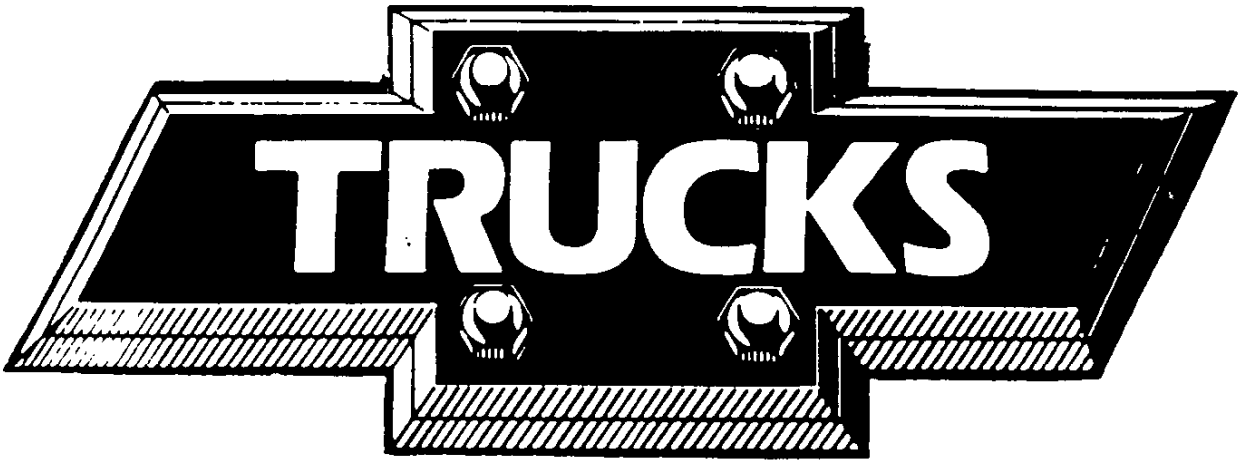
CHEVROLET



1950

VEHICLE IDENTIFICATION NUMBER

• CHEVROLET 3HPB199432 •

A combination vehicle identification number and rating plate is used on all models. It is located on the left hand door lock pillar. The number consists of 13 alpha and numeric characters designating the vehicle division, chassis, type, engine, series, model, model year, assembly plant, and assembly sequence number.

FIRST DIGIT: Identifies the assembly plant

ASSEMBLY PLANT	CODE
Flint, MI	1
Tarrytown, NY	2
St. Louis, MO	3
Kansas City, MO	5
Oakland, CA	6
Atlanta, GA	8
Norwood, OH	9
Baltimore, MD	14
Los Angeles, CA	20
Janesville, WI	21

SECOND DIGIT: Identifies the year (H = 1950)

THIRD DIGIT: Identifies the series

SERIES	CODE
1500	J
3100	P
3600	R
3800	S

FOURTH DIGIT: Identifies the month

MONTH	CODE
January	A
February	B
March	C
April	D
May	E
June	F
July	G
August	H
September	I
October	J
November	K
December	L

LAST SIX DIGITS: Represent the basic production number

MODEL, WHEELBASE AND GVW INFORMATION

1508 SERIES

DESCRIPTION	WHEEL BASE	GVW	CODE
Sedan delivery	115"	4,100	1508

3100 SERIES

DESCRIPTION	WHEEL BASE	GVW	CODE
Light-duty chassis w/flat-face cowl	116"	4,600	3102
Light-duty chassis w/cowl and windshield	116"	4,600	3112
Light-duty chassis and cab	116"	4,600	3103
Light-duty pickup	116"	4,600	3104
Light-duty panel	116"	4,600	3105
Light-duty carryall suburban w/panel type rear doors	116"	4,600	3106
Light-duty canopy express	116"	4,600	3107
Light-duty carryall suburban w/end-gate	116"	4,600	3116

3600 SERIES

DESCRIPTION	WHEEL BASE	GVW	CODE
Medium-duty chassis w/flat-face cowl	125 1/4"	5,800	3602
Medium-duty chassis w/cab	125 1/4"	5,800	3603
Medium-duty chassis w/cab and pickup box	125 1/4"	5,800	3604
Medium-duty chassis w/cab and platform	125 1/4"	5,800	3608
Medium-duty chassis w/cab, platform and stake	125 1/4"	5,800	3609
Medium-duty chassis w/cowl and windshield	125 1/4"	5,800	3612

3800 SERIES

DESCRIPTION	WHEEL BASE	GVW	CODE
Medium-duty chassis w/flat-face cowl	137"	6,700	3802
Medium-duty chassis w/cab	137"	6,700	3803
Medium-duty chassis w/cab and pickup box	137"	6,700	3804
Medium-duty chassis w/panel body	137"	6,700	3805
Medium-duty chassis w/canopy express body	137"	6,700	3807
Medium-duty chassis w/cab and platform	137"	6,700	3808
Medium-duty chassis w/cab, platform and stake	137"	6,700	3809
Medium-duty chassis w/cowl and windshield	137"	6,700	3812

1950 CHEVROLET TRUCK

TRANSMISSION IDENTIFICATION

1950 transmission serial number consist of letters and numerals which indicate the year, the type, the truck series, the plant where manufactured, and the unit number.

EXAMPLE: HG 1042

H or T .....Model year (1950)
G .....Regular Production Options (RPO)
1042.....42nd transmission built

1500 SERIES

TYPE	PLANT	CODE
Regular	Saginaw	HA
Regular	Muncie	HB
Regular	Toledo	HC
RPO	Saginaw	HG
RPO	Muncie	HH
RPO	Toledo	HJ

3100 SERIES

TYPE	PLANT	CODE
3-Speed	Saginaw	HN
3-Speed	Muncie	HO
3-Speed	Toledo	HP

3600 SERIES

TYPE	PLANT	CODE
3-Speed	Saginaw	HQ
3-Speed	Muncie	HR
3-Speed	Toledo	HS

3100/3600 SERIES

TYPE	PLANT	CODE
RPO,4-Speed	Saginaw	TK
RPO,4-Speed	Muncie	TL
RPO,4-Speed	Toledo	TM

3800 SERIES

TYPE	PLANT	CODE
4-Speed	Saginaw	TA
4-Speed	Muncie	TB
4-Speed	Toledo	TC

REAR AXLE IDENTIFICATION

The 1950 rear axle is identified by letters and numbers. The two letters signify the year, type, truck series and manufacturing plant. The numerals indicate the date of manufacture.

EXAMPLE: TE 409

T .....Model year (1950)
E.....4.11:1 Gear Ratio
4 .....Month built (April)
09 .....Day built (9th)

1500 SERIES

RATIO	PLANT	CODE
4.11:1	G&A*	HA
4.11:1	Buffalo	HB

3100 SERIES

RATIO	PLANT	CODE
4.11:1	G&A*	HE
4.11:1	Buffalo	HF

3600 SERIES

RATIO	PLANT	CODE
4.57:1	G&A*	HG
4.57:1	Buffalo	HH

3800 SERIES

RATIO	PLANT	CODE
5.14:1	G&A*	TJ
5.14:1	Buffalo	TK
5.14:1+	G&A*	TQ
5.14:1+	Buffalo	TR

* Detroit Gear & Axle
+ Dual rear wheels

1950 CHEVROLET TRUCK

REGULAR PRODUCTION OPTIONS (RPO)

DESCRIPTION	CODE
Double-acting shock absorbers	200
Long running boards and rear fenders	207
Rear axle ratio 5.14:1	208
Rear-view mirrors and brackets, LH/RH	210
Rear shock absorbers shield	211
Hydrovac power brake	213
Oil-bath air cleaner	216
Heavy-duty clutch	227
Oil filter	237
Governor	241
Dual tail and stop light	249
Heavy rear springs	254
Heavy duty radiator	256
Right-hand front seat	263
Auxiliary rear springs	267
Heavy-duty 3-spd. trans.	316
Heavy-duty 4-spd. trans.	318
Combination fuel and vacuum pump	340
Genuine leather trim	361
Front bumper (Forward-Control chassis)	367
Chrome radiator grille	386
Deluxe equip. cab & panel	390

COLOR IDENTIFICATION

EXTERIOR COLOR	CODE
Forester Green	5
Swift's Red	234A
Armour Yellow	234B
White	234C
Jet Black	234D
Omaha Orange	234E
Cape Maroon	234F
Mariner Blue	234G
Windsor Blue	234H
Seacrest Green	234J
Sun Beige	234K
Cream Medium	234L
Maryland Black	STD+
Mist Green	235A
Grecian Gray	235B
Falcon Gray	235C
Windsor Blue	235D
Crystal Green	235E
Oxford Maroon	235F
Rodeo Beige	235J
Mist Green/ Crystal Green	235G
Grecian Gray/ Falcon Gray	235H

+ Sedan delivery

ENGINE IDENTIFICATION

1950 engine serial number consist of letters and numerals which indicate the 1950 model, truck series, engine size, clutch size, the manufacturing plant, and the unit number.

EXAMPLE: HBA 1050

H.....Model year (1950)
B.....216 Regular
A.....Built in Flint
1050.....50th Engine built

1500 SERIES

ENGINE CODE	PLANT	NO. CYL.	CID	HORSE-POWER	COMP. RATIO	CARB	TRANS
HAA	Flint	6	216	92	6.6:1	1 BC	N/A
HAM	Tonawanda	6	216	92	6.6:1	1 BC	N/A
HAC	Flint	6	216	92	6.6:1	1 BC	N/A
HAP	Tonawanda	6	216	92	6.6:1	1BC	N/A

3100 SERIES

ENGINE CODE	PLANT	NO. CYL.	CID	HORSE-POWER	COMP. RATIO	CARB	TRANS
HBA	Flint	6	216	92	6.6:1	1 BC	N/A
HBM	Tonawanda	6	216	92	6.6:1	1 BC	N/A
BHCA*	Flint	6	216	92	6.6:1	1 BC	N/A
BHCM*	Tonawanda	6	216	92	6.6:1	1 BC	N/A

3600/3800 SERIES

ENGINE CODE	PLANT	NO. CYL.	CID	HORSE-POWER	COMP. RATIO	CARB	TRANS
AHCF*	Flint	6	235	92	6.6:1	1 BC	N/A
AHCM*	Tonawanda	6	235	92	6.6:1	1 BC	N/A

* "A" will precede prefix if motor is used on 3600 and 3800 series
* "B" will precede prefix if R.P.O. on 3100 series

ORIGINAL COPY

MODEL IDENTIF

TYPE		LIGHT DUTY	MEDIUM DUTY					
LINE		CONVENTIONAL			FORWARD CONTROL			
SERIES		3100	3600	3800	3700	3900	4100	4
DE-SCRIP-TION	Nominal rating	1/2 Ton	3/4 Ton	1 Ton	3/4 Ton	1 Ton	1-1/2 Ton	
	GVW range (lb)	4200-4600	5200-5800	5700-8800	6200-7000	6700-10000	7500-12500	
	Basic rr wheels	Single					Dual (except where	
	Wheelbase	116	125-1/4	137	125-1/4	137	137	1
FLAT FACE COWL CHASSIS For bodies other than Chevrolet		3102	3602	3802			4102 Single	4402
SCHOOL BUS FLAT FACE COWL CHASSIS For bodies other than Chevrolet								
WINDSHIELD COWL CHASSIS For bodies other than Chevrolet		3112	3612	3812			4112 Single	4412
FORWARD CONTROL CHASSIS For bodies other than Chevrolet					3742	3942		
CAB CHASSIS For bodies other than Chevrolet		3103	3603	3803			4103	4403
PLATFORM TRUCK (08) AND EXPRESS PLATFORM TRUCK (18) Chassis, cab, and platform			3608	3808			4108	4408 ar
STAKE TRUCK Chassis, cab, platform, and stake racks			3609 (3606+RPO 401)	3809 (3806+RPO 401)			4109 (4108+RPO 401)	4409 (4408+R
EXPRESS STAKE TRUCK Chassis, cab, platform, stake racks, and tail gate								4429 (4418+R
HIGH RACK (STOCK) TRUCK Chassis, cab, platform, and high stake racks								4419 (4408+R
PICKUP TRUCK Chassis, cab, and pickup box		3104	3604	3804				
PANEL TRUCK Chassis and panel body with two rear doors		3105		3805				
CANOPY EXPRESS TRUCK Chassis and open side body with canopy roof and tail gate		3107		3807				
SUBURBAN CARRYALL Chassis and 8 passenger closed body (3106 with doors) (3116 with gates)		3106 & 3116						

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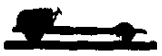
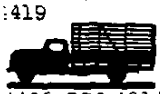
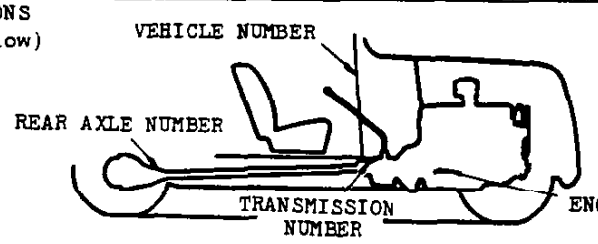
DENTIFICATION

HEAVY DUTY							
CONVENTIONAL					CAB-OVER-ENGINE		
4400	6100*	6400*	4500	6700	5100*	5400*	5700*
.on	2 Ton		1-1/2 Ton	2 Ton	2 Ton		
-12500	13000-16000		10500-12000	13500-15000	13000-16000		
where noted)	Dual				Dual		
161	137	161	161	199	110	134	158
4402 Single 	6102 	6402 					
			4502 	6702 			
4412 Single 	6112 	6412 					
4403 	6103 	6403 			5103 	5403 	5703 
4408 and 4418 	6108 	6408 and 6418 				5408 and 5418 	
4409  4408+RPO 401)	6109  (6108+RPO 401)	6409  (6408+RPO 401)				5409  (5408+RPO 401)	
4429  4418+RPO 401)		6429  (6418+RPO 401)				5429  (5418+RPO 401)	
4419  4408+RPO 401)		6419  (6408+RPO 401)				5419  (5408+RPO 401)	
	*- Also, Series 6100S, 6400S, 5100S, 5400S, 5700S are available (13000-15000 GVW) and identified as 1-1/2 Ton Special. Models and equipment in the 1-1/2 Ton Special Series are the same as the respective 2 Ton Series, except for the identification plate showing 15000 max GVW.						

SERIAL NUMBER LOCATIONS
(See descriptions below)



NOTE:
Serial numbers were obtained from Standards Department

	UNITS			3100	3600	3700	3800	3900	4100	4400	4502	6702	6100	6400	5100	5400	5700
VEHICLE	Prefix			HP	HR	HT	HS	HU	TJ	TK	TL	TX	TV*	TW*	TP*	TR*	TS*
	Number code and example			Includes symbols of assembly plant, model year, series, month assembled, and serial number. The first figure indicates the assembly plant, (see page 8); the first letter, the model year; the second letter, the series; the third letter, the month, "A" January, "B" February, etc; then the serial number beginning at 1001 at each plant for each series. 1-1/2 Ton Special models are numbered in sequence with similar basic series.												
	Plate location			Flat Face Cowl Chassis, on cowl inner panel LH; Forward Control Chassis, on temporary instrument panel support LH; All others, on body hinge pillar LH													
REAR AXLE	Prefix	Detroit	Regular	HE	HG	HQ	TJ	TC	TL			TG					
			RPO 202									TN (two-speed axle)					
			RPO 204						TE								
			RPO 208		HQ												
			RPO 295				TQ**	TA**									
		Buffalo	Regular	HF	HH	HR	TK	TD	TM			TH					
			RPO 202									TP (two-speed axle)					
			RPO 204						TF								
			RPO 208		HR												
			RPO 295				TR**	TB**									
	Number code and example			Includes symbols for model year, model and manufacturing plant, and month and day of assembly. Example: TC-507. T = 1950 model year; C = regular 3900 rear axle, built in Detroit; 5 = fifth month; 07 = seventh day.												
	Location			Series 3100: on front face of differential carrier flange, right side All others: on the top of differential carrier, at right side													
ENGINE	Prefix	Flint	Regular	HBA	AHCA	HCF	AHCA	HCF	HCA			HEA			HDA		
			RPO 227	BHCA													
			RPO 225						AHEA								
			RPO 212						HCD								
			RPO 213				AHCD										
		Tonawanda	Regular	HBM	AHCM	HCS	AHCM	HCS	HCM			HEM			HDM		
			RPO 227	BHCM													
			RPO 225						AHEM								
			RPO 212						HCQ								
			RPO 213				AHCQ										
	Number code			Serial numbers begin with 1001 at each plant and continue in sequence													
	Location			On crankcase at rear of distributor, on right side of engine													
TRANSMISSION	Prefix	Saginaw	Regular	HN	HQ		TA	TD	TA						TD		
			RPO	TK (RPO 318)							TG(RPO 348)						
		Muncie	Regular	HO	HR		TB	TE	TB						TE		
			RPO	TL (RPO 318)							TH(RPO 348)						
		Toledo	Regular	HP	HS		TC	TF	TC						TF		
			RPO	TM (RPO 318)							TJ(RPO 348)						
	Number code			Three-speed: start with 1001 at each plant and continue in sequence Four-speed: start with 1001 at each plant and continue in sequence													
	Location			Three-speed: on left side of case at rear of cover Four-speed: on rear of case, just below cover on right side													

* - TVS for 6100S, TWS for 6400S, TPS for 5100S, TRS for 5400S, and TSS for 5700S series.
** - RPO 295 for dual rear tires on 3802-03-08-12 and 3942.

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VEHICLE WEIGHTS

LIGHT DUTY TRUCKS

Model	Shipping			Curb		
	Front	Rear	Total	Front	Rear	Total
3102 ⊕	1520	920	2440	1570	1000	2570
3103	1780	1130	2910	1860	1200	3050
3104	1775	1400	3175	1845	1470	3315
3105	1725	1650	3375	1775	1730	3505
3106	1755	1915	3670	1805	1995	3800
3107 ⊕	1745	1590	3335	1795	1670	3465
3112 ⊕	1580	960	2540	1630	1040	2670
3116	1755	1920	3675	1805	2000	3805

MEDIUM DUTY TRUCKS

Model	Shipping			Curb		
	Front	Rear	Total	Front	Rear	Total
3602 ⊕	1640	1070	2710	1705	1175	2880
3603	1885	1240	3125	1960	1345	3305
3604	1905	1610	3515	1980	1715	3695
3608 ⊕	1910	1630	3540	1985	1735	3720
3609	1905	1795	3700	1980	1900	3880
3610 ⊕	1710	1100	2810	1775	1205	2980
3742	1540	925	2465	1530	1145	2675
3802	1835	1150	2985	1890	1285	3175
3803	2120	1300	3420	2200	1405	3605
3804	2130	1800	3930	2210	1905	4115
3805	2045	2145	4190	2100	2280	4380
3807 ⊕	2095	2050	4145	2150	2185	4335
3808	2130	1840	3970	2210	1945	4155
3809	2140	2065	4205	2220	2170	4390
3812 ⊕	1940	1140	3080	1995	1275	3270
3942	1670	1020	2690	1680	1235	2915

HEAVY DUTY TRUCKS

Model	Shipping			Curb		
	Front	Rear	Total	Front	Rear	Total
4102 ⊕	2005	1370	3375	2050	1525	3575
4103	2245	1720	3965	2325	1825	4150
4108 ⊕	2250	2285	4535	2330	2390	4720
4109	2260	2510	4770	2340	2615	4955
4112 ⊕	2070	1410	3480	2115	1565	3680

⊕ - Estimated weights

HEAVY DUTY TRUCKS - Continued

Model	Shipping			Curb		
	Front	Rear	Total	Front	Rear	Total
4402 ⊕	2080	1405	3485	2140	1545	3685
4403	2355	1745	4100	2450	1835	4285
4408 ⊕	2395	2435	4830	2490	2525	5015
4409	2440	2680	5120	2535	2770	5305
4412 ⊕	2150	1440	3590	2210	1580	3790
4418 ⊕	2385	2430	4815	2480	2520	5000
4419 ⊕	2400	2995	5395	2495	3085	5580
4429 ⊕	2420	2735	5155	2515	2825	5340
5103 *	2620	1860	4480	2720	1970	4690
5403 *	2665	1905	4570	2775	2005	4780
5408 *⊕	2735	2570	5305	2845	2670	5515
5409 *⊕	2740	2855	5595	2850	2955	5805
5418 *⊕	2725	2565	5290	2835	2665	5500
5419 *⊕	2765	3105	5870	2875	3205	6080
5429 *⊕	2745	2885	5630	2855	2985	5840
5703 *	2745	1920	4665	2860	2015	4875
6102 *⊕	2155	1850	4005	2205	2015	4220
6103 *	2430	2020	4450	2520	2140	4660
6108 *⊕	2415	2595	5010	2505	2715	5220
6109 *⊕	2425	2820	5245	2515	2940	5455
6112 *⊕	2220	1890	4110	2270	2055	4325
6402 *⊕	2205	1875	4080	2270	2025	4295
6403 *	2495	2035	4530	2590	2150	4740
6408 *⊕	2555	2695	5250	2650	2810	5460
6409 *	2590	2950	5540	2685	3065	5750
6412 *⊕	2280	1905	4185	2345	2055	4400
6418 *⊕	2520	2715	5235	2615	2830	5445
6419 *⊕	2655	3160	5815	2750	3275	6025
6429 *⊕	2565	3010	5575	2660	3125	5785

* - Shipping weight and curb weight is approximately the same for corresponding 5100S, 5400S, 5700S, 6100S, 6400S models in the "1-1/2 Ton Special" series.

SCHOOL BUS CHASSIS

Model	Shipping			Curb		
	Front	Rear	Total	Front	Rear	Total
4502 ⊕	2135	1720	3855	2230	1885	4115
6702	2285	2080	4365	2395	2255	4650

VEHICLE WEIGHT CONDITIONS

SHIPPING WEIGHT: This weight is established by the Traffic Department; it is the basic weight of the vehicle with all regular equipment and with grease and oil wherever required. It does not include the weights of gasoline or water.

