

MOTOR VEHICLE MANUFACTURERS SPECIFICATIONS

Metric (U.S. Customary)

2004

Manufacturer Fuji Heavy Industries Ltd.	Vehicle Line SUBARU IMPREZA	
Mailing Address 1-7-2, Nishi-shinjuku Shinjuku-ku, Tokyo 160-8316 Japan	Issued Jan-03	Revised Mar-03

Direct questions concerning these specifications to the manufacturer listed above.

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

AIAM

Specifications

METRIC

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NOTE:

1. This form uses both SI Metric units and U.S. Customary units. The metric unit of measure is presented first, and the U.S. Customary unit follows in parentheses.
2. UNLESS OTHERWISE INDICATED:
 - a. Specifications apply to standard models without optional equipment. Significant deviations are noted.
 - b. Nominal design dimensions are used throughout these specifications.
 - c. All linear dimensions are in millimeters (inches), and all mass (weight) specifications are in kilograms (pounds).
3. The general Specifications herein are those in effect at date of compilation and are subject to change without notice or incurring obligation by the manufacturer.
4. Additional Vehicle Dimensions (based in part on SAE J1100 "Motor Vehicle Dimensions") may be available from the manufacturer.

Specifications

Vehicle Line: IMPREZA

METRIC (U.S. Customary) Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Vehicle Origin

Design & development (company)	Fuji Heavy Industries Ltd.
Where built (country)	Japan
Authorized U.S. sales marketing representative	Subaru of America Inc.

Vehicle Models

Model Description & Drive (FWD / RWD / AWD / 4WD)	Introduction Date	Make, Vehicle Models, Series, Body Type (Mfg's Code)	No. of Designated Seating Positions (Front/Rear)	Max. Truck/ Cargo Load- Kilograms (Pounds)	EPA Fuel Economy (City/Hwy)
4 Door Sedan 2.5L RS 5MT (AWD)		GDECY6J	2/3	36(80)	21/28
4 Door Sedan 2.5L RS 4AT (AWD)		GDECY6R	2/3	36(80)	22/28
WRX - 4 Door Sedan 2.0L WRX 5MT (AWD)		GDACY8D	2/3	36(80)	20/27
4 Door Sedan 2.0L WRX 4AT (AWD)		GDACY8P	2/3	36(80)	19/26
WRX STI - 4 Door Sedan 2.5L STI 6MT (AWD)		GDFCYEH	2/3	36(80)	18/24
Sport Wagon 2.5L TS 5MT (AWD)		GGECY4J	2/3	68(150)	21/28
Sport Wagon 2.5L TS 4AT (AWD)		GGECY4R	2/3	68(150)	22/28
Sport Wagon 2.5L Outback 5MT (AWD)		GGECY7J	2/3	68(150)	21/28
Sport Wagon 2.5L Outback 4AT (AWD)		GGECY7R	2/3	68(150)	22/28
Sport Wagon 2.0L WRX 5MT (AWD)		GGACY8D	2/3	68(150)	20/27
Sport Wagon 2.0L WRX 4AT (AWD)		GGACY8P	2/3	68(150)	19/26

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

Specifications

Vehicle Line: **IMPREZA**

METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Power teams

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

		A		B		C	D	E	
ENGINE	Engine Code	EJ251AW (2.5 MT)		EJ251AX (2.5 AT)		EJ205BW (2.0 Turbo MT)	EJ205BX (2.0 Turbo AT)	EJ257BW (2.5 Turbo MT)	
	Displacement Liters (in3)	2457 (150)				1994 (122)		2457 (150)	
	Induction system (FI, Carb, etc.)	FI				FI		FI	
	Compression ratio	10.0				8.0		8.2	
	SAE Net at RPM	Power kW (bhp)	123 (165) / 5,600				169 (227) / 6,000		224(300) / 6000
		Torque N.m (lb.ft.)	225 (166) / 4,000				294 (217) / 4,000		407(300) / 4000
	Exhaust single, dual	Dual							
TRANS	Transmission/Transaxle	TS/Outback	RS	TS/Outback	RS	TY754VN	TV1A4Y	TY856WH	
		TY754VC	TY754VC	TZ1A4Z	TZ1A4Z				
	Effective Final Drive / Axle Ratio (std. first)	3.900	4.111	4.111	4.444	3.900	4.111	3.900	

Series Availability		Power Teams (A - B - C - D - E)		
Model		Code	Standard	Optional
4 Door Sedan 2.5L RS 5MT (AWD)		GDE	A	N.A.
4 Door Sedan 2.5L RS 4AT (AWD)		GDE	B	N.A.
→ 4 Door Sedan 2.0L WRX 5MT (AWD)		GDA	C	N.A.
4 Door Sedan 2.0L WRX 4AT (AWD)		GDA	D	N.A.
→ 4 Door Sedan 2.5L STI 6MT (AWD)		GDF	E	N.A.
Sport Wagon 2.5L TS 5MT (AWD)		GGE	A	N.A.
Sport Wagon 2.5L TS 4AT (AWD)		GGE	B	N.A.
Sport Wagon 2.5L Outback 5MT (AWD)		GGE	A	N.A.
Sport Wagon 2.5L Outback 4AT (AWD)		GGE	B	N.A.
Sport Wagon 2.0L WRX 5MT (AWD)		GGA	C	N.A.
Sport Wagon 2.0L WRX 4AT (AWD)		GGA	D	N.A.

Specifications

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METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Engine Description

Engine Code

A	B	C	D	E
EJ251AW (2.5 MT)	EJ251AX (2.5 AT)	EJ205BW (2.0 Turbo MT)	EJ205BX (2.0 Turbo AT)	EJ257BW (2.5 Turbo MT)

ENGINE - GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)	Horizontally opposed, front, longitudinal					
	SOHC		DOHC			
Manufacturer	Fuji Heavy Industries Ltd.					
No. of cylinders	4					
Bore	99.5 (3.9)		92.0 (3.6)	99.5 (3.9)		
Stroke	79.0 (3.1)		75.0 (2.9)	79.0 (3.1)		
Bore spacing (C/L to C/L)	113 (4.45)					
Cylinder block material & mass kg(lbs.)(machined)	Aluminum alloy, 23.03(50.7)		Aluminum alloy, 23.88 (52.6)		Aluminum alloy, 23.08 (50.9)	
Cylinder block deck height	201 (7.91)					
Cylinder block deck length	253 (9.96)					
Deck clearance (minimum) (above or below block)	0					
Cylinder head material & mass kg (lbs.)	Aluminum alloy RH: 8.15(18.0), LH:8.15(18.0)		Aluminum alloy RH:7.92(17.5), LH:7.70(17.0)		Aluminum alloy RH:7.39(16.3),LH:7.26(16.0)	
Cylinder head volume cm ³ (inches ³)	50.0 (3.05)		49.5 (3.02)		55.5(3.38)	
Cylinder liner material	Cast iron					
Head gasket thickness (compressed)	0.7 (0.002)					
Minimum combustion chamber total volume cm ³ (inches ³)	64.8 (4.0)		66.6 (4.1)		85.0(5.2)	
Cyl.no. system	L. Bank	2 and 4				
(front to rear)*	R. Bank	1 and 3				
Firing order	1-3-2-4					
Intake manifold material & mass kg (lbs.)**	Plastic 2.6kg		Aluminum 6.0kg		Aluminum 5.9kg	
Exhaust manifold material & mass kg (lbs.)**	N.A.		Steel 10.1kg			
Knock sensor (number & location)	1, #4 cylinder					
Fuel required unleaded, diesel, etc.	Unleaded					
Fuel antiknock index (R + M) + 2	87 or higher		91 or higher		93 or higher	
Engine mounts	Quantity	3				
	Material and type(elastomeric, hydroelastic,hydraulic damper,etc.)	Elastomeric				
	Added isolation(sub-frame, crossmember, etc.)	Pitching stopper and crossmember				
Total dressed engine mass (wt) dry***		131.5	115.6	153.7	136.9	154.7

