

AUTOMOBILE MANUFACTURERS ASSOCIATION CONSOLIDATED SPECIFICATION QUESTIONNAIRE

Page 1

MAKE OF CAR:	DESOTO	MODEL NAME	SYMBOL
COMPANY:	DESOTO DIVISION CHRYSLER CORPORATION DETROIT 31, MICHIGAN	Firedome	S-23
		Fireflite	S-24
		Fireflite Adventurer . . .	S-24
MODEL YEAR:	1956	DATE	Sept. 30, 1955

TABLE OF CONTENTS

General Specifications	1	Frame	16
Engine	2	Front Suspension	16
Electrical	8	Steering	17
Drive Units	12	Rear Suspension	18
Brakes	15	Body	19
Index	24		

- 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-23	S-24	S-24 Adventurer (2-Door Hardtop)
Wheelbase		126.0	
Tread		60.4	
		59.6	
Maximum Length (L-103)	217.9		220.9
Overall Width (W-103)		78.3	
Dimensions Height (H-101)	60.6		58
Steering ratio—overall		N/A	
Turning diameter (curb to curb)		43' 9"	
Shipping weight* (x)	3855	4005	4030
Transmission—	Conventional	Standard	Not Available
(Specify standard, optional, not avail.)	Overdrive	Optional	Not Available
	Automatic	Optional	Standard
Axle ratio	Conventional	3.9	---
	Overdrive	4.3	---
	Automatic	3.73	3.54 (a)
Tire size		7.60 x 15 Tubeless	(b)
	Type	90° V	
	No. of cylinders	8	
	Valve arrangement	Overhead, Lateral, Inclined	
Engine	Bore and stroke	3.72 x 3.80	3.78 x 3.80
	Piston displacement, cu. in.	330	341.4
	Standard compression ratio	8.5	9.25
	Maximum bhp at engine rpm	230 at 4400	255 at 4400 320 at 5200
	Maximum torque at rpm	305 at 2800	350 at 3200 356 at 4000

*Standard car weight, not including gas and water.

(x) Revised 3-1-56; S-24 Adventurer added.

(a) Optional Ratios: 3.07, 3.36, 3.54, 3.73, 3.91

(b) 7.60 x 15 Tubeless, Nylon, W/S/W Standard.

AMA Consolidated Specification Questionnaire

Page 2

MAKE OF CAR DE SOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

ENGINE—GENERAL

Type	V, In-line, other	V
	Angle of V	90°
No. of cylinders		8
Valve arrangement		Overhead, Laterally Inclined
Bore and stroke		3.72 x 3.80
Piston displacement, cu. in.		330
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	8.5
	Optional Head	9.25
Cylinders	Head Material	Standard
		Optional
	Sleeve—Wet, dry, other, none	Cast Iron
Number of mounting points	Front	Two
	Rear	One
Taxable horsepower	(Dia. ² x No. Cyl.)	44.3
	2.5	45.7
Advertised max. brake horsepower at engine RPM*	Standard head	230 at 4400
	Optional head	255 at 4400
	With fuel (Octane and method)	86.5 Motor
	Standard Head	91 - 98 Research
	Optional Head	---
Max. torque (lb. ft. @ RPM)	Standard head	305 at 2800
	Optional head	350 at 3200
Recommended idle speed (neutral)		450 - 500
		600

ENGINE—PISTONS

Material		Aluminum Alloy
Description and finish		Thermally Controlled by Steel Belt, Horizontal Slot, Elliptically Turned, Tin Plated.
Weight (piston only) oz.		19.9
Clearance	Top land	.032
	Skirt	.00075 to .00125
	Top	---
	Bottom	---
Ring groove depth	No. 1 ring	.21
	No. 2 ring	.21
	No. 3 ring	.21
	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, and Manifold Heat Off.

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 3

MAKE OF CAR DESOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

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		Three
Compression	Material	Piston Ring Iron
	Coating	Tin
	Width	.078
	Gap	.010 - .020
	Maximum wall thickness	.186
Oil	Material	Piston Ring Iron
	Coating	None
	Width	.186
	Gap	.010 - .020
	Maximum wall thickness	.145
Location of expanders		On Oil Ring

ENGINE—PISTON PINS

Material			High Manganese Steel
Length			3.07
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 - .0005
	In rod		.0001 - .0004 (Selective)
Direction offset in piston			Right - .06

ENGINE—CONNECTING RODS

Material		High Manganese Forging Steel
Weight (oz.)		25.1
Length (center to center)		6.62
Bearing	Material	Thin Babbitt on Steel
	Type (cast-in or removable)	Removable
	Effective length	.81
	Clearance	.0005 to .0015 (Desired)
	End play	.006 to .014 (2 Rods)

ENGINE—CRANKSHAFT

Material		Drop Forged Steel
Weight (lb.)		N/A

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 4

MAKE OF CAR DESOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

ENGINE—CRANKSHAFT (cont.)

