MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1990

Manufacturer

SUZUKI MOTOR CO., LTD.

Mailing Address

HAMAMATSU-NISHI, P.O. BOX 1 432-91, HAMAMATSU, JAPAN Vehicle Line

SWIFT GT

Issued

2-9-90

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 suggested 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.



Motor Vehicle Manufacturers Association of the United States, Inc.

Forms Provided by Technical Affairs Division

METRIC (U.S. Customary)

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NOTE:

- 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 unit follows in parentheses.
- 2. UNLESS ÓTHERWISE 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.

 Vehicle Line
 SWIFT GT

 Model Year
 1990
 Issued 2-9-90
 Revised (*)

METRIC (U.S. Customary)

Vehicle Origin

Aetilčia Otišiit	
Design & development (company)	SUZUKI MOTOR CO., LTD.
Where built (country)	JAPAN
Authorized U.S. sales marketing representative	AMERICAN SUZUKI MOTOR CORPORATION

Vehicle Models

Model Introduction Description & Drive Date (FWD / RWD / AWD / 4WD)*		Make, Vehicle Models,	No. of Designated	Max. Trunk/Cargo	
		Series, Body Type	Seating Positions	Load-Kilograms	
		(Mfgr's Model Code)	(Front/Rear)	(Pounds)	
SWIFT GT 2-Door Hatchback Sedan (FWD)		AA34S	2/2	40 (88)	

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

Vehicle Line SWIFT GT

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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		В	С	D
	Engine Code		FCA		FCB	CCA	ССВ
	Displaci Liters (i		L-4 1.3L (79	in ³)	L-4 1.3L (79 in ³)	L-4 1.3L (79 in ³)	L-4 1.3L (79 in ³)
ENGINE	Induction system (Fi, Carb, etc.)		EFI		EFI	EFI	EFI
ENG	Compression ratio		10.0:1		10.0:1	10.0:1	10.0:1
	SAE Net	Power kW (bhp)	75 (100) @ 6,	500	75 (100) @ 6,500	75 (100) @ 6,500	75 (100) @ 6,500
	at RPM	Torque N • m (lb. ft.)	113 (83) @ 5,	000	113 (83) @ 5,000	113 (83) @ 5,000	113 (83) @ 5,000
	Exhaus single, (D		D	D	D
TRANS	Transmission/ Transaxle		Manual 5-Spee	ed	Auto 3-Speed	Manual 5-Speed	Auto 3-Speed
TRA	Axle Ratio (std. first)		4,105		3,684	4,105	3,684

Series .	Availability	Power Tea	ams (A - B - C - D)
Model	Code	Standard	Optional
			
	,		
······································			
		<u> </u>	
		· · · · · · · · · · · · · · · · ·	
		·	· · · · · · · · · · · · · · · · · · ·
 			
<u> </u>		<u> </u>	

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Engine Description Engine Code L-4 1.3L EFI

FCA, FCB, CCA, CCB

Revised (*)

ENGINE - GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)		Inline, Front DOHC Transverse, Front of engine faces right side of vehicle
Manufacturer		SUZUKI
No. of cylinders		4
Bore		74_mm (2.91 in.)
Stroke		75.5 mm (2.97 in.)
Bore spacing (C	/LtoC/L)	84 mm (3.31 in.)
Cylinder block m	aterial & mass kg (lbs.) (machined)	Aluminum allov. 15.7 Kg (39.02)
Cylinder block de	ck height	186.8 mm (7.35 in.)
Cylinder block le	ngth	372 mm (14.65 in.)
Deck clearance (above or below	minimum) block)	0 mm
Cylinder head ma	aterial & mass kg (lbs.)	Aluminum alloy, 5.23 Kg (11.53)
Cylinder head vo	tume (cm³)	1,896
Cylinder liner ma	terial	Cast iron
Head gasket thickness (compressed)		1.2 mm (0.05 in.)
Minimum combustion chamber total volume (cm³)		35.86
Cyl. no. system.	L. Bank	1-2-3-4
front to rear)*	R. Bank	
Firing order		1-3-2-4
ntake manifold n	naterial & mass [kg (lbs.)]**	Aluminum alloy, 1.66 (3.66)
Exhaust manifold	material & mass [kg (lbs.)]**	Cast iron, 3.37 (7.43)
Fuel required unl	eaded, diesel, etc.	Unleaded
Fuel antiknock in	dex (R + M) ÷ 2	86 or more
	Quantity	3
Engine mounts	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Rubber, Elastomeric
	Added isolation (sub-frame, crossmember, etc.)	None
Total dressed engine mass (wt) dry***		MT: 61.0 (134.5), AT: 56.5 (124.6)
Engine – P	stons	
Material & mass, g (weight, oz.) - piston only		Alluminum alloy 220 gr.
Engine – C	amshaft	·
Location		In cylinder head
Material & mass i	kg (weight, lbs.)	Cast iron, 1.24 (2.73)

Belt

19.1 mm/9.525

Drive type

Chain / belt

Width / pitch

^{*} 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:

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METRIC (U.S. Customary)

Engine Description Engine Code

L-4 1.3L EFI, FCA,FCB,CCA,CCB

Engine - Valve System

Hydraulic litters (std., opt., NA)		Std.
Valves	Number intake / exhaust	8/8
	Head O.D. intake / exhaust	29/24 mm (1.14/0.94 in.)

Engine - Connecting Rods

Material & mass [kg., (weight, lbs.)]*	Forged steel 0.455(1.003)
Length (axes & to €) mm	120 mm (4.72 in.)

Engine - Crankshaft

Material & mass [kg., (weig	ht, lbs.)]*	Forged steel 10.67 (23.52)	
End thrust taken by bearing	g (no.)	2	
Length & number of main bearings		18 mm (0.71 in.) x 5	
Seal (material, one, two	Front	One	
piece design, etc.)	Rear	One	

Engine - Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]	392 (461) @ 4,000	
Type oil intake (floating, stationary)	Stationary	
Oil filter system (full flow, part, other)	Full flow	
Capacity of c/case, less filter-refill-L (qt.)	3.1 (3.3)	

Engine - Diesel Information

Diesel engine manufacturer		N.A.	
Glow plug, current drain at 0°F		N.A.	
Injector	Туре	N.A.	
nozzie	Opening pressure [kPa (psi)]	N.A.	
Pre-chamber	design	N.A.	
Fuel in-	Manufacturer	N.A.	- · · · · · · · · · · · · · · · · · · ·
jection pump	Туре	N.A.	
Fuel injection	pump drive (belt, chain, gear)	N.A.	
Supplementar	y vacuum source (type)	N.A.	
Fuel heater (y	es/no)	N.A.	
Water separat (std., opt.)	or, description	N.A.	
Turbo manufa	cturer	N.A.	
Oil cooler-type (oil to engine coolant; oil to ambient air)		N.A.	
Oil filter		N.A.	

Engine - Intake System

		
Turbo charger - manufacturer	N.A	
Super charger - manufacturer	II .	-
Intercooler	1)	

^{*} Finished State

Vehicle Line SWIFT GT

Model Year 1990 Issued 2-9-90 Revised (*)

METRIC (U.S. Customary)

Engine Description Engine Code		L-4 1.3L EFI (M/T)	L-4 1.3L EFI. (A/T)			
		L FCA. CCA	FCB,CCB			
Engine -	Cooling System	<u> </u>				
Coolant reco	very system (std., opt., n.a.)	Std.				
Coolant fill lo	cation (rad., bottle)	Bottle				
Radiator cap	relief valve pressure [kPa (psi)]	88.3 (12.8)				
Circulation	Type (choke, bypass)	Choke				
thermostat	Starts to open at "C ("F)	88 (190), 92 (198)				
	Type (centrifugal_other)	Centrifugal				
	GPM 1000 pump rpm	15 1/min.				
	Number of pumps					
Nater	Drive (V-belt, other)	V ribbed belt (4PK)				
pump	Bearing type	Ball & roller				
•	Impeller material	Steel				
	Housing material	Aluminum alloy				
3y-pass recir	culation [type (inter., ext.)]	Ext.				
Cooling	With heater L(qt.)	4.7 (4.9)	4.7 (4.9)			
ystem	With air conditioner - L(qt.).	4.7 (4.9)	4.7 (4.9)			
capacity	Opt. equipment [specify - L(qL)]					
Mater jackets	full length of cyl. (yes, no)	Yes				
Nater all arou	ind cylinder (yes, no)	Yes				
Water jackets	open at head face (yes, no)	Yes				
	Std., A/C, HD	Std.				
	Type (cross-flow, etc.)	Vertical-flow				
	Construction (fin & tube mechanical, braze, etc.)	Fin & tube	······································			
Radiator core						
,016	Material, mass [kg (wgt., lbs.)]	Copper & brass, 2.8 (6.2)	3.2 (7.0)			
	Width	328 mm (12.91 in.)	328 mm (12.91 in.)			
	Height	325 mm (12.80 in.)	350 mm (13.78 in.)			
	Thickness	16 mm (0.63 in.)	32 mm (1.26 in.)			
	Fins per inch		10			
Radiator end	tank material	Plastics				
	Std., elec., opt.	Std., Elec.				
	Number of blades & type (flex, solid, material)	4, solid, Plastics				
	Diameter & projected width	300 mm (11.81 in.)				
-	Ratio (fan to crankshaft rev.)	N.A.				
an	Fan cutout type					
	Drive type (direct, remote)	Electric motor drive				
	RPM at idle (elec.)	2,100 rpm (electric)				
	Motor rating (wattage) (elec.)	80				
	Motor switch (type & location) (elec.)	Bimetal type, on intake manifold				
	Switch point (temp., pressure) (elec.)	ON/OFF:93/88 (199/190)				
	Fan shroud (material)	Steel	Steel			

SWIFT GT Issued 2-9-90 Revised (*)

METRIC (U.S. Customary)

Engine Descr Engine Code	iption	L-4 1.3L EFI (MT) L-4 1.3L EFI (AT) FCA,CCA FCB,CCB					
Engine - 1	Fuel System (See supple	emental page for detailes of Fuel Injection, Supercharger, Turbocharger, etc. if used)					
injection system	carburetor, fuel n, etc.	Fuel injection					
Manufacturer		HITACHI CO., LTD.					
Carburetor no.	of barrels	N.A.					
Idle A/F mix.		14.6					
	Point of injection (no.)	Port injection (4)					
Fue! injection	Constant, pulse, flow	N.A.					
•	Control (electronic, mech.)	Electronic					
	System pressure [kPa (psi)]	250 (36)					
ldte spdrpm	Manual	850 (neutral)					
(spec. neutral or drive and							
propane if used)	Automatic	850 (neutral)					
Intake manifold or water thermo	heat control (exhaust ostatic or fixed)	N.A.					
Air cleaner type)	Replaceable nonwoven fabric element, Single snorkel					
Fuel filter (type/	Accation)	Paper/Fuel tank side					
_	Type (elec. or mech.)	Elec.					
Fuel pump	Location (eng., tank)	Tank					
	Pressure range [kPa (psi)]	250 (36)					
	Flow rate at regulated pressure (L (gai)/hr @ kPa (psi))	80 @ 250 (21.1 @ 36)					
Fuel Tank	,						
Capacity (refill t	(nalions)]	40 (10.6)					
Location (descri		Under floor - rear					
Attachment		Bolt					
	e (ka (weight the))						
Material & Mass [kg (weight lbs.)]		Steal 8 6 (18 9)					
Filler		Steel, 8.6 (18.9)					
Filler pipe	Location & material Connection to tank	Left side rear quarter panel, Steel					
pipe	Location & material Connection to tank	Left side rear quarter panel, Steel Kevlar reinforced rubber hose					
	Location & material Connection to tank rial)	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel					
pipe Fuel line (mater	Location & material Connection to tank rial) erial)	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel FKM/CHC/CHC					
pipe Fuel line (mater Fuel hose (mater	Location & material Connection to tank rial) erial) terial)	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel FKM/CHC/CHC Steel					
pipe Fuel line (mater Fuel hose (mater Return line (ma	Location & material Connection to tank rial) erial) terial)	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel FKM/CHC/CHC Steel Steel					
Fuel line (mater Fuel hose (mater Return line (mater Vapor line (mater Extended	Location & material Connection to tank rial) erial) terial)	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel FKM/CHC/CHC Steel Steel N.A.					
Fuel line (mater Fuel hose (mater Return line (mater Vapor line (mater Extended	Location & material Connection to tank rial) erial) terial) erial) Opt., n.a.	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel FKM/CHC/CHC Steel Steel N.A. N.A.					
Fuel line (mater Fuel hose (mater Return line (mater Vapor line (mater Extended	Location & material Connection to tank rial) erial) terial) erial) Opt., n.a. Capacity [L (gallons)]	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel FKM/CHC/CHC Steel Steel N.A. N.A. N.A.					
Fuel line (mater Fuel hose (mater Return line (mater Vapor line (mater Extended	Location & material Connection to tank rial) erial) erial) erial) Opt., n.a. Capacity [L (gallons)] Location & material	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel FKM/CHC/CHC Steel Steel N.A. N.A. N.A. N.A. N.A.					
Fuel line (mater Fuel hose (mater Return line (mater Vapor line (mater Extended	Location & material Connection to tank rial) erial) terial) erial) Opt., n.a. Capacity [L (gallons)] Location & material Attachment	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel FKM/CHC/CHC Steel Steel N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.A					
Fuel line (mater Fuel hose (mater Return line (mater Vapor line (mater Extended range tank	Location & material Connection to tank rial) erial) terial) erial) Opt., n.a. Capacity [L (gallons)] Location & material Attachment Opt., n.a.	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel FKM/CHC/CHC Steel Steel N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.A					
Fuel line (mater Fuel hose (mater Return line (mater Vapor line (mater Extended range tank	Location & material Connection to tank rial) erial) erial) opt., n.a. Capacity [L (gallons)] Location & material Attachment Opt., n.a. Capacity [L (gallons)]	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel FKM/CHC/CHC Steel Steel N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.A					
Fuel line (mater Fuel hose (mater Return line (mater Vapor line (mater Extended range tank	Location & material Connection to tank rial) erial) erial) erial) Opt., n.a. Capacity [L (gallons)] Location & material Attachment Opt., n.a. Capacity [L (gallons)]	Left side rear quarter panel, Steel Kevlar reinforced rubber hose Steel FKM/CHC/CHC Steel Steel N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.A					

