

# INTRODUCTION

## How to Use This Manual

This supplement contains information for the 96 ACCORD COUPE/AERO DECK.

Refer to following shop manuals for service procedures and data not included in this supplement. Accord Aero deck is sold as Accord Wagon in Australia. Please refer to the procedures for Accord Wagon for repair/maintenance of the Accord Aero deck.

Description	Code No.
94 ACCORD Shop Manual MAINTENANCE, REPAIR and CONSTRUCTION	62SV400
94 ACCORD COUPE Shop Manual MAINTENANCE, REPAIR and CONSTRUCTION	62SV200
94 ACCORD AERO DECK Supplement Manual	62SV220
95 ACCORD Supplement Manual	62SV420
95 ACCORD COUPE, ACCORD AERO DECK/WAGON Supplement Manual	62SV221
96 ACCORD Supplement Manual	62SV422

The first page of each section is marked with a black tab that lines up with one of the thumb index tabs on this page. 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.

## 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.

All information contained in this manual is based on the latest product information available at the time of printing. We reserve the right to make changes at any time without notice. No part of this publication may be reproduced, stored in retrieval system, or transmitted, in any form by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. This includes text, figures and tables.

▬ marked sections are not included in this manual.

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

General Info 

Special Tools 

Specifications 

Maintenance 

Engine 

Drivetrain 

Fuel and Emissions 

\* Transaxle 

\* Steering 

Suspension 

\* Brakes (Including ABS) 

\* Body 

\* Heater and Air Conditioning 

\* Electrical (Including SRS) 

# Outline of Model Changes

## European (KG, KZ, KE, KS) Models

ITEM	DESCRIPTION	MODELS					REFERENCE SECTION
		94 AERO DECK	95 COUPE	95 AERO DECK	96 COUPE	96 AERO DECK	
General	ACCORD AERO DECK added	○					—
Engine	Exhaust pipe and muffler changed	○					—
	• Maintenance interval for engine oil and oil filter changed				○	○	8
Fuel and Emissions	• Fuel Tube/Quick-Connect Fittings introduce • Engine Control Module modified				○	○	11
Manual Transmission	Changed • Countershaft clearance inspection • Reverse idler gear shaft bolt torque		○	○			—
	• Honda genuine manual transmission fluid (MTF) specified				○	○	13
Automatic Transmission	Modified • 1st clutch piston Changed • 1st-hold clutch plates • Secondary shaft axial clearance specification • Torque value of the transmission housing mounting bolts		○	○			—
Steering	• Steering gearbox removal/installation procedures changed				○	○	17
Suspension	Rear dumper removal and installation changed	○					—
Body	ACCORD AERO DECK added	○					—
	Changed • Instrument panel and dashboard lower <sup>? COVER</sup> removal procedures (automatic climate control model) • Headliner replacement procedure • Quantities of the side sill panel clips used • Sunroof constructions • Radio with a coded theft protection circuit (COUPE-KE model, AERO DECK-KE and KS models) Added • Door cylinder protector and door weatherstrip Disused • Manual door window		○	○			—
	Changed • Door molding adhesive tape location Added • Side and rear emblems		○				—
	Changed • Emblem attachment points • Front seat belt lower anchor bolt construction			○			—
	Changed • Attachment point of emblem • Opener cable location • Opening repair chart				○		20
	• Guide to the cushion tape location of ceiling light harness Changed • Front bumper and spoiler, rear bumper and bumper skirt • Trunk lid				○	○	
	• Door molding adhesive tape and clip location changed • Roof rack added					○	

ITEM	DESCRIPTION	MODELS					REFERENCE SECTION
		94 AERO DECK	95 COUPE	95 AERO DECK	96 COUPE	96 AERO DECK	
Electrical	ACCORD AERO DECK added	○					—
	Added • Driver's side vanity mirror light		○	○			—
	• Circuit diagrams of systems whose wire colors changed • It is now possible to replace the power mirror actuator • Immobilizer system information entered • Horn circuits of models with SRS airbag system changed				○	○	23
	• Inner taillights added				○		
Supplemental Restraint System (SRS)	DE-made SRS unit adopted	○					—
	Changed • From SRS-type I to SRS-type III		○	○			—
	• SRS unit and cable reel connectors changed				○	○	23

NOTE: Refer to 94 ACCORD COUPE Shop Manual (Code No. 62SV200), 94 ACCORD AERO DECK Shop Manual Supplement (Code No. 62SV220) and 95 ACCORD COUPE, ACCORD AERO DECK/WAGON Shop Manual Supplement (Code No. 62SV221) for the items not shown.

## Australian (KQ), Saudi Arabian (KY), Taiwan (KH) and Korea (KH) Models

ITEM	DESCRIPTION	MODELS					REFERENCE SECTION
		94 AERO DECK	95 COUPE	95 AERO DECK*1 or WAGON*2	96 COUPE	96 DECK*1 or WAGON*2	
General	ACCORD AERO DECK added	○					—
	Sales name has been changed from ACCORD AERO DECK to ACCORD WAGON (for KQ model)			○			—
	• ACCORD AERO DECK and COUPE for KY model added				○	○	1
Engine	Changed • Intake manifold • Exhaust pipe and muffler	○					—
	• VTEC oil pressure switch abolished • Troubleshooting for VTEC solenoid valve changed				○	○	6
	• Maintenance interval for engine oil and oil filter changed				○	○	8
Fuel and Emissions	Changed • Engine coolant temperature sensor circuit (KH model)		○	○			—
	• Engine Control Module modified • Fuel injection Air (FIA) Control System abolished (KH model) • Fuel Tube/Quick-Connect Fittings introduced				○	○	11
Manual Transmission	Changed • Countershaft clearance inspection • Reverse idler gear shaft bolt torque		○	○			—
	• Honda genuine manual transmission fluid (MTF) specified				○	○	13
Automatic Transmission	Road test of F22B1 engine added	○					—
	Modified • 1st clutch piston Changed • 1st-hold clutch plates • Secondary shaft axial clearance specification • Torque <u>value</u> of the transmission housing mounting bolts		○	○			—
Steering	• Steering gearbox removal/installation procedures changed				○	○	17
Suspension	Rear dumper removal and installation changed	○					—
Body	ACCORD AERO DECK added	○					—
	Changed • Instrument panel and dashboard lower cover removal procedures (automatic climate control model) • Headliner replacement procedure • Quantities of the side sill panel clips used • Sunroof construction Added • Door cylinder protector • Door lower weatherstrip • Radio with a coded theft protection circuit (COUPE-KM model, AERO DECK-KM model) Disused • Manual door window		○	○			—
	Changed • Door molding adhesive tape location Added • Side and rear emblems • Front bumper beam and rear bumper beam (KM model)		○				—
	Changed • Emblem attachment point			○			—
	Changed • Attachment point of emblem • Opener cable location • Opening repair chart • Power adjustable seat added				○		20
	• Door molding adhesive tape and clip location changed					○	
	Changed • Front bumper and spoiler, rear bumper and bumper skirt • Trunk lid • Guide to the cushion tape location of ceiling light harness				○	○	

