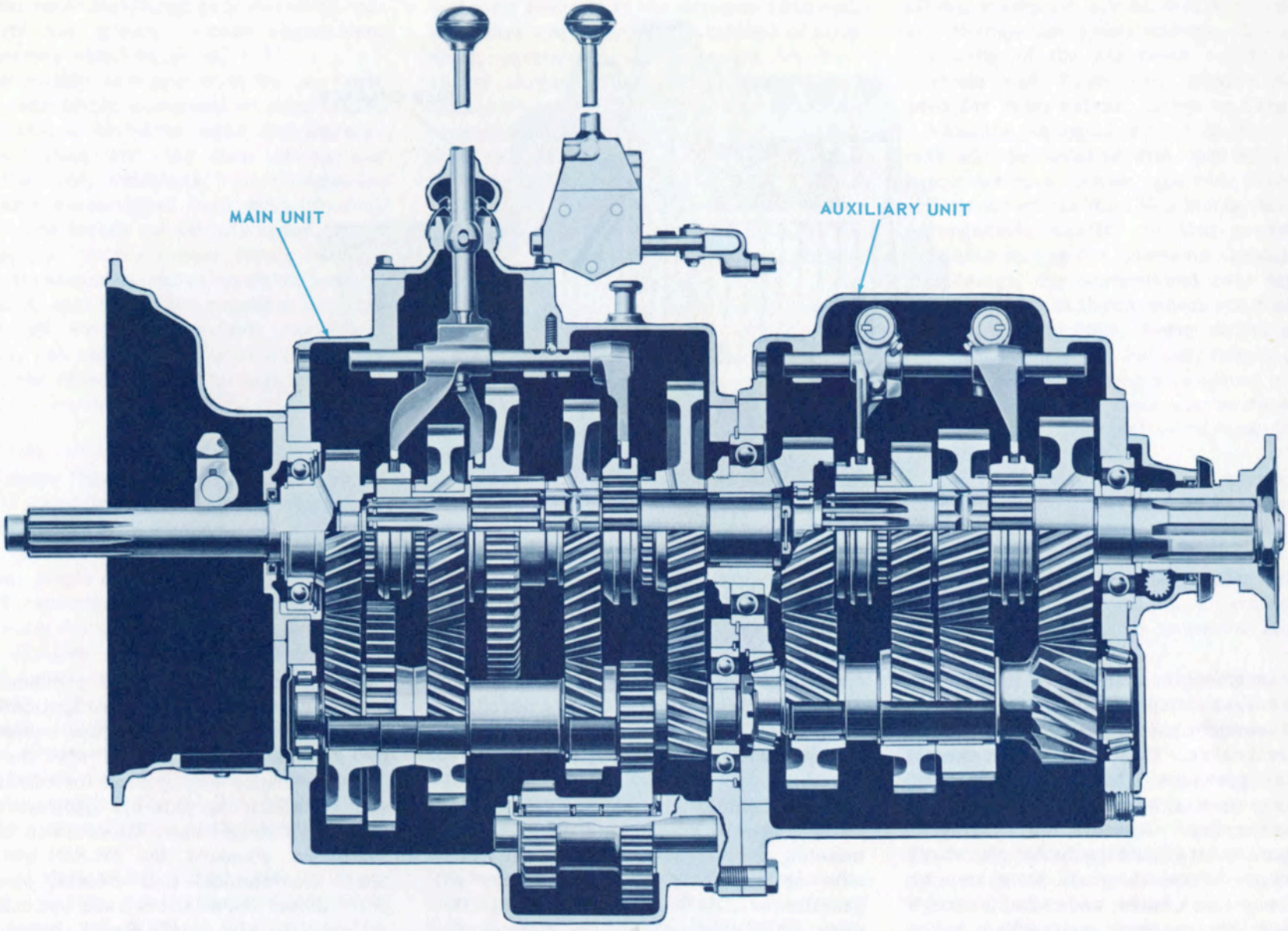


ROCKWELL FAIL-SAFE EMERGENCY BRAKE SYSTEM

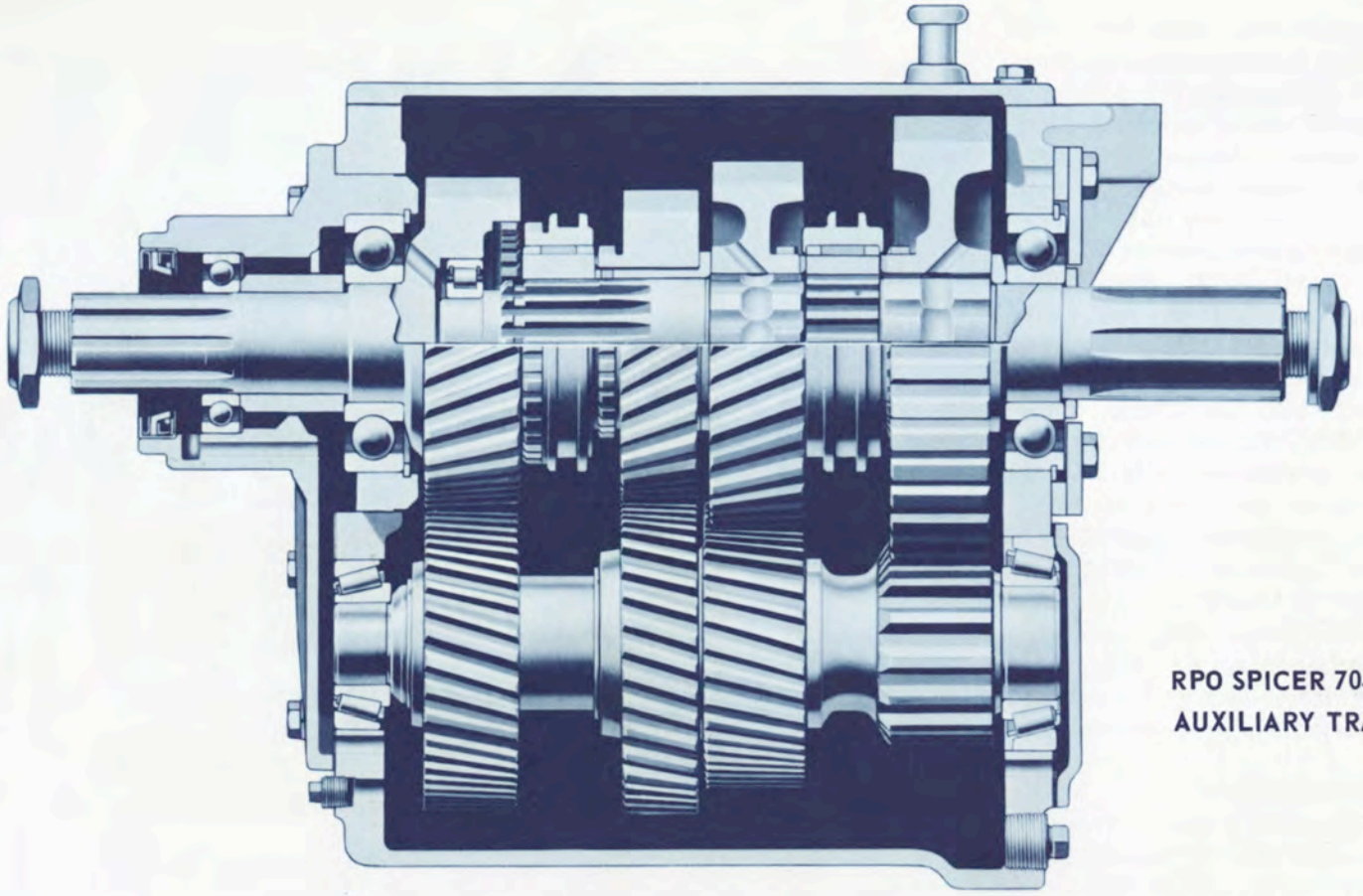
This movement is transmitted through the service brake diaphragm plate rod to the brake actuating mechanism, thereby applying the brakes. This same action occurs when air pressure is lost from the system, resulting in a safe, automatic application of the brakes. The air tank supplying pressure to the parking brake chambers is protected from the main air system by a one-way check valve, and contains enough pressure for at least one parking brake release in the event of main air system failure. If complete pressure loss occurs, and if the pressure in the protected tank is depleted, the rear brakes will remain applied until air pressure is restored. After sufficient air pressure is introduced back into the system, the service brakes become immediately operative.

