

# INTRODUCTION

## How to Use This Manual

This manual is divided into 23 sections. The first page of each section is marked with a black tab that lines up with one of the thumb index tabs on this page and the back cover. You can quickly find the first page of each section without looking through a full table of contents. The symbols printed at the top corner of each page can also be used as a quick reference system.

Each section includes:

1. A table of contents, or an exploded view index showing:
  - Parts disassembly sequence.
  - Bolt torques and thread sizes.
  - Page references to descriptions in text.
2. Disassembly/assembly procedures and tools.
3. Inspection.
4. Testing/troubleshooting.
5. Repair.
6. Adjustments.

## Special Information

**WARNING** Indicates a strong possibility of severe personal injury or loss of life if instructions are not followed.

**CAUTION** : Indicates a possibility of personal injury or equipment damage if instructions are not followed.

**NOTE** : Gives helpful information.

**CAUTION** : Detailed descriptions of *standard* workshop procedures, safety principles and service operations are not included. Please note that this manual does contain warnings and cautions against some specific service methods which could cause **PERSONAL INJURY**, or could damage a vehicle or make it unsafe. Please understand that these warnings cannot cover all conceivable ways in which service, whether or not recommended by HONDA, might be done, or of the possible hazardous consequences of each conceivable way, nor could HONDA investigate all such ways. Anyone using service procedures or tools, whether or not recommended by HONDA, *must satisfy himself thoroughly* that neither personal safety nor vehicle safety will be jeopardized.

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Specifications Apply to U.S.A. and Canada

HONDA MOTOR CO., LTD.  
Service Publication Office

General Info

Special Tools



Specifications



Maintenance



Engine



Cooling



Fuel and Emissions



Transaxle



Steering



Suspension



Brakes  
(including ABS)



Body

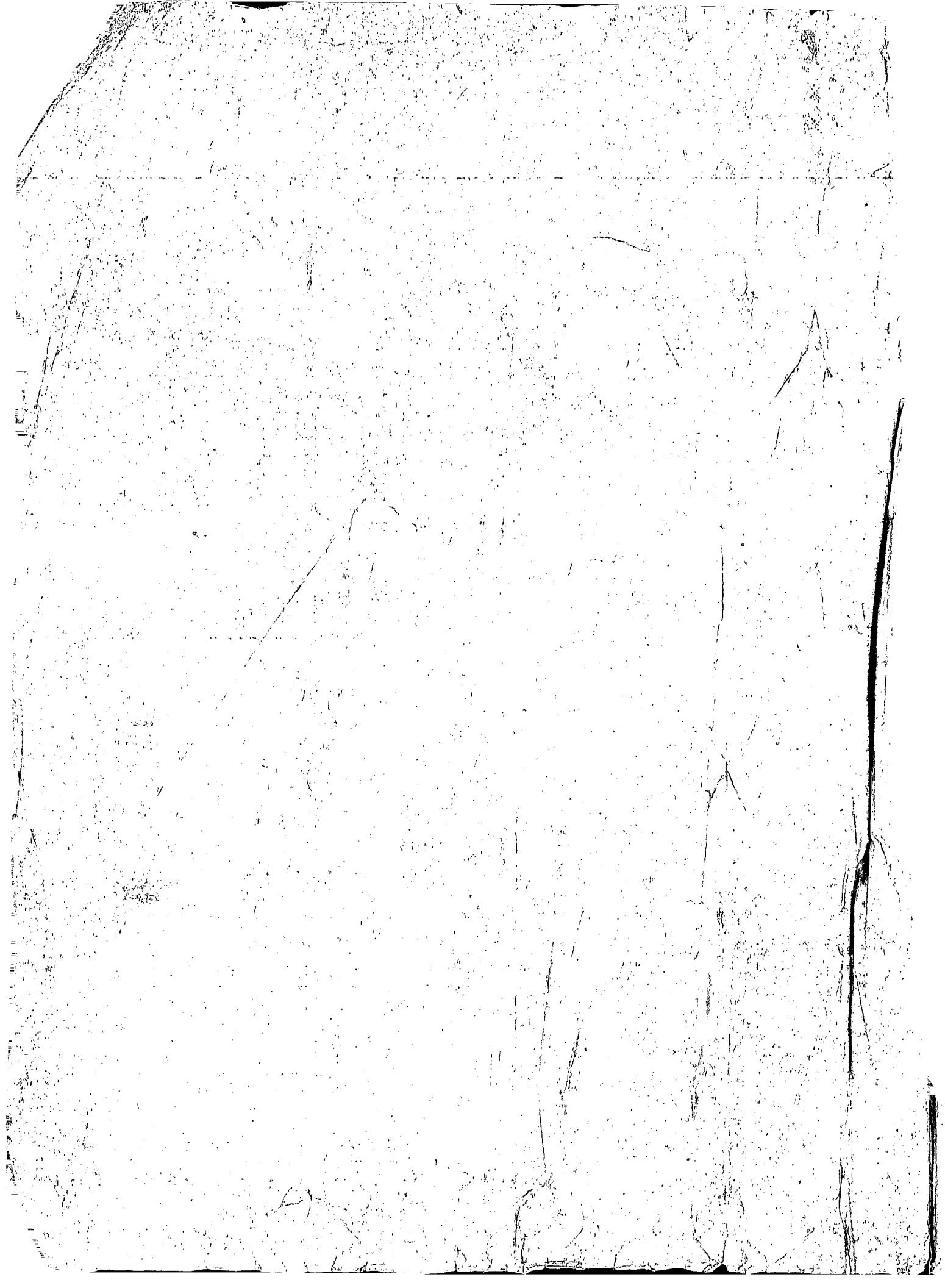


Heater and  
Air Conditioning



Electrical





## **General Information**

Chassis and Paint Codes .....	1-2
Identification Number Locations .....	1-4
Label Locations .....	1-5
Lift and Support Points .....	1-6
Towing .....	1-9

# Chassis and Paint Codes

## U.S. Model

### Vehicle Identification Number

JH4DA934\*PS000001

#### Manufacturer, Make and Type of Vehicle

JH4: HONDA MOTOR CO., LTD. JAPAN.  
ACURA Passenger Car

#### Body type

DA9: INTEGRA 2D-Hatchback 1800  
DB1: INTEGRA 4D-Sedan 1800  
DB2: INTEGRA 2D-Hatchback 1700

#### Body and Transmission Type

3: 2D-Hatchback 5-speed Manual  
4: 2D-Hatchback 4-speed Automatic  
5: 4D-Sedan 5-speed Manual  
6: 4D-Sedan 4-speed Automatic

#### Vehicle Grade

4: RS (DA9, DB1)  
5: LS (DA9, DB1)  
6: GS (DA9, DB1)  
7: GS with leather seats and steering wheel cover (DA9, DB1)  
8: GSR (DB2)  
8: LSS (DA9)

#### Check Digit

#### Model Year

P: 1993

#### Factory Code

S: Suzuka Factory

#### Serial Number

### Transmission Number

YS1-1000001

#### Transmission Type

YS1: Manual  
MPRA: Automatic

#### Serial Number

YS1: 1000001 ~  
MPRA: 3000001 ~

### Paint Code

Paint Code	Color
B-56M	Saxony Blue Metallic
B-62P	Captiva Blue Metallic
BG-29P	Aztec Green Pearl
G-71P	Isle Green Pearl
NH-503P	Granada Black Pearl
NH-538	Frost White
R-72P	Torino Red Pearl
R-81	Milano Red
RP-21M	Horizon Gray Metallic
YR-503M	Rosewood Brown Metallic

