



1965 CHEVROLET TRUCK

ENGINEERING FEATURES

CHEVROLET ENGINEERING
PRODUCT
INFORMATION DEPARTMENT

■ SEPTEMBER, 1964 ■

■ The 1965 truck line, an evolution of aggressive engineering and development programs, represents Chevrolet's greatest product diversification in vocational competence.

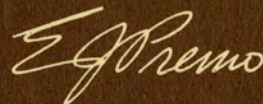
The total of 324 different models, on 24 wheelbases, represents an increase of 128 over the previous year. Most significantly, 145 of the total are diesel engine units. This includes all medium and heavy-duty, 4 and 6-wheel cab-chassis types, in compliance with the increasing popularity of diesel power. Also, diesel engine availability is extended to six, with the addition of three brand-new 4-cycle, V-6 units, and the release of the export 3-cylinder, 2-cycle model for domestic usage.

Consumer model selectivity is broadened further with the addition of five new tilt-cabs and two new forward control chassis to the medium-duty Series 50 gasoline engine group.

Optional equipment selection is expanded

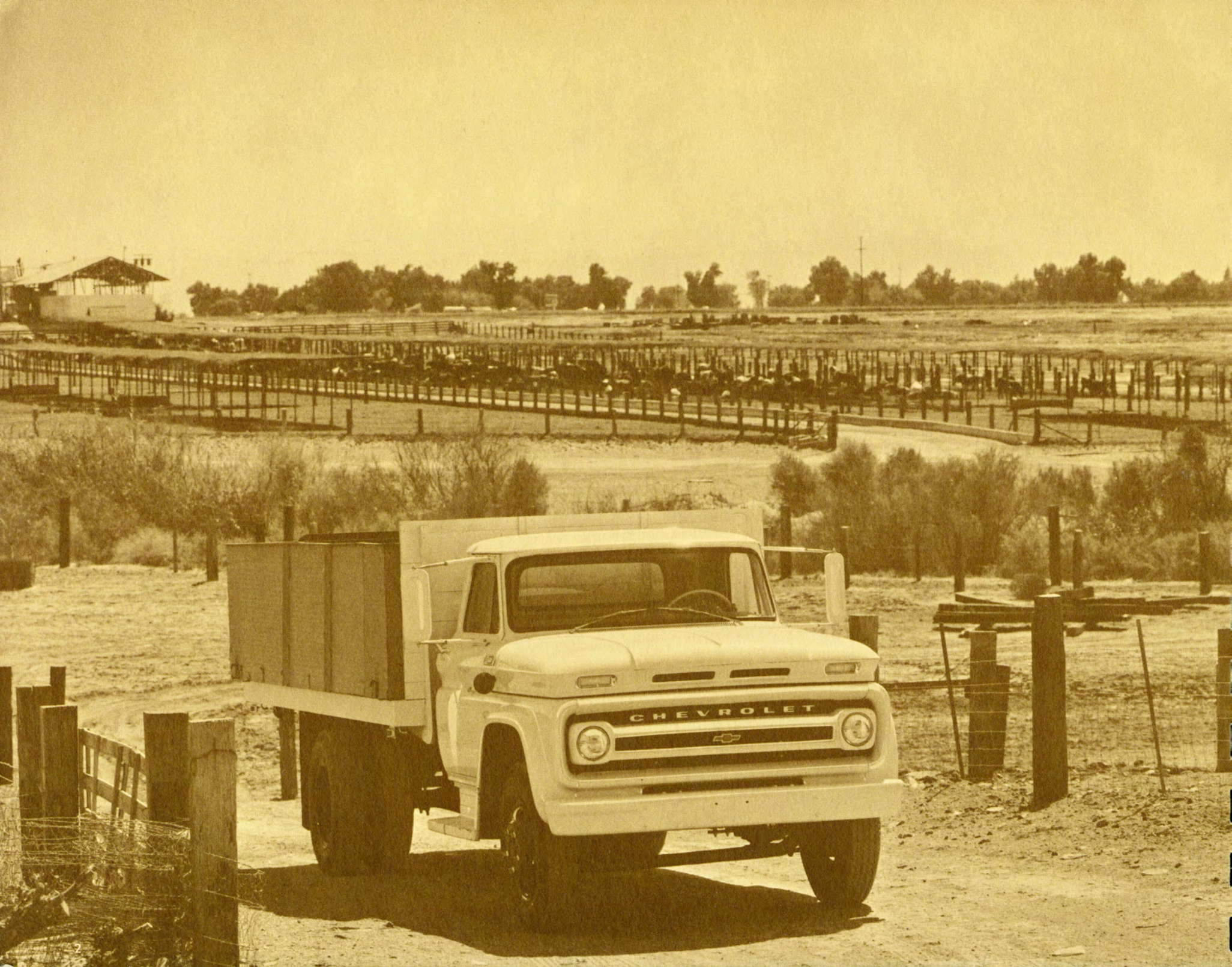
also with new rear axles, including a 13,500-pound capacity unit of Chevrolet design; new body glass equipment and auxiliary seat for the Chevy-Van; new accessories, including an auxiliary heater for Suburban Carryalls; and extended applicability of various existing optional equipment.

Additional to the many important interim improvements made in 1964, the new truck program features significant chassis, body, and engine refinements such as new synthetic rubber front wheel bearing seals for greater durability; new cab and sheet metal mounts on most Series 50-80 models for better stability; modifications to carryover diesel engines for improved performance; and the extension of the 6000-mile lubrication interval to Series 50-80 models. These and many other new features which exemplify Chevrolet's dynamic engineering policy are detailed in the following pages.



CHIEF ENGINEER

1965 CHEVROLET TRUCK ENGINEERING FEATURES



gasoline models

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model line-up

The 1965 Chevrolet gasoline-engine-powered truck line is comprised of 179 different models in 106 series, including the four passenger car-designed ElCamino sedan pickups in four series. Seven of the models are new. Discontinued for 1965 are the two models in Series R12, or the Corvair 95 Series - Model R1205, the Corvan, and Model R1254, the Rampside pickup. Wheelbases range from 90 to 261-1/2 inches. The 95-inch wheelbase of the Corvair 95 Series is, of course, discontinued, making a total of 21 carryover wheelbases.

All seven of the new gasoline engine models are added to the nominal 1-1/2 ton category, or Series 50 group; five are tilt-cab models and two are forward control chassis models. Models T5203, T5303, T5603, T5803, and T5903 are tilt-cabs with wheelbases, respectively, of 97, 109, 133, 145, and 175 inches. The forward control chassis models are Model P5742 of 157-inch wheelbase and Model P5842 of 175-inch wheelbase. All of the new models increase consumer selectivity by extending, in the case of tilt-cabs, availability down to the 1-1/2 ton category from the 2-1/2 ton category, and, in the case of forward control chassis, availability up to the 1-1/2 ton category from the 1/2-ton category.

Model designation numbers for the passenger car-designed, truck-merchandized El Camino models are new for 1965 because of changes to the passenger car model designation system. The former Models 53-5480 are now designated as Models 133-13480, whereas the former Models 55-5680 are now identified as Models 135-13680. As in 1964, odd-number prefixes (133- or 135-) denote 6-cylinder engine equipment and even-number pre-

fixes (134- or 136-) denote 8-cylinder engine equipment. El Camino models are discussed with detail in another section of this publication.

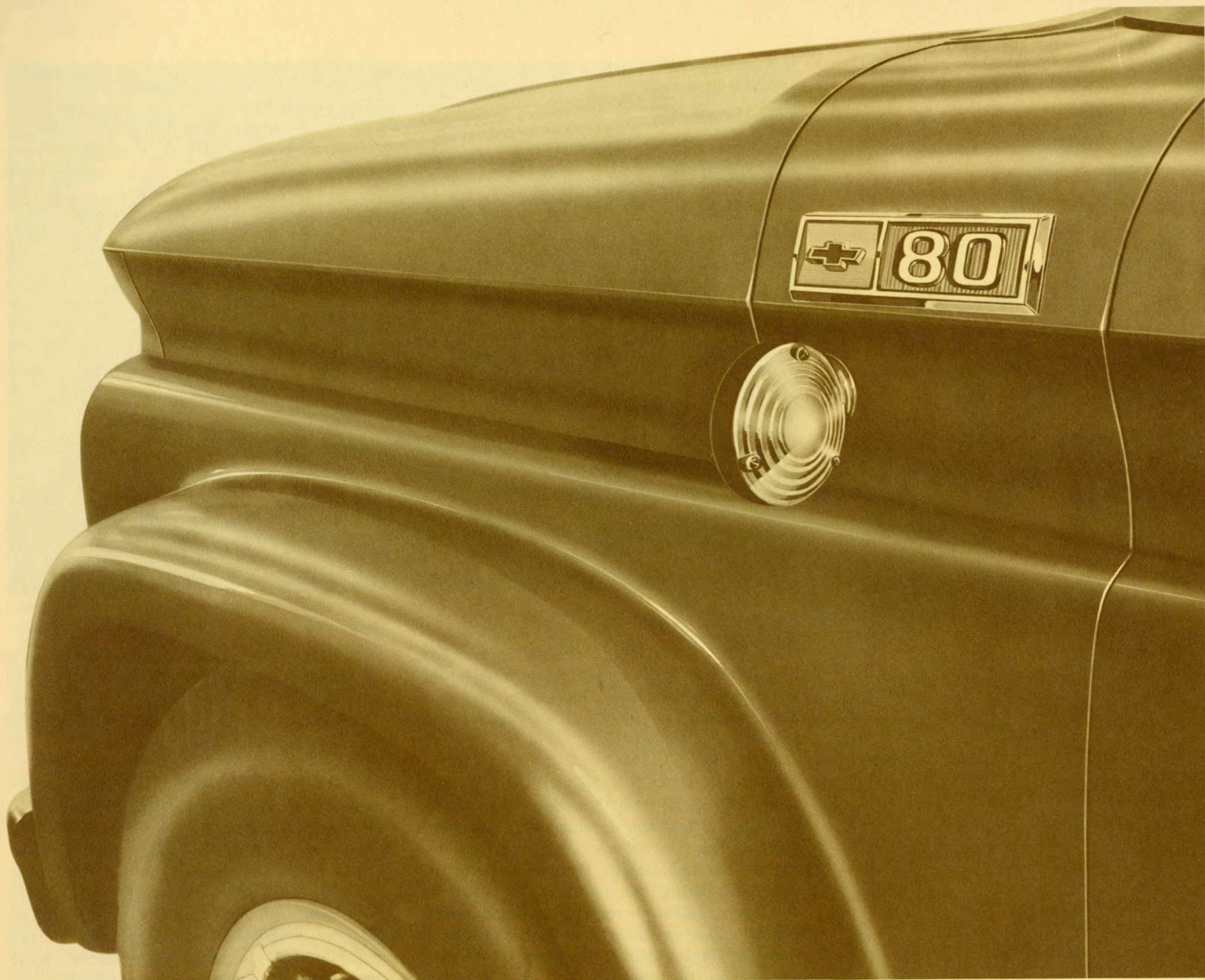
Newly-styled series designation plates are released in 1965 for all gasoline engine series except the Series P10-20-30 and Series T60-80 groups. The plates again incorporate the Chevrolet emblem and group numerals, but afford more immediate series identification through their larger size and new location on the fender upper extension. Chrome-plated in both bright and satin finishes, the plates display blue paint for the emblem field and red paint for the numeral background.

A new series designation plate also is released for the new Series T50 group. The plate consists solely of the numeral fifty in bright chrome plate and is comparable in design to those plates for carryover tilt-cab models.

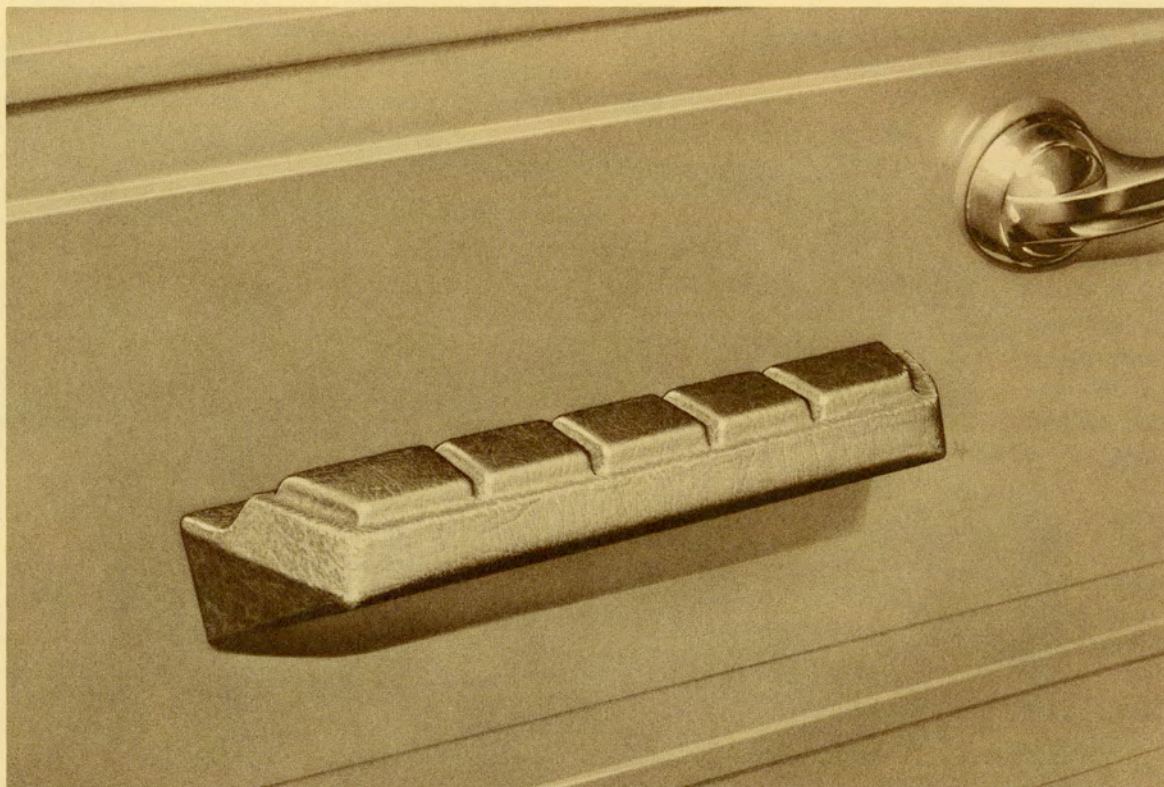
Though the Chevy-Van (Series G12) uses no series designation plate, the nameplate is carried forward from 1964. The Chevelle nameplate for El Camino models is discontinued.

Gross Vehicle Weight and Gross Combination Weight ratings are continued unchanged.

New plates designate the series group of most 1965 gasoline engine models, as illustrated.



body and accessories



Body and sheet metal design is carried forward from 1964 with only minor changes, as listed below. Body design for the new T50 models is identical to that of the existing T60 models.

EXTERIOR COLOR LINE-UP is increased from 14 to 15 with the addition of three new colors and the deletion of two former colors. The new colors are: Fawn, replacing the former Beige; Maroon, a metallic color replacing the former Gray-Green; and Light Yellow, a new color supplementing the existing shade of yellow now specified as Dark Yellow. Because of the increase in the number of solid colors

available, 2-tone color combinations are increased correspondingly from 12 to 13. Method of 2-toning remains unchanged; Chevy-Van models again are not available with 2-toned exteriors.

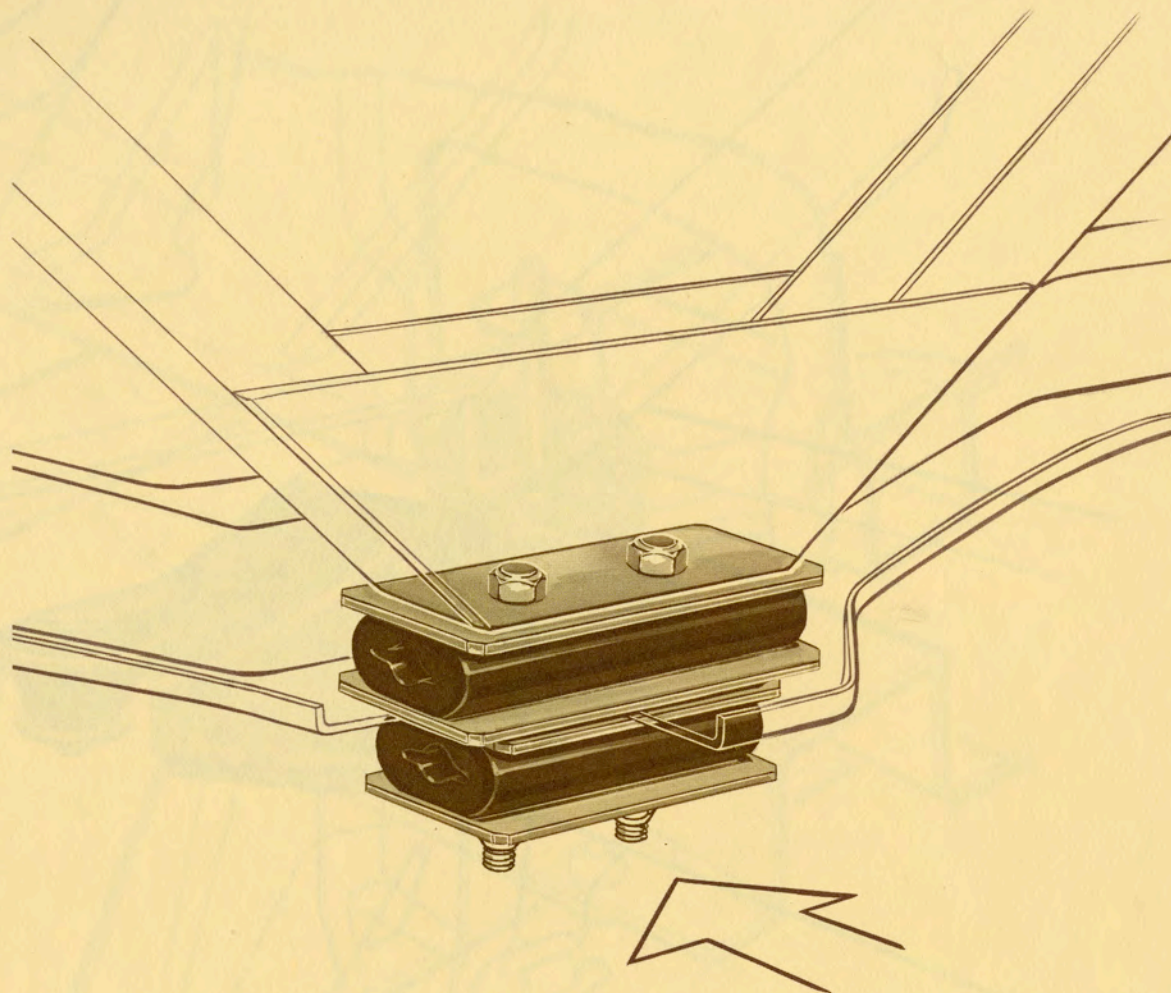
NEW-DESIGN ARMREST. A new steel-reinforced, molded polyurethane foam armrest covered with embossed vinyl is released as standard equipment for the Chevy-Van and as part of RPO's A57, A61, and Z62. It also is available as an accessory. Since the new armrest is of unitized design, a separate plastic base is not utilized as in previous applications. Vinyl color remains Medium Fawn or Red.

NEW BODY AND SHEET METAL MOUNTS.

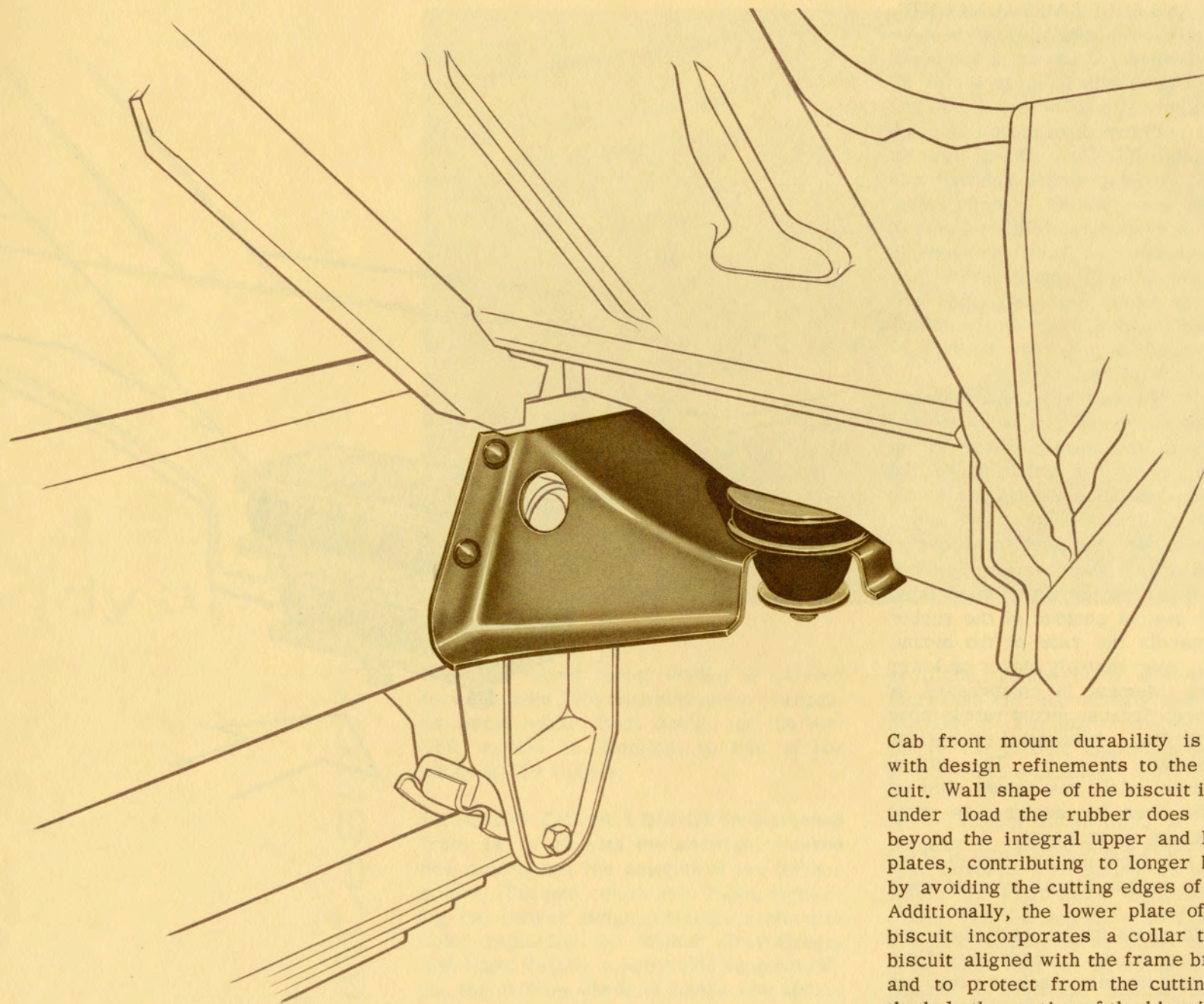
Compression-rebound mounts replace shear-type mounts for the front end sheet metal and rear of cab in most Series 50 through 80 applications for better cab and sheet metal stability throughout the range from no-load to full-load. Though type is unchanged, the compression-rebound cab front mounts are modified in some applications for increased durability not only to the mounts themselves, but also to the cab and body mounting frame brackets; the body mounting frame brackets, revised to accommodate the new mounts, are larger and of increased section, contributing further to their durability.

The new front end sheet metal compression-rebound mounts are center-mounted as in the former shear mount applications, tying the bulkhead to the frame at the centerline of the vehicle with one assembly. Both the upper and lower mount are of an unconventional design which utilizes heavy tubular rubber sandwich-bonded to top and bottom steel plates. The ovaloid contour of the rubber element controls the rate of the mount, permitting a progressively higher or lower rate as the element is compressed or decompressed. Because mount rate is more exactly controlled, sheet metal excitations are considerably lessened. The natural limits of travel of the new rubber element preclude the need for designed-in stops as in the former shear mount.

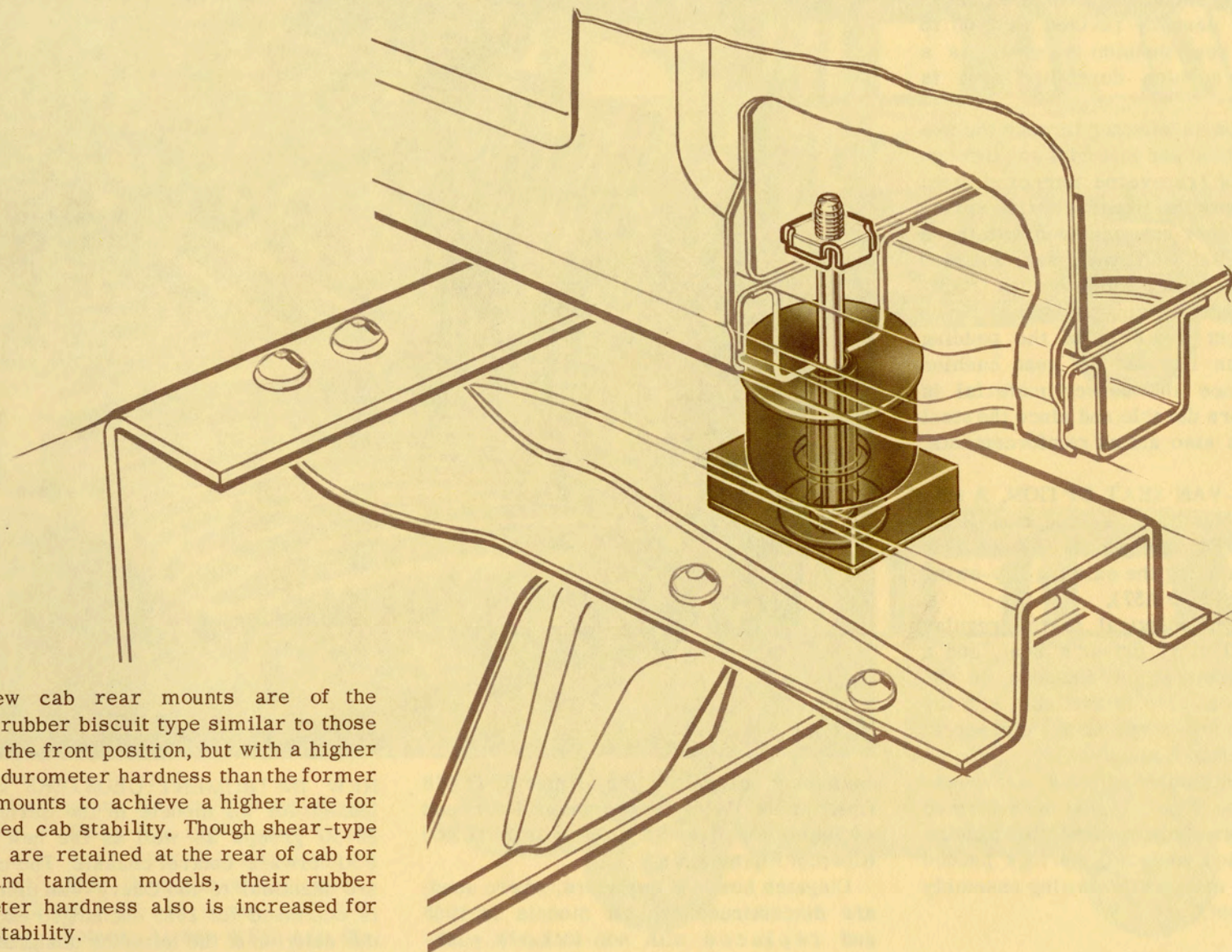
The new cab front mounts, though of the same double rubber biscuit type as their predecessors, are larger and thicker, providing a softer rate for increased body and body mounting frame bracket durability. Body mounting frame brackets, too, are larger and of increased section for added durability.



