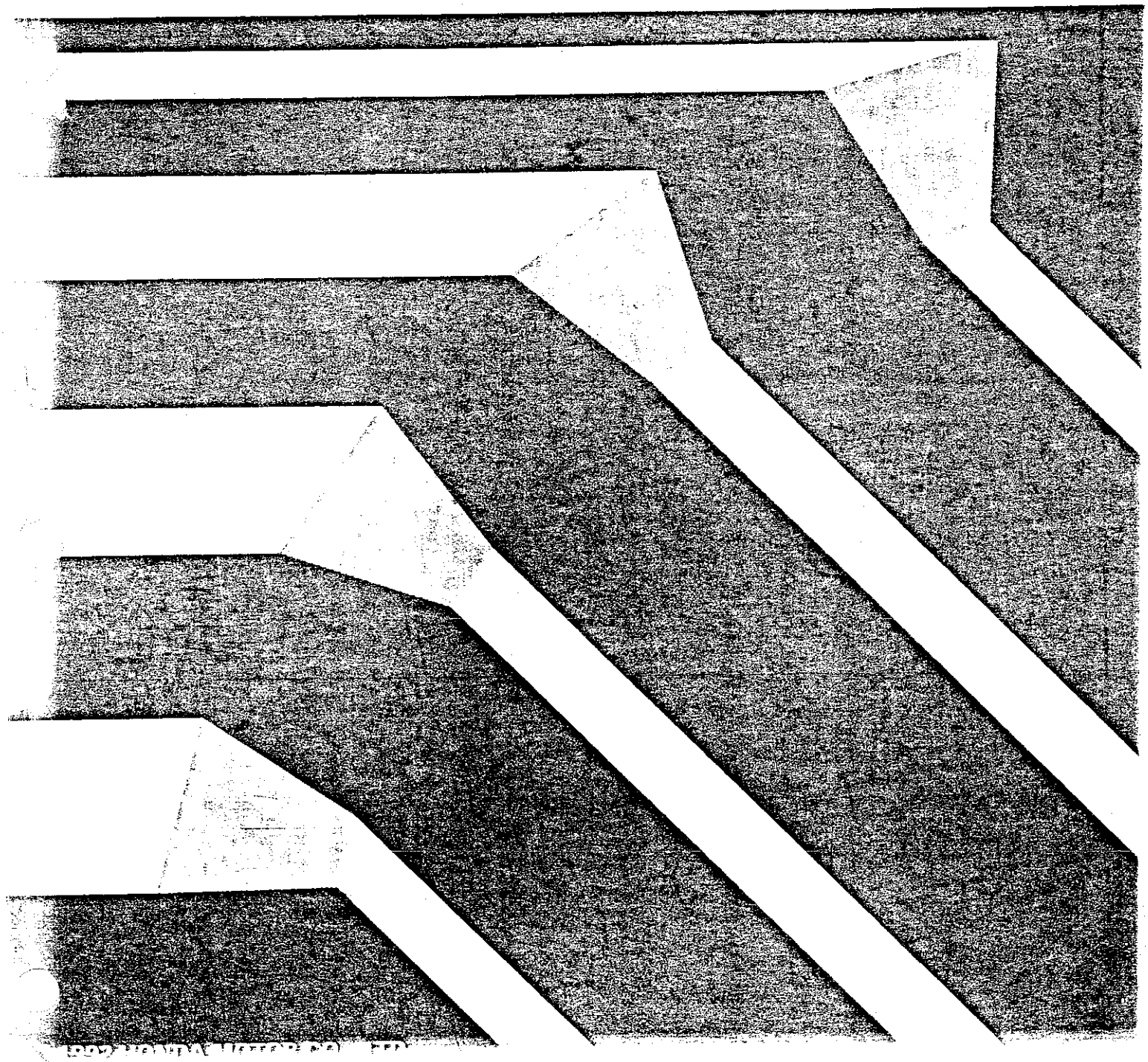
SHOP MANUAL

HONDA CRX

MAINTENANCE, REPAIR and CONSTRUCTION 92



INTRODUCTION

How to Use This Manual

The 92 CRX Shop Manual (Maintenance, Repair and Construction) 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. 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 contains warnings and cautions against some specific service methods which could cause PERSONAL INJURY, 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 every 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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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 Conditioner
Electrical

General Information

Chassis and Engine Number 1-2
Identification Number Locations 1-3
Label Locations 1-4
Lift and Support Points 1-5
Service Precautions 1-8

Chassis and Engine Numbers

European Model

Vehicle Identification Number

JHMEG21700S000001

Manufacturer, Make and Type of Vehicle
- JHM: HONDA MOTOR CO., LTD, JAPAN. HONDA Passenger Car

Body Type
- EG2: CRX 1600/2-Door Coupe with B16A2 engine
- EH6: CRX 1600/2-Door Coupe with D16Z6 or D16Z7 engine

Body and Transmission Type
- 1: 2-Door Coupe/5-speed Manual
- 2: 2-Door Coupe/4-speed Automatic

Vehicle Grade
- 6: ESi (EH6: KG/KF/KS/KE)
- 7: VTi (EG2: KG/KF/KE)
- 9: VTi with power roof (EG2: KG/KF/KE)

Fixed Code

Auxiliary Number

Factory Code
- S: Suzuka Factory in JAPAN

Model Year
- 0: 1992

Serial Number

Engine Number

B16A2-1000001

Engine Type
- B16A2: 1600 DOHC 16-valves Multi-point Fuel-injection VTEC Engine with TWC
- D16Z6: 1600 SOHC 16-valves Multi-point Fuel-injection VTEC Engine with TWC
- D16Z7: 1600 SOHC 16-valves Multi-point Fuel-injection VTEC Engine with TWC for KG (Austria)

Serial number
- B16A2: 1000001 ~
- D16Z6: 1700001 ~
- D16Z7: 1000001 ~

Transmission Number

S20-1000001

Transmission Type
- S20: Manual transmission for except B16A2 engine
- Y21: Manual transmission for B16A2 engine
- M24: Automatic transmission

Serial Number

Except European Model

Vehicle Identification Number

JHMEG21800S000001

Manufacturer, Make and Type of Vehicle
- JHM: HONDA MOTOR CO., LTD, JAPAN HONDA Passenger Car

Body Type
- EG2: CRX 1600/2-Door Coupe with B16A2 engine
- EH6: CRX 1600/2-Door Coupe with D16A9 engine

Body and Transmission Type
- 1: 2-Door Coupe/5-speed Manual

Vehicle Grade
- 7: Si with power roof (EH6: KP/KT/KY)
- 8: SiR (EG2: KQ)
- 9: SiR with power roof (EG2: KQ)

Fixed Code

Auxiliary Number

Factory Code
- S: Suzuka Factory in JAPAN

Model Year
- 0: 1992

Serial Number

Engine Number

B16A2-1000001

Engine Type
- B16A2: 1600 DOHC 16-valves Multi-point Fuel-injection VTEC Engine with TWC for KQ
- D16A9: 1600 DOHC 16-valves Multi-point Fuel-injection Engine without TWC for KP/KT/KY