Vibration damper type		Rubber - Dynamic	
End thrust taken by bearing (No.)		#3 - Center	
Crankshaft end play		.002 - .007	
Main bearing	Material		Lead Base Babbitt on Steel
	Type (cast-in or removable)		Removable
	Clearance		.0005 - .0015
	Journal dia. and bearing effective length	No. 1	2.50 x .75
		No. 2	2.50 x .75
		No. 3	2.50 x .72
		No. 4	2.50 x .75
		No. 5	2.50 x 1.34
		No. 6	
		No. 7	
Direction offset from cyl. bore		None	
Connecting rod crankpin journal diameter		2.50	

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	
	Gear or chain	Chain	
Type of drive	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)		Low Friction Lock on Exhaust	
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	

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 5

MAKE OF CAR DESOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

ENGINE—VALVE SYSTEM (cont.)

Timing	Intake	Opens (°BTC)	4 ATC	15 BTC	35 BTC
		Closes (°ABC)	76 ABC	57 ABC	65 ABC
	Exhaust	Opens (°BBC)	54 BBC	49 BBC	65 BBC
		Closes (°ATC)	10 ATC	15 ATC	25 ATC
Intake	Material		Silicon-Chromium Steel		
	Overall length		4.84		
	Actual overall head dia.		1.94		
	Angle of seat		45°		
	Seat insert material		---		
	Stem diameter		.372		
	Stem to guide clearance		.002		
	Lift		.381		.431
	Outer spring press. and length	Valve closed (lb. @ in.)	72 at 1.69		58 - 63 at 1.65
		Valve open (lb. @ in.)	166 at 1.31		156 - 161 at 1.218
	Inner spring press. and length	Valve closed (lb. @ in.)	---		26 - 30 at 1.531
		Valve open (lb. @ in.)	---		64 - 69 at 1.093
Exhaust	Material		21-4N - Nitrogen Treated Manganese Chromium Nickel Steel		
	Overall length		4.86		
	Actual overall head dia.		1.75		
	Angle of seat		45°		
	Seat insert material		---		
	Stem diameter		.372		
	Stem to guide clearance		.003		
	Lift		.357		.413
	Outer spring press. and length	Valve closed (lb. @ in.)	72 at 1.69		58 - 63 at 1.65
		Valve open (lb. @ in.)	166 at 1.31		156 - 161 at 1.218
	Inner spring press. and length	Valve closed (lb. @ in.)	---		26 - 30 at 1.531
		Valve open (lb. @ in.)	---		64 - 69 at 1.093

ENGINE—LUBRICATION SYSTEM

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

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 6
Rev. 8-53

MAKE OF CAR DE SOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

ENGINE—LUBRICATION SYSTEM (cont.)

Oil pump type	Rotary
Normal oil pressure (lb. @ rpm)	50 - 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.)	Four
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	Per A. P. I. Classification

ENGINE—FUEL SYSTEM

Recommended fuel	Standard head	Regular	Premium
Fuel Tank	Optional head		
	Capacity (gals.)	21	
	Filler Location	Right Rear Fender	
Fuel Filter	Type	Oilite	Oilite - Ceramic (b)
	Location	Fuel Tank	Fuel Tank - Carburetor
Fuel pump	Type (elec. or mech.)	Mechanical	
	Location	Right Front of Engine	
	Pressure range	5.0 to 6.5 lb	
	Vacuum booster (std., optl., none)	None	
Carburetor	Make	Ball & Ball	Carter
	Model number	BBD 2308 S	(x) WCFB 2311 SA (c)
	Number used	One	Two
	Type	Downdraft, side inlet, other	Downdraft
	Single or dual	Dual	4-Barrel
	Intake manifold heat control (manual, auto., none)	Automatic	
	Automatic choke type (integral, other)	Integral	
	Air cleaner type	Standard	Oil Bath
	Optional		Oil Bath (d)

ENGINE—EXHAUST SYSTEM

Type (single, single with cross-over, dual, other)	Single with Cross-Over (a)	Dual
Muffler type (rev. flow, str. thru, sep. resonator)	Reverse Flow	
Exhaust pipe dia.	Branch	1-7/8
	Main	2-1/2
Tail pipe diameter	2	1-3/4

(x) Revised 3-1-56; S-24 Adventurer added.

(a) Dual Exhaust Special Equipment.

(b) Plastic or Oilite - Ceramic.

(c) WCFB 2476 S (front) and WCFB 2445 S (rear)

(d) Two Air Cleaners Used.

