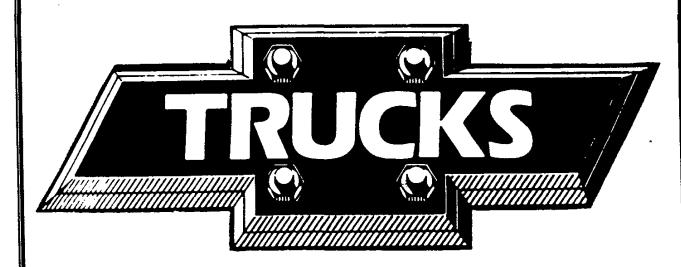


# CHEVROLET



1963

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		•
		•
		<u>.</u>

# Pickups

## **SELECTOR**

# 8½-ft Rampside 95 Body

Inside Length	1057/8"
Inside Width	
Inside Height	151/4"-291/4"

Maximum Rated Payload 1850 lb

Model R1254 Pages 2-3

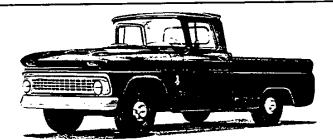


## 6½-ft Stepside Body★

Inside Length	781/8"
Inside Width	50"
Inside Height	171/2"

Maximum Rated Payload 1550 lb

Model C1404 Pages 4-5



## 61/2-ft Fleetside Body★

Inside Length	781/8"
Inside Width	72"
Inside Height	191/8"

Maximum Rated Payload 1500 lb

Model C1434 Pages 6-7



#### 8-ft Stepside Body\*

Inside Length	98"
Inside Width	50"
Inside Height	171/2

Maximum
Rated Payload
1450 lb
3550 lb

Model C1504 C2504 Pages 8-9 12-13



#### 8-ft Fleetside Body\*

Inside Length	98"
Inside Width	72"
Inside Height	191/8"

Maximum
Rated Payload
1400 lb
3500 lb

Model C1534 C2534 Pages 10-11 14-15



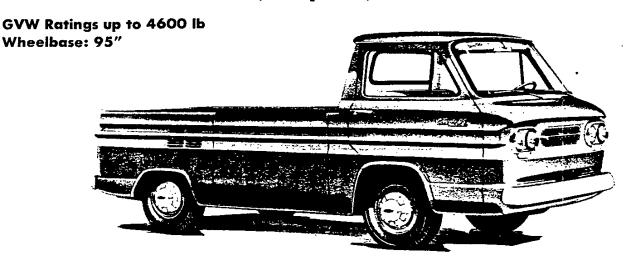
# 9-ft Stepside Body

Inside Length	1081/4"
Inside Width	50"
Inside Height	171/2"

➤ Maximum Rated Payload 3700 lb

Model C3604 **Pages** 16—17

# **MODEL R1254 PICKUP (Rampside)**



#### STANDARD EQUIPMENT

Air Cleaner: Two; oil-wetted polyurethane element Axle, Rear: Hypoid; ratio 3.89. See Suspension, Rear Battery: 12-Volt; 54-plate; capacity 40 amp-hr Body: Rampside; see Cab & Bodies Brakes, Service: Hydraulic; self-adjusting Sizes: front and rear 11" x 2"
Effective area: drum 276 sq in; lining 167 sq in Brake, Parking: Rear wheels; area 83 sq in Bumper: Front and rear; painted Cab: Corvair 95; see Cabs & Bodies Carburetor: Two; single-barrel; automatic choke Clutch: Diameter 91/8"; area 72 sq in Cooling: Air cooled by 11" centrifugal blower; 215° thermostat Controls & Instruments: Light switch; headlight beam control; speedometer; odometer; fuel gauge. Lights for generator, fan, oil pressure, engine temperature, direction signal and high beam indicator Direction Signals: Front and rear Engine: 145 Six; positive crankcase ventilation

Gross horsepower......80

Filter, Fuel: At carburetor; porous sintered bronze

Filter, Oil: Full-flow; 1 pint; replaceable element

Frame: Unitized body-frame construction Generator: 30 amp DC; normal cut-in

GVW Plate: 4600 lb

Lights: Head, parking, tail, stop, license plate; dome, instrument

panel

Mirror: Inside

Seat: Full-width

Shock Absorbers: Front & rear; piston diameter 1" Springs, Front: Coil; capacity 1150 lb each at ground Springs, Rear: Coil; capacity 1150 lb each at ground Steering: Ball-gear, ratio 20.0; wheel diameter 17" Suspension, Front: Independent; capacity 2500 lb Suspension, Rear: Independent; capacity 2500 lb Tank, Fuel: Under seat; capacity 18.6 gallons

Tires: Five tubeless 7.00-14/4PR front, single rear and spare

Tools: Mechanical jack; wheel wrench

Transmission: 3-speed synchromesh; ratios 3.50, 1.99, 1.00,

3.97 (rev)

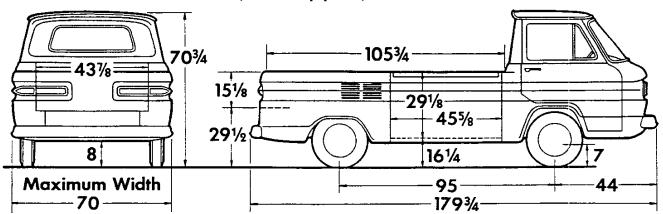
Wheels: Five 14" x 5.0"; attachment, 5 studs on 434" circle;

4 painted hub caps

Windshield Wipers: Electric; single-speed

#### DIMENSIONS

(With std equipment, unloaded)



Cu	Curb Weight with Standard Equipment (lb)		t (lb)	Load Weight Distribution	o <b>n</b>
	ront 375		<b>'otal</b> 2785	Front 39%	Rear 61%

# **MODEL R1254 PICKUP**

# PAYLOAD RATINGS & GVW SELECTOR

		Chassis Equipment	Recommended N	inimum Tire Sizes	
Maximum Rated Payload Weight	GVW Rating	Required for GVW Rating	Front	Single Rear	
1250 lb	4000 ІЬ	Standard	7.00-14/4PR	7.00-14/4PR	
1850 lb	4600 lb	Standard	7.00-14/6PR	7.00-14/6PR	

#### **OPTIONAL EQUIPMENT**

#### For dealer-installed equipment, see Custom Features section

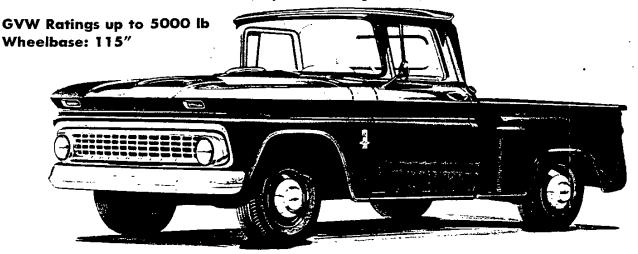
Air Cleaner: Pre-oil bath K47	Floor, Level Pickup Box	F82	Paint, Exterior: See Colors section	
Axle, Positraction Rear G81	Generator: 35 amp, low cut-in		Radio: Manual control	
Custom Chrome: Includes front and rear chromed bumpers and hub caps V37	Glass, Laminated: For door windows	A09	Shock Absorbers: Heavy-duty; front	
Custom Equipment: Includes bright- metal windshield molding; rear red in- serts; nylon and vinyl seat upholstery;	Heater & Defroster: Gasoline operated Direct air		Transmission: 4-speed synchromesh Powerglide	M20 M35
extra-thick foam seat padding; 2-tone	Mirror, Exterior: 3%-inch fixed arm	ממ	Wheel Covers	P01
doors and steering wheel; right sun- shade; left arm rest; cigar lighter; rear engine grille	Left sideLeft and right sides	D32	Windshield Wipers & Washer: Electric; 2-speed wipers	C14

			Option Numbers	
Tire Size	Tire Capacity	Rim Width	Option Num Highway T Regular  Std R20 R21 R22 R24	y Tread
	(lb ea)		Regular	Nylon
TUBELESS				
7.00-14/4PR blackwall+	975	5.0"	Std.	
7.00-14/4PR whitewall♦	975	5.0"	R20	-
7.00-14/6PR blackwall+	1065	5.0"	R21	_
7.00-14/6PR whitewall♦	1065	5.0"	R22	
7.00-14/6PR blackwall+	1180	5.0"	R24	_
7.00-14/8PR blackwall*	1400	5.0*	R25	_

<sup>♦</sup>Passenger car type

**<sup>♣</sup>**Truck type

# MODEL C1404 PICKUP (6½-Ft Stepside)



#### STANDARD EQUIPMENT

Air Cleaner: Oil wetted; polyurethane element

Axle, Reax: Hypoid semi-floating type; ratio 3.73; capacity 3500 lb

Battery: 12-Volt; 54-plate; capacity 53 amp-hr Body: Stepside Pickup; see Cabs & Bodies

Brakes, Service: Hydraulic Sizes: front 11" x 2"; rear 11" x 2" Effective area: drum 276 sq in; lining 167 sq in Brake, Parking: Rear wheels; area 83 sq in

Bumper: Front only, painted

Cab: Conventional; see Cabs & Bodies Carburetor: Single-barrel downdraft Clutch: Diameter 10"; area 100 sq in

Cooling: Capacity 11 qt; 11/4" radiator core, 314-sq-in area; 13-lb pressure cap; 170° thermostat

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

Direction Signals: Front and rear

Engine: 230 Six; positive crankcase ventilation Gross horsepower.... .140  Exhaust System: Single pipe & aluminized muffler

Fenders: Front and rear

Filter, Fuel: Screen in fuel tank

Filter, Oil: Full-flow; 1-quart; throw-away type Frame: 39,000-lb-test steel; section modulus 2.98

Generator: 37 amp Delcotron

GVW Plate: 5000 lb

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

Mirror, Exterior: Left side; 61/4" fixed arm Shock Absorbers: Front & rear; piston diameter 1" Springs, Front: Coil; capacity 1250 lb each at ground Springs, Rear: Coil; capacity 1250 lb each at ground Steering: Ball-gear, ratio 24.0; wheel dia 17 Suspension, Front: Independent; capacity 2500 lb

Tank, Fuel: Back of seat in cab; capacity 19 gallons Tires: Five tubeless 6.70-15/4PR front, single rear and spare

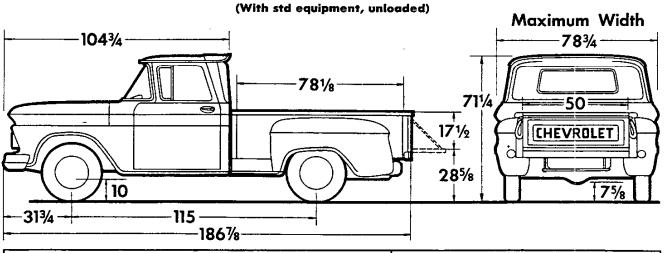
Tools: 3300-lb mechanical jack; wheel wrench

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

Wheels: Five 15" x 5.0"; attachment, 6 studs on 51/2" circle; spare carrier under frame; 4 painted hub caps

Windshield Wipers: Electric; single-speed

#### **DIMENSIONS**



Curb Wei	Curb Weight with Standard Equipment (lb)		Load Weight Distribution		
<b>Front</b>	<b>Rear</b>	<b>Total</b>	Front	Rear	
1950	1375	3325	1%	99%	

# **MODEL C1404 PICKUP**

#### **PAYLOAD RATINGS & GVW SELECTOR**

Maximum Rated Payload Wt	cvw	Chassis Equipment	Recommended Minimum Tire Sizes			
		Required for GVW Rating	Front	Single Rear		
800 Љ	4100 lb	Standard	6.70-15/4PR	6.70-15/4PR		
1100 Њ	4400 1ь	Standard	7.10-15/4PR	7.10-15/4PR		
1450 lb	4800 lb	2000-lb rear springs	7.10-15/6PR	7.10-15/6PR		
1550 lь	5000 1ь	2000-lb rear springs	7-17.5/6PR	7-17.5/6PR		

#### OPTIONAL EQUIPMENT

#### For dealer-installed equipment, see Custom Features section.

→ Air Cleaner: Oil bath; capacity 2 pints; for 230 and 292 engines only; not available with vacuum power brakes. Axle, Positraction Rear: Capacity 3500 lb; ratio 3.73. Not available	K48	Engine: 292 Six; includes 11" clutch, HD radiator and 61 amp-hr battery 283 V8; includes 11" clutch.  Gauges: Ammeter, engine temperature, oil pressure.	L32	Mirror, Rearview: Exterior Lett; 171/4" swinging arm. Right; 171/4" swinging or 61/4" fixed arm West Coast type Ir. West Coast type Sr. Paint, Exterior: See Colors section	D32 D29 D30
with maximum economy equipment or 3.07 ratio rear axle	G80 H01	Generator: 42 amp Delcotron 52 amp Delcotron 62 amp Delcotron Glass, Laminated: Door windows	K82 K81	Radiator: Heavy-duty. Radio: Manual control. Seat, Bostrom: Driver only. Driver seat plus 2-man seat.	U60 A55 A55
mum economy equipment	H04 T60 J70	only; includes metal frames	A11 A11	Seat, Full-Depth Foam Shock Absorbers: Heavy-duty Front and rear Rear only Springs, Auxiliary Rear:	F51 F51
only with std painted front bumper  Carrier, Spare Wheel: Side mounted	P13 M01	Governor: Not available with Power- glide 230 engine: 1850–3000 rpm 2600–3600 rpm 283 engine: 2400–3600 rpm	K37 K37 K37	Capacity 500 lb each	G50 U16
Bodies Section for description Appearance Option	Z61 V37	3000-3800 rpm	K37 K37 C42	Transmission: Heavy-duty 3-speed synchromesh Heavy-duty 4-speed synchromesh; includes 11" clutch Poweralide: includes heavy-duty	M16 M20
Economy Equipment: Includes special carburetor & 3.07 ratio rear axle; for use with std engine and transmission only	254	Hooks, Towing: Front Lock: Right door. Side wheel carrier	A97	radiator. Window, Full-View Rear Windshield Wipers & Washer: Electric; 2-speed wipers.	M35 A10

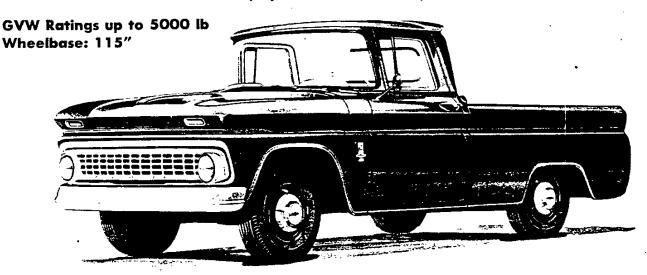
	[ _			Option N	iumbers	
Tire Size	Tire Capacity (lb ea)	Rim Width	Highway Tread		On-Off-Road Trea	
			Regular	Nylon	Regular	Nylon
TUBELESS						
6.70-15/4PR	1115	5.00*	Std a	R30	R28	_
6.70-15/6PR	1215	5.00"	001 c	_	_	_
7.10-15/4PR	1195	5.00*	R50 d	R52	_	
7.10-15/6PR	1300	5.00"	R54			_
6.00-16/6PR	1065	5.00"	R58	_	_	_
6.50-16/6PR	1380 <b>b</b>	5.00"	R59		_	_
6.50-16/6PR	1420 <b>b</b>	5.00"	R60		_	_
7-17.5/6PR	1520	5.25*	R80	R82	R81	_
TUBE TYPE				Ì		
6.70-15/4PR	1115	5.0*	R31	R33	R32	
6.70-15/6PR	1215	5.0*	R34	_	_	_
7.00-15/6PR	1520	5.5*	R42	R44	R43	_
7.10-15/4PR	1195	5.0*		R53		_
6.50-16/6PR	1380 <b>b</b>	5.0*	R61	_	R62	
6.50-16/6PR	1420 <b>b</b>	5.0*	R63	R65	R64	_

a-R29 with white sidewalls.

**b**—Two types in this size. Passenger car type has 1380-lb capacity; truck type has 1420-lb capacity.

**c**—R36 with white sidewalls.

# MODEL C1434 PICKUP (6½-Ft Fleetside)



#### STANDARD EQUIPMENT

Air Cleaner: Oil wetted; polyurethane element

Axle, Rear: Hypoid semi-floating type; ratio 3.73; capacity 3500 lb

Battery: 12-Volt; 54-plate; capacity 53 amp-hr Body: Fleetside Pickup: see Cabs & Bodies

Brakes, Service: Hydraulic Sizes: front 11" x 2"; rear 11" x 2"

Effective area: drum 276 sq in; lining 167 sq in Brake, Parking: Rear wheels; area 83 sq in

Bumper: Front only, painted

Cab: Conventional; see Cabs & Bodies Carburetor: Single-barrel downdraft Clutch: Diameter 10"; area 100 sq in

Cooling: Capacity 11 qt; 11%" radiator core, 314-sq-in area; 13-lb pressure cap;  $170^\circ$  thermostat

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

Direction Signals: Front and rear

Engine: 230 Six; positive crankcase ventilation Gross horsepower.... Gross torque, lb-ft.... Exhaust System: Single pipe & aluminized muffler

Fenders: Front and integral rear

Filter, Fuel: Screen in fuel tank

Filter, Oil: Full-flow; 1-quart; throw-away type Frame: 39,000-lb-test steel; section modulus 2.98

Generator: 37 amp Delcotron

GVW Plate: 5000 lb

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

Mirror, Exterior: Left side; 61/4" fixed arm

Shock Absorbers: Front & rear; piston diameter 1" Springs, Front: Coil; capacity 1250 lb each at ground

Springs, Rear: Coil; capacity 1250 lb each at ground Steering: Ball-gear, ratio 24.0; wheel dia 17"

Suspension, Front: Independent; capacity 2500 lb

Tank, Fuel: Back of seat in cab; capacity 19 gallons

Tires: Five tubeless 6.70–15/4PR front, single rear and spare

Tools: 3300-lb mechanical jack; wheel wrench

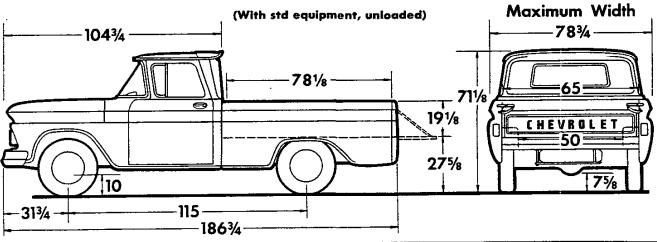
Transmission: 3-speed synchromesh; steering column gearshift;

ratios 2.94, 1.68, 1.00, 3.14 (rev)

Wheels: Five 15" x 5.0"; attachment, 6 studs on 51/2" circle; spare carrier under frame; 4 painted hub caps

Windshield Wipers: Electric; single-speed

# **DIMENSIONS**



Curb Weight with Standard Equipment (lb)			Load Weight	Distribution
Front	<b>Rear</b>	<b>Total</b>	Front	<b>Rear</b>
1975	1395	3370		99%

# **MODEL C1434 PICKUP**

# PAYLOAD RATINGS & GVW SELECTOR

Maximum Rated		Chassis Equipment	Recommended Minimum Tire Sizes			
Payload Wt		Required for GVW Rating	Front	Single Rear		
750 lb	4100 1Ь	Standard	6.70-15/4PR	6.70-15/4PR		
1050 lb	4400 1Ь	Standard	7.10-15/4PR	7.10-15/4PR		
1450 lb	4800 lb	2000-lb rear springs	7.10-15/6PR	7.10-15/6PR		
1500 lb	5000 1Ь	2000-lb rear springs	7-17.5/6PR	7-17.5/6PR		

#### **OPTIONAL EQUIPMENT**

# For dealer-installed equipment, see Custom Features section.

→ Air Cleaner: Oil bath; capacity 2 pints; for 230 and 292 engine only; not available with vacuum power brakes.  Axle, Positraction Rear: Capacity 3500 lb; ratio 3.73. Not available with maximum economy equipment or 3.07 ratio rear axle.	K48	Engine: 292 Six; includes 11" clutch, HD radiator and 61 amp-hr battery	L32	Mirror, Rearview: Exterior Left; 171/4" swinging arm. Right; 171/4" swinging or 61/4" fixed arm West Coast type, Ir. (6" x 11"). West Coast type, Sr. (7" x 16"). Paint, Exterior: See Colors section Radiator: Heavy-duty.	D32 D29 D30 V01
Axle, Rear: Capacity 3500 lb Ratio 3.07; not available with Power- glide transmission. Ratio 4.11; not available with maxi-	H01	Generator: 42 amp Delcotron	K82 K81	Radio: Manual control	A55 A55
mum economy equipment  Battery: Heavy-duty; 70 amp-hr  Brakes, Vacuum Power	H04 T60	Glass, Laminated: Door windows only; includes metal frames	A09	Seat, Full-Depth Foam Shock Absorbers: Heavy-duty Front and rear Rear only	F51
Bumper, Painted Rear: For use only with std painted front bumper	V38	Windshield only	All	Springs, Auxiliary Rear: Capacity 500 lb each	G60
Carrier, Spare Wheel: Side mounted Clutch: Dia 11*; for 230 engine	P13	230 engine: 1800-3100 rpm 3000-4000 rpm	K37 K37	Capacity 2000 lb each	U16
Custom Equipment: See Cabs & Bodies Section for description Appearance Option.	Z61	283 engine: 2400-3600 rpm	K37 K37	Tank, Fuel: Capacity 20 gallons  Transmission: Heavy-duty 3-speed synchromesh 4-speed synchromesh; includes	
Chrome Option Comfort Option Side Molding	Z62	Heater & Defroster: De Luxe Recirculating	C42 C43	11" clutch	M35
Economy Equipment: Includes special carburetor & 3.07 ratio rear axle; for use with std engine and transmission only	,	Hocks, Towing: Front  Lock: Right door Side wheel carrier	A97	Window, Full-View Rear Windshield Wipers & Washer: Electric; 2-speed wipers	AIO

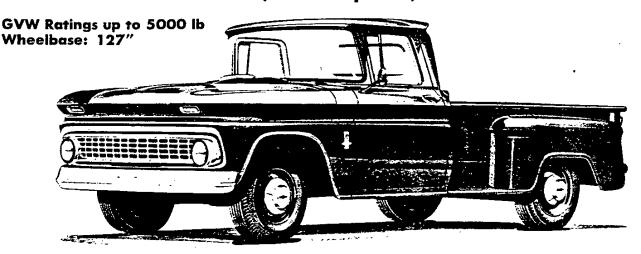
				Option No	ambers	
Tire Size	Tire Capacity	Rim Width	Highwa	y Tread	On-Off-Ro	ad Tread
	(lb ea)		Regular	Nylon	Regular	→ Nylon
TUBELESS						
6.70-15/4PR	1115	5.00*	Std a	R30	-	R38
6.70-15/6PR	1215	5.00*	Q01 c	_	_	_
7.10-15/4PR	1195	5.00″	R50 <b>d</b>	R52		_
7.10-15/6PR	1300	5.00"	R54	- 1	_	-
6.00-16/6PR	1065	5.00"	R58	_	-	
6.50-16/6PR	1380 <b>b</b>	5.00*	R59	-	_	-
6.50-16/6PR	1420 <b>b</b>	5.00"	R60	_	_	
7-17.5/6PR	1520	5.25"	R80	R82	R81	_
TUBE TYPE	-	ĺ	{	[		
6.70-15/4PR	1115	5.0"	R31	R33	<del>-</del>	R32
6.70-15/6PR	1215	5.0″	R34	- 1	_	- I
7.00-15/6PR	1520	5.5″	R42	R44	R43	_
7.10-15/4PR	1195	5.0″	J -	R53	_	_
6.50-16/6PR	1380 <b>b</b>	5.0"	R61	! – í		R69
6.50-16/6PR	1420 <b>b</b>	5.0"	R63	R65	R64	i –

a—R29 with white sidewalls.

**b**—Two types in this size. Passenger car type has 1380-lb capacity; truck type has 1420-lb capacity. **d**—R51 with white sidewalls.

c-R36 with white sidewalls.

# MODEL C1504 PICKUP (8-Ft Stepside)



#### STANDARD EQUIPMENT

Air Cleaner: Oil wetted; polyurethane element

Axle, Rear: Hypoid semi-floating type; ratio 3.73; capacity 3500 lb

Battery: 12-Volt; 54-plate; capacity 53 amp-hr Body: Stepside Pickup; see Cabs & Bodies Brakes, Service: Hydraulic Sizes: front 11" x 2"; rear 11" x 2"

Effective area: drum 276 sq in; lining 167 sq in Brake, Parking: Rear wheels; area 83 sq in

Bumper: Front only, painted

Cab: Conventional; see Cabs & Bodies Carburetor: Single-barrel downdraft Clutch: Diameter 10"; area 100 sq in

→ Cooling: Capacity 11 at; 11/4" radiator core, 314-sq-in area; 13-lb pressure cap; 180° thermostat

Controls & Instruments: Hand choke; light switch; headlight beam control; speedmeter; odometer; fuel gauge. Lights for generator oil property of the control erator, oil pressure, engine temperature, direction signals and high beam indicator

Direction Signals: Front and rear

Engine: 230 Six; positive crankcase ventilation

Gross horsepower Gross torque, lb-ft..... Exhaust System: Single pipe & aluminized muffler

Fenders: Front and rear

Filter, Fuel: Screen in fuel tank

Filter, Oil: Full-flow; 1-quart; throw-away type

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

Generator: 37 amp Delcotron

GVW Plate: 5000 lb

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

Mirror, Exterior: Left side; 61/4" fixed arm

Shock Absorbers: Front & rear; piston diameter 1" Spring, Front: Coil; capacity 1250 lb each at ground Springs, Rear: Coil; capacity 1250 lb each at ground

Steering: Ball-gear, ratio 24.0; wheel dia 17" Suspension, Front: Independent; capacity 2500 lb Tank, Fuel: Back of seat in cab; capacity 17 gallons

Tires: Five tubeless 6.70-15/4PR front, single rear and spare

Tools: 3300-lb mechanical jack; wheel wrench

Transmission: 3-speed synchromesh; steering column gearshift;

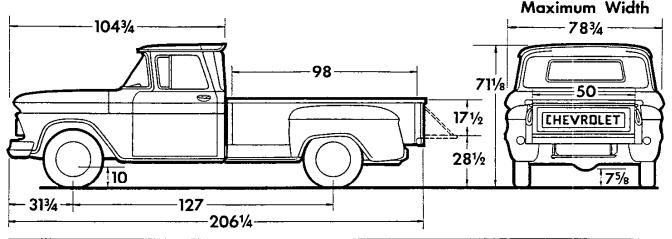
ratios 2.94, 1.68, 1.00, 3.14 (rev)

Wheels: Five 15" x 5.0"; attachment, 6 studs on  $5\frac{1}{2}$ " circle; spare

carrier under frame; 4 painted hub caps Windshield Wipers: Electric; single-speed

#### **DIMENSIONS**

#### (With std equipment, unloaded)



→ Curb Weight with Standard Equipment (lb)			Load Weight Distribution		
Front	Rear	Total	Front	Rear	
1965	1450	3415	3%	97%	

# **MODEL C1504 PICKUP**

# PAYLOAD RATINGS & GVW SELECTOR

Maximum Rated	GVW Rating	Chassis Equipment	Recommended Minimum Tire Sizes			
Payload Wt		Required for GVW Rating	Front	Single Rear		
700 1ь	4100 1Ь	Standard	6.70-15/4PR	6.70-15/4PR		
1000 lb	4400 1Ь	Standard	7.10-15/4PR	7.10-15/4PR		
1400 lb	4800 1Ь	2000-lb rear springs	7.10-15/6PR	7.10-15/6PR		
1450 lb	5000 lb	2000-lb rear springs	7-17.5/6PR	7-17.5/6PR		

# **OPTIONAL EQUIPMENT**

# For dealer-installed equipment, see Custom Features section.

F	Lir Cleaner: Oil bath; capacity 2 bints; for 230 and 292 engine only; not evailable with vacuum power brakes like, Positraction Rear: Capacity	K48	Engine: 292 Six; includes 11" clutch, HD radiator and 61 amp-hr battery 283 V8: includes 11" clutch	L25 L32	Mirror, Rearview: Exterior Left; 171/4" swinging arm Right; 171/4" swinging or 61/4" fixed arm West Coast type, Ir. (6" x 11")	D32 D29
3	1500 lb; ratio 3.73. Not available with maximum economy equipment or 3.07 atio rear axle	G80	Gauges: Ammeter, engine temperature, oil pressure		West Coast type, Sr. (7' x 16")  Paint, Exterior: See Colors section  Radiator: Heavy-duty	VOI
1	Axle, Rear: Capacity 3500 lb latio 3.07; not available with Power- lide transmission.		Generator: 42 amp Delectron 52 amp Delectron 62 amp Delectron	K82	Radio: Manual control	A55
1	datio 4.11; not available with maximum economy equipment  Battery: Heavy-duty; 70 amp-hr  Brakes, Vacuum Power	H04 T60	Glass, Laminated: Door windows only; includes metal frames	A09	Seat, Full-Depth Foam Shock Absorbers: Heavy-duty Front and rear Rear only	Z52 F51
	Sumper, Painted Rear: For use only with sid painted front bumper.		Windshield only	All	Springs, Auxiliary Rear: Capacity 500 lb each	
9	Carrier, Spare Wheel:	P13	Powerglide 230 engine: 1800-3100 rpm	K37	Springs, Rear: Capacity 2000 lb each Tachometer: Electric; for 283 engine	G50
	Clutch: Dia 11"; for 230 engine Custom Equipment: See Cabs &		3000-4000 rpm	K37 K37	only; includes optional gauges  Tank, Fuel: Capacity 20 gallons	Ų16
i	Bodies Section for description Appearance Option	Z61	292 engine: 1800-3100 rpm	K37	Transmission: Heavy-duty 3-speed synchromesh 4-speed synchromesh; includes	
	Chrome Option		Heater & Defroster: De Luxe Recirculating	C42 C43	11" clutch	M20
]	Economy Equipment: includes special carburetor & 3.07 ratio rear axle; for use with std engine and transmission only		Hooks, Towing: Front  Lock: Right door Side wheel carrier	A97	ator. Window, Full-View Rear. Windshield Wipers & Washer: Electric; 2-speed wipers.	AIO

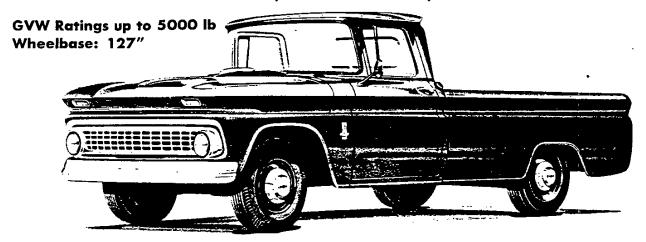
				Option N	Option Numbers		
Tire Size	Tire Capacity	Rim Width	Rim Width Highway Tre		On-Off-Ro	oad Tread	
	(lb ea)		Regular	Nylon	Regular	→ Nylon	
TUBELESS							
6.70-15/4PR	1115	5.00"	Std a	R30	_	R38	
6.70-15/6PR	1215	5.00"	Q01 c		_	-	
7.10-15/4PR	1195	5.00"	R50 d	R52	_	-	
7.10-15/6PR	1300	5.00"	R54	<u> </u>	_	l –	
6.00-16/6PR	1065	5.00"	R58	<b>i</b> –	<del></del>	i –	
6.50-16/6PR	1380 <b>b</b>	5.00"	R59	_	_	_	
6.50-16/6PR	1420 <b>b</b>	5.00*	R60		<b>–</b>	-	
7-17.5/6PR	1520	5.25"	R80	R82	R81	-	
TUBE TYPE			ļ			naa	
6.70-15/4PR	1115	5.0*	R31	R33	_	R32	
6.70-15/6PR	1215	5.0 <b>°</b> .	R34	<u> </u>		_	
7.00-15/6PR	1520	5.5*	R42	R44	R43	<b> </b> -	
7.10-15/4PR	1195	5.0"	-	R53	-	7000	
6.50-16/6PR	1380 <b>b</b>	5.0"	R61	-	<u> </u>	R69	
6.50-16/6PR	1420 <b>b</b>	5.0"	R63	R65	R64		

a—R29 with white sidewalls.

b—Two types in this size. Passenger car type has 1380-lb capacity; truck type has 1420-lb capacity.

c-R36 with white sidewalls.