Serial number
- B16A2: 1000001 ~
- D16A9: 2000001 ~

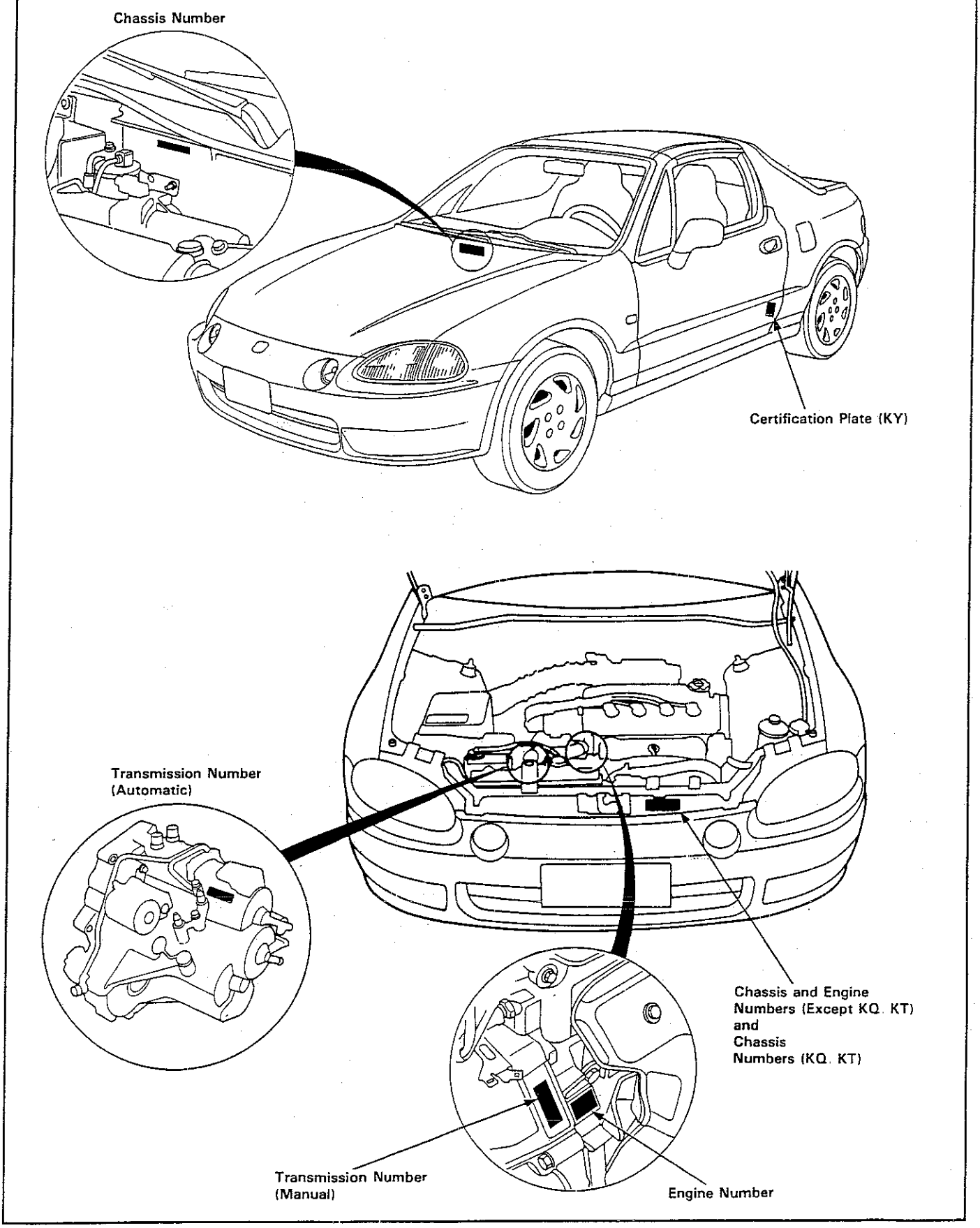
Manual Transmission Number

S20-1000001

Transmission Type
- S20: For D16A9 engine
- Y21: For B16A2 engine

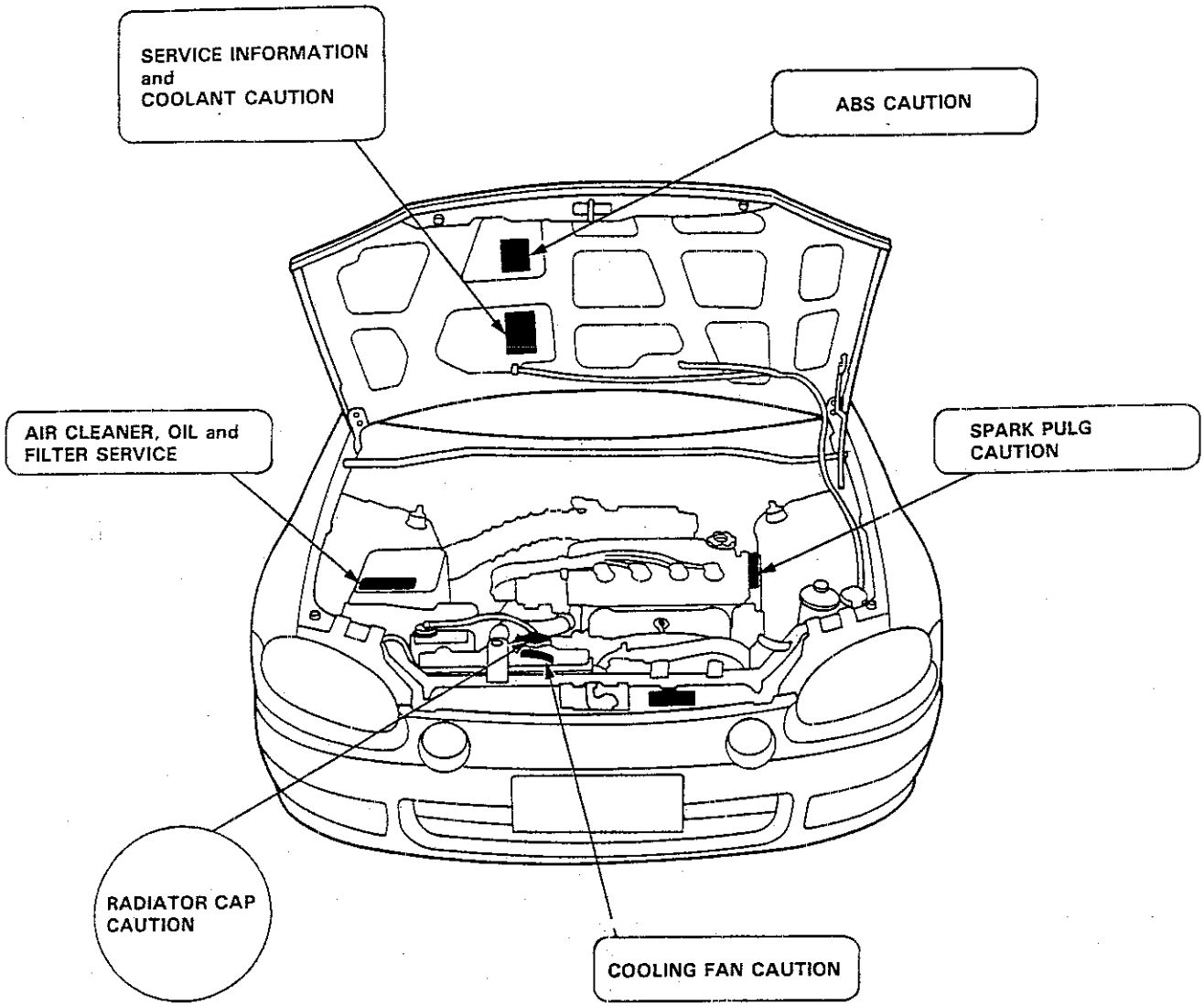
Serial Number

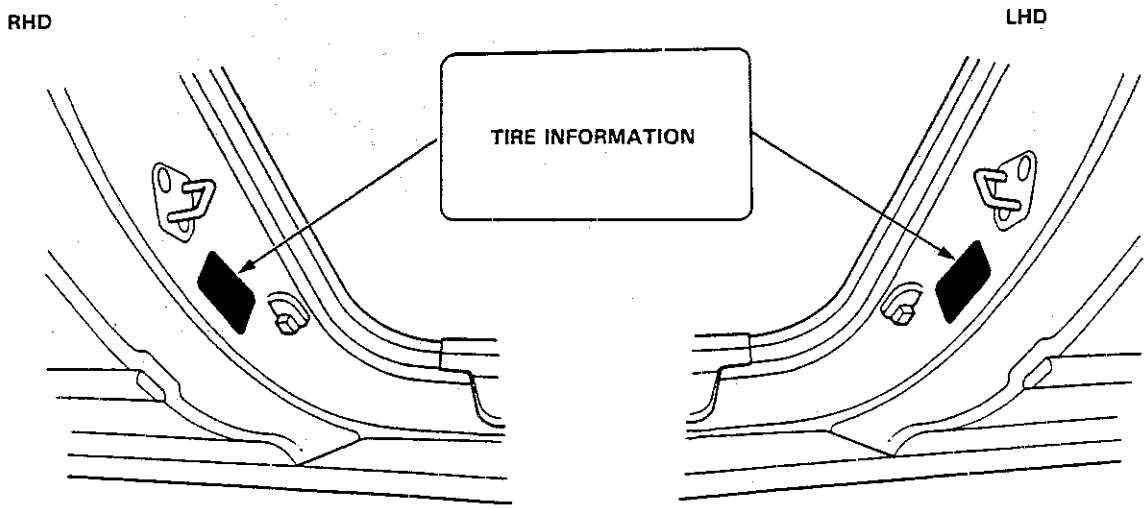
Identification Number Locations



Label Locations

Warning/Caution Labels





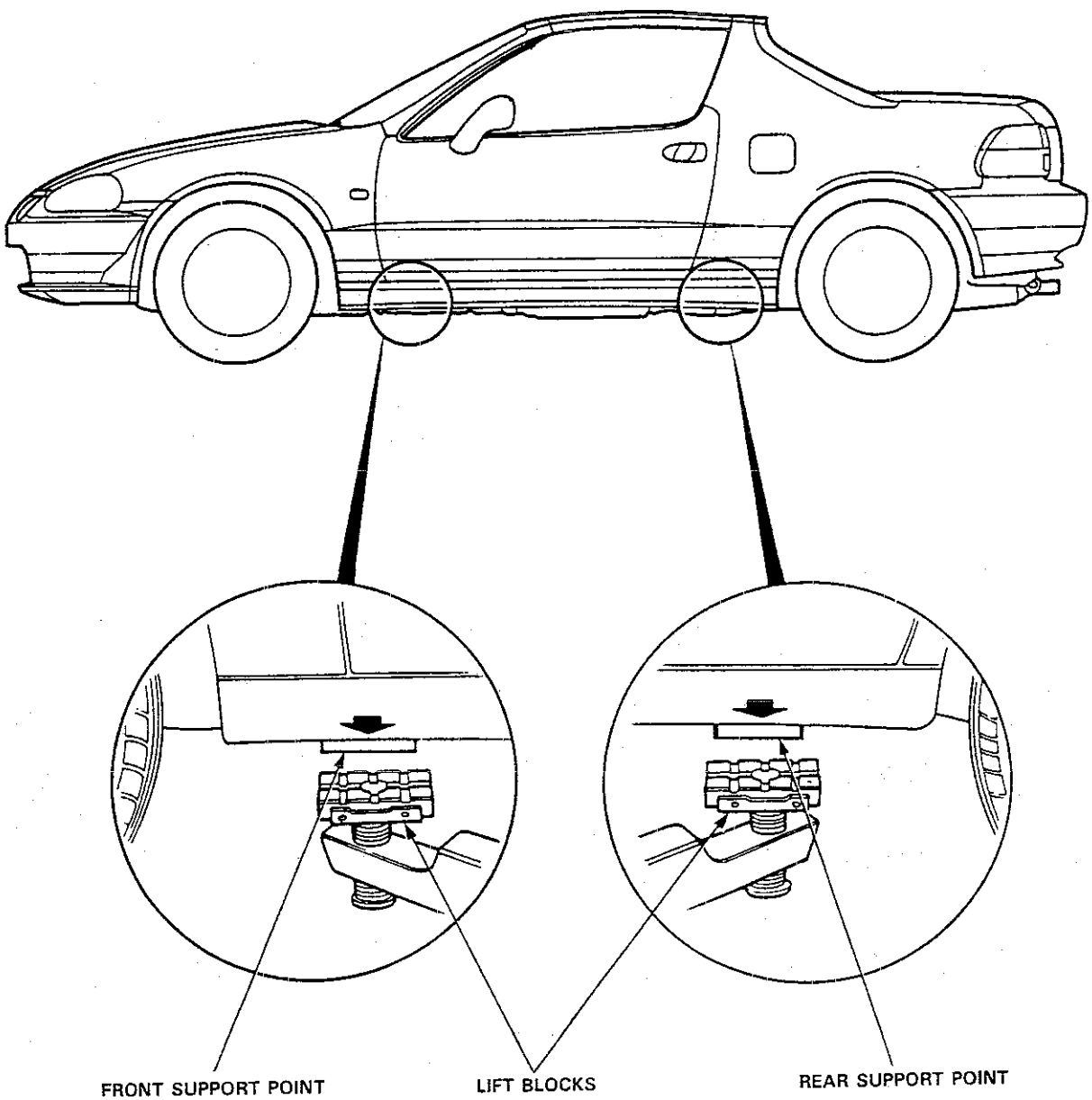
Lift and Support Points

Hoist

⚠ WARNING **When heavy rear components such as suspension, fuel tank, spare tire and hatch are to be removed, place additional weight in the luggage area 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 weighs approximately 14 kg (30 lbs), 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 centimeters (inches) 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.



Lift and Support Points

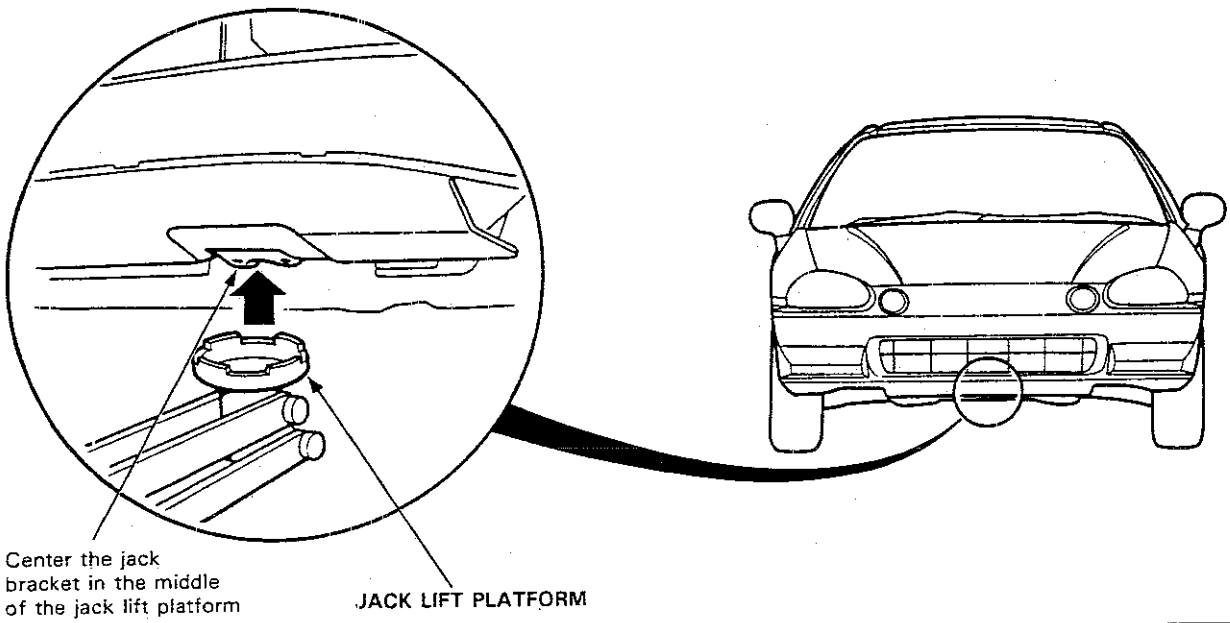
Floor Jack

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 in PARK).
3. Raise the car high enough to insert the safety stands.
4. Adjust and place the safety stands as shown on page 1-10 so the car will be approximately level, then lower the car onto them.

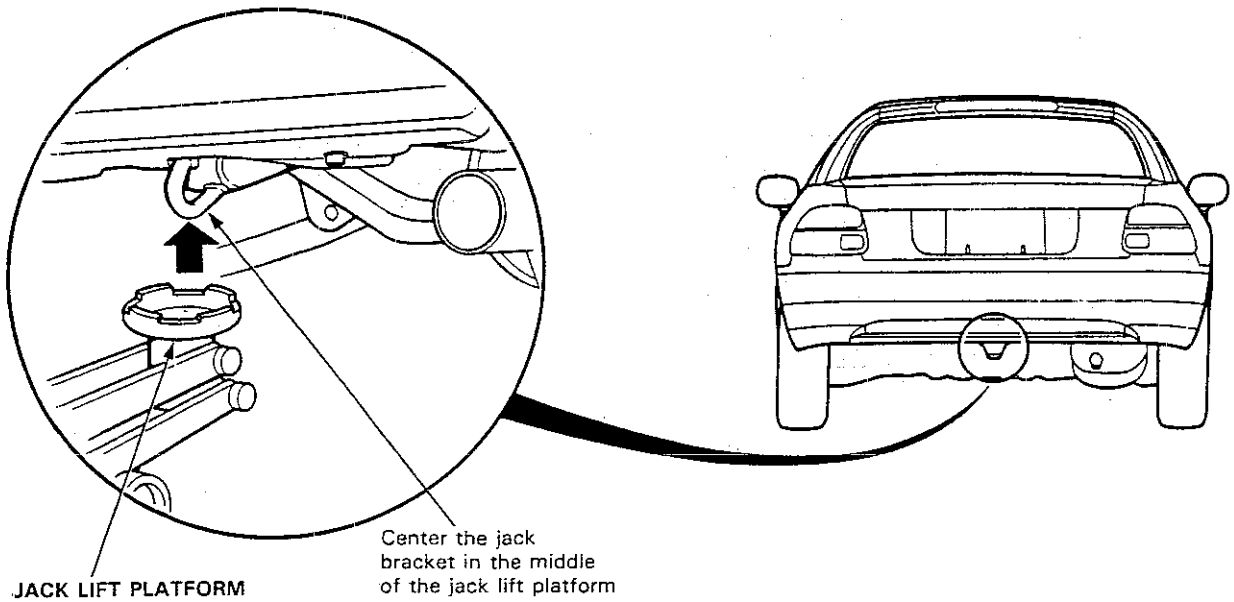
⚠ WARNING

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

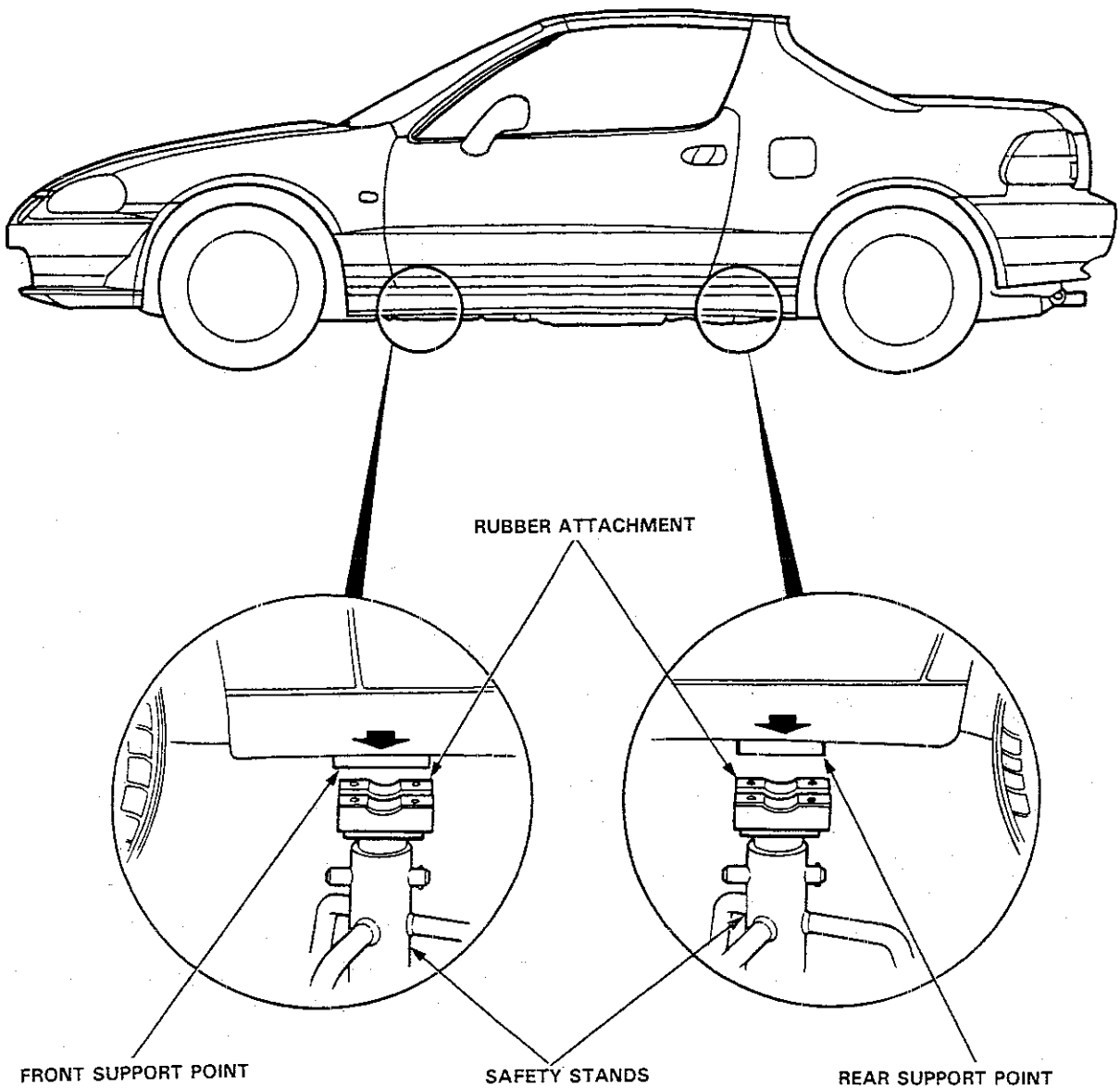
Front



Rear



Safety Stands



Towing

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

Emergency Towing
There are three popular methods of towing a car:

Flat-bed Equipment—The operator loads the car on the back of a truck. This is the best way of towing the car.

Wheel Lift Equipment—The tow truck uses two pivoting arms which go under the tires (front or rear) and lifts them off the ground. The other two wheels remain on the ground.

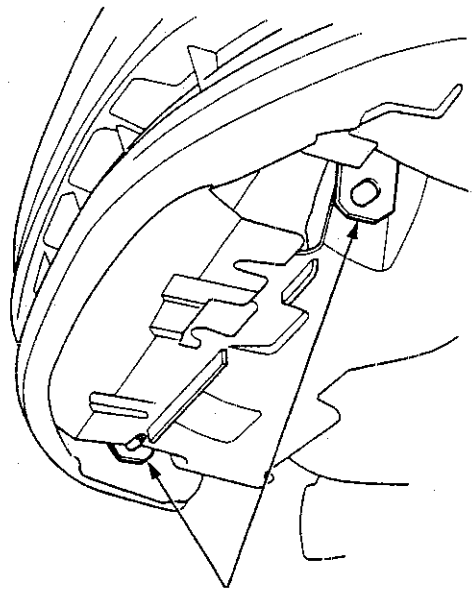
Sling-type Equipment—The tow truck uses metal cables with hooks on the ends. These hooks go around parts of the frame or suspension and the cables lift that end of the car off the ground. The car's suspension and body can be seriously damaged if this method of towing is attempted.

