

AMA-40A
1970

AMA Specifications—Passenger Car

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MANUFACTURER	DODGE DIVISION CHRYSLER CORPORATION	CAR NAME	DODGE CHALLENGER	
MAILING ADDRESS	DETROIT, MICHIGAN 48231	MODEL YEAR	1970	ISSUED: 10-3-69
				REVISED (●) 3-20-70

NOTES:

1. The General 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.

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Car & Body Dimensions	1,2	Drive Units	14	Suspensions	21
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BODY - TYPES AND STYLE NAMES -		Body type, style names; use manufacturer's code for series & body style.		
		2-Door Hardtop 23	2-Door Convertible 27	2-Door Special Hardtop 29
Challenger	Six	JH 23	JH 27	JH 29
	V-8			
Challenger R/T	V-8	JS 23	JS 27	JS 29

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DODGE
 MAKE OF CAR CHALLENGER MODEL YEAR 1970 DATE ISSUED 10-3-69 REVISED (a) 3-20-70

CAR AND BODY DIMENSIONS

See Pages 25, 26 for SAE Dimension Definitions
 (All dimensions in inches unless otherwise indicated)

All dimensions to ground are for comparative purposes only. Dimensions are to be shown for:
 4-Dr. Sedan, 2-Dr. H.T., 4-Dr. H.T., Convertible and Station Wagon.

MODEL	SAE Ref. No.	23		27		29	
		Six	V-8	Six	V-8	Six	V-8

WIDTH

Track - Front	W101	59.7					
Track - Rear	W102	60.7 (a)					
Maximum overall car width	W103	76.1					
Body width at No. 2 pillar	W117	76.1		74.3		76.1	

LENGTH

Body "O" to front of dash	L 30	0.7					
Wheelbase	L101	110					
Overall car length	L103	191.3					
Overhang - front	L104	38.5					
Overhang - rear	L105	42.8					
Body upper structure length	L123	92.0					
Body "O" line to C of rear wheel	L127	93.5					
Body "O" line to w/s cowl point	L130	-9.4					

HEIGHT

Passenger Distribution (front & rear)		2-front, 2-rear						
Trunk/Cargo load (lbs.)		None						
Overall height	H101	50.8	50.9(b)	50.6	51.1	50.8	50.9(b)	
Cowl height	H114	34.2(c)						
Deck height	H138	36.7(d)						
Rocker panel - front	To ground	H112	7.4	7.5(e)	7.4	7.5(e)	7.4	7.5(e)
	From front wheel C		31.5					
Rocker panel - rear	To ground	H111	7.1	6.6(f)	8.1	12.0(g)	14.1	11.6(h)
	From rear wheel C		18.5					
Windshield slope angle	H122	55° 28'						

GROUND CLEARANCE

Bumper to ground - front	H102	11.4	11.5(j)	11.4	11.5(j)	11.4	11.5(j)
Bumper to ground - rear	H104	18.2(k)					
Angle of approach	H106	17.2	17.4(l)	17.2	17.4(l)	17.2	17.4(l)
Angle of departure	H107	24.4(m)					
Ramp breakover angle	H147	10.5	10.7(n)	10.5	10.7(n)	10.5	10.7(n)
Min. running clearance (Specify)(o)	H156	5.0	5.1(p)	5.0	5.1(p)	5.0	5.1(p)

(a) With 225 CID or 318 CID with automatic transmission: 61.3

- | | |
|---------------|-------------------------------|
| (b) R/T: 51.3 | (j) R/T: 11.9 |
| (c) V-8: 34.3 | (k) R/T: 18.7 |
| (d) R/T: 37.2 | (l) R/T: 18.0 |
| (e) R/T: 7.9 | (m) R/T: 25.0 |
| (f) R/T: 4.9 | (n) R/T: 11.5 |
| (g) R/T: 10.3 | (o) Frame structure to ground |
| (h) R/T: 10.1 | (p) R/T: 5.5 |

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CAR AND BODY DIMENSIONS

 See Pages 25, 26 for SAE Dimension Definitions
 (All dimensions in inches unless otherwise indicated)

MODEL	SAE Ref. No.	23	27	29
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FRONT COMPARTMENT

Effective head room	H61	37.4	38.1	37.6
Max. eff. leg room — accelerator	L34		42.3	
H Point to Heel point	H30		7.3	
H Point travel	L17		5.6	
Shoulder room	W 3		58.1	
Hip room	W 5		56.9	
Upper body opening to ground	H50	46.2	46.9	46.2

REAR COMPARTMENT

H Point couple distance	L50		29.2	
Effective head room	H63	35.6	35.9	35.8
Min. effective leg room	L51	30.9	28.9	30.9
H Point to Heel point	H31		9.7	
Min. knee room	L48	1.0	0.7	1.0
Rear Compartment room	L 3	22.1	19.6	22.4
Shoulder room	W 4	56.8	53.7	56.8
Hip room	W 6	54.9	50.2	54.9
Upper body opening to ground	H51		--	

LUGGAGE COMPARTMENT

Usable luggage capacity	V 1		8.0	
Liftover height	H195		31.3(a)	
Position of spare tire storage			Floor	
Method of holding lid open			Torsion bar	

STATION WAGON — THIRD SEAT

Shoulder Room	W85			
Hip room	W86			
Effective leg room	L86			
Effective head room	H86			
Seat facing direction				

STATION WAGON — CARGO SPACE

Cargo length at floor — front seat	L202			
Cargo length at belt — front seat	L204			
Cargo width — Wheelhouse	W201			
Opening width at belt	W204			
Maximum cargo height	H201			
Rear opening height	H202			
Cargo volume index (cu. ft.) W4 x L204 x H201 1728	V2			

(a) Challenger R/T: 31.8

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POWER TEAMS

(Indicate whether standard or optional)

MODEL AVAILABILITY		ENGINE					TRANSMISSION	AXLE RATIO (a) (Std. first) (Indicate A/C ratio)
		Displ. cu. in.	Carburetor	Compr. Ratio	BHP @ RPM	Torque @ RPM		
6-Cyl	Std H	225	1, 1-V	8.4	145 @ 4000	215 @ 2400	Manual 3-Speed	3.23
							Automatic	2.76*, 3.23
V-8	Std H	318	1, 2-V	8.8	230 @ 4400	320 @ 2000	Manual 3-Speed	3.23
							Manual 4-Speed	3.23
							Automatic	2.76*, 3.23
	Opt H	340	1, 4-V	10.5	275 @ 5000	340 @ 3200	Manual 3-Speed	3.23
							Manual 4-Speed	3.23, 3.55**, 3.91**
	Opt H	383	1, 2-V	8.7	290 @ 4400	390 @ 2800	Automatic	2.76*, 3.23
							Manual	3-Speed
	Std: S	383	1, 4-V	9.5	330 @ 5000	425 @ 3200		Manual 4-Speed
							Automatic (b)	3.23, 3.55**, 3.91**
	Opt S	426	2, 4-V	10.2	425 @ 5000	490 @ 4000	Manual 4-Speed	3.54**, 4.10**
							Automatic	3.23, 3.55**, 4.10**
		440	1, 4-V	9.7	375 @ 4600	480 @ 3200	Manual 4-Speed	3.54**, 4.10**
Automatic							3.23, 3.55**, 4.10**	
440		3, 2-V	10.5	390 @ 4700	490 @ 3200	Manual 4-Speed	3.54**, 4.10**	
						Automatic	3.23, 3.55**, 4.10**	

(a) SURE-GRIP available on all ratios except as noted. Axle ratios do not change when A/C is installed.

(b) Axle ratio 2.76: STD on H

* SURE-GRIP NA

** SURE-GRIP only

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DODGE		MODEL YEAR 1970		DATE ISSUED 10-7-69		REVISED (*)	
MAKE OF CAR CHALLENGER		See Page 3 for Engine Usage					
MODEL		225 CID	318 CID	340 CID			

ENGINE—GENERAL

Type, no. cyls., valve arr.	Six, in-line, OHV	90° V-8, OHV	
Bore and stroke (nominal)	3.4 x 4.12	3.91 x 3.31	4.04 x 3.31
Piston displacement, cu. in.	225	318	340
Bore spacing (C to C)	(a)	4.46	
No. system (front to rear)	L. Bank	1-3-5-7	
	R. Bank	2-4-6-8	
Firing order	1-5-3-6-2-4	1-8-4-3-6-5-7-2	
Compress. ratio (nominal)	8.4:1	8.8:1	10.5:1
Cylinder Head Material	Cast iron		
Cylinder Block Material	Cast iron		
Cyl. Sleeve-Wet, dry, none	None		
Number of mtg. points	Front	Two	
	Rear	One	
Engine installation angle	Lateral: 0° 06' Inclined rear to front: 2° 30' to 3°		
Taxable $\frac{\text{Dia}^2 \times \text{No. Cyl.}}{\text{horsepower} \times 2.5}$	27.7	48.9	52.2
Publishing max. bhp* @ eng. RPM	145 @ 4000	230 @ 4400	275 @ 5000
Publishing max. torque* (lb. ft. @ RPM)	215 @ 2400	320 @ 2000	340 @ 3200
Recommended fuel regular - premium	Regular		Premium

ENGINE—PISTONS

Material	Aluminum alloy		
Description and finish	Closed slipper type, steel strut, elliptically turned, tin-plated		Open slipper type
Weight (piston only) oz.	16.4	20.9	25.4
Clearance (limits)	Top land	0.024 min.	0.018 min.
	Skirt	Top	0.0005 to 0.0015
		Bottom	-0.0005 to +0.0015
Ring groove depth	No. 1 ring	0.179	0.205
	No. 2 ring	0.179	0.205
	No. 3 ring	0.181	0.193
	No. 4 ring	--	

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

(a) 3.98 (1-2, 3-4, 5-6); 4.0 (2-3, 4-5)

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DODGE
 MAKE OF CAR CHALLENGER MODEL YEAR 1970 DATE ISSUED 10-7-69 REVISED (*)

See Page 3 for Engine Usage

MODEL 1, 2-V | 1, 4-V | Hi-Perf
 383 CID

ENGINE—GENERAL

Type, no. cyls., valve arr.	90° V-8, OHV		
Bore and stroke (nominal)	4.25 x 3.38		
Piston displacement, cu. in.	383		
Bore spacing (C to C)	4.8		
No. 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		
Compres. ratio (nominal)	8.7:1	9.5:1	10.5:1
Cylinder Head Material	Cast iron		
Cylinder Block Material	Cast iron		
Cyl. Sleeve-Wet, dry, none	None		
Number of mtg. points	Front	Two	
	Rear	One	
Engine installation angle	Lateral: 0° 06' inclined rear to front 2° 30' to 3°		
Taxable horsepower	57.8		
	Dia ² xNo. Cyl.	2.5	
Publishing max. bhp* @ eng. RPM	290 @ 4400	330 @ 5000	335 @ 5200
Publishing max. torque* (lb. ft. @ RPM)	390 @ 2800	425 @ 3200	425 @ 3400
Recommended fuel regular - premium	Regular	Premium	

