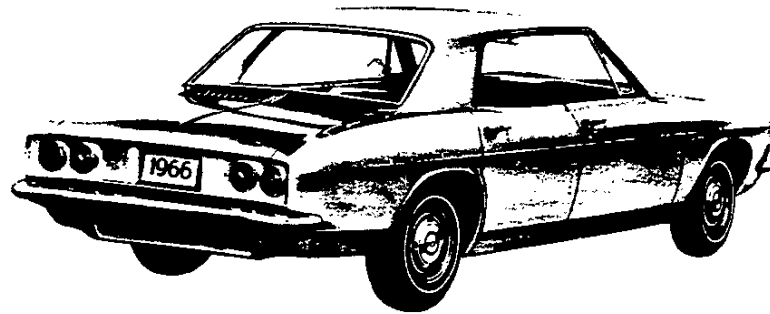




GENERAL

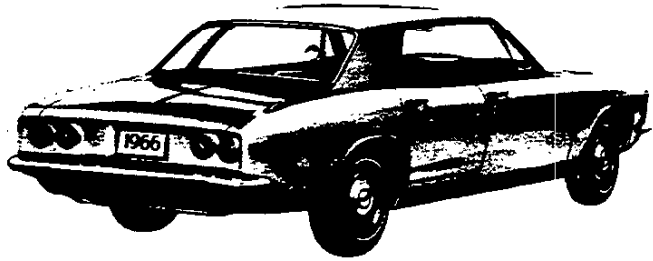


MODEL IDENTIFICATION	2
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MODEL IDENTIFICATION

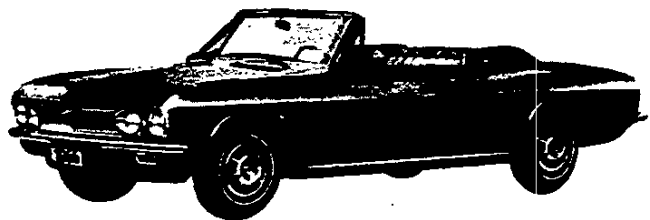
CORVAIR 500 10100 SERIES

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

SERIAL NUMBERS AND IDENTIFICATION

ONLY BASIC DESIGNATIONS SHOWN

VEHICLE SERIAL NUMBER

Example:

Model	1966	Assembly Plant (Willow Run)	Unit Number (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: RA0212 T

Source ^c 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: AA0212 B

Type Designation	Production* Month and Day	Source ^c 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
c - 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	
	Anodized Aluminum	Windshield reveal	All	
		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		
		Wheel openings	105-10700	
		Chrome Plated Metal	Engine compartment lid nameplate "Corvaire"	All
			Engine compartment lid emblem "140"	10700
	Front panel nameplate "Corvaire"			
	Front panel emblem		All	
	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			

REGULAR EQUIPMENT—INTERIOR

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	
	Cigarette lighter and ash tray		All	
Instrument Panel	Control knobs - chrome		10700	
	Glove box door series nameplate		10500	
	Glove box door series emblem		All	
	Glove box lock			
	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 ²	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		105-10767
Top, convertible electric folding	C06		
Top, convertible folding (color options)	C08		

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	101-10500
164 Cubic Inch P-6 110HP	L62	
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

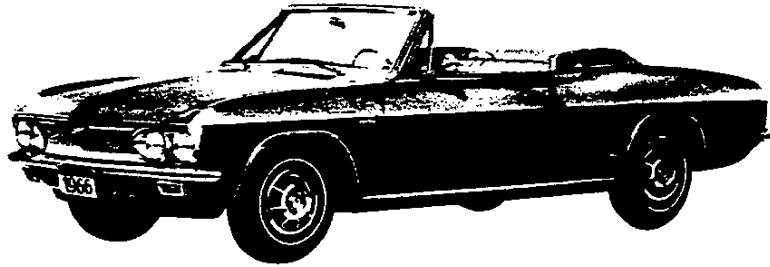
Four speed transmission	M20	All
Powerglide transmission	M35	101-10500

DEALER INSTALLED ACCESSORIES

Air conditioning, All Weather	101-105-10700	
Antenna, radio front manual	All	
Antenna, radio rear manual		
Cap, gas tank filler locking	All except 10700	
Clock, instrument panel		
Compass, auto	All	
Container, litter, inst. panel mtd. (Black only)	All exc. floor shift transmission	
Container, floor litter (saddle type)		
Cover, simulated wire wheel trim	All	
Cover, simulated magnesium wheel	10100	
Cover, wheel trim		
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	All 4-door models	
Lock, rear door safety		
Luggage carrier, deck lid	All	
Mat, contour twin front floor		
Mat, contour twin rear floor	All except 10700	
Mat, full width front floor		
Mirror, inside rear view prismatic	All	
Mirror, outside rear view; replacement kit		
Mirror, remote operated outside rear view	All except convertible	
Mirror, visor vanity		
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	2
LUGGAGE CAPACITY	2
STATION WAGON CARGO SPACE	2
EXTERIOR DIMENSIONS	3
VEHICLE WEIGHTS	4

INTERIOR DIMENSIONS

FRONT COMPARTMENT

CODE	DESCRIPTION	SPORT SEDANS		SPORT COUPES		CONVERT-IBLES
		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.)	