### Paint Code

**B-56M**

### Engine Number

B17A1-2000001

#### Engine Type

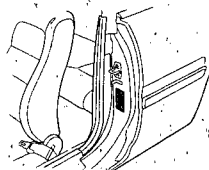
B17A1: 1.7 l DOHC VTEC Sequential Multiport Fuel-injection  
B18A1: 1.8 l DOHC Sequential Multiport Fuel-injection

#### Serial Number

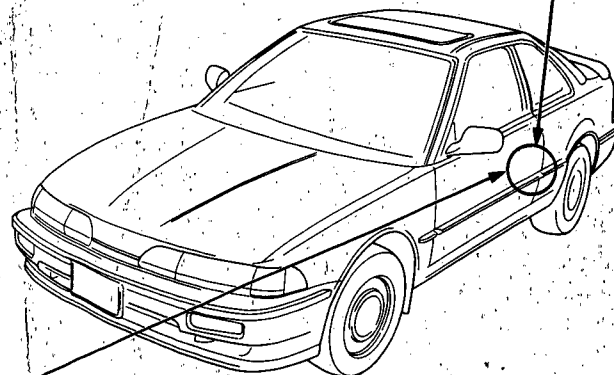
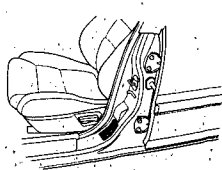
B17A1, California Model: 2000001 ~  
B17A1, 49 ST Model: 2300001 ~  
B18A1, California Model: 4000001 ~  
B18A1, 49ST Model: 4300001 ~

### Vehicle Identification Number and Federal Motor Vehicle Safety Standard Certification.

2D-Hatchback



4D-Sedan





# Canada Model

## Vehicle Identification Number

JH4DA934\*PS800001

### Manufacturer, Make and Type of Vehicle

JH4: HONDA MOTOR CO., LTD. JAPAN.  
ACURA Passenger Car

### Body type

DA9: INTEGRA 2D-Hatchback 1800  
DB1: INTEGRA 4D-Sedan 1800  
DB2: INTEGRA 2D-Hatchback 1700

### Body and Transmission Type

3: 2D-Hatchback 5-speed Manual  
4: 2D-Hatchback 4-speed Automatic  
5: 4D-Sedan 5-speed Manual  
6: 4D-Sedan 4-speed Automatic

### Vehicle Grade

4: RS (DA9, DB1)  
5: LS (DA9, DB1)  
6: GS (DA9, DB1)  
7: GS with leather seats and steering wheel cover (DA9, DB1)  
8: GSR (DB1)  
8: RS SE (DB1)

### Check Digit

### Model Year

P: 1993

### Factory Code

S: Suzuka Factory

### Serial Number

## Transmission Number

YS1-1000001

### Transmission Type

YS1: Manual  
MPRA: Automatic

### Serial Number

YS1: 1000001 ~  
MPRA: 3000001 ~

## Paint Code

Paint Code	Color
B-59P	Buckingham Blue Pearl
B-62P	Captiva Blue Pearl
BG-29P	Aztec Green Pearl
G-71P	Isle Green Pearl
NH-503P	Granada Black Pearl
NH-538	Frost White
R-72P	Torino Red Pearl
R-81	Milano Red
RP-21M	Horizon Gray Metallic
YR-503M	Rosewood Brown Metallic

## Paint Code

**B-59P**

## Engine Number

B17A1-2700001

### Engine Type

B17A1: 1.7 l DOHC VTEC Sequential Multiport Fuel-injection  
B18A1: 1.8 l DOHC Sequential Multiport Fuel-injection

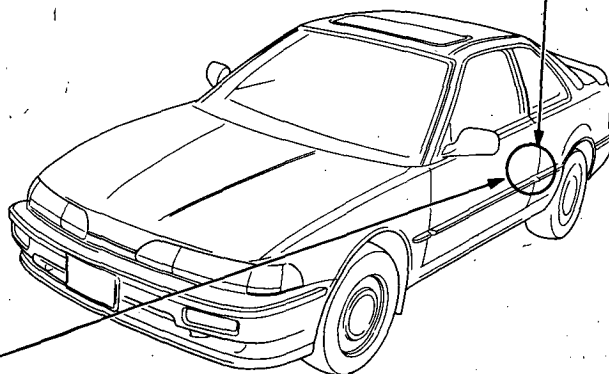
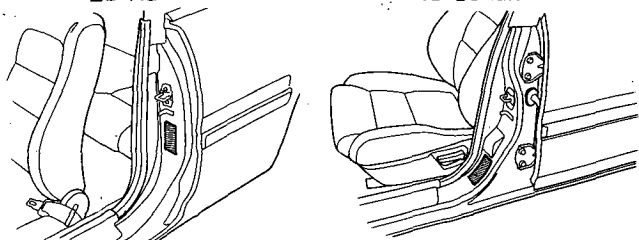
### Serial Number

B17A1: 2700001  
B18A1: 4700001

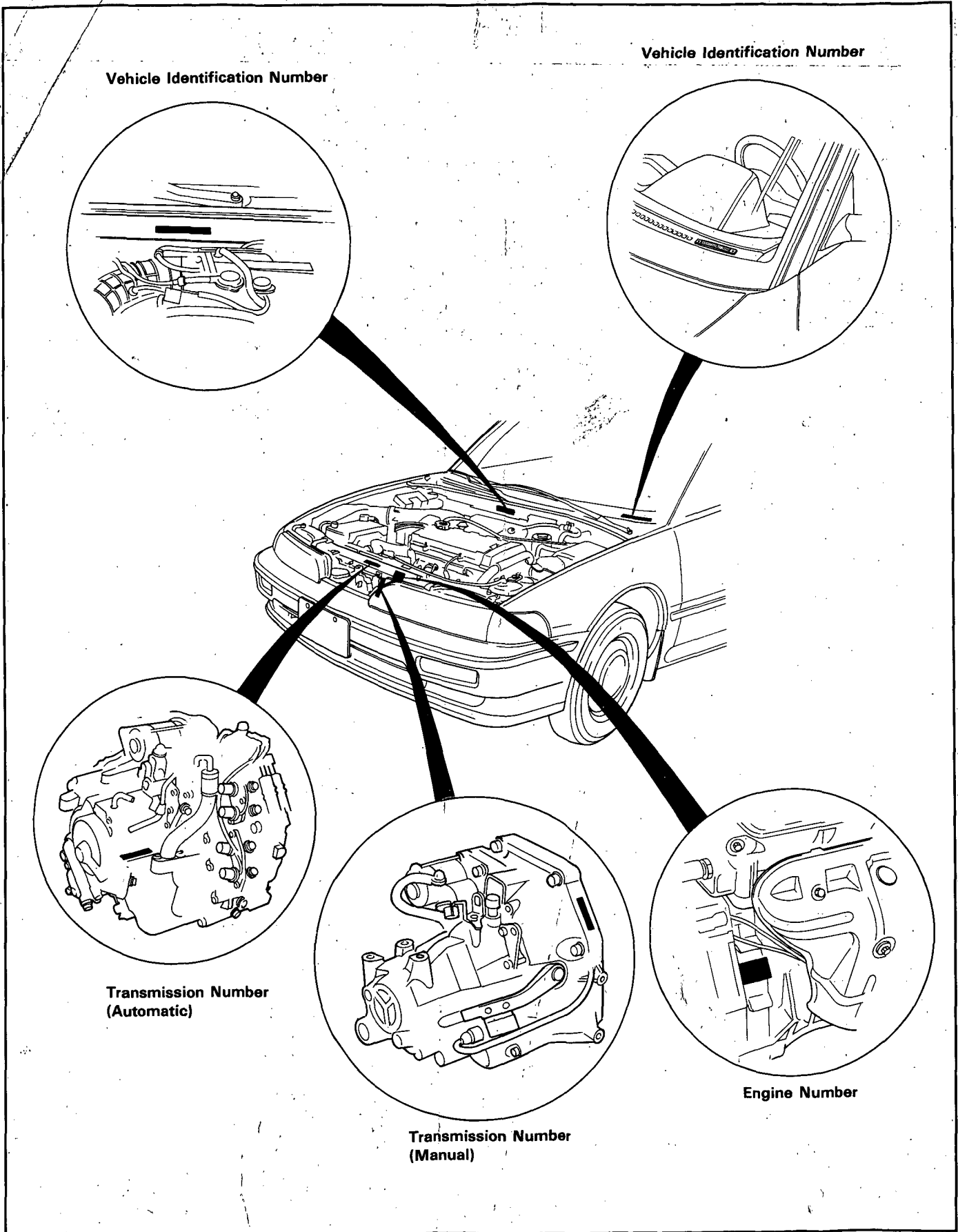
## Vehicle Identification Number and Canadian Motor Vehicle Safety Standard Certification