# **MODEL C1534 PICKUP (8-Ft Fleetside)**



#### STANDARD EQUIPMENT

Air Cleaner: Oil wetted; polyurethane element

Axle, Rear: Hypoid semi-floating type; ratio 3.73; capacity 3500 lb

Battery: 12-Volt; 54-plate; capacity 53 amp-hr Body: Fleetside Pickup; see Cabs & Bodies

Brakes, Service: Hydraulic Sizes: front 11" x 2"; rear 11" x 2" Effective area: drum 276 sq in; lining 167 sq in

Brake, Parking: Rear wheels; area 83 sq in

Bumper: Front only, painted

Cab: Conventional; see Cabs & Bodies Carburetor: Single-barrel downdraft Clutch: Diameter 10"; area 100 sq in

→ Cooling: Capacity 11 qt; 11/4" radiator core, 314-sq-in area; 13-lb pressure cap; 180° thermostat

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

Direction Signals: Front and rear

Engine: 230 Six; positive crankcase ventilation	
Gross horsepower	140
Gross torque, lb-ft	220

Exhaust System: Single pipe & aluminized muffler

Fenders: Front and integral rear Filter, Fuel: Screen in fuel tank

Filter, Oil: Full-flow; 1-quart; throw-away type Frame: 39,000-lb-test steel; section modulus 2.98

Generator: 37 amp Delcotron

**GVW Plate:** 5000 lb

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

Mirror, Exterior: Left side; 61/4" fixed arm

Shock Absorbers: Front & rear; piston diameter  $1^*$ Springs, Front: Coil; capacity 1250 lb each at ground Springs, Rear: Coil; capacity 1250 lb each at ground

Steering: Ball-gear, ratio 24.0; wheel dia 17" Suspension, Front: Independent; capacity 2500 lb

Tires: Five tubeless 6.70-15/4PR front, single rear and spare

Tools: 3300-lb mechanical jack; wheel wrench

Transmission: 3-speed synchromesh; steering column gearshift;

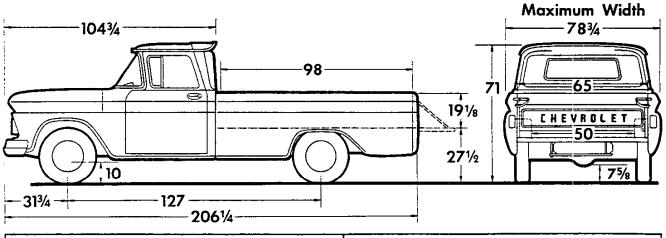
ratios 2.94, 1.68, 1.00, 3.14 (rev)

Wheels: Five 15" x 5.0"; attachment, 6 studs on 51/2" circle; spare

carrier under frame; 4 painted hub caps Windshield Wipers: Electric; single speed

#### **DIMENSIONS**

#### (With std equipment, unloaded)



Curb Weigh	it with Standard Eq	nipment (lb)	Load Weight	Distribution
Front	Rear	Total	Front	Rear
2000	1460	3460	4%	96%

# **PAYLOAD RATINGS & GVW SELECTOR**

24	um Rated GVW	Chassis Equipment	Recommended Minimum Tire Sizes			
Maximum Rated Payload Wt	Kebuited to:		Front	Single Rear		
650 lb	4100 1Ь	Standard	6.70-15/4PR	6.70-15/4PR		
950 lb	4400 lb	Standard	7.10-15/4PR	7.10-15/4PR		
1350 lb	4800 lb	2000-lb rear springs	7.10-15/6PR	7.10-15/6PR		
1400 lb	5000 1b	2000-lb rear springs	7-17.5/6PR	7-17.5/6PR		

# **OPTIONAL EQUIPMENT**

# For dealer-installed equipment, see Custom Features section.

→Air Cleaner: Oil bath; capacity 2		Engine:		Mirror, Rearview: Exterior	
pints; for 230 and 292 engine only; not available with vacuum power brakes.	K48	292 Six; includes 11" clutch, HD radiator and 61 amp-hr battery 283 V8; includes 11" clutch	L25 L32	Left; 171/4" swinging arm Right; 171/4" swinging or 61/4" fixed arm West Coast type, Ir. (6" x 11")	D32 D29
Axle, Positraction Rear: Capacity 3500 lb; ratio 3.73. Not available with maximum economy equipment or 3.07		Gauges: Ammeter, engine temperature, oil pressure		West Coast type, Sr. (7" x 16")	V01
ratio rear axle		Generator: 42 amp Delcotron	K82	Radio: Manual control	A55
Ratio 4.11; not available with maximum economy equipment  Battery: Heavy-duty; 70 amp-hr	H04	Glass, Laminated: Door windows only; includes metal frames		Seat, Full-Depth Foam. Shock Absorbers: Heavy-duty Front and rear.	Z52
Brakes, Vacuum Power	J70	Glass, Soft Ray: Windshield only	A11 A11	Rear only.  Springs, Auxiliary Rear:  Capacity 500 lb each	F51
Carrier, Spare Wheel: Side mounted	7	Fowerner: Not available with Powerglide 230 engine: 1800–3100 rpm	K37	Springs, Rear: Capacity 2000 lb each Tachometer: Electric; for 283 engine	G50
Clutch: Dia 11"; for 230 engine  Custom Equipment: See Cabs & Bodies Section for description		3000-4000 rpm 283 engine: 2400-3600 rpm 3000-3800 rpm	K37 K37 K37	only; includes optional gauges  Tank, Fuel: Capacity 20 gallons  Transmission:	U16
Appearance Option	V37	292 engine: 1800-3100 rpm	<del>-K37</del> -	Heavy-duty 3-speed synchromesh 4-speed synchromesh; includes 11" clutch	
Side Molding  Economy Equipment: Includes special carburetor & 3.07	B98	Recirculating  Hooks, Towing: Front	C43	Powerglide; includes heavy-duty radiator	M35
ratio rear axle; for use with std engine and transmission only	•	Lock: Right door	A97 A97	Windshield Wipers & Washer: Electric; 2-speed wipers	

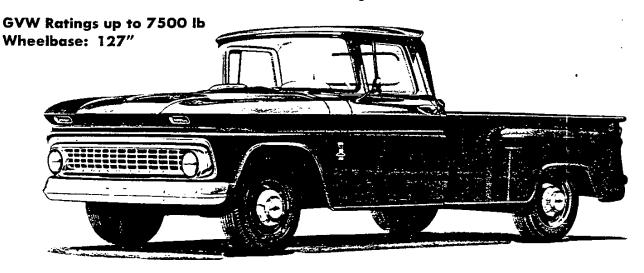
				Option Nu	ımbers	
Tire Size	Tire Capacity	Rim Width	Highway Tread		On-Off-Ro	ad Tread
	(lb ea)		Regular         Nylon         Regular           00°         Std a         R30         —           00°         Q01 c         —         —           00°         R50 d         R52         —           00°         R54         —         —           00°         R58         —         —           00°         R59         —         —           00°         R60         —         —           25°         R80         R82         R81           0°         R31         R33         —           .0°         R34         —         —           .5°         R42         R44         R43           .0°         R61         —         —           .0°         R61         —         —	Regular	→ Nylon	
TUBELESS						
6.70-15/4PR	1115	5.00"	Std a	R30		R38
6.70-15/6PR	1215	5.00"	Q01 c	1 -	_	-
7.10-15/4PR	1195	5.00°	R50 <b>d</b>	R52	_	-
7.10-15/6PR	1300	5.00"	R54	-	_	_
6.00-16/6PR	1065	5.00″	R58	_	_	_
6.50-16/6PR	1380 <b>b</b>	5.00"	R59	-	_	-
6.50-16/6PR	1420 <b>b</b>	5.00"	R60	-	_	-
7-17.5/6PR	1520	5.25*	R80	R82	R81	-
TUBE TYPE						1
6.70-15/4PR	1115	5.0"	R31	R33	_	R32
6.70-15/6PR	1215	5.0"	R34	_	_	-
7.00-15/6PR	1520	5.5"	R42	R44	R43	-
7.10-15/4PR	1195	5.0*	<b>–</b>	R53	<u> </u>	
6.50-16/6PR	1380 <b>b</b>	5.0"	R61	<b> </b>	-	R69
6.50-16/6PR	1420 <b>b</b>	5.0*	R63	R65	R64	<b>—</b>

a—R29 with white sidewalls.

**b**—Two types in this size. Passenger car type has 1380-lb capacity; truck type has 1420-lb capacity. **d**—R51 with white sidewalls.

c—R36 with white sidewalls.

# MODEL C2504 PICKUP (8-Ft Stepside)



#### STANDARD EQUIPMENT

Air Cleaner: Oil wetted; polyurethane element

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

Battery: 12-Volt; 54-plate; capacity 53 amp-hr Body: Stepside Pickup; see Cabs & Bodies

Brakes, Service: Hydraulic Sizes: front and rear 11" x 23/4"

Effective area: drum 385 sq in; lining 239 sq in

Brake, Parking: Rear wheels; area 119 sq in

Bumper: Front only, painted Cab: Conventional; see Cabs & Bodies Carburetor: Single-barrel downdraft, Clutch: Diameter 10"; area 100 sq in

→ Cooling: Capacity 11 qt; 11/4" radiator core, 314-sq-in area; 13-lb pressure cap; 180° thermostat

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

Direction Signals: Front and rear

Engine: 230 Six; positive crankcase ventilation  Exhaust System: Single pipe & aluminized muffler

Fenders: Front and rear

Filter, Fuel: Screen in fuel tank

Filter, Oil: Full-flow; 1-quart; throw-away type Frame: 39,000-lb-test steel; section modulus 3.71

Generator: 37 amp Delcotron

GVW Plate: 7500 lb

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

Mirror, Exterior: Left side; 61/4" fixed arm Shock Absorbers: Front & rear; piston diameter 1" Springs, Front: Coil; capacity 1250 lb each at ground Springs, Rear: Coil; capacity 2000 lb each at ground Steering: Ball-gear, ratio 24.0; wheel dia 17"

Suspension, Front: Independent; capacity 3000 lb Tank, Fuel: Back of seat in cab; capacity 17 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;

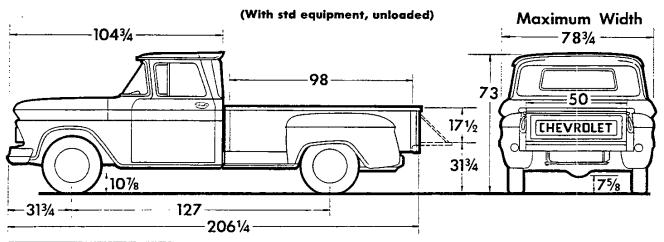
ratios 2.94, 1.68, 1.00, 3.14 (rev)

Wheels: Five 17.5" x 5.25"; attachment, 8 studs on  $6\frac{1}{2}$ " circle; spare

carrier under frame; 4 painted hub caps

Windshield Wipers: Electric; single-speed

#### **DIMENSIONS**



→ Curb Weight	with Standard Eq	uipment (lb)	Load Weight	Distribution
Front	<b>Rear</b>	<b>Total</b>	Front	<b>Rear</b>
2155	1690	3845	3%	97%

# MODEL C2504 PICKUP

# PAYLOAD RATINGS & GVW SELECTOR

		Chassis Equipment	Recommended Minimum Tire Sizes			
Maximum Rated GVW Payload Wt Rating	GVW Rating	Required for GVW Rating	Front .	Single Rear		
1700 lb	5500 lb	Standard	7-17.5/6PR	7-17.5/6PR		
2150 lb	6000 1Ь	Standard	7-17.5/6PR	8-17.5/6PR		
2850 1ь	6700 1Ь	Standard	7-17.5/6PR	8-17.5/8PR		
3550 lb	7500 1ь	1500-lb front springs; 3000-lb rear springs	8-19.5/6PR	8-19.5/8PR		

# **OPTIONAL EQUIPMENT**

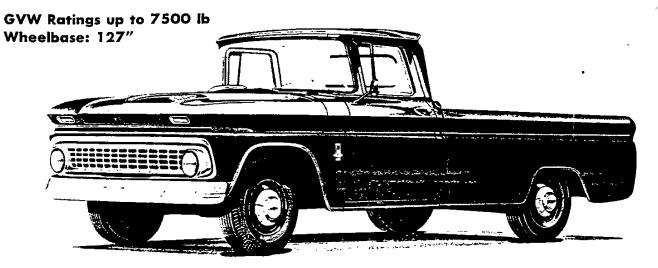
#### For dealer-installed equipment, see Custom Features section.

1	) For de	aier-ii	nstallea equipment, see costoni	real	J, C3 JC411-111	
, S	Air Cleaner: Oil bath; capacity 2 pints; for 230 and 292 engine only; not available with vacuum power brakes.  Axle, NoSPIN Rear: Ratio 4.57	K48	Glass, Laminated: Door windows only; includes metal frames		Seat, Bostrom: Driver only Driver seat plus 2-man seat Seat, Full-Depth Foam	A55
<b>→</b>	Axle, Rear: Ratio 4.11 for use with	H04 →	All windows.  Governor: Not available with Powergl 230 engine: 1800–3100 rpm	All lide	Shock Absorbers: Heavy-duty Front and rear Rear only	F51
	Brukes, Vacuum Power  Bumper, Painted Rear: For use only with std painted front bumper	170	3000-4000 rpm	K37 K37 K37	Springs, Auxiliary Rear: Capacity 500 lb each Springs, Front:	
	Carrier, Spare Wheel: Side mounted Clutch: Dia 11"; for 230 engine	P13	292 engine: 1800-3100 rpm	-K37	Capacity 1500 lb each	
	Custom Equipment: See Cabs & Bodies Section for description Appearance Option	V37	Recirculating.  Hooks, Towing: Front Lock: Right door	C43 V76	Capacity 3000 lb each	U16
	Comfort Option  Engine: 292 Six; includes 11" clutch, HD radiator and 61 amp-hr battery 283 V8; includes 11" clutch	L25	Side wheel carrier  Mirror, Rearview: Exterior  Left; 171/4" swinging arm	A97 D32	Transmission: Heavy-duty 3-speed synchromesh 4-speed synchromesh; includes 11' clutch	
	Gauges: Ammeter, engine tempera- ture, oil pressure		West Coast type, Jr. (6" x 11") West Coast type, Sr. (7" x 16")	D29 D30	Powerglide; includes heavy-duty radiator	MJ
	Generator: 42 amp Delcotron	Ķ82	Paint, Exterior: See Colors section Radiator: Heavy-duty Radio: Manual control	<b>V</b> 01	Windshield Wipers & Washer: Electric; 2-speed wipers	

			ļ	Option N	umbers		
Tire Size	Tire Capacity	Rim Width	Highway	Tread	On-Off-Roo	d Tread	
THE SITE	(lb ea)		Regular	Nylon	Regular	Nyloz	
TUBELESS							
7-17.5/6PR	1520	5.25"	Std a	R82	R81		
8-17.5/6PR	1740	5.25"	R83	R85	R84	<u> </u>	
8-17.5/8PR	2060	5.25"	R86	-	R87	-	
8-19.5/6PR	2090	5.25*	R94	R95	_	_	
8-19.5/8PR	2440	5. <b>2</b> 5*	R96	R98	R97	-	
FUBE-TYPE					R43		
7.00-15/6PR	1520	5.5*	R42	R44	N43	-	
7.00-17/6PR	- 1740	5.0*	R72	_	_	_	
7.00-17/8PR	2060	5.0 <b>°</b>	R73	<u> </u>	R74	-	
7.50-17/8PR	2440	6.0*	R75	<u> </u>	R76		

a—R80 for spare tire.

# **MODEL C2534 PICKUP (8-Ft Fleetside)**



#### STANDARD EQUIPMENT

Air Cleaner: Oil wetted; polyurethane element

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

Battery: 12-Volt; 54-plate; capacity 53 amp-hr Body: Fleetside Pickup; see Cabs & Bodies

Brakes, Service: Hydraulic

Sizes: front and rear 11" x 23/4"
Effective area: drum 385 sq in; lining 239 sq in

Brake, Parking: Rear wheels; area 119 sq in

Bumper: Front only, painted

Cab: Conventional; see Cabs & Bodies Carburetor: Single-barrel downdraft Clutch: Diameter 10"; area 100 sq in

→ Cooling: Capacity 11 qt; 1½" radiator core, 314-sq-in area; 13-lb pressure cap; 180° thermostat

beam control; speedometer; odometer; fuel gauge. Lights for generator, oil pressure, engine temperature, direction signals and high beam indicator

Direction Signals: Front and rear

Engine: 230 Six; positive crankcase ventilation Gross torque, lb-ft. Exhaust System: Single pipe & aluminized muffler

Fenders: Front and integral rear Filter, Fuel: Screen in fuel tank

Filter, Oil: Full-flow; 1-quart; throw-away type Frame: 39,000-lb-test steel; section modulus 3.71

Generator: 37 amp Delcotron

GVW Plate: 7500 lb

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

Mirror, Exterior: Left side; 61/4" fixed arm Shock Absorbers: Front & rear; piston diameter 1" Springs, Front: Coil; capacity 1250 lb each at ground Springs, Rear: Coil; capacity 2000 lb each at ground Steering: Ball-gear, ratio 24.0; wheel dia 17"

Suspension, Front: Independent; capacity 3000 lb Controls & Instruments: Hand choke; light switch; headlight > Tank, Fuel: Back of seat in cab; capacity 17 gallons Tires: Four tubeless 7-17.5/6PR front & single rear Tools: 3300-lb mechanical jack; wheel wrench

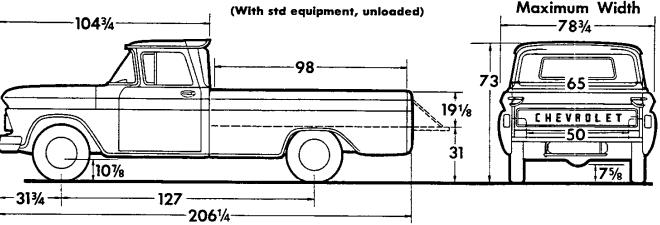
**Transmission:** 3-speed synchromesh; steering column gearshift;

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; 4 painted hub caps Windshield Wipers: Electric; single-speed

# **DIMENSIONS** 1043/4



→ Curb Weigh	t with Standard Eq	uipment (lb)	Load Weight	Distribution
Front 2100	<b>Rear</b>	<b>Total</b>	Front	<b>Rear</b>
	1795	3895	4%	96%

# PAYLOAD RATINGS & GVW SELECTOR

Maria Barad	GVW	Chassis Equipment	Recommended Minimum Tire Sizes			
Maximum Rated Payload Wt	Rating	Required for GVW Rating	Front	Single Rear		
1650 lb	5500 lb	Standard	7-17.5/6PR	7-17.5/6PR		
2100 lb	6000 1Ъ	Standard	7-17.5/6PR	8-17.5/6PR		
2800 1Ь	6700 1Ь	Standard	7-17.5/6PR	8-17.5/8PR		
3500 lb	7500 1ь	1500-lb front springs; 3000-lb rear springs	8-19.5/6PR	8-19.5/8PR		

# XX

#### OPTIONAL EQUIPMENT

# For dealer-installed equipment, see Custom Features section.

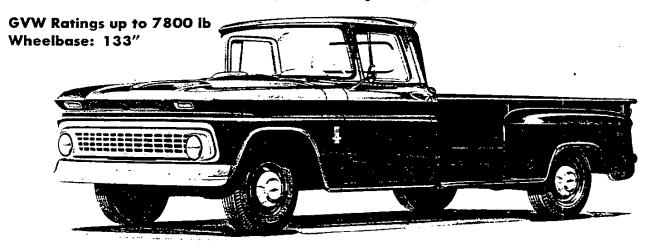
`	101 40	<b>2.0.</b>	istanio – aquipment, and and			
; >	-Air Cleaner: Oil bath; capacity 2 pints; for 230 and 292 engine only; not available with vacuum power brakes.		Glass, Laminated: Door windows only; includes metal frames	A09	Seat, Bostrom: Driver only Driver seat plus 2-man seat	A55 A55
	Axle, NoSPIN Rear: Ratio 4.57		Glass, Soft Ray: Windshield only	All	Seat, Full-Depth Foam	Z52
>	Axle, Rear: Ratio 4.11 for use with 7:00-15/6PR or 7-15.5/6PR tires only; not available with Powerglide	H04 →	All windows.  Governor: Not available with Powergli 230 engine: 1800–3100 rpm	All ide K37	Shock Absorbers: Heavy-duty Front and rear Rear only	F51
	Brakes, Vacuum Power	170	3000-4000 rpm	K37	Springs, Auxiliary Rear: Capacity 500 lb each	G60
	Bumper, Painted Rear: For use only with std painted front bumper  Carrier, Spare Wheel: Side mounted	V38	3000-3800 rpm	K37 K37	Springs, Front: Capacity 1500 lb each	
	Clutch: Dia 11"; for 230 engine  Custom Equipment: See Cabs &	M01	Heater & Defroster: De Luxe	C42	Springs, Rear: Capacity 3000 lb each	G50
	Body Section for description Appearance Option Chrome Option	<b>Z</b> 61	Hooks, Towing: Front		<b>Tachometer:</b> Electric; for 283 engine only; includes optional gauges	U16
	Comfort Option	Z62	Lock: Right door		Tank, Fuel: Capacity 20 gallons	N01
	Engine: 292 Six; includes 11" clutch, HD radiator and 61 amp-hr battery	L25	Mirror, Rearview: Exterior Left; 171/4" swinging arm Right; 171/4" swinging or 61/4" fixed arm West Coast type, Jr. (6" x 11")	D34	Transmission: Heavy-duty 3-speed synchromesh 4-speed synchromesh; includes 11" clutch	M20
	Gauges: Ammeter, engine temperature, oil pressure	Z53	West Coast type, Sr. (7" x 16")	D30	Powerglide; includes heavy-duty radiator	M35
	Generator:		Paint, Exterior: See Colors section	***	Window, Full-View Rear	A10
	42 amp Delcotron	K82	Radio: Manual control		Windshield Wipers & Washer: Electric; 2-speed wipers	C14

# TIRE & DISC WHEEL COMBINATIONS

				Option Numbers		
Tire Size	Tire Capacity	Rim Width	Highway Tread		On-Off-Road Tree	
	(lb ea)		Regular	Nylon	Regular	Nylon
TUBELESS						
7-17.5/6PR	1520	5.25"	Std a	R82	R81	_
8-17.5/6PR	1740	5.25"	R83	R85	R84	_
8-17.5/8PR	2060	5.25"	R86	_	R87	_
8-19.5/6PR	2090	5.25"	R94	R95	_	-
8-19.5/8PR	2440	5.25*	R96	R98	R97	_
TUBE TYPE				Ì		İ
7.00-15/6PR	1520	5.5"	R42	R44	R43	1 —
7.00-17/6PR	1740	5.0*	R72		<b> </b>	i –
7.00-17/8PR	2060	5.0"	R73	_	R74	) —
7.50-17/8PR	2440	6.0*	R75	_	R76	l –

a-R80 for spare tire.

# **MODEL C3604 PICKUP (9-Ft Stepside)**



#### STANDARD EQUIPMENT

Air Cleaner: Oil wetted; polyurethane element

Axle, Rear: Hypoid full-floating type; ratio 5.14; capacity 7200 lb

Battery: 12-Volt; 54-plate; capacity 53 amp-hr Body: Stepside Pickup; see Cabs & Bodies

Brakes, Service: Hydraulic

Sizes: front 11" x 234", rear 13" x 2½" Effective area: drum 395 sq in; lining 252 sq in

Brake, Parking:  $8" \times 2\frac{1}{2}"$  drum & band

Bumper: Front only, painted

Cab: Conventional; see Cabs & Bodies Carburetor: Single-barrel downdraft Clutch: Diameter 11"; area 124 sq in

→ Cooling: Capacity 11 qt; 1¼\* radiator core, 314-sq-in area; 13-lb pressure cap; 180° thermostat

Controls & Instruments: Hand choke; light switch; headlight > Tank, Fuel: Back of seat in cab; capacity 17 gallons beam control; speedometer; odometer; fuel gauge. Lights for generator, oil pressure, engine temperature, direction signals and high beam indicator

Direction Signals: Front and rear

Engine: 230 Six; positive crankcase ventilation
Gross horsepower
Gross torque, lb-ft

Exhaust System: Single pipe & aluminized muffler

Fenders: Front and rear

Filter, Fuel: Screen in fuel tank

Filter, Oil: Full-flow; 1-quart; throw-away type Frame: 39,000-lb-test steel; section modulus 5.14

Generator: 37 amp Delcotron

**GVW Plate: 10,000 lb** 

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

Mizzoz, Exterior: Left side; 61/4" fixed arm Shock Absorbers: Front; piston diameter 1"

Springs, Front: Coil; capacity 1500 lb each at ground Springs, Rear: Leaf; capacity 2400 lb each at ground

➤ Steering: Ball-gear, ratio 24:1; wheel dia 17"

Suspension, Front: Independent; capacity 3500 lb

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

Tools: 3300-lb mechanical jack; wheel wrench

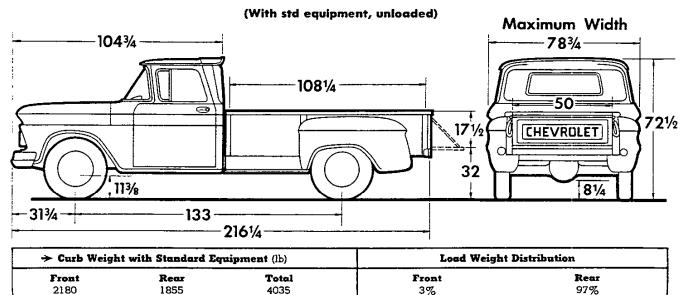
Transmission: 4-speed synchromesh; ratios 7.06, 3.58, 1.71, 1.00,

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; 4-painted hub caps Windshield Wipers: Electric; single-speed

#### DIMENSIONS



# PAYLOAD RATINGS & GVW SELECTOR

1		41111	Chassis Equipment	Recommended	Minimum Tire Sizes
<b>→</b>	Maximum Rated Puyload Weight	GVW Rating	Required for GVW Rating	Front	Rear
	2700 lь	6700 1Ь	Standard	8-17.5/6PR	8-17.5/8PR, single
	3700 lb	<b>★7800 1b</b>	3100-lb rear springs	8-19.5/6PR	8-19.5/10PR, single

 $<sup>\</sup>star$  Rating shown on RPO GVW plate.

# OPTIONAL EQUIPMENT

# For dealer-installed equipment, see Custom Features section.

ror ae	aler-i	usigned edothwent, acc govern			
→ Air Cleaner: Oil bath; capacity 2 pints; for 230 and 292 engine only; not		Glass, Laminated: Door windows only; includes metal frames	409	Radio: Manual control  Seat, Bostrom:	
available with vacuum power brakes.	K48	Glass, Soft Ray:		Driver only	A55
Axle, NoSPIN Rear: Ratio 5.14	G86	Windshield only		Driver seat plus 2-man seat	
Battery: Heavy-duty; 70 amp-hr	T60	Governor:		Seat, Full-Depth Foam	252
Brakes, Vacuum Power	J70 <sup>7</sup>	230 engine: 1800-3100 rpm K 3000-4000 rpm K	K37 K37	Shock Absorbers: Heavy-duty Front	F51
Bumper, Painted Rear: For use only	1720	283 engine: 2400-3600 rpm		Rear	F51
with std painted front bumper  Carrier, Spare Wheel: Side mounted		3000-3800 rpm F 292 engine: 1800-3100 rpm F	K37	Springs, Auxiliary Rear: Capacity 1050 lb each. For use with	
Custom Equipment: See Cabs &		3000-3900 rpm	<del>K37</del>	3100-lb rear springs	G60
Bodies Section for description Appearance Option		GVW Plate: 7800 lb	Z70	Springs, Front: Capacity 1750 lb each	F60
Chrome Option	V37	Recirculating. (	C43	Springs, Rear: Capacity 3100 lb each	G50
→ Engine: 292 Six; includes HD radiator and 61 amp-hour battery	1.25	Lock: Right door	A97	<b>Tachometer:</b> Electric; for 283 engine only; includes optional gauges	
283 V8	L32	Mirror, Rearview: Exterior		Tank, Fuel: Capacity 20 gallons	NOl
Gauges: Ammeter, engine tempera ture, oil pressure	-	Left; 171/4" swinging arm	D32	Transmission: Heavy-duty 3-speed synchromesh	
Generator:		West Coast type Sr. (7" x 16")	D30	Window, Full-View Rear	A10
42 amp Delcotron	. K82	Paint, Exterior: See Colors section Radiator: Heavy-duty		Windshield Wipers & Washer: Electric; 2-speed wipers	

		1	Option Numbers				
Tire Size	Tire Capacity	Rim Width	Highway	Tread	On-Off-Ros	d Tread	
	(lb ea)		Regular	Nylon	Regular	Nylon	
TUBELESS							
8-17.5/6PR	1740	5.25"	Std a			_	
8-17.5/8PR	2060	5.25*	Std <b>b</b>	_	R87	_	
8-19.5/6PR	2090	5.25*	R94	R95	( -	_	
8-19.5/8PR	2440	5.25"	R96	R98	R97	1 -	
8-19.5/10PR	2650	5.25*	R99	_	_	_	
TUBE-TYPE				<u> </u>			
7.00-17/6PR	1740	5.0*	R72 a	<b>!</b> –			
7.00-17/8PR	2060	5.0″	R73	<u> </u>	R74	_	
7.50-17/8PR	2440	6.0*	R75	-	R76	_	

a-Front only.

**b**—Std rear only. R86 for spare or front tires.



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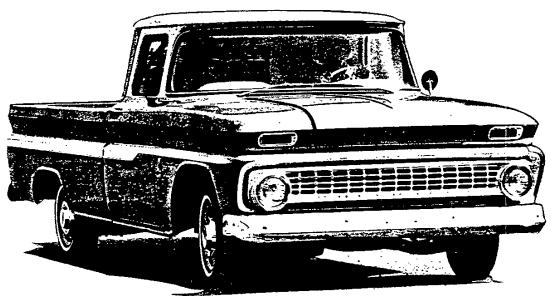
**Painters** 

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**Public Utilities** 

Ranchers

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# FRONT SPRINGS

#### **SPECIFICATIONS**

## Standard Coil Springs

Series	Rating at Ground (lb each)	Sprung Capacity (lb each)	Deflection Rate at Wheel (lb/inch)	Wire Diameter (inch)	Outside Diameter (inches)
R10	1150	1040	175	0.677	5.15
C10 (Except Panels, Carryalls & Cowl models), P10,	1250	1050	173	0.731	5.14
C10 (Panels, Carryalls & Cowl models)	1250	1050	160	0.715	5.14
C30	1500	1300	239	0.808	5.24

# **Optional Coil Springs**

Series	Rating	Sprung	Deflection	Wire	Outside
	at Ground	Capacity	Rate at Wheel	Diameter	Diameter
	(lb each)	(lb each)	(lb/inch)	(inch)	(inches)
C20	1500	1300	239	0.808	5.24
	1750	1550	298	0.822	5.34

# **Standard Leaf Springs**

	Rating	→ Rating at Pad (lb each)	Clamped	Semi-Elliptic Leaves			
Series	at Ground (lb each)		Deflection Rate (lb/inch) →	Number	Length (inches)	Width (inches)	
SINGLE-STAGE:							
K10	1650	1350	500	5	44	21/2	
K20	1750	1350	500	5	44	21/2	
P20, P30	2000	1700	490	8	44	2	
TWO-STAGE, VARIABLE RATE:							
C50, L50, S50	2000	1750	400 to 540	5	59	21/2	
C60, L60, D60, S62, S64, S67	3000	2700	450 to 700	6	59	21/2	
T60, S69, C80, L80, T80, E80, U80	3500	3150	540 to 850	6	591/2	3	
M60	4000	3650	580 to 840	7	59	21/2	
M80	4500	4100	700 to 1000	7	591/2	3	

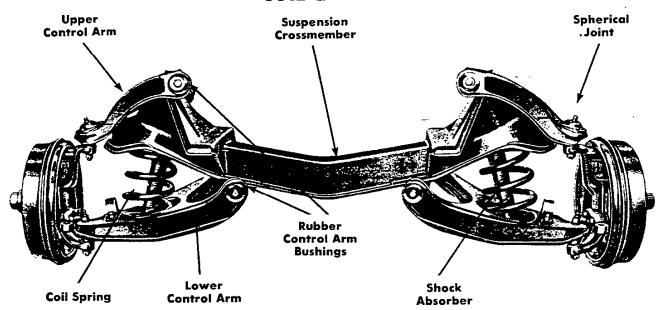
# **Optional Leaf Springs**

	Rating	Rating	Clamped	Semi	-Elliptic Le	uves
Series	at Ground (lb each)	at Pad (lb each)	Deflection Rate (lb/inch)	Number	Length (inches)	Width (inches)
SINGLE-STAGE:						
P30	2500	2200	726	10	44	2
TWO-STAGE, VARIABLE RATE:			ļ			
C50, L50, S50	3000	2700	450 to 700	6	59	21/2
C60, L60, M60, D60, S62, S64, S67	3500	3150	540 to 850	6	591/2	3
C60, L60, D60, S62, S64, S67	4000	3650	580 to 840	7	59	21/2
C60, L60, M60, T60, D60, S60, C80, L80, T80, E80, U80	4500	4100	700 to 1000	7	591/2	3
C80, L80, T80, M80, E80, U80	5500	5050	850 to 1315	9	591/2	3
C80, L80, T80, M80, E80, U80	7000	6500	990 to 1550	11	591/2	3

<sup>→</sup> Indicates revised specifications

## FRONT SUSPENSION

#### **COIL SPRINGS**



#### **CORVAIR 95 MODELS**

All front suspension components are assembled as a unit with a removable crossmember, thus greatly simplifying servicing. The control arms are attached to the crossmember through rubber bushed, forged steel pivot shafts. The axis of the upper control arm pivot is positioned at a 10-degree angle to the axis of the lower control arm pivot, providing dive control upon braking.

Extended-life lubrication provides greater component durability

and reduced maintenance.

The front suspension upper control arm spherical joints are permanently sealed, requiring no periodic service.

While sealing of the lower spherical joints is similar to that of the upper joints, lubrication fittings and grease escape grooves are provided because of its primary function as the load-carrying member.

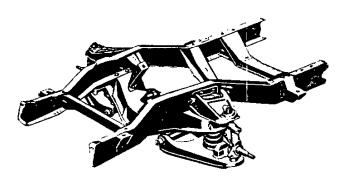
#### SERIES C10, P10, C20, C30

All Series 10 through 30, except four-wheel drive and forward control models P20 and P30, are equipped with coil spring front suspension. Coil springs provide an extremely rugged and compact independent suspension assembly. Maintenance is greatly reduced since spring adjustments are not required.

Vertical walls of the suspension crossmember have a double thickness in critical areas to withstand loads and forces from the lower control arms and pivot shafts. Stamped steel, single unit lower control arms contribute to a simplified design.

Upper and lower control arm pivot shafts are forged steel on Series 20 and 30 (steel bar stock on Series 10) to resist fore, aft and lateral movements. An outstanding feature of the upper control arm pivot shaft attachment is the ease and endurance of caster-camber adjustments.

