

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1990

Manufacturer CHRYSLER MOTORS CORPORATION	Vehicle Line DODGE SPIRIT	
Mailing Address DETROIT, MICHIGAN 48288	Issued 9-15-89	Revised

Direct questions concerning these specifications to the manufacturer listed above.

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The General Specifications herein are those in effect at date of compilation and are subject to change without notice or incurring obligation by the manufacturer.

MVMA Specifications Form

METRIC (U.S. Customary)

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NOTE:

1. This form uses both SI metric units and U.S. Customary units. The metric unit of measure is presented first, and the U.S. Customary follows in parentheses.
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.
 - c. All linear dimensions are in millimeters (inches), and all mass (weight) specifications are in kilograms (pounds).
3. The General Specifications herein are those in effect at date of compilation and are subject to change without notice or incurring obligation by the manufacturer.
4. Additional Vehicle Dimensions (based in part on SAE J1100 "Motor Vehicle Dimensions") may be available from the manufacturer.

MVMA Specifications

Vehicle Line **DODGE SPIRIT**Model Year **1990** Issued **9-15-89** Revised (•) _____

METRIC (U.S. Customary)

Vehicle Origin

Design & Development (company)	Chrysler Motors Corporation
Where built (country)	U.S.A.
Authorized U.S. sales marketing representative	Dodge Division of Chrysler Motors Corporation

Vehicle Models

Model Description & Drive (FWD/RWD/AWD/4WD)*	Introduction Date	Make, Vehicle Models, Series, Body Type (Mfg'r's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk Cargo Load - Kilograms (Pounds)
Spirit 4-Door Sedan - FWD	October 1989	AADH41	5 (2/3) std. 6 (3/3) opt.	52 (115)
Spirit LE 4-Door Sedan - FWD	October 1989	AADP41	5 (2/3) std. 6 (3/3) opt.	52 (115)
Spirit ES 4-Door Sedan - FWD	October 1989	AADX41	5 (2/3) std.	52 (115)

* FWD - Front Wheel Drive RWD - Rear Wheel Drive AWD - All Wheel Drive 4WD - Four Wheel Drive

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Power Teams

SAE J1349 Net bhp (brake horsepower) and net torque corrected to 77°F (25 °C) and 29.61 in. Hg (100 kPa) atmospheric pressure.

		A	B	C	D	E	
E N G I N E	Engine Code	EDM	←	EDT	←	EFA	
	Displacement Liters (in ³)	2.5 (153.0)	←	←	←	3.0 (181.4)	
	Induction system (Fi, Carb., etc.)	TBI-EFI	←	SMPI Turbo	←	MPI	
	Compression ratio	8.9:1	←	7.8:1	←	8.9:1	
	SAE Net	Power kW (bhp)	75 (100) @ 4800	← ←	112 (150) @ 4800	← ←	105 (141) @ 5000
	at RPM	Torque N • m (lb. ft.)	183 (135) @ 2800	← ←	244 (180) @ 2000	← ←	232 (171) @ 3600
	Exhaust single, dual	single	←	←	←	←	
T R A N S	Transmission/ Transaxle	Manual 5-speed	Auto. 3-speed	Manual 5-speed	Auto. 3-speed	4-speed OD auto.	
	Axle Ratio (std. first) (a)	2.51:1	3.02:1	2.51:1	3.02:1	2.36:1	

[illegible]

(a) Overall top gear ratio

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Vehicle Line **DODGE SPIRIT**

Model Year **1990** Issued **9-15-89** Revised (•)

METRIC (U.S. Customary)

Engine Description
Engine Code

**2.5L (153.0 in³)
EFI, EDM**

**2.5L (153.0 in³)
SMPI Turbo I, EDT**

ENGINE - GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-camber, etc.)	Four cylinder, in-line, SOHC, front, transverse	
Manufacturer	Chrysler	
No. of cylinders	4	
Bore	87.5 (3.44)	
Stroke	104.0 (4.09)	
Bore Spacing (C/L to C/L)	96.0 (3.78)	
Cylinder block material & mass kg (lbs.) (machined)	Cast Iron 40.55 (89.4)	
Cylinder block deck height	237.8 (9.36)	
Cylinder block length	418 (16.46)	
Deck clearance (minimum) (above or below block)	0.00	0.1 (0.004), above
Cylinder head material & mass kg (lbs.)	Aluminum 9.71 (21.4)	Aluminum 10.66 (23.5)
Cylinder head volume (cm ³)	48.94 to 51.94	
Cylinder liner material	N.A.	
Head gasket thickness (compressed)	1.78 (0.070)	
Minimum combustion chamber total volume (cm ³)	73.815	92.24
Cyl. no. system (front to rear)*	L Bank	R to L as installed - 1, 2, 3, 4
	R Bank	--
Firing order	1, 3, 4, 2	
Intake manifold material & mass [kg (lbs.)]**	Aluminum 2.86 (6.3)	Aluminum 5.67 (12.5)
Exhaust manifold material & mass [kg (lbs.)]**	Cast Iron 6.08 (13.4)	Cast iron 5.17 (11.4)
Fuel required, unleaded, diesel, etc.	Regular unleaded	Premium unleaded
Fuel antiknock index (R + M) + 2	87 octane or higher	recommend 91 or higher, 87 or higher accept.
Engine mounts	Number	3
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Natural Rubber
	Added isolation (sub-frame, crossmember, etc.)	None
Total dressed engine mass (wt) dry***	153.18 (337.0)	161.36 (355.0)

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum 322 (11.4)	Aluminum 367 (13.0)
--	---------------------	---------------------

Engine - Camshaft

Location	Overhead	
Material & mass kg (weight, lbs.)	Post-hardened nodular iron 2.68 (5.9)	
Drive type	Chain/belt	Belt
	Width/pitch	23.8/9.52 (0.937/0.375)

* Rear of engine - drive takeoff. View from drive takeoff end to determine left & right side of engine

** Finished state

*** Dressed engine mass (weight) includes the following: starter, alternator, manifolds, water pump, engine mounted emissions controls, power steering pump, drive belts, oil filter, right engine mount, and throttle controls as required.

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Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

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METRIC (U.S. Customary)

Engine Description

Engine Code

3.0L (181.4 in³)

MPI, EFA

ENGINE - GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-camber, etc.)	V-6, 60°, SOHC, front, transverse	
Manufacturer	Mitsubishi Motors Corp.	
No. of cylinders	6	
Bore	91.1 (3.59)	
Stroke	76.0 (2.99)	
Bore Spacing (C/L to C/L)	108 (4.25)	
Cylinder block material & mass kg (lbs.) (machined)	Cast iron 47.50 (104.5)	
Cylinder block deck height	210.5 (8.29)	
Cylinder block length	384 (15.12)	
Deck clearance (minimum) (above or below block)	0.44 (0.017) below	
Cylinder head material & mass kg (lbs.)	Aluminum alloy 12.45 (27.3)	
Cylinder head volume (cm ³)	46.3 ± 0.666	
Cylinder liner material	N.A.	
Head gasket thickness (compressed)	1.20 - 1.325 (0.047 - 0.052)	
Minimum combustion chamber total volume (cm ³)	63.3	
Cyl. no. system (front to rear)*	L. Bank	2, 4, 6
	R. Bank	1, 3, 5
Firing order	1, 2, 3, 4, 5, 6	
Intake manifold material & mass (kg (lbs.))**	Die cast aluminum 7.60 (16.7)	
Exhaust manifold material & mass (kg (lbs.))**	Nodular cast iron 9.59 (21.1)	
Fuel required, unleaded, diesel, etc.	Regular unleaded	
Fuel antiknock index (R + M) + 2	87 Octane or higher	
Engine mounts	Number	3
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Natural Rubber
	Added isolation (sub-frame, crossmember, etc.)	None
Total dressed engine mass (wt) dry***	168.18 (370.0)	

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum alloy 404 (14.2)
--	------------------------------

Engine - Camshaft

Location	Cylinder head
Material & mass, kg (weight, lbs.)	Cast iron 4.64 (10.2)
Drive type	Belt
	25.4 / 9.52 (1.0 / 0.375)

* Rear of engine - drive takeoff. View from drive takeoff end to determine left & right side of engine

** Finished state

*** Dressed engine mass (weight) includes the following: starter, alternator, manifolds, water pump, engine mounted emissions controls, power steering pump, drive belts, oil filter, right engine mount, and throttle controls as required.