ITEM	DESCRIPTION	MODELS					REFERENCE SECTION	
		94 AERO DECK	95 COUPE	95 AERO DECK*1 or WAGON*2	96 COUPE	96 AERO DECK*1 or WAGON*2		
Air Conditioning	Added • Automatic climate control (KH model)		○	○			—	
Electrical	ACCORD AERO DECK added	○					—	
	Added • Automatic climate control (KH model) • Retractable power mirrors (KH model) • Driver's side vanity mirror light • Coded theft protection circuit for the radio (KM model) • Keyless entry system		○	○			—	
	Changed • Taillight bulbs replacement		○				—	
	• KY model added; related information entered • Information related to the addition F22B4 (KY model) engine entered • Circuit diagrams of system whose wire colors changed • Horn circuits of models with SRS airbag system changed • It is now possible to replace the power mirror actuator • Immobilizer system information entered					○	○	23
	• Inner taillights added				○			
Supplemental Restraint System (SRS)	DE-made SRS unit adopted	○					—	
	Changed • From SRS-type I to SRS-type III		○	○			—	
	• SRS unit and cable reel connectors changed				○	○	23	

NOTE: Refer to 94 ACCORD Shop Manual (Code No. 62SV400), 94 ACCORD AERO DECK Shop Manual Supplement (Code No. 62SV220), 95 ACCORD Shop Manual Supplement (Code No. 62SV420) and 95 ACCORD COUPE, ACCORD AERO DECK/WAGON Shop Manual Supplement (Code No. 62SV221) for the items not shown.

\*1: Except KQ model, \*2: KQ model



## **General Information**

**Chassis and Engine Numbers ..... 1-2**

**Identification Number Locations ..... 1-6**

# Chassis and Engine Numbers

## AERO DECK or WAGON

European and KQ models:

**Vehicle Identification Number** 1HGCE17100A200001

**Manufacturer, Make and Type of Vehicle** \_\_\_\_\_  
 1HG: HONDA OF AMERICA MFG., INC., U.S.A.  
 HONDA Passenger car

**Line, Body and Engine Type** \_\_\_\_\_  
 CE1: ACCORD AERO DECK\*1 or WAGON\*/F22B1, F22B5  
 CE2: ACCORD AERO DECK/F20B3

**Body Type and Transmission Type** \_\_\_\_\_  
 7: 5-door Wagon/5-speed Manual  
 8: 5-door Wagon/4-speed Automatic

**Vehicle Grade (Series)** \_\_\_\_\_  
 1: 2.2i LS  
 2: 2.0i LS  
 3: 2.0i LS with S/R  
 4: 2.2i LS with S/R  
 5: 2.0i ES 2.2i ES  
 6: 2.2i ES with leather seats  
 2.0i ES  
 7: VTI  
 2.0i ES with S/R  
 8: 2.0i ES with S/R

**Fixed Code** \_\_\_\_\_

**Auxiliary Number** \_\_\_\_\_

**Factory Code** \_\_\_\_\_  
 A: Ohio Factory in U.S.A. (Marysville)

**Serial Number** \_\_\_\_\_

\*1: European model, \*2: KQ model

**Engine Number** F20B3-3000001

**Engine Type** \_\_\_\_\_  
 F20B3: 2.0 l SOHC Sequential Multiport Fuel-injected engine with CATA [European (KG, KE, KS, KZ) models]  
 F22B1: 2.2 l SOHC VTEC Sequential Multiport Fuel-injected engine with CATA [Australian (KQ) model]  
 F22B5: 2.2 l SOHC Sequential Multiport Fuel-injected engine with CATA [European (KG, KE, KS, KZ) models]

**Serial Number** \_\_\_\_\_  
 F20B3, F22B5: 3000001 ~  
 F22B1 : 3800001 ~

**Transmission Number** P2U5-7000001

**Transmission Type** \_\_\_\_\_  
 P2U5: Manual for F22B1 engine  
 P2C4: Manual for F20B3, F22B5 engines  
 AOYA: Automatic

**Serial Number** \_\_\_\_\_

KY and KH models:

**Vehicle Identification Number** 1HGCE172\*TA000001

**Manufacturer, Make and Type of Vehicle** \_\_\_\_\_  
 1HG: HONDA OF AMERICA MFG., INC., U.S.A.  
 HONDA Passenger car

**Line, Body and Engine Type** \_\_\_\_\_  
 CE1: ACCORD AERO DECK/  
 F22B2 and F22B4

**Body Type and Transmission Type** \_\_\_\_\_  
 7: Wagon/5-speed Manual  
 8: Wagon/4-speed Automatic

**Vehicle Grade (Series)** \_\_\_\_\_  
 2: LX  
 7: 2.2 EX  
 8: 2.2 EX with Stereo Sound System  
 9: EX

**Check Digit** \_\_\_\_\_

**Model Year** \_\_\_\_\_  
 Model Year  
 T: 1996

**Factory Code** \_\_\_\_\_  
 A: Ohio Factory in U.S.A. (Marysville)

**Serial Number** \_\_\_\_\_

**Engine Number** F22B2-3400001

**Engine Type** \_\_\_\_\_  
 F22B2: 2.2 l SOHC Sequential Multiport Fuel-injected engine with CATA  
 F22B4: 2.2 l SOHC Sequential Multiport Fuel-injected engine without CATA

