MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1990

Manufacturer	Vehicle Line	
DIAMOND STAR MOTORS	EAGLE TALON	
Mailing Address		
100 N. DIAMOND STAR PKWY. NORMAL, IL 61761	Issued 9-15-89	Revised

Direct questions concerning these specifications to the manufacturer listed above.

The information contained herein is prepared, distributed by, and is solely the responsibility of the vehicle manufacturing company to whose products it relates. This specification form was developed by the vehicle manufacturing companies under the auspices of the Motor Vehicle Manufacturers Association of the United States, Inc.

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)

Table of Contents

⌀ Indicates Format Change From Previous Year

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

METRIC (U.S. Customary)

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

Vehicle Origin

Design & development (company)	Mitsubishi Motors Corporation.
Where built (country)	U.S.A
Authorized U.S. sales marketing representative	Chrysler Motors Corp.

Vehicle Models

Model Description & Drive (FWD / RWD / AWD / 4WD)*	Introduction Date	Make, Vehicle Models, Series, Body Type (Mfgr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load-Kilograms (Pounds)
2 DOOR Coupe (FWD)		D22AMNHML 4E/9E D22AMRHML 4E/9E D22AMNPFL 4E/9E	4 (2/2)	28 Kg (62 lbs)
2 DOOR Coupe (4WD)		D27AMNGFL 4E/9E		

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

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

METRIC (U.S. Customary)

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
ENGINE	Engine Code		4G63	4G63	4G63	4G63
	Displacement Liters (in^3)		1.997 (122)	1.997 (122)	1.997 (122)	1.997 (122)
	Induction system (FI, Carb, etc.)		F.I.	F.I.	F.I.	F.I.
	Compression ratio		9.0	9.0	7.8	7.8
	SAE Net at RPM	Power kW (bhp)	101 (135) at 6000	101 (135) at 6000	142 (190) at 6000	145 (195) at 6000
		Torque N • m (lb. ft.)	169 (125) at 5000	169 (125) at 5000	275 (203) at 3000	275 (203) at 3000
	Exhaust single, dual		Dual	Dual	Single	Single
TRANS	Transmission/ Transaxle		Manual 5-speed	Automatic 4-speed	Manual 5-speed	Manual 5-speed
	Axle Ratio (std. first)		4.322	4.007	4.153	4.933

Series Availability		Power Teams (A - B - C - D)	
Model	Code	Standard	Optional
2DOOR Coupe (FWD)	D22AMNHML	A	–
	D22AMRHML	B	–
	D22AMNPFL	C	–
2DOOR Coupe (4WD)	D27AMNGFL	D	–

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (-)

METRIC (U.S. Customary)

Engine Description / Engine Code	4G63 (1.997 Liters) MT	4G63 (1.997 Liters) AT	4G63 with Turbo (1.997 Liters)

ENGINE – GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)		In line, Front Transverse, DOHC		
Manufacturer		Mitsubishi Motors Corp.		
No. of cylinders		4		
Bore		85.0		
Stroke		88.0		
Bore spacing (C / L to C / L)		93		
Cylinder block material & mass kg (lbs.) (machined)		Cast iron, 37.5 (82.7)		
Cylinder block deck height		229		
Cylinder block length		439		
Deck clearance (minimum) (above or below block)		0.0 (mm)		
Cylinder head material & mass kg (lbs.)		Aluminum alloy, 12.6 (27.8)		
Cylinder head volume (cm^3)		45.5		
Cylinder liner material		N.A.		
Head gasket thickness (compressed)		1.25		
Minimum combustion chamber total volume (cm^3)		61.7		72.7
Cyl. no. system (front to rear)*	L. Bank	N.A.		
	R. Bank	N.A.		
Firing order		1-3-4-2		
Intake manifold material & mass [kg (lbs.)]**		Aluminum alloy, 5.5 (12.1)		
Exhaust manifold material & mass [kg (lbs.)]**		Cast iron, 7.5 (16.5)		Cast iron, 5.0 (11)
Fuel required unleaded, diesel, etc.		Unleaded		
Fuel antiknock index (R + M) ÷ 2		No less than 91		No less than 95 or 91 with knock control
Engine mounts	Quantity	4		
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Rubber (Elastomeric)		
	Added isolation (sub-frame, crossmember, etc.)	*1 Crossmember and Centermember *2 No.1 Crossmember and No.2 Crossmember		
Total dressed engine mass (wt) dry***		151.3	144.3	158.7

Engine – Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum alloy, 343 (12.1)	Aluminum alloy, 362 (12.8)	*1: D22A, *2: D27A

Engine – Camshaft

Location	Above each IN. and EX. valve on cylinder-head	
Material & mass kg (weight, lbs.)	Cast iron, IN:1.9 (4.2), EX:1.9 (4.2)	
Drive type	Chain / belt	Belt
	Width / pitch	29/9.525

* 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:

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•)

METRIC (U.S. Customary)

Engine Description / Engine Code		4G63 (1.997 Liters)	4G63 with Turbo (1.997 Liters)

Engine – Valve System

Hydraulic lifters (std., opt., NA)		Std.	
Valves	Number intake / exhaust	8/8	
	Head O.D. intake / exhaust	34/30.5	

Engine – Connecting Rods

Material & mass [kg., (weight, lbs.)]*		Forged iron, 0.69 (1.52)	
Length (axes ℄ to ℄) mm		150.0	

Engine – Crankshaft

Material & mass [kg., (weight, lbs.)]*		Forged iron, 16.3 (35.9)	
End thrust taken by bearing (no.)		3	
Length & number of main bearings		23mm, 5	
Seal (material, one, two piece design, etc.)	Front	Synthetic rubber, One piece	
	Rear	Synthetic rubber, One piece	

Engine – Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]		300 (42.7) at 2000	
Type oil intake (floating, stationary)		Stationary	
Oil filter system (full flow, part, other)		Full flow	
Capacity of c/case, less filter-refill-L (qt.)		4.0 (3.5)	

Engine – Diesel Information

Diesel engine manufacturer		–	
Glow plug, current drain at 0°F		–	
Injector nozzle	Type	–	
	Opening pressure [kPa (psi)]	–	
Pre-chamber design		–	
Fuel injection pump	Manufacturer	–	
	Type	–	
Fuel injection 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		N.A.	Mitsubishi Heavy Industries Ltd.
Super charger - manufacturer		N.A.	N.A.
Intercooler		N.A.	Std.

