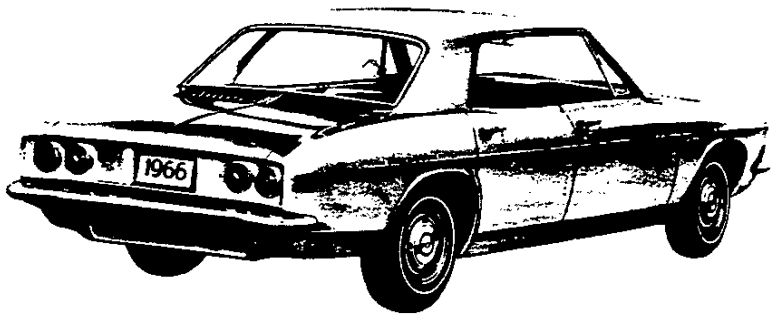
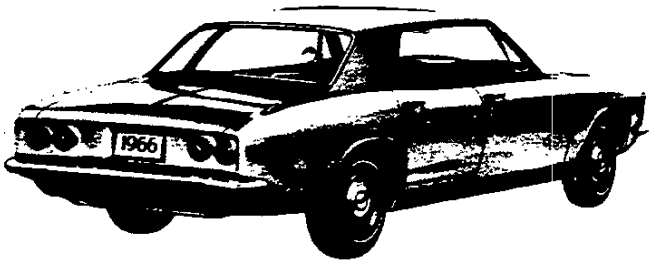
GENERAL



MODEL IDENTIFICATION

CORVAIR 500 10100 SERIES

MODEL 10137 2-DOOR SPORT COUPE, 5-PASSENGER
MODEL 10139 4-DOOR SPORT SEDAN, 6- PASSENGER

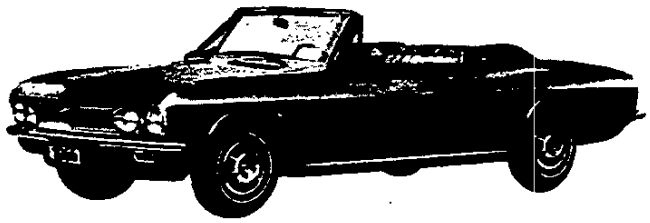


MONZA 10500 SERIES

MODEL 10537 2-DOOR SPORT COUPE, 4-PASSENGER
MODEL 10539 4-DOOR SPORT SEDAN, 5-PASSENGER
MODEL 10567 2-DOOR CONVERTIBLE,4-PASSENGER

CORSA 10700 SERIES

MODEL 10737 2-DOOR SPORT COUPE, 4-PASSENGER
MODEL 10767 2-DOOR CONVERTIBLE, 4-PASSENGER



ONLY BASIC DESIGNATIONS SHOWN

VEHICLE SERIAL NUMBER

Example:

Model	Model Year	Assembly Plant	Unit Number
	1966	(Willow Run)	(25th unit)
10137	6	W	100025

Thus: The 25th model built at Willow Run would be serial number 101376W100025

ASSEMBLY PLANTS

W - Willow Run L - Los Angeles

Starting unit number ---------- 100001 and up at each assembly plant

Location ---------- On plate on L.H. rear top of side rail rearward of battery retaining unit

REAR AXLE IDENTIFICATION

Example: RA 0212 T

Source¢ Designation	Production* Month and Day	Type Designation
T(Tonawanda)	0212	RA

RA - 6-cylinder, 3 and 4-speed (101-10500)
RB - 6-cylinder, 3-4 speed (10700)
RG - 6-cylinder, automatic (101-10500)

* - Month: February, 02; 12th day of February, 12

Location ---------- Number stamped on lower left side of differential carrier

ENGINE IDENTIFICATION

Example: AA 0212 B

Type Designation	Production* Month and Day	Source¢ Designation
AA	0212	W(Warren)

AA ------ 101-10500 3-speed, 4-speed, PG ------ 3.27:1
AB ---------- 10700 3-speed, 4-speed --------- 3.55:1

* - Month: June, 06; 12th day of June 12
¢ - G - Gear & Axle, B - Buffalo, W - Warren

Location ---------- Stamped on top of crankcase at rear of engine rear center, right of generator

REGULAR EQUIPMENT—EXTERIOR

Bright Metal Trim & Moldings	Stainless Steel	Back window reveal	All exc. convs.
		Body belt - rear	Convertibles
		Roof drip gutter	10537,39; 10737
		Roof reveal	All exc. conv.
		Windshield header and pillar	Convertibles
		Windshield reveal	All
	Anodized Aluminum	Back-up lamp bezels	All
		Body sill	105-10700
		Engine air exhaust grille bezel	10700
		Headlamp and taillamp bezels	All
		Parking lamp bezels	
		Rear cove reveal	105-10700
		Wheel openings	
	Chrome Plated Metal	Engine compartment lid nameplate "Corvair"	All
		Engine compartment lid emblem "140"	10700
		Front panel nameplate "Corvair"	All
		Front panel emblem	
		Front door vent glass channel and post	
		Front door vent glass frame	
		Front fender series nameplate	101-10700
		Front fender series emblem (Rr.qtr.emblem 10700)	105-10700
		Hub caps	10100
		Stainless steel wheel trim covers	105-10700
Back-up lamps			All
Body rear cove area (silver painted)			10700
Exhaust grille - engine air - (silver painted)			105-10700
Filler - left front fender gasoline			All
Horn - single			10100
Horns - dual			105-10700
Lamp - rear license			All
Top - counterbalanced manual folding			Convertibles
Wipers - dual electric two speed windshield with washers			All
Chrome plate outside mirror - driver's door			All

Bright Metal Trim and Moldings	Coat hooks		All exc. convs.
	Console - transmission shift lever		10700
	Door and window controls handles - single arm		All
	Door sill plates		
	Front seat end panels		105-10700
	Rear view mirror back and support		
	Seat adjuster handle		All
	Sunshade supports		
	Transmission shift lever		10700
Instrument Panel	Cigarette lighter and ash tray		All
	Control knobs - chrome		
	Glove box door series nameplate		10700
	Glove box door series emblem		10500
	Glove box lock		All
	Ignition lock and starter switch - "4-Position"		
	Instrument panel trim plates	Black paint	105-10700
	Instrument panel pad		All
	Instrument cluster - standard		101-10500
	Instrument cluster (special)	Speedometer with trip odometer	10700
		Tachometer	
		Manifold pressure and cylinder head temperature gauge	
		Electric clock	
	Vent control knobs - color-keyed		All
Interior Lights	Glove box lamp		105-10700
	Instrument panel courtesy (dual)		Convertibles
	Roof center dome		All exc. convs.
Steering Wheel	Deep hub - dual solid spokes - horn button		10100
	Deep hub - dual solid spokes - horn ring		105-10700
Armrests - front door			All
Armrests with ashtrays - rear door or quarter panel			10539,67;10767
Heater - perimeter			All
Locking buttons - door			
Mat - luggage compartment			105-10700
Mirror - rear view (painted back and support)			10100
Seat belts - front and rear			All
Seat - folding rear			105-10700 exc. convs.
Seats - front bucket			105-10700
Sunshades - dual, padded			All
Switch - front door jamb			105-10700
Switch - manual dome lamp (main switch)			All
Ventipanes - friction pivot front			

REGULAR PRODUCTION OPTIONS

BODY OPTIONS

Name		Number	Models
Air conditioning, All Weather		C64	All
Antenna, radio rear manual		U73	
Antenna, radio rear power		U75	
Armrests, rear door		D10	10139
Convenience Group	Inside mirror	Z19	All
	Remote control outside mirror		
	Door edge guards		
	Underhood lamp		
	Luggage lamp		
	Glove box lamp		10100
Glass, tinted body		A01	All
Glass, tinted windshield		A02	
Guard, front bumper		V31	
Guard, rear bumper		V32	
Headrest, conventional type front seat		A82	
Heater (delete)		C48	
Lock, spare wheel		P19	
Lamp switch and flasher, traffic hazard		V74	
Radio and antenna, push button tuning		U63	
Radio and antenna, AM - FM push button tuning		U69	
Seat belts, custom deluxe dual front & rear - (with front retractors only)		A39	
Seat, folding rear		A67	10100
Shoulder harness		A85	All
Speaker, radio auxiliary		U80	
Steering, telescoping shaft		N36	
Top, convertible electric folding		C06	105-10767
Top, convertible folding (color options)		C05	

ENGINE OPTIONS

Air cleaner, heavy duty pre-cleaner	K46	101-10500
Air cleaner, oil bath	K47	All
Generator, Delcotron 12-47 amp.	K84	
Battery, heavy duty	T60	
Air injection reactor	K19	
164 Cubic Inch P-6 110HP	L62	101-10500
164 Cubic Inch P-6 140 HP	L63	
164 Cubic Inch P-6 180 HP Turbocharged	L87	10700

CHASSIS OPTIONS

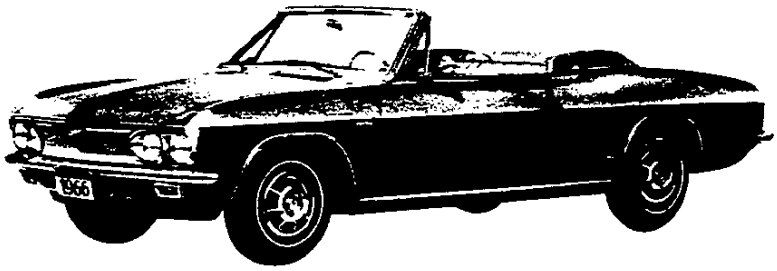
Axle, rear (3.27:1 ratio)	G93	All
Axle, rear (3.55:1 ratio)	G95	101-10500
Axle, rear positraction	G81	All
Cover, magnesium wheel trim	N96	
Cover, simulated wire wheel	P02	
Cover, wheel trim	P01	10100
Steering wheel, wood grained plastic	N34	All
Steering shaft, telescopic	N36	
Steering special	N44	
Suspension, special performance front and rear	F41	
Tires, 7.00x13-4pr whitewall rayon	P54	

TRANSMISSION OPTIONS

Four speed transmission	M20	All
Powerglide transmission	M35	101-10500

Air conditioning, All Weather	101-105-10700
Antenna, radio front manual	All
Antenna, radio rear manual	
Cap, gas tank filler locking	
Clock, instrument panel	All except 10700
Compass, auto	All
Container, litter, inst. panel mtd. (Black only)	
Container, floor litter (saddle type)	All exc. floor shift transmission
Cover, simulated wire wheel trim	All
Cover, simulated magnesium wheel	
Cover, wheel trim	10100
Fire extinguisher, 2-3/4 & 5 lb dry chemical	All
Frame, license plate	
Guard, front bumper	
Guard, door edge	
Guard, gas tank filler door	
Guard, rear bumper	
Lamp, ash tray	
Lamp, courtesy	10000 exc. 105-10767
Lamp, glove box	10100
Lamp, luggage compartment	All
Lamp, parking brake alarm	
Lamp, portable spot	
Lamp, underhood	
Lock, spare wheel	
Lock, rear door safety	All 4-door models
Luggage carrier, deck lid	All
Mat, contour twin front floor	
Mat, contour twin rear floor	
Mat, full width front floor	All except 10700
Mirror, inside rear view prismatic	All
Mirror, outside rear view; replacement kit	
Mirror, remote operated outside rear view	
Mirror, visor vanity	All except convertible
Radio and antenna, AM-FM push button tuning	All
Radio and antenna, manual tuning	
Radio and antenna, push button tuning	
Radio speaker, rear auxiliary	
Radio stereo equipment	
Road hazard package	
Seat cushion, ventilated	
Seat belt retractors	
● Shoulder harness	
● Ski rack equipment	
Switch, traffic hazard lamp	
Tissue dispenser (saddle type)	
Tissue dispenser, instrument panel	
Tool kit	
Trailer hitch, 1000 pound capacity	
Wiring harness, car to trailer connecting	

DIMENSIONS AND WEIGHTS



INTERIOR DIMENSIONS

FRONT COMPARTMENT

CODE	DESCRIPTION	SPORT SEDANS		SPORT COUPES		CONVERTIBLES
		BENCH	BUCKET	BENCH	BUCKET	
H3	Seat cushion height	10.0	9.9	10.0	9.9	
H11	Entrance height	30.1		30.0	30.1	30.0
H13	Steering wheel thigh clearance	3.1	3.0	3.1	3.0	
H30	H point to heel point	7.4		7.6	7.4	
H32	Seat cushion deflection	3.8	4.0	3.6	4.0	
H50	Upper body opening to ground	46.9				
H58	H point rise	.5				
H61	Effective headroom	37.6	37.5		37.7	38.5
H70	H point to body O line	11.8	11.9	12.0	11.9	
H136	Body O line to ground	5.0				
W3	Shoulder room	54.7				
W5	Hip room	56.1				
L7	Steering wheel torso clearance	12.0		12.1	12.0	
L17	H point travel	4.0				
L34	Effective leg room	41.1	40.9	41.1	40.9	

REAR COMPARTMENT

H8	Seat cushion height	11.6	11.7	9.8	9.9	
H12	Entrance height	30.0	30.2	---		
H31	H point to heel point	10.3	10.2	8.8	9.0	
H33	Seat cushion deflection	3.2	3.4	4.2	4.3	4.2
H51	Upper body opening to ground	46.7		---		
H63	Effective headroom	36.4	36.6	36.4		38.2
H71	H point to body O line	11.6	11.4	10.1		
H137	Body O line to ground	5.0				
W4	Shoulder room	54.3		52.7		47.9
W6	Hip room	56.1		54.8	54.9	48.2
L3	Rear compartment room	26.6	26.0	23.8	23.2	23.8
L50	H point couple distance	32.0	32.2	28.6		28.8
L51	Effective leg room	35.4	34.6	30.8	30.5	30.8

LUGGAGE COMPARTMENT

---	Compartment opening width	47.8
---	Compartment interior height	22.0
---	Compartment interior width	67.5
---	Compartment interior length	35.5
H195	Compartment loading height	27.6
V1	Usable luggage capacity (cu.ft.)	7.0
---	Total compartment volume (cu.ft.)	13.3

STATION WAGON CARGO SPACE

H201	Maximum cargo height	WAGON NOT AVAILABLE
H202	Rear opening height	
W250	Tailgate to ground height	
W200	Cargo width - front	
W201	Cargo width - wheelhouse	
W203	Rear opening width at floor	
W204	Rear opening width at belt	
W205	Rear opening width above belt	
L200	Maximum cargo length - front seat	
L201	Maximum cargo length - second seat	
L202	Cargo length at floor - front seat	
L203	Cargo length at floor - second seat	
L204	Cargo length at belt - front seat	
L205	Cargo length at belt-second seat	
V2	Total cargo volume (cu.ft.)	