NEW PROCESS TRANSMISSIONS. A new heavy-duty, close-ratio, 5-speed transmission, the New Process 541GD, is available optionally for use with either 401 gasoline or DH478 diesel engine installations. It is similar in design to the carry-over, wide-ratio, 541GL unit.

SPICER TRANSMISSIONS. Heavy-duty, close and wide-ratio, Spicer Series 5000 5-speed transmissions are provided for both diesel and gasoline engine applications. Wide-ratio Model 5652 is base equipment for all Tandems equipped with the 401 gasoline engine and optional for remaining 401 installations, plus all applications of the DH478 diesel unit. Close-ratio Model 5752C is standard for 6V-53N-powered Short Conventional Cab models, plus all D637 diesel installations, and optional for all gasoline and DH478 diesel applications except Tandems. Both transmissions feature compact design, synchronized second through fifth gears, right and left hand power take-off openings, and good durability.



RPO SPICER 7216-3B 16-SPEED TRANSMISSION



RPO SPICER 7041 4-SPEED AUXILIARY TRANSMISSION

The optional Spicer 7216-3B compound transmission for Series WM80,000 Tilt-Tandems offers sixteen evenly-spaced forward speeds and four reverse speeds. Basically a 4-speed main transmission with a 4-speed auxiliary attached directly to the main transmission case, the new unit provides the same resultant gearing as the separate units, but in a much shorter length and with less total weight.

Ratios are spaced evenly in 21 percent steps to effectively operate in the most efficient engine RPM range, and are tailored for over-the-road operation and limited off-highway applications. All gears in the unsynchronized compound transmission are of helical, constant-mesh design for dependability and long life. Four SAE 6-bolt power take-off openings are provided.

Two Spicer 4-speed auxiliary transmissions, Models 6041 and 7041, are released for both gasoline and diesel powered Tandem vehicles. Ratios are designed for good performance during on and off-highway or mountainous operation. Both units offer constant-mesh gearing with engagement being accomplished through sliding hubs splined to the mainshaft. Case and cover construction is of cast iron while the mainshaft, countershaft, and all gears are precision-machined of alloy steel, carburized and hardened for prolonged durability. Larger gear face widths and higher capacity bearings differentiate heavy-duty Model 7041 from the 6041 unit. Power take-off openings are provided on both sides of the heavy-duty auxiliary and on the right hand side only of the lighter unit.

CHEVY-VAN

EL CAMINO

MODEL IDENTIFICATION

Carried on the front doors, the 1966 Chevy-Van nameplate incorporates the vehicle name and Chevrolet emblem for ready identification. Both satin and bright chrome finishes are used for the plates, which are highlighted with black paint fill for the depressed lettering and ornamental border and blue paint fill for the depressed emblem field. Further interest is achieved with the dual-planed front face.

STYLING AND BODY

PRODUCTION INTERIOR

In addition to new nameplates, Chevy-Van models feature new exterior colors which are identical to those of regular Chevrolet trucks, new seat trims, new standard equipment items such as seat belts, and new interior colors which are keyed to the exterior colors.

NEW COLOR-KEYED INTERIORS. Four different interior colors keyed to the exterior colors are featured for the Chevy-Van. Formerly, only one interior color — Fawn — was released for use with all exterior colors. In addition to Fawn, which is continued, new Red, Green, and Turquoise interior colors are available. Color-keying is as follows: Fawn is used with Dark Blue, Light Blue, Orange, Dark Yellow, Saddle, and Black exteriors; Red is used with Red, White, Off-White, and Gray exteriors; Green is used with Dark Green and Light Green exteriors; and Turquoise is used with Turquoise, Dark Aqua, and Silver exteriors.

All four interior colors are used not only for the body panels, instrument panel, engine housing, and doors, but also for the seat trim, seat belts, armrests, and roof panel headlining. Sunshade color is changed in 1966 from Fawn to White and steering wheel color is changed from Fawn to Charcoal. Black floor mats are continued.

NEW PRODUCTION SEAT TRIM. The new all-vinyl seat trim released for the Chevy-Van is similar in design to that for regular Chevrolet models. Textured vinyl is employed for both coverings and facings, but different texture patterns are used for each; additionally, coverings are distinctively embossed. Trim colors - Fawn, Red, Green, and Turquoise - are keyed to the interior color, with the same color used for both facings and coverings. Illustrated are the driver's seat and the RPO stationary passenger seat.

NEW SPECIAL BODY FEATURES. The following special feature items are released as base equipment for the 1966 Chevy-Van: Driver's seat belt unit; 2-speed electric windshield wipers with matte-finished chrome parts to replace the existent single-speed units; windshield washers; and back-up lamps.

Additionally, non-gloss paint is utilized for the instrument panel and related components such Dispatch Box Door, Defroster Outlets, Radio Cover Plate, and Ash Tray Face Plate. Color value of the non-gloss paint is darker than the main interior color with Dark Red used for Red interiors, Dark Fawn for Fawn interiors, and Dark Green for Green and Turqoise interiors.

CUSTOM EQUIPMENT (RPO Z60) is continued generally unchanged except for new seat trim, new seat trim colors, and a new 2-tone treatment for the front door access panel, as shown on the opposite page.

Custom seat styling is unique to the Chevy-Van. Seat trim materials, comprised of textured vinyl facings and bolsters and woven cloth coverings, are identical to those used for regular truck Custom seats. New Fawn, Red, Green, and Turquoise trim

colors are utilized, however, to achieve keying with the new interior body colors. One color is used for the entire seat trim.

For 1966, the Custom steering wheel is painted Charcoal in all applications, and the raised border surrounding the depressed area of the front door access panel is painted Off-White.

OTHER OPTIONAL EQUIPMENT CHANGES. Seat options for the Chevy-Van — RPO A57, One-Passenger Auxiliary Seat (folding-type), and RPO A61, Stationary Auxiliary Seat — feature newly-styled trim which is identical in design and color to either the standard or RPO Z60 Custom interior. Additionally, seat belts are released as a part of the Chevy-Van auxiliary seat options. Belts with optional seats match the base unit provided with the driver's seat. Due to the release of belt units with optional seats as well as the standard seat, accessory seat belts are discontinued. Also discontinued is RPO A62, Less Front Seat Belt Equipment. The mounting of the painted Junior West-Coast outside rear view mirror, which is available both as an RPO and as an accessory, is revised in 1966 to obtain an adjustment feature which permits the mirror head to be pivoted away from its normal position for clearance in close-quarter situations. The adjustment is non-lockable. Appearance, of course, is affected.