* Finished State

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•)

METRIC (U.S. Customary)

Engine Description / Engine Code	4G63 ((1.997 Liters)		4G63 with Turbo (1.997 Liters)
	MI	AT	

Engine – Cooling System

Coolant recovery system (std., opt., n.a.)		Std.		
Coolant fill location (rad., bottle)		Bottle		
Radiator cap relief valve pressure [kPa (psi)]		88 (12.8)		
Circulation thermostat	Type (choke, bypass)	Choke pellet		
	Starts to open at °C (°F)	88 (190.4)		
Water pump	Type (centrifugal, other)	Centrifugal		
	GPM 1000 pump rpm	N.A.		
	Number of pumps	1		
	Drive (V-belt, other)	V ribbed belt		
	Bearing type	Roller & Ball, integral shaft, permanently sealed		
	Impeller material	Cold-rolled carbon steel sheet		
	Housing material	Aluminum die casting		
By-pass recirculation [type (inter., ext.)]		External		
Cooling system capacity	With heater – L(qt.)	7.0 (7.4)		
	With air conditioner – L(qt.)	7.0 (7.4)		
	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	Std. and A/C		
	Type (cross-flow, etc.)	Down-flow		
	Construction (fin & tube mechanical, braze, etc.)	Tube and corrugated fin brazed		
	Material, mass [kg (wgt., lbs.)]	Copper & Brass 5.35	Copper & Brass 5.7	Copper & Brass, 5.35
	Width	680		
	Height	350		
	Thickness	16	32	
	Fins per inch	20	17	
Radiator end tank material		Plastic		
Fan	Std., elec., opt.	Electric		
	Number of blades & type (flex, solid, material)	4		
	Diameter & projected width	320		
	Ratio (fan to crankshaft rev.)	N.A.		
	Fan cutout type	N.A.		
	Drive type (direct, remote)	N.A.		
	RPM at idle (elec.)	2080		
	Motor rating (wattage) (elec.)	120		
	Motor switch (type & location) (elec.)	Thermo switch, RAD		
	Switch point (temp., pressure) (elec.)	82°C-85°C		
	Fan shroud (material)	Plastic		

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

METRIC (U.S. Customary)

Engine Description / Engine Code	4G63 (1.997 Liters)	4G63 with Turbo (1.997 Liters)

Engine – Fuel System (See supplemental page for detailes of Fuel Injection, Supercharger, Turbocharger, etc. if used)

Induction type: carburetor, fuel injection system, etc.		Fuel Injection	
Manufacturer		NIPPON INJECTOR Co.,Ltd.	
Carburetor no. of barrels		-	
Idle A/F mix.		14.7	
Fuel injection	Point of injection (no.)	Inlet port (4)	
	Constant, pulse, flow	6.09 mm³ / 2.2 msec	8.07 mm³ / 1.8 msec
	Control (electronic, mech.)	Electronic	
	System pressure [kPa (psi)]	329 (47.71)	250 (36.25)
Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	750 rpm (A/C on 850 rpm)	
	Automatic	750 rpm (650 rpm Drive)	-
Intake manifold heat control (exhaust or water thermostatic or fixed)		N.A.	
Air cleaner type		Dry non-woven cloth	
Fuel filter (type/location)		Paper, Engine room	
Fuel pump	Type (elec. or mech.)	Electric	
	Location (eng., tank)	In tank	
	Pressure range [kPa (psi)]	177 to 588 (26 to 85)	
	Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))	90 L/hr (23.8 gal/hr) @ 250kPa (36psi)	

Fuel Tank		D22A	D27A
Capacity [refill L (gallons)]		60 (15.9)	
Location (describe)		Under rear seatpan	Under trunk floor
Attachment		Strap	Bolt & Nut
Material & Mass [kg (weight lbs.)]		Steel, 13.2 (29.1)	Steel, 15.6 (34.4)
Filler pipe	Location & material	Left, rear quarter panel, Steel	
	Connection to tank	Rubber hose	
Fuel line (material)		Steel	
Fuel hose (material)		Rubber	
Return line (material)		Steel	
Vapor line (material)		Steel	
Extended range tank	Opt., n.a.	N.A.	
	Capacity [L (gallons)]	N.A.	
	Location & material	N.A.	
	Attachment	N.A.	
Auxiliary tank	Opt., n.a.	N.A.	
	Capacity [L (gallons)]	N.A.	
	Location & material	N.A.	
	Attachment	N.A.	
	Selector switch or valve	N.A.	
	Separate fill	N.A.	

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•)

METRIC (U.S. Customary)

Engine Description / Engine Code	4G63(1.997 Liters)	4G63 with Turbo (1.997 Liters)

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		Three-way catalyst with feedback control, Exhaust gas recirculation	
	Air Injection	Pump or pulse	N.A.	
		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)	Controlled flow (Calif. only: and electronic)	
		Exhaust source Point of exhaust injection (spacer, carburetor, manifold, other)	Exhaust Manifold Port No.4 Intake manifold	Exhaust Manifold Port No.4 Single tank
	Catalytic Converter	Type	Three-way	
		Number of	1	
		Location(s)	Under floor	
		Volume [L (in³)]	Calif.: 1.0 (61.02) + 0.7 (42.71), Fed: 1.7 (103.7)	
		Substrate type	Monolith	
		Noble metal type	-	
		Noble metal concentration (g/cm³)	-	
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Induction System	
	Energy source (manifold vacuum, carburetor, other)		Intake Manifold Vacuum	
	Discharges (to intake manifold, other		To intake manifold	
	Air inlet (breather cap, other)		Air intake hose	
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister	
		Carburetor	-	
	Vapor storage provision		Canister	
Electronic system	Closed loop (yes/no)		Yes	
	Open loop (yes/no)		Yes	