ENGINE—PISTONS

Material	Aluminum alloy		
Description and finish	Closed slipper-type, steel strut, elliptically turned, tin-plated		
Weight (piston only) oz.	27.2		
Clearance (limits)	Top land	0.022 min.	
	Skirt	Top	0.00025 to 0.00125
		Bottom	-0.00125 to +0.00125
Ring groove depth	No. 1 ring	0.220	
	No. 2 ring	0.220	
	No. 3 ring	0.228	
	No. 4 ring		

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

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 See Page 3 for Engine Usage
 MODEL 426 CID Hemi 440 CID
 Hi-Perf 3, 2-V

ENGINE – GENERAL

Type, no. cyls., valve arr.	90 V-8, OHV		
Bore and stroke (nominal)	4.25 x 3.75	4.32 x 3.75	
Piston displacement, cu. in.	426	440	
Bore spacing (♣ to ♣)	4.8		
No. 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		
Compres. ratio (nominal)	10.2:1	9.7:1	10.5:1
Cylinder Head Material	Cast iron		
Cylinder Block Material	Cast iron		
Cyl. Sleeve-Wet, dry, none	None		
Number of mtg. points	Front	Two	
	Rear	One	
Engine installation angle	Lateral: 0° 06' inclined rear to front: 2° 30' to 3°		
Taxable horsepower	57.8	59.7	
Publishing max. bhp* @ eng. RPM	425 @ 5000	375 @ 4600	390 @ 4700
Publishing max. torque* (lb. ft. @ RPM)	490 @ 4000	480 @ 3200	490 @ 3200
Recommended fuel regular – premium	Premium		

ENGINE – PISTONS

Material	Aluminum alloy		
Description and finish	Forged, elliptically turned, tin-plated	Closed slipper-type, steel strut, elliptically turned, tin-plated	
Weight (piston only) oz.	29.7	30.2	
Clearance (limits)	Top land	0.022 min.	
	Skirt	Top	0.00025 to 0.00125
		Bottom	-0.00125 to +0.00125
Ring groove depth	No. 1 ring	0.215	0.224
	No. 2 ring	0.215	0.224
	No. 3 ring	0.191	0.193
	No. 4 ring	--	

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

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MAKE OF CAR	DODGE CHALLENGER	MODEL YEAR	1970	DATE ISSUED	10-7-69	REVISED (a)
See Page 3 for Engine Usage						
MODEL	225 CID	318 CID	340 CID			

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 - #1	Cast iron, twist and radius faced, tin-plate	(a)		
	material, coating, etc.	Cast iron, reverse twist and taper, lubrite-coated			
	Width	0.078			
	Gap	0.010 to 0.020	0.013 to 0.023		
Oil	Description -	3-piece abutment-type, stainless steel			
	material, coating, etc.	spacer-expanded with chrome-plated segments			
	Width	0.188			
	Gap	Not applicable			
Expanders		See above			

ENGINE – PISTON PINS

Material		Carbon steel-carburizing grade			
Length		2.965	2.995		
Diameter		0.9008	0.9842		
Type	Locked in rod, in piston, floating, etc.	Press-fit in rod		Floating	
	Bush- ing	In rod or piston	None		Rod
		Material	--		Bronze on steel
Clearance	In piston	0.00045 to 0.00075	0.0000 to 0.0005		
	In rod	(b)	0.0001 to 0.0006		
Direction & amount offset in piston		Right 0.06			

ENGINE – CONNECTING RODS

Material		Drop-forged steel			
Weight (oz.)		26.8	25.6	26.7	
Length (center to center)		6.699	6.123		
Bearing	Material & Type	Lead-base babbitt on steel	Bi-metal grid	Tri-metal	
	Overall length	0.985	0.843		
	Clearance (limits)	0.0005 to 0.0025		0.0002 to 0.0027	
	End play	0.006 to 0.012	0.006 to 0.014 (2 rods)		

(a) Cast iron, twist and barrel-lap face, moly-filled.

(b) 0.0007 to 0.0014 interference.

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DODGE			
MAKE OF CAR	CHALLENGER	MODEL YEAR	1970
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		REVISED	(*)
MODEL	See Page 3 for Engine Usage		
	383 CID All		

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.	#1	Cast iron, reverse twist and radius faced, tin-plated
		#2	Cast iron, reverse twist and taper, tin-plated
	Width		0.078
	Gap		0.013 to 0.023
Oil	Description - material, coating, etc.		3-piece abutment-type, stainless steel spacer-expander with chrome-plated segments
	Width		0.188
	Gap		Not applicable
Expanders			See above

ENGINE – PISTON PINS

Material			Carbon steel-carburizing grade
Length			3.565
Diameter			1.0936
Type	Locked in rod, in piston, floating, etc.		Press-fit in rod
	Bush- ing	In rod or piston	None
		Material	
Clearance	In piston		0.00045 to 0.00075
	In rod		0.0007 to 0.0014 interference
Direction & amount offset in piston			Right 0.09

ENGINE – CONNECTING RODS

Material			Drop-forged steel
Weight (oz.)			28.6
Length (center to center)			6.358
Bearing	Material & Type		Tri-metal
	Overall length		0.927
	Clearance (limits)		0.0007 to 0.0032
	End play		0.009 to 0.017 (2 rods)

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DODGE		MAKE OF CAR CHALLENGER		MODEL YEAR 1970	DATE ISSUED 10-7-69	REVISED (•)
		See Page 3 for Engine Usage				
MODEL	426 CID, Hemi	Hi-Perf	440 CID	3, 2-V		

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.	#1 (a)	(b)	(a)
	Width	Cast iron, reverse twist and taper, tin-plated		
	Gap	0.078		
Oil	Description - material, coating, etc.	3-piece abutment-type, stainless steel, spacer-expander with chrome-plated segments		(c)
	Width	0.188		0.113
	Gap	Not applicable		
Expanders	See above			

ENGINE – PISTON PINS

Material	Carbon steel-carburizing grade		
Length	3.400	3.565	3.385
Diameter	1.0311	1.0936	
Type	Locked in rod, in piston, floating, etc.	Floating	Press-fit in rod
	Bush- ing	Rod	None
Clearance	In rod or piston Material	Bronze on steel	--
	In piston	0.0001 to 0.0006	0.00045 to 0.00075
	In rod	0.0002 to 0.0007	0.0007 to 0.0014 interference
Direction & amount offset in piston	Right 0.09		

ENGINE – CONNECTING RODS

Material	Drop-forged steel		
Weight (oz.)	38.2	29.8	
Length (center to center)	6.861	6.768	
Bearing	Material & Type	Tri-metal	
	Overall length	0.927	
	Clearance (limits)	0.0010 to 0.0035	0.0007 to 0.0032
	End play	0.009 to 0.017 (2 rods)	

- (a) Cast iron, twist and barrel-lap faced, moly-filled
 (b) Cast iron, twist and radius-faced, tin-plated
 (c) 3-piece stainless steel spacer-expander with chrome-plated segments

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	DODGE		
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MODEL	225 CID	318 CID	340 CID

ENGINE – CRANKSHAFT

Material		Drop-forged steel	Cast ductile iron	Drop-forged steel	
Vibration damper type		Non-adhesive, rubber, dynamic			
End thrust taken by bearing (No.)		Three			
Crankshaft end play		0.002 to 0.007			
Main bearing	Material & type	Lead-base babbitt on steel, removable, precision		(a)	
	Clearance	0.005 to 0.0025 specified, 0.005 to 0.0015 desired			
	Journal dia. and bearing overall length	No. 1	2.75 x 1.034	2.5 x 0.872	
		No. 2	2.75 x 1.034	2.5 x 0.872	
		No. 3	2.75 x 1.254	2.5 x 1.151	
		No. 4	2.75 x 1.034	2.5 x 0.872	
		No. 5	--	2.5 x 1.562	
No. 6			--		
No. 7			--		
Dir. & amt. cyl. offset		None			
Crankpin journal diameter		2.187		2.125	

ENGINE – CAMSHAFT

Location		Right	Center of "V" above crankshaft		
Material		Hardenable cast iron, oil pump and distributor drive gear cast integrally			
Bearings	Material	Lead base babbitt on steel			
	Number	Four	Five		
Type of Drive	Gear or chain	Chain		Double roller chain	
	Crankshaft gear or sprocket material	Malleable cast iron or sintered iron (Super Oilite)		Steel	
	Camshaft gear or sprocket material	Nylon-coated aluminum		Cast iron	
	Timing chain	No. of links	50	68	
		Width	.88	.63	.87
Pitch		.50		.375	

ENGINE – VALVE SYSTEM

Hydraulic lifters (Std., opt., NA)		NA	Std
Valve rotator, type (intake, exhaust)		Low-friction lock on exhaust	
Rocker ratio		1.5:1	
Operating tappet clearance (indicate hot or cold)	Intake	.010	Hydraulic
	Exhaust	.020	Hydraulic

(Continued)

- (a) Aluminum alloy on steel, removable, precision, except No. 5 lead-base babbitt on steel

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MODEL	383 CID All			

ENGINE – CRANKSHAFT

Material		Drop-forged steel		
Vibration damper type		Non-adhesive, rubber, dynamic		
End thrust taken by bearing (No.)		Three		
Crankshaft end play		0.002 to 0.007		
Main bearing	Material & type		Lead-base babbitt on steel, removable precision	
	Clearance		0.0005 to 0.0025 specified, 0.0005 to 0.0015 desired	
	Journal dia. and bearing overall length	No. 1	2.625 x 0.944	
		No. 2	2.625 x 0.944	
		No. 3	2.625 x 1.223	
		No. 4	2.625 x 0.944	
		No. 5	2.625 x 0.944	
No. 6		--		
Dir. & amt. cyl. offset		None		
Crankpin journal diameter		2.38		

ENGINE – CAMSHAFT

Location		Center of "V" above crankshaft		
Material		Hardenable cast iron, oil pump and distributor 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		Malleable cast iron or sintered iron (Super Oilite)	
	Camshaft gear or sprocket material		Nylon-coated aluminum	
	Timing chain	No. of links	50	
		Width	.75	
Pitch		.50		

ENGINE – VALVE SYSTEM

Hydraulic lifters (Std., opt., NA)		Std
Valve rotator, type (intake, exhaust)		Low-friction lock on exhaust
Rocker ratio		1.5:1
Operating tappet clearance (indicate hot or cold)	Intake	Hydraulic
	Exhaust	Hydraulic

(Continued)

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MAKE OF CAR CHALLENGER	MODEL YEAR 1970						
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See Page 3 for Engine Usage							
MODEL	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; text-align: center;">426 CID, Hemi</td> <td style="width: 40%; text-align: center;">440 CID</td> <td style="width: 30%; text-align: center;">3, 2-V</td> </tr> <tr> <td style="text-align: center;">Hi-Perf</td> <td colspan="2"></td> </tr> </table>	426 CID, Hemi	440 CID	3, 2-V	Hi-Perf		
426 CID, Hemi	440 CID	3, 2-V					
Hi-Perf							

ENGINE – CRANKSHAFT

Material		Drop-forged steel		
Vibration damper type		Non-adhesive, rubber, dynamic		
End thrust taken by bearing (No.)		Three		
Crankshaft end play		0.002 to 0.007		
Main bearing	Material & type	(a)	Lead-base babbitt on steel, removable, precision, tin alloy on steel (#3 main only) (b)	
	Clearance	0.0015 to 0.0025	(c)	
	Journal dia. and bearing overall length	No. 1	2.75 x 0.944	
		No. 2	2.75 x 0.944	
		No. 3	2.75 x 1.223	
		No. 4	2.75 x 0.944	
		No. 5	2.75 x 0.944	
No. 6		--		
	No. 7	--		
Dir. & amt. cyl. offset		None		
Crankpin journal diameter		2.38		