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	392 (13.8)	399 (13.9)	417(14.7)
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Engine - Camshaft

Location	Cylinder head		
Material & mass kg (weight, lbs.)	Special cast iron LH: 1.75(3.9) RH: 1.67(3.7)	Special case iron LH int.:1.79 (4.0) LH ext.:1.75 (3.9) RH int.:1.74 (3.9) RH ext.:1.69 (3.8)	Composite camshaft LH int.: 1.39 (3.06) LH ext.:1.35 (2.98) RH int.:1.31 (2.89) RH ext.:1.30 (2.87)
Drive type	Chain / belt	Belt	
	Width / pitch	27.0 / 8.0	
		30.0 / 8.0	

* 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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Engine - Valve System

Hydraulic lifters (std., opt., n.a.)		N.A.	
Valves	Number intake / exhaust	2/2 per a cylinder	
	Head O.D. intake / exhaust	36.9(1.42)/31.5(1.24)	36.0(1.42)/32.0(12.6)

Engine - Connecting Rods

Material & mass kg., (weight, lbs.)*	SAE104LH, 0.629(1.39)	SAE104LH, 0.614(1.35)	SAE104LH, 0.59(1.30)
Length (axes C/L to C/L)	131.7 (5.19)	130.5 (5.14)	

Engine - Crankshaft

Material & mass kg., (weight, lbs.)*	S48CLS, 9.40(20.7)	S48CLS, 9.30(20.5)	S48CLS, 9.40(20.7)
End thrust taken by bearing (no.)	5		
Length & number of main bearings	19(0.75) and 15(0.59), 5		
Seal (material, one, two piece design, etc.)	Front	Fluoric rubber, one piece	
	Rear	Fluoric rubber, one piece	

Engine - Lubrication System

Normal oil pressure kPa (psi) at engine rpm	98.1(14.2)@600, 294(42.6)@5000
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, part, other)	Full flow
Capacity of c/case, less filter - refill - L(qt.)	4.0 (4.2) 4.5 (4.8)

Engine - Diesel Information

Engine		
Diesel engine manufacturer		N.A.
Glow plug, current drain at 0°F		N.A.
Injector	Type	N.A.
nozzle	Opening pressure kPa(psi)	N.A.
Pre-chamber design		N.A.
Fuel injection	Manufacturer	N.A.
pump	Type	N.A.
Fuel injection pump drive (belt, chain, gear)		N.A.
Supplementary vacuum source (type)		N.A.
Fuel heater (yes/no)		N.A.
Water separator, description (std., opt.)		
Turbo manufacturer		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.	Mitsubishi Heavy Industries Ltd.	Ishikawajima-harima Heavy Industries Ltd.
Super charger - manufacturer	N.A.	N.A.	
Intercooler	N.A.	Sanden Corporation	

* Finished State

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Engine - Cooling System

Coolant recovery system (std., opt., n.a.)		Reservoir tank, std.				
Coolant fill location (rad., bottle)		Bottle				
Radiator cap relief valve pressure kPa (psi)		108 (15.6)				
Circulation thermostat	Type (choke, bypass)	Bypass				
	Starts to open at+B40 (°F)	78 (172.4)				
Water pump	Type (centrifugal, other)	Centrifugal				
	GPM 1000 pump rpm	7.9				
	Number of pumps	1				
	Drive (V-belt, other)	Timing belt				
	Bearing type	Ball bearings				Ball and Roller bearings
	Impeller material	Cast iron				Metal plate
Housing material		Aluminum alloy				
By-pass recirculation type (inter., ext.)		External				
Cooling system capacity	With heater - L (qt.)	7.0(7.4)	6.9(7.3)	7.7(8.1)	7.6(8.0)	7.7(8.1)
	With air conditioner - L (qt.)	7.0(7.4)	6.9(7.3)	7.7(8.1)	7.6(8.0)	7.7(8.1)
	Opt. equipment specify - L (qt.)	N.A.				
Water jackets full length of cyl. (yes, no)		Yes				
Water all around cylinder (yes, no)		No				
Water jackets open at head face (yes, no)		Yes				
Radiator core	Std., A/C, HD	Std.				
	Type (cross-flow, etc.)	Down-flow				
	Construction (fin & tube mechanical, braze, etc.)	Tube and corrugate fin, single row				
	Material, mass kg (wgt., lbs.)	Aluminum 1.35(2.97)	Aluminum 1.57(3.86) *	Aluminum 2.49(5.49)	Aluminum 1.57(3.86) *	Aluminum 2.49(5.49)
	Width mm(in)	691.5(27.22)				
	Height mm(in)	340(13.39)				
	Thickness mm(in)	16(0.63)		27(1.06)	16(0.63)	27(1.06)
	Fins per inch	15	20			
Radiator end tank material		Glass fiber reinforced nylon 66				
Fan	Std., elec., opt.	Elec., Std.				
	Number of brades & type (flex, solid, material)	5, flex, PA66-GF30 *				
	Number & location (front, rear of radiator)	1, rear of radiator				
	Diameter & projected width	320(12.6) & 84(3.31)				
	Ratio (fan to crankshaft rev.)	N.A.				
	Fan cutout type	N.A.				
	Drive type (direct, remote)	Elec.				
	RPM at idle (elec.)	1900		2000(Lo Speed), 2500(Hi Speed)		
	Motor rating (wattage/elec.)	70W		120W		
	Motor switch (type&location/elec.)	ECU control				
	Switch point(temp./pressure/elec.)	95 °C (below 70km/h)		95°C (below 20km/h - Lo Speed) (More than 20km/h - Hi Speed)		
	Fan shroud (material)	Polypropylene				

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

Manual 4-speed (manufacturer/country)	N.A.			
Manual 5-speed (manufacturer/country)	Fuji Heavy Industries Ltd. / Japan		N.A.	
Manual 6-speed (manufacturer/country)	N.A.			Fuji Heavy Industries Ltd. / Japan
Automatic (manufacturer/country)	N.A.		Fuji Heavy Industries Ltd. / Japan	N.A.
Automatic overdrive (manufacturer/country)	N.A.			

Manual Transmission/Transaxle

Number of forward speeds		5		N.A.	6
Gear ratios	1st	3.454		N.A.	3.636
	2nd	2.062	1.947	N.A.	2.375
	3rd	1.448	1.366	N.A.	1.761
	4th	1.088	0.972	N.A.	1.348
	5th	0.780	0.738	N.A.	0.971
	6th	N.A.		N.A.	0.756
	Reverse	3.333		N.A.	3.545
Synchronous meshing (specify gears)		All gears include rev.		N.A.	All gears include rev.
Shift lever location		Floor		N.A.	Floor
Trans. case matl. & mass kg (lbs.)*		Aluminium		N.A.	Aluminium
Lubricant	Capacity L (pt.)	3.9(7.39)		N.A.	4.1(8.66)
	Type recommended	GL-5		N.A.	GL-5

Clutch (Manual Transmission)

Clutch manufacturer		EXEDY		N.A.	EXEDY
Clutch type (dry, wet; single, multiple disc)		Dry single		N.A.	Dry single
Linkage (hydraulic, cable, rod, lever, other)		Hydraulic		N.A.	
Max. pedal effort (nom.spring load) N (lbs.)	Depressed	125		N.A.	
	Released	75		N.A.	
Assist (spring, power/percent, nominal)		Spring		N.A.	
Type pressure plate springs		Diaphragm springs		N.A.	Diaphragm springs
Total spring load (nominal) N (lbs.)		5688(1279)	7850N	N.A.	9120N
Clutch facing	Facing mfg. & material coding	Nissinbo		N.A.	Nissinbo
	Facing material & construction	G114		N.A.	G114
	Rivets per facing	16		N.A.	16
	Outside x inside dia. (nominal)	225x150 (8.86x5.91)	230x155 (9.06x5.81)	N.A.	240x180 (9.45x6.30)
	Total eff. area cm ² (in. ²)	221(34.2)	227(37)	N.A.	251(38.9)
	Thickness (pressure plate side/ly wheel side)	3.5(0.138)	3.5/3.2	N.A.	3.5/3.2
	Rivet depth (pressure plate side/ly wheel side)	1.65~2.25	1.65~2.25	N.A.	1.65~2.25
	Engagement cushion method	leaf spring		N.A.	leaf spring
	Release bearing type & method lub.	Ball bearing & enclosed grease		N.A.	Ball bearing & enclosed grease
	Torsional damping method, springs, hysteresis	Coil spring & molded resin		N.A.	Coil spring