EXTERIOR DIMENSIONS

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

CODE	DESCRIPTION	SPORT SEDANS	SPORT COUPES	CONVERTIBLES
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

CODE	DESCRIPTION	SPORT SEDANS	SPORT COUPES	CONVERTIBLES
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

CODE	DESCRIPTION	SPORT SEDANS	SPORT COUPES	CONVERTIBLES
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

Model	VEHICLE TYPE Description	SHIPPING WEIGHT			CURB WEIGHT		
		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

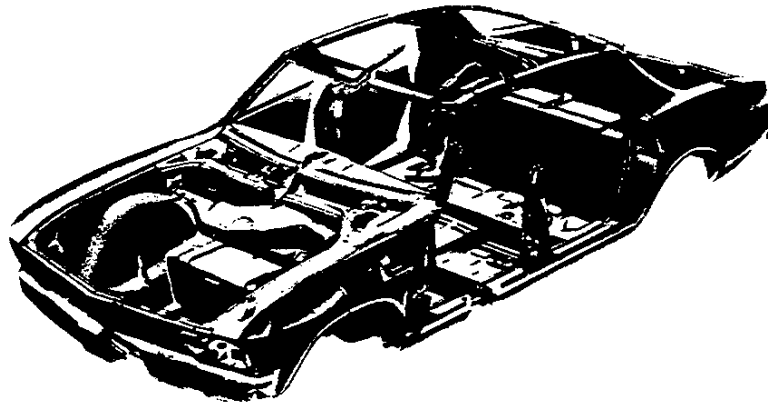
SHIPPING WEIGHT: Weight of basic vehicle with regular equipment and grease and oil. Weight of gasoline and water not included.

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).

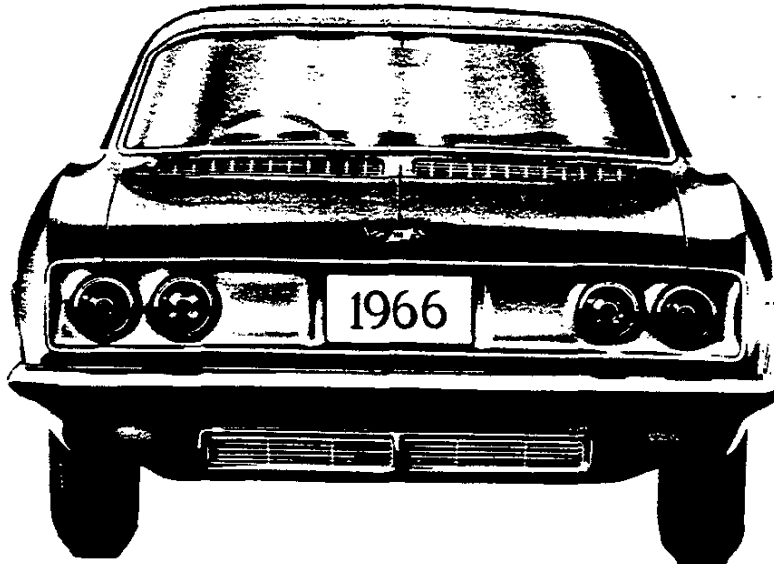
RPO A67	Folding rear seat	-----	+ 30
RPO C48	Less heater	-----	- 29
RPO C64	Air conditioning	-----	+115
RPO L63	High performance engine	-----	+ 34
RPO L87	Turbocharged engine	-----	- 2
RPO M20	Four-speed transmission	-----	+ 6
RPO M35	Powerglide transmission	-----	+10

BODY



EXTERIOR PAINT PROCESS	2
EXTERIOR-INTERIOR COLOR COMBINATIONS	3
BODY CONSTRUCTION AND GLASS AREA	5

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.

EXTERIOR-INTERIOR COLORS

CORVAIR 500 10100 SERIES

EXTERIOR			INTERIOR TRIM COLORS AND RPO NUMBERS		
			Med. Fawn	Red	Blue
RPO	Color	Sales Name	Models 10137-39		
			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.

EXTERIOR-INTERIOR COLORS—Cont'd

MONZA 10500 SERIES

CORSA 10700 SERIES

EXTERIOR			INTERIOR TRIM COLORS AND RPO NUMBERS							
			Lighr 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, instr. 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.

BODY CONSTRUCTION AND GLASS AREA

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 ventpanes ----- 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.