ENGINE – CAMSHAFT

Location		Center of "V" above crankshaft		
Material		Hardenable cast iron, oil pump and distributor drive gear cast integrally		
Bearings	Material	Copper lead on steel	Lead-base babbitt on steel	
	Number	Five		
Type of Drive	Gear or chain	Double-roller chain	Chain	
	Crankshaft gear or sprocket material	Steel	Malleable cast iron or sintered iron (Super Oilite)	
	Camshaft gear or sprocket material	Cast iron	Nylon-coated aluminum	
	Timing chain	No. of links	66	50
		Width	.75	.75
Pitch		.50	.50	

ENGINE – VALVE SYSTEM

Hydraulic lifters (Std., opt., NA)		Std	
Valve rotator, type (intake, exhaust)		None	Low-friction lock on exhaust
Rocker ratio		1.5:1	
Operating tappet clearance (indicate hot or cold)	Intake	Hydraulic	
	Exhaust	Hydraulic	

(Continued)

- (a) Tri-metal: steel back, copper-lead, intermediate layer of high-lead overplate
 (b) 440 CID, 3, 2-V: all main bearings tin alloy on steel
 (c) 0.0005 to 0.0025 specified, 0.0005 to 0.0015 desired

AMA Specifications—Passenger Car

MAKE OF CAR DODGE **CHALLENGER** **MODEL YEAR** 1970 **DATE ISSUED** 10-7-69 **REVISED (e)** 3-20-70

See Page 3 for Engine Usage

MODEL 225 CID 318 CID 340 CID

ENGINE - VALVE SYSTEM (cont.)

Timing (based on top of ramp points)	Intake	Opens (°BTC)	10		22
		Closes (°ABC)	50		66
		Duration - deg.	240		268
	Exhaust	Opens (°BBC)	50	58	74
		Closes (°ATC)	6	10	22
		Duration - deg.	236	248	276
Valve opening overlap		16	20	44	
Intake	Material		SAE 1041		Silchrome XB
	Overall length		4.77	4.97	4.99
	Actual overall head dia.		1.62	1.78	2.02
	Angle of seat & face		Seat: 44.5 to 45.0; valve: 45.0 to 45.5		
	Seat insert material		None		
	Stem diameter		0.372 to 0.373		
	Stem to guide clearance		0.001 to 0.003		
	Lift (∅ zero lash)		0.397	0.372	0.430
	Outer spring press. & length	Valve closed (lb. ∅ in.)	63 @ 1.65	92 @ 1.65	96 @ 1.65
		Valve open (lb. ∅ in.)	156 @ 1.26	189 @ 1.28	242 @ 1.21
	Inner spring press. & length	Valve closed (lb. ∅ in.)	None		Surge damper
		Valve open (lb. ∅ in.)	None		Surge damper
	Exhaust	Material		21-2N	21-4N
Overall length		4.80	5.00		
Actual overall head dia.		1.36	1.50	1.60	
Angle of seat & face		Seat: 44.5 to 45.0; valve : 47.0 to 47.5			
Seat insert material		None			
Stem diameter		0.371 to 0.372			
Stem to guide clearance		0.002 to 0.004			
Lift (∅ zero lash)		0.393	0.400	0.445	
Outer spring press. & length		Valve closed (lb. ∅ in.)	63 @ 1.65	92 @ 1.65	96 @ 1.65
		Valve open (lb. ∅ in.)	156 @ 1.26	189 @ 1.25	244 @ 1.20
Inner spring press. & length		Valve closed (lb. ∅ in.)	None		Surge damper
		Valve open (lb. ∅ in.)	None		Surge damper

ENGINE - LUBRICATION SYSTEM

Type of lubrica- tion (splash, pressure, nozzle)	Main bearings	Pressure		
	Connecting rods	Pressure		
	Piston pins	Metered jet spray		
	Camshaft bearings	Pressure		
	Tappets	Splash	Pressure	
	Timing gear or chain	Jet		
	Cylinder walls	Metered jet spray		

(Continued)

AMA Specifications—Passenger Car

DODGE
MAKE OF CAR CHALLENGER **MODEL YEAR** 1970 **DATE ISSUED** 10-7-69 **REVISED** (*)3-20-70

See Page 3 for Engine Usage

MODEL _____ 383 CID 1, 2-V 383 CID 1, 4-V 383 CID Hi-Perf

ENGINE – VALVE SYSTEM (cont.)

Timing (based on top of ramp points)	Intake	Opens (°BTC)	18		21
		Closes (°ABC)	58		67
		Duration - deg.	256		268
	Exhaust	Opens (°BBC)	66		79
		Closes (°ATC)	14		25
		Duration - deg.	260		284
Valve opening overlap		32		46	
Material		SAE 1041			
Overall length		4.86			
Actual overall head dia.		2.08			
Angle of seat & face deg		Seat: 44.5 to 45.0; valve: 45.0 to 45.5			
Seat insert material		None			
Stem diameter		0.3723 to 0.3730			
Stem to guide clearance		0.0010 to 0.0027			
Intake	Lift (@ zero lash)		0.425		0.450
	Outer spring press. & length	Valve closed (lb. @ in.)	125 @ 1.86	105 @ 1.86	
		Valve open (lb. @ in.)	200 @ 1.42	234 @ 1.40	
	Inner spring press. & length	Valve closed (lb. @ in.)	None		Surge damper
		Valve open (lb. @ in.)	None		Surge damper
	Material		21-2N		
Overall length		4.89			
Actual overall head dia.		1.74			
Angle of seat & face deg		Seat: 44.5 to 45.0; valve: 47.0 to 47.5			
Seat insert material		None			
Stem diameter		Hot end: 0.3713 to 0.3720; cold end: 0.3723 to 0.3730			
Stem to guide clearance		Hot end: 0.0020 to 0.0037; cold end: 0.0010 to 0.0027			
Exhaust	Lift (@ zero lash)		0.437		0.465
	Outer spring press. & length	Valve closed (lb. @ in.)	125 @ 1.86	105 @ 1.86	
		Valve open (lb. @ in.)	200 @ 1.42	234 @ 1.40	
	Inner spring press. & length	Valve closed (lb. @ in.)	None		Surge damper
		Valve open (lb. @ in.)	None		Surge damper

ENGINE – LUBRICATION SYSTEM

Type of lubrica- tion (splash, pressure, nozzle)	Main bearings	Pressure
	Connecting rods	Pressure
	Piston pins	Metered jet spray
	Camshaft bearings	Pressure
	Tappets	Pressure
	Timing gear or chain	Jet
	Cylinder walls	Metered jet spray

(Continued)

AMA Specifications—Passenger Car

DODGE

MAKE OF CAR CHALLENGER MODEL YEAR 1970 DATE ISSUED 10-7-69 REVISED (a) 3-20-70

See Page 3 for Engine Usage

MODEL	426 CID Hemi	440 CID
	1, 4-V	3, 2-V

ENGINE - VALVE SYSTEM (cont.)

Timing (based on top of ramp points)	Intake	Opens (°BTC)	36	21	
		Closes (°ABC)	68	67	
		Duration - deg.	284	268	
	Exhaust	Opens (°BBC)	80	79	
		Closes (°ATC)	24	25	
		Duration - deg.	284		
Valve opening overlap		60	46		
Material		Silchrome XB	SAE 1041		
Overall length		5.41	4.87		
Actual overall head dia.		2.25	2.08		
Angle of seat & face deg		Seat: 44.5 to 45.0; valve: 45.0 to 45.5			
Seat insert material		None			
Stem diameter		0.3085 to 0.3095	0.3723 to 0.3730		
Stem to guide clearance		0.0002 to 0.004	0.0010 to 0.0027		
Intake	Lift (∅ zero lash)		0.490	0.450	
	Outer spring press. & length	Valve closed (lb. ∅ in.)	115 @ 1.86	105 @ 1.86	115 @ 1.86
		Valve open (lb. ∅ in.)	310 @ 1.37	234 @ 1.40	310 @ 1.37
	Inner spring press. & length	Valve closed (lb. ∅ in.)	Surge damper		
		Valve open (lb. ∅ in.)	Surge damper		
	Material		21-4N (Stellite face)	21-2N	
Overall length		4.86	4.89		
Actual overall head dia.		1.94	1.74		
Angle of seat & face		Seat: 44.5 to 45.0; valve: 47.0 to 47.5			
Seat insert material		None			
Stem diameter		0.3075 to 0.3085	Hot end: 0.3713 to 0.3720 (a)		
Stem to guide clearance		0.0030 to 0.0050	Hot end: 0.0020 to 0.0037 (b)		
Exhaust	Lift (∅ zero lash)		0.480	0.465	
	Outer spring press. & length	Valve closed (lb. ∅ in.)	115 @ 1.86	105 @ 1.86	115 @ 1.86
		Valve open (lb. ∅ in.)	310 @ 1.37	234 @ 1.40	310 @ 1.37
	Inner spring press. & length	Valve closed (lb. ∅ in.)	Surge damper	None	Surge damper
		Valve open (lb. ∅ in.)	Surge damper	None	Surge damper

ENGINE - LUBRICATION SYSTEM

Type of lubrica- tion (splash, pressure, nozzle)	Main bearings	Pressure
	Connecting rods	Pressure
	Piston pins	Metered jet spray
	Camshaft bearings	Pressure
	Tappets	Pressure
	Timing gear or chain	Jet
	Cylinder walls	Metered jet spray

(a) Cold end: 0.3723 to 0.3730
 (b) Cold end: 0.0010 to 0.0027

(Continued)

AMA Specifications—Passenger Car

MAKE OF CAR DODGE **CHALLENGER** **MODEL YEAR** 1970 **DATE ISSUED** 10-7-69 **REVISED** (*) 3-20-70
 See Page 3 for Engine Usage

MODEL	225 CID	318 CID	340 CID	383 CID	426 CID Hemi	440 Hi-Perf; 3, 2-V
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ENGINE – LUBRICATION SYSTEM (cont.)