2D-Hatchback

4D-Sedan



# Identification Number Locations



Vehicle Identification Number

Vehicle Identification Number

Transmission Number  
(Automatic)

Transmission Number  
(Manual)

Engine Number

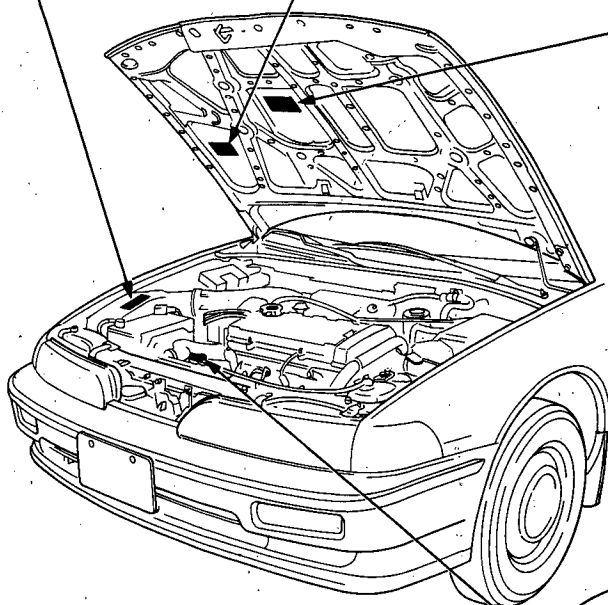
# Label Locations



**AIR CLEANER,  
OIL and FILTER SERVICE**

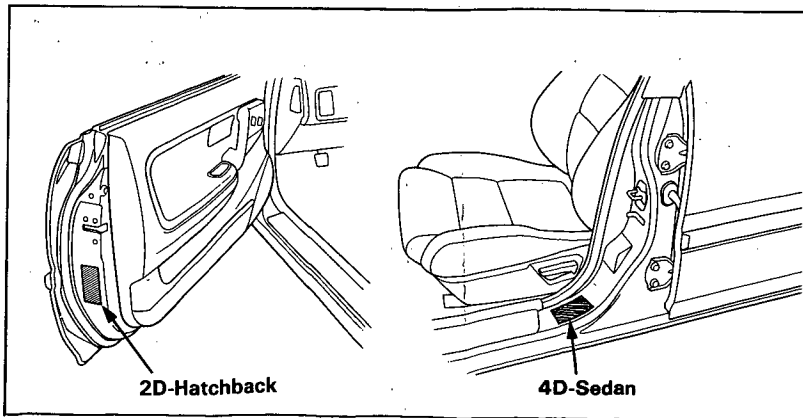
**ABS CAUTION**

**SERVICE INFORMATION**



**RADIATOR CAP  
CAUTION**

## TIRE INFORMATION (DRIVER'S SIDE)



**2D-Hatchback**

**4D-Sedan**

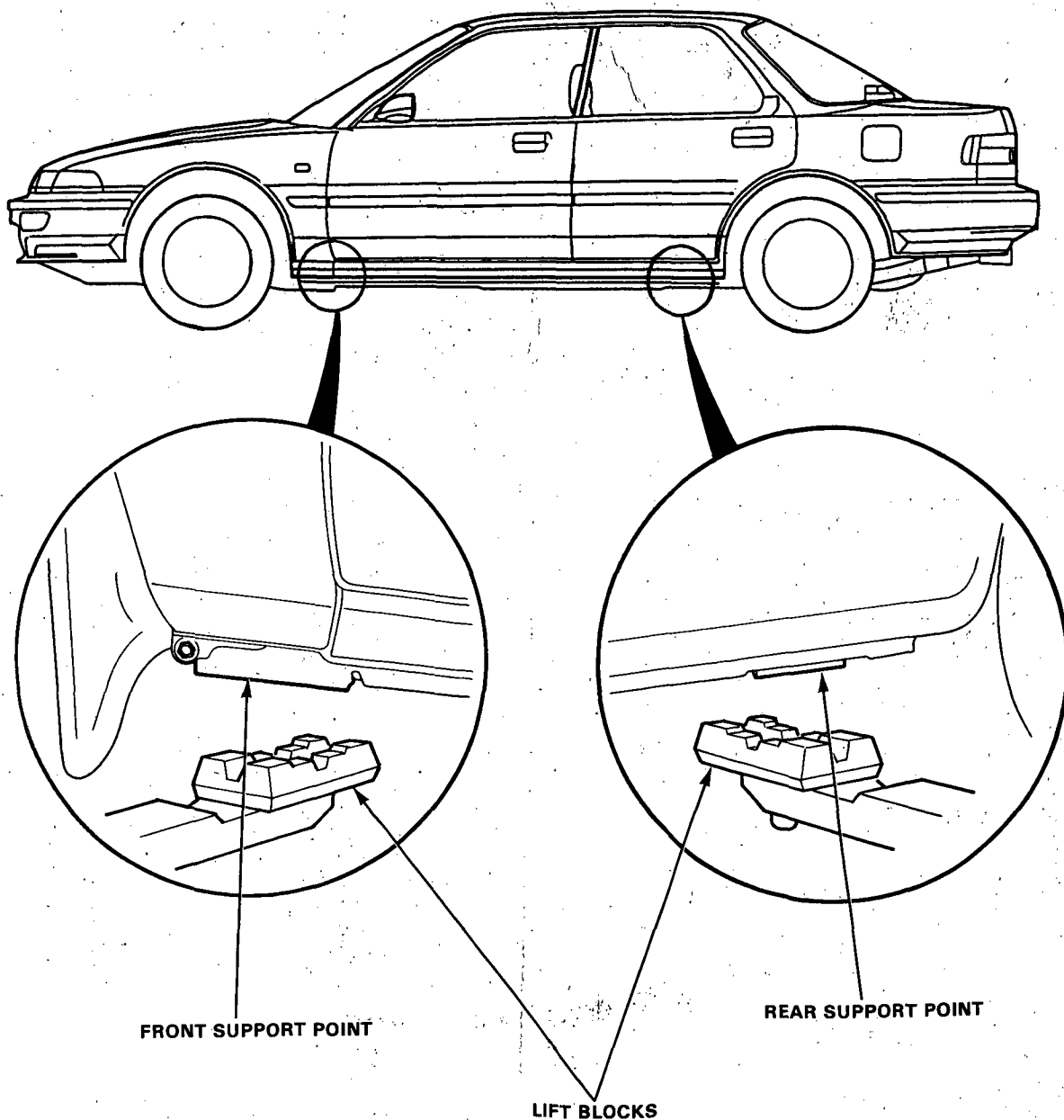
# Lift and Support Points

## Lift

**⚠ WARNING** When heavy rear components such as suspension, fuel tank, spare tire and trunk lid/hatch are to be removed, place additional weight in the trunk before hoisting. When substantial weight is removed from the rear of the car, the center of gravity may change and can cause the car to tip forward on the hoist.

**NOTE:** Since each tire/wheel assembly weights approximately 30 lbs (14 kg), placing the front wheels in the trunk can assist with the weight distribution.

1. Place the lift blocks as shown.