METRIC (U.S. Customary)

Engine Description Engine Code

Vehicle Line	SWIFT	GT			
Model Year	1990	Issued	2-9-90	Revised (•)	

L-4 1.3L EFI CCA,CCB

Vehicle Emission Control

	Type (air injection, engine modifications, other)			Feedback fuel injection + 3 way cata. + EGR		
		Pump or pult	ie -	N.A.	_	
		Driven by		N.A.		
	Air Injection	Air distributio (head, manife		N.A.		
		Point of entry	,	N.A.		
Exhaust	Exhaust Gas	Type (contro open orifice,	lled flow, other)	Back pressure controlled	_	
Emission Control	Recircula- tion	Exhaust sour Point of exha (spacer, carb manifold, oth	ust injection uretor,	Manifold		
		Туре		Single bed	_	
		Number of		1	_	
		Location(s)	•	Under floor		
	Catalytic	Volume (L. (in	(رد	0.95 (58.0)	_	
	Converter	Substrate typ	•	Monolith	_	
		Noble metal t	уре	Platinum & Rhodium	_	
		Nobie metal concentration	(g/cm³)	0.0013		
	Type (ventilates to atmosphere, induction system, other)		here.	Induction system		
Crankcase Emission	Energy source (manifold vacuum, carburetor, other)			Manifold vacuum	_	
Control	Discharges (to intake manifold, other			Intake manifold		
	Air inlet (bre	Air inlet (breather cap, other)		AFM outlet hose		
Evapora-	Vapor vente		uel tank	Canister		
tive Emission		(crankcase, canister, other) Carburetor			_	
Control	Vapor stora	ge provision		Canister	_	
Electronic	Closed loop	(yes/no)		Yes		
system	Open loop (yes/no)		No	_	

Engine - Exhaust System

Type (single, single with cross-over, dual, other)		Dual		
Muffler no. (separate res	& type (reverse flow, straight thru, sonator) Material & Mass [kg (weight lbs)]	1, Straight thru. 1, Straight thru.		
Resonator n	no. & type			
	Branch o.d., wall thickness	N.A.		
Exhaust pipe	Main o.d., wall thickness	35.0-15mm (dual)		
	Material & Mass [kg (weight lbs)]	Stainless steel		
Inter-	o.d. & wall thickness	54.0-1.6/42.7-1.2mm		
mediate pipe	Material & Mass [kg (weight lbs)]	Inner: Stainless steel, Outer: Aluminum coated steel		
Tail pipe	o.d. & wall thickness	35.0-1.2mm (Dual)		
	Material & Mass [kg (weight lbs)]	Aluminum coated steel		

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Engine Description Engine Code

Vehicle Line	SWIFT	GT	
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L-4 1.3L EFI FCA,FCB

<u>V</u> ehicle E	Emission Control	
	Type (air injection, engine modifications, other)	Feedback fuel injection + 3 way cata.
	Pump or pulse	N.A.

Type (air injection, engine modifications, other)		jine 	Feedback fuel injection + 3 way cata.
	Pump or	pulse	N.A.
	Driven by	,	N.A.
Air Injection			N.A.
	Point of e	entry	N.A.
Exhaust	Type (co	ntrolled flow, ice, other)	N.A.
Recircula- tion	Point of e	exhaust injection carburetor.	N.A.
	Туре		Single bed
	Number o	of :	1
Catalytic Converter	Location(s)	Under floor
	Volume (t	L (in³)}	0.95 (58.0)
	Substrate	type	Monolith
	Nobie me	ital type	Platinum & Rhodium
			0.0013
Type (ventilates to atmosphere, induction system, other)		osphere, r)	Induction system
Energy source (manifold vacuum, carburetor, other)		ld her)	Manifold vacuum
Discharges (to intake manifold, other			Intake manifold
Air inlet (breather cap, other)		other)	AFM outlet hose
Vapor vented to (crankcase, canister, other) Fuel tank Carburetor		Fuel tank	Canister
		Carburetor	
Vapor storage provision		n	Canister
Closed loop	(yes/no)		Yes
Open loop (yes/no)			No
	Exhaust Gas Recirculation Catalytic Converter Type (ventil induction sy Energy sour vacuum, car Discharges manifold, ot Vapor vente (crankcase, canister, otf Vapor stora Closed loop	Air Injection Pump or Driven by Air distrit (head, m Point of e Sxhaust Gas Recirculation Point of e (spacer, manifold) Catalytic Converter Location(Catalytic Converter Noble me Noble me concentration with the concentration point of e (spacer, manifold) Type Number of Substrate Noble me concentration system, other point of e (spacer, manifold) Type (ventilates to atminduction system, other point of e (spacer, other) Type (ventilates to atminduction system, other point of e (spacer, other) Vapor storage provision Closed loop (yes/no)	Air Injection Air Injection Air distribution (head, manifold, etc.) Point of entry Type (controlled flow, open orifice, other) Exhaust Gas Recirculation Type (controlled flow, open orifice, other) Exhaust source Point of exhaust injection (spacer, carburetor, manifold, other) Type Number of Location(s) Volume {L (in³)} Substrate type Noble metal type Noble metal type Noble metal concentration (g/cm³) Type (ventilates to atmosphere, induction system, other) Energy source (manifold vacuum, carburetor, other) Discharges (to intake manifold, other Air inlet (breather cap, other) Vapor vented to (crankcase, canister, other) Vapor storage provision Closed loop (yes/no)

Engine - Exhaust System

Type (single dual, other)	e, single with cross-over.	Dua 1		
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass [kg (weight lbs)]		1, Straight thru.		
Resonator r	no. & type	1, Straight thru.		
	Branch o.d., wall thickness	N.A.		
Exhaust pipe	Main o.d., wall thickness	35.0 - 1.5mm (dual)		
	Material & Mass [kg (weight fbs)]	Stainless steel		
Inter-	o.d. & wall thickness	45.0-1.6/35.0-1.2 mm		
mediate pipe	Material & Mass [kg (weight lbs)]	Stainless steel		
Tail pipe	c.d. & wall thickness	35.0-1.2 mm (dual)		
	Material & Mass [kg (weight lbs)]	Aluminum coated steel		

SWIFT GT Vehicle Line, **MVMA Specifications** Issued 2-9-90 1990 Revised (*) Model Year . **METRIC (U.S. Customary)** L-4 1.3L EFI (A/T) L-4 1.3L EFI (M/T) Engine Description Engine Code FCA.CCA Transmissions/Transaxie (Std., Opt., N.A.) N.A. Manual 3-speed (manufacturer/country) N.A. Manual 4-speed (manufacturer/country) SUZUKI MOTOR CO TD./JAPAN Manual 5-speed (manufacturer/country) Std. Opt. AISIN SEIKI/JAPAN Automatic (manufacturer/country) Automatic overdrive (manufacturer/country) N.A.

Number of forward speeds		5
	1st	3,42
	2nd	1.89
	3rd	1.28
Gear ratios	4th	0.91
IETIC2	5th	0.76
	Reverse	3,27
Synchronous meshing (specify gears)		All forward gears
Shift lever loc	cation	Floor mounted
Trans. case i	mat'l. & mass kg (lbs)*	Aluminum die-cast. 7.7 (16.9)
Lubricant	Capacity [L (pt.)]	2.4 (5.1)
	Type recommended	Hypoid Gear Oil

Clutch (Manual Transmission)

Clutch manufacturer			DAIKIN MANUFACTURING
Clutch type (d	Clutch type (dry, wet; single, multiple disc)		Dry, Single
Linkage (hyd	raulic, cable, r	od, lever, other)	Cable
Max. pedal e	ffort (nom.	Depressed	103 (23.2)
spring load, r	new) N (lbs)	Released	70 (15.7)
Assist (spring	, power/perce	nt, nominal)	Nominal
Type pressur	re plate spring	5	Diaphragm
Total spring k	oad (nominal,	new) N (lbs)	3.190 (717.1)
	Facing mfgr. & material coding		NIHON VALQUA, NK50
	Facing material & construction		Semi mold
	Rivets per facing		16
	Outside x inside dia. (nominal)		190x132mm (7.48x5.20 in.)
	Total eff. area [cm²(in.²)]		147 (22.8)
Clutch facing	Thickness (pressure plate side/fly wheel side)		3.5/3.5mm(0.14/0.14in.)
	Rivet depth (pressure plate side/fly wheel side)		Min. 1.3/1.3 mm (0.05/0.05 in.)
	Engagement cushion method		Separate cushion type
Release bea	ring type & me	thod lub.	Automatic center adjusting type with grease lubrication
Torsional dar	Torsional damping method, springs, hysteresis		Springs .

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

METRIC (U.S. Customary)

Engine Description Engine Code
 Vehicle Line
 SWIFT GT

 Model Year
 1990
 Issued
 2-9-90
 Revised (*)

L-4 1.3L EFI (A/T) FCB,CCB

Automatic Transmission/Transaxle

Trade Name		3-speed automatic		
Type and spi	ecial features (describe)	Torque converter with planetary gears		
	Location (column, floor, other)	Floor mounted on console		
3ear miector	Ltr./No. designation (e.g. PRND21)	P-R-N-D-2-L		
	Shift interlock (yes, no, describe)	No		
	1st	2.81 (Equivalent)		
Gear	- 2nd	1.55 (Equivalent)		
2005	3rd	1.00 (Equivalent)		
	4th	N.A		
	Raverse	2.30 (Equivalent)		
	speed - drive range [km/h (mph)] wn speed - drive range [km/h (mph)]	$1 \rightarrow 2$: 55(34.2), $2 \rightarrow 3$: 105(65.3) $2 \rightarrow 1$: 36(22.3), $3 \rightarrow 2$: 85(52.8)		
	e speed (km/h (mph))	N.A.		
	Number of elements	3		
Torque	Max. ratio at stall	1,8		
converter	Type of cooling (air, liquid)	Liquid		
	Nominal diameter	210 mm (8,27 in.)		
	Capacity factor "K"	260K		
	Capacity [refill L(pt.)]	4.9 (10.4)		
Lubricant	Type recommended	DEXRON		
Oil cooler (std., opt., N.A., internal, external, sir, liquid)		Std Integral with radiator		
Oil cooler (st	o., opt., re.a., internal, external, att, admo)			

Ø All Wheel / 4 Wheel Drive

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

^{*} Input speed + , torque

^{**} Dry weight including torque converter. If other, specify.