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

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		TS/Outback RS		

Automatic Transmission/Transaxle

Trade name		N.A.	None			N.A.	
Type and special features (describe)		N.A.	4-forward and 1-reverse, two sets of simple planetary gear type			N.A.	
Shift mechanics		N.A.	Electronic hydraulic type			N.A.	
Gear selector	Location (column, floor, other)	N.A.	Floor			N.A.	
	Ltr./No. designation (e.g. PRND21)	N.A.	P,R,N,D,3,2,1			N.A.	
	Shift interlock (yes, no, describe)	N.A.	Yes			N.A.	
Gear ratios	1st	N.A.	2.785	3.027	2.785	N.A.	
	2nd	N.A.	1.545	1.619	1.545	N.A.	
	3rd	N.A.	1.000			N.A.	
	4th	N.A.	0.694			N.A.	
	Reverse	N.A.	2.272			N.A.	
	Final Drive ratio	N.A.	4.111	4.444	4.111	N.A.	
Max. upshift vehicle speed -drive range km/h(mph)		N.A.	161	154	181	N.A.	
Max. upshift engine speed RPM		N.A.	6000			6500	N.A.
Max. kickdown speed - drive range km/h (mph)		N.A.	142	130	158	N.A.	
Min. overdrive speed km/h (mph)		N.A.	32			38	N.A.
Torque converter	Type	N.A.	Symmetric, 3 elements			N.A.	
	Torus design	N.A.				N.A.	
	Number of elements	N.A.	3			N.A.	
	Max. ratio at stall	N.A.	2.0			2.2	N.A.
	Type of cooling (air, liquid)	N.A.	Liquid			N.A.	
	Nominal diameter	N.A.	246			N.A.	
	Capacity factor "K"	N.A.				N.A.	
Pump type		N.A.	Trochoid pump			N.A.	
Lubricant	Capacity refill L (pt.)	N.A.	9.5 (20.1)			9.5 (20.1) *	N.A.
	Type recommended	N.A.	Dexron III			N.A.	
Oil cooler (std., opt., N.A., internal, external, air, liquid)		N.A.	External, liquid			N.A.	
Transmission mass kg (lbs) & case material**		N.A.	Aluminum			N.A.	

All Wheel / 4 Wheel Drive

Description & type (part-time, full-time, 2/4 shift while moving, mechanical, elec., chain/gear, etc.)		Full-time		
Transfer case	Manufacturer and model	Fuji Heavy Industries Ltd.	Ltd.	Fuji Heavy Industries Ltd.
	Type and location			
Low-range gear ratio		N.A.		
System disconnect (describe)				
Center differential	Type (bevel, planetary, w or w/o viscous bias, torsen, etc.)	Bevel	Multi plates clutch	Planetary
	Torque split (% front/rear)	50/50	Variable	

* Input speed + / torque

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

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

Effective final drive ratio	TS/Outback	RS	3.900	TS/Outback	RS	4.111	3.900
(or overall top gear ratio)	3.900	4.111		4.111	4.444		
Transfer ratio and method (chain, gear, etc.)	Gear						
Front drive unit	Ring gear p.d.	170					180
No. of teeth	Pinion	10	9	10	9		10
Ring gear		39	37	39	37	40	39

Front Drive Unit

Front Drive URR				
Description (Integral to trans... etc)		Integral to trans		
Limited slip differential (type)		N.A.		suretrac
Drive pinion	Type	Hypoid gear		
	Offset	27	23	27
No. of differential pinions		2		N.A.
Pinion /differential	Adjustment (shim, etc.)	Shim		N.A.
	Bearing adjustment	N.A.		N.A.
Driving wheel bearing (type)		Roller bearing		
Lubricant	Capacity L (pt.)	3.5(7.39)		4.1
	Type recommended	GL-5		GL-5

Axle Shafts - Front Wheel Drive

Manufacturer and number used			NTN,2				
Type (straight, solid bar,tubular, etc.)			Left	Straight, solid bar			
			Right	Straight, solid bar			
Outer diam. x length" x wall thickness	Manual transaxle	Left	4D: $\phi 26 \times 511$ SW: $\phi 26 \times 500$	4D: $\phi 26 \times 511$ SW: $\phi 26 \times 500$	N.A.	$\phi 26 \times 497$	
		Right	4D: $\phi 26 \times 511$ SW: $\phi 26 \times 500$	4D: $\phi 26 \times 511$ SW: $\phi 26 \times 500$	N.A.	$\phi 26 \times 497$	
	Automatic transaxle	Left	N.A.		4D: $\phi 26 \times 511$ SW: $\phi 26 \times 500$	N.A.	
		Right	N.A.		4D: $\phi 26 \times 511$ SW: $\phi 26 \times 500$	N.A.	
	Optional transaxle	Left	N.A.				
		Right	N.A.				
	Slip yoke	Type	N.A.				
		Number of teeth	N.A.				
Spline ϕ d.		N.A.					
Universal joints	Make and mfg. no.	Inner	NTN SFJ829010C			NTN DOJ67B0700	
		Outer	NTN EBJ87B003			NTN BJ92LACB0145	
	Number used	2					
	Type, size, plunge	Inner	82AC			87AC	
		Outer	87AC			92AC	
	Attach (u-bolt, clamp, etc.)		Inside: spring pin, Outside: nut				
	Bearing	Type (plain,anti-friction)	Anti-friction				
		Lubrication (filing, prepack)	Prepack				
Drive taken through (torque tube,arms or springs)							
Torque taken through (torque tube,arms or springs)							

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

Specifications

Vehicle Line: **IMPREZA**

METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Engine Description
Engine Code

A	C	B	D	E
EJ251AW (2.5 MT)	EJ205BW (2.0 Turbo MT)	EJ251AX (2.5 AT)	EJ205BX (2.0 Turbo AT)	EJ257BW (2.5 Turbo MT)

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

Effective final drive ratio (or overall top gear ratio)		TS/Outback: 3.900 RS: 4.111	3.545	TS/Outback: 4.111 RS: 4.444	4.111	3.900
Transfer ratio and method (chain, gear, etc.)		1.000 (gear)	1.100 (gear)	1.000 (gear)		
No. of teeth	Pinion	TS/Outback: 10	11	TS/Outback: 9	9	10
		RS: 9		RS: 9		
	Ring gear	TS/Outback: 39	39	TS/Outback: 37	37	39
		RS: 37		RS: 40		

Rear Axle Unit

Description						
Limited slip differential (type)		N.A.	Viscous	N.A.	Viscous	mechanical
Drive pinion	Type	Hypoid gear				
	Offset	30				
No. of differential pinions		2				
Pinion / differential	Adjustment(shim,etc.)	Shim				
	Bearing adjustment	Shim				
Driving wheel bearing (type)		Roller bearing				
Lubricant	Capacity L (pt.)	0.8(1.7)				
	Type recommended	GL-5				

Propeller Shaft - Rear Wheel Drive

Propeller Shaft - Rear Wheel Drive								
Manufacturer			UNISIA JECS					
Type (straight tube, tube-in-tube, internal-external damper, etc.)			Straight tube					
Outer diam. x length* x wall thickness	Manual 4-speed transmission		N.A.					
	Manual 5-speed transmission		63.5x643x1.6 57.0x708x1.6	63.5x638x1.6 57.0x713x1.6	N.A.			
	Manual 6-speed transmission		N.A.			70x574x1.6, 57x708x1.8		
	Overdrive		N.A.					
	Automatic transmission		N.A.		63.5x584x1.6 57.0x708x1.6	635x579x1.6 57.0x713x1.6	N.A.	
Intermediate bearing	Type (plain, anti-friction)		Anti-friction					
	Lubrication (fitting, prepack)		Prepack					
Slip yoke	Type		Spline					
	Number of teeth		24					
	Spline o.d.		25					
Universal joint	Make and mfg. no.	Front	UJ B3700000204	UJ B3700000206	UJ B3700000205	UJ B3700000208	UJ B3700000210	
		Rear	UJ B3700000204	UJ B3700000206	UJ B3700000205	UJ B3700000208	UJ B3700000210	
	Number used		3					
	Type (ball and trunnion, cross)		Cross	2:Cross, 1:DOJ	Cross	2:Cross, 1:DOJ	Cross	
	Rear attach (u-bolt, clamp, etc.)		Bolt & nut					
	Bearing	Type (plain, anti-friction)	Anti-friction					
		Lubrication (fitting, prepack)	Prepack					
	Drive taken through (torque tube, arms or springs)			N.A.				
	Torque taken through (torque tube, arms or springs)			N.A.				

