

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

### 2007-08 GENERAL INFORMATION

#### Specifications - Element

## STANDARDS AND SERVICE LIMITS

### ENGINE ELECTRICAL

#### ENGINE ELECTRICAL SPECIFICATION

Item	Measurement	Qualification	Standard or New	Service Limit
Ignition coil	Rated voltage		12V	
	Firing order		1-3-4-2	
Spark plug	Type		NGK:IZFR6K11	
	Gap		1.0-1.1 mm (0.039-0.043 in.)	--
Ignition timing	At idle Check the red mark	M/T (in neutral)	8 ± 2° BTDC	
		A/T (in N or P position)	8 ± 2° BTDC	
Drive belt	Tension		Auto-tensioner	
Alternator	Output	At 13.5 V and normal engine temperature	105A	
	Coil (rotor) resistance	At 68°F (20°C)	2.5 ohms	
	Slip ring O.D.		14.4 mm (0.57 in.)	14.0 mm (0.55 in.)
	Brush length		10.5 mm (0.41 in.)	1.5 mm (0.06 in.)
	Brush spring tension		3.2 N (0.33 kgf, 0.7 lbf)	
Starter	Output		1.6 kW	
	Commutator mica depth		0.40-0.50 mm (0.016-0.020 in.)	0.15 mm (0.006 in.)
	Commutator runout		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
	Commutator O.D.		28.0-28.1 mm (1.102-1.106 in.)	27.5 mm (1.083 in.)
	Brush length		11.1-11.5 mm (0.44-0.45 in.)	4.3 mm (0.17 in.)

### ENGINE ASSEMBLY

#### ENGINE ASSEMBLY SPECIFICATION

Item	Measurement	Qualification	Standard or New
Compression	Pressure Check with the starter cranking the engine	Minimum	930 kPa (9.5 kgf/cm <sup>2</sup> , 135 psi)
		Maximum	200 kPa (2.0 kgf/cm <sup>2</sup> , 28

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

variation      |psi)

### CYLINDER HEAD

#### CYLINDER HEAD SPECIFICATION

Item	Measurement	Qualification	Standard or New	Service Limit	
Head	Warpage		--	0.05 mm (0.002 in.)	
	Height		103.95-104.05 mm (4.093-4.096 in.)	--	
Camshaft	End play		0.05-0.20 mm (0.002-0.008 in.)	0.4 mm (0.02 in.)	
	Camshaft-to-holder oil clearance	No. 1 journal	0.030-0.069 mm (0.001-0.003 in.)	0.15 mm (0.006 in.)	
		No. 2, 3, 4, 5 journals	0.060-0.099 mm (0.002-0.004 in.)	0.15 mm (0.006 in.)	
	Total runout		0.03 mm (0.001 in.) max.	0.04 mm (0.002 in.)	
	Cam lobe height	Intake, primary		34.263 mm (1.3489 in.)	--
		Intake, secondary		29.638 mm (1.1668 in.)	--
Exhaust			34.092 mm (1.3422 in.)	--	
Valve	Clearance (cold)	Intake	0.21-0.25 mm (0.008-0.010 in.)	--	
		Exhaust	0.28-0.32 mm (0.011 -0.013 in.)	--	
	Stem O.D.	Intake	5.475-5.485 mm (0.2156-0.2159 in.)	5.445 mm (0.214 in.)	
		Exhaust	5.450-5.460 mm (0.2146-0.2150 in.)	5.42 mm (0.213 in.)	
	Stem-to-guide clearance	Intake	0.030-0.055 mm (0.0012-0.0022 in.)	0.08 mm (0.003 in.)	
		Exhaust	0.055-0.080 mm (0.0022-0.0031 in.)	0.11 mm (0.004 in.)	
Valve seat	Width	Intake	1.25-1.55 mm (0.049-0.061 in.)	2.00 mm (0.079 in.)	
		Exhaust	1.25-1.55 mm (0.049-0.061 in.)	2.00 mm (0.079 in.)	
	Stem installed height	Intake	44.0-44.5 mm (1.73-1.75 in.)	--	
		Exhaust	44.1-44.6 mm (1.74-1.76 in.)	--	
Valve spring	Free length	Intake	47.57 mm (1.873 in.)	--	
		Exhaust	49.64 mm (1.954 in.)	--	

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

Valve guide	I.D.	Intake	5.515-5.530 mm (0.2171-0.2177 in.)	5.55 mm (0.219 in.)
		Exhaust	5.515-5.530 mm (0.2171-0.2177 in.)	5.55 mm (0.219 in.)
	Installed height	Intake	15.2-16.2 mm (0.598-0.638 in.)	--
		Exhaust	15.5-16.5 mm (0.610-0.650 in.)	--
Rocker arm	Arm-to-shaft clearance	Intake	0.025-0.052 mm (0.0010-0.0020 in.)	0.08 mm (0.003 in.)
		Exhaust	0.018-0.056 mm (0.0007-0.0022 in.)	0.08 mm (0.003 in.)

### ENGINE BLOCK

#### ENGINE BLOCK SPECIFICATION

Item	Measurement	Qualification	Standard or New	Service Limit
Block	Warpage of deck		0.07 mm (0.003 in.) max.	0.10 mm (0.004 in.)
	Bore diameter	A or I	87.010-87.020 mm (3.4256-3.4260 in.)	87.070 mm (3.4279 in.)
		B or II	87.000-87.010 mm (3.4252-3.4256 in.)	87.070 mm (3.4279 in.)
	Bore taper		--	0.05 mm (0.002 in.)
	Reboring limit		--	0.25 mm (0.01 in.)
Piston	Skirt O.D. at 13 mm (0.5 in.) from bottom of skirt	No letter or A	86.980-86.990 mm (3.4244-3.4248 in.)	86.930 mm (3.4224 in.)
		Letter B	86.970-86.980 mm (3.4240-3.4244 in.)	86.920 mm (3.4220 in.)
	Clearance in cylinder		0.020-0.040 mm (0.0008-0.0016 in.)	0.05 mm (0.002 in.)
	Ring groove width	Top	1.230-1.240 mm (0.0484-0.0488 in.)	1.26 mm (0.0450 in.)
		Second	1.240-1.250 mm (0.0488-0.0492 in.)	1.270 mm (0.050 in.)
		Oil	2.005-2.025 mm (0.0789-0.0797 in.)	2.05 mm (0.081 in.)
Ring-to-groove clearance	Top	Top	0.050-0.075 mm (0.0020-0.0030 in.)	0.13 mm (0.005 in.)
		Second	0.050-0.075 mm (0.0020-0.0030 in.)	0.13 mm (0.005 in.)
			0.20-0.35 mm (0.008-0.014 in.)	0.60 mm

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

Piston ring	Ring end gap	Top	in.)	(0.024 in.)
		Second	0.40-0.55 mm (0.016-0.022 in.)	0.70 mm (0.028 in.)
		Oil	0.20-0.50 mm (0.008-0.020 in.)	0.80 mm (0.031 in.)
Piston pin	O.D.		21.962-21.965 mm (0.8646-0.8648 in.)	21.953 mm (0.8643 in.)
	Pin-to-piston clearance		-0.005 to +0.001 mm (-0.00020 to +0.00004 in.)	0.005 mm (0.0002 in.)
Connecting rod	Pin-to-rod clearance		0.005-0.014 mm (0.0002-0.0006 in.)	0.02 mm (0.0008 in.)
	Small-end bore diameter		21.970-21.976 mm (0.8650-0.8652 in.)	--
	Large-end bore diameter		51.0 mm (2.01 in.)	--
	End play installed on crankshaft		0.15-0.35 mm (0.006-0.014 in.)	0.40 mm (0.016 in.)
Crankshaft	Main journal diameter	No. 1 journal No. 2 journal No. 4 journal No. 5 journal	54.984-55.008 mm (2.1648-2.1657 in.)	--
		No. 3 journal	54.976-55.000 mm (2.1644-2.1654 in.)	--
	Rod journal diameter		47.976-48.000 mm (1.8888-1.8898 in.)	--
	Rod/main journal taper		0.005 mm (0.0002 in.) max.	0.010 mm (0.0004 in.)
	Rod/main journal out-of-round		0.005 mm (0.0002 in.) max.	0.010 mm (0.0004 in.)
	End play		0.10-0.35 mm (0.004-0.014 in.)	0.45 mm (0.018 in.)
	Runout		0.03 mm (0.0012 in.) max.	0.04 mm (0.0016 in.)
Crankshaft bearing	Main bearing-to-journal oil clearance	No. 1 journal No. 2 journal No. 4 journal No. 5 journal	0.017-0.041 mm (0.0007-0.0016 in.)	0.050 mm (0.0020 in.)
		No. 3 journal	0.025-0.049 mm (0.0010-0.0019 in.)	0.055 mm (0.0022 in.)
	Rod bearing clearance		0.020-0.050 mm (0.0008-0.0020 in.)	0.060 mm (0.0024 in.)