LENGTHS

CODE	DESCRIPTION	SPORT SEDANS	SPORT COUPES	CONVERTIBLES
L101	Wheelbase	108.0		
L102	Tire size (standard)	6.50 x 13		
L103	Overall length	183.3		
L104	Overhang - front	33.0		
L105	Overhang - rear	42.3		
---	Overall length - less bumpers	179.7		
L127	Body O line to C/L of rear wheels	98.0		
L128	Hood length at centerline	43.3		

WIDTHS

W101	Tread - front	55.0		
W102	Tread - rear	56.6		
W103	Maximum overall width of car	69.7		
W106	Front fender overall width	69.3		
W120	Overall car width, front doors open	131.3	- - -	
W121	Overall car width, rear doors open	127.7	- - -	

HEIGHTS

H101	Overall height (design)	51.2	51.3	51.5
---	Overall height (curb)	52.7	52.8	53.0
H102	Front bumper to ground	16.4		
H104	Rear bumper to ground	16.6		
H111	Rocker panel to ground - front	6.4		
H112	Rocker panel to ground - rear	6.8		
H114	Hood at rear to ground	35.2		
H115	Step height - front (design)	12.5		
H116	Step height - rear (design)	12.3	- - -	
H125	Headlamp to ground	23.0		
H126	Taillamp to ground	23.5		
H130	Step height - front (curb)	14.0		
H131	Step height - rear (curb)	13.8	- - -	
H136	Body O line to ground - front	5.0		
H137	Body O line to ground - rear	5.0		
H195	Liftover height	27.6		

CLEARANCES

H106	Angle of approach	26°
H107	Angle of departure	20°
H147	Ramp breakover angle	11°
H148	Front suspension to ground	5.9
H149	Oil pan to ground	5.9
H150	Flywheel housing to ground	5.6
H151	Frame to ground	6.4
H152	Exhaust system to ground	7.5
H153	Rear axle to ground	8.8
H154	Fuel tank to ground	6.8
H155	Tire well to ground	- -
H156	Minimum ground clearance	5.4
S1	Windshield glass area	1009.1

VEHICLE WEIGHTS

CORVAIR 500 10100 SERIES

VEHICLE TYPE		SHIPPING WEIGHT			CURB WEIGHT		
Model	Description	Front	Rear	Total	Front	Rear	Total
10137	2-Door Sport Coupe 6-cylinder	815	1585	2400	900	1590	2485
10139	4-Door Sport Sedan 6-cylinder	830	1615	2445	915	1620	2530

MONZA 10500 SERIES

10537	2-Door Sport Coupe 6-cylinder	830	1615	2445	910	1620	2530
10539	4-Door Sport Sedan 6-cylinder	845	1650	2495	930	1655	2580
10567	2-Door Convertible 6-cylinder	935	1740	2675	1020	1745	2760

CORSA 10700 SERIES

10737	2-Door Sport Coupe 6-cylinder	845	1640	2485	925	1645	2570
10767	2-Door Convertible 6-cylinder	950	1770	2720	1030	1775	2805

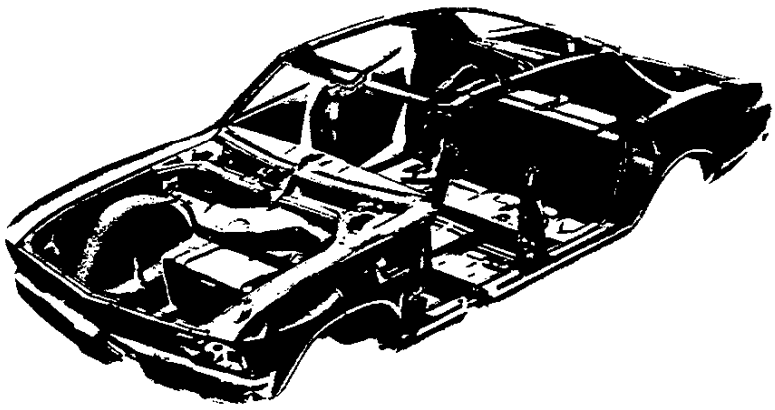
SHIPPING WEIGHT: Weight of basic vehicle with regular equipment and grease and oil. Weight of gasoline and water not included.

CURB WEIGHT: Weight of empty vehicle ready to drive. Shipping weight plus the weight of gasoline. For the weight of gasoline add 86 pounds.

For total shipping, and curb, weights of vehicles equipped with the following options, add to, or deduct from, the base vehicle weight (lbs).

RPO A67	Folding rear seat	+ 30
RPO C48	Less heater	- 29
RPO C64	Air conditioning	+115
RPO L63	High performance engine	+ 34
RPO L87	Turbocharged engine	- 2
RPO M20	Four-speed transmission	+ 6
RPO M35	Powerglide transmission	+10

BODY



EXTERIOR PAINT PROCESS

1. RUSTPROOFING . . . Bare steel is thoroughly treated with chemicals that etch the metal for improved paint adhesion. This chemical also cleans the metal to give it a corrosion-resisting surface.
2. BODY AND SHEET METAL PRIMER . . . Four different and specially formulated corrosion resistant primers are used during sub-assembly of the body where rust could possibly develop. Areas considered especially critical are subsequently coated with another type rust inhibiting compound, after the lacquer coats have been applied.
   A primer coat is applied to all outside and inside surfaces of the front fenders and hood. This is done by dipping or flowcoating to insure coating in all seams and secluded areas, and then baking at 390 degrees F for 30 minutes. After baking, a coat of sealer is applied to all surfaces requiring a subsequent coat of lacquer.
3. PRIMER-SURFACER COAT AND FLASH PRIME COAT . . . An air dried flash prime coat is applied to surfaces below the beltline. Next, a full primer-surfacer coat is applied to all outside surfaces of the body receiving lacquer and then oven baked for 45 minutes at 285 degrees F.
4. SANDING . . . Power wet sanding followed by hand sanding is done on all surfaces requiring lacquer. Upon inspection, spot sanding assures an absolutely smooth surface for the lacquer. After lacquer application and initial baking, final wet sanding, both power and hand, prepares the body for final baking by removing surface irregularities.
5. LACQUERING . . . Many coats of acrylic lacquer are now sprayed on the surfaces to build up a finish of the required thickness for each color.
6. INITIAL BAKING . . . To set up the paint hardness for final sanding the body is baked for approximately 10 minutes at 200 degrees F.
7. FINAL BAKING . . . To assure a durable, hard, high luster finish the lacquer is now baked for 30 minutes at 275 degrees F. Reheating the lacquer after final sanding permits paint film to soften and allows surface blemishes and sanding scratches to disappear during the thermo-reflow process.
8. UNDERCOATING . . . An asphaltic based-asbestos fiber type sound deadener is sprayed inside the wheel housings and on the underside of the underbody at designated locations to block out road noises.
9. PAINT REPAIR . . . Any slight mars, nicks, or scratches that might occur during final assembly are factory-repaired and corrected before shipment. Light "slush" polishing is done to bring painted surfaces to a high luster finish. Wax is sprayed on each vehicle for protection during transit.

CORVAIR 500 10100 SERIES

EXTERIOR			INTERIOR TRIM COLORS AND RPO NUMBERS		
			Med. Fawn	Red	Blue
			Models 10137-39		
RPO	Color	Sales Name	701	739	721
AA	Black	Tuxedo Black	X	X	X
CC	White	Ermine White	X	X	X
DD	Med. Blue	Mist Blue			X
EE	Dk. Blue	Danube Blue			X
FF	Brt. Blue	Marina Blue			X
HH	Med. Green	Willow Green	X		
KK	Med. Turq.	Artesian Turquoise	X		
LL	Dk. Turq.	Tropic Turquoise	X		
MM	Bronze	Aztec Bronze	X		
NN	Maroon	Madeira Maroon	X	X	
RR	Red	Regal Red		X	
TT	Med. Fawn	Sandalwood Tan	X		
VV	Beige	Cameo Beige	X		
WW	Slate	Chateau Slate			X
YY	Yellow	Lemonwood Yellow	X		
	Two-Tone (Lower/Upper) (a)				
CK	White/Med. Turquoise		Not Available		
DC	Med. Blue/White				X
DE	Med. Blue/Dk. Blue				X
HC	Med. Green/White		Not Available		
LC	Dk. Turquoise/White		Not Available		
NA	Maroon/Black		Not Available		
TV	Fawn/Beige		X		
WA	Slate/Black		Not Available		

(a) Model 10139 only.

MONZA 10500 SERIES

CORSA 10700 SERIES

EXTERIOR			INTERIOR TRIM COLORS AND RPO NUMBERS							
			Light Fawn	Turq.	Red	Bright Blue		Black	White (Black)	Bronze
			Models 10537-39-67, 10737-67 (a)							
RPO	Color	Sales Name	702	792	740	722		758	795	788
AA	Black	Tuxedo Black	X	X	X	X		X	X	X
CC	White	Ermine White	X	X	X	X		X	X	X
DD	Med. Blue	Mist Blue						X	X	
EE	Dk. Blue	Danube Blue	X					X		
FF	Brt. Blue	Marina Blue				X		X	X	
HH	Med. Green	Willow Green	X					X	X	
KK	Med. Turq.	Artesian Turquoise	X	X				X	X	
LL	Dk. Turq.	Tropic Turquoise	X	X						
MM	Bronze	Aztec Bronze	X					X		X
NN	Maroon	Madeira Maroon	X		X			X	X	
RR	Red	Regal Red			X			X	X	
TT	Med. Fawn	Sandalwood Tan	X					X		
VV	Beige	Cameo Beige	X			X		X		X
WW	Slate	Chateau Slate						X	X	
YY	Yellow	Lemonwood Yellow	X	X				X	X	
	Two-Tone (Lower/Upper) (b)									
CK	White/Med. Turquoise			X						
DC	Med. Blue/White		Not Available							
DE	Med. Blue/Dk. Blue		Not Available							
HC	Med. Green/White		Not Available							
LC	Dk. Turquoise/White			X						
NA	Maroon/Black							X		
TV	Fawn/Beige		X							
WA	Slate/Black							X		

(a) White trim (black carpet, inst. panel, etc.) RPO 795 not available for Model 10539.
(b) Model 10539 only.
Convertible top: White (regular production), black or beige (RPO C05) with any exterior color.

GENERAL

Type ---------- Integral, with step-down underbody floor, front and rear side rail type members, front and rear end sheet metal components welded to the body assembly, and protective inner fender skirts.

DOORS AND LOCKS

Door construction (front and rear) ------ Two full steel welded panels hinged at front

Door handles ---------- Push-button with fork type door latches. Inside push button locks on all doors.

Door ventipanes ---------- Friction type

VENTILATION

High level with double wall plenum chamber, providing washing and air drying of rocker panels for corrosion resistance. Air and water travel through rocker panels and drain at ends of rocker inner panels.

HOOD AND DECK LID

Type ---------- Dual panel construction, torsion rod counterbalanced luggage compartment lid with external keylock release, telescoping link engine compartment lid with external release lever. Engine compartment air intake beneath rear window providing plenum chamber arrangement with air to engine compartment and water separation and drain off.

WINDSHIELD WIPERS

Type ---------- Positive action, Dual 2-speed electric

Linkage ---------- Parallel acting

SEAT CONSTRUCTION

Type -------- Front seat cushion

0.75 poly foam ---------- 10100

1.50 foam rubber -------- 105-10700

-------- Rear seat cushion

Jute and cotton ---------- 10100, 10537,67,10700

1.75 poly foam ---------- 10539

SPARE TIRE MOUNT

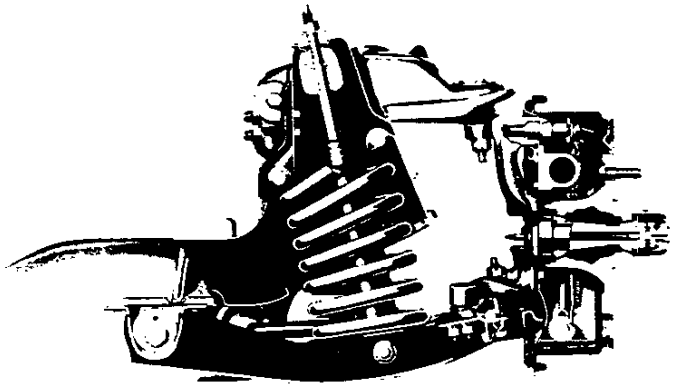
Location ---------- Right rear corner in engine compartment. Tools consist of scissors jack and combination wheel nut wrench and lever handle stored under tire.

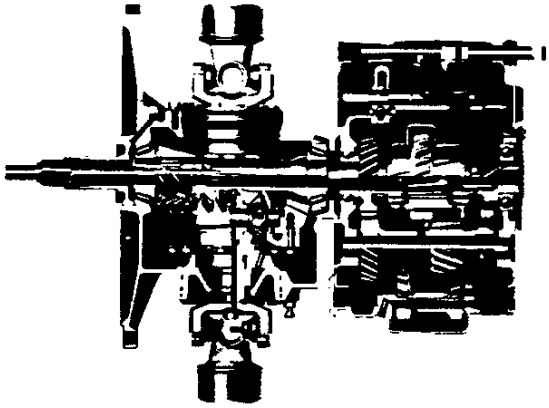
BODY GLASS

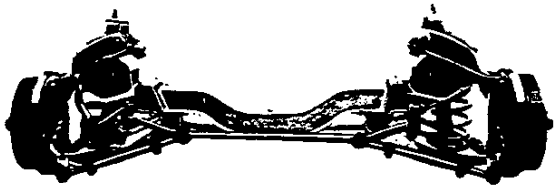
LOCATION	TYPE*	37	39	67
Windshield	One-Piece		1009.1	
Front Door Window	Pivoting Ventipane		51.6	
	Roll Down	821.1	606.0	821.1
Rear Door Window	Roll Down		726.8	
Rear Quarter Window	Roll Down	443.9		865.0
Back Window	One-Piece	1224.7	814.4	1056.0
Total Visibility (Sq. In.)		3550.4	3207.9	2991.0

* All window glass is curved safety solid plate except curved laminated safety plate windshield and flat plastic convertible rear window.

CHASSIS







FRAME AND FRONT SUSPENSION

FRAME
Description ---------- Integral, with step down underbody floor, front and rear side rail type members, and front and rear end sheet metal components welded to body assembly

FRONT SUSPENSION
Description ---------- Independent SLA type, with coil springs and concentric shock absorbers, spherically jointed steering knuckles for each wheel.
Wheel travel, design height
Total ---------- 7.15
Jounce ---------- 3.70
Rebound ---------- 3.45
Wheel to spring, travel ratio ---------- 1.63:1

CONTROL ARMS
Description ---------- Reinforced steel stamping with pre-load steel enclosed rubber bushings at pivot

STEERING KNUCKLES
Description ---------- Forged steel with integral brake cylinder mounting, and detachable steering knuckle arm
Spindle diameters
Inner bearing ---------- 1.2493-1.2498
Outer bearing ---------- .7492-.7497
Thread size ---------- 3/4-20 NEF-3 (mod.)
Wheel bearings --------- Taper roller, two per spindle

SPHERICAL JOINTS
Type ---------- Ball studs, lower self-adjusting for wear
Bearing surface
Upper (two) ---------- Teflon-cotton and teflon-coated phenolic composition
Lower ---------- Teflon-cotton composition

SHOCK ABSORBERS
Type ---------- Direct, double acting; hydraulic
Piston diameter ---------- 1.00

STABILIZER BAR
Type ---------- Link
Material ---------- HR steel
Diameter ---------- .812

● FRONT WHEEL ALIGNMENT (Curb)
Camber (degrees) ---------- P1/2 to P1-1/2
Caster (degrees) ---------- P2-1/2 to P3-1/2
Toe-in (total) ---------- 3/16 to 5/16
SAI (degrees) ---------- 6 to 7

GENERAL SUSPENSION PROVISIONS
Car leveling ---------- Front stabilizer bar
Brake dip control ---- Angle of front upper control arm

FRONT SPRINGS

Part Number	Ref.	Type	Material	Cut-off Length	Wire Dia.	Inside Dia.	Heights		Deflection Rate (lbs per inch)	
							Free	Working (In. @ lbs)	@ Spring	@ Wheel
3857688	A	Coil, R.H. helix	AISI A-5160	101.42	.447	3.453	12.57	6.42 @ 800	130	73
3857690	B			101.88	.465	3.453	12.28	6.42 @ 880	150	80

	Engine	164 Cu.In. 6-Cylinder Engine						
	Models	10100		10500			10700	
		39	37	39	37	67	37	67
3- and 4-Speed, PG	Appl.	A	A	A	A	B	A	B

MANUAL STEERING

Description ---------- Semi-reversible, recirculating ball nut gear with integral shaft. Telescoping shaft available as an option.
Ratio ---------- Gear, 18:1, Overall, 23.3:1
Turning diameters (ft)
- Outside front, wall to wall ---------- 39.3
- Outside front, curb to curb ---------- 37.0
- Inside rear, wall to wall ---------- 19.2
- Inside rear, curb to curb ---------- 20.1

Number of wheel turns, lock to lock ---------- 4.50
Outside wheel angle with inside wheel
- @ 15 degrees ---------- 14
- @ 20 degrees ---------- 18.4
- @ 36.8 degrees (limit of turn) ---------- 34.8

Steering shaft ---------- One; .75 dia.
Linkage ---------- Parallelogram, front of wheels, 2 tie rods
Steering wheel
- Type ---------- Deep dished, 16.0 dia.

