RSX

Service Manual 02-03

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 its corresponding thumb index tab 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.

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.

Safety Messages

Your safety, and the safety of others, is very important. To help you make informed decisions, we have provided safety messages, and other safety information throughout this manual. Of course, it is not practical or possible to warn you about all the hazards associated with servicing this vehicle. You must use your own good judgment.

You will find important safety information in a variety of forms including:

- **Safety Labels** – on the vehicle.
- **Safety Messages** – preceded by a safety alert symbol ⚠ and one of three signal words, DANGER, WARNING, or CAUTION. These signal words mean:

⚠ DANGER	You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.
⚠ WARNING	You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.
⚠ CAUTION	You CAN be HURT if you don't follow instructions.

- **Instructions** – how to service this vehicle correctly and safely.

As you read this manual, you will find information that is preceded by a NOTICE symbol. The purpose of this message is to help prevent damage to your vehicle, other property, or the environment.

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Specifications apply to U.S.A. and Canada

HONDA MOTOR CO., LTD.
Service Publication Office

As sections with *include SRS components; special precautions are required when servicing.

General Information

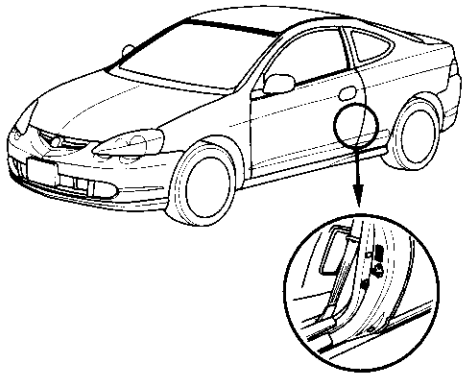
Chassis and Paint Codes - 2002 Model

Vehicle Identification Number

JH4 DC5 3 8 * 2 C 000001

a b c d e f g h

a. Manufacturer, Make and Type of Vehicle
JH4: HONDA MOTOR CO., LTD.
ACURA Passenger vehicle
b. Line, Body and Engine Type
DC5: ACURA RSX/K20A2, K20A3
c. Body Type and Transmission Type
3: 2-door Hatchback/5-speed Manual
2-door Hatchback/6-speed Manual
4: 2-door Hatchback/5-speed Automatic
d. Vehicle Grade (Series)
0: Type S
6: RSX (Canada only)
8: RSX
Premium (Canada only)
e. Check Digit
f. Model Year
2: 2002
g. Factory Code
C: Saitama Factory in Japan (Sayama)
h. Serial Number
U.S.: 000001–
Canada: 800001–



Vehicle Identification Number and Federal Motor Vehicle Safety Standard Certification.

Engine Number

K20A2 - 1400001

a b

a. Engine Type
K20A2: 2.0 ℓ DOHC VTEC Sequential Multiport Fuel-injected 200 HP engine
K20A3: 2.0 ℓ DOHC VTEC Sequential Multiport Fuel-injected 160 HP engine
b. Serial Number
K20A2: 1400001–
K20A3: 1100001–

Transmission Number

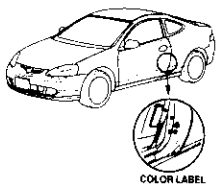
MRMA - 1000001

a b

a. Transmission Type
MRMA: 5-speed Automatic
W2M5: 5-speed Manual
X2M5: 6-speed Manual
b. Serial Number

Paint Code

Code	Color	U.S.	Canada
B-507P	Arctic Blue Pearl	○	○
B-92P	Nighthawk Black Pearl	○	○
B-96P	Eternal Blue Pearl	○	
NH-578	Taffeta White	○	
NH-623M	Satin Silver Metallic	○	○
NH-624P	Premium White Pearl	○	
NH-636P	Brilliant White Pearl		○
R-81	Milano Red		○
R-507P	Fire Pepper Red Pearl	○	
YR-534M	Desert Silver Metallic	○	○



Chassis and Paint Codes - 2003 Model

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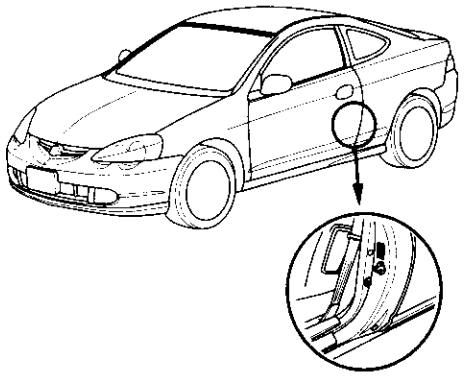
a b c d e f g h

a. Manufacturer, Make and Type of Vehicle
JH4: HONDA MOTOR CO., LTD.
ACURA Passenger vehicle
b. Line, Body and Engine Type
DC5: ACURA RSX/K20A2, K20A3
c. Body Type and Transmission Type
3: 2-door Hatchback/5-speed Manual
2-door Hatchback/6-speed Manual
4: 2-door Hatchback/5-speed Automatic
d. Vehicle Grade (Series)
0: Type S
6: RSX (Canada only)
8: RSX
Premium (Canada only)
e. Check Digit
f. Model Year
3: 2003
g. Factory Code
C: Saitama Factory in Japan (Sayama)
h. Serial Number
U.S.: 000001 –
Canada: 800001 –



Vehicle Identification Number and Federal Motor Vehicle Safety Standard Certification.

