

# CHEVROLET



1967



# Pickups



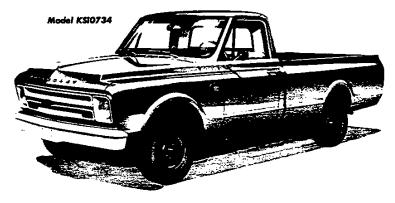
Max. Payload	Model	Section	Pages
1210	13380-580	El Camino	1-5
1065	13480-680	El Camino	1-5

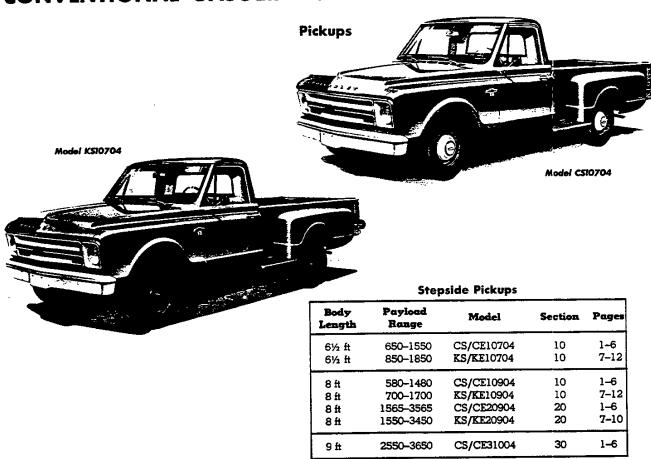


### Model CST0734

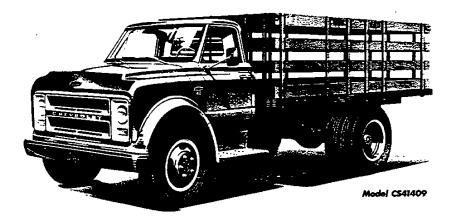
Fieetside Pi	kups
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Body Payload Length Range		Model	Section	Pages
61/2 ft	600-1500	CS/CE10734	10	1-6
6½ ft	<b>770</b> –1 <b>77</b> 0	KS/KE10734	10	7-12
8 ft	440-1340	CS/CE10934	10	1-6
8 ft	600-1600	KS/KE10934	10	7-12
8ft	1475-3475	CS/CE20934	20	1–6
8 ft	1450-3350	KS/KE20934	20	7–10





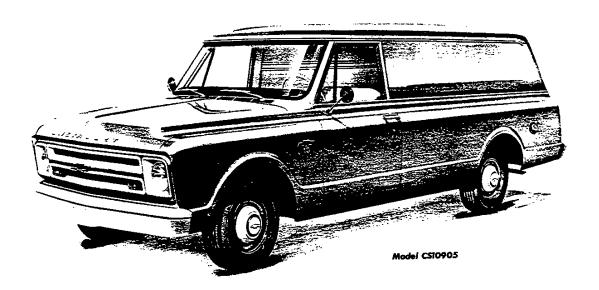
### Stakes

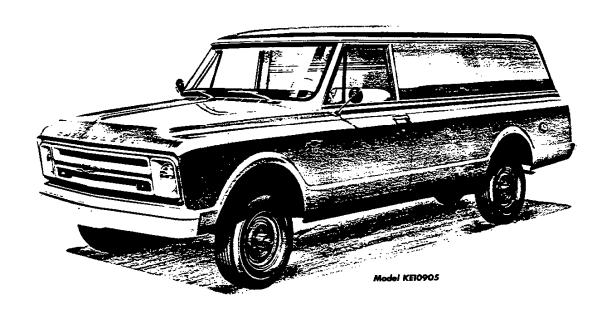


Stakes

Body Length	Payload Range	Model	Section	Pages
8 ft	1350-3350	CS/CE20909	20	1–6
9 ft 9 ft	2190-5490 4900-12,400	CS/CE31009 CS/CE41009	30 40	1-6 1-6
12 ft	4600-12,100	CS/CE41409	40	1–6

# **Paneis**

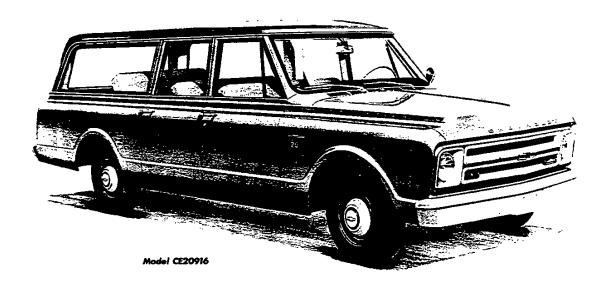




# **Paneis**

Body Length	Payload Range	Model	Section	Pages
9 ft	600-1200	CS/CE10905	10	7-11
9 ft	400-1400	KS/KE10905	10	19-22
9ft	1250-3250	CS/CE20905	20	9-12
9 ft	1225-3125	KS/KE20905	20	19-22

Suburban Carryalls

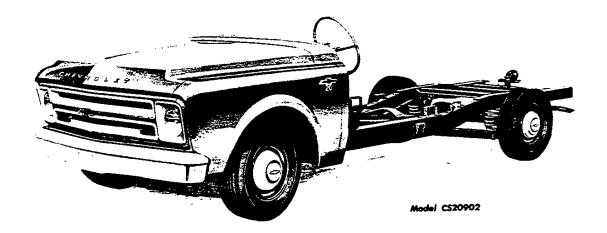




# Suburban Carryalls

Body Length	Payload Range	Model	Section	Pages
9 ft	350-950	CS/CE10906-16	10	7-11
9 ft	150-1150	KS/KE10906-16	10	19-22
9 ft	1050-3050	CS/CE20906-16	20	9-12
9 ft	1000-2900	KS/KE20906-16	20	19-22

#### Cowis



### Cowls

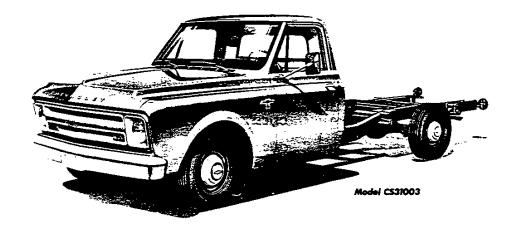
Body-Payload	Model	Section	Pages
Range			
1560-2460	CS/CE10702	10	1–6
1395–2295	CS/CE10712	10	1-6
2585-4585	CS/CE20902	20	16
2415-4415	CS/CE20912	20	1–6
3600-6900	CS/CE31002	30	1-6
3420-6720	CS/CE31012	30	1–6
6340-13,840	CS/CE41002	40	1–6
6125-13,625	CS/CE41012	40	1-6
10,400-17,400	CS/CE51002	50	1-6
10,200-17,200	CS/CE51012	50	1-6
13,725-18,725	CS/CE61002	60	1–6
13,500-18,500	CS/CE61012	60	1–6
6280-13,780	CS/CE41202	40	1-6
6060-13,560	CS/CE41212	40	1-6
6265-13,765	CS/CE41402	40	1–6
6050-13,550	CS/CE41412	40	1–6
10,325-17,325	CS/CE51402	50	1–6
10,100-17,100	CS/CE51412	50	1–6
13,625-18,625	CS/CE61402	60	1-6
13,400-18,400	CS/CE61412	60	1-6
6170-13,670	CS/CE41702	40	1–6
5950-13,450	CS/CE41712	40	1–6
10.225-17,225	CS/CE51702	50	1-6
10,000-17,000	CS/CE51712	50	1-6
13,525-18,525	CS/CE61702	60	1–6
13,300-18,300	CS/CE61712	60	1-6

Chassis-Cabs

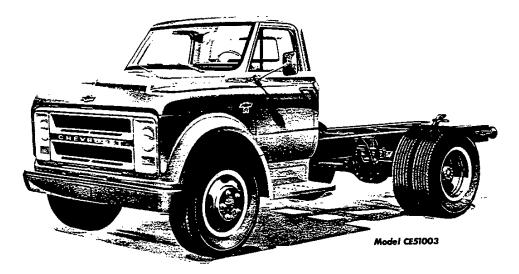


#### Chassis-Cabs

Body Length	Body-Payload Range	Model	Section	Pages
6-6½ ft	10001900	CS/CE10703	10	1–6
6-6½ ft	11802180	KS/KE10703	10	7–12
7-8½ ft	985-1885	CS/CE10903	10	1-6
7-8½ ft	1100-2100	KS/KE10903	10	7-12
7-8½ ft	1975-3975	CS/CE20903	20	1-6
7-8½ ft	1940-3840	KS/KE20903	20	7-10
7-9½ ft	2990-6290	CS/CE31003	30	1-6
7-9½ ft	5750-13,250	CS/CE41003	40	1-6
7-9½ ft	9780-16,780	CS/CE51003	50	1-6
7-9½ ft	12,990-21,490	CS/CE61003-13	60	1-6
7-9½ ft	19,110-25,610	HM71003-13	70	1-4
7-9½ ft	18,360-24,860	HM81013	80	1-4
8-11 ft	5650-13,150	CS/CE41203	40	1-6
8-11 ft	9700-16,700	CS/CE51203	50	1-6
8-11 ft	12,910-21,410	CS/CE61203-13	60	1-6
8-11 ft	19,050-25,550	HM71203-13	70	1-4
8-11 ft	18,300-24,800	HM81213	80	1-4
8-12 ft	18,270-24,770	HM81313	80	1-4

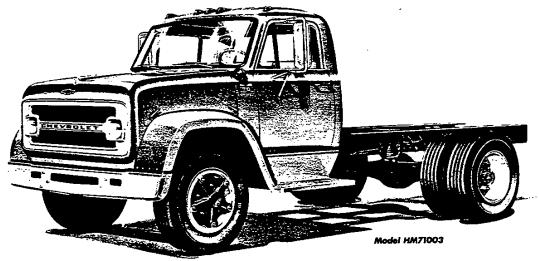


# Chassis-Cabs

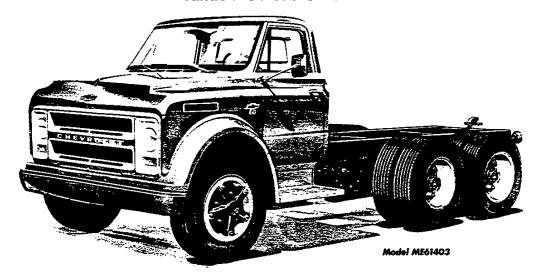


Chassis-Cabs

Body Length	Body-Payload Range	Model	Section	Pages
9–13 ft	2850-10,150	CS/CE31403	30	1-6
9-13 ft	5650-13,150	CS/CE41403	40	1–6
9-13 ft	9700-16,700	CS/CE51403	50	16
9-13 ft	12,880-21,380	CS/CE61403-13	60	1–6
9-13 ft	19,000-25,500	HM71403-13	70	1-4
9-13 ft	18,250-24,750	HM81413	80	1-4
10-16 ft	5550-13,050	CS/CE41703	40	1–6
10-16 ft	9600-16,600	CS/CE51073	50	16
10-16 ft	12,775-21,275	CS/CE61703-13	60	1–6
10-16 ft	18,910-25,410	HM71703-13	70	1-4
10-16 ft	18,150-24,650	HM81713	80	1-4
12-20 ft	9350-16,350	CS/CE52003	50	1-6
12-20 ft	12,560-21,060	CS/CE62003-13	60	1–6
12-20 ft	18,665-25,165	HM72003-13	70	1-4
12-20 ft	17,900-24,400	HM82013	80	1-4
14-22 ft	18,625-25,125	HM72303-13	70	1-4
14-22 ft	17,850-24,350	HM82313	80	1-4
16-24 ft	18,600-25,100	HM72503-13	70	1-4
16-24 ft	17,800-24,300	HM82513	80	1-4

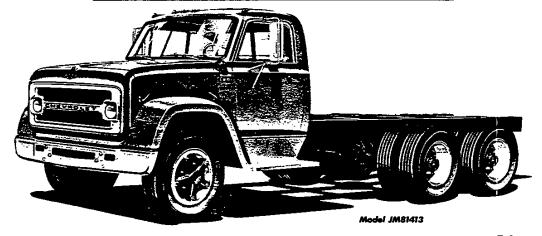


# **Tandem Chassis-Cabs**



Tandem Chassis-Cabs

Body Length	Body-Payload Range	Model	Section	Pages
8–13 ft	16,150-22,150	MS/ME51403	50	7-10
8–13 ft	20,445-35,445	ME61403-13	60	7-10
8-13 ft	26,480-35,480	JM71403-13	70	5–8
8–13 ft	25,900–37,900	JM81413	80	5-8
10–16 ft	16,000-22,000	MS/ME51703	50	7-10
10-16 ft	20,280-35,280	ME61703-13	60	7-10
10-16 ft	26,400–35,400	JM71703-13	70	5–8
10–16 ft	25,800~37,800	JM81713	80	5–8
12-18 ft	15,825–21,825	MS/ME52003	50	7-10
12-18 ft	20,125–35,125	ME62003-13	60	7–10
12-18 ft	26,205–35,205	JM72003-13	70	5–8
14-20 ft	25,600–37,600	JM82113	80	5-8
16-22 ft	25,500-37,500	JM82313	80	5-8



# EL CAMINO SERIES

Six-Cylinder Models

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13380 Sedan Pickup

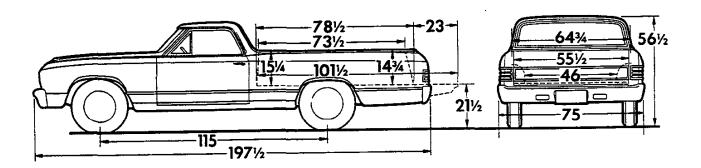
13580 Sedan Pickup

V8 Models

13480 Sedan Pickup 13680 Sedan Pickup

#### **DIMENSIONS**

(With std equipment, unloaded)



	Cuz	b Weights	( <b>1b</b> )	Payload	Wt. Dist.*
Models	Front	Rear	Total	Front	Rear
13380 13580	1655 1646	1449 1443	3104 3089	0%	100%
13480 13680	1764 1765	1472 1472	3236 3237	0%	100%

<sup>\*</sup>Estimate based on water-level loading.

# **EL CAMINO**

#### STANDARD EQUIPMENT

#### Air Cleaner:

·Models 133-13580; oil-wetted polyurethane element

Models 134–13680; oiled-paper element

Axle Rear: Hypoid; capacity 2700 lb

Models 133-13580; ratio 3.36 Models 134-13680; ratio 3.08

Battery: 12-volt; capacity 44-amp-hr
Brake, Parking: Cable to rear wheels
Brakes, Service: Hydraulic; self-adjusting
Sizes: front 9½" x 2½"; rear 9½" x 2"

Effective area: drum 2281/2 sq in; lining 1721/4 sq in

**Bumper:** Front and rear; chrome plated **Cab:** See *Cabs, Bodies & Colors* section

#### Carburetor:

Models 133–13580; single-barrel downdraft Models 134–13680; two-barrel downdraft

#### Clutch:

Models 133-13580; diameter 9%"; area 72 sq in Models 134-13680; diameter 10"; area 91 sq in

#### **→**Cooling:

Models 133–13580; capacity 12 qts; 1¼" radiator core; 323-sq-in area; 15-lb pressure cap; 180° thermostat Models 134–13680; capacity 16 qt; 1¼" radiator core; 357-sq-in area; 15-lb pressure cap; 180° thermostat

**Controls & Instruments:** Light switch; headlight beam control; speedometer; odometer; fuel gauge Lights for generator, oil pressure, engine temperature, direction signals and high beam indicator

**Direction Signals:** Two front and two rear; includes freeway lane-change position on switch & integral hazard warning switch

Engine: See Power Teams chart for power ratings Models 133–13580; 140-hp 230 Hi-Thrift Six; positive crankcase ventilation

Models 134–13680; 195-hp 283 Turbo-Fire V8 (2-bbl); positive crankcase ventilation

Exhaust System: Single pipe & aluminized muffler

Filter, Fuel: Plastic strainer in fuel tank and bronze

filter in carburetor
Filter, Oil: Full-flow

Frame: Carbon steel; perimeter Generator: 37-amp Delcotron

**GVW Plate:** 4300 lb **Heater & Defroster** 

#### Instrument Panel, Padded

**Lights:** Head, parking, tail, rear license carrier, stop; dome, instrument panel and backup

Mirror, Rearview: Inside non-glare shatterproof prismatic type & LH outside

→Seat Belts: Driver & passenger; includes retractors

Shock Absorbers, Front: 1" diameter

**Shock Absorbers, Rear:** 1" diameter; air-booster type

Springs, Front: Coil; capacity 950 lb each at around

Springs, Rear: Coil; capacity 1100 lb each at ground

**Steering:** Ball-gear, ratio 24:1; energy-absorbing steering wheel and column—wheel dia  $16\frac{1}{2}$ "

#### Sunshades, Padded

Suspension, Front: Independent; capacity 1900 lb

Tank, Fuel: Capacity approx 20 gal

**Tires:** Five tubeless 7.35–14/2-ply (4-ply rating) front, rear and spare except on Models 134–13680 when 396 V8 engine is ordered

Five tubeless 7.75–14/2-ply (4-ply rating) front, rear and spare on Models 134–13680 when 396 V8 engine is ordered

Tools: Mechanical jack; wheel wrench

**Transmission:** 3-speed fully synchronized; steering column gearshift; ratios 2.85, 1.68, 1.00, 2.95

**Wheels:** Five 14" x 5"; bolt attachment; spare carrier behind seat; 4 bright-metal hub cabs

Windshield Wipers & Washer: Electric; 2-speed wipers

#### **GVW SELECTOR**

GVW Rating (lb)	Chassis Equipment Required for GVW Rating
4300	Standard

Note: Be sure to recommend adequate springs and tires for total axle loads. See Optional Equipment and Tire & Wheel Combination pages.

# **EL CAMINO**

#### OPTIONAL EQUIPMENT

For dealer-installed equipment, see Custom Features section.

Appearance Guard Group: Includes two color-keyed Models 13380 & 13480: Includes items 1, 2, 3 & 4 front floor mats, front bumper guards, door edge guards, custom deluxe seat belts

Models 13580 & 13680: Includes items 1, 2 & 3

Auxiliary Lighting Group: Includes three or more of the following items: 1. Courtesy lamps; 2. Underhood lamp; 3. Ashtray lamp; 4. Glove compartment lamp Foundation Group: Includes pushbutton radio, electric clock and deluxe foam seat cushion. Available on Models 13380 & 13480 only

All items contained in the above groups may be ordered separately and are shown in the following Options list

Air Conditioning, Four-Season: Incl 61-amp Delcotron, HD radiator and temp-controlled radiator fan	C60	→ GM Air Injection Reactor: Approved by State of California for vehicle registration. Requires closed engine positive ventilation	K19
Axle, Rear: See Power Teams chart for availability Economy		Generator, Alternating Current: 42-amp Delcotron 61-amp Delcotron	K79 K76
Performance	G80	Glass, Soft Ray Tinted: All windows	
Battery: HD; 66-plate, 70 amp-hr	<b>T</b> 60	Guards: Front bumper Door edge	V31 B93
Belts, Shoulder: Driver & passenger Standard type—For use with standard seat belts	AS1	→ Head Restraints: Driver & passenger With bench seat	A82 A81
Group is ordered		with air conditioning	
Brakes, Front Disc: Requires use of power brakes; not available with metallic brake linings. Includes special hubcaps & trim rings		Horn, Tri-Volume  Instrumentation, Special: Model 13680 only. Includes tachometer, ammeter, temperature and	
► Brake Linings, Sintered-Metallic: Models 13480 & 13680 only. Available only when 325- hp 327 cu in or 396 cu in engines are ordered	-	oil pressure gauges	
Brakes, Vacuum Power		AshtrayCourtesy	U29
Clock, Electric: Models 13380 & 13480 only.	U35	Underhood	l .
Clutch, Heavy-Duty: Not available with 250 or 396 engines or GM air injection reactor		only)  Mats, Floor: Two front; color-keyed	
Console: Available only when bucket seats and optional transmission (except overdrive) are	l =	Mirror, Exterior: LH remote control	D33
ordered. Includes compartment and electric clock. Gearshift lever is located on console	2	Paint, Exterior: Solid color; see Cabs, Bodies & Colors section	f
Engines: See Power Teams chart for power ratings and transmission availability Models 133–13580		Radiator, Heavy-Duty: Not available with air conditioning	<b>V</b> 01
155-hp Turbo-Thrift 250 Six		Radio: Fully transistorized Pushbutton control; front antenna	U63
275-hp Turbo-Fire 327 V8	. <b>L79</b> . <b>L3</b> 5	tenna	
350-hp Turbo-Jet 396 V8		Black	. C08
Fan, Radiator: 8-cyl models only; temperature controlled. Included with Four-Season air conditioning	<del>)-</del>  -	Seat Cushion, Extra-Thick Foam: Bench	h

# **EL CAMINO**

# **OPTIONAL EQUIPMENT (Continued)**

Seats, Strato-Bucket: Models 135-13680 only	Ā51	Transmissions: See Power Teams chart for	
Speed & Cruise Control: 8-cyl models with Powerglide transmission only	K30	availability 3-speed special fully synchronized (floor mtd)	M13
Speed Warning Indicator	U15	4-speed wide-range	M20
Steering, Power	N40	Overdrive	MI
Steering Wheel: Sports-styled walnut-grained plastic rim	N34	Powerglide	
Steering Wheel, Comfortilt: (seven-position) Powerglide or 4-speed transmission required		→Ventilation, Closed Engine Positive: Included when 325-hp 327-cu-in engine is ordered	K24
Steering Wheel: Deluxe; Models 13380 &		Wheel Covers: Four, bright metal; not available with disc brakes	P01
13480 only		→ Wheel Covers, Mag-Style: Not available with disc brakes.	
special front springs and 2700-lb capacity rear springs		→ Wheel Covers, Simulated Wire: Not available with disc brakes	
Tachemeter: Electric; 8-cylinder models	U16	Windows, Power	

### →TIRE & WHEEL COMBINATIONS

TUBELESS TIRES	Tire Cap	Type of Wheel	Rim Width	Opt No.
PASSENGER CAR TYPE				
7.35–14/2-ply (4-ply rating)— Regular Blackwall	1020	Disc	5	Std
7.35–14/2-ply (4-ply rating)— Regular Whitewall	1020	Disc	5	P58
♦7.75–14/2-ply (4-ply rating)— Regular Blackwall	1120	Disc	5	P65
7.75-14/2-ply (4-ply rating)— Regular Whitewall	1120	Disc	5	P62
7.75–14/4-ply (4-ply rating)— Nylon Blackwall	1120	Disc	5	P60
7.75–14/4-ply (4-ply rating)— Nylon Whitewall	1120	Disc	5	P61
F70-14/2-ply (4-ply rating)— Special Nylon White Stripe		Disc	5	PW7
F70-14/2-ply (4-ply rating) Special Nylon Red Stripe		Disc	5	PN8

<sup>♦</sup> Included with 396 V8 engines

# **EL CAMINO POWER TEAMS**

# → Engine, Transmission and Rear Axle Combinations

					RE	AR AXLI				
	ENGINES	Ī	With	out Air (	Conditio	ning	Wit	h Air C	ondition	ing
<del></del>		TRANSMISSION		0	ptional			Optional		
Option	Description		Std	Econ	con Peri Sp		Std	Econ Peri Spec		Spec
Std on Models	140-hp Turbo-Thrift 230 6-Cylinder	Std 3-Speed Full-Synchro								
133-13580	230-cu-in displacement Single-barrel carburetor 8.5:1 compression ratio Hydraulic valve lifters	Special 3-Speed Full-Synchro	3.36:1	3.08:1	3.55:1	3.70:1	3.36:1	-	3.55:1	3.70:
	Hydronic voive micro	Powerglide								
		Overdrive	3.70:1		_		3.70:1		_	
L22 on Models 133-13580	155-hp Turbo-Thrift 250 6-Cylinder 250-cu-in displacement Single-barrel carburetor	Std 3-Speed Full-Synchro Special 3-Speed	3.08:1	_	3.36:1	3.55:1 or 3.70:1	3.36:1	_	3.55:1	3.70:
	8.5:1 compression ratio Hydraulic valve lifters	Full-Synchro								
	,	Powerglide	3.36:1	3.08:1	3.55:1	3.70:1	3.36:1	_=	3.55:1	3.70
		Overdrive	3.70:1		_		3.70:1			
Std on Models	195-hp Turbo-Fire 283 8-Cylinder	Std 3-Speed Full-Synchro								1
134-13680	283-cu-in displacement 2-barrel carburetor 9.25:1 compression ratio	2-barrel carburetor Special 3-Speed 9.25:1 compression ratio Full-Synchro 3	3.08:1	_ 3	3.36:1	3.55:1 or 3.70:1	3.36:1	-	3.55:1	3.70:1
	Hydraulic valve lifters	4-Speed Wide-Range	ļ		1					
		Powerglide		<b>!</b>	ļ		0.70		<del>  -</del> -	<del> </del>
		Overdrive	3.70:1		<u> </u>		3.70:1		<del>  -</del> -	
L30 oz Models 134-13680	275-hp Turbe-Jet 327 8-Cylinder 327-cu-in displacement	Std 3-Speed Full-Synchro				3.55:1				
131-13000	Regular camshaft 4-barrel carburetor 10.0:1 compression ratio Hydraulic valve lifters	Special 3-Speed Full-Synchro Powerglide	3.08:1		3.36:1	3.70:1	3.36:1	_	3.55:1	3.70
	Hydramic valve inters	4-Speed Wide-Range	3.07:1	-	3.31:1	3.55:1 or 3.73:1	3.31:1		3.55:1	3.73
L79 on Models 134-13680	325-hp Turbo-Fire 327 8-Cylinder 327-cu-in displacement	Special 3-Speed Full-Synchro	3.31:1	3.07:1	3.55:1	3.73:1	3,31:1	_	3.55:1	3.73
201-10000	High-lift camshaft 4-barrel carburetor	4-Speed Wide-Range	<del> </del>	0.07.1	2.55.3	3.73:1	3.31:1	<del></del>	3.55:1	3.7
	11.0:1 compression ratio Hydraulic valve lifters	4-Speed Close-Ratio	3.31:1	3.07:1	3.55:1	4.10:1 4.56:1 4.88:1	3.31.1		0.00.	
L35 on Models 134-13680	325-hp Turbo-Jet 396 8-Cylinder 396-cu-in displacement	Special 3-Speed Full-Synchro 4-Speed Wide-Range	3.31:1	3,07:1	3.55:	3.73:1 or 4.10:1	3.07:1	-	-	-
	Regular camshaft 4-barrel carburetor 10.25:1 compression ratio Hydraulic valve lifters	Powerglide	3.07:1	2.73:1	3.31:	3.55:1 3.73:1 4.10:1	3.07:1	_	_	_
	Dual exhaust	Turbo Hydra-Matic	#2.73:1	<b>—</b>	3.07:	3.31:1	3.07:1	<u> </u>		
L34 on Models	350-hp Turbe-Jet 396 8-Cylinder 396-cu-in displacement	Special 3-Speed Full-Synchro	3.55:1	3.31:1	3.73:	1 4.10:1	3.07:1	-	-	} -
134-13680	High-lift comshaft	4-Speed Wide-Range	<u> </u>	<del>                                     </del>	1	1 0 = 0 :	207	+	+-	+-
	4-barrel carburetor 10.25:1 compression ratio Hydraulic valve lifters	Powerglide	3.31:1	3.07:1	3.55:	1 3.73:1 or 4.10:1	l l			
:		4-Speed Close-Ratio	3.55:	3.31:	3.73	3.07:1 4.10:1 4.56:1 4.88:1	3.07:1		-	
1	1	Turbo Hydra-Matic	3.07:	1 2.73:	1 3.31	:1 —	3.07:1		-   -	

<sup>\*</sup> All ratios available as positraction. (4.10:1, 4.56:1 and 4.88:1 available as positraction only.) See ordering information on page 5.
# When G.M. Air Injection Reactor (RPOK19) is ordered with Turbo Hydra-Matic trans. (RPO M40), standard axle is 2.56:1, Performance axle is 2.7

February 1, 1967

→Indicates change

Conventional Gasoline—El Camino: Pag

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# SERIES C10

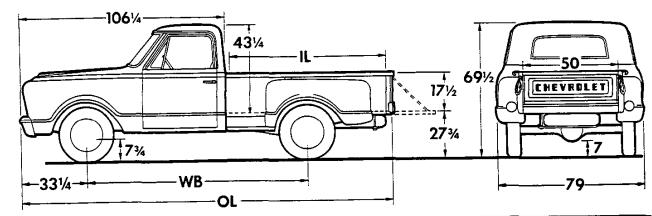
# GVW Ratings up to 5000 lb

# SERIES C10-STEPSIDE PICKUPS

### Six-Cylinder Models

**V8 Models** 

CS10704 Stepside Pickup CS10904 Stepside Pickup CE10704 Stepside Pickup CE10904 Stepside Pickup



	Dimensions (in)★			→Cur	b Weights	Payload Wt. Dist.*		
Models	WB	IL.	OL	Front	Rear	Total	Front	Rear
CS10704 CE10704	115	781/4	1881⁄2	1929 2045	1475 1493	3404 3538	i%	99%
CS10904 CE10904	127	98	2073/4	1989 2104	1508 1525 -	3497 3629	3	97

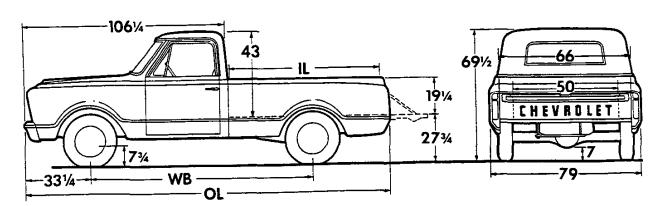
<sup>\*</sup>Estimate based on water-level loading.

# SERIES C10-FLEETSIDE PICKUPS

#### Six-Cylinder Models

**V8 Models** 

CS10734 Fleetside Pickup CS10934 Fleetside Pickup CE10734 Fleetside Pickup CE10934 Fleetside Pickup



	Din	ensions (i	n)*	→Cu	rb Weight	Payload Wt. Dist.*		
Models	WB	IL	OL	Front	Rear	Total	Front	Rear
CS10734 CE10734	115	781/4	1881/2	1971 2087	1507 1524	3478 3611	2%	98%
CS10934 CE10934	127	98	207¾	2038 2154	1545 1561	3583 3715	4	96

<sup>\*</sup>Estimate based on water-level loading.

<sup>★</sup>Dimensions with std equipment, unloaded.

<sup>★</sup>Dimensions with std equipment, unloaded.

# SERIES C10

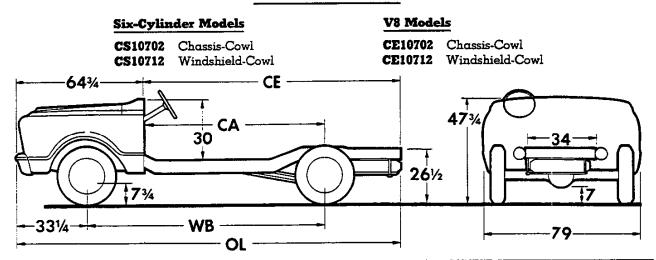
# SERIES C10-CHASSIS-CABS

# **V8 Models** Six-Cylinder Models CE10703 Chassis-Cab Chassis-Cab CS10703 CE10903 Chassis-Cab CS10903 Chassis-Cab 106% 441/4 70 - CE WB -331/4 - OL -

	1	Dimensions (in)★			Dimensions (in)★ → Curb Weights (lb)				is (Ib)	Body-Payload Wt. Dist.*		
Models	WB	CA	CE	OL	Front	Rear	Total	Body	Front	Rear		
CS10703 CE10703	115	42	751/2	181¾	1994 2118	1067 1077	3061 3195	6′ 6½′	3% 1	97% 99		
CS10903 CE10903	127	54	951/2	201¾	2016 2138	1067 1077	3083 3215	7' 7½' 8' 8½'	8 6 3 1	92 94 97 99		

<sup>\*</sup>Estimate based on water-level loading.

### SERIES C10-COWLS.



	Dimensions (in)★				: (in)★ → Curb Weights (lb)			Body-Payload Wt. Dist.	
Models	WB	CA	CE	OL	Front	Rear	Total	Front	Rear
CS10702 CE10702	115	831/2	117	181¾	1615 1734	898 911	2513 2645	Determined	by style,
CS10712 CE10712	115	831/2	117	181¾	1722 1844	949 960	2671 2804		ight of body

<sup>★</sup>Dimensions with std equipment, unloaded.

**<sup>★</sup>Dimensions** with std equipment, unloaded.

<sup>•</sup> Chassis-Cowl shown

#### STANDARD EQUIPMENT

Air Cleaner: Oiled-paper element

Axle, Rear: Hypoid semi-floating type; ratio 3.73;

capacity 3500 lb

Battery: 12-volt, 54-plate; capacity 53 amp-hr

Bodies: See Cabs, Bodies & Colors

Brakes, Service: Hydraulic; self-adjusting; dual

system

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Sizes: front 11" x 2"; rear 11" x 2"

Effective area: drum 276 sq in; lining 167 sq in

Brake, Parking: Cable to rear wheels; area 83 sq in

Bumper: Front only, painted

Carburetor: CS10: single-barrel downdraft CE10: two-barrel downdraft

0 11 --- 10% --- 100 --- in

Clutch: CS10: diameter 10"; area 100 sq in CE10: diameter 11"; area 124 sq in

Cooling: CS10: 14" radiator core, cross-flow type;

446-sq-in area; 13-lb pressure cap CE10: 1¼" radiator core, cross-flow type;

CE10: 1¼" radiator core, cross-flow type; 480-sq-in area; 13-lb pressure cap

Controls & Instruments: 03, 04, 12, 34 models—hand choke; light switch; headlight beam control; speedometer; odometer; fuel gauge. Lights for generator, oil pressure, engine temperature, brake warning, direction signals and high beam indicator

O2 models—hand choke; light switch; headlight beam control; speedometer; odometer; high beam indicator light; fuel gauge; ammeter, oil pressure & engine temperature gauges; brake warning light

**Direction Signals:** Class A; two front and two rear; two front & switch only on 02 models. Includes freeway lane-change position on switch & integral hazard warning switch

Engine: CS10: 250 Six; positive	crankcase ventilation
Gross horsepower	155 @ 4200 rpm
Net horsepower	125 @ 3800 rpm
Gross torque, lb-ft	235 @ 1600 rpm
Net torque, lb-ft	220 @ 1600 rpm

#### →CE10: 283 V8; positive crankcase ventilation

Gross horsepower	175 @	4600 rpm
Net horsepower	145 @	4400 rpm
Gross torque, lb-ft	275 @	2400 rpm
Net torque, lb-ft	240 @	2400 rpm

Exhaust System: Single pipe & aluminized muffler

Filter, Fuel: Wire mesh in fuel tank; bronze filter in carburetor

Filter, Oil: CS10: full-flow; 1-quart; throwaway type CE10: full-flow; 1-quart; replaceable-ele-

ment type

Frame: 39,000-lb-test steel; section modulus 2.98

Fuel Pump: Single-action Generator: 37-amp Delcotron

GVW Plate: 5000 lb

**Lights:** Head, parking, tail, stop; instrument panel. Dome on cab models only. Backup on pickups

Mirror, Rearview:

03 models: Exterior RH & LH 6¼ "fixed arm

04 & 34 models: Exterior LH 61/4" fixed arm and inside

prismatic non-glare shatterproof

02 & 12 models: None

Seat: Full-width (except cowl models)

**Seat Belts:** Driver & passenger (except cowl models); includes retractors

Shock Absorbers: Front & rear; piston diameter 1"

Springs, Front: Coil; capacity 1250 lb each

Springs, Rear: Coil; capacity 1250 lb each

Steering: Ball-gear, ratio 24:1; wheel dia 161/2"

Suspension, Front: Independent; capacity 2500 lb Tank, Fuel: 04, 34, 03 models—back of seat in cab; capacity approx 21 gal

02, 12 models—inside frame at rear; capacity approx 20 gal

**Tires:** Five tubeless 8.15–15/4PR front, single rear and spare

→ Tools: 2500-lb mechanical jack; wheel wrench

Transmission: CS10: 3-speed synchromesh; steering column gearshift; ratios 2.94 1.68, 1.00, 3.14 (rev)

CE10: 3-speed fully synchronized steering column gearshift ratios 2.85, 1.68, 1.00, 2.95 (rev)

Wheels: Five 15" x 5½"; attachment, 6 studs on 5½ circle; spare carrier under frame; 4 painted hubcap

Windshield Wipers & Washer: Electric; 2-speec wipers; not included on 02 models

#### **GVW SELECTOR**

GVW Rating (lb)	Chassis Equipment Required for GVW Rating
4400	Standard
4800	2000-lb rear springs
5000♦	2000-lb rear springs

◆ Rating on standard GVW plate

Note: Be sure to recommend adequate springs and tires for total axle loads. See Optional Equipment and Tire & Wheel Combination pages.

# SERIES C10

# **OPTIONAL EQUIPMENT**

For dealer installed equipment, see Custom Features section.

Air Cleaner: Oil-bath; capacity 1 quart	K48	Custom Side Molding: Cab models only: also includes pickup box moldings when ordered on
Air Cleaner, Heavy-Duty: Includes closed positive ventilation and 1 quart oil-bath precleaner; not available with 327 engine or on chassis-cowl models	<b>K4</b> 6	Fleetside pickups only
Air Conditioning, All-Weather: Includes heater & defroster, HD radiator, battery & front springs & 42-amp generator; not available on chassis-cowl models		ings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH arm-
Axle, Positraction Rear: Capacity 3500 lb Ratio 3.73. Not available with overdrive transmission	G80	rests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coating; vinyl door trim
	400	Engine:
Axle, Rear: Capacity 3500 lb  Ratio 3.07; not available with automatic or  Overdrive transmission	HO1	292 Six (CS10 models only); includes 3-speed fully synchronized transmission
Ratio 4.11; included with Overdrive trans- mission	H04	Net horsepower
<b>Battery:</b> Heavy-duty; 70 amp-hr; included when HD starter motor or air conditioning is ordered	<b>T60</b>	Gross torque, lb-ft
Brackets, Mounting: For mounting pickup box; chassis-cab models only	E80	Clutch
Brakes, Vacuum Power	<b>J70</b>	327 V8 (CE10 models only); includes HD front springs; not available with Chevrolet 4-speed or
Bumper:		overdrive transmission
Painted rear; with std painted front bumper only (pickups only)  Painted step-type rear (pickups only)  Chrome front (pickups & chassis-cabs)  Chrome rear (pickups only)	V38 V43 V37	Gross horsepower       220 @ 4400 rpm         Net horsepower       177 @ 4000 rpm         Gross torque, lb-ft       320 @ 2800 rpm         Net torque, lb-ft       283 @ 2400 rpm
Caps, Hub: Chrome		Clutch
Carrier, Spare Wheel: Side mounted; pickup models only.	)	Floor, Pickup Box: Wood with steel skid strips. Fleetside Pickup models only E81
➤ Clutch, HD: Dia 11"; for 250 engine with 3 speed, overdrive or New Process 4-speed trans	-	Fuel Filter Equipment K28
Cooling, HD: Includes HD radiator and extra HD cooling equipment. Not available with air conditioning	- r	Gauges: Ammeter, engine temperature, oil pressure, not available on chassis-cowls. Included when tachometer is ordered
Custom Appearance Option: Chassis-cabs & pickups only; includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, horn button cap; color-keyed vinyl-coated rubber floor	- k - r	Generator:         12-42-amp Delcotron       K79         5-61-amp Delcotron       K76         23-62-amp Delcotron       K81
mats; Custom emblems. Not available when Custom Sport Truck Option is ordered  Custom Comfort Option: For chassis-cabs & pickups only; includes RH & LH armrests; RF padded sunshade; cigar lighter; special cow insulation; full-depth foam seat with fabric up holstery; underbody coating; vinyl door trim Not available when Custom Sport Truck Option	. 261 X H -1 	Glass, Soft Ray:  Windshield only; not available on chassiscowls
or bucket seats are ordered	. <b>Z62</b>	Requires closed engine positive ventilation K19

# **OPTIONAL EQUIPMENT (Continued)**

For dealer installed equipment, see Custom Features section.

Governor: With synchromesh transmission only		Seat: For cab models only; not available when	
250 engine: 1800-3000 rpm	K37	Custom Sport Truck Option is ordered  Bostrom "Viking"; driver seat only	ΔΕΕ
2800-4000 rpm		Bostrom "Viking"; driver seat only  Bostrom "Viking"; driver seat plus 2-man	AJJ
292 engine: 2200-3100 rpm		companion seat	A55
2800-3900 rpm		Full-depth foam; included when Custom Comfort is ordered	Z52
283 engine: Not available with GM Air Injection Reactor		Bucket; driver & passenger; includes carpeting and center console	A50
2400-3600 rpm		Serial Number Plate: (State of Pennsylvania) 2000-lb rear springs required	
Harness, Shoulder: Driver & passenger; not		Shock Absorbers, HD:	
available on cowl models or with optional	A85	Front and rear	
Bostrom seats  Heater & Defroster: Deluxe Air S. 7.1	C42		
Hooks. Towing: Two, front: not available with		Speed Warning Indicator: Not available on 02 models	U15
chrome bumper	V 16	Springs, Auxiliary Rear:	
Lamps, Marker: Five; not available on cowl	1101	Capacity 500 lb each	G60
models		<b>Springs, Front:</b> Capacity 1350 lb each; included when 327 engine or air conditioning is	
		ordered	F60
Mirror, Exterior: Not available on cowl models Front cross-view; 8" diameter		Springs, Rear: Capacity 2000 lb each	G50
RH; 61/4" fixed arm; pickups only		Stabilizer Bar, Front Suspension	
RH; 171/4" swinging arm; pickup models only			
LH; 17¼" swinging arm; pickup models only		Starter Motor, HD: Includes HD battery	107
RH & LH; 171/4" swinging arm; chassis-cabs only	D32	Steering, Power: Not available with air conditioning or HD cooling when 292 engine and automatic transmission are ordered	<b>N4</b> 0
LH only; pickup models only	D29	Tachometer: Electric; includes optional gauges;	
RH & LH (pickups & chassis-cabs)		not available on chassis-cowls	016
West Coast Sr. type (7" x 16")		Throttle Control: Manual	K31
LH only; pickup models only	D30	Transmission:	
RH & LH (pickups & chassis-cabs)		Overdrive; includes 4.11 rear axle ratio. Not available with 327 engine or governor equip-	
PNameplate, Custom Camper: Chassis-cab & pickup models only. Minimum requirements are front stabilizer bar, HD rear shock absorbers, HD rear springs or auxiliary rear springs, 7.00–15/6PR or track-type 6.50–16/6PR tires.	<b>Z</b> 81	ment  Powerglide; not available with governor equipment  Turbo Hydra-Matic	M10 M35 M49
Paint, Exterior: See Cabs, Bodies & Colors section	•	Chevrolet 3-speed fully synchronized; with 250 engine only	M17
Pump, Fuel & Vacuum Booster: CS10702 model only	K26	11" clutch; not available with 327 engine New Process 435CR 4-speed close-ratio	M20
<b>,</b>		→ Ventilation, Closed Engine Positive	K24
Radiator: Heavy-duty. Included when 327 engine with automatic transmission or air conditioning or HD cooling is ordered	•	→ Wheel Covers, Full: Bright metal; available only with 15" tires	P01
Radio: Pushbutton control; not available on	u U63	Window, Full-View Rear: Chassis-cab & pick- up models only.	A10

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# SERIES C10

**→TIRE & WHEEL COMBINATIONS** 

TUBE-TYPE TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
PASSENGER CAR TYPE				
7.75-15/8PRRegular	1215	Disc	51/2	T27
8.15–15/4PR—Regular	1180	Disc	5½	RL2
—Nylon	1180	Disc	5½	R53
—On-Off Road	1180	Disc	5½	R56*
6.50—16/6PR—Regular	1380	Disc	5.0	R61
—On-Off Road Nylon		Disc	5.0	R69*
TRUCK TYPE				
6.50-16/6PR—Regular	1420	Disc	5.0	R63
—Nylon	1420	Disc	5.0	R65
—On-Off Road	1420	Disc	5.0	R64*
7.00–15/6PR—Regular	1520	Disc	5.5	R42
—Nylon	1520	Disc	5.5	R44
—On Off Road	1520	Disc	5.5	R43*

<sup>\*</sup>Rear only

TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
PASSENGER CAR TYPE				
7.75-15/8PRRegular	1215	Disc	5½	T25a
8.15-15/4PR—Regular —Nylon —On-Off Road	1180 1180 1180	Disc Disc Disc	5½ 5½ 5½	Std <b>b</b> Q05 R55*
8.15-15/8PR—Regular	13001	Disc	51/2	T28
6.50-16/6PR—Regular	1380	Disc	5.00	R59
TRUCK TYPE				
6.50-16/6PR-Regular	1420	Disc	5.00	<b>R6</b> 0
7-17.5/6PR—Regular —Nylon —On-Off Road	1520 1520 1520	Disc Disc Disc	5.25 5.25 5.25	R80 R82 R81*

<sup>\*</sup>Rear only

The following tubeless tires may be ordered with white sidewalls:

a-T26 (7.75-15/8PR)

**b**—R51 (8.15-15/4PR)

GVW Ratings up to 5000 lb

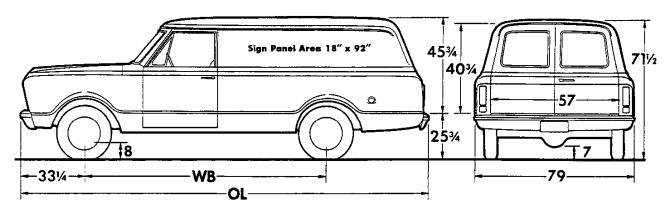
### SERIES C10-PANELS

Six-Cylinder Models

**V8 Models** 

CS10905 Panel

CE10905 Panel



Models	Dimensi	oimensions (in)★ Cu		Curb Weights (lb)		Payload \	Wt. Dist.*
Wodels	WB	OL	Front	Rear	Total	Front	Rear
CS10905 CE10905	127	2151/2	1687 1793	2071 2097	3 <b>7</b> 58 3890	6%	94%

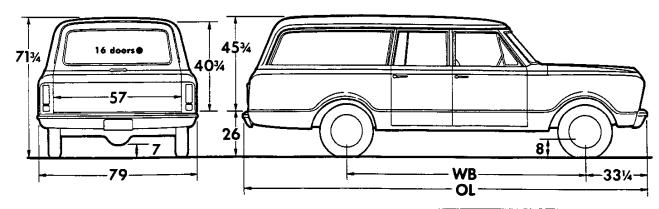
<sup>\*</sup>Estimate based on water-level loading.

#### SERIES C10—SUBURBAN CARRYALLS\*

Six-Cylinder Models

CS10906 Suburban Carryall CS10916 Suburban Carryall V8 Models

CE10906 Suburban Carryall CE10916 Suburban Carryall



76 - 3 - 1 -	Dimensi	ons (in)★	Curb Weights (lb)		Payload Wt. Dist.*		
Models	WB	OL	Front	Rear	Total	Front	Fear
CS10906 CE10906	127	2151/2	1677 1 <b>781</b>	2301 2329	3978 4110	29%	71%
CS10916 CE10916	127	2151/2	1648 \1752	2352 2380	4000 4132	29%	71%

<sup>\*</sup>Estimate based on water-level loading.

<sup>★</sup>Dimensions with std equipment, unloaded.

<sup>\*</sup>Dimensions with std equipment, unloaded.

<sup>•</sup> Illustration shows 16 model rear end/lift gate. See 05 model illustration above for 06 model rear doors.

#### STANDARD EQUIPMENT

Air Cleaner: Oiled-paper element

Axle, Rear: Hypoid semi-floating type; ratio 3.73;

capacity 3500 lb

Battery: 12-volt, 54-plate; capacity 53 amp-hr

Bodies: See Cabs, Bodies & Colors

Brakes, Service: Hydraulic; self-adjusting; dual system

Sizes: front  $11'' \times 2''$ ; rear  $11'' \times 2^{i}$ 

Effective area: drum 276 sq in; lining 167 sq in

Brake, Parking: Cable to rear wheels; area 83 sq in

Bumpers: Front & rear; painted

Carburetor: CS10: single-barrel downdraft CE10: two-barrel downdraft

Clutch: CS10: diameter 10"; area 100 sq in CE10: diameter 11"; area 124 sq in

Cooling: CS10: 11/4" radiator core, cross-flow type;

446-sq-in area; 13-lb pressure cap

CE10: 1¼" radiator core, cross-flow type; 480-sq-in area; 13-lb pressure cap

Controls & Instruments: Hand choke; light switch; headlight beam control; speedometer; odometer; fuel gauge. Lights for generator, oil pressure, engine temperature, brake warning, direction signals and high beam indicator

**Direction Signals:** Class A; two front and two rear. Includes freeway lane-change position on switch & integral hazard warning switch

Doors, Rear:

05 & 06 models: Two; side-hinged 16 models: End/lift gate

Doors, Side:

05 models: Two; one right & one left 06 & 16 models: Three; two right & one left

Engine: CS10; 250 Six; positive crankcas	se ventilation
Gross horsepower	6 @ 4200 rpn
Net horsepower	6 @ 3800 rpm
Gross torque, lb-ft	i @ 1600 грл
Net torque, lb-ft220	) @ 1600 rpn
CE10: 283 V8; positive crankcase venti	ilation
Gross horsepower	6 @ 4600 rpn
Net horsepower	i @ 4400 грп
Gross torque, lb-ft	5 @ 2400 rpn
Net torque, lb-ft240	@ 2400 rpm

Exhaust System: Single pipe & aluminized muffler

Filter, Fuel: Wire mesh in fuel tank, bronze filter in carburetor

Filter, Oil: CS10: full-flow; 1-quart; throwaway type CE10: full-flow; 1-quart; replaceable element

Frame: 39,000-lb-test steel; section modulus 2.98

Generator: 37-amp Delcotron

**GVW Plate:** 5000 lb

**Lights:** Head, parking, tail, stop, backup; dome, instrument panel

Mirror, Rearview:

O5 models: Exterior RH & LH 6¼" fixed arm O6 & 16 models: Exterior LH 6¼" fixed arm and inside prismatic non-glare shatterproof

Seat:

05 models: Driver only; vinyl trim 06 & 16 models: Full-width bench; front only; vinyl

trim

**Seat Belts:** Includes retractors 05 models: Driver only

06 & 16 models: Driver & passenger

Shock Absorbers: Front & rear; piston diameter 1"

Springs, Front: Coil; capacity 1250 lb each

Springs, Rear: Coil; capacity 1250 lb each

Steering: Ball-gear; ratio 24:1; wheel diameter 161/2"

Suspension, Front: Independent; capacity 2500 lb

**Tank, Fuel:** Inside frame at rear; capacity approximately 24.5-gal

Tires: Five tubeless 8.15-15/4PR front, single rear and spare

Tools: 2500-lb mechanical jack; wheel wrench

Transmission:

CS10: 3-speed synchromesh; steering column gearshift; ratios 2.94, 1.68, 1.00, 3.14 (rev) CE10: 3-speed fully synchronized; steering column gearshift; ratios 2.85, 1.68, 1.00, 2.95 (rev)

Wheels: Five 15" x 5½"; attachment 6 studs on 5½" circle; spare carrier inside RH cargo area; four painted hubcaps

Windshield Wipers & Washer: Electric; 2-speed wipers

### **GVW SELECTOR**

GVW Rating (lb)	Chassis Equipment Required for GVW Rating
4400	Standard
4800	2000-lb rear springs
5000♦	2000-lb rear springs

◆ Rating on standard GVW plate

Note: Be sure to recommend adequate springs and tires for total axle loads. See Optional Equipment and Tire & Wheel Combination pages.

### **OPTIONAL EQUIPMENT**

For dealer-installed equipment, see Custom Features section.

740	The sings (continued)
Air Cleaner: Oil-bath; capacity 1 quart K48	Engine: (continued) 327 V8 (CE10 models only); includes HD front
Air Cleaner, Heavy-Duty: Includes closed positive ventilation and 1-quart oil-bath precleaner; not available with 327 engine K46	springs; not available with Chevrolet 4-speed or overdrive transmission
Axle, Positraction Rear: Capacity 3500 lb Ratio 3.73; not available with overdrive transmission	Net horsepower       177 @ 4000 rpm         Gross torque, lb-ft       320 @ 2800 rpm         Net torque, lb-ft       283 @ 2400 rpm         Clutch       12"; 150 sq in
	Fuel Filter Equipment K28
Axle, Rear: Capacity 3500 lb Ratio 3.07; not available with automatic or overdrive transmission	<b>Gauges:</b> Ammeter, engine temperature, oil pressure. Included when tachometer is ordered Z53
Ratio 4.11; included with overdrive transmission	Generator:
Battery: Heavy-duty; 70-amp-hr; included when HD starter motor is ordered	12-42-amp Delcotron       K79         5-61-amp Delcotron       K76         23-62-amp Delcotron       K81
Brakes, Vacuum Power J70	Glass, Soft Ray:
Bumpers, Chrome: Front & rear V37	Windshield only All All windows All
Caps, Hub: Chrome P03	GM Air Injection Reactor: Approved by the
Clutch, HD: Dia 11"; for 250 engine with 3- speed, overdrive or New Process 4-speed trans-	State of California for vehicle registration. Requires closed engine positive ventilation K79
mission only MO1	Governor:
mission only MO1  Cooling, HD: Indludes HD radiator and extra HD/cooling equipment. V05	250 engine: 1800-3000 rpm K37 2800-4000 rpm K37
Custom Appearance Option: Includes bright	292 engine: 2200-3100 rpm K37 2800-3900 rpm K37
metal grille moldings, headlight bezels, vent window frames & windshield moldings, control	283 engine: Not available with GM Air Injection Reactor
knob trim, horn-button cap; Custom emblems. (16 models only: vinyl-coated rubber floor mats). Z61	2400–3600 rpm
Custom Comfort Option:	Harness, Shoulder:
05 models: Includes LH armrest, RH padded sunshade, cigar lighter, cowl insulation and underbody coating	05 models: Driver only
06 & 16 models: Choice of four interior colors.  Also includes full-depth foam seat with fabric/	Heater & Defroster: Deluxe-Air
vinyl upholstery; RH & LH armrests; RH padded sunshade; cigar lighter; vinyl door trim; cowl insulation and underbody coating; white hard-	Hooks, Towing: Two, front. Not available with chrome bumper
board headlining	Lamps, Marker: Five
Custom Side Molding B98	Mirrors, Exterior:
Engine:	Front cross-view; 8" diameter
292 Six (CS10 models only); includes 3-speed fully synchronized transmission L25	West Coast Jr. type (6" x 11")
Gross horsepower	LH only; 06 & 16 models only D29 RH & LH
Gross torque, lb-ft	West Coast Sr. type (7" x 16")
Clutch 11"; 124 sq in Battery 61-amp-hr	LH only; 06 & 16 models only

# **OPTIONAL EQUIPMENT (Continued)**

For dealer-installed equipment, see Custom Features section.

TIRE & WHEEL COMBINATIONS

TUBE-TYPE TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
PASSENGER CAR TYPE				
7.75-15/8PR—Regular 8.15-15/4PR—Regular —Nylon —On-Off Road	1215 1180 1180 1180	Disc Disc Disc Disc	5½ 5½ 5½ 5½ 5½	T27 RL2 R53 R56*
6.50-16/6PR—Regular —On-Off Road Nylon	1380 1380	Disc Disc	5.0 5.0	R61 R69*
TRUCK TYPE				
6.50-16/6PR—Regular —Nylon —On-Off Road	1420 1420 1420	Disc Disc Disc	5.0 5.0 5.0	R63 R65 R64*
7.00-15/6PR—Regular —Nylon —On-Off Road	1520 1520 1520	Disc Disc Disc	5.5 5.5 5.5	R42 R44 R43*

<sup>\*</sup>Rear only

TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
PASSENGER CAR TYPE				
7.75–15/8PR—Regular 8.15–15/4PR—Regular —Nylon	1215 1180 1180	Disc Disc Disc	5½ 5½ 5½ 5½	T25 <b>a</b> Std <b>b</b> Q05
—On-Off Road	1180	Disc	51/2	R55*
8.15-15/8PRRegular	1300	Disc	51/2	T28
6.50-16/6PR—Regular	1380	Disc	5.00	R59
TRUCK TYPE				
6.50-16/6PR—Regular	1420	Disc	5.00	R60
7-17.5/6PR—Regular —Nylon —On-Off Road	1520 1520 1520	Disc Disc Disc	5.25 5.25 5.25	R80 R82 R81*

<sup>\*</sup>Rear only

The following tubeless tires may be ordered with white sidewalls: **a**—T26 (7.75-15/8PR) **b**—R51 (8.15-15/4PR)

# **NOTES**

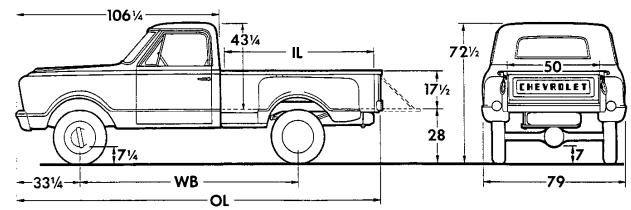
# GVW Ratings up to 5600 lb

### SERIES K10-STEPSIDE PICKUPS

### Six-Cylinder Models

#### V8 Models

KS10704 Stepside Pickup KS10904 Stepside Pickup **KE10704** Stepside Pickup **KE10904** Stepside Pickup



Models	Dimensions (in)★			>Cur	b Weights	(Њ)	Payload Wt. Dist.*	
1,100612	WB	IL	OL	Front	Rear	Total	Front	Rear
KS10704 KE10704	115	781/4	1881⁄2	2131 2239	1566 1572	3697 3811	1%	99%
KS10904 KE10904	127	98	207¾	2235 2345	1628 1633	3863 3978	3	97

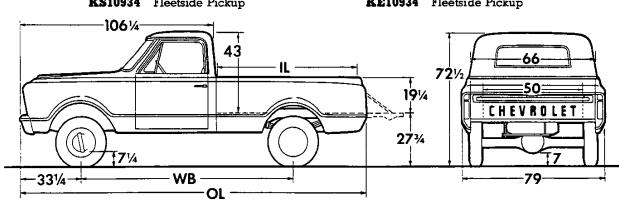
<sup>\*</sup>Estimate based on water-level loading.

#### SERIES K10-FLEETSIDE PICKUPS

#### Six-Cylinder Models

# V8 Models

KS10734 Fleetside Pickup KS10934 Fleetside Pickup **KE10734** Fleetside Pickup **KE10934** Fleetside Pickup



Models	Dimensions (in)★			→Curb Weights (lb)			Payload Wt. Dist.*		
Models	WB	IL	OL	Front	Rear	Total	Front	Rear	
KS10734 KE10734	115	781/4	1881⁄2	2174 2245	1596 1639	3770 3884	2%	98%	
KS10934 KE10934	127	98	207¾	2209 2317	1740 1746	3949 4063	4	96	

<sup>\*</sup>Estimate based on water-level loading.

<sup>★</sup> Dimensions with std equipment, unloaded.

 $<sup>\</sup>star$  Dimensions with std equipment, unloaded

# SERIES K10-CHASSIS-CABS

Six-Cylinder Models

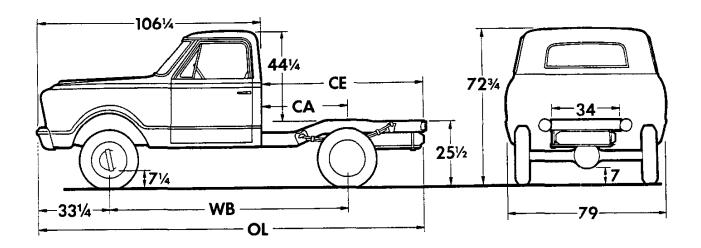
V8 Models

KS10703 Chassis-Cab

KE10703 Chassis-Cab

KS10903 Chassis-Cab

KE10903 Chassis-Cab



		Dimer	asions (i	n)*	→Cur	→Curb Weights (lb)			Body-Payload Wt. D		
Models	WB	CA	CE	OL	Front	Rear	Total	Body	Front	Rear	
KS10703 KE10703	115	42	751/2	181¾	2220 2334	1134 1134	3354 3468	6' 6½'	4% 1	96% 99	
KS10903 KE10903	127	54	951/2	2013/4	2291 2406	1159 1158	3450 3564	7' 7½' 8' 8½'	8 6 3 1	92 94 97 99	

<sup>\*</sup>Estimate based on water-level loading.

<sup>★</sup> Dimensions with std equipment, unloaded.