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METRIC (U.S. Customary)

Engine Description
Engine Code

**3.0L (181.4 in³)
MPI, EFA**

**2.5L (153.0 in³)
EFI, EDM**

Engine - Valve System

Hydraulic lifters (std., opt., n.a.)		Std.	
Valves	Number intake/exhaust	6/6	4/4
	Head O.D. intake/exhaust	42.9 - 43.1 / 34.9 - 35.1 (1.69 - 1.70 / 1.37 - 1.38)	40.6 / 35.4 (1.60 / 1.39)

Engine - Connecting Rods

Material & Mass (kg., (weight lbs.))*	Forged steel: 0.65 (1.4)	Forged steel: 0.68 (1.5)
Ø Length (axes c to c) mm	141 (5.55)	151 (5.94)

Engine - Crankshaft

Material & Mass (kg., (weight lbs.))*	Nodular iron : 15.10 (33.2)	Nodular iron 16.04 (35.3)
End thrust taken by bearing (no.)	Three	Three
Length & number of main bearings	470.8 (18.5) / Four	487.1 (19.2) / Five
Seal (material, one, two piece design, etc.)	Front	Polyacrylic / One piece
	Rear	Fluorocarbon / One piece

Engine - Lubrication System

Normal oil pressure (kPa (psi) at eng. rpm)	241-690(35-100) @ 3000 rpm(a)	172-552(25-80) @ 3000 rpm(a)
Type of intake (floating, stationary)	Stationary	
Oil filter system (full flow, part, other)	Full flow	
Capacity of c/case, less filter-refill-L (qt.)	3.8 (4)	

Engine - Diesel Information

Diesel engine manufacturer	
Glow plug, current drain at 0° F	
Injector nozzle	Type
	Opening pres. (kPa (psi))
Pre-chamber design	
Fuel inj. pump	Manufacturer
	Type
Fuel inj. pump drive (belt, chain, gear)	
Supplementary vacuum source (type)	
Fuel heater (yes/no)	
Water separator description (std., opt.)	
Turbo manufacturer	
Oil cooler type (oil to engine coolant; oil to ambient air)	
Oil filter	

Engine - Intake System

Turbo charger - Manufacturer	
Super charger - manufacturer	
Intercooler	

* Finished State

(a) Fully warmed

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Engine Description

Engine Code

2.5L (153.0in³)

SMPI Turbo, EDT

Engine - Valve System

Hydraulic lifters (std., opt., n.a.)	Std.
Valves	4/4
Number intake/exhaust	
Head O.D. intake/exhaust	40.6 / 35.4 (1.60 / 1.39)

Engine - Connecting Rods

Material & Mass [kg., (weight lbs.)]*	Forged steel 0.68 (1.5)
Ø Length (axes ϵ to ϵ) mm	151 (5.94)

Engine - Crankshaft

Material & Mass [kg., (weight lbs.)]*	High-hardness ductile iron 16.10 (35.4)
End thrust taken by bearing (no.)	Three
Length & number of main bearings	487.1 (19.2) / Five
Seal (material, one, two piece design, etc.)	Polyacrylic / One piece
Front	Fluorocarbon / One piece
Rear	

Engine - Lubrication System

Normal oil pressure [kPa (psi) at eng. rpm]	172-552 (25-80) @ 3000 rpm/Fully warmed
Type of intake (floating, stationary)	Stationary
Oil filter system (full flow, part, other)	Full flow
Capacity of c/case, less filter-refill-L (qt.)	3.8 (4)

Engine - Diesel Information

Diesel engine manufacturer	
Glow plug, current drain at 0° F	
Injector	Type
nozzle	Opening pres. [kPa (psi)]
Pre-chamber design	
Fuel inj.	Manufacturer
pump	Type
Fuel inj. pump drive (belt, chain, gear)	
Supplementary vacuum source (type)	
Fuel heater (yes/no)	
Water separator description (std., opt.)	
Turbo manufacturer	
Oil cooler type (oil to engine coolant; oil to ambient air)	
Oil filter	

Engine - Intake System

Turbo charger - Manufacturer	M.H.I.
Super charger - manufacturer	-
Intercooler	-

* Finished State

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Vehicle Line **DODGE SPIRIT**

Model Year **1990** Issued **9-15-89** Revised (•) _____

Engine Description
Engine Code

**2.5L (153.0 in³) EFI
EDM**

**2.5 L (153.0 in.3), SMPI Turbo
EDT**

Engine - Cooling System

Coolant recovery system (std., opt., n.a.)		Standard				
Coolant fill location (rad, bottle)		Bottle				
Radiator cap relief valve pressure (kPa (psi))		96-124 (14-18)				
Circulation thermostat	Type (choke, bypass)	Choke, Pellet Operated				
	Starts to open at °C (°F)	90(194)				
Water pump	Type (centrifugal, other)	Centrifugal				
	GPM 1000 pump rpm	--				
	Number of pumps	One				
	Drive (V-belt, other)	Multi-Groove Belt				
	Bearing type	Integral Ball Bearing				
	Impeller material	Steel				
	Housing material	Cast Aluminum				
By-pass recirculation [type (inter., ext.)]		External				
Cooling system capacity	With heater - L(qt.)	8.5(9.0)				
	With air cond. - L(qt.)	8.5(9.0)				
	Opt. equipment (specify - L(qt.))	--				
Water jackets full length of cyl. (yes, no)		Yes				
Water all around cylinder (yes, no)		No				
Water jackets open at head face (yes, no)		No				
Radiator core	Std. A/C, HD	Manual trans.	Auto trans.	M/T	A/T w/o A/C	A/T w A/C
	Type (cross-flow, etc.)	Cross Flow				
	Construction (fin & tube mechanical, braze, etc.)	Tube & Fin Spacer, Soldered, 1 Row				
	Material, mass [kg (wgt.lbs.)] *	4.45(9.8)(a)	4.59(10.1)(a)	4.45(9.8)(a)	4.59(10.1)(a)	4.77(10.5)(a)
	Width	546(21.5)				
	Height	368(14.5)				
	Thickness	18(0.7)				
	Fins per inch	15				17
Radiator end tank material		Nylon 66				
Fan	Std., elec., opt.	Electric				
	Number of blades & type (flex, solid, material)	7-blade plastic				
	Diameter & projected width	388 x 51 (15.3 x 2.0)				
	Ratio (fan to crankshaft rev.)	--				
	Fan cutout type	Electric Motor				
	Drive type (direct, remote)	--				
	RPM at idle (elec.)	1800			1950	
	Motor rating (wattage) (elec.)	130				
	Motor switch (type & location) (elec.)	Thermistor, Water Box & AC clutch				
	Switch point (temp., pressure) (elec.)	(b)			(c)	
Fan shroud (material)		Plastic				

* Mass (weight) shown is for assembly as purchased.

(a) Copper/Brass

(b) 99 °C (210 °F) (< 40 mph); 110 °C (230 °F) > 40 mph

(c) 99 °C (210 °F) (< 40 mph); 104 °C (220 °F) > 40 mph

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Issued **9-15-89**

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Engine Description
Engine Code

**3.0L (181.4in³)
MPI, EFA**

Engine - Cooling System

Coolant recovery system (std., opt., n.a.)		Standard	
Coolant fill location (rad, bottle)		Bottle	
Radiator cap relief valve pressure [kPa (psi)]		96 - 124 (14 - 18)	
Circulation thermostat	Type (choke, bypass)	Choke, pellet operated	
	Starts to open at °C (°F)	90 (194)	
Water pump	Type (centrifugal, other)	Centrifugal	
	GPM 1000 pump rpm	not available	
	Number of pumps	one	
	Drive (V-belt, other)	multi-groove belt	
	Bearing type	integral ball bearing	
	Impeller material	steel	
Housing material		Cast aluminum	
By-pass recirculation [type (inter., ext.)]		external	
Cooling system capacity	With heater - L(qt.)	9.0 (9.5)	
	With air cond. - L(qt.)	9.0 (9.5)	
	Opt. equipment [specify - L(qt.)]	--	
Water jackets full length of cyl. (yes, no)		yes	
Water all around cylinder (yes, no)		no	
Water jackets open at head face (yes, no)		no	
Radiator core	Std. A/C, HD	w/o A/C	w A/C
	Type (cross-flow, etc.)	cross flow	
	Construction (fin & tube mechanical, braze, etc.)	tube and fin spacer, soldered, single row	
	Material, mass [kg (wgt.lbs.)] *	Copper/brass 4.60 (10.1)	Copper/brass 4.80 (10.5)
	Width	546 (21.5)	
	Height	368 (14.5)	
	Thickness	18 (0.7)	
	Fins per inch	15	17
Radiator end tank material		Nylon 66	
Fan	Std., elec., opt.	electric	
	Number of blades & type (flex, solid, material)	7-blade plastic	
	Diameter & projected width	388 x 51 (15.3 x 2.0)	
	Ratio (fan to crankshaft rev.)	--	
	Fan cutout type	electric motor	
	Drive type (direct, remote)	--	
	RPM at idle (elec.)	1950	
	Motor rating (wattage) (elec.)	130	
	Motor switch (type & location) (elec.)	thermistor, water box and A/C clutch	
	Switch point (temp., pressure) (elec.)	93.3° C (200° F); 99° C (210° F)	
	Fan shroud (material)	plastic	

* Mass (weight) shown is for purchased assembly

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2.5 L (153.0 in³)
EFI, EDM

2.5 L (153.0 in³)
SMPI Turbo, EDT

3.0L (181.4 in³)
MPI, EFA

Engine - Fuel System (see supplemental page for details of Fuel Injection, Supercharger, Turbocharger, etc. if used)

Induction type: carburetor, fuel injection system, etc.		Fuel injection		
Manufacturer		Holley/Bosch	(b)	Holly/Bosch/Nikk/Nippondenso
Carburetor no. of barrels		N.A.		
Idle A/F mix.		N.A.		
Fuel Injection	Point of injection (no.)	Throttle body (1)	Intake ports (4)	Intake ports (6)
	Constant, pulse, flow	Pulse		
	Control (electronic, mech.)	Electronic		
	System pressure [kPa (psi)]	100 (14.5)	379.6 (55.1)	331 (48)
Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	850	950	N.A.
	Automatic	850/Neutral	900/Neutral	700/Drive - 800/Neutral
Intake manifold heat control (exhaust or water thermostatic or fixed)		Water	None	None
Air cleaner type		Oil wetted paper element		
Fuel filter (type/location)		Paper element; stainless steel can; inline underbody		
Fuel pump	Type (elec. or mech.)	Electric		
	Location (eng., tank)	In fuel tank		
	Pressure range [kPa (psi)]	N.A.		
	Flow rate at regulated pressure (L (gal) / hr @ kPa (psi))	81-161 (21-42) @ 12V & 15psi	92-180 (24-48) @ 12V & 55psi	95-186 (25-49) @ 12V & 48psi

Fuel Tank

Capacity refill L (gallons)		61 (16.0)
Location (describe)		Forward of axle
Attachment		Galvanized or terne plated steel strap to floor pan
Material & Mass [kg (weight lbs.)]		Terne plated steel 11.2 (24.7). (a)
Filler pipe	Location & material	Right rear quarter panel, lead dipped steel
	Connection to tank	Rubber grommet
Fuel line (material)		Duplex coated steel
Fuel hose (material)		Fuel resistant rubber
Return line (material)		Duplex coated steel
Vapor line (material)		Duplex coated steel
Extended range tank	Opt., n.a.	
	Capacity [L (gallons)]	
	Location & material	
	Attachment	
Auxiliary tank	Opt., n.a.	
	Capacity [L (gallons)]	
	Location & material	
	Attachment	
	Selector switch or valve	
	Separate fill	

(a) Includes tank-mounted fuel pump

(b) Holly/Bosch/Siemans Bendix/McGuane

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METRIC (U.S. Customary)

Engine Description

Engine Code

2.5L (153.0in³) TBI-EFI, EDM

49 states, man.