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

Specifications

Vehicle Line: **IMPREZA**

METRIC (U.S. Customary)

Model Year : 2004

Issued : January 2003 Revised(March 2003) :

Model Code/Description

4Door Sedan			Sport Wagon		
RS	WRX	STI	TS	Outback	WRX

Suspension - General Including Electronic Controls

Car leveling	Standard/optional/not avail.	N.A.			
	Manual/automatic control	-			
	Type (air/hydraulic)	-			
	Primary/assist spring	-			
	Rear only/4 wheel leveling	-			
	Single/dual rate spring	-			
	Single/dual ride heights	-			
	Provision for jacking	N.A.			
Shock absorber damping controls	Standard/optional/not avail.	-			
	Manual/automatic control	-			
	Number of damping rates	-			
	Type of actuation (manual /electric motor/air, etc.)	-			
	Sensors	-			
	Lateral acceleration	-			
Shock absorber (front & rear)	Deceleration	-			
	Acceleration	-			
	Road surface	-			
	Type	Double-acting hydraulic			
	Make	KAYABA			
	Piston diameter	Front & rear: 32(1.26)	Front & rear: 35(1.38)	Front & rear: 32(1.26)	
	Rod diameter	Front & rear: 22(0.87)	rear: 11(0.43)	Front & rear: 22(0.87)	

Suspension - Front

Type and description		MacPherson strut type					
Travel	Full jounce (define load condition)	90(3.55)	80(3.15)	75(2.96)	90(3.55)	95(3.74)	80(3.15)
	Full rebound	100(3.94)	110(4.33)	95(3.74)	100(3.94)	95(3.74)	110(4.33)
Spring	Type (coil, leaf, other & material)	Coil spring steel					
	Insulators (type & material)	Rubber sheet					
	Size (Leaf: length & width; Coil: design height & i.d.; Bar: length & diameter)	300x140 ~158x13	290x140 ~158x13	260x140 ~158x14	300x140 ~158x13	298x140 ~158x13	290x140 ~158x13
	Spring rate	26.0,27.7 (1.02,1.09)	28.5(1.12)	39.2(1.54)	28.0(1.02)	27.6(1.09)	28.5(1.12)
	Rate at wheel (N/mm (lb./in.))	25.3,22.3 (0.92,0.88)	26.0(1.02)	32.9(1.30)	22.3(0.88)	23.8(0.94)	26.0(1.02)
	Rate at wheel (N/mm (lb./in.))	25.3,22.3 (0.92,0.88)	26.0(1.02)	32.9(1.30)	22.3(0.88)	23.8(0.94)	26.0(1.02)
Stabilizer	Type (link, linkless, frameless)	Link					
	Material & O.D. bar/tube, wall thickness	Spring steel, 20(0.79)		Spring steel, 18(0.75)	Spring steel, 20(0.79)		

Suspension - Rear

Type and description		Dual link strut type					
Travel	Full jounce (define load condition)	115(4.53)	110(4.33)	100(3.94)	115(4.53)	120(4.72)	110(4.33)
	Full rebound	90(3.54)	85(3.74)	100(3.94)	90(3.54)	85(3.35)	95(3.74)
Spring	Type (coil, leaf, other & material)	Coil spring steel					
	Size (Leaf: length & width; Coil: design height & i.d.; Bar: length & diameter)	330x142x12	322x142x12	304x142x13	330x142x12	333x142x12	320x142x12
	Spring rate	20.6,22.6 (0.8,0.89)	20.9,23.0 (0.82,0.90)	34.0 (1.33)	22.6,24.8 (0.89,0.98)	22.5,24.6 (0.86,0.96)	23.0,25.2 (0.90,0.99)
	Rate at wheel (N/mm (lb./in.))	22.5, 21.0 (0.88,0.83)	21.8, 23.2 (0.85,0.91)	31.0 (1.22)	22.5, 23.9 (0.88,0.93)	22.4, 23.8 (0.87,0.93)	23.2, 24.7 (0.91,0.96)
	Insulators (type & material)	Rubber sheet					
	If	N.A.					
Stabilizer	leaf	N.A.					
	Shackle (comp. or tens.)	N.A.					
	Type (link, linkless, frameless)	Link					
	Material & O.D. bar/tube, wall thickness	Spring steel					
		13(0.51)	20(0.79)		13(0.51)		17(0.67)
Track bar (type)		N.A.					

Specifications

Vehicle Line: IMPREZA

METRUC (U.S. Customary)

Model Year : 2004

Issued : January 2003 Revised(March 2003) :

Model Code/Description

4 Door Sedan		Sport Wagon	
RS	WRX	STI	TS Outback WRX

Brakes - Service

Brakes - Service			Four wheels hydraulic actuated system									
Description		Front (disc or drum)	Disc									
		Rear (disc or drum)	Disc	Drum	Disc							
Valving type (proportion, delay, metering, other)			Proportion									
Power brake (std., opt., n.a.)			N.A.									
Booster type (remote, integral, vac., hyd., etc.)			Integral vacuum									
Vacuum	Source (inline, pump, etc.)		Inline									
	Reservoir (volume in3)		N.A.									
	Pump-type (elec, gear driven, belt driven)		N.A.									
Traction assist			N.A.									
Anti-lock devices	Type (engine or brake intervention)		N.A.									
	Front / rear (std., opt., n.a.)		Front/rear									
	Manufacturer		Bosch Automotive Systems Corp.									
	Type (electronic, mech.)		Elec.									
	Number sensors or circuits		4									
	Number anti-lock hydraulic circuits		4									
	Integral or add-on system		Add-on									
	Yaw control (yes, no)		Yes									
Hydraulic power source (elec, vac, mtr, pwr, org.)			Elec.									
Effective area cm ² (in. ²)*			192/84		236/98		192/84					
Gross lining area cm ² (in. ²)*(F/R)			216/104		300/128		216/104					
Swept area cm ² (in. ²)*(F/R)			1418/967		1522/967		1995/1515		1418/967		1522/967	
Rotor	Outer working diameter		F/R	274/262	290.4/262	323/313	274/262	290.4/262				
	Inner working diameter		F/R	173/194.6	189.4/194.6	202/223	173/194.6	189.4/194.6				
	Thickness		F/R	24/10		30/20	24/10					
	Material & type (vented/solid)		F/R	Cast iron, vented/solid		Cast iron, vented/vented		Cast iron, vented/solid				
Drum	Diameter & width		F/R	N.A.								
	Type and material		F/R	N.A.								
Wheel cylinder bore			42.8x2/38.1		(40+46)x2/36x2		42.8x2/38.1					
Master cylinder	Bore/stroke	F/R	26.9/31.0	26.9/31.0(MT) 25.4/31.0(AT)	26.9/31.0	26.9/31.0(MT) 25.4/31.0(AT)						
Pedal arc ratio			4.0									
Line pressure at 445 N(100lb.) pedal load(kPa(psi))			10094	10094(MT) 11323(AT)	10094	10094(MT) 11323(AT)						
Lining clearance			F/R	Self adjusting (F&R)								
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)		Bonded								
		Rivet size		N.A.								
		Manufacturer		Hitachi chemical co. Ltd		Honeywell International Inc.		Hitachi chemical co. Ltd				
		Lining code*****		N.A.								
		Material		Molded resin, asbestos free								
		***	Primary or out-board	117.8x50.5x11.0		129.8x80.5x9.2		117.8x50.5x11.0				
		Size	Secondary or in-board	117.8x50.5x11.0		129.8x80.5x9.2		117.8x50.5x11.0				
		Shoe thickness (no lining)		6.0		5.0		6.0				
	Rear wheel	Bonded or riveted (rivets/seg.)		Bonded								
		Manufacturer		AKEBONO		Honeywell International Inc.		AKEBONO				
		Lining code*****		N.A.								
		Material		Molded resin, asbestos free								
		***	Primary or out-board	89.4x33.7x9.0		74.8x45.0x9.0		89.4x33.7x9.0				
		Size	Secondary or in-board	89.4x33.7x9.0		74.8x45.0x9.0		89.4x33.7x9.0				
		Shoe thickness (no lining)		5.0		4.5		5.0				