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

- Release the parking brake.
- Shift the transmission to Neutral (5-speed manual). If the car has an automatic transmission: Start the engine. Shift to D_4, then to Neutral. Shut the engine off.
  NOTICE: Improper towing preparation will damage the transmission. Follow the above procedure exactly. If you can not shift the transmission or start the engine (automatic transmission), the car must be transported on a flat-bed.
- It is best to tow the car no farther than 80 km (50 miles), and keep the speed below 55 km/h (35 mph).

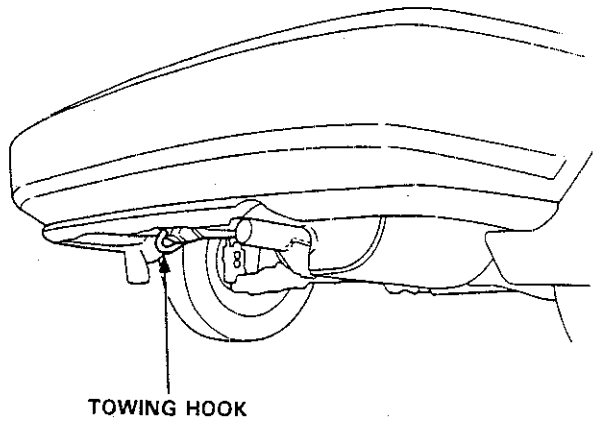
NOTICE: Trying to lift or tow the car by the bumpers will cause serious damge. The bumpers are not designed to support the car's weight.

Front:



TOWING HOOKS

Rear:



TOWING HOOK

CAUTION: Do not open/close the power roof while driving.

NOTE:

- Do not try to open/close the power roof when it is iced by snow or at extreme low temperature
- Do not open/close the wet power roof after rain or snow or cleaning with water
- Do not open/close the power roof when the car is raised by using the safety stands

Abbreviations

List of automotive abbreviations which may be used in shop manual.

A/C	Air Conditioning. Air conditioner
ACG	Alternator
ABS	Anti-lock Brake System
A/T	Automatic Transmission
ATF	Automatic Transmission Fluid
A/F	Air Fuel Ratio
AMP	Ampere (s)
ANT	Antenna
ASSY	Assembly
AUX	Auxiliary
APPROX	Approximately
ATDC	After Top Dead Center
AUTO	Automatic
ATT	Attachment
ACL	Air Cleaner
API	American Petroleum Institute
BARO	Barometric
BAT	Battery
BTDC	Before Top Dead Center
BDC	Bottom Dead Center
CKP	Crankshaft Position
CYP	Cylinder Position
CAT	Catalytic Converter
CO	Carbon Monoxide
CYL	Cylinder
CPC	Clutch Pressure Control
CARB	Carburetor
COMP	Complete
CPU	Central Processing Unit
CHG	Charge
DI	Distributor Ignition
DLC	Data Link Connector
DTC	Diagnotic Trouble Code
DIFF	Differential
DOHC	Dual Overhead Camshaft
EVAP	Evaporative
EGR	Exhaust Gas Recirculation
ECM	Engine Control Module
ECT	Engine Coolant Temperature
EX	Exhaust
ELD	Electric Load Detector
EFI	Electronic Fuel Injection
EPS	Electronic Power Steering
F	Front
FP	Fuel Pump
FWD	Front Wheel Drive
FR	Front Right
FL	Front Left
FSR	Fail Safe Relay
GAL	Gallon
GND	Ground
H/B	Hatchback
HO2S	Heated Oxygen Sensor
HC	Hydrocarbons
IAC	Idle Air Control
ICM	Ignition Control Module
IAT	Intake Air Temperature
IN	Intake
IG, IGN	Ignition
ID	Identification Inside Diameter
INJ	Injection
INT	Intermittent
KS	Knock Sensor
L	Left
LH	Left Handle
LHD	Left Handle Drive
L/C	Lock-up Clutch
LSD	Limited Slip Diff
LF	Left Front
LR	Left Rear
L-4	In-line four cylinder (engine)
LED	Light Emitting Diode

M/S	Manual Steering
MAP	Manifold Absolute Pressure
MIL	Malfunction Indicator Light
M/T	Manual Transmission
MCK	Motor Check
M/S	Manual Steering
MAX	Maximum
MIN	Minimum
NOx	Nitorogen Oxides of
O2S	Oxygen Sensor
OBD	ON Boad Diagnostic
OD	Outside Diameter
PAIR	Pulsed Secondary Air Injection
PSP	Power Steering Pressure
PCV	Positive Crankcase Ventilation
	Proportioning Control Valve
P/S	Power Steering
PGM-FI	Programed-fuel Injection
PRI	Primary
P/N	Parts Number
PL	Pilot Light
PMR	Pump Motor Relay
PSW	Pressure Switch
Qty	Quantity
R	Right
RR	Rear Right
RHD	Right Handle Drive
REF	Reference
RL	Rear Left
RON	Research Octane Number
SAE	Society of Automotive Engineers
SOHC	Single Overhead Camshaft
SOL	Solenoid
SPEC	Specification
SRS	Supplemental Restraint System
STD	Standard
SW	Switch
SCS	Service Check Signal
SEC	Second
	Secondary
T	Torque
TCM	Transmission Control Module
TWC	Three Way Catalytic Converter
TDC	Top Dead Center
TB	Throttle Body
TP	Throttle Position
TC	Torque Converter
T/B	Timing Belt
T/N	Tool Number
TCS	Traction Control System
VSS	Vehicle Speed Sensor
VTEC	Variable Valve Timing & Valve Lift
	Electronic Control
VC	Viscous Coupling
VIN	Vehicle Identification Number
W	With
W/O	Without
WOT	Wide Open Trottle
2WD	Two Wheel Drive
4WD	Four Wheel Drive
2WS	Two Wheel Steering
4WS	Four Wheel Steering
P	Park
R	Reverse
N	Neutral
D4	Drive (1st through 4th gear)
D3	Drive (1st through 3rd gear)
2	Second
1	First
1ST	Low (gear)
2ND	Second (gear)
3RD	Third (gear)
4TH	Fourth (gear)
5TH	Fifth (gear)

Special Tools

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

Specifications

Standards and Service Limits 3-2
Design Specifications 3-22
Body Specifications 3-27

Standards and Service Limits

Cylinder Head/Valve Train — Section 6
D16Z6, D16Z7 Engine

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Compression	250 min^{-1} (rpm) and wide open throttle kPa (kg/cm^2, psi)	Nominal	1,300 (13.0,184)	
		Minimum	1,150 (11.5,166)	
		Maximum variation	200 (2.0,28)	
Cylinder head	Warpage		—	0.05 (0.002)
	Height		92.95–93.05 (3.659–3.663)	—
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 (0.0012) max	0.06 (0.0024)
	Cam lobe height	IN Primary	35.900 (1.4134)	—
		Mid	38.107 (1.5003)	—
		Secondary	36.195 (1.4250)	—
		EX	38.008 (1.4961)	—
Valve	Valve clearance	IN	0.18–0.22 (0.007–0.009)	—
		EX	0.23–0.27 (0.009–0.011)	—
	Valve stem O.D	IN	5.48–5.49 (0.2157–0.2161)	5.45 (0.2146)
		EX	5.45–5.46 (0.2146–0.2150)	5.42 (0.2134)
	Stem-to-guide clearance	IN	0.02–0.05 (0.0008–0.0020)	0.08 (0.003)
		EX	0.05–0.08 (0.002–0.003)	0.12 (0.005)
Valve seat	Width	IN	0.85–1.15 (0.033–0.045)	1.6 (0.063)
		EX	1.25–1.55 (0.049–0.061)	2.0 (0.079)
	Stem installed height	IN	53.165–53.635 (2.0931–2.1116)	53.885 (2.1215)
		EX	53.165–53.635 (2.0931–2.1116)	53.885 (2.1215)
Valve spring	Free length	IN	57.97 (2.282)	—
		EX	58.41 (2.300)	—
Valve guide	I.D.	IN	5.51–5.53 (0.217–0.218)	5.60 (0.220)
		EX	5.51–5.53 (0.217–0.218)	5.60 (0.220)
	Installed height	IN	17.85–18.35 (0.703–0.722)	—
		EX	18.65–19.15 (0.734–0.754)	—
Rocker arm	Arm-to-shaft clearance	IN	0.017–0.050 (0.0007–0.0020)	0.08 (0.003)
		EX	0.018–0.054 (0.0007–0.0021)	0.08 (0.003)

Unit of length: mm (in)

Cylinder Head/Valve Train — Section 6
D16A9 Engine

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Compression	250 min^{-1} (rpm) and wide open throttle kPa (kg/cm^2, psi)	Nominal	1,350 (13 5,192)	
		Minimum	950 (9.5,135)	
		Maximum variation	200 (2.0,28)	
Cylinder head	Warpage		—	0.05 (0.002)
	Height		131.95–132.05 (5.195–5.199)	—
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 (0.0012) max.	0.06 (0.0024)
	Cam lobe height	IN	33.021 (1.3000)	—
		EX	32.382 (1.2749)	—
Valve	Valve clearance	IN	0.13–0.17 (0.005–0.007)*	—
		EX	0.15–0.19 (0.006–0.008)*	—
	Valve stem O.D.	IN	6.58–6.59 (0.2591–0.2594)	6.55 (0.2579)
		EX	6.55–6.56 (0.2579–0.2583)	6.52 (0.2567)
	Stem-to-guide clearance	IN	0.02–0.05 (0.0008–0.0020)	0.08 (0.003)
		EX	0.05–0.08 (0.002–0.003)	0.11 (0.004)
Valve seat	Width	IN	1.25–1.55 (0.049–0.061)	2.0 (0.079)
		EX	1.25–1.55 (0.049–0.061)	2.0 (0.079)
	Stem installed height	IN	45.545–46.015 (1.793–1.812)	46.265 (1.821)
		EX	44.735–45.205 (1.761–1.780)	45.455 (1.790)
Valve spring	Free length	IN	47.49 (1.870)	—
		EX	46.89 (1.846)	—
	Squareness		—	1.6 (0.063)
Valve guide	I.D.	IN and EX	6.61–6.63 (0.260–0.261)	6.65 (0.262)
	Installed height	IN	19.15–19.65 (0.754–0.774)	—
		EX	18.75–19.25 (0.738–0.758)	—

*Measuring point between camshaft and rocker arm

Standards and Service Limits

Cylinder Head/Valve Train — Section 6
B16A2 Engine

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Compression	250 min⁻¹ (rpm) and wide open throttle kPa (kg/cm², psi)	Nominal Minimum Maximum variation	1,300 (13.0,184) 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 Camshaft-to-holder oil clearance Total runout Cam lobe height	 IN Primary Mid Secondary EX Primary Mid Secondary	0.05—0.15 (0.002—0 006) 0.050—0 089 (0.002—0.004) 0.03 (0.0012) max. 33.088 (1.3027) 36.267 (1 4278) 34.978 (1.3774) 32 785 (1.2907) 35 720 (1.4063) 34.691 (1.3658)	0.5 (0.02) 0.15 (0.006) 0.06 (0 0024) — — — — — —
Valve	Valve clearance Valve stem O.D. Stem-to-guide clearance	IN EX IN EX IN EX	0.15—0.19 (0.006—0.007)* 0.17—0.21 (0.007—0.008)* 5.475—5.485 (0.2156—0 2159) 5 450—5.460 (0 2146—0 2150) 0 025—0.055 (0.0010—0.0022) 0.05—0.08 (0.002—0.003)	— — 5.445 (0 2144) 5 420 (0 2134) 0.08 (0.003) 0.11 (0.004)
Valve seat	Width Stem installed height	IN EX IN EX	1.25—1 55 (0.049—0.061) 1.25—1 55 (0.049—0 061) 37.465—37.935 (1.4750—1.4935) 37.165—37.635 (1.4632—1.4817)	2.0 (0.079) 2.0 (0.079) 38.185 (1 5033) 37.885 (1.4915)
Valve spring	Free length	IN OUTER INNER EX	40.92 (1.611) *1 40.91 (1 610) *2 36.71 (1.443) 41 96 (1.652)*1 41.94 (1.651)*2	— — — — —
Valve guide	I.D. Installed height	IN EX IN EX	5.51—5.53 (0.217—0.218) 5 51—5.53 (0.217—0.218) 12.55—13.05 (0.494—0.514) 12.55—13.05 (0.494—0.514)	5.55 (0.219) 5.55 (0.219) — —
Rocker arm	Arm-to-shaft clearance	IN EX	0.025—0.052 (0.0010—0 0020) 0.025—0.052 (0.0010—0.0020)	0.08 (0.003) 0.08 (0.003)

*1: NIPPON HATSUJO manufacture *2: CHUO HATSUJO manufacture
*Measuring point between camshaft and rocker arm

Unit of length: mm (in)

Engine Block — Section 7
D16A9, D16Z6, D16Z7 Engine

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Cylinder block	Wapage of deck surface		0.07 (0.003) max	0.10 (0.004)
	Bore diameter	X	75.000—75.020 (2.9528—2.9535)	75.07 (2.9555)
		Y	75.000—75.015 (2.9528—2.9533)	75.07 (2.9555)
	Bore taper		——	0.05 (0.002)
	Reboring limit		——	0.5 (0.02)
Piston	Skirt O.D.	At 15 mm (0.59 in) from bottom of shirt	74.98—74.99 (2.9520—2.9524)	74.97 (2.9516)
	Clearance in cylinder		0.01—0.04 (0.0004—0.0016)	0.05 (0.002)
	Groove width (for ring)	Top	1.22—1.23 (0.0480—0.0484)	1.25 (0.049)
		Second	1.52—1.53 (0.0598—0.0602)	1.55 (0.061)
		Oil	2.805—2.820 (0.1104—0.1110)	2.85 (0.112)
Piston ring	Ring-to-groove clearance	Top	0.030—0.060 (0.0012—0.0024)*1	0.13 (0.005)
			0.030—0.055 (0.0012—0.0022)*2	0.13 (0.005)
		Second	0.030—0.055 (0.0012—0.0022)	0.13 (0.005)
	Ring end gap	Top	0.15—0.30 (0.006—0.012)	0.60 (0.024)
		Second	0.30—0.45 (0.012—0.018)	0.70 (0.028)
		Oil	0.20—0.80 (0.008—0.031)*1	0.90 (0.035)
		D16Z6, D16Z7	0.20—0.50 (0.008—0.020)*2	0.80 (0.031)
		D16A9	0.20—0.70 (0.008—0.028)*2	
Piston Pin	O.D.		18.994—19.000 (0.7478—0.7480)	——
	Pin-to-piston clearance		0.010—0.022 (0.0004—0.0009)	——
Connecting rod	Pin-to-rod interference		0.014—0.040 (0.0006—0.0016)	——
	Small end bore diameter		18.96—18.98 (0.746—0.747)	——
	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)
	Small end bore-to-large end bore parallelism		0.12 (0.005)/100 max.	0.15 (0.006/100)
Crankshaft	Main journal diameter		54.976—55.000 (2.1644—2.1654)	——
	Rod journal diameter		44.976—45.000 (1.771—1.772)	——
	Taper		0.0025 (0.0001) max	0.010 (0.0004)
	Out-of round		0.0025 (0.0001) max.	0.010 (0.0004)
	End play		0.10—0.35 (0.004—0.014)	0.45 (0.018)
	Total runout		0.03 (0.0012) max.	0.06 (0.0024)
Bearings	Main bearing-to-journal oil clearance			
		No. 1 and 5 journals	0.018—0.036 (0.0007—0.0014)	0.050 (0.0020)
		No. 2, 3 and 4 journals	0.024—0.042 (0.0010—0.0017)	0.050 (0.0020)
	Rod bearing-to-journal oil clearance		0.020—0.038 (0.0008—0.0014)	0.050 (0.0020)