2. Raise the hoist a few inches (centimeters) and rock the car to be sure it is firmly supported.
3. Raise the hoist to full height and inspect lift points for solid support.







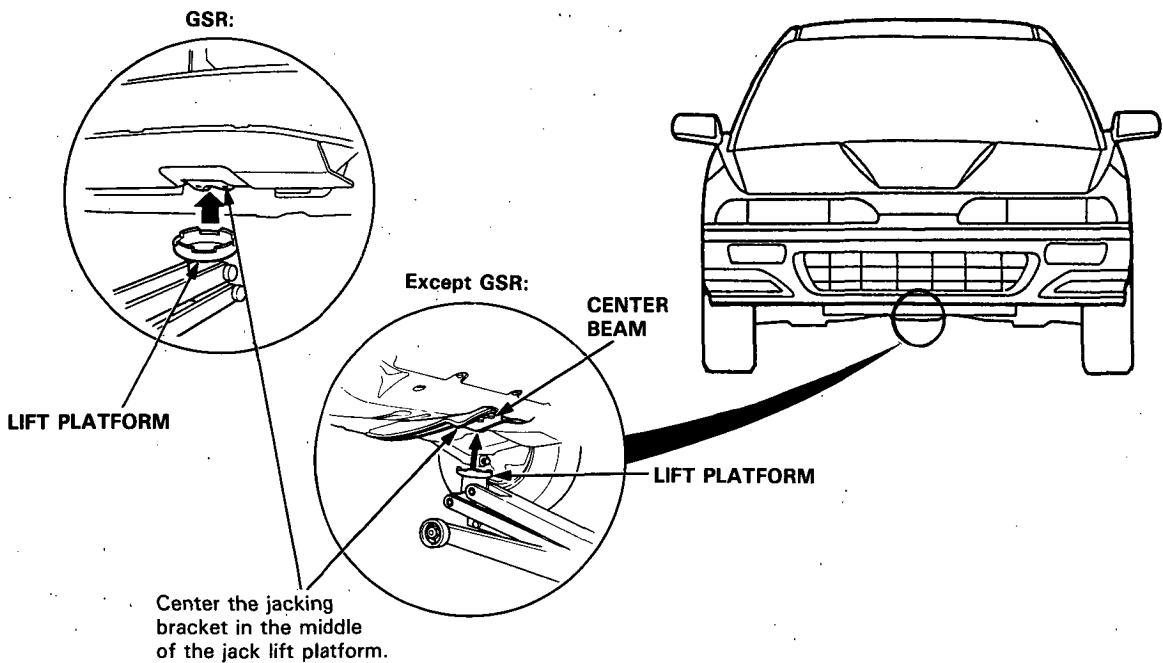
## Floor Jack

1. Set the parking brake and block the wheels that are not being lifted.
2. When lifting the rear of the car, put the gearshift lever in reverse (Automatic transmission in **P** position).
3. Raise the car high enough to insert the safety stands.
4. Adjust and place the safety stands as shown on page 1-8 so the car will be approximately level, then lower the car onto them.

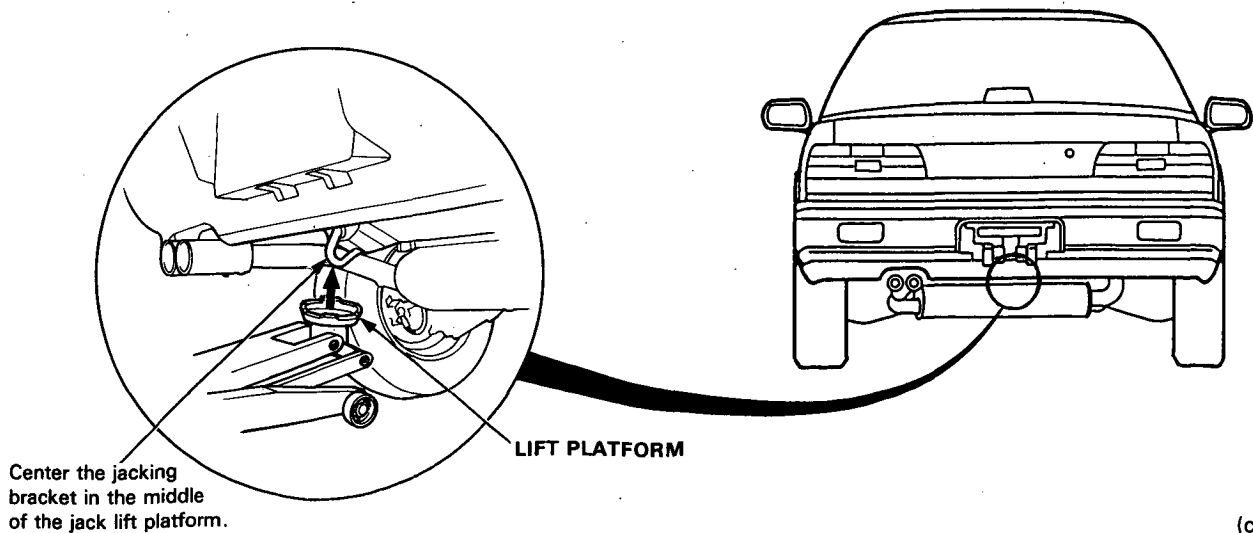
### ▲ WARNING

- Always use safety stands when working on or under any vehicle that is supported only by a jack.
- Never attempt to use a bumper jack for lifting or supporting the car.