CURB WEIGHT: This is the weight of the empty vehicle ready to drive. It is the shipping weight plus the weight of gasoline, water, and spare tire on models which do not include the spare tire as basic equipment.

FOR GROSS VEHICLE WEIGHT: See page 95

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EQUIPMENT WEIGHTS *

EQUIPMENT	SHIPPING WEIGHT
Cab, Conventional	590
Cab, COE	612
Cowl unit, Flat Face	128
Cowl and Windshield unit	228
Body, Suburban Carryall:	
3106, with rear doors	1360
3116, with tail and lift gates	1374
Body, Panel:	
3105	1048
3805	1256
Body, Canopy Express:	
3107	1027
3807	1201
Body, Pickup:	
3104	258
3604	290
3804	419
Platform, Stake Truck:	
3608	414
3808, 4108, 6108	552
4408, 5408, 6408	729
Platform, Express Stake Truck:	
4418, 5418, 6418	738
Racks, Stake Truck:	
3609	160
3809, 4109, 6109	235
4409, 5409, 6409	288
Racks and Tail Gate, Express Stake Truck:	
4429, 5429, 6429	340
Racks, High Rack (Stock) Truck:	
4419, 5419, 6419	563

Each weight shown below is the total weight of one tire and tube, and one wheel assembly.

TIRE SIZE AND PLY RATING	ASSEMBLY WEIGHT
6.00-16-6	48
6.70-15-4	43
6.70-15-6	45
6.50-16-6	51
15-6	72
15-8	73
7.00-17-6	85
7.00-17-8	89
7.50-17-8	95
7.50-17-10	102
7.00-18-8	97
6.50-20-6	97
6.50-20-8	100
7.00-20-8	108
7.00-20-10	118
7.50-20-8	130
7.50-20-10	143
8.25-20-10	154
8.25-20-12	160
9.00-20-10	190

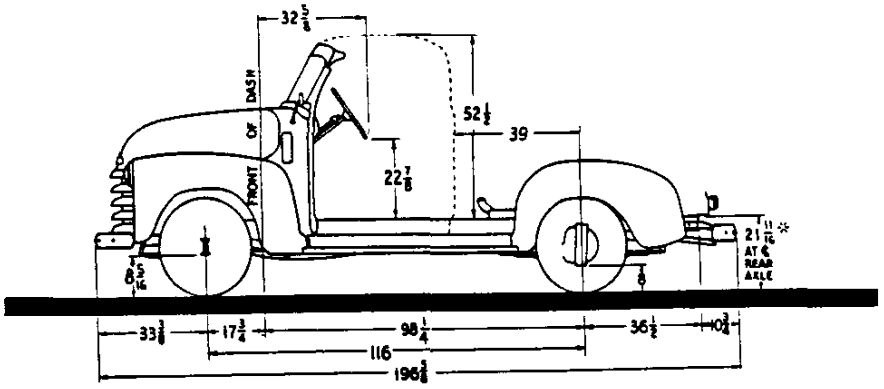
Each weight shown below is the weight to be added when the listed equipment is specified in addition to, or in place of regular equipment. Deductions for deleted regular equipment are included in these weights.

RPO EQUIPMENT	ADDITIONAL WEIGHT
Axle, two-speed:	
5000, 6000	111
Brake, propeller shaft:	
4502, 6702	23 •
Brake booster, hydraulic-vacuum:	
3800, 3942, 4000	19
Bumper, front:	
3742, 3942	79
Filter, oil:	
3100, 3600, 3800, 4000, 5000, 6000	16
Frame, heavy duty:	
4100	58
Less rear fenders: Models 3102-03-12 -- Minus	40 x
Long running boards and rear fenders:	
3600	73 •
3800	78
Platform body equipment (high sill):	
3608, 3609 (with 17" tires)	25
Radiator, heavy duty:	
3600	14
3800, 4000	11
Seat, auxiliary:	
3105, 3107, 3805, 3807	48
Spare wheel and carrier:	
3742 with 15" wheel	62
3742 with 17" wheel	70
3942 with 17" wheel	75
3942 with 18" wheel	56
Shock absorbers, front, double acting:	
4000, 5000, 6000, cam and lever type	23
Shock absorbers, rear, double acting:	
3800 direct acting	19
3942 cam and lever type	23
3942 cam and lever type with stabilizer --	28
4000, 5000, 6702 cam and lever type	39
Springs, rear:	
3100 heavy duty	14
3800 auxiliary	43
3942 auxiliary	53
4100, 4400 auxiliary	77
6100, 6400, 11-leaf 2-stage -------- Minus	76
School Bus chassis equipment:	
3802	65 •
Transmission, 4-speed:	
3100, 3600, 3700	77

* - All of the weights shown on this page include attaching parts and are sufficiently accurate for all normal purposes. If these weights are used in combinations, other than those shown, the results should be verified with this department, to avoid errors of misinterpretation.

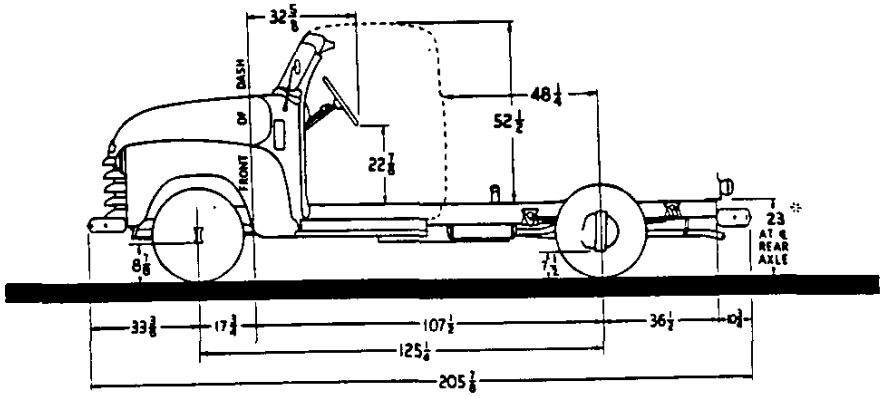
4-14-50. Revised: 7-17-50, • - Weights revised; x - Less rear fenders added.

3102 1/2 TON FLAT FACE COWL CHASSIS
3103 1/2 TON CAB CHASSIS
3112 1/2 TON WINDSHIELD COWL CHASSIS



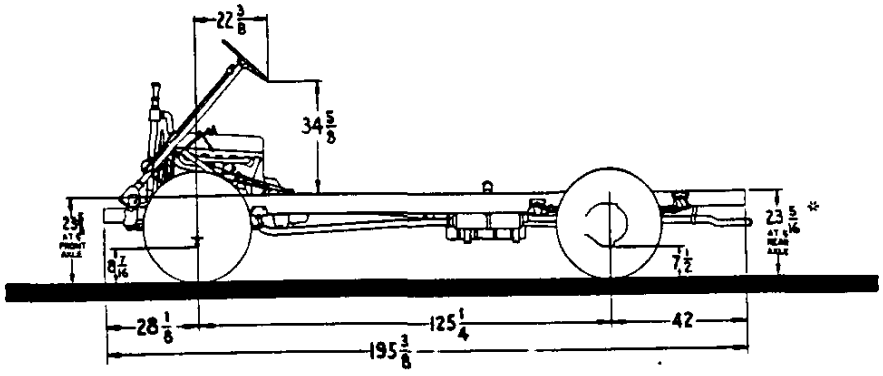
* - Loaded height with 6.00-16-6 pr tires

3602 3/4 TON FLAT FACE COWL CHASSIS
3603 3/4 TON CAB CHASSIS
3612 3/4 TON WINDSHIELD COWL CHASSIS



* - Loaded height with 15"-6 pr tires

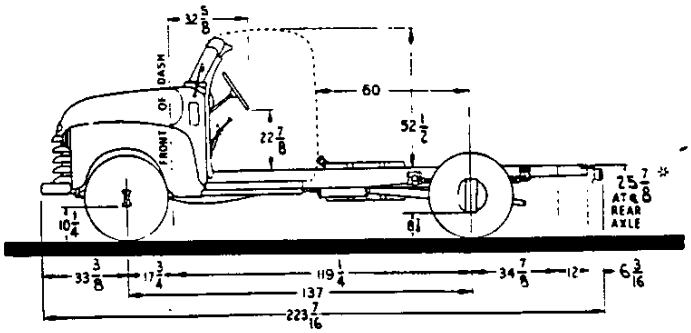
3742 3/4 TON FORWARD CONTROL CHASSIS



* - Loaded height with 15"-6 pr tires

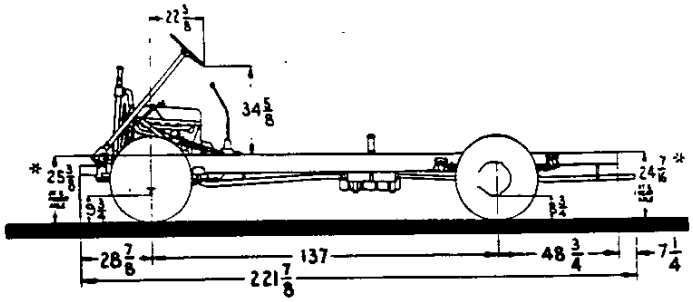
CONTINUED

3802 1 TON FLAT FACE COWL CHASSIS
3803 1 TON CAB CHASSIS
3812 1 TON WINDSHIELD COWL CHASSIS



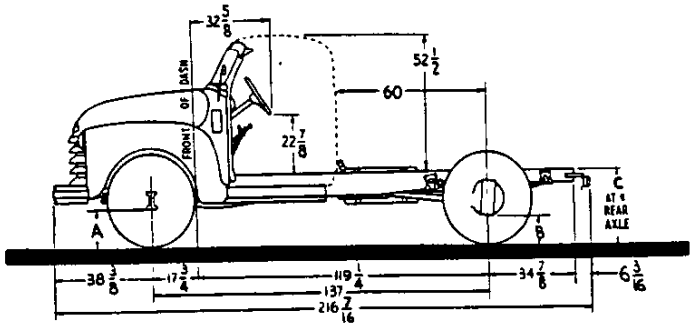
* - Loaded height with 7.00-17-6 pr tires

3942 1 TON FORWARD CONTROL CHASSIS



* - Loaded height with 7.00-17-6 pr tires

4102 1-1/2 TON FLAT FACE COWL CHASSIS
4103 1-1/2 TON CAB CHASSIS
4112 1-1/2 TON WINDSHIELD COWL CHASSIS

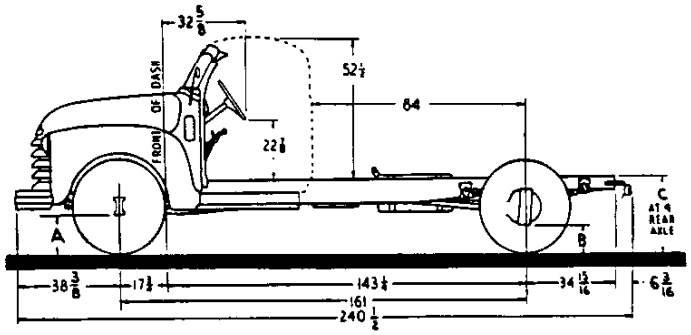


MODEL	TIRES	A *	B *	C *
4103	6.50-20-6 Dual	11-1/4	8-11/16	28-3/8
4102-12	7.00-20-8	11-3/4	9-3/16	28-7/8

* - Loaded heights

CONTINUED

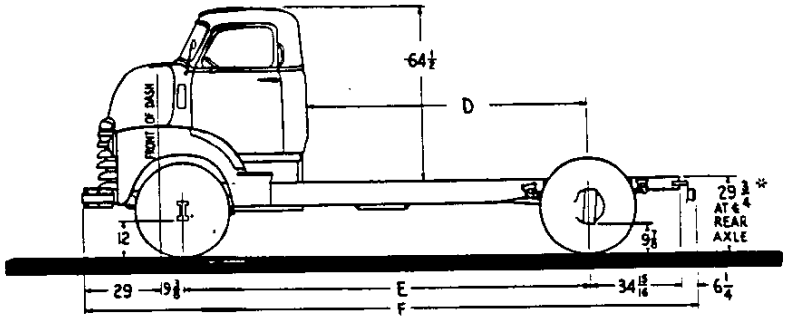
4402 1-1/2 TON FLAT FACE COWL CHASSIS
4403 1-1/2 TON CAB CHASSIS
4412 1-1/2 TON WINDSHIELD COWL CHASSIS



MODEL	TIRES	A *	B *	C *
4403	6.50-20-6 Dual	11-1/4	8-11/16	28-7/8
4402-12	7.00-20-8	11-3/4	9-3/16	29-3/8

* - Loaded heights

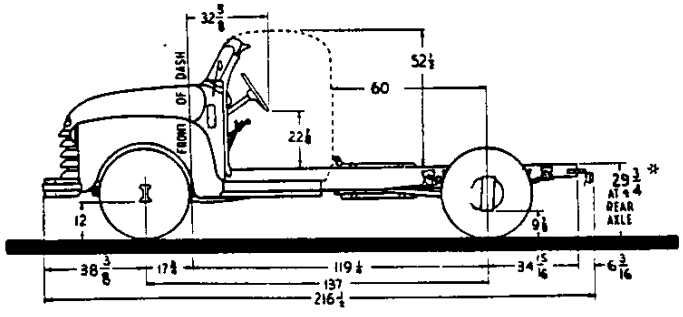
5103S 1-1/2 TON SPECIAL AND 5103 2 TON COE CAB CHASSIS
5403S 1-1/2 TON SPECIAL AND 5403 2 TON COE CAB CHASSIS
5703S 1-1/2 TON SPECIAL AND 5703 2 TON COE CAB CHASSIS



MODEL	D	E	F
5103	60-1/8	110	189-9/16
5403	84-1/8	134	213-9/16
5703	108-1/8	158	237-9/16

* - Loaded height with 7.50-20-8 pr dual tires

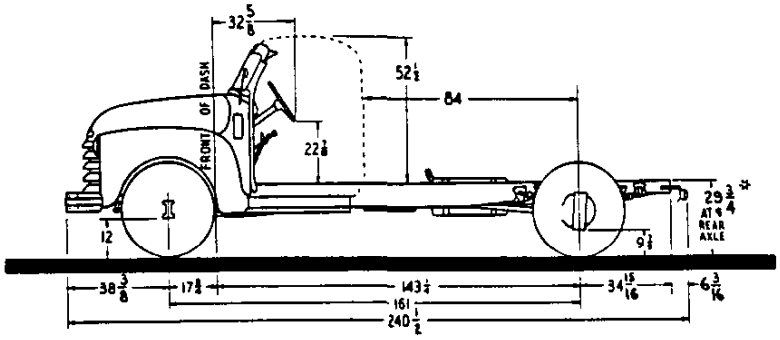
6102S 1-1/2 TON SPECIAL AND 6102 2 TON FLAT FACE COWL CHASSIS
6103S 1-1/2 TON SPECIAL AND 6103 2 TON CAB CHASSIS
6112S 1-1/2 TON SPECIAL AND 6112 2 TON WINDSHIELD COWL CHASSIS



* - Loaded height with 7.50-20-8 pr dual tires

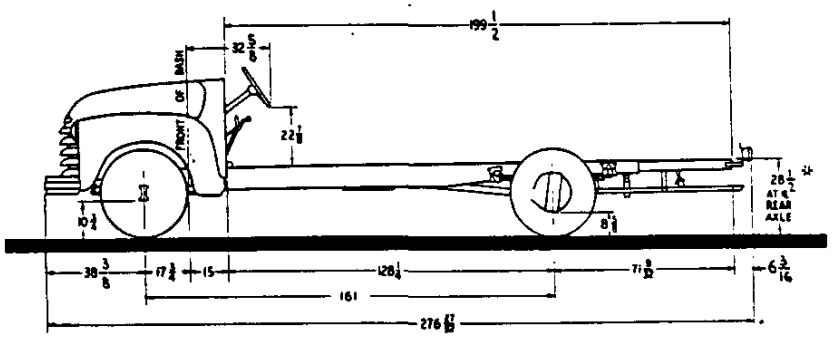
CONTINUED

6402S 1-1/2 TON SPECIAL AND 6402 2 TON FLAT FACE COWL CHASSIS
6403S 1-1/2 TON SPECIAL AND 6403 2 TON CAB CHASSIS
6412S 1-1/2 TON SPECIAL AND 6412 2 TON WINDSHIELD COWL CHASSIS



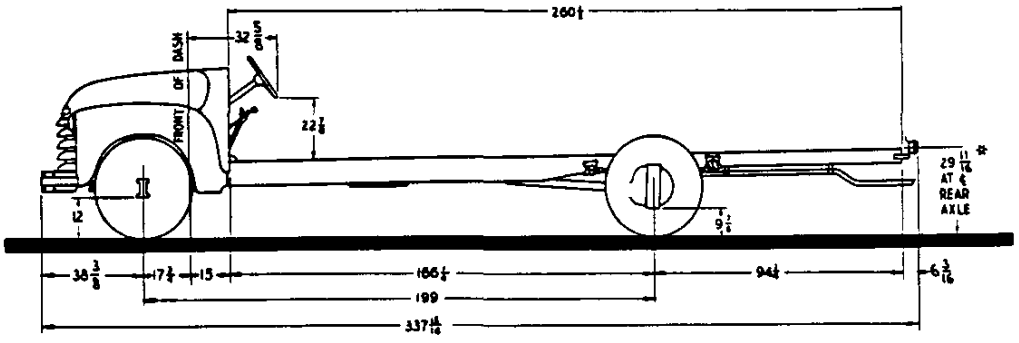
* - Loaded height with 7.50-20-8 pr dual tires

4502 1-1/2 TON SCHOOL BUS FLAT FACE COWL CHASSIS



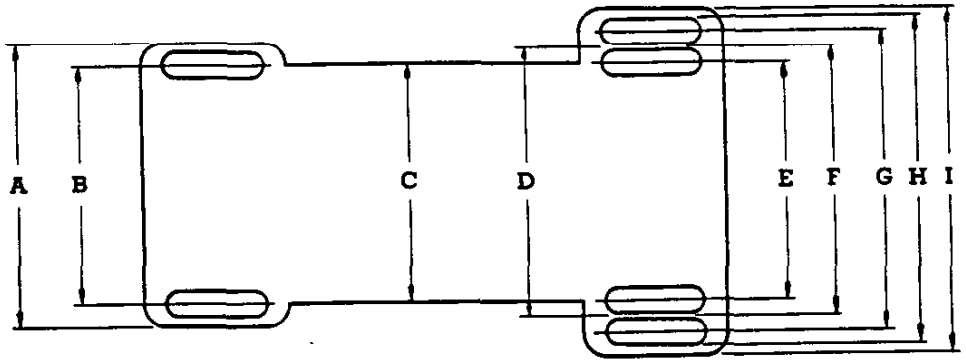
* - Loaded height with 6.50-20-6 pr dual tires

6702 2 TON SCHOOL BUS FLAT FACE COWL CHASSIS



* - Loaded height with 7.50-20-8 pr dual tires

CHASSIS TREADS AND OVERALL WIDTHS



TIRES	MODELS	A ACROSS FRONT FENDERS	B FRONT WHEEL TREAD	C ACROSS RUNNUNG BOARDS	D OVER REAR HUBS OR HUB CAPS	E INNER WHEEL TREAD	F DUAL MEAN TREAD	G OUTER WHEEL TREAD	H OVER REAR TIRES	I OVER REAR FENDERS
6.00-16	3100	72-5/8	56-9/16	72-15/16	69-3/4	61			67-3/8	74-7/16
6.50-16									67-7/8	
6.70-15									68	
15"			57-11/16		70-3/4	62-1/8			69-7/8	
7.00-17	3600		57		72-1/8	62-3/8			70	74-1/2, 3604
7.50-17			56-1/4			61-3/4			69-5/16	
15"	3700		62			62-3/8			69-3/4	
7.00-17			61-7/16			61-3/4			70	
7.50-17									69-5/16	
7.00-17	3800	72-5/8	56-1/4	72-15/16					69-3/4	
7.50-17									69-5/16	75-1/4 • 3805-07; 74-1/2,3804
7.00-18	3802-03--08-09-12		56-3/4		70-15/16	54-1/4	63-1/4	72-1/4	69-7/8	
7.00-17	3900		61-7/16		72-1/8	61-3/4			79-13/16	
7.50-17									69-5/16	
7.00-18			61-13/16		70-15/16	54-1/4	63-1/4	72-1/4	69-3/4	
7.00-20	4100,4400	74-7/8	56	74-1/16	77-1/4	56-1/2*	66*	75-1/2*	79-13/16	
6.50-20									64-1/8*	
7.00-20									82-3/4*	
6.50-20	4502		60						83-1/8*	
7.00-20									82-3/4*	
7.50-20	4100,4400		55-3/4	74-1/16		56-1/4*		75-3/4*	83-1/8*	
8.25-20	5000,5000S	77-9/16	60-1/4	77-7/16	79-5/8	57-3/4*	68-1/2*	79-1/4*	84-3/16*	
7.50-20	6100-6400	74-7/8	58-3/4	74-1/16					87-3/4*	
8.25-20	6100S-6400S								88-1/4*	
7.50-20	6702								87-3/4*	
8.25-20									88-1/4*	
9.00-20	5000,5000S	77-9/16	59-1/2⊕	77-7/16		57*		80*	89-3/4*	
	6100,6400 6100S,6400S	74-7/8	58⊕	74-1/16						

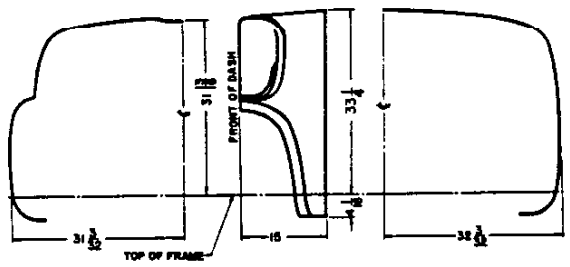
* - Treads are for vehicles equipped with forged hubs; add 1/2" when cast hubs are used.