Oil pump type	Rotary
Normal oil pressure (lb. @ engine rpm)	45 to 65 @ 2000
Oil press. sending unit (elect. or mech.)	Electric
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, part., other)	Full flow
Filter replacement (element, complete)	Complete
Capacity of c./case, less filter-refill (qt.)	4 6
Oil grade recommended (SAE viscosity and temperature range)	Consistently above +32F SAE 10W-30, 20W40, or 30 Occasionally as low as -10F SAE 10W-30 Consistently between +32F and -10F . . . SAE 10W-30 or 10W Consistently below +10F SAE 5W-20
Engine Service Reqmt. (MM, MS, etc.)	MS

ENGINE – EXHAUST SYSTEM

Type (single, single with cross-over, dual, other)	Single	Single w/ crossover	Dual	Dual (a)	Dual
Muffler No. & type (reverse flow, straight thru, separate resonator)	One, reverse		2-reverse, 2-resonator		
Exhaust pipe dia. (O.D., wall thick.)	Branch	--	1.75x0.067	--	(b)
	Main	1.88x0.067	2.00x0.067	2.25 x 0.075	2.50 x 0.075
Tail pipe dia. (O.D. & wall thickness)	1.88x0.043	2.00x0.043	2.25 x 0.043		

ENGINE – CRANKCASE VENTILATION SYSTEM

Type (ventilates to atmos., induction system, other)	Standard	Induction system
	Optional	--
Control Unit	Make and model	2951243 or 2951891
	Location	Cylinder head cover outlet
	Energy source (manifold vacuum, carburetor air stream, other)	Manifold vacuum
	Control method (variable orifice, fixed orifice, other)	Variable orifice
Complete system	Discharges (to intake manifold, carb. air intake, air cleaner intake, other)	Intake manifold, at or below base of carburetor
	Air inlet (breather cap, carburetor air cleaner, other)	Tube from carburetor air cleaner intake horn to oil filler cap
	Flame arrestor (screen, check valve, other)	Check valve

- (a) 383 CID, 1, 2-V: single with crossover
- (b) 383 CID, 1, 2-V: 1.88 x 0.075

AMA Specifications—Passenger Car

DODGE
 MAKE OF CAR CHALLENGER MODEL YEAR 1970 DATE ISSUED 10-6-69 REVISED (*)3-20-70

MODEL _____ All Engines

ENGINE – EXHAUST EMISSION CONTROL

Type (Air injection, engine modifications, other)		Engine Modifications; Cleaner Air System	
Air Injection Pump	Type	Not applicable	
	Displacement	"	
	Drive ratio	"	
	Drive type	"	
	Relief valve (type)	"	
	Filter (describe)	"	
Air Injection System	Air distribution (head, manifold, etc.)	"	
	Point of entry	"	
	Injection tube I.D.	"	
	Check valve type	"	
	Backfire protection (type)	"	
Carburetor	Make	See Page 10	
	Model	"	
	Barrel size	"	
	Idle speed	Drive	"
		Neutral	"
Idle A/F mixture	"		
Distributor	Aux. Adv. Systems (type)	None	
	Make	Chrysler	
	Model	See page 13	
	Cent'fgal adv. in crank degrees @ eng. rpm	Start (rpm)	"
		Intermed. points deg. @ rpm	"
		Max. deg. @ rpm	"
	Vacuum adv. in crank degrees @ eng. rpm	Start (in Hg)	"
		Intermed. points deg. @ in. Hg	"
Max. deg. @ in.		"	
Vacuum Source	Carburetor port		
Timing - Crank degrees @ rpm:	See page 13		
Cooling System	None		
Exhaust System	None		

AMA Specifications—Passenger Car

DODGE
MAKE OF CAR CHALLENGER **MODEL YEAR** 1970 **DATE ISSUED** 10-6-69 **REVISED** (a) 3-20-70

	See Page 3 for Engine Usage			
MODEL	225 CID	318 CID	340 CID	426 CID

ENGINE – FUEL SYSTEM

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

Induction type: Carburetor, fuel injection, supercharger.		Carburetor		
Fuel Tank	Refill capacity (U.S. gals.)	18		
	Filler location	Outside right rear fender		
Fuel Pump	Type (elec. or mech.)	Mechanical		
	Locations	Right center	Right front	
	Pressure range	3.5 to 5	5 to 7	7 to 8.5
Vacuum booster (std., optional, none)		None		
Fuel Filter	Type	Fuel tank: plastic; fuel line: paper		
	Locations	One in fuel tank, one in supply line		
	Choke type	Automatic separate		(a)
	Intake manifold heat control (exhaust or water)	Exhaust		
Carburetor	Air cleaner type	Standard	Paper element	
		Optional	--	
	Idle speed (spec. neutral or drive) neutral	Manual	750	750
	Automatic	700	700	900
	Idle A/F mix.	14.0 to 14.4		

CARBURETOR SUPPLEMENTARY INFORMATION

Model Usage	Engine Displ.	Transmission	Carburetors			No. Used and Type	Barrel Size
			Make	Ex. Calif.	Calif. Only		
6-Cyl	225	Manual	Holley	R-4351A	R-4353A	1, 1-V	1.69
		Automatic		R-4352A	R-4354A		
V-8	318	Manual	Carter	BBD-4721S	BBD-4723S	1, 2-V	1.44
		Automatic		BBD-4722S	BBD-4724S		
		Automatic		BBD-4895S	--		
	426	Manual	Carter	AVS-4933S	AVS-4936S	1, 4-V	P: 1.44 S: 1.69
		Automatic		AVS-4934S	AVS-4937S		
		Automatic		AVS-4935S	--		
All	426	Manual	Carter	Front		2, 4-V	Primary 1.44 Secondary 1.69
				AFB-4742S			
				Rear			
		AFB-4745S					
		Front					
		AFB-4742S					
Automatic	Automatic	Rear					
		AFB-4746S					
		Rear					

(a) Front: none; rear: automatic, integral

AMA Specifications—Passenger Car

DODGE

MAKE OF CAR CHALLENGER MODEL YEAR 1970 DATE ISSUED 10-6-69 REVISED (*)

		See Page 3 for Engine Usage				
		383 CID			440 CID	
MODEL		1, 2-V	1, 4-V	Hi-Perf	Hi-Perf	3, 2-V

ENGINE – FUEL SYSTEM

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

Induction type: Carburetor, fuel injection, supercharger.		Carburetor				
Fuel Tank	Refill capacity (U.S. gals.)	18				
Fuel Tank	Filler location	Outside right rear fender				
Fuel Pump	Type (elec. or mech.)	Mechanical				
Fuel Pump	Locations	Right front of engine				
Fuel Pump	Pressure range	3.5 to 5.0 psi				
Vacuum booster (std., optional, none)		None				
Fuel Filter	Type	Fuel tank - plastic; Fuel line - paper				
Fuel Filter	Locations	One in fuel tank; One in supply line				
Carburetor	Choke type	Automatic, separate				(a)
	Intake manifold heat control (exhaust or water)	Exhaust				
	Air cleaner type	Paper element				
Carburetor	Standard	--				
	Optional	--				
	Idle speed (spec. neutral or drive) neutral	Manual	750	--	750	900
	Automatic	650	700	750	800	900
	Idle A/F mix.	14.0 to 14.4				

CARBURETOR SUPPLEMENTARY INFORMATION

Model Usage	Engine Displ.	Transmission	Carburetors			No. Used and Type	Barrel Size
			Make	Ex. Calif.	Calif. Only		
Without A/C	383	Automatic	Holley	R4371A	R4373A	1, 2-V	1.56
With A/C				R4373A			
Without A/C			Carter	BBD-4726S	BBD-4728S		
With A/C				BBD-4894S			
Without A/C	383	Automatic	Carter	AVS-4376S	AVS-4734S	1, 4-V	P: 1.44
With A/C				AVS-4732S			S: 1.69
All	383	Manual	Holley	R-4367A	R-4217A	1, 4-V	P: 1.56 S: 1.75
Without A/C		Automatic		R-4368A	R4218A		
With A/C		R-4369A					
All	440	Manual	Carter	AVS-4737S	AVS-4739S	1, 4-V	1.69
Without A/C		Automatic		AVS-4738S	AVS-4740S		
With A/C		AVS-4741S					
All	440	All	Holley	Front		3, 2-V	1.75
				R-4382A	R-4175A		
				Rear			
				R-4383A	R-4365A		
				Center			
				R-4375A	R-4374A		
Manual	440	Automatic	Holley	R-4376A	R-4145A	1.50	
Automatic							

(a) Automatic, separate on center carburetor; none on front or rear carburetors

AMA Specifications—Passenger Car

DODGE						
MAKE OF CAR	CHALLENGER	MODEL YEAR	1970	DATE ISSUED	10-7-69	REVISED (*)
See Page 3 for Engine Usage						
MODEL	225 CID	318 CID	340 CID	383 CID	426 CID Hemi	440 Hi-Perf & 3, 2-V

ENGINE – COOLING SYSTEM

Type system (pressure, pressure vented, atmospheric, other)		Pressure vented					
Radiator cap relief valve pressure		16					
Circulation thermostat	Type (choke, bypass)	Choke, pellet					
	Starts to open at (°F)	190	195	190 (a)			
Type (centrifugal, other)		Centrifugal					
Water pump	GPM @ 1000 pump rpm	--					
	Number of pumps	One					
	Drive (V-belt, other)	V-belt					
	Bearing type	Ball, integral shaft, permanently sealed					
By-pass recirculation type (inter., ext.)		External		Internal			
Radiator core type (cellular, tube and fin, other)		Tube & spacer					
Cooling system capacity	With heater (qt.)	13	16		15.5		
	Without heater (qt.)	12	15		14.5		
	Opt. equipment-specify (qt.) A/C	13	16		15.5		
Water jackets full length of cyl. (yes, no)		No	Yes		No		
Water all around cylinder (yes, no)		Yes					
Radiator hose	Lower	Number and type (molded, straight)	One, molded				
		Inside diameter	1.50		1.75		
	Upper	Number and type (molded, straight)	One, molded				
		Inside diameter	1.50				
	By-pass	Number and type (molded, straight)	One Straight	One, molded		None	
		Inside diameter	0.68	0.80		--	
Fan	Number of blades & spacing		4		7		
	Diameter		17	18	18.5	18	18.5
	Ratio-fan to crankshaft rev.		1.07:1	0.95:1		1.20:1	0.95:1
	Fan cutout type		Thermal			Torque	
	Bearing type		See water pump bearing above				
* Drive belts (indicate belt used by letter)	Fan		A	D	G	I	G
	Generator or alternator		A	D	G	I	G
	Water Pump		A	D	G	I	G
	Power Steering		B	E	H	K	H
	Air Conditioning		C	F	I	--	I

* Drive Belt Dimensions	A	B	C	D	E	F	G	H	I	J	K
Angle of V Degrees	36	36	36	36	36	36	36	36	36	36	36
Nominal length (SAE)	57.0	40.75	53.0	47.50	38.0	54.0	46.5	44.0	59.50	45.0	39.38
Width	.38	.38	.50	.38	.38	.38	.38	.38	.38	.38	.50

(a) 383 CID 1, 2-V: 195

AMA Specifications—Passenger Car

DODGE
 MAKE OF CAR CHALLENGER MODEL YEAR 1970 DATE ISSUED 10-7-69 REVISED (a)
 See Page 3 for Engine Usage

MODEL	225 CID	318 CID	340 CID	383 CID	426 CID Hemi	440 Hi-Perf; 3, 2-V

ELECTRICAL – SUPPLY SYSTEM

Battery	Make and Model		2875951	2875320	2642969
	Voltage Rtg. & Total Plates		12, 54	12, 66	12, 78
	SAE Designation & Amp. Hr. Rtg.		46 amp	59 amp	70
	Location		Left front fender shield		
	Terminal grounded		Negative		
Alternator	Make		Chrysler		
	Model		3438172	3438176	3438172
	Type and rating (a)		37 amp		
	Output at engine idle (neutral)		--		
	Ratio—Gen. to Cr/s rev.		2.70:1	2.55:1	2.12:1 2.55:1
Regulator	Make		Chrysler		
	Model		3438150		
	Type		Voltage control		
	Cutout relay	Closing voltage generator rpm	--		
		Reverse current to open	--		
	Regulated	Voltage	13.8 to 14.4 @ 80° ambient		
		Current	--		
	Voltage test conditions	Temperature	80° F		
Load		15 amp			
Other		--			

ELECTRICAL – STARTING SYSTEM

Starting Motor	Make		Chrysler			
	Model		2875560			
	Rotation (drive end view)		Clockwise			
Motor control	Switch (solenoid, manual)		Solenoid			
	Starting procedure		(b)			
Motor Drive	Engagement type		Solenoid			
	Pinion meshes (front, rear)		Front			
	Number of teeth	Pinion	10 (c)			
		Flywheel	Manual	122	130	172
			Auto.	122	130	
Flywheel tooth face width	Manual	0.340				
	Auto.	0.340				

(a) Three-phase full-wave rectified

(b) With transmission in "Neutral" or "Park" depress accelerator pedal to floor and release. If car is equipped with manual transmission, the clutch pedal must be held to the floor while starting engine. Turn ignition key to start position and release when engine starts. When engine is running smoothly tap accelerator pedal to reduce fast idle speed.