Engine Number

K20A2 - 2400001

a b

a. Engine Type
K20A2: 2.0 ℓ DOHC VTEC Sequential Multiport Fuel-injected 200 HP engine
K20A3: 2.0 ℓ DOHC VTEC Sequential Multiport Fuel-injected 160 HP engine
b. Serial Number
K20A2: 2400001 –
K20A3: 2100001 –

Transmission Number

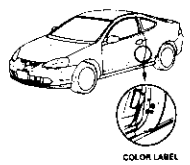
MRMA - 2000001

a b

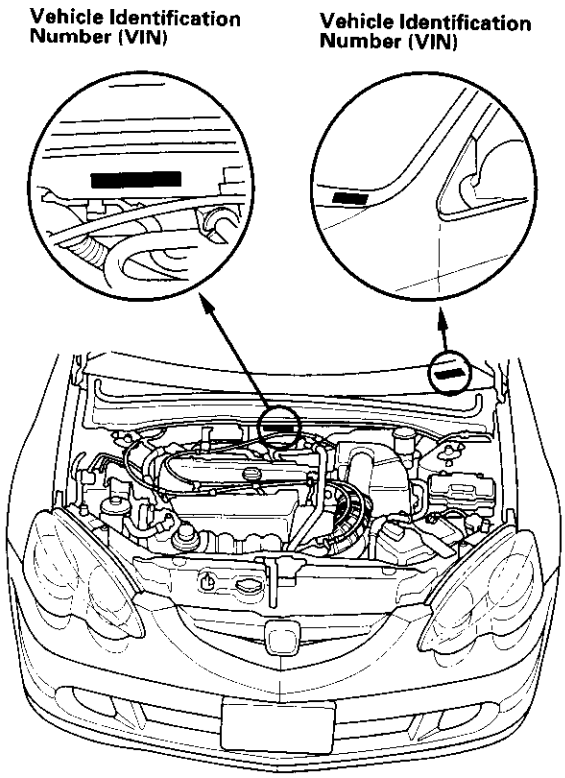
a. Transmission Type
MRMA: 5-speed Automatic
W2M5: 5-speed Manual
X2M5: 6-speed Manual
b. Serial Number

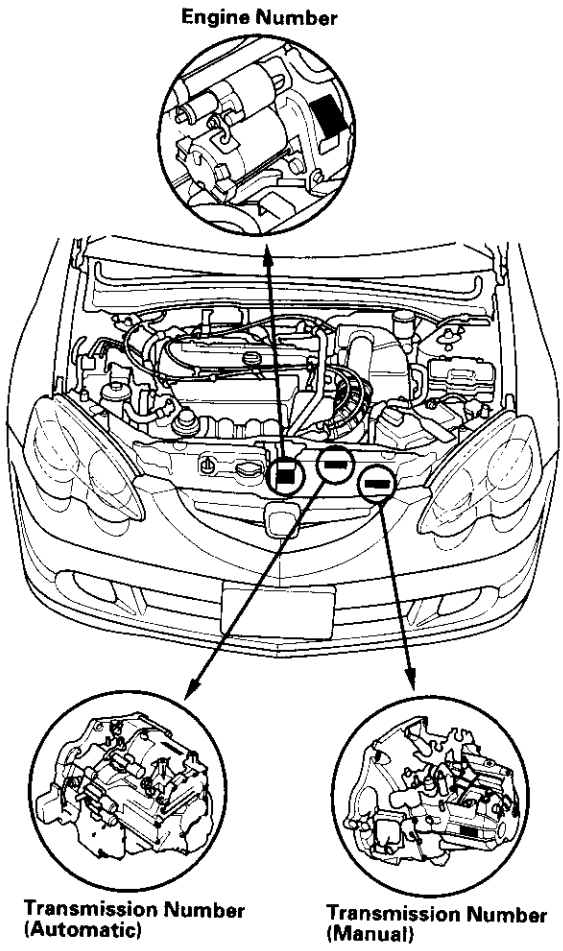
Paint Code

Code	Color	U.S.	Canada
B-507P	Arctic Blue Pearl	○	○
B-92P	Nighthawk Black Pearl	○	○
B-96P	Eternal Blue Pearl	○	
NH-578	Taffeta White	○	
NH-623M	Satin Silver Metallic	○	○
NH-624P	Premium White Pearl	○	○
NH-636P	Brilliant White Pearl		○
R-81	Milano Red		○
R-522	Redondo Red Pearl	○	
YR-534M	Desert Silver Metallic	○	○