*1: RIKEN manufacture
*2: TEIKOKU PISTON RING manufacture

Standards and Service Limits

Engine Block — Section 7
B16A2 Engine

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Cylinder block	Warpage of deck surface		0.05 (0.0020)	0.08 (0.0031)
	Bore diameter	X	81.000–81.020 (3.1890–3.1898)	81.070 (3.1917)
		Y	81.000–81.015 (3.1890–3.1896)	
	Bore taper		——	0.05 (0.002)
	Reboring limit		——	0.25 (0.010)
Piston	Skirt O.D. At 15 mm (0.59 in) from bottom of skirt		80.98–80.99 (3.1882–3.1886)	80.97 (3.1879)
	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)	1.060 (0.0417)
		2nd	1.230–1.240 (0.0484–0.0488)	1.260 (0.0496)
		Oil	2.805–2.820 (0.1104–0.1110)	2.840 (0.1118)
Piston ring	Piston-to-ring clearance	Top	0.045–0.070 (0.0018–0.0028)	0.130 (0.0051)
		2nd	0.040–0.065 (0.0015–0.0026)	0.130 (0.0051)
	Ring end gap	Top	0.20–0.35 (0.008–0.014)	0.60 (0.024)
		2nd	0.40–0.55 (0.016–0.022)	0.70 (0.028)
		Oil	0.20–0.50 (0.008–0.020)	0.80 (0.031)
Piston pin	Diameter		20.994–21.000 (0.8265–0.8268)	——
	Pin-to-piston 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			
	No. 1, 2, 4 and 5 journals		54.976–55.000 (2.1644–2.1654)	——
	No. 3 journal		54.970–54.994 (2.1642–2.1651)	——
	Rod journal diameter		44.976–45.000 (1.7707–1.7717)	——
	Journal taper		0.005 (0.00020) max.	0.010 (0.0004)
	Journal out of round		0.004 (0.00016) max.	0.006 (0.00024)
	End play		0.10–0.35 (0.004–0.014)	0.45 (0.018)
	Total Runout		0.03 (0.0012) max.	0.06 (0.0024)
Bearing	Main bearing-to-journal oil clearance			
	No. 1, 2, 4 and 5 journals		0.024–0.042 (0.0009–0.0017)	0.050 (0.0020)
	No. 3 journal		0.030–0.048 (0.0012–0.0019)	0.060 (0.0024)
	Rod bearing-to-journal oil clearance		0.032–0.050 (0.0013–0.0020)	0.060 (0.0024)

Unit of length: mm (in)

Engine Lubrication — Section 8
D16A9, D16Z6, D16Z7 Engine

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Engine oil	Capacity ℓ (US qt, Imp qt)	D16Z6, D16Z7	4.0 (4.2, 3.5) for engine overhaul 3.3 (3.5, 2.9) for oil change, including filter 3.0 (3.2, 2.6) for oil change, without filter	
		D16A9	4.3 (4.5, 3.8) for engine overhaul 3.6 (3.8, 3.2) for oil change, including filter 3.3 (3.5, 2.9) for oil change, without filter	
Oil pump	Displacement ℓ (US gal, Imp gal)/min @min^{-1} (rpm)	D16Z6, D16Z7	45 (11.9, 9.9) @6,000	
		D16A9	63 (16.6, 13.9) @6,800	
	Inner-to-outer rotor clearance		0.02—0.04 (0.001—0.002)	0.2 (0.008)
	Pump housing-to-outer rotor clearance		0.10—0.18 (0.004—0.007)	0.2 (0.008)
	Pump housing-to-rotor axial clearance		0.03—0.08 (0.001—0.003)	0.15 (0.006)
Relief valve	Pressure setting 80°C (176°F) kPa (kg/cm^2, psi)	at idle	70 (0.7, 10) min.	
		at 3,000 min^{-1} (rpm)	350 (3.5, 50) min.	

Engine Lubrication — Section 8
B16A2 Engine

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Engine oil	Capacity ℓ (US qt, Imp qt)		4.8 (5.1, 4.2) For engine disassembly 4.0 (4.2, 3.6) For oil change, including oil filter	
Oil pump	Displacement ℓ (US gal, Imp gal)/min@min^{-1} (rpm)		73 (19.3, 16.1) @7,800	
	inner-to-outer rotor clearance		0.03—0.09 (0.0011—0.0035)	0.2 (0.008)
	Pump housing-to-outer rotor clearance		0.10—0.19 (0.0039—0.0075)	0.2 (0.008)
	Pump housing-to-rotor axial clearance		0.02—0.07 (0.0008—0.0026)	0.15 (0.006)
Relief valve	Pressure setting 80°C (176°F) kPa (kg/cm^2)	at idle	70 (0.7, 10) min.	
		at 3,000 min^{-1} (rpm)	350 (3.5, 50) min.	

Standards and Service Limits

Cooling — Section 10

	MEASUREMENT	STANDARD (NEW)
Radiator	Engine coolant capacity ℓ (US gal, Imp gal) M/T including engine, heater, cooling line and reservoir Reservoir capacity: 0.4 ℓ (0.42 US qt, 0.35 Imp qt)	B16A2 4.8 (1.27, 1.06) for overhaul 3.9 (1.03, 0.86) for coolant change Except B16A2 4.5 (1.19, 0.99) for overhaul 3.6 (0.95, 0.79) for coolant change
	A/T	D16Z6, D16Z7 4.7 (1.24, 1.03) for overhaul 3.8 (1.00, 0.84) for coolant change
Radiator cap	Opening pressure kPa (kg/cm², psi)	95–125 (0.95–1.25, 14–18)
Thermostat	Start to opening °C (°F) Fully open °C (°F) Valve lift at fully open	76–80 (169–176) 90 (194) 8.0 (0.31) min.
Water pump	Displacement D16Z6, D16Z7 ℓ (US gal, Imp gal)/min D16A9 @min⁻¹ (rpm) B16A2	125 (33.0, 27.5) @6,000 112 (29.6, 24.6) @6,000 140 (37.0, 30.8) @6,000
Cooling fan	Thermoswitch "ON" temperature °C (°F) Thermoswitch "OFF" temperature °C (°F)	91.0–95.0 (196–203) Subtract 3–8 (5–15) from actual "ON" temperature.

Fuel and Emission — Section 11

	MEASUREMENT	STANDARD (NEW)	
Fuel pump	Displacement cc (US oz, Imp oz) in 10 seconds Relief valve opening pressure kPa (kg/cm², psi)	222 (7.5, 7.8) min. 450–600 (4.5–6.0, 64–85)	
Fuel pressure regulator	Fuel pressure with fuel regulator vacuum hose disconnected kPa (kg/cm², psi)	280–330 (2.8–3.3, 40–47)	
Fuel tank	Capacity ℓ (US gal, Imp gal)	45 (11.9, 9.9)	
Engine	Idle speed min⁻¹ (rpm)	M/T	A/T at [N]
	with headlight and cooling fan off D16Z6, D16Z7	750	750
	D16A9	750	—
	B16A2	750	—
	Idle CO %	With TWC: 0.1 max. Without TWC: 2.0 max	

Clutch — Section 12

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Clutch pedal	Pedal height to floor	164 (6.4)	—
	Stroke	130–140 (5.1–5.5)	—
	Pedal play	12–21 (0.5–0.8)	—
	Disengagement height to floor	83 (3.3)	—
	to carpet	55 (2.2) min. Reference	—
Flywheel	Clutch surface runout	0.05 (0.002) max.	0.15 (0.006)
Clutch disc	Rivet head depth	1.3 (0.06) min.	0.2 (0.008)
	Surface runout	0.8 (0.03) max.	1.0 (0.04)
	Thickness	8.4–9.1 (0.33–0.36)	6.0 (0.24)
Clutch cover	Pressure plate warpage	0.03 (0.001) max.	0.15 (0.006)

Unit of length: mm (in)

Manual Transmission S20 — Section 13

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Transmission oil	Capacity ℓ (U S.qt , Imp.qt.)	1.8 (1.9, 1.6) at oil change 1.9 (2.0, 1.7) at overhaul	
Mainshaft	End play	0.11—0.18 (0.004—0.007)	Adjust with shim
	Diameter of ball bearing contact area (clutch housing side)	25.977—25.990 (1.0227—1.0232)	25.92 (1.020)
	Diameter of third gear contact area	33.984—34.000 (1.3380—1.3386)	33.93 (1.336)
	Diameter of 4th, 5th gear contact area	26.980—26.993 (1.0622—1.0627)	26.93 (1.060)
	Diameter of ball bearing contact area (transmission housing side)	21.987—22.000 (0.8656—0.8661)	21.93 (0.863)
	Runout	0.02 (0.0008) max.	0.05 (0.002)
Mainshaft third and fourth gears	I.D.	39.009—39.025 (1.5358—1.5364)	39.07 (1.538)
	End play 3rd	0.06—0.21 (0.0024—0.0083)	0.33 (0.013)
	End play 4th	0.06—0.19 (0.0024—0.0075)	0.31 (0.012)
	Thickness 3rd	30.22—30.27 (1.1898—1.1917)	30.15 (1.187)
	Thickness 4th	30.12—30.17 (1.1858—1.1878)	30.05 (1.183)
Mainshaft fifth gear	I.D.	37.009—37.025 (1.4570—1.4577)	37.07 (1.459)
	End play	0.06—0.19 (0.0024—0.0075)	0.31 (0.012)
	Thickness	28.42—28.47 (1.1189—1.1209)	28.35 (1.116)
Countershaft	End play	0.17—0.38 (0.0067—0.0150)	0.53 (0.021)
	Diameter of needle bearing contact area	30.000—30.015 (1.1811—1.1817)	29.95 (1.179)
	Diameter of ball bearing contact area	24.980—24.993 (0.9835—0.9840)	24.93 (0.981)
	Diameter of low gear contact area	35.984—36.000 (1.4167—1.4173)	35.93 (1.415)
	Runout	0.02 (0.0008) max.	0.05 (0.002)
Countershaft low gear	I.D.	41.009—41.025 (1.6145—1.6152)	41.07 (1.617)
	End play	0.03—0.10 (0.0012—0.0039)	0.22 (0.009)
	Thickness	30.41—30.44 (1.1972—1.1984)	30.36 (1.195)
Countershaft second gear	I.D.	44.009—44.025 (1.7326—1.7333)	44.07 (1.735)
	End play	0.03—0.11 (0.0012—0.0043)	0.23 (0.009)
	Thickness	31.92—31.97 (1.2567—1.2587)	31.85 (1.254)
Spacer collar (Countershaft second gear)	I.D.	32.988—32.998 (1.2987—1.2991)	33.04 (1.301)
	O.D.	38.989—39.000 (1.5350—1.5354)	38.93 (1.533)
	Length	32.03—32.06 (1.2610—1.2622)	32.01 (1.260)
Spacer collar (Mainshaft fourth and fifth gears)	I.D.	27.002—27.012 (1.0631—1.0635)	27.06 (1.065)
	O.D. 4th	33.989—34.000 (1.3381—1.3386)	33.93 (1.336)
	O.D. 5th	31.989—32.000 (1.2594—1.2598)	31.93 (1.257)
	Length 4th	22.83—22.86 (0.8988—0.9000)	22.81 (0.898)
	Length 5th	23.53—23.56 (0.9264—0.9276)	23.51 (0.926)
Reverse idler gear	I.D.	15.016—15.043 (0.5911—0.5922)	15.08 (0.594)
	Gear-to-reverse gear shaft clearance	0.032—0.077 (0.0013—0.0030)	0.14 (0.006)
Synchro ring	Ring-to-gear clearance (ring pushed against gear)	0.73—1.18 (0.029—0.046)	0.4 (0.016)
Shift fork	Shift fork finger thickness	6.4—6.5 (0.252—0.255)	—
	Fork-to-synchro sleeve clearance	0.25—0.45 (0.0098—0.0177)	0.8 (0.03)
Reverse shift fork	Shift fork pawl groove width	12.7—13.0 (0.500—0.512)	—
	Fork-to-reverse idler gear clearance	0.5—1.1 (0.020—0.043)	1.8 (0.071)
	Groove width	7.05—7.25 (0.278—0.285)	—
	Fork-to-fifth/reverse shift piece pin clearance	0.05—0.35 (0.002—0.014)	0.5 (0.02)
Shift arm A	Diameter of shift rod contact area	13.005—13.130 (0.5120—0.5169)	—
	Shift arm A-to-shift rod clearance	0.005—0.230 (0.0002—0.0091)	0.35 (0.0138)
Shift arm B	Diameter of shift arm shaft contact area	13.973—14.000 (0.5501—0.5512)	—
	Shift arm B-to-shift arm shaft clearance	0.013—0.070 (0.0005—0.0028)	0.16 (0.0063)
	Shift arm B-to-shift piece clearance	0.2—0.5 (0.0079—0.0197)	0.62 (0.0244)
	Shift piece diameter of shift fork shaft contact area	12.9—13.0 (0.5079—0.5118)	12.78 (0.5031)

Standards and Service Limits

Manual Transmission Y21 — Section 13

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Transmission oil	Capacity ℓ (U S qt , Imp qt)	2 3 (2.4, 2.0) at oil change 2.4 (2.5, 2.1) at assembly	
Mainshaft	End play	0.11—0 18 (0.004—0 007)	Adjust with shim
	Diameter of ball bearing contact area (clutch housing side)	27.977—27.990 (1 101—1 102)	27.93 (1.10)
	Diameter of third gear contact area	37.984—38.000 (1.495—1 496)	37 93 (1.493)
	Diameter of ball bearing contact area (transmission housing side)	27.987—28.000 (1.1018—1.1024)	27.94 (1.10)
	Runout	0.02 (0.0008) max.	0.05 (0.002)
Mainshaft third and fourth gears	I.D	43.009—43 025 (1.6933—1.6939)	43.08 (1 696)
	End play	0.06—0.21 (0.0024—0.0083)	0.3 (0.012)
	Thickness 3rd	34.92—34 97 (1.3748—1.3768)	34.3 (1.350)
	Thickness 4th	31.42—31.47 (1.2370—1.2390)	31.8 (1.252)
Mainshaft fifth gear	I.D	43 009—43 025 (1.6933—1.6939)	43.08 (1.696)
	End play	0 06—0 21 (0.0024—0 0083)	0.3 (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 (1.299—1.300)	32.95 (1 297)
	Diameter of ball bearing contact area	24.980—24.993 (0.9835—0.9840)	24.94 (0 982)
	Diameter of low gear contact area	36.984—37.000 (1.4561—1.4567)	36.93 (1 454)
	Runout	0.02 (0.0008) max.	0.05 (0.002)
Countershaft low gear	I.D	42.009—42 025 (1.6539—1.6545)	42.08 (1.657)
	End play	0 04—0.12 (0.0016—0.0047)	Adjust with shim
Countershaft second gear	I.D	47.009—47.025 (1.8507—1.8514)	47 08 (1.854)
	End play	0.05—0 12 (0 0020—0.0047)	Adjust with collar
	Thickness	28.92—28.97 (1.1386—1.1405)	28.8 (1.134)
Spacer collar (Countershaft second gear)	I.D	36 521—36.531 (1.4378—1.4382)	36.541 (1.439)
	O D	41.989—42.000 (1.6531—1.6535)	41 94 (1.651)
	Length A	29 02—29.04 (1.1425—1.1433)	——
	Length B	29.07—29.09 (1.1444—1.1453)	——
Spacer collar (Mainshaft fourth and fifth gears)	I.D	31.002—31.012 (1.2205—1.2209)	31.06 (1.223)
	O D	36.989—37.000 (1.4563—1.4567)	36 94 (1 454)
	Length	56.45—56.55 (2.2224—2.2264)	——
		26.03—26.08 (1 0248—1.0268)	