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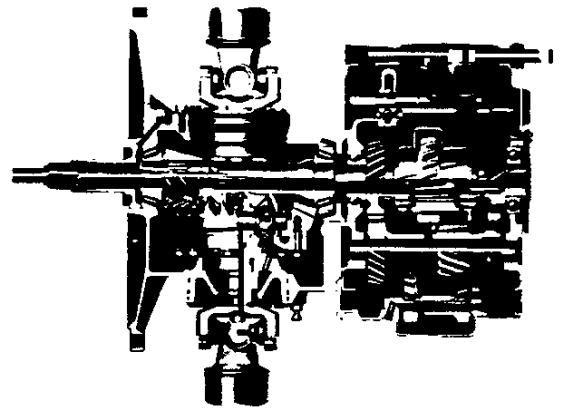
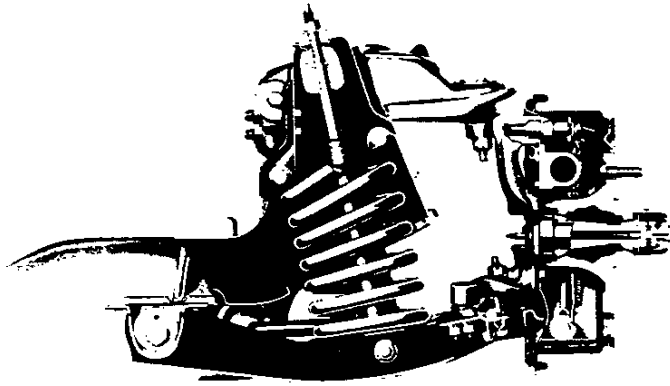
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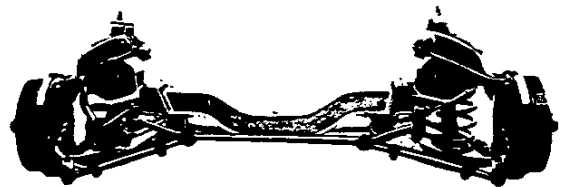
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CHASSIS



FRAME AND FRONT SUSPENSION	2
STEERING, WHEEL AND TIRES, BRAKES	3
REAR AXLE AND SUSPENSION	4
BULBS, FUSES, AND CIRCUIT BREAKERS	5



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 reftlon-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							
	10100		10500		10700			
Models	39	37	39	37	67	37	67	
3- and 4-Speed, PG	Appl.	A	A	A	A	B	A	B

STEERING, WHEELS AND TIRES, BRAKES

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 dish, 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)†	15 26*
	Front Rear

† 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							
	10100		10500		10700			
Models	39	37	39	37	67	37	67	
3- and 4-Speed, PG Appl.	A	A	A	A	B	A	B	

BULBS, FUSES, AND CIRCUIT BREAKERS

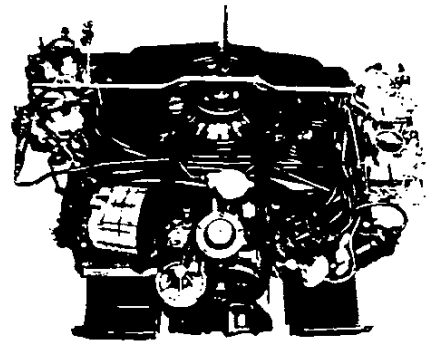
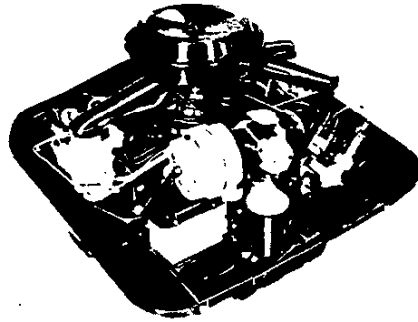
LAMP	NUMBER REQUIRED AND TRADE NUMBER	CANDLE POWER PER LAMP
Ash tray	1-53	1
Automatic transmission position pattern	1-1445	1
Back up	2-1156	32
Clock (with tachometer option)		
Courtesy	2-631	6
Direction signal indicators	2-1445	1
Dome	1-211	12
Generator (and fan) indicator	1-1895	2
Glove compartment	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		4
Turn	2-1157	32
Parking brake alarm	1-257	2
Radio	1-1893	2
Spot lamp, portable	1-4416	30W
Tail		
Tail		4
Stop and turn	2-1157	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 14 amp CB	Fuse panel (f) Switch

* Letter suffix indicates same circuit.

POWER TRAINS



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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) 4-SPEED (3.11:1 low) POWERGLIDE	3.27:1	3.55:1		3.55:1
			3.27:1	3.55:1		3.55:1
			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) 4-SPEED (3.11:1 low) POWERGLIDE (B)	3.55:1		3.27:1	3.55:1
			3.55:1		3.27:1	3.55:1
			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) 4-SPEED (3.11:1 low) POWERGLIDE	3.27:1	3.55:1		3.55:1
			3.27:1	3.55:1		3.55:1
			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*					AXLE RATIO	MAXIMUM AXLE TORQUE LOW GEAR (LB-FT)
		1st	2nd	3rd	4th	Rev		
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).