**Serial Number** \_\_\_\_\_  
 F22B2: 3400001 ~  
 F22B4: 3100001 ~

**Transmission Number** P2A5-7000001

**Transmission Type** \_\_\_\_\_  
 P2A4: Manual with F22B2 engine  
 P2C4: Manual with F22B4 engine  
 AOYA: Automatic

**Serial Number** \_\_\_\_\_



# Coupe

## European Model:

**Vehicle Identification Number** 1HGCD71400A200001

**Manufacturer, Make and Type of Vehicle**  
 1HG: HONDA OF AMERICA MFG., INC., U.S.A.  
 HONDA, Passenger car

**Line, Body and Engine Type**  
 CD7: ACCORD COUPE/F22B5  
 CD9: ACCORD COUPE/F20B3

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

**Vehicle Grade (Series)**  
 3: 2.2i ES  
 4: 2.0i LS  
    2.2i ES with leather seats  
 5: 2.0i ES  
 6: 2.0i ES with leather seats

**Fixed Code**

**Auxiliary Number**

**Factory Code**  
 A: Ohio Factory in U.S.A. (Marysville)

**Serial Number**

**Engine Number** F20B3-3000001

**Engine Type**  
 F20B3: 2.0 l SOHC Sequential Multiport Fuel-injected engine with CATA  
 F22B5: 2.2 l SOHC Sequential Multiport Fuel-injected engine with CATA

**Serial Number**

**Transmission Number** P2C4-7000001

**Transmission Type**  
 P2C4: Manual  
 AOYA: Automatic

**Serial Number**

## Except European Model:

**Vehicle Identification Number** 1HGCD722\*TA000001

**Manufacturer, Make and Type of Vehicle**  
 1HG: HONDA OF AMERICA MFG., INC., U.S.A.  
 HONDA Passenger car

**Line, Body and Engine Type**  
 CD7: ACCORD COUPE/F22B1, F22B2 and F22B4

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

**Vehicle Grade (Series)**  
 1: DX with ABS  
 2: DX  
 5: EX, 2.2 EX  
 6: EX with leather seats  
    2.2 EX with stereo sound system

**Check Digit**

**Model Year**  
 Model Year  
 T: 1996

**Factory Code**  
 A: Ohio Factory in U.S.A. (Marysville)

**Serial Number**

**Engine Number** F22B1-3400001

**Engine Type**  
 F22B1: 2.2 l SOHC VTEC Sequential Multiport Fuel-injected engine with CATA  
 F22B2: 2.2 l SOHC Sequential Multiport Fuel-injected engine with CATA  
 F22B4: 2.2 l SOHC Sequential Multiport Fuel-injected engine without CATA

**Serial Number**  
 F22B1, F22B2: 3400001 ~  
 F22B4 : 3100001 ~

**Transmission Number** P2A4-7000001

**Transmission Type**  
 P2A4: Manual with F22B1 engine  
 P2C4: Manual with F22B4 engine  
 AOYA: Automatic

**Serial Number**



# Chassis and Engine Numbers

## AERO DECK or WAGON

Applicable Area Code/VIN/Engine Number/Transmission Number List

MODEL	GRADE NAME	APPLICABLE AREA CODE	TRANSMISSION TYPE	VEHICLE IDENTIFICATION NUMBER	ENGINE NUMBER	TRANSMISSION NUMBER	
	2.2 EX	KY	5MT	1HGCE177*TA000001~	F22B4-3100001~	P2C4-7000001~	
			4AT	1HGCE187*TA000001~	F22B4-3100001~	A0YA-7000001~	
	2.0 iLS	KG	5MT	1HGCE27200A200001~	F20B3-3000001~	P2C4-7000001~	
				1HGCE27800A200001~	F20B3-3000001~	P2C4-7000001~	
	2.0 iES		4AT	1HGCE28800A200001~	F20B3-3000001~	A0YA-7000001~	
				5MT	1HGCE17400A200001~	F22B5-3000001~	P2C4-7000001~
	2.2 iLS		4AT	1HGCE18400A200001~	F22B5-3000001~	A0YA-7000001~	
				5MT	1HGCE18600A200001~	F22B5-3000001~	P2C4-7000001~
	2.2 iES		4AT	1HGCE18600A200001~	F22B5-3000001~	A0YA-7000001~	
				5MT	1HGCE27500A200001~	F20B3-3000001~	P2C4-7000001~
	ACCORD AERO DECK	2.0 iES	KZ	4AT	1HGCE28500A200001~	F20B3-3000001~	A0YA-7000001~
					5MT	1HGCE17100A200001~	F22B5-3000001~
		2.2 iLS		4AT	1HGCE18100A200001~	F22B5-3000001~	A0YA-7000001~
					5MT	1HGCE17500A200001~	F22B5-3000001~
2.2 iES		4AT		1HGCE18500A200001~	F22B5-3000001~	A0YA-7000001~	
				5MT	1HGCE27300A200001~	F20B3-3000001~	P2C4-7000001~
2.0 iLS		KE		4AT	1HGCE28300A200001~	F20B3-3000001~	A0YA-7000001~
					5MT	1HGCE17600A200001~	F22B5-3000001~
2.2 iES			4AT	1HGCE18600A200001~	F22B5-3000001~	A0YA-7000001~	
				5MT	1HGCE27200A200001~	F20B3-3000001~	P2C4-7000001~
2.0 iLX		KU	5MT	1HGCE17500A200001~	F22B5-3000001~	P2C4-7000001~	
				1HGCE18500A200001~	F22B5-3000001~	A0YA-7000001~	
2.2 iEX			4AT	1HGCE182*TA000001~	F22B2-3400001~	A0YA-7000001~	
				1HGCE189*TA000001~	F22B1-3400001~	A0YA-7000001~	
LX	KH	4AT	1HGCE17700A200001~	F22B1-3800001~	P2U5-7000001~		
			EX	1HGCE18700A200001~	F22B1-3800001~	A0YA-7000001~	
ACCORD WAGON	VTi	KQ	5MT	1HGCE17700A200001~	F22B1-3800001~	P2U5-7000001~	
			4AT	1HGCE18700A200001~	F22B1-3800001~	A0YA-7000001~	



