AUTOMOBILE MANUFACTURERS ASSOCIATION
CONSOLIDATED SPECIFICATION QUESTIONNAIRE

MAKE OF CAR:	DESOTO	**MODEL NAME**	**SYMBOL**
COMPANY:	DeSoto Division Chrysler Corporation Detroit 31, Michigan	Firedome	S-22
		Fireflite	S-21
MODEL YEAR:	1955	**DATE**	10-1-54

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NOTES: 1. The specifications set forth herein are those in effect at the date of compilation and are subject to change without notice.
2. All specifications are standard for the models under which they are listed unless otherwise indicated.
3. All dimensions are nominal engineering dimensions unless otherwise indicated.
4. Unless otherwise indicated, specifications apply to 5 or 6 passenger, 4-door sedan or equivalent.

GENERAL SPECIFICATIONS

Model		S-22	S-21
Wheelbase		126.0	
Tread	Front	60.2	
	Rear	59.6	
Maximum Overall Dimensions	Length (L-103)	217.9	
	Width (W-103)	78.3	
	Height (H-101)	60.6	
Steering ratio—overall		N/A	
Turning diameter (curb to curb)		43' 9"	
Shipping weight*		3890 (a)	3960 (a)
Transmission—(Specify standard, optional, not avail.)	Conventional	Standard	
	Overdrive	Optional	
	Automatic	Optional	
Axle ratio	Conventional	3.9	3.73
	Overdrive	4.3	4.1
	Automatic	3.73	3.54
Tire size		Tubeless 7.60 x 15	
Engine	Type	90° V	
	No. of cylinders	8	
	Valve arrangement	Overhead, Laterally Inclined	
	Bore and stroke	3.720 x 3.344	
	Piston displacement, cu. in.	291	
	Standard compression ratio	7.5	
	Maximum bhp at engine rpm	185 at 4400	200 at 4400
	Maximum torque at rpm	245 at 2800	274 at 2800

*Standard car weight, not including gas and water.

(a) With PowerFlite transmission.

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MODEL			S-22	S-21
ENGINE—GENERAL				
Type	V, In-line, other		V	
	Angle of V		90°	
No. of cylinders			8	
Valve arrangement			OHV - Laterally Inclined	
Bore and stroke			3.720 x 3.344	
Piston displacement, cu. in.			291	
Numbering system (front to rear)	L. Bank		1-3-5-7	
	R. Bank		2-4-6-8	
Firing order			1-8-4-3-6-5-7-2	
Compression ratio	Standard Head		7.5 to 1	
	Optional Head		---	
Cylinders	Head Material	Standard	Cast Iron	
		Optional	---	
	Sleeve—Wet, dry, other, none		None	
Number of mounting points		Front	2	
		Rear	1	
Taxable horsepower	(Dia.^{2} x No. Cyl.) / 2.5		44.3	
Advertised max. brake horsepower at engine RPM*	Standard head		185 at 4400	200 at 4400
	Optional head		---	
	With fuel (Octane and method)	Standard Head	85 Motor	
		Optional Head	---	
Max. torque (lb. ft. @ RPM)	Standard head		245 at 2800	274 at 2800
	Optional head		---	
Recommended idle speed (neutral)			450-500	

ENGINE—PISTONS

Material			Aluminum Alloy
Description and finish			Thermally Controlled by Steel Belt, Elliptically Turned, Tin-Plated
Weight (piston only) oz.			18.2
Clearance	Top land		.032
	Skirt	Top	.001
		Bottom	---
Ring groove depth	No. 1 ring		.192
	No. 2 ring		.192
	No. 3 ring		.192
	No. 4 ring		---

*Corrected as defined by SAE Engine Test Code, with the following standard power consuming accessories: Generator, Water Pump, Manifolds, Fuel Pump. Manual Spark Advance, Manifold Heat Off.

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ENGINE—RINGS				
Type (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.		---	
No. rings above piston pin			3	
Compression	Material		Piston Ring Iron	
	Coating		Tin	
	Width		.078	
	Gap		.015	
	Maximum wall thickness		.184	
Oil	Material		Piston Ring Iron	
	Coating		None	
	Width		.186	
	Gap		.015	
	Maximum wall thickness		.150	
Location of expanders			Oil Ring	
ENGINE—PISTON PINS				
Material			High Manganese Steel	
Length			3.065	
Diameter			.922	
Type	Locked in rod, in piston, floating, etc.		Floating	
	Bushing	In rod or piston	Rod	
		Material	Steel Backed Lead Bronze	
Clearance	In piston		0 to .0005	
	In rod		.0001 to .0004 (Selective)	
Direction offset in piston			Right - 1/16"	
ENGINE—CONNECTING RODS				
Material			High Manganese Forging Steel	
Weight (oz.)			22.8	
Length (center to center)			6.06	
Bearing	Material		Thin Babbitt on Steel	
	Type (cast-in or removable)		Removable	
	Effective length		.812	
	Clearance		.0005 to .0015 (Desired)	
	End play		.006 to .014 (2-Rods)	
ENGINE—CRANKSHAFT				
Material			Drop Forged Steel	
Weight (lb.)			N/A	

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ENGINE—CRANKSHAFT (cont.)