ENGINE DATA AND RATINGS

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		7.00x13-4PR					
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	

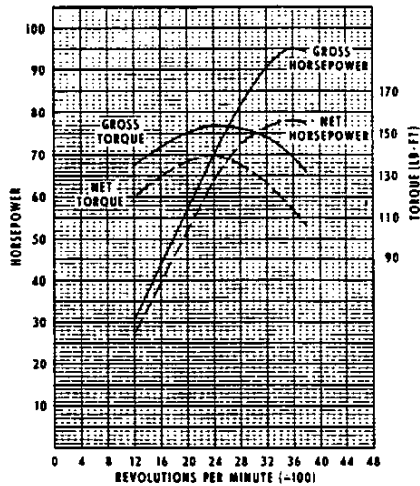
* - Data computed assuming zero slippage in torque converter.

GLOSSARY

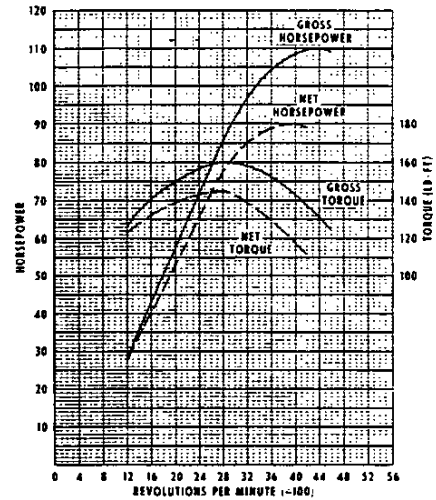
Performance Weight	Curb Weight plus 600 Lb (weight of four 150 lb passengers)
Power Displacement	$\frac{\text{Crankshaft Revs/Mi} \times \text{Piston Displacement}}{2 \times 1728}$
Displacement Factor	$\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

ENGINE OUTPUT CURVES

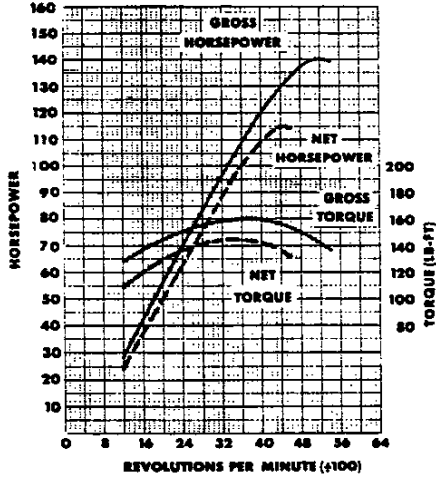
95 HP TURBO-AIR P-6



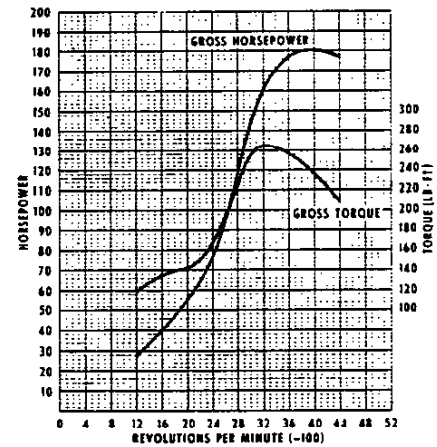
110 HP TURBO-AIR P-6



● 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

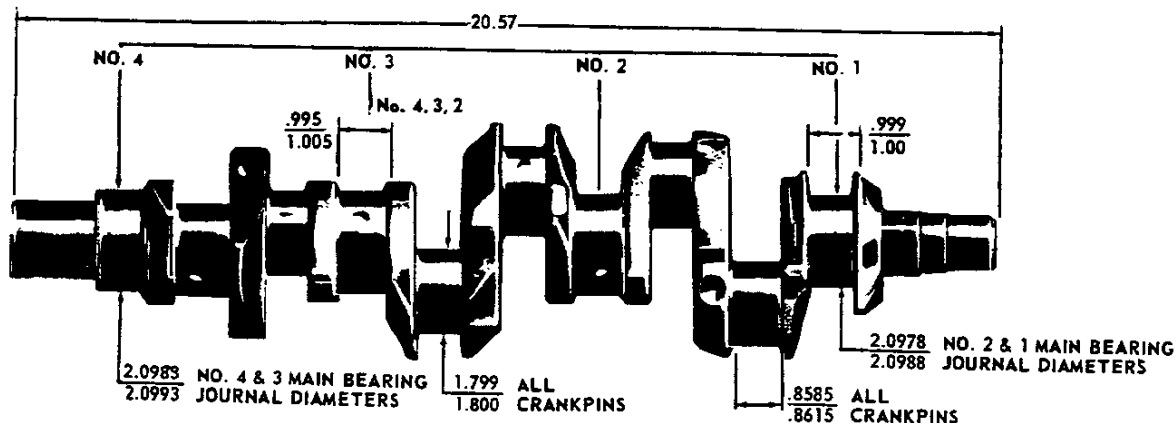
Material ----- Cast alloy iron
 Type ----- Straight-fitted to three steel sleeves pressed into cyl. head exhaust ports

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	1.5793
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