## Coupe

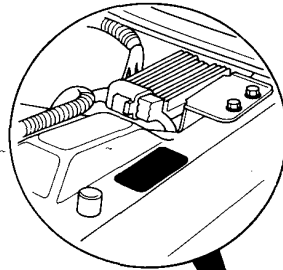
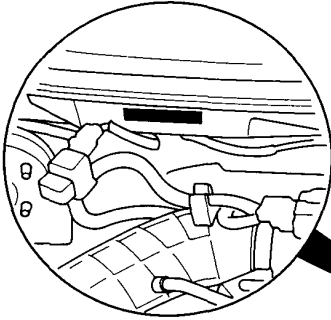
### Applicable Area Code/VIN/Engine Number/Transmission Number List

MODEL	GRADE NAME	APPLICABLE AREA CODE	TRANSMISSION TYPE	VEHICLE IDENTIFICATION NUMBER	ENGINE NUMBER	TRANSMISSION NUMBER	
ACCORD COUPE	2.0 iLS	KG	5MT	1HGCD914*00A200001~	F20B3-3000001~	P2C4-7000001~	
			4AT	1HGCD924*00A200001~	F20B3-3000001~	A0YA-7000001~	
	2.0 iES		5MT	1HGCD915*00A200001~	F20B3-3000001~	P2C4-7000001~	
			4AT	1HGCD925*00A200001~	F20B3-3000001~	A0YA-7000001~	
	2.2 iES		5MT	1HGCD713*00A200001~	F22B5-3000001~	P2C4-7000001~	
			4AT	1HGCD723*00A200001~	F22B5-3000001~	A0YA-7000001~	
	2.0 iES		KZ	5MT	1HGCD915*00A200001~	F20B3-3000001~	P2C4-7000001~
				4AT	1HGCD925*00A200001~	F20B3-3000001~	A0YA-7000001~
	DX	KH	1HGCD722*TA000001~		F22B2-3400001~	A0YA-7000001~	
			EX		KN	1HGCD725*TA000001~	F22B1-3400001~
	1HGCD726*TA000001~	F22B1-3400001~				A0YA-7000001~	
	2.0 iLS	KE	5MT	1HGCD914*00A200001~	F20B3-3000001~	P2C4-7000001~	
			4AT	1HGCD924*00A200001~	F20B3-3000001~	A0YA-7000001~	
	2.2 iES		5MT	1HGCD714*00A200001~	F22B5-3000001~	P2C4-7000001~	
			4AT	1HGCD724*00A200001~	F22B5-3000001~	A0YA-7000001~	
	2.2 EX	KY	5MT	1HGCD715*TA000001~	F22B4-3100001~	P2C4-7000001~	
4AT			1HGCD725*TA000001~	F22B4-3100001~	A0YA-7000001~		

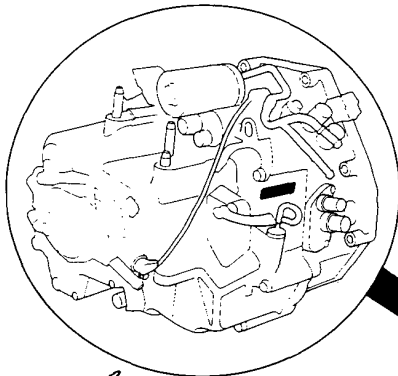
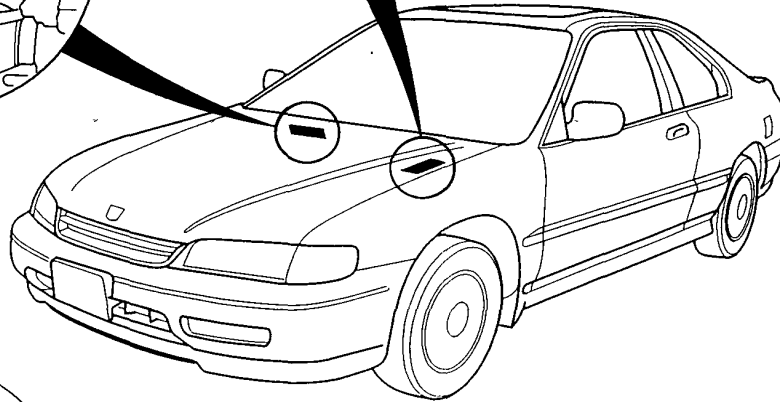
# Identification Number Locations

Coupe:

1 Vehicle Identification Number (VIN)

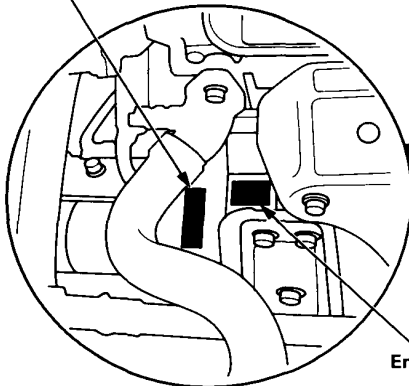


VIN and Engine Number (KE, KG, KZ) 2

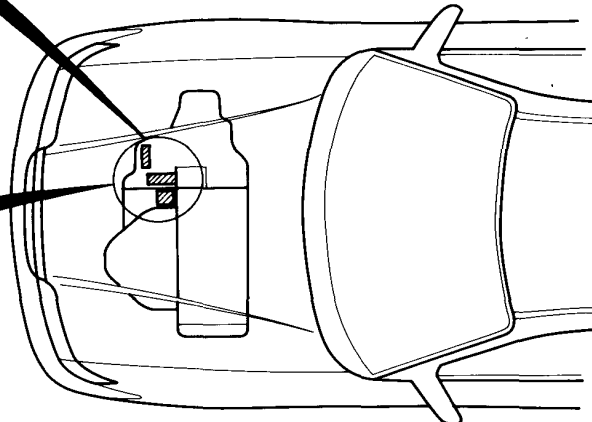


3 Transmission Number (Automatic)

4 Transmission Number (Manual)



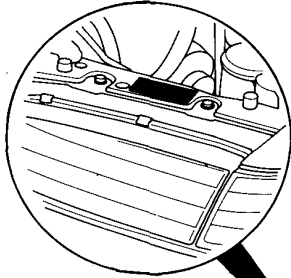
5 Engine Number



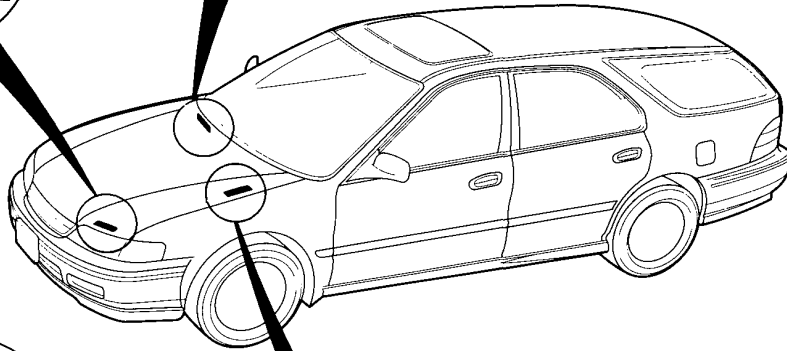
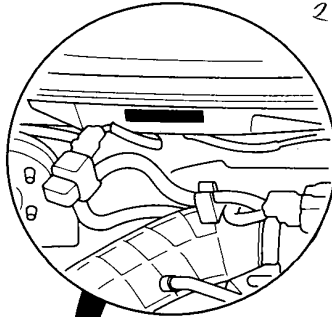


**AERO DECK or WAGON:**

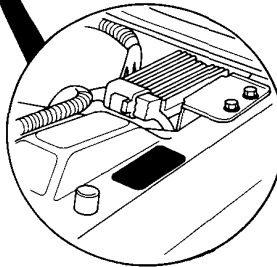
**1** Built Date and Vehicle Type (KQ model)



**2** Vehicle Identification Number (VIN)

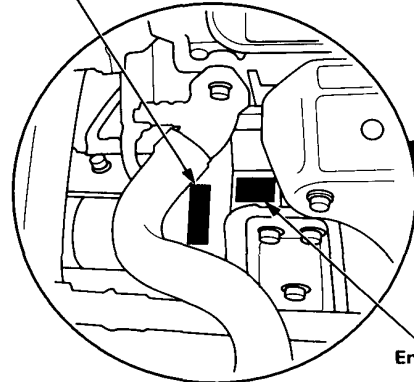


**3**  
VIN and Engine Number (KE, KG, KZ)

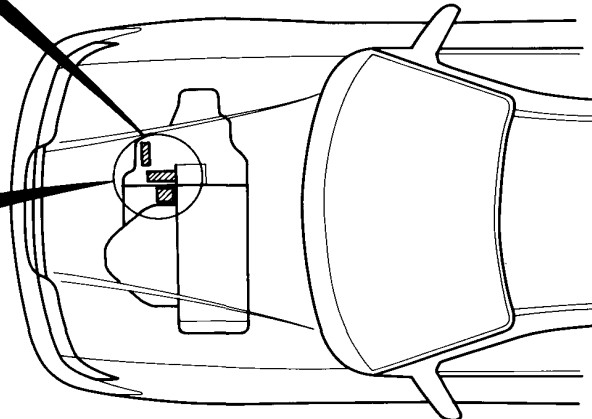


**4** Transmission Number (Automatic)

**5** Transmission Number (Manual)



**6**  
Engine Number





## Special Tools

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

## **Specifications**

<b>Standards and Service Limits .....</b>	<b>3-2</b>
<b>Design Specifications .....</b>	<b>3-13</b>
<b>Body Specifications .....</b>	<b>3-17</b>

# Standards and Service Limits

## Cylinder Head/Valve Train — Section 6

		MEASUREMENT		STANDARD (NEW)		SERVICE LIMIT	
Compression	200 rpm (min <sup>-1</sup> ) and wide open throttle kPa (kgf/cm <sup>2</sup> , psi)		Nominal Minimum Maximum variation	1,230 (12.5, 178) 930 (9.5, 135) 200 (2.0, 28)			
Cylinder head	Warpage Height			99.95 – 100.05 (3.935 – 3.939)		0.05 (0.002)	
Camshaft	End play			0.05 – 0.15 (0.002 – 0.006)		0.5 (0.02)	
	Camshaft-to-holder oil clearance			0.050 – 0.089 (0.0020 – 0.0035)		0.15 (0.006)	
	Total runout			0.03 (0.001) max.		0.04 (0.002)	
	Cam lobe height						
	F22B1 engine		IN	Primary	37.775 (1.4872)		
				Mid	39.725 (1.5640)		
				Secondary	34.481 (1.3575)		
	F22B2 engine		EX		38.366 (1.5105)		
			IN		38.526 (1.5168)		
	F22B5 engine		EX		38.778 (1.5267)		
		IN		39.165 (1.5420)			
F20B3 engine		EX		39.356 (1.5494)			
		IN		38.741 (1.5252)			
		EX		38.972 (1.5343)			
Valve	Valve clearance (Cold)		IN	0.24 – 0.28 (0.009 – 0.011)			
			EX	0.28 – 0.32 (0.011 – 0.013)			
	Valve stem O.D.		IN	5.485 – 5.495 (0.2159 – 0.2163)		5.455 (0.2148)	
			EX	5.450 – 5.460 (0.2146 – 0.2150)		5.420 (0.2134)	
	Stem-to-guide clearance		IN	0.020 – 0.045 (0.0008 – 0.0018)		0.08 (0.003)	
		EX	0.055 – 0.080 (0.0022 – 0.0031)		0.12 (0.005)		
Valve seat	Width		IN	1.25 – 1.55 (0.049 – 0.061)		2.00 (0.079)	
			EX	1.25 – 1.55 (0.049 – 0.061)		2.00 (0.079)	
	Stem installed height F22B1 engine		IN	46.75 – 47.55 (1.841 – 1.872)		47.80 (1.882)	
			EX	46.68 – 47.48 (1.838 – 1.869)		47.73 (1.879)	
	Except F22B1 engine		IN	48.08 – 48.88 (1.893 – 1.924)		49.13 (1.934)	
		EX	50.15 – 50.95 (1.974 – 2.006)		51.20 (2.016)		
Valve spring	Free length F22B1 engine		IN	51.08 (2.011)			
			EX	55.58 (2.188)			
	F22B2 engine		IN	54.82 (2.158)			
			EX	56.28 (2.216)			
	F20B3 engine		IN	53.42 (2.103)			
			EX	54.66 (2.152)			
	F22B5 engine		IN	53.16 (2.093)* <sup>1</sup>			
				53.15 (2.093)* <sup>2</sup>			
				55.80 (2.197)* <sup>1</sup>			
				55.78 (2.196)* <sup>2</sup>			
Valve guide	I.D.		IN	5.515 – 5.530 (0.2171 – 0.2177)		5.55 (0.219)	
			EX	5.515 – 5.530 (0.2171 – 0.2177)		5.55 (0.219)	
	Installed height F22B1 engine		IN	21.20 – 22.20 (0.835 – 0.874)			
			EX	20.63 – 21.63 (0.812 – 0.852)			
	Except F22B1 engine		IN	23.50 – 24.50 (0.925 – 0.965)			
			EX	14.80 – 15.80 (0.583 – 0.622)			
Rocker arm	Arm-to-shaft clearance F22B1 engine		IN	0.026 – 0.067 (0.0010 – 0.0026)		0.08 (0.003)	
			EX	0.018 – 0.054 (0.0007 – 0.0021)		0.08 (0.003)	
	Except F22B1 engine		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)	