#### STANDARD EQUIPMENT

Air Cleaner: Oiled-paper element

Axle, Front: Hypoid, ratio 3.73; capacity 3300 lb; yoke and trunnion universal joints

Axle, Rear: Hypoid semi-floating type; ratio 3.73; capacity 3300 lb

**Battery:** 12-volt, 54-plate; capacity 53 amp-hr

**Bodies:** See Cabs, Bodies & Colors

Brakes, Service: Hydraulic; self-adjusting; dual

system

Sizes: front 11" x 2"; rear 11" x 2"

Effective area: drum 276 sq in; lining 167 sq in

Brake, Parking: Cable to rear wheels; area 83 sq in

**Bumper:** Front only, painted

Carburetor: KS10: single-barrel downdraft KE10: two-barrel downdraft

Clutch: KS10: diameter 10"; area 100 sq in KE10: diameter 11"; area 124 sq in

Cooling: KS10: 11/4" radiator core, cross-flow type; 446-sq-in area; 13-lb pressure cap

KE10: 11/4" radiator core, cross-flow type; 480-sq-in area; 13-lb pressure cap

Controls & Instruments: Hand choke; light switch; headlight beam control; speedometer; odometer; fuel gauge. Lights for generator, oil pressure, engine temperature, brake warning, direction signals and high beam indicator

**Direction Signals:** Class A; two front and two rear. Includes freeway lane-change position on switch & integral hazard warning switch

Engine: KS10: 250 Six; positive crankcase ventilation

Gross horsepower	4200	rpm
Net horsepower	3800	трm
Gross torque, lb-ft	1600	mqn
Net torque, lb-ft	1600	rpm

→KE10: 283 V8; positive crankcase ventilation

Gross horsepower	175	@	4600	rpm
Net horsepower	145	<u>@</u>	4400	rpm
Gross torque, lb-ft	275	@	2400	rpm
Net torque, lb-ft	240	@	2400	rpm

Exhaust System: Single pipe & aluminized muffler

Filter, Fuel: Wire mesh in fuel tank; bronze filter in carburetor

Filter, Oil: KS10: full-flow; 1-quart; throwaway type KE10: full-flow; 1-quart; replaceable element

Frame: 39,000-lb-test steel; section modulus 2.70 (KS-KE107 models); 3.48 (KS-KE109 models)

**Generator:** 37-amp Delcotron

GVW Plate: 5600 lb

Lights: Head, parking, tail, stop; dome, instrument panel. Backup on pickups

Mirror, Rearview:

03 models: Exterior RH & LH 61/4" fixed arm 04 & 34 models: Exterior LH 61/4" fixed arm and inside prismatic non-glare shatterproof

Power Divider: Timken T-221 2-speed; ratios 1.94 & 1.00; power take-off opening at rear

Seat: Full-width

Seat Belts: Driver & passenger; includes retractors

Shock Absorbers: Front & rear; piston diameter 1"

Springs, Front: Tapered-leaf; capacity 1450 lb each

Springs, Rear: Tapered-leaf; capacity 1800 lb each

Steering: Ball-gear, ratio 24:1; wheel dia 161/2"

Tank, Fuel: Back of seat in cab; capacity approx 21 gallons

Tires: Five tubeless 8.15-15/4PR front, single rear and spare

→ Tools: 2500-lb mechanical jack; wheel wrench

**Transmission:** 3-speed synchromesh; steering column gearshift; ratios 2.94, 1.68, 1.00, 3.14 (rev)

Wheels: Five 15" x  $5\frac{1}{2}$ "; attachment, 6 studs on  $5\frac{1}{2}$ " circle; spare carrier under frame

Windshield Wipers & Washer: Electric: 2-speed wipers

#### **GVW SELECTOR**

GVW Rating (lb)	Chassis Equipment Required for GVW Rating
5600 ♦	Standard

♦ Rating on standard GVW plate

Note: Be sure to recommend adequate springs and tires for total axle loads. See Optional Equipment and Tire & Wheel Combination pages.

# **OPTIONAL EQUIPMENT**

For dealer-installed equipment, see Custom Features section.

Air Cleaner: Oil-bath; capacity l quart  Air Cleaner, Heavy-Duty: Includes closed positive ventilation and l-quart oil-bath precleaner; not available with 327 engine  Air Conditioning, All-Weather: Includes	K46	Floor, Pickup Box: Wood with steel skid strips. Fleetside pickup models only	K28
heater & defroster, HD radiator, battery & 42-amp generator.  Battery: Heavy-duty; 70 amp-hr; included with HD starter motor or air conditioning.	C60	12-42-amp Delcotron	K76
Brakes, Vacuum Power		Glass, Soft Ray: Windshield onlyAll windows	A11 A11
Painted rear; with std painted front bumper only (pickups only)	V38 V43 V37	GM Air Injection Reactor: Approved by the State of California for vehicle registration. Requires closed engine positive ventilation	<b>K</b> 19
Carrier, Spare Wheel: Side mounted; pickup models only	P13	2800-4000 rpm	K37 K37
Clutch: Dia 11"; for 250 engine with 3-speed transmission only	MO1	2800-3900 rpm	
and extra-HD cooling equipment. Not available with air conditioning	V05	2400-3600 rpm	K37
Custom Appearance Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, horn-button cap; color-keyed vinyl-		available with optional Bostrom seats	A85 C42
coated rubber floor mats; Custom emblems. No available when Custom Sport Truck Option is ordered.	z61	chrome bumper.  Hubs, Free-Wheeling Front: Manual control at hubs	V76
Custom Comfort Option: Includes RH & LF armrests; RH padded sunshade; cigar lighter special cowl insulation; full-depth foam seat with fabric upholstery; underbody coating; vinyl door trim. Not available when Custom Sport Truck Option or bucket seats are ordered.  Custom Side Molding: Cab models only; also includes pickup box moldings when ordered or	; ; ; ; Z62	Lamps, Marker: Five.  Lock: Side wheel carrier; pickups only  Mirrors, Exterior:  Front cross-view; 8" diameter	D48 D32 D32 D32 D32
Fleetside pickups only  Custom Sport Truck Option: Includes brigh metal grille moldings, headlight bezels, ven window frames & windshield moldings, contro knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucke seats with padded center console; carpeting; RF & LH armrests; RH padded sunshade; ciga lighter; special cowl insulation; underbody coating; vinyl door trim	t t t t t t t t t t t t t t t t t t t	only  West Coast Ir. type (6" x 11")  LH; pickup models only  RH & LH  West Coast Sr. type (7" x 16")  LH; pickup models only  RH & LH  Paint, Exterior: See Cabs, Bodies & Colors section  Radiator: Heavy-duty; included with HE	D32 D29 D29 D30 D30
Engine:         292 Six (KS10 models only)         Gross horsepower       170 @ 40         Net horsepower       153 @ 36         Gross torque, lb-ft       275 @ 16         Net torque, lb-ft       255 @ 24         Battery       61-amp         Clutch       11"; 12         327 V8 (KE10 models only)       20 @ 44         Net horsepower       177 @ 40         Gross torque, lb-ft       320 @ 26         Net torque, lb-ft       283 @ 24         Clutch       12"; 1	000 rpm 500 rpm 500 rpm 400 rpm 5-hr 4 sq in L30 400 rpm 500 rpm 500 rpm 500 rpm	cooling.  Radie: Pushbutton control.  Seat: Not available when Custom Sport Truck Option is ordered.  Bostrom "Viking"; driver seat only.  Bostrom "Viking"; driver seat plus 2-mar companion seat.  Full-depth foam; included when Custom Comfort is ordered.  Bucket; driver & passenger; includes carpet ing and center console.  (Continued on next)	. A55 . A55 . A55 . Z52 . A50

# **OPTIONAL EQUIPMENT (Continued)**

For dealer-installed equipment, see Custom Features section.

Serial Number Plate: State of Pennsylvania Requires rear shock absorbers			
Shock Absorbers, HD: Front & rear Rear only		Tachometer: Electric; includes optional gauges	
Speed Warning Indicator	U15	Transmission: Chevrolet 4-speed synchromesh; includes 11"	<i>K</i> 31
→ Springs, Front: Capacity 1750 lb each	F60	clutch. Not available with 327 engine  Ventilation, Closed Engine Positive	
Starter Motor, HD: Includes HD battery	K67	Window, Full-View Rear	

### **→TIRE & WHEEL COMBINATIONS**

TUBE-TYPE TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
PASSENGER CAR TYPE				
7.75-15/8PR—Regular	1215	Disc	51/2	T27
8.15-15/4PR—Regular	1180	Disc	51/2	RL2
—Nylon	1180	Disc	51/2	R53
—On-Off Road	1180	Disc	51/2	R56
6.50-16/6PR-Regular	1380	Disc	5.0	R61
—On-Off Road Nylon	1380	Disc	5.0	R69
TRUCK TYPE				
6.50-16/6PR-Regular	1420	Disc	5.0	R63
-Nylon	1420	Disc	5.0	R65
—On-Off Road	1420	Disc	5.0	R64
7.00-15/6PR—Regular	1520	Disc	5.5	R42
Nylon	1520	Disc	5.5	R44
—On-Off Road	1520	Disc	5.5	R43

TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
PASSENGER CAR TYPE				
7.75-15/8PR—Regular	1215	Disc	51/2	T25a
8.15-15/4PR—Regular	1180	Disc	51/2	Std <b>b</b>
—Nylon	1180	Disc	51/2	Q05
-On-Off Road	1180	Disc	51/2	R55
8.15-15/8PR—Regular	1300	Disc	51/2	T28
6.50-16/6PR—Regular	1380	Disc	5.00	R59
TRUCK TYPE			•	
6.50-16/6PR—Regular	1420	Disc	5.00	R60
7-17.5/6PR—Regular	1520	Disc	5.25	R80
—Nylon	1520	Disc	5.25	R82
-On-Off Road	1520	Disc	5.25	R81

The following tubeless tires may be ordered with white sidewalls:

a-T26 (7.75-15/8PR)

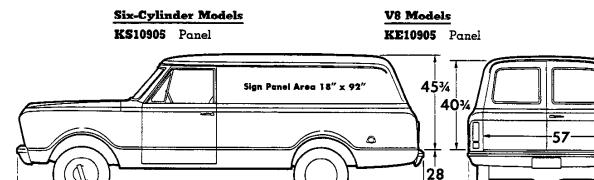
**b**—R51 (8.15–15/4PR)

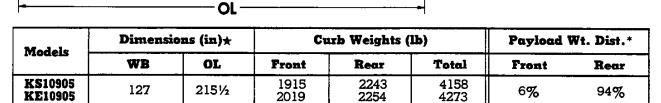
# **NOTES**

GVW Ratings up to 5600 lb

79

### SERIES K10-PANELS





<sup>★</sup>Dimensions with std equipment, unloaded.

71/4

331/4-

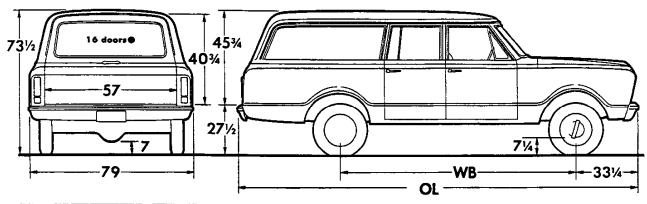
#### SERIES K10-SUBURBAN CARRYALLS.

Six-Cylinder Models

WB-

KS10906 Suburban Carryall KS10916 Suburban Carryall **V8 Models** 

KE10906 Suburban Carryall KE10916 Suburban Carryall



Models  Dimensions (in)★			Cu	xb Weights (	Payload Wt. Dist.*		
Moders	WB	OL	Front	Rear	Total	Front	Rear
KS10906 KE10906	127	2151/2	1893 1996	2482 2495	4375 4491	29%	71%
KS10916 KE10916	127	2151/2	1861 1963	2536 2550	4397 4513	29%	71%

<sup>★</sup>Dimensions with std equipment, unloaded.

<sup>\*</sup>Estimate based on water-level loading.

<sup>\*</sup>Estimate based on water-level loading.

<sup>•</sup> Illustration shows 16 model rear end/lift gate. See 05 model illustration above for 06 model rear doors.

#### STANDARD EQUIPMENT

Air Cleaner: Oiled-paper element

Axle, Front: Hypoid, ratio 3.73; capacity 3300 lb;

yoke and trunnion universal joints

Axle, Rear: Hypoid semi-floating type; ratio 3.73; capacity 3300 lb

Battery: 12-volt, 54-plate; capacity 53 amp-hr

Bodies: See Cabs, Bodies & Colors

Brakes, Service: Hydraulic; self-adjusting; dual

system

Sizes: front 11" x 2"; rear 11" x 2"

Effective area: drum 276 sq in; lining 167 sq in

Brake, Parking: Cable to rear wheels; area 83 sq in

Bumpers: Front & rear, painted

Carburetor: KS10: single-barrel downdraft

KE10: two-barrel downdraft

Clutch: KS10: diameter 10"; area 100 sq in KE10: diameter 11"; area 124 sq in

Cooling: KS10: 11/4" radiator core, cross-flow type; 446-sq-in area; 13-lb pressure cap

KE10: 11/4" radiator core, cross-flow type; 480-sq-in area; 13-lb pressure cap

Controls & Instruments: Hand choke; light switch; headlight beam control; speedometer; odometer; fuel gauge. Lights for generator, oil pressure, engine temperature, brake warning, direction signals and high beam indicator

Direction Signals: Class A; two front and two rear. Includes freeway lane-change position on switch & integral hazard warning switch

### Doors, Rear:

05 & 06 models: Two; side-hinged 16 models: End/lift gate

#### Doors, Side:

05 models: Two; one right & one left 06 & 16 models: Three; two right & one left

Engine: KS10: 250 Six; positive	crankcase ventilation
Gross horsepower	155 @ 4200 rpm
Net horsepower	125 @ 3800 rpm
Gross torque, lb-ft	235 @ 1600 rpm
Net torque, lb-ft	220 @ 1600 rpm

### KE10-283 V8-positive crankcase ventilation

TIO: 203 40, positive cidincese ventation
Gross horsepower
Net horsepower
Gross torque, lb-ft
Net torque, lb-ft

## **GVW SELECTOR**

GVW Rating (lb)	Chassis Equipment Required for GVW Rating
5600♦	Standard

♦ Rating on standard GVW plate

Exhaust System: Single pipe & aluminized muffler

Filter, Fuel: Wire mesh in fuel tank; bronze filter in carburetor

Filter, Oil: KS10: full-flow; l-quart; throwaway type

KE10: full-flow; 1-quart; replaceable element

Frame: 39.000-lb-test steel; section modulus 2.70 (KS-

KE107 models); 3.48 (KS-KE109 models)

Generator: 37-amp Delcotron

GVW Plate: 5600 lb

**Lights:** Head, parking, tail, stop, backup, dome,

instrument panel

Mirror, Rearview:

05 models: Exterior RH & LH 61/4" fixed arm

06 & 16 models: Exterior LH 6 ¼" fixed arm and inside

prismatic non-glare shatterproof

Power Divider: Timken T-221 2-speed; ratios 1.94 &

1.00; power take-off opening at rear

Seat: 05 models: Driver only; vinyl trim

06 & 16 models: Full-width bench; front only;

vinyl trim

Seat Belts: Includes retractors

05 models: Driver only

06 & 16 models: Driver & passenger

Shock Absorbers: Front & rear; piston diameter 1"

Springs, Front: Tapered-leaf; capacity 1450 lb each

Springs, Rear: Tapered-leaf; capacity 1800 lb each

Steering: Ball-gear, ratio 24:1; wheel dia 161/2"

Tank, Fuel: Inside frame at rear; capacity approx ک ر 35 <del>24.5 g</del>al

Tires: Five tubeless 8.15-15/4PR front, single rear and spare

Tools: 2500-lb mechanical jack; wheel wrench

Transmission: 3-speed synchromesh; steering column gearshift; ratios 2.94, 1.68, 1.00, 3.14 (rev)

Wheels: Five 15" x  $5\frac{1}{2}$ "; attachment, 6 studs on  $5\frac{1}{2}$ " circle; spare carrier inside RH cargo area

Windshield Wipers & Washer: Electric; 2-speed wipers

Note: Be sure to recommend adequate springs and tires for total axle loads. See Optional Equipment and Tire & Wheel Combination pages.

### **OPTIONAL EQUIPMENT**

Air Cleaner: Oil-bath; capacity 1 quart K	48 Governor:	TEOR
Air Cleaner, Heavy-Duty: Includes closed	250 engine: 1800-3000 rpm	
positive ventilation and 1-quart oil-bath pre- cleaner; not available with 327 engine K	202	K37
Battery: Heavy-duty; 70 amp-hr; included with HD starter motor To	283 engine: Not available with GM Air Injection Reactor	
Brakes, Vacuum Power	70 2400–3600 rpm	
Bumpers, Chrome: Front & rear V	Harness, Shoulder:	1201
Clutch: Diameter 11"; for 250 engine with 3-speed transmission only	05 models: Driver only	
Cooling, Heavy-Duty: Includes HD radiator	Heater & Defroster: Deluxe-Air	C42
and extra HID cooling equipment.	Hooks, Towing: Two, front. Not available with chrome bumper	V76
Custom Appearance Option: Includes bright	Hubs, Free-Wheeling Front: Manual control	<b>V</b> 10
metal grille moldings, headlight bezels, vent window frames & windshield moldings, control	at hubs	F76
knob trim, horn-button cap; Custom emblems. (16 models only: vinyl-coated rubber floor mats) Ze	Lamps, Marker: Five	U01
	Mirrors, Exterior:	
Custom Comfort Option: 05 models: Includes LH armrest, RH padded	Front cross-view; 8" diameter	D48 D32
sunshade, cigar lighter, cowl insulation and	West Coast Jr. type (6" x 11")	
underbody coating	LH only; 06 & 16 models only RH & LH	
Also includes full-depth foam seat with fabric/	West Coast Sr. type (7" x 16")	
vinyl upholstery; RH & LH armrests; RH padded sunshade; cigar lighter; vinyl door trim; cowl	LH only; 06 & 16 models only RH & LH	D30
insulation and underbody coating; white hard-		
board headlining	section	
Custom Side Molding B	98 Radiator: Heavy-duty; included with HD cooling	V01
Engine:	Radio: Pushbutton control	U63
292 Six (KS10 models only)	rpm Seats:	
Net horsepower	rpm 05_models:	ΔS7
Gross torque, lb-ft	rpm HD driver's seat	AM2
Clutch	in HD driver & passenger seats	AM2
Battery	30 Center seat, full-width	AS3
Gross horsepower		$\Delta S \cap$
1000		1100
Net horsepower	rpm Seat Belt: Rear seat center; 06 & 16 models	
Net horsepower       177 @ 4000         Gross torque, lb-ft       320 @ 2800         Net torque, lb-ft       283 @ 2400	rpm rpm only	
Net horsepower       177 @ 4000         Gross torque, lb-ft       320 @ 2800         Net torque, lb-ft       283 @ 2400         Clutch       12"; 150 sq	rpm rpm only	A68
Net horsepower       177 @ 4000         Gross torque, lb-ft       320 @ 2800         Net torque, lb-ft       283 @ 2400	rpm rpm only	A68 F51
Net horsepower       177 @ 4000         Gross torque, lb-ft       320 @ 2800         Net torque, lb-ft       283 @ 2400         Clutch       12"; 150 sq         Fuel Filter Equipment       K         Gauges: Ammeter, engine temperature, oil pres-	rpm rpm only	A68 F51 G68 U15
Net horsepower 177 @ 4000 Gross torque, lb-ft 320 @ 2800 Net torque, lb-ft 283 @ 2400 Clutch 12"; 150 sq  Fuel Filter Equipment K  Gauges: Ammeter, engine temperature, oil pressure. Included when tachometer is ordered 25	rpm rpm only	A68 F51 G68 U15
Net horsepower. 177 @ 4000 Gross torque, lb-ft. 320 @ 2800 Net torque, lb-ft. 283 @ 2400 Clutch 12"; 150 sq  Fuel Filter Equipment. K  Gauges: Ammeter, engine temperature, oil pressure. Included when tachometer is ordered 25  Generator: 12-42-amp Delcotron K 5-61-amp Delcotron K	Seat Belt: Rear seat center; 06 & 16 models only.  Shock Absorbers, HD: Front and rear Rear only.  Speed Warning Indicator. Springs, Front: Capacity 1750 lb each Starter Motor, HD: Includes HD battery	A68 F51 G68 U15 F60
Net horsepower 177 @ 4000 Gross torque, lb-ft 320 @ 2800 Net torque, lb-ft 283 @ 2400 Clutch 12"; 150 sq  Fuel Filter Equipment K  Gauges: Ammeter, engine temperature, oil pressure. Included when tachometer is ordered 2!  Generator:  12-42-amp Delcotron K 5-61-amp Delcotron K 23-62-amp Delcotron K	Seat Belt: Rear seat center; 06 & 16 models only.  Shock Absorbers, HD: Front and rear Rear only.  Speed Warning Indicator. Springs, Front: Capacity 1750 lb each Starter Motor, HD: Includes HD battery	A68 F51 G68 U15 F60 K67
Net horsepower. 177 @ 4000 Gross torque, lb-ft. 320 @ 2800 Net torque, lb-ft. 283 @ 2400 Clutch. 12"; 150 sq  Fuel Filter Equipment. K  Gauges: Ammeter, engine temperature, oil pressure. Included when tachometer is ordered. Zf  Generator: 12-42-amp Delcotron. K 5-61-amp Delcotron. K 23-62-amp Delcotron. K Class, Soft Ray:	Seat Belt: Rear seat center; 06 & 16 models only	A68 F51 G68 U15 F60 K67
Net horsepower 177 @ 4000 Gross torque, lb-ft 320 @ 2800 Net torque, lb-ft 283 @ 2400 Clutch 12"; 150 sq  Fuel Filter Equipment K  Gauges: Ammeter, engine temperature, oil pressure. Included when tachometer is ordered 2!  Generator:  12-42-amp Delcotron K 5-61-amp Delcotron K 23-62-amp Delcotron K	Seat Belt: Rear seat center; 06 & 16 models only  Shock Absorbers, HD: Front and rear Rear only  Speed Warning Indicator Springs, Front: Capacity 1750 lb each Starter Motor, HD: Includes HD battery  Tachometer: Electric; includes optional gauges  Throttle Control: Manual Transmission:	A68 F51 G68 U15 F60 K67 U16 K31
Net horsepower. 177 @ 4000 Gross torque, lb-ft. 320 @ 2800 Net torque, lb-ft. 283 @ 2400 Clutch. 12"; 150 sq  Fuel Filter Equipment. K  Gauges: Ammeter, engine temperature, oil pressure. Included when tachometer is ordered. Z  Generator: 12-42-amp Delcotron. K 5-61-amp Delcotron. K 23-62-amp Delcotron. K Glass, Soft Ray: Windshield only. A	Seat Belt: Rear seat center; 06 & 16 models only  Shock Absorbers, HD: Front and rear Rear only  Speed Warning Indicator Springs, Front: Capacity 1750 lb each Starter Motor, HD: Includes HD battery  Tachometer: Electric; includes optional gauges  Throttle Control: Manual	A68 F51 G68 U15 F60 K67 U16 K31

TIRE & WHEEL COMBINATIONS

TUBE-TYPE TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt No.
PASSENGER CAR TYPE				
7.75-15/8PR—Regular	1215	Disc	51/2	T27
8.15-15/4PR—Regular —Nylon —On-Off Road	1180 1180 1180	Disc Disc Disc	5½ 5½ 5½ 5½	RL2 R53 R56
6.50-16/6PR—Regular —On-Off Road Nylon	1380 1380	Disc Disc	5.0 5.0	R61 R69
TRUCK TYPE				]
6.50-16/6PR—Regular —Nylon —On-Off Road	1420 1420 1420	Disc Disc Disc	5.0 5.0 5.0	R63 R65 R64
7.00-15/6PR—Regular —Nylon —On-Off Road	1520 1520 1520	Disc Disc Disc	5.5 5.5 5.5	R42 R44 R43

TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt No.
PASSENGER CAR TYPE				
7.75-15/8PR—Regular	1215	Disc	51/2	T25a
8.15-15/4PR—Regular —Nylon —On-Off Road 8.15-15/8PR—Regular	1180 1180 1180 1300	Disc Disc Disc	5½ 5½ 5½ 5½ 5½	Std <b>b</b> Q05 R55 T28
6.50-16/6PR—Regular	1380	Disc	5.00	R59
TRUCK TYPE				
6.50-16/6PR—Regular	1420	Disc	5.00	R60
7-17.5/6PR—Regular —Nylon —On-Off Road	1520 1520 1520	Disc Disc Disc	5.25 5.25 5.25	R80 R82 R81

The following tubeless tires may be ordered with white sidewalls: **a**—T26 (7.75–15/8PR) **b**—R51 (8.15–15/4PR)

### GVW Ratings up to 7500 lb

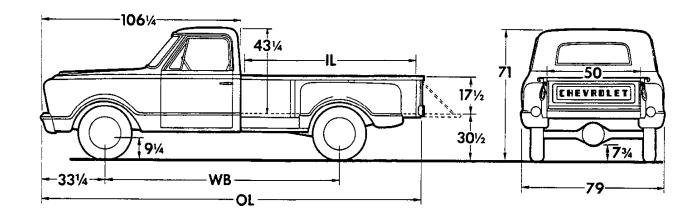
# SERIES C20-STEPSIDE PICKUPS

Six-Cylinder Models

V8 Models

CS20904 Stepside Pickup

CE20904 Stepside Pickup



Models	Din	nensions	(in) <b>★</b>	→Cu	rb Weight	s (lb)	Payload Wt. Dist.*	
Models	WB	IL	OL	Front	Rear	Total	Front	Rear
CS20904 CE20904	127	98	207¾	2189 2300	1725 1732	3914 4032	3%	97%

<sup>\*</sup>Estimate based on water-level loading.

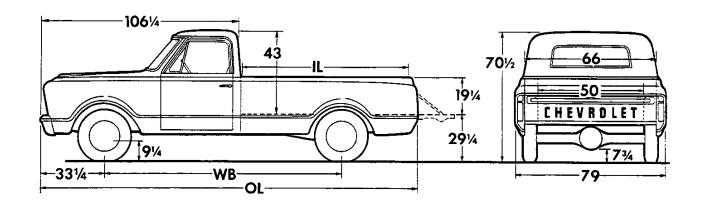
## SERIES C20—FLEETSIDE PICKUPS

Six-Cylinder Models

C\$20934 Fleetside Pickup

V8 Models

CE20934 Fleetside Pickup



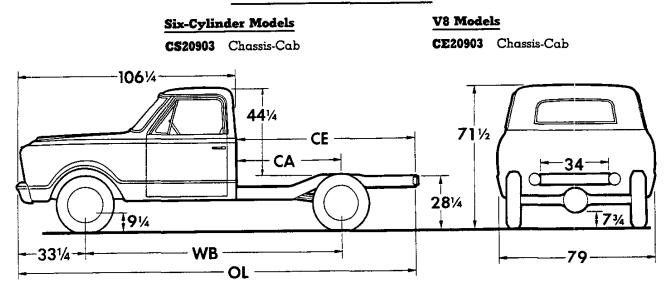
Wadala	Dimensions (in)★			→Cu	zb Weights	: <b>(Љ)</b>	Payload Wt. Dist.*	
Models	WB	IL	OL	Front	Rear	Total	Front	Rear
CS20934 CE20934	127	98	207¾	2199 2309	1801 1809	4000 4118	4%	96%

<sup>\*</sup>Estimate based on water-level loading.

<sup>★</sup>Dimensions with std equipment, unloaded.

<sup>★</sup>Dimensions with std equipment, unloaded.

### SERIES C20—CHASSIS-CABS



	Dimensions (in)★					→Curb Weights (lb)			Body-Payload Wt. Dist.*		
Models	WB	CA	CE	OL	Front	Rear	Total	Body	Front	Rear	
CS20903 CE20903	127	54	951/2	201¾	2226 2341	1277 1280	3503 3621	7' 7½' 8' 8½'	8% 6 3 1	92% 94 97 99	

<sup>\*</sup>Estimate based on water-level loading.

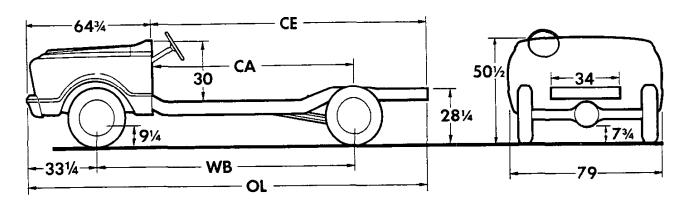
### SERIES C20-COWLS.

### Six-Cylinder Models

CS20902 Chassis-Cowl CS20912 Windshield-Cowl

### **V8 Models**

CE20902 Chassis-Cowl CE20912 Windshield-Cowl



		Dimensio		→Cur	b Weigh	ts (lb)	Body-Payload Wt. Dist.		
Models	WB	CA	CE	OL	Front	Rear	Total	Front	Rear
CS20902 CE20902	127	951/2	137	2013/4	1814 1923	1070 1077	2884 3000	Determine	d by style,
CS20912 CE20912	127	951/2	137	2013/4	1925 2036	1126 1132	3051 3168	length & we	ight of body.

<sup>★</sup> Dimensions with std equipment, unloaded. • Chassis-Cowl shown

<sup>★</sup>Dimensions with std equipment, unloaded.

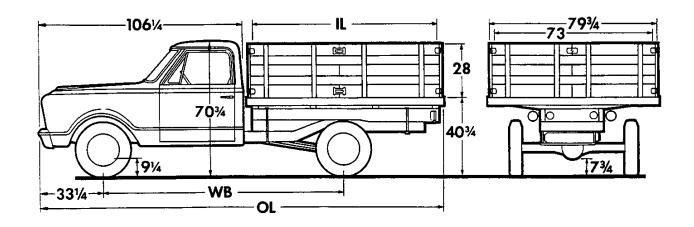
# SERIES C20—STAKES

Six-Cylinder Models

V8 Models

**CS20909** Stake

**CE20909** Stake



Γ	Madala	Dime	ensions (i	n)*	→Cur	b Weights	(њ)	Body-Payload Wt. Dist.*		
	Models	WB	IL	OL	Front	Rear	Total	Front	Rear	
	CS20909 CE20909	127	98	2121/4	2231 2341	1899 1907	4130 4248	2%	98%	

<sup>\*</sup>Estimate based on water-level loading.

 $<sup>\</sup>bigstar \text{Dimensions}$  with std equipment, unloaded.

### STANDARD EQUIPMENT

Air Cleaner: Oiled-paper element

Axle, Rear: Hypoid full-floating type; ratio 4.57;

capacity 5200 lb

Battery: 12-volt, 54-plate; capacity 53 amp-hr

**Bodies:** See Cabs, Bodies & Colors

Brakes, Service: Hydraulic; self-adjusting; dual

system.

Sizes: front 11" x 2 3/4"; rear 11" x 2 3/4"

Effective area: drum 385 sq in; lining 238 sq in

Brake, Parking: Cable to rear wheels; area 119 sq in

**Bumper:** Front only, painted **Cab:** See *Cabs, Bodies & Colors* 

Carburetor: CS20: single-barrel downdraft CE20: two-barrel downdraft

Clutch: CS20: diameter 10"; area 100 sq in CE20: diameter 11"; area 124 sq in

Cooling: CS20: 1¼" radiator core, cross-flow type; 446-sq-in area; 13-lb pressure cap

CE20: 1¼" radiator core, cross-flow type; 480-sq-in area; 13-lb pressure cap

Controls & Instruments: 03, 04, 09, 12, 34 models—hand choke; light switch; headlight beam control; speedometer; odometer; fuel gauge. Lights for generator, oil pressure, engine temperature, brake warning, direction signals and high beam indicator

02 models—hand choke; light switch; headlight beam control; speedometer; odometer; high beam indicator light; fuel gauge; ammeter; oil pressure & engine temperature gauges; brake warning light

**Direction Signals:** Class A; two front and two rear; two front & switch only on 02 models. Includes freeway lane-change position on switch & integral hazard warning switch

#### Engine:

CS20: 250 Six; positive crankcase ventilation

Gross horsepower  Net horsepower  Gross torque, lb-ft	. 125 ( . 235 (	@ 3800 п @ 1600 п	m
Net torque, lb-ft	.220	@ 1000 ut	m
1000, 202 170, maritima annahanna ar			

→ CE20: 283 V8; positive crankcase ventilation

Gross norsepower	172 @	4000	rpm
Net horsepower	145 @	4400	rpm
Gross torque, lb-ft	275 @	2400	TPIM
Net torque, lb-ft	240 @	2400	rpm
			_

Exhaust System: Single pipe & aluminized muffler

Filter, Fuel: Wire mesh in fuel tank; bronze filter in carburetor

Filter, Oil: CS20: full-flow; 1-quart; throwaway type CE20: full-flow; 1-quart; replaceable

element

→Frame: 39,000-lb-test steel; section modulus 3.71

Fuel Pump: Single-action

Generator: 37-amp Delcotron

GVW Plate: 7500 lb

**Lights:** Head, parking, tail, stop; instrument panel. Dome on Cab models only. Backup on Pickups & Stake

Mirror, Rearview:

02 & 12 models: None

03 & 09 models: Exterior RH & LH 17¼" swinging arm 04 & 34 models: Exterior LH 6¼" fixed arm & inside prismatic non-glare shatterproof

Seat: Full-width (except Cowl models)

Seat Belts: Driver & passenger (except Cowl models); includes retractors

Shock Absorbers: Front & rear; piston diameter 1"

Springs, Front: Coil; capacity 1350 lb each

Springs, Rear: Coil; capacity 2000 lb each

Steering: Ball-gear, ratio 24:1; wheel dia 161/2"

Suspension, Front: Independent; capacity 3000 lb

Tank, Fuel: Cab models—back of seat—in cab; capacity approx 21 gallons. Cowl models—inside frame at rear; capacity approx 20 gallons

Tires: Four tubeless 7-17.5/6PR front and single rear

**Tools:** 3300-lb mechanical jack (except Cowls); wheel wrench

**Transmission:** 3-speed fully synchronized; steering column gearshift; ratios 2.85, 1.68, 1.00, 2.95 (rev)

Wheels: Five (four on Cowl models) 17.5" x 5.25"; attachment, 8 studs on 6½" circle; spare carrier under frame (except Cowls); 4 painted hubcaps when single rear wheels are used

Windshield Wipers & Washer: Flectric; 2-speed; not included on O2 models

### **GVW SELECTOR**

GVW Rating (lb)	Chassis Equipment Required for GVW Rating
5500	Standard
7500◆	3000-lb rear springs

◆Rating on standard GVW plate

Note: Be sure to recommend adequate springs and tires for total axle loads. See Optional Equipment and Tire & Wheel Combination pages.

## **OPTIONAL EQUIPMENT**

Air Cleaner: Oil-bath; capacity 1 quart.  Air Cleaner, Heavy-Duty: Includes closed positive ventilation and 1-quart oil-bath precleaner; not available with 327 engine or on 02 models.  Air Conditioning, All-Weather: Not available on chassis-cowl models. Includes heater & defroster, HD radiator, battery & 42-amp generator.	K46	→ Custom Sport Truck Option: Not available on cowl models; includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coating; vinyl door trim
Axle, NoSPIN Rear: Ratio 4.57	G86	Engine:
Axle, Rear: Ratio 4.11; not available with dual rear wheels	H04	292 Six (CS20 models only)
<b>Battery:</b> Heavy-duty; 70-amp-hr; included with HD starter motor or air conditioning	<b>T</b> 60	Net horsepower       153 @ 3600 rpm         Gross torque, lb-ft       275 @ 1600 rpm
Brackets, Mounting: Chassis-cabs only; for mounting pickup box	E80	Net torque, lb-ft.       .255 @ 2400 rpm         Battery.       61-amp-hr         Clutch.       11"; 124 sq in
Brakes, Vacuum Power	J70	327 V8 (CE20 models only) L30
Bumper:  Painted rear; with std painted front bumper only (pickups only)  Painted step-type rear (pickups only)  Chrome front (pickups & chassis-cabs)  Chrome rear ((pickups only)	V43 V37	Gross horsepower
Caps, Hub: Chrome; not available with dual rear wheels		Floor, Pickup Box: Wood with steel skid strips. Fleetside pickup models only
Carrier, Spare Wheel: Cowls and dual rear wheel models only; under frame mounting  Pickup models; side mounted	P10	Fuel Filter Equipment K28  Gauges: Ammeter, engine temperature, oil pressure; not available on chassis-cowl models Z53
Clutch: Dia 11"; for 250 engine with std or NP435CR transmission only		Generator: 12-42-amp Delcotron
Cooling, Heavy-Duty: Includes HD radiator and extra-HD cooling equipment. Not available with air conditioning		5-61-amp Delcotron K76 23-62-amp Delcotron K81  Glass, Soft Ray:
Custom Appearance Option: Cab models only; includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, horn-button cap; color-keyed vinyl-coated rubber floor mats; Custom emblems. Not available when Custom Sport Truck Option is ordered		Windshield only; not available on chassis-cowl models
Custom Comfort Option: Cab models only; includes RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; full-depth foam seat with fabric upholstery; underbody coating; vinyl door trim. Not available when Custom Sport Truck Option is ordered		292 engine: 2200-3100 rpm. K37 2800-3900 rpm. K37 283 engine: 2400-3600 rpm. K37 3000-3800 rpm. K37
<b>Custom Side Molding:</b> For cab models only; also includes pickup box moldings when ordered on Fleetside pickups only		Harness, Shoulder: Driver & passenger; not available on cowl models or with optional Bostrom seats

# OPTIONAL EQUIPMENT (Continued)

Heater & Defroster: Deluxe-Air		Serial Number Plate: (State of Penn:ylvania) Requires 3000-lb rear springs	55K
Hooks, Towing: Two front; not available with chrome bumper		Shock Absorbers, HD:	
→ Jack:			F51
Mechanical; capacity 4000 lb; cowl models with single rear tires only	V62	Rear only	
Mechanical; capacity 4700 lb; with dual rear tires only		Speed Warning Indicator: Not available on 02 models	<b>U</b> 15
Lamps, Marker: Five; not available on cowls		Springs, Auxiliary Rear:	
		Capacity 500 lb each	<b>36</b> 0
Locks: Side wheel carrier; pickup models only.	A97	Springs, Front:	
Mirrors, Exterior:	D40	Capacity 1500 lb each; included with dual	
Front cross-view; 8" diameter Left & right; 6¼" fixed arm; chassis-cabs		rear wheels	F60
only		Springs, Rear:	
Right; 6¼" fixed arm; pickups only		Capacity 3000 lb each	G50
Left & right; 17¼" swinging arm; pickups only	D32	Stabilizer Bar, Front Suspension	F59
West Coast Jr. type (6" x 11")		Starter Motor, Heavy-Duty: Includes HD	T OF
Left side; pickups only		battery; not available with Turbo Hydra-Matic.	K67
Left & right side; cab models only	D29	Steering, Power:	
West Coast Sr. type (7" x 16")		Not available with air conditioning or HD cooling when 292 engine and automatic	
Left side; pickups only		transmission are ordered	<b>N4</b> 0
Left & right side; cab models only	D30	Tachometer: Electric; includes optional gauges;	
Nameplate, Custom Camper: Chassis-cab &		not available on chassis-cowls	U16
pickup models only. Minimum requirements are front stabilizer; HD rear shock absorbers; HD or	:	Throttle Control: Manual	K31
auxiliary rear springs and 7.50-16/8PR or flotation-type rear tires		Transmission:	
Paint, Exterior: See Cabs, Bodies & Colors sect		Chevrolet 4-speed synchromesh; includes  11' clutch	<b>M2</b> 0
Platform Body: Chassis-cabs only; 8-ft length;		New Process 435CR 4-speed close-ratio	
includes backup lamps		Powerglidel	M35
Pump, Fuel & Vacuum Booster: CS20902		Turbo Hydra-Matic 3-speed automatic 1	M49
model only		Ventilation, Closed Engine Positive	K24
→ Radiator: Heavy-duty; included when automat		Wheel, Spare: Included with spare tire	
ic transmission or air conditioning or HD cooling is ordered		Chassis-cab & Stake models with dual rear wheels only	
Radio: Pushbutton control; not available or	ı	•	S76
chassis-cowls	U63	Cowl models	
<b>Seat:</b> For cab models only; not available when Custom Sport Truck Option is ordered.	1	<u> </u>	S77
Bostrom "Viking"; driver seat only	. A55	One, 19.5" x 5.25"	
Bostrom "Viking"; driver seat plus 2-man		One, $16'' \times 5.5''$ ; with dual rear wheels only.	S76
companion seat		One, 16" x 6.00"	Q20
Full-depth foam; included when Custom Comfort Option is ordered		One, 17" x 6.00"; with 7.50/17 tires	Q23
Bucket; driver & passenger; includes carpeting		Window, Full-View Rear: Not available on	
and center console		Cowl models	A10
Conventional Gasoline—20: Page 6		→Indicates change February 1,	1967

### →TIRE & WHEEL COMBINATIONS

	TUBE-TYPE TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
	<b>b</b> 6.50-16/6PR—Regular	1420	Disc	5.5	R63
1	7.00-16/6PR—Regular	1580	Disc	6.0	R66
	—Nylon	1580	Disc	6.0	R78
	—On-Off Road	1580	Disc	6.0	R71*
-	7.00-17/6PR—Regular	1740	Disc	6.0	R72
- }	7.50-16/6PR—Regular	1815	Disc	6.0	R67
- 1	7.00-17/8PR—Regular	2060	Disc	6.0	R73
- 1	—On-Off Road	2060	Disc	6.0	R74*
1	7.50-16/8PR—Regular	2140	Disc	6.0	R68
	7.50—(7/8PR—Regular — On-Off Road	2440 2440	Disc Disc	6.0 6.0	R75 * R76*

**A** Available with dual rears only; not available on pickup models.

\* Rear only.

TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
7-17.5/6PR—Regular	1520	Disc	5.25	Stda
-Nylon	1520	Disc	5.25	R82
—On-Off Road	1520	Disc	5.25	R81*
8-17.5/6PR—Regular	1735	Disc	5.25	[ R83
—Nylon	1735	Disc	5.25	R85
-On-Off Road	1735	Disc	5.25	R84*
8-17.5/8PR-Regular	2060	Disc	5.25	R86
-On-Off Road	2060	Disc	5.25	R87*
8-19.5/6PR-Regular	2090	Disc	5.25	R94
_Nylon	2090	Disc	5.25	R95
8-19.5/8PR—Regular	2440	Disc	5.25	R96
-Nylon	2440	Disc	5.25	R98
-On-Off Road	2440	Disc	5.25	R97*
8-19.5/10PR—Regular	—	Disc	5.25	R99

**a** R80 for spare tire with  $17.5 \times 5.25$  wheel. \*Rear only.

FLOTATION-TYPE TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
10.00-16.5/6PR-Nylon	2330	Disc	8.25	R79★

 $<sup>\</sup>star$  Not available on Stepside pickups.

# **NOTES**

February 1, 1967

GVW Ratings up to 7500 lb

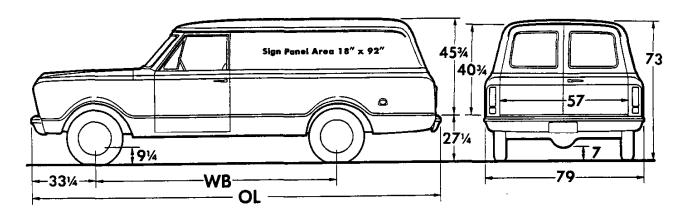
### SERIES C20—PANELS

Six-Cylinder Models

CS20905 Panel

V8 Models

CE20905 Panel



	Dimensi	ons (in)★	Curb Weights (lb)			Payload \	Wt. Dist.*
Models	WB	OL	Front	Rear	Total	Front	Rear
CS20905 CE20905	127	2151/2	1879 1982	2286 2300	4165 4282	6%	94%

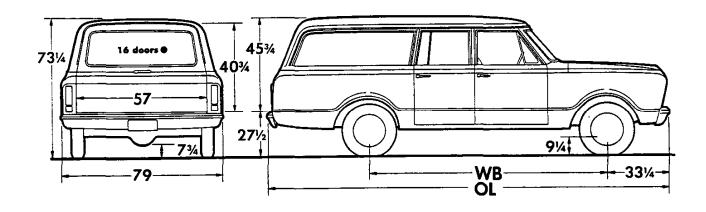
<sup>★</sup>Dimensions with std equipment, unloaded.

### SERIES C20-SUBURBAN CARRYALLS.

Six-Cylinder Models

CS20906 Suburban Carryall CS20916 Suburban Carryall V8 Models

CE20906 Suburban Carryall
CE20916 Suburban Carryall



Dimens	Dimensions (in)★		Curb Weights (lb)		Payload V	Wt. Dist.*	
Models	WB	OL	Front	Rear	Total	Front	Rear
CS20906 CE20906	127	2151/2	1856 1958	2529 2544	4385 4502	29%	71%
CS20916 CE20916	127	2151/2	1823 1924	2584 2600	4407 4524	29	71

<sup>★</sup>Dimensions with std equipment, unloaded.

<sup>\*</sup>Estimate based on water-level loading.

<sup>\*</sup>Estimate based on water-level loading.

<sup>•</sup>Illustration shows 16 model rear end/lift gate. See 05 model illustration above for 06 model rear doors.

### STANDARD EQUIPMENT

Air Cleaner: Oiled-paper element

Axle, Rear: Hypoid full-floating type; ratio 4.57;

capacity 5200 lb

Battery: 12-volt, 54-plate; capacity 53 amp-hr

Bodies: See Cabs, Bodies & Colors

Brakes, Service: Hydraulic; self-adjusting; dual

system

Sizes: front 11" x 23/4"; rear 11" x 23/4"

Effective area: drum 385 sq in; lining 238 sq in

Brake, Parking: Cable to rear wheels; area 119 sq in

Bumpers: Front & rear, painted Cab: See Cabs, Bodies & Colors

Carburetor: CS20: single-barrel downdraft

CE20: two-barrel downdraft

Clutch: CS20: diameter 10"; area 100 sq in

CE20: diameter 11"; area 124 sq in

Cooling: CS20: 1¼" radiator core, cross-flow type; 446-sq-in area; 13-lb pressure cap

CE20: 1 1/4" radiator core, cross-flow type; 480-sq-in area; 13-lb pressure cap

**Controls & Instruments:** Hand choke; light switch; headlight beam control; speedometer; odometer; fuel gauge. Lights for generator, oil pressure, engine temperature, brake warning, direction signals and high beam indicator

**Direction Signals:** Class A; two front and two rear. Includes freeway lane-change position on switch & integral hazard warning switch

#### Doors, Rear:

05 & 06 models: Two; side-hinged 16 models: End/lift gate

### Doors, Side:

05 models: Two; one right & one left 06 & 16 models: Three; two right & one left

CS20: 250 Six; positive crankcase ventilation

#### Engine:

Gross horsepower	rpm
Net horsepower	rpm
Gross torque, lb-ft	rpm
Net torque, lb-ft	rpm
CE20: 283 V8; positive crankcase ventilation	
Gross horsepower	rpm
Net horsepower	rpm

### **GVW SELECTOR**

GVW Rating (lb)	Chassis Equipment Required for GVW Rating
5500	Standard
7500◆	3000-lb rear springs

◆Rating on standard GVW plate

Exhaust System: Single pipe & aluminized muffler

Filter, Fuel: Wire mesh in fuel tank; bronze filter in carburetor

Filter, Oil: CS20: full-flow; 1-quart; throwaway type CE20: full-flow; 1-quart; replaceable element

Frame: 39,000-lb-test steel; section modulus 3.71

Fuel Pump: Single-action

Generator: 37-amp Delcotron

GVW Plate: 7500 lb

**Lights:** Head, parking, tail, stop, backup, dome, instrument panel

#### Mirror, Rearview:

05 models: Exterior RH & LH 6¼" fixed arm 06 & 16 models: Exterior LH 6¼" fixed arm and inside prismatic non-glare shatterproof

#### Seat:

05 models: Driver only; vinyl trim 06 & 16 models: Full-width bench; front only; vinyl trim

Seat Belts: Includes retractors

05 models: Driver only

06 & 16 models: Driver & passenger

Shock Absorbers: Front & rear; piston diameter 1"

Springs, Front: Coil; capacity 1350 lb each

Springs, Rear: Coil; capacity 2000 lb each

Steering: Ball-gear, ratio 24:1; wheel dia 161/2"

Suspension, Front: Independent; capacity 3000 lb

Tank, Fuel: Inside frame at rear; capacity approximately 24.5 gal 23, 5

Tires: Four tubeless 7-17.5/6PR front and single rear

Tools: 3300-lb mechanical jack; wheel wrench

**Transmission:** 3-speed fully synchronized; steering column gearshift; ratios 2.85, 1.68, 1.00, 2.95 (rev)

**Wheels:** Five 17.5" x 5.25"; attachment, 8 studs on 6½" circle; spare carrier inside RH cargo area; 4 painted hubcaps

Windshield Wipers & Washer: Electric; 2-speed wipers

Note: Be sure to recommend adequate springs and tires for total axle loads. See Optional Equipment and Tire & Wheel Combination pages.

## **OPTIONAL EQUIPMENT**

Air Cleaner: Oil-bath; capacity 1 quart K48	Generator:	
Air Cleaner, Heavy-Duty: Includes closed positive ventilation and 1-quart oil-bath precleaner; not available with 327 engine K46	12-42-amp Delcotron       K         5-61-amp Delcotron       K         23-62-amp Delcotron       K	76
Axle, NoSPIN Rear: Capacity 5200 lb; ratio 4.57	Glass, Soft Ray:	
Axle, Rear: Capacity 5200 lb; ratio 4.11 HO		711
Battery: Heavy-duty; 70-amp-hr; included with HD starter motor	<b>GM Air Injection Reactor:</b> Approved by the State of California for vehicle registration. Requires closed engine positive ventilation (06 &	
Brakes, Vacuum Power 370	16 models only)	K19
Bumpers, Chrome: Front & rear V3	Governor:	
Caps, Hub: Chrome POS	250 engine: 1800-3000 rpm I	
Clutch, HD: Dia 11"; for 250 engine with 3-	2800-4000 rpm k 292 engine: 2200-3100 rpm k	
speed, overdrive or New Process 4-speed trans-	3900 3000	
mission only	283 engine: Not available with GM Air Injec-	
HD cooking equipment	tion Reactor 2400-3600 rpm k	727
Custom Appearance Option: Includes bright	3000–3800 rpm I	
metal grille moldings, headlight bezels, vent		
window frames & windshield moldings, control	Harness, Shoulder: 05 models: Driver only	<b>A</b> 85
knob trim, horn-button cap; Custom emblems. (16 models only: vinyl-coated rubber floor mats). Z61	OC OC 5 10 1-1 Differen 6	
Custom Comfort Option:	Heater & Defroster: Deluxe-Air	C42
05 models: Includes LH armrest, RH padded sunshade, cigar lighter, cowl insulation and underbody coating	Hooks, Towing: Two, front. Not available with	
06 & 16 models: Choice of four interior colors.	Lamps, Marker: Five	UO1
Also includes full-depth foam seat with fabric/	Mirrors, Exterior:	
vinyl upholstery; RH & LH armrests; RH padded sunshade; cigar lighter; vinyl door	Front cross-view; 8" diameter	D48
trim; cowl insulation and underbody coating;	RH; 61/4" fixed arm; 06 & 16 models only 1	
white hardboard headlining Z62	West Coast Jr. type (6" x 11")	
Custom Side Molding B9	RH & LH	D29 D29
Engine: 292 Six (CS20 models only); includes 3-speed	West Coast Sr. type (7" x 16")	<b>D</b> 00
fully synchronized transmission L2	LH only; 06 & 16 models only	D30
Gross horsepower	7H1	<b>D</b> 00
Gross torque, lb-ft	om section	
Net torque. lb-ft	om section	
Clutch 11"; 124 sq: Battery 61-amp-hr	n Radiator: Heavy-duty. Included when 327 engine with automatic transmission or HD cool-	
327 V8 (CE20 models only); includes HD front	ing is ordered	V01
springs; not available with Chevrolet 4-speed or	•	U63
overdrive transmission	<b>,</b> ————————————————————————————————————	000
Gross horsepower		
Gross torque, lb-ft	Pm Passenger seat	A57
Net torque, lb-ft	pm IID Deivon's cont	AM
Clutch	HD Driver & passenger seats	
Fuel Filter Equipment K2	8 06 & 16 models:	
Gauges: Ammeter, engine temperature, oil pres-	Center seat, full-width	AS:
sure. Included when tachometer is ordered Z5	Center & rear seats, full-width	A80

# **OPTIONAL EQUIPMENT (Continued)**

Seat Belt: Rear seat center; 06 & 16 models only	A68 i	Steering, Power: Not available with HD cooling when 292 engine and automatic transmission are ordered	NAO
Shock Absorbers, HD: Front and rear Rear only	F51	rachometer: Electric; includes optional gauges	
Speed Warning Indicator		Phrottle Control: Manual	K31
Springs, Auxiliary Rear: Capacity 500 lb each	G60	Transmission:  Chevrolet 4-speed synchromesh; includes 11" clutch	M20
Springs, Front: Capacity 1500 lb each		New Process 435CR 4-speed close-ratio	
Springs, Rear: [ [ [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [		Powerglide; not available with governor equipment	
Starter Motor, HD: Includes HD battery; not available with Turbo Hydra-Matic	K67	Ventilation, Closed Engine Positive	

### TIRE & WHEEL COMBINATIONS

TUBE-TYPE TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
7.00-16/6PR—Regular	1580	Disc	6.0	R66
—Nylon	1580	Disc	6.0	R78
—On-Off Road	1580	Disc	6.0	R71*

<sup>\*</sup>Rear only

TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
7-17.5/6PR — Regular	1520	Disc	5.25	Stda
— Nylon	1520	Disc	5.25	R82
— On-Off-Road	1520	Disc	5.25	R81*
8–17.5/6PR — Regular	1735	Disc	5.25	R83
— Nylon	1735	Disc	5.25	R85
— On-Off-Road	1735	Disc	5.25	R84*
8-17.5/8PR — Regular	2060	Disc	5.25	R86
— On-Off Road	2060	Disc	5.25	R87*

a R80 for spare tire with 17.5 x 5.25 wheel.
\* Rear only

## GVW Ratings up to 7600 lb

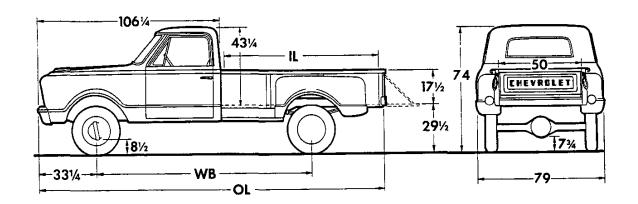
### SERIES K20-STEPSIDE PICKUPS

Six-Cylinder Models

V8 Models

KS20904 Stepside Pickup

KE20904 Stepside Pickup



	Dimensions (in)★			→ Cu	>Curb Weights (lb)			Payload Wt. Dist.*		
Models	WB	IL	OL	Front	Rear	Total	Front	Rear		
KS20904 KE20904	127	98	207¾	2347 2458	1779 1781	4126 4239	3%	97%		

<sup>\*</sup>Estimate based on water-level loading.

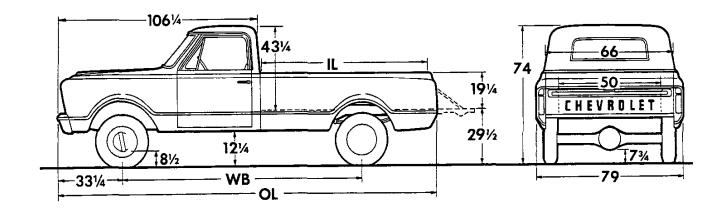
# SERIES K20-FLEETSIDE PICKUPS

Six-Cylinder Models

**V8 Models** 

KS20934 Fleetside Pickup

KE20934 Fleetside Pickup



	Dimensions (in)★			→Cu	rb Weights	(IP)	Payload V	Vt. Dist.*
Models	WB	IL	OL	Front	Rear	Total	Front	Rear
KS20934 KE20934	127	98	2073/4	2356 2467	1856 1858	4212 4325	4%	96%

<sup>\*</sup>Estimate based on water-level loading.

<sup>★</sup>Dimensions with std equipment, unloaded.

<sup>★</sup>Dimensions with std equipment, unloaded.

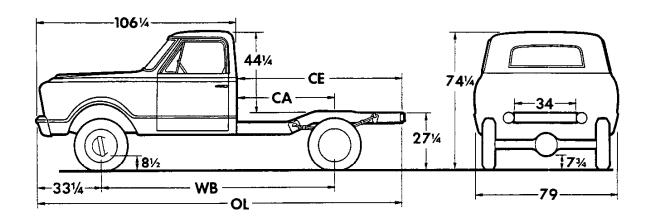
# SERIES K20-CHASSIS-CABS

Six-Cylinder Models

**V8 Models** 

K\$20903 Chassis-Cab

KE20903 Chassis-Cab



	Dimensions (in)★		→Cu:	→Curb Weights (lb)			Body-Payload Wt. Dist.*			
Models	WB	CA	CE	OL	Front	Rear	Total	Body	Front	Rear
KS20903 KE20903	127	54	951/2	201¾	2392 2518	1313 1317	3705 3835	7' 7½' 8' 8½'	8% 6 3 1	92% 94 97 99

<sup>\*</sup>Estimate based on water-level loading.

<sup>★</sup>Dimensions with std equipment, unloaded.

### STANDARD EQUIPMENT

Air Cleaner: Oiled-paper element

Axle, Front: Hypoid; ratio 4.55; capacity 3500 lb; yoke and trunnion universal joints

Axle, Rear: Hypoid full-floating type; ratio 4.57; capacity 5200 lb

Battery: 12-volt, 54-plate; capacity 53 amp-hr

Bodies: See Cabs, Bodies & Colors

Brakes, Service: Hydraulic; self-adjusting; dual

system

Sizes: front 12" x 2"; rear 12" x 2"

Effective area: drum 300 sq in; lining 185 sq in

Brake, Parking: Cable to rear wheels; area 92 sq in

Bumper: Front only, painted

Cab: Conventional; see Cabs, Bodies & Colors

Carburetox: KS20: single-barrel downdraft

KE20: two-barrel downdraft

Clutch: KS20: diameter 10"; area 100 sq in

KE20: diameter 11"; area 124 sq in

Cooling: KS20: 1¼" radiator core, cross-flow type; 446-sq-in area; 13-lb pressure cap

KE20: 1¼" radiator core, cross-flow type; 480-sq-in area; 13-lb pressure cap

**Controls & Instruments:** Hand choke; light switch; headlight beam control; speedometer; odometer; fuel gauge. Lights for generator, oil pressure, engine temperature, brake warning, direction signals and high beam indicator

**Direction Signals:** Class A; two front and two rear. Includes freeway lane-change position on switch & integral hazard warning switch

Engine: KS20: 250 Six; positive	crankcase ventilation
Gross horsepower	155 @ 4200 rpm
Net horsepower	125 @ 3800 rpm
Gross torque, lb-ft	235 @ 1600 rpm
Net torque, lb-ft	220 @ 1600 rpm

→KE20: 283 V8; positive crankcase ventilation

Gross horsepower	175 @	4600	rpm
Net horsepower	145 @	4400	rpm
Gross torque, lb-ft	275 @	2400	rpm
Net torque 1b-ft	240 @	2400	rom

Exhaust System: Single pipe & aluminized muffler

Filter, Fuel: Wire mesh in fuel tank; bronze filter in carburetor

Filter, Oil: KS20: full-flow; 1-quart; throwaway type KE20: full-flow; 1-quart; replaceable element

Frame: 39,000-lb-test steel; section modulus 3.48

Generator: 37-amp Delcotron

GVW Plate: 7600 lb

**Lights:** Head, parking, tail, stop; dome, instrument panel. Backup on pickups

#### Mirror, Rearview:

03 models: Exterior RH & LH 17¼" swinging arm 04 & 34 models: Exterior LH 6¼" fixed arm & inside prismatic non-glare shatterproof

**Power Divider:** Timken T-221 2-speed; ratios 1.94 & 1.00; power take-off opening at rear

Seat: Full-width

Seat Belts: Driver & passenger; includes retractors

Shock Absorbers: Front & rear; piston diameter 1"

Springs, Front: Tapered-leaf; capacity 1600 lb each

Springs, Rear: Tapered-leaf; capacity 1900 lb

Steering: Ball-gear, ratio 24:1; wheel dia 161/2"

**Tank, Fuel:** Back of seat in cab; capacity approx 21 gallons

Tires: Four tubeless 7–17.5/6PR front, single rear

Tools: 3300-lb mechanical jack; wheel wrench

**Transmission:** 3-speed synchromesh; steering column gearshift; ratios 2.94, 1.68, 1.00, 3.14 (rev)

Wheels: Five 17.5" x 5.25"; attachment 8 studs on 61/2" circle; spare carrier under frame

Windshield Wipers & Washer: Electric; 2-speed

### **GVW SELECTOR**

GVW Rating (lb)	Chassis Equipment Required for GVW Rating
5700	Standard
6100	2500-lb rear springs
7200	2500-lb rear springs
7600+	2500-lb rear springs

◆ Rating on standard GVW plate

Note: Be sure to recommend adequate springs and tires for total axle loads. See Optional Equipment and Tire & Wheel Combination pages.