Accessory 14-inch wheel trim covers for use with optional 14-inch wheels are newly-styled in 1966. The covers are identical to those used for the full-size 1966 Chevrolet passenger car. (Thirteen-inch units, changed in mid-season 1965, are carried forward.)

Defrosters for both RPO C42 and accessory Deluxe heaters are revised for improved heat distribution over the windshield glass with the release of a new distributor assembly, new defroster hoses which replace the former metal duct assembly, and new outlet grilles.

Receiver assemblies for both RPO U60 and accessory manual radios are revised for improved durability with the use of silicon rather than germanium transistors. The silicon material has the advantage of greater reliability than the former germanium material, affording the aforementioned durability increase.

A black vinyl, envelope-type litter container measuring 7 by 11 inches is released as an accessory for the Chevy-Van. Attachment is to the lower flange of the instrument panel. The Chevrolet emblem appears on the pull-open tab.

RPO C14, 2-Speed Windshield Wiper and Washer Equipment, is discontinued due to the release of this equipment as a base item. Accessory windshield washers and accessory ventshades also are discontinued.

CUSTOM INTERIOR

ENGINES AND CHASSIS

The 194 cubic inch displacement 6-cylinder engine, introduced in mid-season 1965 to replace the 153 L-4 unit, is continued as the standard component for the Chevy-Van. The availability of the optional 230 L-6 engine also is continued.

A new, optional Air Injection Reactor System is available for base and optional engines when the vehicle is destined for use in the State of California. This optional system is identical to that available for the Conventional 1/2-ton models.

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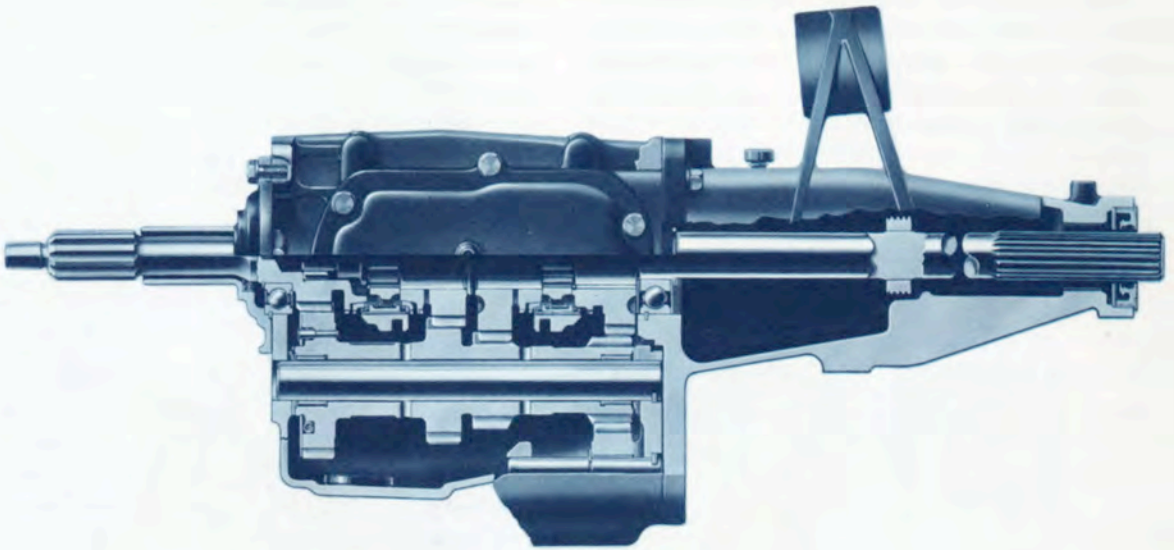
The Series G10 chassis design is basically carried over from the previous year with no changes in front or rear suspensions, springs, shock absorbers, or steering systems. However, a completely new standard transmission and several component refinements contribute to a continuing program of product improvement.



THE NEW 3-SPEED TRANSMISSION is fully-synchronized in all forward gears and features greater versatility, durability, and capacity as well as quieter operation. It is provided as standard equipment on the G10 models, and is identical to the unit used on the 1966 Chevrolet passenger cars except for the extension and controls.

Wider, constant-mesh, helical gears are engaged quietly through either of two sliding clutches. The synchronized first gear increases overall flexibility of performance while promoting easier shifting. The greater gear section sizes, larger mainshaft bearings, and the absence of sliding gears all combine for improved durability.

Transmission controls are designed to suit the G10 installation. Gear selection again is performed by a remote control gearshift lever mounted on the steering column. A special mounting boss on the extension housing of the truck version differentiates it from the passenger car design.

IMPROVED REAR AXLE VENTING. A new rear axle venting system is provided to reduce lubricant contamination. A rubber hose is routed directly from the vent fitting into the adjacent underbody frame box-section for maximum protection.

IMPROVED UNIVERSAL JOINTS. The driveline is revised to include permanently-sealed universal joints, which require no periodic service under normal operating conditions. A tapered projection of the new bearing housing fits into the rubber U-shape of the spring-loaded, steel-backed seal which is press-fitted on the trunnion shoulder. Skewing is minimized through the use of a nylon ring between the roller bearings and the base of the trunnion boss.

NEW TIRE SIDEWALL DESIGN. All white sidewall tire options feature new whitewall styling 0.60 inches wide.

INTERIM '65 CHANGES

Indicative of dynamic engineering progress are the major interim 1965 changes to the Chevy-Van reported below. All changes are continued for the 1966 model year.

BODY. Increased air flow for improved engine cooling results from widening the existent radiator grille openings in the Chevy-Van body front end panel three inches each and adding two new openings in the sheet metal directly below the existent openings.

Vibration-free retention of Chevy-Van sunshade units is assured with windshield header-mounted support clips for retaining the inboard ends of the shades. The pivoting feature is retained since the shades may be removed from the clips.

Thirteen new 2-tone exterior paint options are released for the Chevy-Van, extending to 28 the number of available exterior color combinations. All exterior colors except Off-White and White are used as the main exterior color with Off-White used as the secondary color between the roof and belt line. Wheels are painted the main body color.

ACCESSORIES. The 13-inch stainless steel wheel trim covers for Series G10, which are identical to the covers used for the 1964 Corvair 500 passenger car, are cancelled and replaced with the 1965 Corvair 500 units.

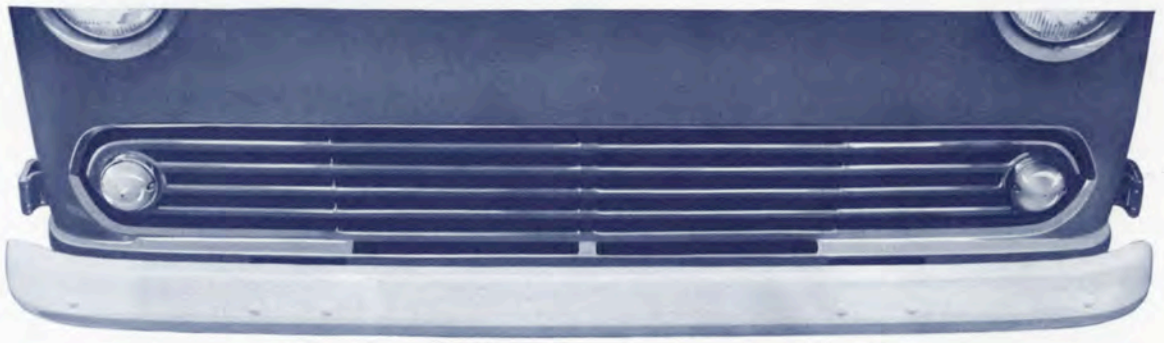
Accessory line-up is expanded with a new stainless steel Junior West Coast outside rear view mirror identical to that released for regular Series 10-30 models. New Front Bumper Guards with either a painted or chrome-plated finish also are introduced.