AMA Consolidated Specification Questionnaire

Page 7

MAKE OF CAR	DESOTO	MODEL YEAR	1956
MODEL	S-23	S-24	S-24 Adventurer (2-Door Hardtop)

ENGINE—COOLING SYSTEM (A)

Type (pressure system, atmospheric, other)			Pressure-Vent
Radiator cap relief valve press.			7 (a)
Circulation thermostat	Type (choke, bypass)	Bellows, Controlled By-Pass (b)	
	Starts to open at	160° - 165°	
Water pump	Type (centrifugal, other)	Centrifugal	
	Number of pumps	One	
	Drive (V-belt, other)	V-Belt	
	Bearing type	Shaft Bearings	
By-pass recirculation type (internal, external)			External
Radiator core type (cellular, tube and fin)			Cellular 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 nose	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	2 (g)
		Angle of V	36° 30'
		Outside length	38.00" (c)
		Width	.380
	Generator	Angle of V	36° 30'
		Outside length	42.50" (d)
		Width	.380
Fan	Number of blades and spacing	Six - 60°, 45°, 75°	
	Diameter	17" (f)	
	Ratio—fan to crankshaft revolutions	.85 (e)	
	Bearing type	See Water Pump	

(x) Revised 3-1-56; S-24 Adventurer added.

(A) With Air Conditioning the following data apply:

- | | |
|---|-----------------------|
| (a) 14 psi | (b) Pellet Thermostat |
| (c) 41.0" | (d) 77.25" |
| (e) .95 | (f) 18" |
| (g) Three drive belts (also for Power Steering only and for Power Steering and Air Conditioning). | |

AMA Consolidated Specification Questionnaire

Page 8
REV. 7-52

MAKE OF CAR DE SOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

ELECTRICAL—SUPPLY SYSTEM

Battery	Make and Model		Auto-Lite 11-HS-60 or Willard HO-11-60
	Voltage Rtg. & Plates/cell		12 V, 11
	SAE Designation & Amp Hr. Rtg		2 SM - 60
	Location		Under Hood, Left Side
Generator	Terminal grounded		Negative
	Make		Auto-Lite
	Model		GJC-7002
	Type		Shunt Wound
Regulator	Ratio—Gen. to Cr/s rev.		2.1
	Make		Auto-Lite
	Model		VRX-6201-A
	Type		Current and Voltage Control
	Cutout relay	Closing voltage @ generator rpm	13.0 - 13.8 at 1300
		Reverse current to open	Contact opens at 0 to 6 amp discharge at 8.2 to 9.3 volts after 10 amp. charge
	Regulated	Voltage	14.28 - 14.88
		Current	30 - 40
	Min. Gen. rpm required		1300 for Cut-In; 2300 for Max. (Hot)
	Voltage test conditions	Temperature	70° F
		Load	Run 15 min. at 7 amp. - Voltage Regulator Check
		Other	Additional 15 min. at Rated Output - Current Regulator Check

ELECTRICAL—STARTING SYSTEM

Starting motor	Make		Auto-Lite
	Model		MDF-6001
	Rotation (drive end view)		Clockwise
	Engine cranking speed		35 to 150 rpm
	Test conditions		SAE 5W at -20° F and SAE 30 with warmed engine
	Lock test	Amps	240
		Volts	4
		Torque (lb. ft.)	6.5
	No load test	Amps	60
		Volts	10
		RPM (min.)	3200
Motor control	Switch (solenoid, manual)		Solenoid, Positive Engagement
	Starting procedure		Depress accelerator pedal about one-third and turn ignition key beyond "Ignition On" position.

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 9

MAKE OF CAR DESO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

ELECTRICAL—STARTING SYSTEM (cont.)

Motor drive	Engagement type		Solenoid Shift, Positive Engagement		
	Pinion meshes (front, rear)		Front		
	Number of teeth	Pinion	9		
		Flywheel	146		
	Flywheel tooth face width		.375		

ELECTRICAL—IGNITION SYSTEM

Coil	Make		Auto-Lite		
	Model		CAD-4002		
	Amps	Engine stopped	3.1		
		Engine idling	2.5		
Distributor	Make		Auto-Lite		
	Model		TBJ-4302-A	TBJ-4302	IBK-4303
	Spark advance data (at distributor shaft)	Centr. advance start (rpm)	300 - 400		
		Centr. advance max. deg. @ rpm	5°-7° at 800	7.5°-9.5° at 2200	7°-9° at 700
		Vacuum advance start (in. Hg.)	5.5"-6.5" hg.	5.5"-6.7" hg. (a)	7"-8" hg.
		Vac. adv. (max. deg. @ in. Hg.)	10.5°-12.5° at 15" hg.	11.5° to 13.5° at 15" hg. (a)	10.5° to 12.5° at 17.5" hg.
	Breaker gap (in.)		.017		
	Cam angle (deg.)		29° - 32°		
	Breaker arm tension (oz.)		17 - 20		
	C/S deg. @ rpm		8° BTC	4° BTC	6° BTC
Timing	Mark location		Crankshaft Vibration Damper		
	Cylinder numbering system (see page 2)		Left: 1-3-5-7		
			Right: 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		
			AR-51	AR-52	AR-31 or AS-250
	Thread (mm)		14		
	Tightening torque (lb. ft.)		30 - 32		
	Gap		.035		
Cable	Conductor type		Stranded Copper		
	Insulation type		Rubber with Neoprene Jacket		
	Spark plug protector		Enclosed Tubes, Covered		

ELECTRICAL—SUPPRESSION

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

(x) Revised 3-1-56; S-24 Adventurer added.