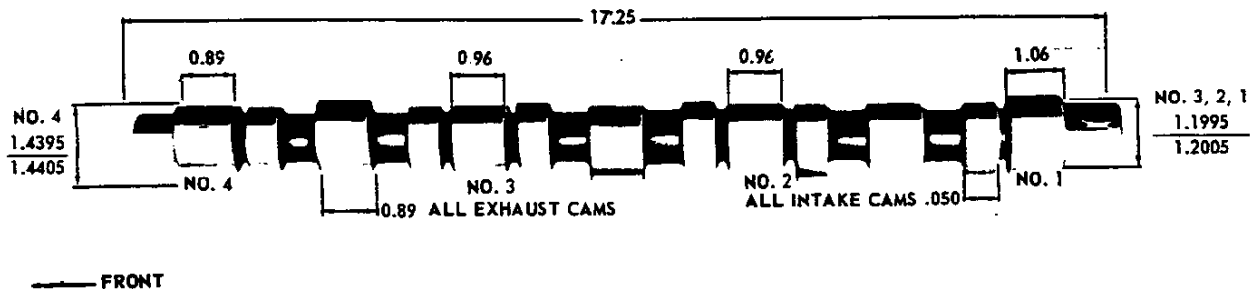
VALVE TIMING (Crankshaft degrees)

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°

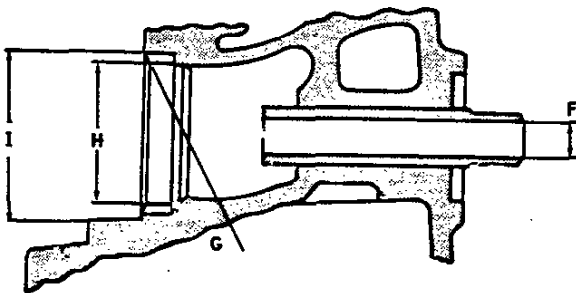
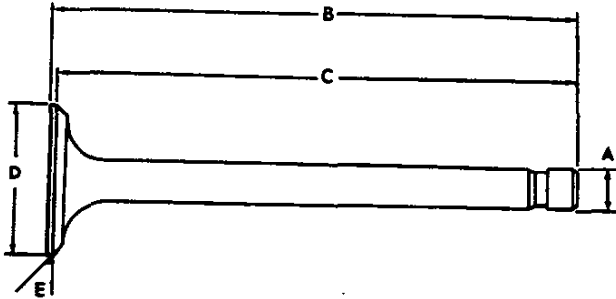
CAMSHAFT AND BEARINGS



PRINCIPAL COMPONENTS—Cont'd.

INLET VALVES

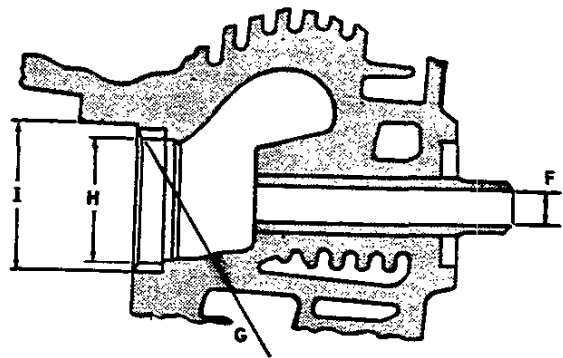
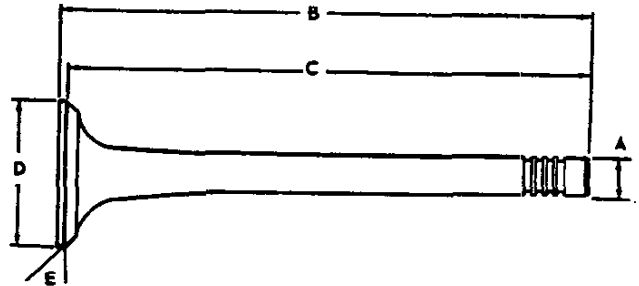
Material ----- High alloy steel
 Coating ----- Aluminized face
 Valve guide material ----- Cast alloy iron
 Valve seat material ----- Sintered alloy iron



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

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

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

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

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

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 super-
 charger and expelled into the induction cross-
 over 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. crng.
 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

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

COOLING SYSTEM

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 canister
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

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

IGNITION SYSTEM

DISTRIBUTORS ----- Refer to chart below

CABLE

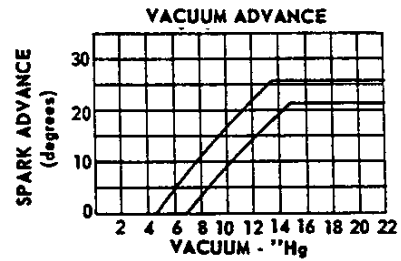
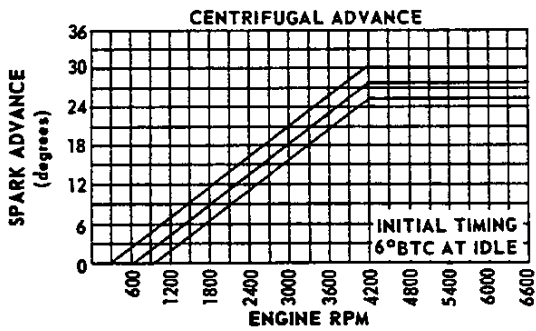
----- Linen core impregnated
 with electrical conducting material and
 insulation of rubber with neoprene jacket