Identification Number Locations

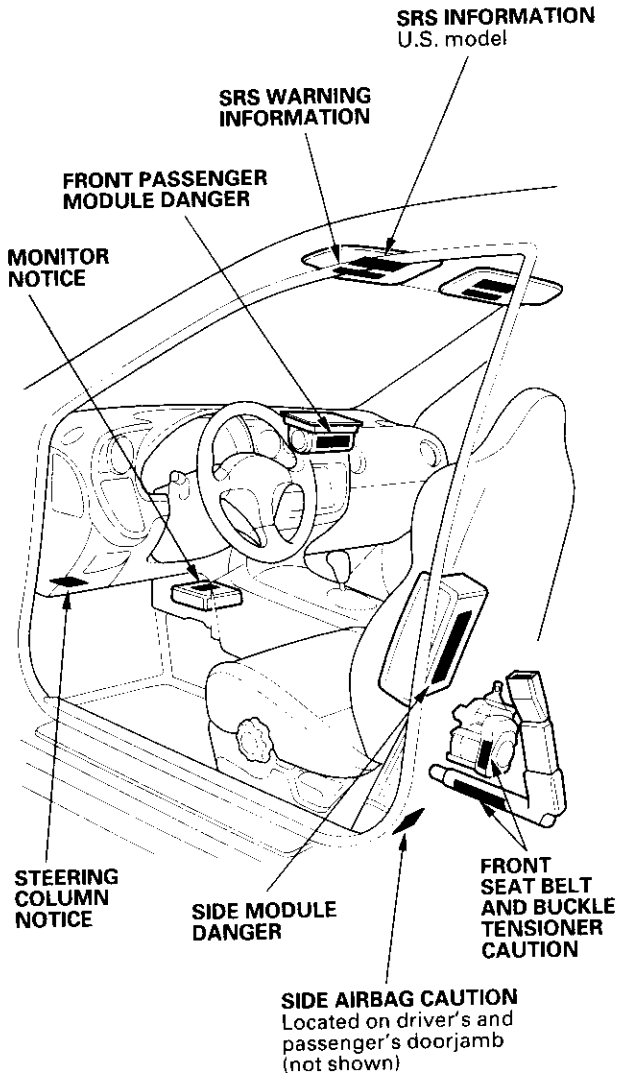




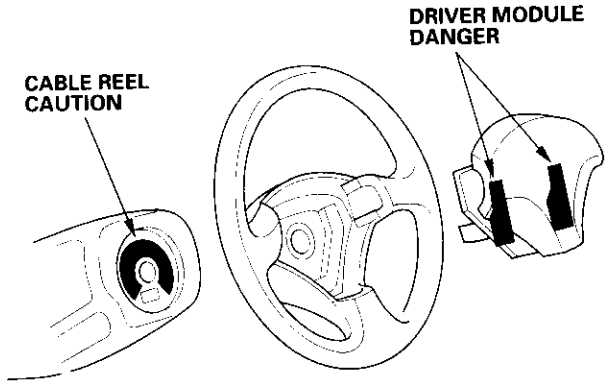
Warning/Caution Label Locations

NOTE: FRONT PASSENGER AIRBAG WARNING TAG (CHILD SEAT) is equipped on the glove box on the U.S. model.

Passenger's Compartment:



Steering Wheel:



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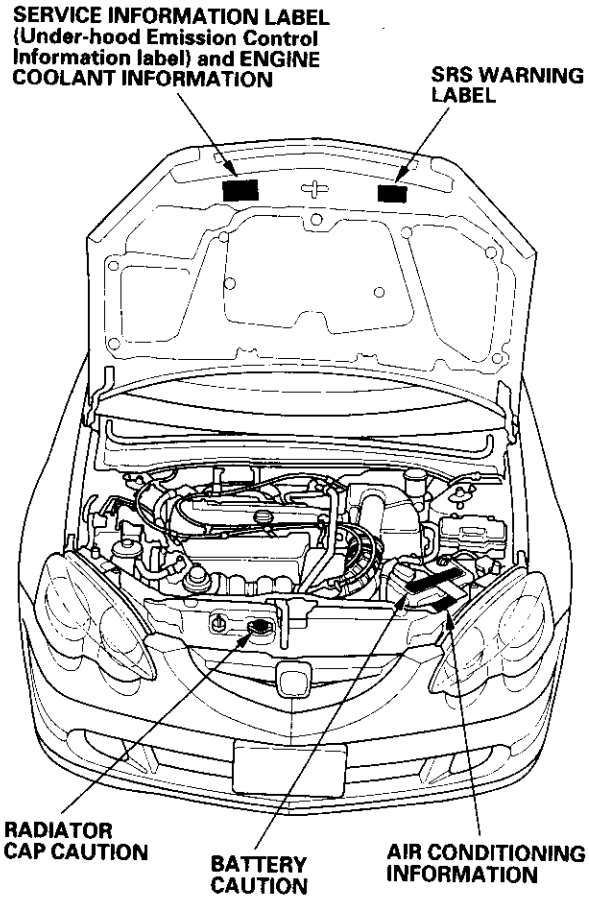
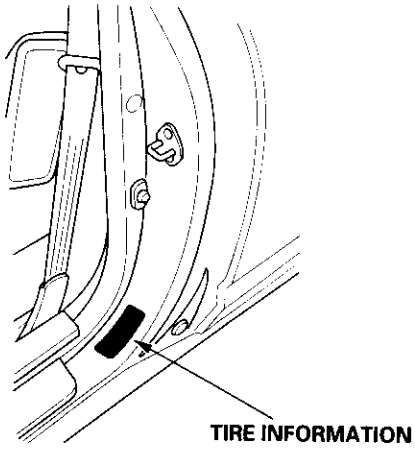
Warning/Caution Label Locations (cont'd)

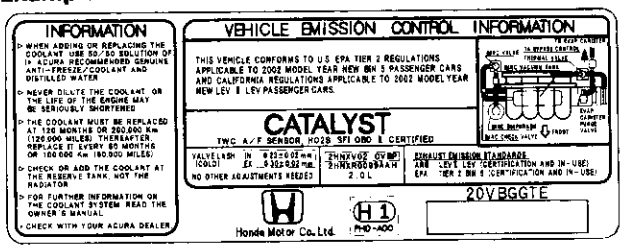




Under-hood Emission Control Label

Emission Group Identification

Example:

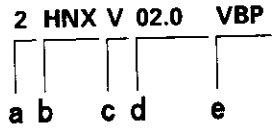


2002 model:
THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 REGULATIONS APPLICABLE TO 2002 MODEL YEAR NEW BIN 5 PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2002 MODEL YEAR NEW LEV II LEV PASSENGER CARS.

2003 model:
THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 REGULATIONS APPLICABLE TO 2003 MODEL YEAR NEW BIN 5 PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2003 MODEL YEAR NEW LEV II LEV PASSENGER CARS.