(a) For Early Cars Only. Later Cars - Vac. Adv. at Start 7"-8" hg.; Max. Vac. Adv. 10.5°-12.5° at 17.5" hg.

AMA Consolidated Specification Questionnaire

Page 10

MAKE OF CAR DESOLO MODEL YEAR 1956

MODEL	S-23	S-24	S-24 Adventurer (2-Door Hardtop)
--------------	------	------	-------------------------------------

ELECTRICAL—INSTRUMENTS AND SWITCHES

Speed-ometer	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 Position - 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 light-ing switch	Identify positions and lights controlled	Left Position - Off 1st Position Clockwise - Instrument, Tail, Parking, Ignition Switch and License Plate Lamp. 2nd Position Clockwise - Instrument, Tail, Head and License Plate Lamps.
	Locations and lamps controlled	Instrument Lamp Switch - Left of Steering Column on Instrument Panel concentric with head lamp switch, variable all instruments; Stop Lamp Switch - in Master Cylinder; Dome Lamp - automatic on all four doors, manual on left "B" post; Map Lamp Switch in lamp; Direction Signal Switch - Steering Column below wheel.
Other switches	Locations and de-vices controlled	Windshield Wiper Switch - Rotary, variable speed, left of steering column. Heater and Defroster Switch - 2-Speed, concentric, right side of steering column.
Windshield wiper	Make	Auto-Lite
	Type	Electric
	Vacuum booster provision	None
	Washer provision	None
Horn	Type	Air Note - Sea Shell
	Number used	2
	Amp draw (each)	9

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 11

MAKE OF CAR	DESOTO	MODEL YEAR	1956
MODEL	S-23	S-24	S-24 Adventurer (2-Door Hardtop)

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 - 5400
Headlamp beam indicator	1 - 57
Parking light	2 - 1034
Tail light	2 - 67
Stop light	2 - 1034
Direction indicator	Front 2 - 1034
	Rear 2 - 1034
	Tell-Tale 2 - 57
License plate light	2 - 67
Instrument light	4 - 57
Ignition lock light	1 - 57
Map light	1 - 1004
Dome light	1 - 1004
Clock light	1 - 57*
Radio dial light	2 - 47*
Glove compartment light	---
Courtesy light	2 - 1004
Trunk compartment light	1 - 1003
Other	
Push Button Trans. Control Light	1 - 57* 1 - 57
Back-Up Light	2 - 1141
Underhood Light	1 - 1003*

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	15 CB (a)
Headlamp beam indicator	Same as (a)
Parking light	6 CB (b)
Tail light	Same as (b)
Stop light	6 CB (c)
Direction indicator	---
License plate light	Same as (b)
Instrument light	Same as (b)
Ignition light	Same as (b)
Map light	Same as (c)
Dome light	Same as (c)
Clock	Internally Protected
Clock light	Same as (b)
Radio	9 SFE
Glove compartment light	Same as (c)
Courtesy light	Same as (c)
Trunk compartment light	Same as (c)
Other	
Windshield Wiper	15 CB (d)
Back-Up Light	Same as (d)

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 12

MAKE OF CAR DESOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

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.)	1962		
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	Standard

DRIVE UNITS—CONVENTIONAL TRANSMISSION

Number of forward speeds	3	
Transmission ratios	In first	2.50
	In second	1.68
	In third	1.00
	In fourth	
	In reverse	3.20
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	

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 13

MAKE OF CAR	DESOTO	MODEL YEAR	1956
MODEL	S-23	S-24	S-24 Adventurer (2-Door Hardtop)

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	---
	Capacity (O.D. only)	3/4 Pint	---
	Separate filter (yes, no)	No	---
	Type recommended	Engine Oil	---
	SAE viscosity number	Summer	10W
Lubricant		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)	Neutral ☐ N ☐ Reverse ☐ R ☐ D ☐ Drive ☐ L 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)	Yes
By governor—forced shift (yes, no)	Yes
Downshift of gears in high range possible up to (mph)	55

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 14

MAKE OF CAR DESOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

DRIVE UNITS—AUTOMATIC TRANSMISSION (cont.)