Engine – Exhaust System

		2WD		4WD
Type (single, single with cross-over, dual, other)		Single with Cross-Over		
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass [kg (weight lbs)]		One (Reverse flow) Stainless steel, 6.3 (13.9)	One (Reverse flow) Stainless steel, 6.4 (14.1)	One (Reverse flow) Stainless steel, 5.9 (13.0)
Resonator no. & type		Two (Straight thru), Stainless steel, 2.4 (5.3)	N.A.	
Exhaust pipe	Branch o.d., wall thickness	42.7x2.0(Dual)	54 x 1.5	-
	Main o.d., wall thickness	48.6x1.5, 54x1.5	54 x 1.5	
	Material & Mass [kg (weight lbs)]	Stainless steel tube, 4.4 (9.7)	Stainless steel tube, 4.2 (9.3)	Stainless steel tube 4.9 (10.8)
Intermediate pipe	o.d. & wall thickness	54 x 1.5, 54 x 2.0	54 x 1.5	54 x 2.0, 54 x 1.5
	Material & Mass [kg (weight lbs)]	Stainless steel tube, 5.2 (11.5)	Stainless steel tube, 5.8 (12.8)	Stainless steel tube 6.3 (13.9)
Tail pipe	o.d. & wall thickness	38.1 x 1.2 (Dual)	42.7 x 1.2 (Dual)	
	Material & Mass [kg (weight lbs)]	Stainless steel tube, 0.8 (1.8)	Stainless steel tube, 1.0 (2.2)	Stainless steel tube, 1.3 (2.9)

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (-)

METRIC (U.S. Customary)

Engine Description / Engine Code	4G63 (1.997 Liters)	4G63 with Turbo (1.997 Liters)

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., Mitsubishi Motors Corp./Japan
Automatic (manufacturer/country)	N.A.
Automatic overdrive (manufacturer/country)	Std., Mitsubishi Motors Corp./Japan / N.A.

Manual Transmission/Transaxle

		2WD		4WD
Number of forward speeds		5		
Gear ratios	1st	3.363	3.083	3.083
	2nd	1.947	1.833	1.684
	3rd	1.285	1.217	1.115
	4th	0.939	0.888	0.833
	5th	0.756	0.741	0.666
	Reverse	3.083	3.166	3.166
Synchronous meshing (specify gears)		1,2,3,4,5		
Shift lever location		Floor		
Trans. case mat'l. & mass kg (lbs)*		Aluminum alloy, 9.9 (21.8)	Aluminum alloy 11.5 (25.4)	Aluminum alloy 19.6 (43.2)
Lubricant	Capacity [L (pt.)]	1.8 (3.8)	2.2 (4.6)	2.9 (6.1)
	Type recommended	Multipurpose gear oil conforming to API GL-4		

Clutch (Manual Transmission)

Clutch manufacturer		Daikin Manufacturing Co.,Ltd.		
Clutch type (dry, wet; single, multiple disc)		Dry single plate		
Linkage (hydraulic, cable, rod, lever, other)		Hydraulic		
Max. pedal effort (nom. spring load, new) N (lbs)	Depressed	123 (27.7)		
	Released	83 (18.7)		
Assist (spring, power/percent, nominal)		No		Spring
Type pressure plate springs		Diaphragm		
Total spring load (nominal, new) N (lbs)		4511 (1014)	6178 (1389)	
Clutch facing	Facing mfgr. & material coding	Hitachi Chemical Co.,Ltd.		
	Facing material & construction	Woven (Non-Asbestos)		
	Rivets per facing	16		
	Outside x inside dia. (nominal)	215 x 140 (mm)	225 x 150 (mm)	
	Total eff. area [cm²(in.²)]	418 (64.8)	442 (68.5)	
	Thickness (pressure plate side/fly wheel side)	3.5/3.5 (mm)		
	Rivet depth (pressure plate side/fly wheel side)	1.6/1.6 (mm)	1.3/1.3 (mm)	
	Engagement cushion method	Flat-wave spring		
Release bearing type & method lub.		Ball bearing, permanently lubricated		
Torsional damping method, springs, hysteresis		Damper rubbers-coil springs and Friction washers		

* Includes shift linkage, lubricant, and clutch housing. If other specify.

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

METRIC (U.S. Customary)

Engine Description / Engine Code		4G63 (1.997 Liters)	4G63 with Turbo (1.997 Liters)	
∅ **Automatic Transmission/Transaxle**		2WD	2WD	4WD
Trade Name		Mitsubishi Motors Corp. F4A22	–	
Type and special features (describe)		Torque converter with automatically operated Planetary gear Transmission Electronic control F4A22	–	
Gear selector	Location (column, floor, other)	Lever : Console mounted	–	
	Ltr./No. designation (e.g. PRND21)	P.R.N.D.2.L / 6	–	
	Shift interlock (yes, no, describe)		–	
Gear ratios	1st	2.846	–	
	2nd	1.581	–	
	3rd	1.000	–	
	4th	0.685	–	
	Reverse	2.176	–	
Max. upshift speed - drive range [km/h (mph)] *		1-2 59/50 (37/31), 2-3 111/94 (69/59), 3-4 187/156 (117/98)	–	
Max. kickdown speed - drive range [km/h (mph)] *		2-1 45/35 (28/22), 3-2 100/85 (63/53), 4-3 168/141 (105/89)	–	
Min. overdrive speed [km/h (mph)]		29 (18)	–	
Torque converter	Number of elements	Three	–	
	Max. ratio at stall	2.17 : 1	–	
	Type of cooling (air, liquid)	Liquid	–	
	Nominal diameter	240	–	
	Capacity factor "K"*	224	–	
Lubricant	Capacity [refill L(pt.)]	6.1 (13.0)	–	
	Type recommended	DEXRON II or DEXRON automatic Trans. fluid	–	
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Std., External liquid	–	
Transmission mass [kg (lbs)] & case material **		Aluminum alloy, 13.7 (30.2)	–	

* Power/Economy

∅ **All Wheel / 4 Wheel Drive**				
Description & type (part-time, full-time, 2/4 shift while moving, mechanical, elect., chain/gear, etc.)		–		Full-time
Transfer case	Manufacturer and model	–		Mitsubishi Motors Corp.
	Type and location	–		–
Low-range gear ratio		–		–
System disconnect (describe)		–		–
Center differential	Type (bevel, planetary, w or w/o viscous bias, torsen, etc.)	–		Bevel with Viscous bias
	Torque split (% front/rear)	–		50/50

* Input speed ÷ torque

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

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•)

METRIC (U.S. Customary)

Engine Description / Engine Code	D27A

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

Axle ratio (or overall top gear ratio)		3.545
Ring gear o.d.		171
No. of teeth	Pinion	11
	Ring gear	39