### ENGINE LUBRICATION

### ENGINE LUBRICATION SPECIFICATION

--	--	--	--	--

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

Item	Measurement	Qualification	Standard or New	Service Limit	
Engine oil	Capacity	Engine overhaul	5.3 L (5.6 US qt)		
		Oil change including filter	4.2 L (4.4 US qt)		
		Oil change without filter	4.0 L (4.2 US qt)		
Oil pump	Inner-to-outer rotor clearance		0.06-0.16 mm (0.002-0.006 in.)	0.20 mm (0.008 in.)	
	Pump housing-to-outer rotor clearance		0.15-0.21 mm (0.006-0.008 in.)	0.23 mm (0.009 in.)	
	Pump housing-to-rotor axial clearance		0.035-0.070 mm (0.0014-0.0028 in.)	0.12 mm (0.005 in.)	
	Balancer shafts, journal diameter	No. 1 journal, front shaft		19.938-19.950 mm (0.7850-0.7854 in.)	19.92 mm (0.784 in.)
		No. 1 journal, rear shaft		23.938-23.950 mm (0.9424-0.9429 in.)	23.92 mm (0.942 in.)
		No. 2 journal, front and rear shafts		32.949-32.961 mm (1.2972-1.2977 in.)	32.93 mm (1.296 in.)
	Balancer shafts, journal taper		0.005 mm (0.0002 in.) max.	--	
	Balancer shafts, end play	Front		0.063-0.108 mm (0.0025-0.0043 in.)	0.14 mm (0.0055 in.)
		Rear		0.063-0.108 mm (0.0025-0.0043 in.)	0.14 mm (0.0055 in.)
	Balancer shafts, shaft-to-bearing clearance	No. 1 journal, front shaft		0.050-0.082 mm (0.0020-0.0032 in.)	0.10 mm (0.004 in.)
		No. 1 journal, rear shaft		0.050-0.082 mm (0.0020-0.0032 in.)	0.10 mm (0.004 in.)
		No. 2 journal, front and rear shafts		0.060-0.120 mm (0.0024-0.0047 in.)	0.15 mm (0.006 in.)
	Balancer shaft bearings, I.D.	No. 1 journal, front shaft		20.000-20.020 mm (0.7874-0.7882 in.)	20.03 mm (0.789 in.)
		No. 1 journal, rear shaft		24.000-24.020 mm (0.9449-0.9457 in.)	24.03 mm (0.946 in.)
		No. 2 journal, front and rear shafts		33.021-33.069 mm (1.3000-1.3019 in.)	33.09 mm (1.303 in.)
	Relief valve, oil pressure with oil temperature at 176°F (80°C)	At idle		70 kPa (0.7 kgf/cm <sup>2</sup> , 10 psi) min.	
		At 3,000 rpm		300 kPa (3.1 kgf/cm <sup>2</sup> , 44 psi) min.	

### COOLING SYSTEM

### COOLING SYSTEM SPECIFICATION

--	--	--	--

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

Item	Measurement	Qualification	Standard or New
Radiator	Coolant capacities (including engine, heater, hoses, and reservoir) Use Honda Long Life Antifreeze/Coolant Type 2	M/T: engine overhaul	7.3 L (1.93 US gal)
		M/T: coolant change	5.2 L (1.37 US gal)
		A/T: engine overhaul	7.2 L (1.90 US gal)
		A/T: coolant change	5.1 L (1.35 US gal)
Coolant reservoir	Coolant capacity		0.6 L (0.16 US gal)
Radiator cap	Opening pressure		93-123 kPa (0.95-1.25 kgf/cm <sup>2</sup> , 14-18 psi)
Thermostat	Opening temperature	Begins to open	169-176°F (76-80°C)
		Fully open	194°F (90°C)
	Valve lift at fully open		8.0 mm (0.31 in.) min.

### FUEL AND EMISSIONS

#### FUEL AND EMISSIONS SPECIFICATION

Item	Measurement	Qualification	Standard or New
Fuel pressure regulator	Pressure with fuel pressure gauge connected		320-370 kPa (3.3-3.8 kgf/cm <sup>2</sup> , 47-54 psi)
Fuel tank	Capacity		60 L (15.9 US gal)
Engine idle	Idle speed without load	M/T (in neutral)	700 ± 50 rpm
		A/T (in N or P position)	700 ± 50 rpm
	Idle speed with high electrical load (A/C switch ON, temperature set to max cool, blower fan on High, rear window defogger ON, and headlights on high beam)	M/T (in neutral)	720 ± 50 rpm
		A/T (in N or P position)	720 ± 50 rpm

### CLUTCH

#### CLUTCH SPECIFICATION

Item	Measurement	Qualification	Standard or New	Service Limit
Clutch pedal	Height from floor		200 mm (7.87 in.)	--
	Stroke		125-135 mm (4.92-5.31 in.)	--
	Play		6-17 mm (0.24-0.67 in.)	--
			112 mm (4.41 in.)	

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

	Disengagement height from floor		min.	--
Flywheel	Runout on clutch mating surface		0.05 mm (0.002 in.) max.	0.15 mm (0.006 in.)
Clutch disc	Rivet head depth		1.65-2.25 mm (0.065-0.089 in.)	0.7 mm (0.03 in.)
	Thickness		8.6-9.2 mm (0.34- 0.36 in.)	6.0 mm (0.24 in.)
Pressure plate	Warpage		0.03 mm (0.001 in.) max.	0.15 mm (0.006 in.)
	Height of diaphragm spring fingers measured with special tool and feeler gauge		0.6 mm (0.02 in.) max.	0.8 mm (0.03 in.)


### MANUAL TRANSMISSION AND M/T DIFFERENTIAL

#### MANUAL TRANSMISSION AND M/T DIFFERENTIAL SPECIFICATION

Item	Measurement	Qualification	Standard or New	Service Limit
Manual transmission fluid	Capacity Use Honda MTF	Fluid change	1.90 L (2.0 US qt)	
		2WD: overhaul	2.15 L (2.3 US qt)	
		4WD: overhaul	2.25 L (2.4 US qt)	
Mainshaft	End play		0.11-0.17 mm (0.004-0.007 in.)	Adjust
	Diameter of bushing contact area		20.80-20.85 mm (0.8189-0.8209 in.)	20.75 mm (0.817 in.)
	Diameter of distance collar contact area		31.984-32.000 mm (1.2594-1.2598 in.)	31.93 mm (1.257 in.)
	Diameter of ball bearing contact area (clutch housing side)		27.977-27.990 mm (1.1015-1.1020 in.)	27.94 mm (1.100 in.)
	Diameter of needle bearing contact area		38.984-39.000 mm (1.5348-1.5354 in.)	38.93 mm (1.533 in.)
	Diameter of ball bearing contact area (transmission housing side)		27.987-28.000 mm (1.1019-1.1024 in.)	27.94 mm (1.100 in.)
	Runout		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
Mainshaft 3rd, 4th, and 5th gear	I.D.		44.009-44.025 mm (1.7326-1.7333 in.)	44.08 mm (1.735 in.)
	End play		0.06-0.16 mm (0.002-0.006 in.)	0.25 mm (0.010 in.)

## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

	Thickness		23.92-23.97 mm (0.941-0.944 in.)	23.80 mm (0.937 in.)
Mainshaft 4th and 5th gear distance collar	I.D.		32.00-32.01 mm (1.2598-1.2602 in.)	32.02 mm (1.261 in.)
	O.D.		38.989-39.000 mm (1.5350-1.5354 in.)	38.94 mm (1.533 in.)
	Length	A	51.95-52.05 mm (2.045-2.049 in.)	--
		B	24.03-24.08 mm (0.946-0.948 in.)	--
				
MBS distance collar	I.D.		28.00-28.01 mm (1.102-1.103 in.)	28.02 mm (1.103 in.)
	Length		23.95-24.05 mm (0.943-0.947 in.)	--
Countershaft	Diameter of needle bearing contact area (clutch housing side)		35.000-35.015 mm (1.3780-1.3785 in.)	34.95 mm (1.376 in.)
	Diameter of distance collar contact area		39.937-39.950 mm (1.5723-1.5728 in.)	39.88 mm (1.570 in.)
	Diameter of ball bearing contact area (transmission housing side)		30.020-30.033 mm (1.1819-1.1824 in.)	29.97 mm (1.180 in.)
	Runout		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
	35 mm shim-to-bearing inner race clearance		0.04-0.10 mm (0.0016-0.0039 in.)	Adjust
Countershaft 1st gear	I.D.		52.010-52.029 mm (2.0476-2.0484 in.)	52.08 mm (2.050 in.)
	End play		0.06-0.16 mm (0.002-0.006 in.)	0.25 mm (0.010 in.)
	Thickness		22.92-22.97 mm (0.902-0.904 in.)	22.87 mm (0.900 in.)
Countershaft 2nd gear	I.D.		52.010-52.029 mm (2.0476-2.0484 in.)	52.08 mm (2.050 in.)
	End play		0.06-0.16 mm (0.002-0.006 in.)	0.25 mm (0.010 in.)
	Thickness		27.92-27.97 mm (1.099-1.101 in.)	27.87 mm (1.097 in.)



## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

Countershaft 1st gear distance collar	I.D.		39.95-39.96 mm (1.5728-1.5732 in.)	39.97 mm (1.574 in.)
	O.D.		46.989-47.000 mm (1.8499-1.8504 in.)	46.94 mm (1.848 in.)
	Length		23.03-23.08 mm (0.907-0.909 in.)	--
Countershaft 2nd gear distance collar	I.D.		39.95-39.96 mm (1.5728-1.5732 in.)	39.97 mm (1.574 in.)
	O.D.		46.989-47.000 mm (1.8499-1.8504 in.)	46.94 mm (1.848 in.)
	Length		28.03-28.08 mm (1.104-1.106 in.)	--
Reverse idler gear	I.D.		20.016-20.043 mm (0.7880-0.7891 in.)	20.90 mm (0.832 in.)
	Gear-to-reverse gear shaft clearance		0.036-0.084 mm (0.0014-0.0033 in.)	0.16 mm (0.006 in.)
Synchro ring	Ring-to-gear clearance	Ring pushed against gear	0.70-1.49 mm (0.028-0.059 in.)	0.4 mm (0.016 in.)
Double cone synchro	Outer synchro ring-to-synchro cone clearance	Ring pushed against gear	0.70-1.19 mm (0.028-0.047 in.)	0.3 mm (0.012 in.)
	Synchro cone-to-gear clearance	Ring pushed against gear	0.50-1.04 mm (0.020-0.041 in.)	0.3 mm (0.012 in.)
	Outer synchro ring-to-gear cone clearance	Ring pushed against gear	0.95-1.68 mm (0.037-0.066 in.)	0.6 mm (0.024 in.)
Triple cone synchro	Outer synchro ring-to-synchro clearance	Ring pushed against gear	0.70-1.19 mm (0.028-0.047 in.)	0.3 mm (0.012 in.)
	Synchro cone-to-gear clearance	Ring pushed against gear	0.50-1.04 mm (0.020-0.041 in.)	0.3 mm (0.012 in.)
	Outer synchro ring-to-gear clearance	Ring pushed against gear	0.95-1.68 mm (0.037-0.066 in.)	0.6 mm (0.024 in.)
Shift fork	Fork thickness		7.4-7.6 mm (0.29-0.30 in.)	--
	Fork-to-synchro sleeve clearance		0.35-0.65 mm (0.014-0.026 in.)	1.0 mm (0.039 in.)
Reverse shift fork	Finger width		13.4-13.7 mm (0.527-0.539 in.)	--
	Fork-to-reverse idler gear clearance		0.20-0.59 mm (0.007-0.024 in.)	1.2 mm (0.047 in.)

## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

Shift arm	I.D.	13.973-14.000 mm (0.5501-0.5512 in.)	--
	Shift arm thickness at contact area	16.9-17.0 mm (0.665-0.669 in.)	--
	Shift arm-to-shift fork clearance	0.2-0.5 mm (0.008-0.020 in.)	0.6 mm (0.023 in.)
Select lever	Finger width	14.85-14.95 mm (0.585-0.589 in.)	--
Change lever	Change-to-select lever clearance	0.05-0.25 mm (0.002-0.010 in.)	0.5 mm (0.020 in.)
	Groove width (to select lever)	15.00-15.10 mm (0.591-0.594 in.)	--
	Shaft-to-shift arm clearance	0.013-0.07 mm (0.0005-0.003 in.)	0.1 mm (0.004 in.)
M/T differential carrier	Pinion shaft contact area I.D.	18.010-18.028 mm (0.7091-0.7098 in.)	--
	Carrier-to-pinion shaft clearance	0.027-0.057 mm (0.0011-0.0022 in.)	0.1 mm (0.004 in.)
	Driveshaft contact area I.D.	28.025-28.045 mm (1.1033-1.1041 in.)	--
M/T differential pinion gear	Backlash	0.05-0.15 mm (0.002-0.006 in.)	--
	I.D.	18.042-18.066 mm (0.7103-0.7113 in.)	--
	Pinion gear-to-pinion shaft clearance	0.059-0.095 mm (0.0023-0.0037 in.)	0.15 mm (0.006 in.)
80 mm shim	80 mm shim-to-bearing outer race clearance in transmission housing	0-0.10 mm (0-0.0039 in.)	Adjust
Transfer assembly	Diameter of tapered roller bearing contact area (transfer shaft)	24.975-24.990 mm (0.9833-0.9838 in.)	24.92 mm (0.9811 in.)
	Diameter of tapered roller bearing contact area (transfer drive gear)	40.002-40.018 mm (1.5749-1.5755 in.)	38.95 mm (1.5335 in.)
	Diameter of tapered roller bearing contact area (driven gear side)	35.002-35.018 mm (1.3780-1.3786 in.)	34.95 mm (1.3760 in.)
	Diameter of tapered roller bearing	26.975-26.988 mm (1.0620-1.0625 in.)	26.92 mm (1.0598 in.)