\*1: CHUO HATSUJO manufactured valve spring

\*2: NIHON HATSUJO manufactured valve spring

Unit of length: mm (in)

## Engine Block — Section 7

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Cylinder block	Warpage of deck surface		0.07 (0.003) max.	0.10 (0.004)
	Bore diameter	A or I B or II	85.010 – 85.020 (3.3468 – 3.3472) 85.000 – 85.010 (3.3465 – 3.3468)	85.070 (3.3492) 85.070 (3.3492)
	Bore taper Reboring limit		— —	0.05 (0.002) 0.5 (0.02)
Piston	Skirt O.D. [ at 21 mm (0.8 in) from bottom of skirt ]	No letter Letter B	84.980 – 84.990 (3.3457 – 3.3461) 84.970 – 84.980 (3.3453 – 3.3457)	84.970 (3.3453) 84.960 (3.3449)
	Clearance in cylinder		0.020 – 0.040 (0.0008 – 0.0016)	0.05 (0.002)
	Groove width (For ring)	Top	1.220 – 1.230 (0.0480 – 0.0484)	1.25 (0.049)
		Second Oil	1.220 – 1.230 (0.0480 – 0.0484) 2.805 – 2.825 (0.1104 – 0.1112)	1.25 (0.049) 2.85 (0.112)
Piston ring	Ring-to-groove clearance	Top	0.035 – 0.060 (0.0014 – 0.0024)	0.13 (0.005)
		Second	0.030 – 0.055 (0.0012 – 0.0022)	0.13 (0.005)
	Ring end gap	Top Second Oil	0.20 – 0.35 (0.008 – 0.014) 0.40 – 0.55 (0.016 – 0.022) 0.20 – 0.70 (0.008 – 0.028)	0.60 (0.024) 0.70 (0.028) 0.80 (0.031)
Piston Pin	O.D.		21.994 – 22.000 (0.8659 – 0.8661)	—
	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		21.968 – 21.981 (0.8649 – 0.8654)	—
	Large end bore diameter	Nominal	51.0 (2.01)	—
		Except F20B3 engine F20B3 engine	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 and 4 journals	49.984 – 50.008 (1.9679 – 1.9688)	—
		No. 2 journal	49.976 – 50.000 (1.9676 – 1.9685)	—
		No. 3 journal	49.972 – 49.996 (1.9674 – 1.9683)	—
		No. 5 journal	49.988 – 50.012 (1.9680 – 1.9690)	—
	Rod journal diameter	Except F20B3 engine	47.976 – 48.000 (1.8888 – 1.8898)	—
		F20B3 engine	44.976 – 45.000 (1.7707 – 1.7717)	—
	Taper		0.005 (0.0002) max.	0.006 (0.0002)
	Out-of-round		0.005 (0.0002) max.	0.006 (0.0002)
End play		0.10 – 0.35 (0.004 – 0.014)	0.45 (0.018)	
Runout		0.03 (0.001) max.	0.04 (0.002)	
Bearings	Main bearing-to-journal oil clearance	No. 1 and 4 journals	0.013 – 0.037 (0.0005 – 0.0015)	0.050 (0.0020)
		No. 2 journal	0.021 – 0.045 (0.0008 – 0.0018)	0.050 (0.0020)
		No. 3 journal	0.025 – 0.049 (0.0010 – 0.0019)	0.055 (0.0022)
		No. 5 journal	0.009 – 0.033 (0.0004 – 0.0013)	0.040 (0.0016)
	Rod bearing-to-journal oil clearance	Except F20B3 engine F20B3 engine	0.021 – 0.049 (0.0008 – 0.0019) 0.015 – 0.043 (0.0006 – 0.0017)	0.060 (0.0024) 0.050 (0.0020)
Balancer shaft	Journal diameter	No. 1 front journal	42.722 – 42.734 (1.6820 – 1.6824)	42.71 (1.681)
		No. 1 rear journal	20.938 – 20.950 (0.8243 – 0.8248)	20.92 (0.824)
		No. 2 front and rear journals	38.712 – 38.724 (1.5241 – 1.5246)	38.70 (1.524)
		No. 3 front and rear journals	34.722 – 34.734 (1.3670 – 1.3675)	34.71 (1.367)
	Journal taper		0.005 (0.0002)	—
	End play	Front	0.10 – 0.40 (0.004 – 0.016)	—
		Rear	0.04 – 0.15 (0.002 – 0.006)	—
	Total runout		0.02 (0.001)	0.03 (0.001)
Shaft-to-bearing oil clearance	No. 1 front, No. 3 front and rear journals	0.066 – 0.098 (0.0026 – 0.0039)	0.12 (0.005)	
	No. 1 rear journal	0.050 – 0.075 (0.0020 – 0.0030)	0.09 (0.004)	
	No. 2 front and rear journals	0.076 – 0.108 (0.0030 – 0.0043)	0.13 (0.005)	



# Standards and Service Limits

## Engine Block — Section 7

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Balancer shaft bearing	I.D.	No. 1 front journal	42.800 – 42.820 (1.6850 – 1.6858)	42.83 (1.686)
		No. 1 rear journal	21.000 – 21.013 (0.8268 – 0.8273)	21.02 (0.828)
		No. 2 front and rear journals	38.800 – 38.820 (1.5276 – 1.5283)	38.83 (1.529)
		No. 3 front and rear journals	34.800 – 34.820 (1.3701 – 1.3709)	34.83 (1.371)