Rear Axle Unit

Description		Separable
Limited slip differential (type)		Opt. (V.C.U. type)
Drive pinion	Type	Hypoid
	Offset	30
No. of differential pinions		2
Pinion / differential	Adjustment (shim, etc.)	Shim
	Bearing adjustment	Shim
Driving wheel bearing (type)		Ball bearing
Lubricant	Capacity [L (pt.)]	0.7 (1.5)
	Type recommended	Multipurpose gear oil, conforming to API GL-5

Propeller Shaft – Rear Wheel Drive

Manufacturer Type (straight tube, tube-in-tube, internal-external damper, etc.)			Mitsubishi Motors Corp, Straight tube	
Outer diam. x length* x wall thickness	Manual 3-speed transmission		–	
	Manual 4-speed transmission		–	
	Manual 5-speed transmission	FRONT	50.8 x 707 x 2.6	
		CENTER	50.8 x 647.5 x 2.6	
		REAR	50.8 x 530.5 x 2.6	
	Overdrive		–	
	Automatic transmission			
Intermediate bearing	Type (plain, anti-friction)		Anti - friction (Ball bearing)	
	Lubrication (fitting, prepack)		Prepack	
Slip yoke	Type		Sliding yoke (Spline)	
	Number of teeth		20 (21 indexed)	
	Spline o.d.		24.13	
Universal joints	Make and mfg. no.	Front	Mitsubishi Motors Corp.(Bearing: Koyo Seiko Co.)	
		Rear	Mitsubishi Motors Corp.(Bearing: Koyo Seiko Co.)	
	Number used		3	1
	Type (ball and trunnion, cross)		Cross (Fooks joint)	C.V. Joint
	Rear attach (u-bolt, clamp, etc)		Clamp (Snap ring)	–
	Bearing: Type (plain, anti-friction)		Anti-friction (Needle bearing)	–
	Bearing: Lubrication (fitting, prepack)		Prepack	–
Drive taken through (torque tube, arms or springs)			Control arms	
Torque taken through (torque tube, arms or springs)			Diff gear mounting system or Control arms	

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

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

METRIC (U.S. Customary)

Engine Description / Engine Code	4G63(1.997 Liters) MT	4G63(1.997 Liters) AT	4G63 with Turbo (1.997 Liters)

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

			2WD			4WD
Effective final drive ratio (or overall top gear ratio)			3.941	3.562	3.437	
Transfer ratio and method (chain, gear, etc.)			1.096	1.125	1.208	1.275 (GEAR)
Front drive unit	Ring gear o.d.		179.26	175.73	187.69	193.19
	No. of teeth	Pinion	17	16		15
		Ring gear	67	57	55	58

Front Drive Unit

Description (integral to trans., etc.)		Separable
Limited slip differential (type)		–
Drive pinion	Type	–
	Offset	–
No. of differential pinions		2
Pinion / differential	Adjustment (shim, etc.)	Shim
	Bearing adjustment	Shim
Driving wheel bearing (type)		Double row angular contact ball bearing
Lubricant	Capacity [L (pt.)]	Refer to transmission Spec.
	Type recommended	Refer to transmission Spec.

Axle Shafts – Front Wheel Drive

Manufacturer and number used			Toyo Bearing Co.,Ltd.		
Type (straight, solid bar, tubular, etc.)		Left	Straight bar		
		Right	Straight bar		
Outer diam. x length* x wall thickness	Manual transaxle	Left	26 x 706	30 x 706	23.2 x 368
		Right	24 x 366	24 x 366	23.2 x 368
	Automatic transaxle	Left	26 x 706	–	–
		Right	24 x 366	–	–
	Optional transaxle	Left	–		
		Right	–		
Slip yoke	Type		None		
	Number of teeth		–		
	Spline o.d.		–		
Universal joints	Make and mfg. no.	Inner	Toyo Bearing Co.,Ltd.		
		Outer	Toyo Bearing Co.,Ltd.		
	Number used		Two x Two		
	Type, size, plunge	Inner	C.V. joint		
		Outer	C.V. joint		
	Attach (u-bolt, clamp, etc)		–		
	Bearing: Type (plain, anti-friction)		–		
	Bearing: Lubrication (fitting, prepack)		–		
Drive taken through (torque tube, arms or springs)			Lower arm & Strut		
Torque taken through (torque tube, arms or springs)			Lower arm & Strut		

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

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	D22A	D27A

Suspension – General Including Electronic Controls

Car leveling	Standard/optional/not avail.	N.A.	
	Manual/automatic control	N.A.	
	Type (air/hydraulic)	N.A.	
	Primary/assist spring	N.A.	
	Rear only/4 wheel leveling	N.A.	
	Single/dual rate spring	N.A.	
	Single/dual ride heights	N.A.	
	Provision for jacking	N.A.	
Shock absorber damping controls	Standard/option/not avail.	N.A.	
	Manual/automatic control	N.A.	
	Number of damping rates	N.A.	
	Type of actuation (manual/ electric motor/air, etc.)	N.A.	
	sensors: Lateral acceleration	N.A.	
	sensors: Deceleration	N.A.	
	sensors: Acceleration	N.A.	
	sensors: Road surface	N.A.	
Shock absorber (front & rear)	Type	Front : Strut Type Rear : Telescopic Type	
	Make	Front/Rear : Kayaba Industry Co.,Ltd.	
	Piston diameter	Front : 32	Rear : 25 (mm)
	Rod diameter	Front : 22	Rear : 12.5 (mm)

Suspension – Front

Type and description		Independent Strut Type	
Travel*	Full jounce	83 (mm)	88 (mm)
	Full rebound	87 (mm)	78 (mm)
Spring	Type (coil, leaf, other) & material	Coil (9254 Steel, Specified in SAE)	
	Insulators (type & material)	–	Rubber pad
	Size (coil design height & i.d.)	314 x 146.3 or 322 x 146.1	334 x 146
	Spring rate [N/mm (lb./in.)]	23.5 (134.4)	25.5 (145.8)
	Rate at wheel [N/mm (lb./in.)]	22.1 (126.3)	24.0 (137.3)
Stablizer	Type (link, linkless, frameless)	Link	
	Material & bar diameter	Spring steel, ø19	Spring steel, ø20

