OBD II Courses Offered at Online University

Interested in increasing your knowledge and improving your skills in the area of OBD II? The Online University has 17 new web-based training modules covering this subject. These self-study modules are in Adobe PDF format, so it's a snap to make copies of them if you like.

The Online University is just a click away on the Honda Interactive Network (iN). Here's what you need to do:

- 1. Sign into *i*N.
- 2. From the main screen, click on "Online University."
- 3. Click on "Service Training."
- 4. Click on "Web Based Training."
- 5. Click on "EMC" (Emissions Module Cognitive).
- 6. Click on the knowledge module you'd like to study. A PDF version of the module comes up on your display screen. You can study the resource material in the module worksheet right from the screen, or print yourself a copy and take it with you.
- 7. When you're done studying the module, and you think you've got the material nailed down, it's time to visit the Testing Center. Click on "Testing Center," sign in, and complete the questions for the Self-Evaluation for that module. If you score **90 percent or higher**, congratulate yourself. You've successfully completed the module and you've earned yourself valuable course credit.

Data Transfer Module Needs an Analog Phone Line

Think of them as a matched set: the data transfer module (DTM) and an analog phone line. You need to plug the DTM into a phone line like the one used for sending and receiving faxes or it *doesn't* work.

This has become an issue lately because some computer techs have been strapping the DTM to the Tech Cart mistakenly thinking they can just plug it into the dedicated line for ISIS. If your DTM is strapped to the Tech Cart, you have only two choices: move the cart close to an analog phone line or install an analog line close to the cart. If there's no way to install a line close to the cart, take the DTM off the cart and find a place where you can plug it into an analog phone line.

Camshaft Pulse Plate Torque Spec Missing

NOTE: This article applies to the 2000–02 S2000 Service Manual, 2002 Civic Si Service Manual, and the 2002 CR-V Service Manual.

The S/M *doesn't* list the mounting bolt torque spec for the camshaft plate attached to the end of the camshaft.

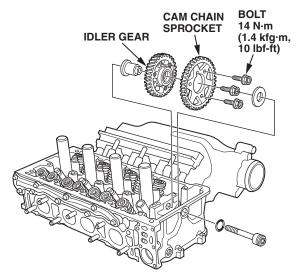
When tightening the camshaft plate mounting bolts, lubricate the threads with clean engine oil, then torque the bolts to **39 N·m (4.0 kgf·m, 29 lbf-ft)**.

MOUNTING BOLTS CAMSHAFT PLATES DOWEL PIN EXHAUST CAMSHAFT

Cam Chain Sprocket-to-Idler Gear Torque Spec Missing

The 2000–02 S2000 S/M *doesn't* list a torque spec for the cam chain sprocket-to-idler gear mounting bolts.

Torque the cam chain sprocket bolts to **14 N·m** (**1.4 kgf-m**, **10 lbf-ft**).



Stiff Shifting? Check the Shift Lever Pivot Ball

If you have a '01–02 Civic M/T customer who complains of stiff shifting, it's most likely either clutch drag or a worn shift lever. First, check for clutch drag by moving the shift lever with the engine turned off. If the shift lever moves freely, you're most likely looking at clutch drag. But if the shift lever is hard to move, the lever itself may be worn or damaged. Remove the shift lever, and look at the pivot ball on the end of the lever. If the pivot ball is cracked, dry, or damaged, replace the shift lever (P/N 54100-S5A-003, H/C 6469910). Remember to lubricate the pivot ball on the new lever with Super High Temp Urea Grease (P/N 08798-9002, H/C 3720984).

A/T Leaks, Makes Noise, Shifts Erratically

On '98–02 Accords and '99–02 Odysseys, damaged differential carrier bearings can cause all sorts of A/T-related problems such as ATF leaks, transmission noise, or erratic shifting. The only fix is a reman A/T. When the carrier bearings are shot, here's what can happen and why:

ATF leakage. If the differential carrier moves around, the driveshafts can exceed the range of the inner axle seals. This can cause ATF to leak from the seals.

Transmission noise. Worn carrier bearings let the differential carrier move around and cause irregular countershaft gear to final driven gear contact. This can generate a nasty noise that's often described as a loud moan or roar.

Erratic shifting. Pieces from the damaged differential carrier bearings can contaminate the ATF, fouling the shift and lock-up valves. A common A/T DTC that goes with damaged differential carrier bearings is DTC P1750 (mechanical problem in hydraulic system).

Broken Wing Spoiler Studs: '00–02 Accord, '01–02 Civic

When installing wing spoilers on '00–02 Accords and '01–02 Civics, *don't* use pneumatic or electric wrenches to tighten the mounting nuts. If you overtighten the nuts, you can break the studs or pull them out of the spoiler. And if you do, it's *not* covered by warranty. Use a torque wrench, and torque the nuts to **7 to 10 N·m (5 to 7 lb-ft)**.