49 states, auto.

Cal., manual

Cal., automatic

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		exhaust gas recirculation, engine modifications, catalytic converter			
	Air injection	Pump or pulse	aspirator			
		Driven by	pulse			N.A.
		Air distribution (head, manifold, etc.)	exhaust pressure			N.A.
		Point of entry	fixed			N.A.
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	catalytic converter			N.A.
		Exhaust source				exhaust back pressure-controlled flow
		Point of exhaust injection (spacer, carburetor, manifold, other)				exhaust manifold branch
	Catalytic Converter	Type				intake manifold plenum
		Number of	3 - way + oxidation			3-way
		Location(s)				one
		Volume [L(in. ³)]				below exhaust manifold
		Substrate type	1.23 + 0.74 (75 + 45)			1.23 + 0.9 (75 + 55)
		Noble metal type				monolithic
		Noble metal concentration (g/cm ³)	Pt:Rh + Pd (a)			Platinum:Rhodium
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		0.00061:0.00009 + 0.00085	0.00061:0.00009 + 0.00061:0.00007	0.00061:0.00018	
	Energy source (manifold vacuum, carburetor, other)					closed induction system
	Discharges (to intake manifold, other)					manifold vacuum
	Air inlet (breather cap, other)					intake manifold
Evaporative emission control	Vapor vented to (crankcase, canister, other)	Fuel tank				air cleaner
		Carburetor				canister
	Vapor storage provision					--
Electronic system	Closed loop (yes/no)					canister
	Open loop (yes/no)					yes - hot engine
						yes - cold engine

Engine - Exhaust System

Type (single, single with cross-over, dual, other)		single			
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & mass (kg. (weight lbs.))		one, reverse flow			
Resonator no. & type		stainless steel 4.94 (10.9) - includes tail-pipe below			
Exhaust pipe	Branch o. d., wall thickness	one, straight through			
	Main o. d., wall thickness	Into catalyst 50.8 x 1.4 (2.00 x 0.055)			
	Material & mass (kg. (weight lbs.))	Out of catalyst 50.8 x 1.4 (2.00 x 0.055)			
Intermediate pipe	o. d., & wall thickness	5.70 (12.6) (b)	6.11 (13.5) (b)	5.70 (12.6) (b)	5.83 (12.8) (b)
	Material & mass (kg. (weight lbs.))	47.8 x 1.2 (1.88 x 0.047)			
Tail pipe	o. d., & wall thickness	stainless steel 5.13 (11.3) (includes resonator)			
	Material & mass (kg. (weight lbs.))	47.8 x 1.1 (1.88 x 0.043)			
		stainless steel (see muffler assembly)			

(a) Pt = Platinum; Rh = Rhodium; Pd = Palladium

(b) stainless steel (Includes catalytic converter)

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (•)

Engine Description

Engine Code

2.5 L (153.0 in³) Turbo, EDT

49 States

California

Vehicle Emission Control

	Type (air injection, engine modifications, other)		engine modifications, catalytic converter	engine mod's, catalytic converter, exhaust gas recirculation
Exhaust Emission Control	Air injection	Pump or pulse	none	
		Driven by	N.A.	
		Air distribution (head, manifold, etc.)	N.A.	
		Point of entry	N.A.	
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	none	exhaust back pressure controlled flow
		Exhaust source	N.A.	turbine housing outlet, above flange
		Point of exhaust injection (spacer, carburetor, manifold, other)	N.A.	intake manifold
	Catalytic Converter	Type	3-way	
		Number of	one	
		Location(s)	under floor	
		Volume [L(in. ³)]	1.80 (110)	
		Substrate type	monolithic	
		Noble metal type	Platinum:Rhodium	
		Noble metal concentration (g/cm ³)	0.00061:0.00011	0.00061:0.00018
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		closed induction system	
	Energy source (manifold vacuum, carburetor, other)		intake manifold vacuum	
	Discharges (to intake manifold, other)		intake manifold	
	Air inlet (breather cap, other)		air cleaner	
Evaporative emission control	Vapor vented to (crankcase, canister, other)	Fuel tank	canister	
		Carburetor	N.A.	
	Vapor storage provision		canister	
Electronic system	Closed loop (yes/no)		yes - hot engine	
	Open loop (yes/no)		yes - cold engine	

Engine - Exhaust System

Type (single, single with cross-over, dual, other)		single
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & mass [kg. (weight lbs.)]		one, reverse flow 409 stainless steel 5.68 (12.5)
Resonator no. & type		one, straight through
Exhaust pipe	Branch o. d., wall thickness	none
	Main o. d., wall thickness	63.5 x 1.4 (2.50 x 0.055)
	Material & mass [kg. (weight lbs.)]	409 stainless steel 1.98 (4.4)
Intermediate pipe	o. d., & wall thickness	57.2 x 1.4 (2.25 x 0.055)
	Material & mass [kg. (weight lbs.)]	409 stainless steel 7.12 (15.7) (a)
Tail pipe	o. d., & wall thickness	50.8 x 1.1 (2.0 x 0.043)
	Material & mass [kg. (weight lbs.)]	stainless steel (see muffler assembly)

(a) includes converter and resonator

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (●)

Engine Description

Engine Code

3.0 L (181.4 in³), EFA

49 States

California

Vehicle Emission Control

	Type (air injection, engine modifications, other)		engine modifications, catalytic converter	engine mod's, catalytic converter, exhaust gas recirculation
Exhaust Emission Control	Air Injection	Pump or pulse	none	
		Driven by	N.A.	
		Air distribution (head, manifold, etc.)	N.A.	
		Point of entry	N.A.	
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	none	exhaust back pressure
		Exhaust source	N.A.	controlled flow
		Point of exhaust injection (spacer, carburetor, manifold, other)	N.A.	exhaust manifold
	Catalytic Converter	Type	3-way	
		Number of	one	
		Location(s)		
			under floor	
		Volume [L(in. ³)]	2.13 (130)	
		Substrate type	monolithic	
		Noble metal type	Platinum:Rhodium	
		Noble metal concentration (g/cm ³)	0.00061:0.00009	0.00061:0.00018
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		closed induction system	
	Energy source (manifold vacuum, carburetor, other)		intake manifold vacuum	
	Discharges (to intake manifold, other)		intake manifold	
	Air inlet (breather cap, other)		air cleaner	
Evaporative emission control	Vapor vented to (crankcase, canister, other)	Fuel tank	canister	
		Carburetor	N.A.	
Electronic system	Vapor storage provision		canister	
	Closed loop (yes/no)		yes - hot engine	
	Open loop (yes/no)		yes - cold engine	

Engine - Exhaust System

Type (single, single with cross-over, dual, other)	single
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & mass [kg. (weight lbs.)]	one, reverse flow, 409 stainless steel 5.33 (11.80)
Resonator no. & type	one, straight through
Exhaust pipe	N.A.
	Branch o. d., wall thickness
	63.5 x 1.4 (2.5 x 0.055)
Intermediate pipe	Main o. d., wall thickness
	409 stainless steel 2.39 (5.30)
	Material & mass [kg. (weight lbs.)]
Tail pipe	57.2 x 1.4 (2.25 x 0.055)
	409 stainless steel 7.89 (17.40) (a)
	Material & mass [kg. (weight lbs.)]
Pipe	50.8 x 1.1 (2.0 x 0.043)
	stainless steel (see muffler assembly)

(a) includes converter and resonator

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised(•)

METRIC (U.S. Customary)

Engine Description
Engine Code

2.5L (153.0 in³) / EFI
EDM

2.5L (153.0 in³) / TURBO I, SMPI
EDT

Transmissions/Transaxle (Std., Opt., N.A.)

Manual 3-speed (manufacturer/country)	N.A.
Manual 4-speed (manufacturer/country)	N.A.
Manual 5-speed manufacturer/country	Std./Chrysler New Process Gear/U.S.
Automatic (manufacturer/country)	Opt./Chrysler/U.S.
Automatic overdrive (manufacturer/country)	N.A.