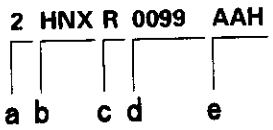
Engine and Evaporative Families:

Engine Family:



a. **Model Year**
   2: 2002
   3: 2003
b. **Manufacturer Subcode**
   HNX: HONDA
c. **Family Type**
   V: LDV
d. **Displacement**
e. **Sequence Characters**
   VBP (H1): 2002 model
   XKC (P5, P6), SKC-Type S (P7, P8): 2003 model

Evaporative Family:



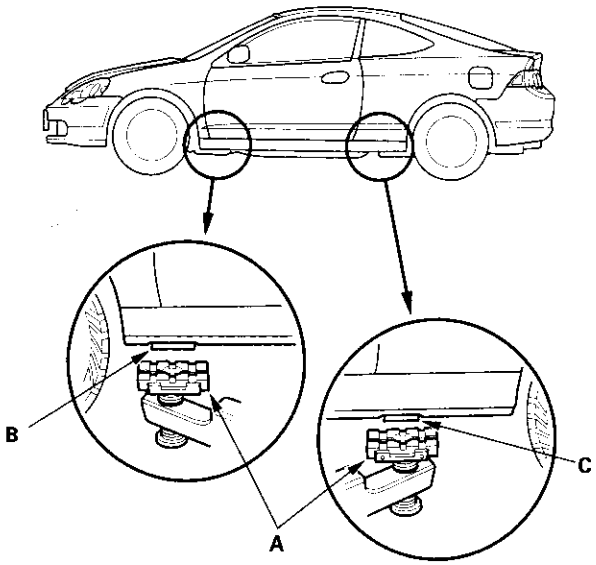
a. **Model Year**
   2: 2002
   2: 2003
b. **Manufacturer Subcode**
   HNX: HONDA
c. **Family Type**
   R: EVAP/ORVR
d. **Canister Work Capacity**
e. **Sequence Characters**
   AAH: 2002 model
   AAA: 2003 model

Lift and Support Points

NOTE: If you are going to remove heavy components such as suspension or the fuel tank from the rear of the vehicle, first support the front of the vehicle with tall safety stands. When substantial weight is removed from the rear of the vehicle, the center of gravity can change and cause the vehicle to tip forward on the hoist.

Frame Hoist

1. Position the hoist lift blocks (A), or safety stands, under the vehicle's front support points (B) and rear support points (C).



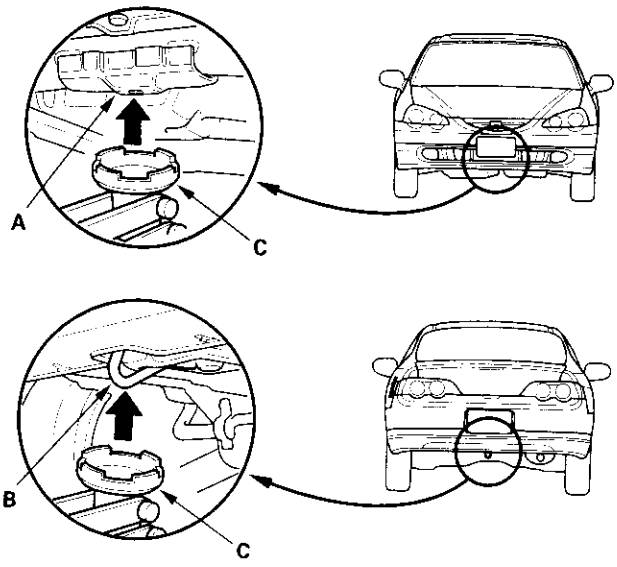
2. Raise the hoist a few inches, and rock the vehicle gently to be sure it is firmly supported.
3. Raise the hoist to full height, and inspect the lift points for solid contact with the lift blocks.

Safety Stands

To support the vehicle on safety stands, use the same support points (B and C) as for a frame hoist. Always use safety stands when working on or under any vehicle that is supported only by a jack.

Floor Jack

1. Set the parking brake.
2. Block the wheels that are not being lifted.
3. When lifting the rear of the vehicle, put the gearshift lever in reverse, or the automatic transmission in [P] position.
4. Position the floor jack under the front jacking bracket (A) or rear jacking bracket (B), center the jacking bracket in the jack lift platform (C), and jack up the vehicle high enough to fit the safety stands under it.



5. Position the safety stands under the support points and adjust them so the vehicle will level.
6. Lower the vehicle onto the stands.

Towing

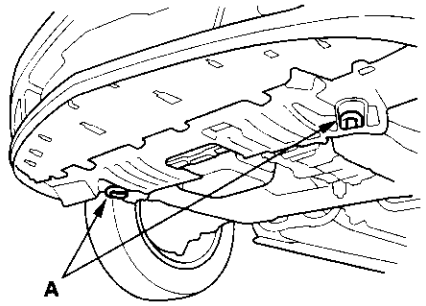
If the vehicle needs to be towed, call a professional towing service. Never tow the vehicle behind another vehicle with just a rope or chain. It is very dangerous.

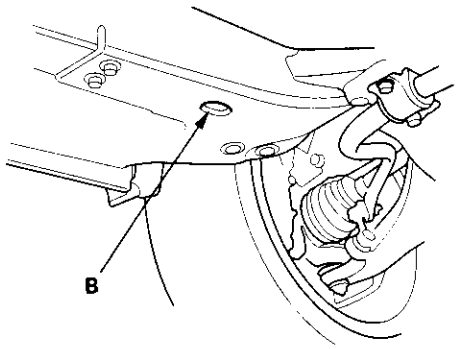
Emergency Towing
There are three popular methods of towing a vehicle.

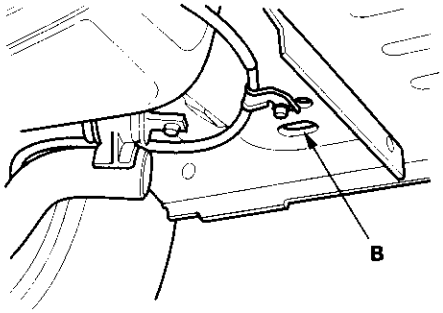
Flat-bed Equipment – The operator loads the vehicle on the back of a truck. This is the best way of transporting the vehicle.