WHEELS

Type ---------- Short spoke, full disk
Attachment to hub -------- 5 hex nut, 7/16-20 UNF-2B arranged on a 4.75 dia. bolt circle
Offset ---------- 1.00
Size ---------- 13 x 5.5J

TIRES

Type ---------- Rayon tubeless, blackwall
Construction ---------- 2-ply; rating 4-ply
Size ---------- 7.00 x 13

SERVICE BRAKES (Standard)

Type ---------- Duo-servo, 4-speed hydraulic reverse self-adjusting
Line pressure (psi @ 100 lb pedal load) ---------- 783
Braking ratios
- Pedal ---------- 6.15:1
- Hydraulic ---------- 3.29:1
- Overall ---------- 20.23:1

Distribution of braking effort (theoretical, percent)
- Front wheels ---------- 46
- Rear wheels ---------- 54

Brake drum
- Diameter, front and rear ---------- 9.50
- Construction -------- Composite, web cast into rim
- Material
  - Web ---------- HR steel
  - Rim ---------- Cast iron alloy
- Swept drum area (sq. in.) ---------- 268.6

Brake lining
- Material --------- Full molded asbestos composition
- Length ---------- Primary shoe, 9.01; Secondary shoe, 9.75
- Width ---------- Front, 2.00; Rear, 2.50
- Thickness, minimum @ C/L --------- Primary .17; Secondary .20

Master cylinder
- Piston diameter ---------- 1.00
- Piston travel ---------- .98

Wheel cylinder
- Piston diameter ---------- Front, .875; Rear, .9375
- Foot pedal travel ---------- 6.00

PARKING BRAKES

Type ---------- Mechanical pull-rods, pulleys, and cables operate rear service brakes
Total effective area (sq. in.) ---------- 93.8
Control ---------- Hand-grip ratchet type with trigger-release in grip located under instrument panel to left of steering column

TIRE SPECIFICATIONS

		7.00 x 13-4PR
Loaded rolling radius		11.6
Loaded rev/in. @ 50 MPH		862
Capacity (lb @ psi)		850 @ 15 1130 @ 26
Recommended pressure (cold)¢	Front	15
	Rear	26 *

¢ Average Load
* Convertible 28

REAR AXLE AND SUSPENSION

REAR AXLE
- Description --- Semi-floating, straddle mounted hypoid gear with differential carrier mounted to engine. Differential carrier contains hypoid gear with overhung pinion gear supported by two taper roller bearings.
- Pinion offset --- 1.75
- Pinion bearing adjustment --- Shim
- Hypoid gear PD --- 6.750
  - Type --- Military Spec. MIL-L-2105-B
  - Viscosity --- SAE 80
  - Filler plug --- 3/4 pipe plug
  - Capacity (pts) --- 4.0
- Ratios (standard)
  - 10100, 10500 --- 3.27
  - 10700 --- 3.55
- Differential type --- 2 pinion

AXLE SHAFT
- Type --- Welded steel tubing incorporating universal joint at each end. Brake drum flange integral with axle which is universally-jointed to axle shaft.
- Axle bearings
  - Type --- Tapered roller, 2 per wheel inner and outer bearing seals steel encased rubber

HYPOID AND PINION GEAR TOOTH COMBINATIONS
- 3.27 --- 36,11
- 3.55 --- 32,9

POSITRACTION DIFFERENTIAL (see Power Trains)
- Type --- Two pinion, disc clutch at one side

REAR SUSPENSION
- Description --- Full independent, articulating link type
- Wheel travel, (design height)
  - Total --- 7.47
  - Jounce --- 3.02
  - Rebound --- 4.45
- Wheel to spring, travel ratio --- 1.1:1

SHOCK ABSORBERS
- Type --- Direct, double-acting, hydraulic
- Piston diameter --- 1.00

● REAR WHEEL ALIGNMENT
- Curb
  - Camber (degrees) --- P1/2 to P1-1/2
  - Toe-in (total) --- 3/16 to 5/16

REAR SPRINGS

Part Number	Ref.	Type	Material	Cut-off Length	Wire Dia.	Inside Dia.	Heights		Deflection Rate (lbs per inch)	
							Free	Working (In. @ lbs)	@ Spring	@ Wheel
3859201	A	Coil, R.H. helix	AISI A-5160	117.53	.538	4.20	14.46	7.78 @ 1070	160	160
3869202	B			117.53	.538	4.20	14.84	7.78 @ 1130	160	160

	Engine	164 Cu.In. 6-Cylinder Engine						
	Models	10100		10500			10700	
		39	37	39	37	67	37	67
3- and 4-Speed, PG	Appl.	A	A	A	A	B	A	B

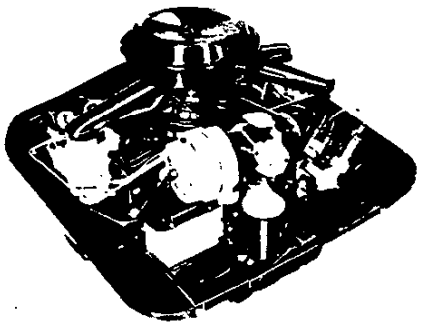
LAMP		NUMBER REQUIRED AND TRADE NUMBER	CANDLE POWER PER LAMP
Ash tray		1-53	1
Automatic transmission position pattern		1-1445	1
Back up		2-1156	32
Clock (with tachometer option) Courtesy		2-631	6
Direction signal indicators		2-1445	1
Dome		1-211	12
Generator (and fan) indicator		1-1895	2
Glove compartment		1-1895	2
Headlamps	Outer	2-4002	High beam, 37.5W Low beam, 55.0W
	Inner	2-4001	High beam, 37.5W
Headlamps hi-beam indicator		1-1445	1
Heater controls		1-1445	1
Instrument cluster		10100 and 10500, 4-1895 10700, 6-1895	2
License plate, rear		1-1155	4
Luggage compartment		1-1003	15
Oil pressure and temperature indicator		1-1895	2
Parking			
	Park	2-1157	4
	Turn		32
Parking brake alarm		1-257	2
Radio		1-1893	2
Spot lamp, portable		1-4416	30W
Tail			
	Tail	2-1157	4
	Stop and turn		32
Traffic hazard indicator		1-1445	1
Underhood		1-93	15

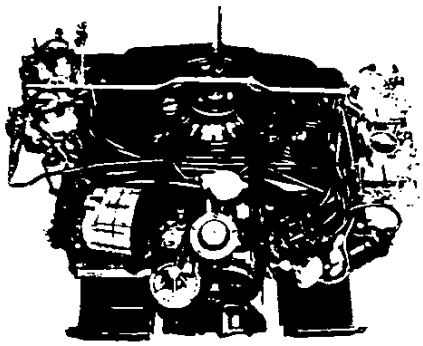
BULBS, FUSES, AND CIRCUIT BREAKERS

CIRCUIT	TYPE OF PROTECTION	LOCATION AND CIRCUIT*
Air conditioning	2 AGC 15 fuses	In line
Ash tray lamp	AGC 3 fuse	Fuse panel (c)
Auto. trans. position pattern lamp	AGC 3 fuse	Fuse panel (c)
Back up lamps		
10100	AGC 10 fuse	Fuse panel (d)
10500 and 10700	AGC 15 fuse	Fuse panel (d)
Cigarette lighter	AGC 10 fuse	Fuse panel (b)
Clock	AGC 10 fuse	Fuse panel (g)
Clock lamp	AGC 3 fuse	Fuse panel (c)
Courtesy lamps	AGC 10 fuse	Fuse panel (g)
Direction signal indicator lamps	AGC 3 fuse	Fuse panel (c)
Dome lamp	AGC 10 fuse	Fuse panel (b)
Folding top motor	40 amp CB	Instrument panel
Fuel gage		
10100	AGC 10 fuse	Fuse panel (d)
10500 and 10700	AGC 15 fuse	Fuse panel (d)
Generator (and fan) indicator lamp		
10100	AGC 10 fuse	Fuse panel (d)
10500 and 10700	AGC 15 fuse	Fuse panel (d)
Glove compartment lamp	AGC 10 fuse	Fuse panel (g)
Headlamps	15 amp CB	Light switch
Headlamps hi-beam indicator lamp	15 amp CB	Light switch
Heater		
10100	AGC 10 fuse	Fuse panel (d)
10500 and 10700	AGC 15 fuse	Fuse panel (d)
Heater control lamp	AGC 3 fuse	Fuse panel (c)
Instrument cluster lamp	AGC 3 fuse	Fuse panel (c)
License plate, rear	AGC 10 fuse	Fuse panel (b)
Luggage compartment lamp	AGC 10 fuse	Fuse panel (b)
Oil press. and temp. indicator lamp		
10100	AGC 10 fuse	Fuse panel (d)
10500 and 10700	AGC 15 fuse	Fuse panel (d)
Parking lamps	15 amp CB	Light switch
Parking brake alarm lamp		
10100	AGC 10 fuse	Fuse panel (d)
10500 and 10700	AGC 15 fuse	Fuse panel (d)
Radio and radio lamp	AGC 2.5 fuse	Fuse panel (e)
Spot lamp, portable	AGC 10 fuse	Fuse panel (b)
Tachometer gage	AGC 15 fuse	Fuse panel (d)
Tail lamps	AGC 10 fuse	Fuse panel (b)
Temperature gage and buzzer	AGC 15 fuse	Fuse panel (d)
Traffic hazard switch	AGC 10 fuse	Fuse panel (h)
Underhood lamp	AGC 4 fuse	In line
Windshield wiper, two-speed	SAE 20 fuse	Fuse panel (f)
	14 amp CB	Switch

* Letter suffix indicates same circuit.

POWER TRAINS





POWER TEAM COMBINATIONS

ENGINE	EQUIPMENT	TRANSMISSION	AXLE RATIO* General Purpose Standard	Special - Purpose or Mountain	Performance Cruise	● Air Conditioning
164 CU.IN. 6 CYL. TURBO-AIR 95 HP STANDARD	2-SINGLE BARREL CARBURETORS HYDRAULIC LIFTERS	10100 & 10500 MODELS				
		3-SPEED (3.11:1 low)	3.27:1	3.55:1		3.55:1
		4-SPEED (3.11:1 low)	3.27:1	3.55:1		3.55:1
		POWERGLIDE	3.27:1	3.55:1		3.55:1
164 CU.IN. 6 CYL. TURBO-AIR 140 HP STANDARD(A)	4-SINGLE BARREL CARBURETORS HYDRAULIC LIFTERS SPECIAL CAMSHAFT	10700 MODELS				
		3-SPEED (3.11:1 low)	3.55:1		3.27:1	3.55:1
		4-SPEED (3.11:1 low)	3.55:1		3.27:1	3.55:1
		POWERGLIDE (B)	3.55:1			3.55:1
164 CU.IN. 6 CYL. TURBO-AIR 110 HP RPO L62	2-SINGLE BARREL CARBURETORS HYDRAULIC LIFTERS SPECIAL CAMSHAFT	10100 & 10500 MODELS				
		3-SPEED (3.11:1 low)	3.27:1	3.55:1		3.55:1
		4-SPEED (3.11:1 low)	3.27:1	3.55:1		3.55:1
		POWERGLIDE	3.55:1			3.55:1
164 CU.IN. 6 CYL. TURBOCHARGED 180 HP RPO L87	SINGLE BARREL SIDE DRAFT CARB. SUPERCHARGED SPECIAL CAMSHAFT	10700 MODELS				
		3-SPEED (3.11:1 low) and 4-SPEED (3.11:1 low)			3.55:1 (Std.)	

A - AVAILABLE AS AN OPTION (RPO L63) ON 10100 & 10500 MODELS
B - AVAILABLE WITH RPO L63 ONLY
* - POSITRACTION AXLE RATIOS AVAILABLE IN COMBINATIONS SHOWN

MULTIPLICATION FACTORS

with MANUAL TRANSMISSIONS

ENGINE	TRANSMISSION	TOTAL GEAR REDUCTION* 1st	2nd	3rd	4th	Rev	AXLE RATIO	MAXIMUM AXLE TORQUE LOW GEAR (LB-FT)
95 HP	3-Speed	10.17	6.02	3.27		10.53	3.27:1	1210
	4-Speed	10.17	7.19	4.81	3.27	10.17	3.27:1	1210
110 HP	3-Speed	10.17	6.02	3.27		10.53	3.27:1	
	4-Speed	10.17	7.19	4.81	3.27	10.17	3.27:1	
140 HP	3-Speed	11.04	6.53	3.55		11.43	3.55:1	
	4-Speed	11.04	7.81	5.22	3.55	11.04	3.55:1	
180 HP	3-Speed	11.04	6.53	3.55		11.43	3.55:1	
	4-Speed	11.04	7.81	5.22	3.55	11.04	3.55:1	

with AUTOMATIC TRANSMISSIONS

ENGINE	TRANSMISSION	SELECTOR POSITION	TOTAL TORQUE MULTIPLICATION*	AXLE RATIO
95 HP	Powerglide	Drive	14.29:1 - 3.27:1	3.27:1
		Low & Reverse	14.29:1 - 5.95:1	
110 HP & 140 HP	Powerglide	Drive	15.51:1 - 3.55:1	3.55:1
		Low & Reverse	15.51:1 - 6.46:1	

* - Axle ratio x transmission ratio.
- Gear reduction x maximum net engine torque x efficiency (8.90 in direct drive, 8.85 all others).

GENERAL DATA

		Synchromesh	Powerglide
Piston Displacement		164	
Type		Horizontal opposed OHV	
Number Cylinders		6	
Bore and Stroke (nominal)		3.437 x 2.94	
Compression Ratio		8.25:1 (a)	
Taxable (SAE) Horsepower		28.4	
Firing Order		1-4-5-2-3-6	
Idling Speed (RPM)		500 (b)	
Compression Press. (PSI) @ Cranking Speed, Engine Hot		140	
Lubrication		Full pressure	
Power Plant Mounting		Two front and one rear shear type	
Measurements	Width (over carburetors)	30.66 (c)	
	Length (inc. clutch housing & oil filter)	28.55	
	Height (top air cleaner to bottom oil pan)	23.57 (c)	

(a) On 110 HP engine and 140 HP engine C.R. is 9.25:1.
(b) 600 RPM on 110 HP engine and 140 HP engine; 850 RPM on Turbocharged 150 HP engine.
(c) Turbocharged 150 HP engine - Width (induction port flange to exhaust pipe) 29.30; Height 23.31.

ADVERTISED ENGINE RATING

Engine Designation		P6 - 95 HP Turbo-Air 164	P6 - 110 HP Turbo-Air 164	P6 - 140 HP Turbo-Air 164	P6 - 180 HP Turbocharged
Availability		Standard	RPO L62	Std. 10700 Models RPO L63-10100&10500	RPO L87
Carburetor		Two - Single barrel (one for each cylinder bank)		Four - Single barrel (two for each bank)	One - Single barrel
Brake Horsepower	Gross	95 @ 3600	110 @ 4400	140 @ 5200	180 @ 4000
	Net	78 @ 3600			
Torque (Lb-Ft)	Gross	154 @ 2400	160 @ 2800	160 @ 3600	265 @ 3200
	Net	140 @ 2400			

ENGINE SPEED AND PISTON TRAVEL

Transmission		3-Speed		4-Speed		Powerglide (a)	
Rear Axle Ratio		3.27:1	3.55:1	3.27:1	3.55:1	3.27:1	3.55:1
Tire Size		7.00 x 13-4PR					
Crankshaft Revolutions per Mile		2723.9	2957.1	2723.9	2957.1	2723.9	2957.1
Crankshaft RPM @ 1 MPH	Low	141.2	153.3	141.2	153.3	82.6	89.7
	Second	83.5	90.7	99.9	108.4		
	Third	45.4	49.3	66.7	72.4	45.4 (b)	49.3 (b)
	Fourth			45.4	49.3		
	Reverse	146.2	158.7	141.2	153.3	82.6	89.7
Piston Travel (ft/mile)		1334.7	1449.0	1334.7	1449.0	1334.7	1449.0

(a) Powerglide not available with Turbocharged 150 HP engine.
(b) Direct drive.