Manual Transmission/Transaxle

Number of forward speeds		5
Gear ratios	1st	3.29
	2nd	2.08
	3rd	1.45
	4th	1.04
	5th	0.72
	Reverse	3.14
Synchronous meshing (specify gears)		All Forward Gears
Shift lever location		Floor
Trans. case mat'l. & mass kg.(lbs.)*		46.36 (102.0) 380 Aluminum Die Cast
Lubricant	Capacity [L (pt.)]	2.1 (4.3)
	Type recommended	API SF/CC SAE 5W-30

Clutch (Manual Transmission)

Clutch manufacturer	Fichtel & Sachs	
Clutch type (dry, wet; single, multiple disc)	Dry Disc, single	
Linkage (hydraulic, cable, rod, lever, other)	Cable	
Max. pedal effort (nom.)	Depressed**	100 (23)
spring load, new) N (lbs.)	Released***	116 (26)
		112 (25)
Assist (spring, power/percent, nominal)	None	
Type pressure plate springs	Belleville	
Total spring load (nominal, new) N (lbs.)	4700 (1057)	5750 (1292)
Clutch facing	Facing mfr. & material coding	Valeo F-202
	Facing material & construction	Fiberglass, Woven
	Rivets per facing	8
	Outside x inside dia. (nominal)	228 x 150 (8.98 x 5.91)
	Total eff. area [cm ² (in ²)]****	463.13 (71.8)
	Thickness (pressure plate side/ fly wheel side)	3.4/3.4 (0.13/0.13)
	Rivet depth (pressure plate side/ fly wheel side)	1.1/1.1 (0.043/0.043) min.
	Engagement cushion method	Wave spring segments
Release bearing type & method lub.	Angular contact ball bearing permanently lubed with grease	
Torsional damping method, springs, hysteresis	Coil springs and friction fiber washers	

* Dry weight, includes shift linkage

** Hold down effort

*** Maximum effort at clutch release point of travel.

**** Includes both clutch facings.

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990** Issued **9-15-89** Revised(*)

METRIC (U.S. Customary)

Engine Description
Engine Code

**3.0 L (181.4 in³), MPI
EFA**

Transmissions/Transaxle (Std., Opt., N.A.)

Manual 3-speed (manufacturer/country)	N.A.
Manual 4-speed (manufacturer/country)	N.A.
Manual 5-speed manufacturer/country)	N.A.
Automatic (manufacturer/country)	N.A.
Automatic overdrive (manufacturer/country)	Opt. / Chrysler / United States

Manual Transmission/Transaxle

Number of forward speeds		
Gear ratios	1st	
	2nd	
	3rd	
	4th	
	5th	
	Reverse	
Synchronous meshing (specify gears)		
Shift lever location		
Trans. case mat'l. & mass kg. (lbs.)*		
Lubricant	Capacity [L (pt.)]	
	Type recommended	

Clutch (Manual Transmission)

Clutch manufacturer		
Clutch type (dry, wet; single, multiple disc)		
Linkage (hydraulic, cable, rod, lever, other)		
Max. pedal effort (nom. spring load, new) N (lbs.)	Depressed	
	Released	
Assist (spring, power/percent, nominal)		
Type pressure plate springs		
Total spring load (nominal, new) N (lbs.)		
Clutch facing	Facing mfr. & material coding	
	Facing material & construction	
	Rivets per facing	
	Outside x inside dia. (nominal)	
	Total eff. area (cm ² (in ²))	
	Thickness (pressure plate side/ fly wheel side)	
	Rivet depth (pressure plate side/ fly wheel side)	
	Engagement cushion method	
Release bearing type & method lub.		
Torsional damping method, springs, hysteresis		

* Dry weight, includes shift linkage

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (•)

METRIC (U.S. Customary)

Engine Description
Engine Code

**2.5L (153.0 in.³) SMPI Turbo
EDT**

**2.5L (153.0 in.³) EFI
EDM**

Ø Automatic Transmission/Transaxle

Trade name		Torqueflite	
Type and special features (describe)		Automatically-operated planetary gear transmission and parallel axis final drive	
		Non-lock up torque converter	electronic lock up torque converter
Gear selector	Location (column, floor, other)	Floor or column mounted	
	Ltr./No. designation (e.g. PRND21)	PRND21	
	Shift interlock (yes, no, describe)	No	
Gear ratios	1st	2.69	
	2nd	1.55	
	3rd	1.00	
	4th	--	
	Reverse	2.10	
Max. upshift speed - drive range [km/h (mph)]		129 (80)	113 (70)
Max. kickdown speed - drive range [km/h (mph)]		119 (74)	105 (65)
Min. overdrive speed [km/h (mph)]		--	
Torque converter	Number of elements	Three	
	Max. ratio at stall	2.00	2.15
	Type of cooling (air, liquid)	Liquid	
	Nominal diameter	241 (9.5)	
	Capacity factor "K"	260	210
Lubricant	Capacity [refill L (pt.)]	8.40 (17.75) - torque converter, transmission and differential	
	Type recommended	Mopar ATF Plus (Auto trans. fluid - Type 7176) (a)	
Oil cooler (std, opt, n.a., internal, external, air, liquid)		Std. - liquid, in radiator	
Transmission case material & mass [kg. (lbs.)]**		Die cast aluminum - 57.50 (126.5) (b)	

Ø All Wheel / 4 Wheel Drive

Description & type (part-time, full-time, 2/4 shift while moving, mechanical, elect., chain/gear, etc.)		
Transfer case	Manufacturer and model	
	Type and location	
Low - range gear ratio		
System disconnect (describe)		
Center differential	Type (bevel, planetary, w or w/o viscous bias, torsen, etc.)	
	Torque split (% front/rear)	

* Input speed ÷ √ torque

** Dry weight including torque converter. If other specify.

(a) Dexron II ATF may be used, only if Mopar ATF is not available.

(b) Dry weight, includes shift linkage

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (e)

METRIC (U.S. Customary)

Engine Description

Engine Code

3.0L (181.0 in.³) MPI

EFA

Ø Automatic Transmission/Transaxle

Trade name		Ultradrive
Type and special features (describe)		Electronically-operated, 4 speed overdrive, planetary gear transmission with lock-up torque converter and parallel axis final drive
Gear selector	Location (column, floor, other)	Steering column
	Ltr./No. designation (e.g. PRND21)	P-R-N-OD-D-L
	Shift interlock (yes, no, describe)	No
Gear ratios	1st	2.84
	2nd	1.57
	3rd	1.00
	4th	0.69
	Reverse	2.21
Max. upshift speed - drive range [km/h (mph)]		131 (81)
Max. kickdown speed - drive range [km/h (mph)]		120 (75)
Min. overdrive speed [km/h (mph)]		40 (25)
Torque converter	Number of elements	Three
	Max. ratio at stall	2.00 : 1
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	241 (9.5)
	Capacity factor "K"	200
Lubricant	Capacity [refill L (pt.)]	8.64 (18.25) - Torque converter, Transmission and Differential
	Type recommended	Mopar ATF Plus (Auto trans. fluid - Type 7176) (a)
Oil cooler (std,opt,n.a.,internal,external,air,liquid)		Std. - external, air
Transmission case material & mass [kg. (lbs.)]**		Die cast aluminum - 65.45 (144.0) (b)

Ø All Wheel / 4 Wheel Drive

Description & type (part-time, full-time, 2/4 shift while moving, mechanical, elect., chain/gear, etc.)		
Transfer case	Manufacturer and model	
	Type and location	
Low - range gear ratio		
System disconnect (describe)		
Center differential	Type (bevel, planetary, w or w/o viscous bias, torsen, etc.)	
	Torque split (% front/rear)	

* Input speed + √ torque

** Dry weight including torque converter. If other specify.

(a) Dexron II ATF may be used, only if Mopar ATF is not available.

(b) Dry weight, includes shift linkage

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (e)

METRIC (U.S. Customary)

Engine Description
Engine Code

**3.0L (181 in³)
MPI, EFA**

**2.5L (153.0 in³)
EFI, EDM**

Ø Axle Ratio and Tooth Combinations (see 'Power Teams' for axle ratio usage)

Effective final drive ratio (or overall top gear ratio)		2.36	3.02 (auto.)	2.51 (man.)
Transfer ratio and method (chain, gear, etc.)		0.91, gear	1.06, gear	N.A.
Front drive unit	Ring gear o.d.	194.3 (7.65)	184.56 (7.26)	197.5 (7.77)
	No. of teeth	16	21	21
	Pinion Ring gear	60	60	49

Ø Front Drive Unit

Description (integral to trans., etc.)		Integral with transmission	
Limited slip differential (type)		N.A.	
Drive pinion	Type	Helical	
	Offset	--	
No. of differential pinions		Two	
Pinion / differential	Adjustment (shim, etc.)	--	
	Bearing adjustment	Shim	
Driving wheel bearing (type)		See Wheel Spindle Hub, p. 14	
Lubricant	Capacity[L (pt.)]	See transaxle	
	Type recommended	See transaxle	

Ø Axle Shafts - Front Wheel Drive

Manufacturer and number used			Two	
Type (straight, solid bar, tubular, etc.)		Left	Solid bar	
		Right	Tube	
Outer diam. x length * x wall thickness	Manual transaxle	Left	N.A.	(a) Page 108
		Right	N.A.	(b) (c) Page 10B
	Automatic transaxle	Left	(d) Page 10B	(a) Page 10B
		Right	(b) Page 10B	(b) (c) Page 10B
	Optional transaxle	Left	--	
		Right	--	
Slip yoke	Type		--	
	Number of teeth		--	
	Spline o.d.		--	
Universal joints	Make and mfg. no.	Inner	GKN-EUR: G182 or SSG: #19	
		Outer	GKN-EUR: 98 LAC or SSG: #23	
	Number used		Two	
	Type, size, plunge	Inner	Tripod plunge	
		Outer	Rzeppa - fixed	
	Attach (u-bolt, clamp, etc.)		--	
	Bearing	Type (plain, anti-friction)	--	
Lubrication (fitting, prepack)		Prepack		
Drive taken through (torque tube, arms or springs)			--	
Torque taken through (torque tube, arms or springs)			--	

* Centerline to centerline of universal joints, or to centerline of attachment.