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

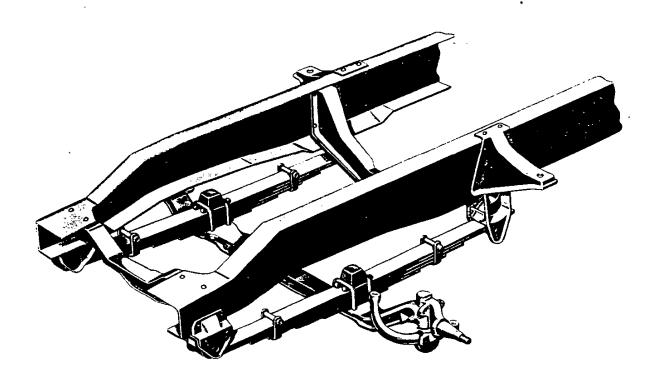


#### SUSPENSION CAPACITY

Series:	
C10, P10	2500 lbs
C20	3000 lbs
C30	3500 lbs

## FRONT SUSPENSION

# I-BEAM AXLE WITH VARIABLE-RATE LEAF SPRINGS



# SERIES 50, 60, 80

Reverse-Elliot I-beam axles and variable-rate 2-stage leaf springs combine to provide all 50 through 80 Series models with a front suspension featuring exceptional durability and outstanding ride and handling characteristics.

I-beams are constructed of heat-treated drop-forged steel. Constant diameter kingpins are protected by diamond shaped seals at each end. Upper and lower kingpin bushings are steel-backed bronze with distribution grooves to ensure uniform lubrication. Tapered wheel bearings are used on all units.



Series	
C-L50	4000 lbs
S50	4500 lbs
C-L-M-D60	5000 lbs
S60 (except S69)	5500 lbs
T60, S69, C-L-T-M-E-U80	7000 lbs
Optio	
C-L50	5000 lbs
\$50	5500 lbs
C-L-M-D-S60 (exc S69)	7000 lbs
C-L-T-M-E-U80	9000 lbs
	11.000 lbs



## Variable-Rate Front Suspension

The two top leaves of the variable-rate front spring, unlike the variable-rate rear spring (see Rear Suspension—page 4), are fastened at the front hanger. At the rear, the unshackled squared-off top leaf rides against a specially hardened cam surface.

In operation, top spring leaf contacts the cam surface near its outer edge under light load. As the load increases, the line of contact moves inward until, at full load, it reaches the inner edge of the cam. Thus, there is soft spring action with light loads and progressively stiffer spring action as the load is increased. Additionally, the springs are of a two-stage design, assuring excellent load-carrying ability.

# FRONT SUSPENSION

## SERIES K10, K20

Front drive is through a single reduction hypoid pinion and ring gear combination. Full floating axle shafts drive the front wheels through yoke and trunnion type universal joints.

Optional free-wheeling front hubs permit the front wheels to be disengaged from the drive line. This minimizes wear of front axle components and also improves fuel economy.

# FOUR-WHEEL DRIVE MODELS

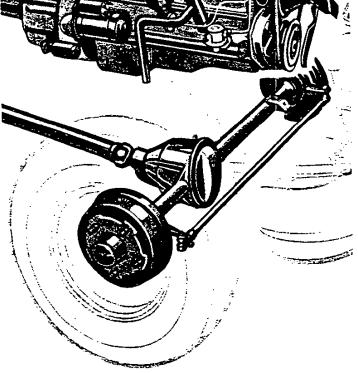
#### **Specifications**

	Series K10	Series K20
Axle: Make. Model. Minimum shaft diameter. Capacity.	Spicer 445F 1.125" 3300 lb	Spicer 445F 1.125" 3500 lb
Pinion & Ring Gear: Ratio	hypoid 3.73 12 47	hypoid 4.55 11 50
Pinion Mounting: Bearings	overhung tapered roller	overhung tapered roller
<b>Differential:</b> Bearings	2-pinion tapered roller	2-pinion tapered roller
Lubricant Capacity	4½ pt	6½ pt

#### **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. The optional front axle also includes 7-inch diameter steering knuckle ball joints and axle shaft universal joints which are approximately 45 per cent stronger than those used with the standard K20 driveline.



# MEDIUM AND HEAVY-DUTY FRONT AXLE DATA

CERIES APPLICATION	CLS 50	CL60, S62, S64, S67	T60, S69	CELMTU 80
4000 Lb I-Beam Axle	Std	-	•	-
5000 Lb I-Beam Axle	RPO F47	Std	-	-
7000 Lb I-Beam Axle	-	RPO F48	Std	Std
9000 Lb I-Beam Axle	-	•		RPO F67
11,000 Lb I-Beam Axle	-		-	RPO F68

## MEDIUM AND HEAVY-DUTY FRONT SPRING DATA

SERIES APPLICATION	CLS 50	CL60, S62, S64, S67	T60, S69	CELMTU 80
2000 Lb, 5-Leaf, 2-1/2" wide	Std	-	-	. •
3000 Lb, 6-Leaf, 2-1/2 wide	RPO F60	Std	•	. ·
4000 Lb, 7-Leaf, 2-1/2" wide	-	RPO F60 with Base I-Beam	<u>-</u>	-
3500 Lb, 6-Leaf, 3" wide	-	Included in RPO F48, 7000 Lb Axle	5, 1 : \$td   1   )	Std CELTU 80
4500 Lb', 7-Leaf, 3" wide	_	RPO F60 with F48, 7000 Lb Axle		Std M80, RP0 F60 on CELT 80
5500 Lb, 9-Leaf, 3" wide	<u>-</u>	. •		RPO F60 & F with RPO F6 9000 Lb Axle
7000 Lb, 11-Leaf, 3" wide	-	RPO F60 with RPO F48, 7000 Lb Axle	RPO F60 with RPO F67 or 11,000 Lb	or F68, 9000 Axles

<sup>\*</sup> RPO F60 on M80 Series; F81 on CELTU80 Series.

Prepared by

M. J. Leone
Engineering Product
Information Department

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# MEDIUM AND HEAVY DUTY REAR AXLE DATA

SERIES APPLICATION	CLS 50	CLT 60	S62-64	D60	S67-S69	CLT 80	EU 80	M80
11,000 lb. single-speed	Std.	-	-	_	-	_	-	-
15,000 lb. single-speed	RPO H15	Std.	Std.	Std.	Std.	-	-	-
15,000 lb.	RPO H96 incls. RPO G52	RPO H96	RPOH96	RPO H98	RPO H96	-	-	<b>-</b>
17,000 lb. single-speed	-	RPOH16 incls. 9200#spg	<b>.</b>	-	RPOH16 incls. 9200#spg	-	-	-
17,000 lb. Chev single-speed	-	RPO H97 incls. 9200#spg	_	•	RPOH97 incls. 9200#spg	-	-	· -
17,000 lb. **. two-speed	<b>-</b>	RPOH79 incls. 9200#spg	-	RPO H71 incls. RPO G56	<b>-</b>	<u>-</u>	<b>-</b>	-
18,500 lb.*' single-speed	-	-	_	_	<b>-</b> '	Std.	incl. in RPO M92	-
18,500 lb.* two-speed	-	_	_	-	•	RPO H80 RPO H81	Std.	-
30,000 lb. Eaton Bogie	-	_	<del>-</del>	_	-	-	<b>-</b>	Std.

8-28-62 5. J. SEINER

#### MEDIUM AND HEAVY DUTY REAR SPRING DATA

SERIES APPLICATION	CLS 50	CLST 60	D60,CLT80	EU80	M80
5500#,8-leaf, 2-1/2"wide	Std,	-	_	-	
7500#, 10-leaf, 2-1/2"wide	RPO G52	Std.	•	-	
8750#, 11-leaf, 2-1/2"wide	RPO G55	RPO G55	-	-	-
9200#, 9-leaf, 3"wide	-	inc.w/17,000#axle	Std.		_
10,400#,10-leaf,3"wide	_	RPOG56-used w/17,000#axle	RPO G56	Std.	-
11,500#,11-leaf,3"wide*	-	RPO G58-used w/17.000# axle	RPO G58	RPOG58-	] -
17, 250#, 12-leaf, 4"wide	-	-	-	-	Std.
9,500#,12-leaf,4"wide	-	-	-	-	RPO

-N/A for S60

MEDIUM AND HEAVY-DUTY AUXILIARY SPRING DATA

SERIES APPLICATION CL50, CLT 60 CDLT60, CELTU80

1500#, 4-leaf, 2-1/2"wide RPO G60

2000#, 4-leaf, 3"wide - RPO G60

701

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# **REAR SPRINGS**

## **SPECIFICATIONS**

# **Coil Springs**

Series	Rating at Ground (lb each)	Sprung Capacity (lb each)	Spring Type	Deflection Rate (lb/inch)	Wire Diameter (inch)	Outside Diameter (inches)
R10	1150	1050	1-Stage	364	0.775	4.93
C10, P10 (Std)	1250	1080	2-Stage	253 to 392	0.698	6.89
C10, P10 (RPO)	2000	1650	2-Stage	332 to 482	0.767	7.034
C20 (Std)	2000	1650	2-Stage	344 to 602	0.798	7.096
C20 (RPO)	3000	2650	2-Stage	578 to 751	0.893	7.286

# **Standard Leaf Springs**

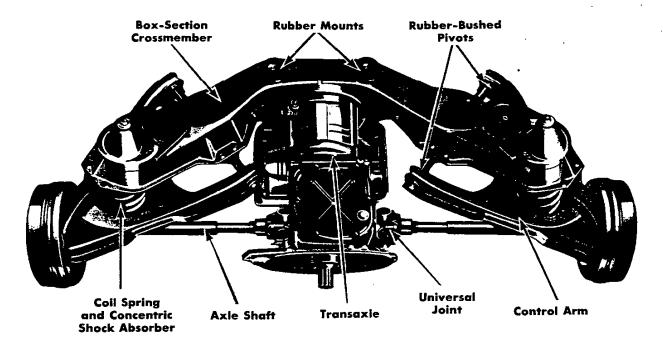
	Rating	Rating		Average		Semi-Ellip	tic Leaves	
Series	at Ground (lb ea)	at Pad (lb ea)	Spring Type		Number	Max Length (in)	Width (in)	Total Thickness (in)
K10	1900	1640	1-Stage	322	6	52	21/2	1.81
K20	1900	1535	1-Stage	322	6	52	21/2	1.81
C30	2400	1920	1-Stage	497	8	52	21/2	2.55
P20, P30	2400	2050	1-Stage	497	8	52	21/2	2.55
C-L-S50	5500	4950	2-Stage	528 to 1636	8	54	21/2	4.30
C-L-T-S60	7500	6750	2-Stage	633 to 2053	10	54	21/2	5.11
D60, C-L-T80	9200	8400	. 2-Stage	625 to 2500	9	55	3	5.15
E-U80	10,400	9600	2-Stage	950 to 2900	10	55	3	5.55
M60	15,000	13,500	1-Stage	9690	11	453/8	4	4.50
M80	17,250	15,440	1-Stage	8490	12	461/4	4	5.36

# **Optional Leaf Springs**

	Rating	Rating		Average		Semi-Ellip	tic Leaves	
Series	at 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)
K20	3150	2785	1-Stage	497	8	52	21/2	2.55
C30	3100	2750	2-Stage		8	52	21/2	2.70
C30	4150	3670	Main Auxiliary		8 5	52 	21/2	2.70 1.55
P30	3400	3000	Main Auxiliary	497 1290 <b>♦</b>	8 5	52	21/2	2.55 1.46
P30	4350	3750	2-Stage	780 to 1030	12	52	21/2	- 4.48
C-L-S50	7500	6750	2-Stage	633 to 2053	10	54	21/2	5.11
C-L-S50, C-L-S-T60	8750	7950	2-Stage	740 to 2235	11	54	21/2	5.47
C-L-T60, S67, S69	9200	8400	2-Stage	625 to 2500	9	55	3	5.15
C-L-T60, D60, S60, C-L-T80	10,400	9600	2-Stage	950 to 2900	10	55	3	5.55
C-L-T-D60, C-L-T-E-U80	11,500	10,750	2-Stage	1075 to 3250	11	55	3	5.96
M80	19,500	17,540	1-Stage	15, 624	12	457/8	4	5.71

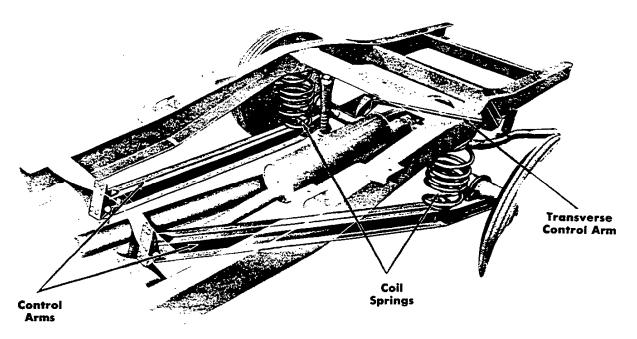
<sup>♦</sup> Total, main and auxiliary

#### REAR SUSPENSION



#### **CORVAIR 95 MODELS**

Series R10 models have an independent rear suspension with swinging axles. The suspension is assembled as a unitized assembly and installed with four resilient rubber mounts. The main structural element is a swept-back crossmember, to which are attached the control arm pivots. The control arms are attached to the pivots through rubber bushings. Coil springs and concentric shock absorbers are fitted between the control arms and the cross-member. The swinging axle shafts are splined into universal joints at the transaxle—the transmission and axle gear assembly.



#### 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, but maintain proper axle position. All springing is performed by two-stage coil springs which provide an excellent ride when vehicle is empty or lightly loaded—yet increase in capacity as loads become greater. See illustration and description on following page.

# REAR SUSPENSION

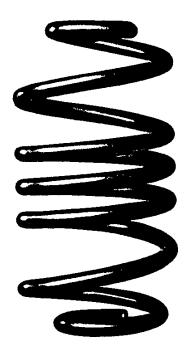
# SERIES C10, P10 and C20 (Continued)

# **Two-Stage Coil Springs**

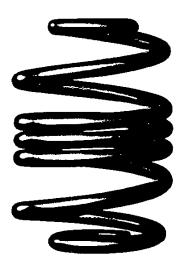
The two-stage coil spring rear suspension, standard and optional on all Series C10, P10 and C20 models, provides a low-rate first stage for smooth ride and a higher rate second stage to insure greater load-carrying capacity.

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.

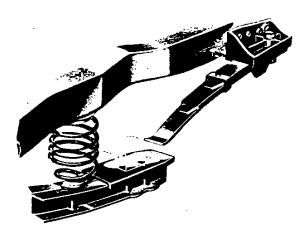
Severe jouncing of the vehicle or heavier loads compress the three coils to a point where they touch and become inactive. This reduces the number of active coils, giving the spring a higher rate and greater carrying capacity.



First Stage
Low rate for ride



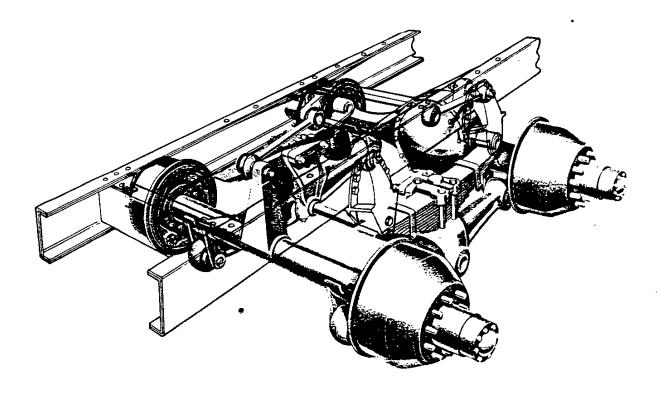
Second Stage
High rate for greater
carrying capacity



# **Cantilever Mounted Auxiliary Springs**

Three-leaf auxiliary rear springs are available as optional equipment on Series C10 and C20 models. The springs are attached to the outside of the frame side rail web at the rear. The lower leaf extends forward into the vicinity of the rear axle mounting pads on the suspension control arms. The auxiliary rear springs make contact with the axle mounting pads only after the base springs are compressed to design load condition. Although they do not permit a higher GVW rating, the auxiliary springs increase the carrying capacity by 500 pounds per side.

## TANDEM SUSPENSION



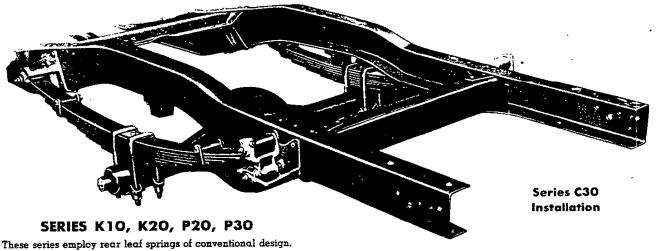
#### SERIES M60

Series M60 tandems use a new version of the Hendrickson rear suspension with a Chevrolet forward driving axle in combination with a tubular trailing axle.

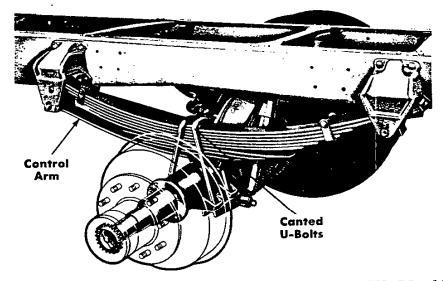
The design of the suspension system, using equalizing beams, provides excellent operating flexibility. The action of these beams allows the vehicle to "walk" over surface irregularities, resulting in a smoother and more level ride. A cross tube connecting the equalizing beams assures correct alignment and prevents damaging load transfer.

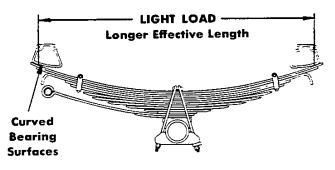
Axle torque is controlled by the use of torque rods, thereby reducing the tendency of the axles to turn backward or forward due to starting or stopping inertia. Short, relatively lightweight rear springs serve to cushion and support the load.

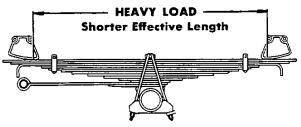
# **REAR SUSPENSION**



These series employ rear leaf springs of conventional design. Standard springs for each model are single-stage. Two-stage springs are optional for C30 Series; auxiliary springs are optionally available for C30 and P30 Series.







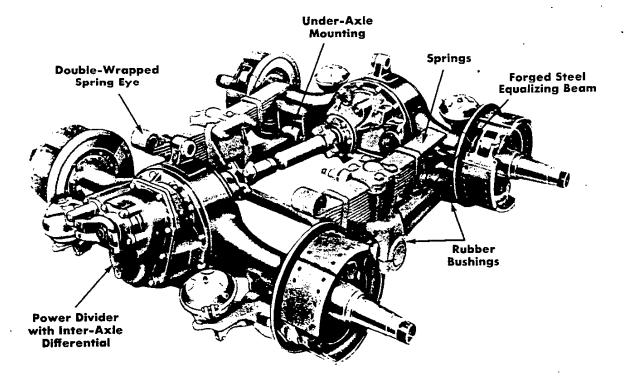
#### SERIES 50, 60, 80 (Except M60 & M80)

The ends of the variable-deflection-rate springs bear against, but are not attached to, curved surfaces. As spring load increases, the curved bearing surface shortens the effective length of the spring, thereby increasing the deflection rate. Thus, there is soft spring action with light loads, and progressively stiffer spring action as the load is increased.

Driving and braking forces are transmitted by the control arm, leaving the spring leaves to perform only a cushioning function.

Canted U-bolts permit full action of the spring leaves.

# TANDEM SUSPENSION

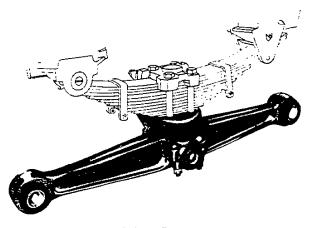


#### SERIES M80

Tandem models are equipped with a Hendrickson RT320 bogie and two 16,000-lb Eaton Series 30 axles. 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, thereby eliminating the need for periodic lubrication.

The power divider with built-in inter-axle differential divides driving power equally between the two axles. The differential feature permits freedom of action of the two axles, and eliminates wheel fight due to road irregularities or small differences 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. The fixed front eye is double-wrapped to give added strength for transmitting driving and braking forces. Spring seats are machined to ensure permanent alignment.



## **Equalizing Beam**

Forged-steel equalizing beams give even load distribution between rear axies. Beam ends and center pivot are fitted with rubber bushings which give flexibility and eliminate need for periodic lubrication.

#### **Axle Specifications**

#### Pinion & Ring Gear:

Туре	Spiral Bevel
Ratio	7.17
Pinion, teeth	6
Ring gear, teeth	43

#### Pinion Mounting:

Type	Straddle
Front bearing	Tapered roller
Rear bearing	Tapered roller
Outboard bearing	Straight roller

#### Differential:

Туре	4-Pinion
Bearings	Tapered roller

#### Axle Shafts:

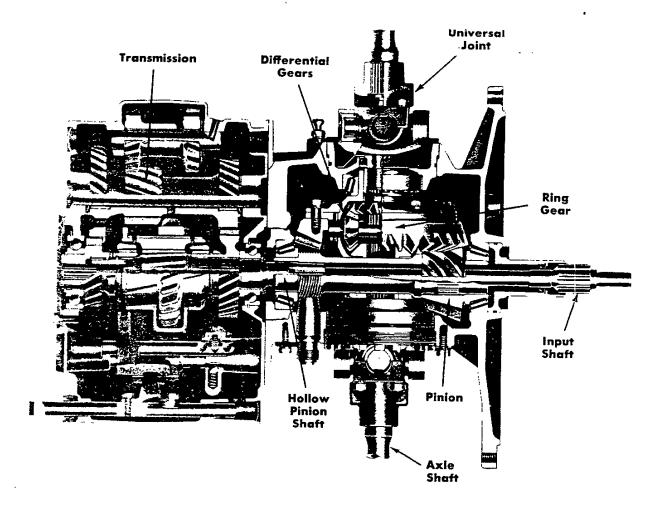
Type	Full-floating
Minimum diameter	111/16"
Diameter over splines	1.86*
Number of splines	16
Attachment to hub	8 studs

#### Wheel Bearings:

Туре	 Tabeted toner
	Timken or Bower

Rear Axle & Suspension—Page 7

# CORVAIR 95 SINGLE-SPEED REAR AXLE



Final drive gears are contained in the transaxle assembly—a combined transmission and rear axle. The transaxle is attached to the underside of the body so that the entire weight is sprung. Weight of truck and cargo is carried by the front and rear suspensions, relieving the axle shafts of any weight carrying function.

Hypoid pinion and ring gear are straddle-mounted. The pinion driveshaft is hollow, and splined to the hollow transmission mainshaft. The engine input shaft passes through both hollow shafts to drive the transmission.

The same lubricant (SAE 80) is used for both transmission and rear axle except when the Powerglide transmission is used. With the Powerglide, different lubricants are used.

Universal joint oil seals are pressed into the bearing adjusting sleeves, and can be serviced without readjusting the bearings. The splined end of each universal joint is placed in the center of the side bearing adjusting sleeve and engages a differential side gear. Each universal joint is splined to an axle shaft and held in place by a bolt.

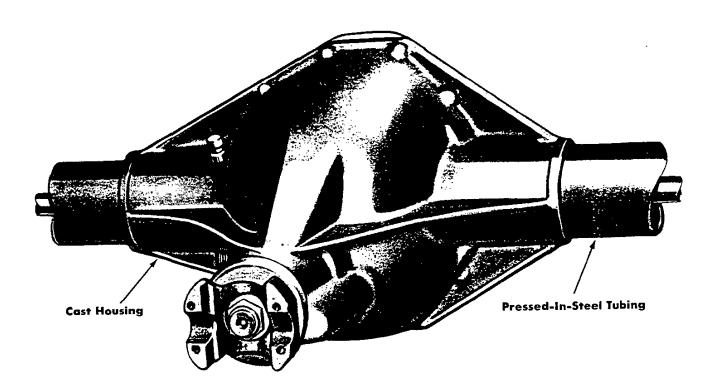
#### **Positraction Differential**

The Positraction differential is available as a regular production option. It reduces wheel spin caused by loss of traction at one driving wheel. Construction is similar to that used for conventional single-speed axles on C10 and P10 models described on page 9 of this section.

#### **Specifications**

Series Application	R10
Pinion & Ring Gear: Type Ratios available Pinion, teeth Ring gear, teeth	Hypoid 3.89 9 35
Pinion Mounting: Mounting type Front bearing Rear bearing	Straddle Tapered roller Tapered roller
Differential: Type Bearings	2-Pinion Tapered roller
Axle Shafts: Diameter	1.29*
Wheel Bearings: Type	Barrel roller Hyatt
	March 1, 1963

# SALISBURY-TYPE DESIGN SERIES C10 and P10

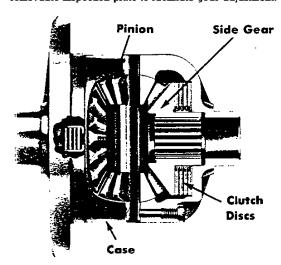


Series C10 and P10 models are equipped with a three-piece construction Salisbury-type rear axle. The illustration above shows the housing construction in which the axle tubes, as separate members, are pressed and welded into a central differential carrier housing.

Reinforcement ribs of the central carrier housing are placed to best advantage. A full rib extending between the pinion bearings and the differential bearings provides excellent support of the gear teeth at the mesh point. The location of these main axle components, as a result of the rib placement, contributes to a rigid, more quiet operation.

# CHEVROLET SINGLE-SPEED REAR AXLE 3300-lb to 3500-lb Capacity

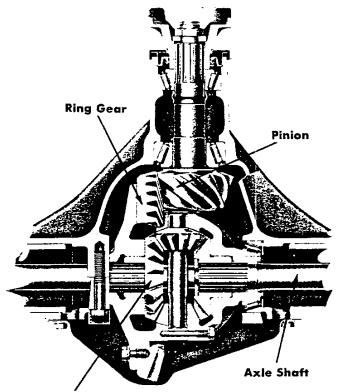
Rugged hypoid ring and pinion gears have large tooth contact area for long, dependable service and quiet operation. Widely spaced tapered roller pinion bearings insure high pinion rigidity and long life of drive gears. The one-piece axle housing has a removable inspection plate to facilitate gear adjustment.



#### **Positraction Differential**

Driving forces are transmitted from differential case to axle shafts 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 shaft offers little resistance to turning. As a result, the axle shaft has little torque applied to it. Instead, most of the available torque is diverted to the other axle shaft which offers resistance to being driven.

#### 3500-lb axle illustrated



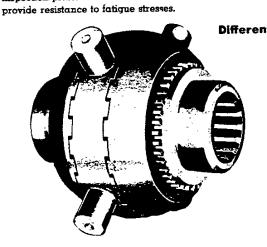
**Differential Gears** 

#### **Specifications**

Capacity	3300 Ъ	3500 lb	3500 lb	
Make	Chevrolet	Che <del>vro</del> let	Chevrolet Positraction	
Series Application	K10	C10, P10, C20*	C10, P10	
Pinion & Ring Gear: Type Ratios available Pinion, teeth Ring gear, teeth	Hypoid 3.73 11 41	Hypoid 3.07 3.73 4.11 14 11 9 43 41 37	Hypoid 3.73 11 41	
Pinion Mounting: Mounting type Front bearing Rear bearing	Overhung Tapered Roller Tapered Roller	Overhung Tapered Roller Tapered Roller	Overhung Tapered Roller Tapered Roller	
Differential: Type Bearings, type	2 Pinion Tapered Roller	2 Pinion Tapered Roller	2 Pinion Tapered Roller	
Axle Shafts: Type. Minimum diameter (in). Differential splines: Number of splines. Diameter over splines (in).	Semi-Floating 1.16 17 1.28	Semi-Floating 1.16 17 1.28	Semi-Floating 1.16 17 1.28	
Housing: Section diameter x thickness (in)	3.00 x 0.22	3.00 <b>±</b> 0.22	3.00 x 0.22	
Wheel Bearings: Type Make	Tapered Roller Hyatt	Tapered Roller Hyatt	Tapered Roller Hyatt	

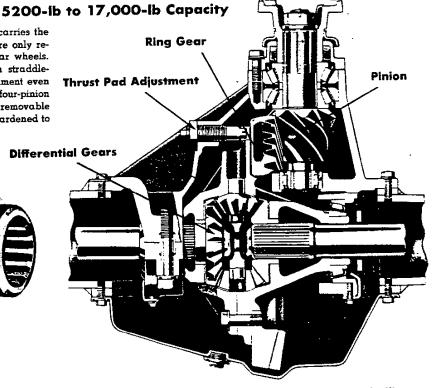
<sup>\*4.11</sup> ratio only on C20.

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-gear thrust pad and a straddle-mounted pinion maintain proper gear alignment even under severe conditions. Differential is of the four-pinion type, and the one-piece axle housing has a removable inspection plate. Axle shafts are induction hardened to



### **NoSPIN Differential**

Axles for Series C-P20 and C-P30 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.



15,000-lb Axle illustrated

#### **Specifications**

CHEVROLET SINGLE-SPEED REAR AXLE

<del></del>	7	5000 II	11,000 lb	15.000 lb	17,000 lb
Capacity	5200 lb	7200 lb	,	C-L-S50	•
Series Applications	C-K-P20	C-P30	C-L-S50	C-D-L-M-S-T60	C-L-S-T60
Pinion & Ring Gear: Type	Hypoid 4.57 <b>a</b> 5.14 <b>b</b> 7 7 32 <b>a</b> 36 <b>b</b>	Hypoid 5.14 5.83e 7 6e 36 35e	Hypoid 6.17 6 37	Hypoid 6.17c 7.20d 6c 5d 37c 36d	Hypoid 7.20 5 36
Pinion Mounting: Mounting type Front bearing Rear bearing	Straddle Ball Straight Roller	Straddle Ball Straight Roller	Straddle Ball Straight Roller	Straddle Tapered Roller Straight Roller	Straddle Tapered Roller Straight Roller
Differential: Type Bearings, type	2-Pinionf Barrel Roller	4-Pinion Barrel Roller	4-Pinion Barrel Roller	4-Pinion Barrel Roller	4-Pinion Barrel Roller
Axle Shafts: Minimum diameter (in)	1.34	1.34	1.44	1.69	1.69
Differential splines: Number of splines. Diameter over splines (in) Hub-end attachment.	1.7 1.53 Bolted <b>g</b>	17 1.53 Bolted	27 1.73 Splined	29 1.86 Splined	29 1.86 Bolted
<b>Housing:</b> Section dia x thickness (in).	3.25 x 0.281	3.25 x 0.281	4.00 x 0.375	4.50 x 0.44	4.75 x 0.500
Wheel Bearings: Type Make	Barrel Roller Hyatt	Barrel Roller Hyatt	Barrel Roller Hyatt	Barrel Roller Hyatt	Tapered Roller Timken or Bower

<sup>-</sup>Series C-K20 only.

b-Series P20 only.

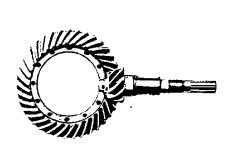
c-Series D60 only.

d—Except Series D60.

e—Series P30 only.f—4-Pinion on P20 Series

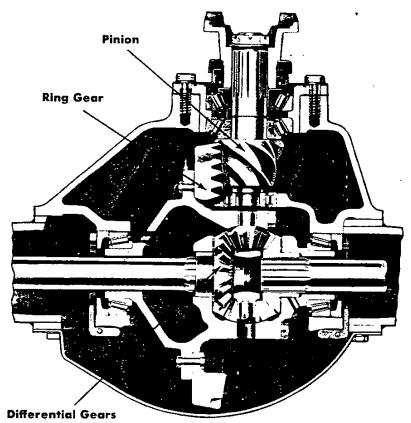
g-Splined on Series K20.

# EATON SINGLE-SPEED REAR AXLE 18,500-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 taperedroller 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.



### **Specifications**

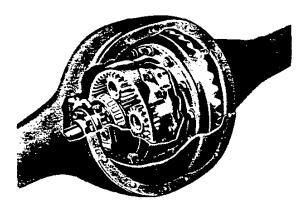
Series Applications         C-L-T80         E-U80           Eaton Axle Series         1790A         1790A           Pinion & Ring Gear:         Spiral Bevel         Spiral Bevel           Type         Spiral Bevel         Spiral Bevel           Ratios available         7.17         5.57           Pinion, teeth         6         7           Ring gear, teeth         43         39           Pinion Mounting:         Straddle         Straddle           Front bearing         Tapered Roller         Tapered Roller           Outboard bearing         Straight Roller         Straight Roller           Differential:         4-Pinion         4-Pinion	Capacity	18.500 1ь	18,500 lb
Eaton Axle Series         1790A         1790A           Pinion & Ring Gear:         Spiral Bevel         Spiral Bevel           Type.         Spiral Bevel         5.57           Ratios available         7.17         5.57           Pinion, teeth         6         7           Ring gear, teeth         43         39           Pinion Mounting:         Straddle         Straddle           Front bearing         Tapered Roller         Tapered Roller           Outboard bearing         Straight Roller         Straight Roller           Differential:         4-Pinion         4-Pinion	l i	,	,
Pinion & Ring Gear:         Spiral Bevel         Spiral Bevel           Type         7.17         5.57           Ratios available         7.17         5.57           Pinion, teeth         6         7           Ring gear, teeth         43         39           Pinion Mounting:           Mounting type         Straddle         Straddle           Front bearing         Tapered Roller         Tapered Roller           Outboard bearing         Straight Roller         Straight Roller           Differential:         4-Pinion         4-Pinion		C-L-180	E-U80
Type. Spiral Bevel Spiral Bevel Ratios available 7.17 5.57 Pinion, teeth 6 7 Ring gear, teeth 43 39  Pinion Mounting: Straddle Straddle Front bearing Tapered Roller Outboard bearing Straight Roller Straight Roller  Differential: Type 4-Pinion 4-Pinion	Eaton Axle Series	1790Ā	1790Å
Mounting type Straddle Front bearing. Tapered Roller Outboard bearing. Straight Roller  Differential: Type. 4-Pinion 4-Pinion	TypeRatios availablePinion, teeth	7.17 6	5.57 7
Type 4-Pinion 4-Pinion	Mounting type	Tapered Roller	Tapered Roller
2 · /•	<del></del>	4-Pinion Tapered Roller	4-Pinion Tapered Roller
Axle Shafts: Type Full-Floating Full-Floating Minimum diameter (in) 1.81 1.81 Attachment to hub Bolted Bolted	Type	1.81	1.81
Housing:         Section diameter x thickness (in)       5.12 x 0.44       5.12 x 0.44		5.12 x 0.44	5.12 <b>x</b> 0.44
Wheel Bearings:       Type	Туре		
Bearing inside diameter:   At inner bearing	At inner bearing		

# Housing and Axle Shafts

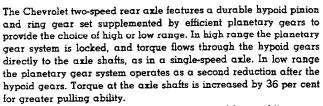
With full-floating axle shafts, the axle housing supports the chassis and payload and absorbs road shocks. Housing is high-strength banjo design, made of dropforged medium-carbon steel. Removable inspection plate simplifies maintenance and adjustment.