Vibration damper type			Damped Dynamic Torsional Vibration Absorber
End thrust taken by bearing (No.)			Three
Crankshaft end play			.002 to .007
Main bearing	Material		Lead Base Babbitt on Steel
	Type (cast-in or removable)		Removable
	Clearance		.0005 to .0015
	Journal dia. and bearing effective length	No. 1	2.38 x .81
		No. 2	2.38 x .81
		No. 3	2.38 x .81
		No. 4	2.38 x .81
		No. 5	2.38 x 1.53
		No. 6	---
		No. 7	---
	Direction offset from cyl. bore		None
Connecting rod crankpin journal diameter			2.062

ENGINE—CAMSHAFT

Material			Special Cast Iron with Cams, Distributor and Oil Pump Drive Gear Cast Integrally
Bearings	Material		Lead Base Babbitt on Steel
	Number		Five
Type of drive	Gear or chain		Chain
	Crankshaft gear or sprocket material		High Manganese Steel
	Camshaft gear or sprocket material		Cast Iron
	Timing chain	Make	Morse Silent
		No. of links	68
		Width	1.125
		Pitch	.375

ENGINE—VALVE SYSTEM

Hydraulic lifters (yes, no)		Yes
Special provision for valve rotation (intake, exhaust)		No
Rocker ratio		1.5
Operating tappet clearance (indicate hot or cold)	Intake	0
	Exhaust	0
Tappet clearance for timing	Intake	Valve Train Solid
	Exhaust	Valve Train Solid
Timing marks on fly-wheel, damper, other		Crankshaft Vibration Damper

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ENGINE—VALVE SYSTEM (cont.)				
Timing	Intake	Opens (°BTC)	4 ATC	12 BTC
		Closes (°ABC)	76 ABC	52 ABC
	Exhaust	Opens (°BBC)	54 BBC	50 BBC
		Closes (°ATC)	10 ATC	14 ATC
Intake	Material		Silicon-Chromium Steel	
	Overall length		4.81	
	Actual overall head dia.		1.84	
	Angle of seat		45°	
	Seat insert material		None	
	Stem diameter		.372	
	Stem to guide clearance		.002	
	Lift		.360	
	Outer spring press. and length	Valve closed (lb. @ in.)	28 at 1.69	
		Valve open (lb. @ in.)	92 at 1.31	
	Inner spring press. and length	Valve closed (lb. @ in.)	22 at 1.56	
		Valve open (lb. @ in.)	42 at 1.19	
Exhaust	Material		XCR Chromium Nickel Steel	
	Overall length		4.80	
	Actual overall head dia.		1.50	
	Angle of seat		45°	
	Seat insert material		Alloy Cast Iron	
	Stem diameter		.372	
	Stem to guide clearance		.003	
	Lift		.360	
	Outer spring press. and length	Valve closed (lb. @ in.)	28 at 1.69	
		Valve open (lb. @ in.)	92 at 1.31	
	Inner spring press. and length	Valve closed (lb. @ in.)	22 at 1.56	
		Valve open (lb. @ in.)	42 at 1.19	

ENGINE—LUBRICATION SYSTEM

Type of lubrication (splash, pressure, nozzle)	Main bearings	Pressure
	Connecting rods	Pressure
	Piston pins	Metered Jet Spray
	Camshaft bearings	Pressure
	Tappets	Metered Pressure
	Timing gear or chain	Metered Flow
	Cylinder walls	Metered Jet Spray

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ENGINE—LUBRICATION SYSTEM (cont.)

Oil pump type	Rotary
Normal oil pressure (lb. @ rpm)	50 to 65 at 1500
Oil pressure gage type (electric or mechanical)	Mechanical
Type oil intake (floating, stationary)	Floating
Oil filter type (full flow, partial flow)	Shunt Type Replaceable Element
Capacity of crankcase, less filter—refill (qt.)	5
Oil grade recommended (SAE viscosity and temperature range)	Not Lower Than +32° F ..... SAE 30 As Low As +10° F ..... SAE 20W As Low As -10° F ..... SAE 10W Below -10° F ..... SAE 5W
Oil type recommended	None

ENGINE—FUEL SYSTEM

Recommended fuel	Standard head		Regular	
	Optional head		---	
Fuel Tank	Capacity (gals.)		20	
	Filler Location		Right Rear Fender	
Fuel Filter	Type		Oilite	
	Location		Fuel Tank	
Fuel pump	Type (elec. or mech.)		Mechanical	
	Location		Right Front of Engine	
	Pressure range		5.0 to 6.5	
	Vacuum booster (std., optl., none)		None	
Carburetor	Make		Ball and Ball	Carter
	Model number		BBD-2117S	WCFB-2210S
	Number used		One	
	Type	Downdraft, side inlet, other	Downdraft	
		Single or dual	Dual	Four-Barrel
	Intake manifold heat control (manual, auto., none)		Automatic	
	Automatic choke type (integral, other)		Integral	
	Air cleaner type	Standard	Oil Bath	
		Optional	---	

ENGINE—EXHAUST SYSTEM

Type (single, single with cross-over, dual, other)		Single with Cross-Over
Muffler type (rev. flow, str. thru, sep.resonator)		Reverse Flow
Exhaust pipe dia.	Branch	1.9
	Main	2.2
Tail pipe diameter		2

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ENGINE—COOLING SYSTEM

Type (pressure system, atmospheric, other)			Pressure-Vent	
Radiator cap relief valve press.			7 psi (a)	
Circulation thermostat	Type (choke, bypass)		By-Pass	
	Starts to open at		160° to 165° F	
Water pump	Type (centrifugal, other)		Centrifugal	
	Number of pumps		One	
	Drive (V-belt, other)		V-Belt	
	Bearing type		Bushings	
By-pass recirculation type (internal, external)			External	
Radiator core type (cellular, tube and fin)			Cellular (a)	Fin and Tube
Cooling system capacity	With heater (qt.)		24	
	Without heater (qt.)		23	
Water jackets full length of cylinder (yes, no)			Yes	
Water all around cylinder (yes, no)			Yes	
Radiator hose	Lower	Number and type (molded, straight)	One, Molded	
		Inside diameter and length	1.8, Curved	
	Upper	Number and type (molded, straight)	One, Molded	
		Inside diameter and length	1.8, Curved	
	By-pass	Number and type (molded, straight)	One, Molded	
		Inside diameter and length	1.2, Curved	
Drive belts	Fan	Number used	Two (a)	
		Angle of V	36°	
		Outside length	37.2	38
		Width	.38	
	Generator	Angle of V	36°	
		Outside length	41	
		Width	.38	
Fan	Number of blades and spacing		Four - 76° and 104° (a)	
	Diameter		18	
	Ratio—fan to crankshaft revolutions		.95 to 1	.85 to 1 (a)
	Bearing type		See Water Pump	