(cont'd)

Unit of length: mm (in)

Manual Transmission Y21 (cont'd) — Section 13

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Reverse Idle gear	I.D. Gear-to-reverse gear shaft clearance	20.016—20.043 (0.7880—0.7891) 0.036—0.084 (0.0014—0.0033)	20.09 (0.7909) 0.16 (0.006)
Synchro ring	Ring-to-gear clearance (ring pushed against gear)	0.85—1.10 (0.033—0.043)	0.4 (0.016)
Double cone synchro ring	Clearance (ring pushed against gear) Outer synchro ring-to-gear Inner synchro ring-to-gear Outer synchro ring-to-synchro cone	 0.95—1.68 (0.037—0.066) 0.5—1.0 (0.02—0.04) 0.5—1.0 (0.02—0.04)	 0.6 (0.024) 0.3 (0.01) 0.3 (0.01)
Shift fork	Shift fork finger thickness Fork-to-synchro sleeve clearance	7.4—7.5 (0.291—0.295) 0.45—0.65 (0.018—0.026)	— 1.0 (0.039)
Reverse shift fork	Shift fork pawl groove width Fork-to-reverse idler gear clearance "L" groove width at fifth gear side at reverse gear side Fork-to-fifth/reverse shift piece pin clearance at fifth gear side at reverse gear side	13.0—13.3 (0.511—0.524) 0.5—1.1 (0.020—0.043) 7.40—7.70 (0.291—0.303) 7.05—7.25 (0.278—0.285) 0.4—0.9 (0.016—0.035) 0.05—0.45 (0.0020—0.018)	— 1.8 (0.07) — — — —
Shift rod guide	Groove width of shift arm contact area Shift rod guide-to-shift arm clearance	11.8—12.0 (0.4646—0.4724) 0.05—0.35 (0.002—0.014)	— 0.80 (0.031)
Shift guide	Groove width of shift arm contact area Shift rod guide-to-shift arm clearance I.D. Guide-to-shaft clearance Diameter of shift fork contact area Guide-to-shift fork clearance	7.9—8.0 (0.311—0.315) 0.10—0.30 (0.004—0.012) 14.000—14.068 (0.551—0.554) 0.011—0.092 (0.0004—0.0036) 11.90—12.00 (0.469—0.472) 0.20—0.50 (0.008—0.020)	— 0.60 (0.024) — 0.150 (0.0059) — 0.80 (0.032)
Select arm	Diameter of shift rod guide contact area Arm-to-shift rod guide clearance Groove width of interlock contact area Arm-to-interlock clearance	11.90—12.00 (0.469—0.472) 0.05—0.25 (0.002—0.010) 10.05—10.15 (0.3957—0.3977) 0.05—0.25 (0.002—0.010)	— 0.50 (0.020) — 0.50 (0.020)

Standards and Service Limits

Automatic Transmission — Section 14

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Transmission fluid	Capacity ℓ (US qt, Imp qt)		5.9 (6.2, 5.2) for overhaul 2.7 (2.8, 2.4) for fluid change	
Hydraulic pressure kPa (kg/cm², psi)	Line pressure at 2,000 min⁻¹ (rpm) [N] or [P]		850–900 (8.5–9.0, 121–128)	800 (8.0, 114)
	2nd clutch pressure at 2,000 min⁻¹ (rpm) [D4]		400 (4.0, 57) throttle fully closed | 850–900 (8.5–9.0, 121–128) throttle more than 1/8 opened	350 (3.5, 50) throttle fully closed | 800 (8.0, 114) throttle more than 1/8 opened
	3rd clutch pressure at 2,000 min⁻¹ (rpm) [D4]			
	4th clutch pressure at 2,000 min⁻¹ (rpm) [D4]			
	2nd clutch pressure at 2,000 min⁻¹ (rpm) [2]		850–900 (8.5–9.0, 121–128)	800 (8.0, 114)
	1st clutch pressure at 2,000 min⁻¹ (rpm) [D4] or [1]		850–900 (8.5–9.0, 121–128)	800 (8.0, 114)
	1st-hold clutch pressure at 2,000 min⁻¹ (rpm) at [1]		850–900 (8.5–9.0, 121–128)	800 (8.0, 114)
	Governor pressure at 60 km/h (38 mph)	D16Z6, D16A8 D16A7	180–190 (1.80–1.90, 26–27) 182–192 (1.82–1.92, 26–27)	175 (1.75, 25) 177 (1.77, 25)
	Throttle pressure B	Throttle fully closed Throttle fully open	0–15 (0–0.15, 0–2) 850–900 (8.5–9.0, 121–128)	— 800 (8.0, 114)
	Throttle pressure A	Throttle fully closed Throttle fully open	0–5 (0–0.05, 0–1) 505–520 (5.05–5.2, 72–74)	— 500 (5.0, 71)
Stall speed min⁻¹ (rpm) (check with car on level ground)			2,400–2,800	—

(cont'd)

Unit of length: mm (in)

Automatic Transmission (cont'd) — Section 14

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Clutch	Clutch initial clearance	1st, 2nd	0.65—0.85 (0.026—0.033)	—
		3rd, 4th	0.40—0.60 (0.016—0.024)	—
		1st-hold	0.5—0.8 (0.02—0.03)	—
	Clutch return spring free length	1st	31.0 (1.22)	29.0 (1.14)
		2nd, 3rd, 4th	30.5 (1.20)	28.5 (1.12)
		1st-hold	34.6 (1.36)	32.6 (1.28)
	Clutch disc thickness		1.88—2.00 (0.074—0.079)	Until grooves worn out
	Clutch plate thickness	1st	1.55—1.65 (0.061—0.065)	Discoloration
		Except 1st	1.95—2.05 (0.077—0.081)	Discoloration
	Clutch end plate thickness (except 1st-hold)	MARK 1	2.3—2.4 (0.091—0.094)	Discoloration
		MARK 2	2.4—2.5 (0.094—0.098)	
		MARK 3	2.5—2.6 (0.098—0.102)	
		MARK 4	2.6—2.7 (0.102—0.106)	
		MARK 5	2.7—2.8 (0.106—0.110)	
		MARK 6	2.8—2.9 (0.110—0.114)	
		MARK 7	2.9—3.0 (0.114—0.118)	
		MARK 8	3.0—3.1 (0.118—0.122)	
		MARK 9	3.1—3.2 (0.122—0.126)	
		MARK 10	3.2—3.3 (0.126—0.130)	
		MARK 11	2.0—2.1 (0.079—0.083)	
		MARK 12	2.1—2.2 (0.083—0.087)	
		MARK 13	2.2—2.3 (0.087—0.091)	Discoloration
	Clutch end plate thickness (1st-hold)	MARK 1	2.05—2.10 (0.081—0.083)	Discoloration
		MARK 2	2.15—2.20 (0.085—0.087)	
		MARK 3	2.25—2.30 (0.089—0.091)	
		MARK 4	2.35—2.40 (0.093—0.094)	
		NO MARK	2.45—2.50 (0.096—0.098)	
		MARK 6	2.55—2.60 (0.100—0.102)	
		MARK 7	2.65—2.70 (0.104—0.106)	Discoloration

(cont'd)

Standards and Service Limits

Automatic Transmission (cont'd) — Section 14

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Trans-mission	Diameter of needle bearing contact area		
	On mainshaft and stator shaft	22.980—22.993 (0.9047—0.9052)	Wear or damage
	On mainshaft 2nd gear	35.975—35.991 (1.4163—1.4169)	↕
	On mainshaft 4th gear collar	31.975—31.991 (1.2589—1.2595)	↕
	On mainshaft 1st gear collar	30.975—30.991 (1.2195—1.2201)	↕
	On countershaft (L. side)	36.004—36.017 (1.4175—1.4180)	↕
	On countershaft 3rd gear	31.975—31.991 (1.2589—1.2595)	↕
	On countershaft 4th gear	27.980—27.993 (1.1016—1.1021)	↕
	On countershaft reverse gear collar	31.975—31.991 (1.2589—1.2595)	↕
	On countershaft 1st gear collar	31.975—31.991 (1.2589—1.2595)	↕
	On sub-shaft (L. side)	25.991—26.000 (1.0233—1.0236)	↕
	On sub-shaft 4th gear collar	27.980—27.993 (1.1016—1.1021)	↕
	On reverse idler gear shaft	13.990—14.000 (0.5508—0.5512)	↕
	On mainshaft 1st gear	35.000—35.016 (1.3780—1.3786)	↕
	On mainshaft 2nd gear	41.000—41.016 (1.6142—1.6148)	↕
	On mainshaft 4th gear	38.000—38.016 (1.4961—1.4967)	↕
	On countershaft 1st gear	38.000—38.016 (1.4961—1.4967)	Wear or damage
	Inside diameter of needle bearing contact area		
	On countershaft 3rd gear	38.000—38.016 (1.4961—1.6967)	Wear or damage
	On countershaft 4th gear	33.000—33.016 (1.2992—1.2998)	↕
	On countershaft reverse gear	38.000—38.016 (1.4961—1.4967)	↕
	On sub-shaft 4th gear	32.000—32.016 (1.2598—1.2605)	↕
	On reverse idler gear	18.007—18.020 (0.7089—0.7094)	↕
	On stator shaft (R. side)	29.000—29.013 (1.1417—1.1422)	↕
	On stator shaft (stator side)	27.000—27.021 (1.0630—1.1638)	↕
	On reverse idler shaft holder	14.416—14.434 (0.5676—0.5683)	Wear or damage
	End play		
	Mainshaft 1st gear	0.08—0.24 (0.003—0.009)	—
	Mainshaft 2nd gear	0.05—0.13 (0.002—0.0051)	—
	Mainshaft 4th gear	0.05—0.135 (0.002—0.0053)	—
	Countershaft 1st gear	0.1—0.5 (0.004—0.020)	—
	Countershaft 3rd gear	0.05—0.13 (0.002—0.0051)	—
	Countershaft 4th gear	0.05—0.13 (0.002—0.0051)	—
	Sub-shaft 4th gear	0.05—0.17 (0.002—0.007)	—
	Reverse idler gear	0.05—0.18 (0.002—0.007)	—
	Countershaft reverse gear	0.10—0.25 (0.004—0.010)	—
	Selector hub O.D	51.87—51.90 (2.042—2.043)	Wear or damage
	Mainshaft 4th gear collar length	45.00—45.03 (1.772—1.773)	—
	Mainshaft 1st gear collar length	27.00—27.15 (1.063—1.069)	—
	Mainshaft 1st gear collar flange thickness	2.5—2.6 (2.098—2.102)	Wear or damage
	Countershaft distance collar length	38.97—39.00 (1.534—1.535)	—
		39.02—39.05 (1.536—1.537)	—
		39.07—39.10 (1.538—1.539)	—
		39.12—39.15 (1.540—1.541)	—
		39.17—39.20 (1.542—1.543)	—
		39.22—39.25 (1.544—1.545)	—
		39.27—39.30 (1.546—1.547)	—
		38.87—38.90 (1.530—1.531)	—
		38.92—38.95 (1.532—1.533)	—
	Countershaft reverse gear collar length	14.5—14.6 (0.571—0.575)	—
	Countershaft reverse gear collar flange thickness	2.4—2.6 (0.094—0.102)	Wear or damage
	Countershaft 1st gear collar length	14.5—14.6 (0.571—0.575)	—
	Countershaft 1st gear collar flange thickness	2.4—2.6 (0.094—0.102)	Wear or damage
	Sub-shaft 4th gear collar length	24.0—24.1 (0.945—0.949)	Wear or damage
	Sub-shaft 4th gear collar flange thickness	3.00—3.15 (0.118—0.124)	Wear or damage

(cont'd)

Unit of length: mm (in)

Automatic Transmission (cont'd)— Section 14

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Transmission (cont'd)	Mainshaft 2nd gear thrust washer thickness	3.47—3.50 (0.137—0.138) 3.52—3.55 (0.139—0.140) 3.57—3.60 (0.141—0.142) 3.62—3.65 (0.143—0.144) 3.67—3.70 (0.145—0.146) 3.72—3.75 (0.147—0.148) 3.77—3.80 (0.148—0.150) 3.82—3.85 (0.151—0.152) 3.87—3.90 (0.153—0.154)	Wear or damage ↕ Wear or damage
	Thrust washer thickness Mainshaft 4th gear Mainshaft ball bearing L. side Mainshaft 1st gear L. side Mainshaft 1st gear R. side	 4.45—4.55 (0.175—0.179) 3.45—3.55 (0.136—0.140) 1.45—1.50 (0.057—0.057) 3.43—3.50 (0.135—0.138)	 Wear or damage ↕ Wear or damage
	Countershaft 3rd gear thrust washer thickness	2.97—3.00 (0.117—0.118) 3.02—3.05 (0.119—0.120) 3.07—3.10 (0.121—0.122) 3.12—3.15 (0.123—0.124) 3.17—3.20 (0.125—0.126) 3.22—3.25 (0.127—0.128) 3.27—3.30 (0.129—0.130) 3.32—3.35 (0.131—0.132) 3.37—3.40 (0.133—0.134) 3.42—3.45 (0.135—0.136) 3.47—3.50 (0.137—0.138) 3.52—3.55 (0.139—0.140)	Wear or damage ↕ Wear or damage
	Mainshaft 4th gear thrust washer thickness One-way clutch contact area I.D. Countershaft 1st gear Parking gear Mainshaft feed pipe A, O.D. (at 15 mm from end) Mainshaft feed pipe B, O.D. (at 30 mm from end) Countershaft feed pipe O.D. (at 15 mm from end) Sub-shaft feed pipe O.D. (at 15 mm from end) Mainshaft sealing ring thickness (29 mm and 35 mm) Mainshaft bushing I.D. Mainshaft bushing I.D. Countershaft bushing I.D. Sub-shaft bushing I.D. Mainshaft sealing ring groove width	2.93—3.00 (0.115—0.118) 83.339—83.365 (3.2810—3.2821) 66.685—66.698 (2.6254—2.6259) 8.97—8.98 (0.353—0.354) 5.97—5.98 (0.2350—0.2354) 7.97—7.98 (0.3138—0.3142) 7.97—7.98 (0.3138—0.3142) 1.980—1.995 (0.0780—0.0785) 6.018—6.030 (0.2369—0.2374) 9.000—9.015 (0.3543—0.3549) 8.000—8.015 (0.3150—0.3156) 8.000—8.015 (0.3150—0.3156) 2.025—2.060 (0.0797—0.081)	Wear or damage ↕ Wear or damage 8.95 (0.352) 5.95 (0.234) 7.95 (9.313) 7.95 (0.313) 1.80 (0.071) 6.045 (0.2380) 9.030 (0.355) 8.030 (0.3161) 8.030 (0.3161) 2.080 (0.082)
Regulator valve body	Sealing ring contact area I.D.	35.000—35.025 (1.3780—1.3782)	35.050 (1.3799)
Shifting device and parking brake control	Reverse shift fork finger thickness Parking brake ratchet pawl Parking gear Throttle cam stopper height	5.90—6.00 (0.232—0.236) —— —— 27.0—27.1 (1.063—1.067)	5.40 (0.213) Wear or other defect —— ——
Servo body	Shift fork shaft bore I.D. Shift fork shaft valve bore I.D.	14.000—14.010 (0.5512—0.5516) 37.000—37.039 (1.4567—1.4582)	—— 37.045 (1.4585)
Oil pump	Oil pump gear side clearance Oil pump gear-to-body clearance Drive Driven Oil pump driven gear I.D. Oil pump shaft O.D.	0.03—0.05 (0.001—0.002) 0.210—0.265 (0.0083—0.0104) 0.070—0.125 (0.0028—0.0049) 14.016—14.034 (0.5518—0.5525) 13.980—13.990 (0.5504—0.5508)	0.07 (0.003) —— —— Wear or damage Wear or damage