VEHICLE PERFORMANCE FACTORS

ENGINE - 164 Cu.In.	Standard 95 HP	Standard 140 HP	RPO L63 140 HP	RPO L62 110 HP	RPO L87 180 HP
MODEL	10139	10737	10139	10139	10737

3-SPEED TRANSMISSION

Performance Weight (pounds)	3133	3171	3168	3137	3170
Pounds per Gross Horsepower	32.98	22.65	22.63	28.52	17.61
Pounds per Cu.In. Displacement	19.10	19.33	19.32	19.13	19.32
Gross HP per Cu.In. Displacement	.579	.854	.854	.671	1.097
Power Displacement (cu.ft./mile)	131.12	142.35	142.35	131.12	142.35
Displacement Factor (cu.ft./ton mile)	83.73	89.81	89.87	83.57	89.81

4-SPEED TRANSMISSION

Performance Weight (pounds)	3138	3176	3142	3142	3175
Pounds per Gross Horsepower	33.03	22.68	22.44	28.56	17.64
Pounds per Cu.In. Displacement	19.13	19.37	19.16	19.16	19.36
Gross HP per Cu.In. Displacement	.579	.854	.854	.671	1.097
Power Displacement (cu.ft./mile)	131.12	142.35	142.35	131.12	142.35
Displacement Factor (cu.ft./ton mile)	83.57	89.64	90.61	83.46	89.70

POWERGLIDE*

Performance Weight (pounds)	3131		3135	3135	
Pounds per Gross Horsepower	32.96		22.39	28.50	
Pounds per Cu.In. Displacement	19.09		19.12	19.12	
Gross HP per Cu.In. Displacement	.579		.854	.671	
Power Displacement (cu.ft./mile)	131.12		142.35	131.12	
Displacement Factor (cu.ft./ton mile)	84.05		90.84	83.68	

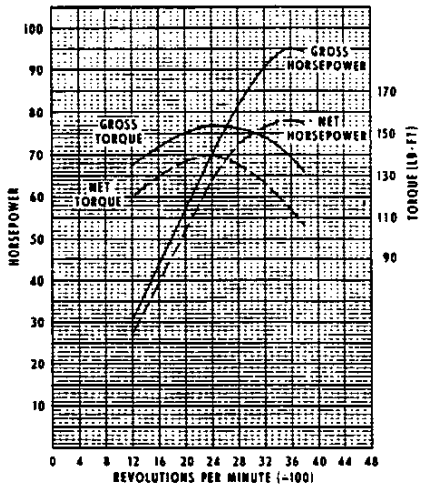
* - Data computed assuming zero slippage in torque converter.

GLOSSARY

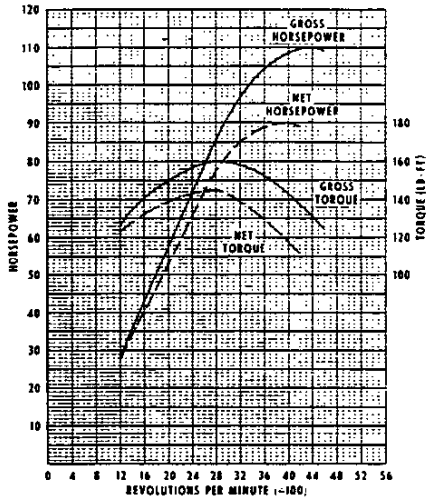
Performance Weight	Curb Weight plus 600 Lb (weight of four 150 lb passengers)
Power Displacement	$\frac{\text{Crankshaft Revs/Mi x Piston Displacement}}{2 \times 1728}$
Displacement Factor	$\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

ENGINE OUTPUT CURVES

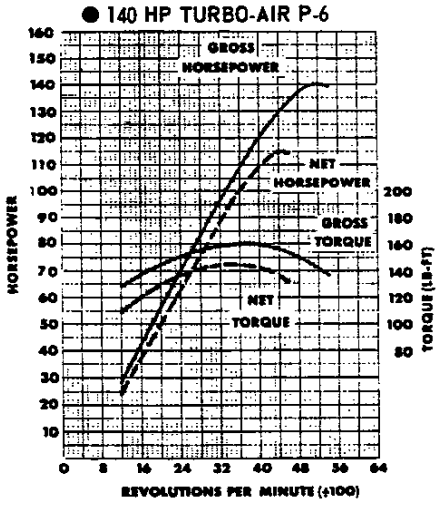
95 HP TURBO-AIR P-6



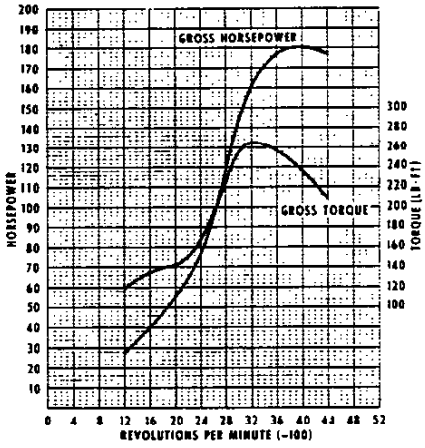
110 HP TURBO-AIR P-6



● 140 HP TURBO-AIR P-6



180 HP TURBOCHARGED P-6



The engine output curves represent full throttle performance as obtained from dynamometer test data corrected to standard barometric pressure 29.92 inches of mercury and standard temperature of 60 degrees F.

GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, optimum spark advance, and optimum fuel setting.

NET POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle, except the generator is not charging.

PRINCIPAL COMPONENTS

CRANKCASE
- Material ---------- Cast Aluminum
- Type ---------- Cast into left and right halves
- No. of Bulkheads ---------- 4
- Bolt No. & Size ---------- 8; .4375 dia., 20 UNF - 2A
- Studs (cyl. & cyl. head assy.) ---- 12 left & 12 right half
- Bore Spacing (centerline to centerline) ---------- 4.85

CYLINDERS
- Material ---------- Cast iron
- Type ---------- Individually cast with integral cooling fins
- Bore Diameter ---------- 3.4370-3.4400
- Numbering Arrangement (front to rear)
  - Left bank ---------- 6-4-2
  - Right bank ---------- 5-3-1

CYLINDER HEADS
- Material. ---------- Permanent mold cast aluminum with integral cooling fins

COMBUSTION CHAMBER VOLUME
(Total chamber volume of assembled engine with piston at top center)
- 95 HP Engine ---------- 3.90 Cu. In.
- 110 HP Engine ---------- 3.51 Cu. In.
- 140 HP Engine ---------- 3.42 Cu. In.
- 180 HP Engine ---------- 4.00 Cu. In.

CRANKSHAFT
- Material ---------- Forged alloy steel
- Journal ---------- Hardened on 140 & 180 HP engines
- End play ---------- .002-.006
- Counterweights ---------- None
- Crank arm length ---------- 1.47
- Vibration damper ---------- All engines except 95 HP engine with synchromesh trans.
- Timing gear & material ---------- Helical cut, steel
- Pulley pitch diameter ---------- 6.64

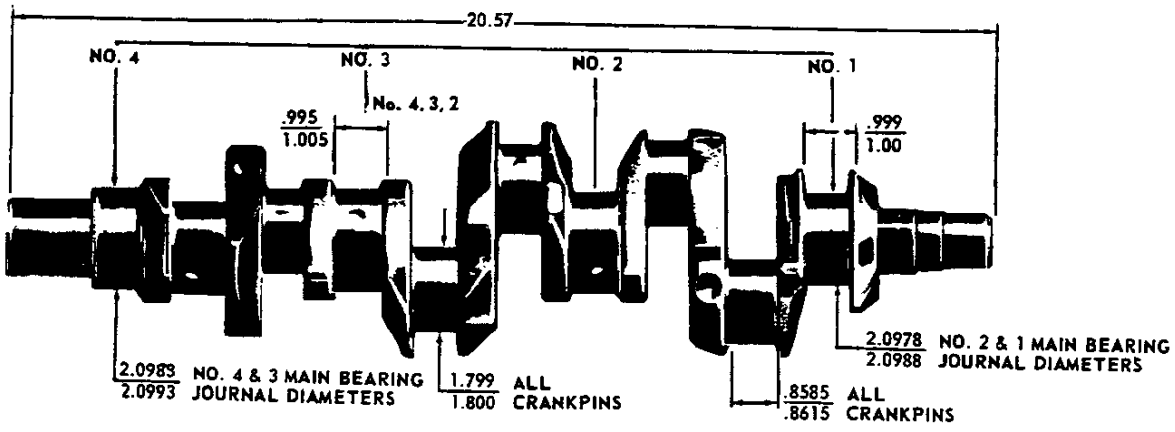
INLET MANIFOLD
- Type ---------- Cast integral with cylinder head

EXHAUST MANIFOLD
- Material ---------- Cast alloy iron
- Type ---------- Straight-fitted to three steel sleeves pressed into cyl. head exhaust ports

MAIN BEARINGS
- Material ---------- Premium aluminum
- Type ---------- Precision, removable
- Thrust Against Bearing No. ---------- 1
- Clearance ---------- .0012-.0037

Dimensions Bearing	Theoretical Inner Dia.	Effective Length	Projected Area
1	2.1008	.785	1.6542
2	2.1008	.752	1.5798
3-4	2.1018	.752	1.5805

CRANKSHAFTS AND BEARINGS



CAMSHAFT

Material	Cast alloy iron
Lobe lift - inlet & exhaust	
95 HP engine	.2567
110 HP & 140 HP engines	.2605
180 HP engine	.2494

BEARINGS ---------- No inserts aluminum crankcase machined for bearing surface

VALVE TRAIN

Type	Individually mounted rocker arms, push rod actuated
Lifters	Hydraulic
Push Rods	
Type & Material	Hollow, steel
Ends	Hardened
Housing	Welded steel tubes
Rocker Arms	
Type & Material	Stamped steel
Ratio	1.57:1

VALVE SPRINGS

Diameter (I.D.)	.872-.888
Installed Length (In. @ Lb.)	
Valves Closed	1.660 @ 78-86
Valves Opened	1.260 @ 170-180
Free Length	2.08
Valve Spring Dampers	Flat steel coil

VALVE LIFT

Inlet & Exhaust	
95 HP engine	.4030
110 HP & 140 HP engines	.4090
180 HP engine	.3916

VALVE TRAIN LASH

Inlet	Zero
Exhaust	Zero

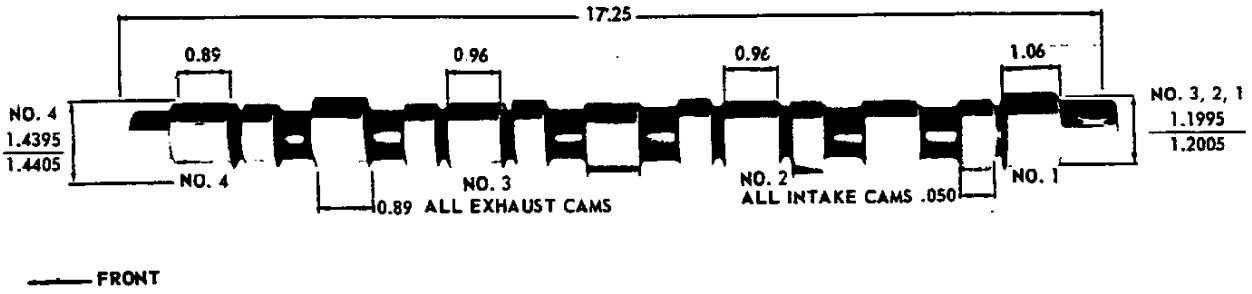
VALVE TIMING (Crankshaft degrees)

95 HP Engine	Excluding Ramps	Including Ramps
Inlet valve		
Opens - BTC	26°	44°
Closes - ABC	60°	88°
Duration	266°	312°
Exhaust valve		
Opens - BBC	60°	78°
Closes - ATC	26°	54°
Duration	266°	312°

110 HP & 140 HP Engines	Excluding Ramps	Including Ramps
Inlet valve		
Opens - BTC	37°	55°
Closes - ABC	81°	105°
Duration	298°	340°
Exhaust valve		
Opens - BBC	79°	97°
Closes - ATC	39°	63°
Duration	298°	340°

180 HP Engine	Excluding Ramps	Including Ramps
Inlet valve		
Opens - BTC	70°	82°
Closes - ABC	86°	110°
Duration	336°	372°
Exhaust valve		
Opens - BBC	98°	110°
Closes - ATC	46°	70°
Duration	324°	360°

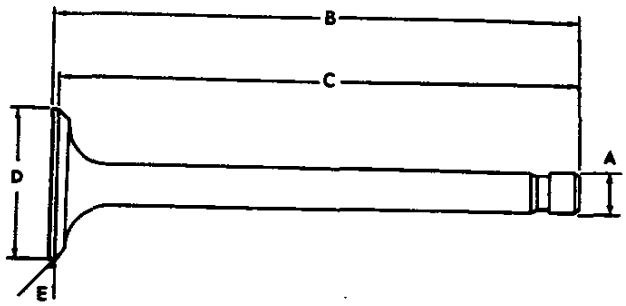
CAMSHAFT AND BEARINGS

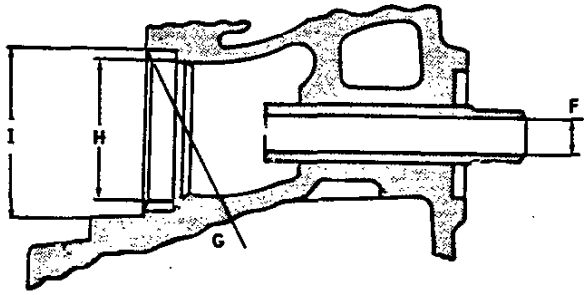


PRINCIPAL COMPONENTS—Cont'd.