*1 BOSCH BRAKING SYSTEMS CO., LTD.

* Excludes rivet holes, grooves, chamfers, etc.

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

*** Total swept area for four brakes.

(Drum brake: Width lining contact with 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.)

**** Manufacturer I.D., catalog for formulation designation and coefficient of friction classification

Specifications

Vehicle Line: **IMPREZA**

METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Model Code/Description

4 Door Sedan			Sport wagon		
RS	WRX	STI	TS	Outback	WRX

Tires And Wheels (Standard)

Tires And Wheels (Standard)							
Tires	Size (service description)		P205/55R16	P205/55R16	225/45R17	P195/60R15	P205/55R16
			89V	89V	90W	87H	89V
	Type (bias,radial,steel,nylon,etc.)		Radial				
	Inflation pressure (cold) for recommended max. vehicle load	Front kPa (psi)	220(32)		250(36)	220(32)	
		Rear kPa (psi)	200(29)		210(30)	200(29)	
	Rev./mile - at 70 km/h (45 mph)		834.1		831.5	856.3	834.1
Wheels	Type & material		Aluminum alloy			Steel	Aluminum alloy
	Rim (size & flange type)		16x6 1/2JJ		17x7 1/2JJ	15x6JJ	16x6 1/2JJ
	Wheel offset		55(2.17)		53(2.09)	55(2.17)	
	Attachment	Type(bolt or stud & nut)	Stud & nut				Stud & nut
		Circle diameter	100(3.94)				
		Number & size	5,M12 x 1.25				
Spare	Tire and wheel		T135/70, D16, 16x4T		T135/70,D17, 17x4T	T135/70, D16, 16x4T	
	Storage position & location (describe)		Rear floor				

Tires And Wheels (Optional)

Tire size (service description)		87W				87W
Type (bias, radial, steel, nylon, etc.)		Radial				Radial
Wheel (type & material)		alloy				alloy
Rim (size, flange type and offset)		17x7JJ, 55				17x7JJ, 55
Tire size (service description)						
Type (bias, radial, steel, nylon, etc.)						
Wheel (type & material)						
Rim (size, flange type and offset)						
Tire size (service description)						
Type (bias, radial, steel, nylon, etc.)						
Wheel (type & material)						
Rim (size, flange type and offset)						
Tire size (service description)						
Type (bias, radial, steel, nylon, etc.)						
Wheel (type & material)						
Rim (size, flange type and offset)						
Spare tire and wheel size (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)						

Brakes - Parking

Type of control		Manual			
Location of control		Floor			
Operated on		Rear wheels			
If separate from service brakes	Type (internal or external)	Internal			
	Drum diameter	170	190	170	
	Lining size	183.1x30.0x3.2	182.3x30.0x3.2	2	
	(length x width x thickness)				

Specifications

Vehicle Line: **IMPREZA**

METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Model Code/Description

4 Door Sedan			Sport wagon		
RS	WRX	STI	TS	Outback	WRX

Steering

Steering								
Manual (std., opt., n.a.)				N.A.				
Power (std., opt., n.a.)				Std.				
Speed-sensitive (std., opt., n.a.)				N.A.				
4-wheel steering (std., opt., n.a.)				N.A.				
Adjustable steering wheel /column (tilt, telescope, other)			Type	Tilt				
			Manufacturer	Toyota Gosei or MOMO/Nippon Seiko				
Wheel diameter** (W9) SAE J1100			(std., opt., n.a.)	Std.				
			Manual	N.A.				
			Power	385(15.2)	375(14.8)	385(15.2)		
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)	11.7(38.4)		11.1(36.4)	11.7(38.4)		
		Curb to curb (l. & r.)	10.8(35.4)		10.2(33.5)	10.8(35.4)		
	Inside rear	Wall to wall (l. & r.)	6.4(21.0)		5.8(19.0)	6.4(21.0)		
		Curb to curb (l. & r.)	6.6(21.7)		6.0(19.7)	6.6(21.7)		
Scrub Radius*								
Manual	Gear	Type	N.A.					
		Manufacturer	N.A.					
		Ratios	Gear	N.A.				
		Overall	N.A.					
	No. wheel turns (stop to stop)		N.A.					
Power	Type (coaxial, elec., hyd., etc)		Hydraulic					
	Manufacturer		Koyo Seiko					
	Gear	Type	Rack& Pinion					
		Ratios	Gear	∞				
		Overall	16.5	15.0	16.5			
	Pump (drive)		Crank shaft					
No. wheel turns (stop to stop)		3.0	2.7	3.2	3.0			
Linkage	Type		Rack & pinion linkage type					
	Location (front or rear of wheels, other)		Front of wheel					
	Tie rods (one or two)		Two					
Steering axis	Inclination at camber (deg.)		14°20'	14°35'	14°50'	13°30'	13°20'	13°45'
	Bearings (type)	Upper	Ball bearing					
		Lower	Ball joint					
		Thrust	N.A.					
Steering spindle/knuckle & joint type			Ball joint					

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

** See Page 23.

Specifications

Vehicle Line: **IMPREZA**

METRIC (U.S. Customary)

Model Year : 2004

Issued : January 2003 Revised(March 2003) :

Model Code/Description

4 Door Sedan			Sport wagon		
RS	WRX	STI	TS	Outback	WRX

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	3°25' ±45'	3°35' ±45'	4°50' ±45'	3°25' ±45'	3°25' ±45'	3°35' ±45'
		Camber (deg.)	-0°15' ±45'	-0°25' ±45'	-0°30' ±45'	-0°10' ±45'	-0°05' ±45'	-0°20' ±45'
		Toe-in outside track-mm (in.)	0°± 3'					
			(0±0.12)					
	Service reset*	Caster (deg.)	Not adjustable					
		Camber (deg.)	0°± 15'					
		Toe-in - mm (in.)	0 ± 1 (0±0.04)					
	Periodic M.V. inspection	Caster (deg.)	3°25' ±45'	3°35' ±45'	4°50' ±45'	3°25' ±45'	3°25' ±45'	3°35' ±45'
		Camber (deg.)	-0°15' ±45'	-0°25' ±45'	-0°30' ±45'	-0°10' ±45'	-0°05' ±45'	-0°20' ±45'
		Toe-in - mm (in.)	0°± 3' (0±0.12)					
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	-1°25'	-1°30'	-1°40'	-1°15'	-1°10'	-1°20'
		Toe-in outside track-mm (in.)	0°± 3'					
			(0±0.12)					
	Service reset*	Camber (deg.)	Not adjustable					
		Toe-in - mm (in.)	0±1(0±0.04)					
	Periodic M.V. inspection	Camber (deg.)	-1°25'	-1°30'	-1°40'	-1°15'	-1°10'	-1°20'
		Toe-in - mm (in.)	0°± 3'					
			(0±0.12)					