Torque converter	Number of elements		Three	
	Max. ratio at stall at engine rpm		2.6 at 1650	2.7 at 1930
	Mechanical lockup	Provided (yes, no)	No	
		Speed range	---	
		Releases at (speed range, mph)	---	
	Type of cooling (forced air, oil cooler and type, other)		Air	Water
Lubricant	Anti-creep device (yes, no)		No	
	Capacity—refill (pt.)		20 Pints	
	Type recommended		Automatic Transmission Fluid, "Type A"	
	Grade	Summer	---	
		Winter	---	
		Extreme cold	---	

DRIVE UNITS—PROPELLER SHAFT

Number used		3		1	
Type (exposed, torque tube)		Exposed			
Outer diameter x length* x wall thickness	Conventional trans.	3.5 x 59.72 x .065	---		
	Overdrive trans.	3.5 x 59.72 x .065	---		
	Automatic trans.	3.25 x 59.72 x .065	3.25 x 59.41 x .065	3.50 x 59.41 x .065	
Inter-mediate bearing	Type (plain, anti-friction)	---			
	Lubri. (fitting, prepack)	---			
Universal joints	Make		Universal Products		
	Number used		2		
	Type (ball and trunnion, cross, other)		Front - Ball and Trunnion Rear - 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.

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 15

MAKE OF CAR DESOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

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)	---
	Overdrive trans.	4.3 (43-10)	---
	Automatic trans.	3.73 (41-11)	3.54 (39-11) (a)
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 5-1/2 K		
Attachment	Type (bolt or stud)	Front - Stud, Rear - Bolt	Stud
	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 (Tubeless) 4 Ply	(b)
	Optional	7.60 x 15 (Tubeless) 6 Ply	---
Rev/mile at 30 mph	728		
Inflation press. (cold)	Front	24	
	Rear	24	

BRAKES—SERVICE

Type			Hydraulic - Internal Expanding Drum	
Booster type			Vacuum - at extra cost	Vacuum
Effective area (sq. in.)			251	
Percent brake effectiveness—rear			40	
Drum	Diameter	Front	12	
		Rear	12	
	Type and material		Composite	

(x) Revised 3-1-56; S-24 Adventurer added.

(a) 3.07 (43-13), 3.36 (37-11), 3.54 (39-11), 3.73 (41-11), 3.91 (43-11)

(b) 7.60 x 15 Tubeless, 4-Ply Nylon WSW.

AMA Consolidated Specification Questionnaire

Page 16

MAKE OF CAR	DESOTO	MODEL YEAR	1956
MODEL	S-23	S-24	S-24 Adventurer (2-Door Hardtop)

BRAKES—SERVICE (cont.)

Brake lining	Bonded or riveted			Bonded	
	Primary	Material		Molded Asbestos	
		Size (length x width x thickness)	Front wheel	12.57 x 2.5 x .20	
			Rear wheel	12.57 x 2.5 x .20	
		Segments per shoe			One
	Secondary	Material		Molded Asbestos	
		Size (length x width x thickness)	Front wheel	12.57 x 2.5 x .20	
			Rear wheel	12.57 x 2.5 x .20	
		Segments per shoe			One
	Wheel cylinder bore	Front	1.12		
Rear		1.12			
Master cylinder bore			1.12		
Available pedal travel			7		
Line pressure at 100 lb. pedal load			750 (a)	1100	
Shoe clearance adjustment			No Major Adjustment Required		

BRAKES—PARKING

Type of control	T-Handle, Multiple Pawl Ratchet		
Location of control	Under Instrument Panel, Left of Steering Column		
Operates on	Rear of Transmission		
If separate from service brakes	Type (internal or external)	External (b)	Internal
	Drum diameter	6 (b)	
	Lining size (length x width x thickness)	15.38 x 2 x .16 (b)	13.06 x 2 x .16

FRAME

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

FRONT SUSPENSION

Type and description	Independent, Lateral Non-Parallel Control Arms with Coil Springs.
----------------------	--

- (x) Revised 3-1-56; S-24 Adventurer added.
 (a) With Power Brakes - 1100 psi
 (b) With PowerFlite, a 7 inch internal parking brake with lining of 13.06 x 2 x .20 is used.

AMA Consolidated Specification Questionnaire

Page 17
Rev. 8-53

MAKE OF CAR DE SOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

FRONT SUSPENSION (cont.)