⊕ - Front wheel tread when 6.5 wheels are used with 8.25-20 tires on front, and 9.00-20 tires on rear.

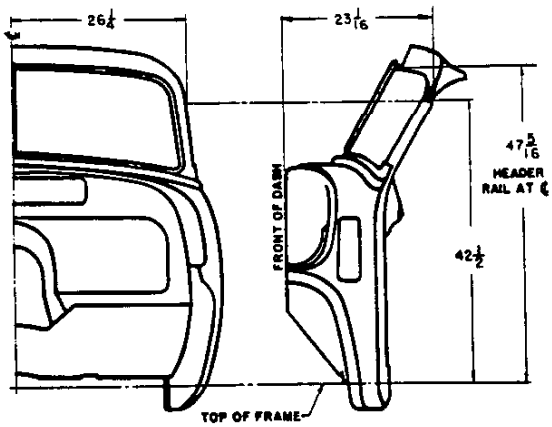
4-14-50. Revised: 7-17-50, • - Dimension corrected.

COWL DIMENSIONS

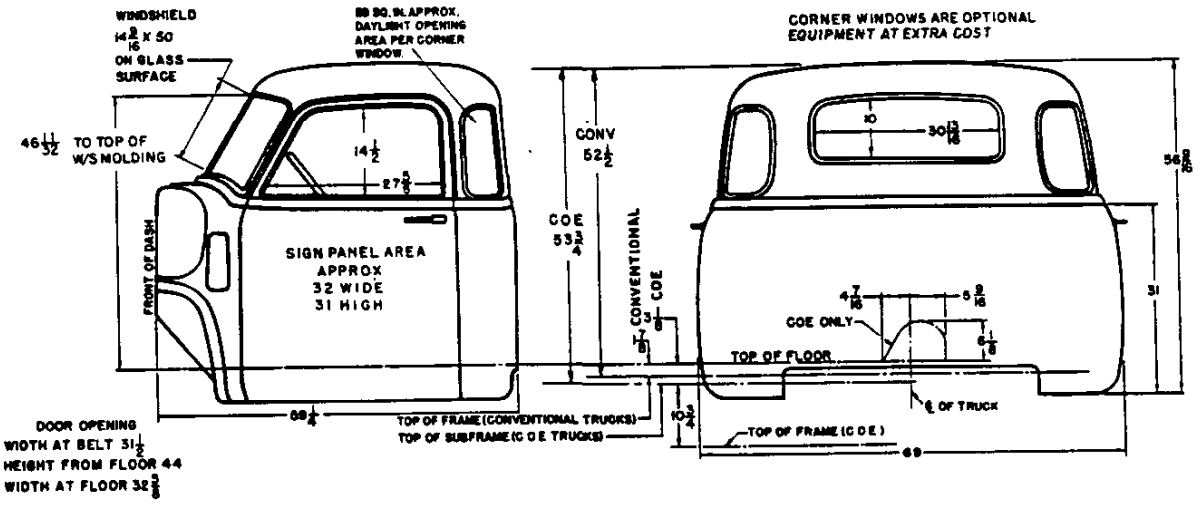
FLAT FACE COWL UNIT



COWL AND WINDSHIELD UNIT

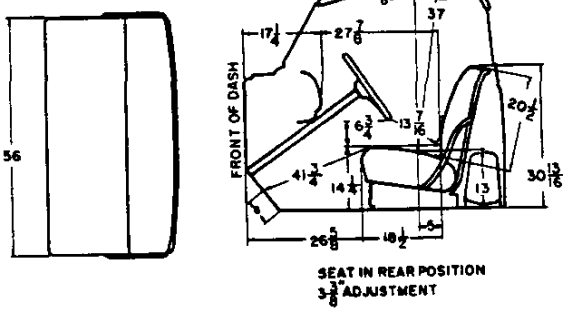


CAB EXTERIOR DIMENSIONS

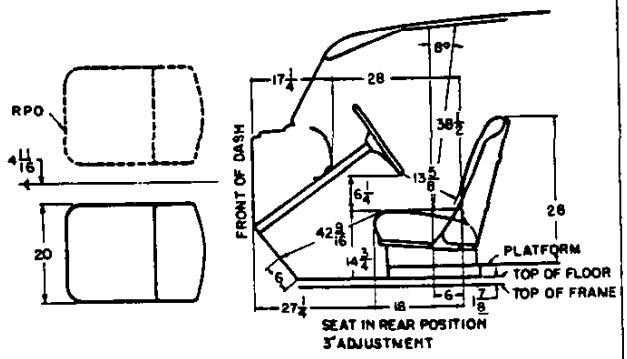


DRIVER COMPARTMENT AND SEAT DIMENSIONS

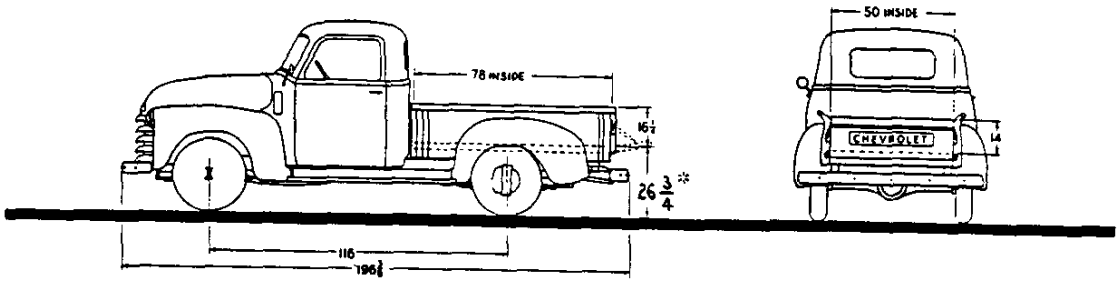
CAB



PANEL AND CANOPY EXPRESS

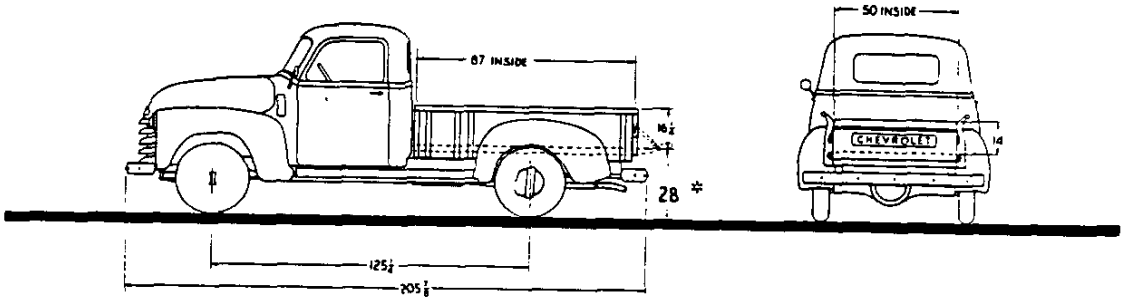


3104 1/2 TON PICKUP TRUCK



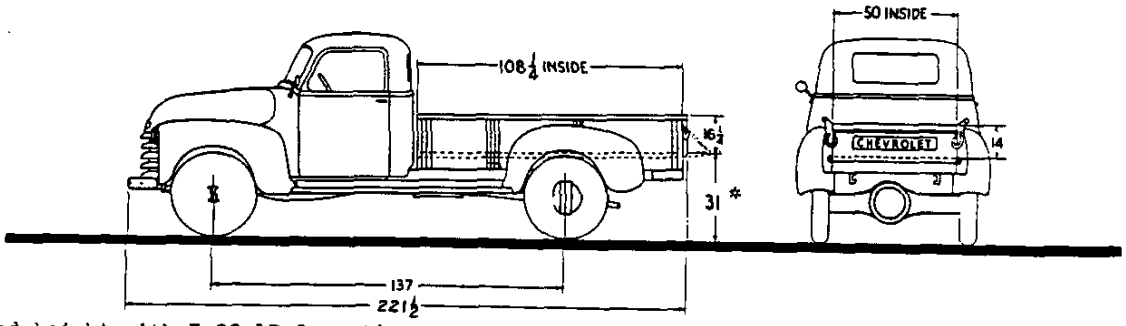
*-Loaded height with 6.00-16-6 pr tires

3604 3/4 TON PICKUP TRUCK



*-Loaded height with 15"-6 pr tires

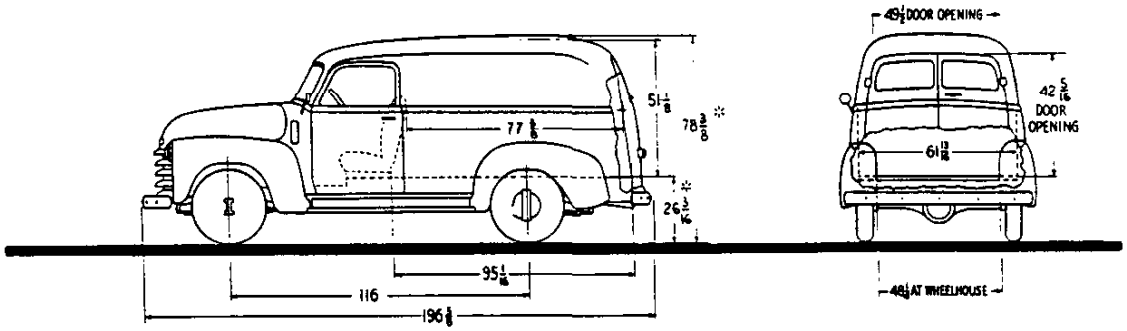
3804 1 TON PICKUP TRUCK



*-Loaded height with 7.00-17-6 pr tires

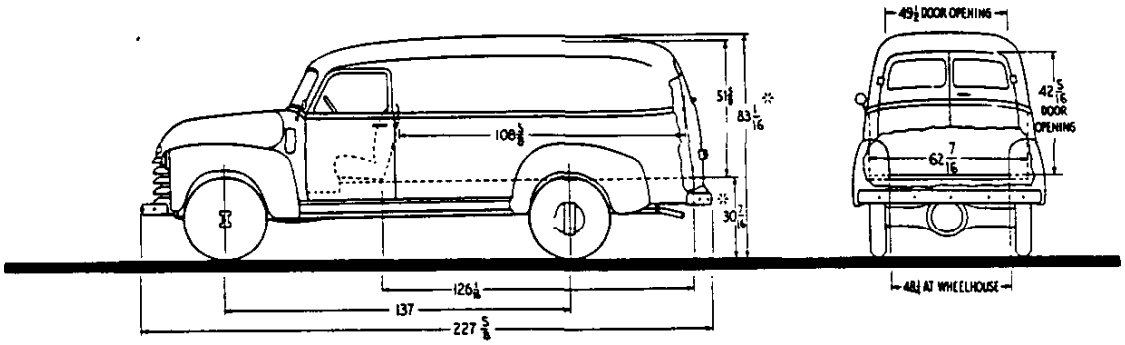
CONTINUED

3105 1/2 TON PANEL TRUCK



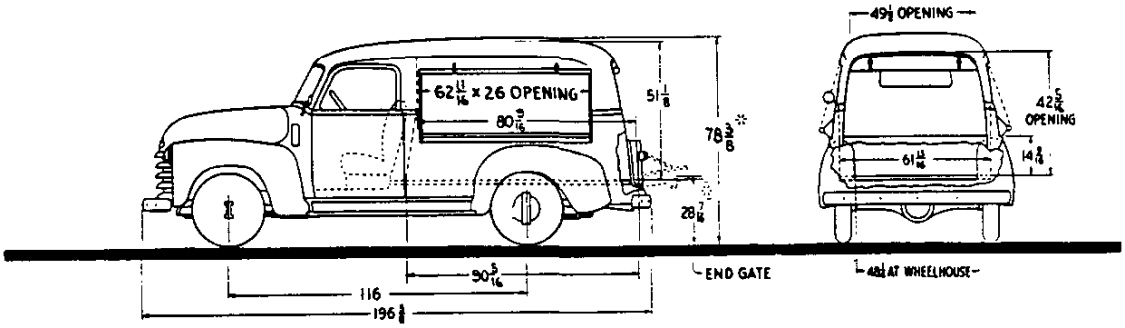
*-Loaded height with 6.00-16-6 pr tires SEAT IN FORWARD POSITION

3805 1 TON PANEL TRUCK



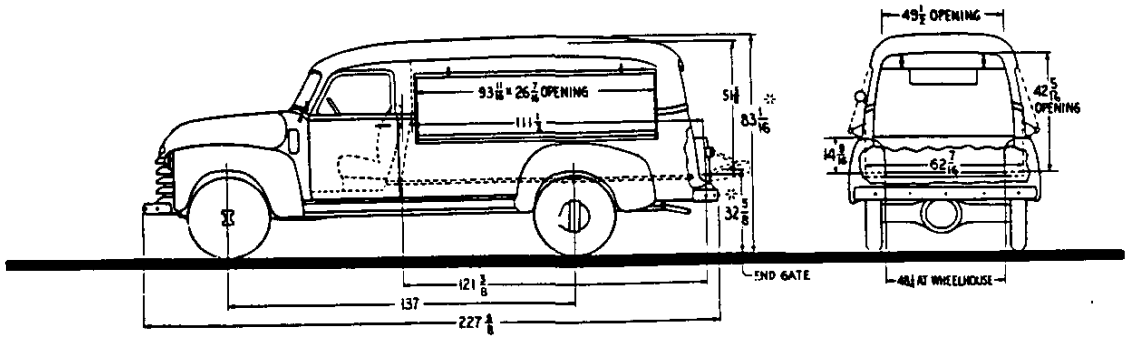
*-Loaded height with 7.00-17-6 pr tires SEAT IN FORWARD POSITION

3107 1/2 TON CANOPY EXPRESS TRUCK



*-Loaded height with 6.00-16-6 pr tires SEAT IN FORWARD POSITION

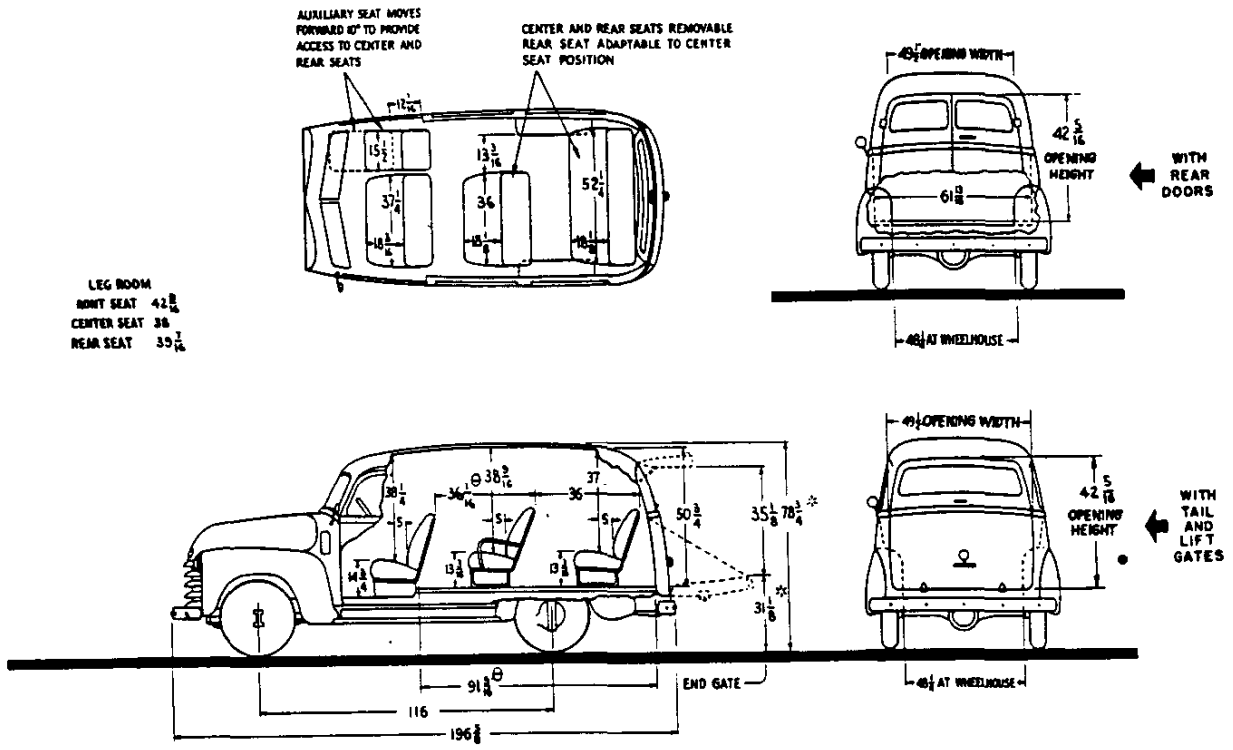
3807 1 TON CANOPY EXPRESS TRUCK



*-Loaded height with 7.00-17-6 pr tires SEAT IN FORWARD POSITION

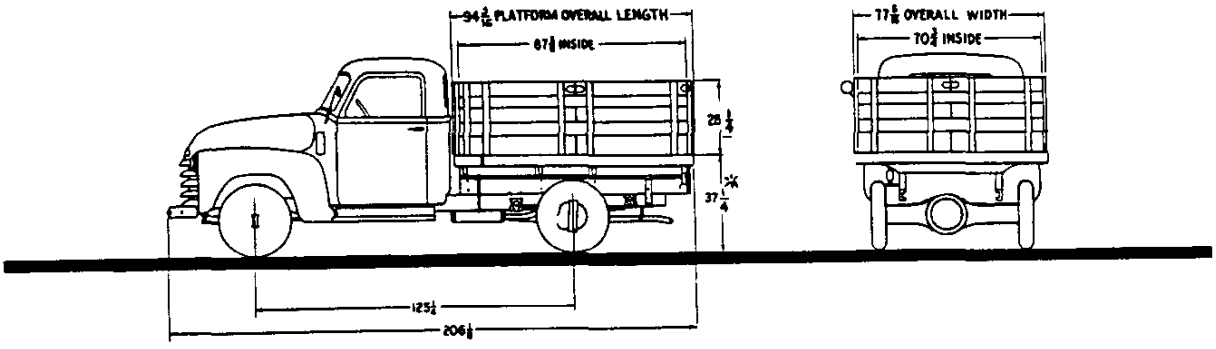
CONTINUED

3106 1/2 TON SUBURBAN CARRYALL - PANEL REAR DOORS
3116 1/2 TON SUBURBAN CARRYALL - END GATES



* - Loaded height with 6.00-16-6 pr tires
θ - Dimensions measured with front seat in rear position. Seat adjustment 3".

3608 3/4 TON PLATFORM TRUCK
3609 3/4 TON STAKE TRUCK

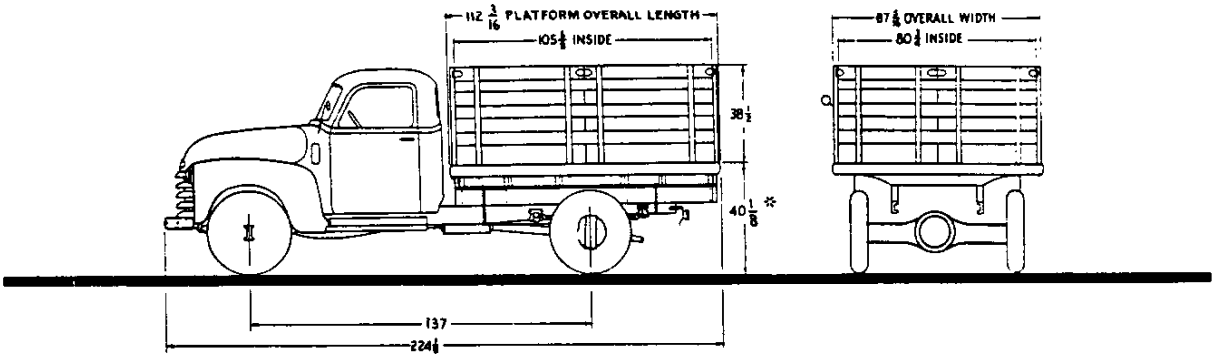


* - Loaded height with 15"-6 pr tires

CONTINUED

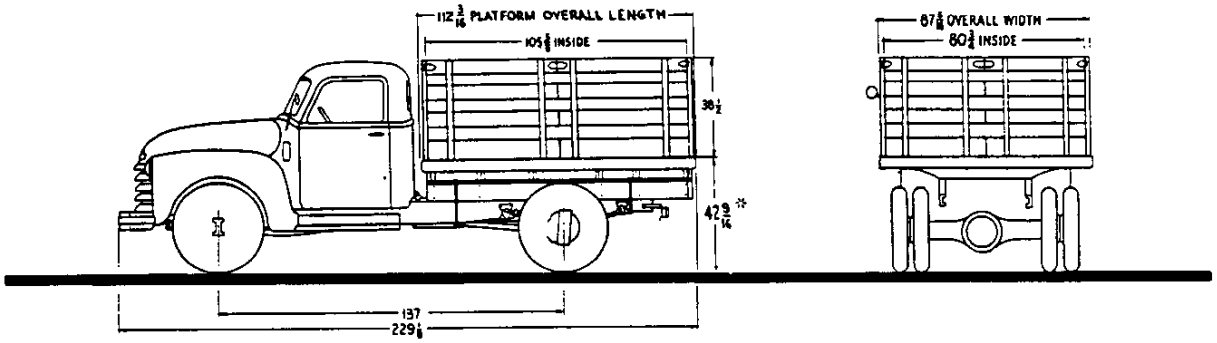
4-14-50. Revised: 7-17-50, • - The figure "6" removed.