(c) 426 CID: nine teeth with manual transmission.

AMA Specifications—Passenger Car

DODGE

MAKE OF CAR CHALLENGER **MODEL YEAR** 1970 **DATE ISSUED** 10-7-69 **REVISED** (*)

See Page 3 for Engine Usage

MODEL	225 CID	318 CID	340 CID	383 CID	426 CID	440 CID
				2-V	4-V;Hi-Perf	Hemi Hi-Perf 3, 2-V

ELECTRICAL – IGNITION SYSTEM

Type	Conventional – Std., Opt., N.A.		Std					
	Transistorized – Std., Opt., N.A.		NA					
	Other (specify)		--					
Coil	Make		Chrysler-Essex or Chrysler Prestolite					
	Model		2444241		2444242			
	Amps	Engine stopped	3.0					
Engine idling		1.9						
Distributor	Make		Chrysler	(a)	Chrysler	Prestolite		
	Model		See page 13A					
	Cent'fgal adv. in c/shaft degrees @ engine rpm (nominal)	Start (rpm)		"				
		Intermediate points deg. @ rpm		"				
		Max. deg. @ rpm		"				
	Vacuum adv. in c/shaft degrees @ in. Hg. (nominal)	Start (in. Hg.)		"				
		Intermediate points, deg. @ in. Hg.		"				
		Max. deg. in. Hg.		"				
	Breaker gap (in.)		(b)	(c)	0.016 to 0.021	(c)	(d)	(c)
	Cam angle (deg.)		41 to 46	30 to 34	(e)	28.5 to 32.5	(e)	(f)
Breaker arm tension (oz.)		17 to 20		(g)	17 to 20	(g)	17 to 20	(g)
Timing	Crankshaft deg. @ rpm idle		See page 13A					
	Mark location		"					
Spark Plug	Make & Model	Mopar	P-6-6P	--	P-3-6P	P-3-4P	--	P-3-4P
		Champion	N-14Y	N9Y	J-14Y	J-11Y	N-10Y	J-11Y
	Thread (mm)		14 mm					
	Tightening torque (lb. ft.)		30 to 32					
Gap		0.035						
Cable	Conductor type		Resistor					
	Insulation type		(h)	Synthetic rubber with Hypalon jacket				
	Spark plug protector		Hypalon	Silicone				

ELECTRICAL – SUPPRESSION

Locations & type	Resistance type spark plug and coil cables
------------------	--

- (a) Prestolite
- (b) 0.017 to 0.023
- (c) 0.014 to 0.019
- (d) 0.016 to 0.021
- (e) One set of points 27 to 32; both sets of points 37 to 42
- (f) 28.5 to 32.5
- (g) 17 to 21.5
- (h) Synthetic rubber with Neoprene jacket

AMA Specifications—Passenger Car

DODGE
 MAKE OF CAR CHALLENGER MODEL YEAR 1970 DATE ISSUED 10-7-69 REVISED (*)3-20-70

AVAILABILITY

(See Page 3 for Engine Usage)

Distributor	Manual Automatic	225 CID	318 CID	340 CID	383 CID		426 CID Hemi		440 CID	
					2-V	4-V	Hi-Perf	Hi-Perf	Hi-Perf	
Timing (a)	Manual	2875822	3438255	3438317	3438231	3438233	2875987	3438222	3438314	3, 2-V
	Automatic	2875826	3438225	3438325			2875989			
		TDC		5 BTC	10 BTC	--	10 BTC	10 BTC	12-1/2 BTC	12-1/2 BTC
					12-1/2 BTC		2-1/2 BTC	12-1/2 BTC		

(a) Transmission in neutral, crankshaft degrees @ engine idle rpm (See page 10) Distributor Solenoid disengaged.

SPECIFICATIONS

DISTRIBUTOR PART NUMBER	CENTRIFUGAL ADVANCE Crankshaft Degrees at Engine RPM			VACUUM ADVANCE Crankshaft Degrees at Inches of Mercury	
	Start	Intermediate	Maximum	Start	Maximum
2875822	2 to 10 @ 1100	18.4 to 22.4 @ 1800	24 to 28 @ 4000	1 to 7 @ 10	10.5 to 15.25 @ 15
2875826	2 to 10 @ 1100	18.4 to 22.4 @ 1800	24 to 28 @ 4000	1 to 7 @ 7	10.5 to 15.25 @ 10
2875982	0 to 10.6 @ 1200	18 to 22 @ 1700	24 to 28 @ 4800	1 to 7 @ 11	19 to 25 @ 15.5
2875987	0 to 9 @ 1300	24.4 to 28.4 @ 2100	28 to 16 @ 3200	0 to 7 @ 9	13.4 to 18.4 @ 13.5
2875989	0 to 8.4 @ 1200	19.4 to 23.4 @ 1900	23 to 27 @ 3200	0 to 7 @ 9	13.4 to 18.4 @ 13.5
3438222	0 to 9.2 @ 1200	11.2 to 15.2 @ 1600	20 to 24 @ 4600	1 to 8.6 @ 10.5	9.4 to 24 @ 15.5
3438225	2 to 12 @ 1100	17 to 21 @ 1600	28 to 32 @ 4200	1.5 to 4.5 @ 12	8.5 to 21.5 @ 15
3438231	0 to 7.6 @ 1100	15 to 19 @ 1700	28 to 16 @ 4400	1.0 to 4 @ 7.5	18.6 to 23.6 @ 12
3438233	0 @ 950	16.5 @ 1600	26 @ 3600	1 to 8.6 @ 10.5	19.4 to 24 @ 15.5
3438255	2 to 12 @ 1100	17 to 21 @ 1600	28 to 32 @ 4200	2 to 8 @ 10.5	16.5 to 21.5 @ 15
3438314	0 to 9.0 @ 1300	18 to 22 @ 1900	24 to 28 @ 4800	1 to 7 @ 11	19 to 25 @ 15.5
3438317	3 to 13 @ 1400	16 to 20 @ 1800	--	2 to 9.2 @ 7.7	14 to 20 @ 10.5
3438325	3 to 11 @ 1300	16 to 20 @ 1700	--	1 to 7 @ 9	14 to 20 @ 25

AMA Specifications—Passenger Car

DODGE
MAKE OF CAR CHALLENGER **MODEL YEAR** 1970 **DATE ISSUED** 10-6-69 **REVISED** (a)

MODEL All Models

ELECTRICAL – INSTRUMENTS AND EQUIPMENT

Speed-ometer	Type	In-line drive pointer
	Trip odometer (yes,no)	Opt with 150 mph (a)
Charge indicator – type		Ammeter
Temperature indicator – type		Electric, thermal
Oil pressure indicator – type		Electric, thermal
Fuel indicator – type		Electric, thermal
Other		Brake system and parking brake warning light
Wind-shield wiper	Type – Standard	Electric, two-speed
	Type – Optional	Electric, variable-speed
Wind-shield washer	Type – Standard	Foot-operated pump
	Type – Optional	Electric
Horn		Four-inch sea shells
Number used		2
Amp draw (each)		Sparton: 6-8 amp; Prestolite: 4-6 amp

DRIVE UNITS – CLUTCH (Manual Transmission)

MODEL	225 CID	318 CID	340 CID	426 CID	383 CID	440 CID
Make & type	Auburn, Borg & Beck		Borg & Beck			
Type	dry plate					
Type	pressure plate springs					
Total spring load (lb.)	1375	1693	2181	2523	2181	2523
No. of clutch driven discs	One					
Clutch facing	Material					
	Woven asbestos					
	Outside & inside dia.	9.25 x 6.00	10.5 x 6.5	11.0 x 7.0	11.0 x 6.5	11.0 x 7.0
	Total eff. area (sq.in.)	77	106.8	113.1	123.6	113.1
Clutch facing	Thickness	0.114	0.125	0.135	0.135	
	Engagement cushioning method	Two-piece cushion	Flat-wave springs			
Release bearing	Type & method of lubrication					
Ball bearing, permanently lubricated						
Torsional damping	Methods: springs, friction material					
Coil springs and friction washers						

(a) Push-button reset

AMA Specifications—Passenger Car

DODGE
MAKE OF CAR CHALLENGER **MODEL YEAR** 1970 **DATE ISSUED** 10-6-69 **REVISED** (*)

See Page 3 for Engine Usage

MODEL _____	225 CID	318 CID	340 CID	383 CID	426 CID	440 CID
--------------------	---------	---------	---------	---------	---------	---------

DRIVE UNITS – TRANSMISSIONS

Manual 3-speed (std. or opt.)	Std (a)	NA
Manual 4-speed (std. or opt.)	NA	Opt (a)
Manual with overdrive (std. or opt.)	NA	
Automatic (std. or opt.)	Opt (b)	

DRIVE UNITS – MANUAL TRANS.