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

Electrical - Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)	Analog, std.
	Trip odometer (std., opt., n.a.)	Std.
	Standard, optional, not available	N.A.
Head-up display	Type	Secondary, opto-electronic
	Speedometer	Digital
	Status / warning indicators	Turn signals, high beam, low fuel, check gauges
	Brightness control	Day/night mode, adjustable
		N.A.
EGR maintenance indicator		N.A.
Charge indicator	Type	Elec.
	Warning device (light, audible)	Light
Temperature indicator	Type	Elec.
	Warning device (light, audible)	Gauge
Oil pressure indicator	Type	Elec.
	Warning device (light, audible)	Light
Fuel indicator	Type	Elec.
	Warning device (light, audible)	Light & gauge
Windshield wiper	Type (standard)	2 speeds & intermittent
	Type (optional)	N.A.
	Blade length mm (in.)	Driver side: 550(21.7). Passenger side: 425(16.73)
Windshield washer	Swept area cm ² (in. ²)	7703
	Type (standard)	Elec.
	Type (optional)	N.A.
Rear window wiper, wiper/washer (std., opt., n.a.)	Fluid level indicator (light, audible)	N.A.
		Std.
Horn	Type	Vibrator
	Number used	2
Other		

Specifications

Vehicle Line: **IMPREZA**

METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Engine Code/Description

A	B	C	D	E
EJ251AW (2.5 MT)	EJ251AX (2.5 AT)	EJ205AW (2.0 Turbo MT)	EJ205AX (2.0 Turbo AT)	EJ257BW (2.5 Turbo MT)

Electrical - Supply System

Battery	Manufacturer	Shinkobe	Matsushita	Shinkobe	Matsushita	Shinkobe
	Model, std., (opt.)	55D23L	75D23L	55D23L	65D23L	55D23L
	Voltage	12				
	Amps at 0°F cold crank	356	520	356	420	356
	Minutes-reserve capacity	99	118	99	111	99
	Amps/hrs.-20 hr. rate	80	85	60	65	60
	Location	Left front of engine compartment				
Alternator	Manufacturer	Mitsubishi Electric Co.				
	Rating (idle/max. rpm)	12V-75A				12V-90A
	Ratio (alt. crank/rev.)	2.42				
	Output at idle (rpm, park)	43A/1600rpm				50A / 1600rpm
	Optional (type & rating)	N.A.				
Regulator	Type	Integrated circuit				

Electrical - Starting System

Motor	Manufacturer	Mitsubishi Electric Co		Denso Co.	Mitsubishi Electric Co.	Denso Co.
	Current drain at 17.8(0)°C(°F)	205-230A		268-292A	215-240A	268-292A
	Power rating kw (hp)	1.0	1.4	1.0	1.4	1.0
Motor drive	Engagement type	Reduction				
	Pinion engages from (front, rear)	Rear				

Electrical - Ignition System

Electrical - Ignition System							
Type	Electronic (std., opt., n.a.)		Std.				
	Other (specify)		N.A.				
Coil	Manufacturer		Diamond Electric Mfg Co., Ltd.				
	Model		FH0137		FK0186	FK0186	
	Current	Engine stopped - A	0				
		Engine idling - A	0.3		0.4 x 4 cylinder		
Spark plug	Manufacturer		Champion				
	Model		RC10YC4		PFR6G	ILFR6B	
	Thread (mm)		14				
	Tightening torque N-m (lb.-ft.)		16 - 21 (11.8 - 15)				
	Gap	1.0 - 1.1		0.7 - 0.8			
		Number per cylinder		1			
Distributor	Manufacturer		N.A.				
	Model		N.A.				

Electrical - Suppression

Electrical - Suppression		
Locations & type	Resistance spark plug cords	Resistance spark plugs
	Resistance spark plug	

Specifications

Vehicle Line: IMPREZA

METRIC (U.S. Customary)

Model Year : 2004

Issued : January 2003 Revised(March 2003) :

Model Code/Description

4 Door Sedan

Sport Wagon

Body

Structure	Monocoque
Bumper system front - rear	Steel frame and polypropylene foam with polypropylene covering
Anti-corrosion treatment	Rust preventing steel, dipping phosphating, cation electrodeposition, chipping primer, rust preventive wax, PVC under coating

Body - Miscellaneous Information

Type of finish (lacquer, enamel, other)	Enamel		
	Aluminum (WRX) , Steel (Others)		
Hood	Material & mass	Aluminum (WRX) , Steel (Others)	
	Hinge location (front, rear)	Rear	
	Type (counterbalance, prop)	Prop	
	Release control (internal, external)	Internal	
Trunk lid	Material & mass	Steel	
	Type (counterbalance, other)	Counterbalance	N.A.
	Internal release control(elec.,mech.,n.a.)	Mechanical	N.A.
Hatchback lid	Material & mass	N.A.	N.A.
	Type (counterbalance, other)	N.A.	N.A.
	Internal release control(elec.,mech.,n.a.)	N.A.	N.A.
Tailgate	Material & mass	N.A.	Steel
	Type (drop, lift, door)	N.A.	lift
	Internal release control(elec.,mech.,n.a.)	N.A.	Elec.
Vent window control (crank, friction, pivot, power)	Front	N.A.	
	Rear	N.A.	
Window regulator type	Front	Link	
	Rear	Link	
Seat cushion type (e.g., 60/40, bucket, bench, wire, form, etc.)	Front	Bucket	
	Rear	Bench	
	3rd seat	N.A.	
Seat back type (e.g., 60/40, bucket, bench, wire, form, etc.)	Front	Bucket	
	Rear	Bench	60/40 folding
	3rd seat	N.A.	N.A.

Frame

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

Vehicle Line: **IMPREZA**

METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Model Code/Description

4 Door Sedan	Sport Wagon
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Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.)	First seat	Lap & shoulder belt with ELR	—	Lap & shoulder belt with ELR
		Second seat	Lap & shoulder belt with ELR		
		Third seat	—		
Standard / optional					
Passive	Type & description (air bag, motorized -2-point belt, fixed belt, knee bolster, manual lap belt)	First seat	Ft. Airbag WRX, STi: Ft. Airbag and Seat side airbag	—	Ft. Airbag WRX, STi: Ft. Airbag and Seat side airbag
		Second seat	N.A.		
		Third seat	—		
Standard / optional					

SAE

Glass

Ref.No.

Windshield glass exposed surface area cm ² (in. ²)	S1	8790(1362)	9036(1401)
Side glass exposed surface area cm ² (in. ²) -total 2-sides	S2	10020(1553)	12366(1917)
Backlight glass exposed surface area cm ² (in. ²)	S3	6656(1032)	4429(687)
Total glass exposed surface area cm ² (in. ²)	S4	25466(3947)	25831(4005)
Windshield glass (type / thickness)		Laminated / 4.7	
Side glass (type / thickness)		Tempered/Ft: 5.0, Rr: 4.0	
Backlight glass (type / thickness)		Tempered/3.5	
Tinted (yes / no, location)		Yes	
Solar control (yes / no, coated / batched, location)		No	

Headlamps

Description (sealed beam, halogen, replaceable bulb, etc.)	Replaceable bulb (halogen D2R)
Shape	Proper
Lo-beam type (2A1, 2B1, 2C1, etc.)	N.A.
Quantity	2
Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	N.A.
Quantity	2

Specifications

Vehicle Line: IMPREZA

METRIC (U.S. Customary)

Model Year : 2004

Issued : January 2003 Revised(March 2003) :