● 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)	6°					
Crankshaft Degrees @ RPM (with vacuum spark line disconnected)	BTC @ 500	BTC @ 500	BTC @ 600	BTC @ 650	BTC @ 650	BTC @ 800
Timing Mark Location	Crankshaft Pulley					

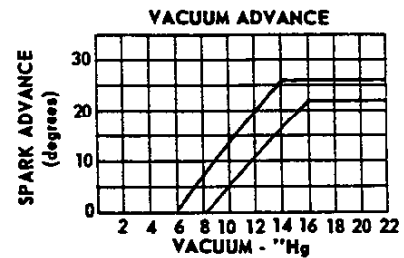
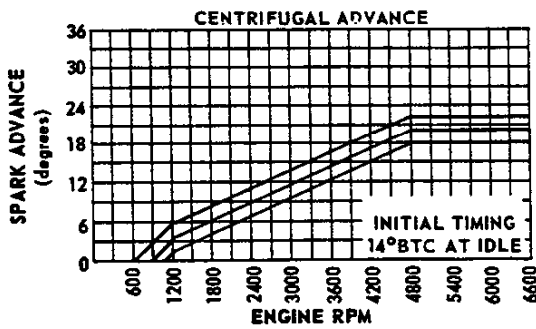
* Diaphragm Pressure Retard: Begins @ Mnfld. Pressure -.0 @ 2 psi; Max. Mnfld. Pressure -.8° @ 3.6 psi.

ELECTRICAL SYSTEM—Cont'd.

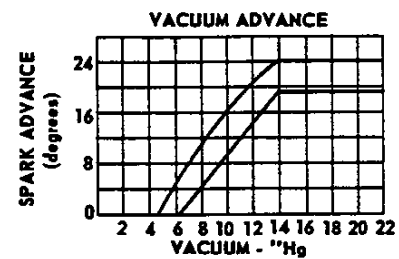
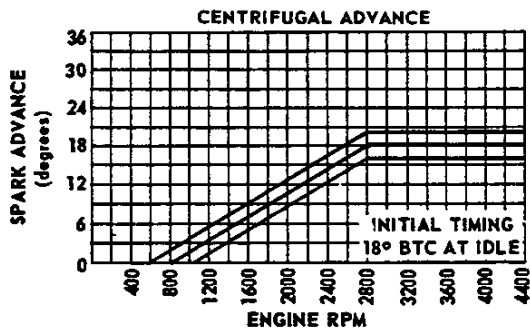
95 HORSEPOWER ENGINE



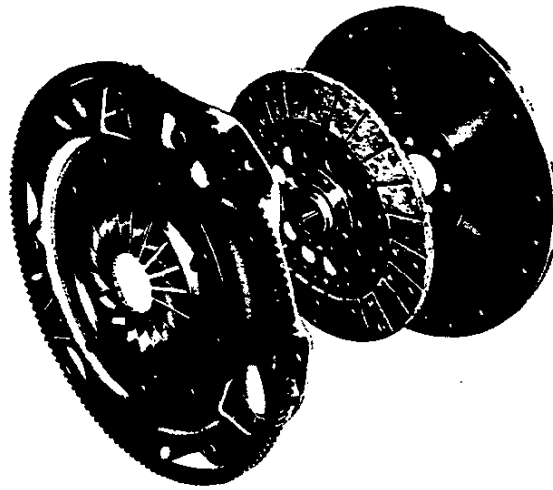
110 HORSEPOWER ENGINE



140 HORSEPOWER ENGINE

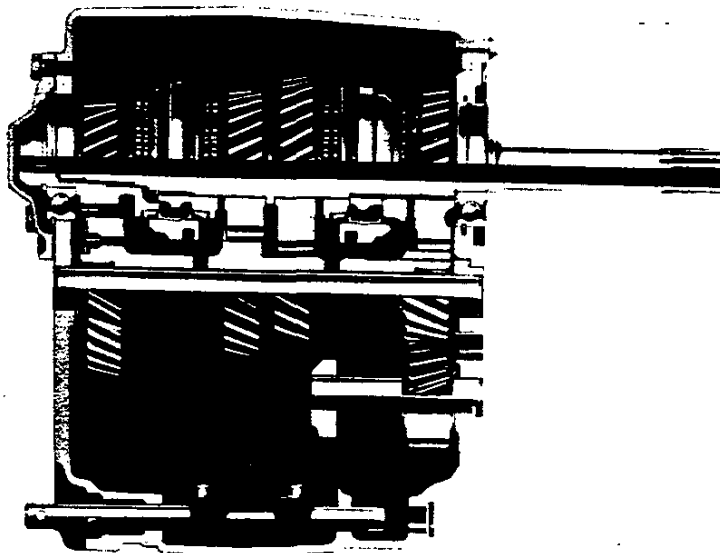


CLUTCHES



ENGINE	Model Application	10100 & 10500		10700		10100 & 10500				10700		
	Availability	95 HP - Base		140 HP - Base		110 HP - RPOL62	140HP RPOL63	180HP RPOL87				
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										