### Front



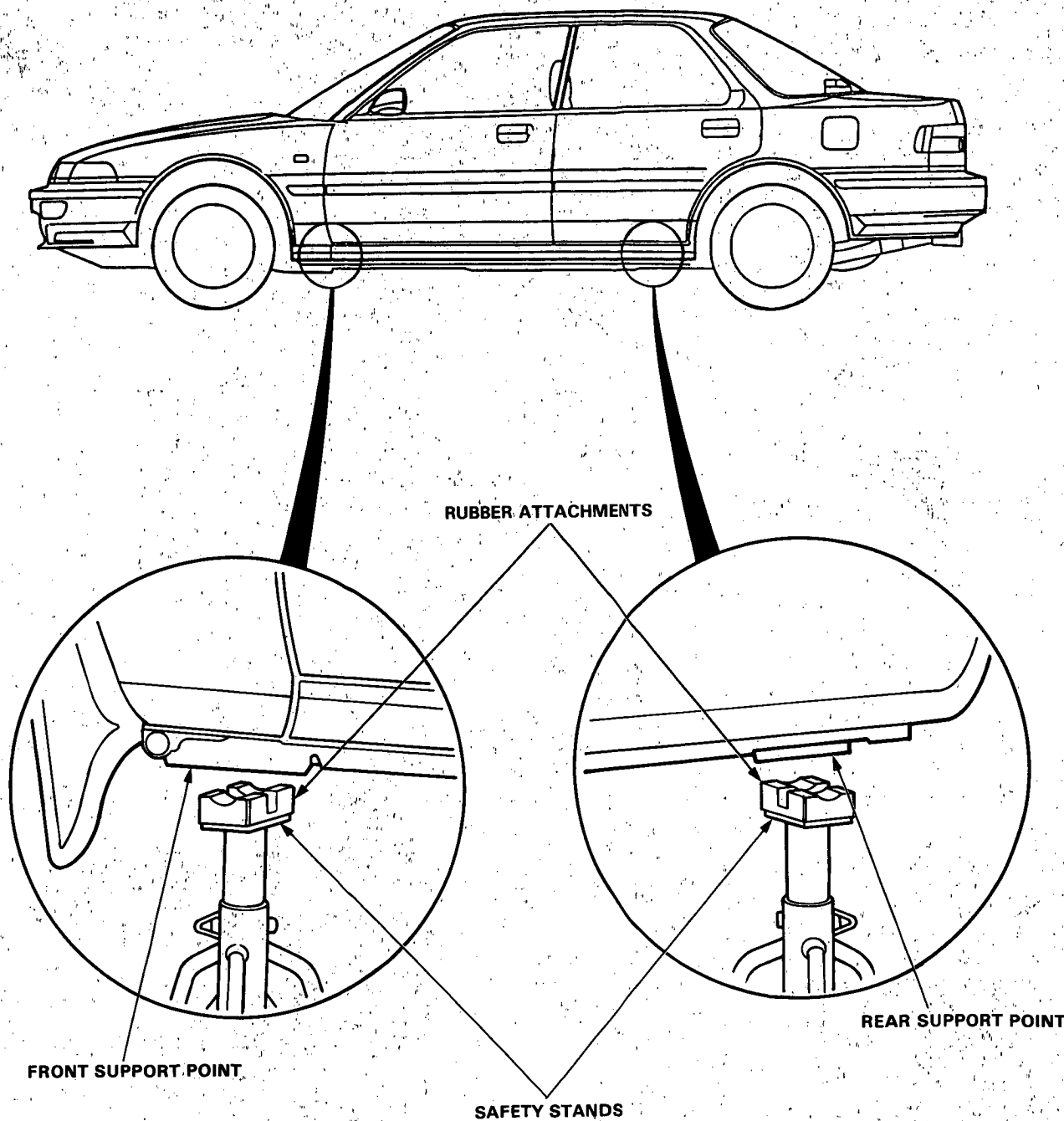
### Rear



(cont'd)

# Lift and Support Points (cont'd)

## Safety Stands



# Towing



**▲ WARNING** Never use tow chains or rope to tow a car; your ability to safely control the car may be adversely affected.

If towing is necessary, we recommend the following:  
**Flat Bed Equipment**—Entire car is winched on a flat bed vehicle. This is the best way of transporting the car.

**Wheel Lift Type**—Tow with the front wheels off the ground.

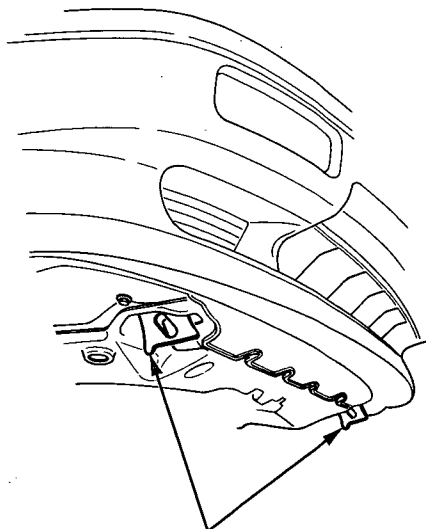
If the car can only be towed with the front wheels on the ground: make sure the transmission is full of fluid (see section 14) and tow with the transmission in neutral (Automatic transmission in **N** position) and the ignition key in the **I** position.

**CAUTION:** To avoid serious damage on automatic transmission cars, first start the engine and shift to **D** position, then to **N** position and shut the engine off. If the engine does not run or the transmission cannot be shifted while the engine is running, the car must be transported on flat bed equipment.