To accommodate flat-bed equipment, the vehicle is equipped with towing hooks (A) and tie down hooks (B).

The towing hook can be used with a winch to pull the vehicle onto the truck, and the tie down hooks slots can be used to secure the vehicle to truck.







Wheel Lift Equipment – The tow truck uses two pivoting arms that go under the tires (front or rear) and lifts them off the ground. The other two wheels remain on the ground. This is an acceptable way of towing the vehicle.

Sling-type Equipment – The tow truck uses metal cables with hooks on the ends. These hooks go around parts of the frame or suspension and the cables lift that end of the vehicle off the ground. The vehicle's suspension and body can be seriously damaged if this method of towing is attempted.

If the vehicle cannot be transported by flat-bed, it should be towed with the front wheels off the ground. If due to damage, the vehicle must be towed with the front wheels on the ground, do the following:

Manual Transmission
- Release the parking brake.
- Shift the transmission in Neutral.

Automatic Transmission
- Release the parking brake.
- Start the engine.
- Shift to [D] position, then [N] position.
- Turn off the engine.

It is best to tow the vehicle no farther than 50 miles (80 km), and keep the speed below 35 mph (55 km/h).

NOTICE
- Improper towing preparation will damage the transmission. Follow the above procedure exactly. If you cannot shift the transmission or start the engine (automatic transmission), the vehicle must be transported on a flat-bed.
- Trying to lift or tow the vehicle by the bumpers will cause serious damage. The bumpers are not designed to support the vehicle's weight.

Parts Marking

To deter vehicle theft, certain major components are marked with the vehicle identification number (VIN). Original parts have self-adhesive labels. Replacement body parts have generic self-adhesive labels. The original engine or transmission VIN plate is transferred to a replacement engine or transmission and attached with break-off bolts.

NOTE: Be careful not to damage the parts marking labels during body repair. Mask the labels before repairing the part.

Specifications

Standards and Service Limits

Design Specifications

Body Specifications

Standards and Service Limits

Engine Electrical

Item	Measurement	Qualification	Standard or New	Service Limit
Ignition coil	Rated voltage		12 V	
	Firing order		1−3−4−2	
Spark plug	Type	K20A3 engine	NGK: IZFR6K11 DENSO: SKJ20DR-M11	
		K20A2 engine	NGK: IFR7G-11K, IFR7G-11KS DENSO: SK22PR-M11, SK22PR-M11S	
	Gap		1.0−1.1 mm (0.039−0.043 in.)	———
Ignition timing		At idle (check the *red* mark)	M/T (in neutral): 8±2° BTDC at 700±50 rpm (K20A2 engine), 650±50 rpm (K20A3 engine)	
			A/T (in N or P): 8±2° BTDC at 650±50 rpm	
Alternator (MITSUBISHI)	Output	At 13.5 V and normal engine temperature	90A	
	Coil (rotor) resistance	At 68 F° (20 C°)	1.84−2.10 Ω	
	Slip ring O.D.		22.7 mm (0.89 in.)	21.7 mm (0.85 in.)
	Brush length		19.0 mm (0.75 in.)	5.0 mm (0.20 in.)
	Brush spring tension		3.3−4.1 N (0.34−0.42 kgf, 0.7−0.9 lbs)	
Alternator (DENSO)	Output	At 13.5 V and normal engine temperature	95A	
	Coil (rotor) resistance	At 68°F (20°C)	2.2−3.0 Ω	
	Slip ring O.D.		14.4 mm (0.57 in.)	14.0 mm (0.55 in.)
	Brush length		10.5 mm (0.41 in.)	1.5 mm (0.06 in.)
	Brush spring tension		2.9−3.5 N (0.30−0.36 kgf, 0.7−0.8 lbs)	
Starter (MITSUBA)	Output		1.2 kW	
	Commutator mica depth		0.4−0.5 mm (0.016−0.020 in.)	0.15 mm (0.006 in.)
	Commutator runout		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
	Commutator O.D.		28.0−28.1 mm (1.102−1.106 in.)	27.5 mm (1.083 in.)
	Brush length		11.1−11.5 mm (0.44−0.45 in.)	4.3 mm (0.17 in.)
Starter (DENSO)	Output		1.1 kW	
	Commutator mica depth		0.50−0.80 mm (0.020−0.031 in.)	0.2 mm (0.008 in.)
	Commutator runout		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
	Commutator O.D.		28.0 mm (1.10 in.)	27.0 mm (1.06 in.)
	Brush length		14.0−14.5 mm (0.55−0.57 in.)	9.0 mm (0.35 in.)
	Brush spring tension		13.7−17.7 N (1.40−1.80 kgf, 3.09−3.97 lbs)	

Engine Assembly

Item	Measurement	Qualification	Standard or New	Service Limit
Compression	Pressure check at 250 rpm with wide open throttle. (See Design Specs for ratio)	Minimum	930 kPa (9.5 kgf/cm², 135 psi)	———
		Maximum variation	200 kPa (2.0 kgf/cm², 28 psi)	———