3808 1 TON PLATFORM TRUCK
3809 1 TON STAKE TRUCK



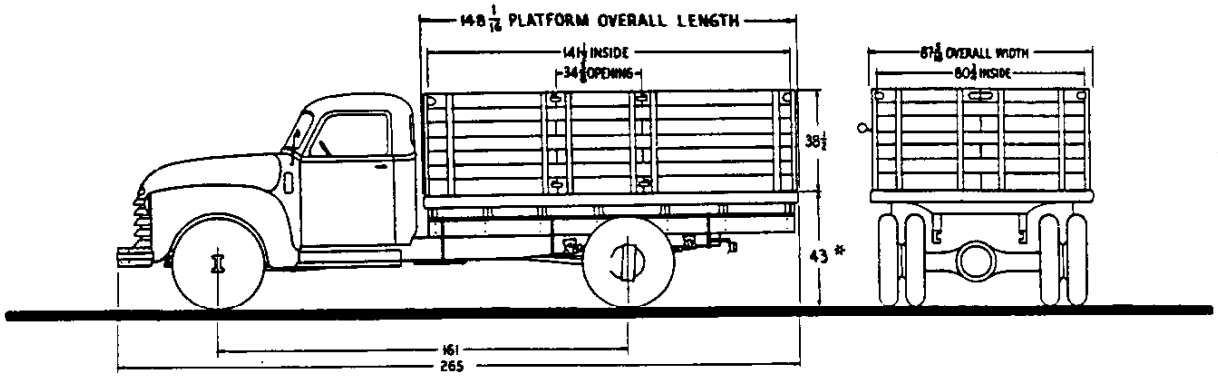
* - Loaded height with 7.00-17-6 pr tires

4108 1-1/2 TON PLATFORM TRUCK
4109 1-1/2 TON STAKE TRUCK



* - Loaded height with 6.50-20-6 pr dual tires

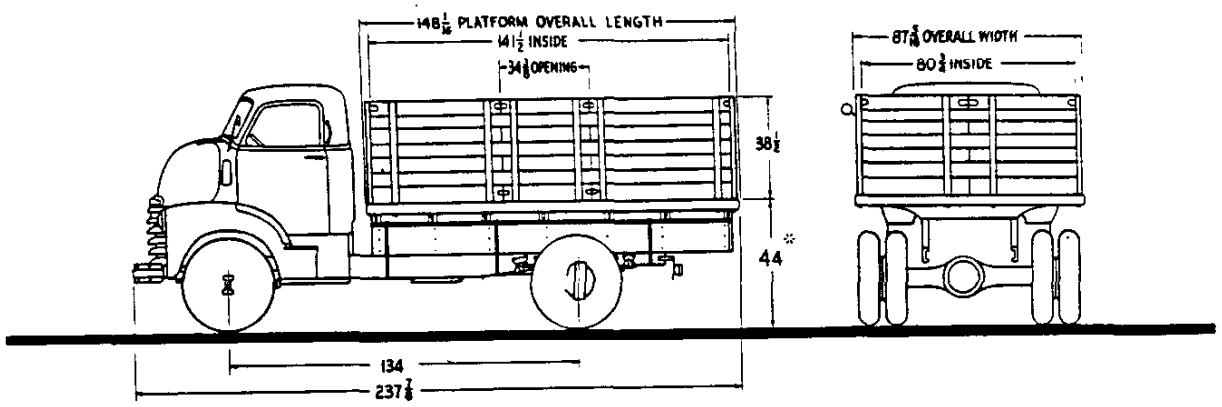
4408 1-1/2 TON PLATFORM TRUCK
4409 1-1/2 TON STAKE TRUCK



* - Loaded height with 6.50-20-6 pr dual tires

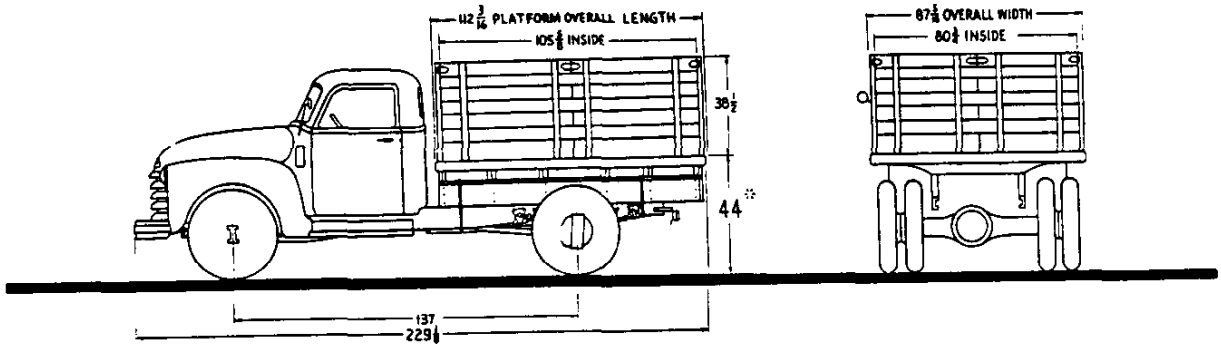
CONTINUED

5408S 1-1/2 TON SPECIAL AND 5408 2 TON COE PLATFORM TRUCKS
5409S 1-1/2 TON SPECIAL AND 5409 2 TON COE STAKE TRUCKS



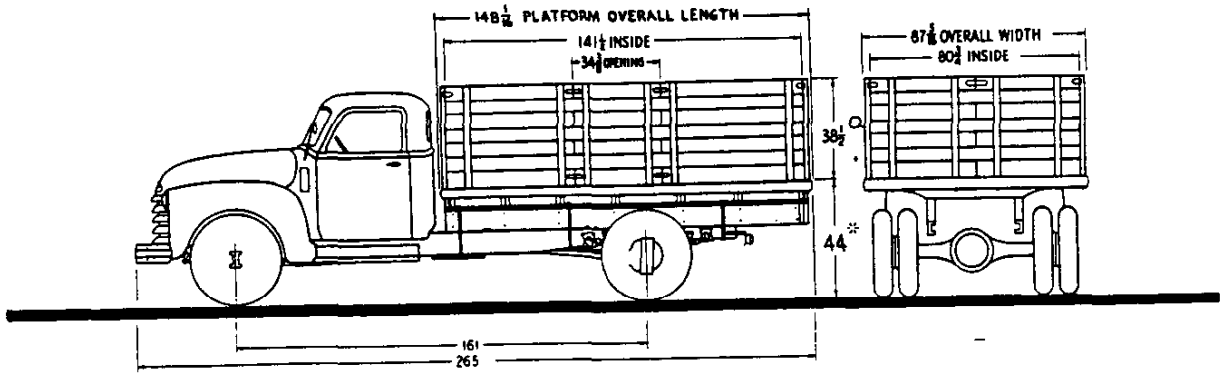
*-Loaded height with 7.50-20-8 pr dual tires

6108S 1-1/2 TON SPECIAL AND 6108 2 TON PLATFORM TRUCKS
6109S 1-1/2 TON SPECIAL AND 6109 2 TON STAKE TRUCKS



*-Loaded height with 7.50-20-8 pr dual tires

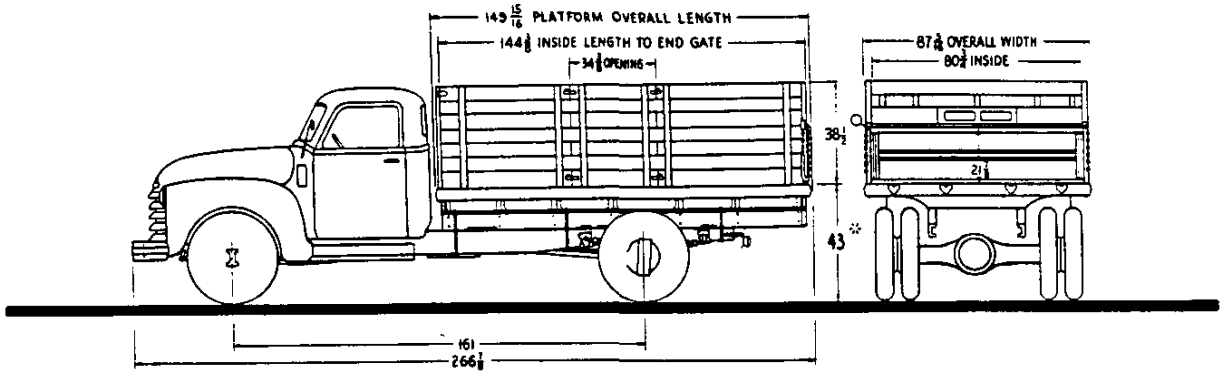
6408S 1-1/2 TON SPECIAL AND 6408 2 TON PLATFORM TRUCKS
6409S 1-1/2 TON SPECIAL AND 6409 2 TON STAKE TRUCKS



*-Loaded height with 7.50-20-8 pr dual tires

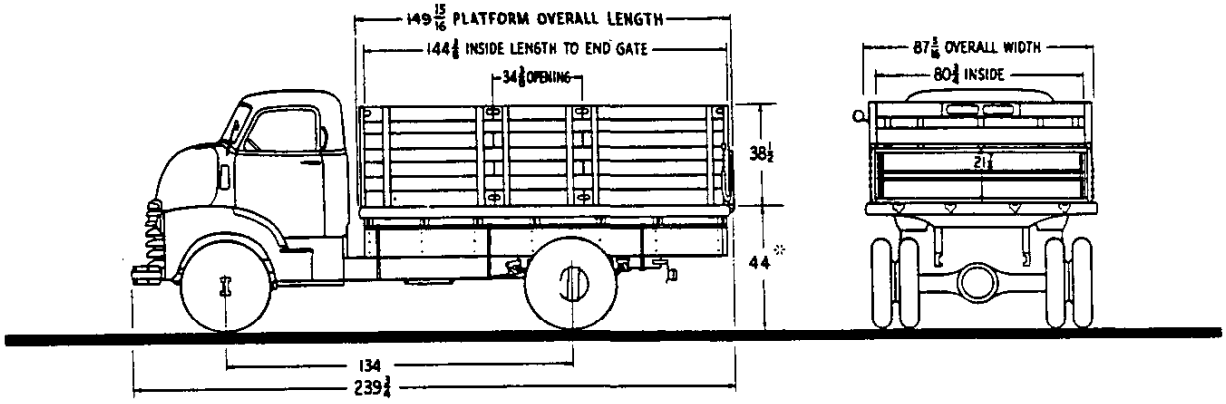
CONTINUED

4418 1-1/2 TON EXPRESS PLATFORM TRUCK
4429 1-1/2 TON EXPRESS STAKE TRUCK



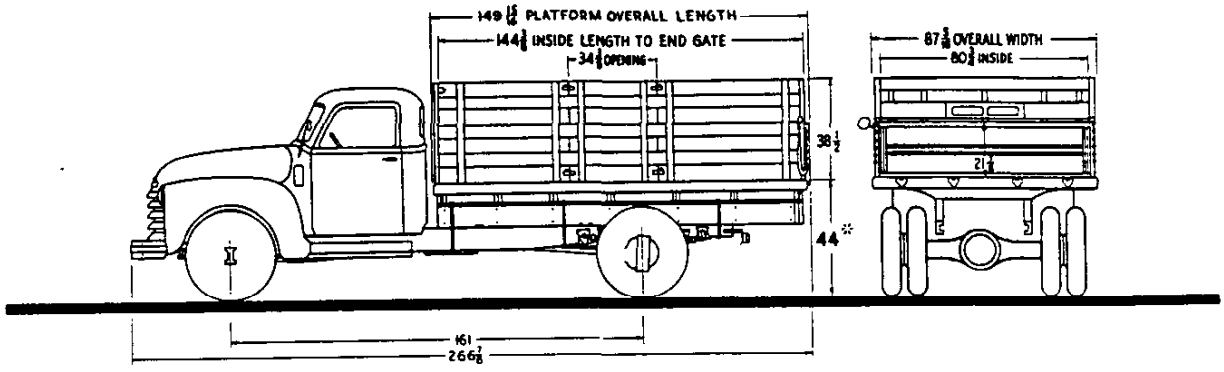
*-Loaded height with 6.50-20-6 pr dual tires

5418S 1-1/2 TON SPECIAL AND 5418 2 TON COE EXPRESS PLATFORM TRUCKS
5429S 1-1/2 TON SPECIAL AND 5429 2 TON COE EXPRESS STAKE TRUCKS



*-Loaded height with 7.50-20-8 pr dual tires

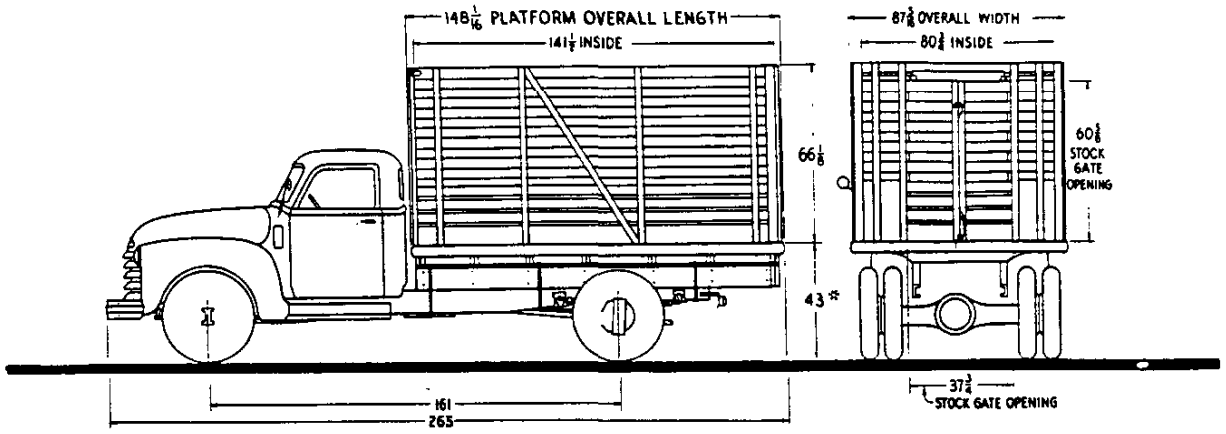
6418S 1-1/2 TON SPECIAL AND 6418 2 TON EXPRESS PLATFORM TRUCKS
6429S 1-1/2 TON SPECIAL AND 6429 2 TON EXPRESS STAKE TRUCKS



*-Loaded height with 7.50-20-8 pr dual tires

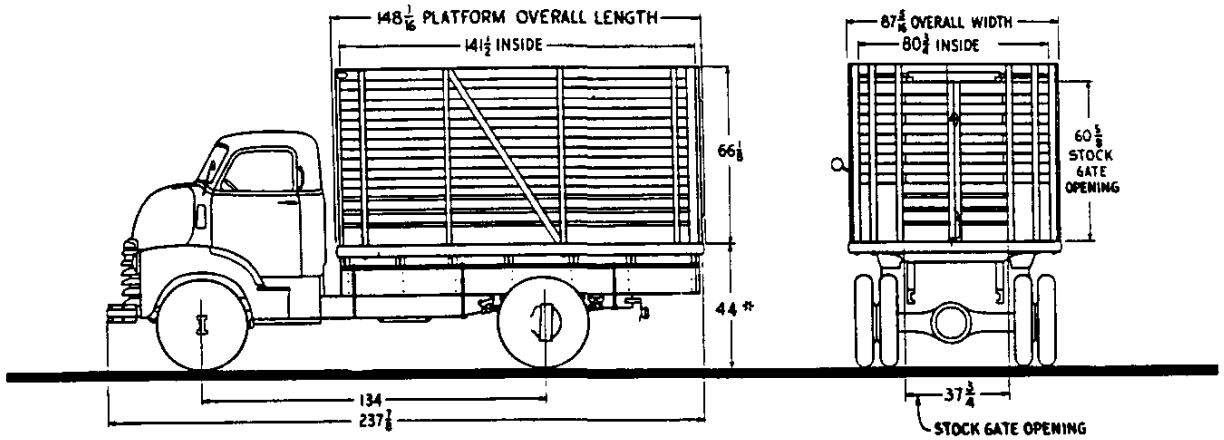
CONTINUED

4419 1-1/2 TON HIGH RACK (STOCK) TRUCK



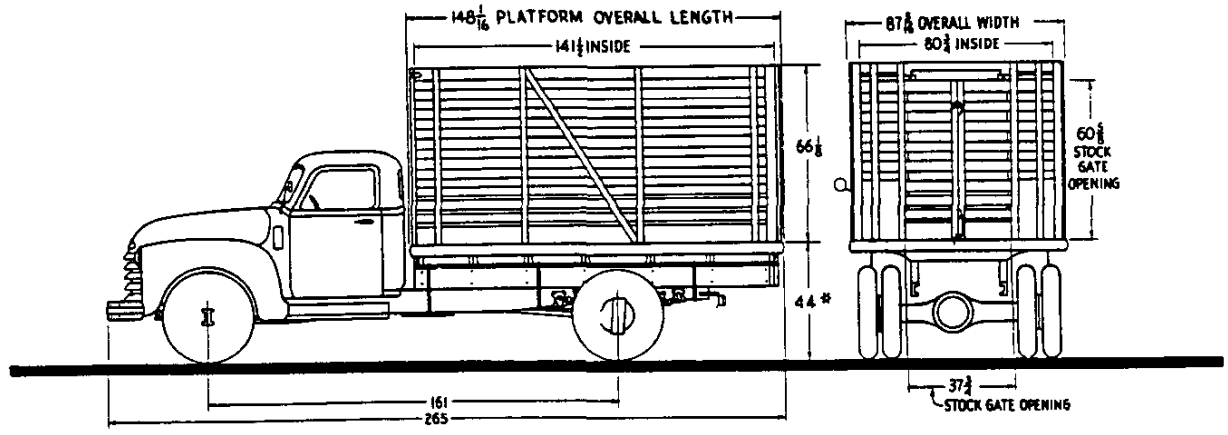
* - Loaded height with 6.50-20-6 pr dual tires

5419S 1-1/2 TON SPECIAL AND 5419 2 TON COE HIGH RACK (STOCK) TRUCKS



* - Loaded height with 7.50-20-8 pr dual tires

6419S 1-1/2 TON SPECIAL AND 6419 2 TON HIGH RACK (STOCK) TRUCKS



* - Loaded height with 7.50-20-8 pr dual tires

EXTERIOR COLORS AND FINISHES

ITEM			BASIC AND DECORATIVE FINISHES		
			Suburban Carryall	Other Conventional Trucks	Cab-Over-Engine Trucks
Bumpers	Commercial		Chrome plated		
	Heavy Duty			Anvil Gray Baking Dulux	
Gravel deflectors			Forester Green Baking Dulux		
Reg rad grille	Bar assys	Outer	Chrome plated		
		Inner	Waldorf White Baking Dulux		
RPO rad grille ⊕	Bar assys	Outer		Chrome plated ⓣ	
		Inner		Waldorf White Baking Dulux	
Hood	Hood and molding		Forester Green Baking Dulux		
	Exposed hinges				Chrome plated
	Emblem	Trade mark	Cloisonne Blue Metallic Baking Dulux		
		Stripes & letters	Vermilion Baking Dulux "CHEVROLET"		
		Background	Chrome plated		
	Name plate		Raised chrome letters, "CHEVROLET", on chrome bar		
	Series designation plate		Raised chrome numbers, "3100", "3600", etc on chrome bar (See page 69)		
Headlamps	Rims		Chrome plated		
	Doors				
Fenders	Fenders proper		Forester Green Baking Dulux		
	Anti-squeak		Black enameled bead		
	Fender step panel				Forester Green Bak Dul
	Fender scuff mat				Black rubber
	RPO moldings *			Polished stainless steel (Panel Trucks only)	
Regular wheels			Forester Green	Black Baking Dulux	
Hub caps (see page 69)			Chrome plated. Vermilion Baking Dulux letters		
RPO wheels *	Wheels proper		With hub caps, body color; all others, black		
	Striping (see page 69)	15"rims	No stripes (15" tires) 3 stripes (6.70-15 tires)		
		16"rims	3 stripes		
		17"rims	2 stripes		
Cab or single unit body proper including the belt molding			Forester Green Baking Dulux		
Cab or single unit body striping on belt molding			One stripe of Cream Medium Striping Duco		
Windshield	Seal		Black rubber		
	Reveal molding		Polished stainless steel	Polished stainless steel *	
	Divider bar		Polished stainless steel		
	Wipers		Chrome plated rods and bars, stainless steel optional		
Rear view mirror	Arm		Black Baking Dulux		
	Mirror case				
Side door window reveals	Regular		Forester Green Baking Dulux		
	RPO *			Polished stainless steel	
Side door handles and lock			Chrome plated		
Side door hinges					Forester Green Bak Dulux
Assist handles					Chrome plated
Side window divider bars			Chrome plated		
Rear window seal			Black rubber		
RPO rear door window reveals *				Polished stainless steel (Panel Trucks only)	

* - Part of RPO 390 De Luxe Equipment.

⊕ - RPO 386 Radiator Grille Equipment or RPO 390 De Luxe Equipment.

ⓣ - Used on 3100 (except 3106-16) 3600 and 3800.