Axle shafts, being of full-floating 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.

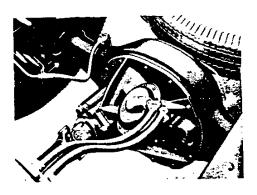
# 15,000-lb & 17,000-lb Capacity



Chevrolet Two-Speed Planetary-Gear Rear Axle



Ring gear and pinion alignment is maintained by straddle mounting of the pinion between dual tapered roller bearings at front and



Double-Line Vacuum Control (Except Series D60)

a straight-roller outboard bearing at rear. An adjustable thrust pad minimizes ring gear deflection during severe torque applications, such as pulling hard in low transmission gear. 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. Removable inspection plate simplifies maintenance and adjustment.

Shafts are drop-forged from alloy steel, induction hardened and shot-peened for resistance to fatigue failure.

## **Specifications**

<del>_</del>		
Capacity Series Application Pinion & Ring Gear: Type Ratios available: High Low	C-L-S50 C-L-M-S-T60	17,000 lb C-L-T-S60 Hypoid 6.40 \cdot 8.72 \cdot 5 \cdot \cdo\cdot \cdot
Pinion, teeth	35★ 32♦	32♦
Pinion Mounting: Mounting type Front bearings (two) Outboard bearing	Straddle Tapered Roller Straight Roller	Straddle Tapered Roller Straight Roller
Differential: Type Bearings, type	4-Pinion Barrel Roller	4-Pinion Barrel Roller
Axle Shafts: Type Minimum diameter (in) Differential-end splines:	Full-Floating 1.69	Full-Floating 1.69
Number of splines  Diameter over splines (in)  Hub-end attachment	29 1.86 Splined	29 1.86 Bolted
Housing: Section diameter x thickness (in)	4.50 x 0.44	4.75 <b>x</b> 0.50
Wheel Bearings: Type	Barrel Roller Hyatt	Tapered Roller Timken or Bower
At inner bearing	2½" 2½"	3* 2 <del>%</del> *

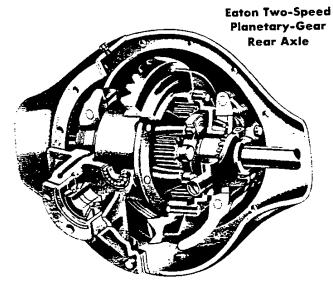
<sup>★</sup> Series D60 only. ♦ Except Series D60.

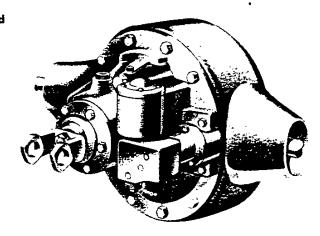


Shifting the Chevrolet two-speed rear axle is smooth, safe and convenient. The double-line vacuum control (except on D60 models) is positive in action and permits parking the truck safely in either high or low range. By operating the convenient push-button control, the driver may select the most favorable combined transmission and rear axle ratio. A decal on the instrument panel explains shifting methods and combinations of transmission and axle ratios.

D60 models employ an electric shift control, operated by a convenient button on the transmission shift lever. This control is similar in function to that described on page 13 for the Eaton 2-speed rear axle.

# EATON TWO-SPEED REAR AXLE 17,000-lb & 18,500-lb Capacity





**Electric Shift Control** 

Eaton two-speed rear axles feature a durable 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 ring gear directly to the axle shafts, as in a single-speed axle. In low range the planetary gear system operates as a second reduction. Reduction and torque at the axle shafts is increased 39 per cent in the 17,000-lb axle, 36 per cent in the 18,500-lb axle.

Eaton two-speed rear axles are noted for long life and low maintenance cost. Drive gears, planetary gears and differential gears are carburized alloy steel, accurately machined and hardened. Straddle-

mounted pinion, low operating stresses in the planetary system and forced-flow lubrication result in dependable performance in heavy-duty truck or tractor operations.

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. Removable inspection plate simplifies maintenance and adjustment.

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

#### **Specifications**



#### Electric Shift Switch

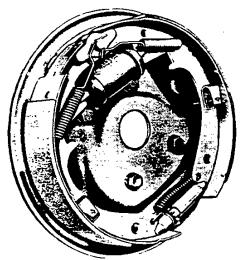
Shifting the Eaton two-speed rear axle is smooth, safe and convenient. The electric shift control is positive in action and permits easy clash-free shifting. By operating the convenient switch control, the driver may select the most favorable combined transmission and rear axle ratio. A decal on the instrument panel explains shifting methods and axle ratios. See Performance section for application data and engine-transmission-axle teams using these axles.

	15 000 11	10,000,11	10 500 11	
Capacity	17,000 1Ь	18,500 lb	18,500 lb	
Series Applications	C-D-L-T60	C-L-T80	E-U80	
Enton Axle Series	1682	17800	17800	
Pinion & Ring Gear:				
Туре	Spiral Be <b>ve</b> l	Spiral Bevel	Spiral Bevel	
Ratios available: High	4.87★ 7.17♦	6.50 7.17	5.57	
Low	6.77★ 9.97♦	8.87 9.77	7.60	
Pinion, teeth	8★ 6♦	6 6	7 39	
Ring gear, teeth	39★ 43♦	39 43	39	
Pinion Mounting:				
Mounting type	Straddle	Straddle	Straddle	
Front bearing	Tapered Roller	Tapered Roller	Tapered Roller	
Rear bearing	Tapered Roller	Tapered Roller	Tapered Roller	
Outboard bearing	Straight Roller	Straight Roller	Straight Roller	
Differential:				
Type	4-Pinion	4-Pinion	4-Pinion	
Bearings, type	Tapered Roller	Tapered Roller	Tapered Roller	
Axle Shafts:	!	ł		
Type	Full-Floating	Full-Floating	Full-Floating	
Minimum diameter	1.69"	1.81*	1.81"	
Diameter over splines	1.86"	1.98"	1.98"	
Number of splines	16	16	16 Bolted	
Attachment to hub	Bolted	Bolted	DOLIGO.	
Housing:		1	0.00 044	
Section diameter x thickness.	4.75 x 0.50	5.12 x 0.44	5.12 x 0.44	
Wheel Bearings:	1	1		
Type	Tapered Roller	Tapered Roller	Tapered Roller	
Make	Timken or Bower	Timken or Bower	Timken or Bower	
Bearing inside diameter:			1 21/4	
At inner bearing	3″	31/4"	31/4"	
At outer bearing	2%"	25%"	25%	

<sup>★</sup> Series D60 only.

<sup>♦</sup> Except Series D60.

# **HYDRAULIC BRAKES**

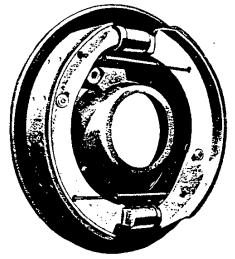


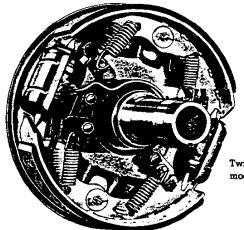
### → Torque-Action Brake

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 50 and 60 Series. K10 and 20 models use the Lockheed type brake on the front wheels and Torque-Action brakes on the rear. Linings are bonded to brake shoes on Series 10 models. All other models have riveted linings.

### **Twin-Action Front Brake**

Twin-Action front brakes are standard on the front wheels of Series C-L-M-T80 models. Linings are riveted to the brake shoes.





#### **Twin-Action Rear Brake**

Twin-Action rear brakes are standard on the rear wheels of Series 50 through 80 models (except E-U80). Linings are riveted to the brake shoes.

### > HYDRAULIC BRAKE SPECIFICATIONS

01	Brake Size (inches)		Lining Ar	Lining Area (sq in)		<b>Drum Area</b> (sq in)	
Series	Front	Rear	Front	Rear	Front	Rear	
C10, P10, R10+	11 x 2	11 x 2	831/2	831/2	138	138	
K10	11 x 2	11 x 2	881/2	831/2	1371/2	138	
C20	11 x 23/4	11 x 2¾	119	119	192	193	
K20	12 x 2	12 x 2	98	93	152	150	
P20	12 x 2	12 <b>x</b> 2	93	92	150	150	
C30	11 x 23/4	13 x 21/2	119	133	192	204	
P30	12 x 2	13 x 2½	93	133	150	204	
50	14 x 21/2	15 x 4	136	245	219	376	
60							
With 5000-lb front axle & 15,000-lb rear axle	$14 \times 2\frac{1}{2}$	15 x 4	136	249	219	376	
With 7000-lb front axle & 15,000-lb rear axle	15 x 3	15 x 4	199	249	283	376	
With 7000-lb front axle & 17,000-lb rear axle	15 x 3	15 x 6	199	380	283	565	
With 5000-lb front axle & 17,000-lb rear axle	$14 \times 2\frac{1}{2}$	15 <b>x</b> 6	136	380	219	565	
M80	15 x 3	15 x 6	199	759	283	1130	
80 (Except E-M-U80)	15 <b>x</b> 3	15 x 7	199	443	283	660	

<sup>♦</sup> Corvair 95 models have self-adjusting brakes.

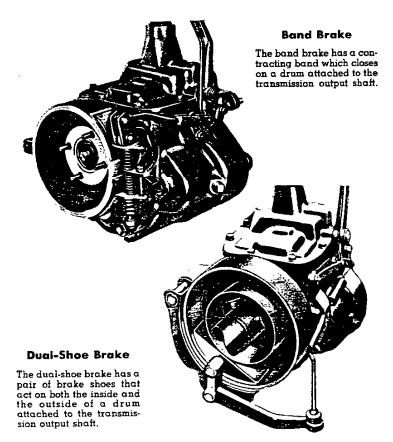
<sup>&</sup>gt; Indicates revised specifications.

#### > HYDRAULIC BRAKE CYLINDER SPECIFICATIONS

	Main Cylinder	Wheel Cyli	nder Dia (in)	Braking I	g Effort (%)	
Series	Diameter (in)	Front	Rear	Front	Rear	
C10	1.125	1.125	1.000	56	44	
PIO	1.125	1.125	1.000	56	44	
K10		1.125	1.000	50	50	
R10	1.000	1.125	1.000	50	50	
C20	1.125	1.125	1.125	49	51	
K20	1.125	1.125	1.125	50	50	
P20	1.125	1.125	1.125	50	50	
C30	1.125	1.125	1.250	41	59	
P30	1.125	1.125	1.250	48	52	
50	1.125	0.875	1.500	30	70	
60:						
With 5000-lb front axle & 15,000-lb rear axle	1.125	0.875	1.500	30	70	
With 7000-lb front axle & 15,000-lb rear axle	1.125	1.125	1.500	36	64	
With 7000-lb front axle & 17,000-lb rear axle	1.250	1.125	1.625	32	68	
With 5000-lb front axle & 17,000-lb rear axle.	1.125	0.875	1.625	30	70	
M80	1.250	1.125	1.625	19	81	
80 (Except E-M-U80)	I I	1.125	1.750	29	71	

#### PARKING BRAKES

### **Propeller Shaft Brakes**



#### → Rear Wheel Brakes

A cable linkage operating the rear wheel brakes is used on all Series 10 and K20 models. Series C20 and P20 models also use this type of parking brake except with the optional heavy-duty 3-speed transmission.

An Orscheln-type brake lever is standard on all P20 and P30 models.

# → Parking Brake Specifications

Series	Trans- mission	Brake Type	Diame- ter (in)	Lining Area (sq in)
10	All	Wheel	_	831/2
C20	Std 3-Spd Powerglide 4-Spd	Wheel	-	1191/2
	HD 3-Spd	Band	8	63
KP20	Std 3-Spd Powerglide 4-Spd	Wheel	-	92.6
	HD 3-Spd*	Band	8	63
30	All	Band	8	63
50, 60	4-Spd	Shoe	10	36
60	N.P. 5-Spd	Band	91/2	671/2
	Clark 5-Spd Powermatic	Band Band	9½ 9½	85 89
D60	Clark 5-Spd Spicer 3152A Spicer 3153	Band	91/2	85
80	Spicer 3152A Spicer 3152	Band	91/2	85
	Spicer 5652B Spicer 5756B	Band	101/2	991/2
	Powermatic	Band	101/2	991/2
	Fuller R46	Internal Expanding	13	831/2

<sup>\*</sup> Not available on K20

## POWER BRAKES

#### **VACUUM POWER BRAKES**

On gasoline models, vacuum brakes are powered by engine intake manifold vacuum. Diesel models (D60) utilize a vacuum pump. A large diaphragm and pressure plate are used to actuate a hydraulic slave cylinder. However, the 8.3" unit employs a power piston instead of a diaphragm.

With these units braking effort is substantially reduced, thus helping to cut driver fatigue and increase driver safety. Although a substantial part of the braking effort is provided, full natural brake feel is retained.

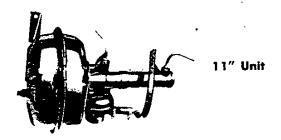
An air cleaner is located on the cab floor behind the driver's seat where it is free from road throw and is easily accessible for cleaning.

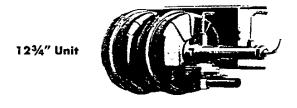
In the event of vacuum failure, braking pressure is available after a few strokes of the brake pedal.

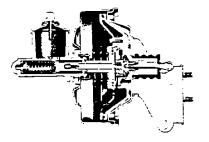
#### Series Usage

Power Unit	Standard Equipment	Optional Equipment
8.3" Piston	None	C10-C30
7" Diaphragm	None	P20 & P30
11" Diaphragm	60★	50
12¾" Diaphragm	S69 C-L-M-T80	60★

<sup>★</sup> Except Model S6902.







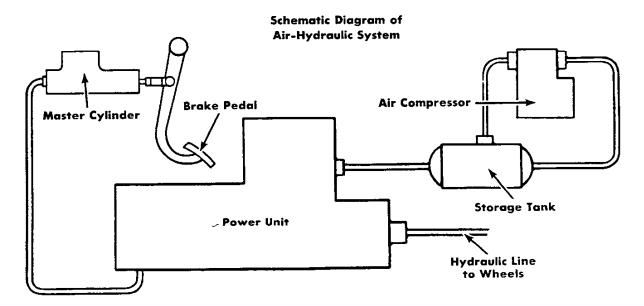
8.3" Unit

#### AIR-HYDRAULIC POWER BRAKE SYSTEM

Air-hydraulic brakes, available as a regular production option on Series C-D-L60 and C-L-M80, include an engine-lubricated air compressor driven by the fan pulley, an air pressure storage tank, and a power unit. The air compressor is a Bendix-Westinghouse Model TU-FLO-400. Capacity is 71/4 cu ft per minute. Compressor is air cooled on C-L60 and C-L-M80 models; water cooled on D60 models. A pressure of 105 to 125 pounds per square inch is maintained in the storage tank.

With the air-hydraulic system, depressing the brake pedal allows compressed air to actuate a cylinder in the power unit which multiplies the hydraulic pressure to the wheel cylinders. This highly efficient braking system does up to 85 per cent of the work of braking. Natural brake pedal feel, however, is retained.

As a safety measure, an air pressure gauge is located on the instrument panel, and a buzzer warns of low air pressure.



## POWER BRAKES

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

Full-air brakes are standard on Series E-U80 and available as a regular production option on Series C-L-T-D60-H, S67-H, S69-H and C-L-M-T80 models.

The air compressor is a Bendix-Westinghouse Model TU-FLO-400 with a capacity of 7½ cubic feet per minute, which supplies pressure of 105 to 125 lb per square inch. Compressor is water cooled on diesel models; air cooled on other models. An optional TU-FLO-500 compressor, with a capacity of 12 cubic feet per minute, is available for all diesel and Series 80 models. Two tanks—the wet tank and the dry tank, each having a capacity of 1188 cubic inches—serve as compressed air reservoirs and provide a place where oil and water vapors can condense—ensuring a dry air supply. Series M80 trucks have an additional dry tank of 830-cu-in capacity.

Brakes are controlled by a low, short-stroke pedal which connects to a brake valve. Air is metered by the valve to the wheel brake chambers in proportion to the pedal travel, and holds any selected amount of line pressure to maintain precise braking control. Quick release valves at both front and rear air lines facilitate the quick discharge of air pressure so that brake shoes return immediately when the brake pedal is released.

When transmitted to a brake chamber, the air pressure acts on a diaphragm. Movement of the diaphragm is transmitted through a lever arm (slack adjuster) to a cam-which forces the brake shoes against the drum. Braking distribution is governed by using diaphragms, slack adjusters and brake drums of different sizes front and rear. Front diaphragm areas are 12 square inches and are linked to  $4\frac{1}{2}$ -inch slack adjusters; rear diaphragms are 30 square inches and are linked to 6-inch slack adjusters.

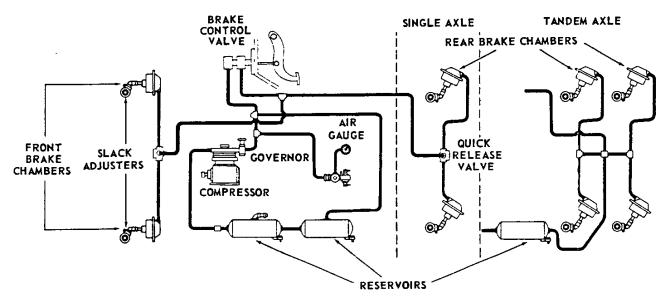
Safety features of the full-air system include a relief valve on the wet tank to release pressures over 150 psi; a check valve ahead of the wet tank to retain air pressure in the event of compressor failure; a warning buzzer that sounds when air pressure falls below a safe level.

Trailer air-brake equipment is available as optional equipment with all air-brake tractor models. The equipment, which includes hand controls, tractor breakaway valve, hoses and brake connections, complies with Interstate Commerce Commission requirements.

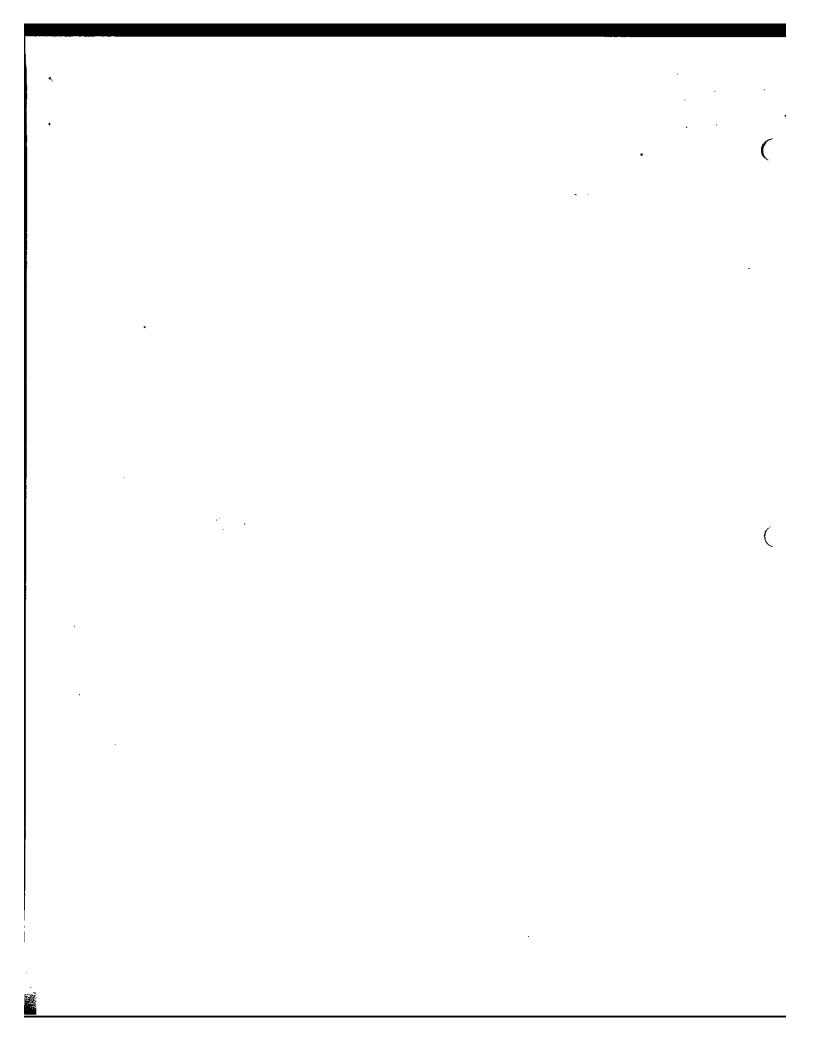
#### **Specifications**

g;_	Brake Siz	e (inches) Lining A		rea (sq in)	<b>Drum Ārea</b> (sq in)		Braking Effort (%)	
Series -	Front	Rear	Front	Rear	Front	Rear	Front	Rear
60-H	15 x 3	15 <b>x</b> 6	190	379	283	565	27	73
M80:		] }			•			
With 7000-lb front	15 x 3	15 x 6	190	759	283	1129	19	81
With 9000-lb or 11,000-lb front axle	15 x 3½	15 <b>x</b> 6	222	759	330	1129	16	84
80 (Except M80):								
With 7000-lb front axle	15 <b>x</b> 3	15 x 7	190	443	283	659	29	71
With 9000-lb or 11,000-lb front axle	15 x 3½	15 x 7	222	443	330	659	23	77

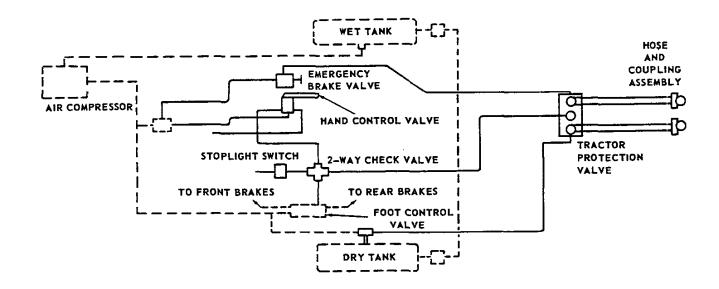
#### Schematic Diagram of Full-Air Brake System



March 1, 1963



# POWER BRAKES



#### TRAILER AIR BRAKE SYSTEM

An optional trailer air brake system, for use only with full air brakes, is available on CLT60-H, D6103-H, D6203-H, D6303-H and 80 series models. The system of controls, valves, hoses and couplings is designed to comply with ICC regulations. It includes the following components:

Tractor Protection Valve Emergency Brake Valve Hand Control Valve

Hose Assembly Springs 2-Way Check Valve

The system is designed with two hose assemblies, 117 inches long, attached to the trailer through the use of "glad hand" type couplings. The opposite hose ends are screwed into the tractor protection valve mounted on a plate at the rear of the cab. Two coil springs are used to support the hose assemblies when they are connected to dummy couplings at the left rear of the cab. Both ends of each spring attach to a hole in the rear cab roof molding forming a loop. The tractor protection valve, which is a spring-actuated-plunger diaphragm unit, automatically shuts off the air supply to the trailer in the event of emergency.

A push-pull type emergency valve is located on the instrument panel to the left of the steering column. This valve allows manual application of the trailer brakes by the operator, shuts off the air supply to the trailer when the tractor is used alone and automatically applies the trailer brakes when air pressure is low.

A metering-cam-actuated hand control, mounted on the steering column, allows regulation of braking pressure to the trailer brakes in direct proportion to hand movements. A two way check valve, located in the line between the hand control valve and the foot control valve, locks out the hand control valve when the foot brakes are applied.

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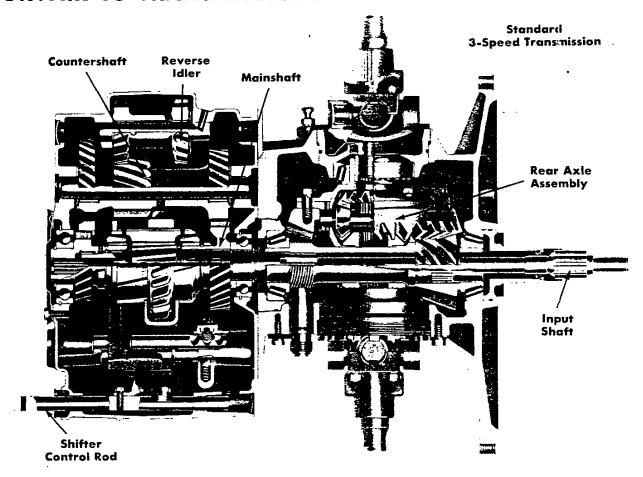
# TRANSMISSION USAGE BY TRUCK SERIES

Transmission	Standard	→ Optional
3-Speed, Chevrolet	10-20	_
3-Speed, Heavy-duty Chevrolet	_	C-P10, C-P20, C-P30
4-Speed, Chevrolet	3060 (Exc D60)	10–20
5-Speed, New Process 540C	-	C-L-M-S-T60♦
5-Speed, Std-Ratio Clark 265V	_	C-L-M-S-T60♠
5-Speed, Close-Ratio Clark 267V	D60-H	C-L-M-S-T60♠
5-Speed, Overdrive Clark 264VO	D60	_
S-Speed, Std-Ratio Spicer 3152	C-L-M-T80★	_
5-Speed, Close-Ratio Spicer 3152A	_	D60-H, C-L-T80 ★
5-Speed, Overdrive Spicer 3153	-	D60
5-Speed, Std-Ratio Spicer 5652B	_	C-L-M-T80■
5-Speed, Close-Ratio Spicer 5756B.	E-U80	C-L-T80■
8-Speed, Fuller R46	_	C-L-M-T80■; E-U80
Powerglide	_	C-P-R10, C-P20
Powermatic	_	C-S60; C-M80; T80★
Auxiliary, 3-Spd or 4-Spd Spicer		M80

- ♦ With 292 Six
- \* With 348 V8
- ♣ With 327 V8
- With 409 V8

Indicates revised specifications

# CORVAIR 95 TRANSMISSIONS



The Corvair 95 transmission is a part of the transaxle—a combined transmission and rear axle assembly mounted on the vehicle underbody just forward of the engine. The input shaft passes through the hollow pinion shaft and mainshaft to drive the transmission. The mainshaft is splined to the pinion shaft to deliver power to the rear axle.

### **Specifications**

Make & Type	Make & Type  Chevrolet 3-Speed Synchromesh					
Gear Ratios:						
First	3.50	3.65				
Second	1.99	2.35				
Third	Direct	1.44				
Fourth	ļ <u> </u>	Direct				
Reverse	3.97	3.66				
Gear Type	Helical	Helical				
Bearing Types:						
Mainshaft front	Roller	Roller				
Mainshaft rear	Ball	Ball				
Countershaft front	Roller	Roller				
Countershaft rear	Roller	Roller				
Clutch gear	Ball	Ball				
Reverse idler	Roller	Roller				
Lubricant Capacity	1.9 pints	1.9 pints				
Brake, Parking:	See Brak	es Section				
1	ļ.					

# Standard 3-Speed Synchromesh Transmission

This transmission is synchronized in 2nd and 3rd gears, with gear selection controlled by a floor-mounted shift lever. Lubrication is common with the rear axle.

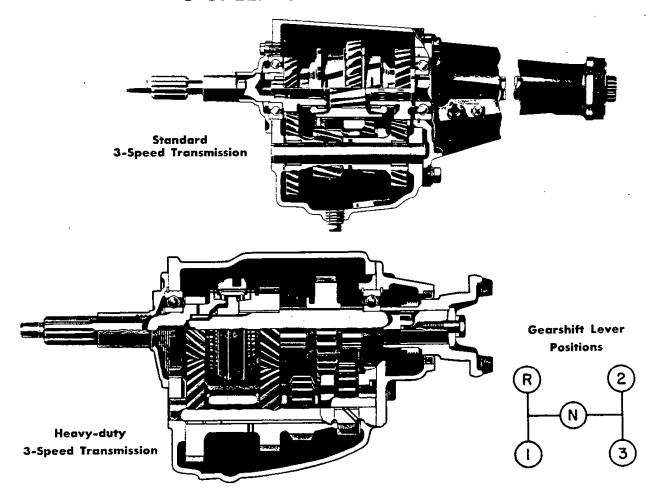
# Optional 4-Speed Synchromesh Transmission

This transmission is synchronized in all forward speeds, with gear selection controlled by a floor-mounted shift lever. Shift pattern is etched on the face of the shift lever, and maximum recommended shifting speeds are indicated on the speedometer dial. Lubrication is common with the transmission.

#### **Optional Powerglide Transmission**

The Powerglide transmission combines a 3-element torque converter and a 2-speed planetary gearset, providing maximum torque multiplication of 4.73 in low gear. Gear ratios are 1.82 for low and reverse gears, and 1.00 for high gear. Low (L), drive (D), neutral (N) and reverse (R) operation are selected by a lever mounted on the instrument panel. Type "A" lubricant is used, and is separate from the rear axle lubricant. A transmission oil cooler is mounted in the left wheel-house compartment.

# 3-SPEED & POWERGLIDE TRANSMISSIONS



# Standard 3-Speed Synchromesh Transmission

Wide-faced helical gears are carburized and shotpeened for long service life. Rounded gear teeth resist chipping. Anti-friction bearings on the clutch shaft, mainshaft and countershaft assure alignment and proper gear meshing. Gearshift lever is conveniently located on the steering column.

# Optional Heavy-duty 3-Speed Synchromesh Transmission

Rugged construction and lower first and second gear ratios make the heavy-duty 3-speed transmission ideally suited for house-to-house service. Quietness and long life are assured by the large tooth contact area of the wide-faced helical gears. Steering column gearshift is used for maximum driver convenience.

# Optional

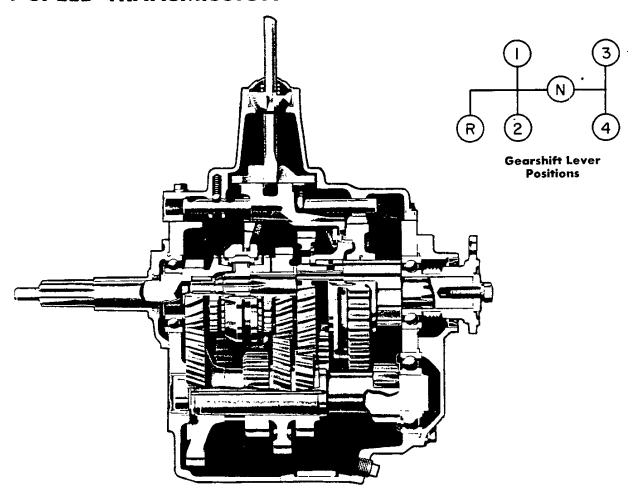
#### **Powerglide Transmission**

This automatic transmission combines a 2-speed planetary gearset and a torque converter to provide torque multiplication as high as 4.58 (153 Four and 230 Six) and 3.87 (292 Six and 283 V8) in low and reverse gears. Gear ratios are 1.76 for low and reverse, and 1.00 for drive range. A steering-column-mounted lever selects the 5 operating positions: Park (P), reverse (F), neutral (N), drive (D) and low (L). For safety, the engine can be started only when the control lever is in either park or neutral position. Optional equipment on Series C10, P10, C20 and P20. See facing page for information about Powerglide transmission for Corvair 95 models.

#### **Specifications**

Make & Type	Chevrolet 3-Speed Synchromesh	Warner A-55-T-89B HD 3-Speed
Series Applications	C-K-P10, C-K-P20	C-P10, C-P20, C-P30
Gear Ratios: First	2.94 1.68 Direct 3.14	3.17 1.75 Direct 3.76
Gear Types: Helical gears	All None	2nd 1st, Rev
Bearing Types: Clutch gear bearing Mainshaft front Mainshaft rear Countershaft front Countershaft rear Reverse idler	Ball Roller Ball Roller Roller Bronze Bushing	Ball Roller Ball Roller Roller Bronze Bushing
Lubricants: Capacity Type, grade Brake, Parking:		2% pints See Owner's Guide See Brakes Section

# 4-SPEED TRANSMISSION



#### **Specifications**

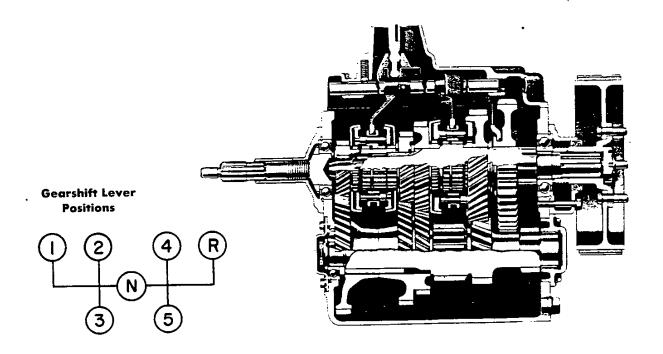
The Chevrolet 4-speed transmission provides synchromesh gear engagement in second, third, and fourth speeds for quick, clashless gear shifting. All components are built to heavy-duty specifications for dependability and durability. Gears are made of alloy steel, carburized and hardened for resistance to wear. Mainshaft and countershaft are carburized and hardened alloy steel. Reverse idler shaft is case-hardened carbon steel. Mainshaft and countershaft are mounted on roller and ball bearings for high efficiency and long service life. A magnetic chip collector removes metallic impurities from the lubricant, thus reducing wear of moving parts.