## **OPTIONAL EQUIPMENT**

Air Cleaner (Schotch; capacity   Includes closed positive ventilation and   equart eli-bath preciseaner, not available with 327 engine.  Air Conditioning, All-Weather: Includes closed fester & defroster, HD radiator, battery & 42 camp generator.  Can generator.  Can Azle, Heavy-Duty Front.  Entery Heavy-duty; 70 amp-hr; included when HD starter motor or air conditioning is ordered.  Frankes, Vacuum Power.  [70]  Bumper:  Painted rear; with std painted front bumper only (pickups only).  Chrome front.  Chrome front.  Chrome front.  Chrome front.  Chrome front.  Chrome erear (pickups only).  Chrome front.  Variation front bumper (pickups only).  Moli in winder drone front bumper (pickups only).  Moli in winder drone delic front bumper (pickup only).  East Selective front will delicate front bumper (pickup only).  East Selective front (pickup only).  East Selective front (pickup only).  East Selective front (pic	101 dester-matanea edarbmer	., 500 design 10diates 500.000
Air Conditioning, All-Weather: Includes precience; not available with 327 engine. K46  Air Conditioning, All-Weather: Includes heater & defroster, HD radiator, bottery & 42-camp generator. C660  Axle, Heavy-Duty Front. C660  Brakes, Vacuum Power C70  Brakes C80  Brakes C80  Brakes C80  Brakes C80  Brakes C80  Brakes C80  Brakes	Air Cleaner: Oil-bath; capacity 1 quart K48	
Clutch. 117, 124 sq in megaerator. Cate Make, Heavy-Duty Front. F49  Battery: Heavy-duty; 70 amp-hr; included when HD starter motor or air conditioning is ordered. T60  Brakes, Vacuum Power. 170  Bumper: Painted rear; with std painted front bumper only (pickups only). V43  Chrome rear (pickups only). V43  Chrome rear (pickups only). V37  Chrome rear (pickups only). V38  Custem Dall'; for 250 engine only. M01  Coolling, Heavy-Duty: Includes HD radiator and extra-heavy-duty cooling equipment; not vanished by thin, horn-button cap; color-keyed viny-cooted rubber floor matis; Custom embles. Not available when Custom Sport Truck Option is ordered. Custem Consolet only only only door trim. Not available when Custom Sport Truck Option is ordered. Custom Sport Truck Option: Includes bright metal grille moldings, headlight bezels, vent without of trames & windsheld moldings, control know trim, ordered . Cate Custom Sport Truck Option: Includes bright metal grille moldings, headlight bezels, vent without or trames & windsheld moldings, control know trim, not available with optional Bostrom seats A85  Harness, Shoulder: Diver & passenger; not available with optional Bostrom seats	positive ventilation and 1-quart oil-bath pre-	Gross horsepower       170 @ 4000 rpm         Net horsepower       153 @ 3600 rpm         Gross torque, lb-ft       275 @ 1600 rpm         Net torque, lb-ft       255 @ 2400 rpm
Rake, Heavy-Duty Front. F49  Battery: Heavy-duty; 70 amp-hr; included when HD starter motor or air conditioning is ordered. T60  Brakes, Vacuum Power. 170  Bumper: Painted rear; with std painted front bumper only (pickups only). 43  Painted step-type rear (pickups only). 43  Chrome front. 43  Chrome front. 43  Chrome front. 43  Carrier, Spare Wheel: Side mounted; pickup models only. 43  Chrome rear (pickups only). 43  Chrome rear (pickups only). 43  Chrome have been been been been been been been be	heater & defroster, HD radiator, battery & 42-	Clutch 11"; 124 sq in
Rattery: Heavy-duty; 70 amp-hr; included when HD starter motor or air conditioning is ordered. T60  Brakes, Vacuum Power. 170  Bumper: 170  Bumper: 170  Bumper: 170  Bumper: 170  Bumper: 170  Painted rear; with std painted front bumper only (pickups only) 170  Chrome front. 170  Chrome front. 170  Chrome rear (pickups only) 170  Chrome rear (pickups only 170  Cooling, Heavy-Duty: Includes bright 171  metal qrille moldings, headlight bezels, vent window	amp generator	
Net torque, lb-fi. 283 @ 2400 rpm HD starter motor or air conditioning is ordered. T60  Brakes, Vacuum Power. 170  Bumper:  Painted rear; with std painted front bumper only (pickups only). V38 Painted step-type rear (pickups only). V37 Chrome front. V37 Chrome front. V37 Chrome rear (pickups only). M31 All windows. A11 All windows. A37 2800-4000 rpm K37 2800-4000 rpm K37 2803 engine: 2800-3900 rpm K37 283 engine: 2400-3600 rpm K37 283 engine: 2400-3600 rpm K37 All windows. A11 Al	Axle, Heavy-Duty Front F49	Net horsepower 177 @ 4000 rpm
Bumper:  Painted rear; with std painted front bumper only (pickups only).  Painted step-type rear (pickups only).  Chrome front.  Chrome rear (pickups only).  Chrome rear (pickups only).  Chrome rear (pickups only).  Chrome rear (pickups only).  Carrier, Spare Wheel: Side mounted; pickup models only.  Clutch: Dia 11"; for 250 engine only  Clutch: Dia 11"; for 250 engine only  Custom Appearance Option: Includes HD radiator and extra-heavy-duty cooling equipment; not available with air conditioning.  Custom Appearance Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, horn-button cap; color-keyed vinyl-coated rubber floor mats; Custom emblems. Not available when Custom Sport Truck Option is ordered.  Custom Comfort Option: Includes RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; full-depth foam seat with fabric upholstery; underbody coating; vinyl door trim. Not available when Custom Sport Truck Option is ordered.  Custom Side Molding: Cab models only; also includes pickup box moldings when ordered on Fleetside pickups only.  Custom Sport Truck Option includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coating; tinyl door trim than pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coating; tinyl door trim than pedal trim, horn-button cap; chrome front bumper; special CST are blems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coating.		Net torque, lb-ft
Painted rear; with std painted front bumper only (pickups only)	Brakes, Vacuum Power J70	
Painted rear; with std painted front bumper only (pickups only)	Bumper:	Fuel Filter Equipment K28
Carrier, Spare Wheel: Side mounted; pickup models only.  Clutch: Dia 11"; for 250 engine only	Painted rear; with std painted front bumper only (pickups only) V38  Painted step-type rear (pickups only) V43  Chrome front V37	Gauges: Ammeter, engine temperature, oil pressure. (Included when tachometer is ordered) Z53  Generator:  12-42-amp Delcotron
Cooling, Heavy-Duty: Includes HD radiator and extra-heavy-duty cooling equipment; not available with air conditioning.  Custom Appearance Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, horn-button cap; color-keyed vinyl-coated rubber floor mats; Custom emblems. Not available when Custom Sport Truck Option is ordered.  Custom Comfort Option: Includes RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; full-depth foam seat with fabric upholstery; underbody coating; vinyl door trim. Not available when Custom Sport Truck Option is ordered.  Custom Side Molding: Cab models only; also includes pickup box moldings when ordered on Fleetside pickups only.  Custom Sport Truck Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coating; tripletation of the coat o	Carrier, Spare Wheel: Side mounted; pickup	23–62-amp Delcotron
Cooling, Heavy-Duty: Includes HD radiator and extra-heavy-duty cooling equipment; not available with air conditioning	·	
Governor:  250 engine: 1800-3000 rpm. K37  2800-4000 rpm. K37  2800-4000 rpm. K37  2800-4000 rpm. K37  2800-3900 rpm. S300-3900 rpm. S30  2800-3900 rpm. S30  2800-390	Clutch: Dia 11"; for 250 engine only MO1	•
metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, horn-button cap; color-keyed vinyl-coated rubber floor mats; Custom emblems. Not available when Custom Sport Truck Option is ordered	and extra-heavy-duty cooling equipment; not	Governor:       250 engine: 1800–3000 rpm.       K37         2800–4000 rpm.       K37
Custom Comfort Option: Includes RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; full-depth foam seat with fabric upholstery; underbody coating; vinyl door trim. Not available when Custom Sport Truck Option is ordered.  Custom Side Molding: Cab models only; also includes pickup box moldings when ordered on Fleetside pickups only.  Custom Sport Truck Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coat-	metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, horn-button cap; color-keyed vinyl- coated rubber floor mats; Custom emblems. Not	2800-3900 rpm K37 283 engine: 2400-3600 rpm K37 3000-3800 rpm K37
Custom Comfort Option: Includes RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; full-depth foam seat with fabric upholstery; underbody coating; vinyl door trim. Not available when Custom Sport Truck Option is ordered.  Custom Side Molding: Cab models only; also includes pickup box moldings when ordered on Fleetside pickups only.  Custom Sport Truck Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & Left & right; 6½ fixed arm; pickups only.  Left & right iside.  West Coast Sr. type (6" x 11")  Left & right side.  D29  West Coast Sr. type (7" x 16")  Left side; pickups only.  D30		available with optional Bostrom seats A85
chrome bumper. V76  Special cowl insulation; full-depth foam seat with fabric upholstery; underbody coating; vinyl door trim. Not available when Custom Sport Truck Option is ordered. Z62  Custom Side Molding: Cab models only; also includes pickup box moldings when ordered on Fleetside pickups only. B98  Custom Sport Truck Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coat-		
Hubs, Free-Wheeling Front: Manual control at hubs.		
trim. Not available when Custom Sport Truck Option is ordered.  Custom Side Molding: Cab models only; also includes pickup box moldings when ordered on Fleetside pickups only.  Eustom Sport Truck Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coat-		
Custom Side Molding: Cab models only; also includes pickup box moldings when ordered on Fleetside pickups only.  Custom Sport Truck Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coat-	fabric upholstery; underbody coating; vinyl door	
Custom Side Molding: Cab models only; also includes pickup box moldings when ordered on Fleetside pickups only.  Eustom Sport Truck Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coat-		
includes pickup box moldings when ordered on Fleetside pickups only.  Custom Sport Truck Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coat-  Mirrors, Exterior:  Front cross-view; 8" diameter		Lock: Side wheel carrier; pickup models only. A97
Custom Sport Truck Option: Includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & Left & right side.  Left; 17¼" swinging arm; pickups only.  Right; 17¼" swinging arm; pickups only.  D32  West Coast Jr. type (6" x 11")  Left & right side.  D29  West Coast Sr. type (7" x 16")  Left side; pickups only.  D30	includes pickup box moldings when ordered on	Mirrors, Exterior: Front cross-view; 8" diameter D48
	metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with padded center console; carpeting; RH & LH armrests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coat-	Left; 17¼" swinging arm; pickups only. D32 Right; 17¼" swinging arm; pickups only. D32 Right; 6¼" fixed arm; pickups only. D32 West Coast Jr. type (6" x 11") Left side; pickups only. D29 Left & right side. D29 West Coast Sr. type (7" x 16") Left side; pickups only. D30

### **OPTIONAL EQUIPMENT (Continued)**

Paint, Exterior: See Cabs, Bodies & Colors section	→Springs, Front:	
Radiator: Heavy-duty	Saviane Kanti	
Seat: For cab models only; not available when Custom Sport Truck Option is ordered.  Bostrom "Viking"; driver seat only  Bostrom "Viking"; driver seat plus 2-man	Starter Motor, Heavy-Duty: Includes HD battery K67	
companion seat	Tachometer: Electric; includes optional gauges U16  Z52 Throttle Control: Manual	0
Rear only  NAMe plate custom	Compa	
Men Reg ere HP HA R. Skrugs &: or platation tere	7.50 × 16 81. R. luke lype	,
•		

## **→TIRE & WHEEL COMBINATIONS**

TUBE-TYPE TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
7.00–16/6PR—Regular	1580	Disc	6.0	R66
—Nylon	1580	Disc	6.0	R78
—On-Off Road	1580	Disc	6.0	R71
7.00–17/6PR—Regular	1740	Disc	6.0	R72
7.50–16/6PR—Regular	1815	Disc	6.0	R67
7.50–16/8PR—Regular	2140	Disc	6.0	R68
7.00–17/8PR—Regular	2060	Disc	6.0	R73
—On-Off Road	2060	Disc	6.0	R74
7.50–17/8PR—Regular	2440	Disc	6.0	R75 <b>b</b>
—On-Off Road	2440	Disc	6.0	R76 <b>b</b>

**b**—Heavy-duty front axle required.

TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
7–17.5/6PR—Regular —Nylon —On-Off Road 8–17.5/6PR—Regular —Nylon —On-Off Road	1520 1520 1520 1520 1735 1735	Disc Disc Disc Disc Disc Disc	5.25 5.25 5.25 5.25 5.25 5.25	Std* R82 R81 R83 R85 R84
8–17.5/8PR—Regular —On-Off Road	2060 2060	Disc Disc	5.25 5.25 5.25	R86 R87
8–19.5/6PR—Regular —Nylon 8–19.5/8PR—Regular —Nylon —On-Off Road 8–19.5/10PR—Regular	2090 2090 2440 2440 2440	Disc Disc Disc Disc Disc	5.25 5.25 5.25 5.25 5.25 5.25	R94a R95a R96a R98a R97a R99a

<sup>\*</sup>R80 for spare tire with 17.5 x 5.25 wheel. —Heavy-duty front axle required.

FLOTATION-TYPE TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
10.00-16.5/6PR—Nylon	2330	Disc	8.25	R79★

<sup>★</sup> Not available on Stepside pickups.

GVW Ratings up to 7600 lb

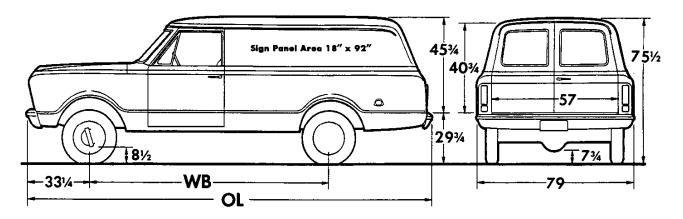
### SERIES K20-PANELS

Six-Cylinder Models

V8 Models

KS20905 Panel

KE20905 Panel



Models	Dimensi	Dimensions (in)★		rb Weights (	Payload Wt. Dist.*		
Models	WB OL		Front Rear Total		Total	Front Rear	
KS20905 KE20905	127	2151/2	2042 2147	2379 2387	4421 4534	6%	94%

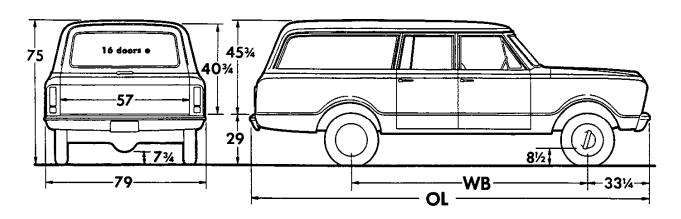
<sup>★</sup>Dimensions with std equipment, unloaded.

### SERIES K20-SUBURBAN CARRYALLS\*

Six-Cylinder Models

KS20906 Suburban Carryall KS20916 Suburban Carryall V8 Models

KE20906 Suburban Carryall KE20916 Suburban Carryall



Models	Dimensi	ons (in)★	Curb Weights (lb)			Payload Wt. Dist.*	
Models	WB	OI.	Front	Rear	Total	Front	Rear
KS20906 KE20906	127	215½	2012 2116	2626 2636	4638 4752	29%	71%
KS20916 KE20916	127	2151/2	1977 2081	2683 2693	4660 4774	29	71

<sup>★</sup>Dimensions with std equipment, unloaded.

February 1, 1967

<sup>\*</sup>Estimate based on water-level loading.

<sup>\*</sup>Estimate based on water-level loading.

<sup>•</sup>Illustration shows 16 model rear end/lift gate. See 05 model illustration above for 06 model rear doors.

### STANDARD EQUIPMENT

Air Cleaner: Oiled-paper element

Axle, Front: Hypoid; ratio 4.55; capacity 3500 lb;

yoke and trunnion universal joints

Axle, Rear: Hypoid full-floating type; ratio 4.57;

capacity 5200 lb

Battery: 12-volt, 54-plate; capacity 53 amp-hr

Bodies: See Cabs, Bodies & Colors

Brakes, Service: Hydraulic; self-adjusting; dual

system

Sizes: front 12" x 2"; rear 12" x 2"

Effective area: drum 300 sq in; lining 185 sq in

Brake, Parking: Cable to rear wheels; area 92 sq in

Bumpers: Front & rear, painted

Carburetor: KS20: single-barrel downdraft

KE20: two-barrel downdraft

Clutch: KS20: diameter 10"; area 100 sq in KE20: diameter 11"; area 124 sq in

Cooling: KS20: 11/4" radiator core, cross-flow type;

446-sq-in area; 13-lb pressure cap

KE20: 11/4" radiator core, cross-flow type;

480-sq-in area; 13-lb pressure cap

Controls & Instruments: Hand choke; light switch; headlight beam control; speedometer; odometer; fuel gauge. Lights for generator, oil pressure, engine temperature, brake warning, direction signals and high beam indicator

Direction Signals: Class A; two front and two rear. Includes freeway lane-change position on switch & integral hazard warning switch

Doors, Rear:

05 & 06 models: Two; side-hinged

16 models: End/lift gate

Doors, Side:

05 models: Two; one right & one left

06 & 16 models: Three; two right & one left

Engine: KS20: 250 Six; p	ositive crankcase ventilation
Gross horsepower	
Net horsepower	125 @ 3800 rpm
Gross torque lb-ft	
Net torque lb-ft	

KE20: 283 V8: positive crankcase ventilation

FZO: ZOO AO: DOSITIAE CIGHECOSE ASHIMOTON
Gross horsepower
Net horsepower
Gross torque, lb-ft
Net torque, lb-ft

Exhaust System: Single pipe & aluminized muffler

Filter, Fuel: Wire mesh in fuel tank; bronze filter in

Filter, Oil: KS20: full-flow; 1-quart; throwaway type

KE20: full-flow; 1-quart; replaceable

element

Frame: 39,000-lb-test steel; section modulus 3.48

Generator: 37-amp Delcotron

GVW Plate: 7600 lb

Lights: Head, parking, tail, stop, backup, dome,

instrument panel

Mirror, Rearview:

05 models: Exterior RH & LH 61/4" fixed arm

06 & 16 models: Exterior LH 61/4" fixed arm and

inside prismatic non-glare shatterproof

Power Divider: Timken T-221 2-speed; ratios 1.94

& 1.00; power take-off opening at rear

Seat: 05 models: Driver only; vinyl trim 06 & 16 models: Full-width bench; front only;

vinyl trim

Seat Belts: Includes retractors

05 models: Driver only

06 & 16 models: Driver & passenger

Shock Absorbers: Front & rear; piston diameter 1"

Springs, Front: Tapered-leaf; capacity 1600 lb

Springs, Rear: Tapered-leaf; capacity 1900 lb

Steering: Ball-gear, ratio 24:1; wheel dia 16½"

Tank, Fuel: Inside frame at rear; capacity approx 24.5 gal 23 5

Tires: Four tubeless 7/17.5-6PR front, single rear

Tools: 3300-lb mechanical jack; wheel wrench

Transmission: 3-speed synchromesh; steering column gearshift; ratios 2.94, 1.68, 1.00, 3.14 (rev)

Wheels: Five 17.5" x 5.25"; attachment, 8 studs on 6½" circle; spare carrier inside RH cargo area

Windshield Wipers & Washer: Electric; 2-speed

### **GVW SELECTOR**

GVW Rating (lb)	Chassis Equipment Required for GVW Rating				
5700	Standard				
6100	2500-lb rear springs				
7200	2500-lb rear springs				
7600♦	2500-lb rear springs				

Rating on standard GVW plate

Note: Be sure to recommend adequate springs and tires for total axle loads. See Optional Equipment and Tire & Wheel Combination pages.

## **OPTIONAL EQUIPMENT**

Air Cleaner: Oil-bath; capacity 1 quart K4	48 <b>GM Air Injection Reactor:</b> Approved by the State of California for vehicle registration. Re-	
Air Cleaner, Heavy-Duty: Includes closed	quires closed engine positive ventilation (06 &	77.10
positive ventilation and 1-quart oil-bath pre- cleaner; not available with 327 engine Ka	16 models only)	K19
Axle, Heavy-Duty Front F4	19 250 engine: 1800-3000 rpm	
Battery: Heavy-duty; 70-amp-hr; included with	2800-4000 rpm	K37
HD starter motor	283 engine: Not available with GM Air Injec-	K37
Brakes, Vacuum Power	2400-3600 rpm	K37
Bumpers, Chrome: Front & rear	3000-3800 rpm	
Clutch: Diameter 11"; for 250 engine with 3-speed transmission only	Harness, Shoulder: 01 05 models: Driver only	
Cooling HD: Includes HD radiator and extra-		
HD cooling equipment. Zwy Cook	<b>mooks, Towing:</b> Iwo, front. Not available with	
Custom Appearance Option: Includes bright metal grille moldings, headlight bezels, vent	chrome bumper	V76
window frames & windshield moldings, control	Hubs, Free-Wheeling Front: Manual control at hubs	F76
knob trim, horn-button cap; Custom emblems. (16 models only: vinyl-coated rubber floor mats). Ze		
	Mirrors, Exterior:	
O5 models: Includes LH armrest, RH padded		
sunshade, cigar lighter, cowl insulation and underbody coating Ze	West Coast Jr. type (6" x 11")	
06 & 16 models: Choice of four interior colors.	LH only; 06 & 16 models only	D29 D29
Also includes full-depth foam seat with fabric/	West Coast Sr. type (7" x 16")	
vinyl upholstery; RH & LH armrests; RH padded sunshade; cigar lighter; vinyl door trim; cowl	LH only; 06 & 16 models onlyRH & LH	D30
insulation and underbody coating; white hard- board headlining Ze	5 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	section	***
Custom Side Molding BS	Radiator: Heavy-duty; included with HD cooling	AOT
The state of the s		TTCO
Engine:	Radio: Pushbutton control	U63
Engine: 292 Six (KS20 models only) L2	Radio: Pushbutton control	
Engine:  292 Six (KS20 models only)  Gross horsepower  170 @ 4000  Net horsepower  153 @ 3600	Radio: Pushbutton control	A57
Engine:  292 Six (KS20 models only)  Gross horsepower  170 @ 4000  Net horsepower  153 @ 3600  Gross torque, lb-ft  275 @ 1600	Radio: Pushbutton control	A57 AM2
Engine:         292 Six (KS20 models only)       L2         Gross horsepower       170 @ 4000         Net horsepower       153 @ 3600         Gross torque, lb-ft       275 @ 1600         Net torque, lb-ft       255 @ 2400         Battery       61-amp-h	Radio: Pushbutton control.  Seats:  rpm	A57 AM2 AM2
Engine:       292 Six (KS20 models only)       L2         Gross horsepower       170 @ 4000         Net horsepower       153 @ 3600         Gross torque, lb-ft       275 @ 1600         Net torque, lb-ft       255 @ 2400         Battery       61-amp-h         Clutch       11"; 124 sq	Radio: Pushbutton control.  Seats:  rpm	A57 AM2 AM2
Engine:       292 Six (KS20 models only)       L2         Gross horsepower       170 @ 4000         Net horsepower       153 @ 3600         Gross torque, lb-ft       275 @ 1600         Net torque, lb-ft       255 @ 2400         Battery       61-amp-h:         Clutch       11"; 124 sq         327 V8 (KE20 models only)	Radio: Pushbutton control.  Seats:  O5 models:  Passenger seat  HD driver seat  HD driver & passenger seats  O6 & 16 models:  Center seat, full-width  Center & rear seats, full-width	A57 AM2 AM2 AS3 A80
Engine:       292 Six (KS20 models only)       L2         Gross horsepower       170 @ 4000         Net horsepower       153 @ 3600         Gross torque, lb-ft       275 @ 1600         Net torque, lb-ft       255 @ 2400         Battery       61-amp-h         Clutch       11"; 124 sq         327 V8 (KE20 models only)         Gross horsepower       220 @ 4400         Net horsepower       177 @ 4000	Radio: Pushbutton control.  Seats:  O5 models:  Passenger seat  HD driver seat  HD driver & passenger seats  O6 & 16 models:  Center seat, full-width  Center & rear seats, full-width  Seat Belt: Rear seat center; O6 & 16 models only  Shock Absorbers, HD:	A57 AM2 AM2 AS3 A80 A68
Engine:  292 Six (KS20 models only)  Gross horsepower  170 @ 4000  Net horsepower  153 @ 3600  Gross torque, lb-ft  275 @ 1600  Net torque, lb-ft  255 @ 2400  Battery  61-amp-h: Clutch  11"; 124 sq  327 V8 (KE20 models only)  Gross horsepower  220 @ 4400  Net horsepower  177 @ 4000  Gross torque, lb-ft  320 @ 2800  Net torque, lb-ft  283 @ 2400	Radio: Pushbutton control.  Seats:  O5 models:     Passenger seat.     HD driver seat.     HD driver & passenger seats.     O6 & 16 models:     Center seat, full-width.     Center & rear seats, full-width.  Seat Belt: Rear seat center; 06 & 16 models only rpm rpm rpm Front and rear. Rear only.	A57 AM2 AM3 AS3 A80 A68
Engine:       292 Six (KS20 models only)       L2         Gross horsepower       170 @ 4000         Net horsepower       153 @ 3600         Gross torque, lb-ft       275 @ 1600         Net torque, lb-ft       255 @ 2400         Battery       61-amp-h         Clutch       11"; 124 sq         327 V8 (KE20 models only)         Gross horsepower       220 @ 4400         Net horsepower       177 @ 4000	Radio: Pushbutton control.  Seats:  O5 models:     Passenger seat.     HD driver seat.     HD driver & passenger seats.     O6 & 16 models:     Center seat, full-width.     Center & rear seats, full-width.  Seat Belt: Rear seat center; 06 & 16 models only rpm rpm rpm Front and rear. Rear only.	A57 AM2 AS3 A80 A68 F51 G68
Engine:  292 Six (KS20 models only)  Gross horsepower  170 @ 4000  Net horsepower  153 @ 3600  Gross torque, lb-ft  275 @ 1600  Net torque, lb-ft  255 @ 2400  Battery  61-amp-h: Clutch  11"; 124 sq  327 V8 (KE20 models only)  Gross horsepower  220 @ 4400  Net horsepower  177 @ 4000  Gross torque, lb-ft  320 @ 2800  Net torque, lb-ft  283 @ 2400	Radio: Pushbutton control.  Seats:  O5 models:  Passenger seat  HD driver seat  HD driver & passenger seats  O6 & 16 models:  Center seat, full-width  Center & rear seats, full-width.  Seat Belt: Rear seat center; O6 & 16 models only  rpm  rpm rpm rpm rpm rpm Rear only.  in  Speed Warning Indicator	A57 AM2 AM3 A80 A68 F51 G68 U15
Engine:       292 Six (KS20 models only)       L2         Gross horsepower       170 @ 4000         Net horsepower       153 @ 3600         Gross torque, lb-ft       275 @ 1600         Net torque, lb-ft       255 @ 2400         Battery       61-amp-h         Clutch       11"; 124 sq         327 V8 (KE20 models only)         Gross horsepower       220 @ 4400         Net horsepower       177 @ 4000         Gross torque, lb-ft       320 @ 2800         Net torque, lb-ft       283 @ 2400         Clutch       12"; 150 sq	Radio: Pushbutton control.  Seats:  O5 models: Passenger seat. HD driver seat. HD driver & passenger seats. O6 & 16 models: Center seat, full-width. L30 rpm Seat Belt: Rear seat center; O6 & 16 models only rpm rpm rpm Rear only. in Speed Warning Indicator Springs, Front: Capacity 1750 lb each. Starter Motor, HD: Includes HD battery.	A57 AM2 AM3 A80 A68 F51 G68 U15 F60
Engine:  292 Six (KS20 models only)  Gross horsepower  153 @ 3600 Net horsepower  153 @ 3600 Gross torque, lb-ft  275 @ 1600 Net torque, lb-ft  255 @ 2400 Battery  61-amp-h: Clutch  11"; 124 sq  327 V8 (KE20 models only)  Gross horsepower  220 @ 4400 Net horsepower  177 @ 4000 Gross torque, lb-ft  320 @ 2800 Net torque, lb-ft  283 @ 2400 Clutch  12"; 150 sq  Fuel Filter Equipment  K: Gauges: Ammeter, engine temperature, oil pres-	Radio: Pushbutton control.  Seats:  O5 models: Passenger seat. HD driver seat. HD driver & passenger seats. O6 & 16 models: Center seat, full-width. Center & rear seats, full-width.  Seat Belt: Rear seat center; O6 & 16 models only rpm Shock Absorbers, HD: Front and rear. Rear only.  Speed Warning Indicator. Springs, Front: Capacity 1750 lb each. Starter Motor, HD: Includes HD battery.	A57 AM2 A83 A80 A68 F51 G68 U15 F60 K67
Engine:  292 Six (KS20 models only)  Gross horsepower  153 @ 3600  Net horsepower  153 @ 3600  Gross torque, lb-ft  275 @ 1600  Net torque, lb-ft  255 @ 2400  Battery  61-amp-h: Clutch  11"; 124 sq  327 V8 (KE20 models only)  Gross horsepower  220 @ 4400  Net horsepower  177 @ 4000  Gross torque, lb-ft  320 @ 2800  Net torque, lb-ft  283 @ 2400  Clutch  12"; 150 sq  Fuel Filter Equipment  K:  Gauges: Ammeter, engine temperature, oil pressure. Included when tachometer is ordered  Zenerator:  12-42-amp Delcotron	Radio: Pushbutton control.  Seats:  O5 models:  Passenger seat  HD driver & passenger seats  O6 & 16 models:  Center seat, full-width  Center & rear seats, full-width.  Seat Belt: Rear seat center; O6 & 16 models only  rpm  Shock Absorbers, HD:  Front and rear  Rear only  in  Speed Warning Indicator  Springs, Front: Capacity 1750 lb each  Starter Motor, HD: Includes HD battery.  Tachometer: Electric; includes optional gauges	A57 AM2 A83 A80 A68 F51 G68 U15 F60 K67
Engine:  292 Six (KS20 models only)  Gross horsepower  153 @ 3600  Net horsepower  153 @ 3600  Gross torque, lb-ft  275 @ 1600  Net torque, lb-ft  255 @ 2400  Battery  61-amp-h: Clutch  11"; 124 sq  327 V8 (KE20 models only)  Gross horsepower  220 @ 4400  Net horsepower  177 @ 4000  Gross torque, lb-ft  320 @ 2800  Net torque, lb-ft  283 @ 2400  Clutch  12"; 150 sq  Fuel Filter Equipment  Gauges: Ammeter, engine temperature, oil pressure. Included when tachometer is ordered  5-61-amp Delcotron  K	Radio: Pushbutton control.  Seats:  O5 models:     Passenger seat.     HD driver & passenger seats.     O6 & 16 models:     Center seat, full-width.     Center & rear seats, full-width.  Seat Belt: Rear seat center; O6 & 16 models only  Shock Absorbers, HD:     Front and rear.     Rear only.     Speed Warning Indicator  Springs, Front: Capacity 1750 lb each.     Starter Motor, HD: Includes HD battery.  Tachometer: Electric; includes optional gauges  Throttle Control: Manual.	A57 AM2 A83 A80 A68 F51 G68 U15 F60 K67
Engine:  292 Six (KS20 models only)  Gross horsepower  153 @ 3600  Net horsepower  153 @ 3600  Gross torque, lb-ft  275 @ 1600  Net torque, lb-ft  255 @ 2400  Battery  61-amp-h: Clutch  11"; 124 sq  327 V8 (KE20 models only)  Gross horsepower  220 @ 4400  Net horsepower  177 @ 4000  Gross torque, lb-ft  320 @ 2800  Net torque, lb-ft  283 @ 2400  Clutch  12"; 150 sq  Fuel Filter Equipment  Kanges: Ammeter, engine temperature, oil pressure. Included when tachometer is ordered  5-61-amp Delcotron  5-61-amp Delcotron  Kanges: Ammeter  Kanges: Ammeter  Kanges: Ammeter  Kanges: Ammeter  Kanges: Ammeter  Generator:	Seats:  O5 models:  Passenger seat  HD driver & passenger seats  O6 & 16 models:  Center seat, full-width  Center & rear seats, full-width  Seat Belt: Rear seat center; O6 & 16 models only  rpm  Shock Absorbers, HD:  Front and rear  Rear only  in  Speed Warning Indicator  Springs, Front: Capacity 1750 lb each  Starter Motor, HD: Includes HD battery  Tachometer: Electric; includes optional gauges  Throttle Control: Manual  Transmission:  Chevrolet 4-speed synchromesh; includes 11"	A577 AM2 AS3 A80 A68 F51 G68 U15 F60 K67
Engine:  292 Six (KS20 models only)  Gross horsepower  153 @ 3600  Net horsepower  153 @ 3600  Gross torque, lb-ft  275 @ 1600  Net torque, lb-ft  255 @ 2400  Battery  61-amp-h: Clutch  11"; 124 sq  327 V8 (KE20 models only)  Gross horsepower  220 @ 4400  Net horsepower  177 @ 4000  Gross torque, lb-ft  320 @ 2800  Net torque, lb-ft  283 @ 2400  Clutch  12"; 150 sq  Fuel Filter Equipment  Gauges: Ammeter, engine temperature, oil pressure. Included when tachometer is ordered  5-61-amp Delcotron  K	Radio: Pushbutton control.  Seats:  O5 models:     Passenger seat.     HD driver & passenger seats.     O6 & 16 models:     Center seat, full-width.     Center & rear seats, full-width.  Seat Belt: Rear seat center; O6 & 16 models only rpm  Shock Absorbers, HD:     Front and rear.     Rear only.  Speed Warning Indicator.  Springs, Front: Capacity 1750 lb each.     Starter Motor, HD: Includes HD battery.  Tachometer: Electric; includes optional gauges Throttle Control: Manual.  Transmission:     Chevrolet 4-speed synchromesh; includes 11"  clutch.	A577 AM2 AS3 A80 A68 F51 G68 U15 F60 K67 U16 K31

TIRE & WHEEL COMBINATIONS

TUBE-TYPE TIRES	Max. Tire Cap.	Type of Wheel		Opt. No.
7.00-16/6PR—Regular	1580	Disc	6.0	R66
—Nylon	1580	Disc	6.0	R78
—On-Off Road	1580	Disc	6.0	R71

TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opi. No.
7-17.5/6PR—Regular	1520	Disc	5.25	Stda
—Nylon	1520	Disc	5.25	R82
—On-Off Road	1520	Disc	5.25	R81
8-17.5/6PR—Regular	1735	Disc	5.25	R83
—Nylon	1735	Disc	5.25	R85
—On-Off Road	1735	Disc	5.25	R84
8-17.5/8PR—Regular	2060	Disc	5.25	R86
—On-Off Road	2060	Disc	5.25	R87

**a**R80 for spare tire with  $17.5 \times 5.25$  wheel.

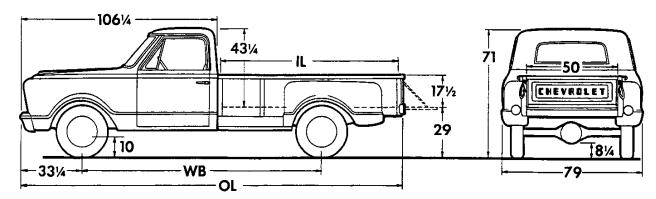
# GVW Ratings up to 14,000 lb

### SERIES C30—STEPSIDE PICKUPS

Six-Cylinder Models
CS31004 Stepside Pickup

V8 Models

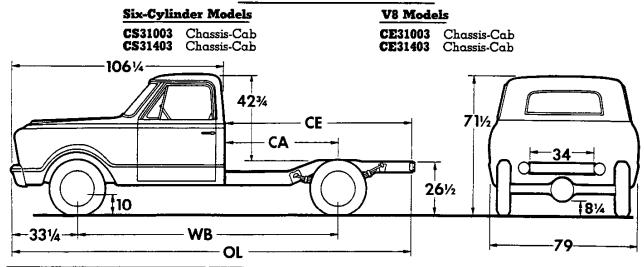
CE31004 Stepside Pickup



Models	Dimensions (in)★				→Curb Weights (lb)			Body-Payload Wt. Dist.*		
Models	WB	IL	OL	Front	Rear	Total	Front	Rear		
CS31004 CE31004	133	1081/4	2173/4	2181 2286	1922 1929	4103 4215	3%	97%		

<sup>\*</sup>Estimate based on water-level loading.

### SERIES C30-CHASSIS-CABS



Models	D	Dimensions (in)★			Dimensions (in)★ → Curb Weights (lb)			Body-Payload Wt. Dist.* (% front—% rear)		
Monets	WB	CA	CE	OL	Front	Rear	Total	Body	CS31003 CE31003	CS31403 CE31403
CS31003 CE31003	133	60	107	2131/4	2226 2335	1434 1438	3660 3773	7' - 8'	12-88 8-92	
CS31403 CE31403	157	84	131	2371/4	2204 2313	1601 1605	3805 3918	8½' 9' 9½' 10½' 11½' 12½' 13½'	5–95 3–97 1–99 – – –	 16-84 12-88 8-92 4-96 1-99

<sup>\*</sup>Estimate based on water-level loading.

**<sup>★</sup>Dimensions** with std equipment, unloaded.

<sup>\*</sup>Dimensions with std equipment, unloaded.

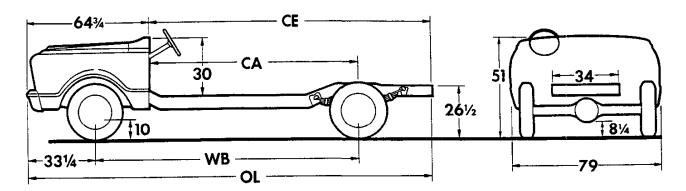
### SERIES C30-COWLS.

### Six-Cylinder Models

CS31002 Chassis-Cowl CS31012 Windshield-Cowl

### **V8 Models**

CE31002 Chassis-Cowl CE31012 Windshield-Cowl



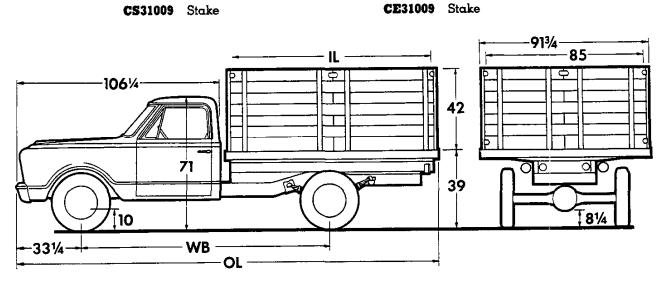
	Dimensions (in)★			→ Curb	Weights	s (IP)	Body-Payload Wt. Dist.		
Models	WB	CA	CE	OL	Front	Rear	Total	Front	Rear
CS31002 CE31002	133	1011/2	1481/2	2131/4	1867 1971	1181 1189	3048 3160	Determined	l by style,
CS31012 CE31012	133	1011/2	1481/2	2131/4	2036 2145	1186 1190	3222 3335	length & wei	ght of body

<sup>★</sup>Dimensions with std equipment, unloaded.

# SERIES C30-STAKES

Six-Cylinder Models
CS31009 Stake

V8 Models



	Dimensions (in)★		→Curb Weights (lb)			Body-Payload Wt. Dist.*		
Models	WB	IL	OL	Front	Rear	Total	Front	Rear
CS31009 CE31009	133	109	2231/4	2255 2361	2234 2240	4489 4601	2%	98%

<sup>\*</sup>Estimate based on water-level loading.

<sup>•</sup> Chassis-Cowl shown

<sup>★</sup>Dimensions with std equipment, unloaded.

### STANDARD EQUIPMENT

Air Cleaner: Oiled-paper element

Axle, Rear: Hypoid full-floating type; ratio 5.14;

capacity 7200 lb

Battery: 12-volt, 54-plate; capacity 53 amp-hr

Body: See Cabs, Bodies & Colors

Brakes, Service: Hydraulic; self-adjusting; dual

system

Sizes: front 11" x 23/4"; rear 13" x 21/2"

Effective area: drum 395 sq in; lining 252 sq in

Brake, Parking: Cable to rear wheels: area 132

sq in

**Bumper:** Front, painted

Cab: See Cabs, Bodies & Colors

Carburetox: CS30: single-barrel downdraft CE30: two-barrel downdraft

Clutch: Diameter 11"; area 124 sq in

Cooling: CS30: 1¼" radiator core, cross-flow type; 446-sq-in area; 13-lb pressure cap CE30: 1¼" radiator core, cross-flow type;

480-sq-in area; 13-lb pressure cap

Controls & Instruments: 03, 04, 09, 12 models—hand choke; light switch; headlight beam control; speedometer; odometer; fuel gauge. Lights for generator, oil pressure, engine temperature, brake warning, direction signals and high beam indicator.

O2 models—hand choke; light switch; headlight beam control; speedometer; odometer; high beam indicator light; fuel gauge; ammeter; oil pressure & engine temperature gauges; brake warning light

**Direction Signals:** Class A; two front and two rear; two front & switch only on O2 models. Includes freeway lane-change position on switch & integral hazard warning switch

→CE30: 283 V8; positive crankcase ventilation

 Gross horsepower
 175 @ 4600 rpm

 Net horsepower
 153 @ 4400 rpm

 Gross torque, lb-ft
 275 @ 2400 rpm

 Net torque, lb-ft
 240 @ 2400 rpm

Exhaust System: Single pipe & aluminized muffler

## **GVW SELECTOR**

GVW Rating (lb)	Chassis Equipment Required for GVW Rating
6700	Standard
7800★	3100-lb rear springs
9000	Main & auxiliary type rear springs—capacity 4150 lb; dual rear wheels & tires
10,000 + ■	1750-lb front springs; main & auxiliary type rear springs—capacity 4150 lb; dual rear wheels & tires
14,000■¥	11,000-lb rear axle

◆ Rating on standard GVW plate

■Not available on Pickup or Panel

★ Rating on optional GVW plate

Filter, Fuel: Wire mesh in fuel tank; bronze filter in carburetor

Filter, Oil: CS30: full-flow; 1-quart; throwaway type CE30: full-flow; 1-quart; replaceable

element

Frame: 39,000-lb-test steel, section modulus 5.05 (CS-CE310 models); 7.29 (CS-CE314 models)

Generator: 37-amp Delcotron

**GVW Plate: 10,000 lb** 

**Lights:** Head, parking, tail, stop; dome, instrument panel. Dome on Cab models. Backup on Pickups & Stakes

## Mirror, Rearview:

02 & 12 models: None

03 & 09 models: Exterior RH & LH 17¼" swinging arm 04 models: Exterior LH 6¼" fixed arm & inside

prismatic non-glare shatterproof

Seat: Full-width (except Cowl models)

**Seat Belts:** Driver & passenger (except Cowl models); includes retractors

Shock Absorbers: Front; piston diameter 1"

Springs, Front: Coil; capacity 1500 lb each

Springs, Rear: Leaf; capacity 2400 lb each

Steering: Ball-gear, ratio 24:1; wheel dia 16½"
Suspension, Front: Independent: capacity 3500

Suspension, Front: Independent; capacity 3500 lb Tank, Fuel:

02-12—outside frame on left; capacity approx 20 gal 03-04-09—back of seat in cab; capacity approx 21 gal

**Tires:** Tubeless; two 8–17.5/6PR front; two 8–17.5/8PR single rear

➤ Tools: 4000-lb mechanical jack when single rear wheels are used; wheel wrench. Jack not included on Cowl models

**Transmission:** 4-speed synchromesh; ratios 7.06, 3.58, 1.71, 1.00, 6.78 (rev); power take-off opening on left side

**Wheels:** Five 17.5" x 5.25"; attachment, 8 studs on  $6\frac{1}{2}$ " circle; spare carrier under frame and 4 painted hubcaps when single rear wheels are used; spare carrier not included on Cowl models

Windshield Wipers & Washer: Electric; 2-speed wipers; not included on 02 models

Note: Be sure to recommend adequate springs and tires for total axle loads. See Optional Equipment and Tire & Wheel Combination pages.

## **OPTIONAL EQUIPMENT**

7	740	Gustom Side Maldings Cale models only ROS
Air Cleaner: Oil-bath; capacity 1 quart K	<b>∖4</b> 8	Custom Side Molding: Cab models only B98
Air Cleaner, Heavy-Duty: Includes closed positive ventilation and 1 quart oil-bath precleaner; not available with 327 engine or on 02 models	<b>₹4</b> 6	→ Custom Sport Truck Option: Not available on cowl models; includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, pedal trim, horn-button cap; chrome front bumper; special CST emblems; vinyl bucket seats with
Air Conditioning, All-Weather: Not available on chassis-cowl models. Includes heater & defroster, HD radiator, battery & 42-amp generator	C60	padded center console; carpeting; RH & LH arm- rests; RH padded sunshade; cigar lighter; special cowl insulation; underbody coating; vinyl door trim
Axle, NoSPIN Rear: Ratio 5.14	G86	Engine:
Chevrolet; capacity 11,000 lb; ratio 6.17; CS-CE314 models only; available only with Chevrolet 4-speed transmission, power brakes, HD radiator, and 700-18/8PR or 8-19.5/10PR dual rear tires. Includes front & rear shock absorbers; 5900 lb each capacity main & auxiliary rear springs, 15" x 4" rear brakes; 2000 lb each front springs; 10" x 2½" drum and dual shoe parking brake.		292 Six (CS30 models)       L25         Gross horsepower       170 @ 4000 rpm         Net horsepower       153 @ 3600 rpm         Gross torque, lb-ft       275 @ 1600 rpm         Net torque, lb-ft       255 @ 2400 rpm         Battery       61-amp-hr         327 V8 (CE30 models)       L30         Gross horsepower       220 @ 4400 rpm         Net horsepower       177 @ 4000 rpm         Gross torque, lb-ft       320 @ 2800 rpm         Net torque, lb-ft       283 @ 2400 rpm         Clutch       12"; 150 sq in
when HD starter or air conditioning is ordered	160	Fuel Filter Equipment K28
Brakes, Vacuum Power	J70	Gauges: Ammeter, engine temperature, oil pressure; not available on 02 models
Painted rear; with std painted front bumper only (pickups only)	V43 V37	Generator:       12-42-amp Delcotron       K79         5-61-amp Delcotron       K76         23-62-amp Delcotron       K81
Caps, Hub: Chrome; not available with dual rear wheels.	P03	Glass, Soft Ray: Windshield only; not available on chassis-cowl models
Carrier, Spare Wheel: Under frame; with dual rear wheels only on chassis-cabs & Stakes		All windows; not available on cowl models All
Side mounted on pickup	P13	<b>Governor:</b> 250 engine: 1800-3000 rpm
<b>Cooling, Heavy-Duty:</b> Includes HD radiator and extra-HD cooling equipment. Not available when air conditioning is ordered.	<b>V</b> 05	2800-4000 rpm
Custom Appearance Option: Cab models only; includes bright metal grille moldings, headlight bezels, vent window frames & windshield moldings, control knob trim, horn-button cap; color-keyed vinyl-coated rubber floor mats;		283 engine: 2400-3600 rpm
Custom emblems. Not available when Custom Sport Truck Option is ordered	Z61	7800 lb
Custom Comfort Option: Cab models only; includes RH & LH armrests; RH padded sunshade; cigar lighter; special insulation; full-depth foam seat with fabric upholstery. Not available when Custom Sport Truck Option is ordered	<b>Z</b> 62	Harness, Shoulder: Driver & passenger; not uvailable on cowl models or with optional Bostrom seats

## **OPTIONAL EQUIPMENT**

Hooks, Towing: Two front; not available with chrome bumper		Serial Number Plate: State of Pennsylvania. CS/CE314 models only; requires 11,000-lb rear axle	
→ Jack:		axie	LUCK
Mechanical; capacity 4000 lb; Cowl models			
only		Shock Absorbers: Heavy-duty	
Mechanical; capacity 4700 lb; with dual		Front & rear; included with 11,000-lb rear axle	
rear wheels only		Rear only	G68
Lamps, Marker: Five; not available on Cowl			
models		Speed Warning Indicator: Not available on 02 models	Uls
Lock: Side wheel carrier; Pickup only	A97		
Mirrors, Exterior:		Springs, Front:	
Front cross-view; 8" diameter	D48	Capacity 1750 lb each; not available when	_
Left & right; 171/4" swinging arm; Pickup		11,000-lb rear axle is ordered	F60
only			
Left & right; 61/4" fixed arm; Chassis-Cabs		Springs, Rear:	
only		Capacity 3100 lb each	G50
Right; 61/4" fixed arm; Pickup only		Main & auxiliary type; capacity 4150 lb	
West Coast Jr. type (6" x 11")		ram a admiral, typo, supusity 1200 to	
Left side; Pickup only	D29		
Left & right side (except Stake)	D29	Stabilizer Bar, Front Suspension	F59
West Coast Sr. type (7" x 16")			
Left side; Pickup only		Starter Motor, Heavy-Duty: Includes HD	
Left & right side	D30	battery	K67
Nameplate, Custom Camper: Chassis-Cab models only. Minimum requirements are front stabilizer; rear shock absorbers; HD rear or aux- iliary rear springs and 7.00–16 dual rear or flotation-type tubeless rear tires		Steering, Power  Tachometer: Electric; includes optional gauges; not available on Chassis-Cowl models	
Paint, Exterior: See Cabs, Bodies & Colors			
section		Throttle Control: Manual	K31
		Intothe Control Manual	1201
Platform Body: Length 9 ft; for CS-CE31003		M	
only; includes backup lamps. Not available with		Transmission:	
6¼" or Jr. West Coast mirror	£57	New Process 435CR 4-spd close-ratio	M28
Pump, Fuel & Vacuum Booster: Model			
CS31002 only	K26	Ventilation, Closed Engine Positive:	<i>.</i>
Radiator: Heavy-duty	VOI	Approved by State of California	K24
• •			
Radio: Pushbutton control; not available on		Wheel, Spare: Included when single rear tires	
Chassis-Cowl models	U63	are used (except Cowls) or when spare tire is ordered	
Seat: For cab models only; not available when			
Custom Sport Truck Option is ordered.		17.5" x 5.25"	
Bostrom "Viking"; driver seat only	A55	19.5" x 5.25"	_
Bostrom "Viking"; driver seat plus 2-man		16" x 5.5"	
companion seat		18" x 5.0"	
Full-depth foam; included when Custom		12 x 0.0 (Cowis omy)	ردي
Comfort is ordered			
Bucket; driver & passenger; includes carpet-		Window, Full-View Rear: Not available on	
ing and center console	A50	Cowl models	A10

### > TIRE & WHEEL COMBINATIONS

TUBE-TYPE TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
6.50-16/6PR - Regular	1420	Disc	5.5	R63a
7.00-16/6PR—Regular	1580	Disc	5.5	R66a
—Nylon	1580	Disc	5.5	R78 <b>a</b>
-On-Off Road	1580	Disc	5.5	R71a
7.50-16/8PR—Regular	2140	Disc	5.5	R68a
7.00-17/6PR—Regular	1740	Disc	6.0	R72 <b>b</b>
7.00-17/8PR—Regular	2060	Disc	6.0	R73
-On-Off Road	2060	Disc	6.0	R74*
7.50-17/8PR—Regular	2440	Disc	6.0	R75
—On-Off Road	2440	Disc	6.0	R76*
7.00-18/8PR—Regular	2140	Disc	5.0	R90a
7.50-17/10PR—Regular	2650	Disc	6.0	R77*

**a**—Available with dual rears only. Not available on pickup models. **b**—Available as front only with 7.00-17 or 7.50-17 rears.

<sup>\*</sup> Rear only

TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
★7-17.5/6PR —Regular	1520	Disc	5.25	R80
-Nylon	1520	Disc	5.25	R82
—On-Off Road	1520	Disc	5.25	R81*
8-17.5/6PR -Regular	1735	Disc	5.25	Std <b>a</b>
•8-17.5/8PR —Regular	2060	Disc	5.25	Std <b>b</b>
	2060	Disc	5.25	R86 <b>c</b>
—On-Off Road	2060	Disc	5.25	R87*
8-19.5/6PRRegular	2090	Disc	5.25	R94
—Nylon	2090	Disc	5.25	R95
8-19.5/8PR Regular	2440	Disc	5.25	R96
-Nylon	2440	Disc	5.25	R98
-On-Off Road	2440	Disc	5.25	R97*
8-19.5/10PR—Regular	2650	Disc	5.25	R99 <b>d</b>

a-8-17.5/6PR tires are standard on the front only.

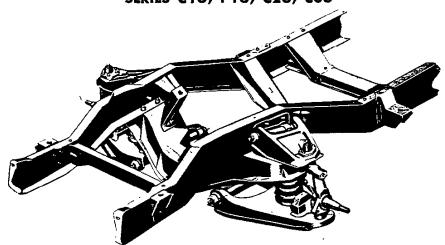
FLOTATION-TYPE TUBELESS TIRES	Max. Tire Cap.	Type of Wheel	Rim Width	Opt. No.
10.00-16.5/6PR—Nylon	2330	Disc	8.25	R <b>7</b> 9♦

<sup>♦</sup> Not available on pickup models.

**a**—8-11.5/0PH tires are standard on the front only. **b**—8-17.5/8PR tires are standard on the rear only. **c**—R86 is used to order either dual rear (except pickup), front or spare tires. **d**—Single rear; dual rear when used with 11,000-lb rear axle.
★ Available with dual rears only. Not available on pickup models.
• May be used as dual rear tires (except pickup).
\* Rear only

Pe	1ge
INDEPENDENT FRONT SUSPENSION (C10, P10, C20, C30)	2
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I-BEAM FRONT AXLES (P20, P30)	•
I-BEAM FRONT AXLES WITH TAPERED-LEAF SPRINGS (G10, G20)	•
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REAR AXLES-CHEVROLET SINGLE-SPEED-2400 LB TO 3500 LB	1
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HEAR AXLES-CHEVROLET SINGLE-SPEED-11,000 LB TO 17,000 LB	2
REAR AXLES-CHEVROLET TWO-SPEED-15,000 LB TO 17,000 LB	2
REAR AXLES—EATON SINGLE-SPEED—18,500 LB TO 23,000 LB	
REAR AXLES—EATON TWO-SPEED—18,500 LB TO 23,000 LB	
TANDEM REAR AXLES (SERIES MS/ME50)	
TANDEM REAR AXLES—EATON 30DSC & 34DSC	
TANDEM REAR AXLE—ROCKWELL-STANDARD SLHD	
TANDEM REAR AXLE—ROCKWELL-STANDARD SQHD	
SPECIFICATIONS—TANDEM REAR SPRINGS	

# INDEPENDENT FRONT SUSPENSION SERIES C10, P10, C20, C30



All Series C10, P10, C20 and C30 models are equipped with independent coil spring front suspension. Coil springs make an extremely rugged and compact suspension assembly. Improved neoprene rubber seals for spherical joints and pivot shaft bushings have extended the lubrication interval to 6000 miles.

Upper and lower control arm pivot shafts are drop-forged steel to better resist fore, aft and lateral movement. The upper and lower control arms are single-piece stamped steel and include carbonitride steel pivot shaft bushings for long trouble-free wear. The stamped steel suspension crossmember has a double thickness in critical areas.

Shock absorbers are stud-mounted to the frame at the top and clevis-mounted at the lower control arm.

A front stabilizer bar is optional at extra cost on Series C10-30. It is designed for use with camper bodies or high center of gravity load applications.

### ► SPECIFICATIONS

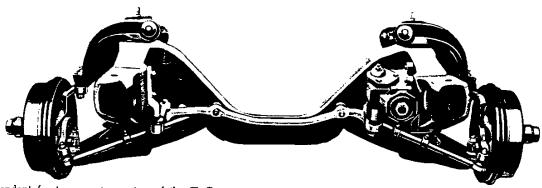
	-	SPECIFICATION:	5				
	C10 exc Chassis- Cowls	C10 Chassis-Cowls	P10	C20	С	30	
STD COIL SPRINGS							
Capacity at Ground (lb each)	1250	1250	1250	1250	15	00	
Sprung Capacity (lb each)	1018	1014	1018	1018	11	52	
Rate	675	625	675	675	9	30	
Wire Diameter (inch)	.731	.715	.731	.731	.7	77	
Outside Diameter (inches)	5.14	5.14	5.14	5.14	5.	37	
OPTIONAL COIL SPRIN	NGS						
Capacity at Ground (lb each)	1350	1350	1350	1500	1750	2000	
Sprung Capacity (lb each)	1118	1118	1118	1152	1402	165	
Rate	800	800	800	930	1160	137	
Wire Diameter (inch)	.758	.758	.758	.777	.822	.849	
Outside Diameter (inches)	5.37	5.37	5.37	5.37	5.37	5.3	
STD SHOCK ABSORBE	RS						
Туре		Hydrauli	c Direct Double	Acting			
Piston Diameter (inch)		1.00					
Piston Travel (inches)			5.00			<del></del>	
OPTIONAL SHOCK AB	SORBERS						
Туре			lydraulic Direct Double Acting				

Piston Diameter

Piston Travel

1.38 inches 4.75 inches

# INDEPENDENT FRONT SUSPENSION EL CAMINO MODELS



The independent front suspension system of the El Camino utilizes stamped control arms, coil springs and special sealed pivot points.

The control arms are channel-section heavy-gauge metal stampings and attach to the steering knuckles with non-metallic lined spherical joints. The lower arm features a tension-type spherical joint and the upper arm a compression joint unit. The four spherical joints require lubrication only every 6000 miles under normal driving conditions.

Coil springs are mounted between the lower arms and the towers formed in the front crossmember. Shock absorbers are mounted vertically within the springs.

A conventional link-type stabilizer bar is standard equipment on all El Camino models.

**SPRINGS** 

3. KINO3					
	STD	OPTIONAL			
Rating at Ground (lb each)	950	950			
Sprung Capacity (lb each)	840	840			
Deflection Rate at Wheel (lb/inch)	290	320			

### STD SHOCK ABSORBERS

Туре	Hydraulic Direct Double Acting
Piston Diameter (in)	1.00
Piston Travel (in)	5.90

# I-BEAM AXLE WITH SINGLE-STAGE LEAF SPRINGS SERIES P20 & P30

STD AXLES

	PS20	PS30	PT30
CAPACITY (lbs)	4000	4000	4000
CTD CDBINGC			

#### STD SPRINGS

Rating at Ground (lbs)	2000	2000	2500
Rating at Pad (lbs)	1700	1700	2200
Clamped Defl. Rate (lbs/inch)	490	490	726
Number of Leaves	8	8	10
Length (inches)	44	44	44
Width (inches)	2	2	2

### **OPTIONAL SPRINGS**

Rating at Ground (lbs)	_	2500	_
Rating at Pad (lbs)	_	2200	
Clamped Defl. Rate (lbs/inch)	_	726	_
Number of Leaves		10	
Length (inches)	_	44	_
Width (inches)	_	2	

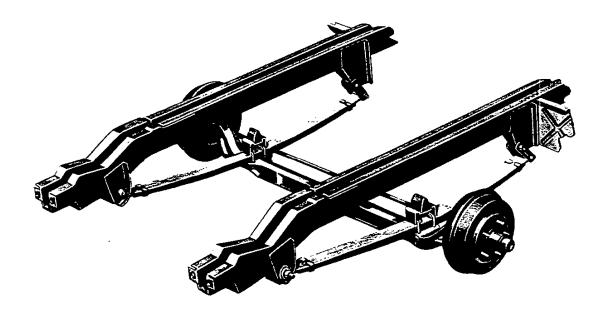
### STD SHOCK ABSORBERS

Туре	Hydraulic Direct Double Acting		
Piston Diameter (in)	1.00		
Piston Travel (in)	7.75	7.75	7.75

The P20 and P30 Step-Vans and Forward Control Chassis models use the modified Reverse-Elliott-type I-beam front axle with single-stage springs. Constructed of drop-forged heat-treated steel, these rugged axles provide long-lasting durability. Constant diameter kingpins are fitted with Delrin 500 bushings for long life.

Spring attachment in the front is by a rubber bushed double spring eye bolted directly to a stamped steel hanger. At the rear, the spring eye connects to a set of shackles which permit smooth spring action.

# I-BEAM AXLE WITH TAPERED-LEAF SPRINGS SERIES G10 & G20



#### STD AXLES

	G10	G20
Capacity (lbs)	2200	3000

#### STD SPRINGS

Rating at Ground (lbs)	1125	1275
Rating at Pad (lbs)	872	966
Clamped Defl. Rate (lbs/in)	192/212	220/244
Number of Leaves	2	
Length (in)	48	
Width (in)	2.5 to 3.05	

### **OPTIONAL SPRINGS**

Rating at Ground (lbs)	1275	1375
Rating at Pad (lbs)	1022	1066
Clamped Defl. Rate (lbs/in)	220/244	288/318
Number of Leaves	2	
Length (in)	48	
Width (in)	2.5 to 3.05	

### STD SHOCK ABSORBERS

Туре	Hydraulic Direct Double-Acting	
Piston Diameter (in)	1.00	
Piston Travel (in)	9.75	

Tapered-leaf front springs are used exclusively on all Sportvan and Chevy-Van models. Ride quality is improved through a reduction in interleaf friction. They also help in reducing the amount of unsprung vehicle weight.

In a tapered-leaf spring, the cross section varies almost continuously; from a thick, laterally narrower area at the pad, to a thinner but wider cross section at the outer ends. The loaded spring is therefore more uniformly stressed throughout its length.

A special shot peening process further increases the spring's fatigue properties. The spring eyes are of the Berlin-type where the eye center is directly in the plane of the leaf, reducing lateral deflection and stresses and giving the vehicle a better ride.

### FOUR-WHEEL-DRIVE MODELS

### SERIES K10, K20

Front wheel drive on models K10 and K20 utilizes a single-reduction hypoid pinion and ring gear driving thru semi-floating axle shafts on the K10 and full-floating shafts on the K20. At the outer ends of the axle are cardan-type universal joints housed in ball ends and pivoting on upper and lower trunnion pins. Tapered-leaf springs are used for both the front and rear suspension.

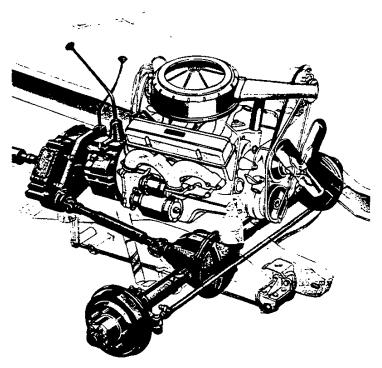
# OPTIONAL HEAVY-DUTY FRONT AXLE

An optional heavy-duty front axle is available for K20 models. Although the rated capacity is the same as the standard front axle, it features heavier components which permit an increase in maximum GVW from 7200 to 7600 pounds.

Heavy-duty bronze bushings and tapered roller kingpin thrust bearings are used in the upper and lower positions, respectively. The optional front axle also includes 7-inch-diameter steering knuckle ball joints and axle shaft universal joints which are stronger torsionally than those used with the standard driveline.

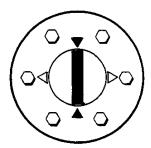
### **SPECIFICATIONS**

Axle:	Series K10	Series K20	
Make	Spicer		
Model	445F		
Type	Semi-Floating	Full-Floating	
Min Shaft Diam (in)	1.1	<del></del>	
Rated Capacity	3300 lbs	3500 lbs	
Pinion & Ring Gear	Нур	oid	
Ratio	3.73	4.55	
Pinion, Teeth	11	11	
Ring Gear, Teeth	41	50	
Pinion Mounting	Overhung		
Pinion Bearings	Tapered Roller		
Differential Type	Two-P	inion	
Differential Bearings	Tapered Roller		
Wheel Attachment	6-Bolt 8-Bolt		
Lubricant Capacity	41/2 Pts	6½ Pts	
Springs: Rated Capacity	Tapered Leaf		
at Ground	1450 lbs	1600 lbs	
Number of Leaves	2		
Shock Absorbers:	Hydraulic Direct Double Acting		
Piston Diameter (in)	1.38		
Piston Travel (in)	7.25		



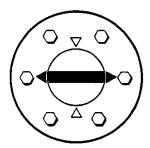
#### **OPTIONAL FREE-WHEELING FRONT HUBS**

Free-wheeling front hubs or HUB/LOK is available on series K10 and K20 as an option at extra cost. HUB/LOK makes it possible to disengage the front wheels from the front driveline when front wheel drive is not required. This leaves the front wheels free to rotate without "back drag" from the front axle and propeller shaft, eliminates unnecessary wear and improves fuel economy.