INLET VALVES

Material ---------- High alloy steel
Coating ---------- Aluminized face
Valve guide material ---------- Cast alloy iron
Valve seat material ---------- Sintered alloy iron

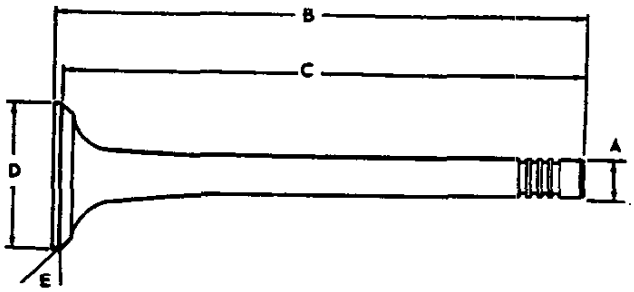


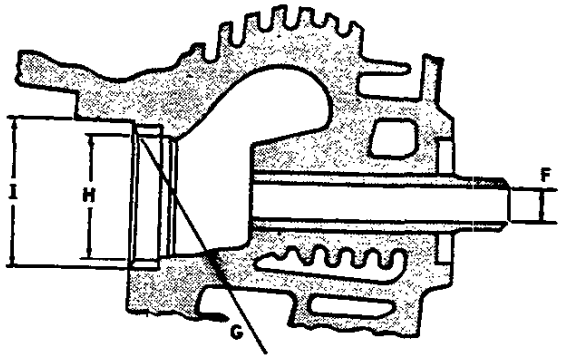


A - Stem diameter ---------- .3414-.3422
B - Overall length
95 HP, 110 HP & 180 HP engines --- 4.4891-4.5091
140 HP engine ---------- 4.5342-4.5542
C - Gage length
95 HP, 110 HP & 180 HP engines --- 4.3921-4.4021
140 HP engine ---------- 4.4712-4.4812
D - Overall head diameter
95 HP, 110 HP & 180 HP engines ----- 1.335-1.345
140 HP engine ---------- 1.715-1.725
E - Angle of face ---------- 44 degrees
F - Guide diameter ---------- .3432-.3442
G - Angle of seat ---------- 45 degrees
H - Valve seat (ID)
95 HP, 110 HP & 180 HP engines ----- 1.223-1.233
140 HP engine ---------- 1.603-1.613
I - Valve seat (OD)
95 HP, 110 HP & 180 HP engines --- 1.4285-1.4295
140 HP engine ---------- 1.8085-1.8095

EXHAUST VALVES

Material
95 HP, 110 HP & 140 HP engines ---- High alloy steel with "cobalt-based" alloy face
180 HP engine (two-piece welded)
Head, face & neck ------ Super alloy (Nimonic 80A)
Stems ---------- Silicon & chromium alloy steel
Valve guide material
95 HP, 110 HP & 140 HP -------- Cast alloy iron
180 HP ---------- Aluminum bronze alloy
Valve seat material --- Cast chromium steel alloy





A - Stem diameter ---------- .3407-.3418
B - Overall length
95 HP, 110 HP & 180 HP engines --- 4.4941-4.5141
140 HP engine ---------- 4.4891-4.5091
C - Gage length
95 HP, 110 HP & 180 HP engines --- 4.3871-4.3971
140 HP engine ---------- 4.413-4.423
D - Overall head diameter
95 HP, 110 HP & 180 HP engines ----- 1.235-1.245
140 HP engine ---------- 1.355-1.365
E - Angle of face ---------- 44 degrees
F - Guide diameter ---------- .3432-.3442
G - Angle of seat ---------- 45 degrees
H - Valve seat (ID)
95 HP, 110 HP & 180 HP engines ----- 1.081-1.091
140 HP engine ---------- 1.201-1.211
I - Valve seat (OD)
95 HP, 110 HP & 180 HP engines --- 1.2865-1.2875
140 HP engine ---------- 1.4065-1.4075

PISTON

Material	Cast aluminum alloy
Head type	Flat
Skirt type	Slipper, autothermic
Top land clearance	.0210-.0320
Skirt clearance	.0011-.0017
Compression ring groove depth	.1925-.1990
Oil control ring groove depth	.1860-.1925
Pin bore offset	.055-.065
Compression height	1.589-1.591

COMPRESSION RINGS - UPPER

Material	
95 HP & 110 HP engines	Cast alloy iron
140 HP & 180 HP engines	High strength ductile iron
Inside bevel	Bottom edge 30 degrees to piston vertical axis
Ring face	Tapered
Coating	
95 HP & 110 HP engines	Chrome plated
140 HP & 180 HP engines	Molybdenum
Width	.0620-.0625
Wall thickness	
95 HP & 110 HP engines	.162-.172
140 HP & 180 HP engines	.145-.155
Gap	.010-.020

COMPRESSION RING - LOWER

Material	Cast alloy iron
Inside bevel	Top edge 30 degrees to piston vertical axis
Ring face	Tapered
Coating	Wear resistant
Width	.0620-.0625
Wall thickness	.162-.172
Gap	.010-.020

OIL CONTROL RINGS

Type	Multi-piece (two rails and one spacer)
Material	
Rails	Steel
Spacer	Alloy steel
Width	.1215-.1255 assembled
Wall thickness	.135-.141
Gap (rails)	.015-.055
Rail coating	Chrome plate

PISTON PINS

Material	Chromium steel
Length	2.630-2.650
Diameter	.7999-.8002
Clearance in piston	.00015-.00025
Pin mounting	Pressed in rod

CONNECTING RODS

Material	Drop forged steel
Length (center to center)	4.719-4.721

CONNECTING ROD BEARINGS

Material	Premium aluminum
Type	Precision removable
Clearance	.0007-.0028
Theo. I.D.	1.8018
Effective length	.639
End play	.0055-.0105

FUEL SYSTEM

FUEL TANK
- Capacity (Gal) ---------- 14
- Location ---------- Upper front compartment floor
- Filler Location ---------- Left front fender crown

FUEL FILTERS, DUAL
- In Fuel Tank ---------- Mesh strainer
- 95 HP, 110 HP & 140 HP Engines ----- Sintered bronze filter in carburetor inlet
- 180 HP Engine ------ Replaceable in-line paper element between fuel pump & carburetor

FUEL PUMP ASSEMBLY
- Drive ---------- Eccentric on rear end of crankshaft
- Type ---------- Mechanical
- Location ---------- Mounted on engine rear housing
- Pressure Range ---------- 5.50-6.75

AIR CLEANERS
- Type
  - 95 HP & 110 HP Engine --- One, with single air horn; centrally mounted on tubular crossover duct
  - 140 HP ---------- One; with dual air horns; centrally mounted on splayed tubular arms; chrome plated cover
  - 180 HP ----------One, with large oval air horn connected to carb. air horn; chrome plated
- Element ---------- Oil-wetted paper

CARBURETOR
- Make & Number
  - 95 HP & 110 HP ------ Rochester - Two; one for each cylinder bank
  - 140 HP -------- Rochester - Four; set of one primary and one secondary for each cylinder bank
  - 180 HP ---------- Carter - One; connected to supercharger
- Type
  - 95 HP, 110 HP & 140 HP Engines -------Single barrel downdraft
  - 180 HP Engine ---------- Triple venturi, sidedraft
- SAE Flange Size
  - 95 HP, 110 & 140 HP Engines ---------- .075
  - 180 HP Engine ---------- 1.25
- Throttle Bore
  - 95 HP, 110 HP & 140 HP Engines ---------- 1.25
  - 180 HP Engine ---------- 1.50
- Venturi Diameter
  - 95 HP, 110 HP & 140 HP Engines ---------- 1.00
  - 180 HP Engine ---------- 1.375

SUPERCHARGER (180 HP Engine only)
- Type ---------- Turbo-Supercharger (Turbine driven compressor)
- Make ----------Thompson
- Turbine ---------- Single-stage, in flow type
  - Material --------- High temperature cobalt base alloy
  - Diameter (in) ---------- 2.97
  - Blades ---------- 11, equally spaced
  - Drive ---------- Engine exhaust gases
- Compressor ---------- Centrifugal impeller
  - Material ---------- Die cast aluminum alloy
  - Diameter (in) ---------- 3.00
  - Blades ----------14, equally spaced
  - Drive ---------- Solid shaft from turbine
- Bearing ---------- One piece floating bushing
  - Material ---------- Aluminum alloy
  - Lubrication ---------- Engine oil full pressure
- Induction Crossover Tube
  - Function ---------- Fuel-air mixture drawn from the single barrel carburetor by the supercharger and expelled into the induction crossover tube which supplies each cylinder bank

CHOKE
- Type ---------- Automatic

EXHAUST AND VENTILATION SYSTEM

TYPE
- 95 HP, 110 HP & 180 HP Engine ---------- Single
- 140 HP Engine ---------- Dual

MUFFLER
- Type ---------- Oval, reverse flow
- Construction ---------- Heads and body joined by rolled lock seam construction
- Shell
  - 95 HP & 110 HP Engines ------ .036 cold rolled steel
  - 140 HP Engine (LH & RH)------ .036 cold rolled steel
  - 180 HP Engine ----.036 sheet steel, aluminum coating
- Wrap ---------- .030 indented asbestos sheet
- Cover ----------.018 sheet steel, aluminum coating
- Heads
  - 95 HP & 110 HP Engines ---------- .060 sheet steel, aluminum coating
  - 140 HP Engine (LH & RH) -- .060 sheet stl, alum. ctng.
  - 180 HP Engine ----.048 sheet steel, aluminum coating
- Baffles
  - 95 HP Engine ---------- 3; #1 & 2 - .036, #3 - .060 cold rolled steel
  - 110 HP Engine ---------- 3; .036 cold rolled steel
  - 140 HP Engine ---------- 3; .036 cold rolled steel
  - 180 HP Engine ----- 3; .036 sheet steel, alum. coating
- Length
  - 95 HP, 110 HP & 140 HP Engines (body) ------ 17.76
  - 180 HP Engine (including pipe extensions) ----- 17.88
- Height (I.D.) ---------- 9.25
- Width (I.D.) ---------- 5.00

EXHAUST PIPE
- Dimensions (O.D.)
  - 95, 110 & 180 HP Engines ---------- 1.875
  - 140 HP Engines (Dual) ---------- 1.625
  - Wall Thickness ---------- .067-.081

SUPERCHARGER INLET PIPE (180 HP Engine)
- Dimensions (O.D.) ---------- 1.875
- Wall Thickness ---------- .081-.097

SUPERCHARGER OUTLET PIPE (180 HP Engine)
- Dimensions (O.D.) ---------- 2.50
- Wall Thickness ---------- .067-.081

TAIL PIPE
- Dimensions (O.D.)
  - 95 HP Engine ---------- 1.50
  - 110 HP & 140 HP Engine ---------- 1.75
  - 180 HP Engine ---------- 2.50
- Wall Thickness ---------- .042-.052
- Coating
  - 95 HP, 110 HP & 140 HP Engines -------- Aluminum
  - 180 HP Engine ---------- Chrome plate

ENGINE VENTILATION
- Type ---------- Closed-positive

● AIR INJECTION REACTOR
(California vehicles only)
- Type ---------- Air injected into exhaust ports by crankshaft driven pump

COOLING SYSTEM

GENERAL
- Type ---------- Forced air cooling

Engine enclosed by sheet metal shrouds to direct air over engine components. Cooling controlled by thermostatically regulated air exhaust doors at rear of each lower shroud

ENGINE BLOWER
- Type ---------- Centrifugal
- Location ---------- Mounted horizontally on top center of engine
- Material ---------- Magnesium
- Diameter ---------- 11.20
- Number of Vanes ---------- 11
- Drive ---------- By "V" belt from crankshaft over idler and generator pulleys
- Air Flow ----------1460 CFM @ 4000 Engine RPM
- Blower Pulley PD ---------- 4.1875
- Ratio (Blower to Engine Speed) ---------- 1.58:1
- Idler Pulley PD ---------- 3.32
- Belt ---------- "V"
  - Pitch Line ---------- 55.74
  - Width ---------- .380
  - Angle of "V" ---------- 40°

ENGINE COOLING AIR THERMOSTATS
- Type ---------- Bellows (seamless)
- Make ---------- Harrison
- Bellows start to open at ---------- 205°F

LUBRICATION AND ELECTRICAL SYSTEM

LUBRICATION SYSTEM

GENERAL
- Type ---------- Controlled full pressure
  - Main Bearings ---------- Pressure
  - Connecting Rods ---------- Pressure
  - Piston Pins ---------- Splash
  - Cylinder Walls -------- Conn. rod bearing throw-off
  - Camshaft Bearings ---------- Pressure
  - Valve Lifters ---------- Pressure
  - Rocker Arms ---------- Pressure
  - Timing Gears -------- Main & cam bearing throw-off
- Oil Pressure Sending Unit
  - Type ---------- Electric
  - Actuation ------ Opens or closes circuit @ 2 to 6 PSI
- Oil Filler
  - Cap ---------- Pressure, twist type
  - Location ---------- Top rear of engine

CRANKCASE CAPACITY (Qt)
- Refill ---------- 4.0
- Refill with Filter Change ---------- 4.5

OIL PUMP
- Type ---------- Gear
- Driven By ---------- Distributor
- Regulator Valve ---------- Opens between 40-45 lbs
- Oil Pressure @ 2000 RPM ---------- 30 PSI
- Intake Type ---------- Fixed
- Capacity (GPM @ Eng RPM) ---------- 9 @ 4000

OIL FILTER
- Type ---------- Full flow throwaway cannister
- Location ---------- Rear section of engine
- Capacity (Pts) ---------- 1.0
- By-pass Valve ---------- Opens between 9 to 11 PSI

OIL COOLER
- Material ---------- Aluminum
- Location ---------- Left bank of cylinder to rear
- By-pass Valve ---------- Opens between 9 to 11 PSI drop in pressure
- No. of Plates
  - 95 HP & 110 HP ---------- Eight
  - 140 HP & 180 HP ---------- Twelve

LUBRICANT GRADES AND TEMPERATURES
- 32° F & Above ---------- SAE 30*
- 10° F to 32° F ---------- SAE 10W
- Below 10° F ---------- SAE 5W-20
- * Always use SAE 30 if temperature is above 60° F

OIL PAN DRAIN SCREW
- Type ---------- Hex head
- Location ---------- Lower front edge of oil pan
- Size Hex Head ---------- .860-.875
- Thread ---------- 1/2-20 UNF 2A
- Length ---------- 0.81
- Diameter ---------- .410-.430

ELECTRICAL SYSTEM

SUPPLY SYSTEM
- BATTERY
  - Voltage Rating ---------- 12
  - Capacity ---------- 44 amp hr @ 20 hr rate
  - Total Number of Plates ---------- 54
  - Number of Cells ---------- 6
  - Terminal Grounded ---------- Negative
  - Location -------- Left hand side engine compartment

GENERATOR
- Type ---------- Diode rectified
- Rating
  - Amps ---------- 9-37
  - Volts ---------- 12-15
- Drive ---------- Blower belt
- Pulley Pitch Diameter ---------- 2.88
- Ratio (Gen. to Engine Speed) ---------- 2.30:1

REGULATOR
- Type ---------- Two unit, vibrator
- Voltage Regulator
  - Voltage ---------- 13.8-14.8 @ 85° F
- Field Relay (Combination light and field relay)
  - Closing Voltage ---------- 1.3 Volts @ 80° F
- Location ---------- Left front engine compartment

ELECTRICAL SYSTEM —CONTINUED

STARTING SYSTEM
- STARTING MOTOR
  - Make ---------- Delco-Remy
  - Rotation (drive end view) ---------- Clockwise
  - Test Condition ----- Engine at operating temperature
  - No Load Test
    - Amps ---------- 49-76
    - Volts ---------- 10.6
    - RPM ---------- 6200-9400
  - Motor Drive
    - Engagement ---------- Solenoid
    - Pinion meshes at ---------- Rear
    - Pinion tooth no. ---------- 9
    - Starter ring gear tooth no. ---------- 147
  - Mounting ---------- Bolted to clutch housing

IGNITION SYSTEM
- DISTRIBUTORS ---------- Refer to chart below

COIL
- Make ---------- Delco-Remy
- Type ---------- 12 Volt
- Amperes Drawn
  - Engine stopped ---------- 4.0
  - Engine idling ---------- 1.8

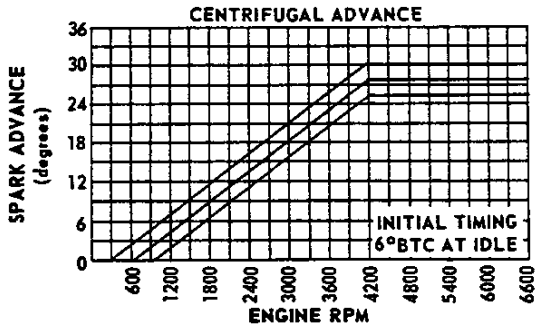
SPARK PLUGS
- Make ---------- AC
- Model
  - 95 HP ---------- 46 FF
  - 110 HP, 140 HP & 180 HP ---------- 44 FF
- Thread Size (mm) ---------- 14
- Gap ---------- .033-.038; .028-.033 on 110 & 150 HP
- Torque ---------- 25 lb ft

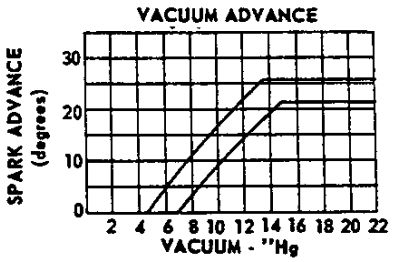
CABLE ---------- Linen core impregnated with electrical conducting material and insulation of rubber with neoprene jacket

●DISTRIBUTORS	95 HP 3-Spd - 4-Spd	95 HP Powerglide	110 HP All Trans	140 HP 3-Spd - 4-Spd	140 HP Powerglide	180 HP 3-Spd - 4-Spd
Make	Delco-Remy					
Model	1111310	1111311	1110319	1110330	1110339	1110329
Type	Single Breaker					
Cam Angle	31° -34°					
Breaker Gap	.019 (new)					
Breaker Arm Tension	19-23 oz.					
Centrifugal Advance Begins (RPM)	700	1700	800	800	800	4000
Max Degrees @ RPM	28 @ 4200	20 @ 4200	20 @ 4800	18 @ 2800	18 @ 3200	18 @ 4900
Vacuum Advance Begins (In. Hg)	6.00	7.00	7.00	6.00	7.00	*
Max Degrees @ In. Hg	24 @ 14	24 @ 15	24 @ 15	22 @ 14	24 @ 15	*
Timing (Initial Design Setting) Crankshaft Degrees @ RPM (with vacuum spark line disconnected)	6° BTC @ 500	14° BTC @ 500	14° BTC @ 600	18° BTC @ 650	14° BTC @ 650	24° BTC @ 800
Timing Mark Location	Crankshaft Pulley					

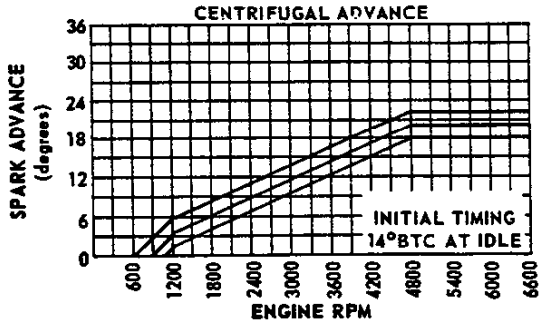
* Diaphragm Pressure Retard: Begins @ Mnfld. Pressure -0@2 psi; Max. Mnfld. Pressure -8" @3.6 psi.