A drum and band type parking brake is attached to the transmission case with installations on Series 20 and 30. Parking brake for Series 50 and 60 is drum and dual-shoe type attached to the transmission case. Rear brakes comprise the parking brake for Series 10 with 4-speed transmission.

A single six-bolt (SAE standard) power take-off opening is located on the left side of the transmission. Up to 40 horse-power can be provided by a power take-off installation.

•	
Make & Type	Chevrolet 4-Speed Synchromesh
Series Applications	C-K-L-M-P-S-T 10 thru 60
Gear Ratios: First. Second Third. Fourth Reverse.	7.06 3.58 1.71 Direct 6.78
Gear Types: Helical Spur	2nd, 3rd 1st, Reverse
Bearing Types: Clutch bearing Mainshaft front Mainshaft rear Countershaft front Countershaft rear Reverse idler front Reverse idler rear	Ball Roller Ball Necedle Roller Ball Bronze Bushing Bronze Bushing
Power Take-Off Data: Opening type Location Meshing gear teeth PTO gear rpm at 1000 engine rpm	SAE Std 6-Bolt Left side 33 425
Lubricants: Oil Capacity. Type, grade. Brakes, Parking:	61/4 Pints See Owner's Guide See Brakes Section

# 5-SPEED NEW PROCESS TRANSMISSION



# **Specifications**

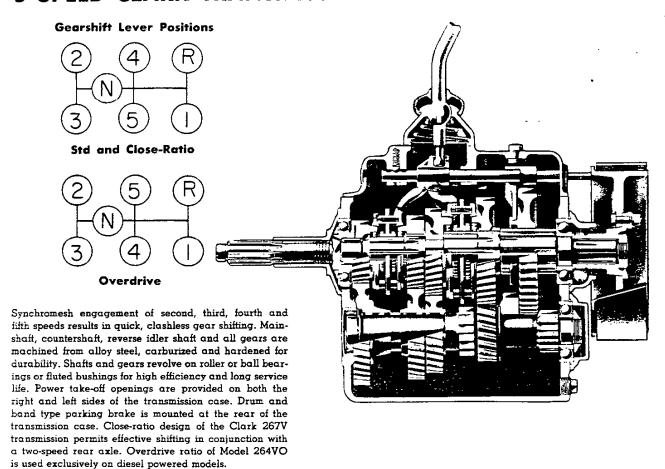
Make, Model & Type	New Process 540C 5-Speed Synchromesh
Series Applications	C-L-M-S-T60
Gear Ratios: First	7.41 4.05 2.40 1.48 Direct 7.85
Gear Types: Helical	2nd, 3rd, 4th 1st, Reverse
Bearing Types: Clutch gear bearing Mainshaft front Mainshaft rear Countershaft front Countershaft front Reverse idler front Reverse idler rear	Ball Ball Ball Roller Bronze Bushing
Power Take-Off Data: Opening type. Location. Meshing gear teeth PTO gear rpm at 1000 engine rpm	15 (left); 20 (right)
Lubricants: Oil capacity	9½ Pints See Owner's Guide
Brake, Parking: Type Drum Diameter Lining Area	9.5

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. See *Performance* section for job applications and performance data.

Synchromesh engagement of second, third, fourth, and fifth speeds results in quick, clashless gear shifting. 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.

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.

# **5-SPEED CLARK TRANSMISSIONS**

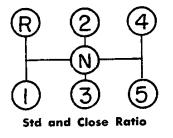


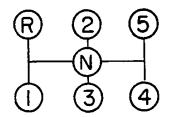
# **Specifications**

	Std-Ratio 5-Speed	Close-Ratio 5-Speed	Overdrive 5-Speed
Model	265V	267V	264VO
Series Application	C-L-M-S-T60	C-L-M-S-T60, D60-H	D60
Gear Ratios: First	7.58 4.38 2.40 1.48 Direct	6.06 3.50 1.80 1.18 Direct 6.00	6.06 3.50 1.80 Direct 0.80 6.00
Reverse  Gear Types:  Helical  Spur	7.51 2nd, 3rd, 4th 1st. Reverse	2nd, 3rd, 4th 1st, Reverse	2nd, 3rd, 4th, 5th
Bearing Types: Clutch gear bearing. Mainshaft front. Mainshaft rear. Countershaft front. Countershaft rear. Reverse idler front. Reverse idler rear.	Ball Roller Ball Roller Ball Roller Roller	Ball Roller Ball Roller Ball Roller Roller	Ball Roller Ball Roller Ball Roller Roller
Power Take-Off Data: Opening type Location Meshing gear teeth PTO gear rpm at 1000 engine rpm	SAE Std 6-Bolt Both sides 24 (left); 22 (right) 357 (left); 571 (right)	SAE Std 6-Bolt Both sides 24 (left); 22 (right) 357 (left); 571 (right)	SAE Std 6-Bolt Both sides 24 (left); 22 (right) 357 (left); 571 (right)
Lubricants: Oil capacity Type, grade	12 Pints See Owner's Guide	12 Pints See Owner's Guide	12 Pints See Owner's Guide
Brake, Parking: Type Drum Diameter Lining Area	Drum & Band 9.5" 85 sq in	Drum & Band 9.5" 85 sq in	Drum & Band 9.5" 85 sq in

# **5-SPEED SPICER TRANSMISSIONS**

#### **Gearshift Lever Positions**





**Overdrive** 

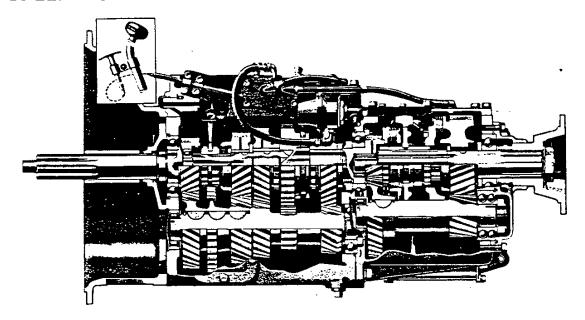
Synchromesh engagement of second, third, fourth and fifth speeds eases shifting, eliminates the need tor double-clutching, and protects gears from the damage of clashing. Mainshaft, countershaft, reverse idler shaft and all gears are machined from alloy steel, carburized and hardened for durability. 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 5756B permits very effective shifting in conjunction with 2-speed rear axle.



#### **Specifications**

	Std-Ratio 5-Speed	Std-Ratio 5-Speed	Close-Ratio 5-Speed	Close-Ratio S-Speed	Overdrive 5-Speed
Model	3152	5652B	3152Å	5756B	3153
Series Applications	C-L-M-T80	C-L-M-T80	D60-H, C-L-T80	C-E-L-T-U80	D60
Gear Ratios:					0.00
First	7.55	7.08	5.99	6.50	6.00
Second	4.17	4.37	3.30	3.52	3.31
Third	2.45	2.50	1.94	1.93	1.94
Fourth	1.45	1.45	1.15	1.17	Direct
Fifth	Direct	Direct	Direct	Direct	0.79
Reverse	7.44	7.50	5.90	6.88	5.90
Gear Types:				0 1 0 1 41 511	2nd, 3rd, 4th, 5th
Helical		2nd, 3rd, 4th, 5th	2nd, 3rd, 4th, 5th	2nd, 3rd, 4th, 5th 1st, Reverse	lst. Reverse
Spur	1st, Reverse	lst, Reverse	1st, Reverse	ist, neverse	ISI, Neverse
Bearing Types:	70.70	Ball	Ball	Ball	Ball
Clutch gear bearing	Ball	Roller	Roller	Roller	Roller
Mainshaft front	Roller		Ball	Ball	Ball
Mainshaft rear	Ball	Ball	Roller	Roller	Roller
Countershaft front	Roller	Roller	Roll	Ball	Ball
Countershaft rear		Ball		Roller	Roller
Reverse idler front	Roller	Roller	Roller	Roller	Roller
Reverse idler rear	Roller	Roller	Roller	иопет	попет
Power Take-Off Data:			OTT CLI CT-1	SAE Std 6-Bolt	SAE Std 6-Bolt
Opening type	SAE Std 6-Bolt	SAE Std 6-Bolt	SAE Std 6-Bolt		Both sides
Location	Both sides	Both sides	Both sides	Both sides	Pour sides
Meshing gear teeth:			L	l an	25
Left side	25	25	25	25	25 22
Right side		22	22	22	44
PTO gear rpm	1		Į.		
at 1000 engine rpm:				1	l 500
Left side	403	445	509	509	509
Right side	458	534	578	578	578
Lubricants:			10 7:	12 Pints	10 Pints
Oil capacity	12 Pints	13 Pints	12 Pints	See Owner's	See Owner's
Type, grade	See Owner's	See Owner's	See Owner's		Guide
· <del>-</del>	Guide	Guide	Guide	Guide	Guide
Brake, Parking:		1	, cp.,	D 6 Ba-3	Drum & Band
Туре	Drum & Band	Drum & Band	Drum & Band	Drum & Band 10.5"	9.5"
Drum Diameter	9.5*	10.5"	9.5″		85 sq in
Lining Area		100 sq in	85 sq in	100 sq in	on ad tu

# **8-SPEED FULLER TRANSMISSION**



### **Specifications**

Specifications	
	8-Speed Constant-Mesh
Model	. R46
Series Application	.80 (with 409 V8) E-U80
Gear Ratios:  First. Second. Third. Fourth Fifth Sixth Seventh	.9.15 .6.53 .4.66 .3.68 .2.49 1.78
Eighth Reverse, low range Reverse, high range	. 10.30
Gear Types Helical Spur	
Bearing Types: (Main Section)  Main drive gear.  Mainshaft pilot.  Mainshaft rear.  Countershaft front.  Countershaft rear.  Reverse idler.	. Roller . Ball . Roller . Ball
Bearing Types: (Auxiliary section) Main drive gear rear Mainshaft pilot. Mainshaft rear Countershaft front Countershaft rear	Roller Ball Roller
Power Take-Off Data: Opening type Location Meshing gear teeth PTO gear rpm at 1000 engine rpm.	Both sides 35
Lubricants: Oil capacity	. 17 pints
Brake, Parking: Type. Drum Diameter. Lining Area.	Internal Expanding

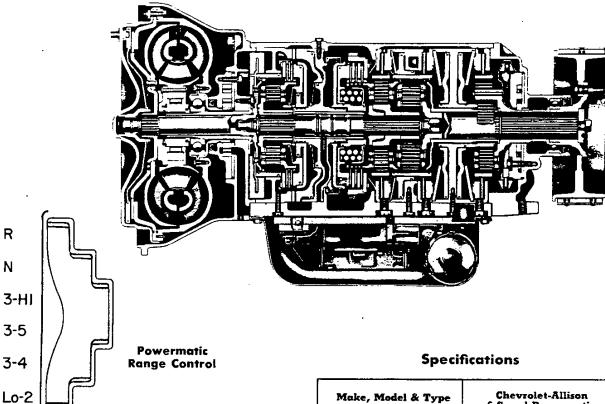
### Fuller R46 Roadranger

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 Roadranger 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.

# 6-SPEED POWERMATIC TRANSMISSION



### Advantages

**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 drive line by oil-cushioned shifting

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 gear shift distractions, cuts fatigue and aids alertness. Hydraulic retarder gives added braking control.

#### Features

Chevrolet's Powermatic is a durable automatic transmission designed and built exclusively for medium- and heavy-duty trucks. Powermatic has construction features to meet truckers' demands for economy, performance, operating flexibility, minimum downtime and low maintenance cost.

**Torque converter** multiplies starting torque as much as 2.8 to 1. Effective ratio of 14.8 to 1 available in Lo—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 case.

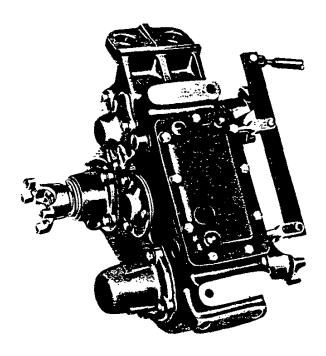
	<del></del>	
Make, Model & Type	Chevrolet- 6-Speed Pow	
Series Applications	60, 8	0
Ranges & Effective Ratios:	Transmission Gears	Reduction Ratio
Range 3-Hi (Cruising, level roads)	Converter & 3rd Lock-up & 3rd Lock-up & 4th Lock-up & 5th Lock-up & 6th	7.53 • 2.69 1.94 1.39 Direct
Range 3-5	Converter & 3rd Lock-up & 3rd Lock-up & 4th Lock-up & 5th	7.53 • 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 Lo-2 (Off-road, extreme hills)	Converter & 1st Lock-up & 1st Lock-up & 2nd	14.8 • 5.29 3.81
Reverse	Converter & Rev Lock-up & Rev	16.9 <b>●</b> 6.04
Torque Converter: Element types Lock-up Clutch	Pump, 2 stator Automatic, g controil	overnor
Reduction Gears: Gear types	Planetary, clutc	h actuated
Power Take-Off Data: Opening type Location PTO gear rpm	SAE Std 6 Both sid See Page	les
Lubricants: Oil capacity	19-qt dry 9 qt less co	refill nverter
Oil type, gradeOil filter type	See Owner's Full-flow, repl	s Guide laceable

Maximum ratio at stall speed.

# **AUXILIARY TRANSMISSIONS**

# FOUR-WHEEL DRIVE TRANSFER CASE

Timken Model T-221



The four-wheel drive transfer case distributes power to rear axle only for two-wheel drive, or to both front and rear axles for four-wheel drive. 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.

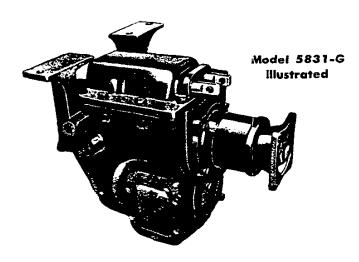
### SPICER AUXILIARY TRANSMISSIONS FOR TANDEMS

#### 3-Speed

A 3-speed auxiliary transmission is offered as a regular production option for all M80 Tandems using the standard 348 engine. Choice of ratios are: Direct, for normal highway driving; 1.31 Intermediate, which splits the ratios of the main transmission; and 2.00 Low, for maximum torque multiplication. Power take-off openings are located on each side of the transmission case.

# 4-Speed

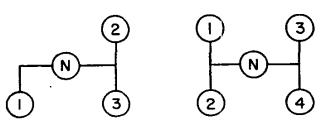
A 4-speed auxiliary transmission is offered as a regular production option for all M80 Tandems. This transmission combines low 1st gear reduction and an overdrive ratio in 4th gear. Power take-off openings are located on the top and on both sides of the transmission case.



#### **Specifications**

	3-Speed	4-Speed
Model (Spicer)	5831-G	6041
Gear Ratios: First		2.14 1.24 1.00 0.86
Gear Types:	Helical	Helical
Bearing Types: Mainshaft, front and rear Countershaft, front and rear		Ball Roller
Power Take-Off Data:	2 std SAE 6-bolt openings	3 std SAE 6-bolt openings

#### Gearshift Lever **Positions**



# POWER TAKE-OFF EQUIPMENT

**Transmission Applications.** Side-mounted power take-off may be installed on the left side of the Chevrolet 4-speed transmission, on both sides of the New Process, Clark and Spicer 5-speed transmissions, the Fuller 8-speed, 3- or 4-speed auxiliaries, or the Powermatic transmission. Standard SAE 6-bolt power take-off openings are provided to accommodate a variety of single- or multi-speed units. A top-mounted PTO may be mounted on the top of the 4-speed auxiliary transmission.

SIDE-MOUNTED POWER TAKE-OFFS For Synchro-Mesh Transmissions

Single-Speed PTO Most truck special equipment power demands can be met with a single-speed power take-off. These units come in medium- or heavy-duty capacities and are of one- or two-gear design. Medium-duty power take-offs are generally rated at about 20 horsepower, and are suitable for operating hydraulic hoists, lift gates or other intermittently driven equipment. Heavy-duty power take-offs are normally rated at about 25 horsepower, and are recommended for continuous or heavy-duty operations, including fluid pumping (gasoline or oil), portable conveyors, wreckers, cranes, garbage packer bodies, hydraulic plows, generators, blowers or compressors. Heavy-duty models are commonly of two-gear design. The output shaft of a one-gear model turns opposite to the transmission PTO gear; the output shaft of a two-gear PTO turns the same way as the transmission PTO gear.

Multi-Speed PTO Special equipment requiring a reverse speed or a range of forward speeds may be driven by any of the following heavy-duty multi-speed power take-offs:

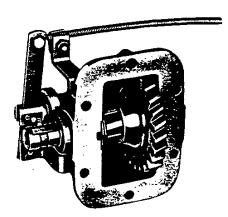
Two speeds forward, no reverse One speed forward, one reverse Two speeds forward, one reverse Two speeds forward, two reverse

The PTO driven gear is in constant mesh with the transmission PTO drive gear. The PTO is engaged by shifting the desired gear into mesh. The output shaft may be assembled to the front or rear. One output shaft is normally provided, although special types with dual output shafts are available. Rated capacity for continuous operation is about 25 horsepower. Typical applications would be to drive winches, cranes or derricks.

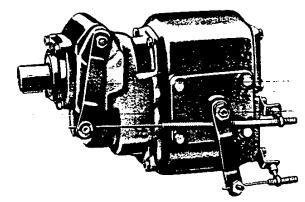
# TOP-MOUNTED POWER TAKE-OFF For 4-Speed Auxiliary Transmission

Power Tower A top-mounted power take-off assembly which transmits full torque of the engine (with forward transmission in direct drive) can be mounted on the Spicer 6041 4-speed auxiliary by removing shifter housing assembly.

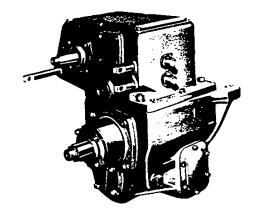
Power take-offs may be controlled by a shift wire or lever, and may be operated with transmission in neutral, or when truck is in motion. Speed of the power take-off shaft is determined by engine rpm and the gear ratio between transmission PTO drive gear and PTO driven gear. Consult the special equipment distributor to select the power take-off of correct capacity and type to meet operating requirements of each application.



Single-Speed One-Gear Power Take-Off (Spicer Model AAN)



Two-Speed Forward
Two-Speed Reverse
(Chelsea Model 56A)

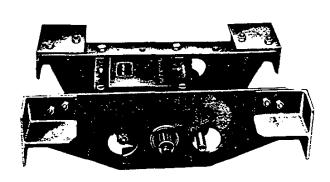


One-Speed Forward
One-Speed Reverse

(Spicer Model 310535X mounted on 6041 4-spd auxiliary)

# POWER TAKE-OFF EQUIPMENT

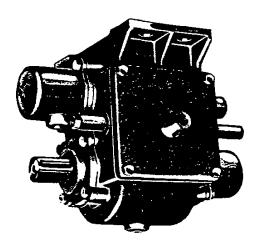
# SPECIAL POWER TAKE-OFFS for Synchro-Mesh or Powermatic Transmission



## Split-Shaft Power Take-Off

(Gar Wood Model L)

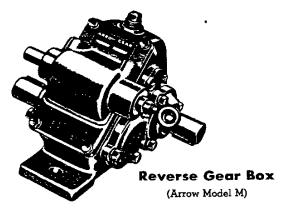
Installed directly in the driveline between transmission and rear axle, a split-shaft power take-off may be operated at any of the speeds of the truck transmission. In winch operation, for example, winch only, truck only, or both winch and truck may be operated. Split-shaft units are normally designed to transmit full engine power, and may therefore be used to drive winches, high-capacity pumps, generators or air compressors. Models are available to provide one speed forward, forward and reverse (permitting all speeds of the truck transmission in reverse), single or dual output shafts.



#### **Two-Speed Hanger Bearing**

(Tulsa)

Driven by either a single-speed or multi-speed side-mounted power take-off, a two-speed hanger bearing doubles the available shaft speeds. Direction of power take-off shaft rotation is reversed in passing through the hanger bearing. Some models provide for installation of input and output shafts in front or rear positions. Relatively compact size and flexibility of mounting at a convenient location extend the range of uses for side-mounted power take-offs with either a synchro-mesh or Powermatic transmission.

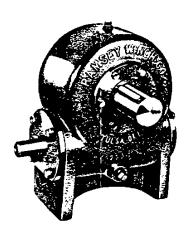


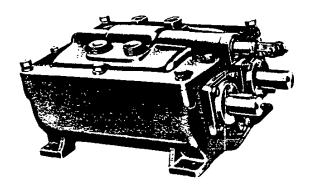
Produces both forward and reverse drives. Forward drive is in 1:1 ratio and reverse drive is in 0.72:1 ratio. Particularly well adapted for use with front-mounted winches.

#### **Speed Reducer**

(Ramsey Model 29X)

Extreme gear reduction may be obtained by driving a worm gear speed reducer from a side-mounted power take-off. Suitable for applications requiring slow shaft speeds with relatively high torque, speed reducers have been used successfully to drive cement mixers on Powermatic-equipped trucks.





#### Friction-Clutch Gear Box

(Gar Wood Model FC-2)

Driven by a single-speed side-mounted power take-off, a frictionclutch gear box provides forward and reverse positions with direct clutch control of the output shaft. These features make the frictionclutch gear box especially adaptable to Powermatic-equipped trucks. Typical applications would be to drive a winch, crane hoist, wrecker or any rigging equipment requiring accurate control.

## POWER TAKE-OFF EQUIPMENT

# SIDE-MOUNTED POWER TAKE-OFFS For Powermatic Transmission

PTO Applications: The Powermatic transmission has an SAE 6-bolt PTO opening on both right and left sides. Side-mounted PTO applications are limited only to the single-speed, non-reversing type. The relatively high speed of the large PTO drive gear prohibits use of multi-speed take-offs, as constant mesh of the driven gear would shorten service life. Dual speeds may be obtained by driving through a two-speed hanger bearing or a speed reducer. A gear box may be used in conjunction with the side-mounted PTO to attain both reverse and forward rotation. A friction-clutch gear box is recommended for driving winches, cranes or any equipment requiring accurate control.

PTO Operation. To engage power take-off: With vehicle stopped and engine idling, shift Powermatic into any operating range (this stops PTO drive gear), engage PTO, return Powermatic to Neutral and run engine at required rpm to operate the power take-off. Care should be taken to avoid excessive PTO speeds. Power take-off may also be operated with Powermatic in Reverse, Lo-2 or 3-4 ranges, permitting use with the vehicle in motion. In these ranges, power take-off will be unaffected by transmission shifting, provided the driver does not manually shift from Lo-2 to 3-4 range. As output loads affect the output rpm of a torque converter, power take-off rpm's are shown below for two available power take-offs.

# Chelsea Model 22L or Spicer Model PG6 Single-Speed PTO (Powermatic in Neutral Range)

ENGINE	PTO Shaft Torque Loads, RPM & Power Output (Installed on Right or Left Side)									
RPM (Neutral)	30 lb-f	t Load	65 lb-f	t Load	125 lb-1	it Load	190 lb-f	t Load	250 1Ь-1	t Load
(Neutrai)	RPM	HP	RPM	HP	RPM	HP	RPM	HP	RPM	HP
1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400	820 930 1040 1160 1270 1380 1490 1640 1730 1820 1920 2010 2100 2190	4.7 5.3 5.9 6.6 7.2 7.9 8.5 9.4 9.9 10.4 11.0 11.5 12.0 12.5	670 780 900 1010 1120 1230 1340 1440 1730 1820 1920 2010 2100 2190	8.3 9.6 11.1 12.5 13.9 15.2 16.6 17.8 21.4 22.5 23.8 24.9 26.0 27.1	510 640 760 870 980 1080 1190 1300 1400 1500 2010 2190	12.1 15.2 18.1 20.7 23.3 25.7 28.3 30.9 33.3 35.7 47.8 50.0 52.1	350 470 690 810 910 1020 1130 1230 1330 1440 2190			27.6 33.8 39.0 44.3 49.0 54.3 59.0 63.8 68.5 72.4
2500 2600 2700 2800	2280 2370 2460 2560	13.0 13.5 14.1 14.6	2280 2370 2460 2560	28.2 29.3 30.4 31.7	puts up	to 250 lb-f	ffs are extra t torque or pm is .915 x	50 hp. Out	put shaft ro	at out- lation is

# Spicer Model GG6 Single-Speed PTO (Powermatic in Neutral Range)

ENGINE	PTO Shaft Torque Loads, RPM & Power Output (Installed on Right or Left Side)											
RPM (Neutral)	15 lb-ft Load		15 lb-ft Load		30 lb-ft	Load	55 lb-f	Load	85 lb-ft	Load	110 Њ-4	t Load
	RPM HP	HP	RPM	НР	RPM	HP	RPM	HP	RPM	HP		
800 900 1000	850 1280 1550	2.4 3.6 4.4	1200	<u>-</u> 6.8	- - -	<del>-</del> -	111	111		-		
1100 1200 1300 1400 1500	1840 2080 2360 2620 2860	5,2 5,9 6,7 7,5 8,2	1480 1760 2040 2280 2520	8.4 10.0 11.6 13.0 14.4	1140 1440 1700 1950	11.9 15.1 17.8 20.4	 800 1280 1550	12.9 20.7 25.1	  800 1280	16.8 26.8		
1600 1700	3120 3350	8.9 9.6	2780 3010	15.9 17.2	2200 2440	23.0 25.6	1800 2050	29.1 33.2	1560 1810	32.7 37.9		

**Note:** Spicer Model GG6 is heavy-duty unit nominally rated at 140 lb-ft torque or 25 hp at 1000 rpm. Output shaft rpm within desired operating range of 800 to 1600 rpm are shown in bold figures. Output shaft rotation is engine-wise; rpm is 2.05 x turbine rpm.

# DRIVE LINE

### DESIGN AND FEATURES

Hotchkiss drive is featured on all Chevrolet trucks equipped with single rear axle. Drive line serves only to transmit power between transmission and rear axle. Rear spring control arms 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.

**Drive lines** for Chevrolet trucks are engineered for reserve torque capacity, accurate balance, high rigidity and resistance to vibration.

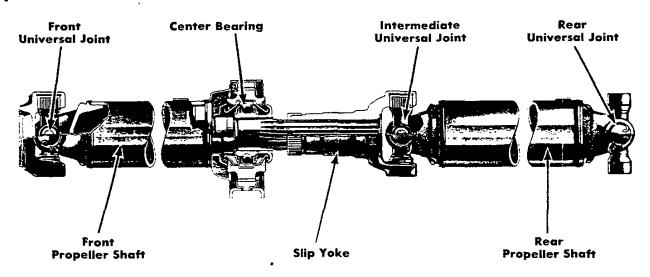
Propeller shafts are made of smooth-wall steel tube. Length and

tube diameters are proportioned for high rigidity to minimize flexing or "whip."

Universal joints are efficient needle bearing type. Trunnions are drop-forged and hardened for wear resistance and long life.

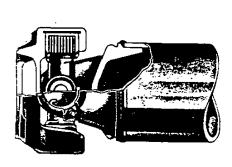
Center bearings, standard on many models, divide drive line into short, rigid propeller shafts. Cushion mounting minimizes transfer of vibrations.

Slip yoke adjusts length of drive line to match normal movement of rear axle over bumps, frees drive line of end stresses.



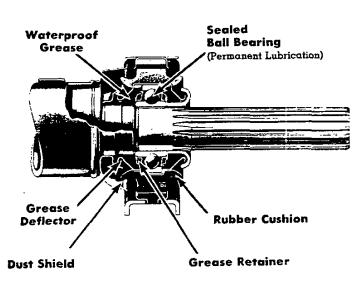
# Typical Drive Line for Medium-duty Series

(2 Propeller Shafts, 3 Universal Joints, Center Bearing)



#### **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.

# **SPECIFICATIONS**

Series	Transmission	Propeller Shafts		Universal Joints	
Seiles	1 ransmission	Quantity Outside Dia (in)		Quantity	
P13, C14	3-Spd; Powerglide HD 3-Spd; 4-Spd	1 1	3.00 3.50	2 2	
K14	3-Spd 4-Spd	3 3	2.50 2.50	6 6	
C15	3-Spd HD 3-Spd; 4-Spd Powerglide	1 2 2	3.50 2.50 2.50	2 3 3	
<b>K</b> 15	3-Spd. 4-Spd	3 3	2.50 2.50	6 6	
C25	3-Spd HD 3-Spd; 4-Spd Powerglide	1 2 2	3.50 2.50 2.50	· 2 3 3	
<b>K25</b>	3-Spd.	3 3	2.50 2.50 2.50	6 6	
P23	3-Spd; Powerglide	1	3.50 3.50	2 2	
P25	3-Spd; Powerglide	2 2	2.50 2.50	3	
P26	3-Spd; Powerglide	2 2	2.50 a 2.50 a	3 3	
C30	All	2	2.50	3 2	
P33	All	1 2 2	3.50 2.50 2.50 <b>a</b>	3 3	
C51-52-53	Ali. Ali Ali	2 3 2	2.50 2.50 2.50 2.50	3 4 3	
L56 S53	Ali Ali	3 2	2.50 2.50 2.50	4 3	
C61-62-63	Synchromesh Powermatic	2 1 3	3.00 3.50 3.00	3 2 4	
D61-62-63 D65-68 L-62-63-65	All	3 2	3.00 3.00	3 4 3	
L66-69	All	3	3.00 3.00 2.50	4	
S64	5-Spd; Powermatic	3 4	3.00 <b>b</b> 2.50 3.00	5	
S67-69	All Synchromesh	4 4 1	3.00 3.50	5 5 2 2 3 3	
T66-68 M63-65 M68, T69	Powermatic. All. All. All.	1 2 2 3	3.00 3.00 3.00 3.00	3 3 4	
M80	All except Fuller 8-Spd	3 3	3.50 3.50	6 6	
C81, C-E-L 82, 83	All	2 3 1 2	3.50 3.50 3.50 3.50 3.50	3 4 2 3	

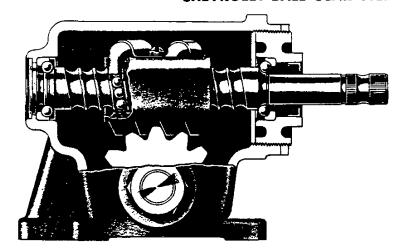
æ−3.00" for rear shaft

**b**-3.50° for rear shaft



# STEERING

#### CHEVROLET BALL-GEAR STEERING



#### CHEVROLET POWER STEERING

#### Medium- & Heavy-Duty Power Steering

Chevrolet's linkage-type power steering is standard on M80 Tandems and available as a regular production option on all other Series 60 and 80 models. New ease and fingertip steering control are provided because up to 80 percent of the steering work is done by hydraulic power. Maneuvering a heavily loaded truck in a small space becomes much easier, and straightaway highway travel is less fatiguing. In addition, power steering effectively damps road shock and vibration at the steering wheel.

High efficiency gear combines steering ease and durability. Sliding friction between worm and nut is eliminated by use of recirculating steel balls which roll with minimum friction.

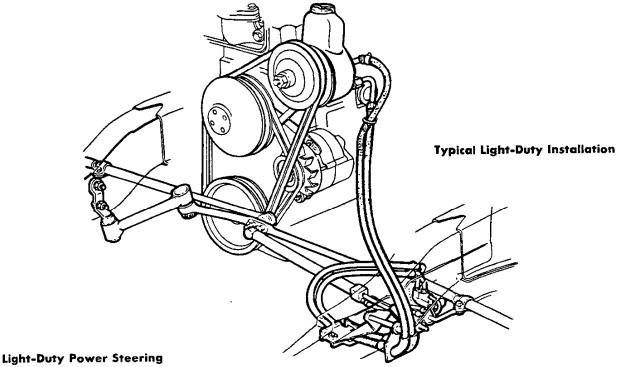
#### **Specifications**

Series	Steering Gear Ratio	Steering Wheel Diameter
R10	20.0 to 1	17"
C-P10, C20-30	24.0 to 1	17"
P20-30	27.7 to 1	19"
K10-20	24.0 to 1	17*
50-80 exc tilt	28.1 to 1	19*
T60, T-U80	28.1 to 1	20*
T-U80	30.5 to 1 ♦	20"

With 9000-lb and 11,000-lb front axle.

A constant-flow hydraulic pump provides hydraulic pressure. The control valve mounted on top of the steering gear reacts to movement of the steering wheel and regulates the flow of fluid to the power cylinder.

The control valve directs fluid under pressure to either the left or right side of the piston in the power cylinder, thus providing assistance for both left and right turns. Manual steering, in case the system is inoperative, is always available.



Chevrolet linkage-type power steering is now available, for light-duty models, as a kit for easy dealer installation. The kit contains the same components as the factory installed unit and fits all 1963 six- and eight-cylinder models in the 10 through 30 series (except Forward Control and Four-Wheel Drive Models). The unit cannot be used on previous models as it is not adaptable to trucks equipped with torsion-bar front suspension.

Complete installation materials are provided, including attach-

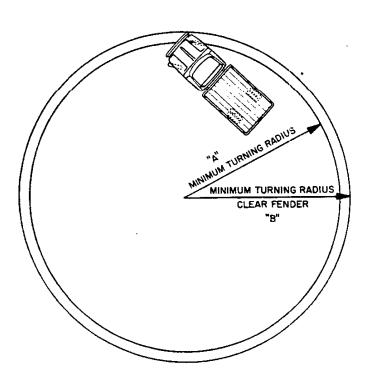
ing parts and instructions. The relay rod, power cylinder, control valve and hoses are assembled as a single unit. Installation requires only about  $3\frac{1}{2}$  hours.