### Engaged

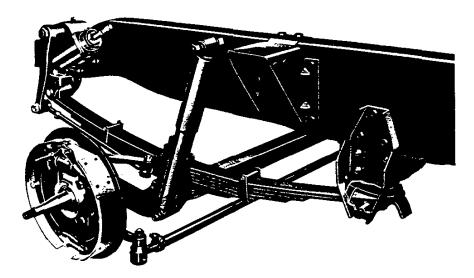
HUB/LOK is engaged for 4-wheel-drive operation when the grooved Activator knob is aligned with the inward pointing arrowheads. (If clutch teeth do not immediately engage when the knob is turned to this position, the first slight turn of the front wheel in either direction will complete the locking.) NO ROCKING IS REQUIRED!



Disengaged

To disengage HUB/LOK, simply turn the Activator knob so that it aligns with the outward-pointing arrowheads. Now the multiple teeth of the inner and outer clutch rings are separated and the wheels will turn free of the driving axle. The truck is now ready for conventional rear-axle driving.

### I-BEAM FRONT AXLE WITH VARIABLE-RATE LEAF SPRINGS SERIES 40-60 CONV. CABS & SERIES 70 TILT CABS

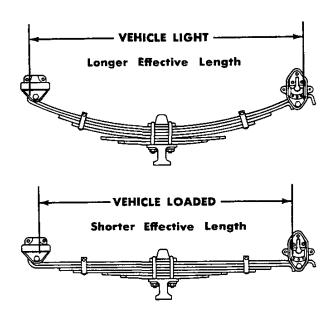


→ Series 40-60 Conventional cab and Series 70 Tilt cab models feature sturdy Reverse-Elliott design I-beam front axles with variable-rate 2-stage leaf springs. This combination provides exceptional durability and outstanding ride and handling characteristics.

I-beams are constructed of heat-treated drop forged steel with extra thickness at stress points. Kingpins and steering knuckles are alloy steel forgings, heat treated for maximum durability. Kingpin bushings are made of long-wearing Delrin 500. Thrust bearings on all axles up to 7000-lb capacity are steel-backed copper alloy washers, while the 9000-lb and heavier axles utilize roller bearings.

Wheel bearings are tapered roller type on all models except P20-P30 where single-row ball bearings are used.

# VARIABLE-RATE FRONT LEAF SPRINGS SERIES 40-60 CONV. CABS & SERIES 70 TILT CABS



The two top leaves of the variable-rate front spring are attached to the front spring hanger thru a double spring eye cushioned by rubber bushings. This differs from the variable-rate rear spring which is not attached in this manner.

At the rear, the upper surface of the leaves rides against a full-floating specially hardened steel cam surface as shown. In operation, the spring contacts the outer edge of the cam when the truck is lightly loaded or empty and the inner edge when loaded. This reduces the effective length of the spring and increases its deflection rate, giving the stiffer spring action desired when loaded. In addition, the springs themselves are of a two-stage design. The lower two leaves become effective only when the vehicle is loaded and increase its load-carrying ability greatly. Thus, there is well-matched spring action for all load conditions.

The full-floating steel cam spring hanger is rubber cushioned for durability and is easily removed for replacement or maintenance.

# SPECIFICATIONS—VARIABLE-RATE FRONT LEAF SPRINGS SERIES 40-60 CONV. CABS & SERIES 70 TILT CABS

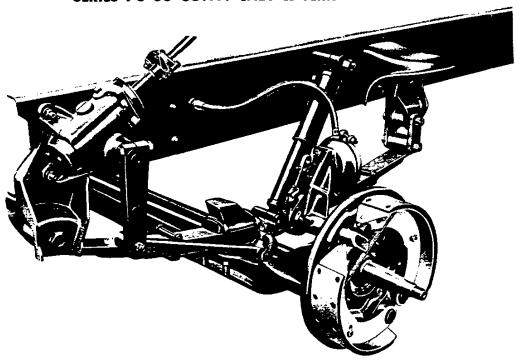
#### STANDARD SPRINGS-VARIABLE-RATE

Series	Rating	Rating Deflection at Pad Rate (lb each) (lb/inch)	Clamped Deflection	Clamped Deflection	Semi	Semi-Elliptic Leaves		
	at Ground (lb each)		(lb/inch)	Rate	Number	Length (inches)	Width (inches)	
CS/CE/PS/SS40	2000	1750	365	540	6	59	2.5	
TS/TE/TT40; CS/CE/CD/CG/SS/SE50 (Exc. SE531)	3000	2700	450	700	6	59	2.5	
MS/ME50; SE531; CS/CE/CD/CG/ ME/MG/SE60	3500	3150	490	850	7	59.12	3	
TS/TE/TD/TG50; TS/TE/TD/TG60; TJ/TM/TV70	3500	3150	525	850	6	60.3	3	

#### OPTIONAL SPRINGS-VARIABLE-RATE

	Rating	Rating	Clamped Deflection	Clamped Deflection	Semi-Elliptic Leaves			
Series	(lb each)	at Pad (lb each)	Rate (lb/inch) First Stage	Rate (lb/inch) Second Stage	Number	Length (inches)	Width (inches)	
CS/CE/PS/SS40	3000	2700	400	741	6	59	2.5	
CS/CE/CD/CG/SS/SE50 (Exc. SE531)	3500	3150	540	850	6	59.5	3	
PS/TS/TE/TT40; CS/CE/CD/CG/SS/SE50	4000	3650	525	840	7	59	2.5	
MS/ME/SS/SESO; CS/CE/CD/CG/ME/MG/SE60 TI/TM70	4500	4100	600	1040	7	59.5	3	
TS/TE/TD/TG50-60	4500	4100	700	1000	7	60.3	3	
TJ/TM/TV70	5250		1	1000	11	53.5	3	
CS/CE/CD/CG/ME/MG60; TS/TE/TD/TG60; TV70	5500	5050	780	1380	11	59.5	3	
TV70; ME/MG60	7000	6500	840	1550	11	59.5	3	

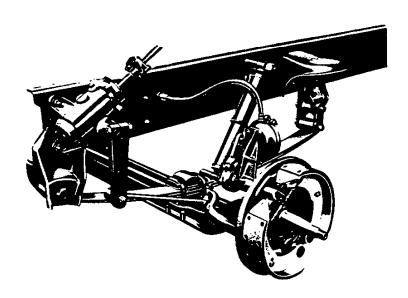
# I-BEAM FRONT AXLE WITH FIXED-RATE LEAF SPRINGS SERIES 70-80 CONV. CABS & SERIES 80 TILT CABS



All 70-80 Series Conventional Cab models and 80 Series Tilt Cab models are equipped with fixed-rate single-stage front springs instead of the variable-rate two-stage springs used on the other larger Chevrolet models. The main difference is that the spring is mounted to the frame through eyes at the front and rear. At the front, a

normal spring hanger bracket holds the spring by a rubber-bushed eye. At the rear, the spring is held by a set of shackles which permit flexing but do not change spring rates by varying their length as the variable-rate springs do. These springs also have only one-stage action and an unchanging deflection rate.

#### OPTIONAL SOFT-RIDE FRONT SPRINGS SERIES 70-80 CONV. CAB MODELS ONLY



Soft-Ride suspension is offered as an option on all Series 70-80 Conventional Cab models. It is available in 7000-lb, 9000-lb and 11,000-lb capacities for use with the various optional axles. Manufactured by Rockwell-Standard, it consists of two heavy tapered leaves per spring.

The main advantages are greatly reduced interleaf friction and a large reduction of the weight of the vehicle so that payloads can be increased. A smoother ride results from the spring's ability to react immediately to road shocks due to the lessened interleaf friction. Stresses are distributed uniformly along the length of the spring, eliminating concentrations of stresses in any areas and assuring longer life.

Shock absorbers are included with this suspension and aid in rebound control. Rebound loads are taken by the entire spring, rather than just a few leaves. The smooth ride afforded is beneficial to all parts of the truck and will reduce downtime substantially by preventing damage from rough roads.

# SPECIFICATIONS—FIXED-RATE FRONT LEAF SPRINGS SERIES 70-80 CONV. CABS & SERIES 80 TILT CABS

#### STANDARD SPRINGS-FIXED-RATE

	Rating	Rating	Clamped Deflection	Semi-Elliptic Leaves			
Series	(lb each)	at Ground at Pad (lb each) (lb each)		Number	Length (inches)	Width (inches)	
HJ/HM/HV70; JJ/JM/JV70; HM80	3500			7	56	3	
IM/TM/WM80	4500		842	8	56	3	

#### OPTIONAL SPRINGS-FIXED-RATE

	Rating	Rating	Clamped Deflection	Ser	ni-Elliptic L	eaves
Sezies	at Ground (lb each)	at Pad (lb each)	Rate (lb/in)	Number	Length (inches)	Width (inches)
HJ/HM/HV70; IJ/IM/JV70; HM80	3500	-	700	2	56	3
HJ/HM/HV70; JJ/JM/JV70; HM80	4500	4100		7	56	3
HM70; HJ/HV/JJ/JM/JV70; HM/JM80	4500		950	2	56	3
TM/WM80	5500	5050	838	8	56	3
HJ/HV/JJ/JM/JV70; HM/JM80	5500		1250	2	56	3
HJ/HV/JJ/JM/JV70; HM/JM80	6000	_	830	6	56	3
IM80	6500		970	7	56	3
WM80	6500	_	1292	9	56	3
WM80	7500					
JM80	8000		1350	7	56	3

# SPECIFICATIONS—I-BEAM FRONT AXLES SERIES 10-80

Rated Capacity (lb)	2200	3000	4000(A)	4000(B)	4000*	5000*	7000	9000	11,000	12,000	15,000	16,000
Туре						Revers	e-Elliott			<del></del>		
Material					•	Drop-For	ged Steel					
Section Modulus	.84	1.19	1.37	1.37	1.67	2.23★	4.20 ●	3.96	6.59	6.82	9.70	9.70
Spindle Diameter (in) Inner	1.2495	1.375	1.4988	1.4988	1.4991	1.7491	1.999	2.249	2.4993	2.5	2.63	3.00
Outer	.7495	.843	.9053	.9053	.8428	1.0291	1.374	1.499	1.8743	1.75	2.00	2.25
<b>Kingpins:</b> Diameter (in) Upper	.8172	.8752	1.09	1.09	.9212	1.1092	1.2494	1.1855	1.3085	1.79	1.79	1.79
Lower	.8172	.8752	1.09	1.09	.9212	1.1092	1.2494	1.433	1.606	1.79	1.31	1.31
Length (in)	5.38	5.54	6.36	6.36	5.625	6.359	7.89	8.75	9.75	9.75	10.69	10.69
Distance between king- pin center lines (in)	54.	.06	57.36	55.92	62.68	62.45	62.45	68.00	66.60∎	67.50	69.25	60.09
Bushing material					·-	Delri	a 500					
Thrust Bearing		Stee	el-Backed	Copper A	Alloy Wa	sher			iight Bearing	Ro	Tapered ller Beari	
Wheel Bearings	Tapered	l Roller		igle Ball	Tapered Roller							

<sup>\*—</sup>Rated 500 lb heavier on "S" models

<sup>★-2.79</sup> on Tilt models

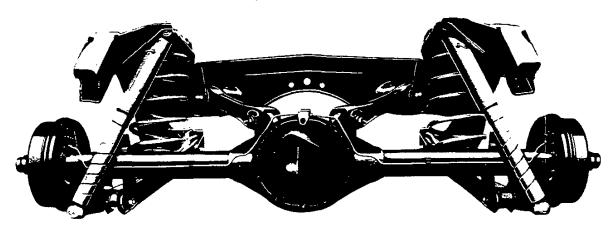
<sup>●-5.28</sup> on Tilt models

<sup>■—69.50</sup> on Tilt models

<sup>(</sup>A)—Model P20 only

<sup>(</sup>B)-Models P30 only

#### **EL CAMINO MODELS**

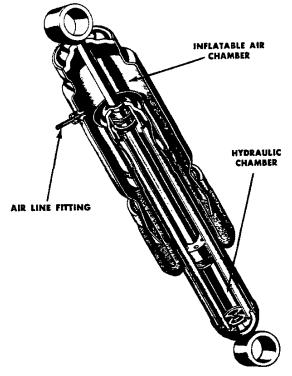


The 4-link rear suspension design of the El Camino models provides excellent ride and load-carrying characteristics. Two stamped channel-section lower control arms extend from brackets at each end of the axle housing to brackets at the start of the frame rail kick-up. Each control arm end pivots in compressed rubber bushings. Shorter stamped channel-section upper control

arms mount on brackets attached to the differential housing and extend diagonally outward to brackets on the intermediate Z-shaped frame crossmember to restrict lateral axie movement relative to the frame. Coil springs are positioned directly over the axle housing. Hydraulic direct double-acting air-booster-type shock absorbers are mounted diagonally behind the coil springs.

#### **Standard & Optional Coil Springs**

Series	Rating at Ground (lb each)	Sprung Capacity (lb each)	Spring Type	Deflection Rate (lb/inch)	Wire Diameter (inch)	Outside Diameter (inches)
133-134-135-13680—Standard	1100	950	1-Stage	130	0.575	6.78
133-134-135-13680—Optional	1350	1200	1-Stage	160	0.623	6.78

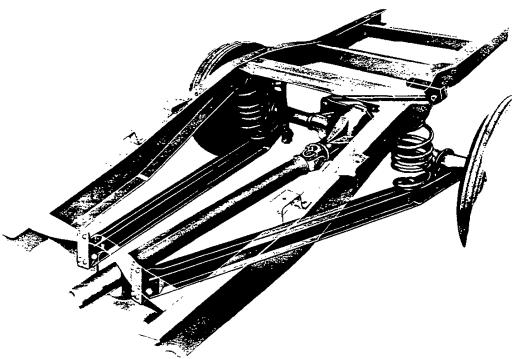


#### El Camino Rear Shock Absorbers Std Equipment Air-Booster Type

El Camino load capacity is increased by 500 pounds when the standard equipment air-booster rear shock absorbers are fully inflated.

Encircled by inflatable air chambers, these shock absorbers can be adjusted by varying the air pressure to meet different road and load conditions. Air pressure is varied through a tire-type air valve mounted adjacent to the spare tire in the cab. From the air valve, air feed lines of durable nylon connect to each shock through a tee fitting which also serves as a balance line to equalize the pressure in each shock absorber chamber. The air chamber is independent of the internal shock mechanism, which assures normal control in event of accidental air pressure loss.

SERIES C10, P10 and C20



Fore-and-aft motion of the rear axle is controlled by two channelsection control arms pivoted at a forward frame crossmember. Lateral motion of the rear axle is restricted by a control arm which runs approximately parallel to the axle housing. One end of this arm is pivoted at the frame siderail, and the other end at the axle attachment. The control arms permit axle motion, bu maintain proper axle position. Spring action is performed by two stage coil springs, providing an excellent ride when the vehicle i empty or lightly loaded—increasing in capacity as the load becomes greater.

#### **Two-Stage Coil Springs**

The two-stage coil spring rear suspension, standard on all Series C10, P10, C20 models, provides a low-rate first stage for smooth ride and a higher rate second stage to insure greater load-carrying capacity.

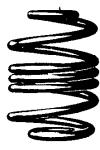
The two-stage principle is achieved through a closer spacing of the three center coils. Thus, in an unloaded condition, riding qualities are enhanced through the use of the entire spring, within the limits of travel of the three center coils.

Severe jouncing of the vehicle or heavier loads compress the three coils to a point where they touch and become inactive. This reduces the number of active coils, giving the spring a higher rate and greater carrying capacity.

## First Stage Low rate for ride

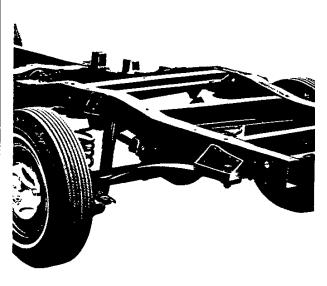
#### **Second Stage**

High rate for greater carrying capacity



### **Cantilever-Mounted Auxiliary Springs**

Single-tapered-leaf auxiliary rear springs with a capacity o 500 lb each are available as optional equipment on Series C1( and C20 models. They are attached to the frame at the rear and extend forward into the vicinity of the rear axle mounting pade on the suspension control arms. The auxiliary rear springs make contact with the axle mounting pads only after the base spring is compressed to design load condition.



November 1, 1966

# COIL REAR SPRINGS SERIES C10, P10 and C20

### **Standard Coil Springs**

Series	Rating at Ground (lb each)	Sprung Capacity (lb each)	Spring Type	Deflection Rate (lb/in)	Wire Diameter (in)	Outside Diameter (in)
C10, P10	1250	1074	2-Stage	253/392	.698	6.896
	2000	1713	2-Stage	344/602	.798	7.096

### **Optional Coil Springs**

Series	Rating at Ground (lb each)	Sprung Capacity (lb each)	Spring Type	Deflection Rate (lb/in)	Wire Diumeter (in)	Outside Diameter (in)
C10, P10		1824 2713	2-Stage 2-Stage	332/482 578/751	.767 .893	7.034 7.286

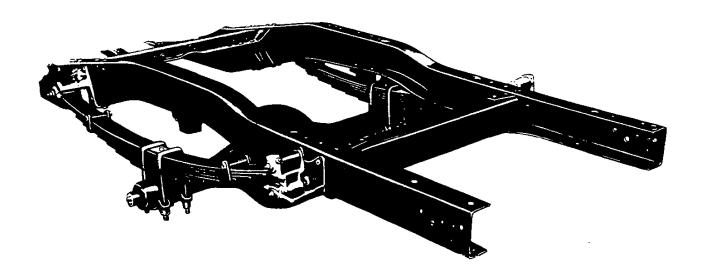
#### Standard Rear Shock Absorbers

Series	Туре	Piston Diameter (in)	Piston Travel (in)
C10, P10	Hydraulic direct	1	7.75
C20	double acting	1	8.00

### **Optional Rear Shock Absorbers**

Series	Туре	Piston Diameter (in)	Piston Travel (in)	
C10, P10; C20	Hydraulic direct double acting	1.38	7.75	

### LEAF REAR SPRINGS SERIES P20, P30, C30



#### **SPECIFICATIONS**

#### **Standard Leaf Springs**

Series	Rating Rating		Spring Type	Average	Semi-Elliptic Leaves				
	at at Ground Pad (lb ea)	Clamped Rate of Deflection (lb per inch)		Number	Max. Length (in)	Width (in)	Total Thickness (in)		
C30	2400 2400	1920 2050	1-Stage 1-Stage	424 497	<b>80 80</b>	52 52	2½ 2½	2.55 2.55	

### **Optional Leaf Springs**

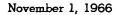
C30	3100	2750	2-Stage	365/500	8	52	21/2	2.70
C30	4150	3670	Main & Auxiliary	365/1151	8	52	21/2	2.70
}	,		Muamury		5	_	-	1.55

#### **Standard Rear Shock Absorbers**

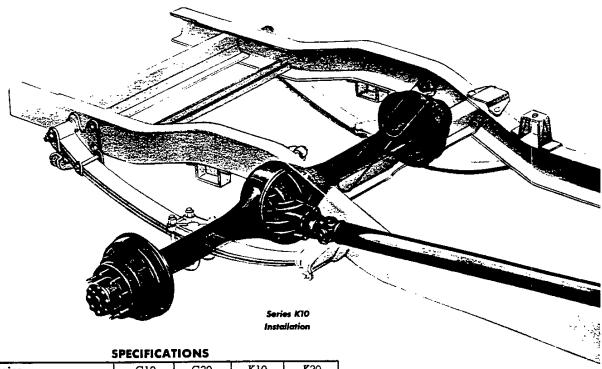
Series	Туре	Piston Diameter (in)	Piston Travel (in)
P20-30	Hydraulic direct double acting	1	8.00

#### **Optional Rear Shock Absorbers**

Series	Туре	Piston Diameter (in)	Piston Travel (in)
P20-30, C30	Hydraulic direct double acting	1.38	7.75



#### TAPERED-LEAF REAR SPRINGS SERIES G10, K10, G20, K20



Cantan	L G10	770	1710	K20
Serres	I GIO	G20	( K10	i NZU

#### STD SPRINGS

Rating at Ground (lbs)	950	1525	1800	1900		
Rating at Pad (lbs)	646	1177	_	_		
Clamped Defl. Rate (lbs/in)	209/231	342/378	403/445			
Number of Leaves			2			
Length (in)	48 58					
Width (in)	2.5 to 3.0					

#### OPTIONAL SPRINGS

•				
Rating at Ground (lbs)	1525	_	2500	
Rating at Pad (lbs)	1218	1552		
Clamped Defi. Rate (lbs/in)	305/335	408/452	_	556/614
Number of Leaves		2		3
Length (in)	48			58
Width (in)	2.5 t	o 3.0		2.5 to 3.0

#### STD SHOCK ABSORBERS

Туре	Hydraulic Direct Double Acting					
Piston Diameter (in)	1.00					
Piston Travel (in)	7.25 10.25					

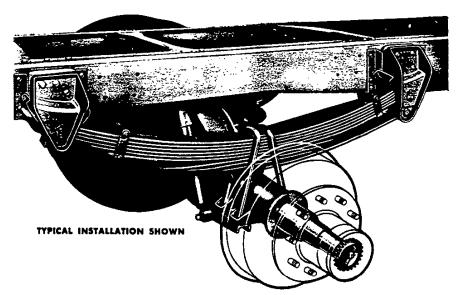
#### **OPTIONAL SHOCK ABSORBERS**

Туре	Hydraulic Direct Double Acting					
Piston Diameter (in)	1.3	1.38				
Piston Travel (in)	7.5					

Tapered-leaf rear springs are used on all Series G10, K10, G20 & K20 models. Ride quality is improved through a reduction in interleaf friction. They also reduce unsprung vehicle weight.

In a tapered-leaf spring, the cross section varies almost continuously from a thick, laterally narrower area at the pad to a thinner but wider cross section at the outer ends. The loaded spring is therefore more uniformly stressed throughout its length. A special shot-peening process further increases the spring's fatigue properties.

# VARIABLE-RATE REAR SPRINGS SERIES 40-70 SINGLE-AXLE MODELS



Variable-rate two-stage rear springs are used on Series 40 thru 70 single-axle 96" and 72" cab models. The chief advantages over conventional springs are a better ride light or loaded, reduction of unsprung weight and elimination of the need for auxiliary springs in operations where loadings vary greatly.

The spring's location is fixed by an eye in the bottom leaf, which serves as a radius rod or torque arm. The ends of the top spring leaf ride

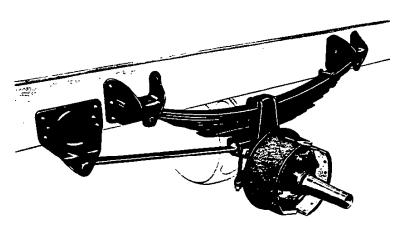
against specially hardened steel cams at the hangers, but are not firmly attached there. The third leaf has its ends turned down over a pin to prevent the spring sliding out of its hangers.

The springs are two-stage variable-rate type. The two-stage feature is seen in the lower half of the spring which does not contact the upper portion unless the spring is loaded. The variable-rate feature of the upper portion of the spring is explained and illustrated on the next page.

# VARIABLE-RATE REAR SPRINGS SERIES 70-80 CONV. CAB SINGLE-AXLE MODELS

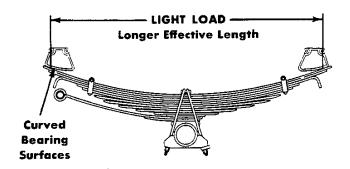
Series 70-80 single-axle 92" cab models utilize a link-bar rear suspension of two-stage variable-rate design. It is similar to the variable-rate radius-leaf type described above in that the spring ends are not attached to the frame firmly. They are free to ride against cam-type brackets so that the length of the spring will vary according to the load.

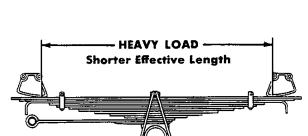
Instead of the usual radius leaf, a flat steel radius rod with rubber-bushed eyes at both ends connects the axle to a separate frame-mounted bracket. The eyes in the link-bar permit the transfer of torque and brake reactions to the frame but reduce axle roll and increase durability.



TYPICAL INSTALLATION SHOWN

#### **VARIABLE-RATE REAR SPRINGS**





TYPICAL INSTALLATION SHOWN

The outer ends of the upper leave: of the variable-deflection-rate springs bear against, but are not firmly attached to, specially hardened steel camtype surfaces at each hanger as shown in the illustration. As the spring load increases, the cam action of these hangers shortens the effective length of the spring, increasing the deflection rate.

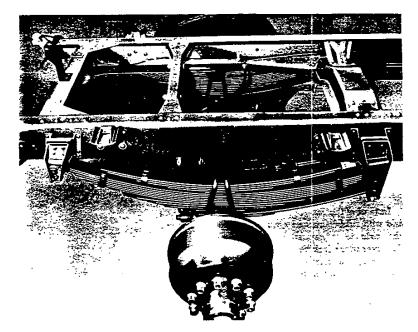
This feature permits normal soft spring action with light loads and progressively stiffer spring action as the load is increased. Canted U-bolts permit full action of the spring leaves.

On some models the springs are two-stage type, further increasing stiffness under heavy loads.

# AUXILIARY REAR SPRINGS ALL SINGLE AXLE—SERIES 40 THRU 80

Most single-axle models from Series 40 thru 80 have optional auxiliary springs available. The illustration shows the mounting position above the main rear springs. Pads for the spring ends are placed so that the spring will contact them only when the main spring load reaches a point where extra stiffness is required. With light loadings, these pads are not in contact with the spring and allow a normal ride.

The extra capacity and tailored ride afforded by these springs allow the operator a better ride over a wider range of operating conditions.



AUXILIARY SPRING

TYPICAL INSTALLATION SHOWN

# SPECIFICATIONS STANDARD VARIABLE-RATE LEAF REAR SPRINGS ALL SINGLE-AXLE MODELS—SERIES 40 THRU 80

	Roting	Rating		Average		Semi-Elliptic Leaves			
Series	Ground (lb ea)	at Pad (lb ea)	Spring Type	Clamped Rate of Deflection (lb per inch)	Number	Max Length (in)	Width (in)	Total Thickness (in)	
CS/CE/PS/SS/ TS/TE/TT40	5500	4950	2-Stage	528/1636	8	54	2.5	4.303	
CS/CE/CD/CG//TS/ TE/TD/TG/SS/SE50	7500	6750	2-Stage	633/2053	10	54	2.5	5.110	
CS/CE/CD/CG/ TS/TE/TD/TG/SE60	9200	8400	2-Stage	625/2500	9	55.1	3	5.157	
TI/TM70; TM80	9200	_	2-Stage	3150	9	59.25	3	5.157	
HM/HJ/HV70; HM80	9250	_	2-Stage	3750	10	59.25	.3	5.167	
TV70	10,400	9600	2-Stage	950/2900	10	55.1	3	5.558	

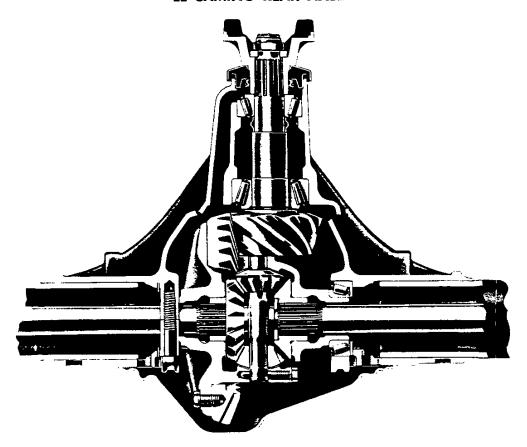
# SPECIFICATIONS OPTIONAL VARIABLE-RATE LEAF REAR SPRINGS ALL SINGLE-AXLE MODELS—SERIES 40 THRU 80

	Rating	Rating		Average		Semi-Elli	iptic Leav	es
Series	Ground (lb ea)	at Pad (lb ea)	Spring Type	Clamped Rate of Deflection (lb per inch)	Number	Max Length (in)	Width (in)	Total Thickness (in)
CS/CE/PS/SS/TS/ TE40	7500	6750	2-Stage	633/2053	10	54	2.5	5.110
CS/CE/PS/SS/TS/ TE/TT40; CS/CE/CD/CG/TS/ TE/TD/TG/SS/SE50	8750	7950	2-Stage	740/2235	11	54	2.5	5.470
TM80	9000							_
CS/CE/CD/CG/TS/ TE/TD/TG/SS/SE50; CS/CE/CD/CG/TS/ TE/TD/TG/SE60; TI/TM70; TM80	10,400	9600	2-Stage	950/2900	10	55.1	3	5.558
HM/HJ/HV70; HM80	11,000		2-Stage	4050	11	59.25	3	5.666
TM/TJ70	11,000	<del>-</del>	2-Stage	-	11	59.25	3	5.959
TM80	11,000	_	2-Stage	_	12	59.25	3	6.36
CS/CE/CD/CG/TS/ TE/TD/TG/SS/SE50; CS/CE/CD/CG/TS/ TE/TD/TG/SE60; TV70	11,500	10,750	2-Stage	1074/3250	11	55.1	3	5.959
HM/HJ/HV70; HM80	12,000	_	2-Stage	_	12	59.25	3	6.165

# SPECIFICATIONS AUXILIARY REAR SPRINGS

		P-4-3					
Series	Rated Capacity (lb ea)	Spring Type	Spring Clip Type	Number	Max Length (in)	Width (in)	Total Thickness (in)
CS/CE/PS/TS/TE/TT40; CS/CE/CD/CG/TS/TE/TD/TG50	1500	1-Stage	Clinch	4	38	2.5	1.44
CS/CE/CD/CG/TS/TE/TD/TG50; CS/CE/CD/CG/TS/TE/TD/TG50; HM/HI/HV/TM/TI/TV70; HM/TM80	2000	1-Stage	Clinch	4	39	3	1. <b>44</b>

#### EL CAMINO REAR AXLE



El Camino models utilize a Salisbury-type rear axle with ratios of 3.36:1 standard on six-cylinder models and 3.08:1 on eight-cylinder models. Other axle ratios are available to meet individual requirements. Hypoid gearing is used for quiet, durable differential operations.

Positraction is also available as an option at extra cost.

#### **Specifications**

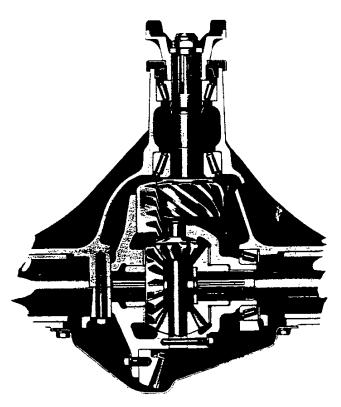
For application and availability see Power Teams chart under El Camino tab.

Capacity					2	700 lbs					
Make	Chevrolet										
Pinion & Ring Gears:					I	Typoid					
Ratios	2.73*	3.07*	3.08*	3.31*	3.36*	3.55*	3.70*	3.73*	4.10♦	4.56♦	4.88
Pinion, teeth	15	14	12	13	11	11	10	11	10	9	8
Ring gear, teeth	41	43	37	43	37	39	37	41	41	41	39
Differential: Type			_		Tw	o-Pinion					
Axle Shaft: Type				Integ	rai Shaf	t and Dr 1.06	ive Flanc	je			
Housing: Section diameter and thickness (in)					3.	.0 x .22				- "-	

<sup>\*</sup>Also available with Positraction limited-slip differential

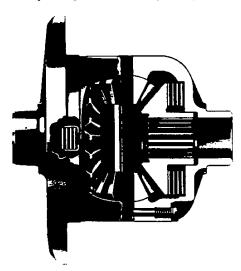
<sup>♦</sup>Available as Positraction only

# CHEVROLET SINGLE-SPEED REAR AXLE 2400-Ib to 3500-Ib Capacity



3500-lb Axie illustrated

Rugged hypoid ring and pinion gears have large tooth contact area for long, dependable service and quiet operation. Widely spaced tapered roller pinion bearings insure high pinion rigidity and long life of drive gears. The one-piece axle housing has a removable inspection plate to facilitate gear adjustment.



#### **Positraction Differential**

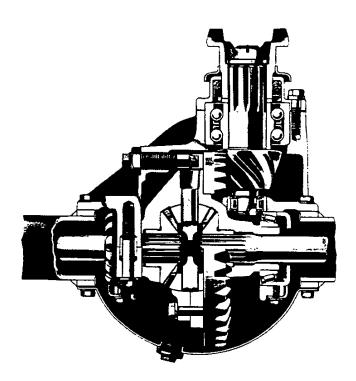
Driving forces are transmitted from differential case to axishafts through the clutch discs and side gears. Engagement of the clutch discs results from a slight lateral movement of the side gears which is created by the force of the differential pinions. If one wheel of the vehicle is on a slippery surface, the axle share offers little resistance to turning. As a result, the axle shaft ha little torque applied to it. Instead, most of the available torque is diverted to the other axle shaft which offers resistance to being driven.

Capacity	2400	) lbs	290	0 lbs	3300 lbs		3500 lbs		3600 lbs	
Make					Chevrolet					
Series:			=							
Standard	G10				K10		C10, P10		G20_	
Optional			G	10						
Pinion & Ring Gear:										
Туре					Hypoid					
Ratios	3.36*	4.11*	3.73*	4.11*	3.73	3.07**	3.73*	4.11**	4.11*	
Pinion, teeth	11	9	11	9	11	14	11	9	9	
Ring gear, teeth	37	37	41	37	41	43	41	37	37	
Differential:										
Туре					2-Pinion					
Bearings, type				1	Capered Roll	er				
Axle Shafts:					Semi-Floatin	g				
Туре				Integral :	Shaft and Dr	ive Flange	•			
Minimum diameter	1.	08	1	.08	1.16		1.16		1.16	
Housing:					] "					
Section diameter and					1		2.0 00			
thickness (in)		3.0	x .22		<u> </u>		3.0 x .25			
Wheel Bearings:										
Туре					Barrel Rolle	er .				

<sup>\*</sup> Also available with Positraction

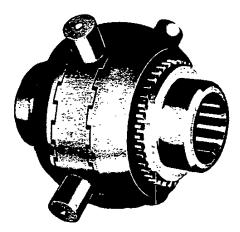
<sup>\*\*</sup> C10 models only

# CHEVROLET SINGLE-SPEED REAR AXLE 5200-lb to 7200-lb Capacity



7200-lb Axle Illustrated

With full-floating design, the axle housing carries the weight of chassis and cargo. Axle shafts are only required to transmit driving torque to the rear wheels. An adjustable ring-goar thrust pad and a straddle-mounted pinion maintain proper (sear alignment even under severe conditions. Differential is of either two-or four-pinion type, and the one-piece axle housing has a removable inspection plate. Axle shafts are induction hardened to provide resistance to fatigue stresses.



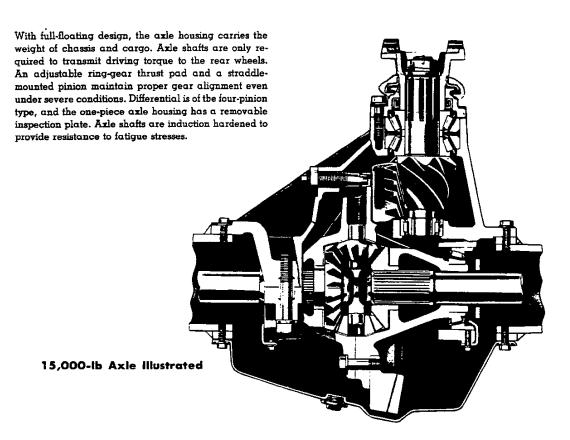
#### **NoSPIN Differential**

Axles for Series C20-30 and P20-30 are optionally available with a NoSPIN differential. In addition to performing usual differential functions, it prevents wheel spin when one driving wheel loses traction. Driving torque is distributed to the driving wheels in proportion to the traction at each wheel, thus easing the negotiation of slippery roads or soft terrain.

- Jpc	CITICA	710113			
Capacity	520	ю њ		7200 lb	
Make				Chevrolet	
Series	C20, K	20, P20		C30, P30	
Pinion & Ring Gear:					<u>-</u>
Туре			Hv	poid	
Ratios	4.11	4.57**	4.57†	5.14§	4.11
Pinion, teeth	9	7	7	7	9
Ring gear, teeth	37	32	32	36	37
Pinion Mounting:					
Mounting type			Stro	ddle	
Front bearing.			В	all	
Rear bearing			Straigl	nt Roller	
Differential:					
Туре	2-Pi	nion •	4-Pinion	2-Pinion	2-Pinion
Bearings, type			Barrel	Roller	
Axie Shafts:			Full-F	oating	
Туре				nd Drive Flange	
Minimum diameter (in)			-	34	
Housing:					·- · · · · · · · · · · · · · · · · · ·
Section diameter and thickness (in)			3.25	x .281	
Wheel Bearings:					
Туре			Barrel	Roller	

- \*—Also available with NoSPIN differential on C20, P20–30 models only
- ■—Optional on Series C20 only §—Āvailable with NoSPIN
- †—Optional on Series C30 only
- ●-4-Pinion on K20 models
  - ★-NoSPIN. Not available on K20

# CHEVROLET SINGLE-SPEED REAR AXLE 11,000-ib to 17,000-ib Capacity



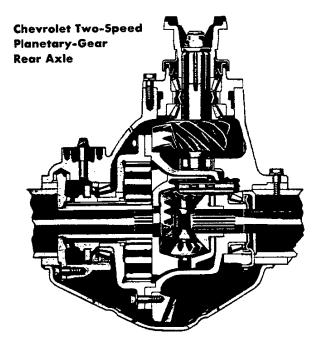
Capacity	11,0	00 lbs	13,50	O lbs		5,000 1Ъ	s _	17,000 lbs
Make				Che	vrolet			
Pinion & Ring Gear: Type				Ну	poid			
Ratios.  Pinion, teeth.  Ring gear, teetk.	5.43 7 38	6.17 6 37	5.29 7 37	6.40 5 32	5.83 6 35	6.17 6 37	7.20 5 36	7.20 5 36
Pinion Mounting:  Mounting type				Stre	addle			
Front bearing		_	Ball ht Roller				Tapered l Straight I	
Differential: Type				<b>4-</b> F	'inion			
Bearings, type	Barr	rel Roller	Tapere	d Roller	Barrel Roller			
Axle Shufts:			Inte	Full-I egral Shaft	loating and Drive	Flange		
Minimum diameter (in)	1.	44	1.	56		1.69		1.69
Housing: Section diameter and thickness (in)	4.0 1	: .375	4.25	x .39		4.50 x .4	4	4.75 x .50
Wheel Bearings: Type		Barre	el Roller				Tapered	Roller

# CHEVROLET TWO-SPEED REAR AXLE 15,000-lb & 17,000-lb Capacity

The Chevrolet two-speed rear axle features a durable hypoid pinion and ring gear set supplemented by efficient planetary gears to provide the choice of high or low range. In high range the planetary gear system is locked, and torque flows through the hypoid gears directly to the axle shafts, as in a single-speed axle. In low range the planetary gear system operates as a second reduction after the hypoid gears. Torque at the axle shafts is increased by 36 per cent for greater pulling ability.

Ring gear and pinion alignment is maintained by straddle mounting of the pinion between dual tapered roller bearings at front and a straight roller outboard bearing at rear. Drive gears, planetary gears and differential gears are carburized alloy steel, accurately machined and hardened.

With full-floating axle shafts, the axle housing supports the chassis, payload and absorbs road shocks. Housing is of high-strength banjo design, made of drop-forged medium-carbon steel with a welded differential cover.



#### **Specifications**

	-h	-					
Capacity	]	5,000 lb	s		17,00	00 lbs	
Make	_			Chevrole	t		
Pinion & Ring Geax:				-		-	
Туре				Hypoid			
Ratios—High	4.86	6.50	7.17	4.86	5.57	6.50	7.17
Low	6.61	8.85	9.76	6.61	7.59	8.85	9.76
Pinion, Teeth	7	6	6	7	7	6	6
Ring Gear, Teeth	34	39	43	34	39	39	43
Pinion Mounting:				Straddle			
Front Bearing			Ta	pered Ro	ller		
Rear Bearing			Sta	raight Ro	ller		
Differential:							
Туре				4-Pinion			
Bearings			Ta	pered Ro	ller		
Axle Shafts:			Fu	ll-Floatine	J		
Type		Ŀ	ategral S	haft and	Drive Flo	inge	
Minimum Diameter (in)				1.69			
Material			Hot-Rol	led Carb	on Steel		
Housing:							
Construction	On	e-Piece S	eamless	with Wel	ded Diffe	rential Co	over
Section (in)	5	.13 x .31	2		5.13	x .375	
Wheel Bearings:			•				
Туре			Ta	pered Ro	ller		



Shifting the Chevrolet two-speed rear axle is smooth, safe and convenient. By operating the convenient pushbutton control, the driver may select the most favorable combined transmission and rear axle ratio. The shift mechanism for the 15,000-lb axle on gasoline models is the vacuum type. All others utilize an electric shift. A decal on the instrument panel explains shifting methods and combinations of transmission and axle ratios.

# EATON SINGLE-SPEED REAR AXLES 18,500-lb, 22,000-lb & 23,000-lb Capacity



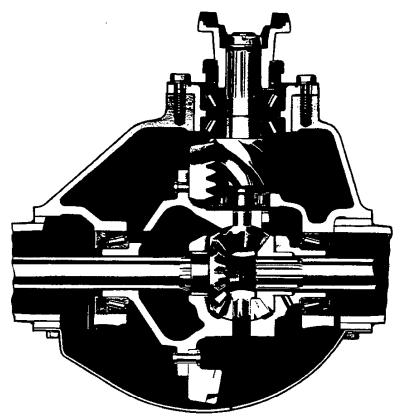
#### **Eaton Spiral-Bevel Gears**

The Eaton single-speed rear axles have a spiral-bevel pinion and ring gear with large tooth face area and thick cross section for high strength and long-wearing quality. Ring and pinion alignment is maintained by a thrust pad. The pinion acquires extra rigidity through straddle mounting between dual opposed tapered-roller bearings at front and a straight-roller outboard bearing at extreme rear end. Gears are accurately machined of alloy steel, carburized and hardened for durability.

## Housing and Axle Shafts

With full-floating axle shafts, the axle housing supports the chassis and payload and absorbs road shocks. Housing is high-strength banjo design, made of dropforged medium-carbon steel. Removable inspection plate simplifies maintenance and adjustment.

Axle shafts, being of fullfloating design, function only to transmit driving torque to the wheels. Shafts are drop-forged of alloy steel, heat-treated for toughness and shot-peened for high resistance to fatigue failure.



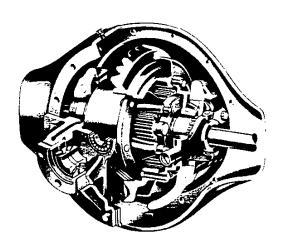
Capacity		18,50	00 lbs			22,000 lbs	1	23,00	00 lbs	
Make & Model		Eaton	17121			Eaton 1812	1	Eaton	on 19101	
Pinion & Ring Gear:					Spiral Beve	ıl				
Ratios	4.87	6.50	7.17	7.60	6.14	6.50	7.17	4.87	5.43	
Pinion—Teeth	8	6	6	5	7	6	6	8	7	
Ring Gear—Teeth	39	39	43	38	43	39	43	39	38	
Pinion Mounting:	_				Straddle					
Front Bearing		Tapered Roller								
Rear Bearing				S	traight Roll	er				
Differential:					4-Pinion					
Bearings				Ť	apered Roll	er				
Axle Shafts:					Full-Floatin	g				
Min. Diameter (in)		1.	.81			1.875		2.	.00	
Material				Chi	rome-Moly	Steel				
Housing:				One-Piece Fo	orged Heat	Treated St	eel			
Section Diameter (in)		5	5.5			5.125		5.	.75	
Thickness (in)		.3:	125			.50		.4	106	

#### EATON TWO-SPEED REAR AXLE 18,500-lb, 22,000-lb & 23,000-lb Capacity

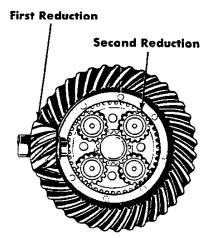


#### Push-Pull-Type Electric Shift Switch

Shifting the Eaton two-speed rear axle is smooth, safe and convenient. The electric shift control is positive in action and permits easy clash-free shifting. By operating the convenient switch control, the driver may select the most favorable combined transmission and rear axle ratio. A decal above the instrument panel explains shifting methods and axle ratios.



Eaton Two-Speed Planetary-Gear Rear Axle



Pianetary Gearset

Eaton two-speed rear axles feature large, durable ring and pinion gears of alloy heat-treated steel for reliable service under toughest conditions. With full-floating axle shafts, the weight of the chassis and load is carried on the rugged axle housing, which is made of forged heat-treated steel. The axle shafts are specially induction-hardened by an electromagnetic process for dependability and function only to transmit torque to the wheels.

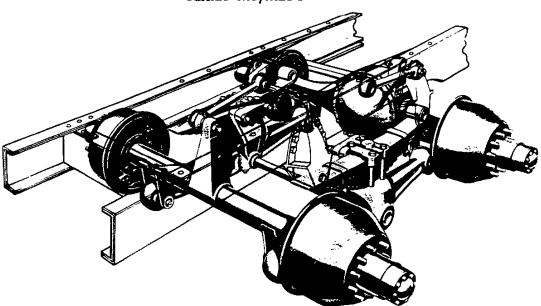
Eaton two-speed rear axles are noted for long life and low maintenance costs. They feature an exclusive forced-flow lubrication

system for longer life.

The two speeds are obtained by the use of a double reduction system in the axle (see above right). In high range, the planetary system is locked up and rotates as one unit, providing only one reduction in the ring and pinion gears. Low range is obtained by engaging the planetary system for a double reduction and resultant torque multiplication. Reduction and torque at the axle shafts are increased 36 per cent in the 18,500-lb and 22,000-lb axles.

Capacity			18,50	00 lbs	•				22,00	00 lbs				23,00	00 lbs	
Make & Model			Eaton	17221					Eaton	18221				Eaton	19201	
Pinion & Ring Gear:								<b>a</b>						-		
Type									Bevel		0.50	- 1-			• • • •	
		5.29	5.57			7.17	4.87	5.29	5.57	6.14	6.50	7.17	4.88	5.43	6.14	6.71
Lo				8.38		9.77		7.21		8.38			6.64		8.36	9.14
Pinion, teeth		7	7	7	6	6	8	7	7	7	6	6	8	7	7	7
Ring gear, teeth		37			39	43	39	37		43	39	43	39	38	43	47
Ring gear—diameter (in)			16	31/2					16	31/2			<u> </u>	1	7	
Pinion Mounting:																
Mounting type								Stra	ıddle							
Front bearing	1	Tapered Roller														
Rear bearing								apere	d Rolle	r						
Differential:																
Туре								4-Pi	nion							
Bearings, type								Гареге	d Rolle	r						
Axle Shafts:								Full-Fi	loating							
Туре						Int	egral S	Shaft a	ınd Dri	ve Flar	ıge					
Material							CH	rome-l	Moly St	eel						
Minimum diameter (in)			1.8	125					1.8	75				2.0	00	
Housing: Section diameter and																
thickness (in)			5.5 x	.3125					5.125	x .50				5.750	x .406	<u> </u>
Wheel Bearings:																
Туре	•						7	Capere	d Rolle	r						

# TRAILING-AXLE TANDEM MODELS SERIES MS/ME50



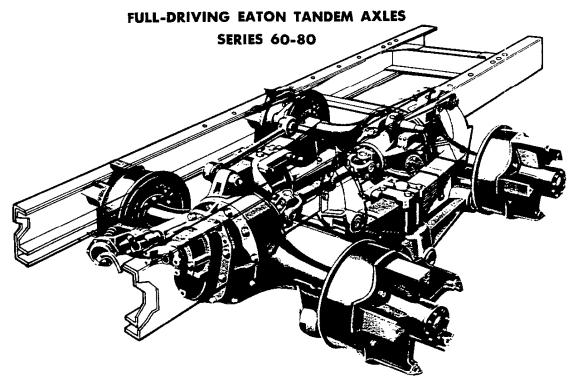
Chevrolet trailing-axle tandem models utilize a Chevrolet forward driving axle and a non-driving Rockwell-Standard trailing axle with Hendrickson steel spring suspension.

The design of the suspension system, using equalizing beams, provides excellent operating flexibility. The action of these beams allows the vehicle to "walk" over surface irregularities, resulting in a smoother, more level ride. A cross tube connecting the equal-

izing beams assures correct alignment and prevents damaging load transfer.

Axle torque is controlled by the use of torque rods mounted to the frame, thereby reducing the tendency of the axles to turn backward or forward due to starting or stopping inertia. Short relatively lightweight rear springs serve to cushion and suppor the load.

Model	MS/ME50
Driving Axle (Std)	
Make	Chevrolet
Ratio	7.20
Туре	Hypoid Full-Floating
Section (in)	4.50 x .50
Trailing Axle (Std)	
Make	Rockwell-Standard
Туре	Tubular
Suspension	
Make & Model	Hendrickson RT340
Bogie Capacity Rating	28,000 lbs
Standard Springs	·
Capacity (each at ground)	15,000 lbs
Optional Springs	
Capacity (each at ground)	17,250 lbs
Optional 2-Speed Driving Axle	
Make	Chevrolet
Ratios	6.50/8.85
Туре	Hypoid Full-Floating



All Series 60 & 70 full-driving tandem axle models are standard-equipped with the Eaton 30 DSC (30,000-lb capacity) axle assembly and Hendrickson steel spring suspension. Optional at extra cost is the Eaton 34 DSC (34,000-lb capacity) axle assembly with Hendrickson steel spring suspension. Series 80 tandem models use the Eaton 34 DSC (34,000-lb capacity) as standard equipment.

The parallelogram design of the bogie, utilizing center-pivoted equalizing beams, gives maximum operating flexibility. The action of these beams allows the wheels to "walk" over surface irregularities, reducing frame motion and providing a relatively smooth and level ride. Axle torque is controlled by rugged ball-and-socket-mounted torque arms, leaving the springs to perform only a cushioning function.

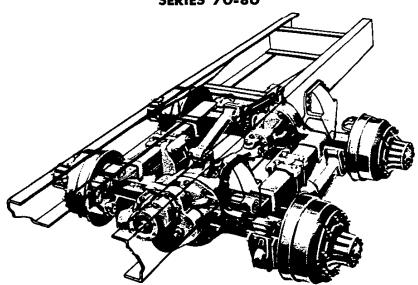
Rubber bushings are used at all points of wear, eliminating the need for periodic lubrication.

The power divider with built-in inter-axle differential divides driving power between the two axles. The differential feature permits freedom of action of the two axles and eliminates "wheel fight" due to road irregularities or normal small variations in tire sizes. By means of a toggle switch on the instrument panel, the inter-axle differential may be locked out to give equal power to both axles regardless of terrain. A red warning light is illuminated when the differential is locked out.

Short, relatively lightweight springs serve to support and cushion the load.

Axle, Make & Model Suspension Bogie Capacity Rating		Hen	Eaton 3 drickson 30,00	steel sp	ring			Hen	Eaton 3 drickson 34,00	•	oring	
Type of Gearing					Spiral	bevel; s	ingle re	duction				
Ratio	4.87	5.57	6.14	6.50	7.17	7.60	4.87	5.57	6.14	6.50	7.17	7.60
Pinion, Teeth	8	7	7	6	6	5	8	7	7	6	6	5
Ring Gear, Teeth	39	39	43	39	43	38	39	39	43	39	43	38
Axle Housings:	:	Вапјо										
Туре												
Section (in)		5.125 x .375 5.5 x .3125										
Axle Shafts:	,											
Type					(	Full-fi [-Chrome	oating Moly ste	el				_
Minimum diameter (in)			1.6	38					1.8	125		
Differential:						-						•
Туре						Four-	pinion					
Bearings						Tapere	d roller					
Pinion Mounting:		_										
Туре						Stra	ddle					
Front bearing	1					Tapere	d roller					
Rear bearing					,	Tapere	d roller					
Outboard bearing	1					Straig	at roller					
Wheel Bearings:	[											
Type	l					Tapere	d roller					

# ROCKWELL-STANDARD SLHD 34,000-LB TANDEM AXLE SERIES 70-80



The Rockwell-Standard SLHD tandem axle assembly, rated at 34,000 lbs, is available optionally on all Series 70 and 80 tandem models. The assembly features single-reduction hypoid gearing and in-line through-drive design between the two axles to reduce driveline angularities.

The axle housings are hot-forged steel with a rectangular section for greater strength and rigidity. The axle shafts are specially hardened by a process that gives a high degree of hardness on the outside with a graduated reduction of hardness toward the center of the shaft.

The drive pinion of the front axle is the overhung type

supported by two opposed tapered roller bearings. The rear axle has a straddle-mounted pinion supported by opposed tapered roller bearings at the front and a straight roller bearing at the rear.

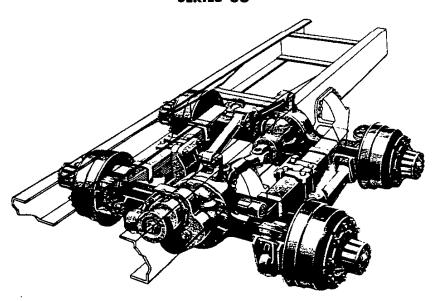
The inter-axle differential divides the torque equally between the two axles, with a manual lockout providing positive drive when maximum traction is needed.

The SLHD has several optional ratios available on most models and one should be selected that is best suited to the vehicle's operating conditions. See the Truck Selection section for ways of selecting axle ratios.

Axie, Make & Model	· · · · · · · · · · · · · · · · · · ·		Rockwe	ll-Standa:	rd SLHD		
Bogie Capacity Rating				34,000 11	os		
Suspension:  Make & model  Type	· ·						
Type of Gearing							
Ratio	5.29	5.83	6.17	6.83	7.20	7.80	8.60
Pinion, Teeth	7	6	6	6	5	5	5
Ring Gear, Teeth	37	35	37	41	36	39	43
Axle Housings: Type Section at spring seat (in) Section modulus of housings		Hot-	-	eel; recta 1/4 x 5) x 8.75	ngular se %	ction	
Axle Shafts: Type Material Minimum diameter (in). Diameter over splines (in).			_	ull-floatii t-treated 1 1/8 2			
Wheel Bearings: Type			To	pered ro	ller		

<sup>\*</sup>On all models except WM80, which uses Hendrickson RT340 suspension

# ROCKWELL-STANDARD SQHD 38,000-LB TANDEM AXLE SERIES 80



The Rockwell-Standard SQHD tandem axle assembly is available as an option on Models IM80 and WM80. It is rated at 38,000 lbs capacity and must be ordered with the Hendrickson 38,000-lb suspension. This rugged tandem assembly features hypoid gearing and in-line through-drive design between the two axles to reduce driveline angularities and resulting wear.

Axle housings are hot-forged steel with a rectangular section for maximum strength. Axle shafts are heat-treated by a special process which imparts a much harder outer surface with a graduated hardness reduction toward

the center of the shaft.

The drive pinion of the forward unit is the overhung type supported by two opposed tapered roller bearings. The rear unit features a straddle-mounted type supported by opposed tapered roller bearings at the front and a straight roller bearing at the rear.

The inter-axle differential divides torque equally between front and rear axles, with a lockout providing positive drive in conditions where maximum traction is required.

The Hendrickson suspension is similar to that described on the preceding page.

Axie, Make & Model	Rockwell-Sto	indard SQHD			
Bogie Capacity Rating	38,000 lbs				
Suspension:  Make & model  Type		son RT380 spring			
Type of Gearing	Hypoid; sin	gle reduction			
Ratio	7.80	8.60			
Pinion, Teeth	5	5			
Ring Gear, Teeth	39	43			
Axle Housings: Type	(41/4:	rectangular section x 5) x ½16 .80			
Axle Shaftz: Type	Heat-tre	floating ated steel <sup>5</sup> /16 1 <sup>1</sup> / <sub>8</sub>			
Wheel Bearings: Type	Тарег	ed roller			

# REAR SPRING SPECIFICATIONS TANDEM AXLE MODELS

#### STANDARD SPRINGS

	Suspension	Rating at	Rating	<b>6</b>		Leaves	
Series	Make & Model	Ground (lbs each)	at Pad (lbs each)	Spring Type	Number	Length (in)	Width (in)
MS/ME50	Hendrickson RT340	15,000	13,500	Single- Stage	11	45.375	4
JI/JM/ JV70; JM80	Hendrickson RU340	17,000	-	Single- Stage	11	34.0	4
WM80	Hendrickson RT340	17,000		Single- Stage	11	34.0	4
ME/MG60	Hendrickson RT340	17,250	15,440	Single- Stage	12	46.25	4

#### **OPTIONAL SPRINGS**

	Suspension	Rating at	Rating	G		Leaves	
Series	Make & Model	Ground (lbs each)	at Pad (lbs each)	Spring Type	Number	Length (in)	Width (in)
MS/ME50	Hendrickson RT340	17,250	15,440	Single- Stage	12	46.25	4
I <b>I/IM/</b> IV70	Hendrickson RU340	17,000*	_	Single- Stage	11	34.0	4
JM/ WM80	Hendrickson RT380	19,000	_	Single- Stage	12	34.0	4
ME/MG60	Hendrickson RT340	19,500	17,540	Single- Stage	12	45.875	4

<sup>\*</sup>When SLHD rear axle is ordered, larger capacity springs are provided

			•
			•

#### HYDRAULIC BRAKES

Hydraulic or vacuum/hydraulic brakes are used as standard equipment on most Chevrolet truck models. All Series 10-30 models have a split front and rear hydraulic braking system as standard equipment. A warning light on the instrument panel signals the driver of any brake malfunction.

Heavy-duty vacuum or air boosters are available optionally on the heavier models for more braking power. The vacuum booster units are piston type on C10-30 models and equal-displacement diaphragm type on the larger models.

Bonded brake linings are used on the El Camino and all Series 10 trucks, with all other models using riveted-type linings. All light-and medium-duty trucks through Series 40–50 feature self-adjusting brakes as base equipment. Availability is restricted to standard-size front brakes only, with manual adjustment brakes being provided with brake options larger than  $15^{\prime\prime}$  x  $5^{\prime\prime}$  or rear axles above 15,000 lbs.



#### **Torque-Action Brake**

Torque-Action brakes are standard on the front and rear wheels of Series 10–30, and are standard on the front wheels only of the 40 and 50 Series.

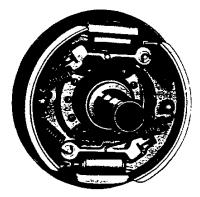


Twin-action brakes of the two-anchor type are standard equipment on the rear wheels of Series 40 and 50 models. Brake lining material of molded asbestos composition is riveted to the brake shoes.



**Twin-Action Front Brake** 

Twin-action front brakes are standard on the front wheels of Series 60 models. Brake lining material of molded asbestos composition is riveted to the brake shoes.



Twin-Action Rear Brake (Four-Anchor Type)

Twin-action brakes of the four-anchor type are standard equipment on Series 60 models. Brake lining material of molded asbestos composition is riveted to the brake shoes.

November 1, 1966 Brakes—Page 1

#### **→VACUUM-HYDRAULIC BRAKE SYSTEM**

Vacuum-hydraulic brakes on Chevrolet gasoline-powered models utilize the engine intake manifold vacuum, while the diesel models use an engine-mounted vacuum pump.

The 8.3" power brake unit used on C10-30 models uses a power piston equal-displacement vacuum booster unit. The larger Chevrolet models use an equal-displacement hydraulic brake system with a diaphragm-type vacuum booster that assists the braking effort. The diaphragms used vary in capacity with the size of the truck model.

#### →AIR-HYDRAULIC BRAKE SYSTEM

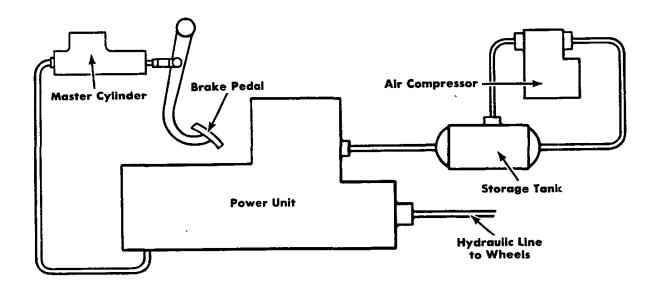
Air-hydraulic brakes are available as optional equipment on CS/CE/CD/CG/MS/ME50; CS/CE/CD/CG/ME60 models. The system includes an engine-lubricated air compressor driven by the fan pully, an air pressure storage tank and a power unit. The air compressor is a Bendix-Westinghouse Model Tu-Flo 400 that has a capacity of 71/4 cu ft per minute @ 1250 rpm. The compressor is air cooled on gasoline and water cooled on diesel models. A

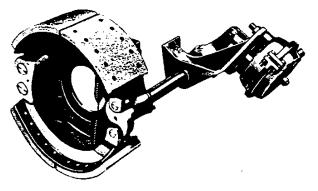
pressure of  $110\ \mathrm{to}\ 125\ \mathrm{pounds}$  per square inch is maintained in the storage tank.

When the brake pedal is depressed, compressed air actuates the cylinder in the power unit which multiplies the hydraulic pressure to the wheel cylinders.

An air pressure gauge is located on the instrument panel and a low pressure warning buzzer is incorporated into the system.

#### Schematic Diagram of Air-Hydraulic System

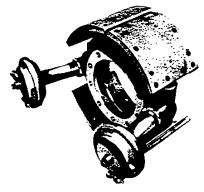




#### **CAM-TYPE BRAKE**

Cam-type brakes are actuated by the air chambers exerting a turning force on a shaft with an "S" design cam on the end. This cam operates between rollers on the free ends of the brake shoes and serves to expand the brake shoes against the drum. The other end of the shoes is anchored to stationary pivots.

Adjustment of cam-type brakes is manual and is accomplished by adjusting the slack adjuster in the linkage.



#### STOPMASTER WEDGE-TYPE BRAKE

Stopmaster wedge-type rear brakes are standard on all 92" cab air brake models. They feature two brake chambers with a wedge-type actuator in each one, operating between a roller assembly which operates the brake shoes. When the brakes are applied, the wedges force the brake shoes against the drum, using both shoes evenly and giving balanced braking action. Stopmaster rear brakes also feature automatic adjustment for minimum maintenance.