(a) With Air Conditioning, the following data apply to both S-22 and S-21:
Radiator Cap Relief Valve Pressure: 14 psi
Radiator Core Type: Fin and Tube
Fan: Six Blades - 18" Diameter
Fan Ratio: .95:1
Drive Belts - Number Used: Three

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ELECTRICAL—SUPPLY SYSTEM				
Battery	Make and Model		Auto-Lite, 2H-120-B (a)	
	Voltage Rtg. & Plates/cell		6V, 17	
	SAE Designation & Amp Hr. Rtg		2H, 120	
	Location		Under Hood, Left Side	
	Terminal grounded		Positive	
Generator	Make		Auto-Lite	
	Model		GGW-6001	
	Type		Shunt Wound	
	Ratio—Gen. to Cr/s rev.		2.02	
Regulator	Make		Auto-Lite	
	Model		VBE-6001-A	
	Type		Current and Voltage Control	
	Cutout relay	Closing voltage @ generator rpm	6.3 - 6.8 at 1000	
		Reverse current to open	4.1 - 4.8	
	Regulated	Voltage	7.1 - 7.4	
		Current	45 - 57 (b)	
	Min. Gen. rpm required		1000	
	Voltage test conditions	Temperature	70°	
		Load	Run 15 Min at 10 Amp	
		Other	---	
ELECTRICAL—STARTING SYSTEM				
Starting motor	Make		Auto-Lite	
	Model		MCH-6113-A	
	Rotation (drive end view)		Clockwise	
	Engine cranking speed		35-110 rpm	
	Test conditions		SAE 5W at -20° F and SAE 30 with completely warmed engine	
	Lock test	Amps	410	
		Volts	2.0	
		Torque (lb. ft.)	8.0	
	No load test	Amps	65	
		Volts	5.0	
		RPM (min.)	4300	
Motor control	Switch (solenoid, manual)		Solenoid	
	Starting procedure		Turn Ignition Key Beyond "Ignition On" Position	

(a) Willard HW-2-120-C, Optional Equipment

(b) Higher value denotes initial temporary rating. Bi-Metal hinge reduces output to lower value after warm-up period.

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ELECTRICAL—STARTING SYSTEM (cont.)				
Motor drive	Engagement type		Solenoid, Clutch	
	Pinion meshes (front, rear)		Front	
	Number of teeth	Pinion	9	
		Flywheel	146	
	Flywheel tooth face width		3/8	
ELECTRICAL—IGNITION SYSTEM				
Coil	Make		Auto-Lite	
	Model		CR-6015	
	Amps	Engine stopped	5	
		Engine idling	2.25	
Distributor	Make		Auto-Lite	
	Model		IAZ-4002-C	IAZ-4002-D
	Spark advance data (at distributor shaft)	Centr. advance start (rpm)	300 - 400	
		Centr. advance max. deg. @ rpm	7° - 9° at 800	11° - 13° at 1800
		Vacuum advance start (in. Hg.)	1° at 5.5" - 6.5" hg	
		Vac. adv. (max. deg. @ in. Hg.)	6° - 8° at 11" hg	10.5° - 12.5° at 17" hg
	Breaker gap (in.)		.015 to .018	
	Cam angle (deg.)		26° - 28°	
	Breaker arm tension (oz.)		17-20	
Timing	C/S deg. @ rpm		10° BTC	4° BTC
	Mark location		Crankshaft Vibration Damper	
	Cylinder numbering system (see page 2)		Left Bank: 1-3-5-7 Right Bank: 2-4-6-8	
	Firing order (see page 2)		1-8-4-3-6-5-7-2	
Spark plug	Make and model		Auto-Lite Resistor 4S-140	Auto-Lite Resistor 4S-165
	Thread (mm)		14-MM	
	Tightening torque (lb. ft.)		30-32	
	Gap		.035	
Cable	Conductor type		Stranded Copper	
	Insulation type		Rubber with Neoprene Jacket	
	Spark plug protector		Neoprene Cover	

ELECTRICAL—SUPPRESSION

Description	Spark Plugs - 10,000 ohm Resistor (Integral) Distributor - 10,000 ohm Resistor (Integral)

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ELECTRICAL—INSTRUMENTS AND SWITCHES