SWIFT GT **MVMA Specifications** Vehicle Line __ Issued __2-9-90 __ Revised (-) Model Year 1990 **METRIC (U.S. Customary)** L-4, 1.3L, EFI FCA, FCB, CCA, CCB Engine Description Engine Code

Ø	Axie Ratio and Tooth Combinations Effective final drive ratio (or overall top gear ratio) Transfer ratio and method (chain, gear, etc.)			(See 'Power Tearns' for axle ratio usage)	
				Reduction gear - 0.96, Final gear - 3	3.68
				N.A.	2.83
From drive unit	Emai	Ring gea	r o.d.	184.61 (7.27)	13,60 = 3
	drive	No. of	Pinion	51 /	96
	UNIT	teath	Ring gear	49	

Front Drive Unit

Description (in	ntegral to tra	ens., etc.)	Front differential with helical gears & ball bearing		
Limited slip di	imited slip differential (type) None		None		
Drive pinion		Type	Helical gear		
one pinon		Offset	N.A.		
No. of differer	tial pinions		2		
Pinion / differ	antial	Adjustment (shim, etc.)	Shim		
rinion / oinen	ensai	Bearing adjustment	N.A.		
Driving wheel	bearing (typ	De)	Ball bearing		
_ubricant	Capacity	y [L (pt.)]	N.A.		
LUDITCEIN	. Type recommended		Automatic transmission fluid		
	7,7		Automatic transmission		
		·			

Axle Shafts - Front Wheel Drive

Manufacturer	and number t	used		NTN TOYO BEARING CO., LTD, 2
Time (etmieb	t polid bor tul	ouler etc.)	Left	Solid bar
Type (straight, solid bar, tubular, etc.)		Right	Solid bar	
	Manualta	tagavla	Left	24 x 371.3mm (0.94 x 14.6 in.)
Outer	Mariuaru	Manuai transaxle		24 x 371.3mm (0.94 x 14.6 in.)
diam. x ength" x	Automatic		Left	24 x 329mm (0.94 x 13.0 in.)
val]	Automatic	Uarisaxie	Right	24 x 336mm (0.94 x 13.2 in.)
hickness	Optional t		Left	None
	Optional	ransaxie	Right	None
	Туре			None
Slip roke	Number of teeth			None
	Spline a.d.			None
	Make and mfg. no. Inner		Inner	NTN TOYO BEARING CO., LTD
		•	Outer	NTN TOYO BEARING CO., LTD
	Number used .			4
Iniversal	inner		inner	M/T - Double offset. DPJ79. A/T - Tripod, TJ79
pints	Type, size	e, plunge	Outer	Rzeppa BJ82
	Attach (u-	bolt, clamp, etc)		Serration
	Bearing	Type (plain, anti-friction)		Anti-friction
		Lubrication (fitting, prepack)		Prepack
Drive taken through (torque tube, arms or springs)			Lower - Control arm, Upper - McPherson strut	
Torque taken through (torque tube, arms or springs)				Engine mounting system

^{*} Centerline to centerline of universal joints, or to centerline of attachment. Page 10 (Front Wheel Drive)

MVMA-90

METRIC (U.S. Customary) Engine Description Engine Code 7 Axie Ratio and Tooth Combinations Axie Ratio and Finder Axie Ratio and Tooth Combinations Axie Ratio and	MVM	MVMA Specifications		Vehicle Line			
Engine Description Engine Code Axio Ratio and Tooth Combinations Axio Ratio coverel too peer ratio Axio Ratio Coverel too peer ratio Axio Ratio Coverel too peer ratio No. of teem Ring gear Peach Type Characterion Characterion Characterion Characterion Characterion Characterion Characterion Characterion Characterion Automatic transmission Interiors Coverdine Automatic transmission Interiors A	iat a tatu	, oher	cauv	,, 13	Model Year	Issued	Revised (•)
Axie Ratio and Tooth Combinations Axie Ratio and T	METRIC	(U.S. Cu	stomary)				
Aute ratio (or overall top peer ratio) Fing gear o.d. No. of Prison Ring gear Rear Azie Unit Description Cheel No. of Information prison Cheel No. of Information prison Prison (therenial prison Cheel Adjustment (phon, etc.) Basing adjustment Driving wheel bearing (type) Lubiciant Chascing (t. (st.)) Type recommended Propellier Shaft — Rear Wheel Drive Wenufacturer Type (trippin tobs, soe-in-sube, internal-stemation disense; etc.) Manual 3-speed transmission Manual 4-speed transmission Manual 5-speed transmission Manual 5-speed transmission Manual 5-speed transmission Manual 5-speed transmission Manual 6-speed transmission Unification Type (plain, anti-fiction) Transmission Make and mig. no. Front Rear attach (u-bod, damp, etc.) Type (plain, anti-fiction) Lubiciation (firing) propects)							
No. of Policy P	Axie Ratio	and Tool	th Combin	ations	(See 'Power Teams' for axle ratio usage)		
Pinion P	Axle ratio (or	overall top ges	r retio)				
Rear Axie Unit Description							
Pear Asia Unit	No. of	Pinion					
Description Limited abs differential (type) One pinion Type One Type One On	teeth	Ring gear			<u> </u>		
Universal sign differential (type) Differential prinors No. of differential prinors Prinon / differential prinors Prinon / differential prinors Prinon / differential prinors Casectry [L(st)] Casectry [L(st)] Type recommended Propeller Shaft — Rear Wheel Drive Manufacturer Internal-existent discripter, etc.) Manual 3-speed transmission Manual 3-speed transmission Manual 3-speed transmission Manual 4-speed transmission Outer diam, x will Manual 5-speed transmission Manual 5-speed transmission Overdine Automatic transmission Internal-existent frame, x will Type (plain, anti-inclora) Sup yole Spins od. Type Number of teeth Spins od. Rear attach (u-bolt, clamp, etc) Rear attach (u-bolt, clamp, etc) Lubrication Rear attach (u-bolt, clamp, etc) Lubrication Rear attach (u-bolt, clamp, etc) Lubrication Type (plain, prepack) Lubrication Rear attach (u-bolt, clamp, etc) Lubrication Lubrication Type (plain, prepack) Lubrication Lubrication Lubrication Type (plain, prepack) Lubrication Lubrication Lubrication Lubrication Type (plain, prepack) Lubrication	⊘ Rear Axie	Unit					
Drive prison Type Officet	Description						
One of differential prinons	Limited slip d	ifferential (type) .				
Offset Adjustment (spire, etc.) Bearing adjustment Spire (spire) Adjustment (spire, etc.)	Drive ninion		Туре				
Prinor / differential Driving wheel bearing (type) Lubricant Capacity [L. (pt.)] Type recommended Propeller Shaft — Rear Whool Drive Manual Caper (type) Manual S-speed transmission Manual S-speed transmission Manual S-speed transmission Manual S-speed transmission Overdrive Automatic transmission Intermediate Bearing Sipp Yype (plain, and-hicton) Type (plain, and-hicton) Sipp (Shine od.) Make and mig. no. Make and mig. no. Make and trunnion, cross) Fear attach (u-bott, clamp, etc) Type (plain and-fireton) Lubrication Lubrication (Iting, prepack) Drive taken through (foruse these.)			Offset			<u> </u>	
Driving wheel bearing (type) Capacity (Luft) Type recommended	No. of differen	ntial pinions					
Driving wheel bearing (type) Lubricam Casacity [L.(pt.i)] Type recommended Propellier Shaft — Rear Wheel Drive Manufacturer Type (straight lube, lube-in-tube, minimal-actional camper, etc.) Manual 3-speed transmission Manual 3-speed transmission Manual 3-speed transmission Manual 5-speed transmission Manual 5-speed transmission Manual 5-speed transmission Intermediale Lubrication (fitting, prepack) Sipp Syde Manual 5-speed transmission Intermediale Lubrication (fitting, prepack) Sipp Syde Manual 5-speed transmission Intermediale Lubrication (fitting, prepack) Type Number of teeth Spline o.d. Front Rear Number used Type (sall and trunnion, crosss) Fear attach (u-bolt, clamp, etc) Lubrication (fitting, prepack) Type (plain, anti-firction) Lubrication (fitting, prepack) Prove taken through (forces type)	Pinion / differ	ential	,				
Lubricant Capacity [L (pt.)] Type recommended Propeller Shaft - Rear Wheel Drive Manufacturer Type (straight tube, lube-in-tube, internal-axistent damper, etc.) Manual 3-speed transmission Manual 3-speed transmission Manual 3-speed transmission Manual 5-speed transmission Outer diam. x length' x well Thickness Manual 5-speed transmission Overdrive Automatic transmission Inter- mediate Dearing Type (plain, anti-friction) Skip yoke Make and mig. no. Front Rear Number used Type (plain, anti-friction) Fear Type (plain, anti-friction) Lubrication ((iting, prepack)) Type (plain, anti-friction) Lubrication ((iting, prepack)) Type (plain, anti-friction) Lubrication ((iting, prepack)) Drive taken through ((troug tube, but-			-	stment			
Universal points Type recommended Type recommended Type recommended Type possible to Rear Wheel Drive Manual 3-speed transmission Manual 3-speed transmission Manual 3-speed transmission Manual 3-speed transmission Outer dam x wall mickness Overdrive Automatic transmission Intermatical transmission Interm	Driving whee						
Propeller Shaft — Rear Whoel Drive Manufacturer Type (straight tube, tube-in-tube, internal-external damper, etc.) Manual 3-speed transmission Manual 4-speed transmission Manual 5-speed transmission Coverdive Automatic transmission Internediate Dearing Type (plain, anti-friction) Stip Yoke Number of teeth Spline o.d. Make and mfg. no. Front Rear Type (pall and trunnien, cross) Rear attach (u-bobt, clamp, etc) Type (pall and trunnien, cross) Rear attach (u-bobt, clamp, etc) Type (pall and trunnien, cross) Lubrication Lubrication Lubrication (inting, prepack) Type (pall and trunnien, cross) Lubrication Lubrication (inting, prepack) Type (pall and trunnien, cross) Lubrication Lubrication (inting, prepack)	Lubricant						
Manufacturer Type (praignt tube, tube-in-tube, informal-external damper, etc.) Manual 3-speed transmission Manual 4-speed transmission Manual 5-speed transmission Manual 5-speed transmission Overdrive Automatic transmission Intermediate bearing Lubication (fitting, prepack) Sip yoke Number of teeth Spline o.d. Make and mig. no. Front Rear Number used Type (plain, anti-fricton) Rear Number seed Type (bell and trunnion, cross) Universal joints Fear attach (u-bolt, clamp, etc) Type (plain, anti-fricton) Lubication (fitting) Front Rear Number used Type (bell and trunnion, cross) Universal joints Type (bell and trunnion, cross) Lubication (thick, prepack) Type (bell and trunnion, cross) Lubication (thick, prepack) Type (bell and trunnion, cross)		i ype reco	mmencec				
Manufacturer Type (praignt tube, tube-in-tube, informal-external damper, etc.) Manual 3-speed transmission Manual 4-speed transmission Manual 5-speed transmission Manual 5-speed transmission Overdrive Automatic transmission Intermediate bearing Lubication (fitting, prepack) Sip yoke Number of teeth Spline o.d. Make and mig. no. Front Rear Number used Type (plain, anti-fricton) Rear Number seed Type (bell and trunnion, cross) Universal joints Fear attach (u-bolt, clamp, etc) Type (plain, anti-fricton) Lubication (fitting) Front Rear Number used Type (bell and trunnion, cross) Universal joints Type (bell and trunnion, cross) Lubication (thick, prepack) Type (bell and trunnion, cross) Lubication (thick, prepack) Type (bell and trunnion, cross)		 -					
Manufacturer Type (praignt tube, tube-in-tube, informal-external damper, etc.) Manual 3-speed transmission Manual 4-speed transmission Manual 5-speed transmission Manual 5-speed transmission Overdrive Automatic transmission Intermediate bearing Lubication (fitting, prepack) Sip yoke Number of teeth Spline o.d. Make and mig. no. Front Rear Number used Type (plain, anti-fricton) Rear Number seed Type (bell and trunnion, cross) Universal joints Fear attach (u-bolt, clamp, etc) Type (plain, anti-fricton) Lubication (fitting) Front Rear Number used Type (bell and trunnion, cross) Universal joints Type (bell and trunnion, cross) Lubication (thick, prepack) Type (bell and trunnion, cross) Lubication (thick, prepack) Type (bell and trunnion, cross)							
Manufacturer Type (praignt tube, tube-in-tube, informal-external damper, etc.) Manual 3-speed transmission Manual 4-speed transmission Manual 5-speed transmission Manual 5-speed transmission Overdrive Automatic transmission Intermediate bearing Lubication (fitting, prepack) Sip yoke Number of teeth Spline o.d. Make and mig. no. Front Rear Number used Type (plain, anti-fricton) Rear Number seed Type (bell and trunnion, cross) Universal joints Fear attach (u-bolt, clamp, etc) Type (plain, anti-fricton) Lubication (fitting) Front Rear Number used Type (bell and trunnion, cross) Universal joints Type (bell and trunnion, cross) Lubication (thick, prepack) Type (bell and trunnion, cross) Lubication (thick, prepack) Type (bell and trunnion, cross)							
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Outer dam. x length x	Type (straigh	t tube, tube-in-	-tube, c.)				
Outer diam x length x wall thickness Overdrive Automatic transmission Intermediate bearing Slip yoke Number of teeth Spline o.d. Make and mfg. no. Hake and mrg. no. Number used Type (ball and trunnion, cross) Front Rear Number used Type (ball and trunnion, cross) Front Rear Lubrication (titting, prepack) Type (ball and trunnion, cross) Front Rear Lubrication (titting, prepack) Drive taken through (torque tube.		Manual 3-	Manual 3-speed transmission				
dam. x length x wall thickness Manual 5-speed transmission Coverdrive Automatic transmission Intermediate bearing Cubrication (fitting, prepack) Type Number of teeth Spline o.d. Make and mfg. no. Front Rear Number used Type (ball and trunnion, cross) Rear attach (u-bolt, clamp, etc) Type (plain, anti-friction) Lubrication (fitting, prepack) Prive taken through (formue tube.	Outer	Manual 4-	Manual 4-speed transmission		·		
Overdrive Automatic transmission Intermediate bearing Eubrication (fitting, prepack) Slip yoke Number of teeth Spline o.d. Make and mfg. no. Front Rear Number used Type (ball and trunnion, cross) Universal joints Rear attach (u-bolt, clamp, etc) Type (plain, anti-friction) Eubrication (fitting, prepack) Prive taken through (forcus tube.	diam. x length* x	Manual 5-	Manual 5-speed transmission				
Automatic transmission Intermediate bearing	thickness	Overdrive	Overdrive				
mediate bearing	•	Automatic	Automatic transmission		·		
Slip yoke Type Number of teeth Spine o.d. Front Rear Number used Type (ball and trunnion, cross) Type (ball and trunnion, cross) Type (plain, anti-friction) Evaluation (fitting, prepack)		Type (plai	n, anti-friction))			
Slip yoke Number of teeth Spline o.d. Front Rear		Lubricatio	n (fitting, prepa	ack)			
Spline o.d. Make and mfg. no. Front Rear Number used Type (ball and trunnion, cross) Universal joints Rear attach (u-bolt, clamp, etc) Type (plain, anti-friction) Lubrication (fitting, prepack) Drive taken through (torque tube.	Clin.	Туре					
Make and mfg. no. Front	yoke						
Make and mig. no. Rear Number used Type (ball and trunnion, cross) Universal joints Rear attach (u-bolt, clamp, etc) Type (plain, anti-friction) Lubrication (fitting, prepack) Drive taken through (torque tube.		Spline o.d	l <u>. </u>	1_			
Universal joints Rear attach (u-bolt, clamp, etc) Type (plain, anti-friction) Lubrication (fitting, prepack) Drive taken through (torque tube.		Make and	mig. no.		 		
Universal joints Rear attach (u-bolt, clamp, etc) Type (plain, anti-friction) Bearing Lubrication (fitting, prepack) Drive taken through (torque tube.		Number		Hear			
Pear attach (u-bolt, clamp, etc) Type (plain, anti-friction) Lubrication (fitting, prepack) Prive taken through (torque tube.							
Bearing Type (plain, anti-friction) Lubrication (fitting, prepack) Drive taken through (torque tube.		Rear atter	th (usholt class	on etc)	 	<u> </u>	
Lubrication (fitting, prepack) Drive taken through (torque tube.			Type (plain, anti-friction) Bearing Lubrication				
Drive taken through (torque tube.		Bearing					
	Drive taken t arms or sprir	hrough (torque igs)					
Torque taken through (torque tube, arms or springs)	Torque taker	through (torqu	ue tube.				

^{*} Centerline to centerline of universal joints, or to centerline of rear attachment. Page 10 MVMA-90 (Rear Wheel Drive) MVMA-90

Vehicle Line	SWIFT	GT
Model Year _	1990	Issued <u>2-9-90</u> Revised (•)

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement 2 DOOR H/B

Suspension -	General Including Electronic Controls
p	Control Micheller Barrers Comments

•	Standard/optional/not avail.		N.A.
	Mai	nual/automatic control	N.A
	Тур	e (air/hydraulic)	N.A.
Car leveling	Prin	nary/assist spring	N.A
	Rea	ar only/4 wheel leveling	N.A
	Sin	gle/dual rate spring	N.A.
	Sin	gle/dual ride heights	N.A.
	₽ro	vision for jacking	N.A.
	Sta	ndard/option/not avail.	N.A.
	Manual/automatic control		N.A
	Number of damping rates		N.A.
Shock absorber	Type of actuation (manual/ electric motor/air, etc.)		N.A.
damping controls	5	Lateral acceleration	N.A.
	, n	Deceleration	N.A.
	Ô	Acceleration	N.A.
•	\$	Road surface	N.A.
Shock absorber	Туре		Front: McPherson, Rear: McPherson, Double acting hydraulic
	Ma	ke	Front: SHOWA, Rear: TOKIKO
(front & rear)	Pis	ton diameter	Front: 25 mm (0.984 in.), Rear: 25 mm (0.984 in.)
r od ij	Ro	d diameter	Front: 18 mm (0.71 in.), Rear: 18 mm (0.71 in.)

Suspension - Front

Type and description		McPherson strut with coil spring
	Full jounce	100 mm
Travel*	Full rebound	50 mm
	Type (coil, leaf, other) & material	Coil, Steel
	Insulators (type & material)	Rubber top only
Spring	Size (coil design height & i.d.)	M/T - 286 x 157 A/T - 290.5 x 137
	Spring rate [N/mm (fb./in.)]	20.6 N/mm
	Rate at wheel [N/mm (lb./in.)]	20.6 N/mm
Stablizer	Type (link, linkless, frameless)	Link
	Material & bar diameter	Steel 22 mm

Suspension - Rear

Type and description			McPherson strut, Separate coil spring
	Full jo	unce	120mm (4.72 in.)
Travel*	Full re	bound	50 mm (1.97 in.)
	Туре	(coil, leaf, other) & material	Coil, steel
	Size (length x width, coil design height & i.d.)		241 x 95 mm
Spring	Spring rate [N/mm (tb./in.)]		54.9 N/mm (313.5)
	Rate at wheel [N/mm (fb./in.)]		21.6 N/mm (123.4)
	Insulators (type & material)		Rubber top only
	11	No. of leaves	N.A.
	leaf	Shackle (comp. or tens.)	N.A.
Stabilizer	Type (link, linkless, frameless)		Link
	Material & bar diameter		Steel 15 mm
Track bar (ty	pe)		None

^{*} Define load condition:

SWIFT GT Vehicle Line 2-9-90 Revised (•) Model Year .

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	2 DOOR H/B	
Brakes - Service		
	Front - Floating ca	liper type

_ ,				2 DOOR H/B
Brakes -	Service			
Description				Front - Floating caliper type Hydraulic, Rear - Floating caliper type
Manufacturer and Front (disc or drum))	Disc TOKICO
brake type (std	i., opt., n.a.)	Rear (disc or drum)		Disc TOKICO
Valving type (p	roportion, de	lay, metering, other)		Proportion
Power brake (s	std., opt., n.a.)		Std.
Booster type (r	remote, integi	al, vac., hyd., etc.)		Vac.
	Source (inline, pump, etc.) Reservoir (volume in.3)			Inline (Intake manifold)
Vacuum				N.A.
	Pump-type	(elec, gear driven, belt	driven)	N.A.
Traction	Operation	al speed range		N.A.
control	Type engi	ne intervention (electron	nic, mech.)	N.A.
	Front / rea	r (std., opt., n.a.)		N.A.
	Manufactu			N.A.
Anti-lock		tronic, mech.)		N.A.
device		ensors or circuits		N.A.
		nti-lock hydraulic circuits	<u> </u>	N.A.
		add-on system		N.A.
		ol (yes, no)		N.A.
<u></u>		wer source (elec., vac. mfr.	, pwr. strg.}	N.A.
Effective area		191/E/D)		146/83 (22.6/12.9)
Gross Lining a				151/86 (23.4/13.3)
Swept area (cr	1	• • • • • • • • • • • • • • • • • • • •	1.50	1002/802 (155.3/124.3)
	Outerworking diameter F/R Inner working diameter F/R			248 / 237 172 / 175
Rotor	Thickness	- -	F/R F/R	172 / 175 18.5 / 10
	-	type (vented/solid)	F/R	
	Diameter		F/B	Cast iron, VENTED / SOLID
Drum	Type and		F/R	
Wheel cylinder	<u> </u>	· · · · · · · · · · · · · · · · · · ·	Į rin	51.1 / 30.2mm (2.01/1.19 in.)
Master cylinde		re/stroke	F/B	20.6 / 28.5 mm (0.81/1.12 in.)
Pedal arc ratio			1	4.1 : 1
		ib.) pedal load [kPa (ps		
Lining clearance		77	F/R	Self adjusting/Self adjusting
	1	Bonded or riveted (riv	vets/seg.)	Bonded
	}	Rivet size		N.A
		Manufacturer		AKEBONO BRAKE INDUSTRY
	Front	Lining code		AK V3016 EE
	wheel	Material	·	Resin mold including metal
	1	Primary or	out-board	99.8 x 38.3 x 10
		Size Secondary	or in-board	99.8 x 38.3 x 10
Brake		Shoe thickness (no li	ning)	5mm (0.20 in.)
lining		Bonded or riveted (ri	vets/seg.)	Bonded
		Manufacturer		NISSHIN SPINNING
	Rear	Lining code****		NBK N603FF
	wheel	Material		Resin mold
		Primary or	out-board	77 x 20.5 x 8
		Size Secondary	or in-board	77 x 20.5 x 8
	1 1	Shoe thickness (no li	ning)	5mm (0,20 in.)

^{*} Excludes rivet holes, grooves, chamlers, 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.

METRIC (U.S. Customary)

Rade	Type And/Ör
,	Type Alle C.
Engis	Type And/Or e Displacement

Vehicle Line	SWIFT	~ .		
Model Year	1990	1ssued 2-9-90	Revised (•)	

2 DOOR H/B

Tires And	Wheels ((Standard)
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	Size (load range	ply)	P175/60 R14		
	Type (bias, radia	l, steel, nylon, etc.)	Radial		
Tires	Inflation pres- sure (cold) for	Front [kPa (psi)]	180		
	recommended max. vehicle load	Rear [kPa (psi)]	180		
	Rev./mile-at 70 k	m/h (45 mph)	928		
	Type & material	-	5° drop center rim contours. Steel		
	Rim (size & flanç	je type)	14 x 5J		
Wheels	Wheel offset		45		
		Type (bolt or stud)	Stud		
	Attachment	Circle diameter	114.3		
		Number & size	4 - M12		
_	Tire and wheel		T115/70 D14, 14 x 4T		
Spare	Storage position & location (describe)		Flat under rear load floor		

Tires And Wheels (Optional)

through the minorial (opinomal)	
Tire size (load range, ply)	N.A.
radial, steel, nylon, etc.)	N.A.
Wheel (type & material)	N.A.
Rim (size, flange type and offset)	N.A.
Tire size (load range, ply)	N.A.
Type (bias. radial, steel, nylon, etc.)	N.A.
Wheel (type & material)	N.A.
Rim (size, flange type and offset)	N.A.
Tire size (load range, ply)	N.A.
Type (bias, radial, steel, nylon, etc.)	N.A.
Wheel (type & material)	N.A.
Rim (size, flange type and offset)	N.A.
Tire size (load range, ply)	N.A.
Type (bias, radial, steel, nylon, etc.)	N.A.
Wheel (type & material)	N.A.
Rim (size, flange type and offset)	N.A.
Spare tire and wheel size	N.A.
(if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	N.A.

Brakes - Parking

Type of control Location of control		Lever - hand operated		
		Between front seat		
Operates on		Rear service brakes		
	Type (internal or external)	N.A.		
ff separate	Drum diameter	N.A		
from service brakes	Lining size (length x width x thickness)	N.A.	,	

SWIFT GT Vehicle Line _ Issued 2-9-90 Model Year _ Revised (*)

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement

2 DOOR H/B

Steering				
Manual (std., o	pt., n.a.)			Std.
	Power (std., opt., n.a.)			N.A.
Adjustable	Adjustable Type			N.A.
steering wheel	column Manufacturer		turer	N.A.
(tilt, telescope,	other)	(std., op	t., n.a.)	N.A.
Wheel diamete		Manual		365 mm (14.37 in.)
(W9) SAE J110	X	Power		N.A.
	Outside	Wall to v	vall (l. & r.)	10.0
Turning	front	Curb to	curb (l. & r.)	9.2
diameter m (ft.)	Inside	Wall to v	vali (l. & r.)	N.A.
	rear	Curb to	curb (l. & r.)	N.A.
Scrub Radius*				- 1
	ŀ	Туре		Rack and pinion .
	Gear	Manufac	turer	SUZUKI MOTOR CO., LTD.
Manual		Ratios	Gear	N.A.
		1100	Overall	18:1
	No. whee	turns (st	op to stop)	3.6
	Type (coaxial, elec., hyd., etc.)		., hyd., etc.)	N.A.
	Manufacturer			N.A.
Power		Туре		N.A.
	Gear	Ratios	Gear	N.A.
		L	Overall	N.A.
	Pump (dr	ive)		N.A.
	No. whee	turns (st	op to stop)	N.A.
	Туре			N.A.
Linkage	Location (front or rear of wheels, other)		ar	N.A.
	Tie rods (one or two)		0)	2
	Inclination	n at camb	er (deg.)	25.70
Steering		Upper		Ball bearing
axis	Bearings (type)	Lower		Rubber bushing
	(1)	Thrust		N.A.
Steering spind	le/knuckle &	joint type		Serrated shaft
	Diameter	Inner be	aring	Inner dia 40mm, Outer dia 72mm
Wheel	C.2116161	Outer be	gninse	Inner dia 40mm, Outer dia 72mm
spindle/hub	Thread (s	ize)		M18 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 22.