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

	contact area (splined side)		in.)	in.)
	Transfer gear backlash		0.06-0.16 mm (0.0024-0.0063 in.)	Adjust
	Total starting torque		2.16-3.57 N.m (22.0-36.4 kgf.cm, 19.1-31.6 lbf.in.)	Adjust

### AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL

#### AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL SPECIFICATION

Item	Measurement	Qualification	Standard or New	Service Limit
Automatic transmission fluid	Capacity Use Honda ATF-Z1	4WD	Fluid change	2.5 L (2.6 US qt)
			Overhaul	7.2 L (7.6 US qt)
		2WD	Fluid change	2.6 L (2.7 US qt)
			Overhaul	7.0 L (7.4 US qt)
ATF pressure	Line pressure	At 2,000 rpm in N or P position	900-960 kPa (9.2-9.8 kgf/cm <sup>2</sup> , 130-140 psi)	850 kPa (8.7 kgf/cm <sup>2</sup> , 120 psi)
	1st clutch pressure	At 2,000 rpm in 1 position	890-970 kPa (9.1-9.9 kgf/cm <sup>2</sup> , 130-140 psi)	840 kPa (8.6 kgf/cm <sup>2</sup> , 120 psi)
	2nd clutch pressure	At 2,000 rpm in 2 position	890-970 kPa (9.1-9.9 kgf/cm <sup>2</sup> , 130-140 psi)	840 kPa (8.6 kgf/cm <sup>2</sup> , 120 psi)
	3rd clutch pressure	At 2,000 rpm in 3rd gear in D3 position	890-970 kPa (9.1-9.9 kgf/cm <sup>2</sup> , 130-140 psi)	840 kPa (8.6 kgf/cm <sup>2</sup> , 120 psi)
	4th clutch pressure	At 2,000 rpm in 4th gear in D position	890-970 kPa (9.1-9.9 kgf/cm <sup>2</sup> , 130-140 psi)	840 kPa (8.6 kgf/cm <sup>2</sup> , 120 psi)
	5th clutch pressure	At 2,000 rpm in 5th gear in D position	890-970 kPa (9.1-9.9 kgf/cm <sup>2</sup> , 130-140 psi)	840 kPa (8.6 kgf/cm <sup>2</sup> , 120 psi)
Torque converter	Stall speed Check with vehicle on level ground		2,400 rpm	2,250-2,550 rpm
	Clutch end-plate-to-top disc clearance	1st	--	1.38-1.58 mm (0.054-0.062 in.)
		2nd	--	1.14-1.34 mm (0.045-0.053 in.)

## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

Clutch		3rd	--	(0.048-0.056 in.)
		4th, 5th	--	0.93-1.13 mm (0.037-0.044 in.)
	Clutch return spring free length	1st, 2nd, 3rd	45.1 mm (1.78 in.)	48.8 mm (1.92 in.)
		4th, 5th	33.5 mm (1.32 in.)	31.5 mm (1.24 in.)
	Clutch disc thickness		1.94 mm (0.076 in.)	--
	Clutch plate thickness	1st, 3rd	1.6 mm (0.063 in.)	When discolored
		2nd	2.0 mm (0.079 in.)	When discolored
		4th, 5th	2.0 mm (0.079 in.)	When discolored
	Clutch wave-plate phase difference		0.07-0.20 mm (0.003-0.008 in.)	0.05 mm (0.002 in.)
	1st clutch end-plate thickness	Mark 1	2.6 mm (0.102 in.)	When discolored
		Mark 2	2.7 mm (0.106 in.)	When discolored
		Mark 3	2.8 mm (0.110 in.)	When discolored
		Mark 4	2.9 mm (0.114 in.)	When discolored
		Mark 5	3.0 mm (0.118 in.)	When discolored
		Mark 6	3.1 mm (0.122 in.)	When discolored
		Mark 7	3.2 mm (0.126 in.)	When discolored
		Mark 8	3.3 mm (0.130 in.)	When discolored
		Mark 9	3.4 mm (0.134 in.)	When discolored
		Mark 1	2.4 mm (0.095 in.)	When discolored
		Mark 2	2.5 mm (0.098 in.)	When discolored
Mark 3		2.6 mm (0.102 in.)	When discolored	
			When	

## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

	2nd clutch end-plate thickness	Mark 4	2.7 mm (0.106 in.)	discolored
		Mark 5	2.8 mm (0.110 in.)	When discolored
		Mark 6	2.9 mm (0.114 in.)	When discolored
		Mark 7	3.0 mm (0.118 in.)	When discolored
		Mark 8	3.1 mm (0.122 in.)	When discolored
		Mark 9	3.2 mm (0.126 in.)	When discolored
	3rd, 4th, 5th clutch end-plate thickness	Mark 1	2.1 mm (0.083 in.)	When discolored
		Mark 2	2.2 mm (0.087 in.)	When discolored
		Mark 3	2.3 mm (0.091 in.)	When discolored
		Mark 4	2.4 mm (0.095 in.)	When discolored
		Mark 5	2.5 mm (0.098 in.)	When discolored
		Mark 6	2.6 mm (0.102 in.)	When discolored
		Mark 7	2.7 mm (0.106 in.)	When discolored
		Mark 8	2.8 mm (0.110 in.)	When discolored
		Mark 9	2.9 mm (0.114 in.)	When discolored
	Diameter of needle bearing contact area	At stator shaft	22.984-23.000 mm (0.905-0.906 in.)	When worn or damaged
		At 5th gear	51.975-51.991 mm (2.046-2.047 in.)	When worn or damaged
		At 4th gear collar	33.975-33.991 mm (1.3376-1.3382 in.)	When worn or damaged
I.D. of gears	5th gear	57.000-57.019 mm (2.2441-2.2448 in.)	When worn or damaged	
	4th gear	40.000-40.016 mm (1.5748-1.5754 in.)	When worn or damaged	
End play of gears	5th gear	0.04-0.10 mm (0.002-0.004 in.)	--	
	4th gear	0.1-0.22 mm (0.004-0.009 in.)	--	
		4.450 mm (0.1752	When worn or	

## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

Mainshaft	41 x 68 mm thrust washer thickness	No. 1	in.)	damaged
		No. 2	4.475 mm (0.1762 in.)	When worn or damaged
		No. 3	4.500 mm (0.1772 in.)	When worn or damaged
		No. 4	4.525 mm (0.1781 in.)	When worn or damaged
		No. 5	4.550 mm (0.1791 in.)	When worn or damaged
		No. 6	4.575 mm (0.1801 in.)	When worn or damaged
		No. 7	4.600 mm (0.1811 in.)	When worn or damaged
		No. 8	4.625 mm (0.1821 in.)	When worn or damaged
		No. 9	4.650 mm (0.1831 in.)	When worn or damaged
		No. 10	4.675 mm (0.1841 in.)	When worn or damaged
		No. 11	4.700 mm (0.1850 in.)	When worn or damaged
		No. 12	4.725 mm (0.1860 in.)	When worn or damaged
		No. 13	4.750 mm (0.1870 in.)	When worn or damaged
		No. 14	4.775 mm (0.1880 in.)	When worn or damaged
		No. 15	4.800 mm (0.1890 in.)	When worn or damaged
	4th gear collar length		66.3-66.4 mm (2.610-2.614 in.)	--
	Length of 4th gear collar flange from end		19.15-19.30 mm (0.754-0.760 in.)	When worn or damaged
	Sealing ring thickness		1.91 -1.97 mm (0.0752-0.0776 in.)	1.86 mm (0.0732 in.)
	Width of sealing ring groove		2.025-2.060 mm (0.0797-0.0811 in.)	2.080 mm (0.0819 in.)
	Clutch feed pipe O.D.		7.97-7.98 mm (0.3138-0.3142 in.)	7.95 mm (0.313 in.)
	Clutch feed pipe bushing I.D.		8.000-8.015 mm (0.3150-0.3156 in.)	8.030 mm (0.3161 in.)
	Diameter of needle bearing	At torque converter housing	36.005-36.015 mm (1.4175-1.4179 in.)	When worn or damaged
			34.982-34.998 mm	When worn or

## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

Countershaft	contact area	At 4th gear	(1.3772-1.3779 in.)	damaged
		At reverse gear	39.979-40.000 mm (1.5740-1.5748 in.)	When worn or damaged
	I.D. of gears	4th gear	41.000-41.016 mm (1.6142-1.6148 in.)	When worn or damaged
		Reverse gear	46.000-46.016 mm (1.8110-1.8116 in.)	When worn or damaged
	End play of gears	5th gear	0.00-0.48 mm (0.000-0.019 in.)	--
		4th gear	0.04-0.27 mm (0.002-0.011 in.)	--
		Reverse gear	0.10-0.25 mm (0.004-0.010 in.)	--
	Collar, 35 x 47 x 7.8 mm thickness		7.8 mm (0.31 in.)	--
	Collar, 37 x 41 x 54.3 mm length		54.25-54.30 mm (2.136-2.138 in.)	--
	Reverse selector hub width		25.45-25.65 mm (1.002-1.010 in.)	--
Reverse selector hub O.D.		55.87-55.90 mm (2.200-2.201 in.)	When worn or damaged	
	Diameter of needle bearing contact area	At 1st gear	39.986-39.999 mm (1.5742-1.5748 in.)	When worn or damaged
		At 2nd gear	39.986-39.999 mm (1.5742-1.5748 in.)	When worn or damaged
		At 3rd gear collar	36.975-36.991 mm (1.4557-1.4563 in.)	When worn or damaged
	I.D. of gears	1st gear	47.000-47.016 mm (1.8504-1.8510 in.)	When worn or damaged
		2nd gear	46.000-46.016 mm (1.8110-1.8116 in.)	When worn or damaged
		3rd gear	43.000-43.016 mm (1.6929-1.6935 in.)	When worn or damaged
	End play of gears	1st gear	0.04-0.12 mm (0.002-0.005 in.)	--
		2nd gear	0.04-0.12 mm (0.002-0.005 in.)	--
		3rd gear	0.10-0.22 mm (0.004-0.009 in.)	--
		No. 1	3.900 mm (0.154 in.)	When worn or damaged
		No. 2	3.925 mm (0.155 in.)	When worn or damaged
			3.950 mm (0.156 in.)	When worn or

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

Secondary shaft	37 x 58 mm thrust washer thickness	No. 3	in.)	damaged		
		No. 4	3.975 mm (0.156 in.)	When worn or damaged		
		No. 5	4.000 mm (0.157 in.)	When worn or damaged		
		No. 6	4.025 mm (0.158 in.)	When worn or damaged		
		No. 7	4.050 mm (0.159 in.)	When worn or damaged		
		No. 8	4.075 mm (0.160 in.)	When worn or damaged		
		No. 9	4.100 mm (0.161 in.)	When worn or damaged		
		No. 10	4.125 mm (0.162 in.)	When worn or damaged		
		No. 11	4.150 mm (0.163 in.)	When worn or damaged		
		No. 12	4.175 mm (0.164 in.)	When worn or damaged		
		No. 13	4.200 mm (0.165 in.)	When worn or damaged		
		No. 14	4.225 mm (0.166 in.)	When worn or damaged		
		No. 15	4.250 mm (0.167 in.)	When worn or damaged		
		No. 16	4.275 mm (0.168 in.)	When worn or damaged		
		No. 17	4.300 mm (0.169 in.)	When worn or damaged		
		No. 18	4.325 mm (0.170 in.)	When worn or damaged		
		No. 19	4.350 mm (0.171 in.)	When worn or damaged		
		No. 20	4.375 mm (0.172 in.)	When worn or damaged		
			40 x 51.5 mm thrust washer thickness	No. 1	4.80 mm (0.189 in.)	When worn or damaged
				No. 2	4.85 mm (0.191 in.)	When worn or damaged
No. 3	4.90 mm (0.193 in.)			When worn or damaged		
No. 4	4.95 mm (0.195 in.)			When worn or damaged		
	5.00 mm (0.197 in.)			When worn or		



## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

		No. 5	in.)	damaged
		No. 6	5.05 mm (0.199 in.)	When worn or damaged
	3rd gear collar length		43.9-44.0 mm (1.728-1.732 in.)	--
	Length of 3rd gear collar flange from end		5.25-5.40 mm (0.207-0.213 in.)	When worn or damaged
	Sealing ring thickness		1.91-1.97 mm (0.0752-0.0776 in.)	1.86 mm (0.0732 in.)
	Width of sealing ring groove		2.025-2.060 mm (0.0797-0.0811 in.)	2.080 mm (0.0819 in.)
	Clutch feed pipe O.D.	3rd clutch feed pipe	11.47-11.48 mm (0.4516-0.4520 in.)	11.45 mm (0.4508 in.)
		1st clutch feed pipe	6.97-6.98 mm (0.2744-0.2748 in.)	6.95 mm (0.2736 in.)
	Clutch feed pipe bushing O.D.	3rd clutch feed pipe	11.500-11.518 mm (0.4528-0.4553 in.)	11.530 mm (0.4539 in.)
		1st clutch feed pipe	7.018-7.030 mm (0.2763-0.2768 in.)	7.045 mm (0.2774 in.)
	ATF guide collar of sealing ring contact I.D.		29.000-29.021 mm (1.1417-1.1426 in.)	29.05 mm (1.144 in.)
Idler gear shaft	Diameter of needle bearing contact area	End cover side	32.003-32.013 mm (1.2600-1.2604 in.)	When worn or damaged
	Thickness of cotters		1.39-1.42 mm (0.0547-0.0559 in.)	--
Reverse idler gear	Reverse idler gear shaft diameter at needle bearing contact area		14.99-15.00 mm (0.5902-0.5906 in.)	When worn or damaged
	I.D.		20.007-20.020 mm (0.7877-0.7882 in.)	When worn or damaged
	I.D. of reverse idler gear shaft contact area on transmission housing		14.800-14.818 mm (0.5827-0.5834 in.)	--
	I.D. of reverse idler gear shaft holder		14.800-14.824* mm (0.5827-0.5836 in.)	When worn or damaged
ATF pump	ATF pump thrust clearance		0.03-0.06 mm (0.001-0.002 in.)	0.07 mm (0.003 in.)
	ATF pump gear-to-body clearance	Drive gear	0.210-0.265 mm (0.008-0.010 in.)	--
		Driven gear	0.070-0.125 mm (0.003-0.005 in.)	--
	ATF pump driven gear I.D.		14.016-14.034 mm (0.5518-0.5525 in.)	When worn or damaged

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

	ATF pump driven gear shaft O.D.		13.980-13.990 mm (0.5504-0.5508 in.)	When worn or damaged
Stator shaft	Needle bearing contact I.D.	Torque converter side	27.000-27.021 mm (1.063-1.064 in.)	When worn or damaged
		ATF pump side	29.000-29.021 mm (1.1417-1.1426 in.)	--
	Sealing ring contact area I.D.		29.000-29.021 mm (1.1417-1.1426 in.)	29.05 mm (1.144 in.)
Reverse shift fork	Fork finger thickness		5.90-6.00 mm (0.232-0.236 in.)	5.40 mm (0.213 in.)
Park gear and pawl	--		--	When worn or damaged
Servo body	Shift fork shaft bore I.D.		14.000-14.010 mm (0.5512-0.5516 in.)	--
	Shift fork shaft valve bore I.D.		37.000-37.039 mm (1.4567-1.4582 in.)	37.045 mm (1.4585 in.)
Regulator valve body	Sealing ring contact I.D.		29.000-29.021 mm (1.1417-1.1426 in.)	29.05 mm (1.144 in.)

### AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL SPECIFICATION

Item	Measurement	Qualification	Standard or New			
			Wire Diameter	O.D.	Free Length	No. of Coils
Main valve body spring (see <b><u>MAIN VALVE BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY</u></b> )	Shift valve A spring		0.8 mm (0.031 in.)	5.6 mm (0.220 in.)	28.1 mm (1.106 in.)	15.9
	Shift valve B spring		0.8 mm (0.031 in.)	5.6 mm (0.220 in.)	28.1 mm (1.106 in.)	15.9
	Shift valve C spring		0.8 mm (0.031 in.)	5.6 mm (0.220 in.)	28.1 mm (1.106 in.)	15.9
	Relief valve spring		1.0 mm (0.039 in.)	9.6 mm (0.378 in.)	34.1 mm (1.343 in.)	10.2
	Lock-up control valve spring		0.65 mm (0.026 in.)	7.1 mm (0.280 in.)	23.1 mm (0.909 in.)	12.7
	Cooler check valve spring		0.85 mm (0.033 in.)	6.6 mm (0.260 in.)	27.0 mm (1.063 in.)	11.3
	Servo control valve spring		0.7 mm (0.028 in.)	6.6 mm (0.260 in.)	35.7 mm (1.406 in.)	17.2

## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

	Shift valve E spring		0.8 mm (0.031 in.)	5.6 mm (0.220 in.)	28.1 mm (1.106 in.)	15.9
Regulator valve body spring (see <b><u>REGULATOR VALVE BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY</u></b> )	Stator reaction spring		4.5 mm (0.177 in.)	35.4 mm (1.394 in.)	30.3 mm (1.193 in.)	1.92
	Regulator valve spring A		1.9 mm (0.075 in.)	14.7 mm (0.579 in.)	80.6 mm (3.173 in.)	16.1
	Regulator valve spring B		1.6 mm (0.063 in.)	9.2 mm (0.362 in.)	44.0 mm (1.732 in.)	12.5
	Torque converter check valve spring		1.2 mm (0.047 in.)	8.6 mm (0.339 in.)	33.8 mm (1.331 in.)	12.2
	Lock-up shift valve spring		1.0 mm (0.039 in.)	6.6 mm (0.260 in.)	35.5 mm (1.398 in.)	18.2
	3rd accumulator spring		2.5 mm (0.098 in.)	14.6 mm (0.575 in.)	29.9 mm (1.177 in.)	4.9
	1st accumulator spring A		2.4 mm (0.094 in.)	18.6 mm (0.732 in.)	49.0 mm (1.929 in.)	7.1
	1st accumulator spring B		2.3 mm (0.091 in.)	12.2 mm (0.480 in.)	31.5 mm (1.240 in.)	6.6
Servo body spring (see <b><u>SERVO BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY</u></b> )	Shift valve D spring		0.8 mm (0.031 in.)	5.6 mm (0.220 in.)	28.1 mm (1.106 in.)	15.9
	4th accumulator spring B		2.3 mm (0.091 in.)	12.2 mm (0.480 in.)	31.5 mm (1.240 in.)	6.6
	4th accumulator spring A		2.4 mm (0.094 in.)	18.6 mm (0.732 in.)	49.0 mm (1.929 in.)	7.1
	2nd accumulator		2.1 mm	10.8 mm	34.0 mm (1.339 in.)	8.2

## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

	spring B		(0.083 in.)	(0.425 in.)		
	2nd accumulator spring A		2.1 mm (0.083 in.)	16.6 mm (0.654 in.)	48.7 mm (1.917 in.)	8.4
	5th accumulator spring		2.5 mm (0.098 in.)	14.6 mm (0.575 in.)	29.9 mm (1.177 in.)	4.9

### AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL SPECIFICATION

Item	Measurement	Qualification	Standard or New	Service Limit	
A/T differential carrier	Pinion shaft contact area I.D.		18.000-18.025 mm (0.709-0.719 in.)	--	
	Carrier-to-pinion shaft clearance		0.017-0.109 mm (0.001-0.004 in.)	--	
	Driveshaft contact area I.D.		28.015-28.045 mm (1.103-1.104 in.)	--	
	Carrier-to-driveshaft clearance		0.035-0.086 mm (0.002-0.003 in.)	0.12 mm (0.005 in.)	
	Carrier bearing starting torque (preload)	For new bearing		2.7-3.9 N.m (28-40 kgf.cm, 24-35 lbf.in.)	Adjust
		For used bearing		2.5-3.6 N.m (25-37 kgf.cm, 22-32 lbf.in.)	Adjust
	Final driven gear backlash			0.085-0.144 mm (0.003-0.006 in.)	0.2 mm (0.008 in.)
A/T differential pinion gear	Backlash		1.1-1.6 mm (0.04-0.06 in.)	--	
	I.D.		18.042-18.066 mm (0.7103-0.7113 in.)	--	
	Pinion gear-to-pinion shaft clearance		0.059-0.095 mm (0.0023-0.0037 in.)	0.12 mm (0.005 in.)	
Transfer assembly	Diameter of transfer shaft on bearing contact area	At roller bearing	38.485-38.500 mm (1.5152-1.5157 in.)	38.43 mm (1.513 in.)	
		At tapered roller bearing	24.975-24.990 mm (0.9833-0.9839 in.)	24.92 mm (0.9811 in.)	
	Transfer drive gear diameter	At tapered roller bearing	40.002-40.018 mm (1.5749-1.5755 in.)	38.95 mm (1.533 in.)	
	Diameter of transfer driven gear on tapered roller bearing contact area	At driven gear side	35.002-35.018 mm (1.3780-1.3787 in.)	34.95 mm (1.376 in.)	
		At shaft splines side	26.975-26.988 mm (1.0620-1.0625 in.)	26.92 mm (1.060 in.)	

## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

	Transfer gear backlash		0.06-0.16 mm (0.002-0.006 in.)	Adjust
	Total starting torque (preload)		1.96-3.14 N.m (20.0-32.0 kgf.cm, 17.4-27.8 lbf.in.)	Adjust

## REAR DIFFERENTIAL

### REAR DIFFERENTIAL SPECIFICATION

Item	Measurement	Qualification	Standard or New
Rear differential fluid	Capacity Use Honda Dual Pump Fluid II	Fluid change	1.0 L (1.1 US qt)
		Overhaul	1.21 (1.3 US qt)

## STEERING

### STEERING SPECIFICATION

Item	Measurement	Qualification	Standard or New	Service Limit
Steering wheel	Rotational play measured at outside edge with engine running		0-10 mm (0-0.39 in.)	--
	Initial turning load measured at outside edge with engine running		29 N (3.0 kgf, 6.6 lbf)	If higher, check gearbox and pump
Gearbox	Angle of rack guide screw loosened from locked position		20° max.	
Pump	Output pressure with shut-off valve closed		7,460-8,140 kPa (76-83 kgf/cm <sup>2</sup> , 1,080-1,180 psi)	
Power steering fluid	Capacity Use Honda Power Steering Fluid	Reservoir capacity	0.27 L (0.28 US qt)	
		System capacity	0.83 L (0.87 US qt)	

## SUSPENSION

### SUSPENSION SPECIFICATION

Item	Measurement	Qualification	Standard or New	Service Limit
Wheel alignment (LX, EX)	Camber	Front	-0°13' ± 45'	
		Rear	-1°00' ± 45'	
	Caster	Front	1°50' ± 1°	
		Total toe-in	Front	0 ± 3 mm (0 ± 0.12 in.)
		Rear	2 <sup>+2</sup> <sub>-1</sub> mm (0.08 <sup>+0.08</sup> <sub>-0.04</sub> in.)	
	Front wheel turning angle	Inward	40° 05' ± 2°	
Outward		32°16' (Reference)		

## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

Wheel alignment (SC)	Camber	Front	-0°24' ± 45'	
		Rear	-1°06' ± 45'	
	Caster	Front	1°50' ± 1°	
		Total toe-in	Front	0 ± 3 mm (0 ± 0.12 in.)
		Rear	2 <sup>+2</sup> <sub>-1</sub> mm (0.08 <sup>+0.08</sup> <sub>-00.4</sub> in.)	
	Front wheel turning angle	Inward	38° 24' ± 2°	
	Outward	31° 24' (Reference)		
Wheel	Aluminum wheel runout	Axial	0-0.6 mm (0-0.02 in.)	2.0 mm (0.08 in.)
		Radial	0-0.6 mm (0-0.02 in.)	1.5 mm (0.06 in.)
	Steel wheel runout	Axial	0-1.4 mm (0-0.06 in.)	2.0 mm (0.08 in.)
		Radial	0-1.4 mm (0-0.06 in.)	1.5 mm (0.06 in.)
Wheel bearing	End play	Front	0-0.05 mm (0-0.002 in.)	
		Rear	0-0.05 mm (0-0.002 in.)	