Suspension – Rear

Type and description		3-Link torsion axle	
Travel*	Full jounce	100 (mm)	
	Full rebound	75	80 (mm)
Spring	Type (coil, leaf, other) & material	Coil (9254 Steel, Specified in SAE)	
	Size (length x width, coil design height & i.d.)	317 x 84.8	333 x 84
	Spring rate [N/mm (lb./in.)]	22.5 (128.8)	24.5 (140.2)
	Rate at wheel [N/mm (lb./in.)]	22.5 (128.8)	26.6 (152.1)
	Insulators (type & material)	Rubber pad	
	If leaf: No. of leaves	–	
	If leaf: Shackle (comp. or tens.)	–	
Stabilizer	Type (link, linkless, frameless)	Bar	
	Material & bar diameter	S38C, ø25 (mm)	S43C, ø20 (mm)
Track bar (type)		–	

* Define load condition:

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	D22A, D27A

Brakes – Service

Description				–
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)			AKEBONO Brake Industry Co.,Ltd., Disc
	Rear (disc or drum)			AKEBONO Brake Industry Co.,Ltd., Disc
Valving type (proportion, delay, metering, other)				Proportion valve
Power brake (std., opt., n.a.)				Std.
Booster type (remote, integral, vac., hyd., etc.)				Integral
Vacuum	Source (inline, pump, etc.)			Inline
	Reservoir (volume in.³)			–
	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 [cm²(in.²)]*				F: 196 (30.4) / R: 120 (18.6)
Gross Lining area [cm²(in.²)]**(F/R)				F: 202 (31.3) / R: 120 (18.6)
Swept area [cm²(in.²)]***(F/R)				F: 1192 (184.8) / R: 1177 (182.5)
Rotor	Outerworking diameter	F/R		F: 254 / R: 263 (mm)
	Inner working diameter	F/R		F: 163 / R: 173 (mm)
	Thickness	F/R		F: 24 / R: 10 (mm)
	Material & type (vented/solid)	F/R		F: Cast iron vented / R: Cast iron solid
Drum	Diameter & width	F/R		–
	Type and material	F/R		–
Wheel cylinder bore		F/R		F: 53.97 / R: 30.16 (mm)
Master cylinder	Bore/stroke	F/R		Bore: 23.81/Stroke:Primary:13, Secondary:15 (mm)
Pedal arc ratio				4.4
Line pressure at 445 N(100 lb.) pedal load [kPa (psi)]				12656 (1844)
Lining clearance		F/R		F:No major adjustment required/R:No major adjustment required
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)		Bonded
		Rivet size		–
		Manufacturer		Hitachi Chemical Co.,Ltd.
		Lining code*****		Hitachi MH102 EE
		Material		Molded
		****	Primary or out-board	111.8 x 43.8 x 10 (mm)
		Size	Secondary or in-board	111.8 x 43.8 x 10 (mm)
		Shoe thickness (no lining)		6.0 (mm)
	Rear wheel	Bonded or riveted (rivets/seg.)		Bonded
		Manufacturer		AKEBONO Brake Industry Co.,Ltd.
		Lining code*****		AKS 26 GF
		Material		Molded
		****	Primary or out-board	72 x 41.6 x 9.5 (mm)
		Size	Secondary or in-board	72 x 41.6 x 9.5 (mm)
		Shoe thickness (no lining)		5.0 (mm)

* 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 for formulation designation and coefficient of friction classification.

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•)

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	4G63(1.997 Liters)	4G63 with Turbo (1.997 Liters)

Tires And Wheels (Standard)

			2WD	4WD
Tires	Size (load range, ply)		P205/55HR16, Std load	P205/55VR16, Std load
	Type (bias, radial, steel, nylon, etc.)		Radial	
	Inflation pressure (cold) for recommended max. vehicle load	Front [kPa (psi)]	200 (29)	
		Rear [kPa (psi)]	180 (26)	
	Rev./mile-at 70 km/h (45 mph)		754	
Wheels	Type & material		Disc, Steel	Disc, Aluminum
	Rim (size & flange type)		16 x 6JJ	
	Wheel offset		46	
	Attachment	Type (bolt or stud)	Stud	
		Circle diameter	114.3	
		Number & size	5, M12 x 1.5	
Spare	Tire and wheel		T125/70D15, 4T x 15 High pressure tire	T125/90D16, 4Tx16 High pressure tire
	Storage position & location (describe)		On cargo Floor	

Tires And Wheels (Optional)

Tire size (load range, ply)	P205/55VR16, Std load	-
Type (bias, radial, steel, nylon, etc.)	Radial	-
Wheel (type & material)	Disc, Steel or Aluminum	-
Rim (size, flange type and offset)	16 x 6JJ	-
Tire size (load range, ply)	205/55VR16, Load range C	-
Type (bias, radial, steel, nylon, etc.)	Radial	-
Wheel (type & material)	Disc, Steel or Aluminum	-
Rim (size, flange type and offset)	16 x 6JJ	-
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)	-	

Brakes – Parking

Type of control		One handle, Hand-operated
Location of control		Between front seats
Operates on		Rear wheels
If separate from service brakes	Type (internal or external)	N.A.
	Drum diameter	N.A.
	Lining size (length x width x thickness)	N.A.

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•)

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	D22A	D27A

Steering

Manual (std., opt., n.a.)				N.A.	
Power (std., opt., n.a.)				Std.	
Adjustable steering wheel/column (tilt, telescope, other)		Type		Tilt	
		Manufacturer		Mitsubishi Motors Corp.	
		(std., opt., n.a.)		Std.	
Wheel diameter** (W9) SAE J1100		Manual		-	
		Power		372	
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)		11.6 (38.1)	
		Curb to curb (l. & r.)		10.8 (35.4)	
	Inside rear	Wall to wall (l. & r.)		6.4 (21.0)	
		Curb to curb (l. & r.)		6.6 (21.7)	
Scrub Radius*				-14.3	
Manual	Gear	Type		N.A.	
		Manufacturer		N.A.	
		Ratios	Gear	N.A.	
			Overall	N.A.	
	No. wheel turns (stop to stop)			N.A.	
Power	Type (coaxial, elec., hyd., etc.)			Integral	
	Manufacturer			Koyo Seiko Co.,Ltd.	
	Gear	Type		Rack & Pinion	
		Ratios	Gear	-	
			Overall	15.8	
	Pump (drive)			V-belt	
	No. wheel turns (stop to stop)			2.7	
Linkage	Type			Trailing, equal length tie rods	
	Location (front or rear of wheels, other)			Rear	
	Tie rods (one or two)			Two	
Steering axis	Inclination at camber (deg.)			14°20'	14°13'
	Bearings (type)	Upper		Ball bearing	
		Lower		Ball joint	
		Thrust		N.A.	
Steering spindle/knuckle & joint type				Ball	
Wheel spindle/hub	Diameter	Inner bearing		40.0 (mm)	
		Outer bearing		40.0 (mm)	
	Thread (size)			M22 x 1.5 (Metric)	
	Bearing (type)			Ball	

* The horizontal distance in the front elevation between wheel centerline and kingpin (ball joint) axis at ground.
** See Page 22.