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990** Issued **9-15-89** Revised (•)

METRIC (U.S. Customary)

Engine Description
Engine Code

2.5L (153.0 in³)
Turbo I, EDT

Ø Axle Ratio and Tooth Combinations (see 'Power Teams' for axle ratio usage)

Effective final drive ratio (or overall top gear ratio)			2.51 (manual trans.)	3.02 (auto. trans.)
Transfer ratio and method (chain, gear, etc.)			N.A.	1.06, gear
Front drive unit	Ring gear o.d.		197.46 (7.77)	184.5 (7.26)
	No. of teeth	Pinion	14	21
		Ring gear	49	60

Ø Front Drive Unit

Description (integral to trans., etc.)		Integral with transmission
Limited slip differential (type)		N.A.
Drive pinion	Type	Helical
	Offset	--
No. of differential pinions		Two
Pinion / differential	Adjustment (shim, etc.)	--
	Bearing adjustment	Shim
Driving wheel bearing (type)		See Wheel Spindle Hub, p. 14
Lubricant	Capacity[L (pt.)]	See transaxle
	Type recommended	See transaxle

Ø Axle Shafts - Front Wheel Drive

Manufacturer and number used			Two	
Type (straight, solid bar, tubular, etc.)		Left	Solid bar	
		Right	Solid bar	Tube
Outer diam. x length* x wall thickness	Manual transaxle	Left	(d) Page 10B	
		Right	(d) Page 10B	
	Automatic transaxle	Left	N.A.	(d) Page 10B
		Right	N.A.	(b) Page 10B
	Optional transaxle	Left	--	
		Right	--	
Slip yoke	Type		--	
	Number of teeth		--	
	Spline o.d.		--	
Universal joints	Make and mfg. no.		Inner	GKN-EUR: G182 or SSG: #19
			Outer	GKN-EUR: 98 LAC or SSG: #23
	Number used		Two	
	Type, size, plunge		Inner	Tripod plunge
			Outer	Rzeppa - fixed
	Attach (u-bolt, clamp, etc.)		--	
	Bearing	Type (plain, anti-friction)	--	
		Lubrication (fitting, prepack)	Prepack	
Drive taken through (torque tube, arms or springs)			--	
Torque taken through (torque tube, arms or springs)			--	

* Centerline to centerline of universal joints, or to centerline of attachment.

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (•)

METRIC (U.S. Customary)

- (a) GKN-EUR: 22.9 x 331.4 (0.90 x 13.05) or SSG: 23.9 x 327.5 (0.94 x 12.98) or GKN-EUR: 22.9 x 325.9 (0.94 x 12.83)
- (b) GKN-EUR: 40.5 x 591.6 (1.59 x 23.3) or SSG: 38.0 x 591.1 (1.50 x 23.27)
- (c) GKN-EUR: 40.5 x 597.6 (1.59 x 23.5)
- (d) GKN-EUR: 25.0 x 325.9 (0.98 x 12.83) or SSG: 23.9 x 327.5 (0.94 x 12.98)

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (•)

METRIC (U.S. Customary)

Body Type

Standard
Firm Ride and Handling - SDC

Limited Production Optional
Precision Feel - SDA

Suspension - General

Car leveling	Standard / optional / not avail.	/			
	Manual / automatic control				
	Type (air / hydraulic)				
	Primary / assist spring				
	Rear only / 4 wheel leveling				
	Single / dual rate spring				
	Single / dual ride heights				
	Provision for jacking				
Shock absorber damping controls	Standard / optional / not avail.				
	Manual / automatic control				
	Number of damping rates				
	Type of actuation (manual / electric motor / air, etc.)				
	<u>sensors</u>				
	Lateral acceleration				
	Deceleration				
	Acceleration				
Shock absorber (front & rear)	Road surface				
	Type	Gas charged - Hydraulic			
	Make	Monroe			
	Piston diameter	Frt. 32 (1.26)	Rr. 30.2 (1.19)	Frt.: 32 (1.26)	Rr.: 25.4 (1.0)
	Rod diameter	Front: 20 (0.79) Rear: 12.7 (0.50)			

Suspension - Front

Type & description		Iso-strut	
Travel*	Full jounce	64.8 (2.55)	71.1 (2.80)
	Full rebound	108.4 (4.27)	102.1 (4.02)
Spring	Type (coil, leaf, other) & material	Coil, AISI 5160 (Modified)	
	Insulators (type & material)	Compression: Rubber	
	Size (coil design height & i.d., bar length x dia.)	216 x 152 I.D. (8.5 x 6.0 I.D.)	
	Spring rate [N/mm (lb./in.)]	16.6 (95)	
	Rate at wheel [N/mm (lb./in.)]	20.1 (115)	
Stabilizer	Type (link, linkless, frameless)	Linkless	
	Material & bar diameter	AISI 1090 Spring steel 27.0 (1.06)	

Suspension - Rear

Type & description		Trailing flex-arm with track bar	
Travel*	Full jounce	62 (2.44)	
	Full rebound	130 (5.11)	
Spring	Type (coil, leaf, other) & material	Coil: AISI 5160 H Chromium steel	
	Size (length x width, coil design height & i.d., bar length & dia.)	229 x 102 I.D. (9.0 x 4.01)	
	Spring rate [N/mm (lb./in.)]	33 (190)	
	Rate at wheel [N/mm (lb./in.)]	21 (118)	
	Insulators (type & material)	Compression: Rubber	
	If leaf	No. of leaves	--
Stabilizer	Shackle (comp. or tens.)	--	
	Type (link, linkless, frameless)	Frameless ERW tube	
Track bar (type)	Material & bar diameter	80 ksi HSLA steel 28.6 O.D. (1.13)	
		Channel	

* Define load condition: Passenger Seating - 2 Front - 3 Rear - Full tank of gas

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (•)

METRIC (U.S. Customary)

Body Type And / Or
Engine Displacement

Standard

Brakes - Service

Description				Four-wheel hydraulic-actuated system
Manufacturer and brake type (std., opt., n.a.)		Front (disc or drum)		Disc
		Rear (disc or drum)		Drum
Valving type (proportion, delay, metering, other)				Dual proportioning valve
Power brake (std., opt., n.a.)				Standard
Booster type (remote, integral, vac., hyd., etc.)				Vacuum, tandem
Vacuum	Source (inline, pump, etc.)			Intake manifold or Throttle body base
	Reservoir (volume, in. ³) and source			--
	Pump-type (elec., gear driven, belt driven)			--
Traction control	Operational speed range			
	Type engine intervention (electronic, mech.)			
Anti-lock device	Front/rear (std., opt., n.a.)			
	Manufacturer			
	Type (electronic, mech.)			
	Number sensors or circuits			
	Number anti-lock hydraulic circuits			
	Integral or add-on system			
	Yaw control (yes, no)			
	Hydraulic power source (elec., vac. mtr., pwr. strg.)			
Effective area [cm ² (in. ²)]* (F/R)			F: 155.6 (24.12) / R: 362.16 (56.19)	
Gross lining area [cm ² (in. ²)]** (F/R)			F: 180.8 (28.02) / R: 346.76 (53.75)	
Swept area [cm ² (in. ²)]*** (F/R)			F: 1385 (214.7) / R: 549.46 (85.17)	
Rotor	Outer working diameter	F/R	F: 256.0 (10.08) / R: N.A.	
	Inner working diameter	F/R	F: 160.0 (6.30) / R: N.A.	
	Thickness	F/R	F: 24.0 (0.945) / R: N.A.	
	Material Type (vented/solid)	F/R	F: damped cast iron, vented / R: N.A.	
Drum	Diameter & Width	F/R	F: N.A. / R: 220 (8.66) x 44.26 (1.74)	
	Type & Material	F/R	R: Cast composite	
Wheel cylinder bore			F: 54 (2.13); R: 15.87 (0.625)	
Master cylinder	Bore/stroke	F/R	22.2 (0.875) x 32.79 (1.291)	
Pedal arc ratio			3.28 : 1	
Line pressure at 445 N(100lb.) pedal load [kPa (psi)]			Power: 9584 (1390)	
Lining clearance			No major adjustment	
Brake lining	Front Wheel	Bonded or riveted (rivets/seg.)		Riveted, 6 / shoe
		Rivet size		3.57 (0.14) dia. x 7.57 (0.3)
		Manufacturer		Bendix
		Lining code *****		BX-JD-EE
		Material		Molded metallic
		****	Primary or outboard 1	136.6 x 47 x 12.1 (5.38 x 1.85 x 0.48)
		Size	Secondary or inboard	126.0 x 47 x 13.1 (4.96 x 1.85 x 0.52)
		Shoe thickness (no lining)		Outer: 4.83 (0.190) ; Inner: 5.68 (0.224)
	Rear Wheel	Bonded or riveted (rivets/seg.)		Riveted, 10 / shoe
		Manufacturer		Bendix
		Lining code *****		BX-MO-FF
		Material		Rolled asbestos
		****	Primary or outboard	226.35 x 40.0 x 6.65 (8.91 x 1.575 x 0.262)
		Size	Secondary or inboard	226.35 x 40.0 x 6.65 (8.91 x 1.575 x 0.262)
		Shoe thickness (no lining)		2.17 (0.0854)

* Excludes rivet holes, grooves, chamfers, etc.