ENGINE. The 194 cubic inch displacement L-6 engine replaces the 153 cubic inch displacement L-4 engine as base equipment on the Chevy-Van for increased power output. The 194 engine is rated at 120 gross horsepower and at 177 pound-feet gross torque.

FRONT SUSPENSION. Improved vehicle stability during hard brake stops is achieved for Series G10 models with the use of a higher-rate spring eye bushing for the left hand front spring. To this same purpose, the king pin roller thrust bearings are replaced with washer-type bearings.

BRAKES. Component changes, both front and rear, achieve improved brake balance and performance. Wheel cylinder diameters are revised from 1.0625 to 1.125 inches in the front assemblies and from 0.875 to 0.8125 inch at the rear. Also, the availability of the base equipment 2-inch lining width is extended to include the optional 2900 pound rear axle; formerly, this axle option required a 2.5-inch lining width. All other design features of the G10 braking system remain unchanged.

WHEELS AND TIRES. Low-profile 13 and 14-inch passenger-type tires are released as base and optional equipment for the G10 truck. Reduced loaded radii produce lower silhouettes, while larger section widths result in increased load capacity ratings. (The new tires are available with either 2 or 4-ply actual construction and are industry-rated at 4 and 8-ply, respectively.) Size designations are unchanged except for the 6-ply tires which are increased to an 8-ply rating. While the 14-inch truck type tires remain unchanged, a new 14x6.0J wheel replaces the formerly used 14x5.0J unit in accordance with industry standards.



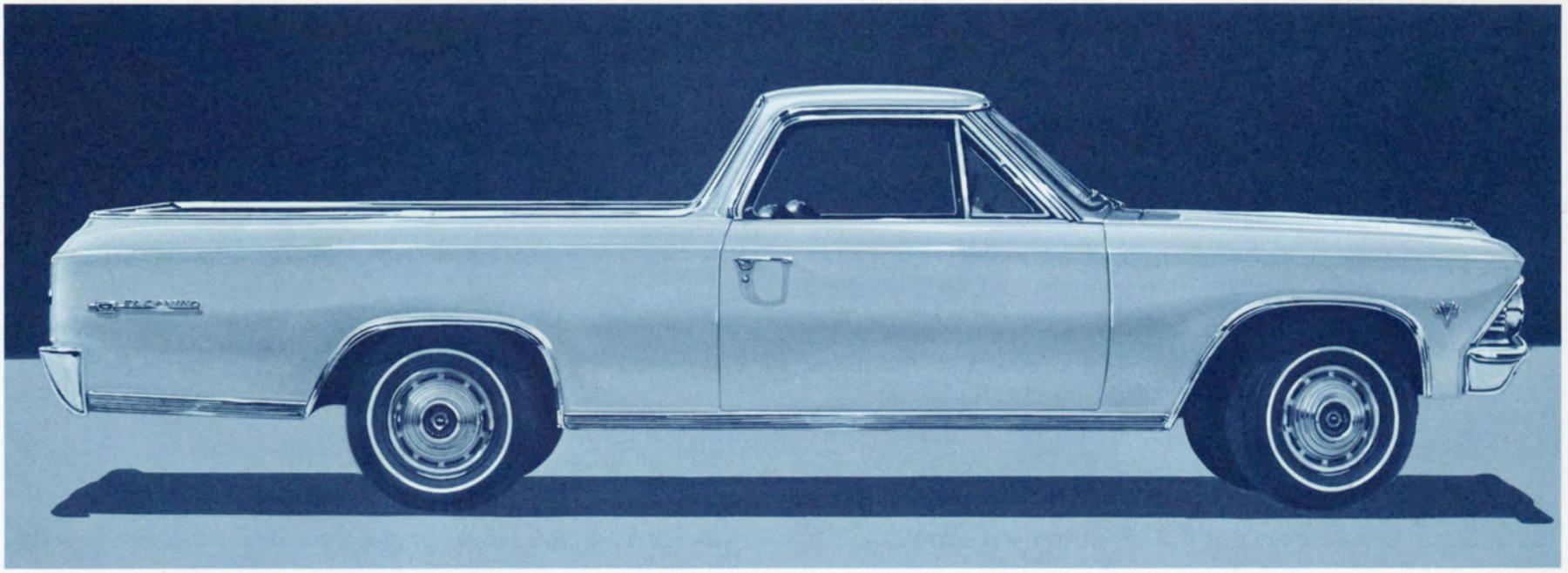
CHEVY-VAN RADIATOR GRILLE OPENINGS

EL CAMINO

STYLING AND BODY

Though El Camino basic body structure is retained, all body outer panels below the belt line except the tailgate outer panel are restyled for 1966. These changes combine with restyled front end sheet metal and major ornamentation to effect a totally new exterior appearance for all 1966 El Caminos.