(cont'd)

Standards and Service Limits

Automatic Transmission (cont'd) — Section 14

	MEASUREMENT	STANDARD (NEW)			
		Wire Dia.	O.D.	Free Length	No. of Coils
Springs	Regulator valve spring A	1.8 (0.07)	14.7 (0.58)	88.6 (3.49)	16.5
	Regulator valve spring B	1.8 (0.07)	9.6 (0.38)	44.0 (1.73)	7.5
	Stator reaction spring	5.5 (0.22)	26.4 (1.04)*	30.3 (1.19)	2.1
	Torque converter check valve spring	1.1 (0.04)	8.4 (0.33)	33.8 (1.33)	12.5
	Modulator valve spring	1.2 (0.05)	7.0 (0.28)*	27.2 (1.07)	8.0
	Relief valve spring	1.1 (0.04)	8.6 (0.34)	37.1 (1.46)	13.4
	Cooler check valve spring	1.1 (0.04)	8.4 (0.33)	33.8 (1.33)	12.5
	Governor spring A	1.0 (0.04)	18.8 (0.74)	32.9 (1.30)	4.1
	Governor spring B	0.9 (0.04)	11.8 (0.47)	27.8 (1.09)	6.0
		0.9 (0.04)	11.8 (0.47)	29.1 (1.15)	6.0
	2—3 orifice control valve spring	0.9 (0.04)	6.6 (0.26)	33.2 (1.31)	14.9
	4—3 kick-down valve spring	1.0 (0.04)	6.6 (0.26)	29.9 (1.18)	14.7
	2/3—4 orifice control valve spring	1.0 (0.04)	8.6 (0.34)	51.9 (2.04)	19.8
	Throttle valve spring A	1.0 (0.04)	8.5 (0.33)	22.2 (0.87)	6.0
	Throttle valve spring A	1.0 (0.04)	8.5 (0.33)	22.1 (0.87)	5.5
	Throttle valve spring A	1.1 (0.04)	8.5 (0.33)	22.3 (0.87)	8.1
	Throttle valve spring A	1.1 (0.04)	8.5 (0.33)	22.3 (0.87)	7.6
	Throttle valve adjust spring B	0.8 (0.03)	6.2 (0.24)	30 (1.18)	8
	Throttle valve adjust spring A	0.8 (0.03)	6.2 (0.24)	27 (1.06)	8.5
	Throttle valve spring B	1.4 (0.06)	8.5 (0.33)	41.5 (1.63)	10.5
	Throttle valve spring B	1.4 (0.06)	8.5 (0.33)	41.5 (1.63)	11.2
	Throttle valve spring B	1.4 (0.06)	8.5 (0.33)	41.6 (1.64)	12.4
	1—2 shift valve spring	0.45 (0.018)	5.1 (0.20)	52.8 (2.08)	29
	1—2 shift valve ball spring	0.45 (0.018)	4.5 (0.18)	10.7 (0.42)	12.7
	2—3 shift valve spring	0.9 (0.04)	7.1 (0.28)	64.7 (2.55)	32.1
	2—3 shift valve ball spring	0.4 (0.02)	4.5 (0.18)	14.7 (0.58)	7.3
	3—4 shift valve spring	0.9 (0.04)	9.6 (0.38)	32.5 (1.28)	10.3
	3—4 shift valve ball spring	0.5 (0.02)	4.5 (0.18)	11.3 (0.44)	7.4
	1st-hold accumulator spring	4.0 (0.16)	21.5 (0.85)	71.7 (2.82)	8.3
	1st accumulator spring	2.6 (0.10)	24.3 (0.96)	79.8 (3.14)	8.5
	2nd accumulator spring	3.5 (0.14)	22 (0.87)	75.4 (2.97)	8.7
	3rd accumulator spring	2.6 (0.10)	17.5 (0.69)	91.8 (3.61)	15.8
	4th accumulator spring	2.6 (0.10)	16 (0.63)	89.4 (3.52)	16.2
	Lock-up shift valve spring	0.9 (0.04)	7.6 (0.30)	73.7 (2.90)	32
	Lock-up timing valve spring	0.8 (0.03)	6.6 (0.26)	61.5 (2.42)	27.6
	Lock-up control valve spring	0.9 (0.04)	6.6 (0.26)	41.0 (1.61)	23.3
	Governor cut valve spring	0.8 (0.03)	7.6 (0.30)	44.5 (1.75)	17
	CPC valve spring A	0.9 (0.04)	8.4 (0.33)	24.9 (0.98)	9.8
	Reverse control valve spring	0.7 (0.03)	7.1 (0.28)	40 (1.57)	20.8
	3—2 timing valve spring	1.2 (0.05)	8.6 (0.34)	46.9 (1.85)	15.2
	3—2 kick-down valve spring	1.3 (0.05)	8.6 (0.34)	45.6 (1.80)	17
	Servo control valve spring	0.9 (0.04)	6.4 (0.25)	34.1 (1.34)	17.5
	2—1 timing valve spring	0.7 (0.03)	5.6 (0.22)	33 (1.30)	21.7
	4th exhaust valve spring	0.9 (0.04)	6.6 (0.26)	43.3 (1.70)	22

*: Inside diameter

Unit of length: mm (in)

Differential M/T S20 — Section 15

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Ring gear	Backlash	0.07—0.130 (0.0028—0.0051)	0.180 (0.0071)
Differential carrier	Pinion shaft bore diameter	18.000—18.018 (0.7087—0.7094)	——
	Carrier-to-pinion shaft clearance	0.013—0.047 (0.0005—0.0019)	0.095 (0.004)
	Drivershaft bore diameter Except D16A9	26.025—26.045 (1.0246—1.0254)	——
	D16A9	28.025—28.045 (1.1033—1.1041)	——
	Carrier-to-driveshaft clearance	0.045—0.086 (0.0018—0.0034)	0.14 (0.006)
Differential pinion gear	Backlash	0.05—0.15 (0.002—0.006)	——
	Pinion gear bore diameter	18.042—18.066 (0.7103—0.7113)	——
	Pinion gear-to-pinion shaft clearance	0.055—0.095 (0.0021—0.0037)	0.150 (0.0059)
Set ring-to-bearing outer race		0—0.1 (0—0.004)	Adjust

Differential M/T Y21 — Section 15

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Ring gear	Backlash	0.085—0.142 (0.003—0.006)	0.200 (0.008)
Differential carrier	Pinion shaft bore diameter	18.000—18.016 (0.7087—0.7093)	——
	Carrier-to-pinion shaft clearance	0.013—0.045 (0.0005—0.0020)	0.100 (0.004)
	Drivershaft bore diameter	28.000—28.021 (1.102—1.103)	——
	Carrier-to-driveshaft clearance	0.025—0.066 (0.001—0.003)	0.120 (0.005)
Differential pinion gear	Backlash	0.05—0.15 (0.002—0.006)	——
	Pinion gear bore diameter	18.042—18.066 (0.710—0.711)	——
	Pinion gear-to-pinion shaft clearance	0.057—0.095 (0.002—0.004)	0.150 (0.006)
Set ring-to-bearing outer race		0—0.1 (0—0.004)	Adjust

Differential A/T — Section 15

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Final driven gear	Backlash	0.071—0.129 (0.0028—0.0051)	——
Differential carrier	Pinion shaft contact area I.D.	18.000—18.018 (15.8382—15.8540)	——
	Carrier-to-pinion clearance	0.016—0.052 (0.0006—0.0024)	0.10 (0.004)
	Drivershaft contact area I.D.	28.005—28.025 (1.1026—1.1033)	——
	Carrier-to-driveshaft clearance	0.025—0.066 (0.0010—0.0026)	0.12 (0.005)
	Ball bearing contact area O.D.	40.002—40.018 (1.5749—1.5755)	——
Differential pinion gear	Backlash	0.05—0.15 (0.002—0.006)	——
	I.D.	18.042—18.066 (0.7103—0.7113)	——
	Pinion gear-to-pinion shaft clearance	0.059—0.095 (0.0023—0.0037)	0.15 (0.006)
Set ring-to-bearing outer race		0—0.15 (0—0.006)	Adjust with shim

Standards and Service Limits

Steering — Section 17

	MEASUREMENT		STANDARD (NEW)
Steering wheel	Play at steering wheel circumference		0—10 (0—0.4)
	Starting load at steering wheel circumference N (kg, lb)		
	Manual steering		13—18 (1.3—1.8, 2.87—3.97)
	Power steering	Engine idling	32 (3.2, 7.1)
Gearbox	Angle of rack-huide-screw loosened from locked position	LHD	20 $^{+5^\circ}_{-0^\circ}$
		RHD	25° max.
	Preload at pinion gear shaft N•m (kg-cm, lb-in)	LHD	0.6—1.1 (6—11, 5.2—9.5)
		RHD	0.7—1.2 (7—12, 6.1—10.4)
Pump	Pump pressure with valve closed (oil temp./speed: 40°C (105°F) min./idle. Do not run for more than 5 seconds). kPa (kg/cm², psi)	LHD	8,000—9,000 (80—90, 1,138—1,280)
		RHD	5,500—6,500 (55—65, 398—470)
Power steering fluid	Recommended power steering fluid		HONDA Power Steering Fluid-V
	Fluid capacity ℓ (US qt, Imp qt)	System LHD	1.1 (1.16, 0.97)
		RHD	1.0 (1.06, 0.88)
		Reservoir	0.4 (0.42, 0.35)
Power steering belt*	Deflection with 100 N (10 kg, 22 lb) between pulleys	Except D16A9	8.0—12.0 (0.31—0.47) with used belt
			6.0—9.5 (0.24—0.37) with new belt
		D16A9	5.5—9.0 (0.22—0.35) with new belt
	Tension measured with belt tension gauge N (kg, lb)	Except D16A9	350—500 (35—50, 77—110) with used belt
			500—700 (50—70, 110—154) with new belt
		D16A9	550—750 (55—75, 121—165) with new belt

*: When using a new belt, first adjust the deflection or tension to the values for the new belts, then readjust the deflection or tension to the values for the used belts after running engine for five minutes.

Unit of length: mm (in)

Suspension — Section 18

	MEASUREMENT			STANDARD (NEW)	SERVICE LIMIT
Wheel alignment	B16A2	Camber	Front	−0°20′ ± 1°	—
			Rear	−0°30′ ± 1°	—
		Caster	Front	1°10′ ± 1°	—
		Total toe	Front	0 ± 2.0 (0 ± 0.08)	—
			Rear	IN 2.0 $^{+2}_{-1}$ (0.08 $^{+0.08}_{-0.04}$)	—
		Front wheel turning angle	Inward wheel	36° ± 2°	—
			Outward wheel	30°30′	—
	Except B16A2				
		Camber	Front	−0°15′ ± 1°	—
			Rear	−0°30′ ± 1°	—
		Caster	Front	1°10′ ± 1°	—
		Total toe	Front	0 ± 2.0 (0 ± 0.08)	—
			Rear	IN 2.0 $^{+2}_{-1}$ (0.08 $^{+0.08}_{-0.04}$)	—
		Front wheel turning angle	Inward wheel	40°00′ ± 2°	—
			Outward wheel	33°00′	—
Wheel	Rim runout	Aluminum wheel	Axial	0–0.7 (0–0.028)	2.0 (0.078)
			Radial	0–0.7 (0–0.028)	1.5 (0.059)
		Steel wheel	Axial	0–1.0 (0–0.039)	2.0 (0.078)
			Radial	0–1.0 (0–0.039)	1.5 (0.059)
Wheel bearing	End play		Front	0–0.05 (0–0.002)	—
			Rear	0–0.05 (0–0.002)	—

Standards and Service Limits

Brakes — Section 19

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Parking brake lever	Play in stroke at 200 N (20 kg, 44 lb) lever force		To be locked when pulled 6—10 notches	——
Foot brake pedal	Pedal height (with floor mat removed)	M/T A/T	160 (6.30) 165 (6.50)	—— ——
	Free play		1—5 (0.04—0.20)	——
Master cylinder	Piston-to-pushrod clearance		0—0.4 (0—0.016)	——
Disc brake	Disc thickness	Front	21.0 (0.83)	19.0 (0.75)
		Rear	9.0 (0.35)	8.0 (0.31)
	Disc runout	Front	——	0.10 (0.004)
		Rear	——	0.15 (0.004)
	Disc parallelism	Front and rear	——	0.015 (0.0006)
	Pad thickness	Front	10.0 (0.39)	3.0 (0.12)
		Rear	7.5 (0.03)	1.6 (0.06)
Rear brake drum	I.D		180 (7.09)	181 (7.13)
	Lining thickness		4.5 (0.18)	2.0 (0.08)
Brake booster	Characteristics at 200 N (20 kg, 44 lb) pedal force.		Vacuum mmHg (inHg)	Line pressure kPa (kg/cm², psi)
		Without ABS	0 (0) 300 (11.8) 500 (19.7)	1,210 (12.1, 172) 5,360 (53.6, 762) 7,860 (78.6, 1,118)
		With ABS	0 (0) 300 (11.8) 500 (19.7)	830 (8.3, 118) 5,480 (54.8, 779) 8,250 (82.5, 1,173)

Air Conditioner — Section 22

	MEASUREMENT		STANDARD (NEW)	
			NIPPONDENSO	SANDEN
Air conditioner system	Lubricant capacity cc (fl oz)	Condenser	15 (1/2)	20 (2/3)
		Evaprorator	35 (1-1/6)	45 (1-1/2)
		Line or hose	10 (1/3)	10 (1/3)
		Receiver	10 (1/3)	10 (1/3)
Compressor	Lubricant capacity cc (US oz, Imp oz)		60—100 (2.03—3.38, 2.11—3.52)	120—140 (4.06—4.73, 4.22—4.93)
	Stator coil resistance at 20°C (68°F), Ω		3.4—3.8	2.65—2.95
	Pulley-to-pressure plate clearance		0.35—0.65 (0.014—0.026)	0.35—0.65 (0.014—0.026)
Compressor belt*	Deflection with 100 N (10 kg, 22 lb) between pulleys		6.5—10.5 (0.26—0.41) with used belt 5.0—7.0 (0.20—0.28) with new belt	
	Tension measured with belt tension gauge N (kg, lb)		350—500 (35—50, 77—110) with used belt 600—800 (60—80, 132—176) with new belt	

*: When using a new belt, first adjust the deflection or tension to the values for the new belts, then readjust the deflection or tension to the values for the used belts after running engine for five minutes.