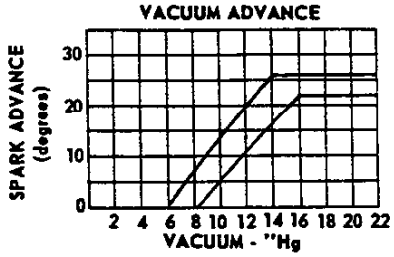
95 HORSEPOWER ENGINE



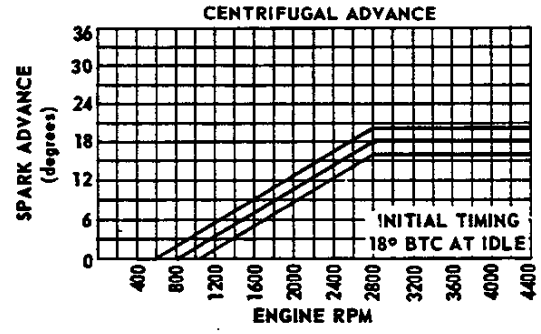


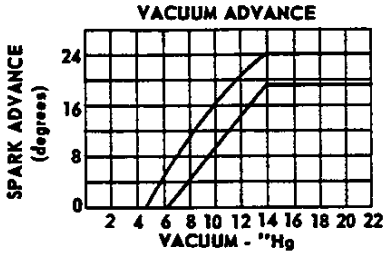
110 HORSEPOWER ENGINE

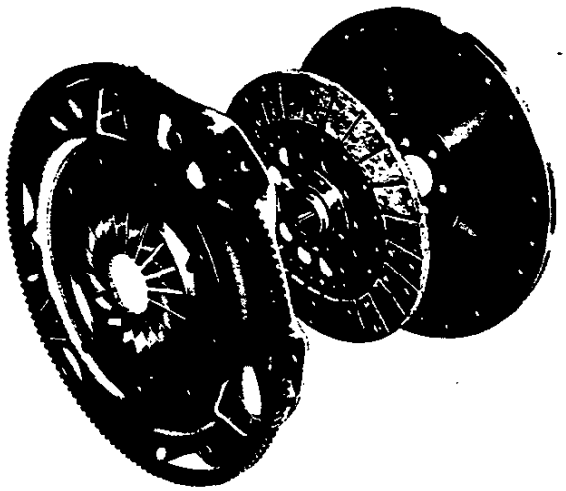




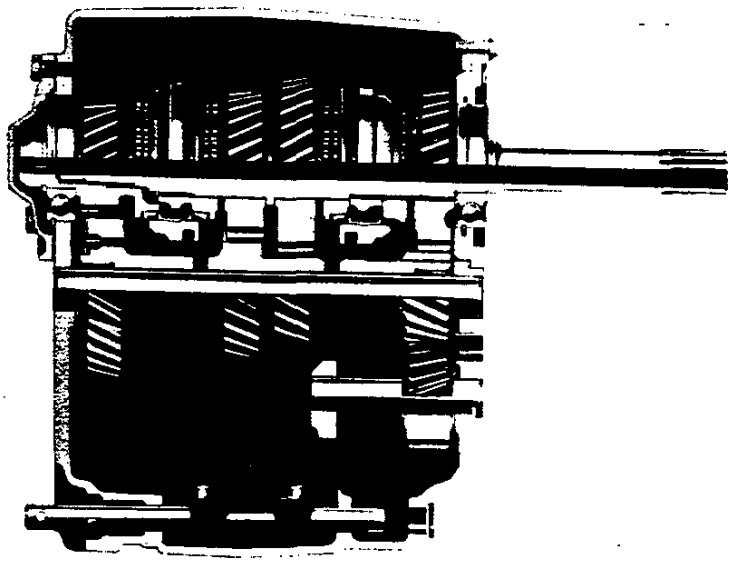
●140 HORSEPOWER ENGINE







ENGINE	Model Application		10100 & 10500		10700		10100 & 10500				10700	
	Availability		95 HP - Base		140 HP - Base		110 HP - RPO L62		140 HP RPO L63		180 HP RPO L87	
Clutch for			3-Spd	4-Spd	3-Spd	4-Spd	3-Spd	4-Spd	3-Spd	4-Spd	3-Spd	4-Spd
Type			Chevrolet, single dry disc, centrifugal									
Clutch cover and press. plate	Eff. plate load, lb		1250-1450		1275-1475		1250-1450		1275-1475			
	Press. plate mat'l		Cast iron		Nodular iron		Cast iron		Nodular iron			
	Clutch spring type		Diaphragm with bent finger design									
	Clutch spring mat'l		HR spring steel									
	Ring gear	Mat'l	HR steel									
		No. of teeth	147									
		PD	12.25									
		Attach.	Welded to clutch cover									
Driven plate	Type		Single dry disc									
	Cushions		Flat spring steel between rings									
	Friction rings	OD	8.0		9.12		8.0		9.12			
		ID	6.0		6.12		6.0		6.12			
		Total area (sq.in.)	44.0		71.8		44.0		71.8			
		Mat'l	Woven type asbestos									
Flywheel	Mat'l		Cast Iron									
Bearings	Release	Type	Single roll ball									
		Lub.	None required, prepacked									
	Pilot	Type	Bronze bushing									
		Lub.	None, sintered and oil impregnated									
Controls	Clutch fork		Drop forged steel, pivot mounted on ball									
	Pedal mounting		Pendant from brace on dash									
Clutch housing material			Aluminum alloy									



4-SPEED TRANSMISSION (RPO M20)

3-SPEED AND 4-SPEED TRANSMISSIONS

Transmission Type			3-Speed					4-Speed				
Engine Application	Model		10100 & 10500			10700		10100 & 10500			10700	
	Availability		Base 95 HP	RPO L62 110 HP	RPO L63 140 HP	Base 140 HP	RPO L87 180 HP	Base 95 HP	RPO L62 110 HP	RPO L63 140 HP	Base 140 HP	RPO L87 180 HP
Case material			Cast iron alloy									
Gear-shift	Type		Remote									
	Control		Lever									
	Location		Floor									
Gears	Type		Helical					Helical except spur for reverse				
	Material		Forged steel, hardened									
	Synchronization		All forward gears									
	Constant mesh gears		All gears					All forward gears				
	Sliding gears		None					Reverse				
	Ratios	First	3.11					3.11				
		Second	1.84					2.20				
		Third	1.00					1.47				
		Fourth						1.00				
		Reverse	3.22					3.11				
Lubri-cant	Type		Meeting Military Spec. MIL-L-2105-B									
	Capacity (pts)		3.1					3.6				

AUTOMATIC TRANSMISSION (RPO M35)

GENERAL DATA
- Type ---------- Automatic hydraulic torque converter with planetary gear system for low and reverse
- Selector lever
  - Location ---------- Instrument panel
  - Operation ---------- Actuates manual valve in hydraulic control system
  - Quadrant positions ---------- L-D-N-R
- Method of cooling ---------- Cooling shroud welded to pump housing
- Flywheel ---------- Ring gear welded to converter housing

HYDRAULIC CONTROLS
- Manual valve type ---------- Spool
- Pressure regulator valve type ---------- Spool
- Pressure range, psi @ idle
  - Drive
    - Minimum and maximum ---------- 37.0 to 45.0
  - Low
    - Minimum and maximum ---------- 37.0 to 45.0
  - Reverse
    - Minimum and maximum ---------- 70.3 to 86.0

CONVERTER ASSEMBLY
- Type ---------- Three element
- Pump
  - Description ---------- Multi-vane sheet steel construction rigid in converter housing
- Turbine
  - Description ---------- Multi-vane sheet steel construction supported in converter housing
- Stator
  - Description -------- Aluminum air foil supported on stationary sleeve by an overrunning clutch
- ●Stall torque ratio ---------- 2.40:1
- Diameter (nominal) ---------- 10.0

PLANETARY GEAR SET
- Type ---------- Compound planetary
- Range
  - Drive ---------- 1.82:1 to 1.0:1.0
  - Low ---------- 1.82:1
  - Reverse ---------- 1.82:1
- Low band ---------- Three linked circular segments
- Low band servo ---------- Piston with release spring and inner cushion spring

CASE
- Material ---------- Aluminum

OUTPUT SHAFT RPM (VEHICLE SPEED MPH)
- N/V factor ---------- 46.0
- Upshift
  - Closed throttle ---------- 677(15)
  - Detent touch ---------- 1809(40)
  - Full detent ---------- 2230(49)
- Downshift
  - Closed throttle ---------- 606(13)
  - Detent touch ---------- 1298(28)
  - Full detent ---------- 2055(45)

HIGH CLUTCH
- Type ---------- Multi-disk
- Drive plates
  - Description ---------- Waved steel with bonded organic facings
  - Number ---------- 2
- Driven plates
  - Description ---------- Flat steel
  - Number ---------- 3

REVERSE CLUTCH
- Type ---------- Multi-disc
- Drive plates
  - Description ---------- Flat steel with bonded organic facings
  - Number ---------- 3
- Driven plates
  - Description ---------- Waved steel
  - Number ---------- 3

TORQUE MULTIPLICATION
- Maximum overall ratio ---------- 4.37:1
- Low and reverse ---------- 4.37:1 to 1.82:1

LUBRICANT
- Type ---------- A, suffix A
- Capacity (pts.)
  - Dry ---------- 13
  - ●Refill ---------- 4.6

GOVERNOR
- Type ---------- Centrifugal
- Operation ---------- Regulates oil pressure to automatic shift control valve
- Drive ---------- Transmission output shaft
- Location ---------- External, upper left side of case

OIL PUMPS
- Type ---------- Internal-external gear
- Number ---------- Two, front and rear
- Function ---------- To supply pressure
- Front pump
  - Drive ---------- Converter pump
  - Function ---------- Supply main system pressure at low vehicle speeds
- Rear pump
  - Drive ---------- Output shaft
  - Function ------ Supply main system pressure at high vehicle speeds and during push starts

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AMA Specifications—Passenger Car

The information contained herein is prepared, distributed by, and is solely the responsibility of the automobile manufacturing company to whose products it relates. Questions concerning these specifications should be directed to the manufacturer whose address is shown below. This uniform specification form was developed by the automobile manufacturing companies under the auspices of the Automobile Manufacturers Association.

MANUFACTURER	Chevrolet Motor Division General Motors Corporation	CAR NAME	Corvair
MAILING ADDRESS	Chevrolet Engineering Center 30003 Van Dyke, Warren, Michigan 48090	MODEL YEAR	1966
		ISSUED:	10-7-65
		REVISED (a)	

NOTES:
1. The Specifications herein are those in effect at date of compilation and are subject to change without notice by the manufacturer.
2. UNLESS OTHERWISE INDICATED:
   a. Specifications apply to standard models without optional equipment. Significant deviations are noted.
   b. Nominal design dimensions are used throughout these specifications.

TABLE OF CONTENTS

BODY—TYPES AND STYLE NAMES—

Body type, number of passenger & style names; use manufacturer's code for series & body style.

500 Series

10137 2-Door Sport Coupe, 5-Passenger
10139 4-Door Sport Sedan, 6-Passenger

Monza

10537 2-Door Sport Coupe, 4-Passenger
10567 2-Door Convertible, 4-Passenger
10539 4-Door Sport Sedan, 5-Passenger

Corsa

10737 2-Door Sport Coupe, 4-Passenger
10767 2-Door Convertible, 4-Passenger

ORIGINAL COPY

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MAKE OF CAR CORVAIR MODEL YEAR 1966 DATE ISSUED 10-7-65 REVISED (1)

GENERAL SPECIFICATIONS—DIMENSIONS

(All dimensions in inches unless otherwise indicated)
(Supplemental data available on request)

MODEL	SAE Ref. No.	Sedans		Coupes		Convert-ibles
		Bench	Bucket	Bench	Bucket	
FRONT COMPARTMENT						
Shoulder room	W3	54.7				
Hip room	W5	56.1				
Max. diff. leg room - accelerator	L34	41.1	40.9	41.1	40.9	
Effective head room	H61	37.6		37.5	37.7	38.5
H Point to Heel point	H30	7.4		7.6		7.4
REAR COMPARTMENT						
Shoulder room	W4	54.3		52.7		47.9
Hip room	W6	56.1				
Minimum effective leg room	L51	35.4	34.6	30.8	30.5	30.8
Effective head room	H63	36.4	36.6	36.4		38.2
LUGGAGE COMPARTMENT						
Usable luggage capacity	V1	7.0				
Liftover height	H195	27.6				
Position of spare tire storage		Horizontal, engine compartment				
Method of holding lid open		Torsion rod, counterbalance				
STATION WAGON—THIRD SEAT						
Hip room	W86	NA				
Effective leg room	L86					
Effective head room	H86					
Seat facing direction						

STATION WAGON—CARGO SPACE

MODEL	SAE Ref. No.	
Minimum distance between wheel houses at floor level	W201	
Rear end opening width at belt	W204	
Floor length from back of front seat at floor level to inside of closed tail gate	L202	NA
Minimum horizontal distance from top rear of front seat back to inside of tail gate at belt	L204	
Maximum height - floor covering to headlining at centerline of rear axle	H201	
Maximum height of rear opening - tail and lift gates open	H202	
Cargo Volume Index (cu. ft.) $\frac{W4 \times L204 \times H201}{1728}$	V2	

AMA Specifications—Passenger Car

MAKE OF CAR Corvair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED

MODEL	10100 & 10500		10700	
	95 HP	110 HP	140 HP*	180 HP

ENGINE—GENERAL

Type, no. cyls., valve arr.		Horizontal opposed, 6-cylinder OHV			
Bore and stroke (nominal)		3.4375 x 2.94			
Piston displacement, cu. in.		164			
Bore spacing (C/L to C/L)		2.85			
No. system (front to rear)	L. Bank	6-4-2			
	R. Bank	5-3-1			
Firing order		1-4-5-2-3-6			
Compres. ratio (nominal)		8.25:1	9.25:1	9.25:1	8.25:1
Cylinder Head Material		Cast aluminum			
Cylinder Block Material		Cast aluminum			
Cylinder Sleeve-Wet, dry, none		None			
Number of mounting points	Front	Two			
	Rear	One			
Engine installation angle		2° 33'			
Taxable horsepower $\frac{Dia^2 \times No.Cyl.}{2.5}$		28.4			
Publishing max. bhp* @ eng. RPM		95 @ 3600	110 @ 4400	140 @ 5200	180 @ 400
Publishing max. torque* (lb. ft. @ RPM)		154 @ 2400	160 @ 2800	160 @ 3600	265 @ 320
Recommended fuel regular - premium		Regular		Premium	
Idle speed (spec. neutral or drive)	Manual	500 in neutral	650 in neutral		850 in ne
	Automatic	500 in drive			

ENGINE—PISTONS

Material			Cast aluminum alloy	
Description and finish			Flat head - Slipper skirt	
Weight (piston only) oz.			15.50	
Clearance (limits)	Top land		.0210 - .0320	
	Skirt	Top	.0011 - .0017(a)	
		Bottom		
Ring groove depth	No. 1 ring		.1925 - .1990	
	No. 2 ring		.1925 - .1990	
	No. 3 ring		.1860 - .1925	
	No. 4 ring		None	

*Max. bhp (brake horsepower) and max. torque corrected to 60° F and 29.92 in. Hg atmospheric pressure.