## Engine Lubrication — Section 8

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Engine oil	Capacity ℓ (US qt, Imp qt)	F22B1 engine	5.6 (5.9, 4.9) for engine overhaul 4.3 (4.5, 3.8) for oil change, including filter 4.0 (4.2, 3.5) for oil change, without filter	
		Except F22B1 engine	4.9 (5.2, 4.3) for engine overhaul 3.8 (4.0, 3.3) for oil change, including filter 3.5 (3.7, 3.1) for oil change, without filter	
Oil pump	Inner-to-outer rotor clearance		0.02 – 0.16 (0.001 – 0.006)	0.20 (0.008)
	Pump housing-to-outer rotor clearance		0.10 – 0.19 (0.004 – 0.007)	0.21 (0.008)
	Pump housing-to-rotor axial clearance		0.02 – 0.07 (0.001 – 0.003)	0.12 (0.005)
Relief valve	Pressure setting at engine oil temp. 80°C (176°F)			
	kPa (kgf/cm <sup>2</sup> , psi)	at idle at 3,000 rpm (min <sup>-1</sup> )	69 (0.7, 10) min. 340 (3.5, 50) min.	

## Cooling — Section 10

	MEASUREMENT	STANDARD (NEW)
Radiator	Coolant capacity ℓ (US qt, Imp qt) [Including engine, heater, cooling line and reservoir]	M/T: 6.9 (7.4, 6.1) for overhaul : 5.4 (5.7, 4.8) for coolant change A/T: 6.8 (7.3, 6.0) for overhaul : 5.3 (5.6, 4.7) for coolant change
	Reservoir capacity: 0.6 ℓ (0.63 US qt, 0.53 Imp qt)	
Radiator cap	Opening pressure kPa (kgf/cm <sup>2</sup> , psi)	93 – 123 (0.95 – 1.25, 14 – 18)
Thermostat	Start to open °C (°F)	70 – 80 (169 – 176)
	Fully open °C (°F)	90 (194)
	Valve lift at fully open	8.0 (0.31) min.
Cooling fan	Thermoswitch "ON" temperature °C (°F)	90 – 96 (194 – 205)
	Thermoswitch "OFF" temperature °C (°F)	Subtract 2 – 7 (4 – 13) from actual "ON" temperature
	Fan timer "ON" temperature °C (°F)	103 – 109 (217 – 228)
	Fan timer "OFF" temperature °C (°F)	Subtract 4 – 9 (7 – 16) from actual "ON" temperature

## Fuel and Emissions — Section 11

	MEASUREMENT	STANDARD (NEW)
Pressure regulator	Pressure with regulator vacuum hose disconnected kPa (kgf/cm <sup>2</sup> , psi)	265 – 314 (2.7 – 3.2, 38 – 46)
Fuel tank	Capacity ℓ (US gal, Imp gal)	64.5 (17.1, 14.2)
Engine	Idle speed with headlight and cooling fan off rpm (min <sup>-1</sup> )	Except KH model: 770 ± 50 (M/T: neutral) 770 ± 50 (A/T: <b>N</b> or <b>P</b> position) KH model: 700 ± 50 (M/T: neutral) 700 ± 50 (A/T: <b>N</b> or <b>P</b> position)
Engine	Fast idle rpm (min <sup>-1</sup> )	1,400 ± 200 (M/T: neutral) 1,400 ± 200 (A/T: <b>N</b> or <b>P</b> position)
Engine	Idle CO %	Except KY model: 0.1 max. KY model: 1.0 ± 1.0 %

## Clutch — Section 12

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Clutch pedal	Pedal height to floor	RHD: 209 (8.2), LHD: 184 (7.2)	—
	Stroke	142.5 – 152.5 (5.6 – 6.0)	—
	Pedal play	9 – 15 (0.4 – 0.6)	—
	Disengagement height to floor	RHD: 99 (3.9) min. LHD: 74 (2.9) min.	—
Flywheel	Clutch surface runout	0.05 (0.002) max.	0.15 (0.006)
Clutch disc	Rivet head depth	1.3 – 1.9 (0.05 – 0.07)	0.2 (0.01)
	Thickness	8.4 – 9.0 (0.33 – 0.35)	6.0 (0.24)
Pressure plate	Warpage	0.03 (0.001) max.	0.15 (0.006)
	Diaphragm spring finger alignment	0.6 (0.02) max.	0.8 (0.03)

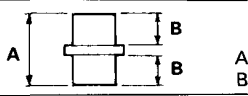
## Manual Transmission — Section 13

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT	
Transmission oil	Capacity ℓ (US qt, Imp qt)	1.9 (2.0, 1.7) for oil change 2.0 (2.1, 1.8) for overhaul		
Mainshaft	End play Diameter of ball bearing contact area Diameter of needle bearing contact area Diameter of ball bearing contact area Runout	0.10 – 0.16 (0.004 – 0.006) 27.977 – 27.990 (1.1015 – 1.1020) 37.984 – 38.000 (1.4954 – 1.4961) 27.987 – 28.000 (1.1018 – 1.1024) 0.02 (0.001) max.	Adjust 27.94 (1.100) 37.93 (1.493) 27.94 (1.100) 0.05 (0.002)	
Mainshaft 3rd and 4th gears	I.D.	43.009 – 43.025 (1.6933 – 1.6939)	43.080 (1.6961)	
	End play	0.06 – 0.21 (0.002 – 0.008)	0.30 (0.012)	
	Thickness 3rd gear 4th gear	32.42 – 32.47 (1.276 – 1.278) 30.92 – 30.97 (1.217 – 1.219)	32.3 (1.27) 30.8 (1.21)	
Mainshaft 5th gear	I.D.	43.009 – 43.025 (1.6933 – 1.6939)	43.080 (1.6961)	
	End play	0.06 – 0.21 (0.002 – 0.008)	0.30 (0.012)	
	Thickness	30.92 – 30.97 (1.217 – 1.219)	30.8 (1.21)	
Countershaft	Diameter of needle bearing contact area	38.000 – 38.015 (1.4961 – 1.4967)	37.95 (1.494)	
	Diameter of ball bearing and needle bearing contact area	24.987 – 25.000 (0.9837 – 0.9843)	24.94 (0.982)	
	Diameter of 1st gear contact area	39.984 – 40.000 (1.5742 – 1.5748)	39.93 (1.572)	
	Runout	0.02 (0.001) max.	0.05 (0.002)	
Countershaft 1st gear	I.D.	46.009 – 46.025 (1.8114 – 1.8120)	46.08 (1.814)	
	End play	0.06 – 0.23 (0.002 – 0.009)	0.23 (0.009)	
Countershaft 2nd gear	I.D.	47.009 – 47.025 (1.8507 – 1.8514)	47.08 (1.854)	
	End play	P2C4	0.05 – 0.10 (0.002 – 0.004)	0.18 (0.007)
		P2A4, P2U5	0.05 – 0.17 (0.002 – 0.007)	0.18 (0.007)
	Thickness	P2C4 P2A4, P2U5	28.92 – 28.97 (1.139 – 1.141) 34.62 – 34.67 (1.363 – 1.365)	—