Unit of length: mm (in)

Electrical — Section 23

	MEASUREMENT	STANDARD (NEW)	
Ignition coil	Rated voltage V	12	
	Primary winding resistance Ω at 20°C (68°F)	0.6—0.8	
	Secondary winding resistance kΩ at 20°C (68°F)	12.8—19.2	
Spark plug	Type	See Section 23	
	Gap	1.0—1.1 (0.39—0.43)	
Ignition timing	At idling ° BTDC	16° (Red) BTDC	
Alternator belt*	Deflection with 100 N (10 kg, 22 lb) between pulleys Except B16A2	7.0—10.5 (0.28—0.41) with used belt 5.5—8.0 (0.22—0.31) with new belt	
	B16A2	5.0—7.0 (0.20—0.28) with new belt	
	Tension measured with belt tension gauge N (kg, lb) Except B16A2	350—550 (35—50, 77—110) with used belt 550—750 (55—75, 121—165) with new belt	
	B16A2	700—900 (79—90, 154—198) with new belt	
Alternator (NIPPON-DENSO)	Output 13.5 V at hot A	70	—
	Coil resistance (rotor) Ω	2.9	14.0 (0.551)
	Slip ring O.D.	14.4 (0.567)	5.5 (0.22)
	Brush length	10.5 (0.41)	—
	Brush spring tension g (oz)	330 (11.6)	
Alternator (MITSUBISHI)	Output 13.5 V at hot A	70	—
	Coil resistance (rotor) Ω	3.4—3.8	22.2 (0.87)
	Slip ring O.D.	22.7 (0.89)	8.0 (0.31)
	Brush length	22.0 (0.87)	—
	Brush spring tension g (oz)	300—450 (10.6—15.9)	
Alternator (NIPPON-DENSO)	Output 13.5 V at hot A	80	—
	Coil resistance (rotor) Ω	2.8—3.0	14.0 (0.551)
	Slip ring O.D.	14.4 (0.567)	5.5 (0.22)
	Brush length	10.5 (0.41)	—
	Brush spring tension g (oz)	300—360 (10.6—12.7)	
Starter motor (MITSUBA) 1.0 kW, 1.2 kW, 1.4 kW)	Type	Gear reduction	
	Mica depth	0.4—0.5 (0.016—0.020)	0.15 (0.006)
	Commutator runout	0—0.02 (0—0.001)	0.05 (0.002)
	Commutator O.D.	28.0—28.1 (1.102—1.106)	27.5 (1.083)
	Brush length	14.3—14.7 (0.56—0.58)	9.3 (0.37)
	Brush spring tension (new) N (kg, lb) 1.0, 1.2 kW	18.5—23.5 (1.85—2.35, 4.1—5.2)	—
	1.4 kW	16—18 (1.6—1.8, 3.5—4.0)	—
Starter motor, (NIPPON-DENSO 1.0 kW, 1.2 KW)	Type	Gear reduction	
	Mica depth	0.5—0.8 (0.02—0.03)	0.2 (0.008)
	Commutator runout	0—0.02 (0—0.001)	0.05 (0.002)
	Commutator O.D.	29.9—30.0 (1.177—1.181)	29.0 (1.142)
	Brush length	13.0—13.5 (0.51—0.53)	8.5 (0.33)
	Brush spring tension (new) N (kg,lb) 1.0 kW	17—24 (1.70—2.40, 3.7—5.3)	—
	1.2 kW	14.0—20.0 (1.4—2.0, 3.1—4.4)	—

* :When using a new belt, first adjust the deflection or tension to the values for the new belt, then readjust the deflection or tension to the values for the used belt after running engine for five minutes.

Design Specifications

	ITEM		METRIC	ENGLISH	NOTES
DIMENSIONS (European)	Overall Length		4,005 mm	157.7 in	
			4,015 mm	158.1 in	Finnish model
	Overall Width		1,695 mm	66.7 in	
	Overall Height		1,255 mm	49.4 in	
	Wheelbase		2,370 mm	93.3 in	
	Track Front/Rear		1,475/1,465 mm	58.1/57.7 in	
	Ground Clearance		140 mm	5.5 in	
	Seating Capacity		Two		
DIMENSIONS (Except European)	Overall Length		3,995 mm	157.2 in	KQ type
			3,997 mm	157.4 in	KY type
	Overall Width		1,695 mm	66.7 in	
	Overall Height		1,255 mm	49.4 in	
			1,276 mm	50.2 in	KY type
	Wheelbase		2,370 mm	93.3 in	
			2,372 mm	93.4 in	KY type
	Track Front/Rear		1,475/1,465 mm	58.1/57.7 in	
	Ground Clearance		140 mm	5.5 in	
			161 mm	6.3 in	KY type
	Seating Capacity		Two		
WEIGHT (European)	Curb weight				
	ESi	M/T	1,050 kg	2,315 lb	KG, KF, KE types
			1,055 kg	2,326 lb	KS type
		A/T	1,080 kg	2,381 lb	KG, KF, KE types
			1,085 kg	2,392 lb	KS type
	VTi		1,105 kg	2,436 lb	KG, KF types
			1,120 kg	2,469 lb	KE type
			1,110 kg	2,447 lb	KS type
	VTi with power roof		1,160 kg	2,557 lb	KG, KF types
			1,175 kg	2,590 lb	KE type
			1,165 kg	2,568 lb	KS type
	Weight distributions (Front/Rear)				
	ESi	M/T	650/400 kg	1,433/882 lb	KG, KF, KE types
			655/400 kg	1,444/882 lb	KS type
		A/T	680/400 kg	1,499/882 lb	KG, KF, KE types
			685/400 kg	1,510/882 lb	KS type (except Sweden)
	VTi		695/410 kg	1,532/904 lb	KG, KF types
			705/415 kg	1,554/915 lb	KE type
			700/410 kg	1,543/904 lb	KS type
	VTi with power roof		700/460 kg	1,543/1,014 lb	KG, KF types
			710/465 kg	1,565/1,025 lb	KE type
			705/460 kg	1,554/1,014 lb	KS type
	Max permissible weight (EC)				
	ESi		1,032 kg	2,910 lb	
	VTi, VTi with power roof		1,430 kg	3,153 lb	

	ITEM		METRIC	ENGLISH	NOTES
WEIGHT (Except European)	Curb weight				
		Si	1,040 kg	2,293 lb	KP, KT types
		Si with power roof	1,157 kg	2,551 lb	KY type
			1,095 kg	2,414 lb	KP, KT types
		SiR	1,115 kg	2,458 lb	KQ type
		SiR with power roof	1,169 kg	2,577 lb	KQ type
	Weight distributions (Front/Rear)				
		Si	640/400 kg	1,411/882 lb	KP, KT types
		Si with power roof	678/479 kg	1,495/1,056 lb	KY type
			645/450 kg	1,422/992 lb	KP, KT types
		SiR	699/416 kg	1,541/917 lb	KQ type
		SiR with power roof	704/465 kg	1,552/1,025 lb	KQ type
ENGINE	Type	D16Z6, D16Z7 engine	Water-cooled, 4-stroke SOHC VTEC gasoline engine		
		D16A9 engine	Water-cooled 4-stroke DOHC gasoline engine		
		B16A2 engine	Water-cooled, 4-stroke DOHC VTEC gasoline engine		
	Cylinder Arrangement		In-line 4-cylinder, transverse		
	Bore and Stroke	D16Z6, D16Z7 engine	75.0 x 90.0 mm	2.95 x 3.54 in	
		D16A9 engine	75.0 x 90.0 mm	2.95 x 3.54 in	
		B16A2 engine	81.0 x 77.4 mm	3.19 x 3.05 in	
	Displacement	D16Z6, D16Z7 engine	1,590 cm^3 (cc)	97.0 cu-in	
		D16A9 engine	1,590 cm^3 (cc)	97.0 cu-in	
		B16A2 engine	1,595 cm^3 (cc)	97.3 cu-in	
	Compression Ratio	D16Z6, D16Z7 engine	9.2 : 1		
		D16A9 engine	9.5 : 1		
		B16A2 engine	10.2 : 1		
	Valve Train	D16Z6, D16Z7 engine	Belt driven, SOHC VTEC 4-valves per cylinder		
		D16A9 engine	Belt driven, DOHC 4-valves per cylinder		
		B16A2 engine	Belt driven, DOHC VTEC 4-valves per cylinder		
	Lubrication System		Forced and wet sump, trochoid pump		
	Fuel Required	D16Z6, D16Z7, B16A2 engine	Premium unleaded grade gasoline with 95 Research Octane Number or higer		
		D16A9 engine	Premium leaded grade gasoline with 98 research Octane Number or higher		
STARTER	Makes/Type		MITSUBA/Gear reduction, 1.0, 1.2 and 1.4 kW NIPPONDENSO/Gear reduction, 1.0, 1.2 kW		
	Normal Output		1.0, 1.2 and 1.4 kW		
	Nominal Voltage		12 V		
	Hour Rating		30 seconds		
	Direction of Rotation		Clockwise as viewed from gear end		
		MITSUBA 1.0, 1.2 kW	3.4 kg	7.5 lb	
		1.4 kW	3.5 kg	7.7 lb	
		NIPPONDENSO 1.0 kW	3.85 kg	8.49 lb	
		1.2 kW	3.4 kg	7.5 lb	
CLUTCH	Clutch Type	M/T	Single plate dry, diaphragm spring		
		A/T	Torque converter with lock-up clutch		
	Clutch Facing Area	M/T	176 cm^2	27 sq-in	Except B16A2 engine
			203 cm^2	31 sq-in	B16A2 engine

Design Specifications

	ITEM		METRIC	ENGLISH	NOTES
TRANSMISSION	Transmission	M/T A/T	Synchronized 5-speed forward, 1 reverse 4-speed forward automatic with lock-up clutch, 1 reverse		
	Primary Reduction		Direct 1 : 1		
	Type		Manual		
			S20 for D16Z6, D16Z7 engine	S20 for D16A9 engine	Y21 for B16A2 engine
	Gear Ratio	1st 2nd 3rd 4th 5th Reverse	3.250 1.900 1.250 0.937 0.771 3.153	3.250 1.900 1.250 0.909 0.750 3.153	3.230 2.105 1.458 1.107 0.875 3.000
	Final Reduction	Gear ratio	4.250	4.250	4.266
		Gear type	Single helical gear		
	Type		Automatic		
			M24A for D16Z6, D16Z7 engine		
	Gear Ratio	1st 2nd 3rd 4th Reverse	2.600 1.393 0.975 0.772 1.954		
	Final Reduction	Gear ratio	4.333		
		Gear type	Single helical gear		
AIR CONDITIONING	Cooling Capacity —— Conditions: Compressor Speed Outside Air Temperature Outside Air Humidity Condenser Air Velocity Blower Capacity		LHD: 3,730 Kcal/h RHD: 3,800 Kcal/h 2,200 min^{-1} (rpm) 35 ➡ 25 ➡ 20°C 80 % ➡ 30 % 3.5 m/sec 430 m^3/h	14,800 BTU/h 15,078 BTU/h 95 ➡ 77 ➡ 68°F 11.5 ft/sec 15,188 cu ft/h	at 12 V
	Compressor	Type/Makes No. of Cylinder Capacity Max. Speed Lubricant Capacity	Scroll type/SANDEN —— 85.6 cc/rev 10,000 min^{-1} (rpm) 120—140 cc	5.22 cu-in/rev 4.06—4.73 US oz, 4.22—4.93 Imp oz	Except B16A2 engine
	Compressor	Type/Makes No. of Cylinder Capacity Max. Speed Lubricant Capacity	Swash-plate type/NIPPONDENSO 10 155.3 cc/rev 7,600 min^{-1} (rpm) 60—100 cc	9.47 cu-in/rev 2.03—3.38 US oz, 2.11—3.52 Imp oz	B16A2 engine

	ITEM		METRIC	ENGLISH	NOTES
AIR CONDITIONER (cont'd)	Condenser	Type	Corrugated fin type		
	Evaporator	Type	LHD: Corrugated fin type RHD: Laminated fin type		
	Blower	Type Motor Input Speed Control Max. Capacity	Sirocco fan 200 W/12 V 4-speed variable 430 m^3/h	15,188 cu-ft/h	at 12 V
	Temp. Control		Air-mix type		
	Comp Clutch	Type Power Consumption	Dry, single plate, poly-V-belt drive 42 W max./12 V		
	Refrigerant	Type Quantity	R12 650^{+0}_{-50} g	$22.9^{+0}_{-1.8}$ oz	
STEERING SYSTEM	Type Overall Ratio Turns Lock-to-Lock Steering Wheel Dia.		Power assisted rack and pinion LHD: 17.7 RHD: 17.1 RHD: 16.6 LHD: 3.58 LHD: 3.25 RHD: 3.47 RHD: 3.05 375 mm	14.8 in	 Except B16A2 engine B16A2 engine Except B16A2 engine B16A2 engine Except B16A2 engine B16A2 engine
SUSPENSION	Type, Front and Rear Shock Absorber, Front and Rear		Independent double wishbone, coil spring Telescopic, hydraulic nitrogen gas-filled		
WHEEL	Camber Caster Toe	Front Rear Front Front Rear	−0°15′ −0°20′ −0°30′ 1°10′ 0 mm In 2.0 mm	0 in In 0.08 in	Except B16A2 engine B16A2 engine
BRAKE SYSTEM	Type, Front Rear Pad and Lining Surface Area: Front Rear Parking Brake Kind and Type		power-assisted self-adjusting ventilated disc Power-assisted self-adjusting solid disc or Drum 51.5 cm^2 x 2 21.0 cm^2 x 2 50.2 cm^2 x 2 Mechanical actuating, rear two wheel brakes	7.94 sq-in x 2 3.26 sq-in x 2 7.78 sq-in x 2	 Disc, 210 mm dia Disc Drum, 180 mm I.D
TIRE	Size/Pressure		See tyre information label on the driver's door jamb.		