		3		4		
		(c)	w/ 340-, 383CID	(d)	w/426-, 440 CID	
Transmission ratios	In first	3.08	2.55	2.47	2.44	
	In second	1.70	1.49	1.77	1.77	
	In third	1.00		1.34		
	In fourth	--		1.00		
	In reverse	2.90	3.34	2.40	2.36	
Synchronous meshing, specify gears		1, 2, 3		1, 2, 3, 4		
Shift lever location		Floor		Floor or console		
Lubricant	Capacity (pt.)	4.75		7.5		
	Type recommended	DEXRON Type Auto. Trans. Fluid		SAE 140		
	SAE viscosity number	Summer	NA		SAE 140	
		Winter	NA		SAE 140	
		Extreme cold	NA		SAE 90	

DRIVE UNITS – MANUAL TRANS. W/OVERDRIVE

(For transmission data see manual transmission section)

Type (planetary or other)		
Manual lockout (yes, no)		
Downshift accelerator control (yes, no)		
Minimum cut-in speed		
Gear ratio		
Lubricant	Capacity (pt.) (Overdrive only)	
	Separate filler (yes, no)	
	Type recommended	
	SAE viscosity number	Summer
		Winter
Extreme cold		

- (a) NA with 383 CID 1, 2-V
- (b) Std with 383 CID 1, 2-V
- (c) With 225, 318 CID
- (d) With 318, 340, 383 CID

AMA Specifications—Passenger Car

	DODGE		
MAKE OF CAR	CHALLENGER	MODEL YEAR	1970
		DATE ISSUED	10-6-69
		REVISED (a)	
See Page 3 for Engine Usage			
MODEL	225 CID	318 CID	340 CID
	383 CID	426 CID	440 CID
	2-V	4-V; Hi-Perf	Hemi
			Hi-Perf; 3, 2-V

DRIVE UNITS – AUTOMATIC TRANSMISSION

Trade name	TorqueFlite							
Type describe	Torque converter with automatically-operated planetary gear transmission							
Selector location	Lever: steering column or console-mounted							
List gear ratios Selector Pattern and indicate which are used in each selector position	Reverse: 2.20 Drive: 2.45, 1.45, 1.00 2: 2.45, 1.45 1: 2.45							
Max. upshift speed—drive range	76	83	74	85	74	93	76	
Max. kickdown speed—drive range	68	74	67	76	67	84	69	
Torque convertor	Number of elements Three							
	Max. ratio at stall		2.1:1		2.0:1		2.1:1	
	Type of cooling (air, liquid) Liquid							
Lubricant	Nominal diameter		10.75		11.75		10.75	
	Capacity—refill (pt.)		17.0		16.0		19.0	
Special transmission features	DEXRON Automatic Transmission Fluid or Type AQ-ATF-2848A							
	None							

DRIVE UNITS – PROPELLER SHAFT

Number used	One							
Type (straight tube, tube-in-tube, internal-external damper, etc.)	Straight tube							
Outer diam. x length* x wall thickness	Manual 3-speed trans.	2.75 x 46.06 x 0.065	3.00 x 45.85 x 0.065	3.00 x 45.60 x 0.065	--	3.00 x 45.60 x 0.065	--	
	Manual 4-speed trans.	--	3.00 x 45.85 x 0.065	3.00 x 45.60 x 0.065	--	3.00 x 45.60 x .065 (a)	3.25 x 44.60 x 0.065 (b)	
	Overdrive transmission	NA						
	Automatic transmission	3.00 x 52.57 x 0.065	3.00 x 45.60 x 0.065	3.00 x 45.85 x 0.065	3.25 x 44.60 x 0.065 (b)			

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

(Continued)

(a) 383 CID Hi-perf: 3.25 x 45.60

(b) With 8-3/4 axle: 45.60

AMA Specifications—Passenger Car

DODGE									
MAKE OF CAR	CHALLENGER	MODEL YEAR	1970	DATE ISSUED	10-6-69	REVISED (●)			
MODEL	225 CID	318 CID	340 CID	383 CID All	426 Hemi	440 CID Hi-Perf; 3, 2-V			

DRIVE UNITS – PROPELLER SHAFT (cont.)

Intermediate bearing	Type (plain, anti-friction)	None					
	Lubrication (fitting, prepack)	None					
Slip Yoke	Type	Sliding spline					
	Number of teeth	25			29		
	Spline O.D.	1.156			1.325		
Universal joints	Make Chrysler	Mf. No.	7260 F & R	(a)	7260 F 7290 R	(a)	7290 F & R
	Number used		Two				
	Type (ball and trunnion, cross)		Cross				
	Rear attach. (u-bolt, clamp, etc.)		C-clamp				
	Bearing	Type (plain, anti-friction)	Anti-friction				
		Lubric. (fitting, prepack)	Prepack				
Drive taken through (torque tube or arms, springs)		Rear springs					
Torque taken through (torque tube or arms, springs)		Rear springs					

DRIVE UNITS – AXLE

Type (front, rear)		Rear					
Description	Carrier & hous.	Unitized	Separable		Unitized		
	Ring gear	7-1/4 OD	8-3/4		9-3/4		
Limited Slip differential, type		Friction bias					
Drive Pinion Offset		1.625	1.50		1.125		
No. of differential pinions		2 (all)		2 (all)		4	
Pinion adjustment (shim, other)		Washer			Shim		
Pinion bearing adj. (shim, other)		Solid spacer		Collapsible spacer		Shim	
Wheel bearing type		Ball		Tapered roller			
Lubricant	Capacity (pt.)	2		4		5-1/2	
	Type recommended	MIL-L-2105B		2933565		(b)	
	SAE viscosity number	Summer	Above -10F			SAE 90	
		Winter	Between -10F & 30F			SAE 80	
		Extreme cold	Below -30F			SAE 75	

AXLE RATIO TOOTH COMBINATIONS

(See page 3 for axle ratio usage)

Axle ratio	2.76		3.23		3.54	3.55	3.91	4.10
No. of teeth	Pinion	17		13		11		11
	Ring gear	47		42		46		43
Ring Gear O.D.	7-1/4	8-3/4	7-1/4	8-3/4	9-3/4	8-3/4	8-3/4	9-3/4

(a) With 7-1/4 axle: 7260 F & R; with 8-3/4 axle: 7260 F & 7290 R

(b) Special SURE-GRIP Lubricant 2585318

AMA Specifications—Passenger Car

DODGE							
MAKE OF CAR	CHALLENGER	MODEL YEAR	1970	DATE ISSUED	10-6-69 REVISED (a) 3-20-70		
MODEL	225 CID 318 CID	383 CID	340 CID	440 CID	426 CID		

DRIVE UNITS – WHEELS

Type & material		Disc, steel				
Rim (size & flange type)	Std.	14 x 5.0 J (a)	14 x 6.0 JJ	14 x 6.0 JJ	14 x 6.0 JJ	15 x 7.0 JJ
	Opt.	14 x 5.5 JJ (b)	14 x 5.5 JJ (c) 15 x 7.0 JJ (d)	15 x 7.0 JJ, rallye 14 x 5.5 JJ	14 x 5.5 JJ (c) 15 x 7.0 JJ (d)	15 x 7.0 JJ, rallye 14 x 5.5 JJ
Attachment	Type (bolt or stud)	Stud				
	Circle diameter	4.5				
	Number and size	Five, 1/2-20 NF				

MODEL

DRIVE UNITS – TIRES

Standard	Size, ply rating, & ply	E78 x 14, 4-2/4	F70 x 14, 4-2/4	F70 x 14, 4-2/4	F70 x 14, 4-2/4	F60 x 15, 4-2/4	
	Type (bias, radial, etc.)	Bias with fiberglass belt					
	Full rated Inflation Press.	Front	26	25	28	25	28
		Rear	30	28	32	28	32
	Rev./Mile at 50 MPH	803 (j)		798 (k)		800 (j)	
Optional	Size, ply rating, & ply	E70 x 14, 4-2/4 F70 x 14, 4-2/4 (e) 7.75 x 14, 4-2 (f)	7.75 x 14, 4-2 (f) E60 x 15, 4-2/4 (g)	7.75 x 14, 4-2 (f, g) E60 x 15, 4-2/4	7.75 x 14, 4-2 (f) E60 x 15, 4-2/4 (g, h)	7.75 x 14, 4-2 (b, g)	

BRAKES – PARKING

Type of control		Foot-operated pedal, hand release lever
Location of control		Under left end of instrument panel
Operates on		Rear wheels
If separate from service brakes	Type (internal or external)	--
	Drum diameter	--
	Lining size (length x width x thickness)	--

- (a) With AC: 14 x 5.5 JJ
- (b) Available in std, rallye or magnum 500
- (c) Magnum 500 wheel or rallye wheel
- (d) Available std or rallye
- (e) Not available with 225 CID or 10" drum brakes
- (f) Bias type, no belt
- (g) Available S-Price only with 11" drum or disc brakes and Heavy-duty suspension
- (h) Not available convertible with AC
- (j) At 28 psi
- (k) At 24 psi

AMA Specifications—Passenger Car

MAKE OF CAR DODGE CHALLENGER MODEL YEAR 1970 DATE ISSUED 10-6-69 REVISED (•) 3-20-70

	225 CID	318, 340, 383, 2-V & 4-V	383 Hi-Perf: 426; 440 Hi-Perf: 440 3, 2-V	All
--	---------	-----------------------------	---	-----

MODEL _____
BRAKES – SERVICE

Type (drum) or (disc & no. of pistons)		Drum		Disc, 1	
Self adjusting (std., opt., N.A.)		Std			
Special Valving	Type (proportion, delay, metering, other)	--		(a)	
Power brake make & type (remote, int., etc.)	Std. Opt.	-- Integral		Tandem --	
Effective area (sq. in.) *		195.2	195.2	234.1	
Gross lining area (sq. in.) **		195.2	195.2	234.1	
Swept area (sq. in.) ***		314.2	314.2	380.1	
Front to Rear Effectiveness Relationship		Front 60; Rear 40			
Drum	Diameter (nominal)	Front	10	11	
		Rear	10	11	
	Type and material	Centrifuse or cast composite, cast iron		--	
Rotor	Outer working diameter	--		10.72	
	Inner working diameter	--		7.14	
	Working width	--		1.79	
	Material & type (vented/solid)	--		Vented; cast iron	
Wheel cylinder bore	Front	1.187		2.75	
	Rear	0.9375		•	
Master Cylinder	Bore	1.00		1.125	
	displacement distribution	Front %	60	75	
		Rear %	40	25	
Pedal arc ratio		Manual: 6.64 Power: 3.18		•	
Line pressure at 100 lb. pedal load		800		1100	
Shoe Clearance	Front	No major adjustment required			
	Rear	No major adjustment required			
Brake lining	Bonded or riveted		Bonded		
	Front Wheel	Material	Molded asbestos		
		Size (length x width x thickness)	Prim. or out-board	8.46 x 2.5 x 0.19	9.31 x 3.00 x 0.19
			Second. or in-board	11.06 x 2.5 x 0.24	11.97x3.00x0.24
	Segments per shoe	One			
	Rear Wheel	Material	Molded asbestos		
		Size (length x width x thickness)	Prim. or out-board	8.46 x 2.5 x 0.19	9.31 x 2.5 x 0.19
Second. or in-board			11.06 x 2.5 x 0.24	11.97x2.5x0.24	
Segments per shoe	One				

* Excludes rivet holes, grooves, chamfers, etc. ** Includes rivet holes, grooves, chamfers, etc.
 *** Total swept area for four brakes. (Widest lining contact width for each brake x its contact circumference.)