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

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

(Disc brake: Square of Outer Working Dia. minus Square of Inner Working Dia. multiplied by Pi/2 for each brake.)

**** Size for drum brakes includes length x width x thickness.

***** Manufacturer I.D., catalog or formulation designation & coefficient of friction classification.

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (•)

Body Type And/Or
Engine Displacement

Spirit & Spirit LE

Spirit ES

Tires And Wheels (Standard)

Tires And Wheels (Standard)				
Tires	Size (load range, ply)		P195/70 R14, SL	P205/60 R 15, SL
	Type (bias, radial, steel, nylon, etc.)		Steel radial	
	Inflation pressure (cold) for recommended max. vehicle load	Front [kPa (psi)]	220 (32)	
		Rear [kPa (psi)]	220 (32)	
		Rev./mile - at 70 km/h (45 mph)	843	846
Wheels	Type & material		Steel disc	Cast aluminum
	Rim (size & flange type)		14 x 5.5 JJ	15 x 6.0 JJ
	Wheel offset		40 (1.6)	
	Attachment	Type (bolt or stud)	Stud	
		Circle diameter	100 (3.94)	
		Number & size	5 - M12 x 1.5	
Spare	Tire and wheel		T125/70 D 14 Compact Spare 14 x 4.0 T Steel disc wheel	
	Storage position & location (describe)		Horizontal - On rear floor pan under cargo area	

Tires And Wheels (Optional)

Tire size (load, range, ply)		P205/60 R 15, SL	
Type (bias, radial, steel, nylon, etc.)		Steel radial	
Wheel (type & material)		Cast Aluminum	
Rim (size, flange, type and offset)		14 x 6.0 JJ - 40 mm (1.6 in)	
Tire size (load, range, ply)			
Type (bias, radial, steel, nylon, etc.)			
Wheel (type & material)		Cast Aluminum	
Rim (size, flange type and offset)		15 x 6.0 JJ - 40 mm (1.6 in)	
Tire size (load, range, ply)			
Type (bias, radial, steel, nylon, etc.)			
Wheel (type & material)			
Rim (size, flange type and offset)			
Tire size (load, range, ply)			
Type (bias, radial, steel, nylon, etc.)			
Wheel (type & material)			
Rim (size, flange type and offset)			
Spare tire and wheel (size) (If configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)		Matching spare Horizontal, on rear floor pan under cargo area	

Brakes - Parking

Type of control		Foot operated-apply / Hand release
Location of control		Left cowl side- apply / Lower left column cover- release
Operates on		Rear service brake - Drum
If separate from service brakes	Type (internal or external)	--
	Drum diameter	--
	Lining size (length x width x thickness)	--
		--

(a) With AKG (Fleet) Package on base Spirit only

(b) With SDC (Sport Handling) only

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990** Issued **9-15-89** Revised(*)

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

185 & 195 Width
Tires

185 & 195 Width Tires
(With 4 Sp. Auto. Trans.)

205 Width Tires

Steering

Manual (std., opt., n.a.)			N.A.			
Power Steering (std., opt., n.a.)			Std.			
Adjustable steering wheel column (tilt, telescope, other)	Type	Tilt				
	Manufacturer	Acustar				
	(Std., opt., n.a.)	Opt.				
Wheel diameter** (W9) SAE J1100	Manual	N.A.				
	Power	381 (15.0)				
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)	--			
		Curb to curb (l. & r.)	11.5 (37.6)	11.5(37.6)L; 12.2(40.0)R	12.2(40.0)L; 12.7(41.6)R	
	Inside rear	Wall to wall (l. & r.)	--			
		Curb to curb (l. & r.)	--			
Scrub Radius*		-9.4 (-0.37)				
Manual	Gear	Type				
		Manufacturer				
		Ratios				Gear
		Overall				
No. wheel turns (stop to stop)						
Power	Type (coaxial, elec., hyd., etc.)		Integral power			
	Manufacturer		T.R.W.			
	Gear	Type	Rack & pinion			
		Ratios	Gear	52.3 mm / Rev.		
			Overall	14.2:1		
	Pump (drive)		Pulley & belt off crankshaft			
	no. wheel turns (stop to stop)		2.4	2.3	2.2	
Linkage	Type		Rack & Pinion (Rod & Ball directly attached to gear)			
	Location (front or rear of wheels, other)		Rear of wheels			
	Tie rods (one or two)		Two (Integral with rack & pinion assembly)			
Steering axis	Inclination at camber (deg.)		13.3° @ .3°			
	Bearings (type)	Upper	Ball bearing			
		Lower	Ball joint			
		Thrust	Ball bearing			
Steering spindle & joint type		Iso strut with lower ball joint				
Wheel spindle/hub	Diameter	Inner bearing	76 / 42 (3.0 / 1.65) dia. : 37 / 40 (1.46 / 1.57) wide			
		Outer bearing	--			
	Thread (size)		M22 x 1.5			
	Bearing (type)		Double-row angular-contact ball			

*The horizontal distance in the front elevation between wheel centerline and kingpin (ball joint) axis at ground.

**See page 21

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (•)

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

All

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	--
		Camber (deg.)	-0.2° - + 0.8°
		Toe-in (outside track - mm(in))	0.4° Toe-in to 0.2° Toe-out (a)
	Service reset*	Caster	Not adjustable; Ref. 1.2°; Max. side to side differential 1.5°
		Camber	+ 0.3° to + 0.3°
		Toe-in	0.1° toe-in ± 0.1° (a)
	Periodic M.V. inspection	Caster	Same as Service Checking
		Camber	--
		Toe-in	--
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	-1.3° to + 0.3°
		Toe-in (outside track - mm(in))	0.6° Toe-out to 0.6° Toe-in (a)
	Service reset*	Camber	-0.5° ± 0.8° (Shim)
		Toe-in	0° ± 0.6° (shim) (a)
	Periodic M.V. inspection	Camber	Same as Service Checking
		Toe-in	--

*Indicates pre-set, adjustable, trend set or other

Electrical - Instruments and Equipment		Standard Cluster	With Tachometer
Speed-ometer	Type (Analog, digital, std., opt.)	Electric/Analog	
	Trip odometer (std., opt., n.a.)	Std.	
EGR maintenance indicator		--	
Charge indicator	Type	Voltmeter	
	Warning device (light, audible)	N.A.	Light (Check gages)
Temp. indicator	Type	Magnetic gage	
	Warning device (light, audible)	N.A.	Light (Check gages)
Oil pressure indicator	Type	N.A.	Magnetic gage
	Warning device (light, audible)	Light (ISO symbol)	
Fuel indicator	Type	Magnetic gage	
	Warning device (light, audible)	Light (ISO symbol)	
Wind-shield wiper	Type (standard)	Electric 2 speed, intermittent wipe	
	Type (optional)	NA	
	Blade length	457 (18)	
	Swept area (cm ² (in ²))	5964.91 (924.56)	
Wind-shield washer	Type (standard)	Electric with arm mounted nozzles	
	Type (optional)	NA	
	Fluid level indicator (light, audible)	Light (ISO symbol) - opt. H; std. P, X	
Rear window wiper, wiper/washer (std., opt., n.a.)		N.A.	
Horn	Type	Seashell	
	Number used	1 (low note) - std.; 2 - opt.	
Other			

(a) Measurements in degrees, not inches

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line **DODGE SPIRIT**

Model Year **1990** Issued **9-15-89** Revised(e)

Engine Description
Engine Code

**3.0L (181.4in³) MPI
EFA**

**2.5L (153.0in³) TBI-EFI
EDM**

Electrical - Supply System

Battery	Manufacturer	GNB, Delco, Exide, Johnson controls		
	Model, std., (opt.)	GRP 34		
	Voltage	12V		
	Amps at 0°F cold crank	500		
	Minutes-reserve capacity	110		
	Amp/hrs. - 20 hr. rate	66		
Alternator	Location	Left front corner of engine compartment		
	Manufacturer	Nippondenso	Nippondenso	Bosch
	Rating (idle/max. rpm)	90 HS	90 HS	90RS
	Ratio (alt. crank/rev.)	2.75:1	2.60 : 1	2.53:1
	Output at idle (rpm, park)	40 Amp		
Regulator	Optional (type & rating)	—		
	Type	Engine control computer		

Electrical - Starting System

Motor	Manufacturer	Nippondenso	Bosch	Bosch
	Current drain at 0 °F	150 - 200 A		175 - 225 A
	Power [kW (hp)]	1.4 (1.9)	1.1 (1.475)	1.1 (1.475)
Motor drive	Engagement type	Solenoid shift		
	Pinion engages from (front, rear)	Front		

Electrical - Ignition System

Type	Electronic (std., opt., n.a.)	N.A.		
	Other (specify)	Engine control computer w/ electronic spark advance		
Coil	Manufacturer	MMC		UTC/Prestolite/Diamond
	Model	MD141044		5226865 / 5227372 / 5227252
	Current	0.0 A		0.0 A
		5.0 A		1.9 A
Spark plug	Manufacturer	Champion	NGK	Champion
	Model	RN11YC4	BPR5ES - 11	RN 12 YC
	Thread (mm)	14 mm		
	Tightening torque [N·m (lb-ft)]	28 (20)		
	Gap	1 - 1.1 (.039 - .044)		0.9 (0.035)
Distributor	Number per cylinder	One		
	Manufacturer	MMC		Chrysler
	Model	MD116211 (Chrysler# 4439211)		5226575