CONTINUED

4-14-50

EXTERIOR COLORS AND FINISHES—Continued

ITEM		BASIC AND DECORATIVE FINISHES		
		Suburban Carryall	Other Conventional Trucks	Cab-Over-Engine Trucks
Cab rear corner window seals *			Black rubber	
Running boards		Black Baking Dulux		Black rubber mats
Running board aprons				Forester Green Bak Dulux
Gasoline tank	Tank proper		Chassis Black Enamel	
	Filler neck			
	Filler neck seal	Black rubber		
	Cap	Cowl chassis models, Black Enamel; all others body color		
Pickup box and aprons			Forester Green Bak Dulux	
Stake, Express Stake, and Stock body racks			Forester Green Air Dry Dulux	
Platform	Rub rail		Black Air Dry Dulux	
	Load space			
	Underbody			
Tail and stop lamp	Lens	Red plastic		
	Body	Single unit bodies, body color; all others black		
	Rim	Polished chrome plating		

* - RPO 390 De Luxe Equipment

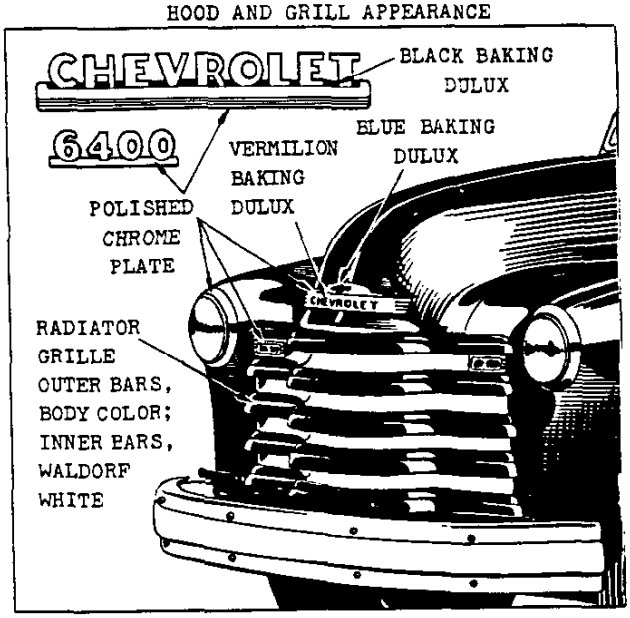
PAINT COLOR COMBINATIONS

Regular or RPO	Basic Color (Baking Dulux)	Striping Color (Duco)
Regular	Forester Green	Cream Medium
RPO 234	Swift Red	Argent Silver
	Armour Yellow	Black
	White	Emerald Green
	Jet Black	Argent Silver
	Omaha Orange	Black
	Cape Maroon	Gold
	Mariner Blue	Cream Medium
	Windsor Blue	
	Seacrest Green	
	Sun Biege	Totem Scarlet
	Cream Medium	Black

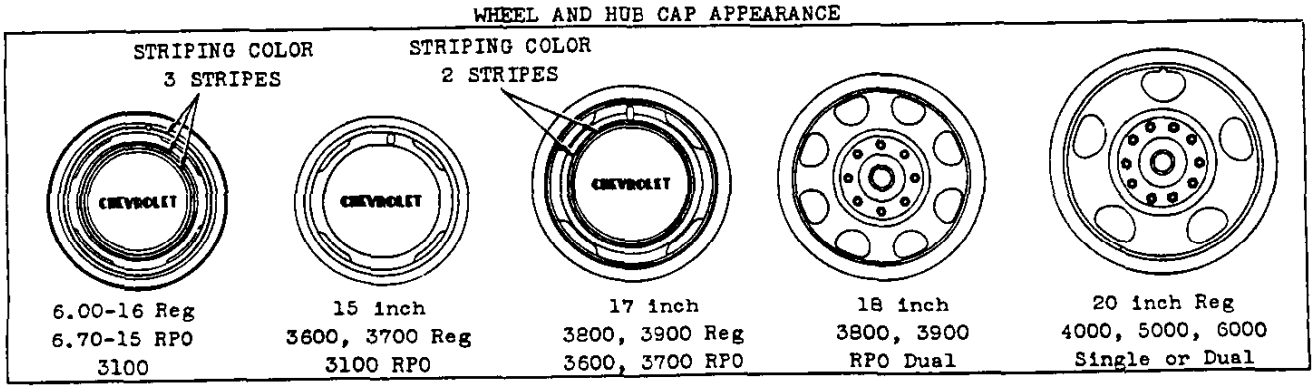
TYPES OF PAINT

Baking Dulux ---------- Baking enamel
Duco ---------- Striping lacquer
Air Dry Dulux ---------- Air drying enamel

HOOD AND GRILL APPEARANCE

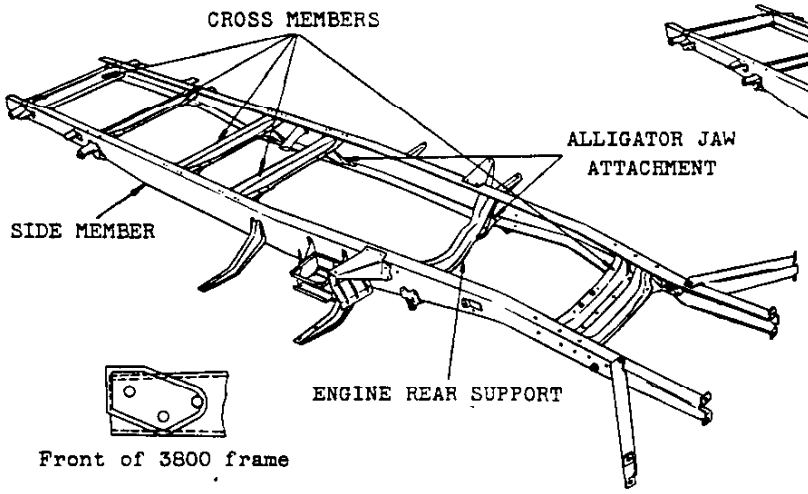


WHEEL AND HUB CAP APPEARANCE



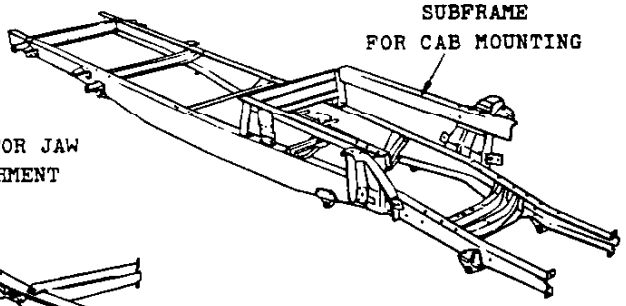
4-14-50

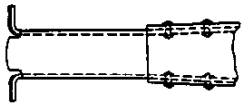
CONVENTIONAL TYPE OF FRAME



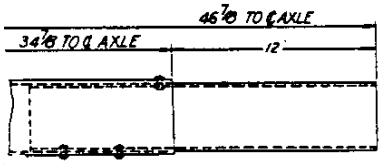
Front of 3800 frame

CAB-OVER-ENGINE TYPE OF FRAME

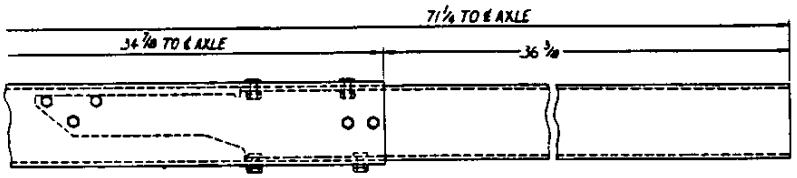




Front of 4100 frame showing extension



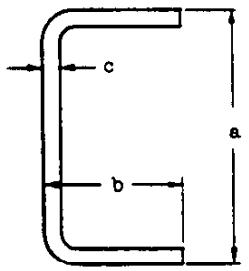
Frame rear extension on 3800 except 3808-09



Frame rear extension on 4502

MODEL		Wheelbase	Frame overall length*	Width over side members	Number of cross members◫	Section modulus▣
CONVENTIONAL	3100	116	173-1/8	46-1/32 at rear	5	2.46
	3600	125-1/4	182-5/16	36		3.25
	3700		195-5/16			
	3800	137	213 ⊕			5.52
	3900		214-5/8			
	4100		209-7/16			
	4400	161	233-7/16		6	8.80
	6100 ⊠	137	209-7/16 ø ●		5	
	6400	161	233-7/16 ø ●		6	
SCHOOL BUS	4502		269-3/4		8	
	6702	199	330-3/4	36-1/16	9	9.60
COE	5100	110	182-7/16 ø ●	36	5	8.80
	5400	134	206-7/16 ø ●			
	5700	158	230-7/16 ø ●		6	

Frame type ---------- Ladder
Side member data:
Section type ---------- Channel
Kickup height, at rear axle ---------
------ 4 on 3100; 1-3/4 on 3600, 3700
Material --- Hot rolled steel, pickled
Yield point --------- 39000 PSI (min)
Elongation -------- 25% in two inches

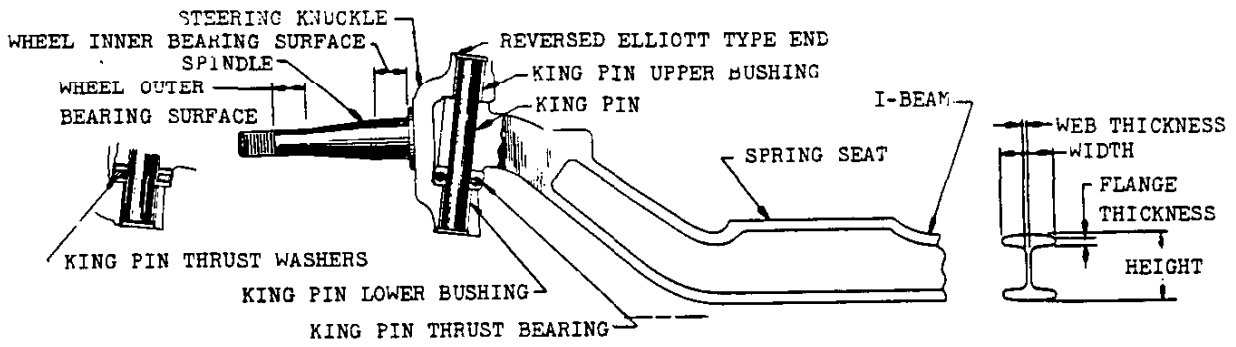


SERIES	Max sectional dimensions		
	a	b	c
3100	5-3/4	2-1/4	9/64
3600,3700	5-27/32		3/16
3800,3900,4100	7	2-3/4	7/32
4400,4500,5000, 6100,6400 ⊠	8-7/8	2-7/8	1/4
6700	8-15/16	2-29/32	9/32

* - Length includes front or rear extensions when specified. ▣ - Inches cubed per side member.
⊕ - Except 3808-09 which are 201 (no frame extension). ⊠ - Used on 4100 with Heavy Duty Equipment.
◫ - Structural cross members: Those which are so attached as to resist torsional frame stresses.
ø - When 9.00-20 tires are specified, add 12 inches for frame extension. ●

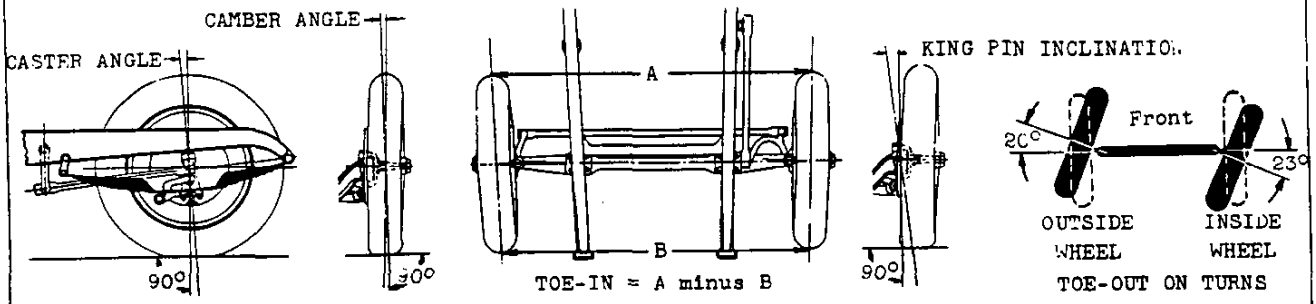
4-14-50. Revised: 7-17-50, ● - Data added.

FRONT AXLE



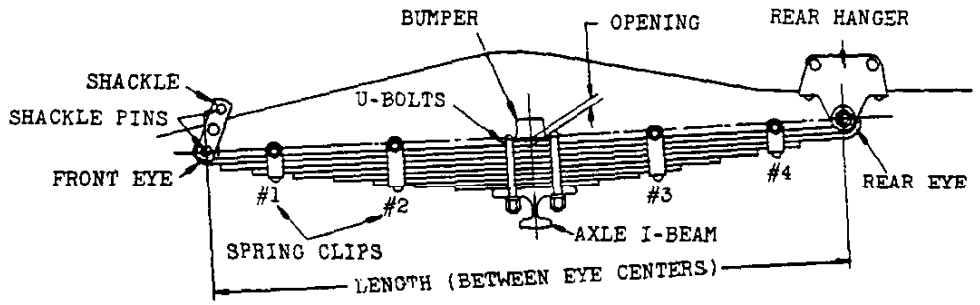
ITEM			3100	3600	3800 4100,4400	3700 3900	4500,6000	5000
Type			Reversed Elliott (modified I-beam section)					
Rated capacity (pounds)			2200	2500	3500		4500	
I-beam (average dimensions)	Height		2-1/8	2-1/4		2-1/2		2-5/8
	Width		1-3/4	2				
	Flange thickness		1/4	5/16		7/16		
	Web thickness		1/4	11/32		1/4		3/8
	Section modulus		70 in. cubed	1.14 in. cubed		1.48 in. cubed		1.61 in.cu.
King pin	Diameter		.8660-.8665	.9210-.9214		1.1090-1.1094		
	Bushing	Type	Floating	Pressed into steering knuckle				
		Length x I D	1-5/16 x .867-.868	1-17/64x.922-.923		1-25/64 x 1.110-1.111		
King pin thrust bearing	Type		Anti-friction bearings---See page 101				Copper and steel washers	
	Diameter	Inside					1.130-1.135 across flats	
		Outside					2-1/16	
Spindle diameter	At inner bearing		1.2801-1.2806	1.4051-1.4056			1.7493-1.7498	
	At outer bearing		.7490 - .7495	.8427 - .8432			1.0293-1.0298	
Front wheel bearings			Anti-friction bearings---See page 101					

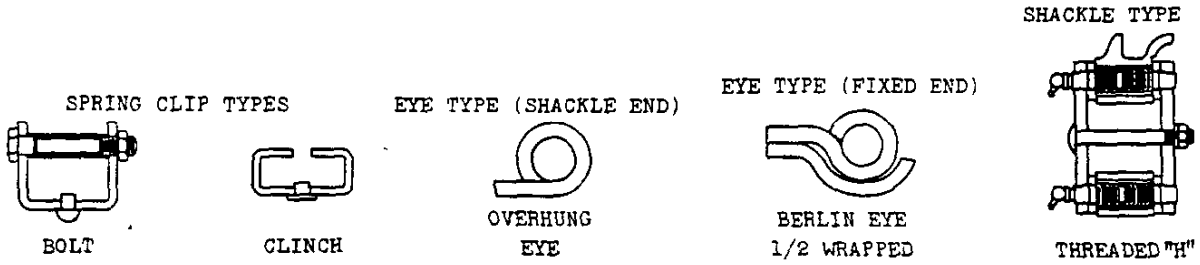
FRONT WHEEL ALIGNMENT



ITEM		3100	3600	3700	3900	3800 4000,6000	5000
King pin inclination		6° 10'-8° 10'					
Camber		0° 30'-1° 30'					
Caster at design load		1° 15'-2° 15'	2°-3°	2° 45'-3° 45'	1° 45'-2° 45'	2° 15'-3° 15'	2° 30'-3° 30'
Toe-in		1/16 to 3/16		1/16 to 1/4			
Toe-out on turns	Outside wheel	20°					
	Inside wheel	21°-25°					

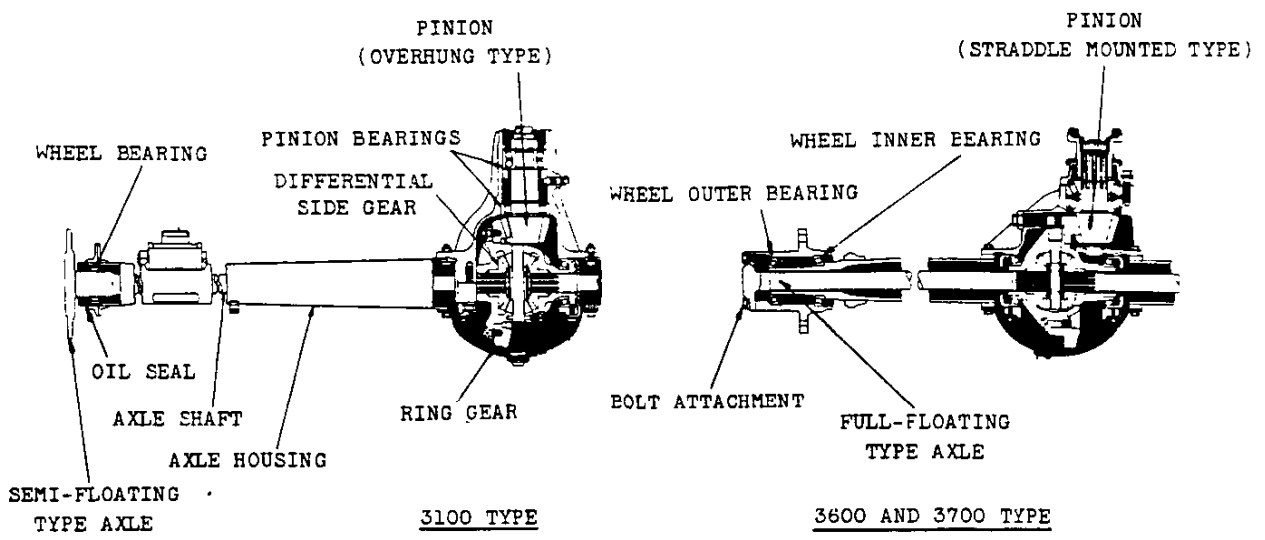
4-14-50





ITEM			3100	3600	3700 3900	3800	4100 4400	4502 6000	5100	5400 5700
Springs	Type		Semi-elliptic							
	L E A V E S Material		Chrome carbon steel							
	Number		8			7		9		11
	Thickness (leaves numbered from top to bottom)	#1,2,3,4,5	.237		.291					
		#6,7								
		#8								
		#9								
		#10,11								
		Total	1.896		2.328	2.037		2.619		3.201
	Load in pounds at opening height		810 to 890 @ 1/2		1215 to 1335 @ 7/8	950 to 1050 @ 1-3/16		1475 to 1625 @ 39/64		1900 to 1980 @ 1-7/8
	Average rate of deflection (pounds per inch)		315		575	475		640		780
	Capacity at ground (pounds)		1000	1050	1700	1600		2200		2400
	Length x width		38 x 1-3/4		40 x 2					
	Spring clip type (see figure)	#1	Clinch		Bolt					
		#2								
		#3	Clinch							
		#4			Bolt					
Spring mountings	Shackle end	Located at	Front		Rear	Front				Rear
		Pin, type & dia	Threaded "H", .6595 - .6645 - 11 thread							
	Fixed end	Bushing	Plain 7/8 O D							
		Bolt size	11/16 O D x 3-3/16		11/16 O D x 3-7/16					
	U-bolt diameter		1/2		9/16					5/8
	Bumper		Rubber, mounted on top of spring main leaf at center bolt							
	Spring mounting angle		7°50' included angle							
	Spring center-to-center		26-13/16 (measured on axle I-beam)							
Shock absorbers (hydraulic)	Type		Reg equip, direct double acting					RPO, cam and lever double acting		
	Model		1052M					1730B		1730C
	Valve code		4J6/J1					G2 Compression 2R Rebound		
	Piston diameter		1					1-1/2		
Ride stabilizer			On models 3102-05-06-12-16, 3742, 3942. Frame to front springs							

4-14-50



3100 TYPE

3600 AND 3700 TYPE

ITEM		3100		3600		3600 RPO		3700	
Type		Semi-floating		Full-floating					
Rating (pounds)		3300		5000					
Housing type		Pressed steel banjo, Two piece welded		Banjo, welded or seamless steel tube					
Final gears	Type	Spiral Hypoid							
	Ratio	4.11:1		4.57:1		5.14:1			
	Teeth	37 & 9		32 & 7		36 & 7			
Gear backlash		.005-.008							
Pinion	Mounting	Overhung		Straddle					
	Adjustment	Shim and collar		Shims					
	Thrust	Against pinion front bearing							
Total gear reduction *	Transmission	3-speed	4-speed	3-speed	4-speed	3-speed	4-speed	3-speed	4-speed
	First	12.08	29.02	13.44	32.26	15.11	36.29	15.11	36.29
	Second	6.90	14.71	7.68	16.36	8.64	18.40	8.64	18.40
	Third		7.03		7.81		8.79		8.79
	Direct drive	4.11		4.57		5.14		5.14	
	Reverse	12.08	27.87	13.44	30.98	15.11	34.85	15.11	34.85
Axle shaft torque (ft lb)◫	First	1746	2656 ⊕	1942	4662	2183	5244	2260	5429
	Second	997	2126	1110	2364	1248	2659	1293	2753
	Third		1016		1129		1270		1315
	Direct drive	629		699		786		814	
	Reverse	1746	2656 ⊕	1942	4477	2183	5036	2260	5214
Lubricant capacity		4-1/2 pints		6 pints					
Differential type		Two pinion		Four pinion					
Axle shaft	Type	Shaft and drive flange integrally forged							
	Minimum dia	1-5/32		1-11/32					
	Hub attachment	Integral		Bolted					
Drive taken through		Springs		Springs (Hotchkiss)					
Torque taken through		Torque tube							
Anti-friction bearings		See page 101							

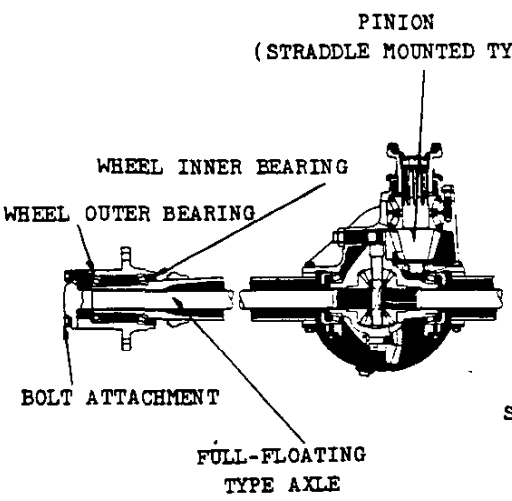
* - Axle ratio x transmission ratio.

⊕ - Maximum capacity of shafts.