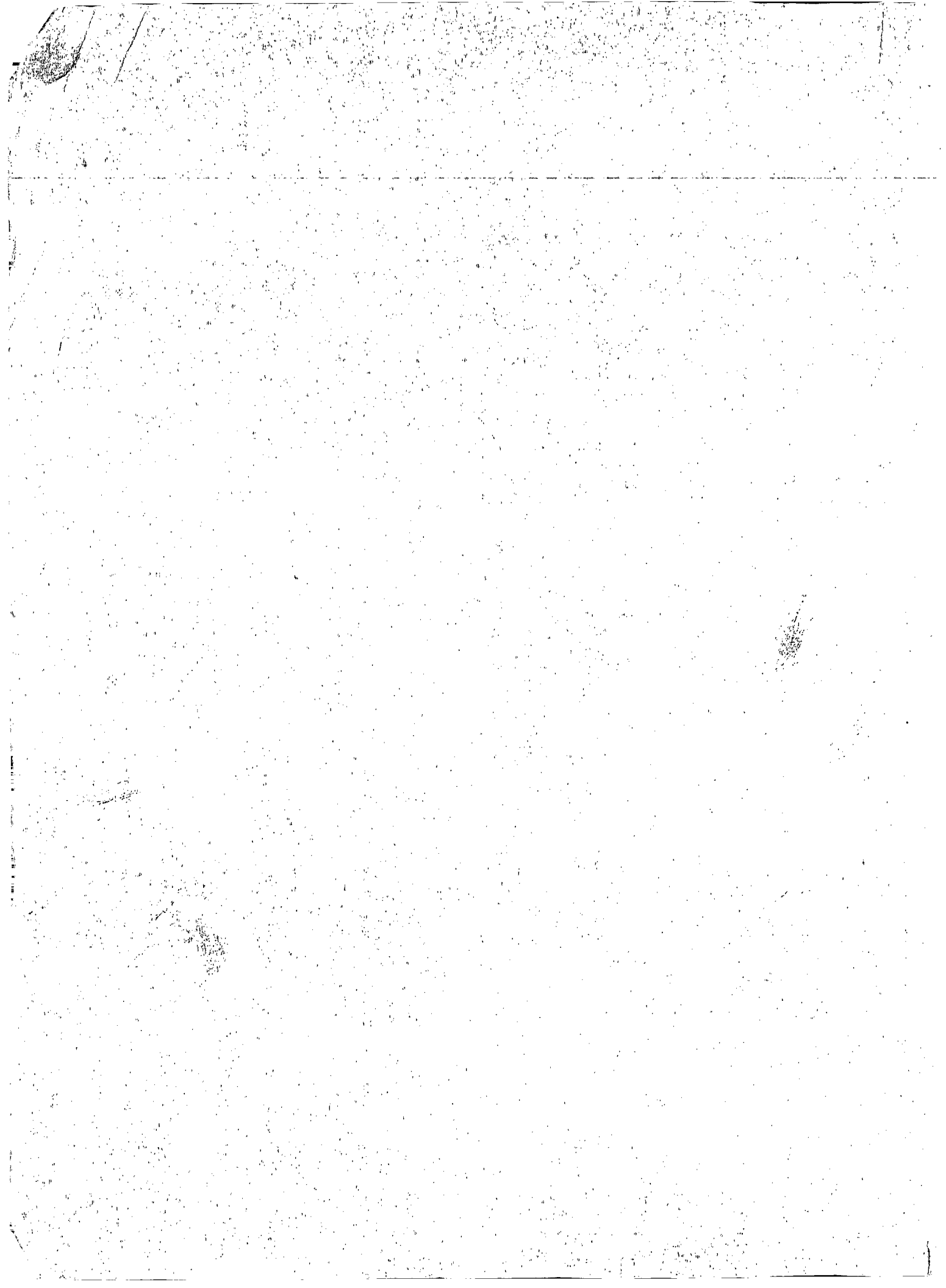
Check local regulations for towing.

**CAUTION:**

- Do not exceed 35 mph (55 km/h) or tow for distances of more than 50 miles (80 km).
- If a sling type tow is used, the tow truck driver should position wood spacer blocks between the car's frame and the chains and lift straps to avoid damaging the bumper and the body.
- Do not use the bumpers to lift the car or to support the car's weight while towing.



TOWING HOOKS



## Special Tools

Individual tool lists are located at the front of each section.



1914

1915

1916

## **Specifications**

<b>Standards and Service Limits .....</b>	<b>3-2</b>
<b>Design Specifications .....</b>	<b>3-14</b>
<b>Body Specifications .....</b>	<b>3-17</b>

**SPCCS**

# Standards and Service Limits

## Cylinder Head/Valve Train — Sections 6 B17A1 engine

		MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Compression	250 rpm and wide open throttle kPa (kg/cm <sup>2</sup> , psi)	Nominal	Minimum	1,300 (13.0, 184)	
			Maximum variation	950 (9.5, 135)	
				200 (2.0, 28)	
Cylinder head	Warpage Height			— 141.95—142.05 (5.589—5.593)	0.05 (0.002) —
Camshaft	End play			0.05—0.15 (0.002—0.006)	0.5 (0.02)
	Camshaft-to-holder oil clearance			0.050—0.089 (0.002—0.004)	0.15 (0.006)
	Total runout			0.03 (0.001) max.	0.06 (0.002)
	Cam lobe Height	IN	Primary	33.088 (1.3027)	—
			Mid	36.431 (1.4343)	—
			Secondary	34.978 (1.3771)	—
		EX	Primary	32.785 (1.2907)	—
			Mid	35.720 (1.4063)	—
			Secondary	34.691 (1.3658)	—
Valve	Valve clearance (cold)*	IN		0.15—0.19 (0.006—0.007)	—
		EX		0.17—0.21 (0.007—0.008)	—
	Valve stem O.D.	IN		5.475—5.485 (0.2156—0.2159)	5.445 (0.2144)
		EX		5.450—5.460 (0.2146—0.2150)	5.420 (0.2134)
	Stem-to-guide clearance	IN		0.025—0.055 (0.0010—0.0022)	0.08 (0.003)
		EX		0.050—0.080 (0.0020—0.0031)	0.11 (0.004)
Valve seat	Width	IN		1.25—1.55 (0.049—0.061)	2.0 (0.08)
		EX		1.25—1.55 (0.049—0.061)	2.0 (0.08)
	Stem installed height	IN		37.465—37.935 (1.4750—1.4935)	38.185 (1.5033)
		EX		37.165—37.635 (1.4632—1.4817)	37.885 (1.4915)
Valve spring	Free length	IN	Outer	40.92 (1.611) *1	—
				40.91 (1.610) *2	—
			Inner	36.71 (1.445) *1	—
		EX		41.96 (1.652) *1	—
				41.94 (1.651) *2	—
Valve guide	I.D.	IN		5.51—5.53 (0.217—0.218)	5.55 (0.219)
		EX		5.51—5.53 (0.217—0.218)	5.55 (0.219)
	Installed height	IN		12.55—13.05 (0.494—0.514)	—
		EX		12.55—13.05 (0.494—0.514)	—
Rocker arm	Arm-to-shaft clearance	IN		0.025—0.052 (0.0009—0.0020)	0.08 (0.003)
		EX		0.025—0.052 (0.0009—0.0020)	0.08 (0.003)

\*Measuring point between camshaft and rocker arm

\*1: NIHON HATSUJO manufacture valve spring, \*2: CHUO HATSUJO manufacture valve spring.



**Cylinder Head/Valve Train — Sections 6**  
**B18A1 engine**

Unit of length: mm (in)

		MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Compression	250 rpm and wide open throttle kPa (kg/cm <sup>2</sup> , psi)	Nominal Minimum Maximum variation	1,300 (13.0, 185) 950 (9.5, 135) 200 (2.0, 28)	
Cylinder head	Warpage Height		— 131.95—132.05 (5.195—5.199)	0.05 (0.002) —
Camshaft	End play Camshaft-to-holder oil clearance Total runout Cam lobe Height	IN EX	0.05—0.15 (0.002—0.006) 0.050—0.089 (0.002—0.004) 0.03 (0.001) 33.716 (1.3274) 33.230 (1.3083)	0.5 (0.02) 0.15 (0.006) 0.06 (0.002) — —
Valve	Valve clearance (cold)* Valve stem O.D. Stem-to-guide clearance Stem installed height	IN EX IN EX IN EX	0.08—0.12 (0.003—0.005) 0.16—0.20 (0.006—0.008) 6.58—6.59 (0.259—0.259) 6.55—6.56 (0.258—0.258) 0.02—0.05 (0.001—0.002) 0.05—0.08 (0.002—0.003) 40.765—41.235 (1.6049—1.6234) 42.765—43.235 (1.6837—1.7022)	— — 6.55 (0.258) 6.52 (0.257) 0.08 (0.003) 0.11 (0.004) 41.485 (1.6333) 43.485 (1.7120)
Valve seat	Width	IN and EX	1.25—1.55 (0.049—0.061)	2.0 (0.079)
Valve spring	Free length	IN EX	42.36 (1.668) 40.09 (1.578)	— —
Valve guide	I.D.	IN and EX	6.61—6.63 (0.260—0.261)	6.65 (0.262)

\*Measuring point between camshaft and rocker arm

**Engine Block — Section 7**  
**B17A1 engine**

		MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Cylinder block	Warpage of deck surface Bore diameter Bore taper Reboring limit	X Y	0.05 (0.002) 81.000—81.020 (3.1890—3.1898) 81.000—81.015 (3.1890—3.1896)	0.08 (0.003) 81.070 (3.1917) 0.05 (0.002) 0.25 (0.010)
Piston	Skirt O.D. At 15 mm (0.6 in) from bottom of skirt Clearance in cylinder Ring groove width	Top 2nd Oil	80.980—80.990 (3.1882—3.1886) 0.010—0.035 (0.0004—0.0014) 1.030—1.040 (0.0406—0.0409) 1.230—1.240 (0.0484—0.0488) 2.805—2.820 (0.1104—0.1110)	80.970 (3.1878) 0.05 (0.002) 1.060 (0.0417) 1.260 (0.0496) 2.840 (0.1118)
Piston ring	Piston-to-ring clearance Ring end gap	Top 2nd Top 2nd Oil	0.045—0.070 (0.0018—0.0028) 0.045—0.070 (0.0018—0.0028)*1 0.040—0.065 (0.0015—0.0026)*2 0.20—0.30 (0.008—0.012)*1 0.20—0.35 (0.008—0.014)*2 0.40—0.55 (0.016—0.022) 0.20—0.45 (0.008—0.018)*1 0.20—0.50 (0.008—0.020)*2	0.13 (0.005) 0.13 (0.005) 0.60 (0.024) 0.70 (0.028) 0.70 (0.028)
Piston Pin	Diameter Pin-to-piston clearance		20.994—21.000 (0.8265—0.8268) 0.010—0.022 (0.0004—0.0009)	— —
Connecting rod	Pin-to-rod interference Small end bore diameter Large end bore diameter End play installed on crankshaft	Nominal	0.013—0.032 (0.0005—0.0013) 20.968—20.981 (0.8255—0.8260) 48.0 (1.89) 0.15—0.30 (0.006—0.012)	— — — 0.40 (0.016)
Crankshaft	Main journal diameter No. 1, 2, 4 and 5 journals No. 3 journal Rod journal diameter Journal taper Journal out-of-round End play Total runout		54.976—55.000 (2.1644—2.1654) 54.970—54.994 (2.1642—2.1651) 44.976—45.000 (1.7707—1.7717) 0.005 (0.0002) max. 0.004 (0.0002) max. 0.10—0.35 (0.004—0.014) 0.020 (0.0008) max.	— — — — 0.006 (0.0002) 0.45 (0.018) 0.030 (0.0012)
Bearings	Main bearing-to-journal oil clearance No. 1, 2, 4 and 5 journals No. 3 journal Rod bearing-to-journal oil clearance		0.024—0.042 (0.0009—0.0017) 0.030—0.048 (0.0012—0.0019) 0.032—0.050 (0.0013—0.0020)	0.050 (0.0020) 0.060 (0.0024) 0.060 (0.0024)

\*1: TEIKOKU PISTON RING manufacture piston ring

\*2: RIKEN manufactured piston ring

# Standards and Service Limits

## Engine Block — Section 7 B18A1 engine

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Cylinder block	Warpage of deck surface		below 0.07 (0.003)	0.10 (0.004)
	Bore diameter	X	81.000—81.020 (3.1890—3.1898)	81.070 (3.1917)
		Y	81.000—81.015 (3.1890—3.1896)	81.070 (3.1917)
	Bore taper		—	0.05 (0.002)
	Reboring limit		—	0.25 (0.01)
Piston	Skirt O.D. At 15 mm (0.6 in) from bottom of skirt		80.980—80.990 (3.1882—3.1886)	80.970 (3.1878)
	Clearance in cylinder		0.010—0.035 (0.0004—0.0014)	0.05 (0.002)
	Ring groove width	Top	1.030—1.040 (0.0406—0.0409)	1.06 (0.042)
		2nd	1.230—1.240 (0.0484—0.0488)	1.26 (0.050)
		Oil	2.805—2.820 (0.1104—0.1110)	2.84 (0.112)
	Piston-to-ring clearance	Top	0.045—0.070 (0.0018—0.0028)	0.13 (0.005)
		2nd	0.045—0.070 (0.0018—0.0028)*1 0.045—0.065 (0.0018—0.0026)*2	0.13 (0.005)
Piston ring	Ring end gap	Top	0.20—0.30 (0.008—0.012)*1 0.20—0.35 (0.008—0.014)*2	0.70 (0.028)
		2nd	0.40—0.55 (0.016—0.022)	0.70 (0.028)
		Oil	0.20—0.45 (0.008—0.018)*1 0.20—0.50 (0.008—0.020)*2	0.60 (0.024)
Piston Pin	O.D.		20.994—21.000 (0.8265—0.8268)	—
	Piston-to-pin clearance		0.010—0.022 (0.0004—0.0009)	—
Connecting rod	Pin-to-rod interference		0.013—0.032 (0.0005—0.0013)	—
	Small end bore diameter		20.968—20.981 (0.8255—0.8260)	—
	Large end bore diameter	Nominal	48.0 (1.89)	—
	End play installed on crankshaft		0.15—0.30 (0.006—0.012)	0.40 (0.016)
Crankshaft	Main journal diameter		54.976—55.000 (2.1644—2.1654)	—
	No. 1, 2, 4, 5 journals		54.970—54.994 (2.1642—2.1651)	—
	No. 3 journal		below 0.005 (0.0002)	0.010 (0.0004)
	Journal taper		below 0.005 (0.0002)	—
	Rod journal diameter		44.976—45.000 (1.7707—1.7717)	—
	Journal out-of-round		below 0.005 (0.0002)	0.010 (0.0004)
	End play		0.10—0.35 (0.004—0.014)	0.45 (0.018)
Total runout		below 0.03 (0.001)	0.05 (0.002)	
Bearings	Main bearing-to-journal oil clearance		0.024—0.042 (0.0009—0.0017)	0.050 (0.0020)
	No. 1, 2, 4, 5 journals		0.030—0.048 (0.0012—0.0019)	0.060 (0.0024)
	No. 3 journal		0.020—0.038 (0.0008—0.0015)	0.050 (0.0020)
	Rod bearing-to-journal oil clearance		0.020—0.038 (0.0008—0.0015)	0.050 (0.0020)

\*1: TEIKOKU PISTON RING manufactured piston ring.

\*2: RIKEN manufactured piston ring.