Spring	Type	Coil	
	Material	Chrome Steel	
	Size (length x width x No. leaves or coil I.D.)	4" I. D.	
	Spring rate (lb. per in.)	480	N/A
	Rate at wheel (lb. per in.)	N/A	629 to 671
	Normal load (lb. @ rated length)	Right - 2190 at 11"	Right - 2000 at 11"
		Left - 2285 at 11"	Left - 2125 at 11"
Shock absorbers	Manufacturer	Own	
	Type (direct or lever)	Direct	
	Piston diameter	One	
Stabilizer	Type (link, linkless, frameless)	Linkless	
	Material	Steel	

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°		N/A

Mechanical	Gear	Type	Worm and Three-Tooth Roller	
		Make	Gemmer	
		Ratios	Gear	20.4
			Overall	30.9
	No. wheel turns		5.5	
Power	Gear	Type	Integral "Coaxial"	
		Make	Own	
		Trade name	Full Time Power Steering	
		Type	Rack and Sector and Recirculating Ball Nut	
	Gear	Ratios	Gear	16.2
			Overall	20.3
	Pump driven by		Generator	
	Overall torque ratio		N/A	
	Number wheel turns		3.5	
	Type		Symmetrical Idler Arm, Equal Length Tie Rods	
Linkage	Location (front or rear of wheels)		Rear	
	Drag link (trans. or long)		Transverse	
	Tie rods (one or two)		Two	

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 18

MAKE OF CAR DESOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

STEERING (cont.)

Kingpin	Inclination at camber (deg.)		5.5° at 0°	
	Diameter		.795	
	Bearings (type)	Upper	Roller	
		Lower	Steel Backed, Lead Bronze	
Wheel alignment (range and preferred)	Thrust		Roller (b)	
	Caster (deg.)		Ball	
	Camber (deg.)		-2° to 0° -2° Preferred with Manual Steering (a)	
	Toe-in (outside tread-inches)		0° Preferred with Power Steering (a)	
Steering knuckle type			1/4° ± 3/8° Preferred Left - +1/2°	
			Right - 0°	
			1/8" Preferred	
			Elliott Type	
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		Chromium Alloy Steel			
	Size (length x width x No. leaves or coil I.D.)		55 x 2.5 x 5	55 x 2.5 x 6		
	Spring rate (lb. per in.)		90		---	
	Rate at wheel (lb. per in.)		N/A		115 to 125	
	Normal load (lb. at rated length)		880 at -.38 Opening	920 at -.38 Opening	840 at -.38 Opening	
	Mounting insulation type		Rubber Bushing			
	If leaf	No. of leaves		5	6	
		Covers (yes, no)		No		
		Lubricated (yes, no)		No		
Inserts		Type and size	2.5 x 3.5			
		Material	Wax Impregnated Material			
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			

(x) Revised 3-1-56; S-24 Adventurer added.

(a) Any difference in caster between left and right wheels should make the left side 0° to 3/4° more negative caster than the right side.

(b) When Power Steering is used, the lower bearing is a steel-backed, lead-bronze bushing.

AMA Consolidated Specification Questionnaire

Page 19
Rev. 8-53

MAKE OF CAR DE SOTO MODEL YEAR 1956

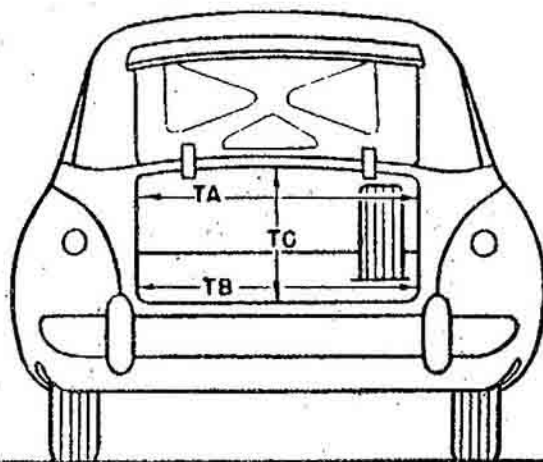
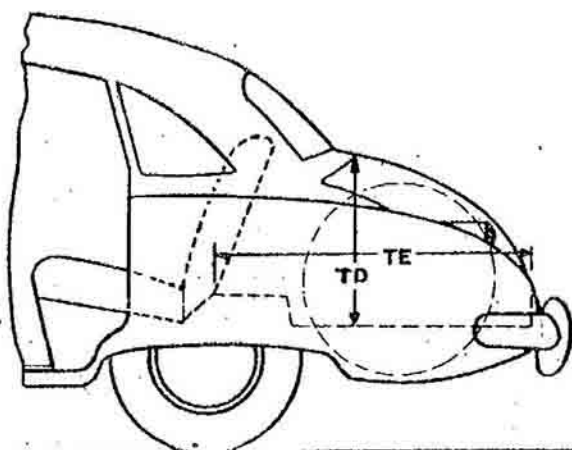
BODY—GENERAL DEFINITIONS

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.

MODEL	S-23	S-24	S-24 Adventurer (2-Door Hardtop)
-------	------	------	-------------------------------------

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	37.4
TD—Vertical height of opening (floor to top, inside edge of opening)	22.0	22.5
TE—Max. horizontal depth (forward from vertical projection of inside edge of opening)	57.4	63.4
Position of spare tire stowage	Right Hand Side - Inclined	
Method of holding lid open	Torsion Bar	

(x) Revised 3-1-56; S-24 Adventurer added.