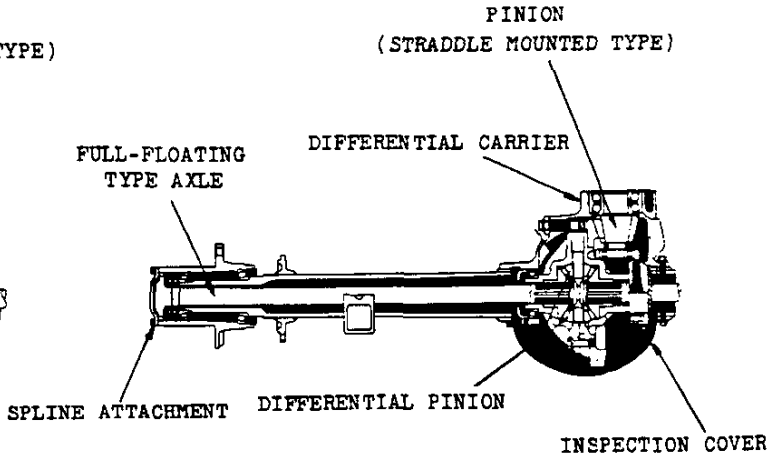
◫ - Gear reduction x engine maximum net torque x efficiency factor (.90 in direct drive, .85 all others).

CONTINUED

4-14-50



3800 AND 3900 TYPE



4000, 5000, AND 6000 TYPE

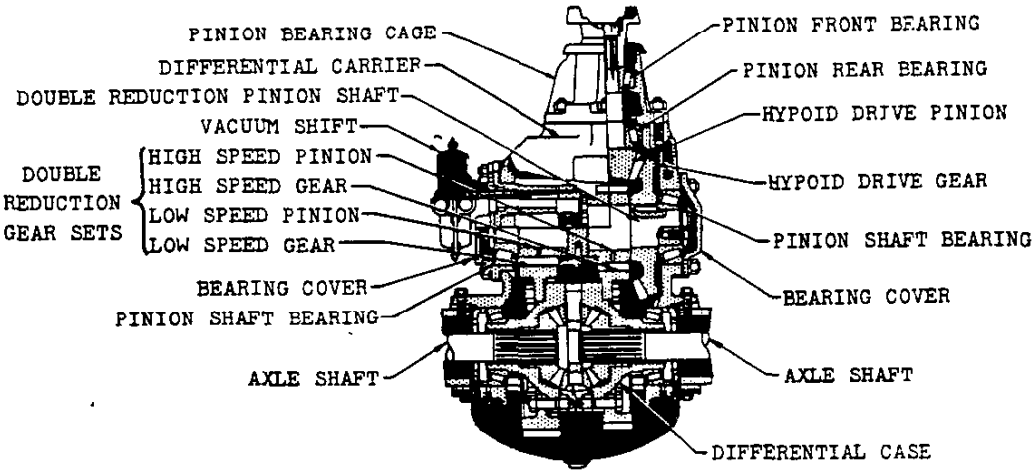
ITEM		3800	3900	4000 RPO	4000	5000	6000
Type		Full-floating					
Rating (pounds)		7200		10500		13000	
Housing type		Banjo, welded or seamless steel tube					
Final gears	Type	Spiral Hypoid					
	Ratio	5.14:1		5.43:1	6.17:1		
	Teeth	36 & 7		38 & 7	37 & 6		
Gear backlash		.005-.008					
Pinion	Mounting	Straddle					
	Adjustment	Shims		None			
	Thrust	Against pinion front bearing					
Total gear reduction *	Transmission	4-speed		4-speed	4-speed		
	First	36.29		38.34	43.56		
	Second	18.40		19.44	22.09		
	Third	8.79		9.29	10.55		
	Direct drive	5.14		5.43	6.17		
	Reverse	34.85		36.82	41.83		
Axle shaft torque (ft lb) @	First	5244	5429	5540	6294	6924	6887
	Second	2659	2753	2809	3192	3511	3492
	Third	1270	1315	1342	1524	1677	1668
	Direct drive	786	814	831	944	1038	1033
	Reverse	5036	5214	5320	6044	6649	6613
Lubricant capacity		6 pints		• 11 pints		• 12 pints	
Differential type		Four pinion					
Axle shaft	Type	Shaft and drive flange integrally forged					
	Minimum dia	1-11/32		1-7/16		1-9/16	
	Hub attachment	Bolted		Splined			
Drive taken through		Springs (Hotchkiss)					
Torque taken through							
Anti-friction bearings		See page 101					

* - Axle ratio x transmission ratio.

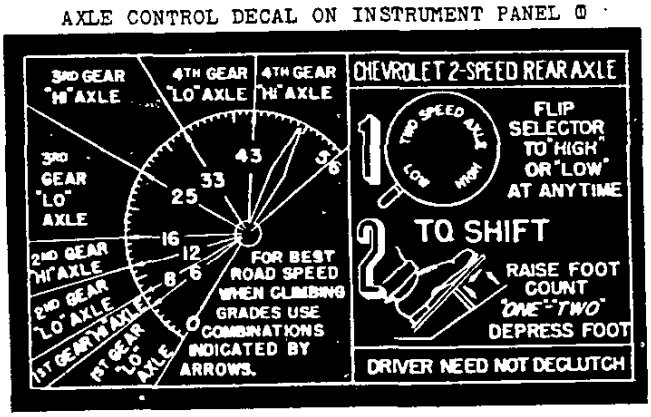
@ - Gear reduction x engine maximum net torque x efficiency factor (.90 in direct drive, .85 all others).

4-14-15. Revised: 7-17-50, • - Vertical dividing lines added.

TWO-SPEED REAR AXLE (RPO 202 FOR ALL 5000-6000 MODELS)



AXLE CONTROL DECAL ON INSTRUMENT PANEL ⓓ



GENERAL DATA

Type ---------- Double reduction, full-floating
Rating (pounds) ---------- 16000
Final gear ratios ------ 6.13:1 high; 8.10:1 low
Drive torque ---------- Through springs
Housing --- Banjo, one piece seamless steel tube

Axle shafts:
Material ---------- Forged steel
Type ---------- Shaft and drive flange integrally forged -- Spline attachment
Minimum diameter ---------- 1-9/16
Anti-friction bearings ---------- See page 101
Vacuum shift control ------- On instrument panel

PRIMARY DRIVE GEARS

Type and ratio ---------- Hypoid, 2.875:1 ratio
Pinion ---------- 8 teeth, overhung mounting
Drive gear ---------- 23 teeth, straddle mounted
Backlash adjustment ---------- .008 to .013, -by shims at double reduction pinion shaft cover

DOUBLE REDUCTION GEARS

Type ---------- Helical spur
Ratio: High speed -------- 2.133:1 (32-15 teeth)
Low speed ---------- 2.818:1 (31-11 teeth)

Lubricant capacity, refill (pints) ------ 14-1/2

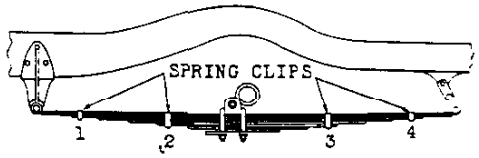
TRANSMISSION		TOTAL GEAR REDUCTIONS *		MAXIMUM AXLE SHAFT TORQUE (FT LB) θ			
		5000-6000		5000		6000	
Gear	Ratio	6.13:1 ratio	8.10:1 ratio	6.13:1 ratio	8.10:1 ratio	6.13:1 ratio	8.10:1 ratio
First	7.06	43.28	57.19	6879	9090	6843	9042
Second	3.58	21.95	29.00	3489	4610	3470	4585
Third	1.71	10.48	13.85	1666	2201	1657	2190
Direct drive	1.00	6.13	8.10	1032	1363	1026	1356
Reverse	6.78	41.56	54.92	6606	8730	6571	8683

* - Rear axle ratio x transmission ratio.
θ - Total gear reduction x engine max. net torque x efficiency factor (.90 direct drive; .85 all others).
ⓓ - Gear change points are for 8.25-50 tires and engine governed speed of 3200 RPM.

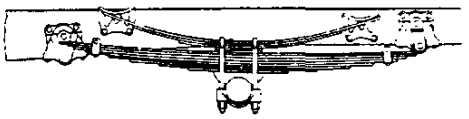
4-14-50

REAR SUSPENSION

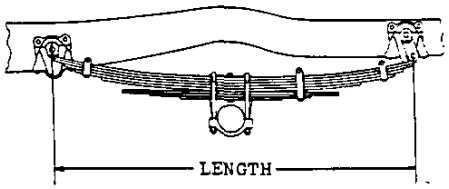
SEMI-ELLIPTIC TYPE



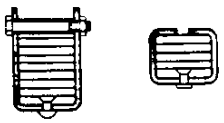
SEMI-ELLIPTIC, TWO STAGE & AUXILIARY TYPE



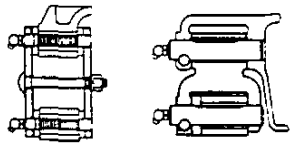
SEMI-ELLIPTIC, TWO STAGE TYPE



SPRING CLIP TYPES



SPRING SHACKLE TYPES



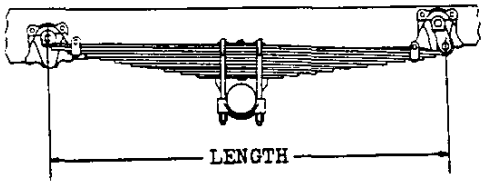
ITEM			3100 Regular	3100 RPO	3700	3900	3600	3800 Reg 3600 RPO	3800, 3900 RPO	3802 RPO
Springs	Type		Semi-elliptic				Semi-elliptic two-stage		Semi-elliptic, two-stage and auxiliary	Semi-elliptic
	Leaves	Material	Chrome carbon steel							
		Number	8	9	8		7 (4 & 3)	8 (5 & 3)	3 (aux)	9
		Thickness (Leaves numbered from top to bottom) #1,2	.291	.291	.323		.291	.291	.323	.291
		#3								
		#4								
		#5								
		#6,7					.323	.323		
		#8								
		#9								
		Total	2.328	2.619	2.392		2.133	2.424	.969	2.715
	Load in pounds at opening height		1100 to 1200 @ 1/2	1300 to 1400 @ 1/2	1735 to 1915 @ 25/32		1325 to 1475 @ 9/16	1575 to 1725 @ 1-29/32		2205 to 2435 @ 13/16
	Average deflection rate (pounds per inch)		190	220	400		250 @ 200-600#; 370 @ 1200-1600#	315 @ 250-750#; 435 @ 1400-1800#	620	470
	Cap. at ground (lb)		1450	1730	2250		2000	2300	3400	2650
	Length x width		54 x 1-3/4		46 x 2				31 x 2	46 x 2
	Spring clip type (see fig.)	Clinch	1-2-3-4							
		Bolt			1-3-4				1-4	1-2-3-4
Spring mountings	Shackle end	Located at	Rear							
		Type	Threaded H		Clevis and plain bushing					
		Pin size	5/8-11 thread		7/8 dia					
	Fixed end	Bushing	Plain 7/8 OD		1-1/8 OD					
		Pin size	11/16 OD (bolt)		7/8 OD					
	Attachment to axle		Two U-bolts and cap							
	Rubber insulated		Yes		No					
	U-bolt diameter		1/2		5/8					
	Bumper		Rubber, mounted on frame side member lower flange							
	Mounting angle		7°50' incl angle		Parallel					
	Center to center		42-5/16		41-1/2					
Ride stabilizer			Included in shock absorber RPO on model 3942 with 7.50-17 or 7.00-18 tires							

REAR SHOCK ABSORBERS

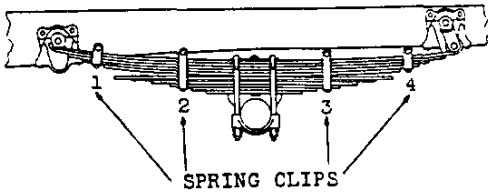
ITEM		3100	3600	3700	3800	3900
Direct double acting		Regular equipment			RPO	
	Model and valve code	1066Z, 6R8/J1	1066T, 6R8/J1		967U, 8J10/A1	
Cam and lever double acting						RPO
	Valve code Compression					GO
	Valve code Rebound					1R
	Piston diameter	1			1-3/8	1-1/2

Continued

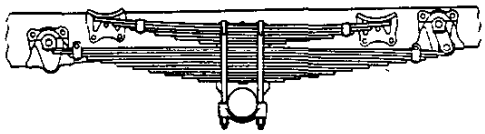
SEMI-ELLIPTIC, HEAVY DUTY TYPE



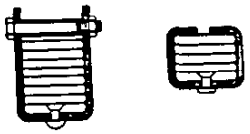
SEMI-ELLIPTIC, TWO-STAGE TYPE



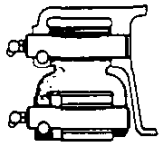
SEMI-ELLIPTIC AND AUXILIARY TYPE



SPRING CLIP TYPES



CLEVIS TYPE SHACKLE



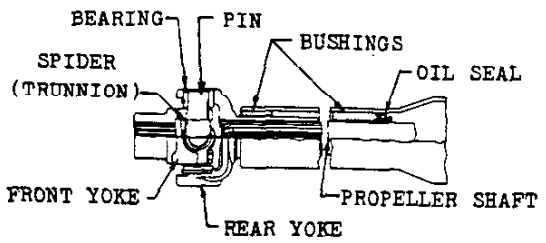
ITEMS			4500,6700 Reg 4100,4400,6100,6400 RPO	4100,4400	5000,6100,6400 Reg 4100,4400 RPO
Springs	Type		Semi-elliptic two stage	Semi-elliptic	Semi-elliptic & auxiliary
	Leaves — Material		Chrome carbon steel		
	Number		11 (5 & 6)	11	6 (aux)
	Thickness (Leaves numbered from top to bottom)	#1,2	.323	.360	.323
		#3,4,5			
		#6			
		#7			
		#8,9			
		#10,11			
		Total	3.949	3.960	1.938
	Load in pounds at opening height		3800 to 4200 @ 1-3/8	4370 to 4830 @ 1/4	
	Average deflection rate (pounds per inch)		625 @ 500-1000#; 1100 @ 3500-4500#	1125	1530
	Capacity at ground (lb)		5600	4465	7800
	Length x width		46 x 2-1/2		31 x 2-1/2
	Spring clip type (see figure)	Clinch			1-4
		Bolt	1-2-3-4	1-4	
Spring mountings	Shackle end	Located at	Rear		
		Type	Clevis and plain bushings		
		Pin size	7/8 dia		
	Fixed end	Bushing	1-1/8 OD		
		Pin size	7/8 dia		
	Spring to axle attachment		Two U-bolts and cap to fixed metal seat on axle housing		
	U-bolt diameter		3/4		
	Bumper		Rubber, mounted on frame side member lower flange		
	Mounting angle		Parallel		
	Spring center to center		42		

REAR SHOCK ABSORBERS

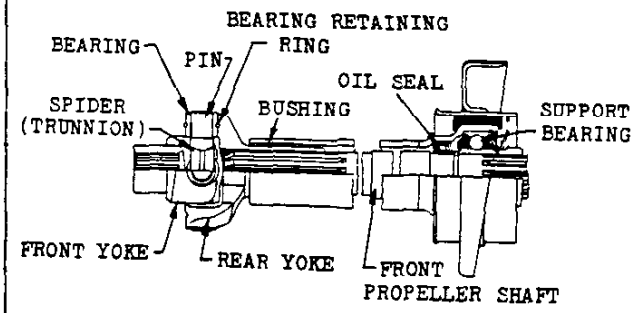
ITEM		4000,5000,6700
Shock absorbers	Type	Cam and lever double acting, RPO 200
	Piston diameter	1-3/4
	Valve code	G2 compression, 2L rebound

4-14-50

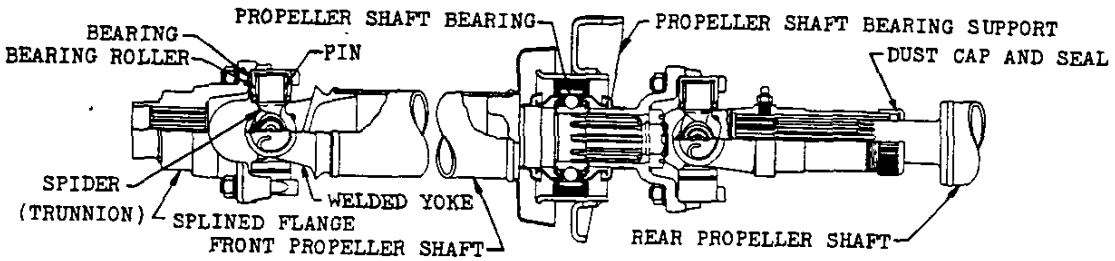
UNIVERSAL JOINT-3100 SERIES



FRONT UNIVERSAL JOINT-3600, 3700 SERIES



DRIVE TRAIN-3800, 3900, 4000, 5000, 6000 SERIES



UNIVERSAL JOINTS

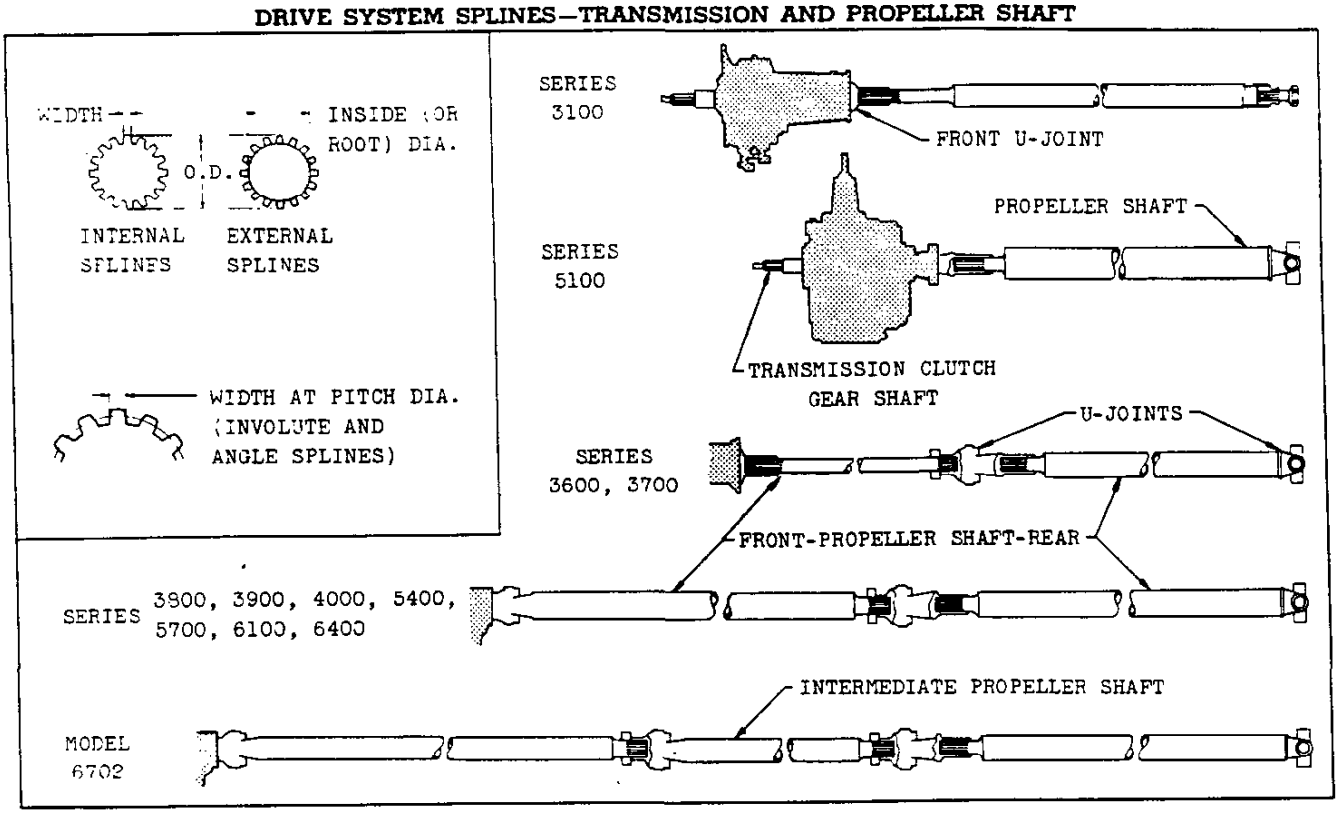
ITEM			3100	3600,3700	5100	3800,3900,4100,4400 5400,5700,6100,6400	4500	6700
Type and material			Yoke and trunnion, drop-forged steel; trunnion, case hardened					
Number used			1	3	2	3		4
Pin diameter		Front	.6835-.6845	.716-.717		.7385-.7390		
		Center & Rear						
U-joint trunnion bearings	Type	Front	Bushing			Anti-friction, See page 101		
		Intermediate						
		Rear						

PROPELLER SHAFTS

Number used			1	2	1	2		3
Type		Front		Solid		Tubular		
		Intermediate						Tubular
		Rear	Tubular					
Outside diameter		Front		1-7/16		2-1/2		
		Intermediate						2-1/2
		Rear	2-1/16	2-1/2	3.00	2-1/2		
Wall thickness		Front		Solid		.080-.085		
		Intermediate						.080-.085
		Rear	.092-.098	.080-.085				
End type	Front	Front	Splined			Welded yoke		
		Rear				Splined		
	Intermediate	Front						Welded yoke
		Rear						Splined
	Rear	Front	Splined	Splined				
		Rear		Welded yoke				
Propeller shaft guard	Number used						2	3
	Type						U-bolt	
	Material						5/8 round steel	
	Location and mounting						Support at front of each prop. shaft	
Support bearings (see page 101)				1		1		2

4-14-50. Revised: 7-17-50, • - Vertical line added; x - Vertical line moved.