- (a) Front: proportioning; rear: residual pressure
- (b) Area x thickness

AMA Specifications—Passenger Car

DODGE
 MAKE OF CAR CHALLENGER MODEL YEAR 1970 DATE ISSUED 10-7-69 REVISED (*)

MODEL

All Models

STEERING

Manual (std., opt., NA)		Std	
Power (std., opt., NA)		Opt	
Adjustable steering wheel (tilt, swing, other)	Type and description (std., opt., NA)	--	
		NA	
Wheel diameter	Manual	16.0	
	Power	16.0	
Turning diameter (feet)	Outside front	Wall to wall (l. & r.)	42.31
		Curb to curb (l. & r.)	39.32
	Inside rear	Wall to wall (l. & r.)	22.58
		Curb to curb (l. & r.)	23.17
Manual	Gear	Type	Recirculating ball
		Make	Chrysler
	Ratios	Gear	Std 24.0:1
		Overall	Std 29.14:1
	No. wheel turns (stop to stop)	Std 5.37	
Power	Type (coaxial, linkage, etc.)		Integral
	Make		Chrysler
	Gear	Type	Recirculating ball
		Ratios	15.7:1
	Overall		24.06:1
	Pump driven by		Belt from crankshaft pulley
No. wheel turns (stop to stop)		3.5	
Linkage	Type		Parallelogram, equal length tie rods
	Location (front or rear of wheels, other)		Rear
	Drag link (trans. or longit.)		Transverse center link
	Tie rods (one or two)		Two
Steering Axis	Inclination at camber (deg.)		7.5° @ 0
	Bearings (type)	Upper	Ball joint
		Lower	Ball joint
		Thrust	Oil impregnated sintered metal
Whl. Align. (range at curb wt. & preferred)	Caster (deg.)		Manual steering -1-5/16 +1/16 Power steering -1/16 +1-5/16
	Camber (deg.)		Left +1/8 +7/8 Right -1/8 +5/8
	Toe-in (outside track inches)		1/32 to 7/32
Steering spindle & joint type		Ball joint	
Wheel Spindle	Diameter	Inner bearing	Drum & disc 1.2494
		Outer bearing	Drum & disc 0.7494
	Thread size		Drum & disc 3/4-16 UNF-3A
	Bearing type		Tapered roller

AMA Specifications—Passenger Car

DODGE		MODEL YEAR 1970		DATE ISSUED 10-7-69 REVISED (*)	
MAKE OF CAR CHALLENGER		See Page 3 for Engine Usage			
MODEL	225 CID	318 CID 383 1, 2-V	340 CID; 383 4-V & Hi-Perf.	426 Hemi; 440 Hi-Perf & 3, 2-V	

SUSPENSION – GENERAL

(See Supplement page for details on Air Suspension)

Provision for car leveling	Manual adjustment at torsion bar anchor bolt	
Provision for brake dip control	By inclined upper control arms and asymmetrical rear springs	
Provision for acc. squat control	Asymmetrical rear springs	
Special provisions for car jacking	None	
Shock absorber front & rear	Type	Direct
	Make	Chrysler
	Piston dia.	1.0
Other special features	None	

SUSPENSION – FRONT

Type and description	Independent, lateral, nonparallel control arms with torsion bars				
Spring	Type	Torsion bar			
	Material	Chromium alloy steel			
	Size (coil design height & I.D., bar length x dia.)	41 x 0.86	41 x 0.88	41 x 0.90	41 x 0.92
	Spring rate (lb. per in.)	NA			
	Rate at wheel (lb. per in.)	95	102	111	118
Stabilizer	Type (link, linkless, frameless)	Link			
	Material & bar diameter	0.88			

SUSPENSION – REAR

Type and description	Parallel, longitudinal leaf			
Drive and torque taken through	Rear springs			
Spring	Type	Semielliptical, asymmetrical		
	Material	Chromium alloy steel		
	Size (length x width, coil design height & I.D., bar length & dia.)	57 x 2.5		
	Spring rate (lb. per in.)	95	110	125
	Rate at wheel (lb. per in.)	115	132	150
	Mounting insulation type	Rubber		
If leaf	No. of leaves	4-1/2		5-1/2
	Shackle (comp. or tens.)	Compression		
Stabilizer	Type (link, linkless, frameless)	None		
	Material	--		
Track bar type	None			

AMA Specifications—Passenger Car

DODGE			
MAKE OF CAR	CHALLENGER	MODEL YEAR	1970
		DATE ISSUED	10-7-69
		REVISED (*)	
MODEL	23	27	29

FRAME

Type and description (Separate frame, unitized frame, partially - unitized frame)	Unit construction
---	-------------------

BODY – MISCELLANEOUS INFORMATION

Drs. hinged (front, tr.)	Front doors	Front	
	Rear doors	--	
Type of finish (lacquer, enamel, other)		Buffable acrylic enamel	
Hood counterbalanced (yes, no)		Yes	
Hood release control (internal, external)		External	
Vehicle Ident. No. location		Left end instrument panel	
Engine No. location		Not applicable	
Theft protection - type		Pin tumbler key locks on ignition switch, doors, luggage compartment, lockable steering and transmission shift	
Vent window control method (crank, friction pivot)	Front	None	
	Rear	None	
Seat cushion type	Front	Zigzag	
	Rear	Formed wire	
	3rd seat	--	
Seat back type	Front	Zigzag	
	Rear	Formed wire	
	3rd seat	--	
Windshield glass type (i.e., single curved - laminated plate)		Single curved laminated safety plate	
Side glass type (i.e., curved - tempered plate)		Curved heat treated safety sheet	
Backlight glass type (i.e., compound curved - tempered plate, three piece)		Single curved heat treated safety sheet	
Windshield glass exposed surface area		1265	
Side glass exposed surface area	1149	1165	1149
Backlight glass exposed surface area	750	575	466
Total glass exposed surface area	3164	3005	2880

AMA Specifications—Passenger Car

DODGE
MAKE OF CAR CHALLENGER **MODEL YEAR** 1970 **DATE ISSUED** 10-7-69 **REVISED** (*)

MODEL _____ All Models

CONVENIENCE EQUIPMENT

(Indicate whether standard, optional or NA on each series)

Power windows	Side windows	Opt
	Vent windows	Opt
	Backlight or tailgate	--
Power seats (specify type as well as availability)		NA
Reclining front seat back (R-L or both)		NA
Front seat head restrainer (R-L or both)		Std
Radios (specify type as well as availability)		Opt: AM or AM-FM (dealer-installed)
Rear seat speaker		Opt: except NA convertible
Power antenna		NA
Clock		Opt: std R/T
Air conditioner (specify type and availability)		Opt: front unit with heater except 426 CID 383 4-V, 440 Hi-Perf with manual transmission
Speed warning device		NA
Speed control device		Opt (NA 340, 426, 440 CID) TorqueFlite, power brake required
Ignition lock lamp		Opt
Dome lamp		Std: except NA convertible
Glove compartment lamp		Opt
Luggage compartment lamp		Opt
Underhood lamp		Opt
Courtesy lamp		Opt: Std convertible
Map lamp		--
Auto. trans. quad. lamp		Std with automatic transmission
Cornering light lamp		NA
Shoulder belts		Std: except Opt convertible
Trip odometer		Opt with rallye cluster (NA - 6-cyl)
Tachometer		Opt: Std R/T
Rear window defogger		Opt: except NA convertible
Trailer towing package		Opt (NA 6-cyl)

LAMP HEIGHT AND SPACING

Height above ground to center of bulb or marker	Headlamp	Highest *	
		Lowest	
	Tail	Highest	
		Lowest	
Sidemarker	Front		
	Rear		
Distance from C/L of car to center of bulb	Headlamp	Inside	
		Outside *	
	Tail	Inside	
		Outside	
	Directional	Front	
		Rear	

* If single headlamps are used enter here.

AMA Specifications—Passenger Car

DODGE

MAKE OF CAR CHALLENGER MODEL YEAR 1970 DATE ISSUED 10-7-69 REVISED (*) 3-20-70

WEIGHTS

6-CYLINDER MODELS Model	CURB WEIGHT * POUNDS			% PASS. WEIGHT DISTRIBUTION				LIQUID WEIGHT	
	Front	Rear	Total	Pass. In Front		Pass. In Rear		Fuel	Coolant
				Front	Rear	Front	Rear		
Challenger									
2-Door Hardtop	1735	1415	3150	44.9	55.1	18.4	81.6	114	31 ●
Convertible	1765	1455	3220	44.9	55.1	20.2	79.8	114	31 ●
2-Door Formal Coupe	1745	1405	3150	44.9	55.1	18.4	81.6	114	31 ●
V-8 Challenger									
2-Door Hardtop	1775	1425	3200	44.9	55.1	18.4	81.6	114	36 ●
Convertible	1815	1470	3285	44.9	55.1	20.2	79.8	114	36 ●
2-Door Formal Coupe	1790	1420	3210	44.9	55.1	18.4	81.6	114	36 ●
Challenger R/T									
2-Door Hardtop	1990	1565	3555	44.9	55.1	18.4	81.6	114	32 ●
Convertible	2030	1595	3625	44.9	55.1	20.2	79.8	114	32 ●
2-Door Formal Coupe	2000	1590	3590	44.9	55.1	18.4	81.6	114	32 ●
NOTE: All curb weights include automatic transmission									
Accessories & Equipment Differential Weights				Remarks					
Air Conditioning	104	-3	101	225 CID engine ●					
Air Conditioning	104	-3	104	318 CID engine ●					
3-Speed Manual Trans.	5	-4	1	225 CID engine					
3-Speed Manual Trans.	24	44	68	318 CID engine					
3-Speed Manual Trans.	-2	-1	-3	383 CID engine					
4-Speed Manual Trans.	48	51	99	318 CID engine					
4-Speed Manual Trans.	26	10	36	383 CID engine					
Power Steering	44	-2	42						
Power Brakes	9	1	10						
Radio	5	2	7						
Console	8	4	12						
Undercoat	17	9	36	●					

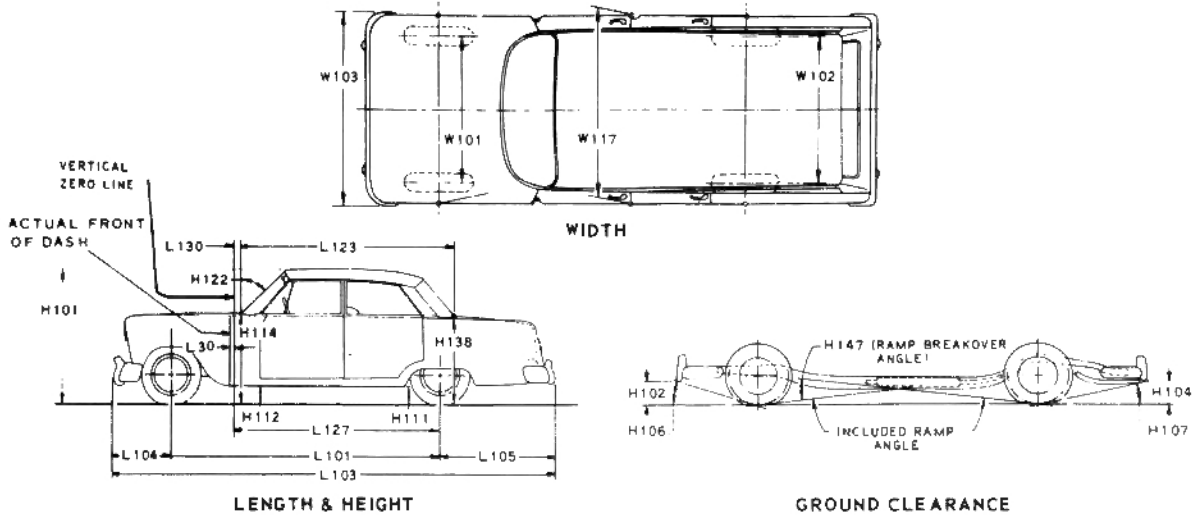
*Reference -- SAE Aerospace-Automotive drawing standards, Section E 1.02 (d).