Cylinder Head

Item	Measurement	Qualification	Standard or New	Service Limit
Head	Warpage		——	0.05 mm (0.002 in.)
	Height		103.95–104.05 mm (4.093–4.096 in.)	——
Camshaft	End play		0.05–0.20 mm (0.002–0.008 in.)	0.4 mm (0.02 in.)
	Camshaft-to-holder oil clearance	No. 1 journal	0.030–0.069 mm (0.001–0.003 in.)	0.15 mm (0.006 in.)
		No. 2, 3, 4, 5 journals	0.060–0.099 mm (0.002–0.004 in.)	0.15 mm (0.006 in.)
	Total runout		0.03 mm (0.001 in.) max.	0.04 mm (0.002 in.)
	Cam lobe height (K20A3 engine)	Intake, primary	33.925 mm (1.3356 in.)	——
		Intake, secondary	29.638 mm (1.1668 in.)	——
		Exhaust	34.092 mm (1.3422 in.)	——
	Cam lobe height (K20A2 engine)	Intake, primary	32.791 mm (1.2910 in.)	——
		Intake, mid	35.534 mm (1.3990 in.)	——
		Intake, secondary	32.678 mm (1.2865 in.)	——
		Exhaust, primary	32.772 mm (1.2902 in.)	——
		Exhaust, mid	34.768 mm (1.3688 in.)	——
		Exhaust, secondary	32.661 mm (1.2859 in.)	——
Valves	Clearance (cold)	Intake	0.21–0.25 mm (0.008–0.010 in.)	——
		Exhaust (K20A3 engine)	0.28–0.32 mm (0.011–0.013 in.)	——
		Exhaust (K20A2 engine)	0.25–0.29 mm (0.010–0.011 in.)	——
	Stem O.D.	Intake	5.475–5.485 mm (0.2156–0.2159 in.)	5.445 mm (0.214 in.)
		Exhaust	5.450–5.460 mm (0.2146–0.2150 in.)	5.42 mm (0.213 in.)
	Stem-to-guide clearance	Intake	0.030–0.055 mm (0.0012–0.0022 in.)	0.08 mm (0.003 in.)
		Exhaust	0.055–0.080 mm (0.0022–0.0031 in.)	0.11 mm (0.004 in.)
Valve seats	Width	Intake	1.25–1.55 mm (0.049–0.061 in.)	2.00 mm (0.079 in.)
		Exhaust	1.25–1.55 mm (0.049–0.061 in.)	2.00 mm (0.079 in.)
	Stem installed height	Intake	40.8–41.0 mm (1.606–1.614 in.)	——
		Exhaust	54.6–54.8 mm (2.150–2.157 in.)	——
Valve springs	Free length (K20A3 engine)	Intake	47.61 mm (1.874 in.)	——
		Exhaust	49.64 mm (1.954 in.) 49.63 mm (1.954 in.)	——
	Free length (K20A2 engine)	Intake	49.77 mm (1.959 in.)	——
		Exhaust	50.39 mm (1.984 in.)	——
Valve guides	I.D.	Intake	5.515–5.530 mm (0.2171–0.2177 in.)	5.55 mm (0.219 in.)
		Exhaust	5.515–5.530 mm (0.2171–0.2177 in.)	5.55 mm (0.219 in.)
	Installed height	Intake	15.2–16.2 mm (0.598–0.638 in.)	——
		Exhaust	15.5–16.5 mm (0.610–0.650 in.)	——
Rocker arms	Arm-to-shaft clearance	Intake	0.025–0.052 mm (0.0010–0.0020 in.)	0.08 mm (0.003 in.)
		Exhaust (K20A3 engine)	0.018–0.056 mm (0.0007–0.0022 in.)	0.08 mm (0.003 in.)
		Exhaust (K20A2 engine)	0.025–0.052 mm (0.0010–0.0020 in.)	0.08 mm (0.003 in.)

Standards and Service Limits

Engine Block

Item	Measurement	Qualification	Standard or New	Service Limit
Block	Warpage of deck		0.07 mm (0.003 in.) max.	0.10 mm (0.004 in.)
	Bore diameter	A or I	86.010–86.020 mm (3.3862–3.3866 in.)	86.070 mm (3.3886 in.)
		B or II	86.000–86.010 mm (3.3858–3.3862 in.)	86.070 mm (3.3886 in.)
	Bore taper		———	0.05 mm (0.002 in.)
	Reboring limit		———	0.25 mm (0.01 in.)
Piston	Skirt O.D. at 11 mm (0.4 in.) from bottom of skirt	No letter or A	85.980–85.990 mm (3.3850–3.3854 in.)	85.930 mm (3.3831 in.)
		Letter B	85.970–85.980 mm (3.3846–3.3850 in.)	85.920 mm (3.3827 in.)
	Clearance in cylinder		0.020–0.040 mm (0.0008–0.0016 in.)	0.05 mm (0.002 in.)
	Ring groove width	Top (K20A3 engine)	1.220–1.230 mm (0.0481–0.0484 in.)	1.25 mm (0.049 in.)
		Top (K20A2 engine)	1.235–1.245 mm (0.0486–0.0490 in.)	1.265 mm (0.0498 in.)
		Second (K20A3 engine)	1.220–1.230 mm (0.0481–0.0484 in.)	1.25 mm (0.049 in.)
		Second (K20A2 engine)	1.230–1.240 mm (0.0484–0.0488 in.)	1.260 mm (0.0496 in.)
		Oil	2.005–2.025 mm (0.0789–0.0797 in.)	2.05 mm (0.081 in.)
Piston ring	Ring-to-groove clearance	Top (K20A3 engine)	0.035–0.060 mm (0.0014–0.0024 in.)	0.13 mm (0.005 in.)
		Top (K20A2 engine)	0.040–0.065 mm (0.0016–0.0026 in.)	0.13 mm (0.005 in.)
		Second (K20A3 engine)	0.030–0.055 mm (0.0012–0.0022 in.)	0.13 mm (0.005 in.)
		Second (K20A2 engine)	0.045–0.070 mm (0.0018–0.0028 in.)	0.13 mm (0.005 in.)
	Ring end gap	Top	0.20–0.35 mm (0.008–0.014 in.)	0.60 mm (0.024 in.)
		Second (K20A3 engine)	0.40–0.55 mm (0.016–0.022 in.)	0.70 mm (0.028 in.)
		Second (K20A2 engine)	0.50–0.65 mm (0.020–0.026 in.)	0.75 mm (0.030 in.)
		Oil (K20A3 engine)	0.25–0.65 mm (0.010–0.026 in.)	0.75 mm (0.030 in.)
		Oil (K20A2 engine)	0.20–0.70 mm (0.008–0.028 in.)	0.80 mm (0.031 in.)
Piston pin	O.D.		21.961–21.965 mm (0.8646–0.8648 in.)	21.953 mm (0.8643 in.)
	Pin-to-piston clearance		−0.005–+0.002 mm (−0.00020–+0.00008 in.)	0.005 mm (0.0008 in.)
Connecting rod	Pin-to-rod clearance		0.005–0.015 mm (0.0002–0.0006 in.)	0.02 mm (0.0008 in.)
	Small-end bore diameter		21.970–21.976 mm (0.8650–0.8652 in.)	———
	Large-end bore diameter	K20A3 engine	48.0 mm (1.89 in.)	———
		K20A2 engine	51.0 mm (2.01 in.)	———
	End play		0.15–0.30 mm (0.006–0.012 in.)	0.40 mm (0.016 in.)