DRIVE SYSTEM SPLINES—TRANSMISSION AND PROPELLER SHAFT



CLUTCH DISC HUB AND TRANSMISSION CLUTCH GEAR SHAFT

SERIES	ITEM	INTERNAL	EXTERNAL
3100, 3600, 3700	Width	.174 - .176	.1705 - .1725
	I.D.	.920 - .925	.918 max.
	O.D.	1.134 - 1.144	1.110 - 1.121
	Splines	10 (straight side)	
3800, 3900, 4000, 5000, 6000	Width	.174 - .176	.169 - .172
	I.D.	.920 - .925	.918 max.
	O.D.	1.134 - 1.144	1.110 - 1.121
	Splines	10 (straight side)	

TRANSMISSION MAINSHAFT AND FRONT U-JOINT FRONT YOKE

SERIES	ITEM	INTERNAL	EXTERNAL
3100, 3600, 3700	Width	.1473 - .1483	.1458 - .1473
	I.D.	.990 - .691	.853 - .863
	O.D.	1.003 - 1.017	.973 - .980
	Splines	10 (involute)	
3000, 4000, 5000, 6000 with 4-speed transmission	Width	.1964 - .1979	.1939 - .1954
	I.D.	1.155 - 1.158	1.123 - 1.125
	O.D.	1.373 - 1.376	1.350 - 1.360
	Splines	10 (involute)	

PROPELLER SHAFT FRONT END AND U-JOINT REAR YOKE

SERIES	ITEM	INTERNAL	EXTERNAL
3100	Width	.0951 - .0961	.0921 - .0941
	I.D.	.993 - .997	.953 - .961
	O.D.	1.0835-1.0935	1.0642-1.0657
	Splines	17 (involute)	

FRONT PROPELLER SHAFT FRONT END AND FRONT U-JOINT REAR YOKE

SERIES	ITEM	INTERNAL	EXTERNAL
3600, 3700	Width	.1990 - .2015	.196 - .198
	I.D.	1.1145-1.1195	1.0515-1.0605
	O.D.	1.306 - 1.321	1.280 - 1.284
	Splines	10 (straight side)	

FRONT PROPELLER SHAFT REAR END AND U-JOINT FRONT FLANGE

SERIES	ITEM	INTERNAL	EXTERNAL
3600, 3700, 3800, 3900, 4000, 5400, 5700, 6000	Width	.2130 - .2145	.2125 - .2140
	I.D.	1.208 - 1.213	1.120 - 1.130
	O.D.	1.374 - 1.375	1.372 - 1.373
	Splines	10 (straight side)	

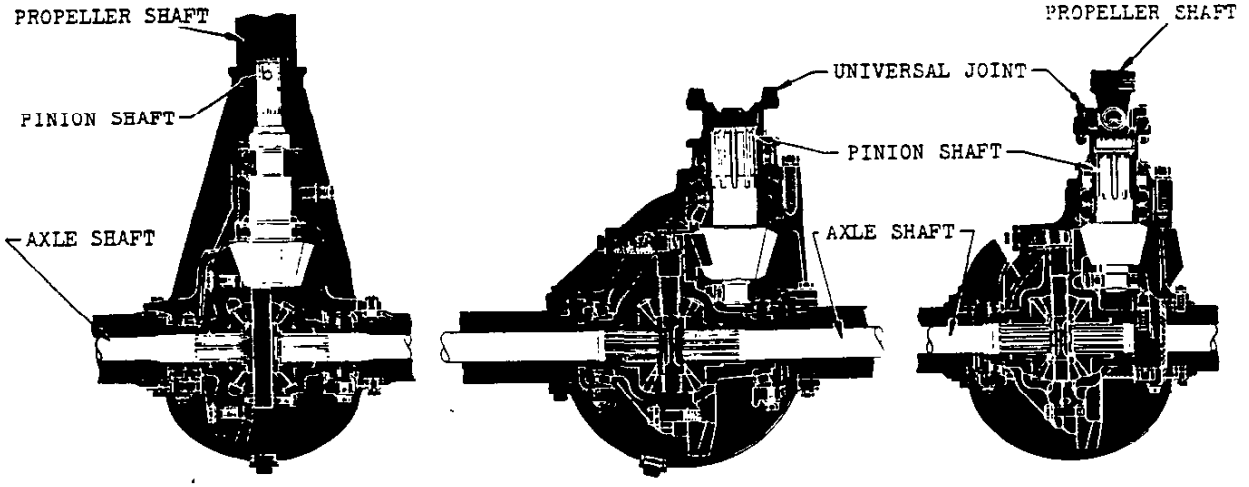
INTERMEDIATE PROPELLER SHAFT REAR END AND U-JOINT FRONT FLANGE

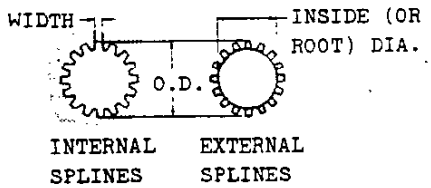
SERIES	ITEM	INTERNAL	EXTERNAL
6702	Width	.2130 - .2145	.2125 - .2140
	I.D.	1.208 - 1.213	1.120 - 1.130
	O.D.	1.374 - 1.375	1.372 - 1.373
	Splines	10 (straight side)	

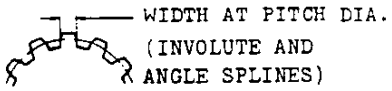
REAR PROPELLER SHAFT FRONT END AND U-JOINT SLEEVE YOKE

SERIES	ITEM	INTERNAL	EXTERNAL
3600, 3700, 3800, 3900, 4000, 5000, 6000	Width	.1455 - .1470	.1435 - .1450
	I.D.	1.295 - 1.300	1.281 - 1.286
	O.D.	1.499 - 1.500	1.497 - 1.498
	Splines	16 (straight side)	

DRIVE SYSTEM SPLINES, REAR AXLE







PROPELLER SHAFT REAR END COUPLING AND REAR AXLE DRIVE PINION SHAFT

SERIES	ITEM	INTERNAL	EXTERNAL
3100	Width	.0951 - .0961	.0951 - .0971
	I.D.	.985 - .989	.962 - .970
	O.D.	1.0835-1.0935	1.068 - 1.074
	Splines	17 (involute)	

PROPELLER SHAFT PINION FLANGE AND REAR AXLE DRIVE PINION SHAFT

SERIES	ITEM	INTERNAL	EXTERNAL
3600*, 3700, 3800, 3900, 4000*, 5000, 6000	Width	.302 - .303	.300 - .302
	I.D.	1.694 - 1.702	1.637 - 1.647
	O.D.	1.9675-1.9755	1.941 - 1.942
	Splines	10 (straight side)	
5000 & 6000 with RPO 202‡	Width	.2325 - .2340	.232 - .234
	I.D.	1.289 - 1.294	1.230 - 1.235
	O.D.	1.499 - 1.502	1.496 - 1.498
	Splines	10 (straight side)	

DIFFERENTIAL SIDE GEAR AND AXLE SHAFT

SERIES	ITEM	INTERNAL	EXTERNAL
3100	Width	.1144 - .1154	.1124 - .1144
	I.D.	1.194 - 1.198	1.166 - 1.174
	O.D.	1.3005-1.3105	1.2795-1.2845
	Splines	17 (involute)	
3600*, 3700 3800, 3900	Width	.1499 - .1509	.1479 - .1499
	I.D.	1.4245-1.4285	1.399 - 1.407
	O.D.	1.5485-1.5595	1.5275-1.5325
	Splines	17 (involute)	
4000*	Width	.259 - .262	.256 - .258
	I.D.	1.472 - 1.477	1.440 - 1.450
	O.D.	1.6735-1.6785	1.6345-1.6445
	Splines	10 (straight side)	
5000 & 6000 with regular or RPO 202‡	Width	.173 - .175	.170 - .172
	I.D.	1.612 - 1.617	1.562 - 1.572
	O.D.	1.782 - 1.784	1.722 - 1.730
	Splines	16 (angle side)	

AXLE SHAFT FLANGE AND REAR WHEEL HUB

SERIES	ITEM	INTERNAL	EXTERNAL
4000*, 5000, 6000 with regular or two speed axle	Width	.3106-.3116	.3086-.3106
	I.D.	3.295-3.305	3.245-3.255
	O.D.	3.795-3.805	3.765-3.775
	Splines	20 (involute)	

* - With regular or RPO single speed axle for series 3600 and 4000

‡ - RPO 202 is two-speed rear axle for series 5000 and 6000

4-14-50

BRAKES

ITEM			3100	3600	3700	3900	3800	4000	5000	6000
Service brake type			Hydraulic, 4-wheel internal expanding, double-articulated shoe							
Parking brake	Type		Mechanical. Pull rods and cables operate two shoes in each rear brake.							
	Actuated by		Foot pedal				Hand lever			
	Mounted on		Shaft through bracket attached to underbody				Transmission		Subframe	Transmission
	Cables located		Outside of frame					Inside of frame		
Drum	Type		Composite. Cast alloy iron rim and cooling ribs, pressed steel web.							
	Dia (front & rear)		11	11 & 12	12	12 & 14		14 & 16		
	Total area (sq in)		242	272	302	371		478		
Lining	Material		Full molded asbestos composition							
	Width	Front	1-3/4			2				
		Rear	1-3/4	2		2-1/2		3		
	Thickness	Front	.187-.194			.265-.272				
		Rear	.187-.194	.265-.272						
	Clearance	Front	Adjust to slight drag, Back off 4 notches							
		Rear	Adjust to slight drag, Back off 2/3 screw turn							
	Attachment	Front	Bonded					Riveted		
		Rear								
Lining area (effective) (sq in)	Service brake		150	176	202	248		330		
	Parking brake		75	101		147		215		
Braking pressure	Front		52-1/2%	45-1/4%	50%			41%		
	Rear		47-1/2%	54-3/4%	50%			59%		
Approximate braking ratio	Pedal		6.426		6.785		6.426		6.534	6.426
	Hydraulic		11.89	8.84	9.68			9.76	9.76*	
	Overall		76.39	56.81	65.69		62.22	62.72	63.77*	62.72*
Foot pedal	Travel		7.906		7.875		7.906		8.0	7.906
	Mounting		On pedal shaft which is attached to side rail bracket						Same except on subframe	Same as 4000 Series
	Pad cover		Molded rubber							
Wheel cylinder	Diameter	Front	1-1/4		1-3/8			1-1/4		
		Rear	1-3/16	1-3/8				1-1/2		
	Piston travel		.105	.141	.129			.128		
Main cylinder	Diameter		1	1-1/4						
	Piston travel		1-1/4							
Brake fluid capacity			Approximately 1 pint •					Approximately 1-1/4 pints •		
Brake fluid recommended			Delco, Super #11 or 12							

* - Ratio does not include Vacuum Brake Booster Equipment

BRAKE BOOSTER EQUIPMENT

ITEM		3800, 3900	4000	5000	6000
Brake booster equipment (hydraulic)	Available as	RPO 213	RPO 212	Regular equipment	
	Type	Single piston, vacuum suspended, reactionary valve			
	Power distribution	At 1000 PSI of hydraulic pressure, power distribution is 37% by pedal and 63% by booster			
	Pedal pressure (actual test)	At 1000 PSI of hydraulic pressure, pedal pressure is 204 lbs without booster, 80 lbs with booster			
Vacuum power reserve tank	Available as		RPO 281 (used with RPO 212)	RPO 281	
	Size		24 long x 7-1/2 ID; 1000 cu in capacity		
	Location		Clamped to inside of left side rail	Clamped to outside of left side rail	Clamped to inside of left side rail

RPO BRAKE EQUIPMENT

Propeller shaft hand brake	Available as		RPO 348, on models 4502, 6702
	Type		Double-faced disc
	Lining	Size	3-7/16 inside radius x 5-7/16 outside radius x 1/4 thick x 90° arc
		No.used	Two
		Area	Total effective area (2 pieces) 27.8 square inches

4-14-50. Revised: 12-1-50, • - Data corrected.

ENGINE—GENERAL

BASIC DESIGN DATA

ITEM	3100	3600	3800, 4100, 4400	4800	3700	3900	5000	4000 EPC, 6000	6700
Piston displacement	Thriftmaster 216.5 cu. in.						Loadmaster 235.5 cu. in.		
Bore and stroke nominal	3-1/2 x 3-3/4						3-9/16 x 3-15/16		
Type	Valve-in-head, 6-cylinder								
Compression ratio	6.6:1						6.7:1		
Taxable SAE horsepower	29.4						30.4		
Idling speed	450-500 RPM								
Oil pressure engine hot	110 PSI at cranking speed 110-180 RPM								
Weights Engine and clutch	575		588		604		613	596	
pounds with transmission	630	642	713		662	730	743	726	
Governor equipment	EPC 241		Regular					Regular	
Governed speed	Range 1500 to 2800 RPM •		35 MPH				3200 RPM		35 MPH

ADVERTISED MAXIMUM ENGINE PERFORMANCE

ITEM		3100, 3600, 3800, 4000	3700, 3900	5000	4000 EPC, 6000
Horsepower	Gross	92 @ 3400 RPM	92 @ 3400 RPM	100 @ 3500 RPM	105 @ 3600 RPM
	Net	85 @ 3300 RPM	85 @ 3300 RPM	94 @ 3400 RPM	93 @ 3500 RPM
Torque	Gross	176 @ 1000-2000 RPM	182 @ 1500-1900 RPM	190 @ 2000 RPM	193 @ 2000 RPM
(lb-ft)	Net	170 @ 1000-2000 RPM	176 @ 1500-1900 RPM ¢	187 @ 2000 RPM	186 @ 2000 RPM

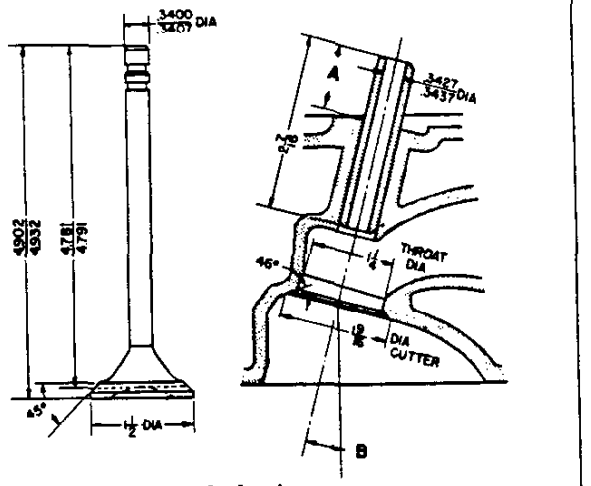
ENGINE SPEED AND PISTON TRAVEL §

Tire size	Axle ratio	Transmission type	Engine RPM at one mile per hour: Low	Second	Third	High §	Piston travel (ft. per mile): Thriftmaster	Loadmaster	[illegible] per mile
6.00-16	4.11:1	3-speed	150	86		51	1909		3054
		4-speed	355	182	87				
6.50-16		3-speed	147	84		50	1877		2992
		4-speed	352	179	86				
6.70-15		3-speed	151	86		51	1921		3074
		4-speed	362	184	88				
15"		3-speed	144	82		49	1837		2939
		4-speed	346	175	84				
15"	4.57:1	3-speed	160	91		54	2043		3268
		4-speed	384	195	93				
7.00-17		3-speed	147	84		50	1871		2993
		4-speed	352	179	85				
7.50-17		3-speed	143	82		49	1819		2911
		4-speed	343	174	83				
15"	5.14:1	3-speed	180	103		61	2297 +	2401 #	3675
		4-speed	432	219	105				
7.00-17		3-speed	165	94		56	2104 +	2206 #	3367
		4-speed	396	201	96				
7.50-17		3-speed	160	92		55	2046 +	2165 #	3274
			385	195	93				
7.00-17		4-speed	396	201	96	56	2104 +	2206 #	3367
7.50-17		4-speed	385	195	93	55	2046 +	2165 #	3274
7.00-18		4-speed	381	193	92	54	2024 +	2126 #	3238
6.50-20	5.43:1	4-speed	392	199	95	56	2081	2185 §	3329
7.00-20		4-speed	381	193	92	54	2023	2124 §	3236
7.50-20		4-speed	368	188	88	52	1936	2034 §	3130
6.50-20	6.17:1	4-speed	445	226	108	63	2364	2482 §	3782
7.00-20		4-speed	433	219	105	61	2298	2413 §	3677
7.50-20		4-speed	415	210	100	59	2202	2312 §	3523
7.50-20		4-speed	415	210	100	59		2312	3523
8.25-20		4-speed	401	203	97	57		2239	3412
7.50-20	Two speed 6.13:1	4-speed	412	208	100	58		2297	3501
	Two speed 8.11:1	4-speed	544	276	132	—		3038	4635
8.25-20	Two speed 6.13:1	4-speed	399	202	97	57		2228	3390
	Two speed 8.11:1	4-speed	527	267	128	75		2939	4479
9.00-20	6.17:1	4-speed	380	193	92	54		2118	3227
	Two speed 6.13:1	4-speed	377	191	91	53		2104	3206
	Two speed 8.11:1	4-speed	499	253	121	71		2780	4239

§ Engine RPM is determined by locating the figure for one mile per hour and multiplying by the desired miles per hour. MPH is determined by dividing the known engine RPM by the engine RPM for one mile per hour. Also known as N V factor. + - 3600, 3800 only. # - 3700, 3900 only. § - EPC. ¢ - Estimated.

Revised: 7-17-50. • - Governed speed corrected.

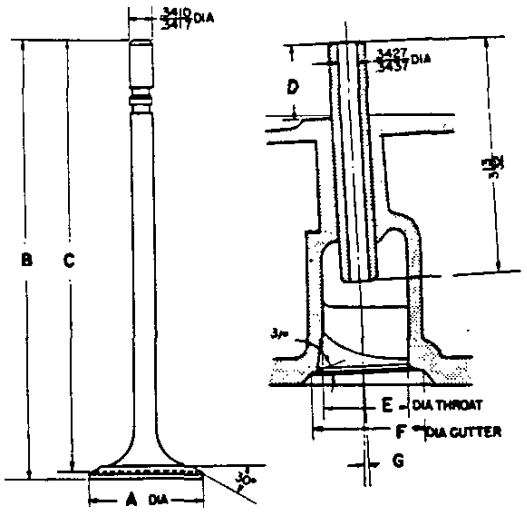
VALVE TRAIN



Flat head, optional design for 216 engines

ITEM	216.5 engine	235.5 engine
A	$31/32^{+0}_{-1/64}$	$7/8^{+0}_{-1/64}$
B	14°46'45"	16°

EXHAUST •



ITEM	216.5 engine	235.5 engine
A	1-41/64	1-15/16
B	6.260-6.290	6.364-6.394
C	6.177-6.187	6.272-6.282
D	$1-5/64^{+0}_{-1/64}$	$1-1/64^{+0}_{-1/64}$
E	1-1/4	1-7/16
F	1-13/16	2-3/64
G	2°33'30"	3°26'

INLET

VALVES

Make ---------- Own
Material: Exhaust valve ------- Silichrome steel
Inlet valve - Silichrome or Nickel-chrome stl
Stem end style --- Grooved for keys and oil seal
Lift: Exhaust valve ---------- .3118
Inlet valve ---------- .2941
Face angle: Exhaust valve ---------- 45°
Inlet valve ---------- 30°
Distance between valve centers (measured along centerline of engine) ----------
216.5 engine, 1-21/32; 235.5 engine, 1-35/64
Valve lash (engine normalized *): Inlet Exhaust
Up to and including
8000 GVW and school buses ----- .008 .015
Above 8000 pounds GVW --------- .010 .020 x

*-To normalize engine, run it at fast idle (approximately 600 RPM) until a constant oil temperature is maintained for a period of five min.

TAPPETS

Type, material ---- Cylindrical, cast alloy iron
Outside diameter ---------- .989-.990
Lift: Exhaust (tappet) ---------- .2111
Inlet (tappet) ---------- .1991
Clearance ---------- Selective fit
Hydraulic valve lifters ---------- None

VALVE STEM GUIDES

Type ---------- Removable
Clearance with stem: Exhaust -------- .002-.0037
Inlet ---------- .001-.0027

VALVE ROCKER ARMS

Material ---------- Cast malleable iron
Ratio (valve lift to cam lift) --------- 1.477:1
Torque of valve rocker shaft support bolts and nuts ---------- 25-30 ft lb
Bearing: Type ---------- Machined in rocker arm
Inside diameter ---------- .7922-.7935
Length ---------- 15/16

VALVE SPRINGS
LENGTH AND PRESSURE

Valve closed ---------- 1.821 at 53-63 lb
Valve open ---------- 1.505 at 124-140 lb
Free (out of engine) length ---------- 2-1/8

VALVE SEATS

Material ------- Cast alloy iron (cylinder head)
Inserts ---------- None
Angle: Exhaust seat (in head) ---------- 46°
Inlet seat (in head) ---------- 31°
Width in head: Exhaust seat ---------- .062-.093
Inlet seat ---------- .035-.060
Cooling, jets of water under pressure ----------
---------- 216.5 engine, yes; 235.5 engine, no

5-1-50. Revised: 7-17-50, • - Valve design and dimension changed; x - Weight corrected.