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement 2 DOOR H/B

Vehicle Line _ Model Year _ SWIFT GT

_ Revised (•)

Wheel Alignment

	Service	Caster (deg.)	30
	checking	Camber (deg.)	00
		Toe-in [outside track-mm (in.)]	0
Front		Caster	Not adjustable
wheel at curb mass	Service reset*	Camber	Not adjustable
(wt.)		Toe-in	Adjustable
	Periodic	Caster	$3 \pm 2^{\circ}$
•	M.V. in- spection	Camber	0 ± 10
	apecuon	Toe-in	-2 ~ 2 mm
	Service	Cember (deg.)	00
Rear	checking	Toe-in [outside track-mm (in.)]	2mm -
wheel at curb mass	Service reset*	Camber	Not adjustable
(WL)		Toe-in	Adjustable
	Periodic	Camber	$0 \pm 1^{\circ}$
	M.V. in- spection	Toe-in	2 ± 2 mm

^{*} Indicates pre-set, adjustable, trend set or other.

Electrical - Instruments and Equipment

Speed-	Type (analog, digital, std., opt.)	Analog.		
ometer	Trip odometer (std., opt., n.a.)	Std.		
EGR maintena	nce indicator	N.A.		
Charge	Туре	Telltale warning light		
indicator	Warning device (light, audible)	Light		
Temperature	Туре	Electric gauge with pointer None Telltale warning light Light Electric gauge with pointer None Electric 2-speed		
indicator	Warning device (light, audible)	None		
Oil pressure	Туре	Telltale warning light		
indicator	Warning device (light, audible)	Light		
Fuel	Туре	Electric gauge with pointer		
indicator	Warning device (light, audible)			
	Type (standard)	Electric 2-speed		
Wind-	Type (optional)	Intermittent		
shield wiper	Blade length	Dr: 500 mm (19.68 in.), As: 450 mm (17.72 in.)		
<u> </u>	Swept area [cm²(in.²)]	6,161 (955)		
Wind-	Type (standard)	Electric		
shield washer	Type (optional)	None		
	Fluid level indicator (light, audible)	None ·		
Rear window w	riper, wiper/washer (std., opt., n.a.)	Std.		
Ho-	Туре	_Electric resonator		
Number used 1		1		
Other		Service & parking brake failure warning light, seat belt warning light and buzzer, headlamp high beam indicating light, check engine indicating light, turn signal indicating light.		

MVMA Specifications		fications	Vehicle Line SWIFT GT Model Year 1990 Issued 2-9-90 Revised (*)		
METRIC	(U.S. Cus	tomary)			
Engine Description Engine Code			L-4, 1.3L, EFI FCA,FCB,CCA,CCB		
Electrical	- Supply	System			
	Manufacturer		FURUKAWA BATTERY CO., LTD.		
•	Model, std., (opt.)		55B24R-MF (55B24S-MF)		
	Voltage		12V		
Battery	Amps at 01	cold crank	400 Amp		
Janot y	Minutes-res	erve capacity	70 min.		
	Amps/hrs2	20 hr. rate	45_AH		
	Location		Left hand side of engine compartment		
•	Manufactur	er	NIPPON DENSO		
	Rating (idle	/max. rpm)	50 A (2,500 rpm)		
Alternator	Ratio (alt. c	rank/rev.)	2,36 : 1		
	Output at idle (rpm, park)		18 A (750 rpm)		
	Optional (ty	pe & rating)	None		
_	Type Integral with alternator				
Regulator Electrical		Svetem	Integral with alternator		
Electrical	- Starting	er	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT		
Electrical	Manufactur	er in *F	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max.		
	Manufacturi Current dra Power ratin	er in *F g [kw (hp)]	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT		
Electrical	Manufactur	er in °F g [kw (hp)] nt type	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max.		
Electrical Motor Motor drive	Manufactur Current dra Power ratin Engagemer Pinion enga	er in *F g [kw (hp)] nt type iges rear)	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid		
Electrical Motor Motor drive	Manufactur Current dra Power ratin Engagemer Pinion enga from (front.	er in *F g [kw (hp)] nt type iges rear)	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front		
Electrical Motor Motor drive	Manufactur Current dra Power ratin Engagemer Pinion enga from (front.	er in °F g [kw (hp)] nt type iges rear) a System std., opt., n.a.)	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1,0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std.		
Electrical Motor Motor drive	Manufactur Current dra Power ratin Engagemer Pinion enga from (front,	er in °F g [kw (hp)] It type iges rear) I System std., opt., n.a.)	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std. High energy ignition		
Electrical Motor Motor drive Electrical	Manufactur Current dra Power ratin Engagemer Pinion enga from (front, - Ignition Electronic (i	er in °F g [kw (hp)] It type iges rear) I System std., opt., n.a.)	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1,0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std.		
Motor Motor drive Electrica	Manufactur Current dra Power ratin Engagemer Pinion enga from (front. - Ignition Electronic (Other (spec Manufactur Model	er in °F g [kw (hp)] It type iges rear) I System std., opt., n.a.)	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std. High energy ignition MITSUBISHI ELECTRIC CORPORATION		
Motor Motor drive Electrica	Manufactur Current dra Power ratin Engagemer Pinion enga from (front, - Ignition Electronic (content) Other (spec	er in *F g [kw (hp)] nt type gges rear) s System std., opt., n.a.) ify) er	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std. High energy ignition MITSUBISHI ELECTRIC CORPORATION		
Electrical Motor Motor drive Electrical	Manufactur Current dra Power ratin Engagemer Pinion enga from (front. - Ignition Electronic (Other (spec Manufactur Model	er in °F g [kw (hp)] nt type iges rear) System std., opt., n.a.) ify) er Engine stopped — A Engine Idling — A	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std. High energy ignition MITSUBISHI ELECTRIC CORPORATION 0 1.5 A max.		
Electrical Motor Motor drive Electrical	Manufactur Current dra Power ratin Engagemer Pinion enga from (front. Ignition Electronic (content (specific form) Manufactur Model Current	er in °F g [kw (hp)] nt type iges rear) System std., opt., n.a.) ify) er Engine stopped — A Engine Idling — A	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std. High energy ignition MITSUBISHI ELECTRIC CORPORATION 0 1.5 A max. NGK or ND		
Motor Motor Motor Electrical Type Coil	Manufactur Current dra Power ratin Engagemer Pinion enga from (front. - Ignition Electronic (content (specific form) Manufactur Model Current Manufactur Manufactur	er in °F g [kw (hp)] nt type iges rear) a System std., opt., n.a.) ifty) er Engine stopped - A Engine Idling - A er	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std. High energy ignition MITSUBISHI ELECTRIC CORPORATION 0 1.5 A max. NGK or ND		
Motor Motor Motor Grive Electrical Type Coil	Manufactur Current dra Power ratin Engagemer Pinion enga from (front, I gnition Electronic (i Other (spec Manufactur Model Current Manufactur Model Thread (mn	er in °F g [kw (hp)] nt type iges rear) a System std., opt., n.a.) ifty) er Engine stopped - A Engine Idling - A er	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1,0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std. High energy ignition MITSUBISHI ELECTRIC CORPORATION 0 1.5 A max. NGK or ND BPR6ES-11 W20EPR-U11		
Electrical Motor Motor drive	Manufactur Current dra Power ratin Engagemer Pinion enga from (front, I gnition Electronic (i Other (spec Manufactur Model Current Manufactur Model Thread (mn	er in °F g [kw (hp)] nt type gges rear) a System std., opt., n.a.) ifty) er Engine stopped - A Engine Idling - A er	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std. High energy ignition MITSUBISHI ELECTRIC CORPORATION 0 1.5 A max. NGK or ND BPR6ES-11 W20EPR-U11 14 14 24.5 24.5		
Motor Motor Motor Grive Electrical Type Coil	Manufactur Current dra Power ratin Engagemer Pinion enga from (front, Ignition Electronic (content) Current Manufactur Model Current Manufactur Model Tightening (er in *F g [kw (hp)] nt type iges rear) I System std., opt., n.a.) ify) er Engine stopped - A Engine Idling - A er n) orque [N-m (lb, ft)]	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std. High energy ignition MITSUBISHI ELECTRIC CORPORATION 0 1.5 A max. NGK or ND BPR6ES-11 W20EPR-U11 14 14 24.5 24.5		
Motor Motor Motor Grive Electrical Type Coil	Manufactur Current dra Power ratin Engagemer Pinion enga from (front. Ignition Electronic (i Other (spec Manufactur Model Current Manufactur Model Thread (mn Tightening i Gap	er in °F g [kw (hp)] nt type gges rear) a System std., opt., n.a.) ify) er Engine stopped — A Engine Idling — A er n) orque [N-m (lb, ft)]	NIPPON DENSO - MT / MITSUBISHI ELECTRIC CORPORATION - AT 200 A max. 1.0 (1.3) - MT / 1.2(1.6) - AT Positive shift solenoid Front Electronic spark advance, Std. High energy ignition MITSUBISHI ELECTRIC CORPORATION 0 1.5 A max. NGK or ND BPR6ES-11 W20EPR-U11 14 14 24.5 24.5		

MVMA-90

Locations & type

Internal alternator capacitor, resister high-tension ignition cables, resister spark plugs, ignition coil by-pass capacitor, flame spraying rotor distributor

MVMA Specifications Vehicle Line SWIFT GT Model Year 1990 Issued 2-9-90 Revised (*)

METRIC	(U.S.	Custo	mary)
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METRIO (0.0. Odstolilary)			
Body Type	2 DOOR H/B		•
Body		•	

BOOY	
Structure	Unitized frame
Bumper system front - rear	Bumper system is composed of energy absorption formed polypropylene, steel member and polypropylene cover.
Anti-corrosion treatment	 Use of surface treatment steel in major body components Application of vinyl chloride coating to floor bottom surface Application of tipping coating to side sill outer surface Application of corrosion protection oil to side sill inner surface

Body - Miscellaneous Information

Type of finish	(lacquer, ename)	, other)	Enamel
	Material & ma	155	Steel
Hood	Hinge location	n (front, rear)	Rear
	Type (counte	rbalance, prop)	Prop
	Release cont	rol (internal, external)	Internal and external
	Material & ma	155	N.A.
Trunk	Type (counte	rbalance, other)	N.A.
lid 	internal releas	e control (elec., mech., n.a.)	N.A.
	Material & r	nass	Steel
back lid	Type (coun	terbalance, other)	Gas dumper stay
	Internal releas	e control (elec., mech., n.a.)	Mech
	Material & mass		N.A.
Tailgate	Type (drop, lift, door)		N.A
	internal release control (elec., mech., n.s.)		N.A
Vent window	control (crank,	Front	N.A.
friction, pivot,		Rear	Pivot
Window requ	lator type	Front	Cable
(cable, tape,	flex drive, etc.)	Rear	Cable
Seat cushion	***	Front	Bucket type, Steel plate press frame, Urethane mold
(e.g., 60/40 b	ucket, bench,	Rear	Bench type, Steel wire frame, Urethane mold
wire, foam, e	lc.)	3rd seat	N.A
Cast back to		Front	Bucket type, Steel tube and press frame, Urethane mold
	bucket, bench,	Rear	Bench type, Steel tube and press frame, Urethane mold
wire toam etc.)		3rd seat	N.A.

 Vehicle Line
 SWIFT GT

 Model Year
 1990
 Issued
 2-9-90
 Revised (•)

METRIC (U.S. Customary)

	Two
OUGV	TVD

2 DOOR H/B

Resi	raint	System
		-,

Restraint S	ystem							
Seating Position	<u> </u>			Left	Center	Right		
Type & description (lap & shoulder belt			First seat	N.A.	N.A.	N.A.		
Active	lap belt, etc.)		Second seat	Lap and shoulder belt, ELR-ALR, Std.	N.A	Lap and shoulder belt, ELR-ALR, Std		
	Standard / optional		Third seat	N.A.	N.A.	N.A.		
	Type &		First seat	Lap and shoulder belt, ELR, Std.	N.A.	Lap and shoulder belt, ELR, Std.		
Passive	déscription (air bag, motorized 2-point belt, fixed be knee bolster, manu- lap belt)	elt,	Second seat	N.A.	N.A.	N.A.		
	Standard / optional		Third seat	N.A.	N.A.	N.A.		
Glass	·	SAE Ref. No.	·					
Windshield glas surfaçe area (ci	is exposed n²(in,²)]	S1	8,28	8,281 (1,284)				
Side glass expo area (cm²(in.²))	sed surface - total 2-sides	S2	12,384 (1,920)					
Backlight glass surface area (ci	exposed m²(in.²)]	S3	4,071 (631)					
Total glass expo area (cm²(in.²))	osed surface	S4	24,736 (3,834)					
Windshield glas	is (type)		Laminated glass					
Side glass (type	o) .		Tempered glass					
Backlight glass	(type)		Tempered glass					
Headlamp	В							
Description - se halogen, replac			Halogen, Replaceable bulb					
Shape			Flush					
Lo-beam type (2A1, 2B1, 2C1, etc.		Flush						
Quantity		2						
Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)			Flush					
Quantity	·		2					
Frame						·		
Type and descr unitized frame,	iption (separate frame partially-unitized fram	e, e)	Uni	tized frame				

METRIC (U.S. Customary)

	_
Body	Type

Vehicle Line	SWIFT	GT			
Model Year _	1990	Issued	2-9-90	Revised (*)	

2 DOOR H/B

Air conditionir auto, temp co	ng (manual, ntrol)	Opt., Manual control
Clock (digital.	analog)	Opt.
Compass / th	=	N.A.
Console (floo		Opt.
Defroster, ele		Opt.
	Diagnostic monitor (integrated, individual)	N.A
	Instrument cluster (list instruments)	N.A.
	Keyless entry	N.A.
Electronic	Tripminder (avg. spd., fuel)	N.A
	Voice alert (list items)	N.A.
	Other	N.A.
Fuel door loc	(remote, key, electric)	Remote and key
<u></u>	Auto head on / off delay, dimming	
	Cornering	
	Courtesy (map, reading)	
	Door lock, ignition	
	Engine compartment	
.amps	Fog	
•	Glove compartment	·
	Trunk	
•	Illuminated entry system (list lamps, activation)	
	Other	
	Day / night (auto. man.)	Manual
Mirrors	L.H. (remote, power, heated)	Remote
	R.H. (convex, remote, power, heated)	Convex. Remote
	Visor vanity (RH / LH, illuminated)	N.A.
Navigation sy	stém (describe)	
	-auto release (warning light)	N . A

METRIC (U.S. Customary)

Engine Description Engine Code

	Vehicle Line _ Model Year	SWIFT 1990	2-9-90	Revised (•)		
Γ	2 DOOR	H/B			-	

	Deck lid	release, pull down)	N.A		
	Door loci describe	ks (manual, automatic, system)	N.A.		
		2 - 4 - 6 way, etc.	N.A		
		Reclining (R.H., L.H.)	N.A		
		Memory (R.H., L.H., present, recline)	N.A.		
	Seats	Lumbar, hip, thigh, support	N.A.		
ower quipment		Heated (R.H., L.H., other)	N.A.		
	Side wind	lows	N.A.		
	Vent wind	lows	N.A.		
	Rear windows		N.A		
Radio systems	Antenna (location, whip, w / shield, power)		Left front pillar, Whip		
	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.		Antenna, Front speaker, rear speaker AM/FM Stereo with Cassette		
			AM/FM AM/FM Stereo AM/FM Stereo with Cassette		
	Speaker (number, location)		2: I.P. mounted, 2: rear quarter panel		
loof: open air	or fixed (flip	-up, sliding, "T")	N.A.		
peed control	device		N.A.		
peed warnin	g device (ligi	nt, buzzer, etc.)	N.A.		
achometer (r	pm)		Standard		
elephone syr	stem (descri	pe)	N.A.		
heft deterren	t system		Steering lock type		

Vehicle Line	SWIFT GT			
Model Year	1990 Issued	2-9-90	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	2 0000 11/0
⊘ Width	Ref. No.	2 DOOR H/B
	1	
Tread (front)	W101	1,365 mm (53.74 in.)
Tread (rear)	W102	1,340 mm (52.76 in.)
Vehicle width	W103	1,585 mm (62.40 in.)
Body width at Sg RP (front)	W117	1,575 mm [1,592 w/body side molding] (62.00 in.) L62.68 in.
Vehicle width (front doors open)	W120	3,590 mm (141.34 in.)
Vehicle width (rear doors open)	W121	
Tumble-home (deg.)	W122	22,50
Outside mirror width	W410	
Wheelbase	L101	2,265 mm (89.17 in.)
Length		
		
Vehicle length	L103	3.710 mm (146.06 in.)
Overhang (front)	L104	767 mm (30,20 in.)
Overhang (rear)	L105	678 mm (26.69 in.)
Upper structure length	L123	2.618 mm (103.07 in.)
Rear wheel C/L "X" coordinate	L127	2.810 mm (110.63 in.)
) Height*		
Passenger distribution (front/rear)	PD1,2,3	2/2
Trunk/cargo load		
Vehicle height	H101	1,330 mm (52.36 in.)
Cowl point to ground	H114	821 mm (32.32 in.)
Deck point to ground	H138	•••
Rocker panel-front to ground	H112	193 mm (7.60 in.)
Rocker panel-rear to ground	H111	205 mm (8.07 in.)
Windshield slope angle	H122	600

Ground Clearance*

Backlight slope angle

H121

Front bumper to ground	H102	184 mm (7.24 in.)
Rear bumper to ground	H104	2.37 mm (9.33 in.)
Bumper to ground [front at curb mass (wt.)]	H103	201 mm (7.91 in.)
Bumper to ground [rear at curb mass (wt.)]	H105	260 mm (10.24 in.)
Angle of approach (degrees)	H106	180
Angle of departure (degrees)	H107	20,50
Ramp breakover angle (degrees)	H147	170
Axle differential to ground (front/rear)	H153	
Min. running round clearance	H156	155 mm (6.10 in.)
Location of min. run. grd. clear.		Catalyst case

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.

SWIFT GT Vehicle Line Model Year

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

Body	Type
------	------

2 DOOR H/B

Front Compartment	SAE Ref. No.	Г J: Pass
SgRP front, "X" coordinate	L31	1,850 mm (72.83 in.)
Effective head room	H61	760 mm (37.80 in.)
Max. eff. leg room (accelerator)	L34	1,079 mm (42.48 in.)
SgRP to heel point	H30	240 mm (9.45 in.)
SgRP to heel point	L 5 3	882 mm (645 mm) (34.72 in.) 25.39 in.)
Back angle	L40	25
Hip angle	L42	97.5° [88.7°]
Knee angle	L44	129 [107.3]
Foot angle	L46	87° [140°]
Design H-point front travel	L17	210 mm (8.27 in.)
Normal driving & riding seat track trvl.	L23	210 mm (8.27 in.)
Shoulder room	W3	1,310 mm (51.57 in.)
Hip room	W5	1,298 mm (51.10 in.)
Upper body opening to ground	H50	1,320 mm (43.43 in.)
Steering wheel maximum diameter*	W9	375 mm (14.76 in.)
Steering wheel angle	H18	25.7
Accel, hell pt. to steer, whi, cntr	L11	452 mm (17.80 in.)
Accel, heel pt. to steer, whil cntr	H17	615 mm (24.21 in.)
Undepressed floor covering thickness	H67	30 mm (1.18 in.)

Rear Compartment

· · · · · · · · · · · · · · · · · · ·		
SgRP point couple distance	L50	660 mm (25.98 in.)
Effective head room	H63	928 mm (36.54 in.)
Min. effective leg room	L51	757 mm (29.80 in.)
SgRP (second to heel)	H31	266 mm (10.47 in.)
Knee clearance	L48	- 73 mm (-2.87 in.)
Shoulder room	W4	1,282 mm (50,47 in.)
Hip room	W6	1,080 mm (42.52 in.)
Upper body opening to ground	H51	
Back angle	L41	25
Hip angle	L43	76°
Knee angle	L45	66.50
Foot angle	L47	1120
Depressed floor covering thickness	H73.	20 mm (0.79 in.)

Luggage Compartment

Usable luggage capacity [L (cu. ft.)]	V1	158.9 (5.6)	
Liftover height	H195	769 mm (30.28 in.)	

Interior Volumes (EPA Classification)

Vehicle class	Sub compact	
Interior volume index (cu. ft.)**	78.8 ft ³	
Trunk / cargo index (cu. ft.)	10.3 ft ³	•

^{*} See page 14.

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

MANAGE Consideration		Vehicle Line	SWIF1	T_GT		
MVMA Specificatio	ns	Model Year	1990	_ Issued 2-9-90	Revised (•)	
METRIC (U.S. Customary)						
Vehicle Dimensions See	Key She	ets for definitions				
Body Type		3 0000 1140				
	l	2 DOOR H/B			<u> </u>	
	SAE ' Ref.	· · ·	_			
Station Wagon - Third Seat	No.			·		
Seat facing direction	SD1					
SgRP couple distance	L85					
Shoulder room	W85					
Hip room	W86					
Effective leg room	L86				<u></u>	
Effective head room	H86					
SgRP to heel point	H87					
Knee clearance	L87					
Back angle	L88		<u></u>			
Hip angle	L89					
Knee angle	L90				<u> </u>	
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 bett	W205					
Cargo height	H201	<u> </u>				
Rear opening height	H202				<u> </u>	
Tailgate to ground height	H250				******	
Front seat back to load floor height	H197				<u> </u>	
Cargo volume index (m³(ft.³))	V2					
Hidden cargo volume index [m3(ft.3)]	V4		,			
Cargo volume index-rear of 2-seat	V10					
Hatchback - Cargo Space		· 		<u>-,</u>		
Cargo length at front seatback height	L208	973 mm (38.31 in.)				
Cargo length at floor (front)	L209	1,018 mm (40,08 ir	1.)			
Cargo length at second seatback height	L210	460 mm (18.11 in.)	<u> </u>			
Cargo length at floor (second)	L211	600 mm (23.62 in.))			
Front seatback to load floor height	H197	645 mm (25.39 in.)			
Second seatback to load floor height	H198	427 mm (16.81 in.))			
Cargo volume index [m³(ft.³)]	V3	0.823 (29.1)				
Hidden cargo volume index [m³(ft.³)]	V4	0.390 (13.8)				
Cargo volume index-rear of 2-seat	V11	0.290 (10.2)				

MVMA	Specifications
METRIC (U.S. Customary)

Vehicle Line	<u>SWIFT</u>	<u>GT</u>	
Model Year	1990	Issued <u>2-9-90</u>	Revised (•)

	·	S. Customary)
Body Ty	pe	2 DOOR H/B
Vehicle	ـــ Fiduci	al Marks
Number*		Define Coordinate Location
1011001		Dalling Coordinate Society.
Front		Front suspension strut upper center
Rear		Burring hole center of rear floor side member at rearmost bottom surface
Fiducial Mark Number		
	W21*	512 mm (20.16 in.)
	L54*	569 mm (22.40 in.)
Front	H81"	525 mm (20.67 in.)
	H161"	755 mm (29.72 in.) 738 mm (27.06 in.)
	W22*	463 mm (18.23 in.)
:	L55°	3.260 mm (128.35 in.)
Rear	H82*	159 mm (6.26 in.)
Lear	44400	413 mm (16.26 in.)
	H162*	390 mm (15.35 in.)

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

MVMA Specifications METRIC (U.S. Customary)

Vehicle Line	SWIFT	GT _			
Model Year	1990	Issued	2-9-90	Revised (•)	

		Vehicle Mass (weight)							
г			CURB MASS	. ko. (lb.)*	%	PASS MASS	DISTRIBUT	ION	
				. ng. (15.7	Pass in Front		Pass in Rear		
Code	Model	Front	Rear	Total	Front	Rear	Front	Rear	ETWC** Code
SWIFT GT					1				
0.11 . 0.					<u> </u>				
AA34S		505	345	850	47	53	13	87	2.125
2 Door H/B Sed	an MT		(760)	(1870).					
									
AA34S	-	530	340	870	47	53_	13	87	2,250
2 Door H/B Sed	an AT	(1160)	(750)	(1910)	<u> </u>				
									·
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L							L		

ETWC LEGEND								
A	= 1000	1	= 2000	Q	= 3000	Y	= 4000	SHIPPING MASS (weight) Calculation (Kg. (lbs.)
BC	= 1125 = 1250	ĩ	= 2125 = 2250	R e	= 3125 = 3250	Z AA	= 4250 = 4500	-
Ď	= 1375	- È	= 2375	Ť	= 3375	BB	= 4750	Shipping Mass (weight) = Curb Weight Less:
Ē	= 1500	M	= 2500	Ü	- 3500	CC	= 5000 = 5250	
F G	= 1625 = 1750	Ö	= 2625 = 2750	w	= 3625 = 3750	DD EE	= 5250 = 5500	
Ă.	= 1875	ř	= 2875	X	= 3875	FF	= 5750	
								

^{*} 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.