TRANSMISSIONS



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-disk

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



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 (0)	

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

General Specifications	1,2	Drive Units	14	Suspensions	21
Engine—Mechanical	3	Brakes	18	Weights	24
Electrical	12	Steering	19	Index	25

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

AMA Specifications—Passenger Car

MAKE JFCAR CORVAIR MODEL YEAR 1966 DATE ISSUED 10-7-65 REVISED

GENERAL SPECIFICATIONS—DIMENSIONS

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

MODEL	SAE Ref. No.	Sedans		Coupes		Convertibles
		Bench	Bucket	Bench	Bucket	

FRONT COMPARTMENT

Shoulder room	W3	54.7				
Hip room	W5	56.1				
Max. eff. 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 holding lid open		Torsion rod, counterbalance				

STATION WAGON—THIRD SEAT

Hip room	W86					
Effective leg room	L86	NA				
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 ⁰¹
MODEL	10100 & 10500 95 HP	110 HP	10700 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'			
Tumble $\frac{\text{Dia}^2 \times \text{No. Cyl.}}{\text{bore} \times \text{power}}$		28.4			
Publishing max. bhp* @ eng. RPM		95 @ 3600	110 @ 4400	140 @ 5200	180 @ 4000
Publishing max. torque* (lb. ft. @ RPM)		154 @ 2400	160 @ 2800	160 @ 3600	265 @ 3200
Recommended fuel regular - premium		Regular		Premium	
Mile 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

AMA Specifications—Passenger Car

MAKE OF CAR Corvair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED 00

POWER TEAMS

(Indicate whether standard or optional)

MODEL AVAILABILITY	ENGINE					TRANSMISSION	"A" "B" "C"		
	Displ. cu. in.	Carburetor	Compr. Ratio	BHP @ RPM	Torque @ RPM		AXLE RATIO (Std. first) (Indicate A/C ratio)		
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	Corvaix	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
	Material	None
Clearance	In piston	None
	In rod	.00015-.00025
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 coating
* - Also optional with 10100 & 10500

AMA Specifications—Passenger Car

MAKE OF CAR	Corvaair	MODEL YEAR	1966	DATE ISSUED	10/7/65	REVISED	NA
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	2.1008 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	
	Number	machined for bearing surface	
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 (Continued)
 * - Also optional with 10100 & 10500

AMA Specifications—Passenger Car

MAKE OF CAR Corvair	MODEL YEAR 1966	DATE ISSUED 10/7/65 REVISED 01
MODEL	10100 & 10500	10700
	95 HP	110 HP
		140 HP*
		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°		
Material		High alloy steel - aluminized face				
Overall length		4.4891-4.5091	4.5342-4.5542	4.4891-4.5091	4.4891-4.5091	
Actual overall head dia.		1.335-1.345	1.715-1.725	1.335-1.345	1.335-1.345	
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		
Intake	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			
	Material		High alloy steel - cobalt based alloy face			
	Overall length		4.4941-4.5141	4.4891-4.5091	4.4941-4.5141	(a)
Actual overall head dia.		1.235-1.245	1.355-1.365	1.235-1.245	1.235-1.245	
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		
Exhaust	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, wzzle)	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

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Mo. OF CAR	Corvaire	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 of 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 V Below 10° F - - - - - SAE 5W-20 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
Front pipe dia. (wall thickness)	Branch	1.375 x .067-.081	1.375x.089
	Main	1.875 x .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 ⁽¹⁾

MODEL 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 & 7026023	
	Barrel size	1.25			
	Idle speed Drive Neutral	500 for Powerglide Transmissions 500 for manual trans. 650 for manual tr			
Distributor	Aux. Adv. Systems (type)				
	Make				
	Model				
	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.@in.	24 @ 14	24 @ 15	24 @ 15	
Vacuum Source					
Timing - Crank degrees @ rpm		8°ATDC @ 500	TDC @ 500	4°BTDC @ 600	
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 bank

AMA Specifications—Passenger Car

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

	10100 & 10500	10700
MODEL	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	
	Air cleaner type	Oil wetted paper	(A)
	Standard	One, pre oil-bath air cleaner	
	Optional		

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

AMA Specifications—Passenger Car Supplement Page

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MAKE OF CAR Corvair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED 001

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 Pa

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MAKE OF CAR Corvaair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED no

MODEL 10100, 10500, & 10700

ENGINE-COOLING SYSTEM

Type	Air, forced supply by centrifugal blower
Engine Shrouding	Engine enclosed in sheet metal to direct cooling 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	Corvaair	MODEL YEAR	1966	DATE ISSUED	10/7/65	REVISED	(1)
MODEL	10100 & 10500	10700	95 HP	110 HP	140 HP*	180 HP	

ELECTRICAL—SUPPLY SYSTEM

Battery	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		
Generator or Alternator	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		
Regulator	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 test conditions	Temperature	Operating			
	Load	3-8 Amperes			
	Other	None			