Speedometer	Make	Auto-Lite
	Trip odometer (yes, no)	No
Charge indicator—type		Ammeter
Temperature indicator—type		Electric, Magnetic
Oil pressure indicator—type		Bourdon Tube
Fuel indicator—type		Electric, Magnetic
Ignition switch	Identify positions in order and circuits controlled	Center ..... Off 1st Position Clockwise ..... All Circuits On 2nd Position Clockwise ..... Ignition and Starter Circuit Only 1st Position Counterclockwise ..... Accessory Circuit Only
	Provision for illumination	Yes
	Location	Right of Steering Column
	Theft protection type	None
Main lighting switch	Identify positions and lights controlled	Left Position ..... Off 1st Position Clockwise ..... Instruments, Tail and Parking Lamps, Ignition Switch Light, License and Ignition Lamp 2nd Position Clockwise ..... Instruments, Tail, Head and License Lamps.
Other light switches	Locations and lamps controlled	Combination instrument and map light switch: Rotary variable, concentric with main light switch, clockwise, clock and instrument lamps; 1st Position, Counterclockwise, instrument, clock and map lights. Automatic front door switches, right and left, contro map lights. Upper right and left "A" posts auto. door switches (b) Lower right and left "A" posts automatic door switches (c)*
Other switches	Locations and devices controlled	Windshield wiper switch, variable speed, right of steering column on instrument panel. Heater motor switch and defroster motor switch, two-speed, concentric, on instrument panel. Stop light switch, in brake line. Directional signal switch, lever on steering column below steering wheel.
Windshield wiper	Make	Auto-Lite
	Type	Electric
	Vacuum booster provision	None
	Washer provision	None
Horn	Type	Vibrator, Sea Shell
	Number used	Two
	Amp draw (each)	15 Amp

(a) Automatic rear door switches and toggle switch at left "B" post control dome light.
(b) & (c) Special Club Coupe and Convertible Coupe.
* With both doors closed map lamps operate independent of quarter panel lamps.

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ELECTRICAL—LAMP BULBS

Give quantity used and trade number, e.g., Headlamp 2-4030.
Indicate accessories which are not standard equipment by an asterisk following the numbers.

Headlamp		2-2422	
Headlamp beam indicator		1-55	
Parking light		2-1154	
Tail light		2-1154	
Stop light		2-1154	
Direction indicator	Front	2-1154	
	Rear	2-1154	
	Tell-Tale	1-55	
License plate light		2-63	
Instrument light		2-55	
Ignition lock light		1-51	
Map light		1-88	
Dome light		1-210	
Clock light		1-55 *	
Radio dial light		1-55	
Glove compartment light		1-55	
Courtesy light		2-1130*	
Trunk compartment light			1-87
Other			
Speedometer		2-55	
Back-Up Lamp		2-1129	
Under-Hood			

ELECTRICAL—FUSE & CIRCUIT BREAKER DATA

Use trade number of fuse, e.g., SFE-10. Indicate circuit breaker by ampere capacity suffixed by letters "C.B", e.g., 30 C.B. Where fuse or circuit breaker protects multiple circuits indicate first use by a letter and repeat the same letter for all units protected by the same fuse or circuit breaker, e.g., Parking light: SFE-10 (a), Direction indicator: same as (a).

Headlamp	25 C. B. (a)
Headlamp beam indicator	Same as (a)
Parking light	Same as (a)
Tail light	10 C. B. (b)
Stop light	10 C. B. (c)
Direction indicator	None
License plate light	Same as (b)
Instrument light	Same as (b)
Ignition light	Same as (a)
Map light	Same as (c)
Dome light	Same as (c)
Clock	SFE-3
Clock light	Same as (b)
Radio	SFE-14
Glove compartment light	Same as (c)
Courtesy light	Same as (c)
Trunk compartment light	Same as (c)
Other	
Back-Up Lamp	10 C. B. (Same as Windshield Wiper)

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DRIVE UNITS—CLUTCH (PEDAL OPERATED)

Make			Borg and Beck	
Type (dry or wet plate)			Dry	
In combination with fluid coupling (yes, no)			No	
Semi-centrifugal (yes, no)			No	
Type pressure plate springs			Coil	
Total plate pressure (lb.)			1639	1384
No. of clutch driven discs			One	
Clutch facing	Material		Molded, Woven, Asbestos	
	Inside diameter		6	
	Outside diameter		10	
	Total eff. area (sq. in.)		100.5	
	Thickness		.125	
	Number required		Two	
	Engagement cushioning method		Springs, Flat, Crimped	
	Release bearing	Type	Ball	
		Method of lubrication	Sealed	
	Torsional damping	Method (springs, other)	Coil Springs	
		Frict. mat.	---	

DRIVE UNITS—TRANSMISSIONS

Conventional (std. or opt.)	Standard
Conventional with overdrive (std. or opt.)	Optional
Automatic (std. or opt.)	Optional - PowerFlite

DRIVE UNITS—CONVENTIONAL TRANSMISSION

Number of forward speeds		Three
Transmission ratios	In first	2.57
	In second	1.83
	In third	1.00
	In fourth	---
	In reverse	3.48
Constant mesh gears in 2nd (yes, no)		Yes
Spur gear used in (indicate speeds)		None
Helical gears used in (indicate speeds)		All Speeds
Synchronous meshing in 2nd and 3rd gears (yes, no)		Yes

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DRIVE UNITS—CONVENTIONAL TRANSMISSION (cont.)

Lubricant	Capacity (pt.)		2-3/4
	Type recommended		Engine Oil
	SAE viscosity number	Summer	10W
		Winter	10W
		Extreme cold	10W

DRIVE UNITS—CONVENTIONAL TRANSMISSION WITH OVERDRIVE

For transmission data see conventional transmission section

Overdrive	Type (planetary or other)			Planetary
	If planetary, No. of pinions			Three
	Manual lockout (yes, no)			Yes
	Downshift accelerator control (yes, no)			Yes
	Minimum cut-in speed			28
	Gear ratio			0.7
	Lubricant	Capacity (O.D. only)		.75 pt
		Separate filter (yes, no)		No
		Type recommended		Engine Oil
		SAE viscosity number	Summer	10W
			Winter	10W
			Ext. cold	10W

DRIVE UNITS—AUTOMATIC TRANSMISSION

Trade name	PowerFlite
Type (fluid coupling with gears, torque convertor with gears, other)	Torque Converter with Gears
Manual selector positions, left to right (show symbols and define, e.g., N- Neutral)	 Reverse Neutral Drive Low
List gear ratios in each drive position (range)	R - Reverse ..... 2.39 N - Neutral ..... --- D - Drive ..... 1.72 and 1.00 L - Low 1.72
Shifting within drive position range by accelerator control and speed limiting governor (yes, no)	No
By governor—forced shift (yes, no)	Yes
Downshift of gears in high range possible up to (mph)	55

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DRIVE UNITS—AUTOMATIC TRANSMISSION (cont.)