MVMA Specifications METRIC (U.S. Customary)

Vehicle Line	SWIFT	GT	•		
Model Year _	1990	Issued _	2-9-90	Revised (•)	

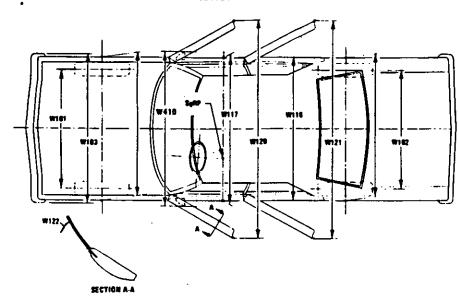
	Optional Equipment Differential Mass (weight)*				
	MASS, kg. (lb.)			Remarks	
Code Equipment	Front	Rear	Total	Restrictions, Requirements	
Electric Rear Window Defogger	0	0.10	0.10		
Air Conditioning	20.3	-2.0	18.3		
			0.005		
Tachometer	0.085	0	0.085		
Rear Window Washer & Wiper	0	1.30	1.30_		
Passenger Assist Grip	0.02	0.03	0.05		
Split Folding Rear Seat Back	0	0	0		
<u> </u>	0.02	0	0.02		
Intermittent Wiper	0.02		0.02		
Custom	0	0	0		
Large Arm Rest	 0 	0	0		
Eur ge Tilm Teac					
Custom Door Trim	0	0	0		
Quarter Window Trim	0.1	0.4	.0.5		
Body Side Molding	0.34	0.34	0.68		
OSRV Mirror (RH)	0_	0	0		
Radio AM/FM					
AM/FM Stereo	1 2	-	1 6		
AM/FM Stereo Cassette Deck	1.2	0.4	1.6		
Radio Speakers - Dual Rear	0.9	0.9	1.8		
Floor Piece Mat	2	2	4		
Engine Block Heater		 			
Full Wheel Cover	0.77	0.77	1.54		
Front and Rear Mud Guard	0.49	0.68	1.17		
		1			
Automatic Transmission	26.0	-3.0	23.0		
Console Box	0.43	0.20	0.63		
		<u> </u>	l,		

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

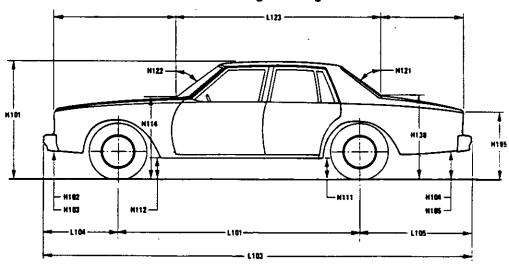
METRIC (U.S. Customary)

Exterior Vehicle And Body Dimensions - Key Sheet

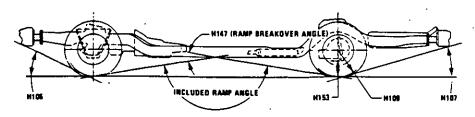
Exterior Width



Exterior Length & Height



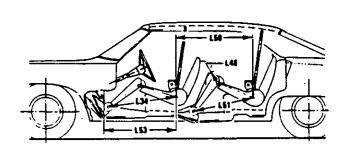
Exterior Ground Clearance

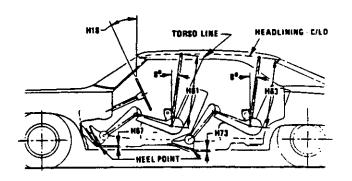


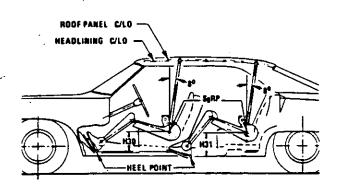
MVMA Specifications Form

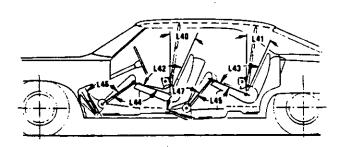
METRIC (U.S. Customary)

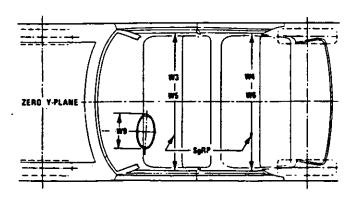
Interior Vehicle And Body Dimensions - Key Sheet

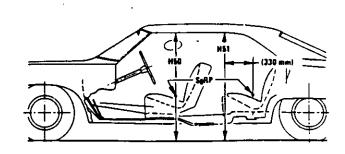






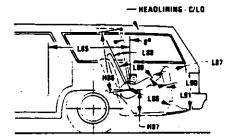




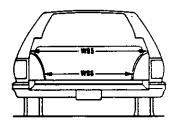


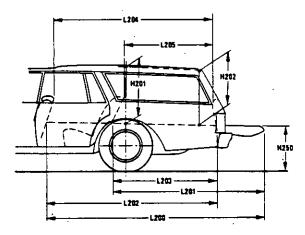
nterior Vehicle And Body Dimensions - Key Sheet

Third Seat

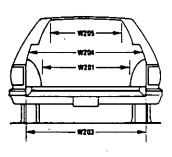


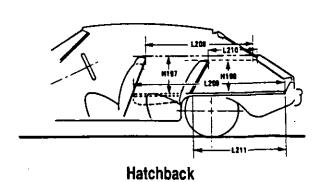
Cargo Space





Station Wagon





METRIC (U.S. Customary)

Exterior Vehicle And Body Dimensions - Key Sheet **Dimensions Definitions**

Seating Reference Point

SEATING REFERENCE POINT means the manufacturer's

design reference point which
(a) Establishes the rearmost normal design driving or riding position of each designated seating position in a vehicle; (b) Has coordinates established relative to the design vehicle structure:

(c) Simulates the position of the pivot center of the human

torso and thigh; and

(d) Is the reference point employed to position the two dimensional templates described in SAE Recommended Practice J826, "Devices for Use in Defining and Measuring Vehicle Seating Accommodations,".

Width Dimensions

TREAD-FRONT. The dimension measured between the

tire centerlines at the ground.

W102 TREAD - REAR. The dimension measured between the tire centerlines at the ground. In case of dual wheels, the dimension will be measured to the centerline of tire and wheel assemblies.

VEHICLE WIDTH. The maximum dimension measured between the widest point on the vehicle, excluding exterior mirrors, flexible mud flaps, marker lamps, but including bumpers, moldings, sheet metal protrusions or dual wheels, if standard equipment.

BODY WIDTH AT SgRP - FRONT. The dimension measured laterally between the widest points on the body at the SgRP-front, excluding door handles, applied moldings, or

VEHICLE WIDTH - FRONT DOORS OPEN. The dimension measured between the widest point on the front doors in

maximum hold-open position

W121 VEHICLE WIDTH - REAR DOORS OPEN. The dimension measured between the widest point on the rear doors in maximum hold-open position. For vehicles with a rear door on only one side, this dimension is to the zero "Y" plane. TUMBLE-HOME. STRAIGHT SIDE GLASS. The angle W122

measured from a vertical to the outside surface of the front door glass at the SgRP "X" plane. CURVED SIDE GLASS. The angle measured from a vertical to a chord extending from the upper DLO to the lower DLO at the outside surface of the front door glass at the front SgRP "X" plane.

OUTSIDE MIRROR WIDTH: The dimension between the W410 widest point on the outside mirrors. The standard right and left mirror adjusted for normal driving will be shown unless otherwise noted. When only one outside mirror is standard,

the dimension will be to the zero "Y" plane.

Length Dimensions

WHEELBASE (WB). The dimension measured longitudinally between front and rear wheel centerlines. In case of dual rear axles, the dimension shall be to the midpoint of the centerlines of the rear wheels.

L103 VEHICLE LENGTH. The maximum dimension measured longitudinally between the foremost point and the rearmost point on the vehicle, including bumper, bumper guards, tow

hooks and/or rub strips, if standard equipment.

OVERHAND – FRONT. The dimension measured longitudi-L104 nally from the centerline of the front wheels to the foremost point on the vehicle including bumper, bumper guards, tow

hooks and/or rub strips, if standard equipment.

OVERHANG - REAR. The dimension measured longitudi-L105 nally from the centerline of the rear wheels; or in the case of dual rear axles, the dimension shall be the midpoint of the centerlines of the rear wheels, to the rearmost point on the vehicle including rear bumpers, bumper guards, tow hooks and rub strips, if standard equipment.

L123 UPPER STRUCTURE LENGTH. The dimension measured longitudinally from the cowl point to the deck point.

L127 REAR WHEEL CENTERLINE "X" COORDINATE or in the case of dual rear axles, the coordinate shall be the midpoint of the distance between the rear axle centerlines.

Height Dimensions

H101 VEHICLE HEIGHT. The dimension measured vertically from

the highest point on the vehicle body to ground.

ROCKER PANEL-REAR TO GROUND. The dimension measured vertically from the bottom of the rocker or side quarter panel at the front of the rear wheel opening, excluding flanges, to ground.

ROCKER PANEL - FRONT TO GROUND. The dimension

measured vertically from the foremost point on the bottom

of the rocker panels, excluding flanges, to ground.
COWL POINT TO GROUND. Measured at zero "Y" plane. H114

BACKLIGHT SLOPE ANGLE. The angle between the H121 vertical reference line and the surface of backlight at vehicle zero "Y" plane. For curve backlight, the angle is to chord

of backlight arc from lower DLO to upper DLO.
WINDSHIELD SLOPE ANGLE. The angle between the H122 vertical reference line and a chord of the windshield arc running from the lower DLO to the upper DLO at the vehicle zero "Y" plane. In the case of wrap over glass, the angle to be measured will be formed by a chord 457 mm (18.0 in.) long drawn from the lower DLO to the intersecting point on the windshield.

H138 DECK POINT TO GROUND. Measured at zero "Y" plane.

STATIC LOAD-TIRE RADIUS-REAR. Specified by the H109 manufacturer in accordance with composite TIRE SECTION STANDARD

Ground Clearance Dimensions

FRONT BUMPER TO GROUND. The minimum dimension measured vertically from the lowest point on the front bumper to ground, including bumper guards, if standard equipment.

FRONT BUMPER TO GROUND-CURB MASS (WT.). H103

Measured in the same manner as H102.

H104 REAR BUMPER TO GROUND. The minimum dimension measured vertically from the lowest point on the rear bumper to ground, including bumper guards, if standard equipment.

H105 REAR BUMPER TO GROUND-CURB MASS (WT.).

Measured in the same manner as H104.

ANGLE OF APPROACH. The angle measured between a line tangent to the front tire static loaded radius arc and the initial point of structural interference forward of the front tire to ground. The limiting structural component shall be designated.

ANGLE OF DEPARTURE. The angle measured between a line tangent to the rear tire static loaded radius arc and the initial point structural interference rearward of the rear tire to ground. The limiting component shall be designated.

RAMP BREAKOVER ANGLE. The angle measured between two lines tangent to the front and rear tire static loaded radius and intersecting at a point on the underside of the vehicle which defines the largest ramp over which the vehicle can roll.

H153 REAR AXLE DIFFERENTIAL TO GROUND. The minimum dimension measured from the rear axle differential to

ground.
MINIMUM RUNNING GROUND CLEARANCE. The mini-H156 mum dimension measured from the sprung vehicle to ground. Specify location.

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions - Key Sheet **Dimensions Definitions**

Glass Areas

Windshield area.

S2 Side windows area, Includes the front door, rear door, vents, and rear quarter windows on both sides of the vehicle.

S3 Backlight areas.

S4 Total area. Total of all areas (S1 + S2 + S3).

Fiducial Mark Dimensions

Fiducial Mark - Number 1

"X" coordinate. W21 "Y" coordinate.

"Z" coordinate. H81

Height "Z" coordinate to ground at curb weight. Height "Z" coordinate to ground. H161

H163 Fiducial Mark - Number 2

L55 "X" coordinate. "Y" coordinate. W22

"Z" coordinate. W82

Height "Z" coordinate to ground at curb weight. Height "Z" coordinate to ground. H162

H164

Front Compartment Dimensions

ACCELERATOR HEEL POINT TO STEERING WHEEL L11 CENTER. The dimension measured horizontally from the AHP to the intersection of the steering column centerline and a plane tangent to the upper surface of the steering wheel rim.