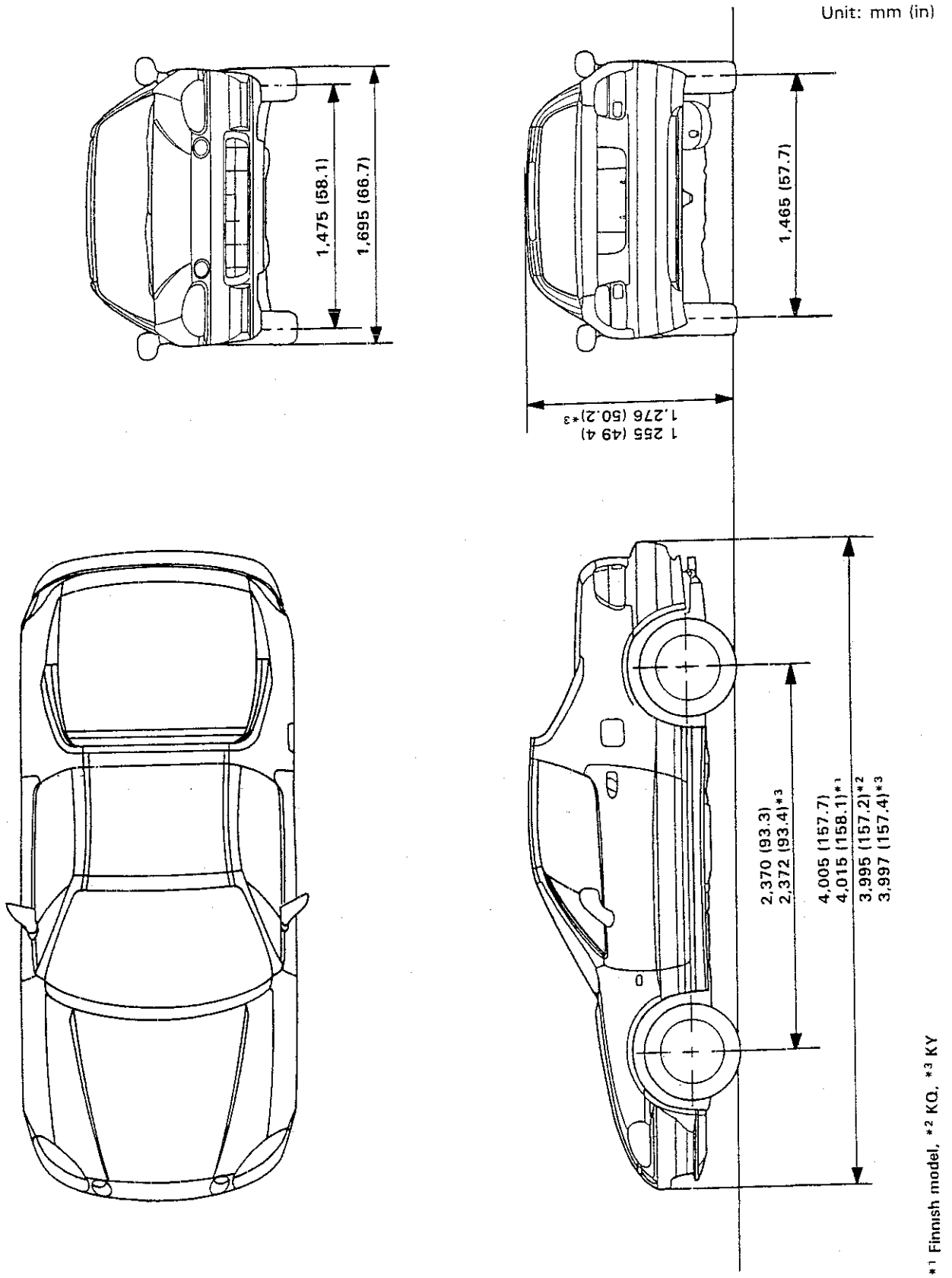
Design Specifications

	ITEM	METRIC	ENGLISH	NOTES
ELECTRICAL	Battery	12 V-36 AH/5 HR, 12 V-38 AH/5 HR, 12 V-47 AH/5 HR		
	Starter	12 V-1.0 kW, 12 V-1.2 kW, 12 V-1.4 kW		
	Alternator	12 V-70 A, 12 V-80 A		
	Fuses			
	In The Under-dash Fuse/Relay Box	See the fuse label attached to the inside of the fuse/relay box cover under the dashboard.		
	In The Under-hood Fuse/Relay Box	See the fuse/relay box cover		
	Headlights Inside*1	12 V-60/55 W		
	Outside	12 V-60/55 W		
	Front Turn Signal Lights*1	12 V-21 W		
	Front Parking Lights*1	12 V—5 W		
	Front Turn Signal/Parking Lights*2	12 V—43/3CP (27/8 W)		
	Side Turn Signal Lights	12 V-5 W		
	Rear Turn Signal Lights	12 V-21 W		
	Brake/Taillights	12 V-21/5 W		
	Back-up Lights	12 V-21 W		
	Accessory Light*2	12 V-45 CP		
	Rear Fog Light*3	12 V-21 W		
	License Plate Lights	12 V-5 W		
	Interior Light	12 V-5 W		
	Trunk Light	12 V-3.4 W		
	Stop Lights*4	12 V-5 W		
	Gauge Lights	12 V-3.0 W		
	Indicator Lights	12 V-1.4 W		
	Illumination and Pilot Lights	12 V-1.4 W, 1.12 W, 0.84 W 12 V-0.91 W, 0.56 W LED		
	Heater Illumination Lights	12 V-1.4 W		

*1: Except KY
*2: KY
*3: European models
*4: Except KP, KT

Body Specifications

Unit: mm (in)



*1 Finnish model, *2 KΩ, *3 KY

Maintenance

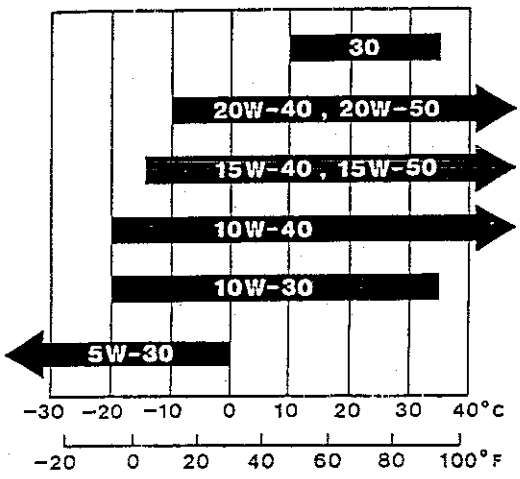
Lubrication Points 4-2
Maintenance Schedule 4-4

Lubrication Points

For the details of lubrication points and types of lubricants to be applied, refer to the Illustrated Index and various work procedures (such as Assembly/Reassembly, Replacement, Overhaul, Installation, etc.) contained in each section

No.	LUBRICATION POINTS		LUBRICANT
1	Engine		API Service Grade: SG or SF fuel efficient oil
2	Transmission	Manual	API Service Grade: SF or SG, 10 W—30 or 10 W—40
		Automatic	Honda Premium Formula automatic transmission fluid or DEXRON® II automatic transmission fluid
3	Brake Line		Brake fluid DOT3 or DOT4
4	Clutch Line		Brake fluid DOT3 or DOT4
5	Power steering gearbox		Steering grease P/N 08733—B070E
6	Shift lever pivots (M/T)		Silicone grease with molybdenum disulfide
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Release fork (M/T) Steering boots Steering column bushings Steering ball joints Select lever (A/T) Pedal linkage Brake master cylinder pushrod Trunk hinges and latch (Manual roof) Door hinges upper and lower Door opening detents Fuel filler lid Engine hood hinges and engine hood latch Clutch master cylinder pushrod Throttle cable end Rear brake shoe linkages		Multi-purpose grease
22	Caliper	Piston seal, Dust seal, Caliper pin, Piston	Silicone grease
23	Power steering system		Honda power steering fluid-V

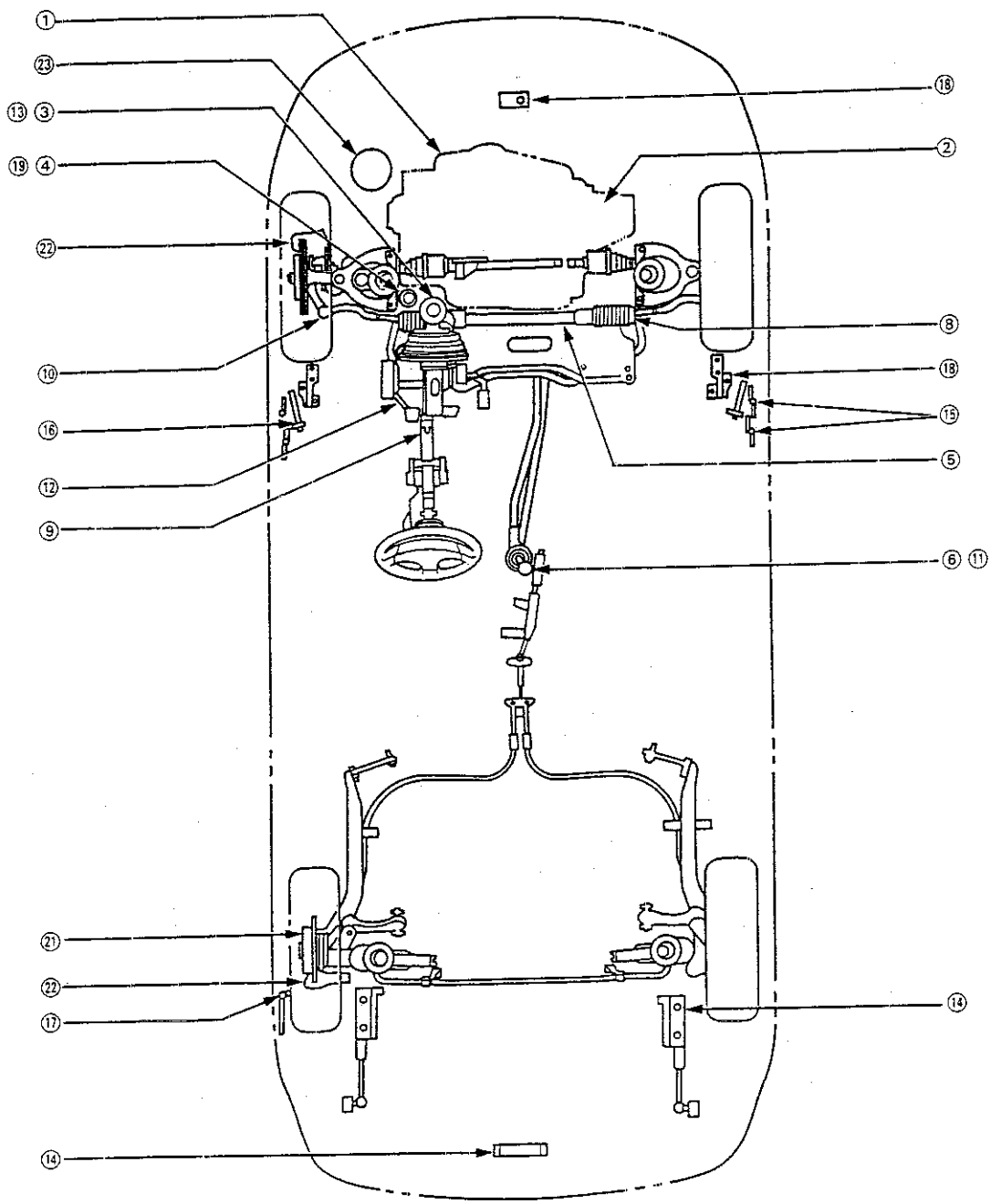
Recommended Engine Oil
API Service Grade: SG or SF fuel efficient oil. Select the oil for the car according to this chart.



Ambient temperature ranges

CAUTION: Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

NOTE: LHD is shown; RHD is symmetrical



R—Replace I—Inspect After inspection, clean, adjust, repair or replace if necessary.

Service at the interval listed x 1,000 km (or miles) or after that number of months, whichever comes first.		x 1,000 km	10	20	30	40	50	60	70	80	90	100
		x 1,000 miles	6	12	18	24	30	36	42	48	54	60
		months	6	12	18	24	30	36	42	48	54	60
Emission Related												
☐ Air Cleaner Element	For European and KQ types					R				R		
	Except for European and KQ types			R		R		R		R		R
Idle speed and idle CO	Except for KS type			I		I		I		I		I
	For KS type											I
Evaporative emission control system												I
Ignition timing and control system	Except for KS types					I				I		
	For KS types											I
Positive crankcase ventilation valve	Except for KS types					I				I		
	For KS types											I
Valve clearance				I		I		I		I		I
Fuel filter (Including aux. filter)						R				R		
Tank, fuel line and connections						I				I		
Spark plugs	For cars with three way catalytic converter					R*1				R*1		
	For cars without three way catalytic converter			R		R		R		R		R
Distributor ignition cap and rotor	Except for KS type					I				I		
	For KS type											I
Ignition wiring	Except for KS type					I				I		
	For KS type											I
⊛ Engine oil and oil filter			R	R	R	R	R	R	R	R	R	R
Alternator drive belt						I				I		
Power steering pump belt						I				I		
Cooling system hoses and connections						I				I		
• Radiator coolant										R*1		
Transmission oil						R				R		

• Day to day care (engine oil, ATF and coolant level) should be done practically according to the owner's manual by the customer.
☐ Under severe driving conditions, service these items more often.
*1 For KS type, replace every 2 years or 40,000 km (24,000 miles), whichever comes first after 30,000 km (18,000 miles).

R—Replace I—Inspect After inspection, clean, adjust, repair or replace if necessary.

Service at the interval listed x 1,000 km (or miles) or after that number of months, whichever comes first.	x 1,000 km	10	20	30	40	50	60	70	80	90	100
	x 1,000 miles	6	12	18	24	30	36	42	48	54	60
	months	6	12	18	24	30	36	42	48	54	60
Engine (Non-Emission Related)											
Timing Belt											R
Water pump											I
Exhaust pipe and muffler			I		I		I		I		I
Catalytic converter heat shield (for cars with three way catalytic converter)											I
Brakes (Non-Emission Related)											
Front brake pads		I	I	I	I	I	I	I	I	I	I
☐ Front brake discs and calipers			I		I		I		I		I
☐ Rear brake discs, calipers and pads					I				I		
Rear brake drums, wheel cylinders and linings					I				I		
Brake hoses and lines (including Anti-lock brake system*2)			I		I		I		I		I
Parking brake			I		I				I		
Brake fluid (including Anti-lock brake system*2)					R				R		
Anti-lock brake system high pressure hose*2									R		
Anti-lock brake system operation*2			I		I				I		
Steering, suspension (Non-Emission Related)											
Front wheel alignment			I		I		I		I		I
Steering operation, tie rod ends, steering gear box and boots			I		I				I		
Suspension mounting bolts			I		I		I		I		I
☐ Power steering system			I		I		I		I		I

• Day to day care (engine oil, ATF and coolant level) should be done practically according to the owner's manual by the customer.
☐ Under severe driving conditions, service these items more often.
*1 Thereafter, replace every 2 years or 40,000 km (24,000 miles), whichever comes first.
*2 For cars with Anti-lock brake system.

Severe Driving Conditions
Items with a ☐ in the chart will need service more often, if you drive in some severe conditions.

The conditions are:
A. Repeated short distance driving.
B. Dusty conditions.
C. Severe cold weather.
D. Areas with road salt or other corrosive materials.
E. Rough or muddy roads.

The services are:
– Replace engine oil and oil filter every 5,000 km (3,000 miles) or 3 months under condition A or B.
– Replace the air cleaner element every 20,000 km (12,000 miles) or 12 months for European and Australian types under condition B or E.
– Replace the air cleaner every 10,000 km (6,000 miles) or 6 months for other than European and Australian types under condition B or E.
– Inspect the front brake discs and calipers every 10,000 km (6,000 miles) or 6 months under condition A, B, D or E.
– Inspect the rear brake discs, calipers and pads every 20,000 km (12,000 miles) or 12 months under condition A, B, D or E.
– Inspect power steering system every 10,000 km (6,000 miles) or 6 months under condition B, C or E.