Torque convertor	Number of elements		Three	
	Max. ratio at stall at engine rpm		Stalled Ratio - 2.6	
	Mechanical lockup	Provided (yes, no)	No	
		Speed range	---	
		Releases at (speed range, mph)	---	
	Type of cooling (forced air, oil cooler and type, other)		Forced Air	
	Anti-creep device (yes, no)		No	
Lubricant	Capacity—refill (pt.)		22	
	Type recommended		Automatic Transmission Fluid, Type "A"	
	Grade	Summer	---	
		Winter	---	
		Extreme cold	---	

DRIVE UNITS—PROPELLER SHAFT

Number used			One	
Type (exposed, torque tube)			Exposed	
Outer diameter x length* x wall thickness	Conventional trans.		3.5 x 60 x .065	3.5 x 59.41 x .065
	Overdrive trans.		3.5 x 60 x .065	3.5 x 59.41 x .065
	Automatic trans.		3.0 x 60 x .065	3.0 x 59.41 x .065
Intermediate bearing	Type (plain, anti-friction)		---	
	Lubri. (fitting, prepack)		---	
Universal joints	Make		N/A	
	Number used		Two	
	Type (ball and trunnion, cross, other)		Cross	
	Bearing	Type (plain, anti-friction)	Anti-Friction	
		Lubric. (fitting, prepack)	Prepack	
Drive taken through (torque tube or arms, spring)			Rear Springs	
Torque taken through (torque tube or arms, springs)			Rear Springs	

*Centerline to centerline of joints or centerline of rear attachment point.

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DRIVE UNITS—REAR AXLE				
Type (semi-floating, other)			Semi-Floating	
Gear type (hypoid, other)			Hypoid	
Gear ratio and No. of teeth	Conventional trans.		3.9 (39-10)	3.73 (41-11)
	Overdrive trans.		4.3 (43-10)	4.1 (41-10)
	Automatic trans.		3.73 (41-11)	3.54 (39-11)
Pinion adjustment (shim, other)			Solid Shim	
Pinion bearing adj. (shim, other)			Shims	Solid Shims
Lubricant	Capacity (pt.)		3.25	3.5
	Type recommended		Multi-Purpose Hypoid Gear Lubricant	
	SAE viscosity number	Summer	SAE 90	
		Winter	SAE 90	
		Extreme cold	SAE 80	
DRIVE UNITS—WHEELS				
Type (disc, other)			Disc	
Rim (size and flange type)			15 x 5.5 K	
Attachment	Type (bolt or stud)		Bolt	
	Circle diameter		4.5	
	Number and size		5, 1/2 - 20 Am Nat Thd	
DRIVE UNITS—TIRES				
Size and ply rating	Standard		7.60 x 15 - 4 (Tubeless)	
	Optional		7.60 x 15 - 6	
Rev/mile at 30 mph			722	
Inflation press. (cold)	Front		24	
	Rear		24	
BRAKES—SERVICE				
Type			Hydraulic, Internal Expanding Drum	
Booster type			Available at Extra Cost	
Effective area (sq. in.)			201	
Percent brake effectiveness—rear			40	
Drum	Diameter	Front	12	
		Rear	12	
	Type and material		Cast Iron	

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BRAKES—SERVICE (cont.)

Brake lining	Bonded or riveted			Bonded
	Primary	Material		Molded Asbestos
		Size (length x width x thickness)	Front wheel	12.57 x 2 x .20
			Rear wheel	12.57 x 2 x .20
		Segments per shoe		One
	Secondary	Material		Molded Asbestos
		Size (length width x thickness)	Front wheel	12.57 x 2 x .20
			Rear wheel	12.57 x 2 x .20
		Segments per shoe		One
Wheel cylinder bore	Front			1.12
	Rear			1.12
Master cylinder bore				1
Available pedal travel				7
Line pressure at 100 lb. pedal load				918
Shoe clearance adjustment				.006, Heel & Toe

BRAKES—PARKING

Type of control		Mechanical, T-Handle, Multiple Pawl Ratchet	
Location of control		Left of Steering Column	
Operates on		Rear of Transmission	
If separate from service brakes	Type (internal or external)	External	(a)
	Drum diameter	6	(a)
	Lining size (length x width x thickness)	15.38 x 2 x .16	(a)

FRAME

Type and description	Welded, Double-Channel, Box Section Side Rails, Lateral Cross Members

FRONT SUSPENSION

Type and description	Independent, Lateral Control, With Coil Springs

(a) When equipped with PowerFlite, an internal type parking brake is used with a 7" diameter drum; lining size: 13.06 x 2 x .16

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FRONT SUSPENSION (cont.)