#### **FULL-AIR BRAKE SYSTEM**

Full-air brakes are standard equipment on all 13 models (Series 60-80).

The standard air compressor is either a Bendix-Westinghouse or Midland with a capacity of 71/4 cubic feet. They are belt driven on all models except those with the 6V-53N diesel engine which is gear driven. The compressor serves only to maintain air pressure between high and low pressure limits. When the pressure is in the normal operating range, an unloading mechanism opens a passage between the compressor's cylinders, nullifying compressor action.

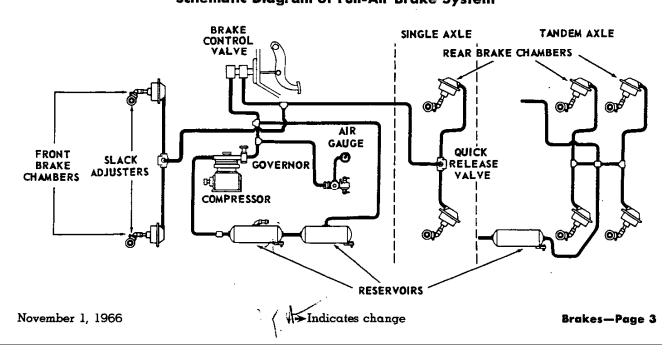
"Wet" and "dry" air pressure reserve tanks serve to remove moisture from the air and to provide a reserve of stopping power for the vehicle. Drain cocks are provided in the tanks to drain off condensed moisture.

The brakes are applied by pushing on the pedal which controls the brake application valve. It allows varying amounts of air to pass to the brake chambers, depending on the amount of pedal travel used. Most Chevrolet full-air brake models use the cam-type brake actuators which are operated by the brake air chambers. When air passes to the chambers, the diaphragms are pressurized and the plunger moves a lever arm on the cam-type actuators, spreading the brake shoes and applying the brakes.

When the application valve is released, rapid discharge of air from the lines and brake chambers is necessary to speed brake shoe release. Quick release valves, which aid this function, are located at the front and rear.

Several safety devices are used in the full-air brake system. A low air pressure warning buzzer sounds whenever air pressure falls below a safe level. An air pressure gauge on the dash shows the air pressure in the system. Normal pressure for proper brake application is at least 70 lbs. per square inch. In addition, there is a pressure relief valve on the "wet" tank to release pressures over 150 psi. There is also a check valve ahea of the "wet" tank to retain air pressure in the event of compressor failure.

#### Schematic Diagram of Full-Air Brake System



#### **→TRACTOR-TRAILER AIR BRAKE CONNECTIONS**

Tractor-Trailer Air Brake Connections are available as a package on most full-air brake models. This package is designed to include the necessary controls, valves, hoses and couplings and complies with ICC regulations. It includes the following components:

Two Hose Assemblies Emergency Brake Valve
Spring Supports for Hoses Trailer Brake Hand Control
Valve
Two-Way Check Valve

The two Hose Assemblies are 117" long and are connected by tubing to the Tractor Protection Valve, which is mounted on the

front of the dash. On the other end are "glad-hand" type connectors for coupling to the trailer.

Two coil springs, hung from the rear of the cab roof, serve to support the hoses when not hooked up to a trailer.

The Tractor Protection Valve, which is a spring-actuated-plunger

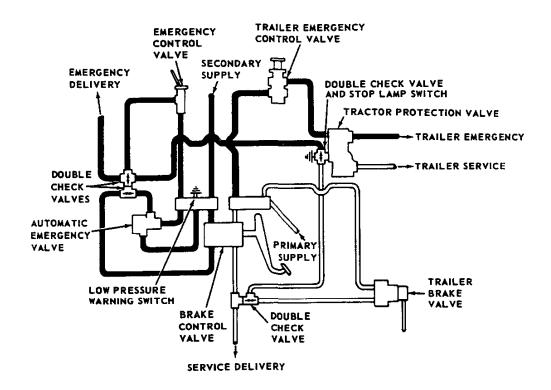
diaphragm-type unit, automatically applies the trailer brakes and shuts off the air supply to the trailer in the event of an emergency. Its location on the dash in the engine compartment eliminates freezing problems.

The Emergency Brake Valve is mounted on the instrument panel. This push-pull-type valve shuts off the air supply to the trailer hoses when the tractor is to be used alone.

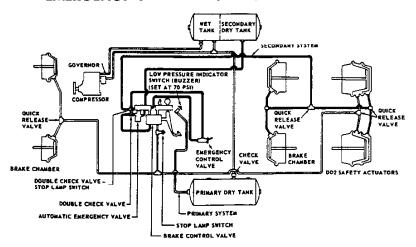
A Trailer Brake Hand Control Valve, mounted on the steering column, applies the trailer brakes independently of the tractor brakes in direct proportion to hand movement.

A Two-Way Check Valve, located in the line between the hand control valve and the regular foot-operated application valve, locks out the hand control valve when the foot pedal is applied so that braking will be smooth and even.

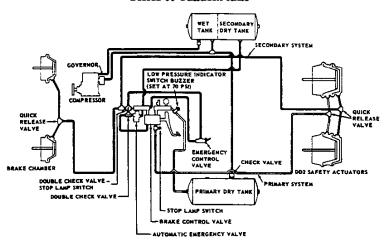
#### SCHEMATIC DIAGRAM OF TRACTOR-TRAILER AIR BRAKE CONNECTIONS



#### **EMERGENCY & PARKING AIR BRAKE SYSTEM**



Series 60 Tandem Axle



Series 60 Single Axle

The emergency and parking air brake system is available as an option on most models with full-air brakes. This system meets the legal requirements of the California Compressed Air Brake Law. It is installed on the rear wheels of the truck only.

The system used on Series 60 conventional cab models with cam-type rear brakes is the Bendix-Westinghouse <u>DD-2 Safety</u> Actuator. When Emergency Brake Equipment (RPO 175 or 177) is ordered, two completely separate systems, primary and secondary, combine to function as the service brakes. In the event of failure of

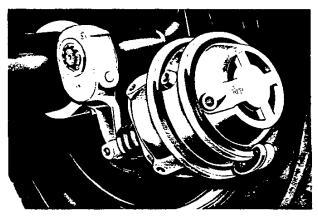
one system, the remaining system continues to operate. The effectiveness or stopping ability of both systems is about equal.

A Stopmaster Fail-Safe wedge-type emergency & parking brake is used on all Series 70–80 conventional cab models, as they have wedge-type rear brakes as standard equipment.

The schematic above shows the DD-2 system with the basic full-air system. The emergency air brake option may be ordered for truck as well as for tractor-trailer operation.

The Bendix-Westinghouse DD-2 safety actuator shown at right assures extra braking reserve during emergency conditions and eliminates the necessity of a separate parking brake and linkage apart from the service brakes.

Automatic and manual actuation of the secondary system is provided to comply with the California Brake Law. Secondary system brake chambers are automatically applied whenever air pressure falls below 35 psi. The brakes cannot be released until air pressure is restored to a satisfactory level. A separate control also is provided in the cab for manual release of the secondary system at any operating pressure.



#### PARKING BRAKES

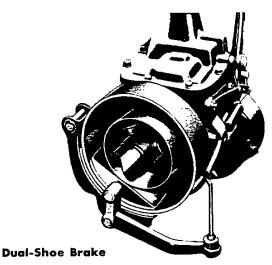
#### **Rear Wheel Brakes**

Cable-actuated rear brakes are used for parking brakes on all Series 10–30 models.

An Orscheln-type handle is standard on the PS10, PS/PT20~30 models.

#### **Propeller Shaft Brakes**

Propeller shaft brakes serve to lock the driveline firmly for parking. They are controlled by a lever through the floor with a release device on the handle.



The dual-shoe brake has a pair of brake shoes that act on both the inside and the outside of a drum attached to the transmission output shaft.

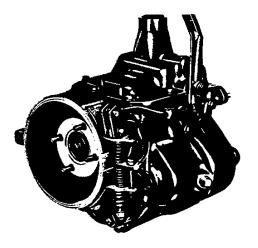
#### Parking Brake Specifications—Series 10-30

Series	Trans- mission	Brake Type	Size (in)	Lining Area (sq in)
CS/CE/KS/KE/ PS10	All	Cable to Rear Wheels	1	83
GS/GE10	All	Cable to Rear Wheels		76
CS/CE20	All	Cable to Rear Wheels	_	119
KS/KE/PS/PT20	All	Cable to Rear Wheels	_	92
GS/GE20	All	Cable to Rear Wheels		84
CS/CE/PS/PT30	All	Cable to Rear Wheels*		132

#### Parking Brake Specifications—Series 40-80

Transmission	Brake Type	Size (in)	Lining Area (sq in)
Chevrolet 4 speed	Drum & Dual Shoe	10 x 2½	36
New Process 435C, 435CR, 540CL, 540CD	Drum & Band	9½ x 2½	67.5
New Process 541CL, 541CD; Spicer 5652, 5752, 5752C; Allison Automatic	Drum & Band	10½ ± 3	99.1
Clark 280V, 282V, 285V; Spicer 3152A, 3152F, 3153	Drum & Band	9½ x 3	84.9
Clark 385V, 387V, 401V	Drum & Band	11½ x 3½	126
Fuller R46, RT510; Spicer 7216-3B	Internal Expanding	12 x 3	83.8

<sup>\*</sup>Series 30 models with optional 11,000-lb rear axle use Series 40 parking brake.



#### Band Brake

The band brake has a contracting band which closes on a crum attached to the transmission output shaft.

#### **SPECIFICATIONS**

		FRONT BRAKES			REAR BRAKES			
SERIES	BRAKE TYPE	BASE OR RPO	SIZE (in)	AXLE CAPAC- ITY	BASE OR RPO	SIZE (in)	AXLE CAPAC- ITY	TOTAL LINING AREA
C10, P10	Hydraulic	Base	11 x 2.0	2500	Base	11 x 2.0	3500	167.0
→ G10	Hydraulic	Base	9.5 x 2.5	2200	Base RPO	9.5 <b>x</b> 2.0	2400 2900	169 169
K10	Hydraulic	Base	11 x 2.0	3300	Base	11 x 2.0	3300	167.0
C20	Hydraulic	Base	11 x 2.75	3000	Base	11 x 2.75	5200	238.0
→ G20	Hydraulic	Base	11 x 2.75	3000	Base	11 x 2.0	3600	198
K20	Hydraulic	Base	12 x 2.0	3500	Base	12 x 2.0	5200	185.2
PS/PT20	Hydraulic	Base	12 x 2.0	4000	Base	12 x 2.0	5200	185.2
CS/CE310	Hydraulic	Base	11 x 2.75	3500	Base	13 x 2.5	7200	251.9
CS/CE314		Base RPO	11 x 2.75	3500 4000	Base RPO	13 x 2.5 15 x 4.0	7200 11,000	251.9 368.0
→ PS/PT30	Hydraulic	Base RPO	12 x 2.0 14 x 2.5	4000	Base RPO	13 x 2.5 15 x 4.0	7200 11,000	225.2 385
CS/CE/PS/SS40	Hydraulic	Base	14 x 2.5	4000 (4500 on SS40)	Base RPO	15 x 4.0	11,000 13,500	385
	Hydraulic	RPO	14 x 2.5	5000 (5500 on SS40)	Base RPO	15 x 4.0	11,000 13,500	385
TS/TE/TT40		Base	14 x 2.5	5000	Base RPO	15 x 4.0	11,000 13,500	385
CS/CE/CD/CG50	Vacuum/Hydraulic	Base	14 x 2.5	5000	Base RPO	15 x 4.0 15 x 5.0	15,000 15,000	385 450
·	Vacuum/Hydraulic	RPO	15 x 3.0	7000	Base RPO	15 x 4.0 15 x 5.0	15,000 15,000	448 513
SS/SE520; SS/SE525	Vacuum/Hydraulic	Base	14 x 2.5	5500	Base RPO	15 x 4.0 15 x 5.0	15,000 15,000	385 450
	Vacuum/Hydraulic	RPO	15 x 3.0	7000	RPO RPO	15 x 4.0 15 x 5.0	15,000 15,000	448 513
SS528	Vacuum/Hydraulic	Base	14 x 2.5	5500	Base	15 x 5.0	15,000	450
	Vacuum/Hydraulic	RPO	15 x 3.0	7000	Base	15 x 5.0	15,000	513
SS531	Vacuum/Hydraulic	Вазе	15 x 3.0	7000	Base	15 <b>x</b> 5.0	15,000	513
TS/TE/TD/TG50	Vacuum/Hydraulic	Base	15 x 3.0	7000	Base RPO	15 x 4.0 15 x 5.0	15,000 15,000	448 513

#### **SPECIFICATIONS**

<u> </u>		FRONT BRAKES			REAR BRAKES			
SERIES	BRAKE TYPE	BASE OR RPO	SIZE (in)	AXLE CAPAC- ITY	BASE OR RPO	SIZE (in)	AXLE CAPAC- ITY	TOTAL LINING AREA
MS/ME50	Vacuum/Hydraulic	Base	15 x 3.0	7000	Base	15 x 4.0	28,000	696.6
<b>,</b>			:		RPO	15 x 5.0	28,000 (2-Speed)	827.2
CS/CE60		Base	15 x 3.0	7000	Base	15 x 6.0	17,000	578.8
(02 & 12 models)	Vacuum/Hydraulic	RPO		9000				
CE/CG/TE/	Vacuum/Hydraulic	Base	15 x 3.0	7000	Base	15 x 6.0	17,000	578.8
TG60					RPO	15 x 7.0	18,500	642.0
(03 models)		RPO	15 x 3.0	9000	Base	15 x 6.0	17,000	578.8
					RPO	15 x 7.0	18,500	642.0
CE/CG/TE/	Air	Base	15 x 3.0	7000	Base	15 x 6.0	17,000	569.4
TG60					RPO	15 x 7.0	18,500	632.6
(13 models)		RPO	15 x 3.5	9000	Base	15 x 6.0	17,000	601.0
(10					RPO	15 x 7.0	18,500	664.2
CS/CD/TS/	Vacuum/Hydraulic	Base	15 x 3.0	7000	Base	15 x 6.0	17,000	578.8
TD60 (O3 models)		RPO		9000				
CS/CD/TS/	Air	Base	15 x 3.0	7000	Base	15 x 6.0	17,000	569.4
<b>TD60</b> (13 models)	; ;	RPO	15 x 3.5	9000	Base	15 x 6.0	17,000	601.0
SE60 (O2 models)	Vacuum/Hydraulic	Base	15 x 3.0	7000	Base	15 x 6.0	17,000	578.8
<b>SE60</b> (62 models)	Air	Base	15 x 3.0	7000	Base	15 x 6.0	17,000	569.4
ME/MG60	Vacuum/Hydraulic	Base	15 x 3.0	7000	Base	15 x 6.0	30,000	958.4
(03 models)		RPO		9000	1			
		RPO		11,000				
ME/MG60	Air	Base	15 x 3.0	7000	Base	15 x 6.0	30,000	948.
(13 models)		RPO	15 x 3.5	9000	Base	15 x 6.0	30,000	980.
		RPO		or 11,000	RPO	15 x 6.0	34,000	<u> </u>

#### → SPECIFICATIONS

		1	RONT BRA	KES		REAR BRAK	ES	TOTAL LINING AREA
SERIES	BRAKE TYPE	BASE OR RPO	SIZE (in)	AXLE CAPAC- ITY	BASE OR RPO	SIZE (in)	AXLE CAPAC- ITY	
HV/HJ70	Air	Base	15 x 3.0	7000	Base	15 x 6.0	18,500	567
		}			RPO	15 x 7.0	22,000	630
			<u>.</u>		RPO	15 x 7.0	23,000	630
	Air	RPO	15 x 3.5	9000	Base	15 x 6.0	18,500	599
					RPO	15 x 7.0	22,000	662
					RPO	15 x 7.0	23,000	662
HM70	Vacuum/	Base	15 x 3.0	7000	Base	15 x 7.0	18,500	642
(03 models)	H <del>y</del> draulic				RPO	15 x 7.0	22,000	642
	Vacuum/	RPO	15 x 3.5	9000	Base	15 x 7.0	18,500	674
	Hydraulic		ļ	ŀ	Base 15 x 7.0 18,500 674  RPO 15 x 7.0 22,000 674  Base 15 x 6.0 18,500 567  RPO 15 x 7.0 22,000 630  RPO 15 x 7.0 23,000 630  RPO 15 x 7.0 22,000 630  RPO 15 x 7.0 23,000 662  RPO 15 x 7.0 23,000 662  RPO 15 x 7.0 23,000 662  RPO 15 x 7.0 30,000 959  RPO 15 x 7.0 34,000 1117  Base 15 x 5.0 30,000 818  DO Base 15 x 5.0 30,000 850			
HM70	Air	Base	15 x 3.0	7000	Base	15 x 6.0	18,500	567
(13 models)					RPO	15 x 7.0	22,000	630
(					RPO	15 x 7.0	23,000	630
	Air	RPO	15 x 3.5	9000	Base	15 x 6.0	18,500	599
					RPO	15 x 7.0	22,000	662
					RPO	15 x 7.0	23,000	662
JM70	Vacuum/							
(O3 models)	Hydraulic	Base	15 x 3.0	7000			·	
	Vacuum/ Hydraulic	RPO	15 x 3.5	9000 or 12,000		<del> </del>	· · · · · · · · · · · · · · · · · · ·	
·		<u> </u>		,	RPO	15 x 7.0	34,000	1117
JM/JJ/JV70	Air	Base	15 x 3.0	7000	Base	15 x 5.0	30,000	818
(13 models)	Air	RPO	15 x 3.5	9000	Base	15 x 5.0	30,000	850
				or 12,000	RPO	15 x 6.0	34,000	976
TV70	Air	Base	15 <b>x</b> 3.0	7000	Base	15 x 7.0	18,500	630
					RPO	15 x 7.0	23,000	630
	Air	RPO	15 x 3.5	9000	Base	15 x 7.0	18,500	662
				or 11,000	RPO	15 x 7.0	23,000	662
TJ70	Air	Base	15 x 3.0	7000	Base	15 x 7.0	18,500	630
1770					RPO	16.5 x 6.0	22,000 (Single-	570
					RPO	16.5 x 6.0	Speed) 22,000 (2-Speed)	570
					RPO	16.5 x 6.0	23,000	570
	Air	RPO	15 x 3.5	9000 or 11,000	Base	15 x 7.0	18,500	662
					RPO	16.5 x 6.0	22,000 (Single- Speed)	602
					RPO	16.5 x 6.0	22,000 (2-Speed)	602
					RPO	16.5 x 6.0	23,000	602

#### **→SPECIFICATIONS**

		FRONT BRAKES			REAR BRAKES			TOTAL
SERIES	BRAKE TYPE	BASE OR RPO	SIZE (in)	AXLE CAPAC- ITY	BASE OR RPO	SIZE (in)	AXLE CAPAC- ITY	LINING AREA
TM70		Base	15 x 3.0	7000	Base	15 x 7.0	18,500	642
(03 Models)	Vacuum/				RPO	16 x 6.0	22,000	606
	Hydraulic	RPO	15 x 3.5	9000	Base	15 x 7.0	18,500	674
			;	or 11,000	RPO	16 x 6.0	22,000	638
TM70	Air	Base	15 x 3.0	7000	Base	15 x 7.0	18,500	630
(13 Models)					RPO	16.5 x 6.0	22,000 (Single- Speed)	570
					RPO	16.5 x 6.0	22,000 (2-Speed)	570
					RPO	16.5 x 6.0	23,000	570
	Air	RPO	15 <b>z</b> 3.5	9000 or 11,000	Base	15 x 7.0	18,500	662
			di 11,000	RPO	16.5 x 6.0	22,000 (Single- Speed)	602	
					RPO	16.5 x 6.0	22,000 (2-Speed)	602
					RPO	16.5 x 6.0	23,000	602
HM80	Air	Base	15 x 3.0	7000	Base	15 x 6.0	18,500	567
			ļ		RPO	15 x 7.0	22,000	630
					RPO	15 <b>x</b> 7.0	23,000	630
	Air	RPO	15 x 3.5	9000	Base	15 x 6.0	18,500	599
				or 12,000	RPO	15 x 7.0	22,000	662
					RPO	15 x 7.0	23,000	662
JM80	Air	Base	15 x 3.5	9000	Base	15 x 6.0	34,000	976
					RPO	15 <b>x</b> 7.0	38,000	1102
	Åir	RPO	15 x 3.5	12,000	Base	15 x 6.0	34,000	976
					RPO	15 x 7.0	38,000	1102
	Air	RPO	17.25 x 3.5	16,000	RPO	15 x 7.0	38,000	1129
TM80	Air	Base	15 x 3.5	9000	Base	15 x 7.0	18,500	662
		RPO		or 11,000	RPO	16.5 x 6.0	22,000 (Single- Speed)	602
					RPO	16.5 x 6.0	22,000 (2-Speed)	602
					RPO	16.5 x 6.0	23,000	602
WM80	Air	Base	15 x 3.5	9000	Base	15 <b>x</b> 7.0	34,000	1102
				or 11,000	RPO	16.5 x 6.0	38,000	982
		RPO	17.25 x 3.5	15,000	RPO	16.5 x 6.0	38,000	1009

#### **ENGINES**

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## TURBO-THRIFT 230 SIX PERFORMANCE (EL CAMINO MODEL)

#### **Basic Specifications**

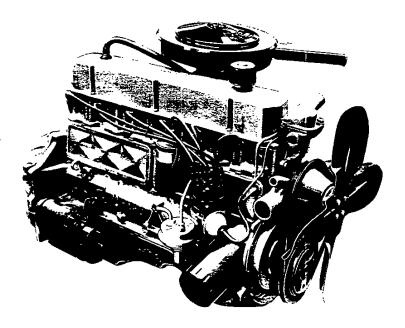
Engine type	Valve-in-head
Piston displacement	
Bore & stroke (nominal)	37/8" x 31/4"
Dry weight (with clutch)	465 lb
Compression ratio	8.5:1
Taxable horsepower (SAE)	
Carburetor type	1-barre

#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.

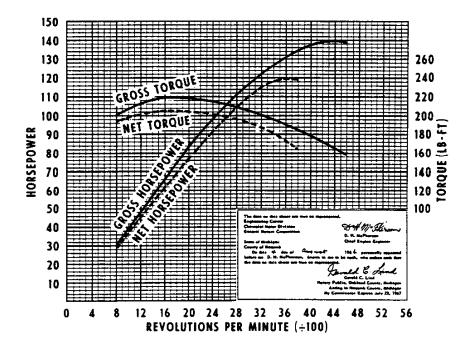


 Gross horsepower
 140 @ 4400 rpm

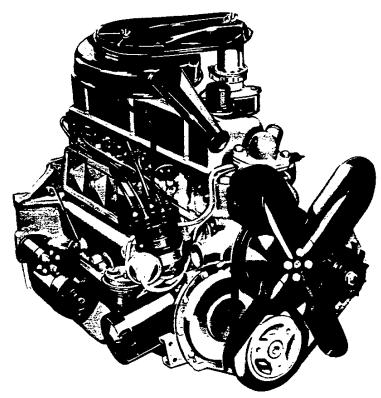
 Net horsepower
 120 @ 3600 rpm

 Gross torque, lb-ft
 220 @ 1600 rpm

 Net torque, lb-ft
 205 @ 1600 rpm



## HIGH TORQUE 230 SIX PERFORMANCE (P10 MODEL)



#### **Basic Specifications**

Engine type	Valve-in-head
Piston displacement	
Bore & stroke (nominal)	
Dry weight (with clutch)	
Compression ratio	
Taxable horsepower (SAE)	
Carburetor type	

#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60°F dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, Delcotron not charging and optimum spark advance.

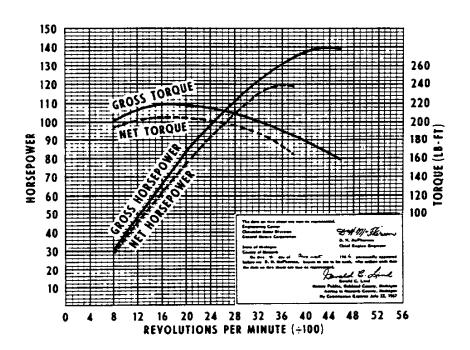
Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.

 Gross horsepower
 140 @ 4400 rpm

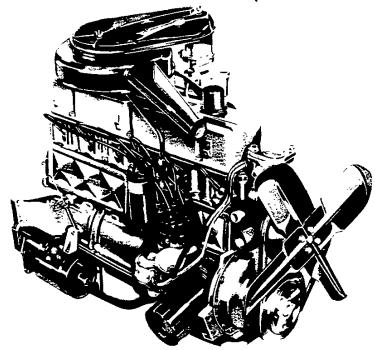
 Net horsepower
 120 @ 3600 rpm

 Gross torque, lb-ft
 220 @ 1600 rpm

 Net torque, lb-ft
 205 @ 1600 rpm



## HIGH TORQUE 230 SIX PERFORMANCE (G10-20 MODELS)



#### **Basic Specifications**

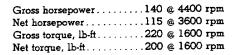
Engine type	Valve-in-head
Piston displacement	
Bore & stroke (nominal)	37%" x 31/4"
Dry weight (with clutch)	
Compression ratio	
Taxable horsepower (SAE)	
Carburetor type	l-barrel

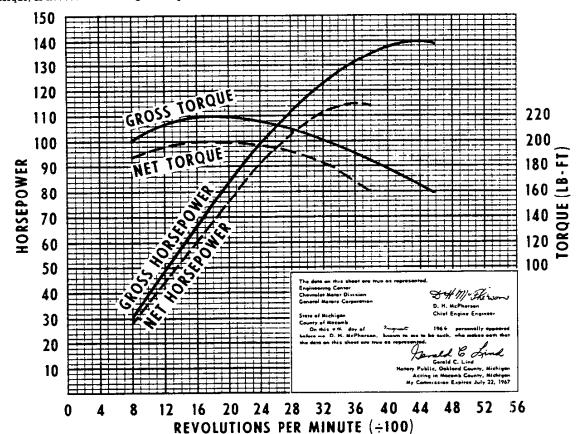
#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60°F dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, Delcotron not charging and optimum spark advance.

Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.





#### HIGH TORQUE 250 SIX PERFORMANCE

#### **Basic Specifications**

Engine type	Valve-in-head
Piston displacement	250 cu in
Bore & stroke (nominal) (in)	3.875 x 3.53
Compression ratio	8.5 to 1
Carburetor type	

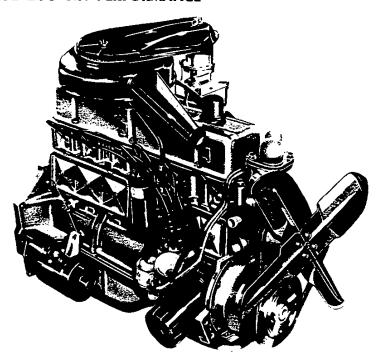
#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92° mercury and 60° F dry air.

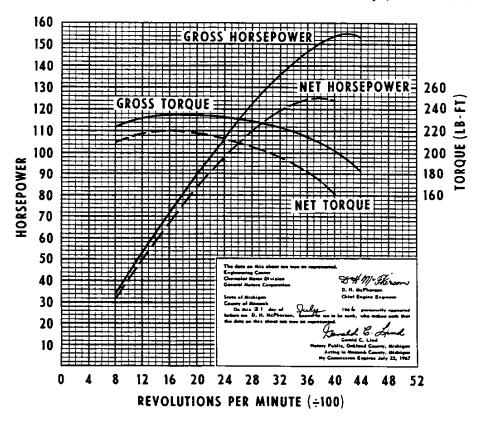
dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

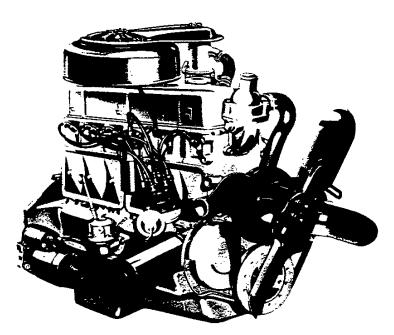
Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.



Gross horsepower 155	
Net horsepower	
Gross torque, lb-ft235	
Net torque, lb-ft	@ 1600 rpm



#### HIGH TORQUE 292 SIX PERFORMANCE



#### **Basic Specifications**

Engine type	. Valve-in-head
Piston displacement	292 cu in
Bore & stroke (nominal)	3%" x 4\%"
Dry weight (with clutch)	561 lb
Compression ratio	8.0 to 1
Taxable horsepower (SAE)	<i></i>
Carburetor type	l-barrel

#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

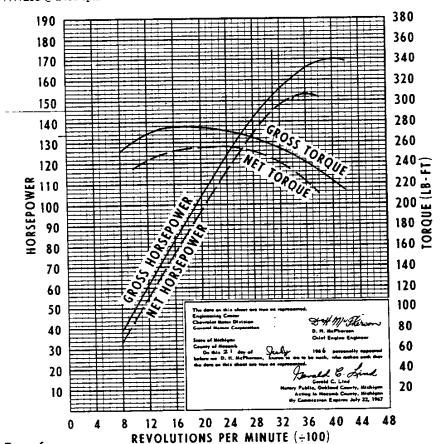
Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.

Gross horsepower 170 @ 4000 rpm

Net horsepower 153 @ 3600 rpm

Gross torque, lb-ft 275 @ 1600 rpm

Net torque, lb-ft 255 @ 2400 rpm



#### **ENGINE FEATURES**

Valve-in-head design—Inlet valves admit fuel mixture directly into cylinders, and exhaust valves allow burned gases to escape with a minimum of work-wasting restriction. Accessibility of valves makes these engines easy to service.

**Independently mounted valve rockers**—Each valve rocker is mounted on an individual ball pivot. Oil is fed through the hollow pushrods into the depressed tops of the valve rockers, thus assuring thorough pivot lubrication. Spill-over oil lubricates the valve stems.

Rotocoils for 292 engine—The 292 engine is fitted with Rotocoil exhaust valve rotators. This reduces build-up of deposits on the valve faces and stems, and increases valve life by as much as 300 per cent.

Regular grade fuel—No need for premium fuels with these high-efficiency engines—regular grade fuels will do the job. The high anti-knock characteristics of the combustion chamber assure full power with economical fuels.

**Precision bearings**—Connecting rod and main bearings are of the replaceable insert type. The inserts, made of specially selected bearing metals on tough steel shells, are precision fitted to main and connecting rod journals of the crankshaft.

Full crankshaft support—Bearings are used between every cylinder, a total of 7 bearings in the 230, 250 and 292 engines. Full crankshaft support reduces vibration and gives added durability. The 250 and 292 engines use a new design 12-weight crankshaft for new smoothness and improved efficiency. (See illustration.)

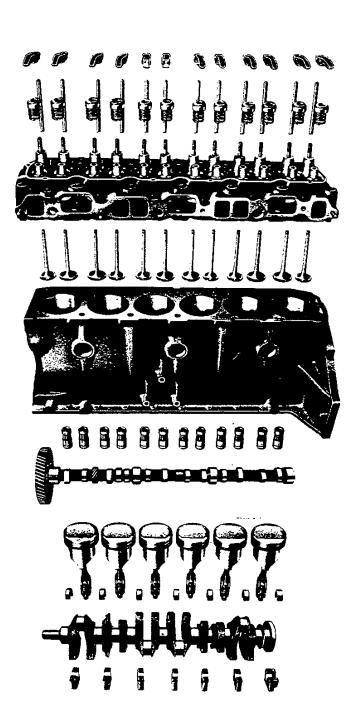
**Precision-cast cylinder block**—Precision casting techniques allow more efficient use of metal. Dead weight is kept to a minimum without sacrifice of strength in areas of high stress.

**Pressurized cooling**—Radiator cap keeps coolant under pressure. This permits coolant to operate at higher temperatures without boiling, thus giving greater cooling effectiveness and extra insurance against engine overheating.

Full-length water jackets—Coolant circulates the full length of the cylinder walls, keeping engine temperatures more uniform and reducing engine wear.

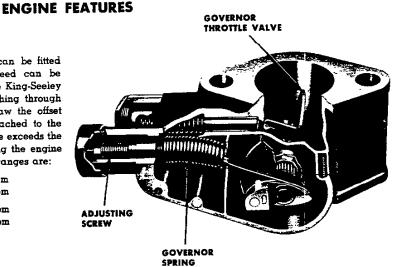
**Oiled-paper and oil-bath air cleaners**—Long engine life is assured by the effective action of oil-wetted and oil-bath air cleaners which remove harsh abrasive dust.

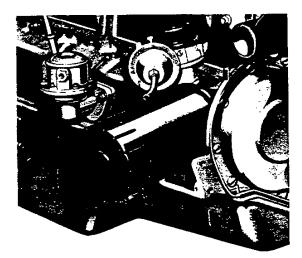
Positive ventilation systems—Engines are protected against acid- and sludge-forming vapors by engine ventilation systems which conduct crankcase vapors through the engine so they are expelled by the exhaust system.



250 Engine Shown

**Optional Governors**—The 250 and 292 engines can be fitted with governors on which the maximum engine speed can be adjusted within a certain range. These governors are King-Seeley velocity type (see diagram at right). The mixture rushing through the governor body from the carburetor tends to draw the offset throttle valve in the governor closed. The spring attached to the throttle valve resists closure until the volume of mixture exceeds the predetermined setting and the valve closes, restricting the engine rpm. Adjustment is simple and foolproof. The setting ranges are:

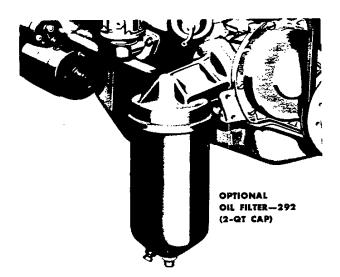




STD. OIL FILTER—292 (1-QT CAP)

Oil filters.—All in-line gasoline engines utilize a full-flow throw-away element oil filter as standard equipment.

Optional oil filter—Most Series 50 & 60 trucks with the 292 engine can be fitted with an optional 2-quart full-flow replaceable-element-type oil filter. This replaces the 1-quart filter used as standard equipment.



**Hydraulic valve lifters**—Both intake and exhaust valves have quiet no-adjustment hydraulic valve lifters that eliminate periodic tappet re-settings.

**Optional tachometer**—An electric tachometer is available optionally on most models.

Fuel filters—A fine mesh metal cloth filter in the fuel tank and a porous sintered bronze filter inside the carburetor inlet are included with all in-line engine applications to ensure protection for the engine's fuel system.

**Optional fuel filter** equipment is available. It provides a frame-mounted replaceable-element fuel filter to replace the mesh screen in the tank.

#### **SPECIFICATIONS**

	230 SIX (G10-G20)	230 SIX*	250 SIX	292 SIX
Basic Description		six-cylinder in-line	valve-in-head design	
Displacement (cu in)	230	230	250	292
Bore & Stroke (in)	31/8 x 31/4	31/8 x 31/4	3.875 x 3.53	31/8 x 41/8
Compression Ratio		8.5:1		8.0:1
Gross Horsepower @ rpm	140 @ 4400	140 @ 4400	155 @ 4200	170 @ 4000
Net Horsepower @ rpm	115 @ 3600	120 @ 3600	125 @ 3800	153 @ 3600
Gross Torque (lb-ft) @ rpm	220 @ 1600	220 @ 1600	235 @ 1600	275 @ 1600
Net Torque (lb-ft) @ rpm	200 @ 1600	205 @ 1600	220 @ 1600	255 @ 2400
Air Cleaner		· <u> </u>	ge for type & capacity	
			tt or copper-lead alloy	
Bearings, Camshaft		steet-packed pappi	n or copperseda anoy	
ID x Length in (Projected Area): Bearing 1 (front)		1.871 x .8	6 (1.61 sq in)	
Bearing 2			6 (1.61 sq in)	
Bearing 3			6 (1.61 sq in)	
Bearing 4			6 (1.61 sq in)	
Bearings, Connecting Rod (Crank end)			removable	
Material	steel-ho	icked babbitt or copper-		premium aluminu
		5 x .837	2.00 x .807	2.255 x .837
ID x Length (in)	2.10.		removable	2.200 2 .001
Bearings, Main		<del></del>		premium aluminu
Material	steel-Do	icked babbitt or copper	<del></del>	1 premium diaminu
End Thrust Taken by:  ID x Length (in) (Protected Ārea):			iring 7	
Bearing 1 (front)			(1.73 sq in)	
Bearing 2	2.3 x .75 (1.73 sq in)			
Bearing 3	2.3 x .75 (1.73 sq in)			
Bearing 4	2.3 x .75 (1.73 sq in)			
Bearing 5			(1.73 sq in)	
Bearing 6			(1.73 sq in)	
Bearing 7	2.3 x .76 (1.75 sq in)			
Camshaft		cast-	illoy iron	
Carburetor				
Туре		l-barre	l downdraft	
Make	Carter		Rochester	
Venturi ID (in)		1.343		1.625
SAE Flange Size (in)			1.5	
Choke Control		111	anual	
Coil, Ignition		Delc	о-Вешу	
Connecting Rods		drop-fe	orged steel	
Length (Center to Center) (in)		5.70		6.76
Crankshaft		nodi	ılar iron	
Cylinder Block		cast-	alloy iron	
Cylinder Head	cast-alloy iron; valve-in-head design			
Distributor	Delco-Remy; centrifugal & vacuum advance			
Filter, Fuel		mesh in fuel tank; sinter	ed bronze in carburetor	inlet
Filter, Oil		full-flow th	rowaway type	
Capacity (qt)	1	1	1	l⋆
Lubrication	Full-pressure system: direct pressure to main, connecting rod & camshaft bearings; pressure stream to cylinder walls & piston pins; pressure spray to timing gears; metered pressure and gravity flow to valve mechanism. See Owner's Guide for lubricant types.			
Oil Capacity (with filter change)		5 qts		6 qts
Piston Pins		chron	nium steel	
Diameter (in)		+	0.927	···

<sup>\*</sup>All except G10-G20

 $<sup>\</sup>star 2$ -qt replaceable element type available

#### **SPECIFICATIONS**

	230 SIX (G10-G20)	230 SIX+	250 SIX	292 SIX
Piston Rings		two compression, one o	il control ring per piston	
Upper Compression		cast iron; i	nside bevel	
Lower Compression		cast iron;	nside bevel	
Oil Control		multi-piece; steel	with chrome-plated OD	
Pistons	co	ıst-alloy aluminum; 3 rir	ıg grooves above piston j	oin
Weight	20.4 oz.	20.84	oz.	24.9 oz.
Plugs, Spark				
Model	AC-46N		AC-C44N	AC-C44N
Pump, Fuel			AC	· · · · · · · · · · · · · · · · · · ·
Pump, Oil		spur gear type driver	ı by distributor shaft	
Pressure (psi)	30-45 @ 1500 rpm		40-60 @ 2000 грт	
Capacity (gpm)	4.3 @ 2000 rpm		6 @ 2000 rpm	
Pump, Water				
Capacity		60 gpm @ 4400		70 gpm @ 4400
Bearing		permanently lubricated	double roll ball bearing	<u> </u>
Radiator		see Cooling Syst	em specifications	
Thermostat		Harris	on 180°	
Туре		p€	llet	
Timing, Ignition				
Crankshaft Position		4°	BTC	
Timing Mark Location		tab at harm	onic balancer	
Firing Order		1-5-3-6-2-4		
Timing, Valve				_
Inlet Opens	62° BTC	18° BTC	16° BTC	45° BTC
Inlet Closes	94° ABC	54° ABC	48° ABC	99° ABC
Exhaust Opens	92° BBC	52° BBC	46°30′ BBC	88° BBC
Exhaust Closes	63° ATC	20° ATC	17°30′ ATC	59° ATC
Valve Guides		integral	with head	
Valve Lifters		hydraulic		
Valve Mechanism	indiv	ridual steel stampings or	ball pivots; pushrod act	uated
Valves, Exhaust				
Face Coating	high-alloy steel aluminized			Cobalt-based alloy
Overall Length (in)	4.93	4.93 4.92		
Head Diameter (in)			.5	
Face Angle		45°		46°
Seat Angle		4	6°	
Lift (in)	33	50	.3880	.3350
Rotators		none	<del></del>	Rotocoil
Valves, Inlet				
Face Coating	no		<del></del>	ninized
Overall Length (in)			92	000
Head Diameter (in)	1,	1.72 1.875		
Face Angle			.5°	
Seat Angle	22	4 :50	.3880	.407
Lift (in)			<del></del>	
Ventilation, Crankcase	posit	ive*	positive	closed positive

<sup>\*</sup> All except G10-G20 \* Closed positive type on PS10-30 & 40 applications; also available as an RPO on 10-30 series.

<sup>•</sup> Positive type on CS10-30 applications.

## TURBO-FIRE 283 V8 PERFORMANCE (EL CAMINO MODEL)

#### **Basic Specifications**

Engine type	Valve-in-head
Piston displacement	283 cu in
Bore & stroke (nominal)	3%″ ϫ 3″
Dry weight (with clutch)	607 lb
Compression ratio	9.25:1
Carburetor type	2-barrel

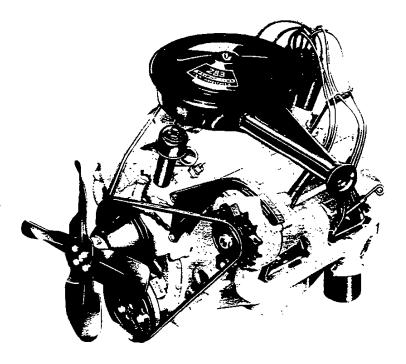
#### **Test Procedures**

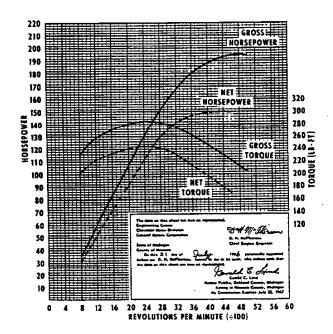
These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F

dry air.

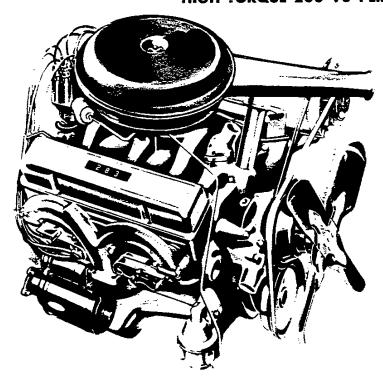
Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.





#### HIGH TORQUE 283 V8 PERFORMANCE



#### **→Basic Specifications**

Engine type	
Bore & stroke (nominal)	
Dry weight (with clutch)	
Compression ratio:	
Series 10-20-30	
Series 40	
Taxable horsepower (SAE)	<b>48.0</b>
Carburetor type	2-barrel

#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92° mercury and 60° F dry air.

dry air.

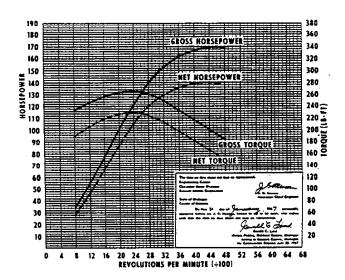
Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

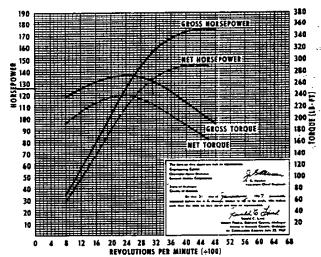
and optimum spark advance.

Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.

Gross horsepower	170	@	4600	rpm
Net horsepower Gross torque, lb-ft	140	6	4400	rpm
Gross torque, lb-ft	265	@	2400	rpm
Matterman 1h 4	230	6	2400	~~~

Gross horsepower 175	@ 4600 rpm
Net horsepower 145	@ 4400 rpm
Net horsepower	@ 2400 rom
Net torque, lb-ft	@ 2400 rpm





## →TURBO-FIRE 327 V8 PERFORMANCE (EL CAMINO MODEL)

#### **Basic Specifications**

Engine type	Valve-in-head
Piston displacement	327 cu in
Bore & stroke (nominal)	4.0" = 31/4"
Compression ratio 275 HP	10 <b>.5:1</b>
325 HP	
Carburetor type	

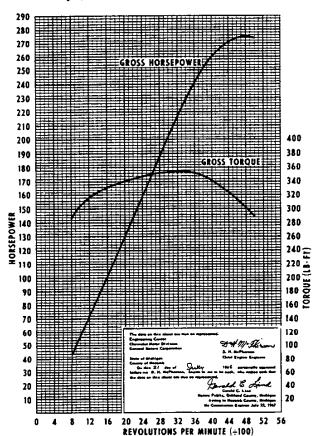
#### **Test Procedures**

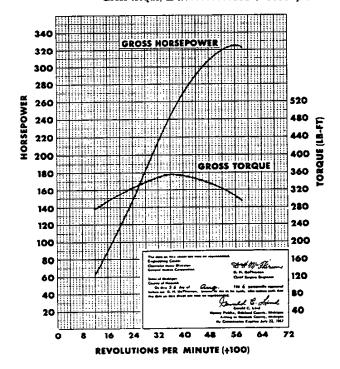
These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60°F dry air.

dry air.

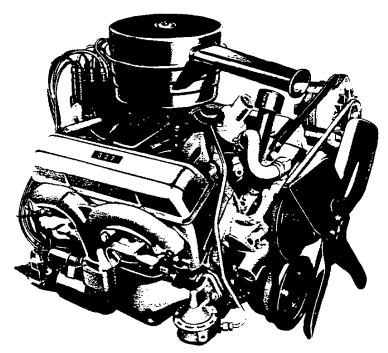
Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.





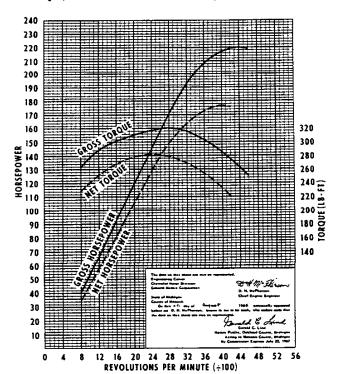


#### HIGH TORQUE 327 V8 PERFORMANCE



Series 10-30

Gross horsepower	.220	6	4400	rpm
Net horsepower	.177	@	4000	rpm
Gross torque, lb-ft	.320	@	2800	rpm
Net torque, lb-ft	. 283	@	2400	rpm



#### **Basic Specifications**

Engine type	Valve-in-head
Piston displacement	327 cu in
Bore & stroke (nominal)	4" x 31/4"
Dry weight (with clutch)	622 lb
Compression ratio: 220 hp	
185 hp	
Carburetor type: 220 hp	4-barrel
185 hp	

#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

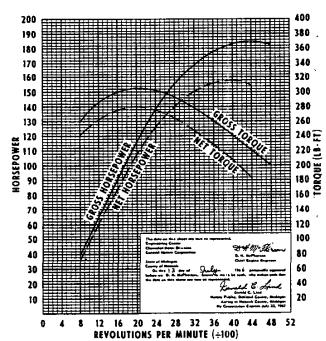
dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

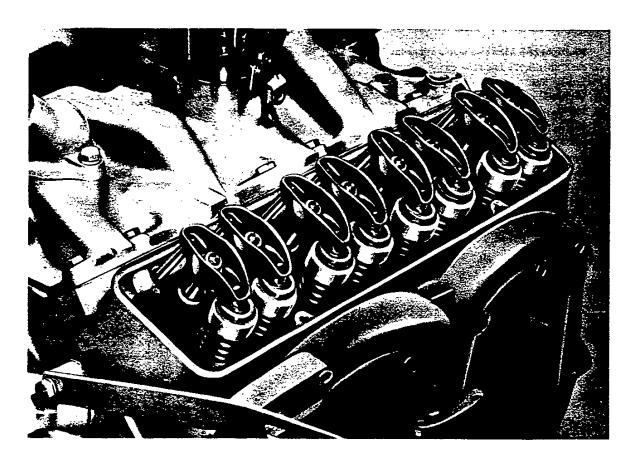
Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.

#### Series 50-60

Gross horsepower	185 @ 4400 rpm
Net horsepower	158 @ 4000 rpm
Gross torque, lb-ft	
Net torque, lb-ft	280 @ 2000 rpm



#### **→ENGINE FEATURES**



Valve-in-head design—Inlet valves admit fuel mixture directly into cylinders, and exhaust valves allow burned gases to escape with a minimum of work-wasting restriction. Accessibility of valves simplifies maintenance.

**Independently mounted valve rockers**—Each valve rocker is mounted on an individual ball pivot. Oil is fed through the hollow pushrods into the depressed tops of the valve rockers, thus assuring thorough pivot lubrication. Spill-over oil lubricates the valves.

Full-pressure Inbrication—Assures proper lubrication of all moving parts. Bearing temperatures are kept low for longer life.

Full-flow oil filter—All engines are equipped with high-efficiency replaceable-element oil filters that increase engine life. (One-quart capacity on the 283 and 2-quart on the 327).

**High-alloy steel inlet valves**—Tough high-alloy steel gives extra durability. Valves on the 327 engine have aluminized faces to retard the formation of deposits, thereby increasing valve life and reducing maintenance requirements.

Long-life exhaust valves—The 327 engine has valves faced with a cobalt-based alloy for long valve life. Aluminized head retards build-up of deposits, and chrome-plated stem reduces scuffing and wear. Aluminized exhaust valve faces on the 283 engine with applications in the 40 Series slow the formation of deposits, keep valves cleaner and longer lived.

Retocoil valve rotators—All 283 V8's when used in 40 Series trucks are fitted with Rotocoil exhaust valve rotators. These reduce build-up of deposits on valve faces and stems.

**Hydraulic valve lifters**—Both intake and exhaust valves have quiet, no-adjustment hydraulic valve lifters.



#### 283 & 327 V8 ENGINES

#### **ENGINE FEATURES**

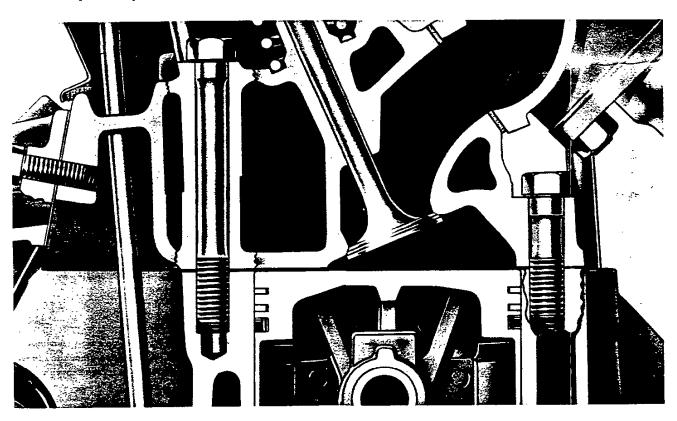
Bypass cooling—Thermostatic control of coolant flow during warm-up of the 327 engine brings it quickly up to proper running temperature and top operating efficiency.

Multiple fuel filters—A fine-mesh metal cloth filter in the fuel tank and a porous bronze filter inside the carburetor are included in 283 engine applications. The 327 engine has a replaceable element filter in the fuel line and wire mesh screen in the carburetor for added protection and dependable operation.

Full-jacket cylinder cooling—Coolant circulates completely around the cylinder walls to keep engine temperatures more uniform and reduce engine wear.

#### Crankcase ventilation systems-

Engines are protected against acid- and sludge-forming vapors by positive-type ventilating systems. Crankcase vapors are forced through the engine and are expelled by the exhaust system. A closed positive type system is standard on the 327 and is used on the 283 when used in Series 40 trucks.



**Roller timing chain**—The 327 engine uses a quiet roller timing chain which has a long trouble-free life.

**Precision distributor adjustment**—A convenient access door in the distributor cap permits precision adjustment of breaker point gap while engine is running. This greatly simplified maintenance procedure assures more dependable ignition.

Air cleaners—Efficient air cleaners filter harsh, abrasive dust out of the intake air to protect the engine from excessive wear.

**Optional governor**—The 283 engine can be fitted with a velocity-type governor on which the maximum engine speed can be adjusted within a certain range. The two available ranges are: 2400 rpm to 3600 rpm and 3000 rpm to 3800 rpm. See Page 8 for a description of a velocity-type governor.

**Optional tachometer**—An electric tachometer reading up to 5000 rpm is available for all engines. With the 283 engine on Series 10-30 trucks, a different instrument panel is included to accommodate the tachometer. This panel also employs an ammeter, engine temperature and oil pressure gauges instead of the indicator lights used on the standard instrument panel.

### 283 & 327 V8 ENGINES

#### **→SPECIFICATIONS**

		High T	orque			Turbo-Fire	
	283	V8	327	V8	283 <b>V</b> 8	327	V8
Basic Description							
Displacement (cu in)	283 327 283 327						
Bore & Stroke (in)	37/8	<b>x</b> 3	4 :	E 31/4	3% x 3	4 x	31/4
Compression Ratio	8.25:1	9.0:1	8.0:1	8.5:1	9.25:1	10.5:1	11.0:1
Gross Horsepower @ rpm	170 @ 4600	175 @ 4600	185 @ 4400	220 @ 4400	195 @ 4800	275 @ 4800	325 @ 560
Net Horsepower @ rpm	140 @ 4400	145 @ 4400	158 @ 4000	177 @ 4000	150 @ 4400	355 @ 3200	355 @ 360
Gross Torque (lb-ft) @ rpm	265 @ 2400	275 @ 2400	305 @ 2000	320 @ 2800	285 @ 2400		
Net Torque (lb-ft) @ rpm	230 @ 2400	240 @ 2400	280 @ 2000	283 @ 2400	245 @ 2400	_	-
Air Cleaner			see each mod	el page for ty	pe & capacity		
Bearings, Camshaft			ste	el-backed bal	obitt		
ID x Length (in) (Projected Ārea):					•		
Bearings 1 (front), 2, 3, 4				x .74 (1.384			
Bearing 5			1.871	x .94 (1.758	sq in)		
Bearings, Connecting Rod		•					
(Crank End)			precision	removable			
Material	steel-k	acked	premium	aluminum	steel-backed	prem	
	bal	obitt	L		babbitt	alum	inum
ID x Length (in)				x .82			
Bearings, Main			precision	removable			
Material: Bearings 1-4		oacked	premium	aluminum	steel-backed	pren	
	ba	bbitt	L		babbitt	alum	inum
Bearing 5			ste	el-backed bal	bbitt		
End Thrust taken by:				Bearing 5			
ID x Length (in) (Projected Area):	1	2.3 x .76 (1.73 sq in)					
Bearings 1, 2, 3, 4				x 1.17 (2.71 :			
Beaing 5 (in)	<del></del>	<del></del>		cast-alloy iro	<del></del>		
Camshaft				cast-alloy fro			
Drive Chain Type	<del></del>		DRI	46	ocker		
No. of Links							
Carburetor	ļ	2	2	downdraft typ   4	2	1	1
No. of Barrels		4		1*	1 4	J	· · ·
Make	1	.09	1.09	1.09, 1.25	1.09	1.25,	1.56
Venturi ID (in)	<del></del>	.25	1.05	1.50	1.25		50
SAE Flange Size (in)	<del>                                     </del>	.23		1.50	1.25	automatic	-
Choke Control		mq:	iudi	Dalas Barra	<u> </u>	dulomene	
Coil, Ignition				Delco-Remy		- :-11:	<del></del>
Current Draw		4 amp			mp with engin	e lanng	
Connecting Rods			forged	steel; I-beam	section		
Length (Center to Center) (in)	ļ. <u></u>			5.70			
Crankshaft			nod	ular or forged			
Cylinder Block				cast-alloy iro			
Cylinder Heads				iron; valve-in-	•		
Distributor	l		Delco-Remy; c	entrifugal & v	acuum advan	ce	
Filter, Fuel							
In Tank		esh	non	е		mesh	
Intermediate	n	one	Purolator	, frame mtd		none	
In Carburetor	porou	s bronze	SC	геел		рогоиз вголзе	
Filter, Oil			full-flov	w replaceable	element		
Capacity (qts)		1		2	l i		
Lubrication	Full-pressure system: direct pressure to valve lifters and main, connecting rod & camshaft bearings; pressure stream to cylinder walls & piston pins; pressure spray to timing sprockets and chain; metered pressure and gravity flow to valve mechanism. See Owner's Guide for lubrican types.						
Oil Capacity							
(With Filter Change)		5§	₹	j	5	};	5
Piston Pins	1		tubular, ha	irdened chroi	ne-alloy steel		
Diameter (in)	i			.927		,	
Retention	<del>                                     </del>		- h-ik	fit in connec	ating rod		

<sup>•</sup> Rochester, Carter, Holley used

<sup>§6</sup> qts on Series 40 with filter change

## 283 & 327 V8 ENGINES

#### **SPECIFICATIONS**

		High Torque		Turbe	-Fire	
	283 V8	327 V8	327 V8	283 <b>V</b> 8	327 V8	
Piston Rings		two compression	n; one oil control ri	ing per piston		
Compression		two thickwall; inside bevel				
Oil Control		two chrome-faced rails; one spacer				
Piston		cast alum	inum alloy with ste	el struts		
Head	flat	sum	)	flat	sump	
Skirt	open	solie	d	open	solid	
Weight (oz)	20.42	23.4	16	20.3	21.6	
Plugs, Spark			AC; 14mm			
Model	AC	C4	4	45	44	
Pump, Fuel			AC			
Pump, Oil		spur-gear ty	pe, driven by distri	butor shaft		
Pressure (psi)		30	) @ 1170-1200 грш	<u> </u>		
Capacity (gal/min)			4.22 @ 1200 rpm			
Pump, Water		centrifug	al-type, driven by	fan belt	· <del></del>	
Capacity (gal/min)	54 @ 4200 rpm	75 @ 400	00 rpm	54 @ 4400 rpm	57 @ 4400 rps	
Lubrication			ntly lubricated and	i sealed		
Thermostat			Harrison 180°			
Туре			pellet			
Timing, Ignition	4° BTDC	2° BT	TDC	4° BTDC	8° BTDC	
Crankshaft Position						
Timing Mark		on	harmonic balance	er		
Firing Order		1-8-4-3-6-5-7-2				
Timing, Valve		·				
Inlet Opens	12° 30′ BTC					
Inlet Closes		57° 30′ ABC				
Exhaust Opens		54° 30′ BBC				
Exhaust Closes			15° 30′ ATC			
Valve Guides			ast integral in head	<u>d</u>		
Valve Lifters			hydraulic			
Valve Mechanism		individual rocker a	irms on ball pivots;	pushrod actuated		
Valves, Exhaust			high-alloy steel			
Face Coating	none*	cobalt-ba	sed alloy	alun	inized	
Overall Length (in)			4.92			
Head Diameter (in)			1.50	1	T	
Face Angle	45°	46		45°	46°	
Seat Angle			46°	7 200	2007	
Lift (in)	.398■	.39		.398	.3987	
Rotators	(Series 40 only)	Rotocoil Rotocoil none (Series 40 only)				
Valves, Inlet			high-alloy steel			
Face Coating	none	alumi	nized	n	one	
Overall Length (in)			4.91			
Head Diameter (in)			1.72			
Face Ängle			45°	<del></del> -		
Seat Angle		46°			1	
Lift (in)	.398	39	87	.398	.3987	
Ventilation	positive ★	closed p	positive	po	sitive	

<sup>\*</sup>Aluminized on Series 40

<sup>★</sup>Closed positive on Series 40

<sup>■.3336</sup> on Series C40

#### →HIGH TORQUE 366 V8 PERFORMANCE

#### **Basic Specifications**

Engine type	Valve	-in-head
Piston displacement	<b>. 3</b> (	36 cu in
Bore & stroke (nominal)	. 3.9375′	× 3.76"
Dry weight (with clutch)		883 lb
Compression ratio		8.0 to 1
Taxable horsepower (SAE)		49.56
Standard carburetor		2-barrel
Optional carburetor		4-barrel

#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

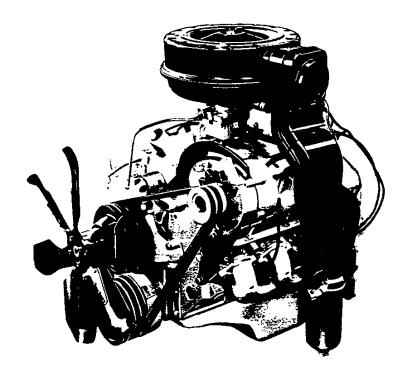
Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.

 366 V8 w/2-Barrel Carburetor

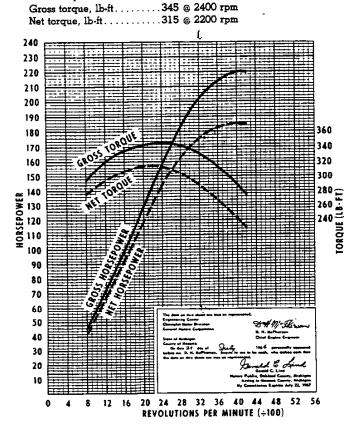
 Gross horsepower
 220 @ 4000 rpm

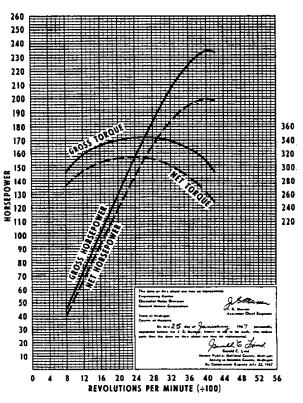
 Net horsepower
 185 @ 4000 rpm



#### 366 V8 w/4-Barrel Carburetor

Gross horsepower235	@	4000 грш
Net horsepower	@	4000 rpm
Gross torque, lb-ft345	@	2600 грл
Net torque, lb-ft315	@	2400 rpm





## TURBO-JET 396 V8 PERFORMANCE (EL CAMINO MODELS)

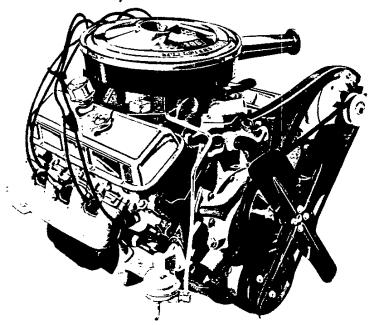
#### **Basic Specifications**

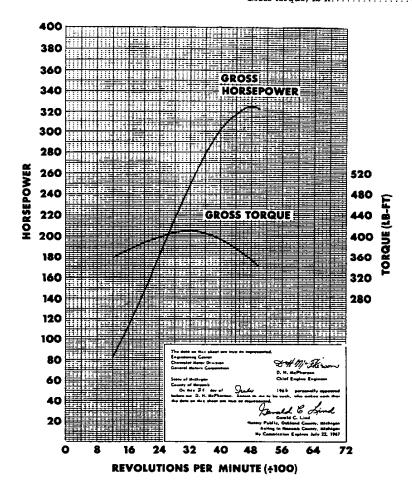
Engine type	Valve-in-head
Piston displacement	
Bore & stroke (nominal) (in)	4.094 x 3.76
Compression ratio	10.25:1
Carburetor type	4-barrel

#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92 mercury and 60°F dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, Delcotron not charging and optimum spark advance.