View of new sheet metal mount looking forward from rear of vehicle.



Cab front mount durability is increased with design refinements to the upper biscuit. Wall shape of the biscuit is such that under load the rubber does not extend beyond the integral upper and lower steel plates, contributing to longer biscuit life by avoiding the cutting edges of the plates. Additionally, the lower plate of the upper biscuit incorporates a collar to keep the biscuit aligned with the frame bracket hole and to protect from the cutting edges of the hole the portion of the biscuit extending through the hole.



The new cab rear mounts are of the double rubber biscuit type similar to those used at the front position, but with a higher rubber durometer hardness than the former shear mounts to achieve a higher rate for increased cab stability. Though shear-type mounts are retained at the rear of cab for LCF and tandem models, their rubber durometer hardness also is increased for added stability.

NEW SEAT CUSHION PAD. The molded polyurethane foam pad for the regular production bench seat cushion of conventional cab and pickup models and for the Chevy-Van driver's seat is revised in 1965 to give firmer seat cushion support. As a result, seat cushion durability also is increased.

The revision is effected through the use of denser cushion pad material and through the addition of transverse tempered steel support wires to the integral burlap spring cover. The higher rate achieved with these changes results in firmer seat cushion support, which is desirable to most truckers over extended driving periods.

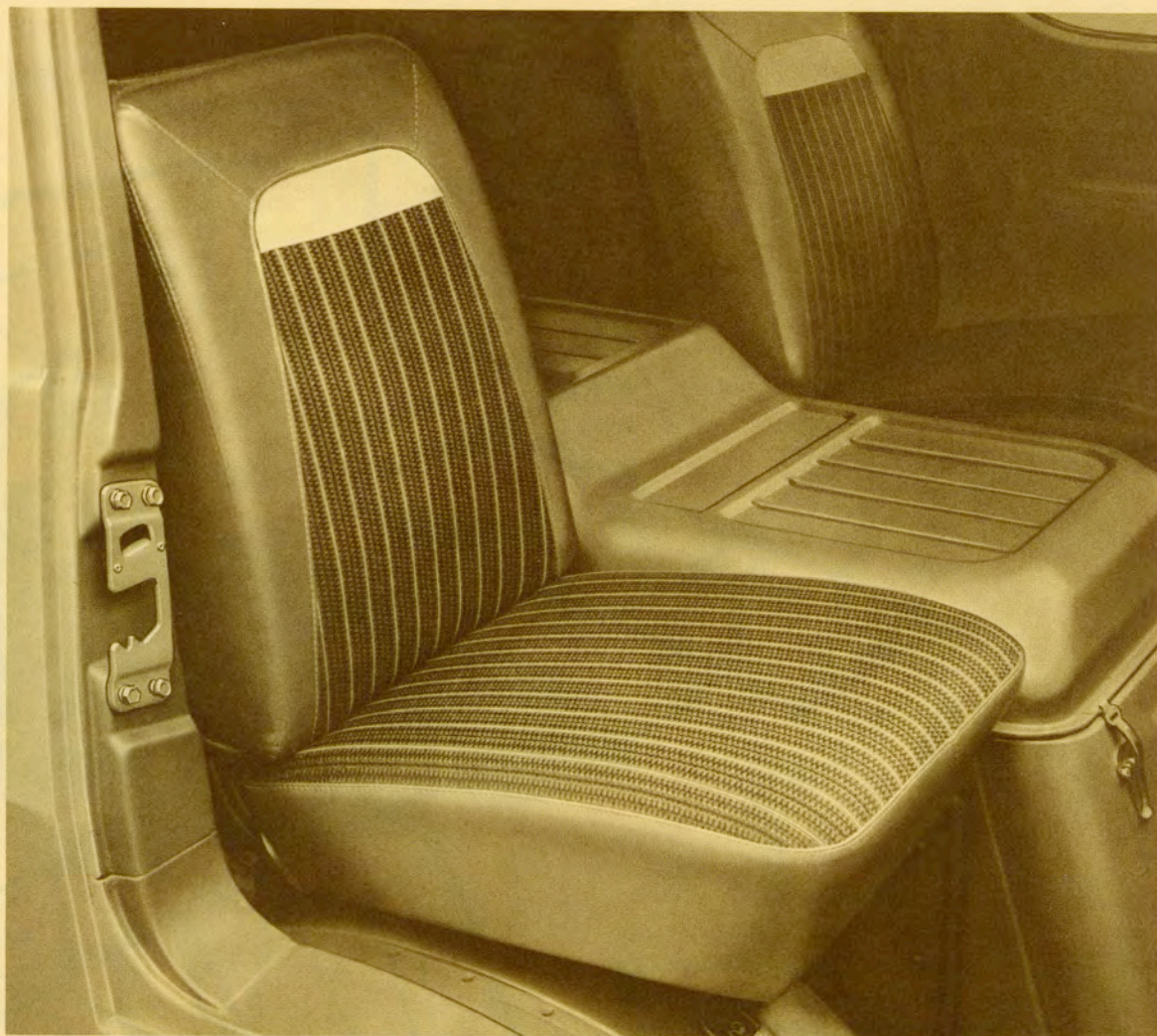
A subsequent benefit of the padding changes is an increase in seat cushion durability since the denser material is inherently more durable and since the steel support wires also act as reinforcements.

NEW CHEVY-VAN SEAT OPTION. A stationary-type auxiliary seat option (RPO A61) for the passenger is released in 1965, supplementing the existing flip-swing auxiliary seat (RPO A57).

Seat trim is identical to the regular production all-vinyl driver's seat, and a right hand armrest is included in the option. The seat also is available with the pattern cloth and vinyl trim released in RPO Z60, Custom Equipment.

Seat construction is similar to that employed for the driver's seat with formed wire springs and polyurethane foam padding for the cushion and coil springs padded with a burlap-wire-cotton batting assembly for the backrest.

DISPATCH BOX DOOR. For 1965, the Chevy-Van instrument panel dispatch box door is released as regular production



equipment, cancelling the former RPO B78 (Instrument Panel Compartment Door) and excluding the door as an item in RPO Z60 (Custom Equipment).

Dispatch box lock cylinders, where used, are discontinued for all models in 1965 and replaced with non-lockable push-buttons. Appearance of the push-button is identical to the former lock cylinder except no key slot is visible.

NEW INSTRUMENT CLUSTERS are released for all models in the Series P10-20-30 groups as well as the new Series P50 forward control chassis. The clusters are identical to the Chevy-Van unit, which is continued for 1965 unchanged except for the deletion of the lettering designating the LOCK position of the ignition switch; the LOCK position is deleted through the use of the conventional truck ignition switch.

NEW CHEVY-VAN GLASS OPTIONS. Two new optional body glass variations are afforded with new body glass RPO's for the Chevy-Van, expanding to six total body glass choice for better meeting individual vocational requirements.

The new body glass RPO's provide, in addition to the front door windows, a choice of either 10 windows all around the vehicle or four windows on the right hand side only. RPO E85, Body Side Door Equipment, is mandatory with either choice. All windows in the new options are recessed and of fixed solid safety sheet glass.

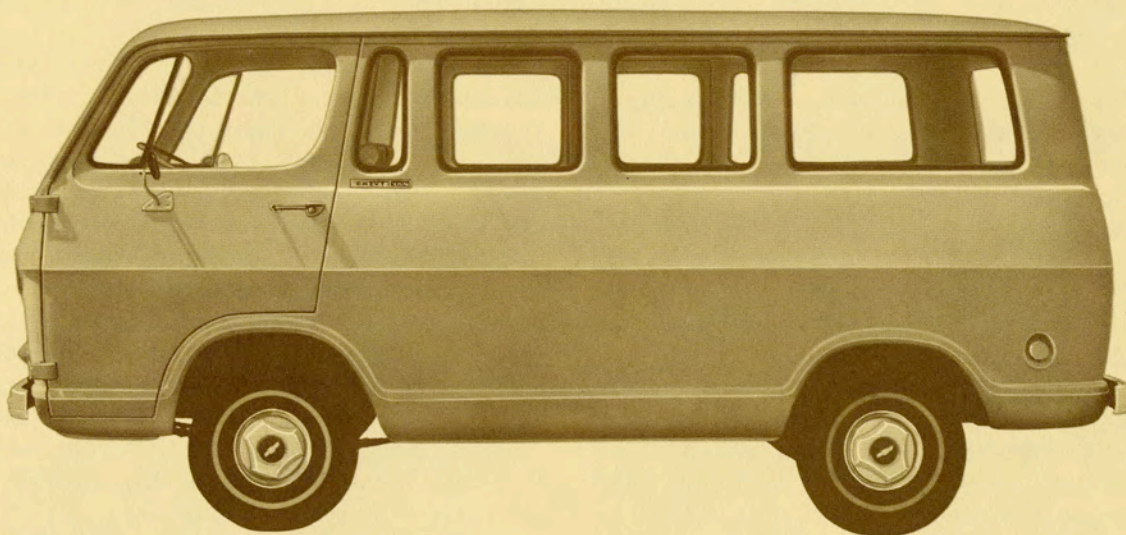
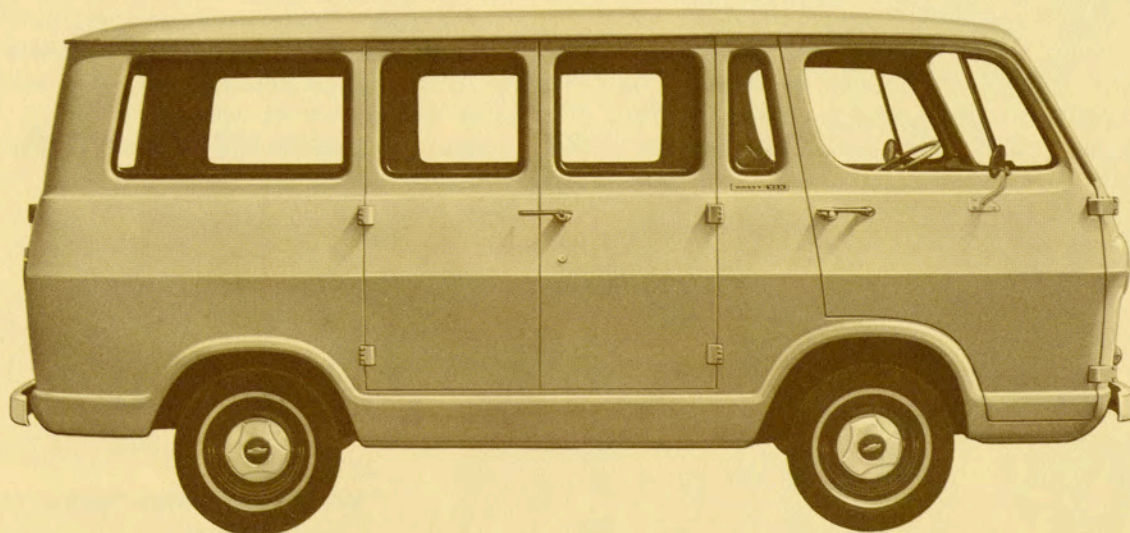
In the 10-window option (RPO A07), four windows are provided on each side of the vehicle in addition to windows for the rear doors. The left hand side windows are: Front quarter, front side, rear side, and rear quarter. The right hand side windows are: Front quarter, front side door, rear side door, and rear quarter. RPO A12, Rear Door Glass Equipment, and RPO A13, Side Door Glass Equipment, are not available, of course, with the 10-window option choice.

In the 4-window option (RPO A08) for the right hand side only, the following windows are provided: Front quarter, front side door, rear side door, and rear quarter. RPO A13, Side Door Glass Equipment, is not available, of course, with this option choice; RPO A12, Rear Door Glass Equipment, however, is available.

The following are the six RPO body glass variations available for 1965 Chevy-Vans:

- 1) RPO A12, Rear Door Glass Equipment;
- 2) RPO A13, Side Door Glass Equipment;
- 3) RPO A12 and RPO A13;
- 4) new RPO A07 (10-window choice);
- 5) new RPO A08 (4-window choice);
- 6) RPO A08 and RPO A12.

Availability of RPO's A07 and A08 is shortly after the start of 1965 production.



BODY ■

OTHER EQUIPMENT CHANGES. RPO A49 (Custom Deluxe Seat Belt Equipment) for suburban carryall models is discontinued. Applicability of RPO C14, Two-Speed Windshield Wiper and Washer Equipment, is expanded to include Series T60 and T80 models, as well as the new T50 models.

New for 1965 is RPO C60, Custom Air Conditioner, which formerly was available only as a dealer-installed accessory. RPO C60 is released for Series C10-60 models only; in all other applications, the unit remains exclusively an accessory item. Also new for 1965 is RPO V74, Traffic

Hazard Lamp Switch Equipment, which supplements the existing RPO V75, Marker Lamp and Traffic Hazard Switch Equipment. RPO V74 is released for all Series 10-30 models except Step-Vans. (Comparable equipment already exists for Step-Van models in RPO's E30, E31, and E32.)

ACCESSORIES ■

CONVENTIONAL MODELS. The dealer-installed accessory line-up for conventional models is re-aligned in 1965 with several noteworthy deletions, additions, and revisions.

Items discontinued because of low-volume sales are the Accelerator Pedal Cover, the Roof Luggage Carrier Cover for Suburbans, the Seat Cover Unit, the Safety and Emergency Unit (flare and fusees), the Double-Face Class A Directional Signals for CK10, 20,30 models, the Side Step for Fleetside Pickups, and the Custom Deluxe Seat Belt (with retractors) for Suburbans.

Several items are offered for the first time in 1965. These items consist of a Traffic Hazard Lamp Switch, which actuates all direction signals; an Illuminated Compass, which may be located to suit individual requirements through a vacuum cup attachment and which is illuminated through an integral battery and switch; a Fire Extinguisher of 5-pound capacity, which

supplements the existing 2-3/4 pound unit; an Air Horn with vacuum-operated compressor; and an Auxiliary Heater for Suburban Carryall models.

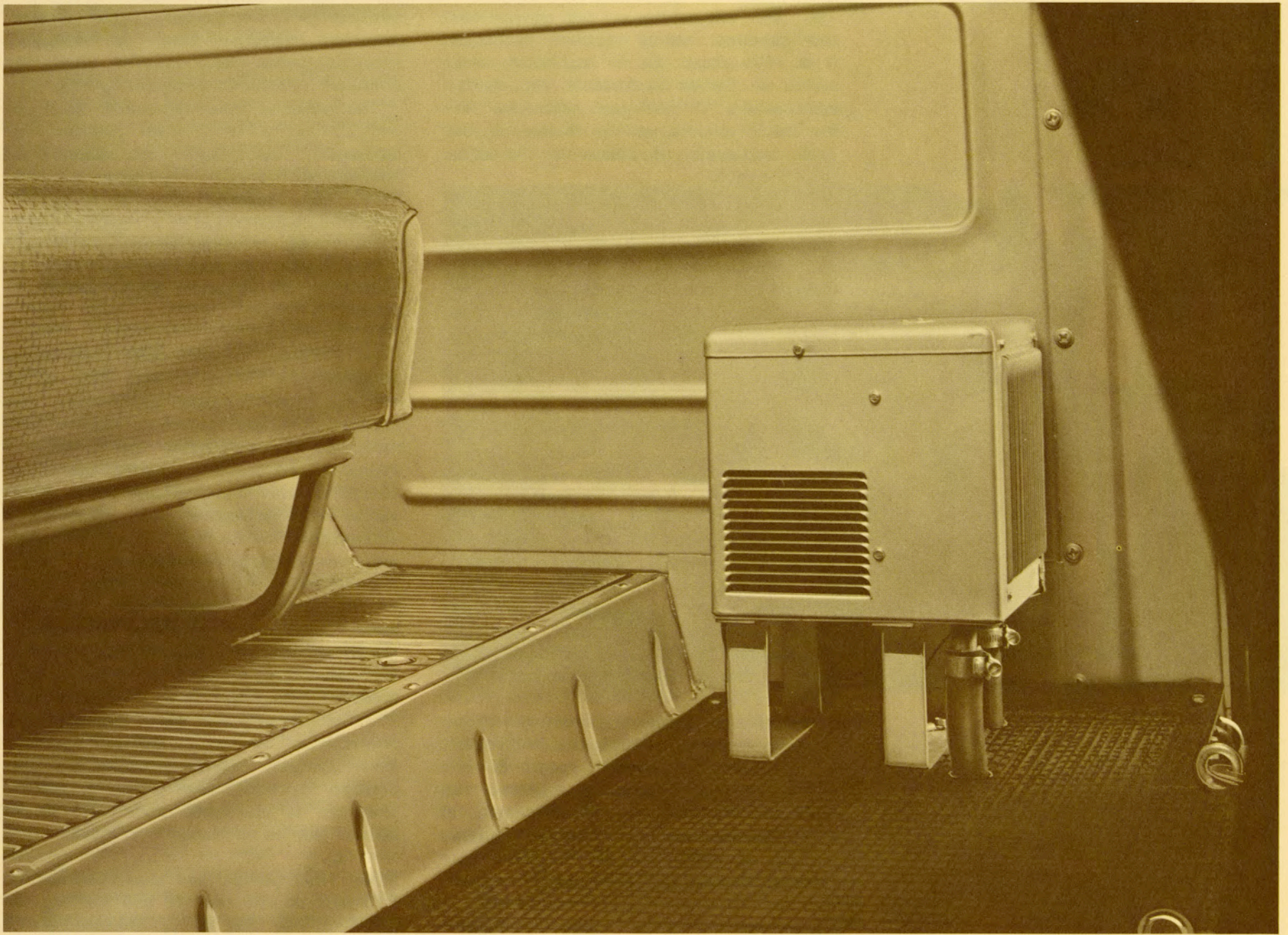
The new Auxiliary Heater is used in conjunction with either the Deluxe Heater and Defroster or the Thrift-Air Heater and Defroster. Controls of the push-pull type are mounted on the instrument panel within the vertical embossment to the left of the dispatch box door. The heater unit itself is mounted on brackets attached to the floor immediately behind the driver's seat. The unit has a maximum capacity of 12,000 BTU's and discharges heated air rearward and from the right hand side through fixed louvers, raising considerably in cold weather the comfort level of the Suburban Carryall rear compartment area.

Revised items include the Instrument Panel Clock, which now incorporates a sweep second hand; the windshield washer, which incorporates a new 2-piece valve in

the pump; the Armrests, which are of new styling and construction; the Clearance Lamps, which utilize new wiring; the Manual Radio, which incorporates a new receiver with improved audio circuitry; and the Tachometer, which is newly-calibrated and employs a new mounting.

All other accessories are carried forward from 1964 without change.

CHEVY-VAN. The accessory line-up for the Chevy-Van is slightly re-aligned with several additions and revisions. New items are the Traffic Hazard Lamp Switch and Illuminated Compass as described above. Revised items, also described above, include the Instrument Panel Clock, the Windshield Washer, and Armrest. Wheel trim Covers, which are identical to those used for the 1965 Chevrolet full-size passenger car, are newly-styled. All other Chevy-Van accessories are carried forward from 1964 without change.



SUBURBAN CARRYALL AUXILIARY HEATER

engines

The 1965 engine line-up for conventional line gasoline models remains unchanged from 1964 except for an increased power option on Series 60 models, the interim addition of a 327 cubic inch engine for Series C20,30 models, and the release of a 230 cubic inch engine to replace the 194 engine in G10 models.

The new Series P and T50 models are equipped with the 230 cubic inch engine as standard equipment, with the 292 cubic inch unit available optionally. Also, T50 models may be equipped with the optional 283 V-8.

Several important refinements and modifications throughout the engine line-up promise improvements in durability and performance characteristics. A noteworthy addition is an optional 2-stage air cleaner system for vehicle operation in extremely dusty areas.

V-8 ENGINES. A new optional 348 cubic inch, 4-barrel carburetor engine for Series 60 models provides an increase of 35 horsepower over the 2-barrel carburetor version offered in 1964 and discontinued for 1965. This unit is the same as that released for Series 80 base models.

A new distributor timer for the 348 cubic inch engine increases spark advance to maintain engine performance at maximum power. The distributor is identical with that used on the optional 409 cubic inch engine.

Durability of connecting rods in 283 and 327 cubic inch engines is improved with additional material for reinforcement of the bolt boss, and cast crankshaft pulleys replace stampings on the 292 (with air brake equipment), 327, 348, and 409 engines.

A new fuel pump having increased capacity is used on 348 and 409 cubic inch engines to reduce the possibility of vapor lock. A new 327 engine option, to be released

interim 1965 for Series C20,30 models, provides increased power for sustained highway speeds, with reserve power for mountain grades as required by campers.

The engine is a modification of the present 327 engine (RPO L30) released for Series 60. New cylinder head assemblies, common with the 283 engine for Series 50 (RPO L32), increase compression ratio to 8.35-to-1, but continue to permit the use of regular fuel. A 4-barrel carburetor with manual choke replaces the present 2-barrel carburetor to produce 220 gross horsepower.

L-6 ENGINES. A 230 cubic inch engine replaces the 194 cubic inch unit as the optional engine in Chevy-Van models. The change produces improved vehicle performance characteristics with a gain in economy. Further, operation and idling characteristics of this engine in this application are improved over the version which existed in 1964 through release of a new fuel pump and idle compensator.

Because of environment in this vehicle and the attendant higher engine compartment temperature generated during sustained periods of idling, fuel pressure is increased and a vapor by-pass is provided to reduce the incident of vapor lock. The idle compensator, which is sensitive to temperature, is used to maintain an idling speed adequate for engine cooling. To compensate for added heat rejection, coolant pressure is increased from 13 to 15 psi and air flow is increased by a 5x18x2-1/4 inch fan.

New fuel pumps are also released for P10 models with the 153 and 230 engines and CK10-20, C30, and CLT50 models with the 230 engine. In these applications, mounting flange thickness is increased from 0.22

to 0.34 inch to minimize flange distortion and the possibility of oil leakage.

TWO-STAGE AIR CLEANER SYSTEMS are available optionally for conventional cabs, with an oil-treated paper element secondary cleaner and an oil bath pre-cleaner.

All 2-stage systems also have a closed-positive crankcase ventilation system as a part of the option where it is not released as base engine equipment. Six-cylinder engines with the RPO 2-stage system have the distributor advance lever opening sealed with a rubber boot and a dust shield to prevent breaker-point dust contamination.

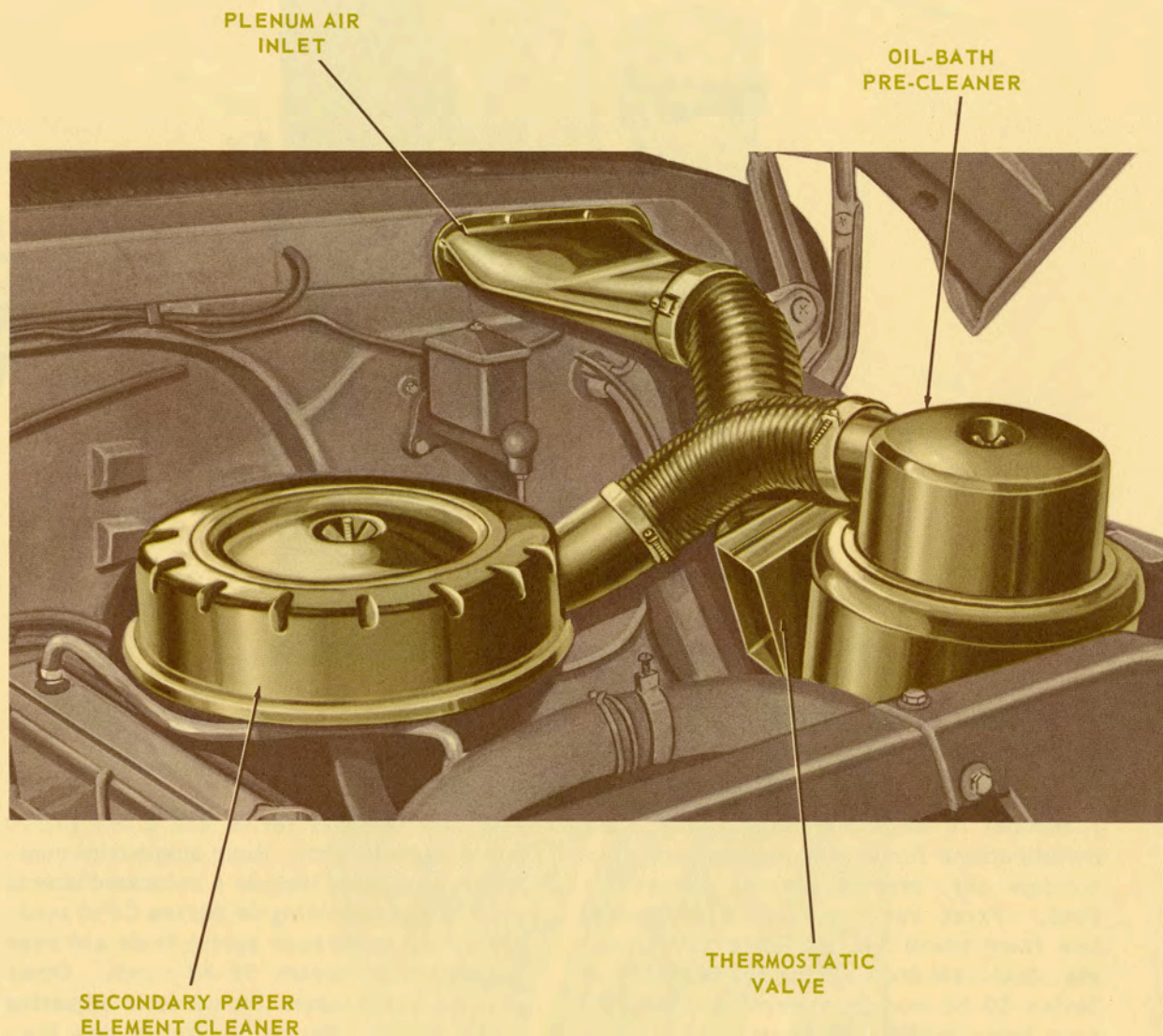
In conventional cab models, inlet air is either from the cowl plenum chamber or from the engine compartment. A thermostatic valve automatically selects warmed air from the engine compartment at temperature below 80 degrees F. and mixes cooler air from the plenum chamber to 100 degrees F. With temperature over 100 degrees F. all air is from the plenum chamber.

In the 2-stage air cleaner system, the oil-treated paper element is effective at all engine speeds and the oil-bath air cleaner is most effective at higher engine speeds. This combination provides cleaner air than is possible with either type of cleaner alone.

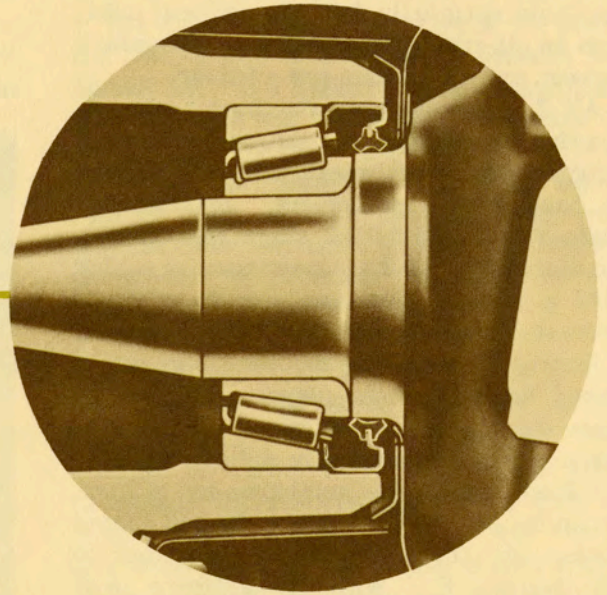
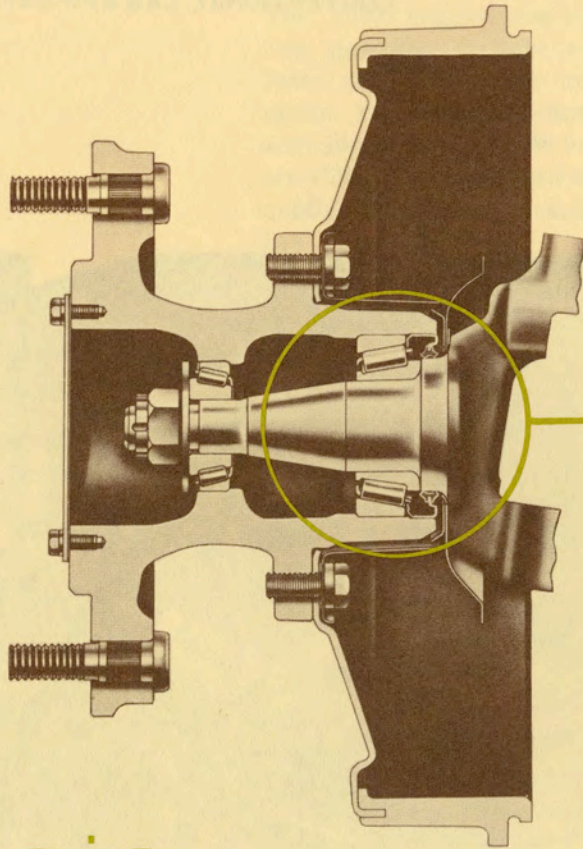
Further, the high level air inlet used with conventional cab and G10 models further extends the operational interval by reducing the dust intake. The total effect is to extend the operational period about fifteen times that of a single cleaner system with an engine compartment air source.

Additionally, employment of the 2-stage air cleaner option results in reduced combustion chamber deposits, longer spark plug life, and a reduced amount of abrasives in engine oil.

CONVENTIONAL CAB RPO 2-STAGE AIR CLEANER SYSTEM



NEW SYNTHETIC RUBBER WHEEL BEARING SEAL



DOUBLE-LIP
DESIGN FEATURE

chassis

A number of important improvements and modifications further strengthen and consolidate the overall chassis design for 1965. Front suspension changes include new front wheel bearing seals on all models; dual-rate front spring eye bushings on Series 50-80 models; stamped front spring rear hangers with full-floating, rubber insulated cams on conventional Series 60H and 80 models; and a 6000-mile lubrication interval for Series 50-80 models.

In the rear axle area, greater selection is afforded in Series 30, 50, and 60 models

with new optional ratios and a new 13,500 pound capacity unit. Rear suspension component revisions include a relocated lateral control bar mounting on Series CP10 models and stamped rear spring front and rear hangers for Series 50-80 units. Other chassis refinements include self-adjusting brakes for all Series 30 models; new low-profile, passenger-type, 7.75-15 and 8.15-15 size tires to replace the 6.70-15 and 7.10-15 components for Series CKP10 models; and standard direction signals and heavy-duty chassis wiring for P models.

FRAME structures are carried forward from 1964 unchanged except for new cab front mounting brackets on Series 50-80 models and minor modifications to accommodate various improved suspension components.

FRONT WHEEL BEARING SEALS. Synthetic rubber replaces felt as front wheel bearing seal material for all Series 10-80 models. Synthetic rubber, as compared to felt, inhibits rather than absorbs moisture. In addition, the new seal material is shrink-

age-resistant and relatively unaffected by temperature change.

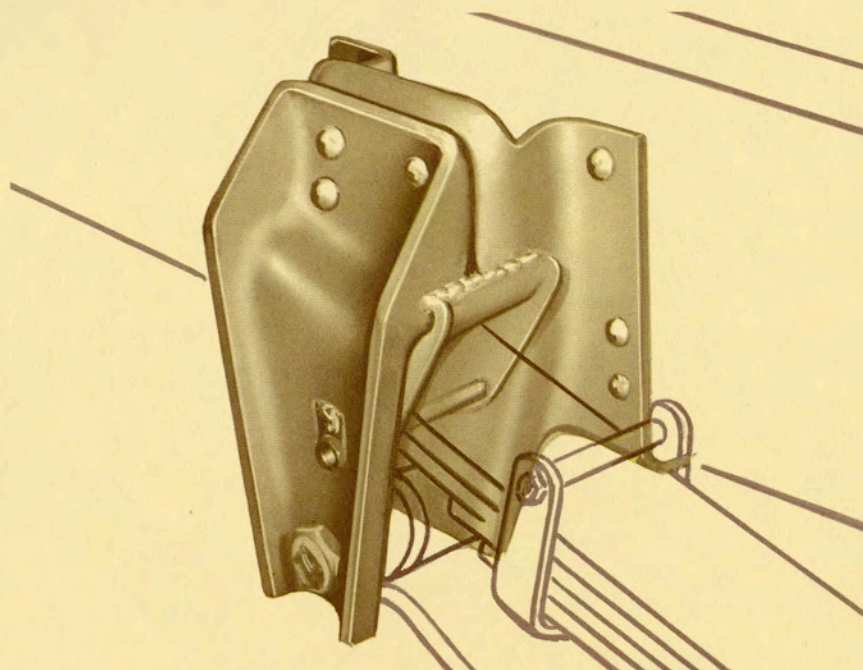
Also, double-lip construction of the new design contributes to lubrication retention while offering excellent resistance to moisture and/or contaminants. Closer tolerances for the finish of the steering knuckle sealing surface also contribute to the sealing improvement.

DUAL-RATE SPRING EYE BUSHINGS are used on front springs for Series 50-80 models. The bushings incorporate a flexible, natural rubber core with partial cutouts located at the top only on springs for the 5000-pound front suspension unit and at the front and rear on springs for the 7000-pound unit. As a result, the new bushings maintain a rate equivalent to previous design vertically, while the cutouts establish a lower rate that dampens fore and aft movements to appreciably reduce wheel fight.

FRONT STABILIZER. A revised stabilizer mounting bracket location permits unrestricted front stabilizer availability, as optional or standard equipment in the Series 10-30 models. Previously, this unit was not compatible with optional power steering, 8-19.5 tires, and dual rear wheels.

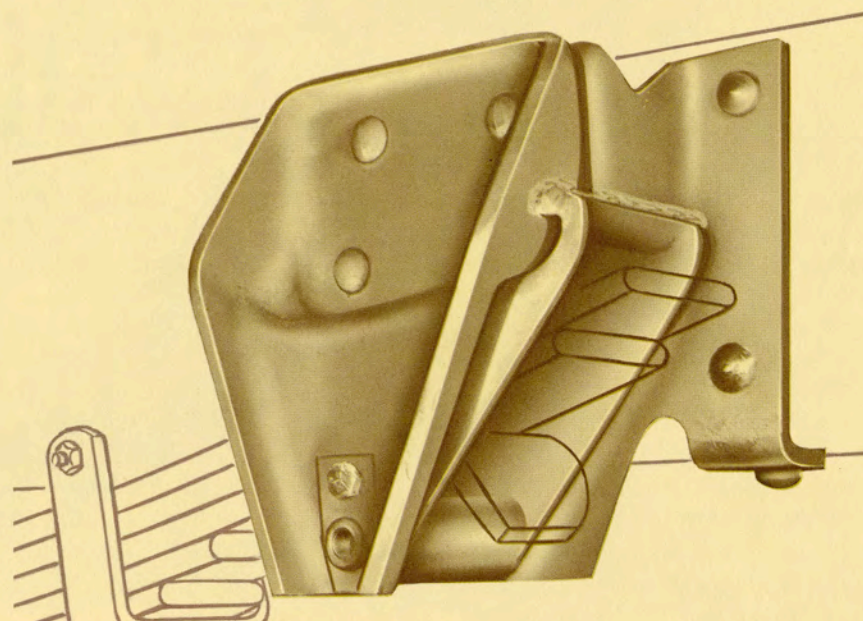
STAMPED SPRING HANGERS. Front and rear hangers for 2-1/2 and 3-inch wide rear springs in Series 50 through 80 applications, as well as front hangers for 3-inch wide front springs in Series CLM60H and 80 applications, are of stamped construction for 1965, replacing the former cast designs. The new components are lighter in weight, yet they feature increased flexibility and resultant increased durability. Ease of manufacturing also is an inherent quality of the new designs.

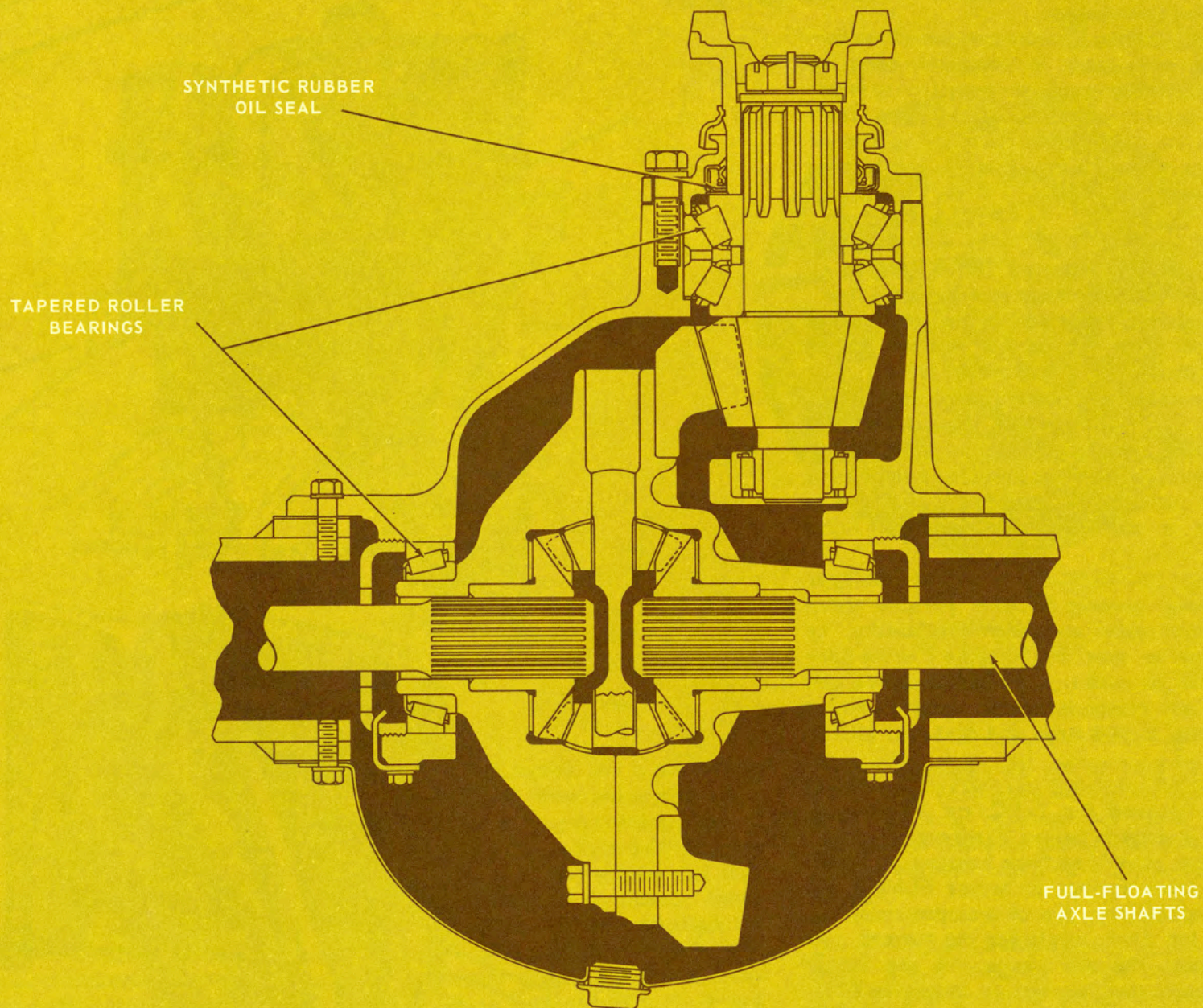
FRONT



NEW STAMPED REAR SPRING HANGERS

REAR





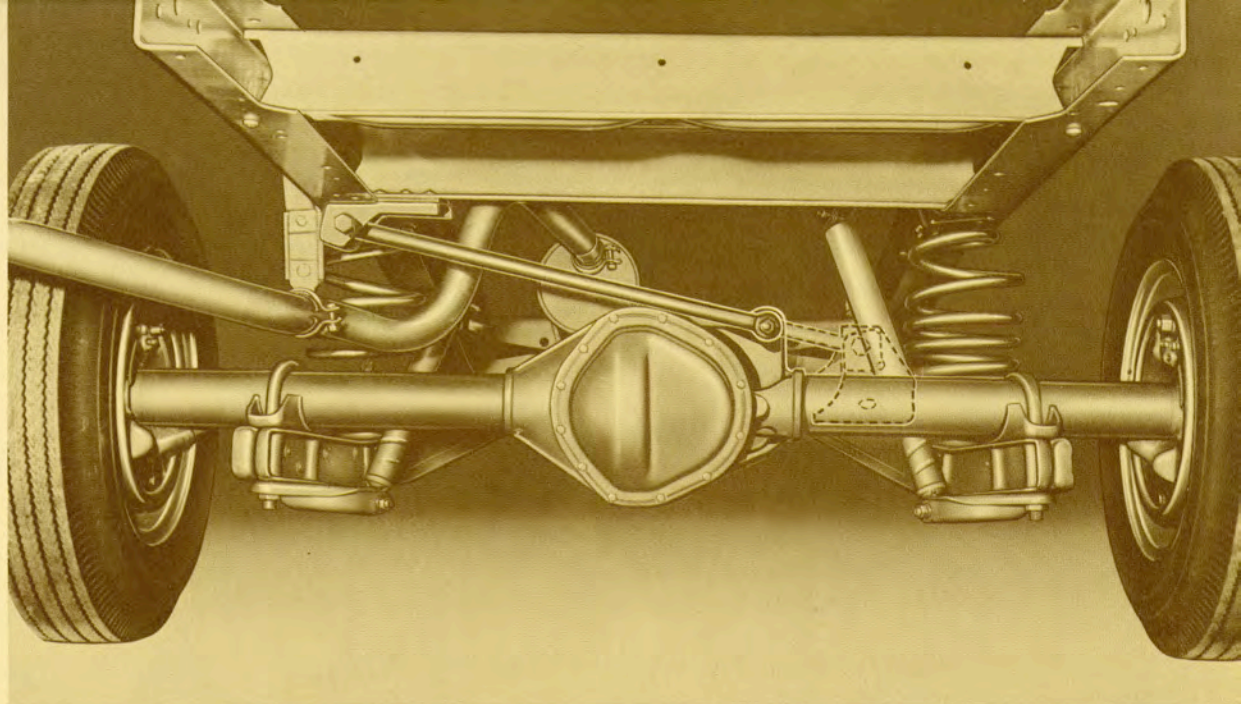
NEW CHEVROLET 13,500-POUND SINGLE-SPEED AXLE

MEDIUM-DUTY REAR AXLES. Available optionally for Series 50 models is a new Chevrolet 13,500 pound capacity, single-speed rear axle. Designed to provide an intermediate capacity option between the base 11,000 pound and the optional 15,000 pound units, the new 6.4-to-1 ratio axle features the proven qualities common to all Chevrolet-designed medium-duty rear axles.

Full-floating axle shafts transmit the drive torque independently of wheel loading and are easy to service. Hypoid drivegear design allows a relatively large piniongear tooth contact area while providing smooth, quiet operation. Tapered roller bearings at the front pinion bearing and differential support bearing locations provide maximum durability for a given bearing size. Synthetic rubber drive pinion oil seals offer resistance to shrinkage and temperature variations. A one-piece, banjo-type housing uses a gasket-sealed, bolted-on, stamped inspection cover.

Medium carbon-alloy bolts and heavy lockwashers, installed under greater torque, produce an improved differential-to-axle housing attachment for Chevrolet 11,000, 15,000, and 17,000 pound capacity rear axles. Two-speed units are further improved by the addition of steel-backed bronze bushings to the planetary pinion gears. Each bushing is assembled into position with four staking locations to insure against bushing rotation.

EXTENDED RATIO AVAILABILITY. New optional ratios permit greater selectivity in Series C30 and CLT60-60H model rear axles. Lower numerical ratios result in higher vehicle top speeds and better fuel economy. The former feature is particularly desirable for camper applications in



REVISED CONTROL BAR MOUNTING FOR SERIES CP10

Series C30 where considerable highway wind resistance is encountered. Other than the new 4.57-to-1 ratio, the new light-duty axle option is unchanged from the base Chevrolet 7200-pound, 5.14-to-1 unit.

The optional Eaton 17,000 pound, 2-speed rear axle with ratios of 7.17/9.97-to-1 is complemented by a similar design unit, but with ratios of 6.50/9.04-to-1. Identical in all aspects except ratio, the new option adds to the existing Series 60 offering of Chevrolet and Eaton rear axles.

IMPROVED REAR SHOCK ABSORBERS. New rear shock absorbers are released for 1965 Series C10-20, P10 models. Basically, a change in valving relative to velocity and load under rebound and compression results in improved ride, balance, and rear wheel control.

REVISED CONTROL BAR MOUNTING. Series CP10 rear axle lateral control bar mounting brackets are relocated for improved durability. Previously, the control bar was attached to a stamped bracket welded to the rear axle housing tube. The new mounting bracket design is an integral part of the differential housing casting, eliminating the possibility of weld failure or tube cracking that formerly existed.

EXPANDED SELF-ADJUSTING BRAKE AVAILABILITY. Series 30 vehicles incorporate self-adjusting brakes at all four wheel locations. With this change, all Chevrolet light-duty trucks now include this feature as base equipment for reduced maintenance and better pedal response. Similar in design to previous applications, the mechanism functions automatically dur-

CHASSIS ■

ing reverse stops, but only when the brakes require adjustment.

REVISED LIGHT-DUTY PARKING BRAKES. Cable-actuated rear wheel parking brakes replace the transmission-mounted drum design previously used on Series CP20 applications of the optional 3-speed wide-ratio and 4-speed transmissions.

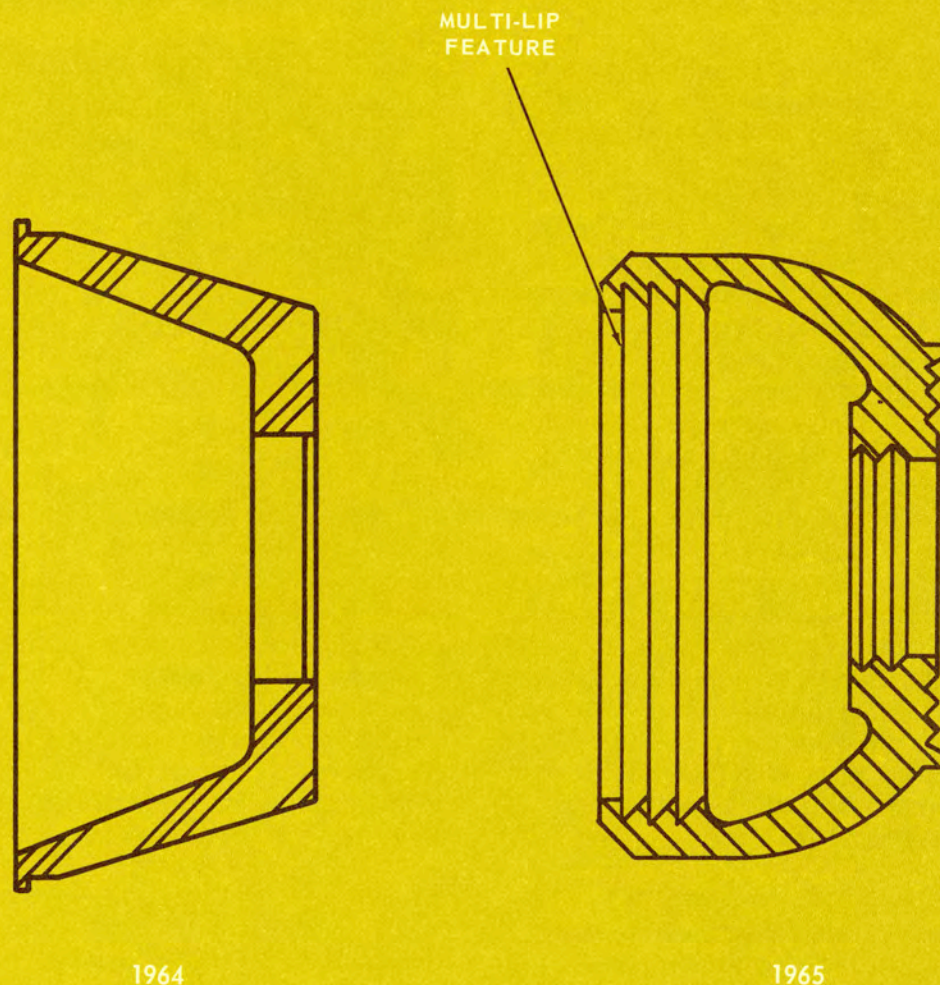
6000-MILE LUBRICATION INTERVAL, currently in effect for light-duty models, is extended to the Series 50 through 80 models. In combination with interim 1964 changes to the steering knuckle king pin oil seals and bushings, the new lubrication interval is achieved with the use of a new synthetic rubber, multi-lip seal for the drag link ball-end which connects it to the steering and third arm assembly.

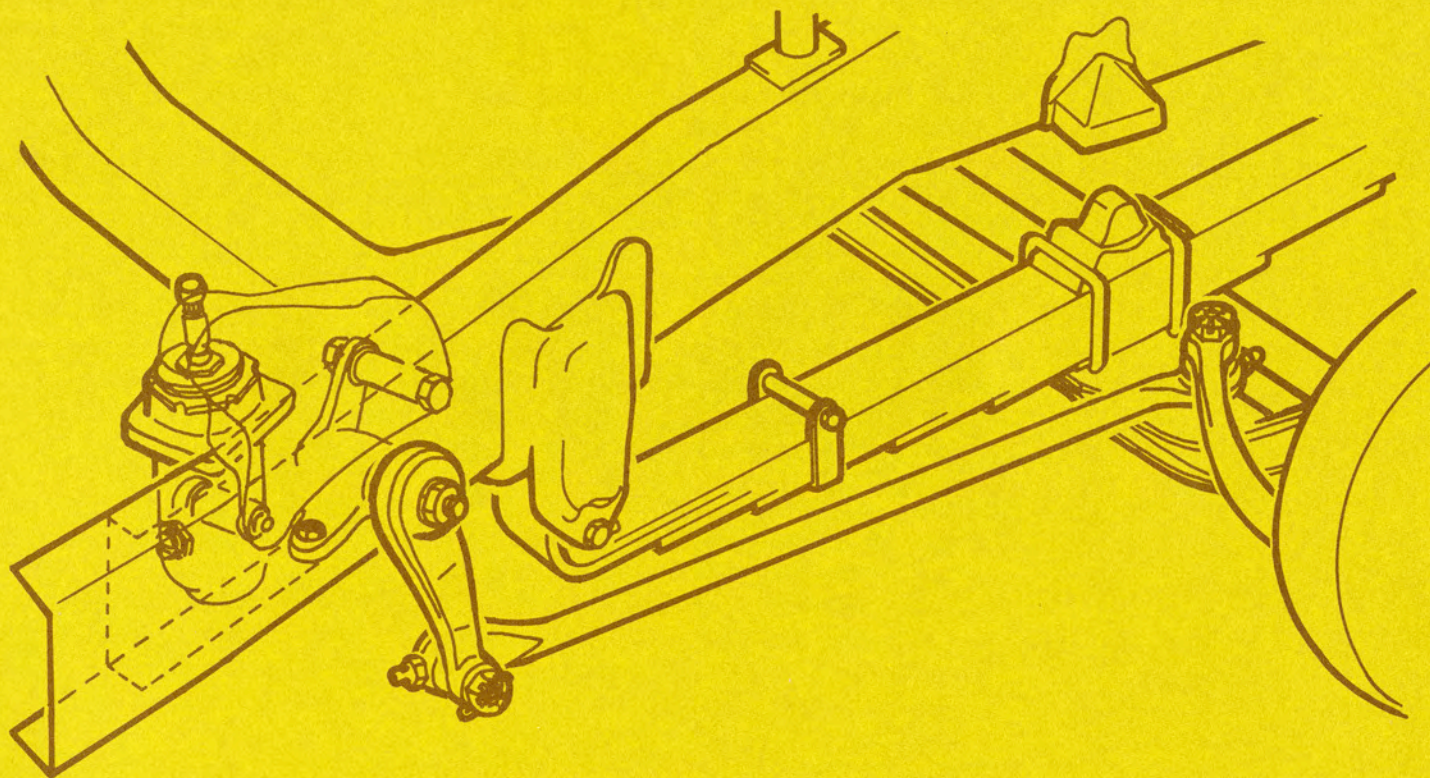
Certain areas of the Series 50-80 chassis require no change in achieving the extended lubrication interval. These include the tie-rod ends; fluid check points such as the steering gear and rear axle; and low wear areas such as spring hangers, propeller shaft slip joints, and universal joints.

NEW SINGLE DRAG LINK on tilt-cabs produces a more rigid steering linkage system. The pitman arm was formerly joined to the steering and third arm by two separate links which also included an idler lever as the center connection. Two lubrication fittings are thus eliminated.

TIRES. New, low-profile, passenger-type tires are released as base and optional equipment for Series CKP10 models. Revised size designations of 7.75-15 and 8.15-15 replace 6.70-15 and 7.10-15, respectively. A lower silhouette is achieved

CROSS-SECTIONS OF DRAG LINK SEALS





NEW SINGLE DRAG LINK FOR TILT-CABS

through a reduced loaded radius, while load capacity increases of 35 to 40 pounds result from larger tire section widths. Furthermore, while 4-ply rated units remain similarly identified, formerly-rated 6-ply tires are increased to an 8-ply rating. Truck-type tires in the 6.70-15 and 7.10-15 and other sizes are not affected.

CHASSIS ELECTRICAL system components generally are carried forward from 1964 except in Step-Van, forward control chas-

sis, chassis-cab, and chassis-cowl applications.

Step-Van and forward control chassis models feature new direction signal equipment, which formerly was optional; new instrument clusters, which are identical to the G10 unit; new recessed license lamps for the Step-Van 7 and Step-Van Kings; and heavy-duty wiring harnesses. The harnesses feature special synthetic insulation for all leads and special binding tape. Heat generated by short circuits or overloads in

individual leads not protected by fuses is localized by the non-melting insulation of all leads, protecting the harness from extensive damage. In such cases, the non-melting binding tape holds the harness together.

Like the units they replace, the new combination tail, stop, and direction signal lamps for chassis-cab and chassis-cowl models are of the Class A type, but are larger to meet new legal requirements in some states.

interim '64 changes

CHEVY-VAN. Designated as Model G1205, the Chevy-Van is a light-duty forward control panel truck with a wheelbase of 90 inches. Its addition to the 1964 Chevrolet truck line-up expands total model count to 196 and total wheelbase count to 22.

Body-frame integral construction is employed for the Chevy-Van in addition to leaf-spring I-beam front suspension and leaf-spring Salisbury axle rear suspension. Brakes are of the self-adjusting type, and the chassis features a 6000-mile lubrication interval. Engine location is amid-ship, and the vehicle is powered by the High-Torque 153 cubic inch displacement L-6 engine. Transmission of power is with the standard 3-speed synchromesh or optional 2-speed Powerglide.

Special attention is given to the matter of corrosion resistance, an inherent problem of body-frame integral construction. Seven major anti-corrosion measures are taken in the Chevy-Van. These are: 1) Use of galvanized body components; 2) Use of heavy-gauge steel for main underbody frame components; 3) Minimal use of exterior coach joints; 4) Use of high-zinc-content primers; 5) Use of aluminum preservative spray; 6) Use of sealers at all critical interior and exterior jointures; 7) Use of undercoating.

Consistent with the Chevy-Van's basic engineering concept of load-carrying ability, its capacity is rated at 211,20 cubic feet. Loading and unloading of cargo is facilitated with a 48-inch high by 50-inch wide rear door opening 22 inches high from the ground. Identical dimensions are afforded with the use of RPO load doors on the right hand side. Minimum inside load length is 88.5 inches at the floor, while inside load height is 54.25 inches. Payload capacity is 900 pounds with the base 3600-

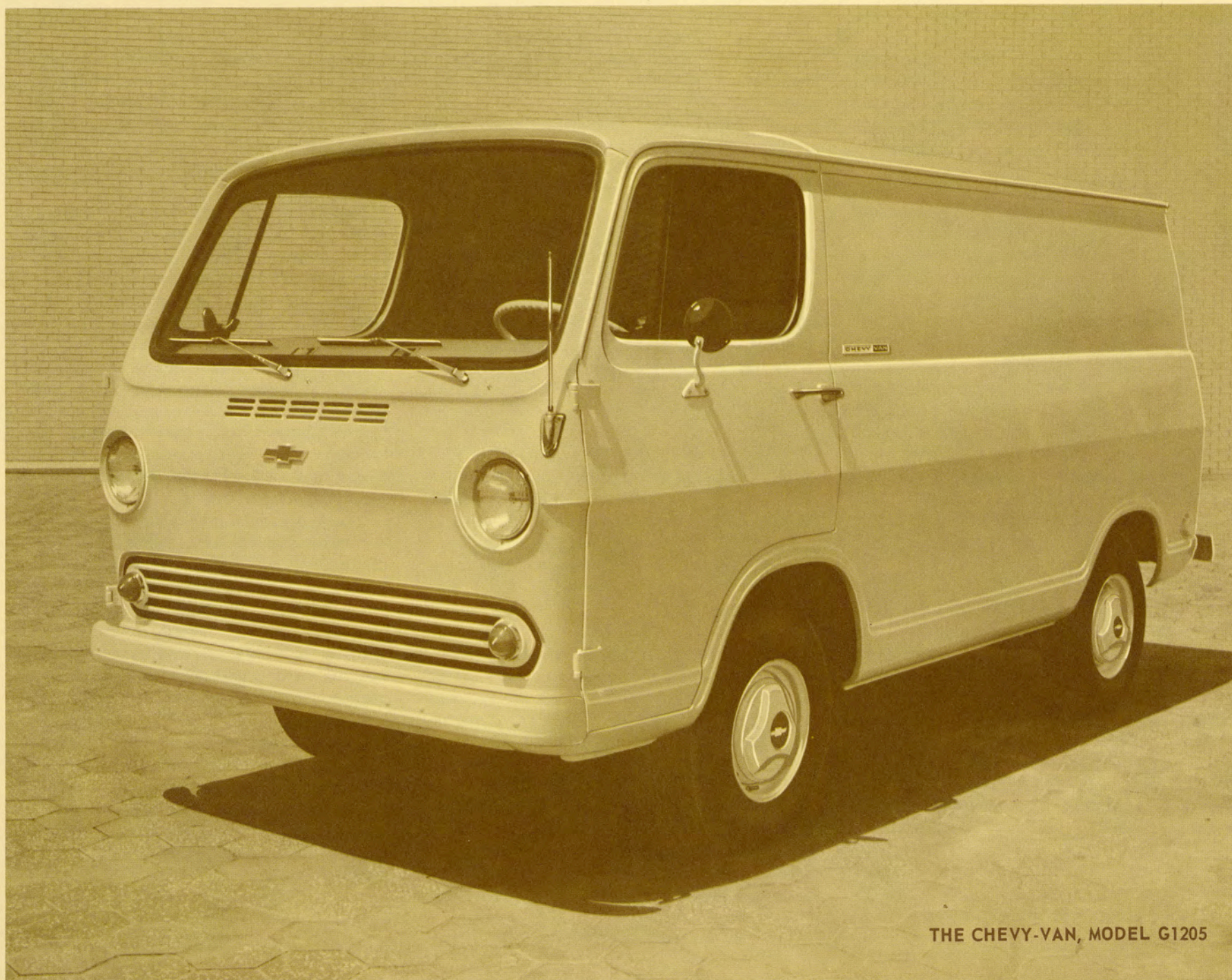
pound GVW, 1750 pounds with the optional 4500-pound GVW, and 2250 pounds with the optional maximum 5000-pound GVW.

GVW RATING CHANGES. Maximum GVW rating for Series CL50 models is increased to 20,000 pounds from 16,000 pounds with the addition of RPO G55, 8750-Pound Rear Spring Equipment, along with the use of 9-22.5-10 front tires and 10-22.5-10 dual rear tires. Other equipment requirements remain unchanged. Additionally, minimum mandatory equipment requirements for the Series CL50 15,000 and 16,000 pound GVW's are revised to exclude the use of RPO H15, 15,000-Pound Rear Axle Equipment, and to include the use of RPO G52, 7500-Pound Rear Spring Equipment.

Maximum GVW rating for Series 60H also is increased from 23,000 pounds to 24,000 pounds with the use of 10-22.5-10 front tires and 11-22.5-12 dual rear tires for C-L-T models. Though the 24,000 pound maximum GVW is extended to S models as well, no equipment changes are effected.

STEP-VAN BODY SHIELDING. In accordance with the extended vehicle warranty program, new sheet metal shielding is added to the top and front areas of the front wheel housings of all Step-Van models in order to minimize the possibility of body front and side panel corrosion.

REVISED INSTRUMENT CLUSTER. For standardization with Corvair passenger cars, the calibrations on the Corvair 95 speedometer dial are changed to read up to 100 miles per hour rather than up to 80 miles per hour. Other appearance aspects of the cluster are not affected by this change. The new instrument cluster also



THE CHEVY-VAN, MODEL G1205

INTERIM '64 CHANGES ■

is used for the Chevy-Van, Model G1205.

SEAT BELTS for the driver and right hand front seat passenger are released as regular production equipment on Suburban Carryalls, El Camino pickups, and the Greenbrier Sports Wagon.

STEERING WHEEL PAINT TREATMENT.

Steering wheel color for all conventional line models except tilt-cabs and Step-Van's is changed from Off-White to Medium Fawn, the main interior color, in order to reduce wheel reflections in the windshield. For appearance purposes, the color of the following items also is changed from Off-White to Medium Fawn: turn signal switch housing of all models above; transmission control lever housing and mast jacket for above conventional line Series 10-30 models. The change in color treatment also is applicable to the Custom steering wheel released in RPO Z61 for Series 10-30 models of the conventional line including the base of the horn button cap.

IMPROVED CORROSION RESISTANCE for front end sheet metal components is featured for all C-K-L-M-S models of the conventional line with the application of zinc chromate primer prior to the application of finish paint. Areas affected by this change are: 1) underside of hood panel, 2) front side of radiator support, 3) radiator support upper tie bar baffles, 4) upper portion of fender skirts, 5) front fender rear reinforcements, 6) front fender closing panels.

INCREASED BODY DURABILITY is afforded Series CK10, 20 and C30 models (except flat face cowl) with the use of one-piece underbody outer sill extensions, which re-

place the former 3-piece design comprised of the extension, a reinforcement, and a front end inner sheet metal mounting bracket.

REDUCED DOOR CLOSING EFFORT with windows closed is afforded all conventional line models with revisions to the side door lock rotors and lock strikers.

NEW TOP COMPRESSION RING, 327 ENGINE. A new molybdenum-filled, square-faced top compression ring for the RPO L30 327 cubic inch engine replaces the chrome-plated, beveled ring to improve ring wear and reduce blow-by. Cylinder bore wear and oil economy with the new ring is comparable to the chrome-plated ring.

IMPROVED CYLINDER HEAD, 292 ENGINE. Water jacket core deck thickness for the 292 cubic inch engine cylinder head is increased from 0.26 inch to 0.36 inch, preventing warpage of the cylinder head and subsequent water seepage through the cylinder head gasket.

OIL BATH AIR CLEANER OPTION. For severe truck operating conditions, a one-quart oil bath air cleaner is available as part of RPO K48 for use with the optional 283 cubic inch displacement V-8 engine on Series CK10, 20 and C30 models.

IMPROVED CHEVROLET 3-SPEED TRANSMISSION. Increased stem section size for the Chevrolet 3-speed transmission clutch gear provides greater torsional strength for this component while contributing to overall transmission reliability.

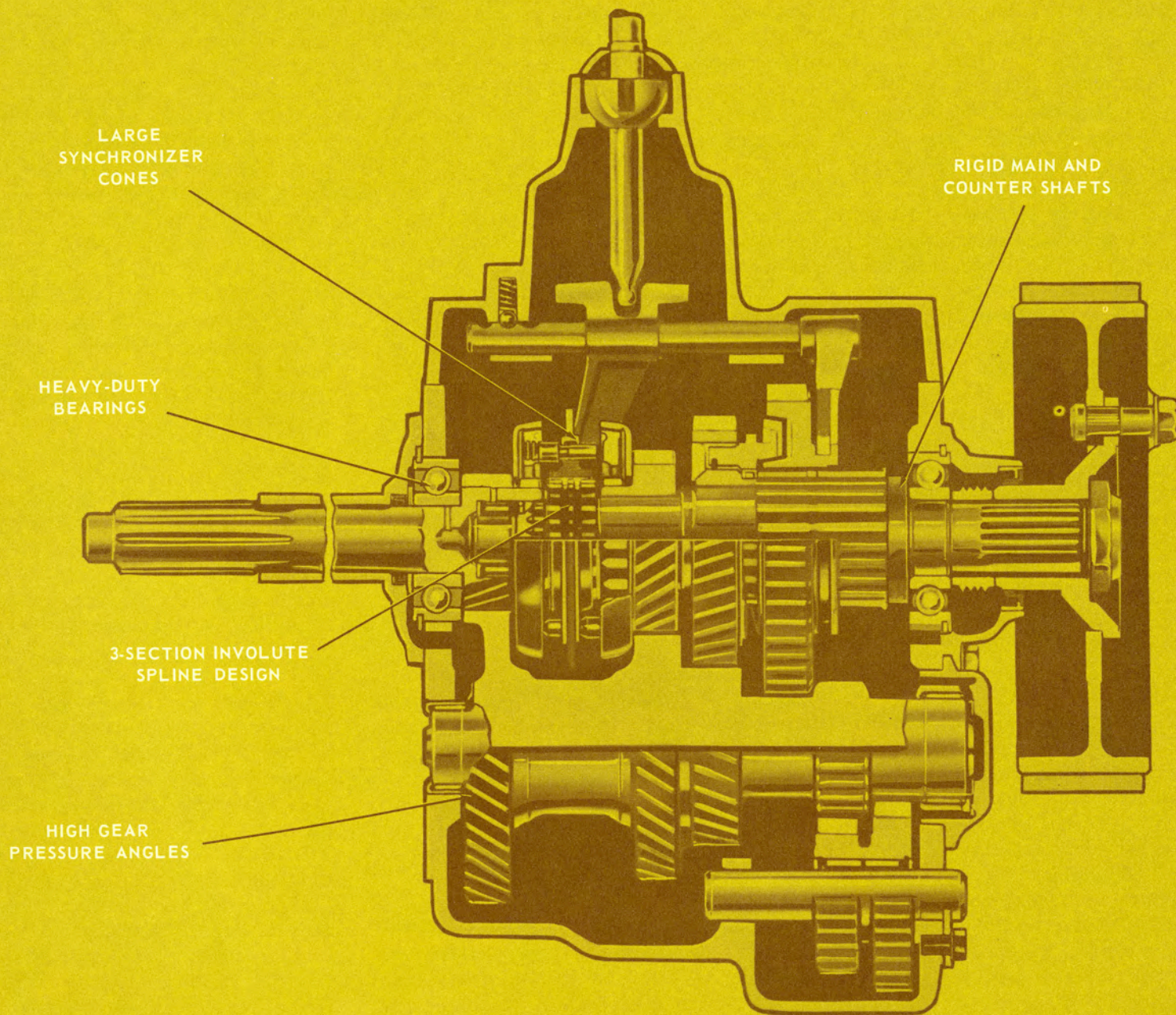
NEW 4-SPEED TRANSMISSION. Easy

shifting, good durability, and quiet operation are featured in the New Process 435 4-speed transmission released as optional equipment for Series CLS50 and CLMST60, 60H trucks equipped with either 6 or 8-cylinder engines. Gear ratios are: First, 6.68-to-1; Second, 3.34-to-1; Third, 1.66-to-1; Fourth, 1.00-to-1; and Reverse, 8.26-to-1.

High gear pressure angles combined with generous gear face widths resist pitting while providing greater tooth contact area. More than usual helical overlap allows more teeth in contact at any one time, thus reducing the noise level of the gearset. Heavy-duty bearings combined with strong and rigid shafts provide good reliability under extreme operating conditions. Bearing types are: Ball bearings for the drive gear; super max ball bearings for the rear mainshaft; and caged roller and needle thrust bearings for the countershaft.

The mainshaft and countershaft resist deflection under load because of their large diameters, solid construction, and short length. Large synchronizer cones with more working surface and greater mechanical advantage provide fast and easy shifting performance. Inner stop rings of special wear-resistant aluminum alloy are constructed with hardened steel pins cast in place.

Gear disengagement is inhibited through a 3-section involute spline design. The teeth in the middle section are a few thousandths of an inch thicker than the teeth at either side; the sliding clutch and low gear shift past the center section when they are engaged with the slightly thicker center tooth, forming a block to prevent gear jump-out under load. Gearshift controls are floor-mounted for all installations



NEW 4-SPEED TRANSMISSION

INTERIM '64 CHANGES ■

except tilt-cabs which utilize the remote control design.

IMPROVED CHEVROLET 4-SPEED TRANSMISSION. Reduced shake and gear "hop-out" is achieved for the Chevrolet 4-speed transmission through a new gear-shift lever design. Overall length is shortened approximately two and one-half inches, with the reduction being made in the straight portion of the lever near the threaded end. In addition, the lower spherical tip diameter is increased by 0.056 inches to provide a closer fit between the shift lever and the shifter yoke.

NEW CLARK TRANSMISSIONS. New Clark Standard and close-ratio 5-speed transmissions are released for Series 60, 60H trucks with 8-cylinder gasoline engines. The Clark Model 2653V (standard ratio) and Model 2622V (close-ratio) units replace the Model 265V and Model 267V transmissions, respectively, for all 327 and 348 cubic inch V-8 applications. More desirable ratios and better durability are provided by the new Clark transmissions.

NEW OVERDRIVE TRANSMISSION. Better fuel economy, lower noise level, and longer engine life are achieved for Series C10 trucks through a new Overdrive transmission, Regular Production Option M10. The above advantages are attained by the 0.7-to-1 ratio of this planetary gear unit integrated with the Chevrolet 3-speed synchromesh transmission. The Overdrive unit may be manually locked out by the operator through a hand control, or by fully depressing the accelerator pedal. Used only in combination with the 4.11-to-1 ratio rear axle, the new option is available with the 230, 292, and 283 cubic inch

engines. Not available for use with the Overdrive transmission, however, are RPO G80 (Positraction Rear Axle), RPO K37 (Governor Equipment), RPO H01 (3.07-to-1 Rear Axle), and RPO Z54 (Maximum Economy Equipment).

EASIER POWERGLIDE SERVICING. Powerglide transmissions, optional equipment for Series CP10, 20 models, are revised to include a drain plug in the oil pan assembly. Previously, it was necessary to remove the oil pan in order to replace the lubricant.

BETTER FULLER TRANSMISSION SHIFTING. Two design refinements to the Fuller 8-speed transmission provide both easier and more positive shifting qualities. The former feature is achieved by increasing the gearshift lever length by three inches at the driver's end. A stiffer reverse gear lock-out spring reduces the possibility of accidentally shifting into reverse gear.

NEW REAR AXLE LUBRICANT. Both base equipment and optional Series CKP10 rear axles utilize a new, special hypoid lubricant for longer life and increased axle dependability. The new lubricant, while contributing to longer seal life, offers better resistance to heat, scoring, and oxidation. Positraction rear axles, which use a special-purpose fluid, are not affected by this change.

IMPROVED REAR AXLE DURABILITY. Increased durability is achieved for the Chevrolet 15,000 and 17,000 pound rear axles through the release of hardened thrust washers for the differential pinion gear, planet support, and side gears. Formerly, the washers were constructed

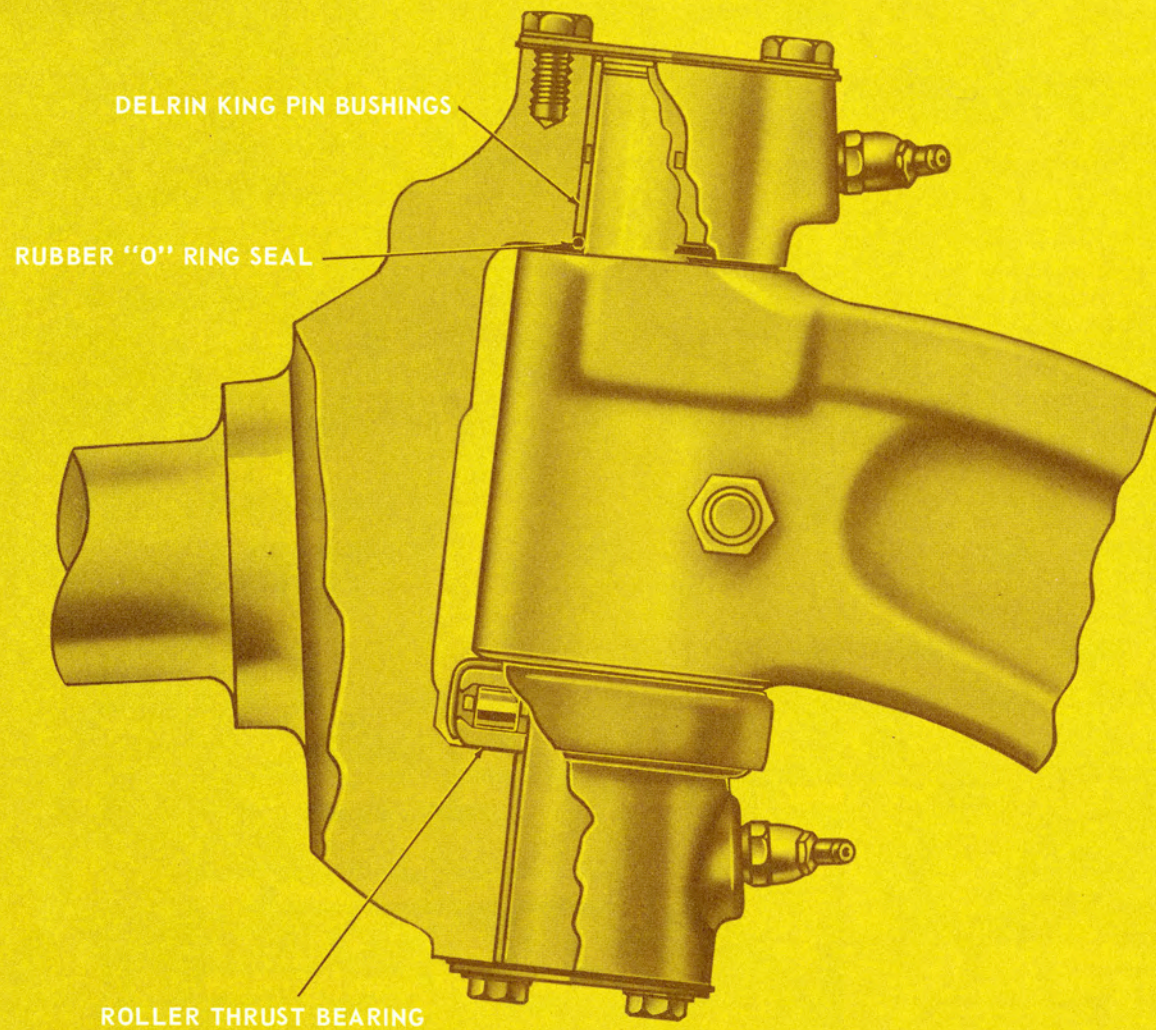
of untreated steel which is more susceptible to scoring and/or wear.

GREATER REAR AXLE LUBE CAPACITIES. Revised oil filler hole locations result in improved lubrication plus longer ring and pinion gear and/or bearing life for all Eaton 17,000 pound, 18,500 pound, and 30,000 pound (bogie) rear axles. Resultant oil level increases of one and one-half inches for the 17,000 pound rear axle, two inches for the 18,500 pound unit and seven-eighths of an inch (each) for the 30,000 pound bogie axles provide corresponding lubricant capacity increases of approximately four, seven, and three pints respectively.

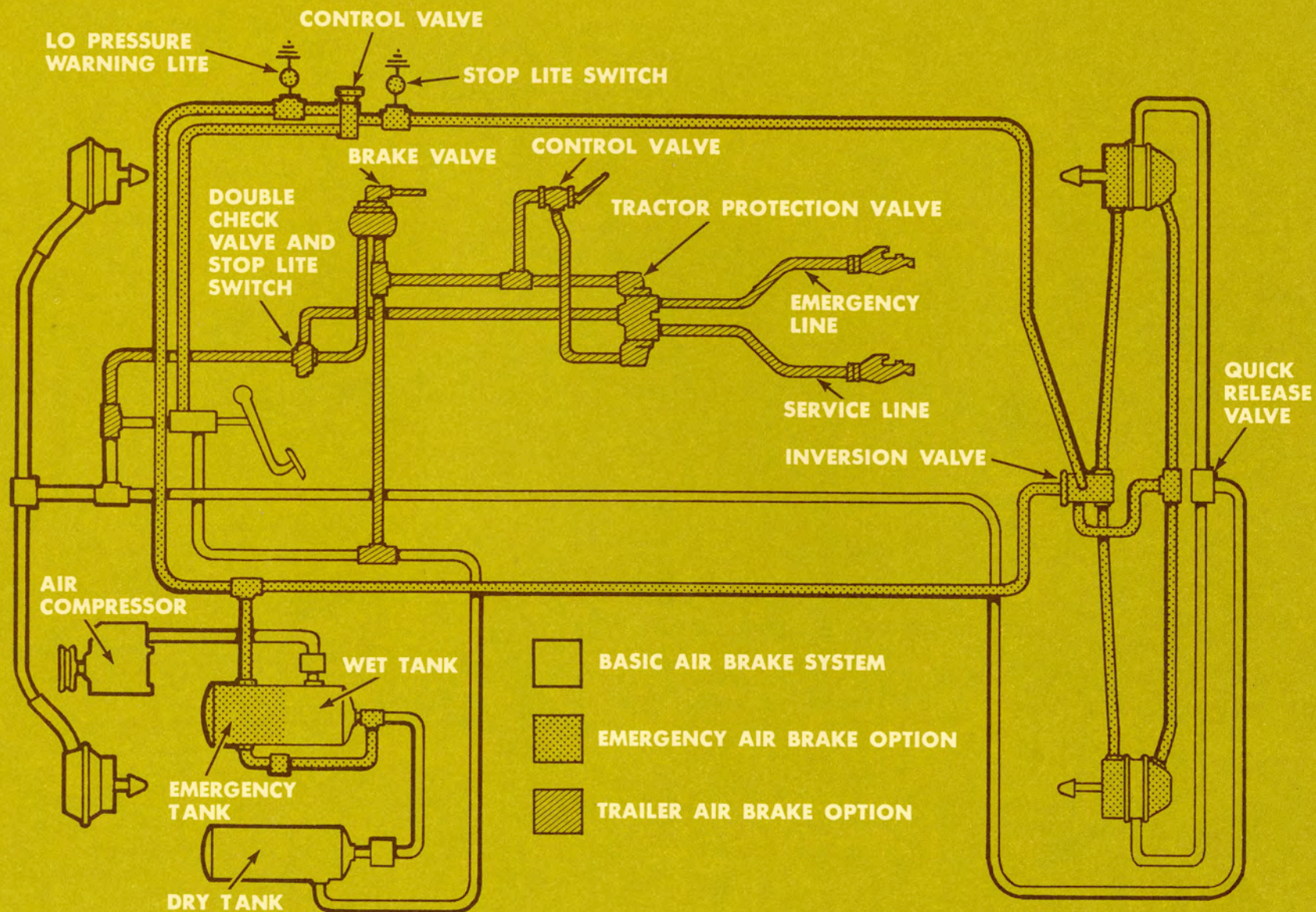
IMPROVED LIGHT-DUTY REAR AXLES. Series CKP10 rear axles are revised to include differential pinion thrust washers in addition to the side gear thrust washers already provided. The addition of the thrust washers behind the gears eliminates the possibility of the above gears wearing into the differential case.

IMPROVED I-BEAM FRONT AXLES. Design improvements to the 4000, 5000, and 7000-pound capacity I-beam front axles result in easier steering, better sealing, and elimination of steering knuckle bushing corrosion.

Rubber O-ring seals are added under the upper steering knuckle bushings to inhibit water and dust entry. Additionally, Delrin plastic replaces steel as steering knuckle bushing material for corrosion-free performance at these locations. The bushings are necessarily shorter to accommodate the new seals. King pin roller thrust bearings, another improvement, contribute to reduced steering effort, and



IMPROVED FRONT AXLES



EMERGENCY AIR BRAKE OPTION

replace the pack-type thrust washers previously used. The latter product improvement is effected for all applications except the base axle on Series CLS50 models.

NEW EMERGENCY AIR BRAKE OPTION.

Designed in compliance with California legal requirements, the new Emergency Air Brake Option (RPO J75) provides optimum safety under all braking conditions. Conventional single-diaphragm air brake chambers are replaced by double-diaphragm, 3-way action units at the rear wheel brakes. Additional piping plus inversion and push-pull valves and an additional air reservoir complete the system.

The new DD3 Safety Actuator air chamber design not only assures extra braking reserve during emergency conditions, but also eliminates the necessity of a separate transmission parking brake and linkage. To park, the handle of the push-pull valve is pulled out. This vents the chamber push rod locking mechanism to atmosphere and permits a spring to force rollers into a wedging position between a collar and the actuator shaft. Simultaneously, the inversion valve control port is vented, thus allowing full emergency reservoir pressure to be directed into the parking diaphragm of the actuator. In the event of air pressure loss, the actuator rollers remain wedged between the collar and shaft, thus preventing the shaft's return to a released position. To release the parking brake, the push-pull valve handle is pushed in thereby applying reservoir pressure to the actuator lock port preparatory to releasing the locking mechanism. At the same time, air pressure also is admitted to the control port of the inversion valve which causes air to be exhausted from the parking diaphragm. A heavy service brake appli-

cation will then produce sufficient forward motion of the actuator shaft to allow the locking mechanism to disengage and thereby release the brakes.

During normal running conditions (push-pull handle pushed in), air pressure is delivered from the parking-emergency reservoir to the inversion valve control port. Directed then to the actuator lock port, the air pressure moves the piston forward, contacting the rollers and forcing them up the ramp. The rollers do not contact the shaft, and normal service brake applications permit the shaft to move freely. If air pressure is lost from the service reservoirs, the emergency brakes may be applied by pulling out the push-pull valve handle which applies the brakes as when parking. In the event of air pressure loss at both the emergency and wet service reservoirs, a check valve protects the dry service reservoir, permitting a normal stop with the service brakes. A slow leak at the emergency reservoir automatically trips the push-pull handle at about 40 psi, after the red low pressure warning light on the instrument panel has indicated a loss of pressure below 60 psi. The inversion valve, likewise, trips at about 40 psi and applies the parking brakes, using the remaining pressure in the parking reservoir. The parking or emergency brakes cannot then be released until the parking reservoir pressure is restored to at least 60 psi. After this minimum pressure is attained the driver may then push in the push-pull valve handle and make a heavy service brake application. This causes air to be exhausted from the parking diaphragm and disengages the actuator lock mechanism. Normal service brake applications may then be made.

In addition to the safety features of the

Emergency Air Brake system, all components are designed for long life, easy disassembly, and low maintenance. The DD3 Safety Actuator is bracket-mounted on the rear axle for minimum overhang and incorporates a chrome-plated shaft, scraper, and protected breather and dust shield for maximum efficiency under all adverse operating conditions.

NEW CHASSIS ELECTRICAL OPTION.

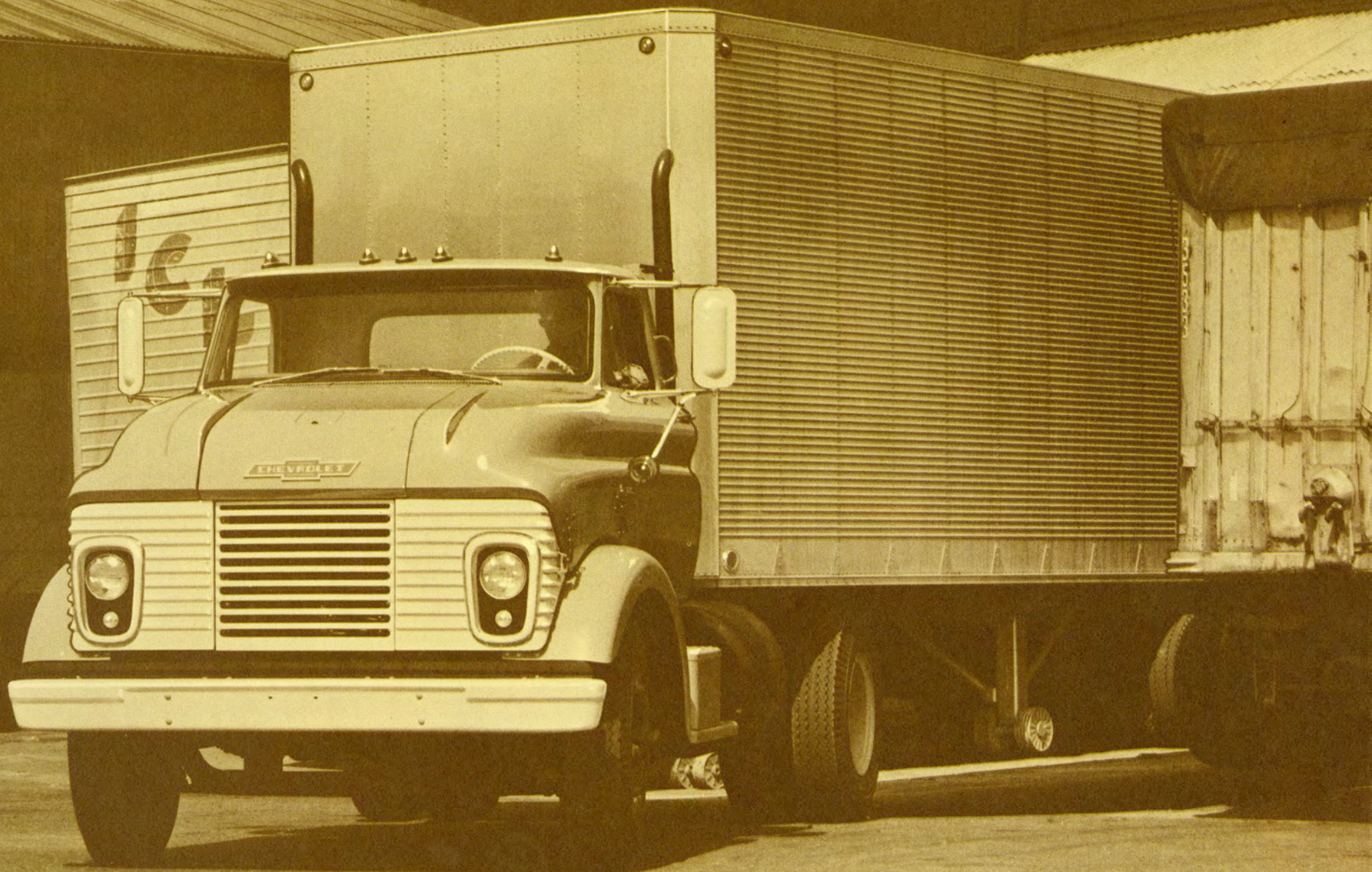
Trailer Jumper Cable Equipment (RPO U86) is released for Series 60 and 80 trucks equipped with full air brakes and trailer hose connections. The new option utilizes a standard 7-wire connector, fully insulated for weather protection inside a single casing, to effect a quick hook-up to direction signals, stop, tail, and marker lamps. Plastic clips attach the cable assembly when not in use to one of the trailer air brake hoses at the rear of the cab. An "on-off" toggle-type switch inside the cab allows operator control of the trailer marker lamps when the jumper cable is attached.

REVISED TIRE AVAILABILITY. RPO R63, 6.50-16-6PR dual rear tires is cancelled for P30 models because of tire-to-tie rod interference. This option is continued, however, for Series C20-30 trucks.

New front and rear tire combinations, designed particularly for camper usage, are released optionally for Series CK20 and C30 trucks. 7.00-16-6PR front with either 7.50-16-6PR or 7.50-16-8PR rear tires and 7.00-17-6PR front with 7.50-17-8PR units constitute three new options for the 3/4-ton models. 7.00-17-6PR front with 7.50-17-10PR rear tires are now available for Series C30 models. All tires are of tube-type, highway rayon construction.

diesel models

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model line-up

The largest diesel model choice in Chevrolet history is offered in 1965 with 145 models in 109 series. One-hundred twenty-eight models are new, increasing measurably customer selectivity. Seventeen models are carried forward from 1964; the five models comprising Series D60S are discontinued. Wheelbases range from 97 to 223 inches for a total of 13; included are new wheelbases of 187, 211, and 223 inches.

New to the diesel line-up are two model types -- the Low Tilt-Cab and the Conventional Cab Tandem (trailing type). Continued are the Conventional Cab, Low-Cab-Forward (LCF), and High Tilt-Cab as well as the LCF Tandem (regular type). New model number letter prefixes are introduced to designate base engine differences between models in a type group; these are "N" and "Y" for Low Tilt-Cabs, "V" and "X" for Conventional Cab Tandems, "Q" for Conventional Cabs (additional to the existing "D" prefix), and "A" for LCF's (additional to the existing "E" prefix).

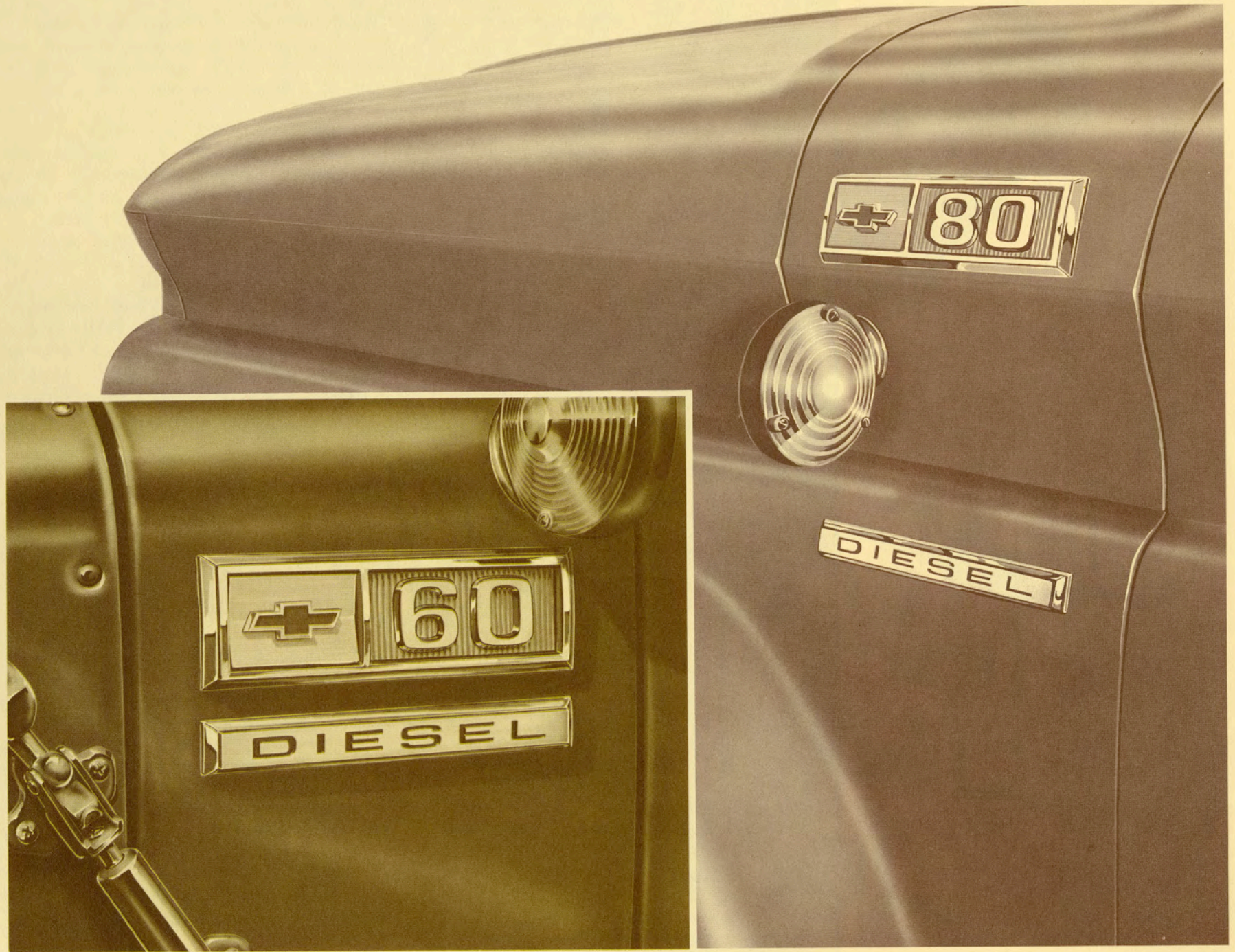
Diesel models are offered in all regular nominal weight categories from 1-1/2 Ton up through 2-1/2 Ton, with availability in the 1-1/2 Ton category (Series 50) for the first time. Optional 2-Ton Heavy-Duty models (Series 60H) again are offered. No optional 1-1/2 Ton Special models, however, are available.

Both Gross Vehicle Weight and Gross Combination Weight ratings for carryover models are identical to those of 1964, including the interim 1964 maximum GVW increase to 24,000 pounds from 23,000 pounds for Series D60H models with the use of 10-22.5-10 front tires and 11-22.5-12 dual rear tires. Ratings for new diesel models are generally the same as those of comparable gasoline models. Exceptions include additional GVW ratings of 22,000

and 23,000 pounds for certain Series 60 models; an additional GVW rating of 24,000 pounds, a 25,500 pound GVW rating in place of the 22,000 pound rating, and a maximum GVW rating of 27,000 pounds in place of 25,000 pounds for Series 80 models except tandems; base and maximum GVW ratings of 37,000 and 39,000 pounds in place of 30,000 and 36,000 pounds for Series 80 tandems; and GCW ratings of 45,000 pounds in place of 51,000 pounds for all Series 80 models.

Newly-styled series designation plates as well as diesel model designation plates are released for all diesel types except tilt-cabs. The series designation plates are identical to those used for comparable gasoline models. Diesel model designation plates are bright and satin-finished chrome with black paint fill for the depressed lettering. Location of both plates varies between conventional cabs and LCF's, as illustrated.

The new series designation plates and diesel model designation plates are prominently displayed. Plate location for LCF models is shown opposite at the lower left while at the upper right is shown the plate location for conventional cab models.



engines

Three new GMC 4-cycle engines are added to the diesel engine line-up for 1965. The two carryover Detroit Diesel engines are modified to improve performance, and the similarly modified Detroit Diesel 3-cylinder 159 cubic inch displacement unit — the 3-53N — is added to the line-up for the new Series D50 models.

The new 6-cylinder, 4-cycle engines provide medium-tonnage operators with diesel power at a low unit cost, competitively, along with superior fuel efficiency, light weight, and low maintenance costs. Although unit cost is higher than comparable power gasoline engines, reduced fuel costs result in early amortization of the cost differential, and in the normal vehicle life effect a substantial savings. Extensive tests indicate that durability is equal to premium medium-duty gasoline powered truck engines. Short, high-swirl inlet manifold passages, and a high pressure fuel injection system contribute to their high volumetric and thermal efficiency.

Basic specifications for the new V-6 engines include a 4.56-inch bore and 3.58-inch stroke for the 351.2 cubic inch displacement version, labeled the D351, and a 5.125-inch bore and 3.86-inch stroke for both 4.77.7 cubic inch displacement models, known as the D478 and DH478. All three have compression ratios of 17.5-to-1.

All engines are the same in basic design with a high degree of interchangeability. Differences between the 351 and 478 cubic inch engines are minimal, and the only differences between the D478 and the DH478 are in the fuel system and oil cooler, the D478 being a de-tuned DH478 with the oil cooler optional rather than standard.

The new engines are 4-cycle and naturally-aspirated. The over-square design permits high crankshaft speeds with rela-

tively low piston speed and reduced piston travel, an inherent mechanical advantage over a long-stroke engine which suffers high friction power losses.

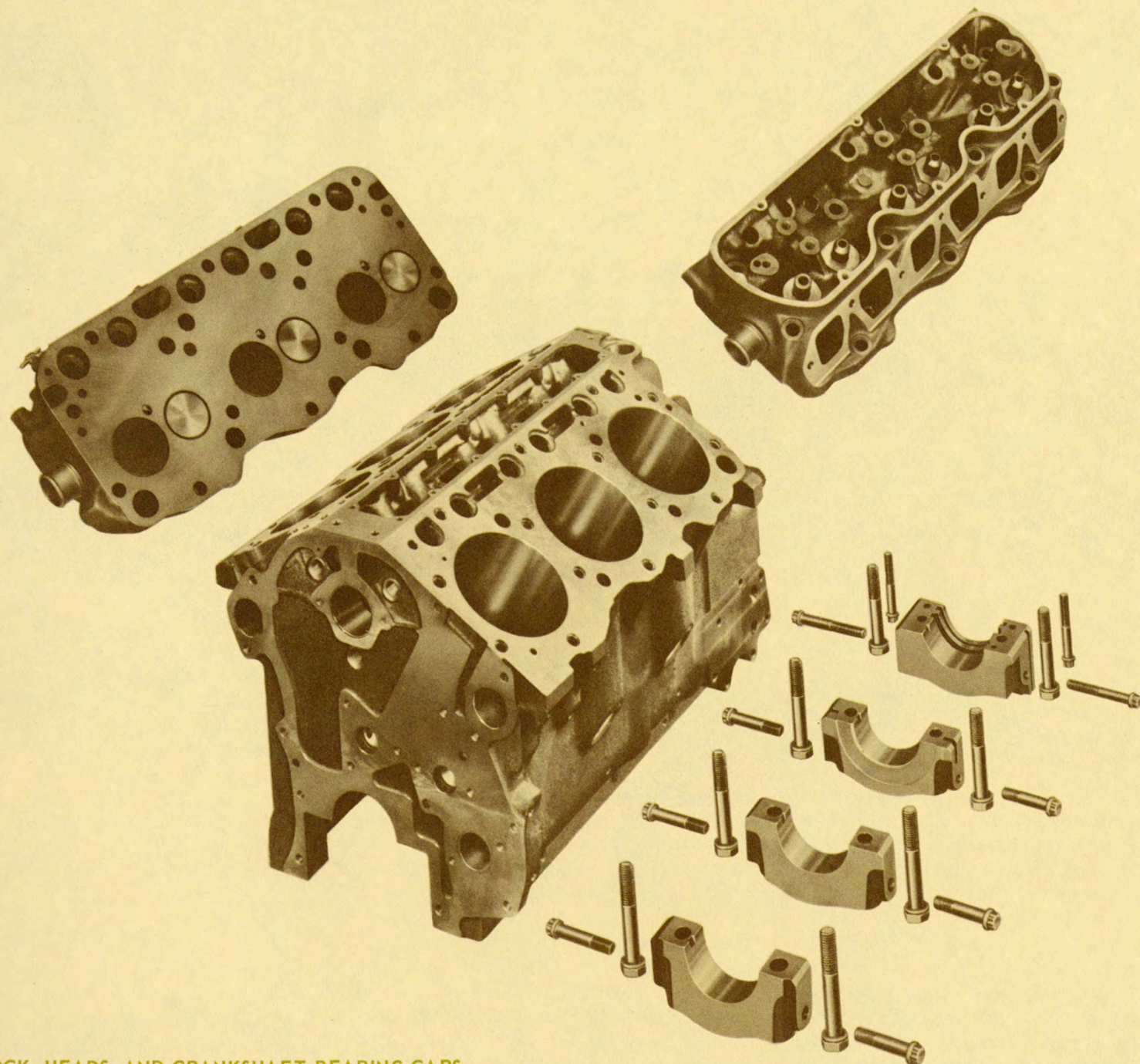
CYLINDER BLOCK. The block is of 60 degree V-design, integrally cast with the crankcase of close-grain chromium-nickel alloy iron, producing a strong and rigid unit. Overall rigidity is furthered by a 3-inch dropped skirt below the crankshaft centerline, staggered banks of cylinders, ribs extending several inches below the outer head bosses, and six head bolt bosses which are blind-tapped and equally-spaced around each cylinder bore. All cylinder bores are surrounded by coolant passages, for uniform expansion, superior heat transfer, low oil consumption, and greater engine life.

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 for positively-positioned bearings, correct alignment, and proper clearances. Special bolts are installed through the sides of the crankcase into the sides of the high-strength ductile iron caps.

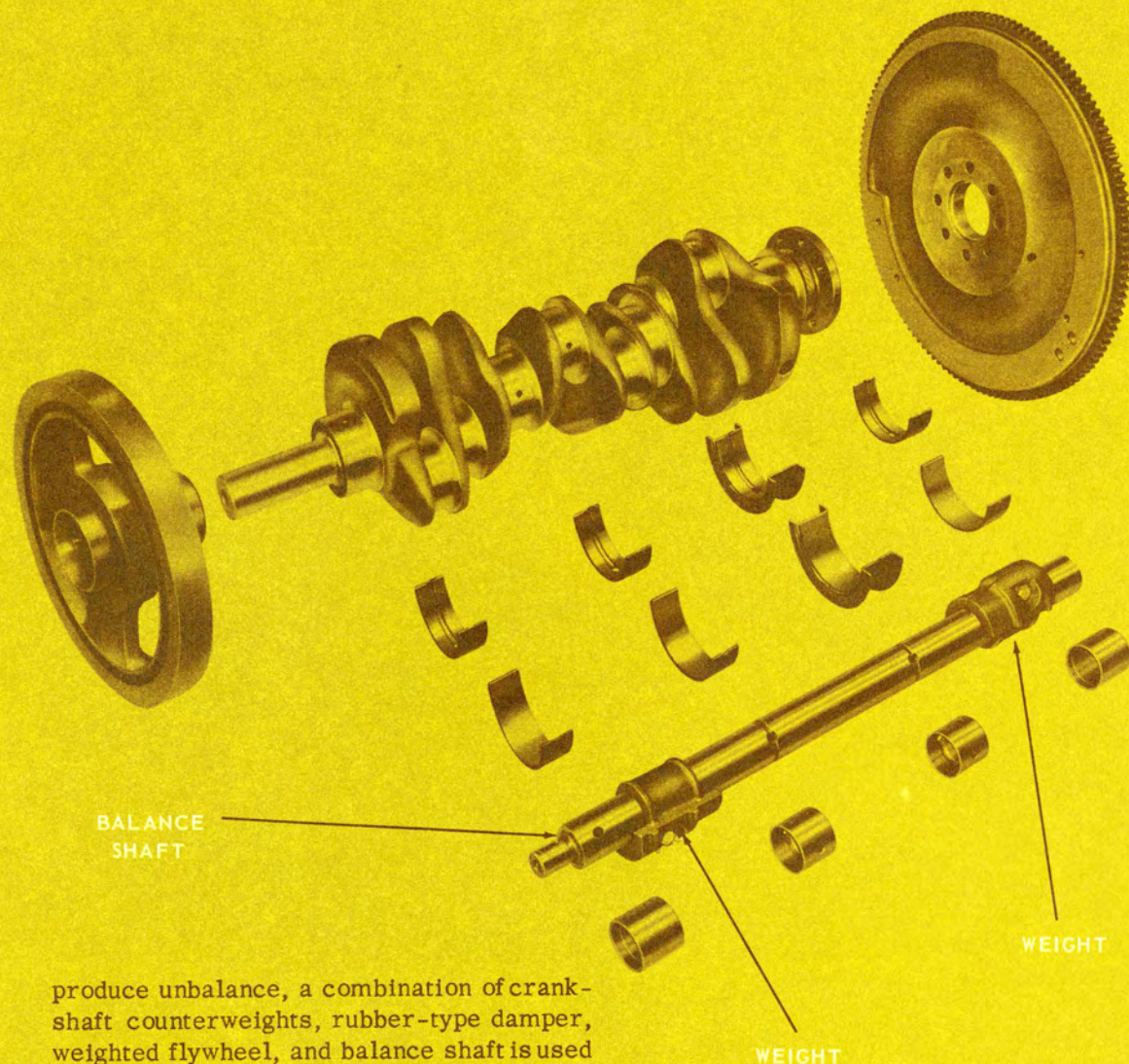
CYLINDER HEADS are cast of fine-grain chromium-nickel alloy iron for close control of strength and hardness.

The intake ports are shaped to produce maximum air swirl within each bore for rapid fuel burning and efficient engine performance. Short, individual exhaust ports, located on the outside of the engine, contribute to volumetric efficiency since the gases are discharged readily.

Valve guides, which are cast integral with the head, are completely surrounded by water jacket coolant, thus assuring rapid heat transfer from the valve stems.



CYLINDER BLOCK, HEADS, AND CRANKSHAFT BEARING CAPS



CRANKSHAFT. The crankshaft is forged of fine-grain steel and is heat-treated for maximum strength. Premium aluminum is used for four main and six connecting rod bearings. Connecting rod journals are evenly spaced at 60-degree intervals around the crankshaft.

ENGINE BALANCE. Since connecting rods and pistons are relatively heavy, their reciprocating masses produce an unbalanced couple. To cancel forces and couples which

produce unbalance, a combination of crankshaft counterweights, rubber-type damper, weighted flywheel, and balance shaft is used to assure smooth and relatively vibration-free engine operation. The balance shaft rotates at twice engine speed in the opposite direction of the crankshaft. Two counterweights on the shaft provide the necessary balancing. The shaft is supported in the block with four steel-backed sintered bronze bearings which are lubricated by full pressure oil from the main gallery.

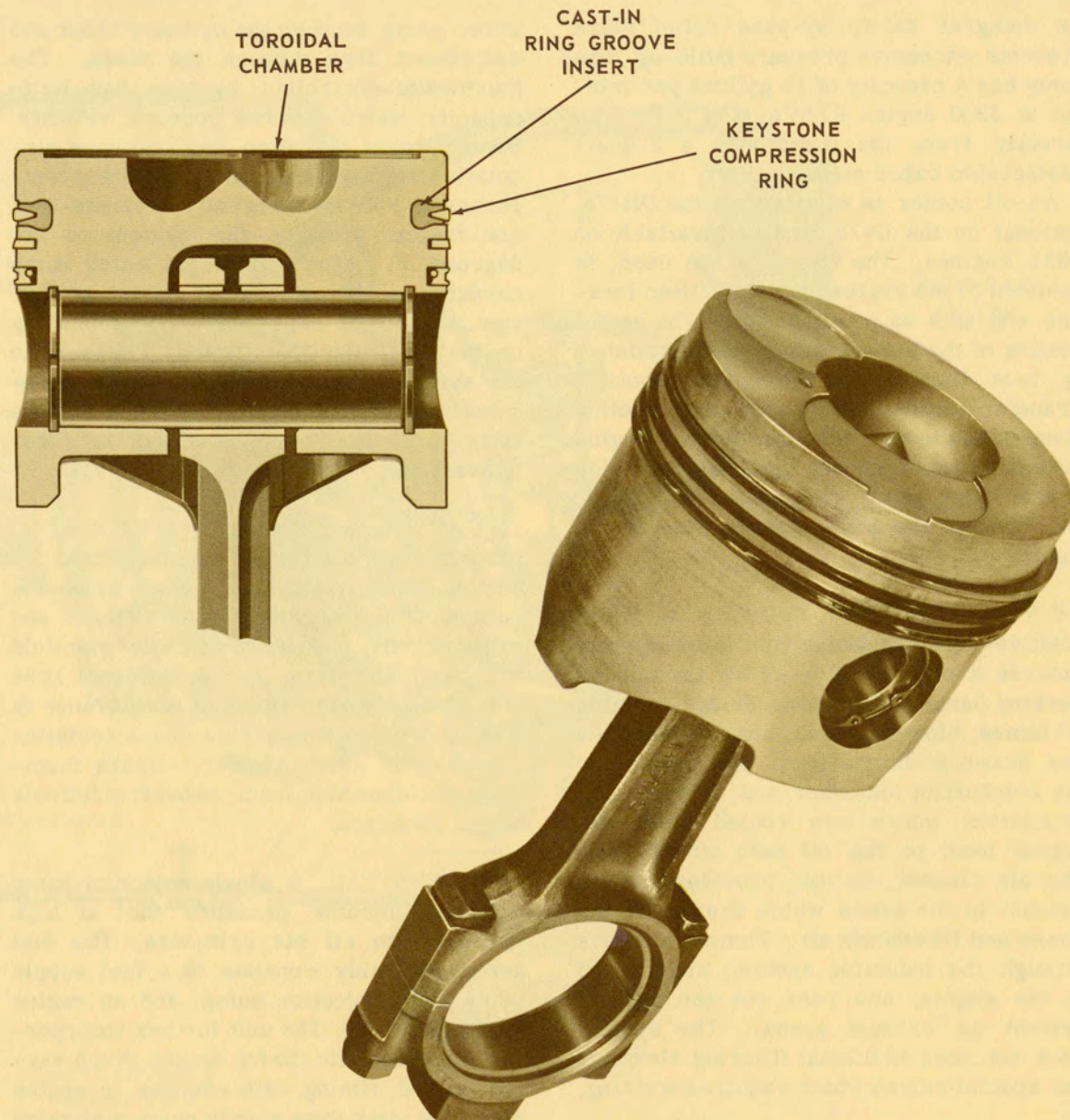
CONNECTING RODS AND PISTONS. Precision balanced connecting rods have a large I-beam section for maximum rigidity. Piston pins are full-floating; bushings are steel-backed bronze, lubricated from large wells in the connecting rods.

Excellent fuel combustion is attained through the use of a toroidal-shaped combustion chamber at the top of each piston which sets up swirling air currents within the cylinder, and is positioned on the piston to receive the full fuel spray from the injector.

Permanent-mold cast aluminum pistons are especially designed for the strength and heat transfer necessary in 4-cycle engines. The cam-ground, tin-plated surface finish can carry an adequate supply of oil for proper lubrication, and to prevent scuffing, particularly during the break-in period. The skirt is barrel-shaped for proper piston expansion at all operating temperatures, uniform piston wear, low cylinder bore wear, and long piston life. Three ring grooves are above the piston pin, two for compression and one for oil control. Oil scraped from the cylinder walls by the oil control ring is drained through eight holes in the piston. The top ring groove has a ring groove insert bonded to the piston.

The top compression ring is of a high-strength, 15-degree keystone design with a chromed barrel-face. The second compression ring is taper-faced and is made of piston ring iron. Oil control rings are cast iron with steel wire peripheral expanders. Scraping edges are chrome-plated.

LUBRICATION SYSTEM. The new diesel engines incorporate full-pressure lubrication. Pressure is developed by a high output rotor-type oil pump which draws oil through a fixed screen intake assembly.



An integral safety by-pass relief valve prevents excessive pressure build-up. The pump has a capacity of 16 gallons per minute at 3200 engine RPM's. Oil is filtered directly from the pump with a 2-quart replaceable paper element filter.

An oil cooler is standard on the DH478, optional on the D478, and not available on D351 engines. The cooler, when used, is mounted to the engine at the oil filter location and acts as a relief-valve. The actual cooling of the hot engine oil is accomplished by heat transfer to the engine coolant. Transfer occurs through an 8-plate cooling element in the oil cooler assembly. Engine coolant passes from the high pressure side of the water pump, through the oil cooler, and back to the low pressure side of the pump.

CRANKCASE VENTILATION. The positive-type crankcase ventilation system assures a constant flow of air through all working parts of the engine. Sludge-forming oil fumes, blow-by gases, and condensation are drawn from the block and heads into the combustion chamber and burned. All ventilation hoses are routed from the engine back to the oil bath air cleaner. The air cleaner, in turn, provides a slight vacuum in the hoses which draws out the fumes and filters the air. Fumes then pass through the induction system, are burned in the engine, and pass out the exhaust system as exhaust gases. The system does not need additional filtering elements and special valves which require servicing.

COOLING SYSTEM. The constant flow, by-pass system eliminates the need for radiator shutters. Large-volume, high velocity flow of coolant is effectively de-aerated for full-flow pressure from the

water pump through the cylinder block and end-to-end flow through the heads. The thermostat-controlled by-pass has large capacity which ensures constant velocity, supercharges the pump, and regulates circulation to maintain engine operating temperature. Factory installed permanent-type anti-freeze protects the system to -20 degrees F. The centrifugal water pump capacity is 106 gallons per minute at 3200 rpm. Radiator capacities vary, depending on the particular installation. Pressure in the system is controlled to nine pounds by a radiator pressure cap. For severe operating conditions, an optional coolant filter is available.

INTAKE and EXHAUST MANIFOLD arrangement is unique for the basic V-design block. All manifolding is on the outside of the engine and each intake and exhaust port has a separate manifold branch. The large cross-sectional area and smooth inside finish of each branch is designed for optimum flow characteristics to and from each cylinder. Intake manifolds are cast aluminum; exhaust manifolds are of cast iron.

FUEL SYSTEM. A single injection pump delivers injector pressure fuel at high pressure to all six cylinders. The fuel pump assembly consists of a fuel supply pump, fuel injection pump, and an engine speed governor. The unit further incorporates an automatic timing device which varies engine timing with changes in engine rpm. The gear-type supply pump maintains a supply of fuel under steady pressure. Three functions are carried out by the single-plunger, distributor-type injector pump: 1) Distributes fuel to each cylinder at the proper moment as needed; 2) Meters

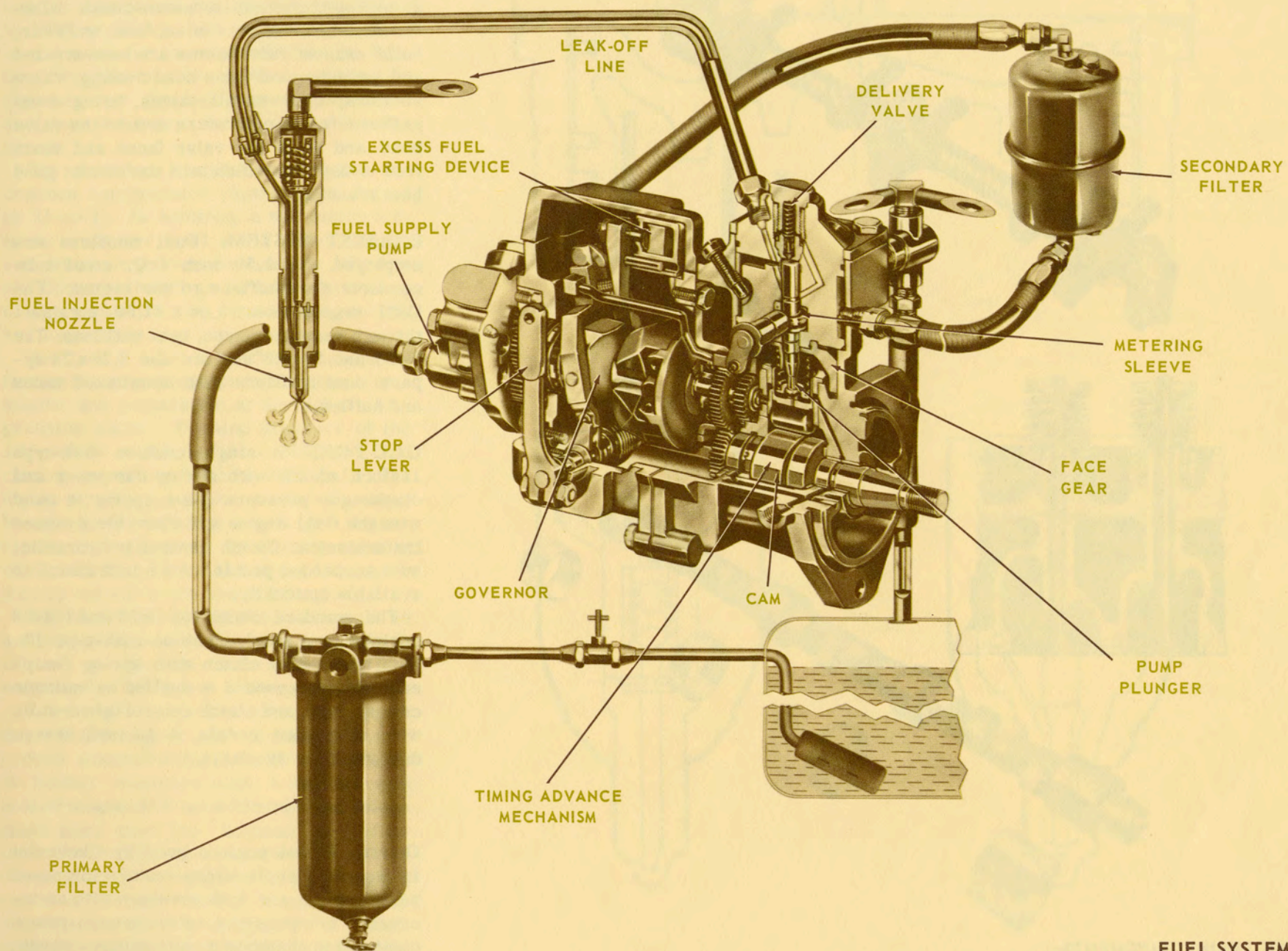
the exact amount of fuel for each cylinder; 3) Creates high pressure to atomize fuel for instant and complete fuel-air mixture within each combustion chamber.

The built-in, variable-speed governor closely controls engine speeds to give optimum power with maximum fuel savings. It includes a fuel modulating feature to regulate the amount of fuel being injected relative to the torque required. A constant pressure of 45 psi is maintained at the injector pump. A nozzle at each cylinder sprays fuel directly into the combustion chamber under extremely high pressure (3000 psi). Each nozzle contains four holes with a diameter of 0.014 inches. Nozzle holders fit into injector wells located on the cylinder heads. An 0.25 inch O.D. heavy-wall steel tube is connected between the pump and each nozzle holder.

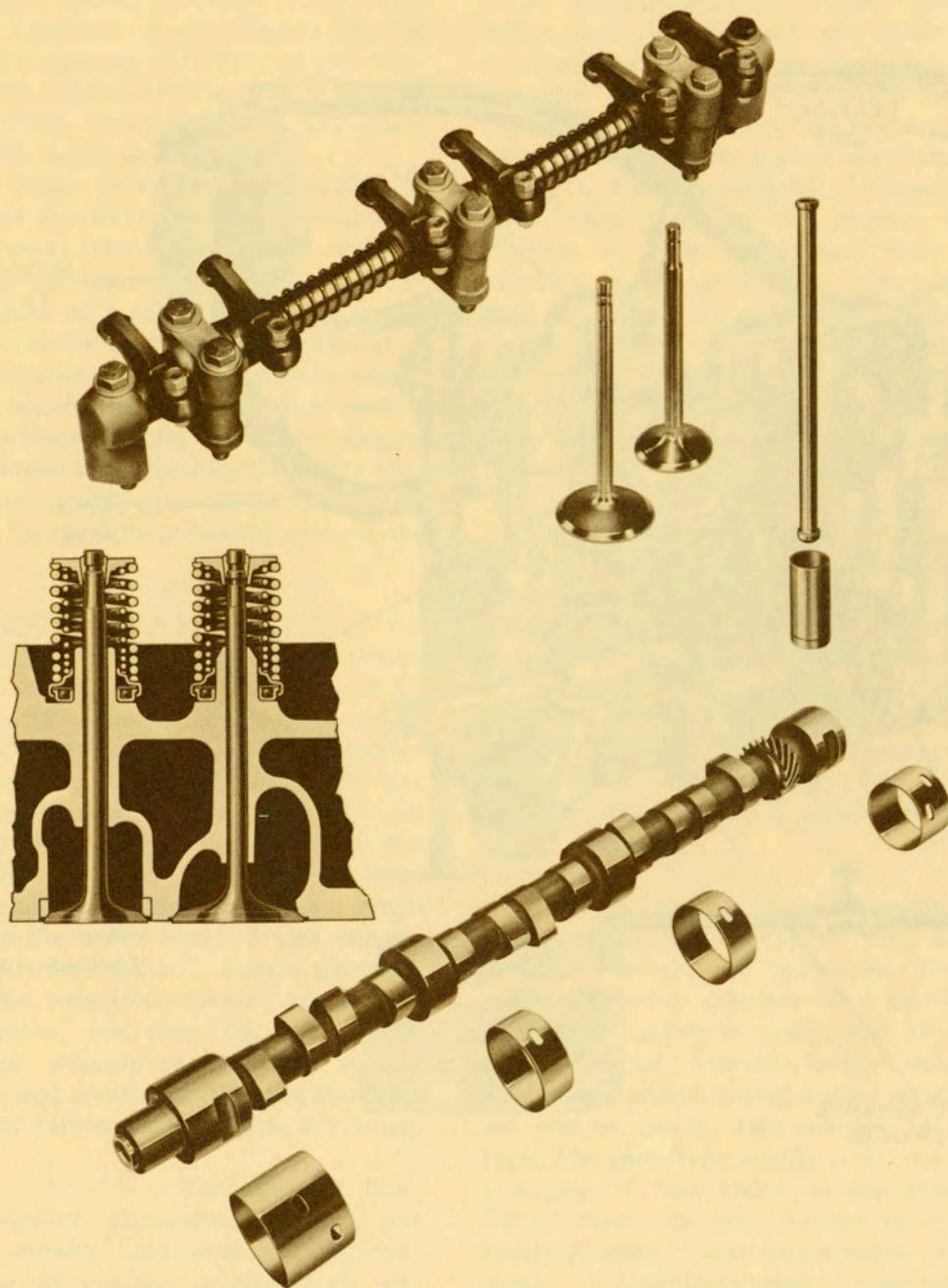
A primary filter with a replaceable element is located in the line between the fuel tank and the fuel supply pump. Final filtering is through a secondary throw-away type filter located between the supply pump and fuel injection pump.

CAMSHAFT. The camshaft is of high-strength ductile iron with the cam lobes hardened and phosphate-coated for wear resistance; it is supported by 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 engine start.

VALVE OPERATING MECHANISM. Intake and exhaust ports as well as the valves are larger than in comparable gasoline engines to promote better breathing characteristics. Intake valves are made of silichrome XB steel. This material is a high-chromium-



FUEL SYSTEM



VALVE TRAIN COMPONENTS

alloy with corrosion and wear-resistance qualities. Exhaust valves are faced with a nickel-chromium-tungsten-cobalt alloy for resistance to corrosion, heat, and wear. Solid exhaust valve stems are heat-treated and provide good valve head cooling. Valve rotators, used on all valves, bring about uniform face temperature around the valve head and keep the valve faces and seats free of deposits which tend to restrict good heat transfer.

EXHAUST SYSTEM. Dual mufflers are employed. A 2.50 inch O.D. steel tube connects the mufflers to the engine. The D351 engine uses 5.06 x 21.50 straight-through resonator-type, dual mufflers. The D478 and DH478 engines use 6.25 x 28 bypass dual mufflers with aluminized tubes and baffles.

CLUTCH. A single cushion disk-type 11-inch clutch with spring dampener and diaphragm pressure plate spring is used with the D351 engine and Chevrolet 4-speed transmission. Clutch control is hydraulic, with suspended pedals. A 12-inch clutch is available optionally.

The standard clutch for D478 and DH478 engines is a single cushion disk-type 12-inch heavy-duty clutch with spring dampener. Plate pressure is applied by multiple coil springs, and clutch control is hydraulic with suspended pedals. A 13-inch heavy-duty clutch is available.

Detroit Diesel Series 53N Engines

Detroit Diesel engines used by Chevrolet in domestic applications feature improved performance and fuel economy with an increased compression ratio through piston combustion chamber modifications and with

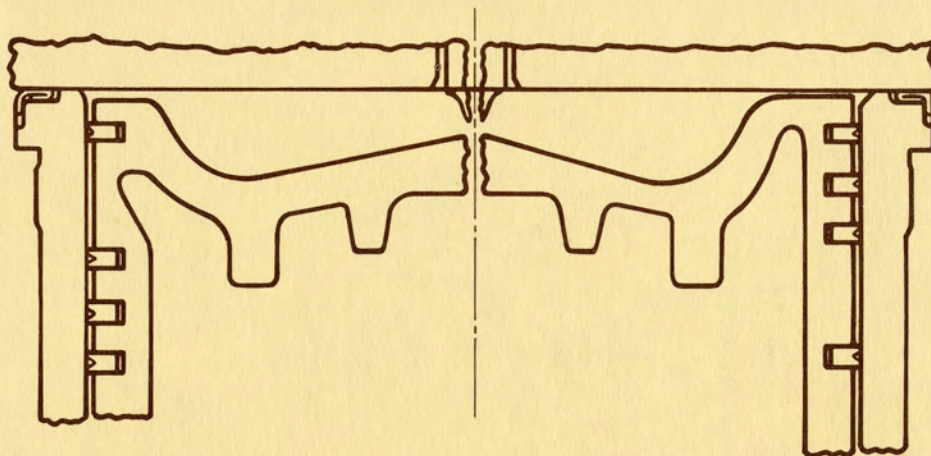
the use of new high pressure needle valve injectors. Because of the modified combustion chambers the engines are known in 1965 as Series 53N engines. The 3-53 engine used for the export J60 Series does not incorporate the modified combustion chamber (nor the high pressure injectors) and does not carry, therefore, the N suffix letter.

The modified combustion chamber increases compression ratio from 17.5-to-1 to 21-to-1. In addition, a new piston features a deeper bowl and a wider, higher rim which improves combustion. Two of the compression rings have been moved up closer to the fire ring for improved sealing and longer fire ring life.

The new N injectors, which replace the former S components, provide better atomization and penetration at the higher compression ratio. Opening pressure of the differential valve is about 3000 psi, and closing pressure is about 2000 psi. The higher opening pressure produces a sharp beginning of injection while the higher closing pressure and the close proximity of the needle seat to the spray holes give a crisp cut-off at the end of injection.

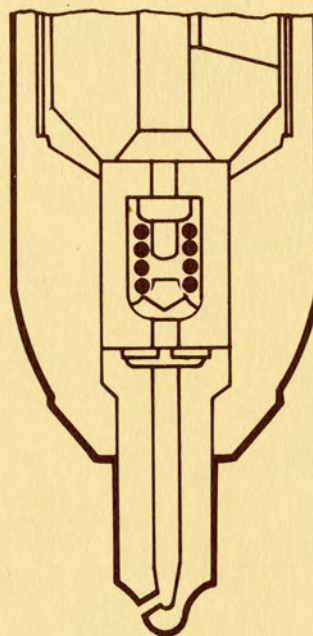
Improvements in combustion result in a moderate increase of power, reduction in exhaust smoke, and improvement in fuel economy for all Series 53N engines.

Ether cups for cold weather starting of the 6V-53N engine are relocated for improved accessibility. The 6V-53N engine is further improved with a new starting motor magnetic switch having a stainless steel core tube for increased durability in withstanding the vibration typical of diesel engine installations. Additionally, revisions to the cooling system provide improved temperature control for better engine warm-up and cab heater operation.

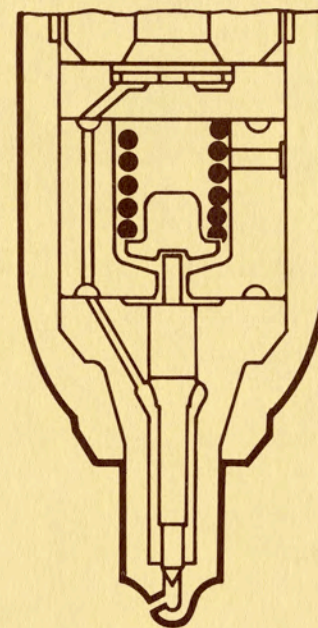


1964

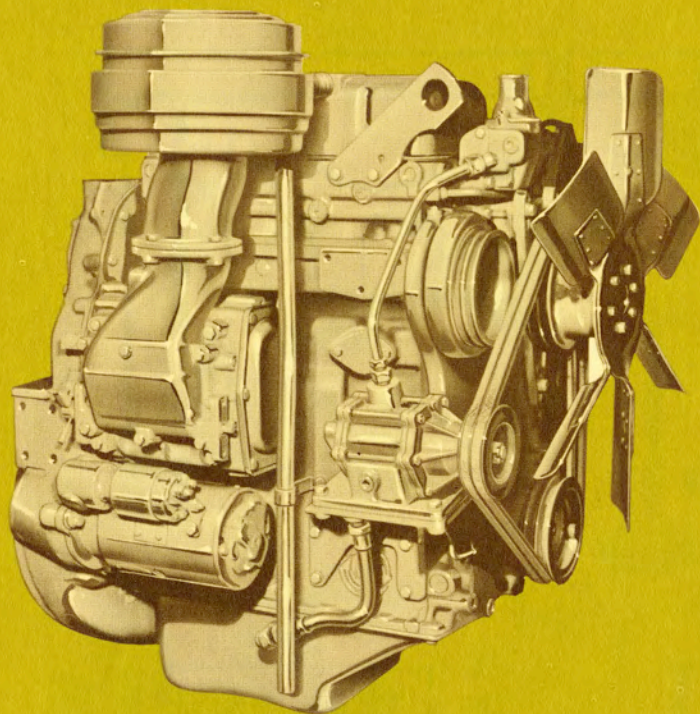
1965



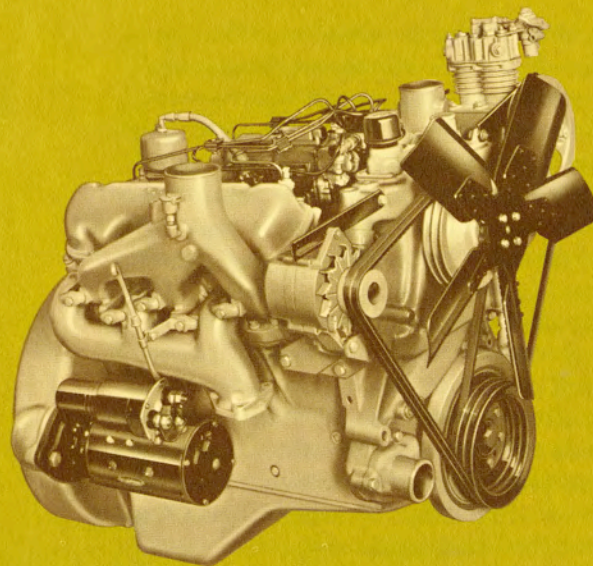
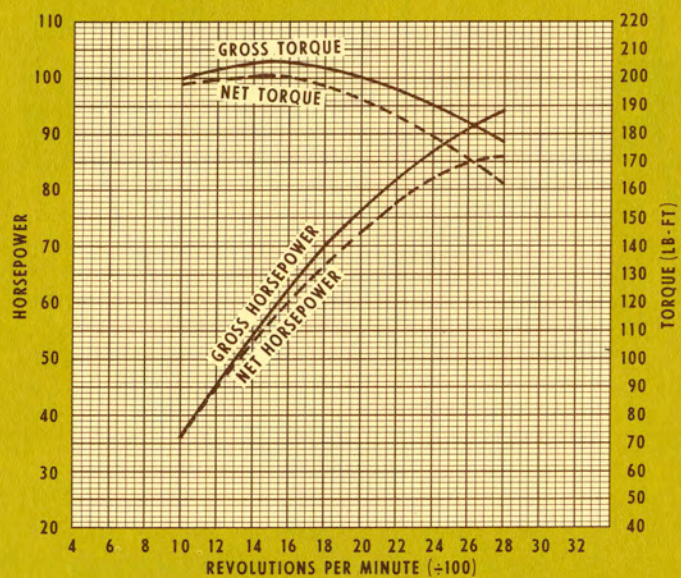
1964



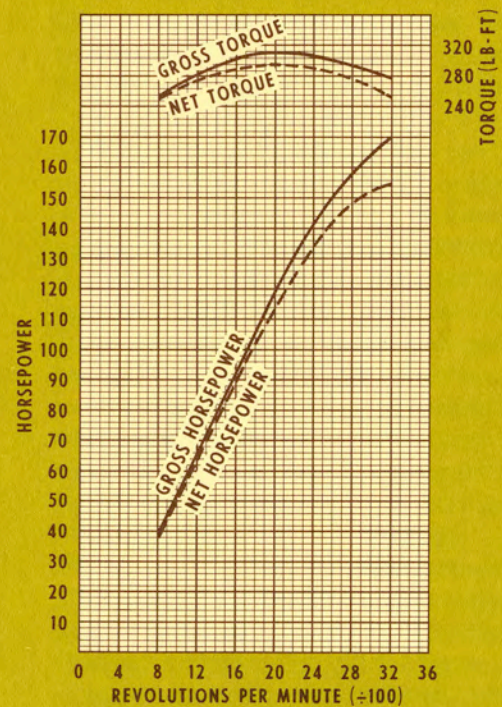
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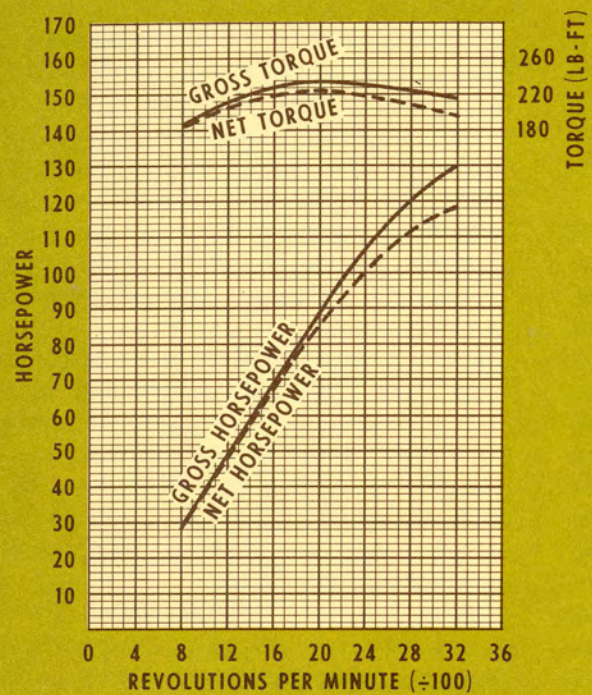
3-53N ENGINE



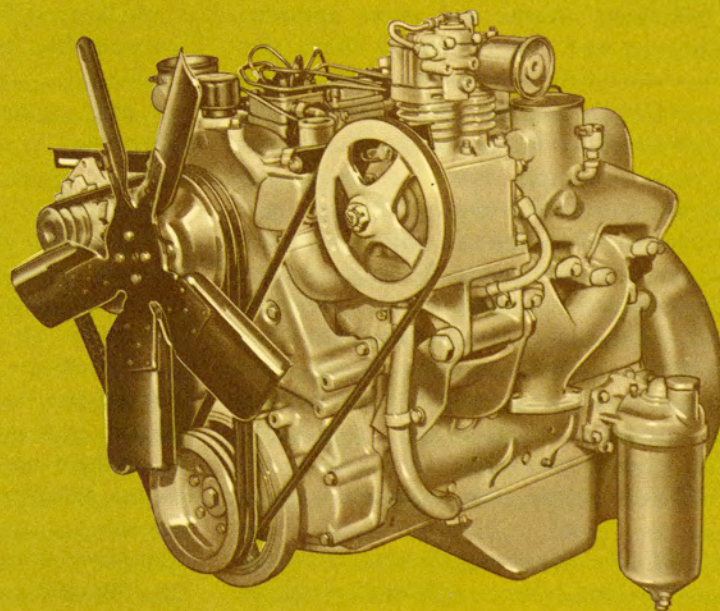
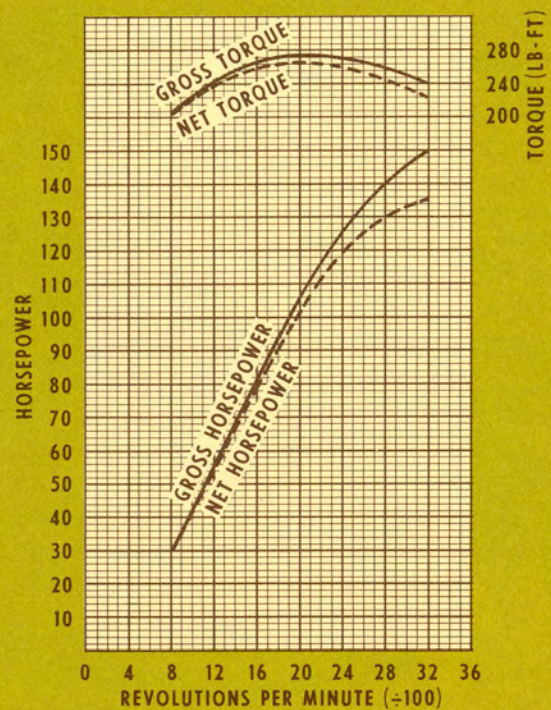
DH478 ENGINE



D351 ENGINE



D478 ENGINE



body

Body and sheet metal design for carryover diesel models (Series D60, E80, U80, W80) is unchanged in 1965 except for the elimination of the dispatch box door lock on conventional cabs and LCF's and the use on Series D60 of the new compression-rebound sheet metal and body mounts as released for Series 60 conventional cab gasoline models.

Improved cab durability for Series E80 and W80 models is afforded with the use of new front body mounts of the double-rubber biscuit type and new rear body mounts of the shear-type. Replacing the former combination tire carcass-rubber biscuit mounts, the front mounts feature biscuits of larger area and lower rate; the larger area provides for necessary rubber durability, while the lower (softer) rate contributes to improved cab durability. Like the former shackle-type units, the shear-type rear body mounts are mounted to the cab and cab rear support frame cross-member at a 45-degree angle. Because of their inherently lower and more uniform rate achieved with rubber held in shear, the

mounts contribute considerably to improved cab durability.

Improved corrosion resistance for Series D60 front end sheet metal components continues from mid-season 1964 with the application of zinc chromate primer prior to the application of finish paint. Areas affected by this change are: 1) underside of hood panel, 2) front side of radiator support, 3) radiator support upper tie bar baffles, 4) upper portion of fender skirts, 5) front fender rear reinforcements, 6) front fender closing panels.

Optional body equipment is carried forward from 1964, but applicability of RPO Z62 (Custom Comfort and Convenience Equipment) and RPO A10 (Panoramic Cab Equipment) is extended to Series D60 and applicability of RPO C14 (2-Speed Windshield Wiper and Washer Equipment) is extended to Series U80.

Body and sheet metal design for new diesel models is generally the same as that of comparable carryover diesel models, including styling aspects. Certain differences exist, however, in models comprising

chassis

The new diesel models utilize essentially the same frames, front and rear suspensions, and steering systems as do the equivalent gasoline units. Various new drive train components are released, however, commensurate with the higher performance characteristics of the diesel engines. Thus, the line-up includes four transmissions new to Chevrolet; an expanded rear axle line; extensively revised ratios; larger optional brake sizes; new side-mounted power steering unit; and a full range of tube-type and tubeless tires.

REAR AXLES. Rockwell-Standard 16,000 pound, single and 2-speed axle designs serve

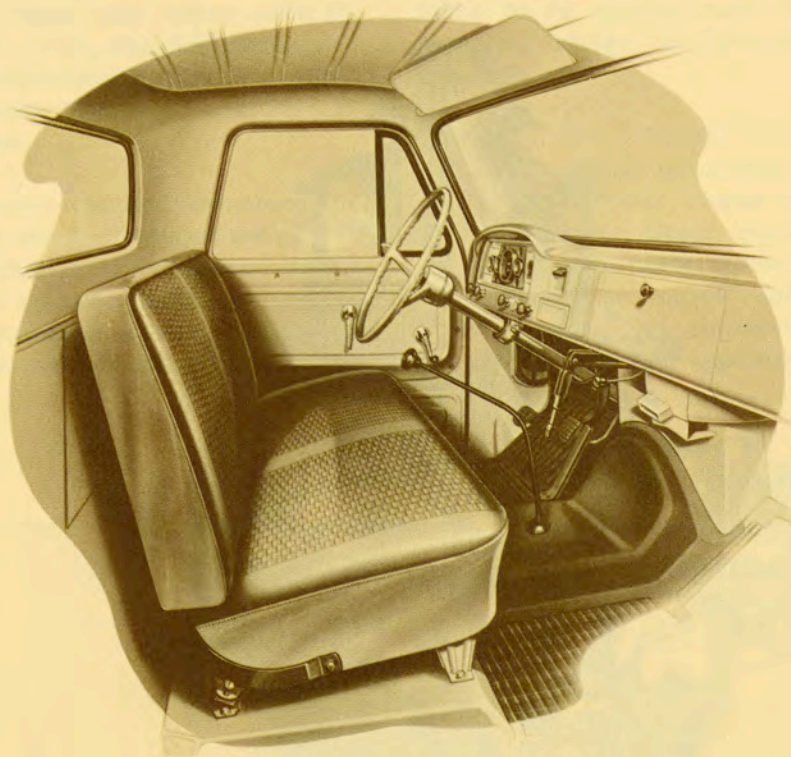
as intermediate capacity axles between the Chevrolet medium and Eaton heavy-duty units.

Both the Rockwell-Standard units feature components of sufficient size and material content to insure long life and good durability. All gears are precision-machined of alloy steel which is carburized and hardened for high strength. Special processing of the full-floating type axle shafts makes the grain of the metal conform to the shape of the shaft profile resulting in equal stress distribution. Subsequent heat treating produces high brinell hardness at the outer surface with maximum resiliency at the core. This procedure gives good

series groups A60-80 (LCF), N60-80 (tilt-cab), and Q50-60-80-V80 (conventional cab); these differences are confined largely to interior appearance and to RPO body equipment. A different RPO numbering system comprised of 4-digit numbers also is utilized for these models.

Series A60-80, Q50-60-80, and V80 models have instrument panels, instrument clusters, and seat trim different from other diesel LCF and conventional cab models. Series N60-80 differences from other diesel tilt-cabs consist mainly of instrumentation.

Typifying these differences is the Series A60 interior illustrated. The seat trim shown is all-vinyl; covering color is Medium Fawn, while facing color is Dark Fawn. Series Q50-60-80 models may be equipped with an Interior Convenience Group (RPO 0170) which features special seat trim of Light and Dark Fawn nylon-faced pattern cloth and Medium Fawn textured vinyl facings; also included in the option are a left hand armrest, right hand sunshade, Fawn-colored floor mat, and Off-White door access panel paint treatment.



resistance to wear combined with greater torsional strength.

Straddle drive pinion mounting for the single-speed design assures accurate alignment with the ring gear. Pinion support is provided by tapered roller bearings at the front and by a straight roller bearing at the rear location.

Double reduction drive is used for the Rockwell 2-speed rear axle. The ring gear is mounted on a cross shaft which also carries two helical pinions. Although they normally ride free on the shaft, either pinion can be connected to the shaft by the sliding collar-type dog clutch. The helical gears which these pinions drive are each

connected to the differential. Thus, the ratio is determined by which set of gears is engaged.

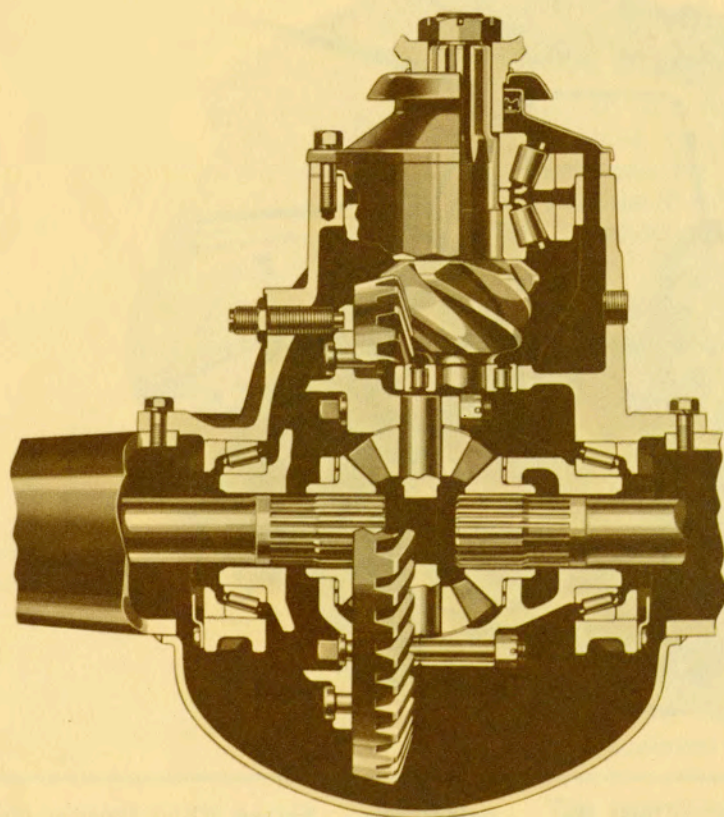
Housings for both the single and 2-speed Rockwell units are of heat-treated medium carbon steel with conventional, one-piece, banjo type construction. A square configuration is used for maximum strength with the given weight and size. Differential cover plates are of heavy-gauge steel, securely welded in place to prevent leakage.

Eaton 17,000 and 18,500 pound single and 2-speed rear axles are released for heavy duty diesel models. While basically the same as previously-used units, a larger number of available ratios permits greater

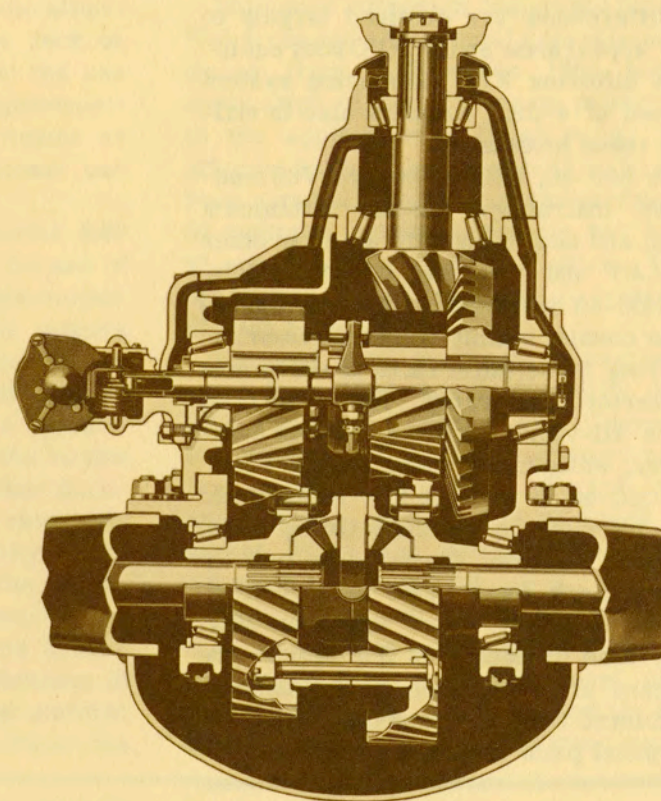
selectivity. Series VX60 tandem models incorporate a 18,500 pound Eaton unit as the driving member coupled with a tubular trailing axle to achieve the 28,000 pound bogie rating. A 2-speed driving axle is available optionally, extending the versatility of these models.

Numerically lower rear axle ratios are released for Series EUW80 models to achieve better operating economy. The 4.87/6.65-to-1 ratio Eaton 18,500 pound rear axle, formerly optional, replaces the similar capacity 5.57/7.60-to-1 unit as base equipment for EU80 trucks, with the latter ratio now being available optionally. Other ratio revisions for Series EU80 vehicles

ROCKWELL-STANDARD AXLES



SINGLE-SPEED



2-SPEED

are: 18,500 pound single-speed changed from 5.57 to 4.87-to-1; 23,000 pound single-speed changed from 5.43 to 4.87-to-1; 23,000 pound 2-speed changed from 5.43/7.39 to 4.87/6.63-to-1.

The standard bogie ratio for W80 models is changed from 5.57 to 4.87-to-1 while 5.57-to-1 replaces 6.50-to-1 as the optional 34,000 pound bogie ratio.

BRAKES. Aside from several noteworthy exceptions, brake sizes and types for the

diesel units are the same as on equivalent gasoline-powered models. In the 60 Series, all -23 models are equipped with an air-hydraulic system as base equipment, with air-brakes as an option. VX60 tandem models include 14x2-1/2 inch front and 15x7-inch rear brakes, assisted by a 12-3/4 inch double diaphragm booster. Vehicles with the 16,000 pound rear axle have 15x5-inch rear brakes.

In the 80 Series, the -23 models, instead of vacuum-hydraulic, also use the air-

hydraulic brake systems. Series V80 tandem models are similarly equipped except that power assist for the -03 units is provided by an 11-1/2 inch double diaphragm and 10-inch single diaphragm combination, while full air brakes are released for the -23 units.

TRANSMISSIONS. Four new transmissions combine with twelve previously-used units to establish the 1965 Chevrolet diesel model transmission line-up. Chevrolet and New

Process 4-speeds, standard or close-ratio Clark and Spicer 5-speeds, the Fuller 8-speed, and the Powermatic automatic offer proven durability combined with a wide choice of capacities, ratios, and convenience of operation.

Two "short-fourth" or close-ratio transmissions - the New Process 540GD and the Clark 269V - provide closely-spaced gear splits in the higher ranges. Standard-ratio units - the New Process 540GL and 541GL models - allow many usable gear combinations for a variety of operations. The New Process 541GL model is a heavy-duty version of the 540GL unit, and features increased input torque capacity through larger gear face width dimensions.

All New Process units utilize pin-type synchronizers for smooth, clashless shifting. The mainshaft and countershaft are mounted on ball and roller bearings for minimum friction and long life. Power take-off openings are provided on both sides of the transmission case.

Durability features, common to Clark transmissions already proven in Chevrolet trucks, are also evident in the 269V unit. Heavy-duty bearings support the main drive gear, mainshaft, countershaft, and reverse idler gear. First and reverse gears are of the sliding-spur type while split-pin type synchronizers promote ease of shifting for the helical design second through fifth gears. Standard SAE 6-stud power take-off openings are provided at both sides of the transmission.

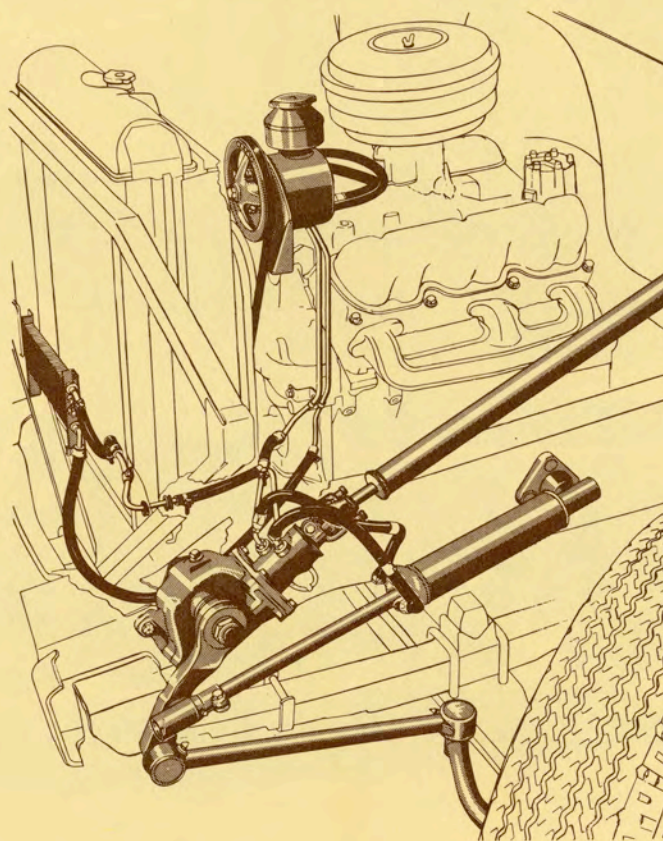
Spicer heavy-duty 5-speed transmission ratios are revised for Series EUW80 models to accommodate diesel engine modifications. For Series EU80 models, the Spicer 5756B is replaced by a 5752C unit having ratios of 6.10, 3.30, 1.81, 1.17, 1.00, and 6.46 (reverse). Series W80 trucks now receive a

Spicer 5752 transmission, replacing the 5652B model, which has ratios of 6.10, 3.30, 2.04, 1.40, 1.00, and 6.46 (reverse). The new transmissions offer the same durability features common to all Spicer 5000 Series units.

STEERING. A side-mounted power steering unit is available for Series AQ60 and AQV80 models with a 7000-pound or higher capacity front axle, and is particularly well-suited for severe operating conditions. The location of the power cylinder on the frame side

rail affords more protection and permits force to be applied more directly to the steering linkage for positive steering response.

WHEELS AND TIRES. A full range of tube and tubeless tires with corresponding disk or cast spoke wheels is released for 1965 Chevrolet diesel trucks. Tires of rayon or nylon construction are available with highway or on-off road treads in a host of sizes and capacities to suit any type of vehicle loading or operation.



SIDE-MOUNTED POWER STEERING

el camino pickups

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CUSTOM EL CAMINO MODEL 13580

styling

Distinguishing the 1965 El Caminos are a new front end appearance, new exterior ornamentation, new interior trim and ornamentation, and 10 new exterior colors.

Front end styling is completely new with a new radiator grille, restyled hood, new front bumper, and restyled fenders. The grille features a central emblem which carries the Chevrolet trademark; dual headlight treatment is retained. Parking

and direction signal lights remain located in the front bumper. Custom El Camino Models 135-13680 feature a new bright molding on the hood windsplit.

The side view is given a new appearance with the restyled fender profile, new moldings, and a new nameplate. For Models 133-13480, a new body side molding replaces the former sill molding. The molding is located low on the door and body side

NEW NAMEPLATE DESIGN



NEW ENGINE EMBLEMS



and runs in a straight line between the wheel openings. Side appearance for Models 135-13680 is enhanced with a new body sill molding. Wheel opening moldings are continued unchanged for these models; no molding is used, however, at the lower rear portion of the pickup box side panel as in 1964.

Completing the side view are a new rear quarter panel nameplate at the same loca-

tion and new front fender engine emblems relocated to front of wheel opening. Emblems are provided for all engines except the base 6-cylinder unit. No series nameplate is carried on the front fender as in 1964.

Rear appearance remains essentially unchanged except for the relocation of back-up lamps from the tail lights to the rear bumper for maximum illumination

when backing. Tail lights, therefore, are restyled to incorporate single lenses. Back-up lamps again are provided Models 135-13680, whereas provisions (mock lenses) are provided Models 133-13480. Other rear end items are carried forward. Color treatment for the depressed border area of the tailgate emblem, however, is changed from Gold to White at the top and from Black to Red at the bottom.

STYLING ■

El Camino models again are available in three interior colors — Fawn, Aqua, and Red. Interior colors are keyed to the exterior color with Fawn available for all 12 exterior colors; Aqua available for Black, White, Medium Aqua, and Dark Aqua exteriors; and Red available for Black, White, Maroon, Red, and Beige exteriors.

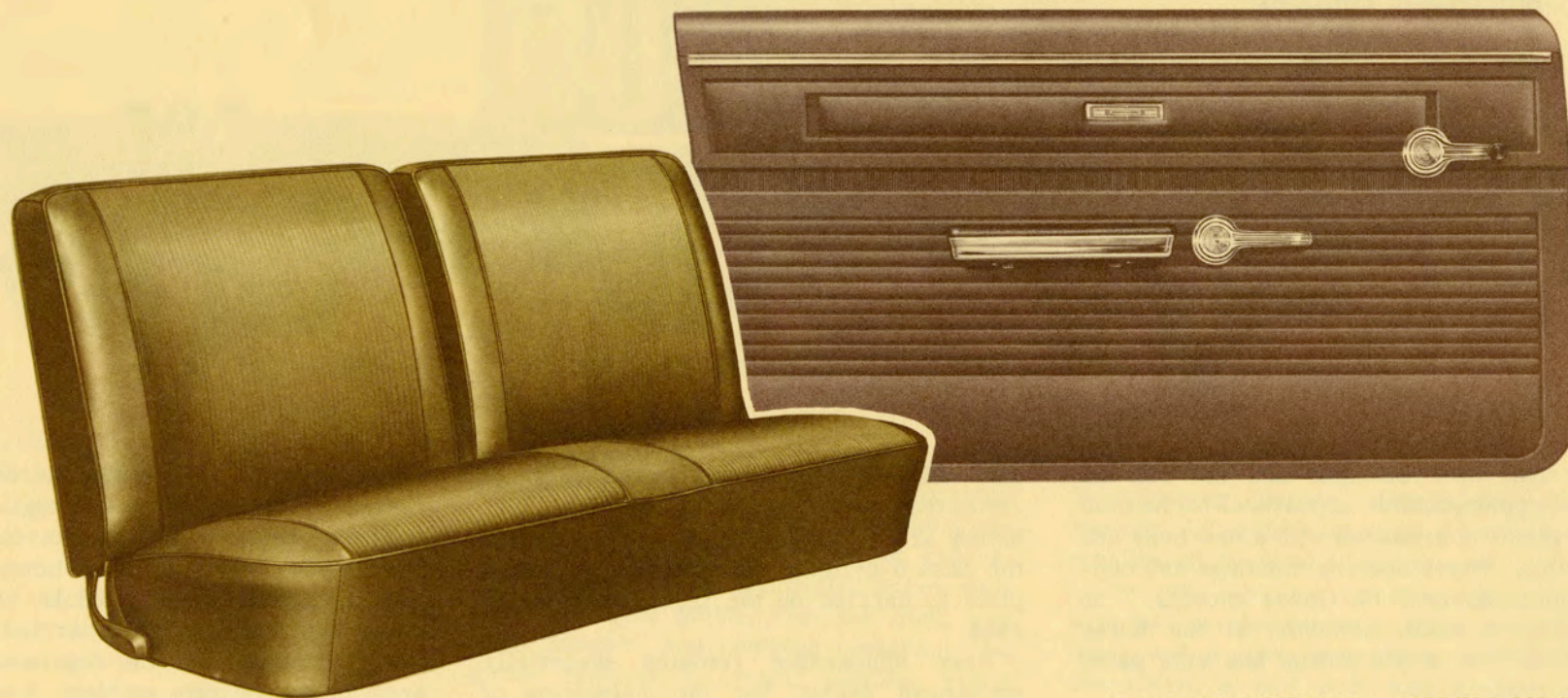
Models 133-13480 feature new-styled all-vinyl seat and sidewall trim. Seat upholstery is vertically-ribbed vinyl for the cushion and backrest coverings and textured vinyl for the facings and bolsters. The new sidewalls are distinctively embossed and carry a bright vinyl emblem as

well as new hardware. New seat and sidewall trim also is featured for Custom Models 135-13680. Diamond-patterned cloth and textured vinyl is used to trim the seat; top backrest bolsters are deeply embossed. Deep horizontal embossments also are used for the vinyl sidewalls which carry bright emblems as well as bright division moldings. New door hardware, identical to that of Models 133-13480, completes the sidewall.

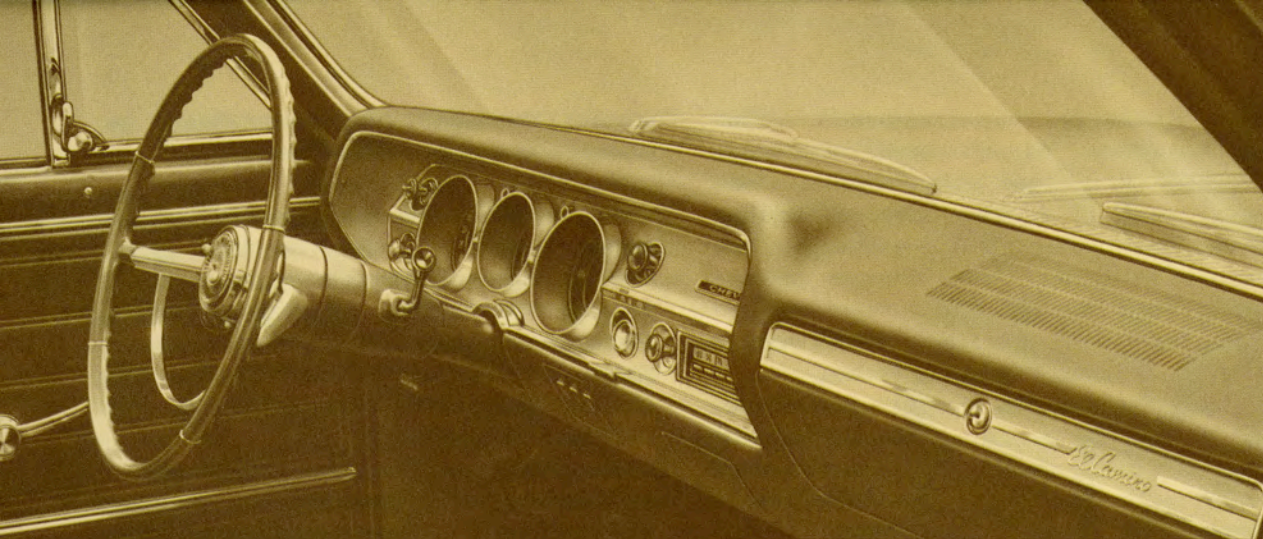
A restyled instrument cluster trim plate lends a new look to the instrument panel. Steering wheel design is carried over from 1964 except for a new hub emblem. Custom models feature a new bright metal trim

plate and emblem for the glove box door.

Optional bucket seats for Models 135-13680 are new for 1965. Seat trim is comprised of textured vinyl with a deeper color tone for the cushion and backrest coverings; backrest pivot arms are bright. As in 1964, the bucket seat option includes a textured vinyl spare wheel and tire cover and the bright metal wheel trim covers, which were introduced in mid-season 1964. Wheel trim covers for 1965 are newly-styled. The bright center console for Model 13680, included in the bucket seat option when RPO 4-speed transmission equipment also is specified, is continued unchanged.



SEAT AND SIDEWALL — MODELS 133-13480



INTERIOR VIEWS – CUSTOM
MODELS 135-13680



body and accessories

Basic El Camino body structure is carried forward from 1964 unchanged. Front fenders, hood, grille, and front bumper are new as a result of the new front end styling; though inner sheet metal is unchanged, new radiator support panel mounts provide better road isolation. Because of the new front bumper configuration, overall vehicle length is increased over 2.5 inches.

Other new features include a 2-key locking system for greater protection against theft, the relocation of the back-up lamps to the rear bumper for maximum illumination, and thicker jute backing on floor mats for Models 135-13680.

Several new body options are released for 1965.

FRONT SHEET METAL MOUNTS. Rubber biscuits replace steel shims at the left and right hand attachment of the radiator support panel to the frame, providing a flexible rather than a solid mounting system for better road isolation of sheet metal. An upper and lower biscuit is utilized for each mount assembly, the panel being supported in compression between the biscuits at each forward end of the frame. Rear attachment of sheet metal remains unchanged.

TWO-KEY LOCKING SYSTEM. In the new 2-key locking system, one key is used for the ignition and door locks while the other key is used for the glove compartment lock. New ignition lock identification is ACC-OFF-ON-START; the key is removable only from the OFF position centered vertically on the lock.

INCREASED SOUND ISOLATION. Jute backing for floor mats of Models 135-13680 is increased to 0.75 inch from 0.50 inch for improved sound isolation. Mastic sheeting

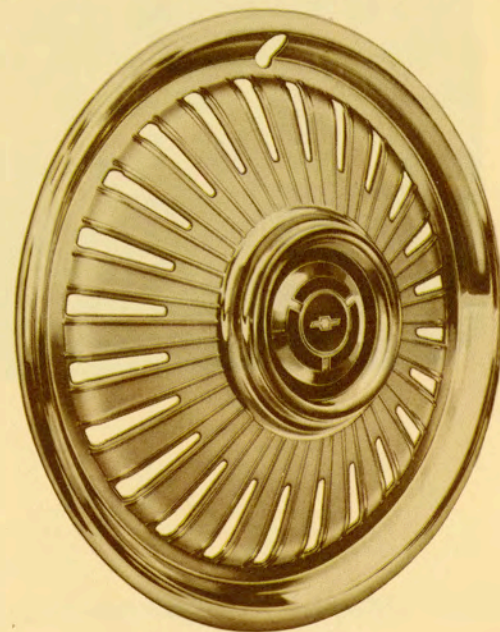
of the passenger compartment floor continues in use from mid-season 1964.

BODY OPTIONS are carried forward unchanged except for items modified by the new styling and trim colors and except for the deletion of RPO C65, Custom Deluxe Air Conditioning. Several new items are added to the option line-up: RPO U03, Low D-Note Electric Horn and RPO U69, AM-FM Push-Button Radio.

The low D-note electric horn is designed as a straight trumpet type; it forms a trio with the two production horns to provide a distinctive signal with increased volume.

Basically the same unit as released for the Chevrolet passenger car, the AM-FM push-button radio with manual front antenna is offered for a more complete radio line.

Both seats and wheel trim covers in the Bucket Seat option for Models 135-13680 are restyled for 1965. (See opposite page.)



El Camino accessory line-up is changed with several additions, revisions, and deletions. New items offered for the first time in 1965 are Auto Compass (windshield type), Car-to-Trailer Electrical Wiring Harness, Cruise Control, Low D-Note Horn, and AM-FM Radio. Though formerly offered, Wheel Trim Covers (disk type) and Instrument Panel Clocks are of new design for 1965. The Seat Cover Unit is discontinued.

The liquid-type Auto Compass is attached to the windshield through a vacuum cup; it is intended to be placed low on the windshield glass near the vehicle centerline to avoid obstructing driver vision. Being wireless, the compass dial is illuminated with an integral battery and switch.

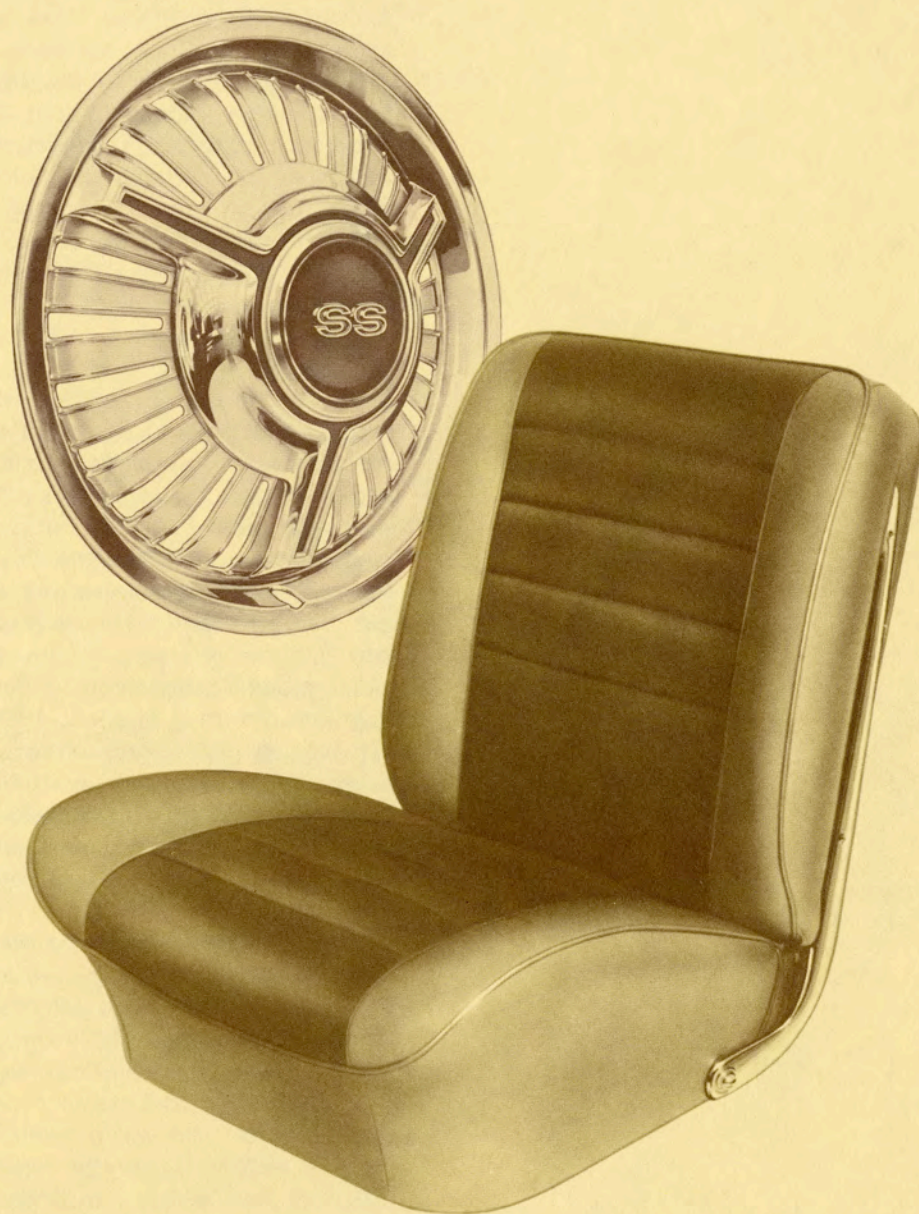
Wire splicing is minimized with the new Car-to-Trailer Electrical Wiring Harness since it is connected to the vehicle main wiring harness through a plug-in system. No drilling of body holes is required.

Basically the same unit as offered on the Chevrolet passenger car, Cruise Control features automatic speed control whereby, once the automatic control button is engaged, the unit will automatically lock-in at the selected speed.

The new Low D-Note Horn and new AM-FM Radio are identical to the RPO units previously described.

All-new styling is featured for the disk-type Wheel Trim Covers, as shown on the opposite page. The simulated wire wheel covers are continued unchanged.

The accessory clocks are modified with the incorporation of a sweep second hand. Two types are offered - one for mounting within the instrument panel provision and one for mounting atop the instrument panel when a tachometer is factory-installed within the clock provision.



BUCKET SEAT OPTIONS (RPO'S 717, 724, 726) FEATURE NEW VINYL SEAT TRIM AND WHEEL COVER STYLING.

engines and chassis

The El Camino engine line-up for 1965 is comprised of five engines with the base units continuing to be the 194 cubic inch L-6 and the 283 cubic inch V-8, with 2-barrel carburetor. The optional 230 cubic inch L-6 is continued for 1965 but with a reduction in gross horsepower. The 250 and 300-horsepower versions of the optional 327 cubic inch V-8 introduced in mid-season 1964 also are continued. Discontinued for 1965 is the 283 cubic inch V-8 with 4-barrel carburetor.

The optional 250 horsepower, 327 cubic inch V-8 engine is equipped with new cylinder heads to maintain output ratings, together with a large, single exhaust system which is also designed for a reduction in replacement costs. The new cylinder heads incorporate larger inlet and exhaust ports and larger diameter inlet valves. In the new exhaust system, 2-inch diameter exhaust pipes extend from each manifold to a junction with a single 2-1/2 inch diameter exhaust pipe extension to the muffler. A dual exhaust system is available optionally.

A new cam shaft, featuring increased valve train durability and quieter operation, is used for the base 194 cubic inch L-6 engine.

The 155-horsepower version of the optional 230 cubic inch L-6 engine is discontinued and replaced with the 140 horsepower version to achieve standardization with the 1965 passenger car engine line-up.

Additionally, fuel pump mounting flange thickness is increased from 0.22 to 0.34 inch to reduce flange distortion and possibility of oil leakage in both 194 and 230 engine applications.

Air cleaner operational interval is extended and efficiency increased with the use of a new oil-wetted paper filter element for all El Camino V-8 engine air cleaners.

The 1965 El Camino chassis is essentially unchanged from the previous year, but with several modifications for improved ride characteristics. The front and rear coil springs have a lower rate, for a softer ride. Also, larger diameter rear axle control arm bushings improve rear suspension isolation and contribute to a quieter ride.

The standard and optional tires are of a new, low profile design. Wheel design is unchanged. With a smaller rolling radius, the new tires reduce vehicle heights. Increased capacity is achieved through larger section widths. Tire sizes are redesignated as follows: 7.00-14-4pr becomes 7.35-14-4pr; 7.50-14-4pr becomes 7.75-14-4pr; and 7.50-14-6pr becomes 7.75-14-8pr. Actual ply construction is 2-ply for the 4-ply rated tires and 4-ply for the 8-ply rated units.

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GASOLINE MODEL LINE-UP

Model Type	Sub-Group	LIGHT-DUTY				MEDIUM-DUTY			HEAVY-DUTY		Sub-Total	Total
		1/2-Ton	3/4-Ton	3/4-Ton Special	1-Ton	1-1/2 Ton	1-1/2 Ton Special	2-Ton	2-Ton H.D.	2-1/2 Ton		
Chassis-Cab	Conventional	C1403 C1503	C2503	C3603S C3803S	C3603 C3803	C5103 C5203 C5303 C5503	C6103S C6203S C6303S C6503S C6803S	C6103 C6203 C6303 C6503 C6803	C6103H C6203H C6303H C6503H C6803H	C8103 C8203 C8303 C8503 C8803	31	79
						L5203 L5303 L5603	L6203S L6303S L6503S L6603S L6903S	L6203 L6303 L6503 L6603 L6903	L6203H L6303H L6503H L6603H L6903H	L8203 L8303 L8603	21	
						T5203 T5303 T5603 T5803 T5903	T6203S T6303S T6603S T6803S T6903S	T6203 T6303 T6603 T6803 T6903	T6203H T6303H T6603H T6803H T6903H	T8203 T8303 T8603 T8803	24	
		4-Wheel Drive K1403 K1503	K2503								3	
	Conventional Stepside	C1404 C1504	C2504	C3604S	C3604						5	
	Conventional Fleetside	C1434 C1534	C2534								3	
	El Camino	133- 13480 135- 13680									4	
	4-Wheel Drive	K1404 K1504 K1434 K1534	K2504 K2534								6	
	Conventional		C2509	C3609S	C3609	C5109 C5309					5	
	LCF					L5309					1	
Panel	Chevy-Van	G1205									1	5
	Conventional	C1405		C3605S	C3605						3	
	4-Wheel Drive	K1405									1	

Model Type	Sub-Group	LIGHT-DUTY				MEDIUM-DUTY			HEAVY-DUTY		Sub-Total	Total
		1/2-Ton	3/4-Ton	3/4-Ton Special	1-Ton	1-1/2 Ton	1-1/2 Ton Special	2-Ton	2-Ton H.D.	2-1/2 Ton		
Cowl	Less Windshield	C1402	C2502	C3602S	C3602	C5102 C5202 C5302 C5502	C6102S C6302S C6502S	C6102 C6302 C6502	C6102H C6302H C6502H		17	41
	Windshield	C1412	C2512	C3612S	C3612	C5112 C5212 C5312 C5512	C6112S C6312S C6512S	C6112 C6312 C6512	C6112H C6312H C6512H		17	
	School Bus					S5302		S6202 S6402 S6702 S6902	S6702H S6902H		7	
Suburban	Conventional	C1406 C1416									2	4
	4-Wheel Drive	K1406 K1416									2	
Forward Control Van	Square-Front	P1345	P2535 P2635		P3535 P3635						5	11
	Round-Front		P2345 P2545 P2645		P3345 P3545 P3645						6	
Forward Control Chassis		P1342	P2342 P2542 P2642		P3342 P3542 P3642	P5742 P5842					9	9
Tandem	Regular									M8303 M8503 M8803	3	6
	Trailing							M6303 M6503 M6803			3	
Sub-Total		27	17	7	15	26	21	28	23	15	179	
Total		66				75			38			

DIESEL MODEL LINE-UP

Model Type	Sub-Group	MEDIUM-DUTY				HEAVY-DUTY					Sub-Total	Total
		1-1/2 Ton	2-Ton			2-Ton Heavy-Duty			2-1/2 Ton			
Chassis-Cab	Conventional	D5103	D6103	Q6103	Q6123	D6103H	Q6103H	Q6123H	Q8103	Q8123	55	130
		D5203	D6203	Q6203	Q6223	D6203H	Q6203H	Q6223H	Q8203	Q8223		
		D5303	D6303	Q6303	Q6323	D6303H	Q6303H	Q6323H	Q8303	Q8323		
		D5503	D6503	Q6503	Q6523	D6503H	Q6503H	Q6523H	Q8503	Q8523		
		Q5103	D6803	Q6703	Q6823	D6803H	Q6703H	Q6823H	Q8703	Q8823		
		Q5203		Q6803			Q6803H		Q8803			
		Q5303		Q6903			Q6903H		Q8903			
		Q5503										
		Q5803										
	Low Cab Forward		A6203	A6223		A6203H	A6223H		A8603	A8223	29	
			A6303	A6323		A6303H	A6323H		A8703	A8323		
			A6403	A6623		A6403H	A6623H		A8803	A8623		
			A6603			A6603H			A8903	E8203		
			A6703			A6703H				E8303		
			A6803			A6803H						
			A6903			A6903H						
	Tilt-Cab	N5203	N6203	N6223	Y6203	N6203H	N6223H	Y6203H	N8303	N8223	46	
		N5303	N6303	N6323	Y6303	N6303H	N6323H	Y6303H	N8603	N8323		
		N5603	N6603	N6623	Y6603	N6603H	N6623H	Y6603H	N8703	N8623		
		N5803	N6703	N6823	Y6803	N6703H	N6823H	Y6803H	N8803	N8823		
		N5903	N6803		Y6903	N6803H		Y6903H	N8903	U8203		
			N6903			N6903H				U8303		
Tandem	Conventional		V6303	X6303					V8303	V8323	12	15
			V6503	X6503					V8503	V8523		
			V6803	X6803					V8803	V8823		
	Low Cab Forward								W8303		3	
									W8503			
									W8803			
Sub-Total		14	48			42			41		145	
Total			62			83						

ENGINE	SERIES APPLICATION	COMP RATIO	GROSS HORSE- POWER	GROSS TORQUE	NET HORSE- POWER	NET TORQUE	CLUTCH SIZE (In.) & TYPE
3-53N	Std: D50 Opt: None	21.00	94 @ 2800	205 @ 1500	86 @ 2800	201 @ 1500	11-D (Std.) 13-C (Opt.)
4-53N	Std: DXY60 Opt: None	21.00	130 @ 2800	278 @ 1800	120 @ 2800	270 @ 1800	13-C
6V-53N	Std: EUW80 Opt: None	21.00	195 @ 2600	447 @ 1400	185 @ 2600	439 @ 1400	14-C
D351	Std: NQ50 Opt: None	17.50	130 @ 3200	234 @ 2000	118 @ 3200	223 @ 2000	11-D
D478	Std: ANQV60 Opt: None	17.50	150 @ 3200	275 @ 2000	135 @ 3200	266 @ 2000	12-C (Std.) 13-C (Opt.)
DH478	Std: ANQV80 Opt: ANQV60	17.50	170 @ 3200	310 @ 2000	155 @ 3200	298 @ 2000	12-C (Std.) 13-C (Opt.)

C - Coil spring.

D - Diaphragm spring.

GASOLINE ENGINE LINE-UP ■

ENGINE	SERIES APPLICATION	COMP RATIO	GROSS HORSE- POWER	GROSS TORQUE	NET HORSE- POWER	NET TORQUE	CLUTCH SIZE (In.) & TYPE
153 L-4	Std: G10, P10 Opt: None	8,50	90 @ 4000	152 @ 2400	82 @ 4000	144 @ 2000	G10 9-1/8-D P10 10-D
194 L-6	Std: 13380, 13580 Opt: None	8,50	120 @ 4400	177 @ 2400	95 @ 4000	155 @ 2000	9-1/8-D
230 L-6	Std: CK10,20; C30; P20,30,50; CLST50 Opt: P10, 13380, 13580	8,50	140 @ 4400	220 @ 1600	120 @ 3600	205 @ 1600	13380, 13580 9-1/8-D CK10,20 10-D P20,30,50, CLST50 11-D
230 L-6	Std: None Opt: G10	8,50	140 @ 4400	220 @ 1600	115 @ 3600	200 @ 1600	10-D
230 L-6 Economy Carburetor	Std: None Opt: C10	8,50	125 @ 3400	210 @ 1600	100 @ 3200	200 @ 1200	10-D (Std.) 11-D (Opt.)
283 V-8	Std: 13480, 13680 Opt: None	9,25	195 @ 4800	285 @ 2400	150 @ 4400	245 @ 2400	10-D (3-speed) 10,4-D (4-speed)
283 V-8	Std: None Opt: CK10,20; C30; CLT50	9,00 (*)	175 @ 4400	275 @ 2400	145 @ 4200	245 @ 2000	11-D

D - Diaphragm spring.

* - 8,5 for Series 50 applications.

ENGINE	SERIES APPLICATION	COMP RATIO	GROSS HORSE- POWER	GROSS TORQUE	NET HORSE- POWER	NET TORQUE	CLUTCH SIZE (In.) & TYPE
292 L-6	Std: CLMT60; CLT60H S62,64,67 Opt: CK10,20; C30; P20,30,50; CLST50	8,00	170 @ 4000	275 @ 1600	153 @ 3600	255 @ 2000	12-C (Std. & CLST50) 11-D (Others)
327 V-8 2-bbl	Std: S69,69H Opt: CLT60,60H; S62, 64,67,67H; M60	8,00	185 @ 4400	305 @ 2000	158 @ 4000	280 @ 2000	13-C
327 V-8 4-bbl	Std: None Opt: 13480, 13680	10,50	250 @ 4400	350 @ 2800	—	—	10,4-D
327 V-8 4-bbl	Std: None Opt.: 13480, 13680	10,50	300 @ 5000	360 @ 3200	—	—	10,4-D
348 V-8	Std: CLMT80 Opt: CLMT60,60H; S62,64,67,67H S69,69H; M60	7,75	220 @ 4400	325 @ 2600	180 @ 4000	300 @ 2400	13-C
409 V-8	Std: None Opt: CLMT80	7,75	252 @ 4000	390 @ 2400	215 @ 4000	352 @ 2400	12-C (2-plate)

C - Coil spring.

D - Diaphragm spring.

GASOLINE REAR AXLE LINE-UP ■

CAPACITY (lbs)	RATIO	TYPE	STANDARD USAGE	OPTIONAL USAGE
2,400	3.36*	Hypoid	G10	None
	4.11*		None	G10
2,700	3.36*		133-13580	134-13680
	3.08*		134-13680#	None
	3.07*		134-13680\$	None
	3.70*		None	133,134,135,13680
	3.73*		None	134-13680\$
2,900	3.73*		None	G10
	4.11*		None	G10
3,300	3.73		K10	None
3,500	3.73*		C10	P10
	4.11*		P10	C10
	3.07		None	C10
5,200	4.57¢		CKP20	None
	4.11		None	C20
7,200	5.14¢		CP30	None
	4.57		None	C30
11,000	6.17		CLPST50	None
13,500	6.40		None	CLPST50
15,000	7.20	Spiral Bevel	CLST60	CLPST50
	6.40/8.72		None	CLPST50, 60; T60
17,000	7.20		CLST60H	CLT60; S67, 69
	6.40/8.72		None	CLT60, 60H; S67, 69; S67, 69H
	6.50/9.04		None	CLT60, 60H
	7.17/9.97		None	CLT60, 60H
18,500	7.17		CLT80	None
	6.50/8.87		None	CLT80
	7.17/9.77		None	CLT80
23,000	6.67		None	CLT80
	6.71/9.14		None	CLT80
28,000 (bogie)	7.20	Hypoid	M60	None
	6.40/8.72		None	M60
30,000 (bogie)	7.17	Spiral	M80	None
34,000 (bogie)	7.17	Bevel	None	M80

* - Available with Positraction differential.

¢ - Available with NoSpin differential.

- With 283 V-8 only.

\$ - With 327 V-8 only.

■ DIESEL REAR AXLE LINE-UP

CAPACITY (lbs)	RATIO	TYPE	STANDARD USAGE	OPTIONAL USAGE
11,000	5.43	Hypoid	DNQ50	None
13,500	5.29		None	DNQ50
15,000	5.83		ANQ60	D50
	6.17		DY60	NQ50, ANQ60
	5.29/7.20		None	DQ50, ANQ60
	5.83/7.95		None	NQ50, ADNQY60
	6.40/8.72		None	NQ50, ANQ60
16,000	5.29; 6.17; 7.20	Hypoid	None	ANQ60
	5.41/7.44		None	ANQ60
	6.16/8.48		None	ANQ60
	6.61/9.09		None	ANQ60
17,000	5.57; 6.14; 7.17	Spiral Bevel	None	ANQ60
	4.87/6.77		None	ADNQY60
	5.57/7.75		None	ANQ60
	6.14/8.54		None	ANQ60
	6.50/9.04		None	ANQ60
	7.17/9.97		None	ANQ60
18,500	4.87		None	EU80
	5.57		ANQ80	None
	6.50; 7.17; 7.60		None	ANQ80
	4.87/6.65		EU80	ANQ80
	5.57/7.60		None	AENQU80
	6.14/8.38		None	ANQ80
	6.50/8.87		None	ANQ80
	7.17/9.77		None	ANQ80
23,000	4.87		None	EU80
	4.87/6.63		None	EU80
28,000 (bogie)	4.87		X60	None
	5.57		V60	None
	5.57/7.60		None	VX60
30,000 (bogie)	4.87		W80	None
	7.17; 7.60		None	V80
	5.57		V80	None
34,000 (bogie)	5.57		None	W80
	6.69; 7.80; 8.60		None	V80

TRANSMISSION	STANDARD APPLICABILITY	OPTIONAL APPLICABILITY
3-Speed Chevrolet	CGKP10; CKP20; El Camino	None
3-Speed Warner T89C	None	CP10,20,30
4-Speed Chevrolet	CP30; CDLNPQST50; ACLMNQSTV60; ACLNQST60H	CKP10,CKP20, El Camino V8
4-Speed New Process	None	CLNQS50; ACLMNQSTV60; ACLNQST 60H
5-Speed New Process 540C	None	CLMST60-60H (6-cyl.)
5-Speed New Process 540GD	None	ANQV60; ANQ60H
5-Speed New Process 540GL	None	ANQV60; ANQ60H
5-Speed New Process 541GL	ANQV80	None
5-Speed Clark 264VO	DY60	D50
5-Speed Clark 267V	DY60H	DY60
5-Speed Clark 269V	None	ANQV80
5-Speed Clark 2653V	X60	CLMST60-60H (V8)
5-Speed Clark 2622V	None	X60; CLMST60-60H (V8)
5-Speed Spicer 3152	CLMT80 (348 V8)	CLS60-60H (V8)
5-Speed Spicer 3152A	None	D60-60H; CLS60-60H (V8); CLT80 (348 V8)
5-Speed Spicer 3153	None	DY60
5-Speed Spicer 5652B	None	CLMT80 (409 V8)
5-Speed Spicer 5756B	None	CLT80 (409 V8)
5-Speed Spicer 5752	W80	None
5-Speed Spicer 5752C	EU80	None
8-Speed Fuller R46	None	EU80; CLMT80 (409 V8)
2-Speed Powerglide	None	CGP10; CP20; El Camino
6-Speed Powermatic MT30	None	CS60, 60H; CMT80 (348 V8)
6-Speed Powermatic MT40	None	CM80 (409 V8); EUW 80
3-Speed W/Overdrive	None	C10, El Camino
2-Speed Transfer Case T221	K10, 20	None
3-Speed Aux. Spicer 5831	None	M80 (348 V8); V80
4-Speed Aux. Spicer 6041	None	MVW80
4-Speed Aux. Spicer 7041	None	W80

RPO	DESCRIPTION
RPO B98 - Side Trim Molding Equipment (Fleetside Pickups)	1) Bright front fender, body, door, and pickup box moldings 2) Off-White paint treatment between upper and lower moldings when body color is not Off-White or White
RPO V37 - Chrome Bumper Equipment (Series CGK10-30)	1) Chrome front bumper 2) Chrome rear bumper, where applicable 3) Chrome hub caps, except K models and except G model with accessory wheel trim covers or RPO Z60
RPO Z60 - Custom Equipment (Model G1205)	1) Nylon-faced pattern cloth and textured vinyl seat trim 2) Right hand sunshade 3) Cigar lighter 4) Vinyl-coated jute headlining for load compartment 5) Chrome hub caps 6) Left and right hand coat hooks 7) Additional horn 8) Two-tone steering wheel paint treatment 9) Full-circle chrome horn ring 10) Rear load door glass
RPO Z61 - Custom Appearance Equipment (Series CK10-30)	1) Bright radiator grille and headlamp doors 2) Bright windshield reveal moldings 3) Bright body upper rear quarter trim plates, cabs only 4) Bright body belt line molding, suburbans and panels except Model C3605 5) Half-circle chrome horn ring 6) Bright-trimmed instrument panel control knobs 7) Two-tone paint treatment for front door inner panels and suburban load compartment 8) "Chevrolet" trim plate for dispatch box door
RPO Z62 - Custom Comfort and Convenience Equipment (Series CDKLMVX10-80)	1) Left hand armrest 2) Right hand sunshade 3) Right hand front door key lock 4) Cigar lighter 5) Undercoating, front compartment area 6) Woven cotton fiber pad, underside of cowl 7) Nylon-faced pattern cloth and textured vinyl seat trim, except panels and except M80 models with auxiliary transmission 8) Full-foam seat cushion and foam backrest padding, except suburbans, panels, and M80 models with auxiliary transmission 9) Foam backrest padding only, suburbans
RPO 0170 - Interior Convenience Group (Series Q50-80)	1) Nylon-faced pattern cloth and textured vinyl seat trim 2) Left hand armrest 3) Right hand sunshade 4) Fawn-colored rubber floor mat 5) Two-tone paint treatment for front door inner panels

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