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•)

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement			D22A	D27A
Wheel Alignment				
Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	2°20' ± 30'	
		Camber (deg.)	0°05' ± 30'	0°10' ± 30'
		Toe-in [outside track-mm (in.)]	0 ± 3 (0 ± 0.118)	
	Service reset*	Caster	–	
		Camber	–	
		Toe-in	–	
	Periodic M.V. inspection	Caster	–	
		Camber	–	
		Toe-in	–	
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	-0°45' ± 30'	-1°30' ± 30'
		Toe-in [outside track-mm (in.)]	0 ± 3 (0 ± 0.118)	3 ± 3 (0.118 ± 0.118)
	Service reset*	Camber	–	
		Toe-in	–	
	Periodic M.V. inspection	Camber	–	
		Toe-in	–	

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

Electrical – Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)	Analog (Std.)
	Trip odometer (std., opt., n.a.)	Std.
EGR maintenance indicator		N.A.
Charge indicator	Type	Voltage relay
	Warning device (light, audible)	Light
Temperature indicator	Type	Cross coil
	Warning device (light, audible)	Driving pointer
Oil pressure indicator	Type	Pressure switch and Electric Thermal
	Warning device (light, audible)	Light
Fuel indicator	Type	Cross coil and Thermistor
	Warning device (light, audible)	Driving pointer & Light
Windshield wiper	Type (standard)	Electric two speed with variable intermittent
	Type (optional)	N.A.
	Blade length	500 (DR. Side, AS. Side) (mm)
	Swept area [cm²(in.²)]	6427 (996)
Windshield washer	Type (standard)	Electric
	Type (optional)	N.A.
	Fluid level indicator (light, audible)	N.A.
Rear window wiper, wiper/washer (std., opt., n.a.)		Opt. (Electric one speed with intermittent)
Horn	Type	80 diameter
	Number used	Two
Other		Brake system and parking brake warning light, Fasten belts warning light, Coolant level warning light.

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•)

METRIC (U.S. Customary)

Engine Description / Engine Code	4G63 (1.997 Liters) MT	4G63 (1.997 Liters) AT	4G63 with Turbo (1.997 Liters)

Electrical – Supply System

Battery	Manufacturer	JOHNSON CONTROLS	
	Model, std., (opt.)	BCI Size GROUP 86	
	Voltage	12	
	Amps at 0°F cold crank	430	
	Minutes-reserve capacity	90	
	Amps/hrs.-20 hr. rate	60	
	Location	Front, right side of engine compartment	
Alternator	Manufacturer	Mitsubishi Electric Corp.	
	Rating (idle/max. rpm)	65	75
	Ratio (alt. crank/rev.)	2.29	
	Output at idle (rpm, park)	–	
	Optional (type & rating)	N.A.	
Regulator	Type	Voltage control	

Electrical – Starting System

Motor	Manufacturer	Mitsubishi Electric Corp.
	Current drain _____ °F	–
	Power rating [kw (hp)]	1.2
Motor drive	Engagement type	Solenoid
	Pinion engages from (front, rear)	Front

Electrical – Ignition System

Type	Electronic (std., opt., n.a.)		Std.	
	Other (specify)		–	
Coil	Manufacturer		Mitsubishi Electric Corp.	
	Model		H4T00172	
	Current	Engine stopped – A	0	
		Engine idling – A	1.4	
Spark plug	Manufacturer		NGK Spark Plug Co.,Ltd., Champion Spark Plug Co.,Ltd. or Nippon Denso	
	Model		BPR6ES-11, RN9YC4 or W20EPR-S11	BPR6ES, RN9YC or W20EPR
	Thread (mm)		14	
	Tightening torque (N-m (lb, ft)]		20 to 30 (15 to 22)	
	Gap		1.0 to 1.1	0.7 to 0.8 (mm)
	Number per cylinder		1	
Distributor	Manufacturer		N.A.	
	Model		N.A.	

Electrical – Suppression

Locations & type	–

MVMA Specifications

Vehicle Models Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

METRIC (U.S. Customary)

Body Type	D22A	D27A

Body

Structure	Monocock body
Bumper system front - rear	Impact absorbing system Fascia (Polyurethane) Energy absorber (Fluid type) Reinforcement (Steel)
Anti-corrosion treatment	Cathodic ED Paint Extended use of galvanized Wax injection Stone chipping resistance coating

Body – Miscellaneous Information

Type of finish (lacquer, enamel, other)			Heat setting acrylic enamel
Hood	Material & mass		Steel, 17.2 kg
	Hinge location (front, rear)		Rear
	Type (counterbalance, prop)		–
	Release control (internal, external)		Internal
Trunk lid	Material & mass		–
	Type (counterbalance, other)		–
	Internal release control (elec., mech., n.a.)		–
Hatch-back lid	Material & mass		Steel, 10.1 kg | Steel, 9.8 kg
	Type (counterbalance, other)		Gas spring
	Internal release control (elec., mech., n.a.)		Mech.
Tailgate	Material & mass		–
	Type (drop, lift, door)		–
	Internal release control (elec., mech., n.a.)		–
Vent window control (crank, friction, pivot, power)		Front	–
		Rear	–
Window regulator type (cable, tape, flex, drive, etc.)		Front	Cable
		Rear	–
Seat cushion type (e.g., 60/40, bucket, bench, wire, foam etc.)		Front	Bucket, Foam
		Rear	Bench, Foam
		3rd seat	–
Seat back type (e.g., 60/40, bucket, bench, wire, foam etc.)		Front	Bucket, Spring
		Rear	50/50, Foam
		3rd seat	–

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•)

METRIC (U.S. Customary)