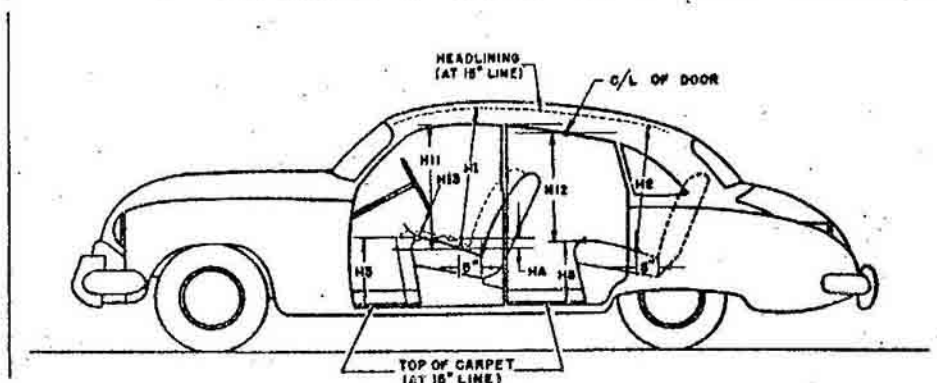
AMA Consolidated Specification Questionnaire

Page 20
Rev. 8-53

MAKE OF CAR DE SOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

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)	35.1	34.6
H2. Rear headroom—from "A" pt. to headlining at 8° back of vertical on 15" line.	34.5	34.0
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).	13.7	
H11. Entrance—front—cushion "A" point to bottom windcord vertical.	29.5	29.0
H12. Entrance—rear—top of cushion to bottom windcord vertical at C/L of rear door.	27.0	
H13. Steering wheel clearance to seat cushion taken on arc.	5.3	5.4
HA. Front seat vertical rise at "A" pt. (inches.)	1.1	

(x) Revised 3-1-56; S-24 Adventurer added.

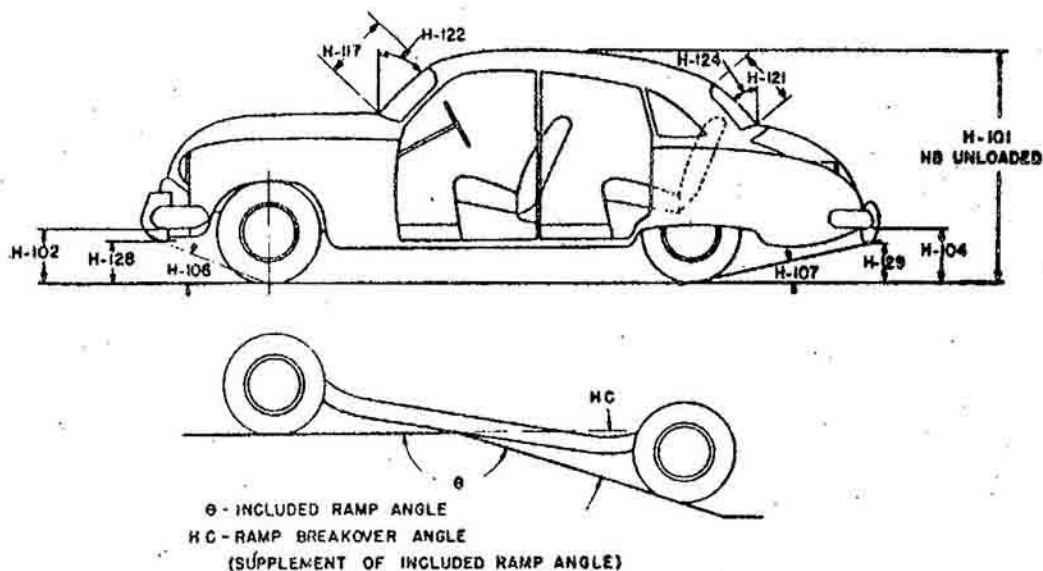
AMA Consolidated Specification Questionnaire

Page 20-A
Rev. 8-53

MAKE OF CAR DESOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

BODY—HEIGHT DIMENSIONS—EXTERIOR



H101. Overall height.	60.5	58.0	
HB. Overall height—unloaded.	62.7	60.1	
H102. Front bumper bottom to ground at normal section.	12.8	10.6	
H104. Rear bumper bottom to ground at normal section.	11.8	11.7	9.8
H106. Angle of approach—from the tire rolling radius to lowest point on front bumper or guard.	19°	N/A	
H107. Angle of departure—from the tire rolling radius to lowest point on rear bumper or guard.	11°	N/A	
HC. Ramp breakover angle.*	12°	N/A	
H117. Windshield DLO-slant height.	16.8		
H121. Backlight DLO*—Max., slant height.	17.6	18.8	
H122. Windshield slope angle to vertical line on car axis.	47°		
H124. Backlight slope angle to vertical line on car axis.	51°	55°	
H128. Ground to bottom of front bumper guard.	18.1	16.0	
H129. Ground to bottom of rear bumper guard.	13.2	13.0	11.2
HD. Min. road clearance (location and dimension).	6.3 at Frame Side Member	6.2 at Frame Side Member	4.2 at Frame Side Member
HE. Min. road clearance at rear axle.	8.4	8.2	

*See Notes, page 19. (x) Revised 3-1-56; S-24, Adventurer added.