## TURBO-JET 396 V8 PERFORMANCE (EL CAMINO MODELS)

#### **Basic Specifications**

Engine type	Valve-in-head
Piston displacement	396 cu in
Bore & stroke (nominal)	4.094" x 3.76"
Compression ratio	10.25:1 (360 hp)
-	11:1 (375 hp)
Carburetor type	4-barrel

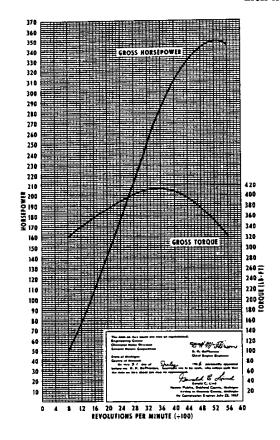
#### **Test Procedures**

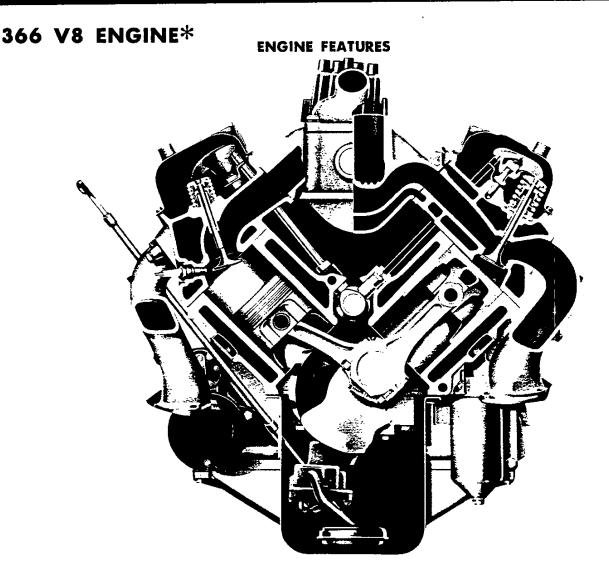
These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

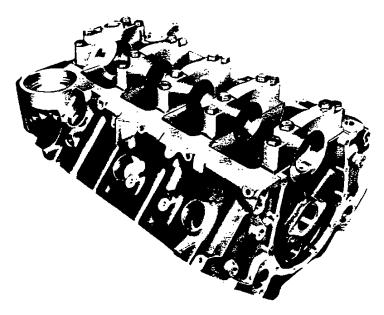
Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.



#### RPO L34







New valve-in-head design.—These heads feature larger, straighter and smoother ports with valves tilted toward the ports for optimum induction and exhaust flow. The modified wedge combustion chambers have the intake and exhaust valves placed alternately so that excessive heat will not develop from adjacent exhaust valves. The valves are also tilted away from the cylinder's vertical axis so as to cause the valve head to move away from the cylinder wall when opening. This allows more mixture to enter and leave the cylinder during each cycle.

**High volumetric efficiency** assures higher torque over broader RPM ranges for better performance.

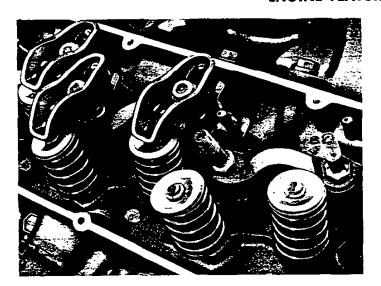
**Heavy-duty premium components** throughout the engine add to the durability of the 366 V8. All the parts are designed for rugged long-lasting truck service.

New cylinder block and crankshaft—The 366 V8 engine features four-bolt heavy-duty main bearing caps. Heavier bearing support bulkheads in the lower block structure and heavier cylinder walls contribute to the rigidity and strength of the new design. Crankshaft main-bearing area is increased through the use of larger journal diameters on the five-main-bearing crankshaft. The crankshaft is made of sturdy forged steel with induction-hardened journals.

\* The 396 V8 (El Camino model only) is similar in basic design to this engine but different in several important areas. For specifications on the 396 V8 see pages 24 and 25 or consult Passenger Car Finger-Tip Facts book if more data is required.

### 366 V8 ENGINE\*

#### ENGINE FEATURES



Independently mounted valve rockers—Each rocke is mounted on an individual ball pivot which is secured by a stud threaded, rather than pressed, into the head Pushrod motion is controlled by stamped steel guides held under the rocker arm studs. Each rocker receives oil under pressure from the hollow pushrod to lubricate the bal pivot. Valves are lubricated by spillage from this source

High-alloy steel intake valves—Tough high-alloy stee gives extra durability and toughness. Stems are chrome plated and the tips are hardened for long wear. The valve seats are integral with the cylinder head while the valve guides are cast iron and replaceable.

Exhaust valves—Made of austenitic steel and faced with a cobalt-based alloy, the stems are chrome-plated and silichrome-tipped for maximum durability. Hardened stee exhaust valve seat inserts resist high temperatures and the removable cast iron valve guide is in contact with the coolant in the head, improving heat transfer.

All valves utilize polyacrylate umbrella-type oil shield to control stem and guide lubrication.

A new air induction system is featured on the 366 V8. The air cleaner is a two-element type for greater efficiency and capacity. The primary or outer element is an oil-wetted polyurethane band wrapped around a secondary oil-wetted paper element. (See illustration at right.)

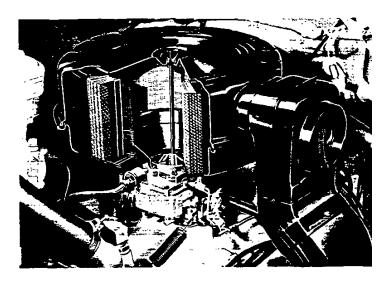
The inlet air temperature is controlled by a thermostatic valve which automatically selects either air warmed by the exhaust manifold heat stove or cooler air from a high-level outside air intake grille located on the left side of the hood on Series 60 conventional cab models. This outside air intake valve starts to open at 80° and is fully open at 100°.

- ➤ The standard carburetor on the 366 V8 is a Rochester two-barrel and it incorporates a vacuum spinner type governor with a full-load setting of 4000 rpm. An optional four-barrel carburetor is also available.
- → A dual exhaust system is used with the 366 engine on ME/TESO & ME/TE60 models. Other models have a single exhaust system. Dual exhausts are included on CE50 & CE60 models when the optional 4-barrel carburetor is ordered. School bus models with the 366 engine are equipped with a single exhaust system.

Pistons are heavy-duty plated aluminum castings with four-ring design (three compression, one oil control). The top compression ring groove is machined in an insert of alloy iron, cast in and bonded integrally with the piston for strength. All piston rings are phosphate coated for oil retention and corrosion-resistance. They are also chrome-plated for long wear.

Connecting rods are heavy I-beam section drop-forged steel with reinforcements in high stress areas. Use of harder steel nuts and bolts in the rod lower end also adds greater strength.

The cumshaft is gear-driven by helical gears for maximum efficiency and durability.



The Inbrication system features a full-flow two-qua oil filter and a newly designed oil pump. The new pum lessens damaging forces inside itself for greater durability and eliminates vibrations which could cause wear. To pump fills the main gallery, which in turn feeds the car shaft, main and connecting rod bearings and valve lifter by direct pressure through drilled passages. The valtarin is lubricated by hollow pushrods which receive the oil from the valve lifters.

The cooling system is of the series-flow type ar features a high-output water pump. The coolant movirom the front of each cylinder bank to the rear, the upward into the cylinder heads and forward to the therm stat outlets. Large passages and full-length water jacks assure uniform cooling and small temperature variation. The flow through the cylinder heads is designed to car away excess heat from areas around spark plugs, poind valve guides. The exhaust valve guides are exposto direct coolant flow for maximum cooling effect.

\*The 396 V8 (El Camino model only) is similar in basic design to this engine but different in several important areas. F specifications on the 396 V8 see the next two pages of specifications or consult Passenger Car Finger-Tip Facts book more data is required.

→Indicates change

## 366 V8 & 396 V8 GASOLINE ENGINES

#### **→SPECIFICATIONS**

	366	V8	396 V8 (325 HP)	396 V8 (350 HP)
Basic Description			V8; valve-in-head design	<u> </u>
Displacement (cu in)	30	56	3:	96
Bore & Stroke (in)	3.9375	x 3.76	4.094	x 3.76
Compression Ratio	8.0:1		10.	25:1
Gross Horsepower @ rpm	220 @ 4000	235 @ 4000	325 @ 4800	350 @ 5200
Net Horsepower @ rpm	185 @ 4000	200 @ 4000	_	
Gross Torque (lb-ft) @ rpm	345 @ 2400	345 @ 2600	410 @ 3200	415 @ 3400
Net Torque (lb-ft) @ rpm	315 @ 2200	315 @ 2400		
Air Cleaner	two-st	age *	oil-wetted	l paper**
Bearings, Camshaft			steel-backed babbitt	popos
ID x Length (projected area)			#1-4, 1.609—#5, 1.759	
Bearing 1 (front), 2, 3, 4 (in)			1.8712 x .860	
Bearing 5 (in)			1.8712 x .940	
Bearings, Connecting Rod		<del></del>	precision removable	<del></del>
Material			premium aluminum	
ID x Length (in)			2.20 x .857	
Bearings, Main			precision removable	
Material 1-4	<del></del>			
5	1	sintered	premium aluminum l-copper nickel-backed babbitt (	on steel
End Thrust			taken by Bearing 5	
ID x Length (projected area)				
Bearing 1 (front), 2, 3, 4 (in)			2.75 x .992 (2.7290 sq in)	
Bearing 5 (in)			2.75 x 1.2525 (3.446 sq in)	
Camshaft			cast-alloy iron	
Drive	ge		che	
Carburetor	30		downdraft type	
No. of barrels	two	four		
Make	Rochester 2G	1001	for	
Venturi ID (in)	1.6875		Hol Primary NOS G	
SAE Flange Size (in)	1.50	- <u>-</u>	Primary 1.25; So	
Choke Control	manual	<del></del>	1,5	
Coil, Ignition	Indiad:		Delan Barr	nanc
Current Draw (amperes)	·	4.0	Delco-Remy	
Connecting Rods	<del></del>	4.0-	engine stopped; 1.8—engine id	ling
Length (center to center) (in)			forged steel; I-beam section	
Crankshaft		:th. :- 1	6.135	<del></del>
A1 GILLOSI GI	forged steel with hardened main	a rod journals	forged	steel
Cylinder Block		, , , , , , , , , , , , , , , , , , ,	cast-alloy iron	<del></del>
Cylinder Heads	<u> </u>	CO	st-alloy iron; valve-in-head design	<del></del>
Distributor			elco-Remy; centrifugal advance	
Fan	six-blade		four-blade—171/3"	
Filter, Fuel	frame-mounte		plastic straine	r in goe took
	screen in car		and sintered bron	
Filter, Oil	2-gt ful	l-flow	l-qt ful	<del></del>
Governor	Delco-	Remy	nor	
Full Load Setting	4000	rpm		<del></del>
Lubrication	Full-pressur pressure str	ream to cylinder	pressure to rod, main and camsh walls and piston pins; centrifu metered pressure to valve mech	cally ailed from camebalt
Oil Capacity (with filter change)	7 q		5 q	
Pistons '				
Material			cast alumi	num alloy
Head	flat top with v	alve pocket	domed	<del></del>
Skirt	slipper type			_ <del></del>
Weight (oz)	32			-/.F

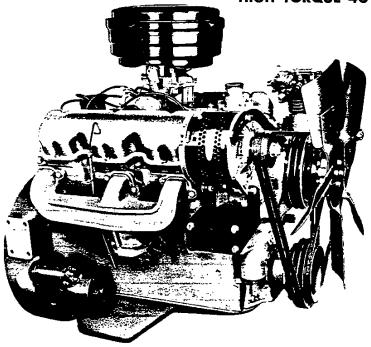
<sup>\*</sup>Primary: oil-wetted polyurethane; secondary: oil-wetted paper. Thermostatically controlled inlet.
\*\*Single air horn on 325-hp; full-circle intake on 360-hp & 375-hp.

## 366 V8 & 396 V8 ENGINES

## → SPECIFICATIONS

	366 V8	396 V8 (325 <b>HP</b> )	396 V8 (350 HP)
Piston Pins		chromium steel	
Diameter (in)		9.895	
Retention		locked in connecting rod	
Piston Rings	3 compression; 1 oil control	2 compression;	l oil control
Compression Rings		kwall barrel-faced cast-alloy iro	on
Oil Control Ring	one-piece; c.i., chrome plated w/coil spring expanders	multi-píece; 2 rai	ls and 1 spacer
Plugs, Spark		AC 14mm	
Model	C42N; long reach	AC4	3N
Pump, Fuel		AC; mechanical diaphragm	
	geo	ar type; driven by distributor sho	aft
Pump, Oil	40-55 @ 2000 rpm	50-75 @ 2000 rpm	
Pressure (normal) (psi)	6 @ 2000	4.3 @ 2000	
Capacity (gal/min @ rpm)	0 @ 2500	centrifugal; belt driven	<del></del>
Pump, Water	91 0 4000	82 @	5200
Capacity (gal/min @ rpm)	81 @ 4000	le-row ball; permanently lubrice	
Bearing			
Radiator		ee Cooling System Specification	
Thermostat	Dole 180°	18	0,
Туре		Pellet	
Timing, Ignition			
Crankshaft Position	8° BTC @ 700 rpm	4° @ 500 rpm	4° BTC @ 550 rpm
Timing Mark Location	on harmonic balancer		torsional damper
Firing Order		1-8-4-3-6-5-7-2	
Timing, Valve			
Inlet Opens (°BTC)	46	40	56 114
Inlet Closes (°ATC)	90	102	114
Exhaust Opens (°BTC)	86	87 55	62
Exhaust Closes (°ATC)	50		02
Valve Guides		cast-alloy iron inserts	
Valve Lifters		hydraulic	mechanical
Valve Mechanism	ball & s	stud mtd rocker arms; pushrod o	actuated
Valves, Exhaust		high-alloy steel	
Face Coating		aluminized	
Overall Length (in)	5.235	5.	.35
Head Diameter (in)	1.655		1.71
Face Angle		45°	
Seat Angle		46°	
Lift (in)	.399	.398	.480
Rotators			
Valves, Inlet		alloy steel	
Face Coating		aluminized	
Overall Length (in)	5.115	5.	225
Head Diameter (in)	1.84	2.	065
Face Ångle	45°		
Seat Angle		46°	1
Lift (in)	.399	.398	.461
Ventilation, Crankcase	po	sitive	closed positive

#### HIGH TORQUE 401 V6



# Gross horsepower .237 @ 4000 rpm Net horsepower .210 @ 3700 rpm Gross torque, ib-ft .372 @ 1600 rpm Net torque, lb-ft .348 @ 1600 rpm

#### **Basic Specifications**

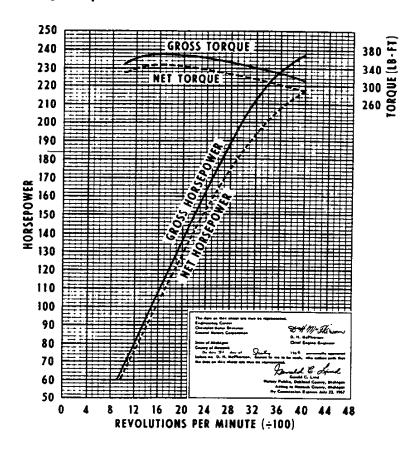
Engine type	. Valve-in-head
Piston displacement	401 cu in
Bore & stroke (nominal)	4.87" x 3,58"
Dry weight	880 1Ь
Compression ratio	<b>. 7.5</b> :1
Taxable horsepower (SAE)	57.04
Carburetor type	2-barrel

#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92° mercury and 60° F dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.



#### **Basic Specifications**

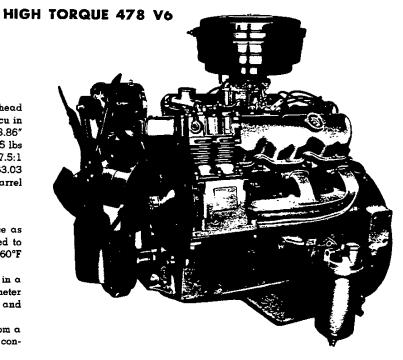
Engine type	Valve-in-head
Piston displacement	
Bore & stroke (nominal)	
Dry weight	925 lbs
Compression ratio	7.5:1
Taxable horsepower (SAE)	63.03
Carburetor type	

#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92° mercury and 60°F dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.

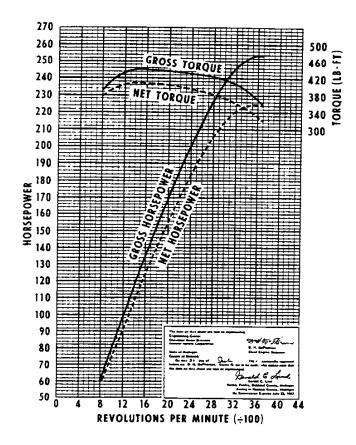


 Gross horsepower
 .254 @ 3700 rpm

 Net horsepower
 .225 @ 3400 rpm

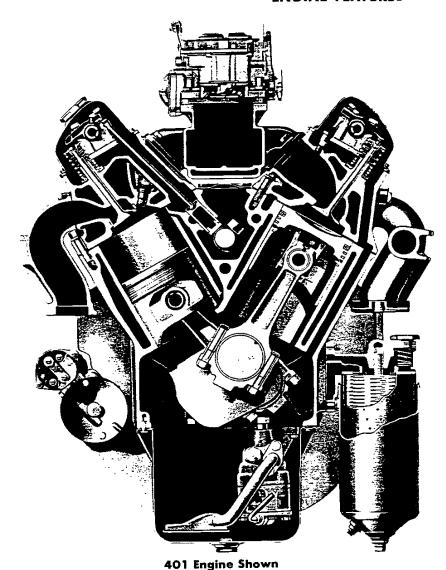
 Gross torque, lb-ft
 .442 @ 1400 rpm

 Net torque, lb-ft
 .410 @ 1400 rpm



### 401 & 478 V6 ENGINES

#### **ENGINE FEATURES**



#### **GENERAL DESIGN**

Valve-in-head 60°V design engines are premium-built truck power plants. Their "oversquare" design with large bore and short stroke cuts power-robbing friction to a minimum while permitting freer breathing and cooler operation. High torque is available over a broader range due to high volumetric efficiency; yielding more work per fuel dollar. Heavy-duty components are utilized wherever they add to durability. High-powered cooling and lubrication systems assure cooler, longer lasting operation by averting overheating or metal-to-metal contact. All the various components are either precision-fitted to exacting tolerances or designed for loads in excess of any they will ever encounter in service.

Crankcase and block are cast in one piece from fine-grain chromium-nickel alloy iron, forming a heavy-duty rigid unit. The cylinder banks are offset or staggered for maximum strength configuration. The block skirt extends three inches below the crankshaft center line to add extra strength to the main bearing caps which are fitted into broached grooves in the skirt. All cylinder bores are honed and lapped to a finish designed for proper

Connecting rods are I-beam design of drop-forged carbon steel, balanced to exacting tolerances.

**Crankshafts** have four heavy main journals and six rod journals spaced evenly at 60° intervals. They are made from drop-forged carbon steel and feature "Tocco" hardened journals.

**Pistons** are heavy-duty permanent-mold aluminum castings with an integral cast-in steel band for expansion control. Four-ring design (three compression, one oil control) assures excellent oil control and better compression sealing. The upper ring groove is machined in the steel insert for maximum durability.

Cylinder heads are cast of fine-grain chromium-nickel alloy iron to ensure against distortion or warpage. The wedge-shaped combustion chambers are fully machined to a smooth finish for closer regulation of compression ratio between cylinders. Short individual intake and exhaust ports contribute to the high volumetric efficiency and smooth flow of gases. Spark plugs are located on the upper side of the head for easier servicing.

Closed positive crankcase ventilation system flushes harmful fumes up to the combustion chambers where they are burned.

lubrication at all speeds.

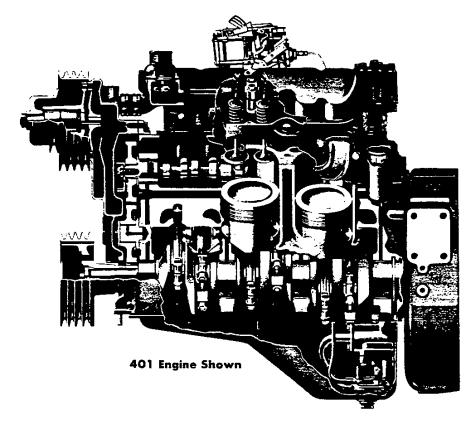
### 401 & 478 V6 ENGINE!

#### **ENGINE FEATURES**

**Hydraulic governor** is housed in the oil pan and operates on the oil pump pressure. When the pressure reaches a predetermined point, oil passes to a diaphragm in the carburetor assembly which operates the throttle plates. Virtually tamperproof, it can be easily reset in the shop.

The cooling system has a high-capacity centrifugal-type water pump which circulates large quantities of coolant at high velocities around the full length of the cylinder bores and around valve guides and seats in the heads. The high velocity of the coolant assures proper cooling and retards formation of deposits in the water jacket.

The lubrication system features a high-output rotor-type oil pump. All oil is filtered continuously by a full-flow filter in the system.



Camshafts are made of high-strength electric furnace iron with the extra-wide lobes hardened and phosphate-coated for resistance to wear. They are supported by four large bearings in the block for proper valve operation. The lobes never start "dry" against the lifters, for they dip in a special reservoir of oil on the first turn of the shaft for instant protection against scuffing. Double-strand roller chains drive the camshaft thru a three-gear train.

Standard heavy-duty valves are made of Silichrome XB alloy for the intakes and nickel-chrome-faced sodium-cooled Silichrome XB for the exhausts. Both have hardened tips to resist wear. The exhaust valve seats are pressed-in inserts of hard nickel-chromium-tungsten-cobalt alloy steel.

Rigid valve train uses extra aluminum rocker shaft brackets to maintain valve train alignment under all conditions.

**Self-locking valve lash adjusting screws** save time an simplify adjustments.

Extra-long valve guides are integral with the heads and ar surrounded by coolant for rapid heat transfer from valve stem Pressed-in valve seats of hard nickel-chromium-tungsten-coba alloy steel protect against seat pitting or burning.

**Valve rotators** are standard on both the intake and exhau valves and help to eliminate burning of valves.

**Dual exhaust systems** are standard on these engines to minimiz back pressure.

**Protected ignition wiring** is trouble-free due to spark plu location on the upper side of the cylinder head, eliminating hec damage from proximity to exhaust manifolds.

## 401 & 478 V6 ENGINES

#### **SPECIFICATIONS**

	401 V6	478 V6		
Basic Description	60° V	6; vaive-in-head design		
Displacement (cu in)	401	478		
Bore & Stroke (in)	4.87 x 3.58	5.125 x 3.86		
Compression Ratio		7.5:1		
Gross Horsepower @ rpm	237 @ 4000	254 @ 3700		
Net Horsepower @ rpm	210 @ 3700	225 @ 3400		
Gross Torque (lb-ft) @ rpm	372 @ 1600	442 @ 1400		
Net Torque (lb-ft) @ rpm	348 @ 1600	410 @ 1400		
Air Cleaner		at oil wetted paper		
Bearings, Camshaft		teel-backed babbitt		
ID x Length (Projected Ārea): Total	7.9	93 x 4.59 (9.12 sq in)		
Bearings, Connecting Rod (Crank end)	þi	precision replaceable		
Material	ste	el-backed aluminum		
ID x Length (in) (Projected Area)	2.81	2 x .935 (2.628 sq in)		
Bearings, Main	rq	recision replaceable		
Material	ste	el-backed aluminum		
End Thrust	t	aken by Bearing 3		
ID x Length (Projected Area) (in)				
Bearings (1-3)	3.125	x 1.5275 (14.764 sq in)		
Bearing (4)		3.126 x 1.5325		
Camshaft	high-alloy electric furnace	iron; lobes hardened and phosphate coated		
Drive	helical gear train			
Carburetor	downdraft			
No. of Barrels		two		
Make		Bendix-Stromberg		
Venturi ID (in)		1.3125		
SAE Flange Size (in)		1.50		
Choke Control		manual		
Coil, Ignition		Delco-Remy		
Current Draw (amp)	4.0 engin	e stopped; 1.5 engine idling		
Connecting Rods	forge	ed steel; I-beam section		
Length (Center to Center) (in)		7.19		
Crankshaft		forged steel		
Cylinder Block	ch	nrome alloy cast iron		
Cylinder Heads	ch	nrome alloy cast iron		
Distributor		Delco-Remy		
Filter, Fuel		AC GF-62T		
Туре	replaceable paper element			
Location	frame mounted			
Filter, Oil	2-qt full-flow; replaceable element			
Governor	hydraulic-positive			
Full-load setting	3700	3400		
Lubrication	Full-pressure system: direct pressure to valve lifters and main, connecting rod & camshaft bearings; splash to cylinder walls & piston pins; pressure spray to timing sprockets and chain; metered pressure to valve mechanism. See Owner's Guide for lubricant types.			
Oil Capacity (with filter change)	10 qts			
Piston Pins	alloy steel; full-floating tubular			
Diameter (in)		1.24		

## 401 & 478 V6 ENGINES

#### **SPECIFICATIONS**

		401 V6	478 V6		
Piston Rings		3 compression;	1 oil control		
Compression		1–3 inside bevel cast iron	1—inside bevel cast iron 2—taper-faced cast iron 3—reverse twist cast iron		
Oil Control		one-piece steel	cast iron with expander		
Pistons		permanent mold cast	aluminum; tin-plated		
Head		recessed			
Skirt		solid sl	ipper		
Weight Plugs, Spark					
		AC 14mm			
Model		42N—long reach			
Pump, Fuel		AC			
Pump, Oil	<del>-  -</del>	rotor ty	pe		
Pressure (normal)		60 ps			
Capacity		13 gal/min @	······································		
Pump, Water		centrifugal typ			
Capacity		176 gal/min	<del></del>		
Bearing		double-row ball; perm	<del></del>		
Thermostats		(2) Harris	on 180°		
Type		Pell	et		
Timing, Ignition Initial Setting		10° BTDC	10° BTDC		
Timing Mark Location		on crankshaft pulley			
Firing Order		1-6-5-4	-3-2		
Timing, Valve Inlet Opens		27° B	TDC		
Inlet Closes		61° A	BDC		
Exhaust Opens		82° BI	BDC		
Exhaust Closes		36° A'	IDC		
Valve Guides		cast integral; v	water cooled		
Valve Lifters		mechanical barre	el type; rotating		
Valve Mechanism		rocker arm and shaft	; pushrod actuated		
Valve Seat Inserts		exhaust valves only; p	<del></del>		
Valves, Exhaust		Silichrome XB steel;	sodium filled stems		
Face Coating		Ni-Chr	оте		
Overall Length	(in)	5.90	00		
Head Diameter	(in)	1.88	······································		
Face Angle		45			
Seat Angle		45°	······································		
Lift	(in)	.397	.417		
Rotators		Rotoc			
Valves, Inlet		Silichrome			
Face coating	- (i=)	aluminized seat			
Overall Length Head Diameter	(in)		·,		
Face Angle	(in)	30°			
Seat Angle		30	· · · · · · · · · · · · · · · · · · ·		
Lift	(in)	.406	.420		
<del></del>	<del></del>	- <u></u>			

#### **TORO-FLOW D478 DIESEL PERFORMANCE**

#### **Basic Specifications**

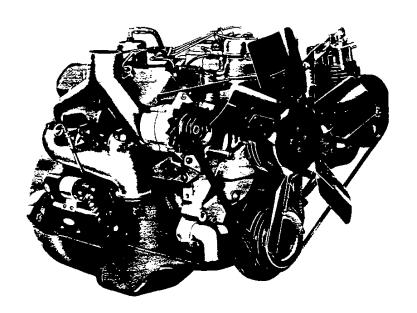
Engine type	V6 4-cycle diesel
Piston displacement	
Bore & stroke (nominal)	51/8" x 37/8"
Compression ratio	17.5:1

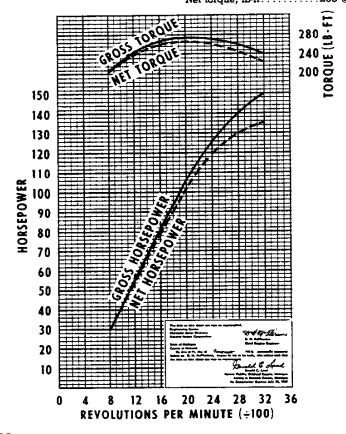
#### **Test Procedures**

These curves represent performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan and generator not charging.

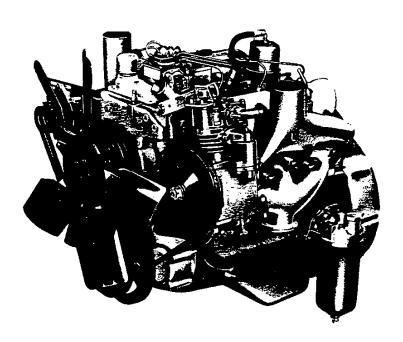
Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.





### DH478 DIESE

#### TORO-FLOW DH478 DIESEL PERFORMANCE



#### **Basic Specifications**

Engine type	V6 4-cyc
Piston displacement	478 cu
Bore & stroke (nominal)	
Compression ratio	17.5

#### **Test Procedures**

These curves represent full-throttle performance a obtained from dynamometer test data corrected barometric pressure of 29.92° mercury and 60° dry air.

Gross horsepower and torque were obtained in regular dynamometer test with the dynamomete exhaust system, no fan, generator not charging, ar optimum spark advance.

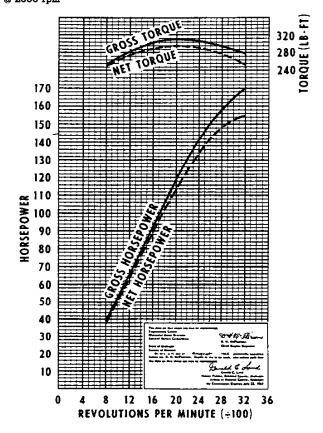
Net horsepower and torque were obtained from dynamometer test simulating actual operating coditions when the engine is in the vehicle.

 Gross horsepower
 170 € 3200 rpm

 Net horsepower
 155 € 3200 rpm

 Gross torque, lb-ft
 310 € 2000 rpm

 Net torque, lb-ft
 298 € 2000 rpm



### D637 DIESEL

#### TORO-FLOW D637 DIESEL PERFORMANCE

#### **Basic Specifications**

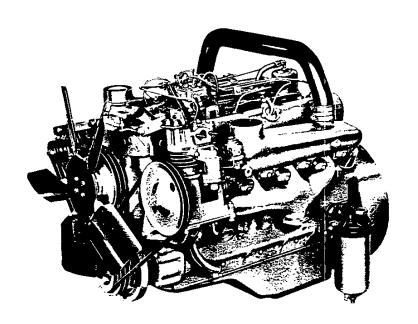
Engine type	. V8 4-cycle diesel
Piston displacement	
Bore & stroke (nominal)	51/8" x 37/8"
Compression ratio	

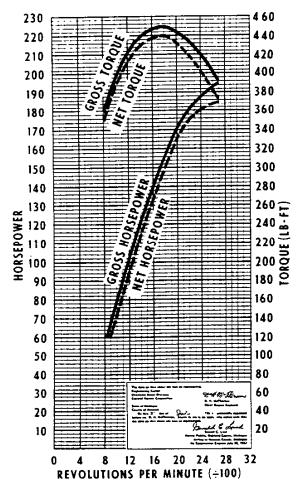
#### **Test Procedures**

These curves represent performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan and generator not charging.

Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.

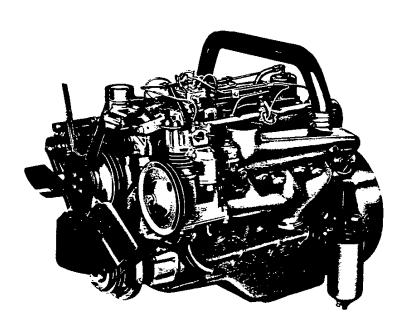




Gross horsepower195	@	2600 rpm
Net horsepower185	@	2600 rpm
Gross torque, lb-ft 450	@	1800 rpm
Net torque, lb-ft440	@	1800 rpm

#### DH637 DIESEL

#### TORO-FLOW DH637 DIESEL PERFORMANCE



#### **Basic Specifications**

Engine type	V8 4-cycle diesel
Piston displacement	637 cu in
Bore & stroke (nominal)	51/8" x 37/8"
Compression ratio	

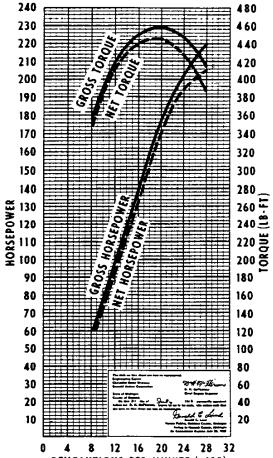
#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.

Gross horsepower	@	2800	rpn
Net horsepower			
Gross torque, lb-ft458	@	2000	rpn
Net torque, lb-ft444	@	2000	rpn



REVOLUTIONS PER MINUTE (+100)

## D478, DH478, D637, DH637 DIESEL ENGINES

Toro-Flow diesels are short-stroke, high-speed, 4-cycle engines designed for maximum performance, economy and durability. They deliver more power per pound of fuel consumed due to their efficient combustion process and new fuel injection system. Turbulence is induced into incoming air by the design of the ports and the combustion chamber recessed into the piston. This toroidal movement of air causes smoother burning of the fuel charge and maximum usage of the energy generated by the combustion. The Toro-Flow has the lowest brake specific fuel consumption of any automotive diesel.

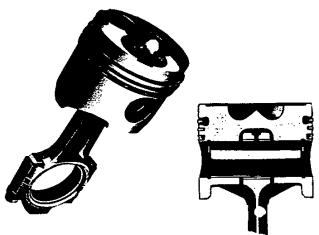
**Lubrication system** is full-pressure type with a high-output rotor-type pump that keeps all interior engine parts well protected from wear. Oil coolers that lower lubricating oil temperature are standard on the DH478, D637 and DH637. They are also available optionally on the D478 only.

Peak torque is maintained over a wide range of engine rpm

for more usable power.

Heavy-duty 2-quart oil filters are full-flow type with replaceable paper-type elements.

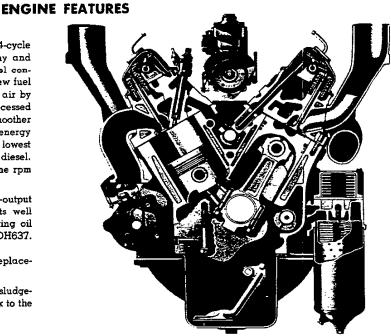
**Positive crankcase ventilation** flushes out all sludgeforming oil fumes and foreign gases, sending them back to the combustion chamber where they are burned.



Cylinder block is cast of hard fine-grain alloy iron with thick, husky walls. Deep ribs, extra-large bosses and widely spaced staggered cylinders add strength and rigidity. The block skirt is dropped three inches below the crankshaft center line for extra support in this area. The heavy main bearing caps are interference-fitted to the skirt and secured by heat-treated bolts. They are also held by side tie-bolts thru the block skirt for maximum rigidity.

Cylinder heads are cast of alloy iron for greatest structural strength. Their bottom surface is flat due to the fact that the combustion chamber is in the piston. Widely spaced valves dissipate heat more readily and seat distortion is virtually eliminated. The intake ports are designed to help create the toroidal swirling of incoming air that is the key to Toro-Flow economy.

Engine balance is excellent due to crankshaft counterweights, rubber-type damper, weighted flywheel and a rotating balance shaft in the lower left portion of the crankcase. The balance shaft turns in the opposite direction than the crankshaft at twice the rpm.

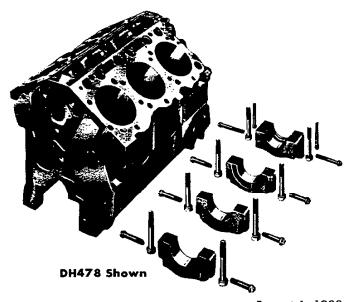


**Typical Toro-Flow Section** 

Cast aluminum pistons contain the unique Toro-Flow combustion chamber which swirls the incoming air with a toroidal motion. This results in more efficient combustion and excellent fuel economy. The pistons are cam-ground to precision tolerances and tin-plated to resist scuffing. Each piston has three rings—two compression and one oil-control. The top compression ring is fitted into a cast-in nickel-iron insert in the piston for maximum durability.

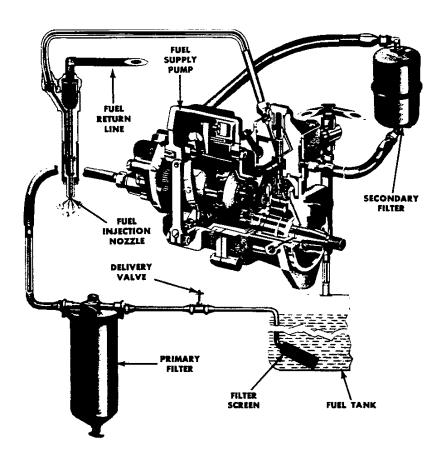
**Connecting rods** have large I-beam sections of forged steel to provide maximum durability. Rods and pistons are precision balanced as units and matched for smooth performance.

**Crankshaft** has four main and six connecting rod journals. Premium aluminum insert bearings are used for long service and durability. All crankshaft journals are "Tufftride"-hardened for excellent wear characteristics.



## D478, DH478, D637, DH637 DIESEL ENGINE!

#### **ENGINE FEATURES**



The fuel system uses the American Bosc fuel injection mechanism which meters, presurizes and distributes the fuel to each clyinde in proper firing sequence. Illustrated at left: the main pump assembly and components the entire fuel system. The pump is mounte on top of the engine between the cylinder head and is driven by the camshaft.

The system includes a frame-mounted pr. mary fuel filter with a throwaway-type elemer and a secondary filter of the disposable type A screen in the fuel tank prevents any con taminants from entering the lines.

The low-pressure fuel supply pump is used to assure adequate fuel to the high-pressure injection portion. Fuel is recirculated to the fuel tank when not needed so that the fuel is constantly being filtered.

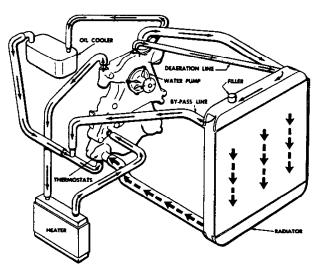
Specific injection timing is varied as needed throughout the rpm ranges by an automatic advance mechanism controlled by engine speed and oil pressure. To provide for easies starting, there is an automatic starting device which provides more fuel when the engine is being cranked over.

The pump plunger provides high-pressure impulses of fuel thru the delivery valve at the proper times to the cylinder injection nozzles. The amounts of fuel sent are controlled within close limits by a variable-speed mechanica governor for maximum power and economy.

The Posi-Temp cooling system used only on Toro-Flow diesel engines requires no radiator shutters and yet permits a much closer control over coolant temperatures. It reduces coolant temperature fluctuation and maintains a relatively constant temperature for highest diesel engine operating efficiency.

A high-capacity centrifugal-type water pump circulates large volumes of coolant through the cylinder block and heads. This high-efficiency cooling increases life of pistons, valves, seats, guides and injector nozzles by eliminating "hot-spots."

The flow from the block and heads enters the inlet hose to the upper radiator tank. If the temperature is too low and the thermostats are closed, the coolant flows across the upper tank and through the bypass line. When the thermostats open, the coolant can flow normally downward through the radiator core. Smaller lines feed coolant to the heater and the oil cooler (where offered), while a deaeration line from the water pump to the upper radiator tank assures full-flow coolant pressure.



Light arrows represent flow with thermostats closed and heavy arrows indicate flow with thermostats open.

# D478, DH478, D637, DH637

	D478	DH478	D637	DH637		
asic Description	477	7. <b>7</b>	6	37		
Displacement (cu in)	-		x 3.86	<del></del>		
Bore and stroke (in)	150 @ 3200	170 @ 3200	195 @ 2600	220 @ 2800		
Gross horsepower @ rpm	135 @ 3200	155 @ 3200	185 @ 2600	205 @ 2800		
Net horsepower @ rpm	275 @ 2000	310 @ 2000	450 @ 1800	458 @ 2000		
Gross torque @ rpm	266 @ 2000	298 @ 2000	440 @ 1800	444 @ 2000		
Net torque @ rpm		200	2600	2800		
Governor rpm			S to 1	<u> </u>		
Compression ratio	95	30				
Weight (lbs)						
_						
eneral	60°	' V6	60	° V8		
Type and number of cylinders	Control of the second of the s					
Cylinder block and crankcase	Cust		l alloy cast iron			
Material		Canome-nicke				
Cylinder head Attachment to block		Heat-tre	ated bolts			
Material		Chrome-nicke	l alloy cast iron	·		
Valve arrangements		In	head			
Valve seat inserts		Exha	ust only			
Stroke cycle	Four					
Ignition method	Compression					
Fuel injection	Through high-pressure line to nozzle at each cylinder					
Air intake system		Naturali	y aspirated			
Crankcase ventilation		Po	sitive			
Firing order	1-6-5	-4-3-2	1-8-4-	3-6-5-7-2		
Camshaft Material	High-strength ele	ectric furnace iron	Alloy no	odular iron		
Material		ked babbitt		cked bronze		
Bearing material		4	<del>                                     </del>	5		
Number of bearings	4	.58	5	.458		
Total bearing length (in)		0.10	10.96			
Total projected area (sq in)			al gears			
Camshaft drive type  Camshaft gear material	+		rma-Steel			
Idler gear material	<del>- </del>		rma-Steel			
Crankshaft gear material		Case-hardened steel				
Crankshaft  Material		Tu	orged steel; fftride			
Counterweights			d integral			
Main journal diameter (in)	<u></u>		3.125			
Crankpin diameter (in)			2.81			
Crankshaft weight (lbs)	9	9.5		99.5		
Flywheel material		High-stre	igth cast iron			
Main bearing type		Precision	replaceable			
Number of bearings		4	<u> </u>	5		
Material		Steel-bac	ked aluminum			
Diameter (in)			3.125			
End thrust taken by	Bea	ring 3		ring 5		
Total bearing length (in)	4	.71		5.65		
Total projected area (sq in)	14	.764		17.71		

# D478, DH478, D637, DH637

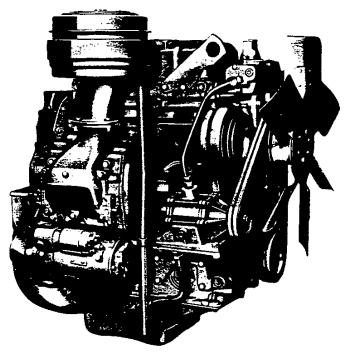
	D478	DH478	<b>D63</b> 7	DH637			
onnecting Rods							
Туре		I-beam sect	ion				
Material		Drop-forged heat-tr	eated steel				
Length center to center (in)		7.19					
Piston pin bushing type		Steel-backed l	oronze				
Projected area (sq in)		2.08					
Lower end rod bearing type		Precision replaceable					
Material	· · · · · · · · · · · · · · · · · · ·	Steel-backed al	uminum				
Diameter and length (in)		2.812 x .9	35				
Projected area (sq in)		2.628					
istons							
Туре		Heavy duty, cam ground		<del></del>			
Material	· ·	Permanent mold cast alu	minum, tin plated				
Compression ring grooves		Two					
Top grooves insert		No-resist cast iron bo					
Oil control ring grooves	0	ne above piston pin with dri	lled holes for drainage	,			
Projected pin bearing area							
in piston (sq in)		4.06					
Piston pin type		Full-floati					
Material		Tubular alloy	r steel				
Diameter (in)		1.615					
Retention method		Snap rings in	piston				
Piston rings							
Top compression ring		Keystone section, b	arrel faced				
Material	High-strength chrome-faced ductile iron						
Second compression ring		Taper fac	ed				
Material		Cast iro	<u> </u>				
Oil control ring		Cast-iron t	vpe				
Material Material		Chrome-plated cast iron v	<del></del>				
Maleriar		Ontono presso destructivo					
Valve Mechanism							
Туре		Rocker arm and shaft, p					
Valve lifters		Mechanical barre	<del></del>				
Material		Hardened ca					
Guide		Reamed holes in cy	<del></del>				
Pushrod		Tubular st	eel				
Length		9.33					
Rocker arm		Pearlitic malled	ible iron				
	Pearlitic malleable iron						
Adjustment	Self-locking screw						
Adjustment Shaft support		Self-locking Aluminum die-ca	sciew				
			screw st brackets				
Shaft support Shaft material		Aluminum die-ca	screw st brackets				
Shaft support Shaft material		Aluminum die-ca	screw st brackets dened steel				
Shaft support Shaft material subrication Type Distribution		Aluminum die-ca Tubular case-hard Full-press	screw st brackets dened steel				
Shaft support Shaft material  ubrication Type Distribution Main bearings		Aluminum die-ca Tubular case-hard Full-press Direct	screw st brackets dened steel				
Shaft support Shaft material  Inhrication Type Distribution Main bearings Connecting rod bearings		Aluminum die-ca Tubular case-hard Full-press Direct Direct	screw st brackets dened steel				
Shaft support Shaft material  ubrication Type Distribution Main bearings		Aluminum die-ca Tubular case-hare Full-press  Direct Direct Direct	screw st brackets dened steel				
Shaft support Shaft material  Inhrication Type Distribution Main bearings Connecting rod bearings		Aluminum die-ca Tubular case-hard Full-press Direct Direct	screw st brackets dened steel				
Shaft support Shaft material  Inbrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings		Aluminum die-ca Tubular case-hare Full-press  Direct Direct Direct	screw st brackets dened steel ure				
Shaft support Shaft material  Inbrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes		Aluminum die-ca Tubular case-hare Full-press  Direct Direct Direct Direct Direct	screw st brackets dened steel ure				
Shaft support Shaft material  Jubrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears		Aluminum die-ca Tubular case-hare Full-press  Direct Direct Direct Direct Direct Direct Direct Dip in oil res	screw st brackets dened steel ure ervoirs				
Shaft support Shaft material  Type Distribution Main bearings Connecting rod bearings Camshaft bearings Camshaft lobes Timing gears Lifters		Aluminum die-ca Tubular case-hare Full-press  Direct Direct Direct Dip in oil res Direct spray and	screw st brackets dened steel ure ervoirs				
Shaft support Shaft material  Lubrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms		Aluminum die-ca Tubular case-hare Full-press  Direct Direct Direct Dip in oil res Direct spray and Direct Direct Direct Direct Direct Direct Direct Direct Direct	screw st brackets dened steel  ure ervoirs d overflow				
Shaft support Shaft material  Jubrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms Rocker arm shaft		Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Dip in oil res Direct spray and Direct Direct Direct Direct Direct Direct Direct	screw st brackets dened steel ure ervoirs				
Shaft support Shaft material  Inbrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms Rocker arm shaft Piston pins		Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Dip in oil res Direct spray and Direct Direct Direct Oirect Oilect Oirect Oilect	screw st brackets dened steel  ure ervoirs d overflow n each piston pin boss				
Shaft support Shaft material  Inbrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms Rocker arm shaft Piston pins Cylinder walls		Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Dip in oil res Direct spray and Direct Direct Direct Direct Direct Direct Direct	screw st brackets dened steel  ure ervoirs d overflow n each piston pin boss				
Shaft support Shaft material  Inbrication Type Distribution Main bearings Connecting rod bearings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms Rocker arm shaft Piston pins Cylinder walls Oil cooler	Optional	Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Dip in oil res  Direct spray and Direct Direct Oil splash through two slots i	screw st brackets dened steel  ure ervoirs d overflow n each piston pin boss				
Shaft support Shaft material  Inhrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms Rocker arms shaft Piston pins Cylinder walls Oil cooler Oil pump type		Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Dip in oil rese Direct spray and Direct Direct Direct Direct Direct Direct Direct Direct Rotor Rotor	screw st brackets dened steel  ure ervoirs d overflow n each piston pin boss				
Shaft support Shaft material  Indication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms Rocker arms Rocker arm shaft Piston pins Cylinder walls Oil cooler Oil pump type Normal pressure (PSI)		Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Direct Direct Direct Direct Direct Oirect Oirect Splash through two slots in Splash Rotor 60	screw st brackets dened steel ure ervoirs d overflow n each piston pin boss Standard				
Shaft support Shaft material  Inhrication  Type  Distribution Main bearings  Connecting rod bearings  Connecting rod bushings  Camshaft bearings  Camshaft lobes  Timing gears  Lifters  Rocker arms  Rocker arms  Rocker arm shaft  Piston pins  Cylinder walls  Oil cooler  Oil pump type  Normal pressure (PSI)  Capacity GPM @ RPM		Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Direct Direct Direct spray and Direct Direct Oil splash through two slots in Splash Rotor 60 16 @ 32	screw st brackets dened steel ure ervoirs d overflow n each piston pin boss Standard				
Shaft support Shaft material  Inbrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms Rocker arms Rocker arm shaft Piston pins Cylinder walls Oil cooler Oil pump type Normal pressure (PSI) Capacity GPM @ RPM Inlet screen		Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Direct Direct Direct Direct Direct Oirect Oirect Splash through two slots in Splash Rotor 60	screw st brackets dened steel ure ervoirs d overflow n each piston pin boss Standard				
Shaft support Shaft material  Jubrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms Rocker arms Rocker arm shaft Piston pins Cylinder walls Oil cooler Oil pump type Normal pressure (PSI) Capacity GPM @ RPM Inlet screen		Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Direct Direct spray and Direct Direct Oil splash through two slots i Splash Rotor 60 16 @ 324 Fixed	screw st brackets dened steel  ure ervoirs I overflow  Standard				
Shaft support Shaft material  Inbrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms Rocker arms Rocker arm shaft Piston pins Cylinder walls Oil cooler Oil pump type Normal pressure (PSI) Capacity GPM @ RPM Inlet screen Oil filter Type		Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Direct Direct spray and Direct Direct Oil splash through two slots i Splash Rotor 60 16 @ 320 Fixed	screw st brackets dened steel  ure ervoirs I overflow  Standard  OO eable element				
Shaft support Shaft material  Inbrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms Rocker arms Rocker arm shaft Piston pins Cylinder walls Oil cooler Oil pump type Normal pressure (PSI) Capacity GPM @ RPM Inlet screen Oil filter Type Location		Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Direct Direct spray and Direct Direct Oil splash through two slots i Splash Rotor 60 16 @ 324 Fixed	screw st brackets dened steel  ure ervoirs I overflow  Standard  OO eable element				
Shaft support Shaft material  Inbrication Type Distribution Main bearings Connecting rod bearings Connecting rod bushings Camshaft bearings Camshaft lobes Timing gears Lifters Rocker arms Rocker arms Rocker arm shaft Piston pins Cylinder walls Oil cooler Oil pump type Normal pressure (PSI) Capacity GPM @ RPM Inlet screen Oil filter Type	Optional	Aluminum die-ca Tubular case-hard  Full-press  Direct Direct Direct Direct Direct spray and Direct Direct Oil splash through two slots i Splash Rotor 60 16 @ 320 Fixed	screw st brackets dened steel  ure ervoirs I overflow  Standard  OO eable element				

# D478, DH478, D637, DH637

	D478	<b>DH</b> 478	D637	DH63		
Ianifolds				·		
Air inlet	Vertical downdraft with the	hree ports for each bank	Vertical downdraft with four			
Exhaust	Three ports for each be	Three ports for each bank of three cylinders				
uel System						
Fuel pump make and model	American B	osch with positive displaceme	nt gear transfer pum	en e		
Туре		Single-plunger distribu				
Pump drive		Gear drive from camsh	<del></del>	<del> </del>		
Fuel strainer		Screen in fuel tank		-		
Primary fuel filter	Replace	eable element mounted on fra	me rail (10 micron)			
Secondary fuel filter		Throwaway type (2 mic				
Fuel injector make		American Bosch				
Туре		Multiple prifice				
Size		Four-hole .014" diame	ter			
Injector coolant		High-velocity water in cylinder head				
Fuel flow control		Fuel-metering sleeve in p	oump			
Injector actuation		High-pressure fuel from p	oump			
Injection pressure		3000 PSI				
Governor		Built in unit with fuel pr	ump			
Туре		Modulating centrifuge	al			
Air cleaner						
Type and size			Oil-bath	l-quart		
Location	On e	engine	R.H. side of :	irewall		
Quantity used		1	1			
xhaust System				<u> </u>		
Engine to muffler		Dual 2.50" OD steel tub	oing			
Muffler size (in)		6% (	OD x 28			
Type		Two-	passage			
Number used			2			
Features		Aluminum dip and	heat-resistant finish			

# 3-53N GM DIESEI

### HIGH TORQUE 3-53N GM DIESEL PERFORMANCE



### **Basic Specifications**

Engine type	In-line 2-cycle diese
Piston displacement	159.2 cu i
Bore & stroke (nominal)	
Dry weight (with clutch)	1005 1
Compression ratio	

#### **Test Procedures**

These curves represent full-throttle performance a obtained from dynamometer test data corrected t barometric pressure of 29.92" mercury and 60° dry air.

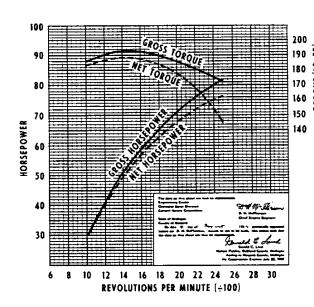
Gross horsepower and torque were obtained in regular dynamometer test with the dynamomete exhaust system, no fan and generator not charging

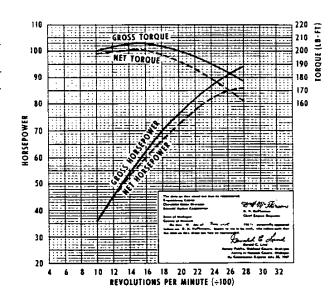
#### Series 20-30

Gross horsepower	82	@	2500 rpm
Net horsepower	76	@	2500 rpm
Gross torque, lb-ft	193	@	1500 rpm
Net torque, lb-ft	189	@	1500 rpm

#### Series 40

Gross horsepower	94	@	2800	rpi
Net horsepower	86	@	2800	rp
Gross torque, lb-ft	205	@	1500	гp
Net torque, lb-ft	201	@	1500	rpi





# 4-53N GM DIESEL

### HIGH TORQUE 4-53N GM DIESEL PERFORMANCE

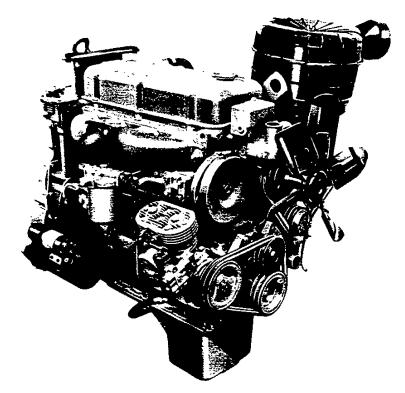
### **Basic Specifications**

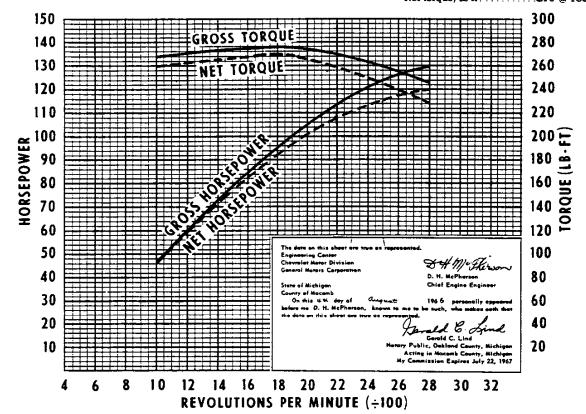
Engine type	In-line 2-cycle diesel
Piston displacement	
Bore & stroke (nominal)	
Dry weight (with clutch)	1203 lb
Compression ratio	

### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan and generator not charging.

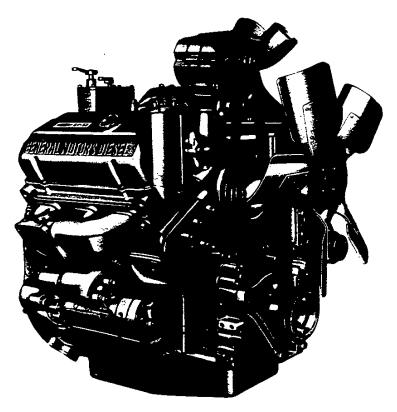




Engine & Clutch-Page 42

# **6V-53N GM DIESEL**

# HIGH TORQUE 6V-53N GM DIESEL PERFORMANCE



### **Basic Specifications**

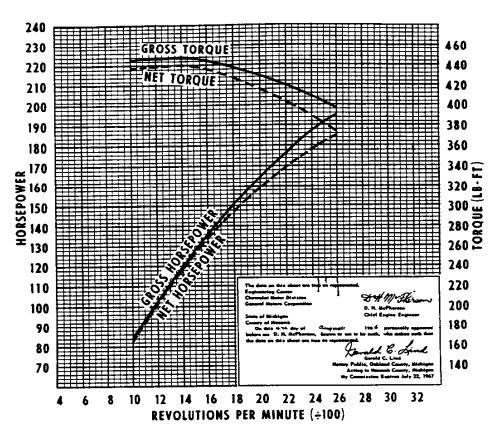
Engine type	V6 2-cycle diesel
Piston displacement	
Bore & stroke (nominal)	
Dry weight (with clutch)	1412 lb
Compression ratio	

#### **Test Procedures**

These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan and generator not charging.

Gross horsepower19	5 @	ā	2600	трm
Net horsepower 18	5 @	ā,	2600	rpm
Gross torque, lb-ft	7 (	ĝ,	1400	rpm
Net torque, lb-ft				



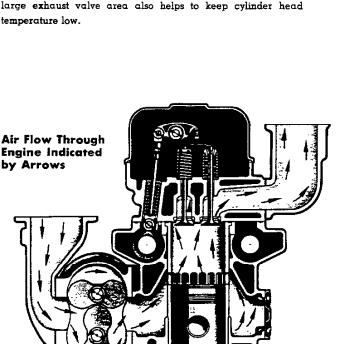
# 3-53N, 4-53N, 6V-53N GM DIESEL ENGINES

**ENGINE FEATURES** 

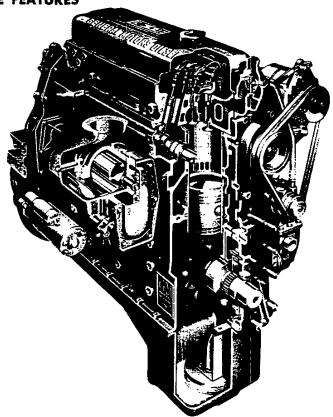
Series 53 GM Diesels are two-cycle compression-ignition engines with a high degree of parts interchangeability regardless of engine type (inline or "V") or number of cylinders. Interchangeable parts include injectors, exhaust valves, cylinder liners, pistons and rings and many other related parts. This feature enables fleet owners to maintain their units with far less parts difficulties or expense.

**Two-cycle design** means that every downstroke of the piston is a power stroke. This feature enables the engine to accelerate more rapidly and to be more responsive to power demands.

4-Valve design—Each cylinder has four exhaust valves that function simultaneously for quick removal of exhaust gases. (Inlet valves are not required in a two-cycle engine.) Hardened alloy-iron valve seats are metallurgically "shrunk" into the cylinder head for increased life and resistance to burning. The large exhaust valve area also helps to keep cylinder head temperature low.



Typical Inline GM Diesel Cross Section



4-53N Engine Shown

High compression ratio—The 21 to 1 compression ratio of the GM Diesel engines makes them one of the most efficient internal combustion engines ever designed. The air in each cylinder is compressed and heated by the piston on its upstroke. Near the top of the upstroke, the fuel is injected into the compressed heated air. The fuel burns evenly and completely, producing a strong, smooth downstroke or power stroke.

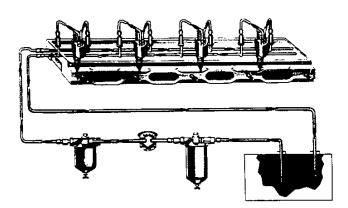
Roots-type blower—A two-vane Roots-type blower supplies air to the engine for combustion and scavenging the engine of exhaust gases. Air passes thru two oil-bath air cleaners to the blower where it is pushed into the engine's air box surrounding the piston liners. The ports in the piston liners serve as induction openings and are only open when the piston is on its downstroke. When uncovered, the inrushing air forces the old burned gases out of the open exhaust valves and "recharges" the cylinder with fresh air. As the valves close and the piston rises, the new charge is compressed and heated, repeating the cycle.

The large quantities of air supplied by the blower also serve to cool the cylinder walls, piston heads and exhaust valves.

**Cylinder liners**—Wet-type replaceable cylinder liners aid cooling by allowing better heat transfer to coolant. Matched piston and liner replacement units make servicing easier.

# 3-53N, 4-53N, 6V-53N GM DIESEL ENGINES

#### **ENGINE FEATURES**



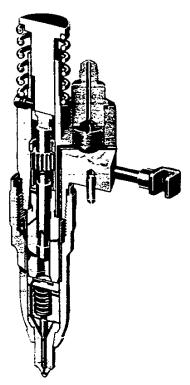
Fuel Flow Diagram for 4-53N Engine

N-type injectors—All GM Diesels used in Chevrolet trucks utilize the N-type or needle injector as shown at the right. They provide better performance and fuel economy by improving the combustion in the cylinders. The N-type injector operates at higher tip pressures for a better fuel spray.