Model Code/Description

4 Door Sedan
Sport Wagon

Climate Control System

Air conditioning (std., opt., man., auto.)		Std. manual
Condenser	Type	Multi flow with liquid tank *
	Eff. face area (sq. mm.)	205000 (317x646) *
	Fins per inch	21 (f.p.1.2mm) *
Evaporator	Type	Laminate
	Eff. face area (sq. mm.)	51000 (255x200) *
	Fins per inch	16 (f.p.1.6mm)
Heater core	Material	Aluminum
	Eff. face area (sq. mm.)	32800 (164x200)
	Fins per inch	28 (f.p. 0.9mm)
Compressor	Type	Rotary, fixed displacement *
	Displacement (cc)	144cc / rev
	Manufacturer	Calsonic - Kansei
	A/C pulley ratio	1.064
Accumulator	Type	N.A.
	Height (mm)	N.A.
	Diameter (mm)	N.A.
Receiver	Type	-
	Height (mm)	235 *
	Diameter (mm)	40
Refrigerant control (CCOT, TVS, etc.)		TVS
Heater water valve (yes / no)		No
Refrigerant (R-12, R-134a, etc.)		R-134a
Charge level (lbs. - oz.)		500±50
Cold engine lockout switch (yes / no)		No
Wide open throttle cutout switch (yes / no)		Yes

Specifications

Vehicle Line: IMPREZA

METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Model Code/Description

4 Door Sedan,
Sport Wagon

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

	Clock (digital, analog)	Digital
	Compass / thermometer	N.A. / Optional
	Console (floor, overhead)	Floor
	Defroster, electric windshield	N.A.
	Defroster, electric backlight	Standard
Electronic	Diagnostic monitor(integrated, individual)	Individual
	Instrument cluster (list instruments)	N.A.
	Keyless entry	Standard
	Tripminder (avg. spd., fuel)	N.A.
	Voice alert (list items)	N.A.
	Other	N.A.
	Fuel door lock (remote, key, electric)	Remote
Integrated Child Seating	Std./Opt. & location in vehicle	N.A.
	Number of occupants	N.A.
	Occupant weight/height (min.&max.)	N.A.
	Restraint system description (3or5-point belts/boosterseat capability)	N.A.
Lamps	Auto head on / off delay, dimming	N.A.
	Cornering	N.A.
	Courtesy (map, reading)	Without:RS,TS with:WRX, STi, Outback
	Door lock, ignition	Ignition KEY Ring Lamp:with WRX, STi
	Engine compartment	N.A.
	Fog	WRX/Outback: Std. , Others:NA
	Glove compartment	Standard
	Trunk	Optional
	Illuminated entry system (list lamps, activation)	N.A.
	Other	N.A.
Mirrors	Day / night (auto. man.)	Manual
	L.H. (remote, power, heated)	Power
	R.H. (convex, remote, power, heated)	Power,convex
	Visor vanity (RH / LH, illuminated)	RH/LH, No illumination
	Navigation system (describe)	N.A.
	Parking brake-auto release (warning light)	N.A.

Specifications

Vehicle Line: **IMPREZA**

METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Model Code/Description

4Door Sedan
Sport Wagon

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

Convenience Equipment (standard, optional, w/w)				
Power equipment	Deck lid (release, pull down)			
	Door locks (manual, automatic, describe system)		Standard: All doors are locked / unlocked when manual lock/unlock switch of ft.door is turned on.	
	Seats	2 - 4 - 6 way, etc.	N.A.	
		Reclining (R.H., L.H.)	N.A.	
		Memory(R.H.,L.H.,preset recline)	N.A.	
		Support(lumber,hip, thigh,etc.)	N.A.	
		Heated (R.H., L.H., other)	N.A.	
	Side windows		Std.	
	Vent windows		N.A.	
Rear windows		N.A.		
Radio systems	Antenna (location,whip, w/ shield, power)		Rear Window, or Rear Gate Window	
	Standard	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package,headphone jacks, etc.	Others	WRX
			AM/FM stereo with CD deck	AM/FM stereo with cassette tape deck and 6 CD changer
	Optional		N.A.	N.A.
	Speaker (number, location)		4, front doors & rear doors	6, front doors(4) & rear doors(2)
Roof: open air or fixed (flip-up,sliding,"T")		N.A.		
Speed control device		Cruise control is optional		
Speed warning device (light, buzzer, etc.)		N.A.		
Tachometer (rpm)		Std. (WRX, STi: 9000rpm, others; 8000rpm)		
Telephone system (describe)		N.A.		
Theft deterrent system		Option		

Trailer Towing

Towing capable	Yes / No	Yes
Engine / transmission / axle	Std / Opt	N.A.
Tow class (I, II, III)*	Std / Opt	I
Max. gross trailer wgt. (lbs.)	Std / Opt	907 (2,000) with brakes
Max. trailer tongue load (lbs.)	Std / Opt	90.7 (200)
Towing package available	Yes / No	Yes (TS & Outback sport & Wagon WRX only)

* Class I - 2,000 lbs. Class II - 3,500 lbs. Class III - 5,000 lbs.

Specifications

Vehicle Line: **IMPREZA**

METRIC (U.S. Customary) Model Year : 2004 Issued : January 2003 Revised(March 2003) :

All dimension to ground are for comparative purpose only. Dimensions are to be shown for all base models of each vehicle line.SAE Ref. no. refers to the definition published in SAE Recommended Practice J1100 "Motor Vehicle Dimensions," unless otherwise specified.

Model Code/Description	SAE Ref. No.	4Door Sedan	Sport Wagon
Width			
Tread (front)	W101	1485(58.5), ST: 1490(58.7)	1465(57.7), Outback:1460(57.5)
Tread (rear)	W102	WRX: 1480(58.3) RS: 1475(58.1) ST: 1485(58.5)	1455(57.3), Outback:1455(57.3)
Vehicle width	W103	1740(68.5)	1695(66.7), Outback:1710(67.3)
Body width at Sq RP (front)	W117	1710(67.3)	
Vehicle width (front doors open)	W120	3418(134.6)	
Vehicle width (rear doors open)	W121	3314(130.5)	3306(130.2)
Turn-in angle (degrees)	W122	23°	23.5°
Outside mirror width	W410	1950	
Length			
Wheelbase	L101	2525(99.4), ST:2540(100.0)	
Vehicle length	L103	4415(173.8)	
Overhang (front)	L104	940(37.0)	
Overhang (rear)	L105	950(37.4)	
Upper structure length	L123	2627(103)	
Rear wheel C/L "X" coordinate	L127	WRX: 2449(96.4), TS:2448(96.4)	WRX: 2450(96.5), TS/Outback:2449(96.4)
Height*			
Passenger distribution (front/rear)	PD 1,2,3	0/0	
Trunk/cargo load		0	
Vehicle height	H101	1440(56.7), ST:1430(56.3)	1465(57.7), 1485(58.5) with roof rail Outback:1475(58.1), 1495(58.9) with roof rail
Cowl point to ground	H114	948(37.4), ST:939(37.0)	948(37.4) Outback:959(37.8)
Deck point to ground	H138	1044(41.1), ST:1034(40.7)	987(38.4), Outback: 1007(39.6)
Rocker panel-front to ground	H112	177(7)	
Rocker panel-rear to ground	H111	177(7)	
Windshield slope angle (degree)	H122	58.7	
Backlight slope angle (degree)	H121	59.5	
Ground Clearance*			
Front bumper to ground	H102	193(7.6), ST:180(7.1)	186(7.7), Outback:206(8.1)
Rear bumper to ground	H104	243(9.6), ST:233(9.2)	265(10.4), Outback:275(10.8)
Bumper to ground front at curb mass (wt.)	H103	193(7.6), ST:180(7.1)	196(7.7), Outback:206(8.1)
Bumper to ground rear at curb mass (wt.)	H105	243(9.6), ST:233(9.2)	265(10.4), Outback:275(10.8)
Angle of approach (degrees)	H106	15.6, ST:13.1	15.6, Outback:16.2
Angle of departure (degrees)	H107	RS: 17.6, WRX:17.7, ST:15.4	TS:17.6, Outback:18.3, WRX:17.7
Ramp breakover angle (degree)	H147	RS: 14.4, WRX:14.6, ST:13.7	TS:14.4, Outback:15.4, WRX:14.6
Axle differential to ground (front/rear)	H153	RS:190mm WRX:190mm ST:172mm	TS:190mm Outback:200mm WRX:190mm
Min. running ground clearance	H156	RS: 150(5.9), WRX:155(6.1), ST:145(5.7)	WRX:155(6.1)
Location of min. run. grd. clear.		Exhaust pipe	
Z0 地上高 (空車時)		240/240, ST: 230/230	TS:240, Outback:250
Z0 地上高 (MLVW時)		220/180	TS:215/185, Outback:230/195, WRX:220/185

* All vehicle height and ground clearances are measured at the Manufacturer's Design

Load Weight.