	Type	Coil
	Material	Amola Steel (a)
Spring	Size (length x width x No. leaves or coil I.D.)	4 I.D.
	Spring rate (lb. per in.)	480
	Rate at wheel (lb. per in.)	N/A
	Normal load (lb. @ rated length)	Right 2190 at 11" Left 2285 at 11"
Shock absorbers	Manufacturer	Own
	Type (direct or lever)	Direct
	Piston diameter	1
Stabilizer	Type (link, linkless, frameless)	Linkless
	Material	Amola

STEERING

Type used (Standard or optional)		Mechanical		Standard
		Power		Optional
Wheel diameter				18
Turning diameter	Outside front	Wall to wall (r. & l.)		46' 4"
		Curb to curb (r. & l.)		43' 9"
	Inside rear	Wall to wall (r. & l.)		25' 9"
		Curb to curb (r. & l.)		26' 8"
Inside wheel angle with outside wheel at 20°				
Mechanical	Gear	Type		Worm and Three-Tooth Roller
		Make		Gemmer
		Ratios	Gear	20.4
			Overall	N/A
	No. wheel turns			5.5
Power	Type			Integral - "Coaxial"
	Make			Chrysler
	Trade name			Full-Time Power Steering
	Gear	Type		Rack and Sector and Recirculating Ball Nut
		Ratios	Gear	16.2
			Overall	N/A
	Pump driven by			Generator
	Overall torque ratio			N/A
	Number wheel turns			3.5
Linkage	Type			Center, Equal Length Tie Rods
	Location (front or rear of wheels)			Rear
	Drag link (trans. or long)			Longitudinal
	Tie rods (one or two)			Two

(a) Temporary Substitution: Chromium-Carbon Steel

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STEERING (cont.)				
Kingpin	Inclination at camber (deg.)		5.5° at 0°	
	Diameter		.795	
	Bearings (type)	Upper	Straight Roller	
		Lower	Lead Bronze	
		Thrust	Ball	
Wheel alignment (range and preferred)	Caster (deg.)		-2° to 0°, -2° Preferred with Manual Steering 0° Preferred with Power Steering (a)	
	Camber (deg.)		1/4° ± 3/8° (b)	
	Toe-in (outside tread-inches)		0 to 1/16, 0 Preferred	
Steering knuckle type			Reverse Elliott	
Wheel spindle	Diameter	Inner bearing	1.25	
		Outer bearing	.75	
	Thread size		3/4 - 16 Am Nat Thd	
	Bearing type		Tapered Roller	
REAR SUSPENSION				
Type			Parallel, Longitudinal Leaf	
Drive and torq. taken through (see page 14)			Rear Springs	
Spring	Type		Semi-Elliptic	
	Material		Steel	
	Size (length x width x No. leaves or coil I.D.)		55 x 2.5 x 4	55 x 2.5 x 5
	Spring rate (lb. per in.)		93	90
	Rate at wheel (lb. per in.)		N/A	
	Normal load (lb. at rated length)		840	
	Mounting insulation type		Rubber Bushing	
	If leaf	No. of leaves	4	5
		Covers (yes, no)	No	
		Lubricated (yes, no)	No	
		Inserts: Type and size	2.5 x 3.5	
		Inserts: Material	Wax Impregnated Fabric	
		Shackle (comp. or tens.)	Compression	
Shock absorbers	Manufacturer		Own	
	Type (direct or lever)		Direct	
	Piston diameter		1	
Stabilizer	Type (link, linkless, frameless)		None	
	Material		---	
Track bar type			None	

(a) Within these limits, it is recommended that the left side caster be between 0° and 3/4° more negative than the right side caster.

(b) Preferred Setting: Left Side, +1/2°
Right Side, 0°

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BODY—GENERAL DEFINITIONS

NOTE: Included in the dimension definitions listed on this and the following pages are those which have been proposed for adoption by the SAE. These are indicated by a number following the type of dimension, e.g., L 3. Additional dimensions have been added by the AMA Specifications Body Sub-Committee for inclusion in the Questionnaire. These are shown by an additional letter, e.g., HA. The dimensions are developed from the following basic points:

1. Front and rear seat "A" points are taken 5" forward of vertical tangent to seat back 15" from center of body.
2. Front seat is in the rear position.
3. Loaded position—5 passengers, front 300 lb., rear 450 lb., includes spare wheel, tire and tools, and full complement of gas, oil, water, etc. and tires to recommended pressure, etc.
4. C. L. (centerline).
5. D. L. O. (daylight opening, exposed glass dimension).
6. Ramp breakover angle (page 20-A) is the supplement of the included ramp angle (180° minus the included ramp angle) over which a car can pass without hanging up.

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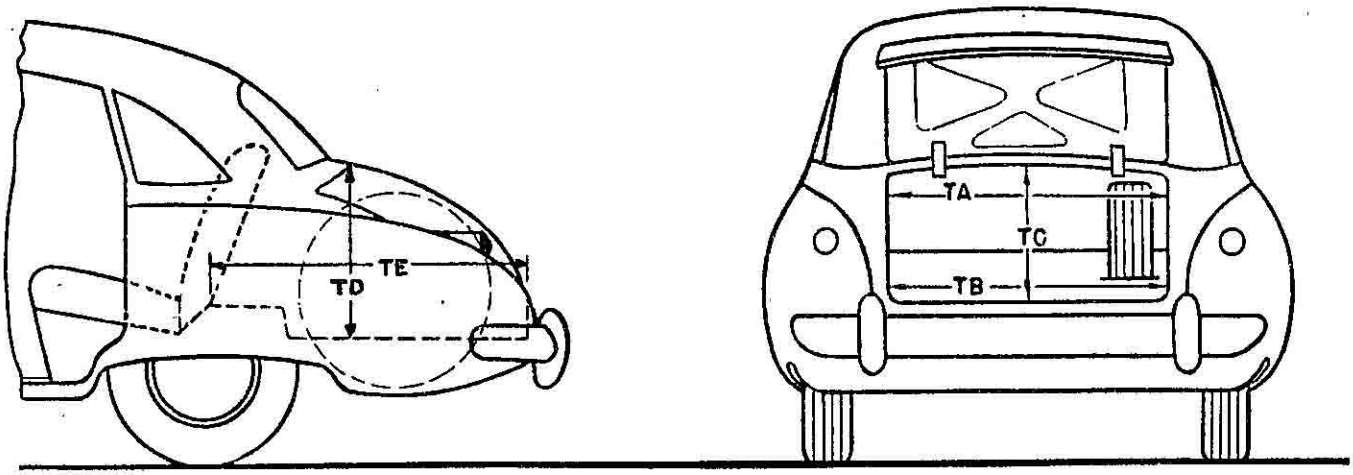
BODY—TRUNK OPENING DIMENSIONS