## Engine Lubrication — Section 8

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Engine oil	Capacity: including oil filter ℓ (US qt, Imp qt)		B18A1 engine: 3.8 (4.0, 3.3) for change B17A1 engine: 4.0 (4.2, 3.5) for change B18A1 engine: 4.6 (4.9, 4.0) for engine overhaul B17A1 engine: 4.8 (5.1, 4.2) for engine overhaul	
Oil pump	Displacement ℓ (US qt, Imp qt)/min @rpm		56 (54/49) @6,000	
	Inner-to-outer rotor radial clearance		0.04—0.16 (0.002—0.006)	0.20 (0.008)
	Pump housing-to-rotor radial clearance		0.10—0.19 (0.004—0.007)	0.20 (0.008)
	Pump housing-to-rotor axial clearance		0.02—0.07 (0.001—0.003)	0.15 (0.006)
Relief valve	Pressure setting with oil temperature 176°F (80°C) kPa (kg/cm <sup>2</sup> , psi)		at idle above 70 (0.7, 10) at 3,000 rpm above 350 (3.5, 50)	

Unit of length: mm (in)

### Cooling — Section 10

	MEASUREMENT	STANDARD (NEW)
Engine coolant	Capacity ℓ (US qt, Imp qt) : including heater 0.6 ℓ (0.6 US qt, 0.5 Imp qt) and reservoir 0.6 ℓ (0.6 US qt, 0.5 Imp qt)	M/T: 5.1 (5.4, 4.5) for change*1 5.0 (5.3, 4.4) for change*2 6.0 (6.3, 5.3) for engine overhaul*1 5.9 (6.2, 5.2) for engine overhaul*2 A/T: 4.9 (5.2, 4.3) for change 5.8 (6.1, 5.1) for engine overhaul
Radiator cap	Opening pressure kPa (kg/cm <sup>2</sup> , psi)	75–105 (0.75–1.05, 11–15)
Thermostat	Start to open °F (°C) Fully open °F (°C) Valve lift at fully open	169–176 (76–80) 194 (90) 8.0 (0.31)
Water pump	Pulley ratio Displacement ℓ (US qt, Imp qt)/min @rpm	0.895 (17 : 19) 140 (148, 123) @6,000
Cooling fan	Thermostat "ON" temperature °F (°C) Thermostat "OFF" temperature °F (°C)	196–203 (91–95) Subtract 5–15 (3–8) from actual "ON" temperature

\*1: B18A1 engine

\*2: B17A1 engine

### Fuel and Emission — Section 11

	MEASUREMENT	STANDARD (NEW)
Fuel pump	Displacement cc (US oz, Imp oz) in 10 seconds at 12 V  Relief valve opening pressure	B18A1 engine: above 230 (7.8, 8.1) B17A1 engine: above 208 (7.0, 7.3)  450–600 (4.5–6.0, 64–85)
Pressure regulator	Pressure with the regulator vacuum hose disconnected kPa (kg/cm <sup>2</sup> , psi)	B18A1 engine: 290–340 (2.9–3.4, 41–48) B17A1 engine: 340–390 (3.4–3.9, 48–56)
Fuel tank	Capacity ℓ (US gal, Imp gal)	50 (13.2, 11.0)
Fast idle	rpm at engine cold (engine coolant temperature below 86°F (30°C)) with headlight and cooling fan OFF	M/T: 1,000–2,000 A/T: 1,000–2,000 in <b>[N]</b> or <b>[P]</b>
Idle speed	rpm with headlight and cooling fan OFF	M/T: 750 ± 50*1 800 ± 50*2 A/T: 750 ± 50 in <b>[N]</b> or <b>[P]</b> position
	rpm with air conditioning ON	M/T: 750 ± 50*1 800 ± 50*2 A/T: 750 ± 50 in <b>[N]</b> or <b>[P]</b> position
Idle CO	% with headlight and cooling fan OFF	below 0.1%

\*1: B18A1 engine

\*2: B17A1 engine

## Standards and Service Limits

### Clutch — Section 12

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Clutch pedal	Pedal height to floor	177 (6.97)	—
	Pedal stroke	142–147 (5.59–5.79)	—
	Pedal play	15–20 (0.59–0.79)	—
	Disengagement height to floor	90 (3.54) min.	—
Clutch releases arm	Free play at arm	4.00–5.00 (0.157–0.197)	—
Flywheel	Clutch surface runout	0.05 (0.002)	0.15 (0.006)
Clutch disc	Surface runout	0.80 (0.031)	1.00 (0.039)
	Rivet head depth	1.30 (0.051)	0.20 (0.008)
	Radial play in spline at circumference	0.10–0.60 (0.004–0.024)	2.00 (0.079)
	Thickness	8.40–9.10 (0.331–0.358)	6.00 (0.239)
Clutch cover	Pressure disc surface runout	0.03 (0.001)	0.15 (0.006)
	Unevenness of diaphragm spring	0.60 (0.024)	1.00 (0.039)
Clutch releases bearing holder	I.D.	35.00–35.12 (1.378–1.383)	35.20 (1.386)
	Holder-to-guide sleeve clearance	0.05–0.19 (0.002–0.008)	0.30 (0.012)

### Manual Transmission — Section 13

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Transmission oil	Capacity ℓ (US qt, Imp qt)	2.3 (2.4, 2.0) for overhaul 2.2 (2.3, 1.9) for oil change	
Mainshaft	End play	0.11–0.18 (0.004–0.007)	Adjust with a shim.
	Diameter of ball bearing contact area, clutch housing side	27.977–27.990 (1.1015–1.1020)	27.93 (1.100)
	Diameter of 3rd gear contact area	37.984–38.000 (1.4954–1.4961)	37.93 (1.493)
	Diameter of ball bearing contact area, transmission housing side	27.987–28.000 (1.1018–1.1024)	27.94 (1.100)
Mainshaft 3rd and 4th gears	Runout	0.02 (0.0008)	0.05 (0.0020)
	I.D.	43.009–43.025 (1.6933–1.6939)	43.08 (1.696)
	End play	0.06–0.21 (0.003–0.008)	0.30 (0.012)
	Thickness	3rd: B17A1 engine	34.92–34.97 (1.375–1.377)
B18A1 engine		34.42–34.47 (1.355–1.357)	33.8 (1.331)
4th: B17A1 engine		31.42–31.47 (1.237–1.239)	31.3 (1.232)
	B18A1 engine	30.92–30.97 (1.217–1.219)	30.8 (1.213)
Mainshaft 5th gear	I.D.	43.009–43.025 (1.6933–1.6939)	43.08 (1.693)
	End play	0.06–0.21 (0.003–0.008)	0.30 (0.012)
	Thickness	31.42–31.47 (1.237–1.239)	31.3 (1.232)
Countershaft	Diameter of needle bearing contact area	33.000–33.015 (1.2992–1.2998)	32.95 (1.297)
	Diameter of ball bearing contact area	24.980–24.993 (0.9835–0.9840)	24.94 (0.982)
	Diameter of 1st gear contact area	36.984–37.000 (1.4561–1.4567)	36.93 (1.454)
	Runout	0.02 (0.001)	0.05 (0.002)
Countershaft 1st gear	I.D.	42.009–42.025 (1.6539–1.6645)	42.08 (1.657)
	End play, after tightening with specified torque	0.04–0.12 (0.002–0.005)	Adjust with a shim.
Countershaft 2nd gear	I.D.	47.009–47.025 (1.8507–1.8514)	47.08 (1.854)
	End play, after tightening with specified torque	0.05–0.12 (0.002–0.005)	Adjust with a collar.
	Thickness	B17A1 engine	28.92–28.97 (1.139–1.141)
B18A1 engine		34.62–34.67 (1.363–1.365)	34.5 (1.36)

(cont'd)