ELECTRICAL—STARTING SYSTEM

Cranking or	Make		Delco-Remy	
	Model		#1108306	
	Rotation (drive end view)		Clockwise	
	Engine cranking speed			
	Test conditions		Operating Temperature	
No load test	Amps	49-76		
	Volts	10.6		
	RPM (min)	6200-9400		
Switch (solenoid, manual)		Solenoid		
Control	Starting procedure		3-Speed & 4-Speed - Place gearshift in neutral and depress clutch to floor.	
	Powerglide Initial Start		- Place control lever in N position. - 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

TAKE OF CAR	Corvaix	MODEL YEAR	1966	DATE ISSUED	10/7/65	REVISED	NA
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	#1110330
	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@4900
	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	24@800
	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 material				
	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.

AMA Specifications—Passenger Car

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

MODEL 10100 | 10500 | 10700

ELECTRICAL—SUPPRESSION

Locations & type

Non-metallic high tension ignition cables

ELECTRICAL—INSTRUMENTS AND EQUIPMENT

Speed-ometer	Make	AC Sparkplug	
	Trip odometer (yes, no)	No	
Charge indicator—type & Fan Indicator		Tell-Tale	With RPO L87
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 Jamping	Methods: springs, friction material	None	

AMA Specifications—Passenger Car

MAKE OF CAR Corvaair MODEL YEAR 1966 DATE ISSUED 10/7/65 REVISED #1

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

Number of forward speeds		3-Speed 3	4-Speed 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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MAKE **CAR** **Corvair** MODEL YEAR **1966** DATE ISSUED **10/7/65** REVISED **NA**

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	mission	

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)

AMA Specifications—Passenger Car

M **E** **O** **F** **C** **A** **R** **C** **O** **R** **V** **A** **I** **R** **M** **O** **D** **E** **L** **Y** **E** **A** **R** **1** **9** **6** **6** **D** **A** **T** **E** **I** **S** **S** **U** **E** **D** **1** **0** **-** **7** **-** **6** **5** **R** **E** **V** **I** **S** **E** **D** **N** **O**

M **O** **D** **E** **L**

DRIVE UNITS—PROPELLER SHAFT (cont.)

Inter- mediate 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 vis- cosity 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 teeth	Pinion	11	9
	Ring gear	36	32

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MODEL

DRIVE UNITS—WHEELS

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

DRIVE UNITS—TIRES

Standard (1st option allowed)	Size & ply	7.00x13-4, Highway Tubeless B/W
	Type - Nylon, etc.	Rayon
Treadwear (mi/mile at 50 mph.)		862
Inflation press. (cold)	Front	15
	Rear	26
Optional tires - size and ply		7.00x13-4 rayon W/W;

BRAKES—SERVICE

Type (dual servo, disc, balanced, etc.)		Duo-servo 4-wheel hydraulic
Self-adjusting (std., opt., N.A.)		Std. (reverse self-adjusting)
Hydraulic system type (single, dual, etc.)		Single
Power brake make & type (remote, integral, etc.)		NA
Effective area (sq. in.) *		168.9
Gross lining area (sq. in.) **		168.9
Swept drum area (sq. in.) ***		268.6
Percent brake effectiveness—front		46
Drum or rotor	Diameter.	9.5
		9.5
Type and material		Composite; cast iron rim; steel web
Rotor (vented or solid)		--
No. pistons per caliper		--
Wheel cylinder bore	Front	.875
	Rear	.9375
Master cylinder bore		1.00
Available pedal travel		6.00
Line pressure at 100 lb. pedal load		783
Shoe clearance adjustment		Self-adjusting

* Excludes rivet holes, grooves, chamfers, etc.

(Continued)

** Includes rivet holes, grooves, chamfers, etc.

*** Total swept area for four brakes:

Widest lining contact width for each brake x its drum circumference.

AMA Specifications—Passenger Car

MAKE OF CAR CORVAIR MODEL YEAR 1966 DATE ISSUED 10-7-65 REVISED NA

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	9.01 x 2.0 x .17
			Second. or in- board	9.01 x 2.0 x .17
		Segments per shoe		One
	Rear Wheel	Material		Molded asbestos
		Size (length x width x thickness)	Prim. or out- board	9.75 x 2.0 x .20
			Second. or in- board	9.75 x 2.0 x .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 sepa- rate 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	

AMA Specifications—Passenger Car

MAJ OF CAR CORVAIR MODEL YEAR 1965 DATE ISSUED 3-7-65 REVISED

MODEL

STEERING (cont.)

Power	Type (coaxial, linkage, etc.)		
	Make		
	Gear	Type	
		Ratio	Overall
	Pump driven by		
Number wheel turns			
Linkage	Type		Parallelogram
	Location (front or rear of wheels, other)		Front of wheels
	Drag link (trans. or long)		None
	Tie rods (one or two)		Two
Steering Axis	Inclination of 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.)		P 2-1/2 to 3-1/2
	Camber (deg.)		P 1/2 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, P 1/2 to 1-1/2; toe-in, 1/4