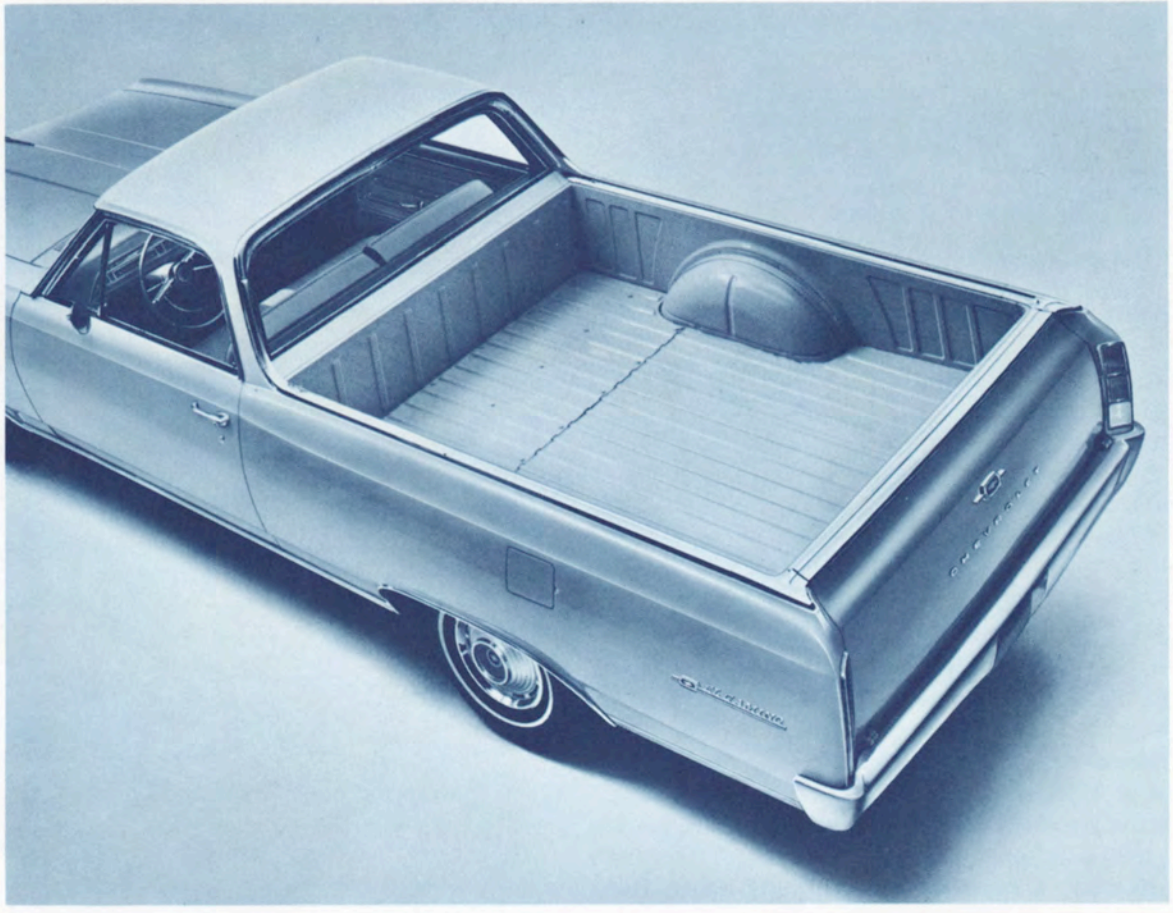
EXTERIOR STYLING. Front appearance is distinctive with a new radiator grille, restyled hood, new front bumper, and restyled fenders. The grille features wrap-around styling and a central emblem carrying the name "El Camino"; dual headlight treatment is retained. Combination parking and direction signal lights remain located in the front bumper. Custom El Camino models feature a new bright hood windsplit ornament, as shown.



The side view is enhanced with the restyled fender profile, door outer panel, and pickup box side panel. New hub caps (or optional wheel trim covers, as shown), a new nameplate at the rear of the pickup box side panel, and new wheel opening moldings are featured for all models. As shown, Custom models are distinguished by a new sill molding and a new lower rear quarter panel molding; both moldings are ribbed and carry Black paint fill. A narrow molding extending the length of the vehicle below the crease line is used for standard models. Engine identification on the front fenders forward of the wheel openings again is afforded with emblems for all V-8's and the optional L-6; the emblem for the new 396 cu.in. engine is new; all other emblems are carried forward, except no numerals are used with the 283 cu.in. engine emblem.

Styling highlights at the rear include a new bumper and new vertical tail lights. Backup lamps, relocated from the rear bumper, are integral with the tail light assemblies. Tailgate ornamentation again is comprised of Chevrolet lettering and a new decorative emblem.

Fifteen solid exterior colors -- six of them new -- are offered in 1966. In regular applications, color choice is restricted to 12 colors, whereas a choice of 14 colors is offered for Custom models with the bucket seat RPO; three of the colors are used exclusively when Black bucket seats are stipulated.



STYLING AND BODY

INTERIOR STYLING. El Camino interiors are all-new, including the instrument panel. Featured in 1966 for both standard and Custom interiors is the use of all-vinyl seat trim, vinyl-covered instrument panel pad, and vinyl-covered, padded sunshades. Three color choices — Fawn, Red, Blue — keyed to the exterior color again are offered; tonal value of the Fawn and Blue interiors varies between standard and Custom models, and Black replaces Blue on Custom models with the bucket seat RPO.

Seats and sidewalls are all-vinyl for all models. In standard applications, the embossed sidewall features a bright 300 Deluxe emblem and an armrest with bright base. Seat trim is comprised of textured vinyl and pattern vinyl with textured vinyl used for facings, center panels, and side panels and pattern vinyl used for cushion and backrest inserts.

The sidewall in Custom applications is attractively embossed and highlighted with bright upper and lower moldings, a bright center area, and a die-cast center ornament. An armrest with bright base is provided. Seat trim is comprised of textured vinyl which is used for facings, center panels, and inserts. Vertical stitching decorates the cushion and backrest inserts, and the backrest inserts carry a die-cast button at the upper center.

New styling also is employed for bucket seat RPO A51 released for Custom models. Seat trim consists of textured vinyl which is used for facings, side panels, and inserts. Both cushion and backrest inserts are vertically stitched, and a die-cast button decorates the backrest insert. The new bucket seat is further distinguished with painted, textured-metal base and back panels enhanced with bright moldings. As in 1965, a textured vinyl spare wheel and

STANDARD SEAT TRIM

CUSTOM SEAT TRIM

tire cover is included; wheel trim covers are deleted from the RPO in 1966.

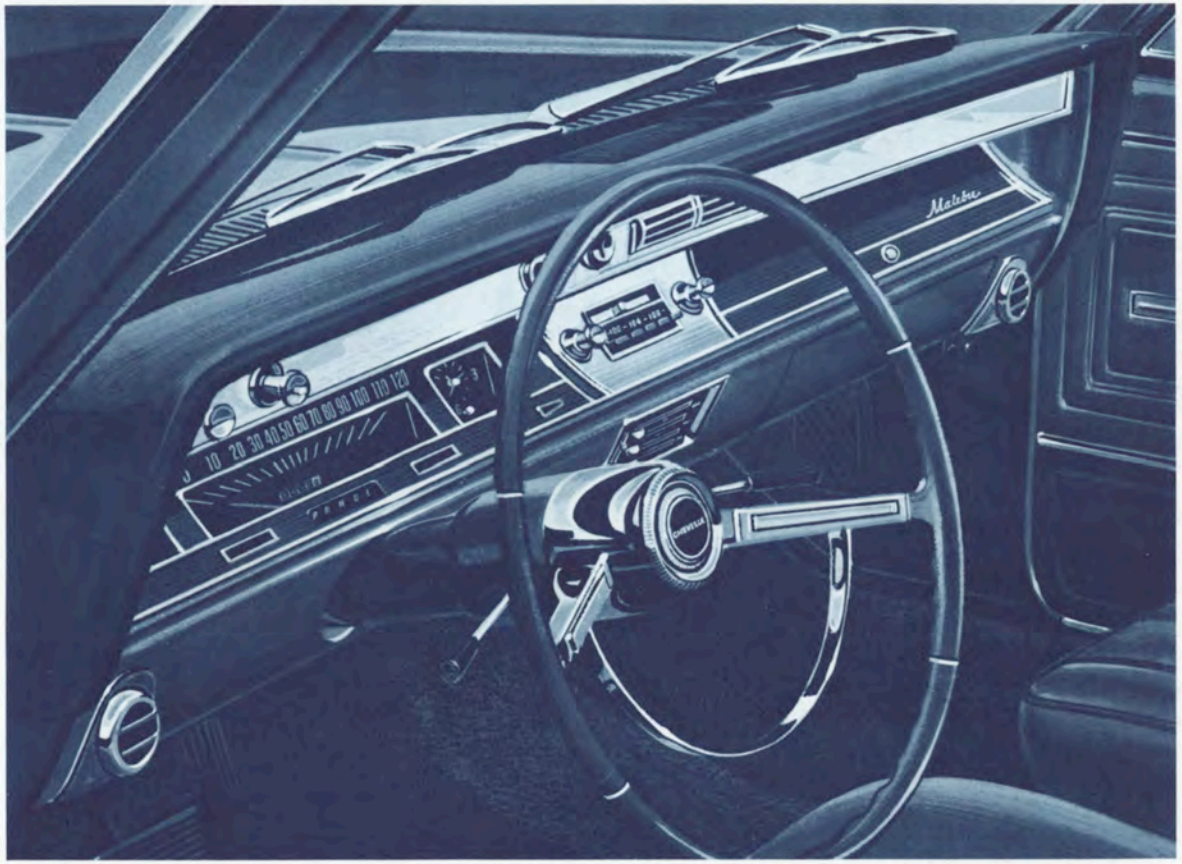
The bright center floor console for Model 13680, formerly included in the 4-speed transmission option but now available separately as RPO D55, is new for 1966; featured are a stowage compartment with a side-hinged lid and a clock. RPO D55 is available only with RPO A51, Bucket Seats, and either the Heavy-Duty 3-Speed, 4-Speed, or Powerglide transmission options.

The new instrument panel features a full-width central recess containing the instrument cluster and radio provision. Bright control knobs, ignition switch, and cigarette lighter are located on the panel above the recess. The ignition switch is new and incorporates a push-turn gate to prevent accidental turning to the accessory position. Panel area below the recess carries the glove box door, ash tray, and heater provision.

The instrument cluster conveniently groups all instruments and warning lamps. Integral with the cluster is the shift quadrant for the RPO Powerglide transmission and the clock for Custom models.

Further distinguishing Custom models, as shown, is a black plastic insert for the right hand side of the central recess; carried on the insert is the word "Malibu" in bright script. A trim molding with a Black crinkled finish decorates the panel area above the recess. Ornamentation for standard models consists of a bright strip molding along the lower edge of the panel area above the recess. The instrument panel crown of all models is padded.

The steering wheel assembly is new, including the hub emblem and half-circle chrome horn ring; 2-toning, formerly utilized in Custom applications only, is discontinued.



NEW INSTRUMENT PANEL STYLING

STYLING AND BODY

BODY STRUCTURE. In addition to the new instrument panel, outer body panels below the belt line are new. Front end sheet metal also is new, including a more rigid inner fender skirt to minimize road splash in the engine compartment. Featured for the body structure is a new pressure relief system comprised of two one-way valves at the bottom of the cab rear panel. The valves permit air to be exhausted from the moving vehicle, affording more effective vehicle heating and lower interior noise level with windows closed.

Door locks are improved for increased effectiveness; by adding a flange and extending the lock fork nose, locks are prevented from peeling of the strikers under severe load conditions.

Custom models feature positive sunshade retention with the incorporation of a hook-up to the inside rear view mirror bracket.

New 3-lever, horizontal action heater controls are located at the center of the instrument panel, providing improved accessibility and readability. Refinements to the heater system improve defrosting time and windshield defrosting pattern.

A number of special feature items are released as standard equipment. These are comprised of the following: Left hand outside rear view mirror; shatterproof glass for existent inside rear view mirror; instrument panel pad; padded sunshades; 2-speed electric windshield wipers with matte-finished chrome parts to replace existent single-speed units; windshield washers; thicker laminate for windshield glass; and backup lamps.

OPTIONAL EQUIPMENT. Body options and accessories for the El Camino are in general carried forward from 1965 except for necessary modifications to match the new styling and trim colors. Several carry-over items incorporate major revisions, however, and several items are added to or deleted from the line-up.

RPO BUCKET SEAT

New for 1966 is RPO A81, Headrest; RPO U14, Instrument Panel Gauge, RPO D55, Console Equipment; and RPO V74, Traffic Hazard Lamp Switch and Flasher. Discontinued options include: RPO U60, Manual Radio; RPO B70, Instrument Panel Pad; and RPO A62, Less Front Seat Belt Equipment.

Though continued, the following options are revised for 1966: Custom Deluxe Seat Belts (RPO A49) incorporate a new push-button release; Bucket Seats (RPO A51) are completely restyled; Wheel Trim Covers (RPO P01) also are restyled; the All-Weather Air Conditioner (RPO C60) utilizes new controls; and Comfort and Convenience Equipment (RPO Z01) is revised to exclude Backup Lamps, L.H. Outside Rear View Mirror, and 2-Speed Windshield Wipers and Washers through release of these items as base equipment. Also, the Prismatic Inside Rear View Mirror included in RPO Z01 features cemented-in glass.

New to the accessory line-up is a Remote Controlled Spot Lamp, an instrument panel-mounted Litter Container, and a Hood Crown Molding for Models 133-13480. Seat Belts, Rain Deflectors, and Backup Lamps are discontinued. Other accessories are carried forward without major change.

ENGINE	APPLICATION	CARB.	COMP. RATIO	GROSS		NET	
				HP-RPM	TORQUE-RPM	HP-RPM	TORQUE-RPM
194 L-6	STD: Models 133-13580	1-Bbl.	8.50	120 @ 4400	177 @ 2400	95 @ 4000	155 @ 2000
230 L-6	OPT: Models 133-13580	1-Bbl.	8.50	140 @ 4400	220 @ 1600	120 @ 3600	205 @ 1600
283 V-8	STD: Models 134-13680	2-Bbl.	9.25	195 @ 4800	285 @ 2400	150 @ 4400	245 @ 2400
283 V-8	OPT: Models 134-13680	4-Bbl.	9.25	220 @ 4800	295 @ 3200	(Not rated)	(Not rated)
327 V-8	OPT: Models 134-13680	4-Bbl.	10.50	275 @ 4800	355 @ 3200	(Not rated)	(Not rated)
396 V-8	OPT: Models 134-13680	4-Bbl.	10.25	325 @ 4800	410 @ 3200	(Not rated)	(Not rated)
396 V-8	OPT: Models 134-13680	4-Bbl.	10.25	360 @ 5200	420 @ 3600	(Not rated)	(Not rated)

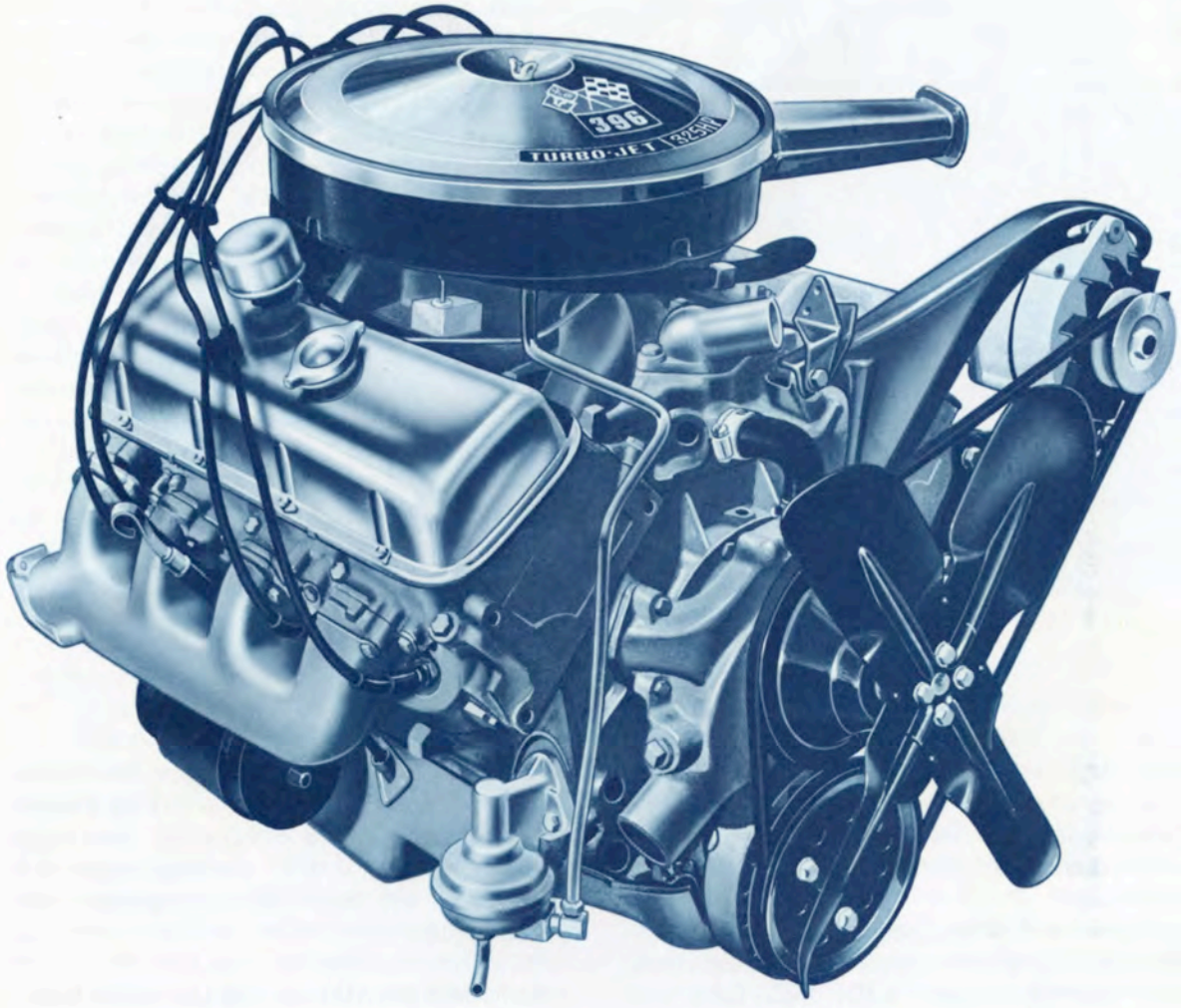
The 1966 El Camino models continue with the current design of the 194, 230, and 283 engines. However, a new 275-horsepower version of the 327 cubic inch V-8 replaces the 250-horsepower unit. The power increase is accomplished with an improved 4-barrel carburetor fuel induction system and a new distributor advance curve. The 300- and 350-horsepower 327 cubic inch V-8's are no longer available, being replaced by two new 396 cubic inch displacement V-8 engines. This new design was first introduced in mid-season 1965 on the Chevrolet passenger car. Featuring exceptional volumetric efficiency and high-speed components, this engine line is extended to the El Camino in two power ratings — the 325-horsepower engine continued from 1965 and a new 360-horsepower unit.

The new 396 engines are basically comparable to the 366 cubic inch truck versions, but with a larger 4.094-inch bore and identical 3.76-inch stroke. Basic engine structures are generally of ferrous castings and forgings.

CYLINDER BLOCK AND CRANKSHAFT. The 396 cylinder block is similar to the 366 cubic inch design except for the larger bore and different block height. The block is shorter to accommodate a 3-ring piston. The 5-main bearing crankshaft, bearings, and wide-base 2-bolt bearing caps are the same as those of the medium-duty truck engine.

CYLINDER HEADS are of the same functional design as in the 366 cubic inch displacement truck engines.

PISTONS. A strong, cast aluminum piston of autothermic slipper-skirt design is used for both engines. The piston pin bosses, with massive upper support ribs, are moved



NEW TURBO-JET 396 V-8 ENGINE

inboard, shortening the piston pin by approximately 0.25-inch. The shortened pin is reduced in weight and is much more rigid in the installed condition. Moving the pin bosses inward increases piston head strength without an appreciable weight increase. To reduce bore wear and improve compression sealing, barrel-faced top piston rings are used with a flame-blown molybdenum alloy inlay. Piston pin oiling is supplied by vertically drilled passages which intersect horizontal passages to the oil ring groove. Balance weights, cast into pin bosses, are located on either side of the piston pin, instead of below it, to provide clearance with crankshaft counter weights. The piston head utilizes an inlet valve cutout and a precision cast dome which accurately corresponds to the combustion chamber shape. The combination of slipper-skirt design, off-set piston pin, and autothermic-expansion control results in a piston with a close bore fit which runs quietly, has excellent oil and compression control, and long durability.

CONNECTING RODS. The strong 366 engine connecting rod design with long attaching bolts also is used in the 396 engines.

FUEL SYSTEM. A permanently-sealed pump of simplified design and improved durability is utilized. The extra large diaphragm provides high pump displacement which maintains uniform fuel flow to the carburetor without the need of a separate pulsator diaphragm. In addition to permitting simplification of the pump, the large displacement improves hot weather engine operation by more rapidly disposing of hot fuel vapors. A single-piece steel stamped rocker arm replaces the normal

laminated arm, and the return spring is mounted concentric with the diaphragm pull rod.

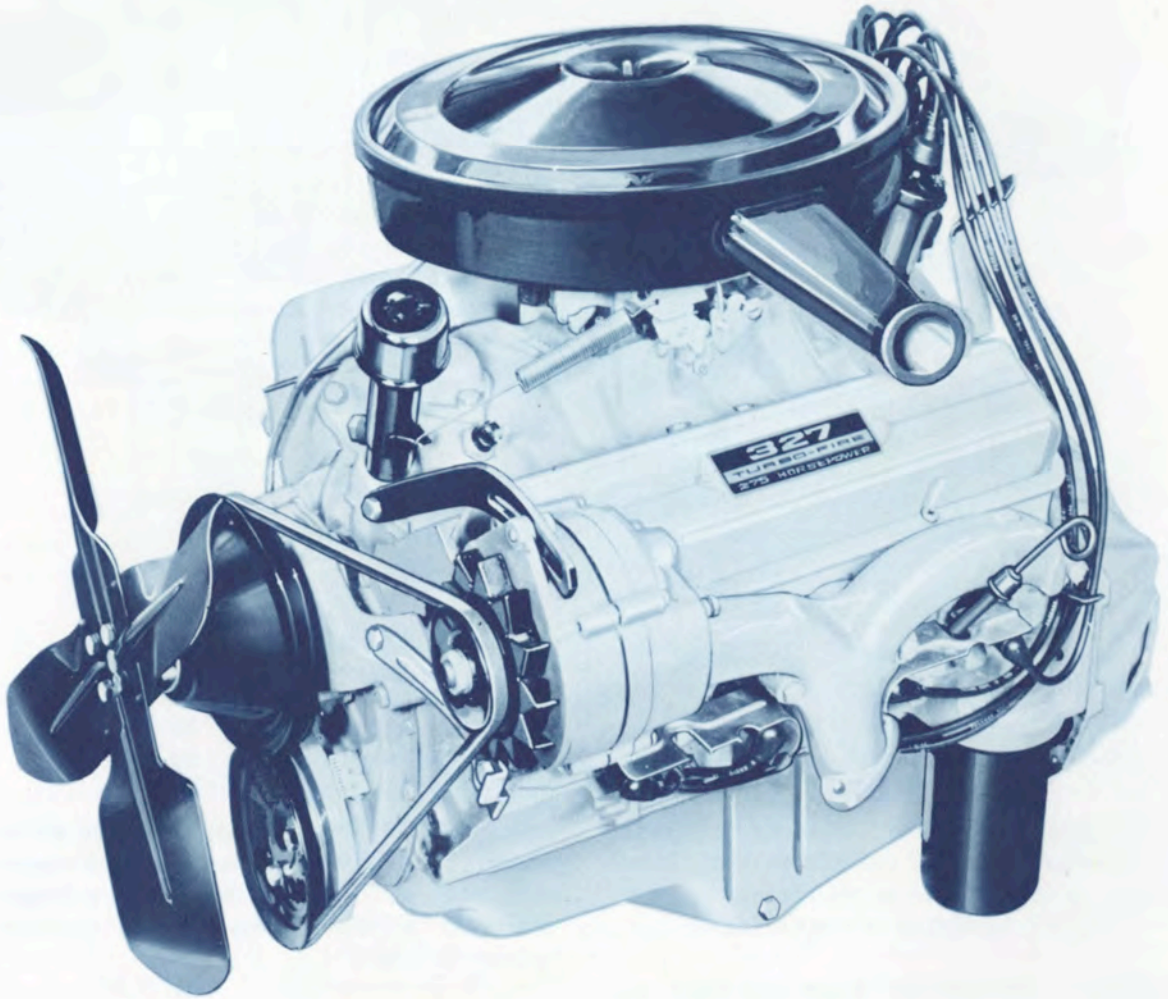
Carburetor air cleaners for Turbo-Jet 396 engines are equipped with oil-wetted paper filter elements. The 325-horsepower engine has a single air horn inlet, and the 360-horsepower unit a 360-degree air inlet.