Electrical Suppression

Locations & type	Resistor spark plugs, Resistance ignition wire, Capacitor-Alternator, Blower motor; Diode-A/C Clutch, Horn relay; Internal fuel pump filter; Starter relay, Power antenna relay; Ground cable - Engine to dash Engine mount, A/C Evaporator Valve to dash; Choke- Amplified speaker option
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MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990** Issued **9-15-89** Revised(*)

METRIC (U.S. Customary)

Engine Description

Engine Code

**2.5 L (153.0in³) SMPI Turbo
EDT**

Electrical - Supply System

Battery	Manufacturer	Delco, Exide, GNB, Johnson Controls	
	Model, std., (opt.)	GRP 34	
	Voltage	12V	
	Amps at 0°F cold crank	500	
	Minutes-reserve capacity	110	
	Amp/hrs. - 20 hr. rate	66	
	Location	Left front corner of engine compartment	
Alternator	Manufacturer	Nippondenso	Bosch
	Rating (idle/max. rpm)	90 HS	90RS
	Ratio (alt. crank/rev.)	2.60:1	2.53:1
	Output at idle (rpm, park)	40 A	
	Optional (type & rating)	none	
Regulator	Type	Engine control computer	

Electrical - Starting System

Motor	Manufacturer	Bosch	
	Current drain at 0 °F	175 - 225 A	
	Power rating [kW (hp)]	1.1 (1.475)	
Motor drive	Engagement type	Solenoid shift	
	Pinion engages from (front, rear)	Front	

Electrical - Ignition System

Type	Electronic (std., opt., n.a.)	N.A.		
	Other (specify)	Engine control computer w/ electronic spark advance		
Coil	Manufacturer	UTC	Prestolite	Diamond
	Model	5226865	5227372	5227252
	Current	0.0 A		
		1.9 A		
Spark plug	Manufacturer	Champion		
	Model	RN12YC		
	Thread (mm)	14 mm		
	Tightening torque [N•m (lb-ft)]	28 (20)		
	Gap	0.9mm (0.035in.)		
	Number per cylinder	One		
Distributor	Manufacturer	Chrysler		
	Model	5226525		

Electrical Suppression

Locations & type	Resistor spark plugs; Resistance ignition wire; Capacitor - Alternator, Blower motor ; Diode - A/C clutch, Horn relay, Internal fuel pump filter, Starter relay; Ground cable - Engine to dash, Engine mount, Blocking Diode-Clutch relay
------------------	---

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line **DODGE SPIRIT**

Model Year **1990** Issued **9-15-89** Revised(*)

Body Type

All

Body

Structure	"Unibody" unitized construction with bolt on front suspension crossmember
Bumper system front - rear	Front: Urethane fascia, Ultra high strength steel reinforcement w/elastomeric energy absorbers Rear: Urethane fascia, Ultra high strength steel reinforcement w/elastomeric energy absorbers
Anti-corrosion treatment	Extensive use of galvanized steel Full immersion zinc phosphate conversion coating Full immersion, high build, epoxy cathodic-electrocoat primer Urethane chip resistant primer on lower exterior surfaces

Body - Miscellaneous Information

Type of finish (lacquer, enamel, other)	Enamel - Universal base coat / Clear coat	
Hood	Material & mass	20.3 (44.7)
	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Counterbalance
	Release control (internal, external)	Internal
Trunk lid	Material & mass	13.3 (29.4)
	Type (counterbalance, other)	Torsion bar - Counterbalance
	Internal release control (elec., mech., n.a.)	Mechanical cable
Hatch-back lid	Material & mass	/
	Type (counterbalance, other)	
	Internal release control (elec., mech., n.a.)	
Tailgate	Material & mass	
	Type (drop, lift, door)	
	Internal release control (elec., mech., n.a.)	
Vent window control (crank, friction, pivot, power)	Front	None
	Rear	Fixed
Window Regulator type (cable, tape, flex, drive, etc.)	Front	Manual - arm & sector / Electric - arm & sector
	Rear	Manual & Electric arm & sector
Seat cushion type (e.g., 60/40, bucket, bench, wire, foam, etc.)	Front	Bucket - Flex-O-Lator Mat - Std. / 50/50 - Flex-O-Lator Mat - Opt.
	Rear	Bench - Full Foam
	3rd seat	--
Seat back type (e.g., 60/40, bucket, bench, wire, foam, etc.)	Front	Bucket - Formed wire
	Rear	Bench - Full foam - Std. / 60/40 - Full foam - Opt.(a)
	3rd seat	--

(a) 1990 1/2 - Fixed Back-C.A.R. - Std. / Bench-Full Foam - Opt.

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (•)

METRIC (U.S. Customary)

Body Type

All

Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt,	First seat	Lap & Shoulder belt Std.	Lap belt Std.	Lap & Shoulder belt Std.
		Second seat	Lap & Shoulder belt Std.	Lap belt Std.	Lap & Shoulder belt Std.
	Standard/Optional	Third seat	N.A.	N.A.	N.A.
Passive	Type & description (air bag, motorized - 2-point belt, fixed belt, knee bolster, manual - lap belt)	First seat	Knee bolster & Air Bag Std.	N.A.	N.A.
		Second seat	N.A.	N.A.	N.A.
	Standard/Optional	Third seat	N.A.	N.A.	N.A.

Glass	SAE Ref. No.	
Windshield glass exposed surface area [cm ² (in ²)]	S1	9724 (1507)
Side glass exposed surface area [cm ² (in ²)] - total 2 sides	S2	10,208 (1582)
Backlight glass exposed surface area [cm ² (in ²)]	S3	4899 (759)
Total glass exposed surface area [cm ² (in ²)]	S4	24798 (3844)
Windshield glass (type)		Laminated safety glass
Side glass (type)		MS 3694A (Clear) & MS 3694B (Tinted) heat treated safety glass
Backlight glass (type)		Heat treated safety glass

Lamps and Headlamps Locations

Headlamp	Description - sealed beam, halogen, replaceable bulb, etc	Replaceable bulb
	Shape	Aero
	Lo-beam type (2A1, 2B1, 2C1, etc.)	9004
	Quantity	2
	Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	9004
	Quantity	2

Frame

Type and description (separate frame unitized frame, partially-unitized frame)	Unitized Construction
--	-----------------------

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (•)

Body Type

AADH41

AADP41

AADX41

Convenience Equipment (standard, optional, n.a.)

Air conditioning (manual, auto. temp control)		Manual - Opt.		
Clock (digital, analog)		Digital (In radio) - Std.		
Compass/thermometer		N.A.		
Console (floor, overhead)		(a)	floor - std.	floor - std.
Defroster, elec. backlight		Opt.	Std.	std.
Electronic	Diagnostic monitor (integrated, individual)	Std.		
	Instrument cluster (list instruments)	N.A.		
	Keyless entry	N.A.		
	Tripminder (avg. spd., fuel)	N.A.	N.A.	Std.
		(Avg. fuel econ., Instant. fuel econ., Dist. to empty, elapse time, trip odo.)		
	Voice alert (list items)	N.A.		
	Other (Graphic message center)	Opt.	Std.	N.A.
		(Head, Tail, Brake lamp outage, low washer fluid, door ajar, trunk ajar)		
Fuel door lock (remote, key, electric)		Remote cable - std.		
Lamps	Auto head on / off delay, dimming	N.A.		
	Cornering	N.A.		
	Courtesy (map, reading)	Dome - Std., Map - Opt.	Dome, map - std.	Dome, Map - std.
	Door lock, ignition (Ignition time delay)	Opt. (in pkg.)	Std.	Std.
	Engine compartment	Opt. (in pkg.)	Std.	Std.
	Fog	N.A.	Std.	Std.
	Glove compartment	Std.		
	Trunk	Std.		
	Illuminated entry system (list lamps, activation)	N.A.		
	Other (Ash receiver)	Std. all		
	(Cigarette lighter & under Inst. Panel)	Opt. (in pkg.)	Std.	Std.
	Mirrors	Day / night (auto. man.)	Manual - Std.	
L.H. (remote, power, heated)		Manual, remote - Std. all; Power, remote, heated opt. all		
R.H. (convex, remote, power, heated)		Convex, man., remote - Std. all; Convex, pwr., remote, heated - opt. all		
Visor vanity (RH/LH, illuminated)		RH/LH - Std.	RH/LH illum. - Std.	RH/LH illum. - Std.
Navigation system (describe)		N.A.		
Parking brake-auto release (warning light)		Warning lamp - Std. all		
(a) Floor - std., w/armrest - opt.				

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990**

Issued **9-15-89**

Revised (e)

METRIC (U.S. Customary)

Model Code

AADH41

AADP41

AADX41

Convenience Equipment (standard, optional, n.a.)