(a) - Measured 2.01 from top of piston

* - Also optional with 10100 & 10500

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POWER TEAMS

(Indicate whether standard or optional)

MODEL AVAILABILITY	ENGINE					TRANSMISSION	AXLE RATIO (Std. first) (Indicate A/C ratio)		
	Displ. cu. in.	Carburetor	Compr. Ratio	BHP @ RPM	Torque @ RPM		"A"	"B"	"C"
10100 10500	164 95 HP	Two; 1-Bbl Down-draft	8.25:1	95 @ 3600	154 @ 2400	3-Speed 4-Speed* Powerglide*	3.27:1	3.55:1	--
10700 (Base) 10100-500 (Optional)	164 140 hp	Four; 1-Bbl Down-draft	9.25:1	140 @ 5200	160 @ 3600	3-Speed 4-Speed * Powerglide*¢	3.55:1 3.55:1 3.55:1	-- --	3.27:1 3.27:1 --
10100 10500	164 110 hp (opt)	Two; 1-Bbl Down-draft	9.25:1	110 @ 4400	160 @ 2800	3-Speed 4-Speed* Powerglide*	3.27:1 3.27:1 3.55:1	3.55:1 3.55:1 --	-- -- --
10700	164 150 hp (opt)	One; 1-Bbl Side-draft	8.25:1	180 @ 4000	265 @ 3200	3-Speed 4-Speed*	--	--	3.55:1 (Std)

A - General Purpose (standard) - same ratio for Air Condition
B - Special Purpose or Mountain - Optional
C - Performance cruise-Optional
* - Optional
** - Positraction axle available in all ratios shown
¢ - 10100-500 Models only

AMA Specifications—Passenger Car

MAKE OF CAR Corvair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED

MODEL	10100 & 10500		10700	
	95 HP	110 HP	140 HP*	180 H

ENGINE—RINGS

Function (top to bottom)	No. 1, oil or comp.	Compression
	No. 2, oil or comp.	Compression
	No. 3, oil or comp.	Oil
	No. 4, oil or comp.	None
Compression	Description - material, coating, etc.	Cast alloy iron - inside bevel or counterbore Upper ring - chrome plated# Lower ring - wear resistant coating
	Width	.0620-.0625
	Gap	.010-.020
Oil	Description - material, coating, etc.	Multi-piece (2 rails and one spacer expander) Steel - rails - chrome plated O. D. Spacer expander - alloy steel
	Width	.1215-.1255 (assembled)
	Gap	.015-.055
Expanders		In oil ring assembly

ENGINE—PISTON PINS

Material			Chromium steel
Length			2.630-2.650
Diameter			.7999-.8002
Type	Locked in rod, in piston, floating, etc.		Locked in rod
	Bushing	In rod or piston	None
		Material	None
Clearance	In piston		.00015-.00025
	In rod		
Direction & amount offset in piston			Major thrust side .055-.065

ENGINE—CONNECTING RODS

Material		Drop forged steel
Weight (oz.)		11.49
Length (center to center)		4.719-4.721
Bearing	Material & Type	Premium aluminum
	Overall length	.639
	Clearance (limits)	.0007-.0028
	End play	.0055-.0105

- 140 HP & 180 HP - upper ring is high strength ductile iron and molybdenum coatin

* - Also optional with 10100 & 10500

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MAKE OF CAR Corvair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED (1)

MODEL	10100 & 10500		10700	
	95 HP	110 HP	140 HP*	180 HP

ENGINE—CRANKSHAFT

Material			Forged alloy steel	
Vibration damper type			None#	Rubber mounted inertia damper
End thrust taken by bearing (No.)			#1 (at rear of engine)	
Crankshaft end play			.002-.006	
Main bearing	Material & type		Premium aluminum	
	Clearance		.0012-.0037	
	Journal dia. and bearing overall length	No. 1	2.1068 x .785	
		No. 2	2.1008 x .752	
		No. 3	2.1018 x .752	
		No. 4	2.1018 x .752	
		No. 5	None	
		No. 6	None	
		No. 7	None	
	Dir. & amt. cyl. offset		None	
Crankpin journal diameter			1.799-1.800	

ENGINE—CAMSHAFT

Location			Directly below crankshaft	
Material			Cast alloy iron	
Bearings	Material		No inserts, aluminum crankcase machined for bearing surface	
	Number			
Type of Drive	Gear or chain		Gear	
	Crankshaft gear or sprocket material		Steel	
	Camshaft gear or sprocket material		Cast aluminum	
	Timing chain	No. of links	None	
		Width		
		Pitch		

ENGINE—VALVE SYSTEM

Hydraulic lifters (Std, opt, NA)			Standard
Valve rotator, type (intake, exhaust)			None
Rocker ratio			1.57:1
Operating tappet clearance (indicate hot or cold)	Intake		Zero
	Exhaust		Zero
Timing marks on flywheel, damper other			Crankshaft Pulley — Harmonic balancer

= Rubber mounted damper used with Powerglide

* - Also optional with 10100 & 10500

(Continued)

AMA Specifications—Passenger Car

MAKE OF CAR Corvair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED

MODEL			10100 & 10500 95 HP	10100 & 10500 110 HP	10700 140 HP*	10700 180 HP
ENGINE—VALVE SYSTEM (cont.)						
Timing	Intake	Opens (°BTC)	44°	55°		82°
		Closes (°ABC)	88°	105°		110°
		Duration-deg.	312°	340°		372°
	Exhaust	Opens (°BBC)	78°	97°		110°
		Closes (°ATC)	54°	63°		70°
		Duration-deg.	312°	340°		360°
	Valve opening overlap		98°	118°		152°
Intake	Material		High alloy steel - aluminized face			
	Overall length		4.4891-4.5091		4.5342-4.5542	4.4891-4.
	Actual overall head dia.		1.335-1.345		1.715-1.725	1.335-1.
	Angle of seat & face		45° (seat) 44° (face)			
	Seat insert material		Sintered alloy iron			
	Stem diameter		.3414-.3422			
	Stem to guide clearance		.0010-.0028			
	Lift (@ zero lash)		.4030	.4090		.3916
	Outer spring press. and length	Valve closed (lb. @ in.)	78-86 @ 1.66			
		Valve open (lb. @ in.)	170-180 @ 1.26			
	Inner spring press. and length	Valve closed (lb. @ in.)	Spring Damper			
		Valve open (lb. @ in.)	Spring Damper			
Exhaust	Material		High alloy steel - cobalt based alloy face			(a)
	Overall length		4.4941-4.5141		4.4891-4.5091	4.4941-4.
	Actual overall head dia.		1.235-1.245		1.355-1.365	1.235-1.2
	Angle of seat & face		45° (seat) 44° (face)			
	Seat insert material		Cast chromium steel alloy			
	Stem diameter		.3407-.3418			
	Stem to guide clearance		.0014-.0035			
	Lift (@ zero lash)		.4030	.4090		.3916
	Outer spring press. and length	Valve closed (lb. @ in.)	78-86 @ 1.66			
		Valve open (lb. @ in.)	170-180 @ 1.26			
	Inner spring press. and length	Valve closed (lb. @ in.)	Spring Damper			
		Valve open (lb. @ in.)	Spring Damper			
ENGINE—LUBRICATION SYSTEM						
Type of lubrication (splash, pressure, nozzle)	Main bearings		Pressure			
	Connecting rods		Pressure			
	Piston pins		Splash			
	Camshaft bearings		Pressure			
	Tappets		Pressure			
	Timing gear or chain		Main & cam front bearing throw off			
	Cylinder walls		Conn. rod bearing throw off			

* - Also optional with 10100 & 10500

(a) - Stem - Silicon & chromium alloy steel;
Head & Neck - Superalloy (Nimonic 80A)

(Continued)

AMA Specifications—Passenger Car

MAKE OF CAR Corvair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED

MODEL	10100 & 10500		10700	
	95 HP	110 HP	140 HP*	180 HP

ENGINE—LUBRICATION SYSTEM (cont.)

Oil pump type	Gear
Normal oil pressure (lb. @ engine rpm)	30 PSI @ 2000
Oil pressure sending unit (elect. or mech.)	Electric
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, partial, other)	Full flow
Filter replacement (element, complete)	Complete
Capacity of crankcase, less filter-refill (qt.)	
Oil grade recommended (SAE viscosity and temperature range) **	32° F and Above - SAE 30 10°F to 32°F - SAE 10 W Below 10°F - SAE 5W-2 Note: Always use SAE 30 if daytime temp. is above 60°F
Engine Service Requirement (MM, MS, etc.)	MS or DG

ENGINE—EXHAUST SYSTEM

Type (single, single with cross-over, dual, other)		Single with crossover	Dual	Single with crossover
Muffler No. & type (reverse flow, straight thru, separate resonator)		One, reverse flow	Two, Reverse flow	One, Reverse flow
Exhaust pipe dia. (O.D. & wall thickness)	Branch	1.375 x .067-.081	-	1.375x.089
	Main	1.875 x .067 -.081	1.625x.067-.081	1.875x.089
Tail pipe diameter (O.D. & wall thickness)		1.50x.042-.052	1.75x.042-.052	2.50 x .047

ENGINE— CRANKCASE VENTILATION SYSTEM

Type (ventilates to atmos., induction system, other)		Standard	Ventilates to induction system
		Optional	
Control Unit	Make and model		
	Location		Tubing and hosing from underside of air cleaner to rear of engine shrouding
	Energy source (manifold vacuum, carburetor air stream, other)		Manifold vacuum and/or carburetor air stream
	Control method (variable orifice, fixed orifice, other)		Variable orifice
Complete system	Discharges (to intake manifold, carb. air intake, air cleaner intake, other)		Carburetor air and compressor inlet
	Air inlet (breather cap, carburetor air cleaner, other)		Carburetor air cleaner
	Flame arrester (screen, check valve, other)		Fixed orifice

* - Also optional with 10100 & 10500

** - SAE5W-30 can be used as an alternate for 5W; 5W-20 or 10W-30.

AMA Specifications—Passenger Car

MAKE OF CAR Corvair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED [illegible]

MODEL	10100 & 10500 95HP	10100 & 10500 110 HP	10700 140 HP

ENGINE—EXHAUST EMISSION CONTROL

Type (Air injection, engine modifications, other)			Air Injection		
Air Injection Pump	Type		Semi-articulated vane type		
	Displacement		19.3 cubic inches		
	Drive ratio		1.25:1		
	Drive type		Crankshaft Pulley		
	Relief valve (type)		Pressure (Plate type)		
	Filter (describe)		None (clean air drawn from air cleaner)		
Air Injection System	Air distribution (head, manifold, etc.)		Manifold		
	Point of entry		Exhaust Ports		
	Injection tube I.D.		.4650		
	Check valve type		Pressure (Plate type)		
	Backfire protection (type)		Vacuum actuated anti-backfire valve		
Carburetor	Make		Rochester		
	Model		7036023 (a)	7036023 (a)	7036023 & 702602[illegible]
	Barrel size		1.25		
	Idle speed	Drive	500 for Powerglide Transmissions		
		Neutral	500 for manual trans.		650 for manual tr[illegible]
Distributor	Aux. Adv. Systems (type)				
	Make		Delco-Remy		
	Model		1110368	1110372	1110371
	Cent'fgal adv. in crank degrees @ eng. rpm.	Start (rpm)	900		
		Intermed. points deg. @ rpm			
		Max. deg.@rpm.	48 @ 4400	40 @ 5000	32 @ 3000
	Vacuum adv. in. crank degrees@ eng. rpm	Start (in Hg)	6	7	7
		Intermed. points deg.@ in. Hg			
		Max. deg.@im.	24 @ 14	24 @ 15	24 @ 15
	Vacuum Source				
Timing - Crank degrees @ rpm			8°ATDC @ 500	TDC @ 500	4°BTDC @ 6[illegible]
Cooling System (describe changes)					
Exhaust System (describe changes)					

(a) - Two carburetors used- one for each cylinder bank

(b) - Four carburetors used - Two for each cylinder back

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MODEL	10100 & 10500		10700	
	95 HP	110 HP	140 HP#	180 HP

ENGINE—FUEL SYSTEM

(See supplemental page for Details of Fuel Injection, Supercharger, etc. if used)

Induction type: Carburetor, fuel injection, supercharger.			Carburetor	Supercharger (A)
Fuel Tank	Refill capacity (gals.)		14	
	Filler location		Left front fender crown	
Fuel Pump	Type (elec. or mech.)		Mechanical	
	Locations		Mounted on engine rear housing	
	Pressure range		5.50-6.75 PSI	
Vacuum booster (std., optional, none)			None	
Fuel Filter	Type		Fine mesh plastic strainer in gas tank	
	Locations		Sintered bronze filter in carburetor inlet	(B)
Carburetor	Choke type		Automatic	
	Intake manifold heat control (exhaust or water)		Carburetors, manifold and intake air warmed by recirculating engine cooling air	(A)
	Air cleaner type	Standard	Oil wetted paper	
		Optional	One, pre oil-bath air cleaner	

CARBURETOR SUPPLEMENTARY INFORMATION

Model Usage	Engine Displ.	Transmission	Carburetors		No. Used and Type	Barrel Size
			Make	Model		
10100 10500	164 95 hp	3-Speed & 4-Speed Powerglide	Rochester	7026023	Two*	1.25
10100 10500	164 110 hp	3-Speed & 4-Speed Powerglide	Rochester	7026023	Two*	1.25
10700	164 140 hp	3-Speed 4-Speed	Rochester	7026023(P) 7026026(S)	Four**	1.25 Primary & Secondary
10700	164 180 hp	3-Speed 4-Speed	Carter	3880786	One***	1.50

* - One for each cylinder bank; single barrel downdraft
** - Two for each cylinder bank; single barrel downdraft
*** - Single barrel (triple venturi) sidedraft
(A) - See supplement to page 10 for detail
(B) - Throw-away in line(paper element) located between fuel pump and carburetor

- Also optional with 10100 & 10500

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MODEL Corvair Corsa 10737 & 10767

Supercharger (Optional)

Type ---------- Turbo-Supercharger (Turbine Driven Compressor)
Make ---------- Thompson

Turbine ---------- Single Stage, In-Flow Type
Material ------ High Temperature Cobalt Base Alloy
Diameter (in.) ---------- 2.97
Blades ---------- 11, Equally Spaced
Drive ---------- Engine Exhaust Gases

Compressor ---------- Centrifugal Impeller
Material ---------- Die Cast Aluminum Alloy
Diameter (in.) ---------- 3.00
Blades ---------- 14, Equally Spaced
Drive ---------- Solid Shaft from Turbine

Bearing ---------- One Piece Floating Bushing
Material ---------- Aluminum Alloy
Lubrication ---------- Engine Oil, Full Pressure

AMA Specifications—Passenger Car

Supplement t

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MAKE OF CAR Corvair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED

MODEL 10100, 10500, & 10700

ENGINE-COOLING SYSTEM

Type		Air, forced supply by centrifugal blower
Engine Shrouding		Engine enclosed in sheet metal to direct coolin air over fins on outside of engine cylinders, cylinder head castings and crankcase
Engine Blower	Type	Centrifugal
	Location	Mounted horizontally on top center of engine
	Material	Magnesium
	Diameter	11.20
	Number of vanes	11
	Driven by	"V" belt
	Air Flow	1460 cfm @ 4000 engine RPM
	Pulley (PD)	4.1875
	Ratio-fan to crankshaft	1.58:1
	Bearing	Permanently lubricated ball bearing
Drive Belt	Type	"V"
	Pitch length	55.74
	Width	.380
	Angle of "V"	40°
Air Thermo-stats	Function; number	Two, regulates air flow control doors
	Type	Bellows
	Location	Lower part of plenum under front cyls.
	Bellows start to open at	205° (approximately)

AMA Specifications—Passenger Car

MAKE OF CAR Corvair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED

MODEL

ENGINE—COOLING SYSTEM

Type system (pressure, pressure vented, atmospheric, other)			
Radiator cap relief valve pressure			
Circulation thermostat	Type (choke, bypass)		
	Starts to open at (°F)		
Water pump	Type (centrifugal, other)		
	GPM @ 1000 pump rpm		
	Number of pumps		
	Drive (V-belt, other)		
	Bearing type		
By-pass recirculation type (internal, external)			
Radiator core type (cellular, tube and fin, other)			
Cooling system capacity	With heater (qt.)		
	Without heater (qt.)		
	Opt. equipment-specify (qt.)		
Water jackets full length of cylinder (yes, no)			
Water all around cylinder (yes, no)			
Radiator hose	Lower	Number and type (molded, straight)	
		Inside diameter	
	Upper	Number and type (molded, straight)	
		Inside diameter	
	By-pass	Number and type (molded, straight)	
		Inside diameter	
Fan	Number of blades & spacing		
	Diameter		
	Ratio-fan to crankshaft rev.		
	Fan cutout type		
	Bearing type		
*Drive belts (indicate belt used by letter)	Fan		
	Generator or alternator		
	Water Pump		
	Power Steering		
	Air Conditioning		

Refer To Supplement Page 11 For Type Of Cooling

* Drive Belt Dimensions	A	B	C	D	E	F	G	H	I	J	K
Angle of V											
Nominal length (SAE)											
Width											

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ODEL	10100 & 10500		10700	
	95 HP	110 HP	140 HP*	180 HP

ELECTRICAL—SUPPLY SYSTEM

attery	Make and Model			Delco-Remy #1980024		
	Voltage Rtg. & Total Plates			12 Volts - 54 Plates		
	SAE Designation & Amp Hr. Rtg.			44 Amp/Hr @ 20 Hr Rate		
	Location			Left side of engine compartment		
	Terminal grounded			Negative		
nerator or ternator	Make			Delco-Remy		
	Model			#1100639		
	Type and rating			Diode rectified - 37 Amps		
	Output at engine idle (neutral)		11 Amps	16 Amps		24 Amps
	Ratio—Gen. to Cr/s rev.			2.3:1		
gulator	Make			Delco-Remy		
	Model			#1119515		
	Type			Vibrator		
	Cutout relay	Closing voltage @ generator rpm		None		
		Reverse current to open				
	Regulated	Voltage		13.8-14.8 @ 85°F		
		Current				
	Voltage set conditions	Temperature		Operating		
		Load		3-8 Amperes		
		Other		None		

ELECTRICAL—STARTING SYSTEM

	Make		Delco-Remy
	Model		#1108306
	Rotation (drive end view)		Clockwise
ting or	Engine cranking speed		
	Test conditions		Operating Temperature
	No load test	Amps	49-76
		Volts	10.6
		RPM (min)	6200-9400
	Switch (solenoid, manual)		Solenoid
or rol	Starting procedure		3-Speed & 4-Speed - Place gearshift in neutral and depress clutch to floor. Powerglide - Place control lever in N position. Initial Start - Press accelerator pedal to floor to set automatic choke then release. Turn ignition to START and release as soon as engine starts.

* - Also optional with 10100 & 10500

(Continued)

AMA Specifications—Passenger Car

MAKE OF CAR Corvair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED (a)

MODEL

				10100 & 10500			10700	
				95HP (Std.)	95 HP (P/gld)	110 HP	140 HP*	180 H

ELECTRICAL—STARTING SYSTEM (cont.)

Motor Drive	Engagement type			Positive shift solenoid				
	Pinion meshes (front, rear)			Rear				
	Number of teeth	Pinion		9				
		Flywheel	Manual	147				
			Auto.	147				NA
	Flywheel tooth face width		Manual	.3630-.3870				
			Auto.	.3630-.3870				NA

ELECTRICAL—IGNITION SYSTEM

Coil	Transistorized - Std., Opt., N.A.							
	Make			Delco-Remy				
	Model			#1115200				
	Amps	Engine stopped		4.0				
		Engine idling		1.8				
Distributor	Make			Delco-Remy				
	Model			#1110310	#1110311	#1110319	#1110330	#1110
	Cent'fgal adv. in crankshaft degrees @ engine rpm (nominal)	Start (rpm)		700	1700	800	800	4000
		Intermediate points deg. @ rpm.						
		Max. deg. @ rpm.		28@4200	20@4200	20@4800	18@2800	18@4
	Vacuum adv. in crankshaft degrees @ in. Hg. (nominal)	Start (in. Hg.)		6.00	7.00	7.00	6.00	(a)
		Intermediate points, deg. @ in. Hg.						
		Max. deg. in. Hg.		24@14	24@15	24@15	22@14	(a)
	Breaker gap (in.)			.019				
	Cam angle (deg.)			31°-34°				
	Breaker arm tension (oz.)			19-23 oz				
Timing	Crankshaft deg. @ rpm.			6@500	14@500	14@600	18@650	2
	Mark location			Crk/shft pulley		Harmonic balancer		
Spark Plug	Make			AC Spark Plug				
	Model			AC46-FF		AC44-FF		
	Thread (mm)			14				
	Tightening torque (lb. ft.)			25				
	Gap			.033-.038		.028-.033		
Cable	Conductor type			Linen core impregnated with electrical conducting ma				
	Insulation type			Rubber with neoprene jacket				
	Spark plug protector			Neoprene				

* - Also optional with 10100 & 10500

(a) - No vacuum advance - unit operates on positive pressure. Manifold pressure begins -0° @ 2 psi; max. pressure 12° @ 4-1/2 psi.

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MODEL	10100	10500	10700

ELECTRICAL—SUPPRESSION

Locations & type	Non-metallic high tension ignition cables

ELECTRICAL—INSTRUMENTS AND EQUIPMENT

Speedometer	Make	AC Sparkplug	
	Trip odometer (yes, no)	No	With RPO L37
Charge indicator—type & Fan Indicator		Tell-Tale	
Temperature indicator—type			
Oil pressure indicator—type & Temp Indicator		Tell-Tale	
Fuel indicator—type		Electric Gauge	
Other		None	
Windshield wiper	Make	Delco-Remy	
	Type—Standard	Electric, Two-Speed	
	Type—Optional	None	
	Vacuum booster provision	None	
	Washer provision	Pushbutton - Standard	
Horn	Type	Vibrator	
	Number used	One	Two
	Amp draw (each)	8.0-11.0@12.5V	

DRIVE UNITS—CLUTCH (Manual Transmission) - 3-Speed & 4-Speed

Make & type		Chevrolet, single dry disc, centrifugal	
Type pressure plate springs		Diaphragm, bent finger design	
Total spring load (lb.)		1250-1450	1275-1475
No. of clutch driven discs		One	
Clutch facing	Material	Woven type asbestos	
	Outside & inside dia.	8.0 & 6.0	9.12 & 6.12
	Total eff. area (sq. in.)	44.0	71.8
	Thickness	.125 ea.	.130 ea.
	Engagement cushioning method	Flat spring steel between facings	
Release bearing	Type & method of lubrication	Single row ball, packed and sealed	
Torsional damping	Methods: springs, friction material	None	

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MODEL

DRIVE UNITS—TRANSMISSIONS

Manual 3-speed (std. or opt.)	Standard
Manual 4-speed (std. or opt.)	Optional
Manual with overdrive (std. or opt.)	NA
Automatic (std. or opt.)	Powerglide - Optional NA with RPO L87

DRIVE UNITS—MANUAL TRANSMISSION

			3-Speed	4-Speed
Number of forward speeds			3	4
Transmission ratios	In first		3.11	3.11
	In second		1.84	2.20
	In third		1.00	1.47
	In fourth			1.00
	In reverse		3.22	3.11
Synchronous meshing, specify gears			All forward gears	
Shift lever location			Floor	
Lubricant	Capacity (pt.)		3.1	3.6
	Type recommended		Military Spec. MIL-L-2105-B	
	SAE viscosity number	Summer	SAE 80	
		Winter	SAE 80	
		Extreme cold	SAE 80	

DRIVE UNITS—MANUAL TRANSMISSION WITH OVERDRIVE

For transmission data see manual transmission section

Type (planetary or other)			
Manual lockout (yes, no)			
Downshift accelerator control (yes, no)			NOT
Minimum cut-in speed			
Gear ratio			AVAILABLE
Lubricant	Capacity (pt.) (Overdrive only)		
	Separate filler (yes, no)		
	Type recommended		
	SAE viscosity number	Summer	
		Winter	
		Extreme cold	

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MODEL 10100 - 10500 - 10700

DRIVE UNITS—AUTOMATIC TRANSMISSION Not available with 10700 Models

Trade name		Powerglide
Type describe		Torque converter with planetary gears
Method of Selection (Lever, Push Button or other)		Lever
Selector Pattern		L-D-N-R
List gear ratios Selector Pattern and indicate which are used in each selector position		Drive 1.82 & 1.0 Low & Reverse - 1.82
Max. upshift speeds—drive range		49
Max. kickdown speeds—drive range		45
Torque converter	Number of elements	3
	Max. ratio at stall	2.60
	Type of cooling (air, liquid)	None
Lubricant	Capacity—refill (pt.)	6
	Type recommended	A Suffix A
Special features		

DRIVE UNITS—PROPELLER SHAFT

Number used		
Type (exposed, torque tube)		
Outer diameter x length* x wall thickness	Manual 3-speed transmission	
	Manual 4-speed transmission	NA
	Overdrive transmission	
	Automatic transmission	

*Center to center of universal joints, or to centerline of rear attachment.

(Continued)

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MODEL

DRIVE UNITS—PROPELLER SHAFT (cont.)

Intermediate bearing	Type (plain, anti-friction)		
	Lubrication (fitting, prepack)		
Universal joints	Make		
	Number used		
	Type (ball and trunnion, cross, other)		
	Bearing	Type (plain, anti-friction)	
		Lubric. (fitting, prepack)	
Drive taken through (torque tube or arms, springs)			
Torque taken through (torque tube or arms, springs)			

DRIVE UNITS—REAR AXLE

Description			Component of transaxle system; straddle mounted hypoid gear with differential carrier rigidly mounted to engine
Limited Slip differential, type			Disc clutch (one side)
Drive Pinion Offset			1.765
No. of differential pinions			Two
Ring gear O.D. (std. ratio)			6.75
Pinion adjustment (shim, other)			None
Pinion bearing adj. (shim, other)			Shim
Wheel bearing type			Two taper roller, each wheel
Lubricant	Capacity (pt.)		4.0
	Type recommended		Military Spec. MIL-L-2105-B
	SAE viscosity number	Summer	SAE 80
		Winter	SAE 80
		Extreme cold	SAE 80

REAR AXLE RATIO TOOTH COMBINATIONS

(See page 4 for axle ratio usage)

Axle ratio		3.27	3.55
No. of tooth	Pinion	11	9
	Ring gear	36	32

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ODEL

DRIVE UNITS—WHEELS

ype & material			Short spoke disc, steel
im (size and flange type)		Std.	13x5.5J
		Opt.	
ttachment	Type (bolt or stud)		Bolt
	Circle diameter		4.75
	Number and size		5 hex nuts, 7/16-20 UNF-2B

DRIVE UNITS—TIRES

tandard (1st option below)	Size & ply	7.00x13-4, Highway Tubeless B/W
	Type - Nylon, etc.	Rayon
ev/mile at 50 mph.		862
flation ess. (cold)	Front	15
	Rear	26
ptional tires - size and ply		7.00x13-4 rayon W/W;

BRAKES—SERVICE

ype (d rva, disc, balanced, etc.)			Duo-servo 4-wheel hydraulic
elf adjusting (std., opt., N.A.)			Std. (reverse self-adjusting)
ydraulic system type (single, dual, etc.)			Single
ower brake make & type emote, integral, etc.)			NA
ffective area (sq. in.) *			168.9
ross lining area (sq. in.) **			168.9
wept drum area (sq. in.) ***			268.6
ercent brake effectiveness—front			46
rum or otor	Diameter	Front	9.5
		Rear	9.5
	Type and material		Composite; cast iron rim; steel web
	Rotor (vented or solid)		--
	No. pistons per caliper		--
heel cylinder bore	Front		.875
	Rear		.9375
aster cylinder bore			1.00
vailable pedal travel			6.00
ine pressure at 100 lb. pedal load			783
hoe clearance adjustment			Self-adjusting

Excludes rivet holes, grooves, chamfers, etc.

* Includes rivet holes, grooves, chamfers, etc.

*** Total swept area for four brakes:
Widest lining contact width for each brake x its drum circumference.

(Continued)

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MODEL

BRAKES—SERVICE (cont.)

Brake lining	Drum or Disc			Drum
	Bonded or riveted			Bonded
	Front Wheel	Material		Molded asbestos
		Size (length x width x thickness)	Prim. or out-board	9.01x2.0x.17
			Second. or in-board	9.01x2.0x.17
		Segments per shoe		One
	Rear Wheel	Material		Molded asbestos
		Size (length x width x thickness)	Prim. or out-board	9.75x2.0x.20
			Second. or in-board	9.75x2.0x.20
		Segments per shoe		One

BRAKES—PARKING

Type of control		Mechanical
Location of control		Under instrument panel to left of steering column
Operates on		Rear service brakes
If separate from service brakes	Type (internal or external)	--
	Drum diameter	--
	Lining size (length x width x thickness)	--

FRAME

Type and description (Separate frame, unitized frame, partially - unitized frame)	Integral; step down underbody floor, front and rear side rail type members, and front and rear end sheet metal components welded to body assembly.

STEERING

Manual (std., opt., NA)				Std.
Power (std., opt., NA)				NA
Adjustable steering wheel (tilt, swing, other)		Type and description		Telescoping steering column, driver adjustable
		(std., opt., NA)		Optional
Wheel diameter		Manual		16.0
		Power		--
Turning diameter	Outside front	Wall to wall (l. & r.)		39.3
		Curb to curb (l. & r.)		37.0
	Inside rear	Wall to wall (l. & r.)		19.2
		Curb to curb (l. & r.)		20.1
Outside wheel angle with inside wheel at 20°				18.4°
Manual	Gear	Type		Semi-reversible, recirculating ball nut
		Make		Saginaw
		Ratios	Gear	18.0:1
			Overall	23.3:1
	No. wheel turns			4.50

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MODEL

STEERING (cont.)

Power	Type (coaxial, linkage, etc.)			
	Make			
	Gear	Type		
		Ratios	Gear	
			Overall	
	Pump driven by			
	Number wheel turns			
Linkage	Type			Parallelogram
	Location (front or rear of wheels, other)			Front of wheels
	Drag link (trans. or tangent)			None
	Tie-rods (one or two)			Two
Steering Axis	Inclination or camber (deg.)			6 to 7
	Bearings (type)	Upper		Ball stud with non-metallic bearings
		Lower		Ball stud with non-metallic bearings
		Thrust		
Wheel Align (range at curb weight and preferred)	Caster (deg.)			P2-1/2 to 3-1/2
	Camber (deg.)			P1/2 to 1-1/2
	Toe-in (outside track – inches)			1/4
Steering spindle & joint type				Steering knuckle with spherical joints
Wheel spindle	Diameter	Inner bearing		1.2493-1.2498
		Outer bearing		.7492-.7497
	Thread size			3/4-20 NEF-3 (Mod.)
	Bearing type			

a) Rear wheel alignment: camber, P1/2 to 1-1/2; toe-in, 1/4