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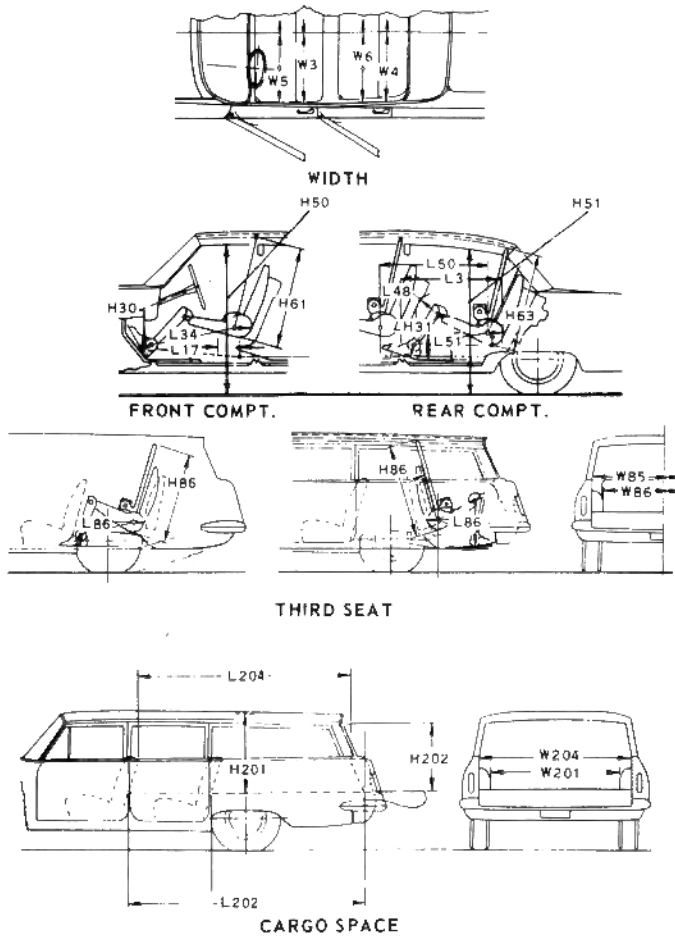
CAR AND BODY DIMENSIONS

KEY SHEET

EXTERIOR CAR AND BODY DIMENSIONS



INTERIOR CAR AND BODY DIMENSIONS



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CAR AND BODY DIMENSIONS

KEY SHEET

DIMENSION DEFINITIONS

EXTERIOR WIDTH DIMENSIONS

- W101 WHEEL TREAD - FRONT. Measured at centerline of tires, with nominal camber, at ground.
 W102 WHEEL TREAD - REAR. Measured at centerline of tires at ground.
 W103 MAXIMUM OVERALL CAR WIDTH. Include bumpers, moldings, or sheet metal protrusions. Measured to outside of metal.
 W117 MAXIMUM BODY WIDTH AT #2 PILLAR. Measured across body at #2 pillar, excluding hardware and applied moldings.

EXTERIOR LENGTH DIMENSIONS

- L 30 VERTICAL ZERO LINE TO ACTUAL FRONT OF DASH. If actual Front of Dash is to the rear of Body Zero Line, it is identified by a minus (-) sign.
 L101 WHEELBASE.
 L103 OVERALL LENGTH. Include bumper guards if standard equipment.
 L104 OVERHANG - FRONT. Measured from C/L of front wheels to front of car, including bumper guards if standard equipment.
 L105 OVERHANG - REAR. Measured from C/L of rear wheels to rear of car, including bumper guards if standard equipment.
 L123 BODY UPPER STRUCTURE LENGTH AT CAR CENTERLINE. The horizontal dimension from the Cowl Point to the Deck Point.
 L127 VERTICAL ZERO LINE TO CENTERLINE OF REAR WHEELS. A horizontal dimension.
 L130 VERTICAL ZERO LINE TO WINDSHIELD COWL POINT. The horizontal dimension from the vertical zero line to the theoretical intersection of extended windshield glass plane and normal cowl surface.

EXTERIOR HEIGHT DIMENSIONS

- H101 OVERALL HEIGHT - DESIGN. Measured with the vehicle in Manufacturer's Design Weight attitude.
 H114 COWL POINT TO GROUND. Measured at vehicle centerline.
 H138 DECK POINT TO GROUND. Measured at vehicle centerline.
 H112 ROCKER PANEL TO GROUND - FRONT. The vertical dimension from ground to bottom of rocker panel, excluding flanges. Measured to the outside of sheet metal at foremost point of rocker panel.
 H111 ROCKER PANEL TO GROUND - REAR. The vertical dimension from ground to bottom of rocker panel, excluding flanges. Measured to the outside of sheet metal at front of rear wheel opening.
 H122 WINDSHIELD SLOPE ANGLE. The angle between a vertical line and the windshield surface at car centerline. On compound-curved windshields the chord of the arc is used and limited to that section of the windshield comprehended by an 18-inch chord.

GROUND CLEARANCE DIMENSIONS

- H102 BUMPER TO GROUND - FRONT. Minimum dimension, includes bumper guards.
 H104 BUMPER TO GROUND - REAR. Minimum dimension, includes bumper guards.
 H106 ANGLE OF APPROACH. The angle between ground and a line tangent to the front tire static loaded radius arc and the first point of interference, i.e., bumper, guard, gravel deflector, fender or other component, excluding license plate. This dimension may be determined graphically for reporting purposes.
 H107 ANGLE OF DEPARTURE. The angle between ground and a line tangent to the rear tire static loaded radius arc and the first point of interference, i.e., bumper, guard, gravel deflector, tail pipe, fender or other component, excluding license plate. This dimension may be determined graphically for reporting purposes.
 H147 RAMP BREAKOVER ANGLE. The supplement of included ramp angle (180° minus included ramp angle) over which car can pass without interference, measured with car sitting on a level surface, using lines tangent to arcs of front and rear static loaded radii and intersecting at point on underside of car which defines the smallest angle.
 H156 MINIMUM RUNNING GROUND CLEARANCE. Location of measurement on the car is to be clearly recorded.

FRONT COMPARTMENT DIMENSIONS

- H 61 EFFECTIVE HEAD ROOM - FRONT. The dimension from H Point to the headlining, plus a constant of 4.0 inches, measured along a line 8° to rear of vertical.
 L 34 MAXIMUM EFFECTIVE LEG ROOM - ACCELERATOR. Measured along a diagonal line from the Manikin ankle pivot center to the H Point plus a constant of 10.0 inches. For treadle type accelerator pedals, the leg room is measured with the Manikin's right foot on the accelerator pedal and the Manikin Heel Point at Accelerator Heel Point. All other types of accelerator pedals will be measured with the Manikin foot angle set at 87° and the shoe touching the pedal.
 H 30 H POINT TO HEEL POINT - FRONT. The vertical dimension from the H Point to the Accelerator Heel Point.
 L 17 H POINT TRAVEL. The horizontal dimension between the H Point in the most forward and rearward seat positions.

FRONT COMPARTMENT DIMENSIONS (Cont.)

- W 3 SHOULDER ROOM - FRONT. The minimum lateral dimensions between the door garnish moldings or nearest interference, measured at the H Point station.
 W 5 HIP ROOM - FRONT. The lateral dimension through the H Point to trimmed body surfaces. Depress loose side wall cloth to trim foundation or other obstruction if such construction exists.
 H 50 UPPER BODY OPENING TO GROUND - FRONT. The vertical dimension from a point on the trimmed body opening to the ground, measured at the H Point station.

REAR COMPARTMENT DIMENSIONS

- L 50 H POINT COUPLE DISTANCE. The horizontal dimension from the front seat H Point to the rear seat H Point.
 H 63 EFFECTIVE HEAD ROOM - REAR. The dimension from the H Point to the headlining, plus a constant of 4.0 inches, measured along a line 8° to rear of vertical.
 L 51 MINIMUM EFFECTIVE LEG ROOM - REAR. Measured along a diagonal line from the ankle pivot center to the H Point plus a constant of 10.0 inches, with the foot positioned to the nearest interference between the seat structure and toe, instep or lower leg.
 H 31 H POINT TO HEEL POINT - REAR. The vertical dimension from the H Point to the Manikin Heel Point on the depressed floor covering.
 L 48 MINIMUM KNEE ROOM - REAR. The minimum dimension from the Manikin knee pivot center to the back of the front seat back.
 L 3 REAR COMPARTMENT ROOM. The horizontal dimension from the back of front seat to front of rear seat back at height tangent to the top of rear seat cushion.
 W 4 SHOULDER ROOM - REAR. The minimum lateral dimension between the door garnish molding or nearest interference. Measured at H Point station.
 W 6 HIP ROOM - REAR. The lateral dimension through H Point to trimmed body surfaces. Depress loose side wall cloth to trim foundation or other obstruction when such construction exists.
 H 51 UPPER BODY OPENING TO GROUND - REAR. The vertical dimension from a point on the trimmed body opening to the ground, measured 13.0 inches forward of the H Point.

LUGGAGE COMPARTMENT DIMENSIONS

- V 1 LUGGAGE CAPACITY - USABLE. The total luggage compartment luggage capacity in cubic feet with the tire and tools in place.
 H195 LIFTOVER HEIGHT. Vertical dimension from the highest point on the luggage compartment lower opening to ground, excluding corner radii.

STATION WAGON - THIRD SEAT DIMENSIONS

- W 85 SHOULDER ROOM - THIRD SEAT. The minimum lateral dimension between the door garnish moldings or nearest interference. Measured at H Point station.
 W 86 HIP ROOM - THIRD SEAT. The lateral dimension through H Point to trimmed surfaces.
 L 86 EFFECTIVE LEG ROOM - THIRD SEAT. Measured along a diagonal line from ankle pivot center to H Point plus a constant of 10.0 inches. With rear-facing third seat, foot is positioned in foot well or to nearest interference with rear end or rear closure.
 H 86 EFFECTIVE HEAD ROOM - THIRD SEAT. The dimension from H Point to the headlining, plus a constant of 4.0 inches. Measured along a line 8° to rear of vertical.

STATION WAGON - CARGO SPACE DIMENSIONS

- L202 CARGO LENGTH AT FLOOR - FRONT SEAT. The horizontal dimension, measured at the floor level from the rear of the front seat back to the normal inside limiting interference on the tailgate, on the car centerline.
 L204 CARGO LENGTH AT BELT - FRONT SEAT. The horizontal dimension measured from the top rear of front seat back to a vertical extension line from the normal inside limiting interference at the top of the tailgate, on the car centerline.
 W201 CARGO WIDTH - WHEELHOUSE. The minimum horizontal dimension, measured between wheelhouses at floor level.
 W204 OPENING WIDTH AT BELT. The minimum horizontal dimension, measured between the nearest normal inside limiting interferences of the rear opening at the top of the tailgate.
 H201 MAXIMUM CARGO HEIGHT. The maximum vertical dimension, measured from the top of the floor covering to the headlining, on the car centerline.
 H202 REAR OPENING HEIGHT. The vertical dimension measured from the top of the floor covering to the normal inside limiting interference at the top of the rear opening, on the car centerline, with both tail-and liftgates fully open.
 V 2 CARGO VOLUME INDEX BEHIND FRONT SEAT. The total volume in cubic feet above the normal load floor and behind the front seat with the liftgate and tailgate closed.

W4xL204xH201

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