TA—Width across the top	60.3
TB—Width across the bottom	55.0
TC—Diagonal dimension at CL from top of opening to bottom	32.5
TD—Vertical height of opening (floor to top, inside edge of opening)	22.0
TE-Max. horizontal depth (forward from vertical projection of inside edge of opening)	54.0
Position of spare tire stowage	Right Hand Side - Inclined
Method of holding lid open	Torsion Bar

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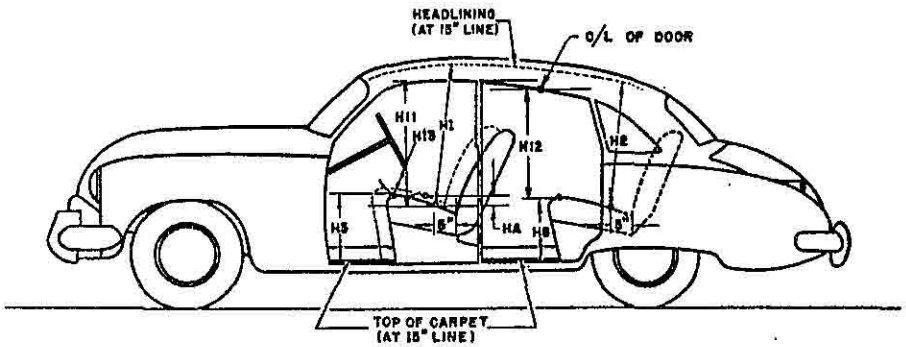
BODY—HEIGHT DIMENSIONS—INTERIOR



H1. Front headroom—from "A" pt. to headlining at 8° back of vertical on 15" line. (For "A" pt. see note 1, page 19)	35.0
H2. Rear headroom—from "A" pt. to headlining at 8° back of vertical on 15" line.	34.5
H3. Front seat height to floor carpet on 15" line (front edge of cushion).	13.3
H8. Rear seat height to floor carpet on 15" line (front edge of cushion).	13.5
H11. Entrance—front—cushion "A" point to bottom windcord vertical.	29.3
H12. Entrance—rear—top of cushion to bottom windcord vertical at C/L of rear door.	27.3
H13. Steering wheel clearance to seat cushion taken on arc.	5.4
HA. Front seat vertical rise at "A" pt. (inches.)	1.1

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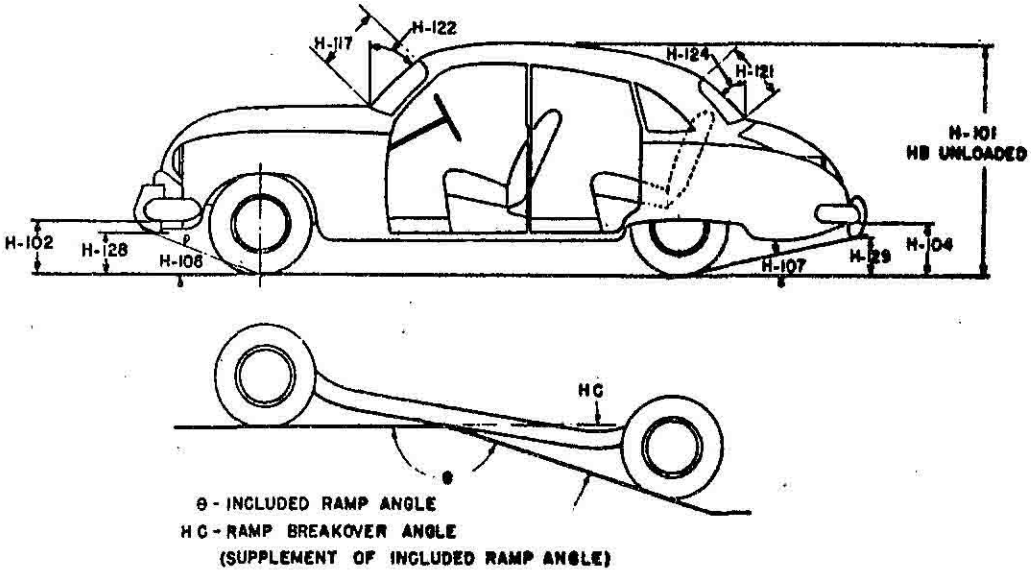
BODY—HEIGHT DIMENSIONS—EXTERIOR



H101. Overall height.	60.6	
HB. Overall height—unloaded.	62.7	
H102. Front bumper bottom to ground at normal section.	12.8	
H104. Rear bumper bottom to ground at normal section.	11.4	
H106. Angle of approach—from the tire rolling radius to lowest point on front bumper or guard.	21°	
H107. Angle of departure—from the tire rolling radius to lowest point on rear bumper or guard.	12°	
HC. Ramp breakover angle.*	11°	
H117. Windshield DLO-slant height.	16.8	
H121. Backlight DLO*—Max., slant height.	117.6	
H122. Windshield slope angle to vertical line on car axis.	47°	
H124. Backlight slope angle to vertical line on car axis.	51°	
H128. Ground to bottom of front bumper guard.	17.5	
H129. Ground to bottom of rear bumper guard.	12.7	
HD. Min. road clearance (location and dimension).	6.3" at Frame Side Member	6.2" at Frame Side Member
HE. Min. road clearance at rear axle.	8.4	8.2

*See Notes, page 19.