Item	Measurement	Qualification	Standard or New	Service Limit
Crankshaft	Main journal diameter	No. 1 journal No. 2 journal No. 4 journal No. 5 journal (K20A3 engine)	54.984–55.008 mm (2.1648–2.1657 in.)	———
		No. 1 journal No. 2 journal No. 4 journal No. 5 journal (K20A2 engine)	54.980–55.004 mm (2.1646–2.1655 in.)	———
		No. 3 journal (K20A3 engine)	54.976–55.000 mm (2.1644–2.1654 in.)	———
		No. 3 journal (K20A2 engine)	54.974–54.996 mm (2.1644–2.1652 in.)	———
	Rod journal diameter	K20A3 engine	44.976–45.000 mm (1.7707–1.7717 in.)	———
		K20A2 engine	47.976–48.000 mm (1.8888–1.8898 in.)	———
	Rod/main journal taper		0.005 mm (0.0002 in.)	0.010 mm (0.0004 in.)
	Rod/main journal out-of-round		0.005 mm (0.0002 in.)	0.010 mm (0.0004 in.)
	End play		0.10–0.35 mm (0.004–0.014 in.)	0.45 mm (0.018 in.)
	Runout	K20A3 engine	0.03 mm (0.0012 in.) max.	0.04 mm (0.0016 in.)
		K20A2 engine	0.02 mm (0.0008 in.) max.	0.03 mm (0.0012 in.)
Crankshaft bearings	Main bearing-to-journal oil clearance	No. 1 journal No. 2 journal No. 4 journal No. 5 journal	0.017–0.041 mm (0.0007–0.0016 in.)	0.050 mm (0.0020 in.)
		No. 3 journal	0.025–0.049 mm (0.0010–0.0019 in.)	0.055 mm (0.0022 in.)
	Rod bearing clearance	K20A3 engine	0.021–0.049 mm (0.0008–0.0019 in.)	0.060 mm (0.0024 in.)
		K20A2 engine	0.033–0.061 mm (0.0013–0.0024 in.)	0.072 mm (0.0028 in.)

Engine Lubrication

Item	Measurement	Qualification	Standard or New	Service Limit
Engine oil	Capacity	K20A3 engine	5.3 ℓ (5.6 US qt) for engine overhaul 4.2 ℓ (4.4 US qt) for engine, including filter 4.0 ℓ (4.2 US qt) for oil change, without filter	
		K20A2 engine	5.8 ℓ (6.1 US qt) for engine overhaul 4.7 ℓ (5.0 US qt) for engine, including filter 4.5 ℓ (4.8 US qt) for oil change, without filter	
Oil pump	Inner-to-outer rotor clearance		0.02–0.15 mm (0.001–0.006 in.)	0.20 mm (0.008 in.)
	Pump housing-to-outer rotor clearance		0.15–0.21 mm (0.006–0.008 in.)	0.23 mm (0.009 in.)
	Pump housing-to-rotor axial clearance		0.02–0.07 mm (0.001–0.003 in.)	0.12 mm (0.005 in.)
	Relief valve, oil pressure with oil temperature at 176°F (80°C)	At idle	70 kPa (0.7 kgf/cm², 10 psi) min.	
		At 3,000 rpm	300 kPa (3.1 kgf/cm², 44 psi) min.	

Standards and Service Limits

Cooling

Item	Measurement	Qualification	Standard or New	Service Limit
Radiator	Coolant capacity (Includes engine, heater, hoses, and reservoir)	M/T: engine overhaul	6.4 ℓ (6.8 US qt)	
		M/T: coolant change	5.1 ℓ (5.4 US qt)	
		A/T: engine overhaul	6.3 ℓ (6.7 US qt)	
		A/T: coolant change	5.0 ℓ (5.3 US qt)	
Reservoir	Coolant capacity		0.5 ℓ (0.5 US qt)	
Radiator cap	Opening pressure		93 – 123 kPa (0.95 – 1.25 kgf/cm², 14 – 18 psi)	
Thermostat	Opening temperature	Begins to open	169 – 176°F (76 – 80°C)	
		Fully open	194°F (90°C)	
	Valve lift at fully open		8.0 mm (0.31 in.) min.	
Radiator fan switch	Thermoswitch "ON" temperature		196 – 203°F (91 – 95°C)	
	Thermoswitch "OFF" temperature		Subtract 5 – 15°F (3 – 8°C) from actual "ON" temperature	