Light-duty power steering helps to combat driver fatigue and allows him to maneuver the truck quite easily in tight spots and on long hauls. Power steering also dampens road shock and vibration at the steering wheel, provides extra comfort and ease of handling the vehicle.

# **TURNING RADIUS**

**Dimension A** is measured to edge of front tire at outside of circle, indicating radius clearance needed at curb height.

**Dimension B** is measured to outer extremity of truck (front bumper or fender), indicating required wall-to-wall clearance radius.



## **TURNING RADIUS**

(Multiply radius by 2 to determine turning circle diameter.)

Series	Wheelbase (inches)	Radius A (feet)	Radius B (feet)
R12	95	19.6	21.3
P13	102	19.5	20.9
C14	115	21.4	22.9
K14	115	23.9	25.3
C15	127	23.1	24.5
K15	127	25.9	27.2
C25	127	22.6	24.1
K25	127	25.9	27.2
P23	104	18.3	19.8
P25	125	21.1	22.5
P26	137	22.7	24.1
C36	133	23.0	24.5
C38	157	26.4	27.9
P33	104	18.2	21.3
P35	125	21.0	22.4
P36	137	22.6	24.0
C51	133	22.2	23.7
C52	145	23.8	25.3
C53	157	25.4	26.9
C55	175	27.7	29.1
L52	133	22.2	23.7
L53	145	23.8	25.3
L56	175	27.7	29.0
S53	157	25.4	26.9
C-D61	133	22.3	23.7
C-D62	145	23.9	25.2
C-D63	157	25.4	26.8
C-D65	175	27.8	29.2
C-D68	197	30.7	32.1

Series	Wheelbase (inches)	Radius A (feet)	Radius B (feet)
L62	133	22.3	23.7
L63	145	23.9	25.2
L65	169	27.0	28.4
L66	175	27.8	29.1
L69	197	30.7	32.0
S62	197	30.7	32.1
S64	2251/2	34.4	35.8
S67	243	36.7	38.1
<b>569</b>	2611/2	39.1	41.0
T62	97	17.6	19.0
T63	109	19.1	20.6
T66	133	22.3	23.6
T6233T	145	23.8	25.2
<b>T6</b> 2	175	27.8	29.2
M63-M83	157	25.5	26.9
M65-M85	175	27.8	29.2
M68-M88	193	30.2	31.6
C81	133	22.3	23.7
C82	145	23.8	25.3
C83	157	24.4	25.8
C85,		27.8	29.2
C88		30.7	32.1
E-L82	133	22.3	23.7
E-L83	145	23.8	25.3
L86	175	27.8	29.2
T-U82	1	17.8	19.3
T-U83		19.4	20.8
T86	1	22.3	23.7
T88		23.8	25.3

Steering—Page 2 March 1, 1963

# FRAME SPECIFICATIONS

The steel in Chevrolet frames has a yield point of 39,000 lb per square inch. For comparative measures of frame strength, this yield point multiplied by the section modulus gives a good measure of the strength of the frame.

	Si	Side Rail Dimensions		
Series			Thickness (inch)	Section Modulus (in cu)
P13, C10	6.03	2.42	.156	2.98
K14	7.09	2.71	.141	3.62
C25	6.11	2.46	.194	3.71
P20, P30	7.21	2.72	.201	5.17
C36, C38	7.20	2.77	.194	5.14
K15, 25	7.18	2.76	.186	6.19
C50	9.12	3.00	.250	9.38
L50	9.12	3.00	.250	9.38
S53	9.12	3.00	.250	9.38
C61, 62, 63, 65	9.12	3.00	.250	9.38
(With optional heavy-duty frame)	9.24	3.06	.312	11.80
(With optional 1/4-inch outer reinforcement)	9.24	3.06	.312	15.86
C68	9.18	3.03	.281	10.59
(With optional heavy-duty frame)	9.24	3.06	.312	11.80
(With optional 1/4-inch outer reinforcement)	9.24	3.06	.312	15.86
D60 & D60-H	9.24	3.06	.312	11.80
(With optional 1/4-inch outer reinforcement)	9.24	3.06	.312	15.86
L62, 63, 65, 66	9.12	3.00	.250	9.38
(With optional heavy-duty frame, except L65)	9.24	3.06	.312	11.80
(With optional 1/4-inch outer reinforcement, except L65)	9.24	3.06	.312	15.86
L69	9.18	3.03	.281	10.59
(With optional heavy-duty frame)	9.24	3.06	.312	11.80
(With optional 1/4-inch outer reinforcement)	9.24	3.06	.312	15.86
S62	9.18	3.03	.281	10.59
S64, S67, S69, S67-H, S69-H	9.24	3.06	.312	11.80
T60 & T60-H	9.18	3.03	.281	10.59
(With optional 1/4-inch outer reinforcement)	9.18	3.03	.281	14.69
C-L-60-H (except L65-H)	9.24	3.06	.312	11.80
(With optional 1/4-inch outer reinforcement, except L65-H).	9.24	3.06	.312	15.86
L65-H	9.12	3.00	.250	9.38
C-L80	9.24	3.06	.312	11.80
(With optional 1/4-inch outer reinforcement)	9.24	3.06	.312	15.86
E80	9.24	3.06	.312	11.80
(With optional 1/4-inch outer reinforcement)	9.24	3.06	.312	15.86
T80	9.18	3.03	.281	10.59
(With optional 1/4-inch outer reinforcement)	¯9.18	3.03	.281	14.69
M60, M80	9.24	3.06	.312	23.34♠
U80	9.16	3.03	.281	14.69

<sup>+</sup> Outer frame reinforcements base equipment.

# FRAME SPECIFICATIONS

Series	Number of Structural	Width Over Rails		Overall Length
Series	Crossmembers	Front	Rear	Rail
C14+	7	28.20	33.96	179.78
C14+	8	28.20	33.96	200.15♦
P13	7	28.10	33.96	166.78
C15	7	28.20	33.96	199.78
C25	7	28.28	34.04	199.78
C36	6	28.28	33.96	211.28
K14	5	28.16	33.96	179.78
K144	6	28.16	33.96	200.29♦
K15	5	28.26	34.02	199.78
K25	5	28.26	34.02	199.78
C51, C61		33.00	34.00	198.81
D61, C81	1	33.12	34.12	198.81
C52, C62	1	33.00	34.00	223.81
D62, C82	_	33.12	34.12	223.81
L52, L62	_	33.00	34.00	198.81
E82, L82	] -	33.12	34.12	198.81
C53, C63		33.00	34.00	235.81
D63, C83	_	33.12	34.12	235.81
L53, L63	1	33.00	34.00	223.81
E83, L83	,	33.12	34.00	223.81
S53	1	33.00	33.50	272.81
C55, C65	_	33.00	34.00	265.81
	1	33.12	34.12	265.81
D65, C85	1	33.00	34.00	260.06
L56, L65, L66	1		34.12	260.06
L86		33.12	34.12	330.06
C68	1 -	33.06	1	330.06
D68, C88		33.12	34.12	330.06
L69	i .	33.06	34.06	223.81
\$62		33.06	34.06	357.06
\$64		33.12	34.12	385.06
\$67		33.12	34.12	411.06
S69	ł	33.12	34.12	
T62, T82	1	53.30	34.06	195.94
T63, T83		53.30	34.06	207.94
T66, T86	1	53.30	34.06	243.94
T68, T88	1	53.30	34.06	255.94
<b>T69</b>		53.30	34.06	285.94
U82	L.	53.30	34.06	195.94
U83	l l	53.30	34.06	207.94
M63, M83		33.12	34.68	247.56
M65, M85		33.12	34.68	277.56
M68, M88	9	33.12	34.68	307.56

<sup>♦</sup> Except C1402, 05, 06-16

<sup>+</sup> C1402, 05, 06, 16 only

<sup>▲</sup> Except K1405, 06, 16

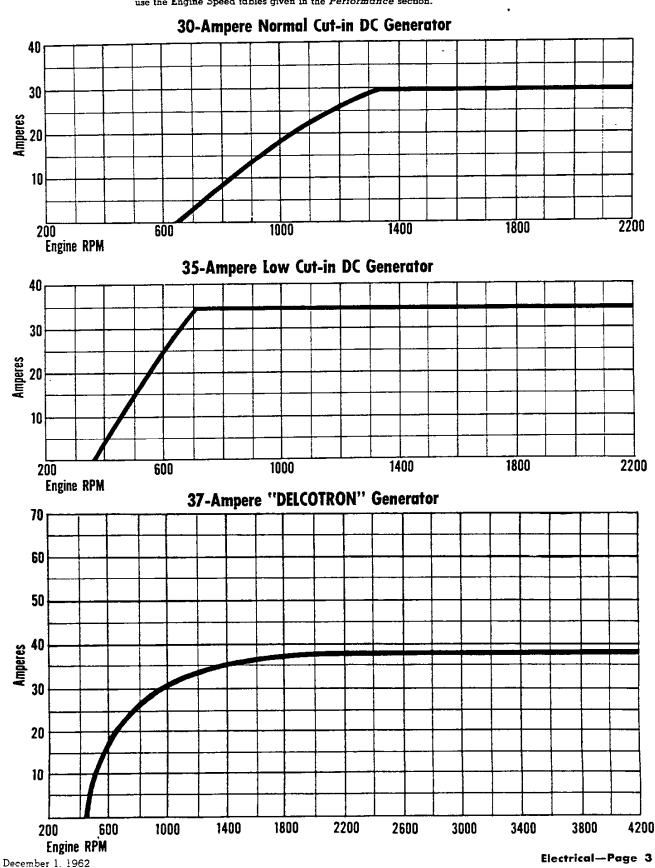
<sup>♣</sup> K1405, 06-16

<sup>•</sup> Plus one on Diesel Models

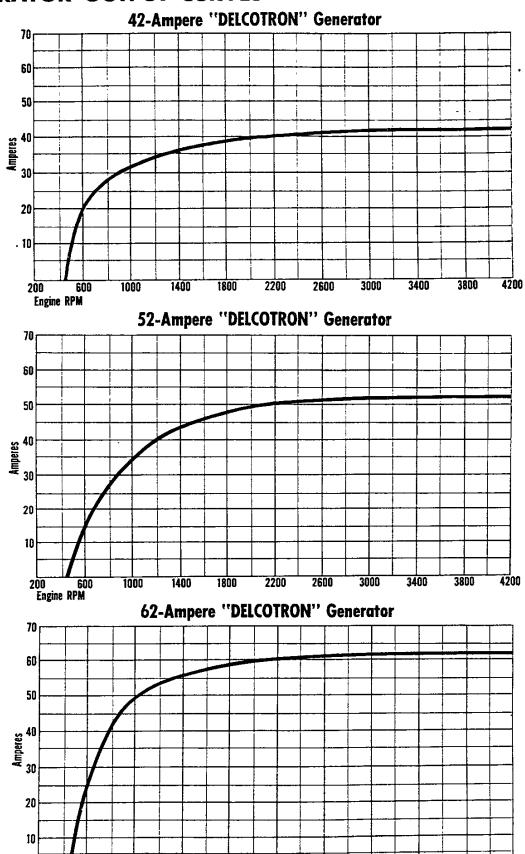
<sup>♦</sup> Includes frame extension

# **GENERATOR OUTPUT CURVES**

Output characteristics of the standard and optional generators are shown on this and the following page. If necessary to relate these outputs to vehicle speed, use the Engine Speed tables given in the *Performance* section.



# **GENERATOR OUTPUT CURVES**



2200

2600

3000

1400

1000

1800

200 600 Engine RPM

CLUTCHES:	
Specifications	. 27-28
COOLING SYSTEMS:	
Specifications	20.20
Specifications	. 29-30
FUEL TANKS:	
Specifications	. 28
ENGINE FEATURES:	
145 Six	. 3
153 Four	
230 Six. 292 Six.	
283 V8	16-17
327 V8	. 16-17
348 Special V8	. 16-17
348 V8	. 16-17
409 V8	. 16-17
4-53 GM Diesel.	24
07-00 GM Diesel.	. 44
ENCINE DOWER & TARALIF CURVEC.	
ENGINE POWER & TORQUE CURVES:	
145 Six	. 2
153 Four	. 6
230 Six	. 7
230 Six (Economy)	
292 Six	
283 V8	. 13
348 Special V8	. 14
348 V8	. 14
409 VB	15
4-53 GM Diesel	. 22
6V-53 GM Diesel	. 23
ENGINE SPECIFICATIONS:	
3.4E C:	
145 Six	
230 Six	
292 Six	
283 V8	. 18-19
327 V8	
348 Special V8	. 20-21
348 V8409 V8	20-21
4-53 GM Diesel	
6V-53 GM Diesel	
#11411# 1141 AT DV #21141/ ATTIC	

### ENGINE USAGE BY TRUCK SERIES

7	Series		
Engine Name	Standard	Optional	
145 Six	RIO	_	
153 Four	P10	_	
230 Six	K-C10 K-C-P20 C-P30 C-L-S50	P10	
292 Six	60 (exc D60, S6902)	K-C10 K-C20 C30 C-L-S50	
283 V8		K-C10 K-C20 C-L50	
327 V8	S6902	60 (exc D60)	
348 Special V8	_	S67-S69	
348 V8	C-L-M-T80	_	
409 V8		C-L-M-T80	
4-53 GM Diesel	D60	_	
6V-53 GM Diesel	E-U80		

# HIGH TORQUE 145 SIX PERFORMANCE

## **Basic Specifications**

Engine type	.Valve-in-head, air cooled
Piston displacement	, 145 cu m
Bore & Stroke (nominal).	
Dry Weight (with clutch)	
Compression ratio	
Taxable horsepower (SA)	5)
Idling speed.	500 rpm
Carburetor type	Downdraft (two)

#### **Test Procedures**

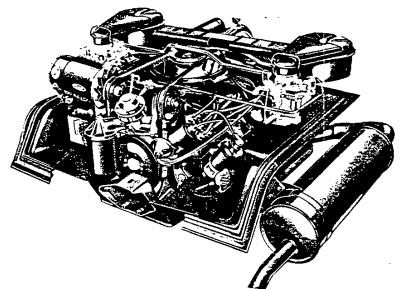
These curves represent full-throttle performance as obtained from dynamometer test data corrected to harometric pressure of 29.92" mercury and  $60^{\circ}$  F dry air.

Gross horsepower and torque were obtained in a

egular dynamometer test with the dynamometer exhaust system, generator not charging, and optimum spark advance.

Net horsepower and torque were obtained from a dynamometer test simulating actual operating con-

ditions when the engine is in the vehicle.

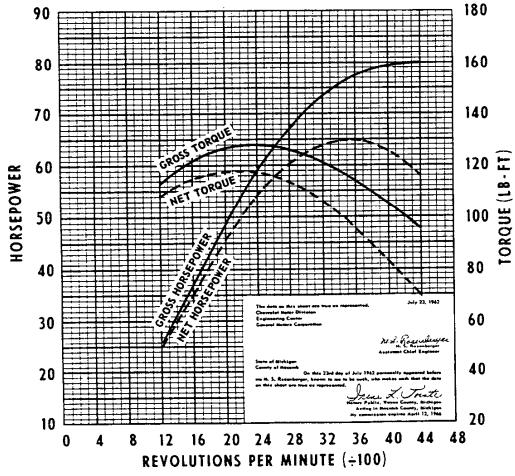


 Gross horsepower
 80 @ 4400 rpm

 Net horsepower
 65 @ 3600 rpm

 Gross torque, lb-ft
 128 @ 2300 rpm

 Net torque, lb-ft
 118 @ 2200 rpm



# **DIRECTION SIGNALS**

Electrical-Page 5

Direction signals are required by law in most states, and virtually all states require direction signals when the nature of the vehicle prevents a clear view of hand signals.

August 1, 1962

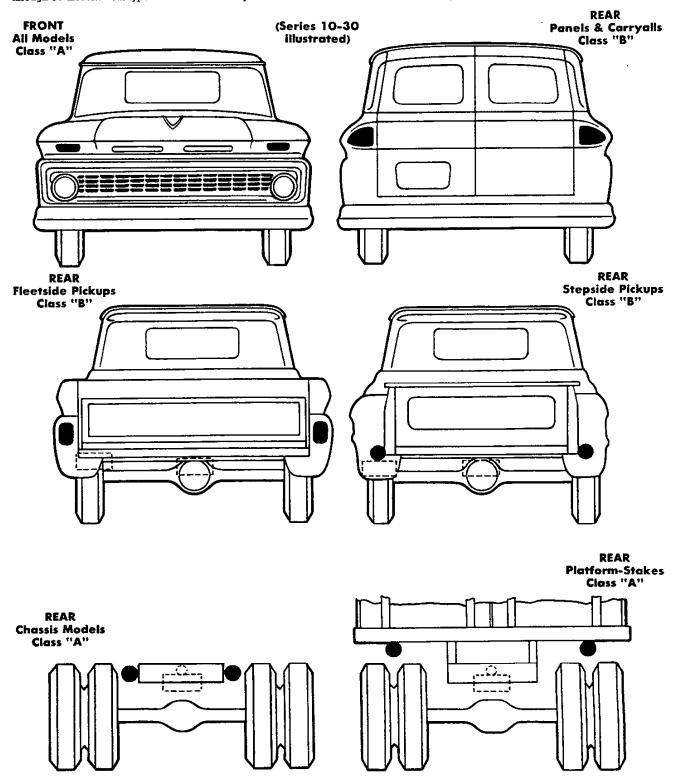
Series 10 through 30 (except chassis-cowl models) use front parking lamps. Double-faced cowl-mounted signals are used on all 50 through 80 models. Both types meet class "A" requirements for lens

area and brightness in most states.

#### Rear Signals:

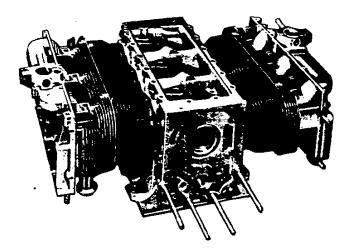
Pickups, Panels and Carryalls utilize standard stop and tail lamps which are classified as class "B" signals.

Rear signals on Chassis-Cab and Stake models, bracket-mounted near the rear of frame, are classified as class "A" signals.



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#### ENGINE FEATURES



Lightweight Aluminum Construction—Saves weight and operating cost, increases payload. The crankcase, cylinder heads, rear engine housing, clutch housing and crankcase cover are aluminum alloy castings. The crankcase is made of two halves, bolted together, and the rear engine housing is bolted to the rear of the crankcase, forming a strong, lightweight structure.

Air Cooling—Weight savings through elimination of radiator, water jackets, pumps, piping and the coolant itself make vehicle operation more economical. Elimination of anti-freeze, additives and the problems of "changeovers," draining, flushing, rust, leakage and replacement or repair of hoses, fittings, pumps and radiators represent big savings in operating cost.

Short Exhaust System—Short travel and low resistance to flow of exhaust gases increase gas mileage. Short exhaust pipe and tailpipe are less susceptible to corrosion and less expensive to replace.

Faster Warm-up—Elimination of water and extra metal masses enables the 145 Six to reach normal operating temperature sooner.

Temperature Closely Controlled—Cooling air is drawn in through a fan located in the top of the shroud that encloses the engine. Air flow is regulated by a thermostatically operated damper valve, which opens or closes the blower intake as the temperature of the engine varies. The damper is closed when the engine is cold, and opens as the engine warms up. If the thermostat bellows should fail, the damper will remain in the open position to prevent engine overheating.

Twin Induction System—The 145 Six truck engine has two single-throat carburetors and two air cleaners. Each carburetor is mounted directly on top of one of the two intake manifolds. The two carburetors and air cleaners, one for each manifold, provide an evenly balanced mixture flow to the cylinders in each bank for top economy and performance.

Fuel Filters—A strainer in the fuel tank and porous bronze filters at each carburetor remove impurities from the fuel.

Hydraulic Valve Lifters—Dependable operation, with full performance and economy, is assured with hydraulic valve lifters, which keep valve train in adjustment automatically. Time and cost of periodic valve adjustments are eliminated.

12-Volt Ignition System—Provides potent spark for easy starting and uninterrupted operation under all conditions.

Valve Seat Inserts—Long-wearing heat-resistant valve seat inserts maintain efficient seating and avoid valve burning. Chromium steel valve seat inserts are used for the exhaust valves, with nickel steel inserts for the intake valves.

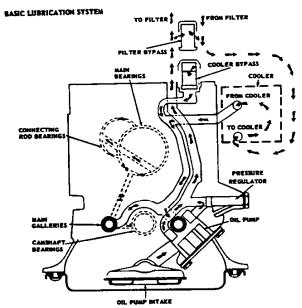
Fully Supported Main Bearings—Four steel-backed babbitt main bearings are supported entirely by the crankcase bulkheads at the junction of the two crankcase balves.

Rugged Forged-steel Crankshaft—Because of the horizontally opposed engine design, the crankshaft is short and rugged and ideally suited to the hard work of truck operation. It is made of forged steel for extra strength and durability.

Forged-steel Connecting Rods—Connecting rods are lightweight steel forgings, and their bearings are the same high-quality steelbacked babbitt type used in the larger Chevrolet truck engines.

Integral Intake Manifolds—The intake manifolds are cast as integral parts of the two cylinder heads and thus are less subject to the effects of vibration and leakage than bolted-on manifolds.

Long-life Exhaust Valves—Exhaust valves are Stellite-faced to reduce wear and increase valve life. In addition, Rotocoil exhaust valve rotators insure positive controlled valve rotation that prevents build-up of deposits on the valve face and stem.



Full-pressure Lubrication—The 145 Six engine is designed for full lubrication of all moving parts, with full pressure delivered from the main oil galleries to crankshaft and camshaft bearings, and from crankshaft main bearings to connecting rod bearings. Overspray from connecting rod bearings lubricates cylinder walls and pistons. The hydraulic lifters draw oil from the main oil galleries, and hollow push rods conduct oil to the rocker arms and valves in the head. The timing gears are lubricated by overspray from the front main bearing and the front camshaft bearing. The fuel pump eccentric and distributor drive gear receive oil through a nozzle in the engine rear housing.

Full-flow Oil Filter and Cooler.—All oil passes through both a filter and a cooler. Lubrication is improved and wear reduced by keeping the oil clean and controlling its temperature. To haster engine warm-up, the oil cooler is bypassed when oil temperature is below 160° F.

Aluminum-coated Muffler—Life of the reverse-flow muffler is increased by aluminum coating on the outer shell, by an asbesto wrap between inner and outer shells, and by location of the muffles near the engine, which minimizes condensation by keeping tempera ture high inside the muffler.

# 145 SIX

Basic Description	horizontally opposed cylinders, valve-in-head design
Displacement	145 cu in
Bore z Stroke	3.437" x 2.600"
Compression Ratio	8.0
Gross Horsepower @ rpm	80 @ 4400
Net Horsepower @ rpm	65 @ 3600
Gross Torque (lb-ft) @ rpm	128 @ 2300
Net Torque (lb-ft) @ rpm	118 @ 2200
Air Cleaner	two; oil-wetted polyurethane elements
Bearings, Camshaft	aluminum, machined in crankcase
ID x Length (Projected Area):	1 202" = 0.050" (1 142 c= in)
Bearing 1 (rear) Bearing 2	1.202" x 0.950" (1.142 sq in) 1.272" x 0.860" (1.094 sq in)
Bearing 3	1.272" x 0.860" (1.094 sq in)
Bearing 4	1.442" x 0.830" (1.197 sq in)
Bearings, Connecting Rod (Crank end)	precision, removable
Material	heavy-duty, copper-lead alloy, steel backed
ID x Length (Projected Area)	1.801" x 0.649" (1.169 sq in)
	precision, removable
Bearings, Main	heavy-duty, copper-lead alloy, steel backed
Material	
End Thrust	taken by bearing 1
ID x Length (Projected Ārea):	2.1008" x 0.785" (1.649 sq in)
Bearing 1 (rear) Bearing 2	
Bearing 2 Bearing 3	2.1008" x 0.752" (1.580 sq in) 2.1013" x 0.752" (1.580 sq in)
Bearing 4	2.1013" x 0.752" (1.580 sq in)
Camshaft	cast alloy iron; driven by helical gear from crankshaft
Carburetor	
Number	2 (one for each cylinder bank)
Туре	single barrel, downdraft
Make	Rochester
Venturi ID	1.00"
	0.75"
SAE Flange Size	automatic
Choke Control	
Coil, Ignition	Delco-Remy
Current Draw	4.0 amp with engine stopped; 1.8 amp with engine idling
Connecting Rods	drop-forged steel; I-beam section
Length (center-to-center)	4.720"
Cooler, Oil	4.720" Harrison
Cooler, Oil Make	
Cooler, Oil Make Material	Harrison aluminum
Cooler, Oil Make Material Crankshaft	Harrison aluminum drop-forged steel; rubber-mounted vibration damper
Cooler, Oil Make Material Crankshaft Cylinders	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins
Cooler, Oil Make  Material  Crankshaft  Cylinders  Number	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6
Cooler, Oil Make Material Crankshaft Cylinders Number Material	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron
Cooler, Oil Make Material Crankshaft Cylinders Number Material Cylinder Heads	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron valve-in-head design with integral intake manifold and integral cooling fins
Cooler, Oil Make Material Crankshaft Cylinders Number Material Cylinder Heads Number	Harrison  aluminum  drop-forged steel; rubber-mounted vibration damper  induction cast with integral cooling fins  6  cast iron  valve-in-head design with integral intake manifold and integral cooling fins  2 (one for each bank of cylinders)
Cooler, Oil Make Material Crankshaft Cylinders Number Material Cylinder Heads Number Material	Harrison  aluminum  drop-forged steel; rubber-mounted vibration damper  induction cast with integral cooling fins  6  cast iron  valve-in-head design with integral intake manifold and integral cooling fins  2 (one for each bank of cylinders)  permanent-mold cast aluminum
Cooler, Oil Make Material Crankshaft Cylinders Number Material Cylinder Heads Number	Harrison  aluminum  drop-forged steel; rubber-mounted vibration damper  induction cast with integral cooling fins  6  cast iron  valve-in-head design with integral intake manifold and integral cooling fins  2 (one for each bank of cylinders)
Cooler, Oil Make Material Crankshaft Cylinders Number Material Cylinder Heads Number Material Distributor	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron valve-in-head design with integral intake manifold and integral cooling fins 2 (one for each bank of cylinders) permanent-mold cast aluminum Delco-Remy, with centrifugal and vacuum control
Cooler, Oil Make Material Crankshaft Cylinders Number Material Cylinder Heads Number Material Distributor Fan Type	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron valve-in-head design with integral intake manifold and integral cooling fins 2 (one for each bank of cylinders) permanent-mold cast aluminum Delco-Remy, with centrifugal and vacuum control centrifugal
Cooler, Oil Make  Material  Crankshaft  Cylinders  Number  Material  Cylinder Heads  Number  Material  Distributor  Fan  Type Location	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron valve-in-head design with integral intake manifold and integral cooling fins 2 (one for each bank of cylinders) permanent-mold cast aluminum Delco-Remy, with centrifugal and vacuum control  centrifugal mounted horizontally on top center of engine
Cooler, Oil Make  Material  Crankshaft  Cylinders  Number  Material  Cylinder Heads  Number  Material  Distributor  Fan  Type	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron valve-in-head design with integral intake manifold and integral cooling fins 2 (one for each bank of cylinders) permanent-mold cast aluminum Delco-Remy, with centrifugal and vacuum control  centrifugal mounted horizontally on top center of engine 11.00"
Cooler, Oil Make  Material  Crankshaft  Cylinders  Number  Material  Cylinder Heads  Number  Material  Distributor  Fan  Type Location	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron valve-in-head design with integral intake manifold and integral cooling fins 2 (one for each bank of cylinders) permanent-mold cast aluminum Delco-Remy, with centrifugal and vacuum control  centrifugal mounted horizontally on top center of engine 11.00°
Cooler, Oil Make Material Crankshaft Cylinders Number Material Cylinder Heads Number Material Distributor Fan Type Location Diameter	Harrison  aluminum  drop-forged steel; rubber-mounted vibration damper  induction cast with integral cooling fins  6  cast iron  valve-in-head design with integral intake manifold and integral cooling fins  2 (one for each bank of cylinders)  permanent-mold cast aluminum  Delco-Remy, with centrifugal and vacuum control  centrifugal  mounted horizontally on top center of engine  11.00°  24  1850 cfm @ 4000 engine rpm
Cooler, Oil Make  Material  Crankshaft  Cylinders  Number Material  Cylinder Heads  Number Material  Distributor  Fan Type Location Diameter Number of Vanes	Harrison  aluminum  drop-forged steel; rubber-mounted vibration damper  induction cast with integral cooling fins  6  cast iron  valve-in-head design with integral intake manifold and integral cooling fins  2 (one for each bank of cylinders)  permanent-mold cast aluminum  Delco-Remy, with centrifugal and vacuum control  centrifugal  mounted horizontally on top center of engine  11.00°  24  1850 cfm @ 4000 engine rpm  V-belt from crankshaft over idler and generator pulleys
Cooler, Oil Make  Material  Crankshaft  Cylinders  Number Material  Cylinder Heads  Number Material  Distributor  Fan Type Location Diameter Number of Vanes Air Flow Drive	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron valve-in-head design with integral intake manifold and integral cooling fins 2 (one for each bank of cylinders) permanent-mold cast aluminum Delco-Remy, with centrifugal and vacuum control  centrifugal mounted horizontally on top center of engine 11.00° 24 1850 cfm @ 4000 engine rpm V-belt from crankshaft over idler and generator pulleys
Cooler, Oil Make  Material  Crankshaft  Cylinders  Number Material  Cylinder Heads  Number Material  Distributor  Fan Type Location Diameter Number of Vanes Air Flow Drive Ratio (Blower to Engine Speed)	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron valve-in-head design with integral intake manifold and integral cooling fins 2 (one for each bank of cylinders) permanent-mold cast aluminum Delco-Remy, with centrifugal and vacuum control  centrifugal mounted horizontally on top center of engine 11.00° 24 1850 cfm @ 4000 engine rpm V-belt from crankshaft over idler and generator pulleys
Cooler, Oil Make Material Crankshaft Cylinders Number Material Cylinder Heads Number Material Distributor Fan Type Location Diameter Number of Vanes Air Flow Drive Ratio (Blower to Engine Speed) Air Flow Control	Harrison  aluminum  drop-forged steel; rubber-mounted vibration damper  induction cast with integral cooling fins  6  cast iron  valve-in-head design with integral intake manifold and integral cooling fins  2 (one for each bank of cylinders)  permanent-mold cast aluminum  Delco-Remy, with centrifugal and vacuum control  centrifugal  mounted horizontally on top center of engine  11.00°  24  1850 cfm @ 4000 engine rpm  V-belt from crankshaft over idler and generator pulleys
Cooler, Oil Make Material Crankshaft Cylinders Number Material Cylinder Heads Number Material Distributor Fan Type Location Diameter Number of Vanes Air Flow Drive Ratio (Blower to Engine Speed) Air Flow Control Filter, Fuel	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron valve-in-head design with integral intake manifold and integral cooling fins 2 (one for each bank of cylinders) permanent-mold cast aluminum Delco-Remy, with centrifugal and vacuum control  centrifugal mounted horizontally on top center of engine 11.00° 24 1850 cfm @ 4000 engine rpm V-belt from crankshaft over idler and generator pulleys
Cooler, Oil Make  Material  Crankshaft  Cylinders  Number Material  Cylinder Heads  Number Material  Distributor  Fan Type Location Diameter Number of Vanes Air Flow Drive Ratio (Blower to Engine Speed) Air Flow Control  Filter, Fuel In Fuel Tank	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron valve-in-head design with integral intake manifold and integral cooling fins 2 (one for each bank of cylinders) permanent-mold cast aluminum Delco-Remy, with centrifugal and vacuum control  centrifugal mounted horizontally on top center of engine 11.00° 24 1850 cfm @ 4000 engine rpm V-belt from crankshaft over idler and generator pulleys 1.58:1 two thermostatically controlled valves in plenum outlet
Cooler, Oil Make Material Crankshaft Cylinders Number Material Cylinder Heads Number Material Distributor Fan Type Location Diameter Number of Vanes Air Flow Drive Ratio (Blower to Engine Speed) Air Flow Control Filter, Fuel	Harrison aluminum drop-forged steel; rubber-mounted vibration damper induction cast with integral cooling fins 6 cast iron valve-in-head design with integral intake manifold and integral cooling fins 2 (one for each bank of cylinders) permanent-mold cast aluminum Delco-Remy, with centrifugal and vacuum control  centrifugal mounted horizontally on top center of engine 11.00° 24 1850 cfm @ 4000 engine rpm V-belt from crankshaft over idler and generator pulleys 1.58:1 two thermostatically controlled valves in plenum outlet

# **ELECTRICAL SYSTEMS**

#### BATTERY AND GENERATOR SELECTION

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 below, consider average road speeds, and recommend a generator which will provide the maximum output required at the vehicle's average road speed. General operating characteristics of Chevrolet's standard and optional equipment generators are described at the right.

#### **Electrical Loads**

(12-Volt System)

Equipment	Amperes
Four Headlights (Upper beam)	13.5
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
Recirculating Heater	6.0
Radio	2.7
Identification Lights (3 in line, front & rear)	3.1
Clearance Lights (8)	4.1
Two-Way Radio (Standby)	4.0 to 7.0
Two-Way Radio (Transmit)	10.0 to 18.0
Safety Light (Spotlight)	3.9
Fog Lamp	2.9
Instrument Lights	0.8

#### Generator Availability by Truck Series

Туре	Standard	Optional
30-amp (DC)		none R10 none
42-amp Delcotron 52-amp Delcotron 62-amp Delcotron 130-amp Delcotron	none D60, E-U80 none none	Exc D60 Exc D60, E-U80 Exc D60, E-U80 S60

## **30-Ampere Normal Cut-in**

Delco-Remy 2-brush shunt-wound type. Current and voltage regulated to 30 amperes maximum at 14.5 volts. Bearings: commutator end—bronze bushing; drive end—ball. Meets the demands of trucks operated primarily at normal road speeds. Recommended for constant loads of up to 24 amperes in night operation.