DESIGN H-POINT - FRONT TRAVEL. The dimension meas-L17 ured horizontally between the design H-point - front in the foremost and rearmost seat track positions. (See SAE

J1100)

L23

NORMAL DRIVING AND RIDING SEAT TRACK TRAVEL. The dimension measured horizontally between a point on the design H-point travel line from the SgRP to the displaced point on the design H-point travel line with the seat moved to the foremost seat position, but not to include seat track travel used for purposes other than normal driving and riding

L31

positions. (See SAE J1100).
SgRP - FRONT. "X" COORDINATED.
MAXIMUM EFFECTIVE LEG ROOM - ACCELERATOR. **L34** The dimension measured along a line from the ankle pivot center to the SgRP - front plus 254 mm (10.0 in.) measured with right foot on the undepressed accelerator pedal. For vehicles with SgRP to heel (H30) greater than 18 in., the accelerator pedal may be depressed as specified by the manufacturer. If the accelerator is depressed, the manufacturer shall place foot flat on pedal and note the depression of the pedal.

BACK ANGLE - FRONT. The angle measured between a vertical line through the SgRP - front and the torso line. If L-40 the seatback is adjustable, use the normal driving and riding

position specified by the manufacturer. HIP ANGLE – FRONT. The angle measured between torso L-42

line and thigh centerline.

KNEE ANGLE - FRONT. The angle measured between L44 thigh centerline and lower leg centerline measured on the

FOOT ANGLE - FRONT. The angle measured between the L46 lower leg centerline and a line tangent to the ball and heel of the bare foot flesh line measured on the right leg. Ref SAE J826.

SgRP-FRONT TO HEEL. The dimension measured L53 horizontally from the SgRP-front to the accelerator heel

point.

W3 SHOULDER ROOM-FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP-front at height between the belt line and 254 mm (10.0 in.) above the SgRP-front, excluding the door assist strap and attaching parts.

W5 HIP ROOM-FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP-front within 25 mm (1.0 in.) below and 76 mm (3.0 in.) above the SgRP—front and 76 mm (3.0 in.) fore and aft of the SgRP—front.

STEERING WHEEL MAXIMUM OUTSIDE DIAMETER.

W9

Define if other than round.

ACCELERATOR HEEL POINT TO THE STEERING WHEEL **H7** CENTER. The dimension measured vertically from the AHP-front to the intersection of the steering column centerline to a plane tangent to the upper surface of the steering wheel rim.

STEERING WHEEL ANGLE. The angle measured from a H18

vertical to the surface plane of the steering wheel.

SgRP – FRONT TO HEEL. The dimension measured vertically from the SgRP – front to the accelerator heel point. H30

UPPER BODY OPENING TO GROUND-FRONT. The **H50** dimension measured vertically from the trimmed body opening to the ground on the SgRP – front "X" plane. EFFECITVE HEAD ROOM – FRONT. The dimension meas-

H61 ured along a line 8 deg. rear of vertical from the SgRP - front

to the headlining plus 102 mm (4.0in.).
FLOOR COVERING THICKNESS - UNDEPRESSED -**H67** FRONT. The dimension measured vertically from the surface of the undepressed floor covering to the underbody sheet metal at the accelerator heel point.

Rear Compartment Dimensions

BACK ANGLE - SECOND. The angle measured between

a vertical line through the SgRP – second and the torso line. HIP ANGLE – SECOND. The angle measured between L43 torso line and thigh centerline.

KNEE ANGLE-SECOND. The angle measured between L45

thigh centerline and lower leg centerline. FOOT ANGLE-SECOND. The angle measured between L47 the lower leg centerline and a line tangent to the ball and heel of the three-dimensional devices bare foot flesh line (Reference J826)

KNEE CLEARANCE - SECOND. The minimum dimension L48 measured from the knee pivot center to the back of the front

seatback minus 51 mm (2.0 in.).

SgRP COUPLE DISTANCE-SECOND. The dimension L50 measured horizontally from the driver SgRP-front to the SaRP - second. L51

MINIMUM EFFECTIVE LEG ROOM-SECOND. The dimension measured along a line from the ankle pivot center

to the SgRP – second plus 254 mm (10.0 in.). SHOULDER ROOM – SECOND. The minimum dimension W4 measured laterally between door or quarter trimmed surfaces on the "X" plane through the SgRP-second at height between 254-406 mm (10.0-16.0 in.) above the SgRP-second, excluding the door assist straps and attaching parts.

HIP ROOM-SECOND. Measured in the same manner as W6

SgRP-SECOND TO HEEL. The dimension measured **H31** vertically from the SgRP-second to the two dimensional

device heel point on the depressed floor covering.

UPPER BODY OPENING TO GROUND - SECOND. The H51 dimension measured vertically from the trimmed body opening to the ground on the "X" plane 330 mm (13.0 in.) forward of the SgRP – second.

EFFECTIVE HEAD ROOM – SECOND. The dimension

H63 measured along a line 8 deg, rear of vertical from the SgRP

to the headlining, plus 102 mm (4.0 in.).
FLOOR COVERING-DEPRESSED-SECOND. The di-H73 mension measured vertically from the heel point to the underbody sheet metal.

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions — Key Sheet Dimensions Definitions

Luggage Compartment Dimensions

V1 USABLE LUGGAGE CAPACITY – Total of volumes of individual pieces of standard luggage set plus H-boxes stowed in the luggage compartment in accordance with the procedure described in paragraph 8.2 of SAE-J1100a.

Interior Volumes (EPA Classification)

The Interior Volume Index is listed for each body style except two seaters. The Interior Volume Index estiamtes the space in a car. It is based on four measurements — head room, shoulder room, hip room, and leg room — for the front and rear seats, plus trunk capacity. The Interior Volume Index is an estimate of the size of the passenger compartment.

The Trunk/Cargo Index is an estimate of the size of the trunk/cargo space. In station wagons and hatchbacks it is an estimate of the space behind the second seat.

Station Wagon - Third Seat Dimensions

L85 SgRP COUPLE DISTANCE – THIRD. The dimension measured horizontally from the SgRP – second to the SgRP – third.

L86 EFFECTIVE LEG ROOM - THIRD. The dimension measured along a line from the ankle pivot center to the SgRP - third plus 254 mm (10.0 in.).

L87 KNEE CLEARANCE – THIRD. The minimum dimension from the knee pivot center to the back of second seatback minus a constant of 51 mm (2.0 in.). With rear-facing third seat, dimension is measured to closure.

L88 BACK ANGLE – THIRD. Measured in the same manner as L41.

L89 HIP ANGLE-THIRD. Measured in the same manner as L43.

L90 KNEE ANGLE – THIRD. Measured in the same manner as L45

L91 FOOT ANGLE – THIRD. Measured in the same manner as L47.

W85 SHOULDER ROOM-THIRD. Measured in the same manner as W4.

W86 HIP ROOM - THIRD. Measured in the same manner as W5.

H86 EFFECTIVE HEAD ROOM - THIRD. The dimension, measured along a line 8 deg. from the SgRP - third to the headlining rear of vertical plus a constant of 102 mm (4.0 in.).

H87 SgRP - THIRD TO HEEL POINT.

SD1 SEAT FACING DIRECTION - THIRD.

Station Wagon - Cargo Space Dimensions

L200 CARGO LENGTH - OPEN - FRONT. The minimum dimension measured longitudinally from the back of the front seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo surface if the rear closure is a conventional door type tailgate at the zero "Y" plane.

L201 CARGO LENGTH – OPEN – SECOND. The dimension measured longitudinally from the back of the second seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo floor surface if the rear closure is a conventional door type tailgate, at the zero "Y" plane.

L202 CARGO LENGTH-CLOSED-FRONT. The minimum dimension measured horizontally from the back of the front seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.

L203 CARGO LENGTH - CLOSED - SECOND. The dimension measured horizontally from the back of the second seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.

L204 CARGO LENGTH AT BELT-FRONT. The minimum dimension measured horizontally from the back of the front seatback at the seatback top to the foremost normal surface of the closed tailgate or inside surface of the cab backpanel at the height of the belt, on the zero "Y" plane.

L205 CARGO LENGTH AT BELT – SECOND. The minimum dimension measured horizontally from the back of the second seatback at the seatback top to the foremost normal surface of the closed tailgate at the height of the belt, on the zero "Y" plane.

W201 CARGO WIDTH – WHEELHOUSE. The minimum dimension measured laterally between the trimmed wheelhousings at floor level. For any vehicle not trimmed, measure to the sheet metal.

W203 REAR OPENING WIDTH AT FLOOR. The minimum dimension measured laterally between the limiting interferences of the rear opening at floor level.

W204 REAR OPENING WIDTH AT BELT. The minimum dimension measured laterally between the limiting interferences of the rear opening at belt height or top of pick up tox

W205 REAR OPENING WIDTH ABOVE BELT. The minimum dimension measured laterally between the limiting interferences of the rear opening above the belt height.

H197 FRONT SEATBACK TO LOAD FLOOR HEIGHT. The dimension measured vertically from the horizontal tangent to the top of the seatback to the undepressed floor covering.

H201 CARGO HEIGHT. The dimension measured vertically from the top of the undepressed floor covering to the headlining at the rear wheel "X" coordinate on the zero "Y" plane.

H202 REAR OPENING HEIGHT. The dimension measured vertically from the top of the undepressed floor covering to the upper trimmed opening on the zero "Y" plane with rear door fully open.

H250 TAILGATE TO GROUND CURB MASS (WT.). The dimension measured vertically from the top of the undepressed floor covering on the lowered tailgate to ground on the zero "Y" plane.

V2 STATION WAGON

Measured in inches:

W4 x H201 x L204 1728 = ft³

Measured in mm:

 $\frac{\text{W4 x H201 x L204}}{10^9} = \text{m}^3 \text{ (cubic meter)}$

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions - Key Sheet **Dimensions Definitions**

٧4 HIDDEN LUGGAGE CAPACITY - REAR OF FRONT SEAT. The total volumes of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the front seat.

V5 TRUCKS AND MPV'S WITH OPEN AREA.

Measured in inches:

L506 x W505 x H503

Measured in mm:

L506 x W500 x H503 = m3 (cubic meter) 109

V6 TRUCKS AND MPV'S WITH CLOSED AREA.

Measured in inches:

L204 x W500 x H505 1728

Measured in mm:

L204 x W500 x H505 = m³ (cubic meter) 109

V8 HIDDEN LUGGAGE CAPACITY-REAR OF SECOND SEAT. The total volume of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the second seat.

V10 STATION WAGON CARGO VOLUME INDEX.

Measured in inches:

H201 x L205 x W4 + W201

Measured in mm:

H201 x L205 x W4 + W201 = m³ (cubic meter)

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Hatchback - Cargo Space Dimensions

All hatchback cargo dimensions are to be taken with the front seat in full down and rear position, and the rear seat folded down. The hatchback door is in the closed position. (For electronically adjusted seats, see the manufacturer's specifications for Design "H" Point).

CARGO LENGTH AT FRONT SEATBACK HEIGHT. The minimum horizontal dimension from the "X" plane tangent to the rearmost surface of the driver's seatback to the inside limiting interference of the hatchback door on the vehicle zero "Y" plane.

CARGO LENGTH AT FLOOR-FRONT-HATCHBACK.

L209 The minimum horizontal dimension measured at floor level from the rear of the front seatback to the normal limiting interference of the hatchback door on the vehicle zero "Y plane.

L210 CARGO LENGTH AT SECOND SEATBACK HEIGHT-HATCHBACK. The minimum dimension measured from the "X" plane tangent to the rearmost surface of second seatback or the load floor which is stowed at least one half of the H198 dimension height above the rear load floor, to the rearmost inside limiting interference on the zero "X" plane.

L211 CARGO LENGTH AT FLOOR - SECOND HATCHBACK. The minimum horizontal dimension measured at floor level from the rear of the second seatback or load floor panel to the normal limiting interference of the hatchback door on the vehicle zero "Y" plane.

FRONT SEATBACK TO LOAD HEIGHT. The dimension measured vertically from the horizontal tangent to the top of the seatback to the undepressed floor covering

SECOND SEATBACK TO LOAD FLOOR HEIGHT: The dimension measured vertically from the second seatback to the undepressed floor covering.

V3 HATCHBACK.

Measured in inches:

$$\frac{L208 + L209 \times W4 \times H197}{2} = H^3$$

Measured in mm:

$$\frac{L208 + L209}{2} \times W4 \times H197$$
= m³ (cubic meter)

V4 HIDDENLUGGAGE CAPACITY - REAR OF FRONT SEAT. The total volumes of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the front seat.

· V11 HATCHBACK CARGO VOLUME INDEX. Usable luggage (one (1) stand and luggage set) below floor: Measured in inches:

L210 + L211 x W4 x H198

Measured in mm:

$$\frac{L210 + L211}{2} \times W4 \times H198$$
= m³ (cubic meter)

METRIC (U.S. Customary)

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