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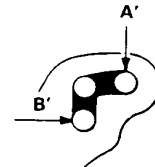
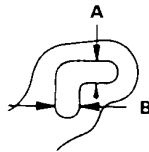
# Standards and Service Limits

## Manual Transmission — Section 13 (cont'd)

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Spacer collar (Countershaft 2nd gear)	I.D. O.D. Length	36.48 – 36.49 (1.4362 – 1.4366) 41.989 – 42.000 (1.6531 – 1.6535) 29.02 – 29.04 (1.1425 – 1.1433)	36.50 (1.437) 41.94 (1.652) —
Spacer collar (Mainshaft 4th and 5th gears)	I.D. O.D. Length	 31.002 – 31.012 (1.2205 – 1.2209) 37.989 – 38.000 (1.4956 – 1.4961) 56.45 – 56.55 (2.222 – 2.226) 26.03 – 26.08 (1.025 – 1.027)	31.06 (1.223) 37.94 (1.494) — 26.01 (1.024)
Reverse idler 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) 0.160 (0.0063)
Synchro ring	Ring-to-gear clearance (ring pushed against gear)	0.85 – 1.10 (0.033 – 0.043)	0.40 (0.016)
Double cone synchro	Clearance (ring pushed against gear) Outer synchro ring-to-gear Synchro cone-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 (0.02) 0.3 (0.01) 0.3 (0.01)
Shift fork	Finger thickness Fork-to-synchro sleeve clearance	3rd/4th shift fork Except above 7.4 – 7.6 (0.29 – 0.30) 6.2 – 6.4 (0.24 – 0.25) 0.35 – 0.65 (0.014 – 0.026)	— — 1.0 (0.039)
Reverse shift fork	Pawl groove width Fork-to-reverse idler gear clearance Groove width*1 Fork-to-5th/reverse shift shaft clearance*2	13.0 – 13.3 (0.51 – 0.52) 0.5 – 1.1 (0.02 – 0.04) 7.05 – 7.25 (0.278 – 0.285) 7.4 – 7.7 (0.29 – 0.30) at A at B at A' at B'	— 1.8 (0.07) — — 0.5 (0.02) 1.0 (0.04)
Shift arm	I.D. Shift arm-to-shaft clearance Shift fork diameter at contact area Shift arm-to-shift fork shaft clearance	15.973 – 16.000 (0.6289 – 0.6299) 0.005 – 0.059 (0.0002 – 0.0023) 12.9 – 13.0 (0.508 – 0.512) 0.2 – 0.5 (0.008 – 0.020)	— — — 0.6 (0.024)
Select lever	Shaft outer diameter Shift arm cover clearance	15.941 – 15.968 (0.6276 – 0.6287) 0.032 – 0.102 (0.0013 – 0.0040)	— —
Shift lever	O.D. Transmission housing clearance	15.941 – 15.968 (0.6276 – 0.6287) 0.012 – 0.122 (0.0005 – 0.0048)	— —
Interlock	Bore diameter Shift arm clearance	16.00 – 16.05 (0.630 – 0.632) 0.032 – 0.109 (0.0013 – 0.0043)	— —

\*1: Measuring points

\*2: Measuring points





Unit of length mm (in)

**Automatic Transmission — Section 14**

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT	
Transmission fluid	Capacity ℓ (US qt, Imp qt)	6.0 (6.3, 5.3) for overhaul 2.4 (2.5, 2.1) for fluid change		
Hydraulic pressure kPa (kgf/cm <sup>2</sup> , psi)	Line pressure at 2,000 rpm (min <sup>-1</sup> ) in <b>N</b> or <b>P</b> position	830 (8.5, 120) throttle fully-closed   880 (9.0, 130) throttle more than 2/8 open	780 (8.0, 110) throttle more than 2/8 open	
	4th clutch pressure at 2,000 rpm (min <sup>-1</sup> ) in <b>D<sub>4</sub></b> position	520 (5.3, 75) throttle fully-closed   880 (9.0, 130) throttle more than 2/8 open	460 (4.7, 67) throttle fully-closed   780 (8.0, 110) throttle more than 2/8 open	
	3rd and 2nd clutch pressure at 2,000 rpm (min <sup>-1</sup> ) in <b>D<sub>4</sub></b> position	490 (5.0, 71) throttle fully-closed   880 (9.0, 130) throttle more than 2/8 open	440 (4.5, 64) throttle fully-closed   780 (8.0, 110) throttle more than 2/8 open	
	2nd clutch pressure at 2,000 rpm (min <sup>-1</sup> ) in <b>2</b> position	830 – 880 (8.5 – 9.0, 120 – 130)	780 (8.0, 110)	
	1st and 1st-hold clutch pressure at 2,000 rpm in <b>1</b> position	830 – 880 (8.5 – 9.0, 120 – 130)	780 (8.0, 110)	
	Throttle B pressure	Throttle fully closed	0 (0, 0)	—
		Throttle fully open	830 – 880 (8.5 – 9.0, 120 – 130)	780 (8.0, 110)
Stall speed rpm (min <sup>-1</sup> )	(Check with car on level ground)			
	F20B3 engine F22B1, F22B2 and F22B5 engines	2,550 2,650	2,400 – 2,700 2,500 – 2,800	

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