# 35-Ampere Low Cut-in

Delco-Remy 2-brush shunt-wound type. Current and voltage regulated to 35 amperes maximum at 14.5 volts. Durable ball bearings at both ends. Recommended for slow-speed operations of moderate current demands (up to 28 amperes night loads). Extended high-speed use will shorten life of brushes and windings.

#### "DELCOTRON"

#### **Diode-Rectified Alternating Current Generator**

Available in several capacities as shown in the generator availability table above, the "DELCOTRON" is an alternating current generator with an integral diode-rectifying system. Battery charging current is produced even at engine idling speeds, helping to ensure a fully charged battery at all times. The "DELCOTRON" also offers increased output at higher speeds. Greater reliability can be expected from the "DELCOTRON" because the brushes carry only 2 to 3 amperes of field current instead of the full generator output carried by the brushes in the conventional generator.

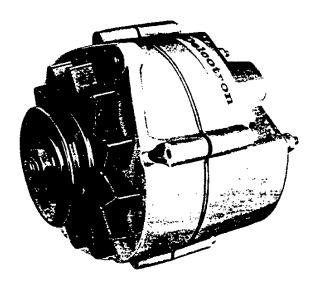
The rotor shaft on the 37-, 42- and 52-ampere "DELCOTRON" generator is carried by needle bearings at the rear and ball bearings at the front. The 62-ampere "DELCOTRON" generator uses ball bearings at both ends of the rotor shaft.

# 12-Volt System

12-Volt electrical system, standard equipment on all models, provides faster cranking speeds and hotter spark for more dependable engine starting in all weather.

#### **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.



#### 37-Amp "DELCOTRON" Generator

Battery charging current is produced even at engine idling speeds.

# **ELECTRICAL SYSTEMS**

#### Starter

Delco-Remy 12-15 volt type with over-running clutch and soleroid-controlled sliding pinion. Four field coils. Bearings are oilless, graphite-filled bronze. Starter is actuated by turning the ignition key in its switch.

#### Generator

The standard generator for all Chevrolet trucks provides more than ample current to meet normal truck electrical demands. Higher output generators are also available.

	Rated Output					
Ţ	Amj					
Generator	Idle	Max	Watts			
30-Ampere (DC)	0 .	30	450			
35-Ampere (DC) low cut-in.	15	35	525			
37-Ampere Delcotron	9	37	555			
42-Ampere Delcotron	12	42	630			
52-Ampere Delcotron	5	52	780			
62-Ampere Delcotron	23	62	930			

### 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.

#### **Heavy-Duty Wiring**

Heavy-duty chassis and engine electrical wiring is standard on Series D60 and all Series 80 models. It is a mandatory option on Series 60-H models.

Wiring components affected are the instrument cluster harness, the main wiring harness, the front extension harness, and the engine wiring harness. Wiring in these 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. Thus, only the overloaded circuit need be repaired.

#### **Battery Specifications**

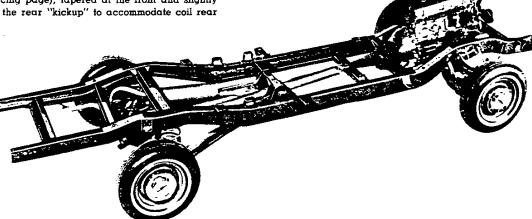
12-Volt Delco-Remy batteries are used as standard and optional equipment on all models.

Truck Series	R10	10-50 C-L-M-T80	C-L-M-T60	S50, S60	P10, C-K10-20	P20, P30 50, M60 C-L-T-M80	<b>D</b> 60	E-U80
	Standard	Standard	Standard +	Standard	Optional	Optional	Standard	Standard
Capacity @ 20-hr rate Model number Plates per cell (6 cells) Dimensions: Length (in) Width (in) Height (in) Weight (lb)	980556 9 13 43/4	53 amp 2SMB 9 101/8 63/4 83/4 43	61 amp 2SMD 11 101/8 63/4 83/4 45	70 amp 3SMA 11 12 634 834 53	70 amp 2 STA 11 101/8 63/4 95/8 50	70 amp 3SMA 11 12 634 834 53	150 amp 4D 19 207/8 8/8 9/2 117	205 amp 8D 27 207/3 103/8 91/2 153
Location		Inside Engine Compartment			R. H. side behind cab	R. H. running board (E80); L. H. side rail (U80)		

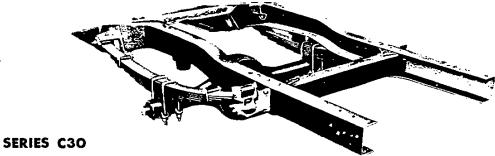
## **SERIES C10, P10, C20**

All Series C10, P10, and C20 models have a ladder-type channel-section frame of riveted construction. Frame dropcenter design lowers floor height for easy entry and exit. Frame width for all models is generally 34 inches (see chart on facing page), tapered at the front and slightly widened at the rear "kickup" to accommodate coil rear springs.

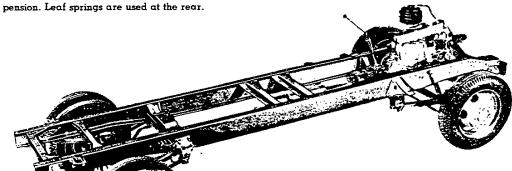
#### Series C10 Illustrated



Series 30 Illustrated



Also of the drop-center ladder-type design, the C30 frame is 34 inches wide to simplify special body installation. Crossmembers are riveted to the channel-section side rails. Like the lighter models, Series C30 frames taper at the front to accommodate coil spring independent front sus-



SERIES 50, 60, 80 (Except Tandems and Tilt Cabs)

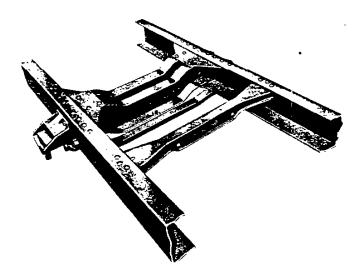
Conventional and LCF 50 through 80 frames feature straight full-channel side rails to form a rugged ladder design with 34-inch over-all width. Crossmembers are of tough alligator-jaw design. Rear spring front hangers are connected by a massive arched crossmember. Gussetbraced channel crossmembers reinforce the rear spring rear hanger position.

Series 60 Illustrated

# **FRAMES**

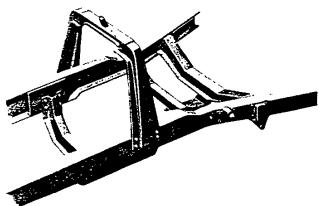
#### SERIES 80 FRAME

Two back-to-back drop-center channel-section rear crossmembers are standard on Series 80 frames for extra strength and trailer kingpin clearance. Series 80 frames are available as optional equipment for all Series 60 gasoline models except Cowls and School Buses. These frames, with a section modulus of 11.80, are standard on D60 models. They are also standard on the M60 with a section modulus of 23.34.



Series 80 Rear Crossmember illustrated

(Optional HD frame for C & L60; std on D60 and M60)



**T60 & T80 Frames Illustrated** 

#### TILT CABS

Frames for tilt cabs are similar to those of conventional models except in the forward section. Side rails flare at the front to provide cab support at the pivot mounts. (See frame width dimensions on facing page.) A heavy-gauge crossmember arches over the clutch housing to support and anchor the rear of the cab in driving position. Frame for Series U80 includes a 1/4-inch-thick reinforcement.

#### SERIES M80 TANDEMS

Frames for tandem models include brawny 1/4-inch-thick side rail reinforcements which extend from the front spring rear hanger to the ends of the rails. Heavy crossmembers provide twist resistance for tough off-road operations.

Series M80 Frame

	SPECIFICATIONS
Lubrication	Full-pressure system; direct pressure to hydraulic lifters and to main, connecting ro and camshaft bearings; metered pressure to valve mechanism; pressure spray to cylinder walls, piston pins and timing gears. (See Owner's Guide for lubricant types
Oil Capacity	5.5 qt; refill 4 qt
Piston Pins	tubular, hardened chrome-alloy steel
Diameter	0.800"
Retention	pressed in connecting rod
Offset	.060" toward major thrust face
Piston Rings	two compression, one oil-control ring per piston
	cast iron, twist type (inside bevel or counterbore),
Compression	wear resistant coating
Oil-Control	single-piece, slotted, cast alloy iron
Pistons	cast alloy aluminum, slipper-skirt type, with steel struts; flat head; cam ground skirts; 3 ring grooves above piston pin
Pump, Fuel Make	AC
	mechanical
. Type	by eccentric on rear end of crankshaft
Drive	
Pressure Range	5.25–6.50 psi
Pump, Oil	spur-gear type driven by distributor shaft
Housing	integral with engine rear housing
Pressure	35 psi @ 2000 engine rpm
Capacity	9 gallons per minute @ 4000 engine rpm
Thermostat Number	2
Make	Harrison
Туре	seamless bellows
Function	opens cooling air plenum exhaust damper when temperature reaches 200-210°F
Timing, Ignition Crankshaft Position	4° BTC
Timing Mark Location	on crankshaft pulley
Firing Order	1-4-5-2-3-6
Timing, Valve	<del> </del>
Inlet Opens	43° BTC
Inlet Closes	93° BTC 87° BBC
Exhaust Opens Exhaust Closes	69° ATC
Spark Plugs	AC, model 46-FF
Thread Size	14 mm
Torque	25 lb-ft
	0.035*
Gap	pressed in head; cast iron
Valve Guides	individual rocker arms on ball pivots; push-rod actuated; hydraulic lifte
Valve Mechanism	individual rocker arms on ball pivots; push-roa actuated; hydraulic little
Valves, Exhaust Material	high-alloy steel
Face	stellite
Overall Length	4.50"
Head Diameter	1.24"
Stem Diameter	0.341*
Face Angle	44°
Seat Angle (in head)	45°
Lift	0.36*
	Rotocoil
Rotators  Valves, Inlet	
Material	AISI A-3140 steel; aluminized face
Overall Length	4.50"
Head Diameter	1.34"
Stem Diameter	0.342'
Face Angle	44°
Seat Angle (in head)	45°
Lift	0.36*
Ventilation	positive

# **153 FOUR**

# HIGH TORQUE 153 FOUR PERFORMANCE

## **Basic Specifications**

Engine type	Valve-in-head
Piston displacement	153 cu m
Bore & Stroke (noming)	31/8″ ≭ 31/4″
Dry Weight (with clutch)	
Compression ratio	8.50 to 1
Toyoble horsepower (SAE)	24.0
Idling speed—Synchromesh trans	4/5 mm
Carburetor type	Downdraft

#### **Test Procedures**

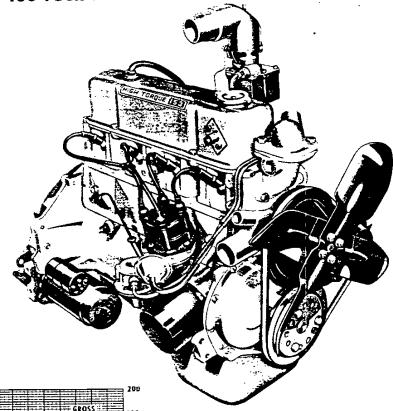
These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

dry air.

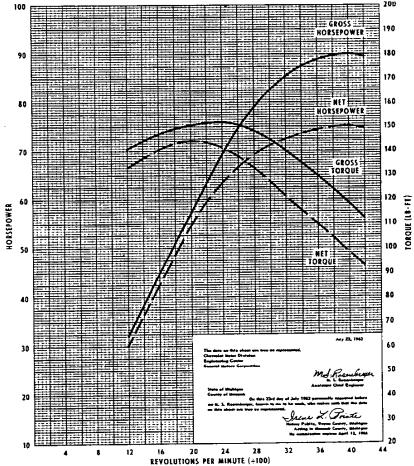
Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and

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	90	@	4000 rpm
Not horsenower	75	(a)	4000 rpm
Gross tormie lb-ft	152	(a;	2400 rpm
Net torque, lb-ft	144	@	2000 rpm



#### HIGH TORQUE 230 SIX PERFORMANCE

# **Basic Specifications**

Engine type	. Valve-in-head
Piston displacement	230 cu in
Bore & Stroke (nominal)	
Dry Weight (with clutch)	465 lb
Compression ratio	8.50 to 1
Taxable horsepower (SAE)	
Idling speed—Synchromesh trans	475 rpm
—Powerglide in "drive"	
Carburetor type	Downdraft

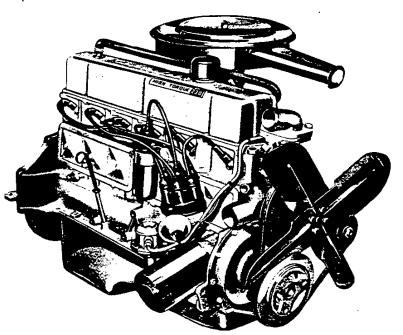
#### **Test Procedures**

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.

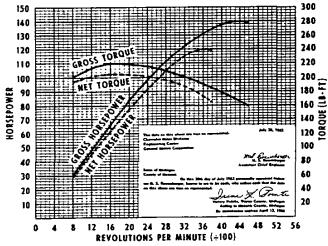


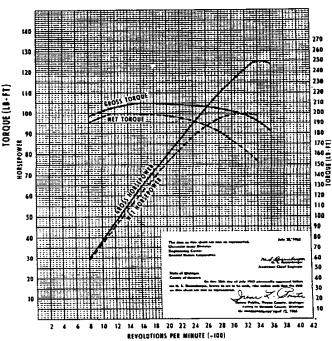
#### With Standard Carburetor

Gross horsepower	140 @ 4400 грт
Net horsepower	120 @ 3600 rpm
Gross torque, lb-ft	220 @ 1600 грш
Net torque, lb-ft	205 @ 1600 грд

#### With Economy Carburetor

Gross horsepower	125 @ 3400 rpm
Net horsepower	100 @ 3200 ron
Gross torque, lb-ft	210 @ 1600 грп
Net torque, lb-ft	200 @ 1200 гра





## HIGH TORQUE 292 SIX PERFORMANCE

# **Basic Specifications**

Engine type	. Valve-in-head
Para & Stroke (noming)	3% X 478
Piston displacement	292 cu in
Dry Weight (with clutch)	
Compression ratio	8.0 to 1
Tarable horsenower (SAE)	
Idling speed—Synchromesh trans	475 rpm
-Powermatic in "drive"	'450 rpm
Carburetor type	Downdraft

#### **Test Procedures**

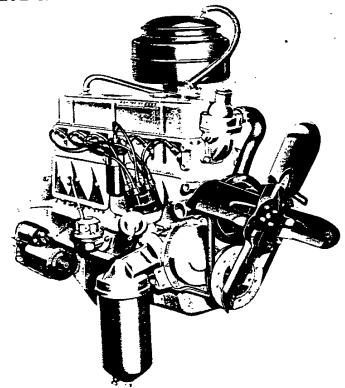
These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F

dry air.

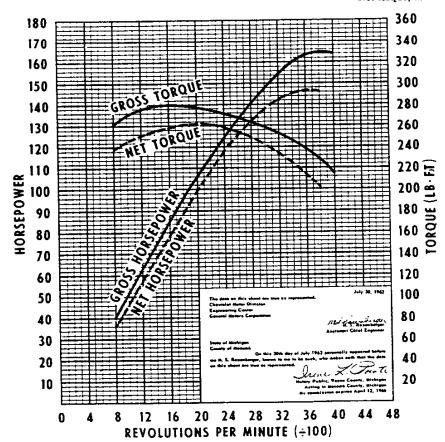
Gross horsepower and torque were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

Net horsepower and torque were obtained from a

dynamometer test simulating actual operating conditions when the engine is in the vehicle.



Gross horsepower	.165	(a)	3800	rpm
Net horsepower	. 147	(a)	3600	rpm
Gross torque, lb-ft	. 280	(a)	1600	TDIII
Net torque, lb-ft	. 262	@	2000	rpm



# 153, 230 and 292 IN-LINE ENGINES

#### **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 5 main bearings in the 153 engine and 7 bearings in the 230 and 292 engine. Full crankshaft support reduces vibration and gives added durability.

**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.

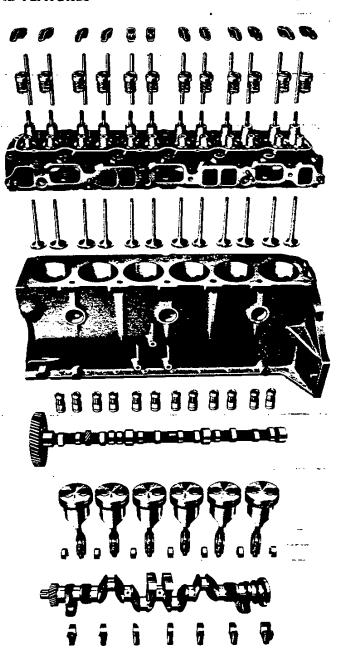
**Pressurized cooling**—Radiator cap keeps coolant under pressure. This permits coolant to operate at higher temperatures without boiling, thus giving greater cooling effectiveness and extra insurance against engine overheating.

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

Oil-wetted 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. One-pint oil-bath air cleaners are standard with P10, 20 and 30 models; oil-wetted (polyurethane element) air cleaners are standard with C10, 20 and 30 models; two-pint oil-bath cleaners are standard with Series 50 and 60 models.

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.

**Optional maximum economy equipment**—For maximum fuel economy, Series C10 trucks with the 230 engine can be fitted with a special economy carburetor and 3.07 ratio rear axle. This equipment is available for use only with the standard 3-speed transmission.



**Optional governor**—Both the 230 and 292 engines can be fitted with governors on which the maximum engine speed can be adjusted within a certain range. Available ranges are:

Engine	Governor Range
230	1850 rpm to 3000 rpm
	2600 rpm to 3600 rpm
292	1900 rpm to 2900 rpm
	2700 rpm to 3600 rpm

**Optional oil filter**—Series 60 trucks with the 292 engine can be fitted with a 2-quart full-flow type oil filter. This replaces the 1-quart filter used as standard equipment.

# **IN-LINE ENGINES**

	153 Four	230 Six	292 Six	
Basic Description	i	n-line, valve-in-head desig	yn .	
Displacement	153 cu in	230 cu in	292 cu in	
Bore & Stroke	37/8" =	31/4"	37/8" x 41/8"	
Compression Ratio	8.	5	8.0	
Gross Horsepower @ rpm	90 @ 4000	140 @ 4400	165 @: 3800	
Net Horsepower @ rpm	75 @: 4000	120 @ 3600	147 @ 3600	
Gross Torque (lb-ft) @ rpm	152 @ 2400	220 @ 1600	280 @ 1600	
Net Torque (lb-ft) @ rpm	144 @ 2000	205 @ 1600	·262 @ 2000	
Air Cleaner	1-pint oil bath	1-pint oil bath (P10, 20 & 30) oil-wetted (C10, 20 & 30) 2-pint oil bath (C, L & S50)	oil-wetted (C10, 20 & 30) 2-pint oil bath (C, L & S50) 2-pint oil bath (C, L, S & T60)	
Bearings, Camshaft		steel-backed babbitt		
ID x Length (Projected Area): Bearing 1 (tront) Bearing 2 Bearing 3 Bearing 4	1.871" x 0.86" (1.61 sq in) 1.871" x 0.86" (1.61 sq in) 1.871" x 0.86" (1.61 sq in)	1.871" x 0.86" (1.61 sq in) 1.871" x 0.86" (1.61)		
Bearings, Connecting Rod (Crank end)		1 emovable		
Material	steel backed babbitt	Moro	ine 100	
ID x Length	2.001" x 0.807"	2.314	″ x 1.01″	
Bearings, Main		removable		
Material		Moraine 100A		
End Thrust	taken by bearing 5	taken by	y bearing 7	
ID x Length (Projected Area).  Bearing 1 (tront)  Bearing 3  Bearing 4  Bearing 5  Bearing 6  Bearing 7	2.300° x 0.75° (1.73 sq in) 2.300° x 0.75° (1.75 sq in) 2.300° x 0.76° (1.75 sq in)	2.300" x 0.75" (1.73 sq in) 2.300" x 0.86" (1.97 sq in)		
Camshaft	cast alloy iron			
Carburetor Type		downdraft		
Make		Rochester		
Venturi ID	1.34*	1.29*	1.34"	
SAE Flange Size		1.50*		
Choke Control		manual		
Coil, Ignition	Del	co-Remy, hermetically sec	aled	
Current Draw	4 amp with en	gine stopped; 1.5 amp wit	th engine idling	
Connecting Rods		ed carbon steel; I-beam se		
Length (Center-to Center)		5.70"		
Crankshaft	forged high carbon steel	cast nodular iron	forged high carbon steel	
Cylinder Block		cast alloy iron		
Cylinder Head	cast	alloy iron; valve-in-head o	lesign	
Distributor	Delco-Rem	y with centrifugal & vacu	um control	
Fan		Cooling System Specifica		
Filter, Fuel	fine-mesh metal cloth in fuel tank			
Filter, Oil	· · · · · · · · · · · · · · · · · · ·	full-flow	<del></del>	
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	4 qt	5 qt	6 qt	
Piston Pins	tubule	ar, hardened chrome-allo	y steel	
Diameter	0.927*			
Retention		shrink fit		

# . 283, 327, 348 and 409 V8 ENGINES

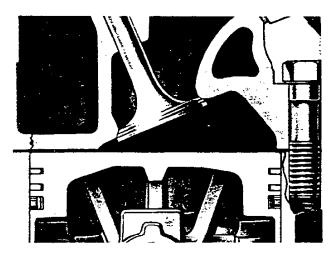
#### ENGINE FEATURES

283 Engine Illustrated



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.



Long-life exhaust valves—The 327, 348 and 409 engines have Stellite-faced valves 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 50 Series slow the formation of deposits, keep valves cleaner and longer lived.

**High-alloy steel inlet valves**—Tough, high-alloy steel gives extra durability. Valves on the 327, 348 and 409 engines have aluminized faces to retard the formation of deposits, thereby increasing valve life and reducing maintenance requirements.

**Forged-steel crankshaft**—Rugged forged steel assures extra strength and durability. Precision balancing reduces vibration and gives longer bearing life. Main and connecting rod journals are induction hardened on the 348 and 409 engines for outstanding durability.

Induction hardened exhaust valve seats—Hardened exhaust valve seats on the 327, 348 and 409 engines reduce wear and distortion—insure better valve seating.

Rotocoils for 50-80 Series—V8 engines for all medium- and heavy-duty trucks are fitted with Rotocoil exhaust valve rotators. These reduce build-up of deposits on valve faces and stems, and increase valve life by as much as 300 per cent.

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

**Pull-pressure lubrication**—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 oil filters that increase engine life.

## HIGH TORQUE 409 V8 PERFORMANCE

# **Basic Specifications**

Engine type	Valve-in-head
Piston displacement	409 cu m
Bore & Stroke (nominal)	4 <u>1</u> 6″ ≖ 31/ <u>2</u> ″
Dry Weight (with clutch)	817 lb
Compression ratio	7.75 to 1
Taxable horsepower (SAE)	
Idling speed	475 rpm
Carburetor type	4-barrel

#### **Test Procedures**

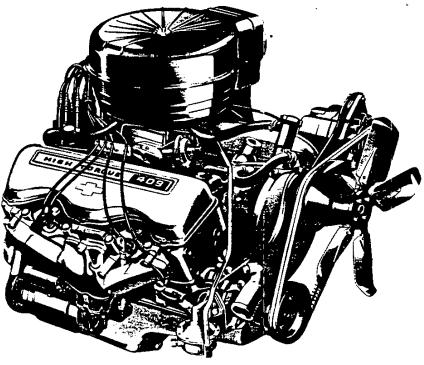
These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

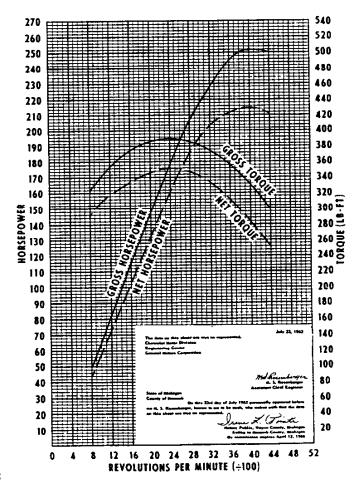
dry air.

Gross horsepower and torque were abtained 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

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





Gross horsepower	.252	(a,	4000 rpm
Net horsepower	.215	<b>(a</b> )	4000 rpm
Gross torque, lb-ft	.390	(a,	2400 rpm
Net torque, lb-ft	.352	(a)	2400 rpm

# . 283 and 327 V8

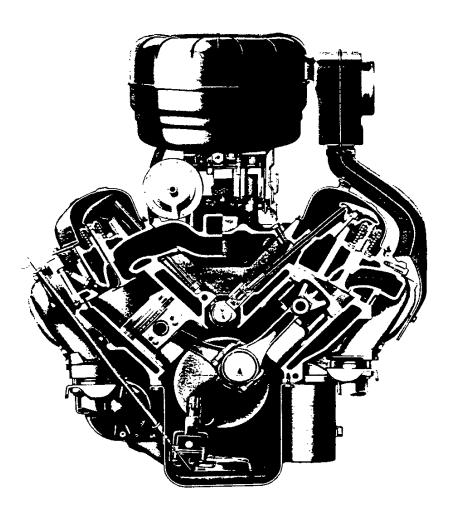
	283 V8	327 V8	
Basic Description	valve-in-	head design	
Displacement	283 cu in	327 cu in	
Bore x Stroke	3%" x 3"	4" x 31/4"	
Compression Ratio	9.0 ♣	8.0	
Gross Horsepower @ rpm	175 @ 4400	185 @ 4400	
Net Horsepower @ rpm	145 @: 4200	158 @ 4000	
Gross Torque (lb-ft) @ rpm	275 @ 2400	305 @ 2000	
Net Torque (lb-ft) @ rpm	245 @ 2000	280 @. 2000	
Her forque (1941) (6. 1pm	210 @ 2000		
Air Cleaner	Oil-wetted (Series 10, 20 & 30) 2-pint oil bath (Series 50)	2-pint oil bath	
Bearings, Camshaft	steel-back	ed babbitt	
ID x Length (Projected Area): Bearing 1 (front), 2, 3, 4 Bearing 5	1.871" x 0.74 1.871" x 0.94		
Bearings, Connecting Rod (Crank end)	remo	vable	
Material	Moraine 100	Moraine 500	
ID x Length	2.001"	x 0.82"	
Bearings, Main	remo	vable	
Material: Bearings 1-4	Moraine 100	Moraine 400	
Bearing 5	Moraine 100	Moraine 100	
End Thrust	taken by	bearing 5	
ID x Length (Projected Area): Bearing 1 (front), 2, 3, 4 Bearing 5	2.300° x 0.76° (1.75 sq in) 2.300° x 1.17° (2.69 sq in)		
Camshaft	cast all	ov iron	
Drive Chain Type	link	roller	
No. of Links or Rollers	46	58	
Carburetor	downdre	<u> </u>	
No. of Barrels	2		
Make	Rochester		
Venturi ID	1.09"		
	1.2		
SAE Flange Size			
Choke Control	man	inai	
Coil, Ignition	Deico-Remy, hermetically sealed		
Current Draw	4 amp with engine stopped;	1.5 amp with engine idling	
Connecting Rods	forged carbon steel; I-beam section		
Length (Center-to-Center)	forged carbon steet; 1-beam section 5.70*		
Crankshaft	forged high-	<u> </u>	
Cylinder Block	cast all	· . · · · · · · · · · · · · · · · · · ·	
Cylinder Heads	cast alloy iron; va	<del></del>	
Distributor	Delco-Remy with centrif	ugal & vacuum control	
Fan	See Cooling Syste	em Specifications	
Filter, Fuel			
In Tank Frame-Mounted	strainer none	replaceable	
In Carburetor	porous bronze	element fine screen	
Filter, Oil		ll-flow	
Lubrication	Full-pressure system: direct pressure to valve lifters and main, connect rod & camshaft bearings; pressure stream to cylinder walls & piston p pressure spray to timing sprockets and chain; metered pressure and graflow to valve mechanism. See Owner's Guide for lubricant types.		
Oil Capacity	5 qt (Series 10-30) 6 qt (Series 50)	6 qt	
Piston Pins	tubular, hardened	chrome-alloy steel	
	0.927"		
Diameter	0.93	27"	

<sup>+8.5</sup> to 1 on C & L50 models.

# 283, 327, 348 and 409 V8 ENGINES

#### **ENGINE FEATURES**

409 Engine Cross Section



By-pass cooling—Thermostatic control of coolant flow during warm-up of the 327, 348 and 409 engines brings them quickly up to proper running temperature and top operating efficiency.

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.

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, 348 and 409 engines have a replaceable element filter in the fuel line and wire mesh screen in the carburetor for added protection and dependable operation.

Roller timing chain—The 327, 348 and 409 engines use a quiet roller timing chain which has a long trouble-free life.

**Positive governor**—The 327, 348 and 409 engines have a positive-acting 4000-rpm governor. Governors are optionally available for the 283 engine.

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. An oil-wetted polyurethane element is used on the 283 engine for Series 10 through 30. Two-pint oil-bath air cleaners are used on the 327, 348 and 409 engines and on the 283 engine for use in the 50 Series.

**Optional governor**—The 283 engine can be fitted with a 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 :pm.

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.

**Optional oil filter**—A 2-quart full-flow oil filter is available for the 327 and 348 engines. This filter is included with the 409 engine.

# 348 and 409 V8

Ì	348 Special V8	348 <b>V</b> 8	4Q9 V8		
Basic Description		valve-in head design			
Displacement	348 cu in	348 cu in	409 cu in		
Bore & Stroke	41/4" x 31/4"	4½" x 3¼"	45/4" x 3½"		
Compression Ratio		7.75			
Gross Horsepower @ rpm	185 @ 4000	220 @ 4400	252 @ 4000		
Net Horsepower (a rpm	160 @ 3600	180 @ 4000	215 @ 4000		
Gross Torque (lb ft) @ rpm	315 @ 2200	325 @ 2600	390 (a 2400		
Net Torque (lb ft) (a rpm	285 @ 1800	300 @ 2400	352 @ 2400		
Air Cleaner		2-pint oil bath	_		
Bearings, Camshaft		steel-backed babbitt			
ID x Length (Projected Area): Bearing 1 (front), 2, 3, 4 Bearing 5		1.871" x 0.86" (1.61 sq in) 1.871" x 0.94" (1.76 sq in)			
Bearings, Connecting Rod (Crank end)	_	removable .	·		
Material		Premium Aluminum			
ID x Length		2.201" x 0.86"			
Bearings, Main		removable			
Material: Bearings 1-4		Premium Aluminum			
Bearing 5		Steel Backed Babbitt			
End Thrust		taken by bearing 5			
ID x Length (Projected Area): Bearing 1 (front), 2, 3, 4 Bearing 5	2.500" x 1.00" (2.51 sq in) 2.501" x 1.26" (3.16 sq in)				
Camshaft		cast alloy iron			
Drive Chain Type		roller			
No. of Drive Chain Rollers	64				
Carburetor		downdraft type			
No. of Barrels	2	4			
Make		Rochester			
Venturi ID	1.12" (pri) 1.25" (sec)				
SAE Flange Size	1.25"				
Choke Control	manual				
Coil, Ignition		Delco-Remy; hermetically sealed			
Current Draw	4 amp wit	h engine stopped; 1.5 amp with en	gine idling		
Connecting Rods		forged carbon steel; I-beam section			
Length (Center-to-Center)	6.13		6.010*		
Crankshaft	forged	carbon steel; induction hardened	journals		
Cylinder Block		cast alloy iron			
Cylinder Heads		cast alloy iron; valve-in-head desig	n		
Distributor	Delco	-Remy with centrifugal & vacuum (	control		
Fan		See Cooling System Specification	s		
Filter, Fuel Frame-Mounted		replaceable element			
In Carburetor		fine mesh screen			
Filter, Oil	full-f	low (I qt)	full-flow (2 qt)		
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 lubricant types.				
Oil Capacity	7 qt		8 qt		
Piston Pins		ubular, hardened chrome-alloy ste	el		
Diameter		0.990"			
Retention		shrink fit in connecting rod			

283 V8	, 327 V8	
two-compression, one oil-c	ontrol ring per piston	
thickwall, inside bevel		
3-piece: 2 flat spring-steel chrome-faced rails; l formed stainless-steel spacer		
cast alloy aluminum with steel struts; flo tin-plated; cam ground; 3 ring		
open slipper	solid slipper	
20.42 az	23.46 oz	
ĀC; 14 mm	size	
45	C42-1	
AC; model EN	AC; model GR	
spur-gear type driven l	oy distributor shaft	
30 psi at 1200	engine rpm	
4.1 gallons per minute o	at 1200 engine rpm	
centrifugal type dri	ven by fan belt	
44.5 gallons per minute	at 4000 engine rpm	
permanently lubrica	ated and sealed	
See Cooling System	Specifications	
Harrison	Dole	
pellet		
4° BTC	8° BTC	
on harmonic balancer		
1-8-4-3-6-5-7-2		
18° BTC	12° 30′ BTC	
54° ABC	57° 30′ ABC	
52° BBC	54° 30′ BBC	
20° ATC	15° 30' ATC	
integral with head		
hydraulic		
individual rocker arms on ball pivots; push rod actuated		
high alloy:	steel	
aluminized (Series 50 only)	stellite	
4.92*		
1.50*		
45°	46°	
46°		
0.33*	0.40*	
Rotocoil (Series 50 only)	Rotocoil	
alloy steel	high alloy steel	
untreated	aluminized	
4.91*		
1.72"		
45°		
46°		
0.33"	0.40*	
	two-compression, one oil-c thickwall, insi  3-piece: 2 flat spring-stee 1 formed stainless cast alloy aluminum with steel struts; flot tin-plated; cam ground; 3 ring open slipper 20.42 oz  AC; 14 mm  45  AC; model EN  spur-gear type driven in 30 psi at 1200 4.1 gallons per minute of centrifugal type dri 44.5 gallons per minute of centrifugal type dri 44.5 gallons per minute permanently lubrice See Cooling System Harrison  pellet  4° BTC  on harmonic in 1·8-4-3-6  18° BTC  54° ABC  52° BBC  20° ATC  integral with hydrauli individual rocker arms on bold high alloy aluminized (Series 50 only)  4.92°  1.50°  45°  A6°  0.33°  Rotocoil (Series 50 only)  alloy steel untreated  4.91°  1.72°  45°  46°  46°	

# 4-53 GM DIESEL

## HIGH TORQUE 4-53 GM DIESEL PERFORMANCE

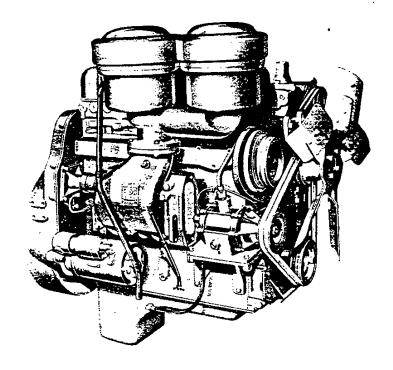
# **Basic Specifications**

Engine type	.In-line 2-cycle diesel
Piston displacement	212 cu in
Bore & Stroke (nominal)	
Dry Weight (with clutch)	1203 lb
Compression ratio	
Idling speed	

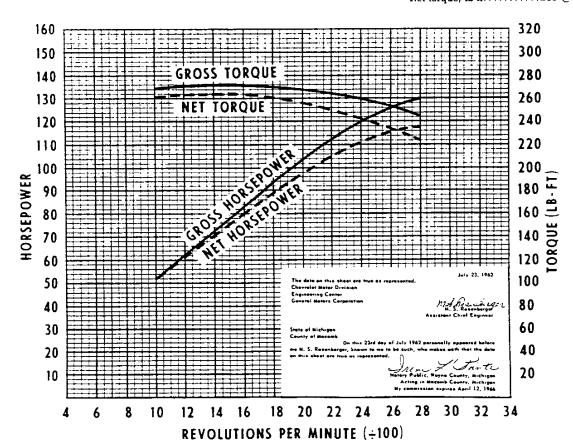
#### **Test Procedures**

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.