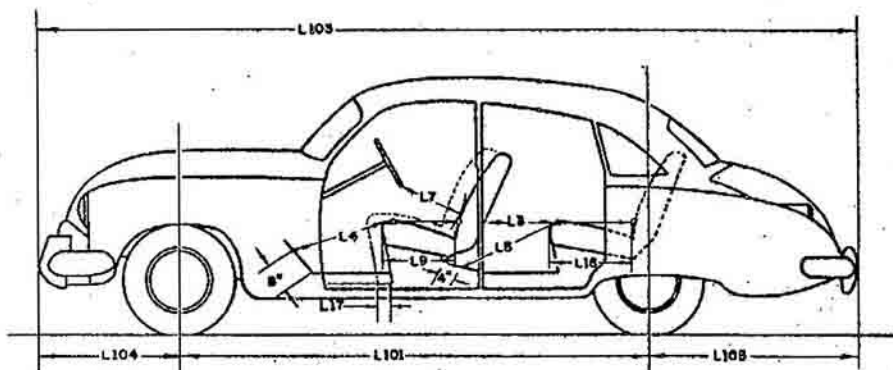
AMA Consolidated Specification Questionnaire

Page 21

MAKE OF CAR DESOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

BODY—LENGTH DIMENSIONS



Interior	L13. Rear compartment back of front seat back to rear seat back.	32.5	29.2
	L4. Leg room—front—diagonal—ball of foot to top of seat to front seat back—15" line.	45.7	
	L5. Leg room—rear—diagonal—from ball of foot to top of rear seat cushion and to seat back.	44.7	41.6
	L7. Steering wheel clearance to seat back taken on arc.	15.8	
	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	220.9
	L104. Overhang—front including bumper guards.	36.6	
	L105. Overhang—rear including bumper guards.	55.3	58.3

(x) Revised 3-1-56; S-24 Adventurer added.

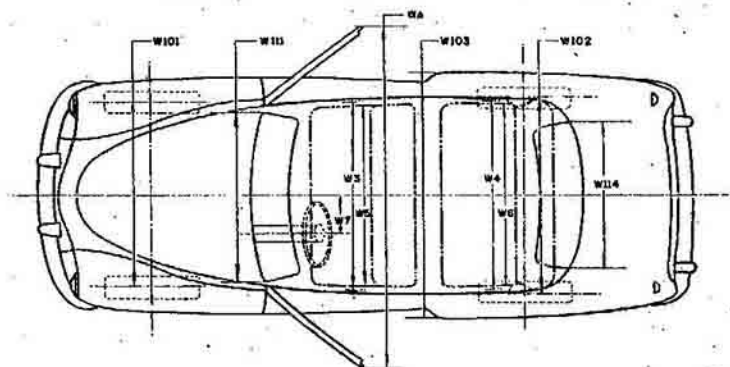
AMA Consolidated Specification Questionnaire

Page 22

MAKE OF CAR DESOTO MODEL YEAR 1956

MODEL S-23 S-24 S-24 Adventurer (2-Door Hardtop)

BODY—WIDTH DIMENSIONS



Interior	W3. Front shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	58.4	58.5
	W4. Rear shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	58.4	56.5
	W5. Front hip room, at top of seat 5" forward of vert. tan. to seat back.	63.3	63.0
	W6. Rear hip room, at top of seat 5" forward of vert. tan. to seat back.	64.0	55.0
	W7. Steering wheel center to center of body.	15.1	
Exterior	W101. Front tread at ground.	60.4	
	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	165.5
	W111. Windshield DLO, max. width.	62.0	
	W114. Back window DLO, max. width.	60.5	

(x) Revised 3-1-56; S-24 Adventurer added.

AMA Consolidated Specification Questionnaire

Page 23
Rev. 8-53

MAKE OF CAR DESOTO MODEL YEAR 1956

MODEL	S-23	S-24	S-24 Adventurer
-------	------	------	-----------------

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		
Backlight glass area		
Total glass area		

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	
	Seville	---
	J-6	
	Sportsman	
	K-6	
	Seville	---
	K-6	
	Sportsman	---
	L-6	
	Convertible Coupe	---
	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

(x) Revised 3-1-56; S-24 Adventurer added.