Two distinctly different types of carburetors are used. The 325-horsepower engine uses a conventional, large 4-barrel type, utilizing venturis in both the primary and secondary barrels; the other is a new high-capacity carburetor combining the advantages of venturi-equipped primary barrels with large capacity secondary barrels which are controlled by air valves.

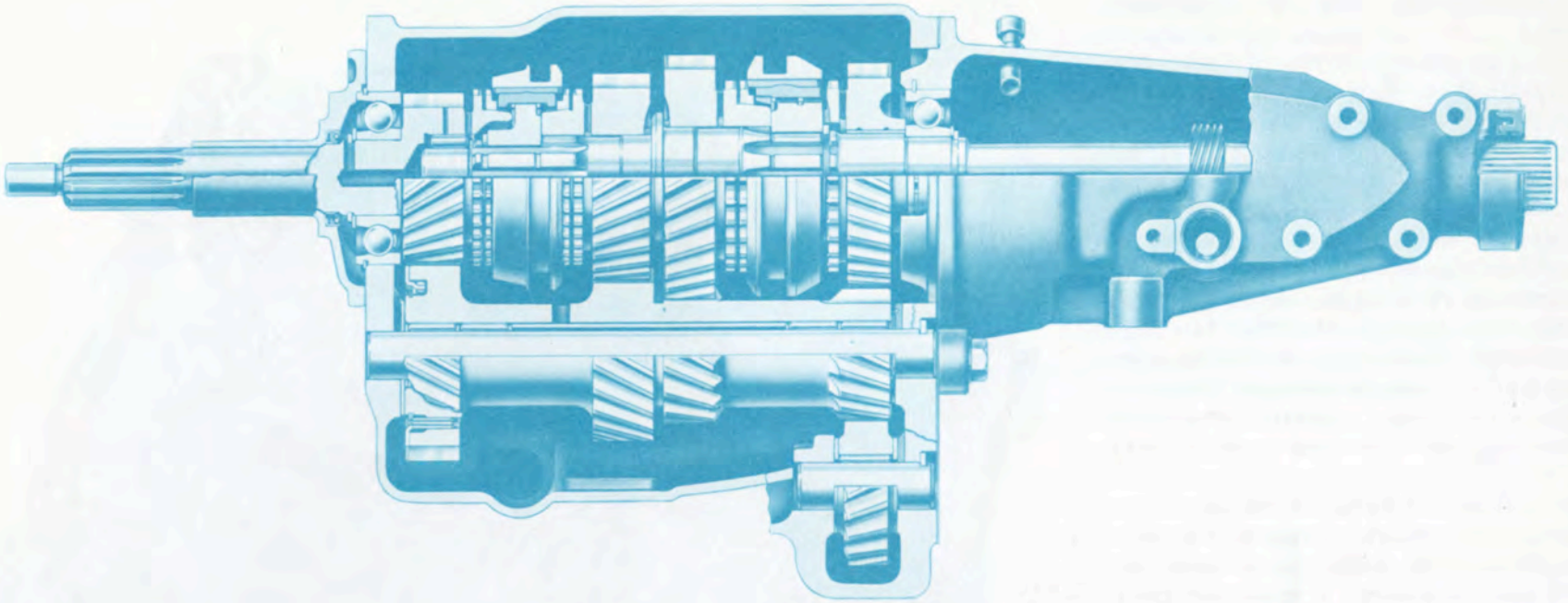
LUBRICATION SYSTEM. The full-pressure lubrication system with larger hydrostatically balanced oil pump is the same as that of the 366 engine. A one-quart full-flow oil filter is used.

COOLING SYSTEM. The cooling system is essentially the same as the 366 truck engine, but with a single thermostat outlet. The conventional tube-and-center type radiator with a 15-pound pressure cap and a 4-blade fan is used on both 396 cubic inch engines.

EXHAUST EMISSION CONTROL. Vehicles built for use in the State of California are equipped with optional exhaust emission control components which are identical in design to those used on Series 10 models.



NEW 275-HORSEPOWER TURBO-FIRE 327 V-8 ENGINE



NEW HEAVY-DUTY 3-SPEED TRANSMISSION

The basic El Camino chassis design is, in general, carried over from 1965. However, several areas of refinement improve the overall durability of the vehicle.

SHOCK ABSORBERS, front and rear, incorporate highly-finished piston rods with greater shape consistency. Quieter operation is achieved, seal wear is reduced, and the rods present greater resistance to corrosion.

THE FRONT SUSPENSION on units with the optional 396 cubic inch V-8 engine is increased in capacity with higher-rate springs and shock absorbers, an added frame reinforcement between each upper and lower control arm rear pivot, a larger diameter stabilizer, and higher capacity spherical joints.

NEW 3-SPEED TRANSMISSIONS. The base 3-speed transmission is new and features full synchronization in all forward gears as well as greater durability and quieter operation. Added to the optional transmission line-up is the fully-synchronized Warner heavy-duty 3-speed unit, which is available only with the 396 V-8 engines. Component features of the Warner design include blocker ring type synchronization, wide helical gears, large center distance, and high capacity bearings. The shift pattern and control lever locations are identical to that provided with the base 3-speed transmission.

LARGER TIRE SIZE. Larger 7.75-14-4PR tires replace the base equipment 7.35-14-4PR units, both front and rear, when the optional 396 cubic inch engine is specified. One hundred pounds per tire of additional capacity, at maximum inflation pressure, is provided. In addition, all whitewall tire options feature the new thinline styling.

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