Gross horsepower	.130	æ,	2800	rpm
Net horsepower	.118	@	2800	rpm
Gross torque, lb-ft				
Not torque 1h-ft	263	<b>@</b>	1500	rom

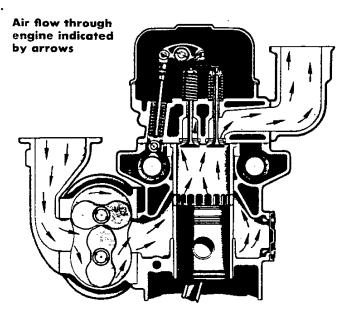


# 348 and 409 V8

	348 Special V8	348 V8	409 V8	
Piston Rings	two-compression,	one oil-control r	ing per piston	
Upper Compression	in	side counterbore		
Lower Compression	tapere	ed face, inside be	vel	
Oil Control	3-piece: 2-flat sp 1 formed	3-piece: 2-flat spring-steel chrome-faced rails; l formed stainless-steel spacer		
Pistons	cast alloy aluminum w tin-plated; cam grou	cast alloy aluminum with cast-in steel ring; angular head; tin-plated; cam ground; 3 ring grooves above piston pin		
Skirt		solid slipper		
Weight	32.5 oz		32.0 oz	
Plugs, Spark	I I	C; 14 mm size		
Model		C42-N		
Pump, Fuel	AC; model GR		AC; model GR	
Pump, Oil	spur-gear typ	e driven by distri	ibutor shaft	
Pressure		at 1200 engine	<del></del>	
Capacity		minute at 1200		
Pump, Water		l type driven by		
Capacity	81 gallons per	minute at 4000	engine rpm	
Lubrication		ly lubricated and		
Radiator	See Coolii	ng System Specif	ications	
Thermostat		Dole		
Туре		pellet		
Timing, Ignition Crankshaft Position	8° BTC		4° BTC	
Timing Mark	on harmonic balancer			
Firing Order	1-8-4-3-6-5-7-2			
Timing, Valve Inlet Opens	18° 30′ BTC			
Inlet Closes		57° 30′ ABC		
Exhaust Opens		58° 30' BBC		
Exhaust Closes		25° 30′ ĀTC		
Valve Guides	in	egral with head		
Valve Lifters		hydraulic		
Valve Mechanism	rocker arms on indiv		push rod actuated	
Valves, Exhaust	1	nigh alloy steel		
Face		stellite 5.13"		
Overall Length				
Head Diameter		1.66* 46°		
Face Angle		44°		
Seat Angle		0.41"		
Lift				
Rotators	Rotocoil			
Valves, Inlet	high alloy steel			
Face	aluminized 5.04*			
Overall Length		1.94"		
Head Diameter				
Face Angle	45° 46°			
Seat Angle		0.40"		
Lift		positive type		
Ventilation		Positive type		

# 4-53 and 6V-53 GM DIESEL

#### **ENGINE FEATURES**



Compression ignition—Spark plugs, ignition coil and distributor are eliminated. Fuel ignition is caused by the high compression temperatures reached in the cylinders. Air is blown into the cylinder, and compressed and heated by the piston upstroke. Near the top of the stroke, fuel is injected into the cylinder. The fuel burns evenly and completely, producing a strong power-creating downstroke of the piston.

High-efficiency Roots blower—A two-vane Roots blower supplies air for combustion of fuel, and for scavenging the engine of exhaust gases. Air enters the cylinder through a ring of ports in the cylinder wall. The ports are uncovered as the piston approaches the bottom of its downstroke. The inrushing air forces the burned gases out through the open exhaust valves. As the valves close a fresh charge of air is trapped in the cylinder to be compressed by the rising piston. The copious quantities of air supplied by the blower provide complete scavenging of exhaust gases, and also serve to cool the cylinder walls, piston head and exhaust valves.

**2-Cycle design**—Every downstroke of every piston is a power stroke. The engine cycle is completed with just two strokes of the piston; a 4-cycle engine requires four strokes to do the same job. This means that the 2-cycle engine is smaller and lighter for a given power output. This also means that the engine accelerates more rapidly, is more responsive to power demands.

Replaceable cylinder liners—For major overhaul, cylinder liners are readily replaced. When installed, the top portion of each liner is surrounded by coolant, thus keeping operating temperatures more nearly uniform and prolonging engine life.

**Precision, replaceable bearings**—All main and connecting rod bearings are of the replaceable insert type, and are made of premium bearing alloys.

**Drop-forged camshaft**—Rugged camshaft has hardened cams and journals.

Hardened valve seats—Alloy iron seats are shrunk into the cylinder head. Hardened seats increase cylinder head life and reduce valve grinding.

Parts interchangeability—All Series 53 GM diesel engines have many interchangeable parts regardless of the number of cylinders in the engine or whether it is an in-line or "V" engine. Interchangeable parts include injectors, exhaust valves, cylinder liners, pistons, piston rings and many other related parts. Thus, truck operators using other equipment powered by GM diesel engines can fit Chevrolet trucks right into their existing maintenance programs with a minimum of difficulty and expense.

**High compression ratio**—Higher compression means more efficient use of fuel. The 17 to 1 compression ratio of the GM diesel engines makes them one of the most efficient internal combustion engines ever designed.

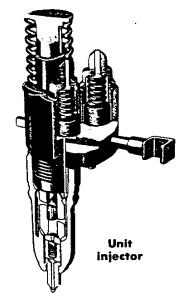
**4-Valve design**—Each cylinder is fitted with four exhaust valves. (Inlet valves are not required in a 2-cycle engine.) The large exhaust valve area permits quick removal of exhaust gases, and aids in keeping valve head temperatures low.

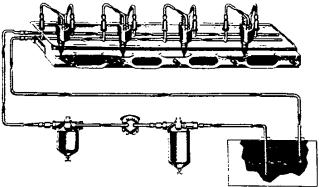
**High energy fuel**—Diesel fuel has a higher energy content than gasoline. This fact combined with the high efficiency of the GM diesel means more miles per gallon of fuel.

**Unit injectors**—Each cylinder is fitted with an injector which is actuated by the camshaft through pushrods. The injector performs

the functions of metering, pressurizing, atomizing and injecting the fuel. An excess of fuel flows through the injector at all times, helping to keep it cool and to operate properly. Injectors are easily removed and replaced when cleaning or other maintenance is required.

Low pressure fuel system—
The fuel supply system includes two fuel filters, a low pressure fuel transfer pump, fuel lines and injectors. The high pressure required for fuel injection is created by the injectors. All the rest of the system operates at low pressure, thus reducing maintenance requirements and the likelihood of leaking fuel lines—a more common ailment with high pressure systems.





Fuel flow diagram for 4-53 engine

# HIGH TORQUE 6V-53 GM DIESEL PERFORMANCE

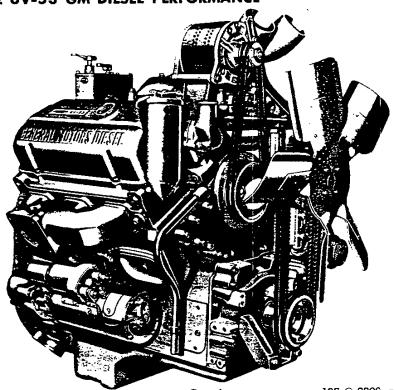
# **Basic Specifications**

Engine type	76 2-cycle diesel
Piston displacement	318 cu in
Bore & Stroke (nominal)	
Dry Weight (with clutch)	
Compression ratio	
Idling speed	

#### **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.

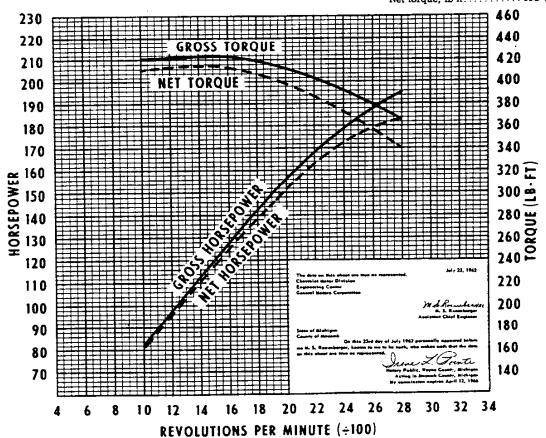


Gross horsepower . 195 @ 2800 rpm

Net horsepower . 183 @ 2800 rpm

Gross torque, lb-ft . 423 @ 1500 rpm

Net torque, lb-ft . 415 @ 1500 rpm



# GM DIESEL

	4-53	6V-53	
Lubrication	Full-pressure system; direct pressure and camshaft bearings; pressure an to cylinder walls and timing gears. (Se	to piston pins, main, connecting rod d splash to valve mechanism; splash se Owner's Guide for lubricant types.)	
Oil Capacity	13 qt	15 qt	
Piston Pins	hardened chrome-all	loy steel; full floating	
Diameter	1.3	75″	
Piston Rings	four-compression, two oi	l-control rings per piston	
Compression	steel; chro	me plated	
Oil-Control	double scraper with ex	pander; cast alloy iron	
Pistons	Trunk-Arma steel; tin plat	ed; dished head, full skirt	
Pump, Fuel Transfer Make	Detroit	Diesel	
Туре	mecho	nnical	
Pressure Range	55-70 psi @, 2500	-2800 engine rpm	
Pump, Oil	spur-ge	ar type	
Pressure	40-50 psi		
Capacity	19 дрт @ 2800 грт	20 дрт @ 2500 грт	
Pump, Water	centri	ifugal	
Capacity	50 gpm @ 2800 engine rpm	83 gpm @ 2800 engine rpm	
Thermostat Number	1	1	
Make	Harrison	Detroit Controls	
Begins to Open	167°-172°	174°-176°	
Туре	pe	llet	
Timing, Valve Exhaust Opens	951/2°	ATC	
Exhaust Closes	1199	BTC	
Valve Guides	pressed	in head	
Valve Mechanism	overhead mechanica	nl; push-rod actuated	
Valve Seats	Cast alloy iron;	pressed in head	
Valves, Exhaust Material	high-alloy steel		
Overall Length	5.55′		
Head Diameter	1.09*		
Stem Diameter	0.248"		
Face Angle	30°		
Seat Angle (in head)	30°		
List	0.33*		
Ventilation	force	d air	

	4-53	6 <b>V</b> -53	
Basic Description	2-cycle, in-line, diesel	2-cycle, V6, diesel	
Displacement	212 cu in	318 cu in	
Bore x Stroke	3.875" <b>x</b> 4.50"		
Compression Ratio	17.0		
Gross Horsepower @ rpm	130 @ 2800 195 @ 2800		
Net Horsepower @ rpm	118 @ 2800	183 @ 2800	
Gross Torque (lb-ft) @ rpm	271 @ 1500	423 @ 1500	
Net Torque (lb-ft) @ rpm	263 @ 1500	415 @ 1500	
iir Cleaner	(2) oil bath	: 1 ot each	
earings, Camshaft	steel-back	<del></del>	
ID x Length (Projected Area)	2.187" x 1.50"		
Searings, Connecting Rod (Crank end)	2.187 <b>x</b> 1.50		
Material	heavy-duty, copper-lec		
ID x Length (Projected Area)	2.500" x 1.32" (3.300 sq in)	2.750" x 1.10" (3.020 sq in)	
earings, Main			
Material	precision, removable  heavy-duty, copper-lead alloy, steel backed		
ID x Length (Projected Ārea)			
lower	3.000° x 1.18° (3.540 sq in) 3.500° x 1.00° (3.500 sc		
Pressure @ Engine rpm	Roots type; 2 vane  8.7 psi @ 2800		
Air Flow @ Engine rpm  Ratio (Blower to Engine Speed)	450 cfm @ 2800	605 cfm @ 2500	
amshaft	2.49		
	SAE 1024 steel; driven by he		
Onnecting Rods	drop-forged steel;	· · · · · · · · · · · · · · · · · · ·	
Length (Center-to-Center)	8.8	· ··· -	
	drop-forg		
ylinder Block	cast i	·	
ylinder Heads  Material	valve-în-he		
<del></del>	cast i		
ylinder Liners	wet; ca		
Number of Ports	18		
an	See Cooling System	<del></del>	
ilter, Fuel	two; replaceal	·····	
ilter, Oil	full-fi		
Capacity	2 qt		
overnor	mechanical		
Setting (Full load)	2800 rpm		
Make Setting (Full load)	· King Seely		

# **CLUTCHES and FUEL TANKS**

#### **CLUTCH SPECIFICATIONS**

Clutch Size & Type	9" Diaphragm	10" Diaphragm	11" Diaphragm	12" Coil	12" Coil 2-Plate	13" Coil	14" Coil
Engine Applications	145 Six	153 Four 230 Six▲	230 Six + 292 Six 283 V8	292 Si <b>≭ </b> ♣	409 V8	327 V8 348 V8 348 Sp V8 4-53	6 <b>V</b> -53
Disc:							
Outside diameter	9.12*	10.0*	11.0"	117/8	117/8	107/5	122/6
Inside diameter		6.0*	6.5"	117/8" 6.75"	11%" 6.75"	12%" 7.25"	13¾* 7.25*
Area (sq in)	71.8	100	124	150	299	1.25	218
Facing thickness (in)	0.135	0.133	0.133	0.140	0.140	0.150	0.187
Facing material	Asbestos	Asbestos	Asbestos	Asbestos	Asbestos	Asbestos	Asbestos
rocing material	composition	composition	composition	composition	composition	composition	composition
Vibration damping at hub	None	6 springs	6 springs	6 springs	6 springs	8 springs	10 springs
Pressure Plate:		• •					
Material	Cast Iron	Cast Iron	Cast Iron	Gray Iron	Gray Iron	Gray Iron	Gray Iron
Diameter (in)	91/4	101/8	111/8	12	12	13	14
Spring:		, -	, ,				
Туре	Diaphragm	Diaphragm	Diaphragm	Coil	Coil	Coil	Coil
Number of springs	1	1	1	12	16	12	21
Release levers	18	18	18	3	4	4	3
Total pressure (lb)	1000-1200	1325-1500	1450-1600	1877	2400	2179	3255
Flywheel:			ļ				
Material	Piston Iron	Piston Iron	Piston Iron	Piston Iron	Piston Iron	Piston Iron	Piston Iron
Ring gear	Steel	Steel	Steel	Steel	Steel	Steel	Steel
Ring gear, teeth		168	168	168	197	180 (V8) 138 (4-53)	138
Pilot Bearing:				<u> </u>			
Material or type Lubrication		Sintered Powde				Ball	Ball
Throw-out Bearing:							
TypeLubrication			——— Регш				

<sup>▲</sup> Standard with 230 Six engine on Series C10 and C20 models.

#### FUEL TANK SPECIFICATIONS

All fuel tanks are of 2-piece seam-welded construction. Tanks for Series D60 and M80 trucks are made of 18-gauge steel; S50 and S60 tanks are of 16-gauge steel; all others are of 20-gauge steel.

Truck Series	Tank Location	Tank Capacity (gallons)	Truck Series	Tank Location	Tank Capacity (gallons)
R10	Under seat	18.6	Panel & Carry- all Models		
Cab Models			C10	Inside frame, behind rear axle	20.5
C10-C60, M60	In cab, back of seat		K10	Outside left frame side rail	20.5
K10, K20 D60, C-L-M80 E-U80 L50, L60	In cab, back of seat In cab, back of seat On top of frame side rail In cab, back of seat	20 18	C30	Outside left frame side rail	18
T60, T80	Outside right frame side rail	18.0	Forward-Contro Models	ol .	
Cowl Models			P10	Inside frame, behind rear axle	20.5
C10, C20 C30	Inside frame, behind rear axle Outside left frame side rail.		P23, P33	Outside right frame side rail	15.5
C50, C60	Outside len frame side rail Outside right frame side rail		P25, P26	Outside right frame side rail	18.0 <b>b</b>
S50, S60	Outside right frame side rail		P35, P36	Outside right frame side rail	18.0 <b>b</b>

a-20 for optional tank.

<sup>♦</sup> Included with 230 Six engine on Forward Control models and all Series 30 and 50 models; optional for 230 Six on Series C10 and C20.

Standard with Series 60 models.

b-30.0 for optional tank.

#### **CLUTCH CONTROLS**

Both mechanical linkage and hydraulic clutch controls are utilized. On models using the hydraulic control system (see chart below) a master cylinder and reservoir (integral with the brake master cylinder housing) contain hydraulic fluid which is torced 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.

# **Hydraulically Actuated Clutches**

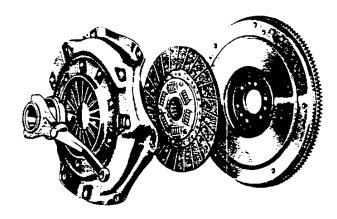
MODEL A	PPLICATION	P10	C60, 60-H, S60	<b>L</b> 50	M60, L-T60, 60-H	C-L-M-T80	D60, 60-H	E-U30
ENGINE A	PPLICATION	153 230	327	230 283 292	292 327	348 409	4-53	6V-53
	Location			On Firewall	•	· · · · · · · · · · · · · · · · · · ·	1	•
Cylinder	Size		1 1/8" Diameter					
-	Stroke	1	1½" Stroke					
	Location		R.H. Side of Clutch Housing					
Slave Cylinder	Size		1½" Diameter					
Cylinder	Stroke		l ½" Stroke					
Clutch For	k	Drop Forg	ed Steel, Pivoted,	Mounted on Bal	1	Le	ver on Clutch	Shaft

#### **Mechanically Actuated Clutches**

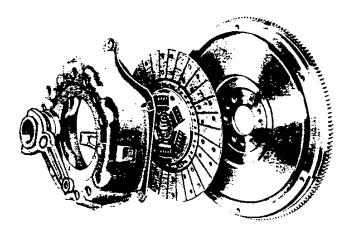
MODEL APPLICATION	R10	P20-30	K-C10-30	C50	\$50	C60, S60
ENGINE APPLICATION	145	230	230 283 292	230 283 292	230 292	292

## **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. Coil spring construction affords good ventilation for cooler operation and protection against burned facings. Pilot bushing and throw-out bearing are self-lubricated.

# IN-LINE ENGINES

	153 Four	230 Six	292 Six	
Piston Rings	two-compr	ession, one oil-control ring pe	er piston	
Upper Compression		thickwall, inside bevel		
Lower Compression		thickwall, inside bevel		
Oil Control		flat spring-steel chrome-face formed stainless-steel spacer	d rails;	
Pistons		cast alloy aluminum with steel struts; cam ground; 3 ring grooves above piston pin		
Weight	20.4	O oz	24.90 oz	
Plugs, Spark		AC; 14 mm size		
Model	46N	44N	42N	
Pump, Fuel	AC; model EM (mo	del EK on chassis-cowls and	Series P20-P30)	
Pump, Oil	spur-ge	ar type driven by distributor	shaft	
Pressure	40	0-60 psi at 2000 engine rpm		
Capacity	6 gallor	is per minute at 2000 engine	rpm	
Pump, Water		trifugal type driven by lan be		
Capacity	70 gallo	ons per minute at 4400 engin	e rpm	
Lubrication		nanently lubricated and seal		
Radiator	See	Cooling System Specification	ns	
Thermostat		Harrison	<u> </u>	
Туре		pellet	·-··	
Timing, Ignition Crankshaft Position	5° BTC	5° BTC	TC	
Timing Mark		steel ball on flywheel		
Firing Order	1-3-4-2	1-5-3-6-2-4	1-5-3-6-2-4	
Timing, Valve Inlet Opens	34° BTC	18° BTC	11°30′ BTC	
Inlet Closes	86° ABC	54° ABC	52° 30′ ABC	
Exhaust Opens	68° BBC	52° BBC	50° BBC	
Exhaust Closes	52° ATC	20° ATC	14° ATC	
Valve Guides		removable	<u> </u>	
Valve Lifters		hydraulic		
Valve Mechanism	individual steel stampii	ngs on ball pivots; push rod o	ictuated	
Valves, Exhaust		high alloy steel		
Face	untreated	aluminized	stellite	
Overall Length		4.92"		
Head Diameter		1.50"		
Face Angle	4	5°	46°	
Seat Ångle		46°		
Lift		0.33″		
Rotators	none	none (Rotocoil on Series 50)	Rotocoil	
Valves, Inlet		steel	high alloy steel	
Face	untre	untreated aluminized		
Overall Length		4.92*	1.002	
Head Diameter	1.3	72"	1.88″	
Face Angle		45°		
Seat Angle		46°		
Lift		. 0.33*		

#### HIGH TORQUE 283 V8 PERFORMANCE

## **Basic Specifications**

Engine type	. Valve-in-head
Piston displacement	283 cu in
Bore & Stroke (nominal)	
Dry Weight (with clutch)	
Compression ratio:	
Series 10-20-30	9.0 to 1
Series C & L 50	8.5 to 1
Taxable horsepower (SAE)	48.0
Idling speed—Synchromesh trans	475 rpm
-Powerglide in "drive"	
Carburetor type	

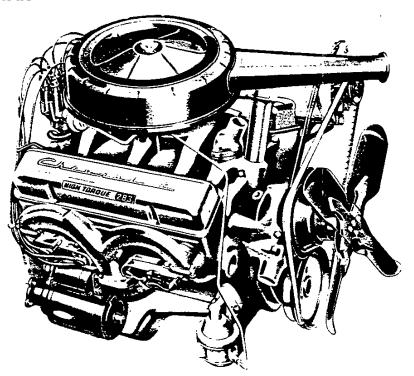
#### **Test Procedures**

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.

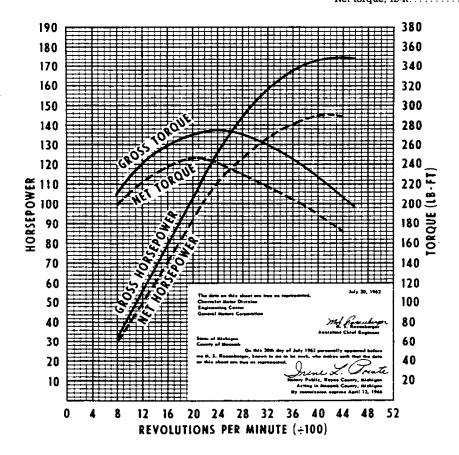
dry air.

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	. 175	(a)	4400	rpm
Net horsepower	. 145	(a,	4200	rpm
Gross torque, lb-ft	. 275	<b>@</b>	2400	rpm
Net torque lb-ft	245	a.	2000	TOIL



# 348 V8 & 348 SPECIAL V8

# HIGH TORQUE 348 V8 & 348 SPECIAL V8 PERFORMANCE

## **Basic Specifications**

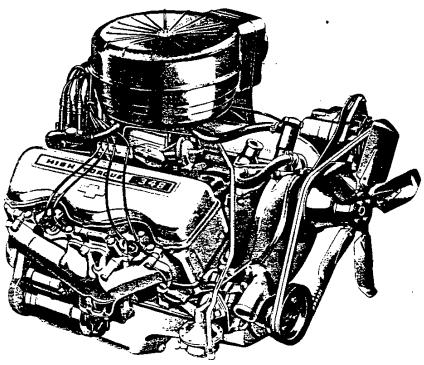
Engine type	. Valve-in-head
Piston displacement	348 cu in
Bore & Stroke (nominal)	41/8" x 31/4"
Dry Weight (with clutch)	802 lb
Compression ratio	7.75 to 1
Taxable horsepower (SAE)	54.45
Idling speed—Synchromesh trans.	475 rpm
-Powermatic in "drive	
Carburetor type—348 V8	4-barrel
-348 Special V8	2-barrel

#### **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.

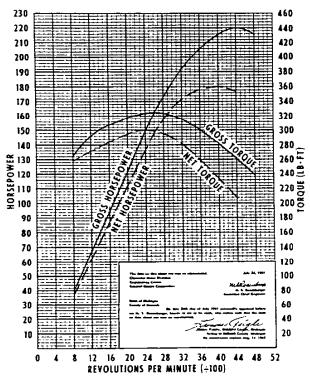
Net horsepower and torque were obtained from a dynamometer test simulating actual operating conditions when the engine is in the vehicle.



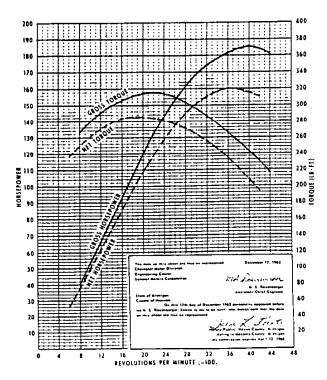
348 V8	348 Spec.	<b>V</b> 8
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Gross horsepower220	@ 4400	rpm185	@	4000 rpm
Net horsepower180	@ 4000	rpm160	@	3600 rpm
Gross torque, lb-ft325	@ 2600	) rpm315	@	2200 rpm
Net torque, lb-ft300	@ 2400	pm285	@	1800 rpm

# 348 V8



# 348 Special V8



## HIGH TORQUE 327 V8 PERFORMANCE

# **Basic Specifications**

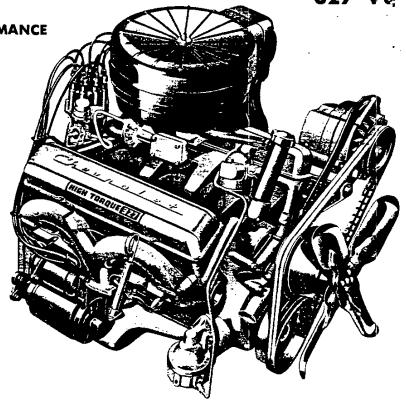
Engine type	. Valve-in-head
Piston displacement	327 cu in
Bore & Stroke (nominal)	4" $\times 3\frac{1}{4}$ "
Dry Weight (with clutch)	622 lb
Compression ratio	8.0 to 1
Taxable horsepower (SAE)	51.2
Idling speed—Synchromesh trans	475 rpm
-Powermatic in "drive"	
Carburetor type	

#### **Test Procedures**

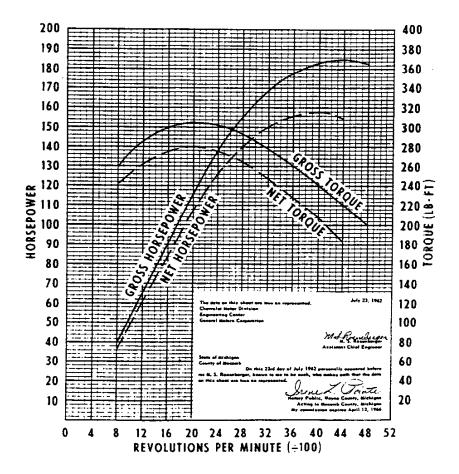
These curves represent full-throttle performance as obtained from dynamometer test data corrected to barometric pressure of 29.92" mercury and 60° F dry air.

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 185 @ 4400 rpm
Net horsepower 158 @ 4000 rpm
Gross torque, lb-ft 305 @ 2000 rpm
Net torque, lb-ft 280 @ 2000 rpm



# **COOLING SYSTEMS**

# **Standard Cooling System Specifications**

	Transmission	Engine	Radiator							
Series			Туре	Height (in)	Width (in)	Thick- ness (in)	Frontal Area (sq in)	System Capac- ity (qt)	Pres- sure Cap (lb)	Fan (No. blades x diameter)
→ CK10, CK20, C30	Synchromesh	230 292 283	tube & center tube & center tube & center	17.4 17.4 17.4	18.1 25.2 25.2	1.26 1.26 1.26	314 439 439	11.0 13.0 14.0	13 13 13	4 x 17% 4 x 17% 4 x 17%
C10, C20	Powerglide	230 292 283	tube & center tube & center tube & center	17.4 17.4 17.4	25.2 25.2 25.2	1.98 1.98 1.98	439 439 439	12.0 13.5 15.5	13 13 13	4 x 17% 4 x 17% 4 x 17%
P10	Synchromesh	153 230	tube & center cellular	14.1 20.7	18.1 19.7	1.26 2.00	255 407	8.25 14.0	13 7	4 x 17% 4 x 17%
	Powerglide	153 230	tube & center cellular	14.1 20.7	18.1 19.7	1.26 2.00	255 407	8.25 14.0	13 7	4 x 17% 4 x 17%
P20, P30	All	230	cellular	19.9	21.4	2.00	426	14.0	7	4 x 173%
C50, L50, S50	Synchromesh	230 292 283	cellular cellular cellular	19.9 19.9 24.7	23.6 23.6 23.6	2.00 2.00 2.00	470 470 583	12.0 15.5 18.5	7 7 7	4 x 20 4 x 20 4 x 20
C60, L60, S60	Synchromesh	292 327	cellular cellular	19.9 24.7	23.6 23.6	2.00 2.00	470 583	15.5 18.5	7	4 x 20 4 x 20
D60	Synchromesh	4-53	tube & center	29.0	23.6	2.62	684	21.5	9	5 x 18
<b>T</b> 60	Synchromesh	292 327	cellular cellular	19.9 19.9	23.6 23.6	2.47 2.47	470 470	23.5 26.0	7 7	4 x 20 5 = 20
C80, L80, M80	Synchromesh	348 409	tube & center tube & center	29.0 29.0	23.6 23.6	1.75 2.62	684 684	30.0 30.0	9	5 x 20 6 x 20
T80	Synchromesh	348 409	tube & fin tube & fin	24.0 24.0	28.7 28.7	2.25 2.88	689 689	37.5 37.5	9	5 x 20 6 x 20
E80	Synchromesh	6V-53	tube & center	29.0	23.6	2.62	684	26.7	9	5 x 22
T80	Synchromesh	6 <b>V</b> -53	tube & fin	24.0	28.7	2.88	689	34.5	9	5 x 22

# **Optional Heavy-Duty Cooling System Specifications**

<b>→ CK10</b>	Synchromesh	230 292 283	tube & center tube & center tube & center	17.4 17.4 17.4	25.2 25.2 25.2	1.26 1.98 1.98	439 439 439	12.0 13.5 15.5	13 13 13	4 x 17% 4 x 17% 4 x 17%
→ CK20, C30	Synchromesh	230 292 283	tube & center tube & center tube & center	17.4 17.4 17.4	25.2 25.2 25.2	1.26 2.62 2.62	439 439 439	12.0 14.0 16.0	13 13 13	4 x 17% 4 x 17% 4 x 17%
C50, L50, S50	Synchromesh	230 292 283	cellular cellular cellular	24.7 24.7 24.7	23.6 23.6 23.6	2.47 2.47 2.47	583 583 583	13.5 17.0 18.5	7 7 7 7	5 x 20 5 x 20 5 x 20
C60, L60, S60	Synchromesh	292 327	cellular cellular	24.7 24.7	23.6 23.6	2.47 2.47	583 583	16.5 21.5	7 7	5 x 20 6 x 20
C80, L80, M80	Synchromesh	348 409	tube & center tube & center	29.0 29.0	23.6 23.6	2.62 2.62	684 684	31.0 31.0	7 7	6 x 20 6 x 20

Indicates revised specifications.

# **COOLING SYSTEMS**

# **→ RADIATOR SHUTTERS**

Air actuated radiator shutters are available as optional equipment on Series D60, D60H and CMEU80 models. Thermostat-controlled, the shutters automatically maintain uniform engine temperatures within precise limits.

In extreme duty operations, engine life may be prolonged and fuel saved by maintaining proper engine temperature for optimum combustion efficiency.

Radiator shutters also shorten engine warmup periods.

#### Series E80 Illustrated