Fuel and Emissions

Item	Measurement	Qualification	Standard or New	Service Limit
Fuel pressure regulator	Pressure with fuel pressure gauge connected		320 – 370 kPa (3.3 – 3.8 kgf/cm², 47 – 52 psi)	
Fuel tank	Capacity		50 ℓ (13.2 US gal)	
Engine idle	Idle speed with headlights and radiator fan off	K20A2 engine in neutral	700 ± 50 rpm	
		K20A3 engine in neutral (M/T)	650 ± 50 rpm	
		K20A3 engine in [N] or [P] position (A/T)	650 ± 50 rpm	
	Fast idle	K20A2 engine in neutral	1,800 ± 200 rpm	
		K20A3 engine in neutral (M/T)	1,600 ± 200 rpm	
		K20A3 engine in [N] or [P] (A/T)	1,600 ± 200 rpm	

Clutch

Item	Measurement	Qualification	Standard or New	Service Limit
Clutch pedal	Height from the floor		197 mm (7.76 in.)	———
	Stroke		130 – 140 mm (5.1 – 5.5 in.)	———
	Play		10 – 16 mm (0.39 – 0.63 in.)	———
	Disengagement height from the floor		115 mm (4.53 in.) min.	———
Flyweel	Runout on clutch mating surface		0.05 mm (0.002 in.) max.	0.15 mm (0.006 in.)
Clutch disc	Rivet head depth		1.65 – 2.25 mm (0.065 – 0.089 in.) min.	0.7 mm (0.03 in.)
	Thickness		8.3 – 8.9 mm (0.33 – 0.35 in.)	6.0 mm (0.24 in.)
Pressure plate	Warpage		0.03 mm (0.001 in.) max.	0.15 mm (0.001 in.)
	Height if diaphragm spring fingers	Measured with special tool and feeler gauge	0.6 mm (0.02 in.) max.	0.8 mm (0.03 in.)

Standards and Service Limits

Manual Transmission and M/T Differential

Item	Measurement	Qualification	Standard or New	Service Limit
Transmission fluid	Capacity		For fluid change: 1.5 ℓ (1.6 US qt)	
			For overhaul: 1.7 ℓ (1.8 US qt)	
Mainshaft	End play		0.11 – 0.17 mm (0.004 – 0.007 in.)	Adjust
	Diameter of bushing surface		20.80 – 20.85 mm (0.819 – 0.821 in.)	20.75 mm (0.817 in.)
	Diameter of distance collar		31.984 – 32.000 mm (1.2594 – 1.2598 in.)	31.93 mm (1.257 in.)
	Diameter of ball bearing contact area (clutch housing side)		27.977 – 27.990 mm (1.1015 – 1.1020 in.)	27.92 mm (1.099 in.)
	Diameter of needle bearing contact area		38.984 – 39.000 mm (1.5348 – 1.5354 in.)	38.93 mm (1.533 in.)
	Diameter of ball bearing contact area (transmission housing side)		27.987 – 28.000 mm (1.1019 – 1.1024 in.)	27.93 mm (1.100 in.)
	Runout		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
Mainshaft 3rd, 4th and 5th gears	I.D.		44.009 – 44.025 mm (1.7326 – 1.7333 in.)	44.08 mm (1.735 in.)
	End play		0.06 – 0.16 mm (0.002 – 0.006 in.)	0.25 mm (0.010 in.)
	Thickness		23.92 – 23.97 mm (0.981 – 0.944 in.)	23.80 mm (0.937 in.)
Mainshaft 6th gear	I.D.		40.009 – 40.025 mm (1.5752 – 1.5758 in.)	40.08 mm (1.578 in.)
	End play		0.06 – 0.16 mm (0.002 – 0.006 in.)	0.25 mm (0.010 in.)
	Thickness		23.92 – 23.97 mm (0.981 – 0.944 in.)	23.80 mm (0.937 in.)
Countershaft	Diameter of needle bearing contact area (clutch housing side)		40.000 – 40.015 mm (1.5748 – 1.5754 in.)	39.95 mm (1.573 in.)
	Diameter of distance collar contact area		39.937 – 39.950 mm (1.5723 – 1.5728 in.)	39.883 mm (1.5702 in.)
	Diameter of ball bearing contact area (transmission housing side)		30.020 – 30.033 mm (1.1819 – 1.1824 in.)	29.97 mm (1.180 in.)
	Run out		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
	35 mm shim-to-bearing inner race clearance		0.04 – 0.10 mm (0.0016 – 0.0039 in.)	Adjust
Countershaft 1st gear	I.D.		52.010 – 52.029 mm (2.0476 – 2.0484 in.)	52.08 mm (2.050 in.)
	End play		0.06 – 0.16 mm (0.002 – 0.006 in.)	0.25 mm (0.010 in.)
	Thickness		22.92 – 22.97 mm (0.902 – 0.904 in.)	22.87 mm (0.900 in.)
Countershaft 2nd gear	I.D.		52.010 – 52.029 mm (2.0476 – 2.0484 in.)	52.08 mm (2.050 in.)
	End play		0.06 – 0.16 mm (0.002 – 0.006 in.)	0.25 mm (0.010 in.)
	Thickness		27.92 – 27.97 mm (1.099 – 1.101 in.)	27.87 mm (1.097 in.)
Countershaft 1st gear distance collar	I.D.		39.95 – 39.96 mm (1.5728 – 1.5732 in.)	39.97 mm (1.574 in.)
	O.D.		46.989 – 47.000 mm (1.8499 – 1.8504 in.)	46.94 mm (1.848 in.)
	Length		23.03 – 23.08 mm (0.907 – 0.909 in.)	— —
Countershaft 2nd gear distance collar	I.D.		39.95 – 39.96 mm (1.5728 – 1.5732 in.)	39.97 mm (1.574 in.)
	O.D.		46.989 – 47.000 mm (1.8499 – 1.8504 in.)	46.94 mm (1.848 in.)
	Length		28.03 – 28.08 mm (1.104 – 1.106 in.)	— —