Power Equipment	Deck lid (release, pull down)		N.A.	
	Door locks (manual, automatic, describe system)		Manual with ignition interlock - Opt.	
	Seats	2 - 4 - 6 way, etc.	6-way, driver only - Opt.	
		Reclining (R.H., L.H.)	N.A.	
		Memory (R.H., L.H., preset, recline)	N.A.	
		Lumbar, hip, thigh, support	N.A.	
		Heated (R.H., L.H., other)	N.A.	
	Side windows		Opt.	
	Vent windows		N.A.	
	Rear windows		Opt.	
Radio systems	Antenna (location, whip, w/shield, power)		Whip - Right front fender - Std.	
	Std.	AM stereo/FM/MX/ETR	ETR/Cassette	AM stereo/FM/MX/
	Opt.	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep pkg., headphone jacks, etc.	AM stereo/FM/MX/ETR/Cassette	
			Infinity I - Premium AM stereo/FM/MX/ETR/Cassette	
			Infinity II - Premium AM stereo/FM/MX/ETR/Cassette w/Graphic Equalizer	
	Speaker (number, location)		Two coax., frt. dr. - Std. 4 coax. frt. & rr. drs. - Opt. Opt. (a)	4 coax. frt. & rr. drs. - Std. 4 equalized coaxial, front & rear doors - Incl. w/Infinity I & II
	Roof open air fixed (flip-up, sliding, "T")		Flip up manual with removable sunshade - Opt.	
Speed control device		Opt.	Std.	Std.
Speed warning device (light buzzer, etc.)		N.A.		
Tachometer (rpm)		Opt.	Std.	Std.
Telephone system (describe)		N.A.		
Theft deterrent system		Inside hood release, glove box lock, locking steering column - Std.		

(a) 4 equalized coaxial, front & rear doors - w/Infinity I

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

Model Year **1990** Issued **9-15-89** Revised(*)

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for Definitions

All dimensions to ground are for comparative purposes only. Dimensions are to be shown for all base body models of each car line

SAE Ref. no. refers to the definition published in SAE Recommended Practice J1100 "Motor Vehicle Dimensions," unless otherwise specified.

Body Type	SAE Ref. No.	41
-----------	--------------	----

ØWidth

Tread (front)	W101	1463 (57.6)
Tread (rear)	W102	1453 (57.2)
Vehicle width	W103	1709 (67.3)
Body width at SgRP (front)	W117	1731 (68.1)
Vehicle width (front doors open)	W120	3432 (135.1)
Vehicle width (rear doors open)	W121	3320 (130.7)
Turn-in angle (deg.)	W122	24.8°
Outside mirror width	W410	

ØLength

Wheelbase	L101	2624 (103.3)
Vehicle length	L103	4602 (181.2)
Overhang (front)	L104	981 (38.6)
Overhang (rear)	L105	997 (39.3)
Upper structure length	L123	2391 (94.1)
Rear wheel C/L "X" coordinate	L127	2712 (106.8)

ØHeight*

Passenger distribution (front/rear)	PD 1,2,3	2 Front / 3 Rear
Trunk/cargo load		-
Vehicle height	H101	1359 (53.5)
Cowl point to ground	H114	922 (36.3)
Deck point to ground	H138	957 (37.7)
Rocker panel front to ground	H112	211 (8.3)
Rocker panel rear to ground	H111	191 (7.5)
Windshield slope angle	H122	56.0°
Backlight slope angle	H121	35.4°

Ground Clearance

Front bumper to ground	H102	258 (10.2)
Rear bumper to ground	H104	286 (11.3)
Bumper to ground (front at curb mass (wt.))	H103	276 (10.9)
Bumper to ground (rear at curb mass (wt.))	H105	359 (14.1)
Angle of approach (degrees)	H106	17°
Angle of departure (degrees)	H107	21°
Ramp breakover angle (degrees)	H147	16°
Axle differential to ground (front/rear)	H153	Front - 117 (4.6) Rear - 100 (3.9)
Min. running ground clearance	H156	116 (4.6)
Location of min. run. ground clearance		Frnt. Suspension C'mbr. Brkt.

* All vehicle height and ground clearance are made at the Manufacturer's Design Load Weight.

Manufacturer's Design Load Weight is defined with indicated passenger distribution and trunk/cargo load, unless otherwise specified.

All linear dimensions are in millimeters (inches) unless otherwise noted.

MVMA Specifications

Vehicle Line DODGE SPIRIT

Model Year 1990

Issued 9-15-89

Revised(*)

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Body Type

41

Ø Front Compartment

SAE
Ref.
No.

SgRP front, "X" coordinate	L31	1403 (55.2)
Effective head room	H61	976 (38.4)
Max. eff. leg room (accelerator)	L34	1063 (41.9)
SgRP to heel point	H30	271 (10.7)
SgRP to heel point	L53	850 (33.5)
Back angle	L40	24°
Hip angle	L42	97°
Knee angle	L44	124°
Foot angle	L46	87°
Design H-point front travel	L17	205 (8.1)
Normal driving & riding seat track trvl.	L23	184 (7.2)
Shoulder room	W3	1380 (54.3)
Hip room	W5	1312 (51.7)
Upper body opening to ground	H50	1243 (49.0)
Steering wheel maximum diameter*	W9	381 (15.0)
Steering wheel angle	H18	25.8°
Accelerator heel pt. to steer. whl. cntr.	L11	501 (19.7)
Accelerator heel pt. to steer. whl. cntr.	H17	636 (25.0)
Undepressed floor covering thickness	H67	22.4 (0.88)

Ø Rear Compartment

SgRP couple distance	L50	867 (34.1)
Effective head room	H63	962 (37.9)
Min. effective leg room	L51	973 (38.3)
SgRP (second to heel)	H31	284 (11.2)
Knee clearance	L48	74 (2.9)
Shoulder room	W4	1397 (55.0)
Hip room	W6	1320 (52.0)
Upper body opening to ground	H51	1242 (49.0)
Back angle	L41	24°
Hip angle	L43	88°
Knee angle	L45	98°
Foot angle	L47	130°
Depressed floor covering thickness	H73	12.7 (0.5)

Luggage Compartment

Usable luggage capacity (L (cu. ft.))	V1	408 (14.4)
Liftover height	H195	555 (21.9)

Interior Volumes (EPA Classification)

Vehicle Class		Mid-size
Interior volume index (cu. ft.)**		111.2
Trunk / cargo index (cu. ft.)		14.4

* See p. 14

** Includes passenger and trunk / cargo index - see definition page 32.

MVMA Specifications

Vehicle Line **DODGE SPIRIT**

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Revised(s)

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for Definitions

Body Type

SAE
Ref.
No.

Station Wagon - Third Seat

SgRP couple distance	L85	
Shoulder room	W85	
Hip room	W86	
Effective leg room	L86	
Effective head room	H86	
SgRP to heel point	H87	
Knee clearance	L87	
Seat facing direction	SD1	
Back angle	L88	
Hip angle	L89	
Knee angle	L90	
Foot angle	L91	

Station Wagon - Cargo Space

Cargo length (open front)	L200	
Cargo length (open second)	L201	
Cargo length (closed front)	L202	
Cargo length (closed second)	L203	
Cargo length at belt (front)	L204	
Cargo length at belt (second)	L205	
Cargo width (wheelhouse)	W201	
Rear opening width at floor	W203	
Opening width at belt	W204	
Min. rear opening width above belt	W205	
Cargo height	H201	
Rear opening height	H202	
Tailgate to ground height	H250	
Front seat back to load floor height	H197	
Cargo volume index [m ³ (ft. ³)]	V2	
Hidden cargo volume [m ³ (ft. ³)]	V4	
Cargo volume index-rear of 2 nd -seat	V10	

Hatchback - Cargo Space

Cargo length at front seatback height	L208	
Cargo length at floor (front)	L209	
Cargo length at second seatback height	L210	
Cargo length at floor (second)	L211	
Front seatback to load floor height	H197	
Second seatback to load floor height	H198	
Cargo volume index[m ³ (ft. ³)]	V3	
Hidden cargo volume [m ³ (ft. ³)]	V4	
Cargo volume index-rear of 2 nd -seat	V11	

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METRIC (U.S. Customary)

Body Type

All

Vehicle Fiducial Marks

Fiducial Mark Number*		Define Coordinate Location
Front		The center of gauge holes located in front longitudinal approximately 836 mm (32.9 in.) from centerline of front wheels.
Rear		The center of gauge holes located in rear longitudinal approximately 3211 mm (126.4 in) from the centerline of front wheels.
Front	Fiducial Mark Number	
	W21	433.5 (17.1)
	L54	925 (36.4)
	H81	-9 (-0.35) Bottom surface of Longitudinal
	H161	
	H163	
Rear	Fiducial Mark Number	
	W22	527.6 (20.8)
	L55	3376.2 (132.9)
	H82	235 (9.3) Bottom Surface of Longitudinal
	H162	
	H164	

*Reference - SAE Recommended Practice, J182, Motor Vehicle Fiducial Marks.

METRIC (U.S. Customary)

Model Year 1990

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Vehicle Mass (Weight)

* Reference - SAE J1100 Motor vehicle dimensions, curb weight definition.

****ETWC - Equivalent Test Weight Class - basis for U.S. Environmental Protection Agency emission certification.**

Refer to ETWC code legend below for test weight class.

ETWC LEGEND									
A	= 1000	I	= 2000	Q	= 3000	Y	= 4000		
B	= 1125	J	= 2125	R	= 3125	Z	= 4250		
C	= 1250	K	= 2250	S	= 3250	AA	= 4500		
D	= 1375	L	= 2375	T	= 3375	BB	= 4750		
E	= 1500	M	= 2500	U	= 3500	CC	= 5000		
F	= 1625	N	= 2625	V	= 3625	DD	= 5250		

SHIPPING MASS (weight) Calculation Kg. (lbs.)

Shipping Mass (weight) = Curb Weight less:

35 kg.(78 lbs.)

MVMA Specifications

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METRIC (U.S. Customary)**Estimated**[illegible]

* Also see Engine - General section for dressed engine mass (weight).