ENGINE ELECTRICAL SYSTEM

GENERATOR

Make, model ---------- Delco-Remy, 1102710
Type ---------- 2 brush, shunt wound
Rated voltage ---------- 6 to 8
Ventilation --------- By fan in generator pulley
Driven by ---------- Fan belt
Pulley size ---------- 28°V x 3-11/32 dia
Speed ratio (generator to engine) ------- 1.83:1
Maximum output speeds (hot):
Generator RPM ---------- 2400 and up
Engine RPM ---------- 1311 and up

Bearings:	Commutator end	Drive end
Number	812823	Anti-friction bearing, see page 101
Type	Bronze bushing	
ID	.562-.563	
OD	.783-.784	
Length	51/64	

Brush spring tension ---------- 24 to 32 oz
Rotation (drive end) ---------- Clockwise

VOLTAGE AND CURRENT REGULATOR

Make and model ---------- Delco-Remy, 1118301
Type ---------- Vibrator
Location -- On dash LH side in engine compartment
Voltage regulator:
Volts ---------- 7.4
Temperature ---------- Operating
Average air gap ---------- .075-.085
Current regulator:
Amperes ---------- 35
Temperature ---------- Operating
Average air gap ---------- .075-.085
Cutout relay:
Point opening (amperes) ---------- 0 - 4
Point closing: Volts ---------- 6.4
Generator armature speed --------- 800 RPM
Engine speed ---------- 437 RPM
Average air gap ---------- .020
Point gap ---------- .020

RPO 326 HEAVY DUTY GENERATOR EQUIPMENT

Generator equipment (40 amp) ---------- All •
Generator: Make, model --- Delco-Remy, 1102729
Regulator: Make, model --- Delco-Remy, 1118300
Generator equip. (55 amp) -- All except 37,3900,5000 x
Generator: Make, model --- Delco-Remy, 1106757
Regulator: Make, model --- Delco-Remy, 1118390

STARTING

Starting device -------- Mechanical over-running clutch actuated by push button and solenoid for Series 3700, 3900 and by pedal for all others.
Starting operation ---------- With ignition switch ON, depress push button on Series 3700, 3900; depress starter pedal on all others.
Pinion meshes ---------- From front of flywheel
Pinion teeth ---------- 9
Flywheel teeth ---------- 139, 1/2 wide, 13.5 PD
Flywheel bolt torque (service) ----- 50-65 ft lb
Gear ratio (starter to flywheel) ------- 15.44:1
Normal engine cranking RPM (60°F air) ------ 125

STARTING MOTOR

Make ---------- Delco-Remy
Model: Series 3700, 3900 ---------- 1107075
All others ---------- 1107055
Direction of rotation (front view) ----------
---------- Counter-clockwise

Bushings	Commutator end	Drive end
Type	Oilless, rolled bronze, with graphite-filled indentations on inside surface	
ID	.5625-.5635	.499-.501
OD	.6245-.6255	.5615-.5625
Length	.812	.781

Test data:	Lock test	No load test
Amperage	525	65
Volts	3.4	5
Torque	12 ft lb	
RPM		5000

Brush spring tension ---------- 24 to 28 oz

BATTERY

ITEM	4500, 6700	5000	ALL OTHERS
Make and model	Delco, 19Q4W	Delco, 15AA4-W	
Length, at top	10-3/8	9-1/32	
Width, at top	7		
Height	8-11/16		
Voltage	6		
Capacity	125 amp hrs	100 amp hrs	
	at 20-hour rate		
Bench normal charging rate	9 amp	7 amp	
Cells	3, side-to-side arrangement		
Plates per cell	19	15	
Ground	Negative terminal		
Location(3700 & 3900 same as 4500 & 6700)	At right side of engine, on frame	Below driver compartment floor, on right side	

IGNITION SYSTEM

Type -- Separate units, high tension distributor with centrifugal and vacuum spark advance, high intensity spark and water-proof ignition coil.
Ignition cable: Make ---------- Packard Electric
Ignition lock: Make ---------- Delco-Remy
Type ---------- Two position: on and off, key is removed in off position only

COIL

Make, model ---------- Delco-Remy, 1115380
Location ---------- Engine right side
Amperes drawn -- 4.5, engine stopped; 2.5 idling

SPARK PLUGS

Make, model ---------- AC, 44-5 Com.
Thread size ---------- 14 mm
Recommended gap ---------- .035
Recommended torque ---------- 20-25 ft lb

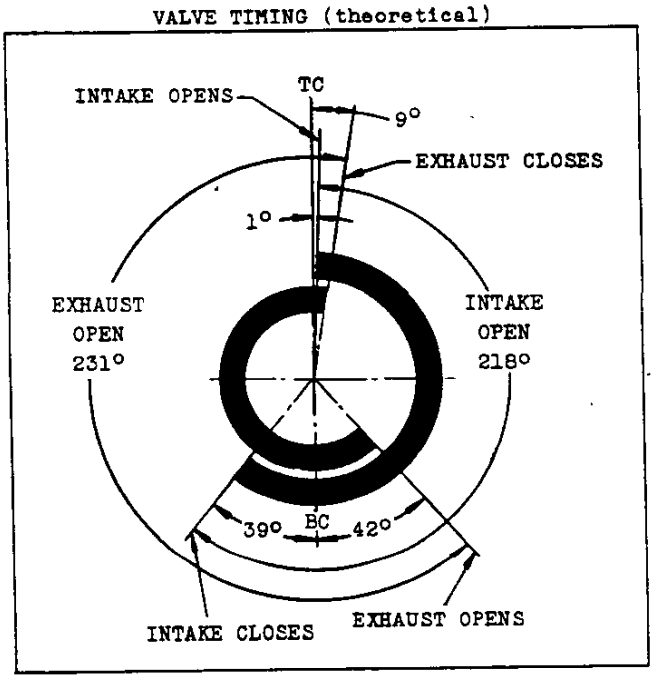
CONTINUED

5-1-50. Revised: 7-17-50, • - Series usage changed; x - 55 amp generator equipment added.

DISTRIBUTOR

Make, model: 216.5 engine -- Delco-Remy, 1112353
235.5 engine ---------- Delco-Remy, 1112358
Current source ---------- Generator or battery
Breaker contact opening and nominal cam angle:
With new breaker lever --- .018-.024 ---- 34°
With old breaker lever --- .015-.022 ---- 39°
Breaker arm tension ---------- 17-21 oz
Vacuum control part number ---------- 1116043
Condenser: Part no. and cap. ----- 1869704, .2mf

VALVE TIMING (theoretical)

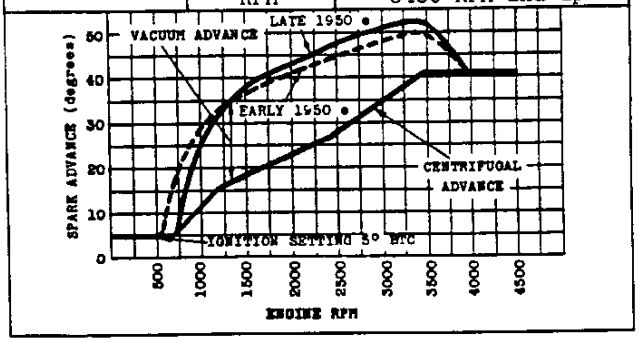


ENGINE TIMING-Ignition

Timing spark advance (initial setting) -- 5° BTC
Timing mark, location --- Steel ball in flywheel
Firing order ---------- 1-5-3-6-2-4

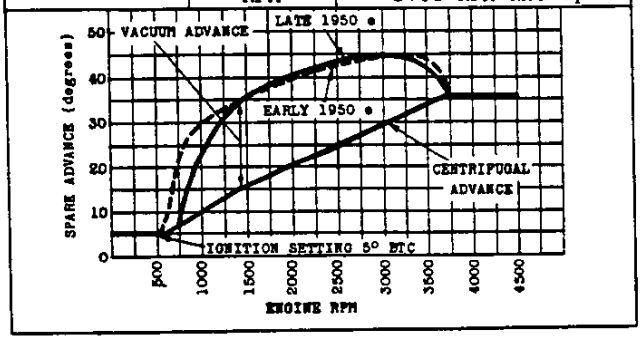
THRIFTMASTER 216.5 CU.IN. ENGINE

Automatic spark advance	Advance begins	Full advance
Vacuum control	7" to 8.5" Hg	18° to 22° at 16.5" to 18.5" Hg
Centrifugal	575 to 775 RPM	32.5° to 39.5° at 3450 RPM and up



LOADMASTER 235.5 CU.IN. ENGINE

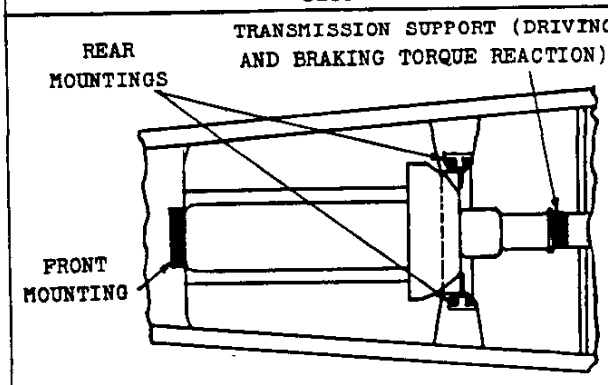
Automatic spark advance	Advance begins	Full advance
Vacuum control	7" to 8.5" Hg	18° to 22° at 16.5" to 18.5" Hg
Centrifugal	450 to 750 RPM	29° to 33° at 3700 RPM and up



• - VACUUM ADVANCE CURVES. Early 1950: revised to most recent test data. Late 1950: applicable for carburetors with relocated vacuum advance ports.

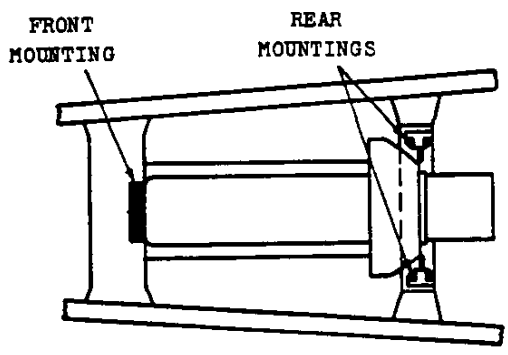
POWER PLANT MOUNTING

3100



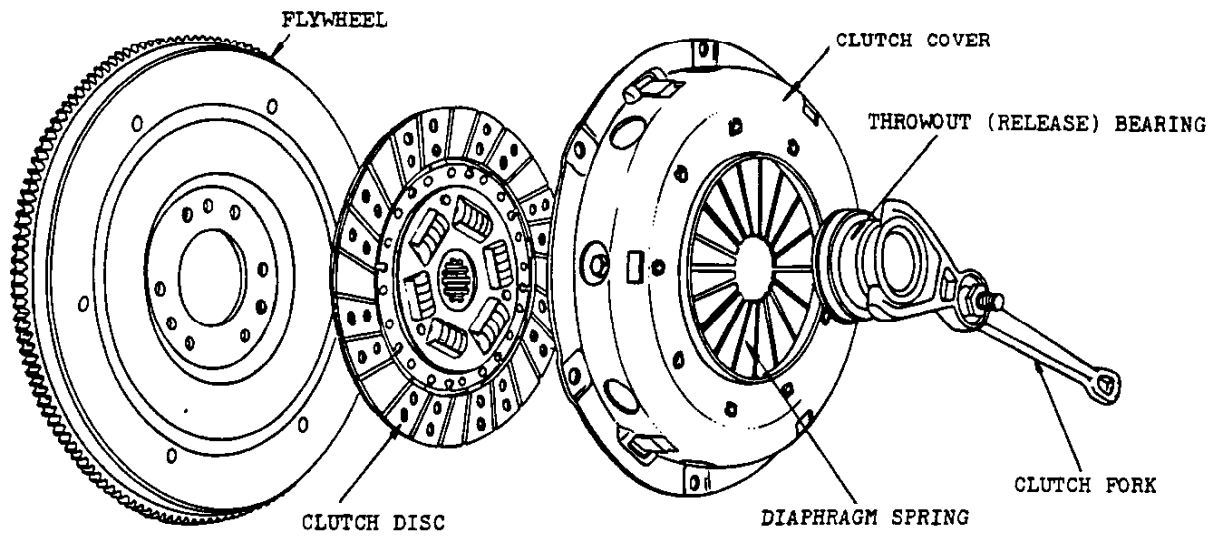
TYPE: 4-POINT RUBBER (CUSHION BALANCED)

ALL OTHER TRUCKS



TYPE: 3-POINT RUBBER (CUSHION BALANCED)

5-1-50. Revised. 9-22-50; 12-1-50, • - New spark advance curves added.

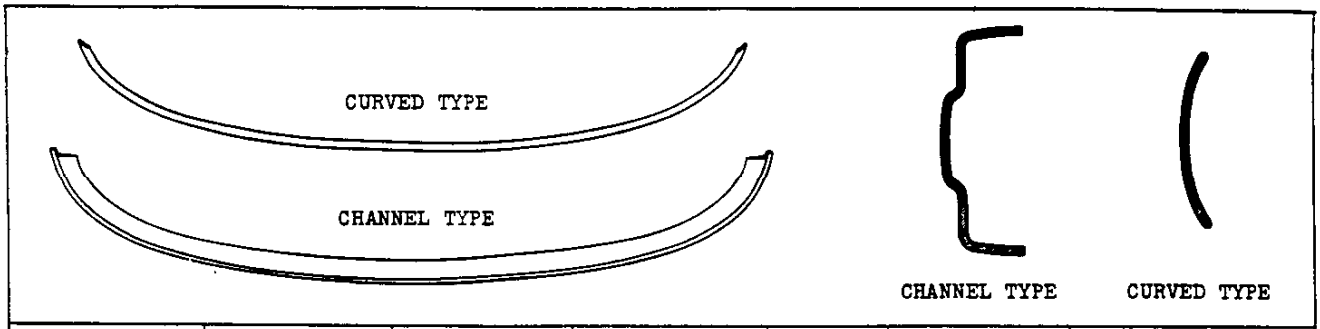


3100 SERIES REGULAR CLUTCH ILLUSTRATED

ITEM			3100		All except 3100
			Regular clutch	RPO 227	Regular clutch
Type			Single dry plate		
Rated torque capacity			210 foot pounds		
Drive			Direct to flywheel face		
Ventilation			Vanes cast in pressure plate		
Diaphragm spring	Pressure in flat position		1100 to 1225 pounds	1175 to 1275 pounds	
	Material		Spring steel, heat treated		
	Pressure levers		18, integral with spring		
Driving members			Two (flywheel and pressure plate)		
Driven disc	Type		One, spring cushioned plate with two molded facings		
	Vibration insulation at hub		6 cushion springs		
	Facing (2)	Material	Woven or molded asbestos composition •		
		Outside diameter	9-1/8	10-3/4	
		Inside diameter	6-1/8	7	
		Area (both facings)	71.86 square inches	104.6 square inches	
		Thickness	.132-.138	.137-.143	
Bearings	Throwout (release)	Type, make, number	Anti-friction bearings, See page 101		
		Lubrication	Packed for life		
	Pilot	Make and number	Chevrolet 412562		
		Type	Sintered graphite-bronze bushing. Oil-impregnated		
		Inside diameter	.5905-.5920		
		Outside diameter	1.0935-1.0945		
		Width	.740-.760		
		Lubrication	Self		
Controls	Clutch fork type		Drop-forged (pivot mounted on ball)		
	Pedal mounting location		On shaft, bracketed to side rail (to subframe in 5000)		
Flywheel	Material		Cast alloy iron		
	Weight (with ring gear)		30 pounds		
	Ring gear type		Steel, shrunk on		
	Ring gear teeth		139, 1/2 wide, 13.9 P.D. (9 teeth on starter pinion)		
Clutch attachment to flywheel			6 bolts	9 bolts	

5-1-50. Revised: 7-17-50, • - Material type corrected.

BUMPERS



ITEM	3100, 3600	3105-06-07-16	3102-03-04-12, 3602-03-04-12	3800	3805-3807	4000,5000,6000 Reg 3700, 3900 RPO
Location	Front	Rear		Front	Rear	Front
Type	Curved					Channel
Overall width	69-7/8		70	69-7/8		75-1/16
Overall height	5-7/32					6-31/32
Gauge	.133-.147			.231-.245		.227-.251
Material	Spring steel					H R Steel
Finish	Chrome plated					Painted

LIGHTS AND HORN

(Units listed below are shipped loose on Series 3700 and 3900)

HEADLIGHTS

Make and type ---------- Guide, Sealed Beam
Location ---------- In front fender faces
Sealed Beam unit: Diameter ---------- 7
Lens diameter ---------- 6-11/16
Dimmed by --------- Foot switch (depresses beam)
Beam indicator location ---- In speedometer face

PARKING LIGHTS

Location ---------- Between first two bars in upper corners of radiator grille

TAIL AND STOP LIGHTS

Make and type ---------- Guide, combination
Number and location:
Two-unit bodies ---------- One, attached to rear end of frame left side member
Canopy Expresses and Suburban Carryall ---------- One, centered on tail gate (linkage automatically adjusts light for tail gate position)
Panels ---------- One, on left rear door
RPO 249:
Panels, Canopy Expresses, and Suburban Carryall ----- Two extra combination tail and stop lights, one at rear of each body side panel
Rear license plate illumination -------- Lighted through window in combination tail and stop light
Dome light ---------- In all except cowl models

LIGHTING SWITCHES

Make ---------- Delco-Remy
Main switch ---------- Two-position, mounted on instrument panel. Incorporates a rheostat, operated by rotating the switch knob, which controls the brightness of the instrument panel lights
Stop light switch ----- Mechanical, on toe board
Dome light switch ---------- At light

PROTECTIVE DEVICES

Circuit breaker: Type ---------- Bimetal thermal element in main lighting switch
Capacity ---------- 30 amperes
Fuses (in series with circuit breaker, in tail and stop light circuits): Number and type ---------- 2 (1 spare); 20 amp, SFE glass cartridge
Location ------- In fuse box on front of dash

HORN

Make and type ---------- Delco-Remy, vibrator
Location ---------- COE on front of dash, all others on intake manifold
Current drain ---------- 10 amperes

BULBS

USED IN		QUANTITY	TRADE NO.	POWER	USED IN			QUANTITY	TRADE NO.	POWER
Parking lights		2	63	3 cp	Tail and stop lights	Panel Trucks	Tail Stop	1	1154*	3 cp 21 cp
Instrument cluster		4	55	2 cp						
Beam indicator		1	51	1 cp		All others	Tail Stop	1	63	3 cp
Ignition lock		1	55	2 cp				1	1129	21 cp
Dome light		1	87	15 cp		RPO 249	Tail Stop	2	1154*	3 cp 21 cp
Headlights	Upper beam	2	2400 CC*	45 W						
	Lower beam			35 W						

* - Single bulb, double filament

5-1-50. Revised: 12-1-50, ● - Data corrected.

REGULAR PRODUCTION OPTIONS

RPO	ITEM			MODELS
200	Shock absorbers	Lever, double acting	Front	Series 4000, 5000, 6000
			Rear	Series 3900, 4000, 5000, 6700
		Direct, double-acting	Rear	Series 3800
202	Two-speed rear axle			Series 5000, 6000
204	Rear axle, 5.43 to 1 ratio			Series 4000
207	Long running boards and rear fenders			Series 3602-03-12; 3802-03-12
208	Rear axle, 5.14 to 1 ratio			Series 3600
210	Rear view mirror	Short, LH (bracket only)		All Cab Chassis, except model 3103
		Short, RH (mirror and bracket)		All Cab Chassis, Pickups, and single-unit body models
		Long, LH (bracket only)		Models 3103-04; 3604, 3804
		Long, RH (mirror and bracket)		All cab models
211	Rear shock absorber shields			Series 3000, except 3900
212	Brake booster			Series 4000
213				Series 3800, 3900
216	Oil bath air cleaner	1 lb capacity		Series 3100, 3600, 3800, 4100, 4400
		2 lb capacity		Series 3100, 3600, 3800, 4000
225	Loadmaster heavy-duty engine			Series 4000
227	Heavy-duty clutch			Series 3100
230	High-sill platform			Models 3608-09
233	Heavy-duty frame			Series 4100
234	Color combinations (11)			All, except Series 3700, 3900 (see Page 69)
237	Oil filter			All, except Series 3700, 3900
241	Engine governor			Series 3100, 3600, 3800, 4100, 4400
249	Dual tail and stop lights			All single-unit body models
254	Heavy-duty rear springs			Series 3100
256	Heavy-duty radiator			Series 3600, 3800, 4000
263	Auxiliary seat			All Panels and Canopy Express models
267	Auxiliary rear springs			Series 3800, 3900, 4100, 4400
268	Two-stage rear springs			Series 4100, 4400, 6100, 6400
281	Vacuum reserve tank			Series 4000, 5000, 6000
292	20 x 5.00S wheel equipment			Models 4102-12; 4402-12
318	Four-speed transmission			Series 3100, 3600, 3700
326	Heavy-duty generator equipment	Rating, 40 amp		All models ●
		Rating, 55 amp		All, except 3700, 3900, 5000 x
328	Auxiliary stand-drive control			Models 3802, 4102 ●
329	School bus chassis equipment (Junior)			Model 3802
340	Vacuum booster fuel pump			All models
348	Propeller shaft brake			Series 4500, 6700
361	Genuine leather seat trim			All cab models, single-unit body models, except 3106-16
367	Front bumper			Series 3700, 3900
380	HD equipment (and identification plate)			Series 4100, 4400
384	Spare wheel carrier equipment			Series 3700, 3900
386	Chrome radiator grille			Series 3100, 3600, 3800, except models 3106-16
389	Wide running boards			Model 3104
390	De Luxe equipment			All cab models and panels
401	Stake racks			All platform and express platform models
	Stock racks			Models 4408, 5408, 6408
402	Identification plate ("S" series)			Series 5000, 6100, 6400
272	Tires, 7.50-17-8 pr			Series 3600, 3700, 3800, 3900
273	Tires, 15"-6 pr			Series 3100 (3600, 3700 spare)
277	Tires, 7.00-17-6 pr			Series 3600, 3700 (3800, 3900 spare)
278	Tires, 7.00-17-8 pr			Series 3600, 3700, 3800, 3900
279	Tires, 7.50-17-10 pr			Model 3802, spare
280	Tires, 15"-8 pr			Series 3100, 3600, 3700
282	Tires, 6.50-16-6 pr			Series 3100
288	Tires, 6.70-15-6 pr			Series 3100
295	Tires, 7.00-18-8 pr			Series 3800, 3900, except models 3804-05-07
296	Tires, 7.00-20-10 pr			Series 4000
300	Tires, 7.00-20-8 pr			Series 4000
304	Tires, 7.50-20-8 pr			Series 4100, 4400 (5000, 6000 spare)
305	Tires, 7.50-20-10 pr			Series 4100, 4400, 5000, 6000
312	Tires, 9.00-20-10 pr			Series 5000, 6100, 6400
343	Tires, 8.25-20-10 pr			Series 5000, 6000
344	Tires, 8.25-20-12 pr			Series 5000, 6000
615	Less rear fender equipment			Models 3102-03-12 ◆

5-1-50. Revised: 7-17-50, ● - Model usage changed; x - 55 amp generator equipment added; ◆ - RPO 615 added.