Injectors are actuated by the camshaft thru pushrods and rocker arms at the proper time. The injector itself pressurizes the fuel internally and atomizes it directly into the cylinder.

The higher pressure start of injection of the N-type injector (3000 psi) and the cut-off pressure (2000 psi) produce more complete combustion due to sharper starts and cutoffs—improving fuel timing and metering. These injectors, coupled with the 21 to 1 compression ratio, produce better power, a reduction in exhaust smoke and improved fuel economy.

Fuel system—The entire fuel system is supplied by a low-pressure transfer pump that moves the fuel from the tank through two filters to the injectors. The low pressure feature means less maintenance due to pressure leaks which are common to high pressure systems. Fuel is circulated through the injectors and the excess is pumped back to the tank, cooling the injectors and refiltering the fuel again.



45mm N-Type Injector

**Governor**—The governors used on Series 53N GM Diesels are mechanical type made by King Seely. They are set for maximum full load settings of 2800 rpm on the 3–53N and 4–53N and 2600 rpm on the 6V–53N.

**Pistons**—Trunk-type pistons are made of Arma-Steel and are tin-plated for durability.

**Piston rings**—Four chrome-steel compression rings and two scraper-type oil control rings are used on each piston.

**Precision replaceable bearings**—All main and connecting rod bearings are of the precision replaceable insert type and are made of premium bearing alloys.

**Lubrication system**—A forced-feed lubrication system is used with an internal-gear-type oil pump. Oil coolers are standard equipment on GM Diesels.

# 3-53N, 4-53N and 6V-53N GM DIESELS

	3-53N	3-53N	4-53N	6V-53N			
Basic Description	2-cycle in-li	ne diesel	2-cycle in-line diesel	2-cycle V6 diesel			
Displacement	159 c	u in	212 cu in	318 cu in			
Bore & Stroke (in)		3.875	x 4.50				
Compression Ratio		21	.0:1				
Gross Horsepower @ rpm	82 @ 2500	94 @ 2800	130 @ 2800	195 @ 2600			
Net Horsepower @ rpm	76 @ 2500	86 @ 2800	120 @ 2800	185 @ 2600			
Gross Torque (lb-ft) @ rpm	193 @ 1500	205 @ 1500	278 @ 1800	447 @ 1400			
Net Torque (lb-ft) @ rpm	189 @ 1500	201 @ 1500	270 @ 1800	439 @ 1400			
Firing Order	1-3	-2	1-3-4-2	1L-3R-3L-2R-2L-1R			
Air Cleaner			<del> </del>				
Bearings, Connecting Rod (Crank end)		precision re	emovable				
Material	stee	l-backed copper-lead	or steel-backed aluminum				
ID x Length (Projected Area) (in)	2.	500 x 1.32 (3.30 sq in	)	2.750 x 1.10 (3.02 sq in			
Bearings, Main		precision removable					
Material	stee	steel-backed copper-lead or steel-backed aluminum					
ID x Length (Projected Area) (in)	3	3.00 x 1.18 (3.54 sq in) 3.500					
Blower		Roots	-type				
Pressure @ Engine rpm (Inches of Mercury)		8.7 © 2800					
Ratio (Blower to Engine Speed)		2.4	9:1				
Connecting Rods	"	drop-forged steel;	I-beam section				
Length (Center to Center) (in)		8.8	0				
Crankshaft		drop-forg	ed steel				
Cylinder Block		cast i	ron				
Cylinder Heads		valve-in-hed	ad design				
Material		cast i	ron				
Cylinder Liners		wet type; o	cast iron				
Number of Intake Ports per Liner		18	3				
Exhaust System		<del></del>		<u> </u>			
Туре		single; offset flow	······································	dual; reverse flow			
Exhaust Pipe—OD		31/2		3			
Tailpipe—OD		27/8		21/2			
Fan		see cooling syster	n specifications				
Filter, Fuel		two; replaceal	ble elements				
Filter, Oil		full-fi	low				
Capacity		2 q	rt				
Governor		King-S	eelv				
Туре	mechanical						
Setting (Full Load)	2500 rpm	2800	<del></del>	2600 rpm			
Injectors, Fuel	unit-type; model N-40		unit type; model N-45				
Number of Holes	8	<del></del>	8				
Diameter (in)			.0055				
Delivery Pressure (psi)	3000		3000	· = · · · · · · · · · · · · · · · · · ·			
Bore & Stroke (in)			.25 x .347				

# 3-53N, 4-53N and 6V-53N GM DIESELS

	3-53N	3-53N	4-53N	6V-53N		
Lubrication System	and camshaft	bearings; pressure ar	to piston pins, main, ad splash to valve med See Owner's Guide for l	:hanism; splash		
Oil Capacity (qts)	12	12	14	14		
Oil Cooler		Harri	son; plate-type			
Piston Pins		hardened chrome-alloy steel; full floating				
Diameter (in)			1.375			
Piston Rings		four compression, two oil-control rings per piston				
Compression		steel; c	hrome plated			
Oil Control		double scraper with	expander; cast alloy i	гоп		
Pistons		Arma-Steel; tin pla	ted; dished head, full sl	cirt		
Pump, Fuel Transfer						
Make		Det	roit Diesel			
Туре		mech	anical gear			
Pressure Range (gal/hr @ psi)		6	60 @ 65			
Vaives, Exhaust						
Туре			Poppet			
Number			4			
Diameter (in)			1.09			
Lift (in)			.32747			
Water Pump						
Туре		Centrifu	gal; belt driven			
Delivery (@ 2800 rpm)	42 gal	42 gal	50 gal	83 gal		

## STANDARD COOLING SYSTEMS

			Radiator							
SERIES	Engine	Туре	Height (in)	Width (in)	Thick- ness (in)	Dist. Between Tubes (in)	Frontal area (sq in)	System capacity (qt)	Pressure cap. (lb)	Fan (No. blades i x diameter)
CS10	250 292	Tube & Center* Tube & Center*	17 17	261/ <sub>4</sub> 261/ <sub>4</sub>	11/4 11/4	.25 .18	446 446	12 12½	13 13	4 x 18 4 x 18
CE10	283 327	Tube & Center* Tube & Center*	17 17	281/4 281/4	11/4 2	.22 .25	480 480	17½ 17	13 13	4 x 18 4 x 18
<b>GS</b> 10	230 250	Tube & Center Tube & Center	17½ 17½	18 19	1 ½ 1 ¾	.16 .20	314 333	10½ 11½	15 15	4 x 18 4 x 18
GE10	283	Tube & Center*	17	22	2	.22	374	171/2	15	5 x 18
KS10	250 292	Tube & Center* Tube & Center*	17 17	26¼ 26¼	1 1/4 1 1/4	.25 .18	446 446	12 12½	13 13	4 x 18 4 x 18
KE10	283 327	Tube & Center* Tube & Center*	17 17	281/4 281/4	11/4 2	.22 .25	480 480	171/2 17	13 13	4 x 18 4 x 18
PS10	230 250	Tube & Center Tube & Center	17½ 17½	18 19	1 1/4 1 3/4	.16 .16	314 333	10 11	13 13	4 x 17½ 4 x 18
CS20	250 292	Tube & Center* Tube & Center*	17 17	26½ 26¼	1 1/4 11/4	.20 .18	446 446	12 12½	13 13	4 x 18 4 x 18
CE20	283 327	Tube & Center* Tube & Center*	17 17	28¼ 28¼	1 1/4 2	.20 .25	480 480	17½ 17	13 13	4 x 18 4 x 18
GS20	230 250	Tube & Center Tube & Center	17½ 17½	18 19	11/4 13/4	.16 .20	314 333	10½ 11½	15 15	4 x 18 4 x 18
GE20	283	Tube & Center*	17	22	2	.22	374	171/2	15	5 x 18
KS20	250 292	Tube & Center* Tube & Center*	17 17	26¼ 26¼	1 1/4 1 1/4	.20 .18	446 446	12 12½	13 13	4 x 18 4 x 18
KE20	283 327	Tube & Center* Tube & Center*	17 17	28¼ 28¼	11/4 2	.20 .25	480 480	17½ 17	13 13	4 x 18 4 x 18
P\$20	250 292	Tube & Center Tube & Center	17½ 17½	23 23	2 2	.22 .20	401 401	12 12½	13 13	4 x 20 4 x 20
PT20	3-53N	Tube & Center	171/2	23	2	.16	401	201/4	13	6 x 20
CS30	250 292	Tube & Center* Tube & Center*	17 17	26¼ 26¼	11/4 11/4	.20 .18	446 446	12 12½	13 13	4 x 18 4 x 18
CE30	283 327	Tube & Center* Tube & Center*	17 17	28¼ 28¼	11/4	.20 .25	480 480	17½ 17	13 13	4 x 18 4 x 18
PS30	250 292	Tube & Center Tube & Center	17½ 17½	23 23	2 2	.22 .20	401 401	12 12½	13 13	4 x 20 4 x 20
PT30	3-53N	Tube & Center	171/2	23	2	.16	401	201/4	13	6 x 20
C\$40	250 292	Tube & Center* Tube & Center*	24 24	261/4 261/4	1 1/4 1 1/4	.18 .18	634 634	16 16½	9	4 x 20 4 x 20
CE40	283	Tube & Center*	24	261/4	11/4	.18	634	21	9	4 x 20
PS40	250 292	Tube & Center Tube & Center	17½ 17½	23 23	2 2	.16 .16	401 401	13 12¾	13 13	4 x 20 4 x 20
SS40	250 292	Tube & Center* Tube & Center*	24 24	26¼ 26¼	11/4	.18 .18	634 634	16 16½	9	4 x 20 4 x 20
TS40	250 292	Tube & Center Tube & Center	24¾ 24¾	23 23	2 2	.20 .20	569 569	13½ 17	9 9	4 x 20 4 x 20
TE40	283 327	Tube & Center Tube & Center	24¾ 24¾	23 23	2 2	.20 .20	569 569	21 251/4	9 9	5 x 20 5 x 20
<b>TT4</b> 0	3-53N	Tube & Center	24¾	23	2	.20	569	201/2	9	6 x 20
CS50	292	Tube & Center*	24	261/4	11/4	.18	634	161/2	9	4 x 20
CE50	327 366	Tube & Center* Tube & Center*	24 24	26¼ 34	2 2	.20 .16	634 820	20½ 31	9	5 x 20 5 x 20
CD50	4-53N	Tube & Center	24	281/4	2	.18	680	20	9	6 x 20

<sup>\*</sup>Crossflow type

# STANDARD COOLING SYSTEMS (Cont'd)

			R	adiator						
SERIES	Engine	Туре	Height (in)	Width (in)	Thick- ness (in)	Dist. Between Tubes (in)	Frontal area (sq in)	System capacity (qt)	Pressure cap. (lb)	Fan (No. blades x diameter)
CG50	D478 DH478	Tube & Center	24	281/4	2	.18	680	29¾	9	5 <b>x</b> 22
MS50	292	Tube & Center*	24	261/4	11/4	.18	634	161/2	9	4 x 20
ME50	327	Tube & Center*	24	261/4	2	.20	634	201/2	9	5 x 20
	366	Tube & Center*	24	34	2	.16	820	31	9	5 x 20
SS50	292	Tube & Center*	24	261/4	11/4	.18	634	161/2	9	4 x 20
SE50	327	Tube & Center*	24	261/4	2	.20	634	201/2	9	5 x 20
	366	Tube & Center*	24	34	2	.16	820	31	9	5 x 20
TS50_	292	Tube & Center	243/4	23	2_	.20	569	17	9	4 x 20
TE50	327	Tube & Center	243/4	23	2	.20	569	251/4	9	5 x 20 6 x 20
	366	Tube & Center	24	281/2	2	.18	684	28½ 21	9	6 x 20
TD50	4-53N	Tube & Center	24¾	23	2	.20	569	<del>!                                      </del>	9	5 x 22
TG50	D478	Tube & Center	24¾	23	2½ 2½	.16 .20	569 627	34½ 37	9	5 x 22
	DH478	Tube & Center	22 24	281/2	11/4	.18	634	161/2	9	4 x 20
CS60	292	Tube & Center*		261/4	+	<del></del>	634	<del>                                     </del>	9	5 x 20
CE60	327	Tube & Center* Tube & Center*	24 24	26¼ 34	2 2	.20	820	20½ 31	9	5 x 20
<del></del>	366		24		2	.18	680	20	9	6 x 20
CD60	4-53N	Tube & Center		281/4	2	.18	680	293/4	9	5 x 22
CG60	D478 DH478	Tube & Center Tube & Center	24 24	281/4 281/4	2	.18	680	2934	9	5 x 22
35750	<del></del>	Tube & Center*	24	34	2	.16	820	31	9	5 x 20
ME60	366			<del> </del>	2	.18	680	293/4	9	5 x 22
MG60	DH478	Tube & Center*	24	281/4	+	<del></del>	634	201/2	9	5 x 20
SE60	327	Tube & Center*	24 24	261/4 34	2 2	.20	820	31	9	5 x 20
	366	Tube & Center*		23	2	.20	569	17	9	4 x 20
TS60	292	Tube & Center	2434	<del></del>	2	.20	569	251/4	9	5 x 20
TE60	327 366	Tube & Center Tube & Center	24¾ 24	23	2	.18	684	281/2	9	6 x 20
mm.co	<del></del> -	Tube & Center	243/4	23	1 2	.20	569	21	9	6 x 20
TD60	4-53N			23	21/2	.16	569	341/2	9	5 x 22
TG60	D478 DH478	Tube & Center Tube & Center	24¾ 22	281/2	21/2	.20	627	37	9	5 x 22
HM70	401	Tube & Center			2		683	331/2	9	4 x 24
HJ70	D637	Tube & Center	<del>                                     </del>	<del> </del>	2		683	381/2	9	5 x 24
HJIU	DH637	Tube & Center			21/2		683	381/2	9	5 x 24
HV70	6V-53	Tube & Center			11/4	- <del>)</del>	790	36	9	5 x 22
JM70	401	Tube & Center			2		683	331/2	9	4 x 24
J370	D637	Tube & Center		<del> </del>	2		683	381/2	9	5 x 24
<b>,,,</b> ,,	DH637	Tube & Center			21/2		683	381/2	9	5 x 24
JV70	6V-53	Tube & Center			11/4	T	790	36	9	5 x 22
TM70	401	Tube & Center	<del> </del>	<del> </del>	21/2	1	627	43	9	5 x 22
TJ70	D637	Tube & Center	<del>                                     </del>	<del> </del>	2	1	727	43	9	5 x 24
1,10	DH637	Tube & Center		1	2		727	43	9	5 x 24
TV70	6V-53	Tube & Center		<u> </u>	23/4		689	321/2	9	5 x 22
HM80	401	Tube & Center	<del> </del>	<del> </del>	2	1	683	331/2	9	5 x 24
TT/VIOU	478	Tube & Center			21/2		683	36	9	5 x 24
JM80	401	Tube & Center	$\vdash$	1	2		683	331/2	9	4 x 24
	478	Tube & Center		L	21/2	<u> </u>	683	371/2	9	5 x 24
TM80	401	Tube & Center			21/2		627	44	9	5 x 22
	478	Tube & Center		<u> </u>	21/2		727	441/2	9	5 x 24
WM80	401	Tube & Center			21/2		627	44	9	5 x 22
1	478	Tube & Center	1	1	21/2		727	441/2	9	5 x 24

<sup>\*</sup>Crossflow type

## **OPTIONAL COOLING SYSTEMS**

	ļ				Radiato	er .					
Series	Engine	Optional Combinations	Туре	Height (in)	Width (in)	Thick- ness (in)	Dist. Be- tween Tubes (in)	Fron- tal Area (sq in)	System Capac- ity (qt)	Pressure Cap.	Fan (No. blade x diam.)
CS10	250	HD Radiator	Tube & Center*	17	281/4	2	.25	480	123/4	13	4 x 18
		HD Cooling	Tube & Center*	17	281/4	2	.25	480	13	15	5 x 18
		Air Conditioning	Tube & Center*	17	281/4	2	.25	480	13	15	5 x 18
	ĺ	Automatic Trans.	Tube & Center*	17	281/4	2	.22	480	13	13	4 x 18
		Auto. Trans. w/Air Cond.	Tube & Center*	17	281/4	2	.18	480	13	15	5 x 18
	292	HD Radiator	Tube & Center*	17	281/4	2	.25	480	131/4	13	4 x 18
	İ	HD Cooling	Tube & Center*	17	281/4	2	.18	480	131/4	15	5 x 18
ĺ	1	Air Conditioning	Tube & Center*	17	281/4	2	.18	480	131/4	15	5 x 18
		Automatic Trans.	Tube & Center*	17	281/4	2	.22	480	131/4	13	4 x 18
		Auto. Trans. w/Air Cond.	Tube & Center*	17	281/4	2	.18	480	131/4	15	5 x 18
CE10	283	HD Radiator	Tube & Center*	17	281/4	2	.25	480	173/4	13	4 x 18
		HD Cooling	Tube & Center*	17	281/4	2	.18	480	173/4	13	5 x 18
		Air Conditioning	Tube & Center*	17	281/4	2	.18	480	173/4	13	
		Automatic Trans	Tube & Center*	17	281/4	2	.22	480		· · · · · · · · · · · · · · · · · · ·	5 x 18
		Auto. Trans. w/Air Cond.	Tube & Center*	17		2			171/2	13	4 x 18
	327	HD Radiator		17	281/4		.18	480	171/2	15	5 x 18
	321	HD Cooling	Tube & Center*	17	281/4	2	.18	480	17	13	4 x 18
			Tube & Center*		281/4	23/4	.18	480	181/2	15	5 x 18
		Air Conditioning	Tube & Center*	17	281/4	23/4	.18	480	181/2	15	5 x 18
		Automatic Trans.	Tube & Center*	17	281/4	2	.18	480	161/4	13	4 x 18
6510		Auto. Trans. w/Air Cond.	Tube & Center*	17	281/4	23/4	.18	480	17¾	15	5 x 18
<b>GS</b> 10	230	HD Radiator	Tube & Center	171/2	19	13/4	.16	333	111/2	15	4 x 18
		Automatic Trans.	Tube & Center	171/2	19	13/4	.16	333	111/2	15	5 x 18
	250	HD Radiator	Tube & Center	171/2	19	13/4	.16	333	111/2	15	4 x 18
		Automatic Trans.	Tube & Center	17	22	2	.18	374	121/2	15	5 x 18
GE10	283	HD Radiator	Tube & Center*	17	22	2¾	.16	374	173/4	15	5 x 18
		Automatic Trans.	Tube & Center*	17	22	23/4	.16	374	173/4	15	5 x 18
KS10	250	HD Radiator	Tube & Center*	17	281/4	2	.25	480	123/4	13	4 x 18
		HD Cooling	Tube & Center*	17	281/4	2	.25	480	13	15	5 x 18
- 1		Air Conditioning	Tube & Center*	17	281/4	2	.25	480	13	15	5 x 18
	292	HD Radiator	Tube & Center*	17	281/4	2	.25	480	131/4	13	4 x 18
ļ		HD Cooling	Tube & Center*	17	281/4	2	.18	480	131/4	15	5 x 18
		Air Conditioning	Tube & Center*	17	281/4	2	.18	480	131/4	15	5 x 18
KE10	283	HD Radiator	Tube & Center*	17	281/4	2	.25	480	173/4	13	4 x 18
	٠	HD Cooling	Tube & Center*	17	281/4	2	.18	480	173/4	13	5 x 18
1		Air Conditioning	Tube & Center*	17	281/4	2	.18	480	173/4	13	5 x 18
	327	HD Radiator	Tube & Center*	17	281/4	2	.18	480	17	13	4 x 18
1	i	HD Cooling	Tube & Center*	17	281/4	23/4	.18	480	181/2	15	5 x 18
		Air Conditioning	Tube & Center*	17	281/4	2¾	.18	480	181/2	15	5 x 18
PS10	230	Automatic Trans.	Tube & Center	171/2	19	13/4	.16	333	10	13	4 x 171/2
	250	Automatic Trans.	Tube & Center	171/2	19	13/4	.16	333	12	13	4 x 18
CS20	250	HD Radiator	Tube & Center*	17	281/4	2	.25	480	123/4	15	5 x 18
l		HD Cooling	Tube & Center*	17	281/4	2	.18	480	13	15	5 x 18
i		Air Conditioning	Tube & Center*	17	281/4	2	.25	480	13	15	5 x 18
	†	Automatic Trans.	Tube & Center*	17	281/4	2	.22	480	13	13	4 x 18
	ţ	Auto. Trans. w/Air Cond.	Tube & Center*	17	281/4	2	.18	480	13	15	4 x 18
ľ	292	HD Radiator	Tube & Center*	17	281/4	2	.25	480	131/4	13	4 x 18
ŀ		HD Cooling	Tube & Center*	17	281/4	2	.18	480	131/4	15	5 x 18
	ľ	Air Conditioning	Tube & Center*	17	281/4	2	.18	480	131/4	15	5 x 18
	į	Automatic Trans.	Tube & Center*	17	281/4	2	.22	480	131/4	13	4 x 18
	ļ	Auto. Trans. w/Air Cond.	Tube & Center*	17	281/4	2	.18	480	131/4	15	5 x 18
					/4				/4	.,	0 2 10

<sup>\*</sup>Cross-flow type

# OPTIONAL COOLING SYSTEMS (Cont'd)

					Radiato	r			1	_	F
Series	Engine	Optional Combinations	Туре	Height (in)	Width (in)	Thick- ness (in)	Dist. Be- tween Tubes (in)	Fron- tal Area (sq in)	System Capac- ity (qt)	Pressure Cap. (lb)	Fan (No. blade x diam.)
CE20	283	HD Radiator	Tube & Center*	17	281/4	2	.18	480	173/4	13	4 x 18
		HD Cooling	Tube & Center*	17	281/4	2	.18	480	17%_	15	5 x 18
	l	Air Conditioning	Tube & Center*	17	281/4	2	.18	480	173/4	13	5 x 18
	1	Automatic Trans.	Tube & Center*	17	281/4	2	.22	480	1734	13	4 x 18
		Auto. Trans. w/Air Cond.	Tube & Center*	17	281/4	2	.18	480	173/4	15	5 x 18
	327	HD Radiator	Tube & Center*	17	281/4	2	.18	480	173/4	13_	4 x 18
		HD Cooling	Tube & Center*	17	281/4	23/4	.18	480_	173/4	15	5 x 18
	ļ	Air Conditioning	Tube & Center*	17	281/4	2	.18	480	173/4	13	5 x 18
		Automatic Trans.	Tube & Center*	17	281/4	2	.18	480	161/4	13	· 4 x 18
		Auto. Trans. w/Air Cond.	Tube & Center*	17	281/4	2¾	.18	480	173/4	15	5 x 18
GS20	230	HD Radiator	Tube & Center	171/2	19	13/4	.16	333	111/2	15	4 x 18
		Automatic Trans.	Tube & Center	171/2	19	13/4	.16	333	111/2	15	5 x 18
	250	HD Radiator	Tube & Center	171/2	19	13/4	.16	333_	111/2	15	4 x 18
		Automatic Trans.	Tube & Center*	17	22	2	.18	374	121/2	15_	5 x 18
GE20	283	HD Radiator	Tube & Center*	17	22	23/4	.16	374	173/4	15	5 x 18
		Automatic Trans.	Tube & Center*	17	22	23/4	.16	374	173/4	15	5 x 18
KS20	250	HD Radiator	Tube & Center*	17	281/4	2	25	480	1234	13	4 x 18
		HD Cooling	Tube & Center*	17	281/4	2	.25		13	15	5 x 18
	1	Air Conditioning	Tube & Center*	17	281/4	2	.25		13	15	5 x 18
	292	HD Radiator	Tube & Center*	17	281/4	2	.25	480	131/4	13	4 x 18
		HD Cooling	Tube & Center*	17	281/4	2	.18	480	131/4	15	5 x 18
		Air Conditioning	Tube & Center*	17	281/4	2	.18	_480	131/4	15	5 x 18
KE20	283	HD Radiator	Tube & Center*	17	281/4	2	.18	480	173/4	13	4 x 18
		HD Cooling	Tube & Center*	17	281/4	2	.18	480	173/4	13	5 x 18
	1	Air Conditioning	Tube & Center*	17	281/4	2	.18	480	173/4	13	5 x 18
l	327	HD Radiator	Tube & Center*	17	281/4	2	.18	480	17	13	4 x 18
		HD Cooling	Tube & Center*	17	281/4	23/4	.18	480	181/2	15	5 x 18
		Air Conditioning	Tube & Center*	17	281/4	23/4	.18	480	181/2	15	5 x 18
PS20	250	Automatic Trans.	Tube & Center	171/2	23	2	.20	401	12	13	4 x 20
	292	Automatic Trans.	Tube & Center	171/2	23	2	.18	401	121/2	13	4 x 20
CS30	250	HD Radiator	Tube & Center*	17	281/4	2	.25	480	123/4	13	4 x 18
	1	HD Cooling	Tube & Center*	17.	281/4	2	.25		13	15	5 x 18
1		Air Conditioning	Tube & Center*	17	281/4	2	.25		13	15	5 x 18
	292	HD Radiator	Tube & Center*	17	281/4	2	.25	480	131/4	13	4 x 18
1		HD Cooling	Tube & Center	+	281/4	2	.18	480	131/4	15	5 x 18
	1	Air Conditioning	Tube & Center*		281/4	2	.18	480	131/4	15	5 x 18
	1				281/4	2	.18	480	173/4	13	4 x 18
CE30	283	HD Radiator	Tube & Center*	+	281/4	2	.18	480	173/4	13	5 x 18
[	ĺ	HD Cooling	Tube & Center					<del></del> -	<del></del>	13	5 x 18
		Air Conditioning	Tube & Center*		281/4	2	.18	480	173/4	+	<del></del>
	327	HD Radiator	Tube & Center*	<del></del>	281/4	2	.18	480	17	13	4 x 18
		HD Cooling	Tube & Center		281/4	23/4	.18	480	181/2	15	5 x 18
L		Air Conditioning	Tube & Center	17	281/4	23/4	.18	480	181/2	15	5 x 18
CS40	250	HD Radiator	Tube & Center	24	261/4	2	.20	634	161/2	9	4 x 20
1		HD Cooling	Tube & Center	24	281/4	2	.20	680	18	9	5 x 20
		Air Conditioning	Tube & Center	24	281/4	2	.20	680	18	9	5 x 20
	292	HD Radiator	Tube & Center	• 24	261/4	2	.20	634	17	9	4 x 20
		HD Cooling	Tube & Center	<del></del>	281/4	2	.20	680	181/4	9	5 x 20
	i				1			680	181/4	9	5 x 20

<sup>\*</sup>Cross-flow type

# **OPTIONAL COOLING SYSTEMS (Cont'd)**

				***	Radiato	r					Fan (No. blade x diam.)
Series	Engine	Optional Combinations	Туре	Height (in)	Width (in)	Thick- ness (in)	Dist. Be- tween Tubes (in)	Fron- tal Area (sq in)	System Capac- ity (qt)	Pressure Cap. (lb)	
CE40	283	HD Radiator	Tube & Center*	24	261/4	2	.20	634	211/2	9	4 x 20
		HD Cooling	Tube & Center*	24	281/4	2	.20	680	211/2	9	5 x 20
		Air Conditioning	Tube & Center*	24	281/4	2	.20	680	211/2	9	5 x 20
SS40	250	HD Radiator	Tube & Center*	24	261/4	2	.20	634	16½	9	4 x 20
	292	HD Radiator	Tube & Center*	24	261/4	2	.20	634	17	9	4 x 20
CS50	292	HD Radiator	Tube & Center*	24	261/4	2	.20	634	17	9	4 x 20
		HD Cooling	Tube & Center*	24	281/4	2	.20	680	181/4	9	6 x 20
	1	Air Conditioning	Tube & Center*	24	281/4	2	.20	680	181/4	9	6 x 20
	<u> </u>	Automatic Trans.	Tube & Center*	24	281/4	2	.16	680	181/4	9	4 x 20
CES0	327	HD Radiator	Tube & Center*	24	281/4	2	.16	680	213/4	9	5 x 20
		HD Cooling	Tube & Center*	24	281/4	2	.16	680	213/4	9	6 x 20
		Air Conditioning	Tube & Center*	24	281/4	2	.16	680	2134	9	6 x 20
		Automatic Trans.	Tube & Center*	24	281/4	2¾	.16	680	231/2	9	5 x 20
	366	HD Radiator	Tube & Center*	24	281/4	2	.16	680	213/4	9	5 x 20
		HD Cooling	Tube & Center*	24	281/4	2	.16	680	213/4	9	6 x 20
	1	Air Conditioning	Tube & Center*	24	281/4	2	.16	680	213/4	9	6 x 20
		Automatic Trans.	Tube & Center*	24	34	23/4	.16	820	33	9	6 x 20
MS50	292	HD Radiator	Tube & Center*	24	261/4	2	.20	634	17	9	4 x 20
	}	HD Cooling	Tube & Center*	24	281/4	2	.20	680	181/4	9	6 x 20
		Air Conditioning	Tube & Center*	24	281/4	2	.16	680	213/4	9	6 x 20
MES0	327	HD Radiator	Tube & Center*	24	281/4	2	.16	680	213/4	9	5 x 20
		HD Cooling	Tube & Center*	24	281/4	2	.16	680	213/4	9	6 x 20
		Air Conditioning	Tube & Center*	24	281/4	2	.16	680	213/4	9	6 x 20
	366	HD Radiator	Tube & Center*	24	34	2¾	.16	820	33	9	6 x 20
		HD Cooling	Tube & Center*	24	34	23/4	.16	820	33	9	5 x 22
		Air Conditioning	Tube & Center*	24	34	23/4	.16	820	33	9	5 x 22
\$\$50	292	HD Radiator	Tube & Center*	24	261/4	2	.20	634	17	9	4 x 20
1		Automatic Trans.	Tube & Center*	24	281/4	2	.16	680	181/4	9	4 x 20
SE50	327	HD Radiator	Tube & Center*	24	281/4	2	.16	680	213/4	9	5 x 20
		Automatic Trans.	Tube & Center*	24	281/4	23/4	.16	680	231/2	9	5 x 20
	366	HD Radiator	Tube & Center*	24	34	23/4	.16	820	33	9	6 x 20
		Automatic Trans.	Tube & Center*	24	34	23/4	.16	820	33	9	6 x 20

<sup>\*</sup>Cross-flow type

# OPTIONAL COOLING SYSTEMS (Cont'd)

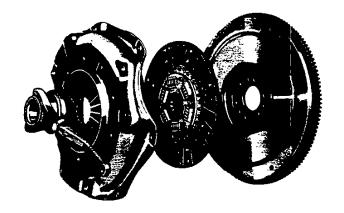
					Radiato	r					
Series	Engine	Optional Combinations	Туре	Height (in)	Width (in)	Thick- ness (in)	Dist. Be- tween Tubes (in)	Frontal Area (sq in)	System Capac- ity (qt)	sure Cap. (lb)	Fan (No. blade x diam.)
CS60	292	HD Radiator	Tube & Center*	24	261/4	2	.20	634	17	9	4 x 20
		HD Cooling	Tube & Center*	24	281/4	2	.20	680	181/4	9	6 <b>x</b> 20
		Air Conditioning	Tube & Center*	24	281/4	2	.20	680	181/4	9	6 x 20
		Automatic Trans.	Tube & Center*	24	281/4	2	.16	680	181/4	9	4 x 20
CE60	327	HD Radiator	Tube & Center*	24	281/4	2	.16	680	213/4	9	5 x 20
		HD Cooling	Tube & Center*	24	281/4	2	.16	680	213/4	9	6 x 20
		Air Conditioning	Tube & Center*	24	281/4	2	.16	680	213/4	9	6 x 20
		Automatic Trans.	Tube & Center*	24	281/4	2¾	.16	680	231/2	9	5 x 20
	366	HD Radiator	Tube & Center*	24	34	23/4	.16	820	33	9	6 x 20
		HD Cooling	Tube & Center*	24	34	23/4	.16	820	33	9	5 x 22
		Air Conditioning	Tube & Center*	24	34	2¾	.16	820	33	9	5 x 22
		Automatic Trans.	Tube & Center*	24	34	23/4	.16	820	33	9	6 x 20
ME60	366	HD Radiator	Tube & Center*	24	34	2¾	.16	820	33	9	6 x 20
		Air Conditioning	Tube & Center*	24	34	2¾	.16	820	33	9_	5 x 22
		Automatic Trans.	Tube & Center*	24	34	23/4	.16	820	33	9	6 x 20
SE60	327	HD Radiator	Tube & Center*	24	281/4	2	.16	680	213/4	9	5 x 20
		Automatic Trans.	Tube & Center*	24	281/4	2¾	.16	680	231/2	9	5 x 20
	366	HD Radiator	Tube & Center*	24	34	23/4	.16	820	33	9	6 x 20
		Automatic Trans.	Tube & Center*	24	34	23/4	.16	820	33	9	6 x 20
HM70	401	HD Cooling	Tube & Center			2		683	33	9	5 x 24
HJ70	D637 ) DH637	HD Cooling	Tube & Center Tube & Center			2½ 2½		683 683	39 39	9	5 x 24 5 x 24
HV70	6V-53	HD Cooling	Tube & Center	<b>†</b>		2		792		9	5 x 22
JM70	401	HD Cooling	Tube & Center		,	2		683	36	9	5 x 24
JJ70	D637 DH637	HD Cooling	Tube & Center Tube & Center			2½ 2½		683 683	39 39	9	5 x 24 5 x 24
JV70	6V-53	HD Cooling	Tube & Center	<u> </u>		2		792		9	5 x 22
TM70	401	HD Cooling	Tube & Center			2		569		9	5 x 24
TJ70	D637 ) DH637	HD Cooling	Tube & Center Tube & Center			2½ 2½		727 727	43½ 43½	9 9	5 x 24 5 x 24
HM80		HD Cooling	Tube & Center			2		683	331/2	9	5 x 24
	478	HD Cooling	Tube & Center	<b> </b>	ļ	21/2	<b> </b>	683	36	9	5 x 24
JM80	401	HD Cooling	Tube & Center	<del>                                     </del>		2	ļ <u>-</u>	683	36	9	5 x 24
	408	HD Cooling	Tube & Center	<del> </del>	ļ	21/2	ļ	683	36	9	5 x 24
TM80	<del> </del>	HD Cooling	Tube & Center	<del>                                     </del>	<del> </del>	2	<del> </del>	684	431/2	9	5 x 24
	478	HD Cooling	Tube & Center	<del> </del>	<u> </u>	2½	<del> </del>	727	441/2	9	5 x 24
WM80	<del> </del>	HD Cooling	Tube & Center	<u> </u>	<b>-</b>	2	ļ	684	431/2	9	5 x 24
	478	HD Cooling	Tube & Center		ļ	21/2		727	441/2	9	5 x 24

\*Cross-flow type

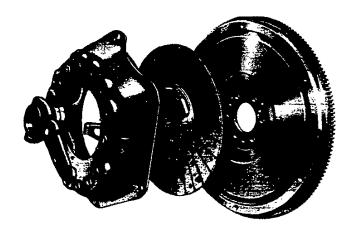
# **CLUTCHES**

## **DIAPHRAGM-SPRING CLUTCHES**

Chevrolet's diaphragm-spring clutches are well known for driving ease and dependability. The diaphragm spring operates with very light pedal pressure, yet directs uniformly high pressure to the pressure plate and clutch disc. Self-lubricating pilot bushing and permanently lubricated throw-out bearing require no maintenance between normal clutch overhauls.



#### **COIL-SPRING CLUTCHES**



Chevrolet's coil-spring clutches combine operating ease with high torque capacity and durability in severe truck service. Heat-treated coil springs direct pressure to the pressure plate and driven disc. Coilspring construction affords good ventilation for cooler operation and protection against burned facings. Pilot bushing and throw-out bearing are self-lubricated.

### **CLUTCH CONTROLS**

Both mechanical linkage and hydraulic clutch controls are utilized. On models using the hydraulic control system, a master cylinder and reservoir (integral with the brake master cylinder housing) contain hydraulic fluid which is forced through the hydraulic line when the clutch pedal is depressed. The fluid pressure actuates the slave cylinder which moves the clutch fork, releasing the clutch. Releasing the clutch pedal engages the clutch.

# **SPECIFICATIONS**

### DIAPHRAGM CLUTCHES

Clutch Size (in)	10	11
Clutch Springs  Material	Spring 1	g steel L
Total pressure (lbs)	1325–1500	1450-1600
Type Number of plates Vibration dampers Material Outside diameter (in) Inside diameter (in) Thickness (in) Area (sq in)	Dry disc with 6 Sp. Woven asbest 10 6 .133 100	l rings
Bearings Clutch-release type Pilot type		row ball ad bronze bushing
Flywheel Material	Cas	t iron

## COIL CLUTCHES

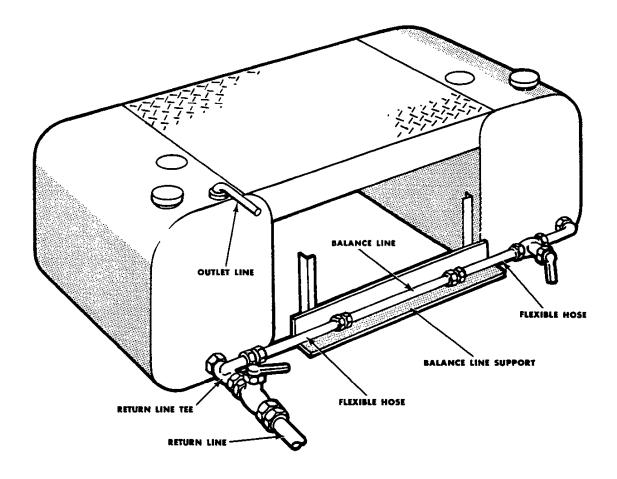
Clutch Size (in)	12	13	13 (2-plate)	14	14 (2-plate)
Clutch Springs Material		н	eat-treated spring w	ire	
Number used	12 1877	12 2179		21 3255	
Driven Disc Type		Dr	y disc with two facin	ds <sub>*</sub>	
Number of platesVibration dampers	1 6 Springs	l 8 Springs	2	l 10 Springs	2
Material		Wo	ven asbestos compos	nition	
Outside diameter (in)	117/8 63/4 .140 149.7	12% 7¼ .150 177.8	12% 7¼ 355.6	13¾ 7¼ .187 214.9	1334 8 392.9
Bearings Clutch-release type Pilot type			Single-row ball Single-row ball		
Flywheel Material			Cast iron	<u> </u>	
Ring Gear Type		•	Cold-drawn steel		

<sup>\*</sup>Dual disc clutches have four facings.

# **FUEL TANKS**

Series	Tank Location	Std/Opt	Approximate Tank Capacity (gallons)	Туре
Chassis-Cab Models				
C10, K10; C20, K20; C30; CS/CE40; CS/CE/CD/CG/MS/ME50; CS/CE/CD/CG/ME/MG60	Back of seat in cab	Std	21	
T\$/TE/TT40; T\$/TE/TD/TG50; T\$/TE/TD/TG60	Outside RH frame rail	Std	18	
	Under cab RH side	Std	20	Rectangular
HM/JM70	Behind cab	Opt	37 (each)	Dual-Cylindrical
	RH frame rail behind cab	Opt	37	Cylindrical
HJ/HV/JJ/JV70 (exc JJ/JV714)	Outside RH frame rail	Std	64	Cylindrical
HJ70; HV712; JJ/JV717	Outside LH frame rail	Opt	37	Cylindrical
HJ/HV714; JJ720	Under cab—LH side	Opt	50	Cylindrical
JJ/JV720-721-723	Outside LH frame rail	Opt	64	Cylindrical
TM70	Outside RH frame rail	Std	18	Rectangular
******	Outside RH frame rail	Opt	30	Rectangular
TV70	On top of frame rail	Std	18	_
TJ70	Outside LH frame rail	Std	18	Rectangular
	Outside LH frame rail	Opt	37	Cylindrical
	Across frame behind cab	Std	17	Throwaway
HM/JM80	Behind cab	Opt	37 (each)	Dual-Cylindrical
	RH frame rail behind cab	Opt	37	Cylindrical
TM/WM80	Across frame behind cab	Std	17	Throwaway
Cowl Models				
C10; C20	Inside frame behind rear axle	Std	20.5	_
C30	Outside LH frame rail	Std	21	<del>_</del>
CS/CE40; CS/CE50; CS/CE60	Outside RH frame rail	Std	18	_
School Bus Models		<del></del>		
SS40; SS/SE50; SE60	Outside RH frame rail	Std	30	· —
Forward Control Models	-	<u></u>		
G10; G20	Behind rear axle	Std	16	<del></del>
P10	Inside frame behind rear axle	Std	20.5	_
PS/PT209; PS/PT309	Outside RH frame rail	Std	15.5	_
PS/PT213, PS/PT215;		Std	18	
PS/PT313, PS/PT315	Outside RH frame rail	Opt	30	<del>-</del>
DC40		Std	20	_
PS40	Outside RH frame rail	Opt	30	_

# LOCAL FUEL TANK INSTALLATIONS—DIESEL MODELS RECOMMENDED PRACTICES



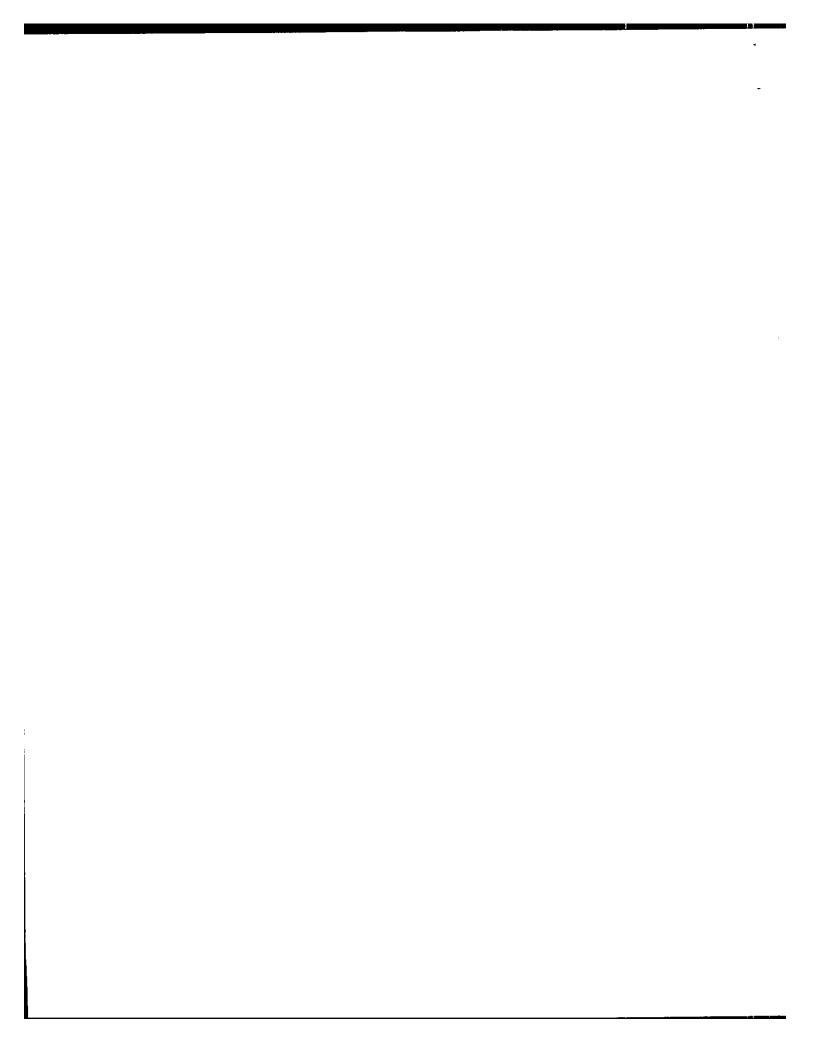
When replacing the throwaway-type temporary fuel tank on a Chevrolet diesel truck, several important recommendations should be noted. If two tanks are to be installed, the fuel outlet and return lines should be connected to the same tank. However, they should be as far apart as possible to eliminate the possibility of picking up the hot fuel just returning from cooling the injectors. Recirculating this hot fuel before it has cooled can be harmful to the injectors.

The return line should feed directly into the tank (as shown below) with the balance line being hooked in with a tee fitting. The tee may be eliminated if there is an inlet line from each tank; in which case the balance line connects the two tanks directly. The balance line should be adequately supported to prevent damage from flexing, etc. Flexible hose couplings should also be used on each end of the balance line so that any motion of the fuel tanks will be absorbed. Without them, poor tank mountings can cause fuel line failures due to twisting, flexing and vibration.

If either the muffler or exhaust pipe are located near the tank or fuel lines, a heat shield should be installed.

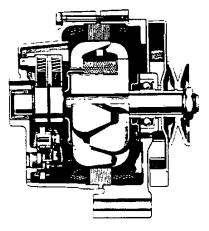
Recommended minimum fuel line sizes are:

Outlet and balance lines—%" tubing Return line—5/16" tubing



#### **GENERATOR**

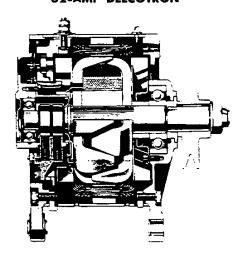
### 37-AMP DELCOTRON



All Chevrolet trucks use "DELCOTRON" 12-volt generators as standard and optional equipment. They are alternating current generators that are diode-rectified to produce direct current. The availability chart below shows which generators are available on each model and lists the pertinent specifications of each one.

The "DELCOTRON" 1D-100 series is used as standard equipment on most models. It has a cast aluminum case with a ball bearing at the drive end and a needle bearing at the rear. Lubrication intervals are increased by the use of grease reservoirs near each

### 62-AMP DELCOTRON



bearing

The "DELCOTRON" 2D-150 series features a heavier rotor shaft, ball bearings at both ends and a stamped steel case with ventilation holes. It also has longer brushes with constant-tension springs for long life. The 2D-150 series is for heavier duty service than the 1D-100 series.

The "DELCOTRON" 4D-150 series used on the school bus models is a higher capacity version of the 2D-150 series for heavy electrical loadings.

# →GENERATOR AVAILABILITY BY MODEL SERIES

		Rated Outp	out			
Capacity (amps)	Amı	peres	Watts	DELCOTRON Model	Standard	Optional
(	Idle Max		@ 14 Volts			
32	9	32	448	1D-100	G10-20	
37	9	37	518	1D-100	El Camino; C10/K10/P10; C20/K20/P20; C30/P30; CS/CE/TS/TE/ PS/SS40; CS/CE/MS/ME/TS/TE/ SS/SE50; CS/CE/ ME/TS/TE/SE60; HM/IM/TM70	_
42	12	42	588	1D-100	HM/IM/TM/WM80	El Camino; C10/K10/P10; C20/K20/P20; C30/P30; CS/CE/TS/TE/PS/SS40; CS/CE/MS/ME/TS/ TE/SS/SE50; CS/CE/ ME/TS/TE/SE60; HM/IM/TM70
61	5	61	854	2D-150	PT20-30; TT40; CD/CG/TD/TG50; CD/CG/TD/TG/MG60; HV/HI/IV/II/TV/ TI70	El Camino; C10/K10/P10; C20/K20/P20; C30/P30; C5/CE/ T5/TE/P5/S540; C5/CE/M5/ME/T5/TE/ S5/SE50; C5/CE/ME/ T5/TE/SE60; TM70; TM/WM80
62	23	62	868	2D-150		C10/K10/P10; C20/K20/P20; C30/P30; CS/CE/TS/TE/PS/SS40; CS/CE/MS/ME/TS/ TE/SS/SE0; CS/CE/ ME/TS/TE/SE60; HM/JM/TM/HJ/JJ/T170; HM/JM/TM/WM80
130	50	130	1820	4D-150	_	SE60

# **BATTERY SPECIFICATIONS—GASOLINE MODELS**

### Delco batteries are used as standard and optional equipment on all models

Series: Standard	El Camino; G10-20	C10, K10, P10; C20, K20; C30, P20-30; CS/CE/PS/ TS/TE40	CS/CE/MS/ ME/TS/TE50; CS/CE/ME/ TS/TE60	SS40; SS/SE50; SE60; HM/IM/TM70; HM/IM/ TM/WM80	_	_
Optional	+			El Camino; C10, G10, K10, P10, C20, G20, K20, C30; PS20-40; CS/CE/TS/ TE40; CS/CE/ MS/ME/TS/ TE50; CS/CE/ ME/TS/TE60	HM/IM70; HM/IM80	HM/IM70; HM/IM/ TM/WM80
Capacity (amps) (@ 20-amp-hr rate)	44	53	61	70	85	145•
Plates Per Cell	9	9	11	11	15	21
Size: Length (in)	-	10½	10 ½	101/8		_
Width (in)	_	63/4	634	6¾	_	_
Height (in)	_	8¾	83/4	9.42		
Weight (lbs)	35	41	44	49		_

<sup>■—</sup>Two 6-volt batteries wired in series

### **BATTERY SPECIFICATIONS—DIESEL MODELS**

### Delco batteries are used as standard and optional equipment on all models

Series: Standard	PT20-30; TT40; CD/CG/TD/TG50; CD/CG/MG/TD/TG60	H]/HV/]]/]V/ T]70; TV70	_
Optional	_	<del></del>	H]/]]/T]70
Capacity (amps) (@ 20-amp-hr rate)	150	205	205⊕
Plates Per Cell	19	27	27
Size: Length (in)	20 7/8	207/8	201/8
<b>Width</b> (in)	81/8	10%	103%
Height (in)	9½	91/2	9½
Weight (lbs)	115	153	306

<sup>●—</sup>Two 12-volt batteries wired in parallel

### **BATTERY AND GENERATOR SELECTION**

#### →Reference Chart—Electrical Loads

(12-Volt System)

Equipment	Amperes
Two Headlights (Upper beam)	11.0
Two Headlights (Lower beam)	9.3
Parking Lights	2.3
Stop Lights (2)	3.6
Ignition (Including gauges)	2.0
Electric Windshield Wipers	4.0
De Luxe Heater	8.0
Auxiliary Heater	6.0
Radio	1.2
Identification Lights (3 in line, front & rear)	3.1
Clearance Lights (8)	4.1
Two-Way Radio (Standby)	0.5
Two-Way Radio (Transmit)	2.0
Safety Light (Spotlight)	3.9
Instrument Lights	0.8
Air Conditioning	20.0

The great variety of truck operating conditions creates wide variations in demands upon the electrical system. Trucks operated as tractor units, especially, call for a higher output generator to meet the current load of extra equipment. It is therefore important to consider the electrical system in matching a truck to the job.

#### **Battery Selection**

The standard battery has ample storage capacity for most truck applications. The optional heavy-duty battery should be recommended for additional cranking performance and for operations in extremely cold climates. Tractors in over-the-road service will also benefit from the added reserve of a heavy-duty battery. The numerous clearance lights impose a heavy current drain during nighttime parking.

#### **Generator Selection**

A battery serves only to store electricity and must be recharged by the generator during the normal operation of the truck. Generator capacity should be selected so that the constant electric load (amperes of current draw) does not exceed 80 percent of generator maximum output capacity. This leaves 20 percent of surplus generator capacity to replace battery energy used in starting or during temporary electrical overloads.

Determine the constant electrical load from the table at left, consider average road speeds, and recommend a generator which will provide the maximum output required at the vehicle's average road speed. Specifications and operating characteristics of Chevrolet's standard and optional equipment "DELCOTRON" generators are described on Page 1.

#### →MISCELLANEOUS

#### 12-Volt System

A 12-volt electrical system, with a negative ground is used on all

### **Ignition Switch**

The ignition switch has three positions: OFF-LOCKED, ON and START. The key is removable only from the OFF-LOCKED position. Once installed, the center electrical connector plug on the switch cannot be removed without removing the complete switch assembly. Such removal requires the use of the ignition key. Therefore, it is very difficult to bridge the ignition and solenoid circuits to start the engine without a key, thus providing added theft resistance.

#### **Multi-Plug Connectors**

Plastic multi-plug connectors join major wiring harnesses at terminal points—they make electrical system servicing easier, protect wires from road splash and corrosion. Single wires, too, are protected by enclosed terminals.

#### **Dual Circuit Breaker**

Fire hazard caused by short circuits in the wiring is reduced to a minimum because all electrical circuits are protected. A dual bi-metal 15-ampere thermal circuit breaker is incorporated in the light switch, one circuit for the headlights, and one for the parking lights. If a short develops in either circuit, one of the circuit breakers relieves the load. Other electrical circuits are protected by fuses of proper size or by fusible links.

#### **Voltage Regulators**

The standard voltage regulator used on Chevrolet trucks is a double-contact two-unit type. With optional generators, a transistorized unit is used.

### **Heavy-Duty Wiring**

Heavy-duty chassis and engine electrical wiring is standard on all 40 through 80 series, and forward control models. 100-ampere wiring is standard on all School Bus models.

Wiring components affected are the instrument cluster harness, the main wiring harness, the front extension harness, and the engine wiring harness. Hypalon® wiring in the assemblies, not protected by fuses, is so insulated that if a short circuit or overload occurs the heat generated will not affect the surrounding wires and only the overloaded circuit need be repaired.

© Du Pont registered trademark

#### **Heavy-Duty Tri-Shield Wiring**

Heavy-duty tri-shield wiring is optional on TM70 series models and standard on all other 70 and 80 series models. All wiring harnesses incorporate a fusible link which provides increased overload protection to all electrical circuits, except the starting motor circuit. The fusible link runs from the positive battery terminal to a junction block; because of its light gauge, this wire acts as a fuse in the event of an overload. Selected portions of this system are triple-wrapped with insulating and abrasion resisting coatings. Also included are provisions for connecting optional or accessory electrical items, such as trailer lights, without the need for splicing connections.

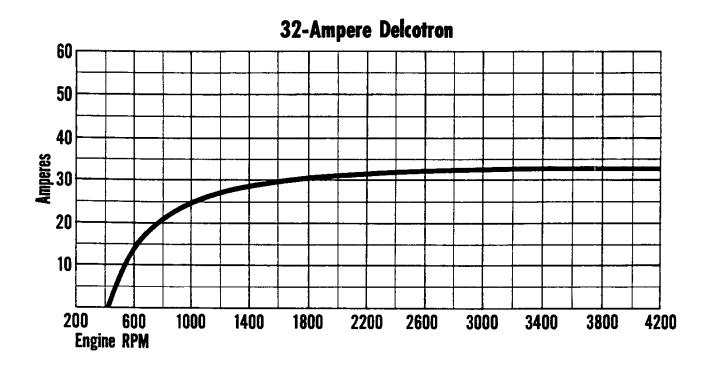
#### Starter

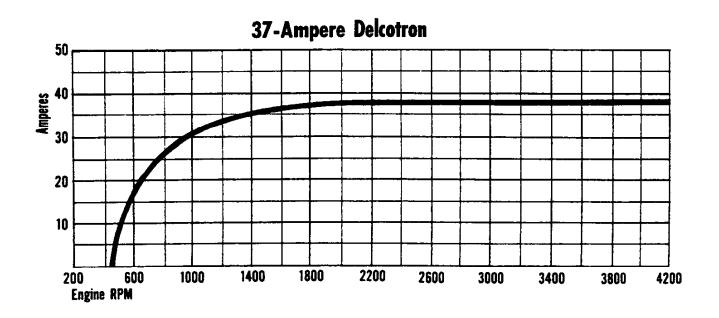
All Chevrolet trucks use a Delco 12-15-volt starter with overrunning clutch and solenoid-controlled sliding pinion. Bearings are oilless graphite-filled bronze on all gasoline models for less maintenance. Diesel models use oil cups which require lubrication. Starter is actuated by turning the ignition key to START position. Gasoline models use roll-type clutches in the overrunning clutch assembly. Diesel models use the heavier sprag-type clutches for extra cranking power and durability.

#### >Traffic Hazard Warning Switch

All 10-80 Series models except Tilt-Cabs and Series 20-30 Forward Control models have a standard traffic hazard warning switch mounted integrally in the steering column. All other models also have a standard traffic hazard warning switch which is mounted instead on the instrument panel. When actuated, the two front and two rear turn signal lights flash in rapid succession as well as the turn signal indicators on the instrument panel.

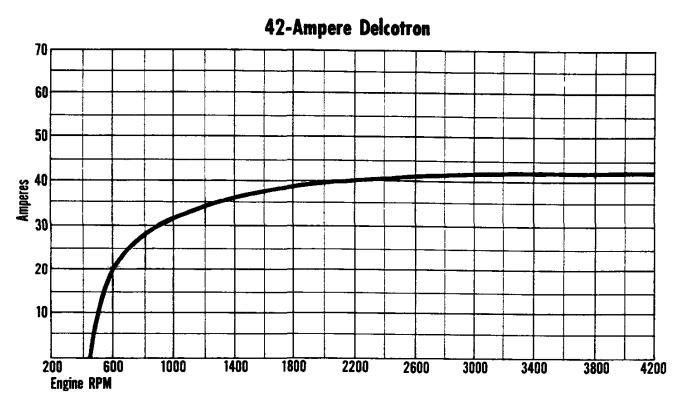
### **GENERATOR OUTPUT CURVES**

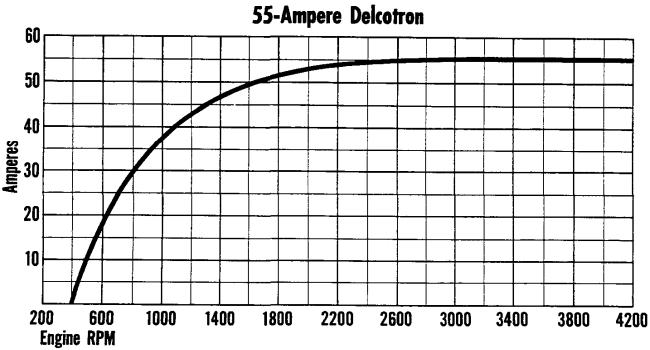




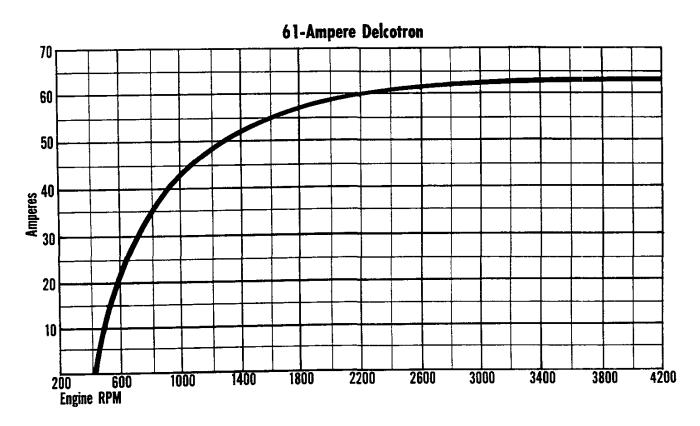
Electrical—Page 4 November 1, 1966

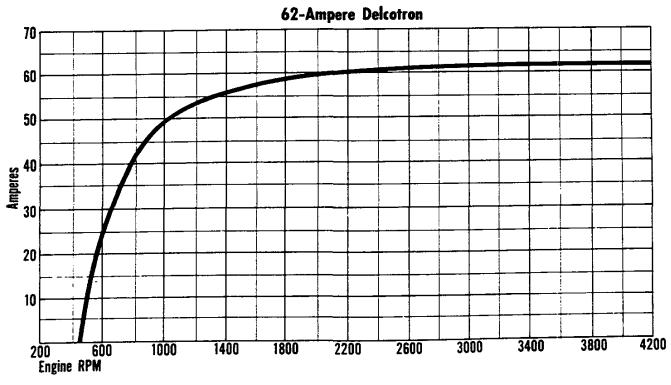
## **GENERATOR OUTPUT CURVES**



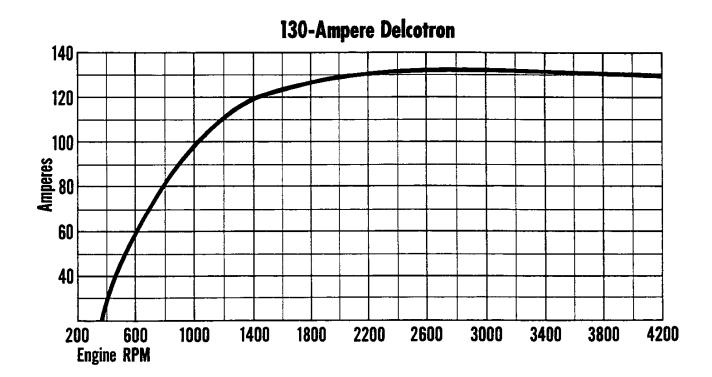


# **GENERATOR OUTPUT CURVES**





## **GENERATOR OUTPUT CURVES**



#### **→LIGHTS**

#### Front Turn Signals and Parking Lights

All Series 10 thru 60 models except Tilt Cabs use two amber combination parking and front turn signal lights which meet Class A requirements.

Series 40-80 Tilt Cabs use cowl-mounted double-faced (amberfront, red-rear) Class A front turn signals. Parking lights with white lenses are mounted in the grille.

Series 70–80 Conventional Cab models use similar cowl-mounted double-faced Class A front turn signals. Parking lights that mount in the grille assembly are optional.

#### →Rear Signals and Tail/Stop Lights:

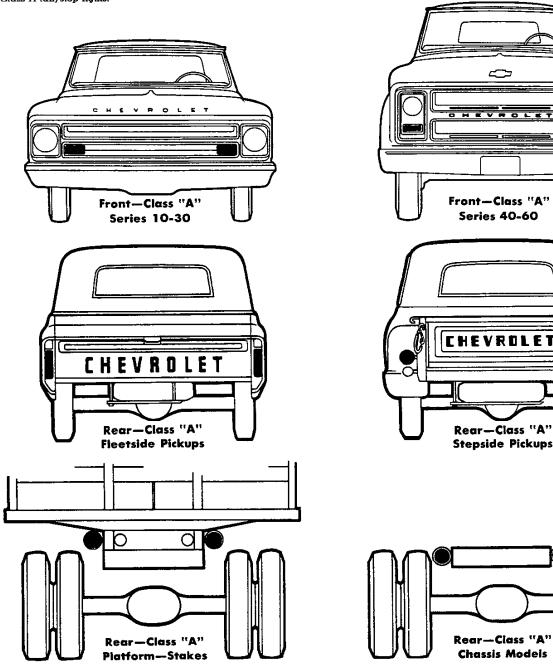
All Series 10-80 models (except Flat-Face Cowis and School Buses and 92" Conv. Cab models) have red dual combination Class A tail/stop lights.