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

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

Specifications

Vehicle Line: **IMPREZA**

METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Model Code/Description

SAE
Ref.
No.

4Door Sedan

Sport
Wagon

Front Compartment

SgRP front, "X" coordinate	L31	1280(50.4)	
Effective head room	H61	980.4(38.6)	1008.4(39.7)
		sunroof: 921.5(36.3)	sunroof: 945(37.2)
Max. eff. leg room (accelerator)	L34	1089.7(42.9)	
SgRP to heel point	H30	259(10.2)	
SgRP to heel point	L53	894(35.2)	
Back angle (degrees)	L40	25	
Hip angle (degrees)	L42	100.5	
Knee angle (degrees)	L44	132.2	
Foot angle (degrees)	L46	86	
Design H-point front travel	L17	216(8.5)	
Normal driving & riding seat track travel	L23	216(8.5)	
Shoulder room	W3	1338.6(52.7)	
Hip room	W5	1353.8(53.3)	
Upper body opening to ground	H50	1295.4(51)	1315.7(51.8)
Steering wheel maximum diameter*	W9	385, STI: 375	
Steering wheel angle (degrees)	H18	24.0	
Accel. heel pt. to steer. whl. cntr	L11	510	499
Accel. heel pt. to steer. whl. cntr	H17	621	635
Undepressed floor covering thickness	H67	19(0.75)	

Rear Compartment

SgRP point couple distance	L50	729(28.7)	
Effective head room	H63	932.2(36.7)	947.4(37.3)
		sunroof: 930(36.6)	sunroof: 947(37.3)
Min. effective leg room	L51	838.2(33)	856(33.7)
SgRP (second to heel)	H31	320(12.6)	361(14.2)
Knee clearance	L48	0	-15(-0.6)
Shoulder room	W4	1343.7(52.9)	
Hip room	W6	1318.3(51.9)	1313.2(51.7)
Upper body opening to ground	H51	1305.6(51.4)	1325.9(52.2)
Back angle (degrees)	L41	26	23
Hip angle (degrees)	L43	91.9	93.9
Knee angle (degrees)	L45	87	90.3
Foot angle (degrees)	L47	117.8	115.9
Depressed floor covering thickness	H73	17.4(0.69)	

Luggage Compartment

Usable luggage capacity L (cu.ft.)	V1	311 (11.0)	510 (18.0)
Liftover height	H195	660(26)	

Interior Volumes (EPA Classification)

Vehicle class	Sub-compact car	Small station wagon
Interior volume index including trunk/cargo (cu.ft.)**	98.6	108.4
Trunk/cargo index (cu.ft)	11.0	-

* See page 14.

** See definition page 33.

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

Specifications

Vehicle Line: **IMPREZA**
METRIC (U.S. Customary) Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Model Code/Description

SAE
Ref.
No.

4 Door Sedan

Sport Wagon

Station Wagon / MPV* - Third Seat

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

Station Wagon / MPV* - Cargo Space

Cargo length (open front)	L200	N.A.	N.A.
Cargo length (open second)	L201	N.A.	N.A.
Cargo length (closed front)	L202	N.A.	1480.8(58.3)
Cargo length (closed second)	L203	N.A.	914.4(36)
Cargo length at belt (front)	L204	N.A.	1628.1(64.1)
Cargo length at belt (second)	L205	N.A.	736.6(29)
Cargo width (wheelhouse)	W201	N.A.	944.9(37.2)
Rear opening width at floor	W203	N.A.	N.A.
Opening width at belt	W204	N.A.	1030(40.6)
Min. rear opening width above belt	W205	N.A.	824(32.4)
Cargo height	H201	N.A.	797.6(31.4)
Rear opening height	H202	N.A.	741.7(29.2)
Tailgate to ground height	H250	N.A.	N.A.
Front seat back to load floor height	H197	N.A.	602(23.7)
Cargo volume index m ³ (ft. ³)	V2	N.A.	1.74(61.6)
Hidden cargo volume index m ³ (ft. ³)	V4	N.A.	
Cargo volume index-rear of 2-seat	V10	N.A.	0.67(23.8)
Cargo volume index*	V6	N.A.	
Cargo width at floor*	W500	N.A.	
Maximum cargo height*	H505	N.A.	

Hatchback - Cargo Space

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

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

*MPV - Multipurpose Vehicle

Specifications

Vehicle Line: IMPREZA

METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

Model Code

4 Door Sedan

Description

Sport Wagon

Vehicle Fiducial Marks

Vehicle Fiducial Marks		
Fiducial Mark Number*	Define coordinate location	
Front (1)	Gauge hole on frame front (ϕ 20)	
Front (2)		
Rear (1)		
Rear (2)		
Note: Provide 3 of 4 Fiducial Mark Locations		
Front	W21**	±400
	L54**	420
	H81**	-56
	H161**	184, Outback:194, STi:174
	H163**	-
Rear	W22**	±555
	L55**	3040
	H82**	169
	H162**	409, Outback:419, STi:399
	H164**	-

*Reference - SAE Recommended Practice, J182a, Motor Vehicle Fiducial Marks.

**Reference - SAE Recommended Practice J1100 - Motor Vehicle Dimensions.

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

Specifications

Vehicle Line: IMPREZA

METRIC (U.S. Customary)

Model Year : 2004 Issued : January 2003 Revised(March 2003) :

		Vehicle Mass (weight)				% PASS MASS DISTRIBUTION				
Code	Model	CURB MASS.kg.(lb.)*			Shipping Mass kg(lb)***	ETWC** kg(lb)	Pass in Front		Pass in Rear	
		Front	Rear	Total			Front	Rear	Front	Rear
4 Door Sedan 2.5L RS 5MT (AWD)		(1715)	(1250)	(2965)		S	50	50	19	81
4 Door Sedan 2.5L RS 4AT (AWD)		(1770)	(1250)	(3020)		T	50	50	19	81
4 Door Sedan 2.0L WRX 5MT (AWD)		(1820)	(1265)	(3085)		U	50	50	19	81
4 Door Sedan 2.0L WRX 4AT (AWD)		(1875)	(1265)	(3140)		U	50	50	19	81
4 Door Sedan 2.5L STI 6MT (AWD)		(1905)	(1328)	(3263)		V	50	50	19	81
Sport Wagon 2.5L TS 5MT (AWD)		(1715)	(1330)	(3045)		T	50	50	19	81
Sport Wagon 2.5L TS 4AT (AWD)		(1765)	(1335)	(3100)		T	50	50	19	81
Sport Wagon 2.5L Outback 5MT (AWD)		(1725)	(1325)	(3050)		T	50	50	19	81
Sport Wagon 2.5L Outback 4AT (AWD)		(1775)	(1330)	(3105)		T	50	50	19	81
Sport Wagon 2.0L WRX 5MT (AWD)		(1820)	(1345)	(3165)		U	50	50	19	81
Sport Wagon 2.0L WRX 4AT (AWD)		(1875)	(1345)	(3220)		U	50	50	19	81

* 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.

A=1000 I=2000 Q=3000 Y=4000
 B=1125 J=2125 R=3125 Z=4250
 C=1250 K=2250 S=3250 AA=4500
 D=1375 L=2375 T=3375 BB=4750
 E=1500 M=2500 U=3500 CC=5000
 F=1625 N=2625 V=3625 DD=5250
 G=1750 O=2750 W=3750 EE=5500
 H=1875 P=2875 X=3875 FF=5750

*** Shipping Mass (weight) = Curb Weight Less: