



## **Maintenance**

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### **Maintenance Minder**

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# Lubricants and Fluids

For details of the lubrication points and type 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.

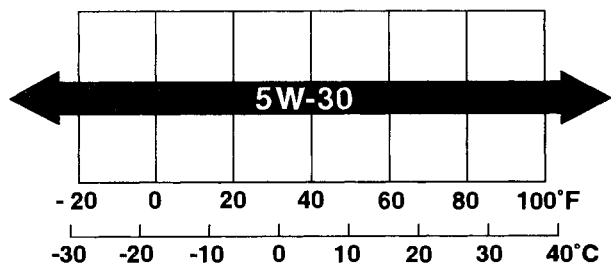
| Application |                                              | Lubricant or Fluid                                                                                                                                                                                                                                                                                                                                  |
|-------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A           | Engine                                       | Motor Oil:<br>American Honda: Always use Mobil 1® P/N 5W-30-MB1-000 or an equivalent oil that meets the Acura HTO-06 standard. Not all synthetic oils will meet this standards.<br>Honda Canada: Acura 5W-30 Full Synthetic P/N CA67007 or an equivalent oil that meets the Acura HTO-06 standard. Not all synthetic oils will meet this standards. |
| B           | Automatic transmission                       | Acura Automatic Transmission Fluid (ATF-Z1):<br>American Honda P/N 08200-9001A<br>Honda Canada P/N CA66689<br>Always use Acura ATF-Z1. Using a non-ACURA ATF can affect shift quality.                                                                                                                                                              |
| C           | Transfer assembly                            | Hypoid Gear Oil GL4 or GL5<br>Use a SAE 90 or SAE 80W-90 viscosity hypoid gear oil, API classified GL 4 or GL5 only.<br>Viscosity SAE 90: above 0 °F (−18 °C)<br>SAE 80W-90: below 0 °F (−18 °C)                                                                                                                                                    |
| D           | Rear differential                            | Acura Automatic Transmission Fluid (ATF-Z1):<br>American Honda P/N 08200-9001A<br>Honda Canada P/N CA66689                                                                                                                                                                                                                                          |
| E           | Brake system (including VSA line)            | Acura DOT 3 Brake Fluid: P/N 08798-9008A<br>Always use Acura DOT 3 Brake Fluid. Using a non-Acura brake fluid can cause corrosion and decrease the life of the system.                                                                                                                                                                              |
| F           | Brake booster clevis                         | Multipurpose Grease                                                                                                                                                                                                                                                                                                                                 |
| G           | Battery terminals                            |                                                                                                                                                                                                                                                                                                                                                     |
| H           | Pedal linkage                                |                                                                                                                                                                                                                                                                                                                                                     |
| I           | Fuel fill door                               |                                                                                                                                                                                                                                                                                                                                                     |
| J           | Hood hinges and hood latch                   |                                                                                                                                                                                                                                                                                                                                                     |
| K           | Tailgate hinges                              |                                                                                                                                                                                                                                                                                                                                                     |
| L           | Caliper piston boot, caliper pins, and boots | Honda Silicone Grease: P/N 08C30-B0234M                                                                                                                                                                                                                                                                                                             |
| M           | Door checker                                 | Molykote Grease 44MA                                                                                                                                                                                                                                                                                                                                |
| N           | Power steering system                        | Acura Power Steering Fluid: P/N 08206-9002A<br>Always use Acura Power Steering Fluid. Using any other type of power steering fluid or automatic transmission fluid can cause increased wear and poor steering in cold weather.                                                                                                                      |
| O           | Air conditioning compressor                  | Compressor Oil: ND-OIL 8 (P/N 38897-PR7-A01AH or 38899-P13-A01) for refrigerant HFC-134a (R-134a)                                                                                                                                                                                                                                                   |
| P           | Cooling System                               | Acura Long Life Antifreeze/coolant type2: P/N 0L999-9011A                                                                                                                                                                                                                                                                                           |

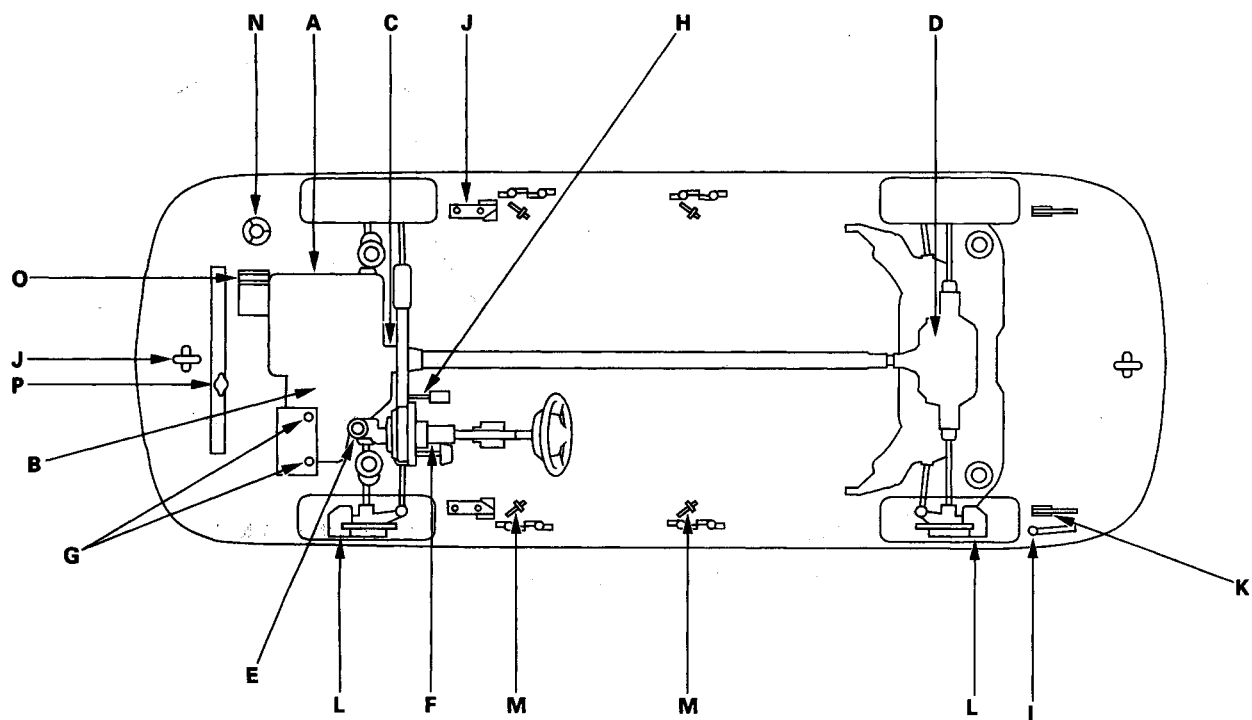
## API CERTIFICATION SEAL



## Required Engine Oil

Engine oil viscosity for ambient temperature ranges



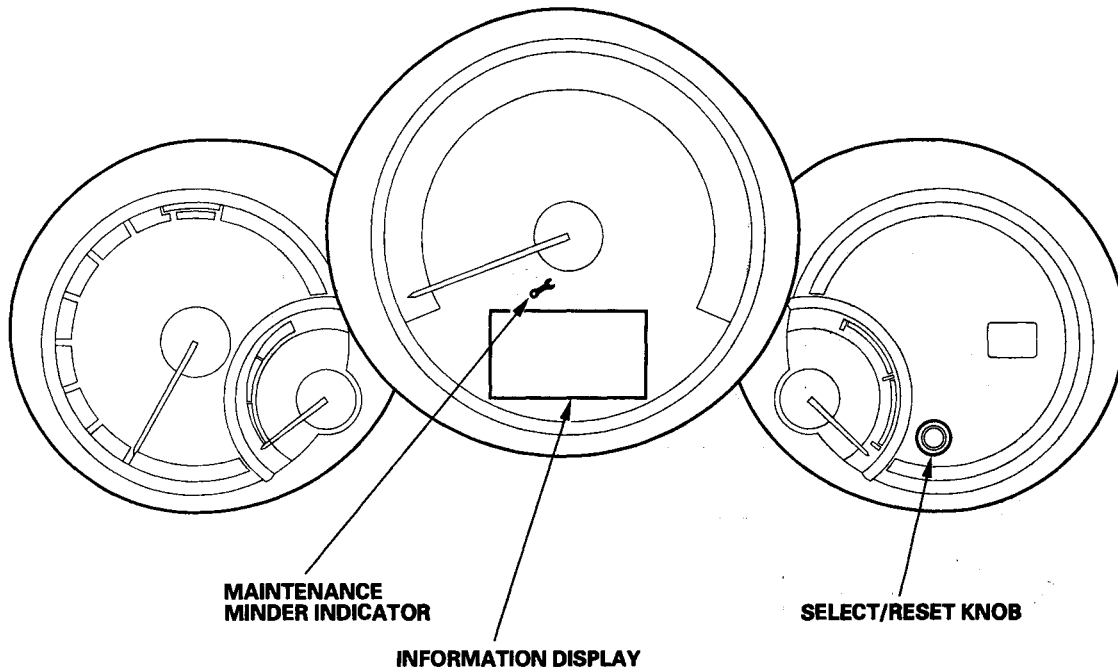


# Maintenance Minder

## General Information (Information Display)

### Maintenance Display

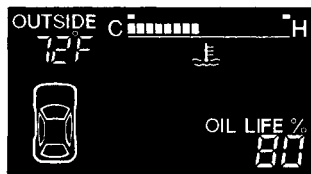
The Maintenance Minder is an important feature of the information display (RDX model). The RDX's onboard computer (PCM) calculates the remaining engine oil and automatic transmission fluid life. The system also displays the code for other scheduled maintenance items needing service.





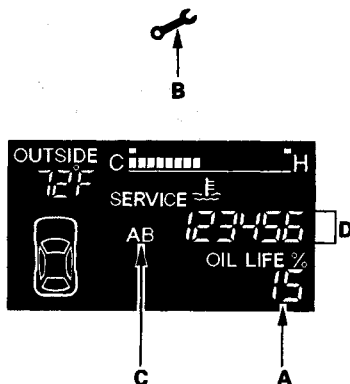
## Service Information

1. The remaining engine oil life (A) is shown as a percentage in the information display. To see the current engine oil life, turn the ignition switch to the ON (II) position, then push and release the Select/Reset Knob repeatedly until the engine oil life displays.

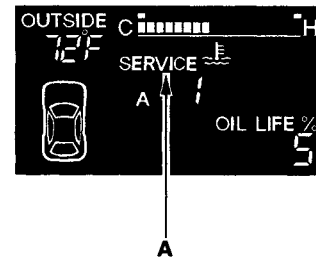


2. When the ignition switch is in the ON (II) position, and the remaining engine oil life (A) is 6 % to 15 %, the remaining engine oil life and other scheduled maintenance item(s) needing service are displayed. The maintenance minder indicator (B) also comes on when the engine oil life is 15 % or less. To cancel the display and the indicator, press the Select/Reset Knob.

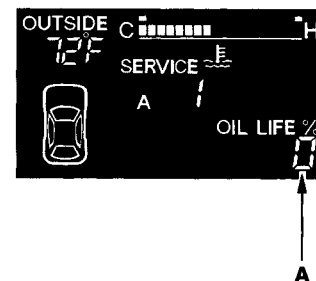
- Complete list of maintenance main items (C) (see page 3-10).
- Complete list of maintenance sub items (D) (see page 3-11).



3. When the ignition switch is in the ON (II) position, and the remaining engine oil life is 1 % to 5 %, the message "SERVICE" (A) is displayed along with engine oil life and the same maintenance item code(s).



4. When the ignition switch is in the ON (II) position, and the remaining engine oil life is 0 %, the engine oil life indicator (A) blinks. Pressing the Select/Reset Knob cancels the display, but the maintenance minder indicator stays on.

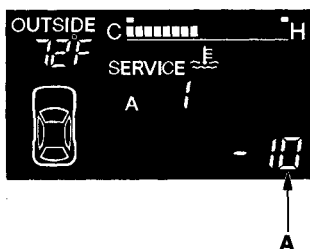


(cont'd)

# Maintenance Minder

## General Information (Information Display) (cont'd)

5. If the indicated maintenance is not done, the engine oil life indicator shows a negative mileage, for example "-10," on the display.
- If The negative mileage is between 0 and -9, the indicator is displayed for only a few seconds when the ignition switch is turned to the ON (II) position. The negative mileage (A) remains displayed after the vehicle is driven more than 10 miles (for USA models) or 10 km (for Canada models) after 0 % oil life is reached, and the display cannot be cancelled. This means the indicated maintenance item(s) should have been done more than 10 miles (or 10 km) ago.



## Resetting the Maintenance Information Display

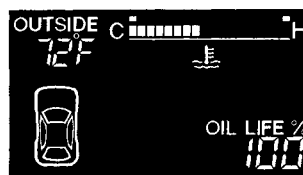
### NOTE:

- The vehicle must be stopped to reset the display.
- If a required service is done and the display is not reset, or if the maintenance display is reset without doing the service, the system will not show the proper maintenance timing. This can lead to serious mechanical problems because there will be no accurate record of when the required maintenance is needed.
- The engine oil life and the maintenance items can be reset independently only with the HDS.

1. Turn the ignition switch ON (II) position.
2. Push and release the Select/Reset Knob repeatedly until the engine oil life indicator is displayed.
3. Press and hold the Select/Reset Knob for about 10 seconds. The engine oil life indicator and the maintenance item code(s) will blink.

NOTE: If you are resetting the display when the engine oil life is more than 15 %, make sure the maintenance item(s) requiring service are done before resetting the display.

4. Press and hold the Select/Reset Knob for another 5 seconds. The maintenance item code(s) will disappear, and the engine oil life will reset to "100."

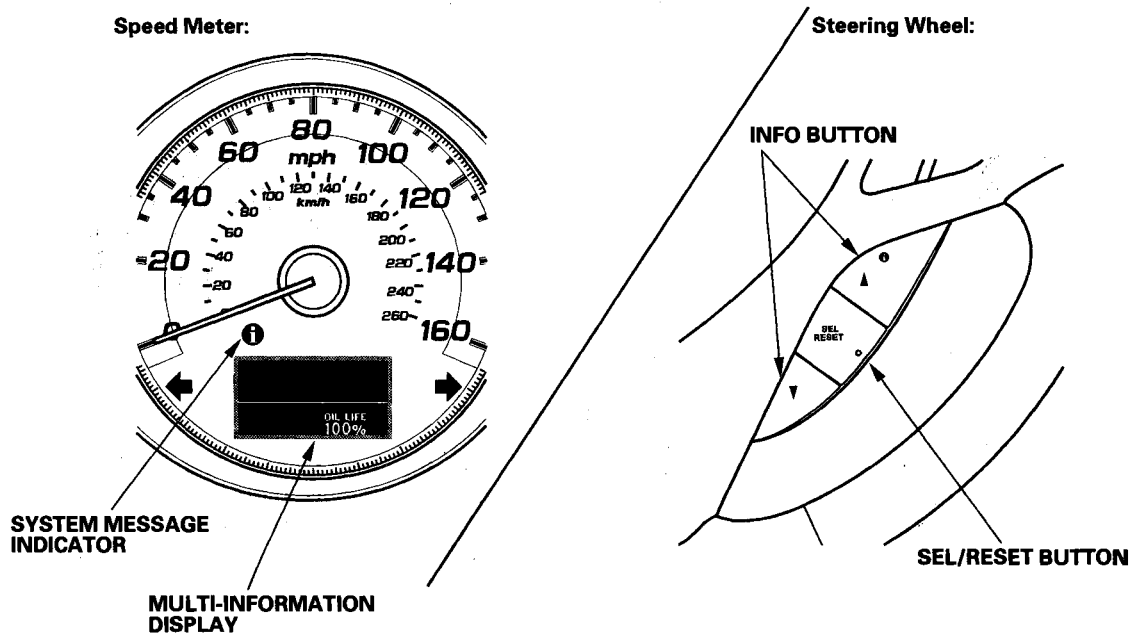




## General Information (Multi-information Display)

### Maintenance Display

The Maintenance Minder is an important feature of the multi-information display (RDX with Technology Package). Based on engine operating conditions and accumulated engine revolutions, the RDX's onboard computer (PCM) calculates the remaining engine oil and automatic transmission fluid life. The system also displays the codes for other scheduled maintenance items needing service.



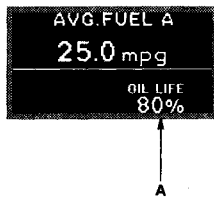
(cont'd)

# Maintenance Minder

## General Information (Multi-information Display) (cont'd)

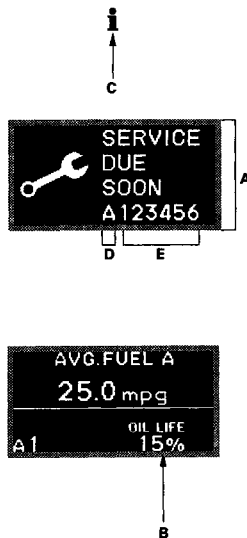
### Service Information

1. The remaining engine oil life (A) is shown as a percentage on the multi-information display. To see the current engine oil life, turn the ignition switch to the ON (II) position, then push and release the Sel/Reset Button repeatedly until the engine oil life displays.



2. When the ignition switch is in the ON (II) position, and the remaining engine oil life is 6 % to 15 %, the remaining engine oil life and other scheduled maintenance item(s) needing service are displayed. The maintenance system message "SERVICE DUE SOON" (A) also come on. To cancel the message, press the Info Button. The display continues to show the remaining engine oil life (B) and the message indicator (C) until it is reset.

- Complete list of maintenance main items (D) (see page 3-10).
- Complete list of maintenance sub items (E) (see page 3-11).



3. When the ignition switch is in the ON (II) position, and the remaining engine oil life is 1 % to 5 %, the maintenance system message "SERVICE DUE NOW" is displayed along with the same maintenance item code(s). If the maintenance system message display is cancelled, a "SERVICE" message appears.

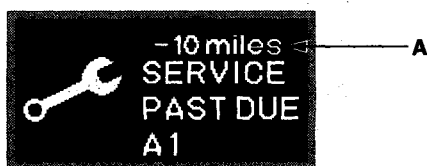


4. When the ignition switch is in the ON (II) position, and the remaining engine oil life is 0 %, the maintenance system message "SERVICE PAST DUE" is displayed along with the same maintenance item code(s).





5. If the indicated maintenance is not done, the "SERVICE PAST DUE" message shows a negative mileage, for example "-10," on the display. If the negative mileage is between 0 and -9, the message is displayed for only a few seconds when the ignition switch is turned to the ON (II) position. The negative mileage (A) remains displayed after the vehicle is driven more than 10 miles (for USA models) or 10 km (for Canada models) after 0 % oil life is reached, and the display cannot be cancelled. This means the indicated maintenance item(s) should have been done more than 10 miles (or 10 km) ago.



## Resetting the Maintenance-Information Display

### NOTE:

- The vehicle must be stopped to reset the display.
- If a required service is done and the display is not reset, or if the maintenance display is reset without doing the service, the system will not show the proper maintenance timing. This can lead to serious mechanical problems because there will be no accurate record of when the required maintenance is needed.
- The engine oil life and the maintenance items can be reset independently only with the HDS.

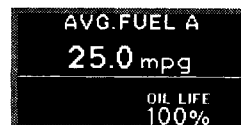
1. Turn the ignition switch to ON (II) position.
2. If system message(s) are displayed, press the Info Button to cancel the display.
3. Push and release the Sel/Reset Button repeatedly until the engine oil life indicator is displayed.
4. Press and hold the Sel/Reset Button for about 10 seconds, the "OIL LIFE RESET" mode display appears.

### NOTE:

- If you are resetting the display when the engine oil life is more than 15 %, make sure any maintenance item(s) requiring service are done before resetting the display.
- To cancel the "OIL LIFE RESET" mode, press the Info Button repeatedly until the "CANCEL" indicator displayed, then press the Sel/Reset Button.



5. Press Info Button repeatedly until the "RESET" indicator is displayed, then press the Sel/Reset Button.
- The maintenance item code(s) will disappear, and the engine oil life will reset to "100."



# Maintenance Minder

## Maintenance Main Items

If the message "SERVICE" or "SERVICE DUE NOW" does not appear more than 12 months after the display is reset, change the engine oil every year.

**NOTE:**

- Replace the brake fluid every 3 years. Independent of the maintenance messages in the information display.
- Inspect idle speed every 160,000 miles (256,000 km).
- Adjust the valves during services A, B, 1, 2 or 3, only if they are noisy.

| Symbol | Maintenance Main Items                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A      | Replace engine oil (see page 8-9).<br>Engine oil capacity without oil filter: 4.5 L (4.8 US qt).                                                                                                                                                                                                                                                                                                                                            |
| B      | Replace engine oil and oil filter (see page 8-10).<br>Engine oil capacity with oil filter: 4.7 L (5.0 US qt).                                                                                                                                                                                                                                                                                                                               |
|        | Check front and rear brakes (see page 19-4). <ul style="list-style-type: none"><li>• Check pads and discs for wear (thickness), damage, and cracks.</li><li>• Check calipers for damage, leaks, and tightness of mounting bolts.</li></ul>                                                                                                                                                                                                  |
|        | Check parking brake adjustment (see page 19-7).<br>Check the number of clicks (6 to 7) when the parking brake pedal is pressed with 294 N (30 kgf, 66 lbf) of force.                                                                                                                                                                                                                                                                        |
|        | Inspect tie-rod ends, steering gearbox, and gearbox boots (see page 17-8). <ul style="list-style-type: none"><li>• Check rack grease and steering linkage.</li><li>• Check boots for damage or leaking grease.</li><li>• Check fluid lines for damage or leaks.</li></ul>                                                                                                                                                                   |
|        | Inspect suspension components (see page 18-3). <ul style="list-style-type: none"><li>• Check bolts for tightness.</li><li>• Check condition of ball joint boots for deterioration and damage.</li></ul>                                                                                                                                                                                                                                     |
|        | Inspect driveshaft boots (see page 16-4).<br>Check boots for cracks and boot bands for tightness.                                                                                                                                                                                                                                                                                                                                           |
|        | Inspect brake hoses and lines including VSA (see page 19-36).<br>Check the master cylinder and VSA modulator-control unit for damage and leakage.                                                                                                                                                                                                                                                                                           |
|        | Inspect all fluid levels and condition of fluids. <ul style="list-style-type: none"><li>• Engine coolant (see page 10-7).</li><li>• Automatic transmission fluid (ATF-Z1) (see page 14-238).</li><li>• Rear differential fluid (ATF-Z1) (see page 15-69).</li><li>• Transfer fluid (see page 14-241).</li><li>• Power steering fluid (see page 17-12).</li><li>• Brake fluid (see page 19-11).</li><li>• Windshield washer fluid.</li></ul> |
|        | Inspect exhaust system* (see page 9-23).<br>Check catalytic converter heat shields, exhaust pipes, and muffler for damage, leaks, and tightness.                                                                                                                                                                                                                                                                                            |
|        | Inspect fuel lines* (see page 11-368) and connections* (see page 11-370).<br>Check for loose connections, cracks, and deterioration; retighten loose connections and replace damaged parts.                                                                                                                                                                                                                                                 |

NOTE: According to state and federal regulations, failure to do the maintenance items marked with an asterisk ( \* ) will not void the customer's emissions warranties. However, Acura recommends that all maintenance services be done at the recommended interval, to ensure long-term reliability.



## Maintenance Sub Items

| Number | Maintenance Sub Items                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | Rotate tires, and check tire inflation and condition.<br>Follow the pattern shown in the Owner's Manual.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2      | Replace air cleaner element (see page 11-395).<br>If the vehicle is regularly driven in dusty conditions, replace the element every 15,000 miles (24,000 km).<br>Replace dust and pollen filter (see page 21-87). <ul style="list-style-type: none"><li>• Replace the filter at 15,000 miles (24,000 km) intervals if the vehicle is driven mostly in urban areas that have high concentrations of soot in the air from industry and diesel-powered vehicles.</li><li>• Replace the filter whenever airflow from the heating and cooling system is less than normal.</li></ul> Inspect drive belt (see page 4-31).<br>Look for cracks and damage, then check the position of the drive belt auto-tensioner indicator.                                                           |
| 3      | Replace automatic transmission fluid (see page 14-239) and transfer (see page 14-241) fluid. <ul style="list-style-type: none"><li>• Driving in mountainous areas at very low vehicle speeds or trailer towing results in higher transmission and transfer fluid temperatures. This requires transmission fluid changes more frequently than recommended by the Maintenance Minder. If the vehicle is regularly driven in these conditions, change the transmission and transfer fluid at 60,000 miles (100,000 km), then every 30,000 miles (48,000 km).</li><li>• Automatic transmission fluid capacity 3.3 L (3.5 US qt), use Acura automatic transmission fluid (ATF-Z1).</li><li>• Transfer fluid capacity: 0.43 L (0.45 US qt), use Hypoid Gear Oil GL4 or GL5.</li></ul> |
| 4      | Replace spark plugs (see page 4-22).<br>Use SILKR8A-S (NGK)<br>Inspect the valve clearance (cold) (see page 6-9).<br>Intake: 0.21—0.25 mm (0.008—0.010 in.), Exhaust: 0.28—0.32 mm (0.011—0.013 in.).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 5      | Replace engine coolant (see page 10-7).<br>Capacity (including the reservoir): 6.5 L (1.72 US gal), use Acura Long Life Antifreeze/Coolant Type 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 6      | Replace rear differential fluid (see page 15-69). <ul style="list-style-type: none"><li>• Driving in mountainous areas at very low speeds, towing a trailer, or frequently driving fully loaded results in a higher level of mechanical (shear) stress to fluid. This requires differential fluid changes more frequently than recommended by the Maintenance Minder. If the vehicle is regularly driven under these conditions, change the differential fluid at 7,500 miles (12,000 km), then every 15,000 miles (24,000 km).</li><li>• Capacity: 2.53 L (2.67 US qt), use Acura automatic transmission fluid (ATF-Z1)</li></ul>                                                                                                                                              |

## **SUPPLEMENTAL RESTRAINT SYSTEM (SRS) (If engine electrical maintenance is required)**

The RDX SRS includes a driver's airbag in the steering wheel hub, a passenger's airbag in the dashboard above the glove box, seat belt tensioners in the front seat belt retractors, driver's seat belt buckle tensioner in the driver's seat belt lower anchor, front passenger's seat belt buckle tensioners in the front passenger's seat belt lower anchor, side curtain airbags in the sides of the roof, and side airbags in the front seat-backs. Information necessary to safely service the SRS is included in this Service Manual. Items marked with an asterisk ( \* ) on the contents page include or are located near SRS components. Servicing, disassembling, or replacing these items require special precautions and tools, and should be done only by an authorized Acura dealer.

- To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of a severe frontal or side collision, all SRS service work must be performed by an authorized Acura dealer.
- Improper service procedures, including incorrect removal and installation of the SRS, could lead to personal injury caused by unintentional deployment of the airbags and/or side airbags.
- Do not bump or impact the SRS unit, front impact sensors, or side impact sensors when the ignition switch is ON (II), or for at least 3 minutes after the ignition switch is turned OFF; otherwise, the system may fail in a collision, or the airbags may deploy.
- SRS electrical connectors are identified by yellow color coding. Related components are located in the steering column, front console, dashboard, dashboard lower panel, in the dashboard above the glove box, in the front seats, in the roof side, and around the floor. Do not use electrical test equipment on these circuits.