Flat-Face Cowls and School Buses have a single combination tail/stop light mounted on the rear crossmember.

All 92" Conv. Cab models use a single rear combination tail and stop light mounted centrally on the frame rear crossmember. Dual combination tail, stop, and turn signal lights are RPO equipment (X50), and may be necessary to meet Class "A" requirements in some states.

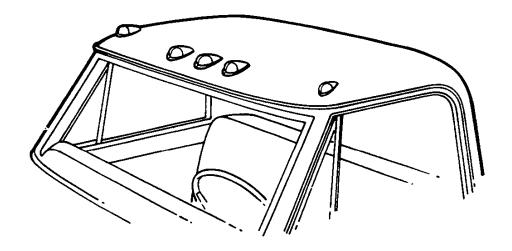
#### **Backup Lights**

Dual backup lights with white lenses are standard equipment on Chevy-Van, Sportvan, Fleetside Pickup, Stepsice Pickup, Platform and Stake Rack, Step-Van 7, Step-Van, and Step-Van King application. Backup lights also are included in RPO E56, Platform and Stake Rack equipment, and RPO E57, Platform equipment.

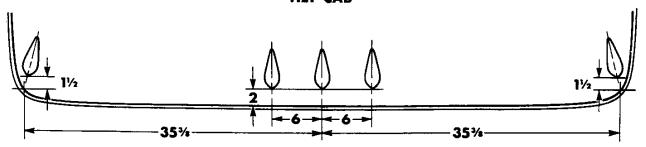


November 1, 1966

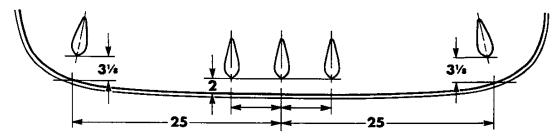
## **CAB CLEARANCE LIGHT LOCATIONS**



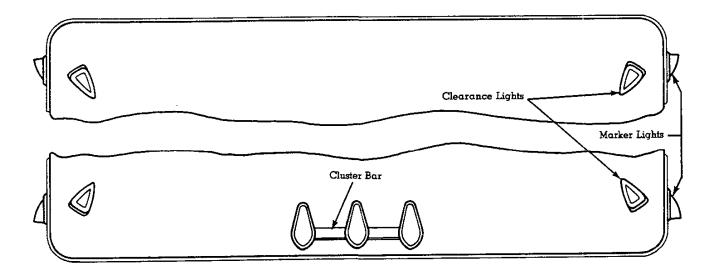
TILT CAB



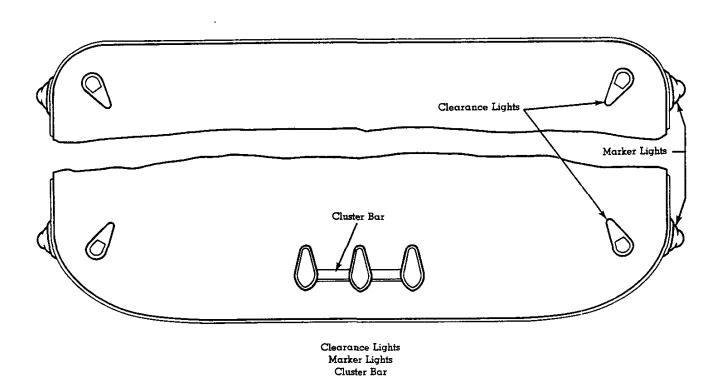
# CONVENTIONAL CAB



## STEP-VAN CLEARANCE LIGHT LOCATIONS



Clearance Lights Marker Lights Cluster Bar



#### **GENERAL DESCRIPTION**

Chevrolet truck frames are engineered to support the load, the power train, the steering mechanism and to maintain correct alignment of body and chassis components. The actual load-bearing ability of a truck is determined by the strength of the frame, because it is the vital backbone of the vehicle.

Chevrolet truck frames are designed for maximum strength with a minimum of unnecessary extra weight. The rear of the

frames of most Chevrolet single-axle models are tapered to a narrower depth because less material is required there to meet stress requirements. This weight saving is "plus" payload for the truck operator.

In all models, the frames have been designed to handle the loads that they will encounter in their respective load-rating categories.

#### FRAME STRENGTH MEASUREMENT

#### Section Modulus

Section modulus is a measure of the frame strength based solely on the height, width, thickness and configuration of the side rails. It is calculated at the point of maximum stress, which is usually directly behind the cab. Section modulus is <u>not</u> a measure of material strength and can only be used by itself to compare frames of like materials. Frame reinforcements will increase the section modulus because they increase the strength by adding to the thickness of the section. Consult the frame chart for all section modulus ratings.

#### **Yield Strength**

Yield strength is a measurement of the frame material's strength. It is the maximum load (PSI) that can be placed on a material and still have it return to its original position when the load is removed without being bent out of shape. It can be used only to compare frames of identical section.

Chevrolet uses several materials for truck frames. The basic material for most frames is carbon steel with a yield strength of 39,000 PSI. High tensile steel with a yield strength of 50,000 PSI is used where more strength is necessary for heavier loads. Heattreated steel is offered with yield strengths of 80,000 and 110,000 PSI for maximum frame rigidity. Consult the frame chart for the material used and its yield strength.

#### **RBM**—Resisting Bending Moment

Since section modulus can only be used to compare frames of like materials and yield strength can only indicate relative strengths of identical frames, some measurement is necessary to compare frames of different materials and different sections. The RBM, or resisting bending moment, can be used for this comparison as it utilizes section modulus and yield strength in its makeup.

RBM = Section Modulus x Yield Strength

This measurement will show that a smaller section frame of higher strength steel will be just as strong as a larger section frame of lower strength steel. It is readily apparent that both section modulus and yield strength are equally important so that their product, RBM, is the correct figure to use for frame comparisons.

The RBM's for all standard and optional frames are shown on the frame charts.

#### FRAME SIDE RAILS

Channel-type side rails are designed to best suit the desired characteristics of the model on which they will be used. Section modulus and yield strengths are matched to the truck's loadcarrying rating for efficient operation. Tapered rear portions of frames are used on models where strength is not required in this area. Some models use a heavy full-depth rail for uniform strength to the end of the rail to enable the operator to load to the model's full rating safely.

#### FRAME CROSSMEMBERS

The crossmembers serve to hold the side rails in place and resist buckling and frame twisting. Those that are used for special applications such as engine supports are of welded construction while all others are of channel-type construction. The channel design aids the torsional rigidity, or resistance to twisting, of the frame.

Most crossmembers are fastened to the side rails with rivets. Some are bolted to maintain accessibility for major service operations, such as transmission support crossmembers.

Most models, except the 70–80 models, have some crossmembers riveted to the upper or lower frame rail flanges. These models use web-mounted crossmembers that are not fastened to either the top or bottom frame rail flanges, but instead to the rail itself, to avoid holes in the rail flanges.

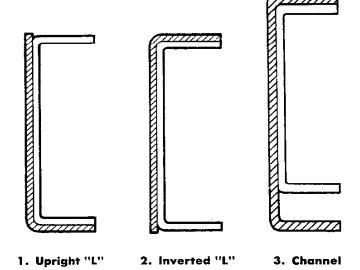
Tandem models have a special channel-type liner inside the frame that is fastened to the rear crossmembers. This is called a "bogie liner" and serves to reinforce the area around the rear axle.

## FRAME

### FRAME REINFORCEMENTS

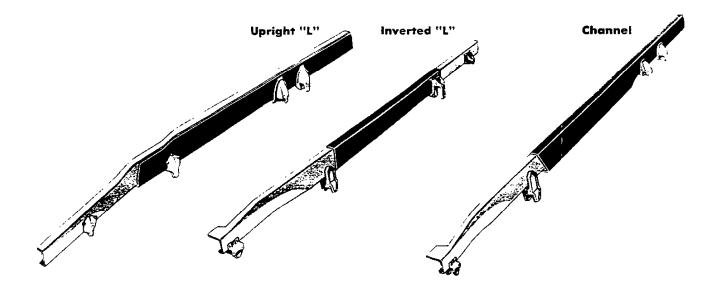
Frame reinforcements offered by Chevrolet are of three types: 1. **Upright "L"**, 2. **Inverted "L"** and 3. **Channel.** They are always of the same type steel as the frame and help to increase the section modulus by building up the frame thickness and section for increased strength.

- Upright `L' reinforcements are offered optionally on models TM/WM80 (see chart below for their location).
- Inverted "L" reinforcements are available optionally on models CS/CE/CD/CG/TS/TE/TD/TG50; CS/CE/CD/CG/TS/TE/TD/TG60; TM70; and all 92" cab single-axle and tandem models. They are standard equipment on models TV/TI70 (see chart below for their location).
- 3. Channel reinforcements are used on models MS/ME50 and ME/MG60 as standard equipment. The channel used is larger than the frame rail for most of its length. It then narrows to fit the frame rail closely from the front rear suspension bracket to the end of the rail.



#### FRAME REINFORCEMENT LOCATIONS

Туре	Series	From	То
Upright "L"	TM80	Ahead of front spring rear hanger	Behind rear spring front hanger
Upright "L"	WM80	Ahead of front spring rear hanger	End of frame
Inverted "L"	CS/CE/CD/CG/TS/TE/TD/ TG50; CS/CE/CD/CG/TS/ TE/TD/TG60; TI/TM/TV70	Ahead of front spring rear hanger	Behind rear spring front hanger
Inverted "L"	All 92" Single Axle	Ahead of front spring rear hanger	Behind rear spring front hanger
Inverted "L"	All 92" Tandem	Ahead of front spring rear hanger	End of frame
Channel	MS/ME50; ME/MG60	Behind front spring rear hanger	End of frame



### FRAMES

#### **SERIES 10-30**

All Series CS/CE10-30; PS10; PS/PT20-30 use a channel-section frame of ladder-type construction. The crossmembers are securely riveted to the side rails and rail flanges and have a drop-center design to allow a lower cab floor height for easy entry and exit. The frame width tapers at the front to accommodate the front suspension and is wider at the rear for stability.

#### SINGLE-AXLE CONV. SERIES 40-50

Conventional Series 40 and 50 single-axle model frames feature straight full-channel side rails in the maximum stress area between the cab and rear axle. The lower edges of the rails are tapered upward behind the rear axle as maximum strength is not needed here and excess weight can be removed. Channel-type crossmembers are of tough alligator-jaw design and reinforce the rear axle spring hangers at the rear. Inverted "L" reinforcements are available optionally for Series 50 models.

# SINGLE-AXLE CONV.

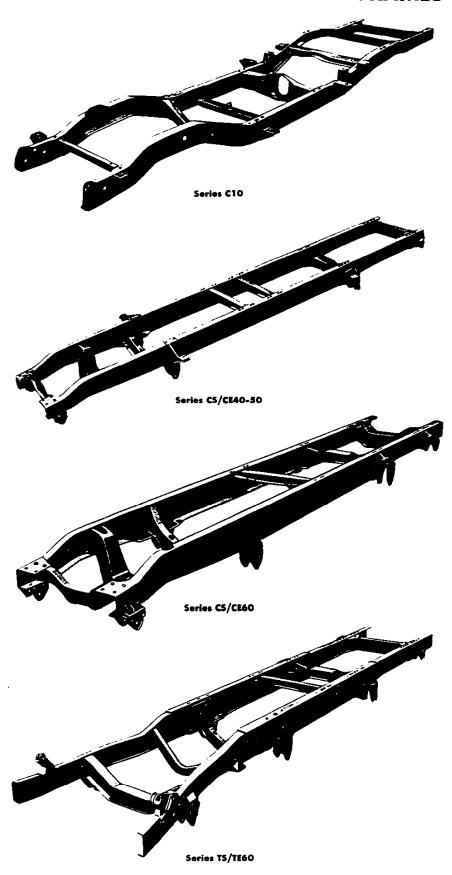
Conventional Series 60 single-axle model frames are similar to the Series 40 and 50 frames discussed above with a few exceptions. Extra-heavy channel-section rear crossmembers add strength in this area and the side rails are made of heavier gauge steel for greater durability.

Inverted "L" reinforcements are offered

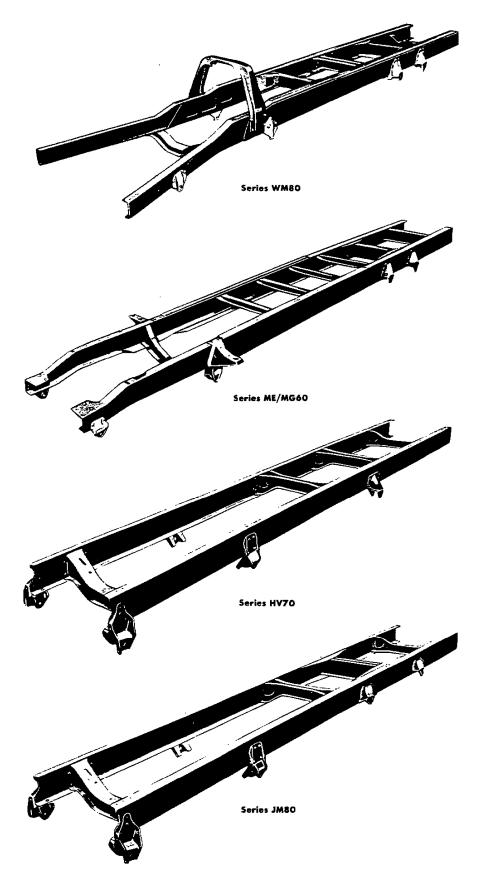
Inverted "L" reinforcements are offered optionally to increase the section modulus. Series 60 frames are also available as heavy-duty optional equipment for several Series 50 gasoline models.

#### SINGLE-AXLE TILT SERIES 40-80

Frames for single-axle tilt cab models are similar to the conventional models described above except in the forward section. The side rails flare outward at the front end to provide a wider cab support at the cab's tilting pivot points. A heavygauge crossmember arches over the rear of the engine and serves to support and anchor the rear of the cab in driving position. The height of the rails is tapered at the rear of the frame to conserve weight where maximum strength is not required. Frame reinforcements are offered optionally on most models to increase the section modulus and are standard on several tilt models.



## **FRAMES**



### Frames & Steering—Page 4

### TANDEM-AXLE TILT SERIES WM80

The WM80 model uses a full-depth frame of high-tensile steel and has a standard upright "L" reinforcement extending to the end of the frame rails. This rugged frame also has a torsional stabilizing member (frame inner liner) at the front which provides greater torsional rigidity and strength in the area behind the cab. This "K" member (so named because it forms the letter "K" where it joins the crossmember) extends from the center line of the front suspension to the crossmember where it is securely riveted. The rear of the frame has an additional full inner channel reinforcement around the bogie (bogie lines) for maximum strength in this critical area.

#### TANDEM-AXLE CONV. SERIES 50-60

Series 50–60 conventional tandem models have full-depth channel-type rails with a standard outside channel reinforcement that starts at the front spring rear hanger and continues to the end of the frame. Extra-heavy channel-type crossmembers provide excellent resistance to twisting and bending under the most severe operating conditions. An additional full inner channel reinforcement (bogie liner) is used around the rear axle assembly.

#### SINGLE-AXLE 92" CONV. SERIES 70-80

All 92" conventional single-axle Series 70-80 models use a straight full-depth channel frame from front to rear for increased strength. The crossmembers are web-mounted with rivets to the side rails only so that the rail flanges can be left free of holes for maximum strength. Bolt attachment of crossmembers is used in some areas for major service accessibility. Inverted "L" reinforcements are available optionally to increase the section modulus of the frame.

### TANDEM-AXLE 92" CONV. SERIES 70-80

Tandem axle 92" conventional Series 70-80 models also use a straight full-depth channel frame from front to rear. The frames are much the same as the 92" conventional single-axle frames discussed above except that the tandem model uses an inner channel reinforcement around the tandem rear axles (bogie liner) and heavier rear crossmembers. Inverted "L" reinforcements are also available on the tandems to increase the section modulus of the frame.

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## > TRANSMISSION AVAILABILITY BY TRUCK SERIES

Transmission	Standard	Optional
Chevrolet 3-Speed	CS10; KS/KE/PS10; PS20	_
Chevrolet Fully Synchronized 3-Speed	El Camino; CE/GS/GE10; CS/CE/GS/GE20	C\$10
HD 3-Speed	_	El Camino
Chevrolet Fully Synchronized 3-Speed Overdrive		El Camino; CS/CE10
Chevrolet Fully Synchronized 4-Speed	_	El Camino
Chevrolet 4-Speed	PT20; CS/CE/PS/ PT30; CS/CE/PS/SS/ TS/TE40; CS/CE/ CG/MS/ME/SS/ SE/TS/TE/TG50; CS/CE/CG/ME/SE/ TS/TE/TG60	CS/CE/KS/ KE/PS10-20
New Process 435C 4-Speed	_	CS/CE/SS40; CS/CE/CG/ MS/ME/SS/SE/TS/TE/ TG50; CS/CE/CG/SE/ TS/TE/TG60
New Process 435CR 4-Speed		CS/CE/PS10-30
New Process 540CL 5-Speed Wide-Ratio	_	CS/CG/MS/SS/TS/TG50; CS/CG/TS/TG60
New Process 540CD 5-Speed Close-Ratio		CG/TG50; CG/TG60
New Process 541CL 5-Speed Wide-Ratio	MG60; HM/TM70-80	CE/SESO; CE/SE60
New Process 541CD 5-Speed Close-Ratio	_	CE/SE50; CE/SE60; HM/TM70; HM/TM80
Clark 280V 5-Speed Overdrive	TT40; CD/TD50-60	<u> </u>
Clark 282V 5-Speed Close-Ratio	-	CE/ME/SE/TE50; CE/SE/TE60
Clark 285V 5-Speed Wide-Ratio	-	CE/ME/SE/TE50; CE/ME/MG/SE/TE60
Clark 385V 5-Speed Wide-Ratio	JV70	JJ <b>7</b> 0
Clark 387V 5-Speed Close-Ratio	<u> </u>	HJ/TJ70; HM/TM80
Clark 401V 5-Speed Wide-Ratio	<del>-</del>	JM80
Spicer 3152A 5-Speed Close-Ratio	_	CE/CD/ME/SE/TE50; CE/CD/SE/TE60
Spicer 3152F 5-Speed	ME60	CE/ME/SE/TE50; CE/MG/SE/TE60
Spicer 3153 5-Speed Overdrive	<u> </u>	CD50-60
Spicer 5652 5-Speed Wide-Ratio	JM70; JM/WM80	HM/TM70; HM/TM80
Spicer 5752 5-Speed Wide-Ratio	JJ70	
Spicer 5752C 5-Speed Close-Ratio	TV/HV/HI/TJ70	HM/TM70; HM/TM80
Fuller R46 8-Speed	<u> </u>	TV70
Fuller RT510 10-Speed		JJ <b>7</b> 0
Spicer 7216-3B 16-Speed	<del>-</del>	WM80
Spicer 7231-A 3-Speed Auxiliary	_	JM80
Spicer 6041 4-Speed Auxiliary	-	ME/MG60; IM70; IM/WM80
Spicer 7041 4-Speed Auxiliary		JJ/JV70; JM80
Powerglide 2-Speed Automatic	_	El Camino; CS/CE/ GS/GE/PS10; CS/ CE/GS/GE/PS/PT20
Turbo Hydra-Matic 3-Speed Automatic	-	El Camino; CS/CE10; CS/CE/ PS/PT20
Allison Automatic 6-Speed Automatic	_	CS/CE/SS/SE50; CS/CE/ME/SE/TE60 TV70
		1470

# **EL CAMINO TRANSMISSIONS**

### →3-SPEED TRANSMISSIONS

Туре	Chevrolet 3-Speed	HD 3-Speed	Chevrolet 3-Speed	HD 3-Speed	
Applications	230 Six, 250	Six, 283 V8	327 V8	327 V8, 396 V8	
Synchronized Speeds			All forward		
Gear Ratios: First Second Third Reverse	2.85 1.68 Direct 2.95	2.86 1.72 Direct 2.86	2.54 1.50 Direct 2.63	2.41 1.57 Direct 2.41	
Gears: Type. Material	Helical Forged steel; hardened				
Gearshift Control: Type	Manual remote Mounted on steering column				

### 4-SPEED TRANSMISSIONS

Туре	Chevrolet 4-Speed	Chevrolet 4-Speed	Chevrolet 4-Speed		
Applications	283 V8	327 V8	396 V8 (325 HP, 350 HP)		
Synchronized Speeds		All forward			
Gear Ratios: First	3.11 2.20 1.47 Direct 3.11	2.54 1.80 1.32 Direct 2.54	2.52 1.88 1.47 Direct 2.59		
Gears: Type	Helical Forged steel; hardened				
Gearshift Control: Type	Manual direct Mounted on the floor				

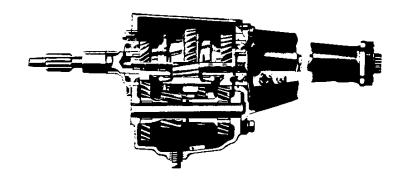
### **OVERDRIVE TRANSMISSIONS**

Туре	Chevrolet 3-Speed Overdrive	
Applications	250 Six, 283 V8	
Synchronized Speeds	All forward	
Type of Overdrive	3-Pinion planetary unit	
Gear Ratios:  First First-overdrive. Second Second-overdrive. Third Third-overdrive. Reverse	2.85 2.00 1.68 1.18 Direct .70 2.95	
Gears: Type Material	Helical Forged steel; hardened	
Gearshift Control: Type	Manual remote On steering column	
Lockout Method	By manual "puil-type" control or accelerator kickdown	

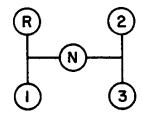
### **AUTOMATIC TRANSMISSIONS**

Туре	Chevrole	t Powerglide		
Applications	230 Six, 250 Six, 283 V8	327 V8, 396 V8 (325 HP & 350 HP)		
Converter Ratio	2.1			
Ratios: First (Lo) Second (Drive) Reverse	1.82 1.76 Direct Direct 1.82 1.76			
Cooling		Water		

# **3-SPEED TRANSMISSIONS**



#### Gearshift Lever Positions



# Standard 3-Speed Synchromesh Transmission

The wide-faced helical gears are carburized and shot-peened for long service life. Rounded gear teeth resist chipping. Antifriction bearings on the clutch shaft, mainshaft and countershaft assure alignment and proper gear meshing. The gearshift lever is located on the steering column.

# →Standard 3-Speed Fully Synchronized Transmission

The 3-speed fully synchronized transmission is standard on most Series 10–20 Conventional models, except Series CS10 models with the base 250 six engine. It is available as an option when this engine is used. All forward speeds are synchronized for much better vehicle flexibility and convenience. The gearshift is located on the steering column.

# Optional 3-Speed Overdrive Transmission

The 3-speed overdrive transmission provides better fuel economy, lower noise level and longer engine life by cutting down engine RPM. It is also fully synchronized in all 3 forward speeds for ease of operation. The overdrive may be manually locked out by a hand control or disengaged by depressing the accelerator pedal. This transmission is available only with the 4.11 rear axle ratio. The gearshift is located on the steering column.

	Chevrolet 3-Speed Synchro- mesh	Chevrolet 3-Speed Fully Synchronized	Chevrolet 3-Speed Overdrive	
Synchronized Speeds:	2nd & 3rd	All forward	All forward	
Gear Ratios:				
First	2.94	2.85	2.85 (2.00)	
Second	1.68	1.68	1.68 (1.18)	
Third	Direct	Direct	Direct (.70)	
Reverse	3.14	2.95	2.95 —	
Gear Types:				
Helical gears		All		
Spur	. None			
Bearing Types:				
Clutch gear bearing		Ball		
Mainshaft, front		Roller		
Mainshaft, rear		Ball		
Countershaft, front		Roller		
Countershaft, rear	. Roller			
Reverse idler	. Bronze bushing			
Lubricants:				
Capacity	2 Pints	3 Pints	4 Pints	
Type, grade		See Owner's Guid	le	

## POWERGLIDE & TURBO HYDRA-MATIC TRANSMISSIONS

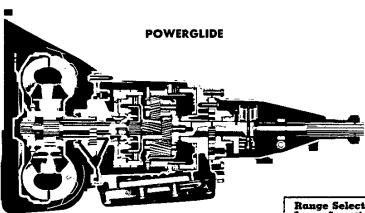
### **Specifications**

Ingine Usage		6-Cy	linder	8-Cy	linder
Range Selector Lever Location		Mounted on Steering Column			lumn
Co	nverter Ratio	Max	l to l	Max	l to 1
Powerglide Torque	Drive	2.40	1.00	2.10	1.00
Multiplication	Low	4.37	1.82	3.70	1.76
	Reverse	4.37	1.82	3.70	1.76
Oil Filler & Gauge Location		Right	Front Side	of Trans	nission
Lubricant Dry Fill			181	Pints	
Capacity	Refill	3 Pints			

The optional Powerglide 2-speed transmission is available on Series G10-20; CS/CE10-20; PS10-20 and El Camino models only. It combines a 2-speed planetary gearset and a torque converter to provide smoothness and torque multiplication as high as 3.82 (low/reverse on 6-cylinder models) and 3.70 (low/reverse on 8-cylinder models).

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A selector lever is mounted on the steering column with five positions: Park (P), Reverse (R), Neutral (N), Drive (D) and Low (L). For safety, the engine can only be started in either Park or Neutral position.



**Specifications** 

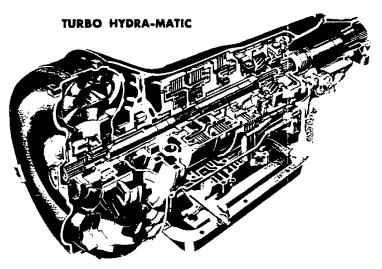
Range Selecto Lever Locatio		Steering	g Column		
	Torque Convertor	Lock-Up	Breakaway		
_	First	2.48	4.96		
Gear Ratios	Second	1.48	2.96		
Munos	Third	1.00	2.00		
	Reverse	2.10	4.20		
_	Element Types	Pump, S	tator, Turbine		
Torque Convertor	Torque Lock-Up Clutch		Automatic		
Gear Type		Planetary			
Lubricant	Lubricant Dry Fill		Pints		
Capacity Refill		9 Pints			

The optional Turbo Hydra-Matic 3-speed automatic is available on Series CS/CE10-20; PS20 models only. It provides greater performance, smoothness and flexibility through a 3-element torque converter with a compound planetary gearset. The additional forward gear, as compared to 2-speed Automatics, affords improved fuel economy and better performance by more efficient use of engine torque thru all ranges.

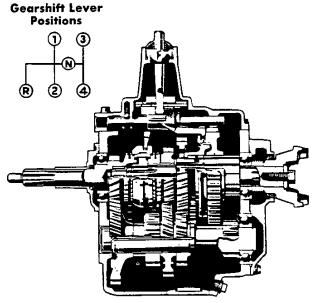
A six-position selector provides the following ranges: Park, Reverse (R), Neutral (N), Drive (D), Low Two (L2), and Low One (L1). Moving the selector to L2 locks out third gear entirely, with automatic shifting between first and second gears. The transmission is locked in low gear when L1 is selected.

Automatic shifting schedules are controlled by a vacuum modulator instead of the mechanical linkages used in other designs. This allows smoother shifts by "sensing" engine vacuum changes.

Downshifts for passing are controlled by a solenoid on the carburetor.



## **4-SPEED TRANSMISSIONS**

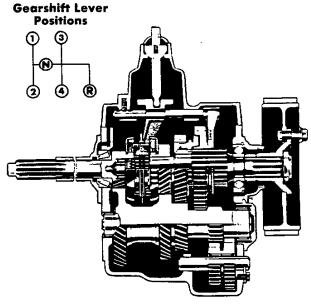


### CHEVROLET 4-SPEED

The Chevrolet 4-speed transmission provides a first gear antirattle device and synchromesh gear engagement in second, third and fourth gears for quick, clashless shifting. All components are built for dependability and durability. A magnetic collector removes metallic particles from the lubricant, reducing wear to magnetic particles.

ing wear to moving parts.

Series 10–30 models use cable-actuated rear brakes for a parking brake. Series 30 models with the 11,000-lb rear axle use a transmission-mounted drum & dual shoe type.



→NEW PROCESS 4-SPEEDS

The New Process 435C 4-speed transmission features good durability, quiet operation and easy shifting. It has synchromesh gear engagement in 2nd, 3rd and 4th gears.

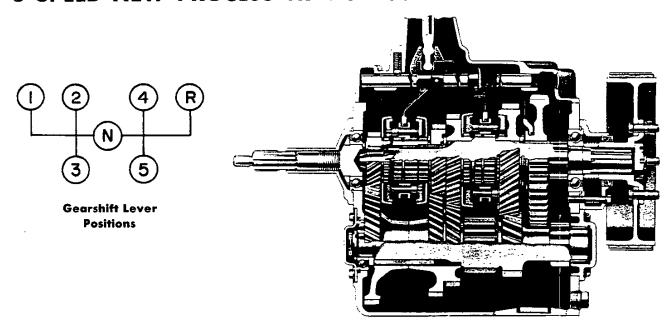
High gear pressure angles combined with generous gear face widths resist pitting and provide greater tooth contact

High gear pressure angles combined with generous gear face widths resist pitting and provide greater tooth contact area. The transmission also has heavy-duty bearings and strong rigid shafts for good reliability under extreme operating conditions. Large synchronizer cones with more working surface provide fast and easy shifting. A magnetic particle collector in the bottom of the case helps to reduce transmission wear.

A drum and band parking brake is attached to the trans-

	Chevrolet 4-Speed	New Process 435C 4-Speed	New Process 435CR Close-Ratio 4-Speed		
Synchronized Speeds		2nd, 3rd & 4th			
Gear Ratios: First	7.06 3.58 1.71	6.68 3.34 1.66	4.56 2.28 1.31		
ThirdFourthReverse	Direct 6.78	Direct 8.26	Direct 5.64		
Gear Types: Helical		2nd, 3rd, 4th 1st, Reverse			
Bearing Types:  Mainshaft, front.  Mainshaft, rear.  Countershaft, front.  Countershaft, rear.	Ball Needle Roller				
Power Take-Off Data: Opening type		SAE Std 6-Bolt			
Location	Left Side	3rd Speed Countergear	Side		
PTO gear rpm at 1000 engine rpm	425	39	95		
Lubricants: Oil capacity	61/4 Pints	7 Pints See Owner's Guide	7 Pints		
Brakes, Parking: Type  Drum diameter (in)  Lining area (sq in)	9.5				

# **5-SPEED NEW PROCESS TRANSMISSIONS**



The New Process 5-speed synchromesh transmission permits more efficient engine use, lower fuel consumption, and reduced maintenance. The choice of gear ratios allows the engine to operate in the speed range of greatest power output and operating efficiency. High-ratio first and reverse gears provide greater torque multiplication than is available with the 4-speed transmission.

Synchromesh engagement of second, third, fourth, and fifth speeds results in quick, clashless gearshifting. Mainshaft, countershaft, reverse shaft and all gears are machined from

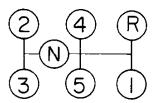
alloy steel, carburized and hardened for durability. Gear teeth are shot peened for added resistance to fatigue failure. Compact design results in short, rigid shafts for accurate meshing of gear teeth. Mainshaft and countershaft are mounted on ball and roller bearings for high efficiency and long service life. A magnetic chip collector in the bottom of the case also helps to reduce transmission wear.

Power take-off openings are provided on both the right and left sides of the transmission case. Drum and band type parking brake is mounted at the rear of the transmission case.

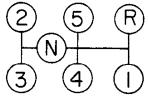
	Std-Ratio 5-Speed	Close-Ratio 5-Speed	Std-Ratio 5-Speed	Close-Ratio 5-Speed	
Model	540CL	540CD	541CL	541CD	
Synchronized Speeds		2nd, 3rd, 4	th and 5th		
Gear Ratios:  First Second Third Fourth Fifth Reverse	7.41 4.05 2.40 1.48 Direct 7.85	6.05 3.31 1.84 1.17 Direct 6.42	7,25 3,88 2,19 1,37 Direct 7,22	6.15 3.30 1.86 1.17 Direct 6.13	
Gear Types: Helical					
Bearing Types: Mainshaft, front Mainshaft, rear Countershaft, front Countershaft, rear	Ball Ball				
Power Take-Off Data: Opening type		SAE stand Right- and left-hand			
PTO gear rpm @ 1000 engine rpm	374 left 456 right	457 left 558 right	369 left 425 right	434 left 500 right	
Lubricants: Oil capacity	10 pints	10 pints	10 pints	10 pints	
Type, grade					
Brakes, Parking: Type	Drum and band 9.5 10.5				
Drum diameter (in)					

# **5-SPEED CLARK TRANSMISSIONS**

### **Gearshift Lever Positions**

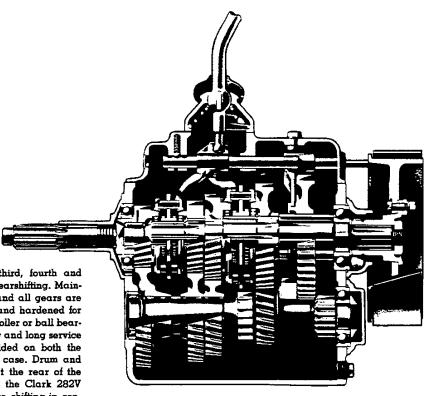


Std- and Close-Ratio



Overdrive

Synchromesh engagement of second, third, fourth and fifth speeds results in quick, clashless gearshifting. Mainshaft, countershaft, reverse idler shaft and all gears are machined from alloy steel, carburized and hardened for durability. Shafts and gears revolve on roller or ball bearings or fluted bushings for high efficiency and long service life. Power take-off openings are provided on both the right and left sides of the transmission case. Drum and band type parking brake is mounted at the rear of the transmission case. Close-ratio design of the Clark 282V and 387V transmissions permits effective shifting in conjunction with a two-speed rear axle. Overdrive ratio of the 280VO is used exclusively on diesel-powered models.

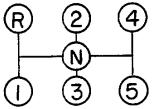


	Std-Ratio 5-Speed	Close-Ratio 5-Speed	Overdrive 5-Speed	Std-Ratio 5-Speed	Close-Ratio 5-Speed	Std-Ratio 5-Speed
Model	285V	282V	280VO	385V	/387V/	401V
Gear Ratios:						. 7/ 4/1
First	-6.99 ^	6.99	5.98	7.01	6.27	7.07
Second	4.09	4.09	3.50	3.97	3.55	4.33
Third	2.24	2.17	1.86	2.34	1.89	2.68
Fourth	1.46	1.17	1.00	1.42	1.18	1.64
Fifth	Direct	Direct	.80	Direct	Direct	Direct
Reverse	5.89	5.89	5.04	5.71	5.11	6.90
Gear Types:				******		
Helical			2, 3,	4, 5		
Spur			1, Re	verse		
Bearing Types:						·
Mainshaft, front			Rol	ler		
Mainshaft, rear			Вс	ıll		
Countershaft, front			Rol	ler		
Countershaft, rear			Вс	all	······································	•
Power Take-Off Data:			<u> </u>			
Opening type			SAE stand	ard 6-stud		
Location		Ri	ght and left side	es of transmissio	n*	78
PTO gear rpm @ 1000 engine rpm		794 left 794 right		1050 left 1050 right	1230 left 1230 right	381 left 698 right
Lubricants:				1000 1.g.k	1 1200 11921 1	OSO right
Oil capacity	12 pints				pints	22 pints
Type, grade	See Owner's Guide					
Broke, Parking:					·	<del></del>
Туре			Drum é	k band	<del></del>	
Drum diameter (in)	9.5					
Lining area (sq in)			8	35		

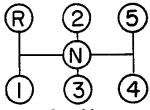
<sup>\*</sup>Adaptor required in some applications.

# 5-SPEED SPICER TRANSMISSIONS

**Gearshift Lever Positions** 

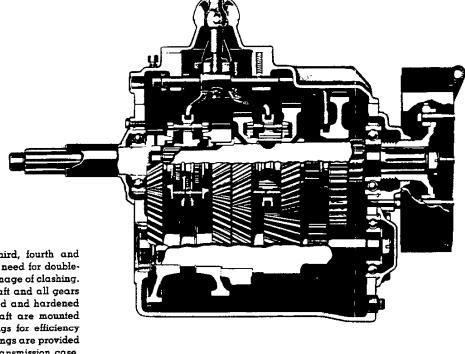


Standard and Close-Ratio



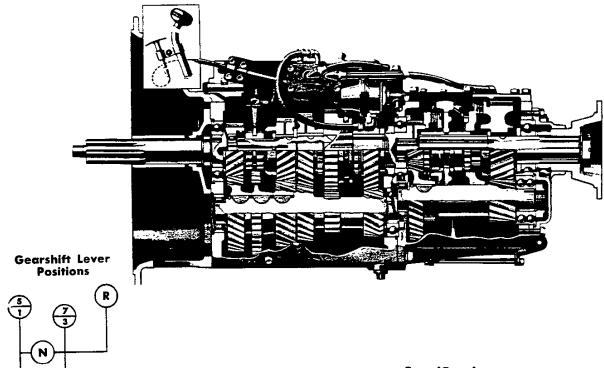
Overdrive

Synchromesh engagement of second, third, fourth and fifth speeds eases shifting, eliminates the need for double-clutching, and protects gears from the damage of clashing. Mainshaft, countershaft, reverse idler shaft and all gears are machined from alloy steel, carburized and hardened for durability. Mainshaft and countershaft are mounted on high-capacity ball and roller bearings for efficiency and long service life. Power take-off openings are provided on both the right and left sides of the transmission case. Drum and band type parking brake is mounted at the rear of the transmission case. Close-ratio design of Models 3152A and 5752C permits very effective shifting in conjunction with 2-speed rear axle.



	Std-Ratio 5-Speed	Std-Ratio 5-Speed	Close-Ratio 5-Speed	Overdrive 5-Speed	Std-Ratio 5-Speed	Close-Ratio 5-Speed
Model	5652	5752	5752C	3153	3152F	3152A
Synchronized Speeds			2nd, 3rd, 4	lth and 5th	-,	
Gear Ratios:  First	7.08 3.83 2.36 1.45 Direct 7.50	6.10 3.30 2.04 1.40 Direct 6.46	6.10 3.30 1.81 1.17 Direct 6.46	6.00 3.31 1.94 Direct 0.79 5.90	7.07 3.90 2.22 1.37 Direct 6.96	6.00 3.31 1.94 1.16 Direct 5.90
Gear Types: Helical Spur	2nd, 3rd, 4th and 5th 1st and Reverse					
Bearing Types:  Mainshaft, front.  Mainshaft, rear.  Countershaft, front.  Countershaft, rear.			Bo Ro	ller all ller all		
Power Take-Off Data: Opening type Location		SAE 6-Bolt Both Sides			SAE 6-Bolt: Left SAE 8-Bolt: Righ	
PTO gear rpm at 1000 engine rpm: Left side Right side	509 578	509 578	509 578	509 578	509 578	509 578
Lubricants: Oil capacity				10 Pints See Owner's Guide		
Brake, Parking:			Drum	& Band		
Type  Drum diameter (in)  Lining area (sq in)		10.5 99.1	Drum	L Dano	9.5 85	

### 8-SPEED FULLER TRANSMISSION



#### Fuller R46

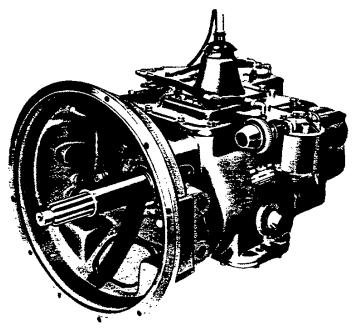
The Fuller R46 is essentially a constant-mesh four-speed main transmission coupled with a synchronized two-speed auxiliary transmission. The separate cast iron cases of the main and auxiliary are bolted together as a single unit.

Constant-mesh helical gears in all forward speeds are engaged by sliding hubs splined to the mainshaft. Shifting of the main transmission is accomplished by a remote-control mechanism; the auxiliary is shifted by an air cylinder controlled by a cable located on the transmission shift lever. Synchronizing of the auxiliary unit is by means of a multiple clutch plate while the actual shift is made, as in the main unit, through a sliding hub splined to the mainshaft.

Shifting of the Fuller R46 varies from the conventional transmission with auxiliary transmission or two-speed axle combinations in that split-shifting is not employed. Rather, the shifting sequence involves 8 progressive steps. With the reduction unit in low-range position (down), shift lever is moved from 1st through 4th positions. Reduction unit switch is then moved to high-range position (up) and the shift lever is returned to lowest gear position. The main unit may then be upshifted through its sequence again. To downshift, the procedure is reversed.

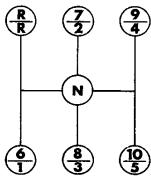
	8-Speed Constant-Mesh
Make & Model	Fuller R46
Gear Ratios:	
	9.15
Second	6.53
ThirdFourth	4.66
Fourth	3.68
Fifth. Sixth.	12.49
Sixth	11.79
Seventh	Direct
EighthReverse, low range	In 30
Reverse, high range	12.80
	1
Synchronized Speeds	None
Gear Types:	ļ
Helical	11st through 8th
Spur	Reverse
Bearing Types: (Main Section)	
Main drive gear	Ball
Mainshaft pilot	Boller
Mainchaft roor	Ball
Mainshaft, rear	Roller
Countershaft, rear	.Ball
Reverse idler	
Bearing Types: (Auxiliary section)	
Main drive gear, rear	Boll .
Main anve gear, rear	Roller
Mainshaft pilot	(Boll
Countershaft, front	Roller
Countershaft, rear	Ball
Power Take-Off Data:	T
	CXE -4.1 6 k-14
Opening type	Beth sides
PTO gear rpm at 1000 engine rpm	1710
	1710
Lubricants:	l
Oil capacity	17 pints
Type, grade	foee Owner's Guide
Brake, Parking:	<b>.</b>
Туре	Internal expanding
Drum diameter (in)	.11.3
Lining area (sq in)	100.0

## 10-SPEED FULLER TRANSMISSION



### **Specifications**

	10-Speed Constant-Mesh
Make and Model	Fuller RT510
Synchronized Speeds	None
Gear Ratios:	
First	9.00
Second	7.02
Third	5.48
Fourth	4.26
Fifth	3.43
Sixth	2.62
Seventh	2.05
Eighth	1.60
Ninth	1.24
Tenth	1.00
Reverse, low range	9.50
Reverse, high range	2.76
Gear Types:	
Helical	1st thru 10th
Spur	Reverse
Power Take-Off Data:	
R/H Side	SAE Std. 6-bolt
Bottom	H.D. 8-bolt
Lubricants:	
Oil capacity (pts)	18
Type, grade	See Owner's Guide



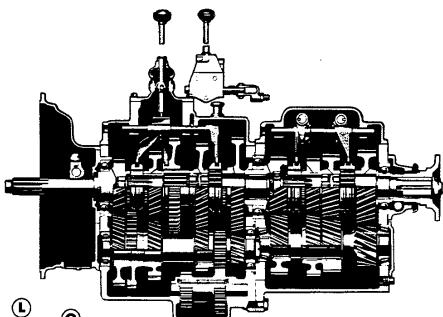
#### Fuller RT510

The Fuller RT510 is a unique transmission with a twincountershaft design. This feature enables the countershafts to split engine torque so that each one carries a lesser load than a single countershaft design. The mainshaft "floats" between the countershafts, thus eliminating gear bushings and shaft sleeves which could wear out.

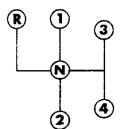
The ten speeds are progressively spaced and controlled by one shift lever in conjunction with a button on the shift lever. The main transmission has five speeds with conical clutching teeth on the gears for easy shifting. A two-speed range section on the back of the main unit is shifted by an air cylinder which is controlled by the button on the shift lever. The range section is pre-selected with the button by the driver and automatically shifts itself when the transmission is moved to neutral.

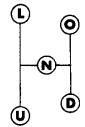
The main box is first shifted through all five speeds with the range section in low. The range section is then placed in high and the same gear pattern is repeated for the other five speeds.

# 16-SPEED SPICER TRANSMISSION



**Gearshift Lever Positions** 





Spicer 7216-3B

The Spicer 7216-3B sixteen-speed compound transmission is composed of a four-speed main unit and an attached four-speed auxiliary rear section. Each is controlled by a separate shift lever. All forward speed gears are constant-mesh helical type and the reverse gears are spur type. All gears are made of carburized and hardened alloy steel. The cases are cast iron and feature several PTO openings as shown on the specifications chart.

The basic advantage of a compound transmission is the compact, lightweight installation afforded by elimination of externally mounted auxiliaries. All gear reductions needed are available without the use of multiple-speed axles or complex drivelines.

Shifting through the 7216-3B is accomplished by placing the main unit in first gear and shifting the auxiliary through its four speeds. The same procedure is followed for the rest of the main speeds with the exception of not using the auxiliary's low-low gear with main speeds two through four.

Make & Model			Spicer 7	216-3B			
Gear Ratios:	Auxiliary Unit						
Main Unit	Low- Under- Direct- C Low Drive Drive I						
First. Second. Third. Fourth. Reverse.		6.50 3.65 2.09 1.21 6.51	5.37 3.02 1.73 1.00 5.38	4.45 2.50 1.43 .83 4.45			
Power Take-Off Data Location Openings, L.H R.H Drive gear Gear type Speed @ 1000 eng. r.p.m	SAE SAE P.T.C S	sides 6-bolt 8-bolt ). gear pur '24	Both sides SAE 6-bolt SAE 6-bolt C/s drive Helical First 198 Second 353 Third 615 Fourth 1064 Reverse 352				
Lub. Capacity (pts.)		2	8				

### Advantages

Lo-2

**Shorter trip times** possible through power-on shifts and efficient use of engine power by automatic shifting.

**Greater payloads** possible through shorter trip times, thus permitting more tonnage to be hauled per day.

Fuel economy through power-on shifts and automatic converter lock-up clutch.

Reduced shock-loads to engine and driveline by oil-cushioned shifting.

**Longer service brake life** through braking assistance of hydraulic retarder.

**Reduced maintenance.** Engine clutch eliminated. Single-speed rear axle saves first cost, eliminates maintenance of two-speed axle parts.

**Increased road safety.** Frees driver of clutch and gearshift distractions, cuts fatigue and aids alertness. Hydraulic retarder gives added braking control.

### Features

The Allison Automatic is a durable automatic transmission designed and built exclusively for medium- and heavy-duty trucks. It has construction features to meet truckers' demands for economy, performance, operating flexibility, minimum downtime and low maintenance cost.

**Torque convexter** multiplies starting torque as much as 2.8 to 1. Effective ratio of 14.8 to 1 available in 1-2 range.

**Converter lock-up clutch** engages automatically when converter is not needed—gives direct engine coupling for high efficiency and fuel economy.

Planetary gears provide six closely spaced forward gear ratios. Durable planetary gears are in constant mesh, engaged automatically by self-adjusting multiple-disc clutches.

Four-range control gives driver full control of forward driving ranges for best performance and flexibility.

**Hydraulic retarder** assists in braking. Pedal operated, retarder multiplies engine braking up to six times.

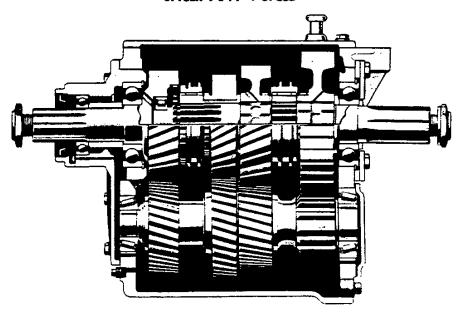
Power take-off openings are provided on both sides of transmission

Make, Model & Type	Alliso 6-Speed Au	
Ranges & Effective Ratios:	Transmission Gears	Reduction Ratio
Range 3-6 (Cruising, level roads)	Converter & 3rd Lock-up & 3rd Lock-up & 4th Lock-up & 5th Lock-up & 6th	7.53 = 2.69 • 1.94 • 1.39 • Direct •
Range 3-5 (Traffic or hills)	Converter & 3rd Lock-up & 3rd Lock-up & 4th Lock-up & 5th	7.53 <b>1</b> 2.69 1.94 1.39
Range 3-4(Slow traffic, steep hills)	Converter & 3rd Lock-up & 3rd Lock-up & 4th	7.53 ■ 2.69 1.94
Range 1-2(Off-road, extreme hills)	Converter & 1st Lock-up & 1st Lock-up & 2nd	14.8 <b>=</b> 5.29 • 3.81 •
Reverse	Converter & Rev Lock-up & Rev	16.9 <b>■</b> 6.04
Torque Converter: Element types Lock-up clutch Reduction Gears:	Pump, 2 stato Automatic, c control	jovernor
Gear types	Planetary, clute	ch actuated
Power Take-Off Data: Opening type Location PTO gear rpm	Both si	des
Lubricants: Oil capacity	19-qt dry 9 qt less co	
Oil type, gradeOil filter type		
Brake, Parking: Type Drum diameter (in) Lining area (sq in)	Drum & 1 9.5* 89	

- Maximum ratio at stall speed.
- Gear ratios without converter.
- \* MT30 only; MT40 uses 10.5" x 99.1 sq in.
- ★ Speed of PTO gear in neutral varies directly as converter turbine shaft speed varies with load on power.

### **AUXILIARY TRANSMISSION!**

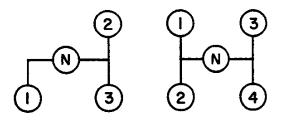
### SPICER 7041 4-SPEED



#### **Gearshift Lever Positions**

3-Speed

4-Speed

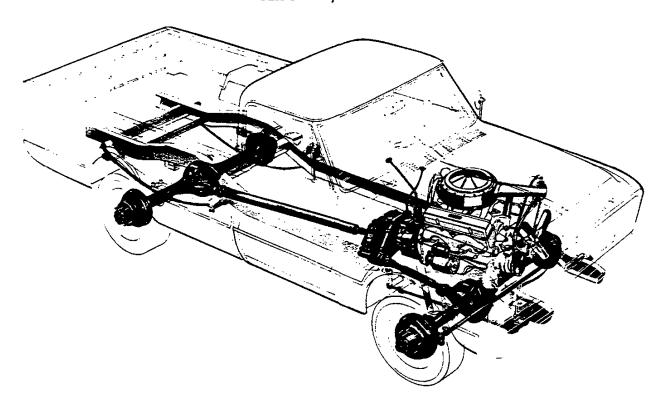


Auxiliary transmissions are used in combination with the mai transmission where extreme grades, big payloads and widel varying operating conditions require a broad range of closel spaced, even gear steps.

The Spicer 6041 and 7041 4-speed auxiliary transmissions combin low gear ratios necessary for heavy-duty off-highway usage wil closely spaced gears and an overdrive gear needed for efficien on-highway empty operations. Three power take-off location facilitate easy accessory power hookups. All gears are helical constant mesh for easier and quieter shifting. Shafts and gears at precision machined and carburized for resistance to wear.

1	3-Speed	4-Speed	4-Speed			
Make & Model	Spicer 7231-A	Spicer 6041	Spicer 7041			
Ratios: First	2.14	2.14	2.31			
Second	Direct	1.24	1.21			
Third	.74	Direct	Direct			
Fourth		.86	.83			
Gear Types	Helical					
Lever Location	Floor mounted					
Power Take-Off Data: Type		SAE std 6-bolt				
Number of outlets	2	3				
Locations	Both sides	RH, LH, a	nd top			
Lubricants: Oil capacity (pts)	8	8	11			

# FOUR-WHEEL-DRIVE TRANSFER CASE SERIES KS/KE10-20



The transfer case on Four-Wheel-Drive models is bolted directly to the transmission case tailshaft through an adapter, eliminating the intermediate propeller shaft linking the two gear boxes. In four-wheel-drive position, driver has the choice of direct gear or 1.94 to 1 underdrive. Control is through a single lever having four positions. From the rear toward the front of the truck, these positions are: four-wheel underdrive; neutral; four-wheel direct

drive; and two-wheel direct drive.

All gears and shafts are accurately machined from alloy steel, carburized and hardened for durability. Shafts are mounted on antifriction ball or roller bearings for efficiency and long service life.

A power take-off opening is provided at the rear of the case.

### **ODOMETER CORRECTIONS**

Speedometer drive gears are cut to the nearest full tooth when they are manufactured. This causes errors in the mileage indicated on the odometer in the vehicle when various transmission and rear axle combinations are used. Changing tires from a smaller to a larger tire size also causes errors in the indicated mileage. These errors are reduced by the use of adaptors that are placed on the speedometer gears when optional transmissions, optional rear axles or optional larger rear tires are ordered from the factory. As an example, if a 60 Series truck were equipped with a New Process 5-speed transmission, a 7.20 rear axle ratio and 8.25 x 20

rear tires, the speedometer error without an adaptor would be —4.88%. For every 100 miles the vehicle actually traveled, only 95.12 miles would register on the odometer. With an adaptor placed on the speedometer, the error would be reduced to 1.06%. For every 100 actual miles traveled by the vehicle, it would register 101.6 on the odometer.

Odometer adaptor gear information and percent of error in odometer readings for the various transmission, rear axle and tire combinations can be obtained from the Zone Service Manager.

November 1, 1966

### DRIVELIN

### **DESIGN AND FEATURES**

**Hotchkiss drive** is featured on all Chevrolet trucks equipped with single rear axle except CS/CE10-20 models. Driveline serves only to transmit power between transmission and rear axle. Rear springs cushion the driving and braking forces at the rear axle for smooth operation. Hotchkiss drive keeps chassis weight down and provides efficient power transfer in all types of truck service.

CS/CE10-20 models utilize radius rods to control braking and acceleration forces. This leaves the coil springs to act as elastic members only.

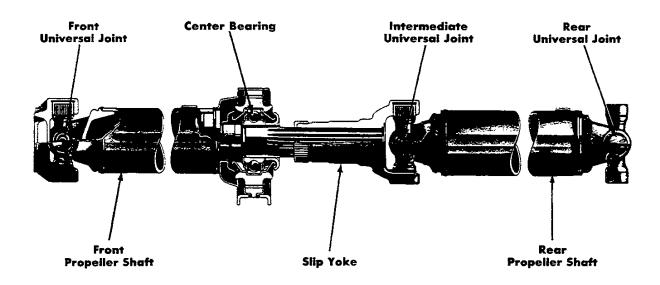
**Drivelines** for Chevrolet trucks are engineered for reserve torque capacity, accurate balance, high rigidity and resistance to vibration.

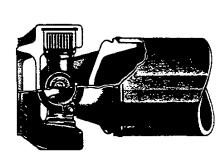
**Propeller shafts** are made of smooth-wall steel tube. Length ar tube diameters are proportioned for high rigidity to minimis flexing or "whip."

**Universal joints** are efficient needle bearing type. Trunnions as drop-forged and hardened for wear resistance and long life.

**Center bearings,** standard on many models, divide drivelir into short, rigid propeller shafts. (ushion mounting minimize transfer of vibrations.

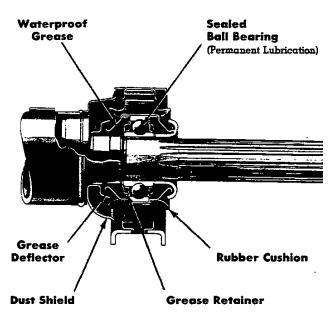
Slip yoke adjusts length of driveline to match normal movemen of rear axie over bumps, frees driveline of end stresses.





#### **Universal Joint**

Low-friction universal joints provide reserve torque capacity and efficient transfer of driving force to rear axle.



### Center Bearing

Rubber-cushioned center bearing isolates propeller shafts, reduces transfer of possible vibrations on all models equipped with multiple propeller shafts.

# DRIVELINE

### **SPECIFICATIONS**

The propeller shaft and universal joint specifications shown below are based on Models with Standard Equipment Only. If optional equipment (engine, transmission, auxiliary transmission, rear axle) is ordered, different combinations of propeller shafts and universal

joints are provided to make up the driveline. These combinations are not described in the Data Book. If specifications for these combinations are necessary, they may be obtained thru the Zone Office.

	Propeller Shaft Diameter (in)						Un	iversal J	oints		
Series	No. Usen Front or Single	Center or Front Intermediate	Rear Intermediate	Rear	No. Used	1	2	Seri	ies 4	5	6
CE107; CS/CE109 CS/CE209 CS310 CE310 CS314 CE314 KS/KE107 KS/KE109 KS/KE209 PS/PT110 PS/PT209 PS/PT213 PS/PT309 PS/PT313 PS/PT315 PS414 PS421 CE410-412-414 CE417 CS/SS410-412-414 CS/SS417 TS/TE412-414 TS/TE418-420 TS/TE425 TT412-414 TT418-420 TT425 CD510-512-514 CD517-520 CE510-512-514 CG510-512-514 CG517-520 CS512-514 CG517-520 CS512-514 CG517-520 CS512-514 CS517-520 SS525-528 TD512-514 TD518-520 TD525	1 3.50 2 2.00 2 2.50 2 2.50 3.00 3.50 1 1 2.50 3.50 2 2.50 2 2.50 2 2.50 2 2.50 2 2.50 3 2.50 2 2.50 3 3.50 2 2.50 3 3.50 2 2.50 3 3.50 2 2.50 3 3.50 2 2.50 3 3.50 2 3.50 2 3.50 2 3.50 3 3.50 2 3.50 3 3.50 2 3.50 3 3 3.50 3 3 3.50 3 3 3.50 3 3 3.50 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3.00 3.50 3.50 3.00 3.00 3.00	3.00 3.00	2.00 2.50 2.50 2.50 2.50 2.50 2.50 2.50	233333322222323334343423423434343434343	1285 1285 1285 1380 1310 1350 1350 1350 1350 1350 1350 135	1285 1285 1350 1350 1350 1350 1350 1350 1350 135	1285 1350 1350 1350 1350 1350 1350 1350 135	1410 1410 1410 1410 1410 1410	1410 1410	

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## **SPECIFICATIONS**

	Propeller Shaft Diameter (in.)						Ųn	iversal J	oints			
Series	No. Used	Front or Single	Center or Front Intermediate	Intermediate Rear Intermediate	Used		Series					
	No.	Froz	Cen	Rea Inte	Rear	No.	1	2	3	4	5	6
TS512-514	1	3.00				2	1410	1410		l-spd 2-spd		
TS/TE518-520 TS/TE525 CD610-612-614	3 2	3.00 3.00 3.00	3.00		3.00 3.00 3.00	3 4 3	1410 1410 1410	1410 1410 1410	1410 1410 1410	1410		
CD617-620 CE610-612-614 CE617	3 2 3	3.00 3.00 3.00	3.00		3.00 3.00 3.00	4 3 4	1410 1410 1410	1410 1410 1410	1410 1410 1410	1410		
TG620-623 TG625 SE628-631	3 4	3.00 3.00 3.00	3.00 3.00	3.00	3.00 3.00 3.00	3 4 5	1410 1410 1410	1410 1410 1410	1410 1410 1410	1410 1410	1410	
TS/TE612-614	1	3.00		3.00	3.00	2	1410	1410	1410		1-spd 2-spd	
TS/TE618-620 TS/TE625 CE620	3	3.00 3.00 3.00	3.00 3.00 3.00		3.00	4 4	1410 1410	1410 1410	1410 1410	1410 1410		
CG610-612-614 CG617-620-623 CS610-612-614	3 2	3.00 3.00 3.00	3.00		3.00 3.00 3.00	3 4 3	1410 1410 1410	1410 1410 1410	1410 1410 1410			
CS617-620 MG614-620-617 ME614-617-620	3 3	3.00 3.50 3.50	3.00 3.50 3.50		3.00 3.50 3.50	4 5 5	1410 1480 1480	1410 1480 1480 1410	1410 1480 1480	1410 1480 1480	1515 1515	1480 1480
TD612-614 TD618-620	1 2	3.00	3.00			3	1410 1410	1410	1410	1-spd 2-spd		
TD625 TG612-614	3	3.00	3.00		3.00	2	1410 1410	1410 1410	1410	1410 1-spd 2-spd		
TG618 TV70 HM710-712-714-717;	1	3.00 3.50	3.00	:	<u>:</u>	3 2	1410 1480	1410 1480	1410			
HM810-812-814-817 TM718-720;	2	3.50			3.50	3	1480 1480	1480 1480	1480 1480			
TM818-820-823 HM720-723-725; HM820-823-825	3	3.50	3.50		3.50	4	1480	1480	1480	1480		
TM723-725 HI/HV70 JI/JV714: JM814;	3 2	3.50 3.50	3.50		3.50 3.50	4 3	1480 58WB	1480 58WB	1480 58WB	1480		
WM816-819-822 П/IV717-720-721-	3	3.50	3.50		3.50	4	58WB	58WB	58WB	58WB 58WB	58WB	i
723; JM817-821-823 JM714-717-720 TI/TM712-714:	4 4	3.50 3.50	3.50 3.50	3.50 3.50	3.50 3.50	5 5	58WB 1480	58WB 1480	58WB 58WB	1480	1480	
TM812-814	1	3.50		<u> </u>	<u> </u>	2	1480	1480				

# **Universal Joint Specifications**

Series number	1280	1310	1350	1410	1480	1550	58WB
Make	Spicer	Spicer	Spicer	Spicer	Spicer	Spicer	Blood Brother
Bearing pin diameter (in.)	.61456150	.65696574	.77307735	.77307735	.89428947	.89428947	1.0621-1.062
Number bearings per journal	4	4	4	4	4	4	4
Number rollers per bearing	24	32	34	34	33	33	39
Roller diameter (in.)	.09220923	.07110713	.07830785	.0785	.09360938	.09360938	.09280930
Roller length (in.)	21/64	33/64	5/8	5/8	25/32	25/32	53/64

August 1, 1966

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