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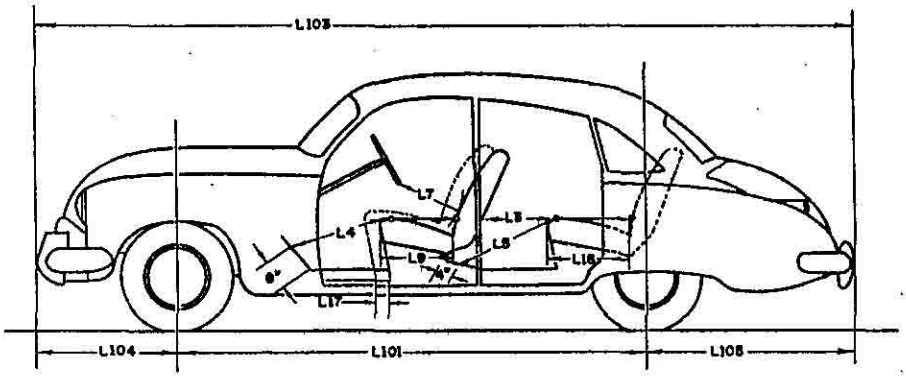
BODY—LENGTH DIMENSIONS



Interior	**L3.** Rear compartment back of front seat back to rear seat back.	34
	L4. Leg room—front—diagonal—ball of foot to top of seat to front seat back—15" line.	44.6
	L5. Leg room—rear—diagonal—from ball of foot to top of rear seat cushion and to seat back.	44.8
	L7. Steering wheel clearance to seat back taken on arc.	14.6
	L9. Front seat depth (front edge to vert. tan. to seat back on 15" line).	18.1
	L16. Depth of rear seat (front edge to seat back).	17.8
	L17. Total adjustment of front seat at floor.	5.0
Exterior	**L101.** Wheel base.	126.0
	L103. Overall length (bumper to bumper inc. guards).	217.9
	L104. Overhang—front including bumper guards.	36.6
	L105. Overhang—rear including bumper guards.	55.3

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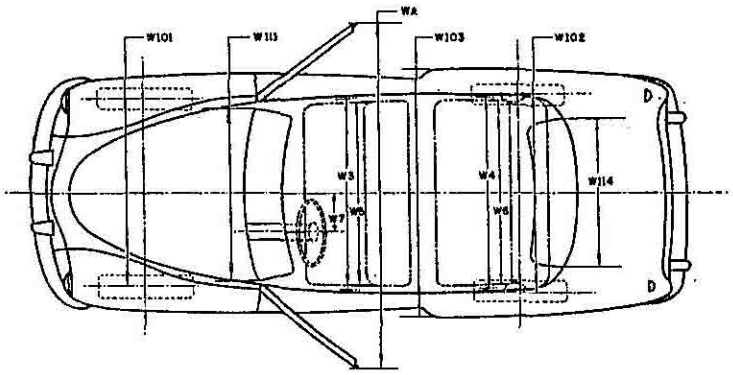
BODY—WIDTH DIMENSIONS



Interior	**W3.** Front shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	58.4
	W4. Rear shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	58.4
	W5. Front hip room, at top of seat 5" forward of vert. tan. to seat back.	63.3
	W6. Rear hip room, at top of seat 5" forward of vert. tan. to seat back.	64.0
	W7. Steering wheel center to center of body.	15.1
Exterior	**W101.** Front tread at ground.	60.2
	W102. Rear tread at ground.	59.6
	W103. Max. overall width of car including bumpers or mouldings.	78.3
	WA. Max. overall width of car with doors open.	153.0
	W111. Windshield DLO, max. width.	62.0
	W114. Back window DLO, max. width.	60.5

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BODY—MISCELLANEOUS INFORMATION

Doors hinged (front, rear)	Front	Front
	Rear	Front
Type of finish (lacquer, enamel)		Synthetic Enamel
Hood opening (front, side; semi-full, full, half)		Front, Full
Hood counterbalanced (yes, no)		Yes
Hood release control (internal, external)		External
Vent window control method (crank, friction, pivot).		Pivot
Windshield (one piece, two piece; curved, flat)		One Piece, Curved - Double Wrap-Around
Rear window type (one piece, two piece, three piece; curved, flat)		One Piece, Curved
Windshield glass area		1094
Backlight glass area		1091
Total glass area		3398

BODY—TYPES AND STYLE NAMES

Body type, number of passengers, and style names (use letter code shown below followed by passenger capacity and style name e.g., N-6 Ranchwagon)		
	G-6 Four-Door Sedan	
	J-6 Special Coupe (S-22-1)	J-6 Sportsman
	L-6 Convertible Coupe	
	J-6 Sportsman (S-22-2)	
	P-6 Station Wagon	

Body type code

A—Coupe—2 door flatback
B—Coupe—2 door notchback
C—Sedan—2 door flatback
D—Sedan—2 door notchback
E—Sedan—4 door flatback (4 windows)
F—Sedan—4 door flatback (6 windows)
G—Sedan—4 door notchback (4 windows)
H—Sedan—4 door notchback (6 windows)
J—Hardtop—2 door
K—Hardtop—4 door
L—Convertible—2 door
M—Convertible—4 door
N—Station wagon—2 door
P—Station wagon—4 door
Q—Combined passenger and utility—2 door
R—Combined passenger and utility—4 door
S—Sedan delivery
T—Limousine

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