Body Type	D22A, D27A

Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.) Standard / optional	First seat	–	–	–
		Second seat	3 point seat belt with ELR	–	3 point seat belt with ELR
		Third seat	–	–	–
Passive	Type & description (air bag, motorized - 2-point belt, fixed belt, knee bolster, manual - lap belt) Standard / optional	First seat	Motorized 2 point belt with ELR, manual lap belt with ELR & Knee bolster	–	Motorized 2 point belt with ELR, manual lap belt with ALR/ELR & Knee bolster
		Second seat	–	–	–
		Third seat	–	–	–

Glass	SAE Ref. No.	
Windshield glass exposed surface area [cm²(in.²)]	S1	10291 (1595)
Side glass exposed surface area [cm²(in.²)] - total 2-sides	S2	9393 (1456)
Backlight glass exposed surface area [cm²(in.²)]	S3	8839 (1370)
Total glass exposed surface area [cm²(in.²)]	S4	28523 (4421)
Windshield glass (type)		Curved-laminated plate
Side glass (type)		Curved-Tempered plate
Backlight glass (type)		Curved-tempered plate

Headlamps

Description - sealed beam, halogen, replaceable bulb, etc.	Sealed beam, Halogen
Shape	Rectangular
Lo-beam type (2A1, 2B1, 2C1, etc.	2E1
Quantity	Two
Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	2E1
Quantity	Two

Frame

Type and description (separate frame, unitized frame, partially-unitized frame)	–

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•)

METRIC (U.S. Customary)

Body Type	D22A		D27A
	MNHML, MRHML	MNPFL	

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

Air conditioning (manual, auto, temp control)		Opt. (Manual temp control)	
Clock (digital, analog)		Std. (Digital)	
Compass / thermometer		N.A.	
Console (floor, overhead)		Floor console	
Defroster, elec. backlight		Std.	
Electronic	Diagnostic monitor (integrated, individual)	Integrated	
	Instrument cluster (list instruments)	Std. (Speedometer, Tachometer, Trimeter, Fuel Ind. Eng. Coolant Ind., Oil pressure Ind., Battery Ind., Brake Ind.)	
	Keyless entry	–	Boost Meter
	Tripminder (avg. spd., fuel)	N.A.	
	Voice alert (list items)	N.A.	
	Other	–	
Fuel door lock (remote, key, electric)		Remote	
Lamps	Auto head on / off delay, dimming	N.A.	
	Cornering	N.A.	
	Courtesy (map, reading)	Room, Map, Foot	
	Door lock, ignition	Ignition	
	Engine compartment	N.A.	
	Fog	N.A.	
	Glove compartment	Std.	
	Trunk	Std.	
	Illuminated entry system (list lamps, activation)	N.A.	
	Other	–	
Mirrors	Day / night (auto. man.)	Std. (Man)	
	L.H. (remote, power, heated)	Std. (power)	
	R.H. (convex, remote, power, heated)	Std. (power)	
	Visor vanity (RH / LH, illuminated)	RH/LH	
Navigation system (describe)		N.A.	
Parking brake-auto release (warning light)		N.A.	

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•)

METRIC (U.S. Customary)

Engine Description **Engine Code**	D22A, D27A

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

Power equipment	Deck lid (release, pull down)		N.A.
	Door locks (manual, automatic, describe system)		Single Action Key Less Lock Opt. (Center Door Lock)
	Seats	2 - 4 - 6 way, etc.	N.A.
		Reclining (R.H., L.H.)	N.A.
		Memory (R.H., L.H., present, recline)	N.A.
		Lumbar, hip, thigh, support	N.A.
		Heated (R.H., L.H., other)	N.A.
	Side windows		Opt. (Power Window)
	Vent windows		N.A.
	Rear windows		N.A.
Radio systems	Antenna (location, whip, w / shield, power)		Rear Quarter, Whip.
	Standard	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	AM/FM MPX ETR & Cassette Stereo
	Optional		Audio System (AM/FM MPX ETR & Cassette Stereo with Graphic equalizer)
			Audio System (AM/FM ETR with Cassette Stereo & CD Player)
	Speaker (number, location)		Std. (I/pan...2, Rear Seat Side...2) Opt. (Front Door...2)
Roof: open air or fixed (flip-up, sliding, "T")			N.A.
Speed control device			Opt.
Speed warning device (light, buzzer, etc.)			N.A.
Tachometer (rpm)			Std.
Telephone system (describe)			N.A.
Theft deterrent system			N.A.

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 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 vehicle 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.	D22A		D27A
		MNHML, MRHML	MNPFL	
Ø Width				
Tread (front)	W101	1465		
Tread (rear)	W102	1450		1455
Vehicle width	W103	1690	1700	
Body width at Sg RP (front)	W117	1690		
Vehicle width (front doors open)	W120	3820		
Vehicle width (rear doors open)	W121	-		
Tumble-home (deg.)	W122	30°		
Outside mirror width	W410	1882		
Ø Length				
Wheelbase	L101	2470		
Vehicle length	L103	4330	4350	4380
Overhang (front)	L104	950	960	
Overhang (rear)	L105	910	920	950
Upper structure length	L123	2560		
Rear wheel C/L "X" coordinate	L127	2470		
Ø Height*				
Passenger distribution (front/rear)	PD1,2,3	Front: 2, Rear: 2		
Trunk/cargo load		-		
Vehicle height	H101	1306		1321
Cowl point to ground	H114	920		935
Deck point to ground	H138	985		1000
Rocker panel-front to ground	H112	216		231
Rocker panel-rear to ground	H111	365		233
Windshield slope angle	H122	63°		
Backlight slope angle	H121	72°		
Ground Clearance*				
Front bumper to ground	H102	201	172	185
Rear bumper to ground	H104	298	298	307
Bumper to ground [front at curb mass (wt.)]	H103	242	213	226
Bumper to ground [rear at curb mass (wt.)]	H105	347	341	356
Angle of approach (degrees)	H106	16.5°	13.8°	14.7°
Angle of departure (degrees)	H107	19.0°	17.0°	18.4°
Ramp breakover angle (degrees)	H147	16°		16.5°
Axle differential to ground (front/rear)	H153	Front 195		Front 230/Rear 250
Min. running round clearance	H156	160		158
Location of min. run. grd. clear.		Flexible Pipe		Catalytic Converter

* All vehicle **height** and **ground** clearances are measured at the Manufacturer's Design Load Weight.
Manufacturers 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 Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

METRIC (U.S. Customary)
Vehicle Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	D22A, D27A
Ø Front Compartment		
SgRP front, "X" coordinate	L31	1410
Effective head room	H61	962
Max. eff. leg room (accelerator)	L34	1114
SgRP to heel point	H30	197
SgRP to heel point	L53	910
Back angle	L40	25°
Hip angle	L42	101°
Knee angle	L44	141°
Foot angle	L46	95°
Design H-point front travel	L17	260
Normal driving & riding seat track trvl.	L23	260
Shoulder room	W3	1370
Hip room	W5	1400
Upper body opening to ground	H50	1190
Steering wheel maximum diameter*	W9	370
Steering wheel angle	H18	19°
Accel. heil pt. to steer. whl. cntr	L11	420
Accel. heel pt. to steer. whl. cntr	H17	760
Undepressed floor covering thickness	H67	20
Ø Rear Compartment		
SgRP point couple distance	L50	635
Effective head room	H63	867
Min. effective leg room	L51	724
SgRP (second to heel)	H31	285
Knee clearance	L48	0
Shoulder room	W4	1330
Hip room	W6	1160
Upper body opening to ground	H51	1180
Back angle	L41	27°
Hip angle	L43	88°
Knee angle	L45	72°
Foot angle	L47	102°
Depressed floor covering thickness	H73	20
Luggage Compartment		
Usable luggage capacity [L (cu. ft.)]	V1	N.A.
Liftover height	H195	935
Interior Volumes (EPA Classification)		
Vehicle class		Sub compact cars
Interior volume index (cu. ft.)**		91
Trunk / cargo index (cu. ft.)		10.201

* See page 14.
** Includes passenger and trunk / cargo index - see definition page 32.

MVMA Specifications

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	D22A	D27A
Station Wagon – Third Seat			
Seat facing direction	SD1	–	
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	–	
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 index [m^3($ft.^3$)]	V4	–	
Cargo volume index-rear of 2-seat	V10	–	
Hatchback – Cargo Space			
Cargo length at front seatback height	L208	840	
Cargo length at floor (front)	L209	1405	
Cargo length at second seatback height	L210	424	
Cargo length at floor (second)	L211	755	739
Front seatback to load floor height	H197	488	
Second seatback to load floor height	H198	368	251
Cargo volume index [m^3($ft.^3$)]	V3	0.729 (25.7)	
Hidden cargo volume index [m^3($ft.^3$)]	V4	–	
Cargo volume index-rear of 2-seat	V11	0.288 (10.2)	0.195 (6.9)

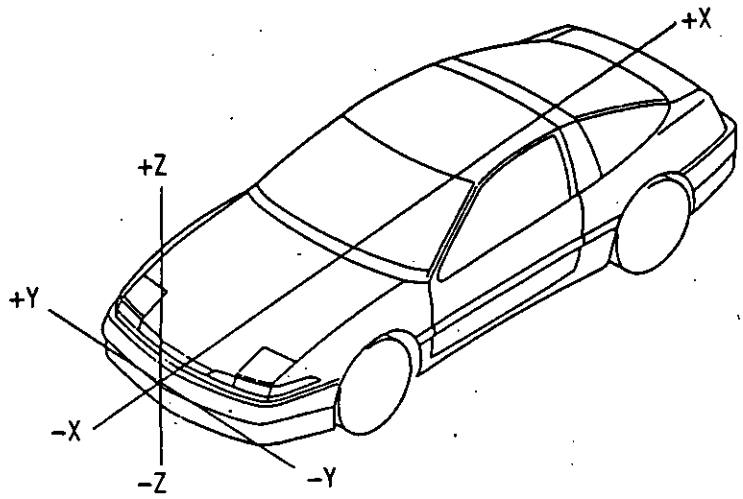
MVMA Specifications Form

METRIC (U.S. Customary)

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

Body Type	D22A	D27A

Vehicle Fiducial Marks



Datum plane definition – Vertical longitudinal plane through the longitudinal center of the car.
Vertical transverse plane through the front wheel center.
Horizontal plane through the lower surface of the front floor panel.

Number*	Fiducial Mark Number	Define Coordinate Location	
Front	W21*	480	
	L54*	-405	
	H81*	195	
	H161*	410	425
	H163*	–	
Rear	W22*	480	
	L55*	2975	
	H82*	196	
	H162*	414	
	H164*	–	

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

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line Talon

Model Year 1990 Issued 1989-4 Revised (•) _____

Code	Model	Vehicle Mass (weight)							
		CURB MASS, kg. (lb.)*			% PASS MASS DISTRIBUTION				
					Pass in Front		Pass in Rear		
		Front	Rear	Total	Front	Rear	Front	Rear	ETWC** Code
D22AMNHML	4E/9E	758	472	1230	43	57	17	83	R
		(1671)	(1040)	(2711)					
D22AMRHML	4E/9E	783	472	1255	43	57	17	83	R
		(1726)	(1040)	(2766)					
D22AMNPFL	4E/9E	783	477	1260	43	57	17	83	R
		(1726)	(1051)	(2777)					
D27AMNGFL	4E/9E	829	578	1407	43	57	17	83	U
		(1827)	(1274)	(3101)					

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

** ETWC – Equivalent Test Weight Class – basis for U.S. Environmental Protection Agency emission certifications. 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
G	= 1750	O	= 2750	W	= 3750	EE	= 5500
H	= 1875	P	= 2875	X	= 3875	FF	= 5750

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

Shipping Mass (weight) = Curb Weight Less:

28kg (62 lbs)

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line Talon
Model Year 1990 Issued 1989-4 Revised (•) _____

Code	Equipment	Optional Equipment Differential Mass (weight)* MASS, kg. (lb.) Front	Rear	Total	Remarks Restrictions, Requirements
	Air-Conditioner	22.4 (49.4)	0 (0)	22.4 (49.4)	
	Rear Shelf	0 (0)	2.6 (5.7)	2.6 (5.7)	
	Power Steering	6.7 (14.8)	0 (0)	6.7 (14.8)	
	Rear Window Wiper	0 (0)	3.7 (8.2)	3.7 (8.2)	
	Power Window	1.4 (3.1)	1.5 (3.3)	2.9 (6.4)	
	Auto Speed Control	3.8 (8.4)	0 (0)	3.8 (8.4)	
	Sun roof	4.0 (8.8)	6.0 (13.2)	10.0 (22.0)	

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