## BRAKES

### BRAKES SPECIFICATION

Item	Measurement	Qualification	Standard or New	Service Limit
Parking brake	Distance traveled when lever pulled with 196 N (20 kgf, 44 lbf) of force	LX, EX	4 to 7 clicks	
		SC	8 to 10 clicks	
	Drum I.D.		169.9-170.0 mm (6.689-6.693 in.)	171 mm (6.732 in.)
	Shoe lining thickness		2.5 mm (0.098 in.)	1.0 mm (0.04 in.)
Brake pedal	Pedal height (carpet removed)	M/T	178 mm (7 in.)	
		A/T	180 mm (7 3/32 in.)	
	Free play		1-5 mm (1/16-3/16 in.)	
Master cylinder	Piston-to-pushrod clearance		0-0.4 mm (0-0.02 in.)	
Brake disc	Thickness	Front	22.9-23.1 mm (0.90-0.91 in.)	21.0 mm (0.83 in.)
		Rear	8.9-9.1 mm (0.35-0.36 in.)	7.5 mm (0.30 in.)
	Runout	Front	--	0.04 mm (0.0016 in.)
	Parallelism		--	0.015 mm (0.0006 in.)
		Front	10.6-11.2 mm (0.42-	1.6 mm (0.06

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

Brake pad	Thickness		0.44 in.)	in.)
		Rear	8.6-9.7 mm (0.34-0.38 in.)	1.6 mm (0.06 in.)

### AIR CONDITIONING

#### AIR CONDITIONING SPECIFICATION

Item	Measurement	Qualification	Standard or New
Refrigerant	Type		HFC-134a (R-134a)
	Capacity of system		500-550 g (17.6-19.4 oz)
Refrigerant oil	Type		DENSO ND-OIL 8 (P/N 38897-PR7-A01AH or 38899-PR7-A01)
	Capacity of components	Condenser	25 mL (5/6 fl.oz)
		Evaporator	45 mL (1 1/2 fl.oz)
		Each line and hose	10 mL (1/3 fl.oz)
		Compressor	160-175 mL (5 1/3-5 5/6 fl.oz)
Compressor	Field coil resistance	At 68°F (20°C)	3.9-4.3 ohms
	Pulley-to-pressure plate clearance		0.35-0.6 mm (0.014-0.024 in.)

### DESIGN SPECIFICATIONS

#### DESIGN SPECIFICATIONS

Item	Measurement	Qualification	Standard or New
DIMENSIONS	Overall length	LX	4,300 mm (169.3 in.)
		EX	4,326 mm (170.3 in.)
		SC	4,341 mm (170.9 in.)
	Overall width		1,815 mm (71.5 in.)
	Overall height	LX, EX	1,788 mm (70.4 in.)
		SC	1,763 mm (69.4 in.)
	Wheelbase		2,575 mm (101.4 in.)
	Track	Front (LX, EX)	1,577 mm (62.1 in.)
		Front (SC)	1,578 mm (62.1 in.)
		Rear (LX, EX)	1,582 mm (62.3 in.)
Rear (SC)		1,587 mm (62.5 in.)	
Seating capacity		Four (4)	
WEIGHT	Gross Vehicle Weight Rating (GVWR)		2,020 kg (4,450 lbs)
	Type		Water cooled, 4-stroke DOHC i-VTEC gasoline engine

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

ENGINE	Cylinder arrangement		Inline 4-cylinder, transverse	
	Bore and stroke		87 x 99 mm (3.43 x 3.90 in.)	
	Displacement		2,354 cm <sup>3</sup> (144 cu in.)	
	Compression ratio		9.7	
	Valve train		Chain drive, DOHC i-VTEC 4 valves per cylinder	
	Lubrication system		Forced, wet sump, with trochoid pump	
	Oil pump displacement	At 6,000 rpm		52.8 L (55.8 US qt)/minute
	Water pump displacement	At 6,000 rpm		95.5 L (101 US qt)/minute
	Fuel required			Regular UNLEADED gasoline with 87 Pump Octane Number or higher
STARTER	Type		Gear reduction	
	Normal output		1.6 kW	
	Nominal voltage		12V	
	Hour rating		30 seconds	
	Direction of rotation		Clockwise as viewed from drive end	
CLUTCH	Type		Single plate dry, diaphragm spring	
	Clutch friction material surface area		174 cm <sup>2</sup> (26.97 sq in.)	
MANUAL TRANSMISSION	Type		Synchronized, 5-speed forward, 1 reverse	
	Primary reduction		Direct 1:1	
	Gear ratio	1st		3.533
		2nd		2.042
		3rd		1.355
		4th		1.028
		5th		0.825
		Reverse		3.583
Final reduction	Type		Single helical gear	
	Gear ratio		4.765	
AUTOMATIC TRANSMISSION	Type		Electronically controlled automatic, 5-speed forward, 1 reverse, 3-element torque converter with lock-up clutch	
	Primary reduction		Direct 1:1	
	Gear ratio	1st		2.786
		2nd		1.614
		3rd		1.082
		4th		0.773



## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

		5th	0.566
		Reverse	2.000
	Transfer gear	Type	Single helical gear
		Gear ratio	4.765
Differential final gears	Type	Single helical gear	
	Gear ratio	4.500	
STEERING	Type		Hydraulic power-assisted rack and pinion
	Overall ratio	LX, EX	16.2
		SC	15.34
	Turns, lock-to-lock	LX, EX	3.26
SC		2.98	
Steering wheel diameter		386 mm (15.2 in.)	
SUSPENSION	Type	Front	Independent strut with stabilizer, coil spring
		Rear	Independent double wishbone with stabilizer, coil spring
	Shock absorber	Front	Telescopic, hydraulic, nitrogen gas-filled
		Rear	Telescopic, hydraulic, nitrogen gas-filled
TIRES	Size of front and rear tires	LX, EX	P215/70R1699S
		SC	P225/55R18 97H
	Size of spare tires		T145/90D16 106M
WHEEL ALIGNMENT (LX, EX)	Camber	Front	-0° 13'
		Rear	-1° 00'
	Caster	Front	1° 50'
		Total toe-in	Front
Rear	2 mm (0.08 in.)		
WHEEL ALIGNMENT (SC)	Camber	Front	-0° 24'
		Rear	-1° 06'
	Caster	Front	1° 50'
		Total toe-in	Front
Rear	2 mm (0.08 in.)		
BRAKES	Type of service brake	Front	Power-assisted self-adjusting ventilated disc
		Rear	Power-assisted self-adjusting solid disc
	Type of parking brake		Mechanical actuating, rear wheels
Pad friction surface	Front	46.0 cm <sup>2</sup> (7.13 sq in.) x 2	

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element

	area	Rear	27.9 cm <sup>2</sup> (4.32 sq in.) x 2
	Parking brake shoe friction surface area		49.0 cm <sup>2</sup> (7.6 sq in.) x 2
AIR CONDITIONING	Compressor	Type	Swash plate
		Capacity	188 mL (11.47 cu in.)/rev.
		Maximum speed	7,922 rpm
		Lubricant capacity	160 mL (51/3 fl.oz)
		Lubricant type	DENSO ND-OIL 8
	Condenser	Type	Corrugated fin
	Evaporator	Type	Corrugated fin
	Blower	Type	Radial fan
		Motor type	190 W/12 V
		Speed control	Infinite variable
		Maximum capacity	480 m <sup>3</sup> (16.900 cu ft)/h
	Temperature control		Air-mix type
	Compressor clutch	Type	Dry, single plate, poly-V belt drive
Electrical power consumption at 68°F (20°C)		35 W max. at 12 V	
Refrigerant	Type	HFC-134a (R-134a)	
	Capacity	500-550 g (17.6-19.4 oz)	
ELECTRICAL RATINGS	Battery		12 V-47 Ah/20 HR (12 V-38 Ah/5HR)
	Fuses	Under-hood fuse/relay box	100 A, 50 A, 40 A, 30 A, 20 A, 15 A, 10 A, 7.5 A
		Under-dash fuse/relay box	20 A, 15 A, 10 A, 7.5 A
	Light bulbs	Headlight high/low beam(LX, EX)	12 V-60/55 W (H4/HB2)
		Headlight high beam (SC)	12 V-60 W (HB3)
		Headlight low beam (SC)	12 V-55 W (H11)
		Front turn signal/parking lights	12V-21/5 W (LX, EX) 12V-28/8 W (SC)
		Front side marker lights	12 V-3CP (LX, EX) 12 V-5 W (SC)
		Rear turn signal lights	12 V-21 W (Amber)
		Brake/rear side marker lights/taillights	12 V-21/5 W
		High mount brake light	12 V-21 W

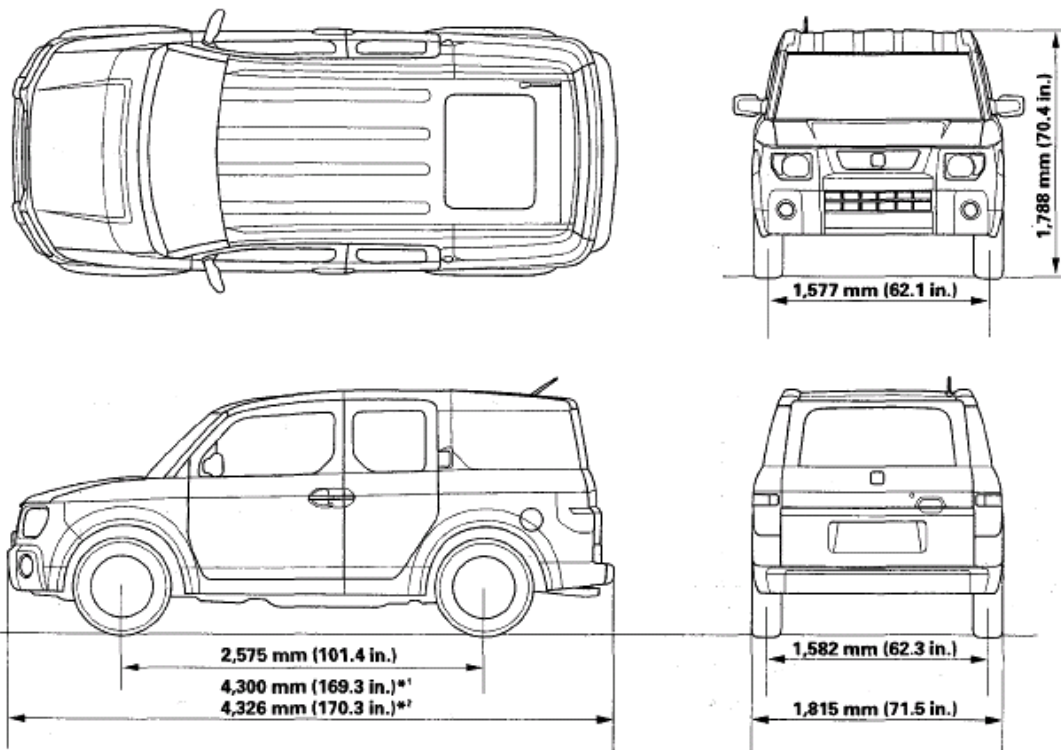
## 2007 Honda Element EX

### 2007-08 GENERAL INFORMATION Specifications - Element

	Back-up lights	12 V-18 W
	License plate lights	12 V-5 W
	Ceiling lights	12 V-10 W
	Spotlights	12 V-8 W
	Gauge lights	LED
	Indicator lights	LED
Washer reservoir	Capacity	4.5 L (4.7 US qt)

### BODY SPECIFICATIONS

**LX, EX:**



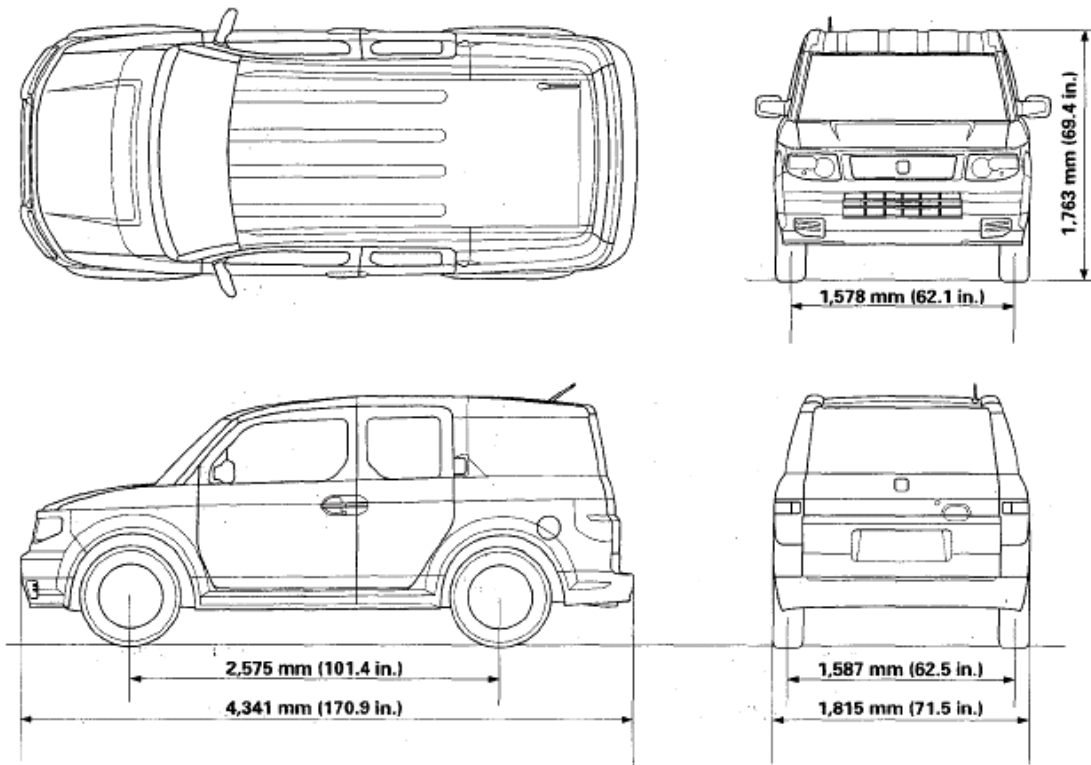
\*<sup>1</sup>: LX  
\*<sup>2</sup>: EX

**Fig. 1: Identifying Body Specifications (LX, EX)**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

**SC:**

## 2007 Honda Element EX

2007-08 GENERAL INFORMATION Specifications - Element



**Fig. 2: Identifying Body Specifications (SC)**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.