S/M Fix: SRS DTCs, '01–02 Accord

For '01-02 Accords, the troubleshooting procedures for SRS DTCs 13-1, 13-2 and SRS DTCs 14-1, 14-2 on page 23-203 of the 1998–02 Accord Service Manual need some revising. Make these changes to your copies of the S/M:

DTC 13-1, 13-2: Internal Failure of the driver's side impact sensor

- 1. Erase the DTC memory (see page 23-45).
- 2. Turn the ignition switch ON (II), and check that the SRS indicator light comes on for about 6 seconds and then goes off.

Does the SRS indicator light stay on?

YES Replace the SRS unit (see page 23-299 R

NO Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see page 23-45).

YES - Faulty front passenger's side impact sensor or SRS unit; replace the front passenger's side impact sensor. If the problem is still present, replace the SRS unit.

DTC 14-1, 14-2: Internal Failure of the front passenger's side impact sensor

- 1. Erase the DTC memory (see page 23-45).
- 2. Turn the ignition switch ON (II), and check that the SRS indicator light comes on for about 6 seconds and then goes off.

Does the SRS indicator light stay on?

YES Replace the SRS unit (see page 23-299

Check for Dealership Address Errors on Navi

When doing a PDI or test-driving a vehicle with the Navigation System, punch in your dealership address on the display unit to make sure the system database lists your dealership and shows it correctly on the display. If your address *isn't* listed or its location is wrong on the display, report the error to your District Parts and Service Manager so it can be fixed during the next database update.

NO Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see page 23-45).

A/C Compressor Seizure: '99–01 Odyssey

If the A/C compressor seizes on a '99–01 Odyssey, replace all damaged and contaminated parts, and increase the system oil level to **210 cc**.

When installing a new compressor, check the color of the serial number tag on the original compressor. It tells you how much oil is in the system.

- If the tag is *black*, the A/C system contains **180 cc** of oil.
- If the tag is *blue*, the A/C system contains **210 cc** of oil.

Then follow the appropriate procedure:

Original Compressor Is Dry

- 1. Drain all of the oil from the new compressor into a clean, suitable container.
- If the original compressor has a *blue* serial number tag, the system already has 210 cc of oil. Pour 50 cc (1 2/3 oz) of oil back into the new compressor. This replaces the oil that would have been in the original compressor.
- If the original compressor has a *black* serial number tag, the system only has **180 cc** of oil. Pour **80 cc (2 2/3 oz)** of oil back into the new compressor to increase the system oil level to **210 cc**.

Original Compressor Has Some Oil

- 1. Drain all of the oil from the original compressor into a clean, suitable container. Measure how much oil is collected.
- 2. Drain all of the oil from the new compressor into a clean, suitable container. Measure how much oil is collected.
- 3. If the new compressor has a *blue* serial number tag, refill the new compressor with the same amount of oil you drained from the original compressor. Make sure you're using the oil you drained from the new compressor.
- If the new compressor has a *black* serial number tag, refill the new compressor with the same amount of oil you drained from the original compressor plus an extra **30 cc** (1 oz). That extra **30 cc** shot of oil increases the oil level from **180 cc to 210 cc**. Make sure you're using the oil you drained from the new compressor.
- 5. Properly dispose of any excess oil drained from the new compressor and the oil drained from the original compressor.

Choose the Right Differential Fluid for the Job

American Honda recommends four different differential fluids for its 4WD vehicles. The kicker is none of these fluids are interchangeable. So, when you're adding or replacing differential fluid, use this handy chart to make sure you're picking the right fluid for the job:

Year/Model	Recommended Fluid	Ordering Info
1985–91 Civic 4WD	GL5 SAE 90	
1997–02 CR-V	Dual Pump Fluid	P/N 08200-9002 H/C 6512644
1994–02 Passport	Synthetic GL-5 SAE 75W-90 (front diff)	51130-3 (Mobil P/N)
	GL-5 SAE 80W-90 (rear diff)	51015-6 (Mobil P/N)
2003 Pilot	VTM-4 Fluid	P/N 08200-9003 H/C 6512651

Use Correct S/M Section to Assemble M/T: '96–00 Civic

The 1996–00 Civic S/M splits section 13 into two parts: one part for the S4C M/T used in the '99–00 Civic Si, and another part for the S40 M/T used in everything else.

When assembling an M/T, make sure you're looking at the correct page for the type you're working on, especially when it comes time to install the 3rd/4th synchro hub. If you're looking at the wrong page, you'll install the synchro hub upside down. And if that happens, the M/T *won't* shift properly or it could pop out of gear. Here's a handy reference to help you remember which page you need to follow to install the 3rd/4th synchro hub:

- S40 M/T (All Civics except Si) See Mainshaft Assembly Index on page 13-15.
- **S4C M/T (Civic Si)** See Mainshaft Assembly Index on page 13-67.

Diagnosing Vehicles With Airbag ON/OFF Switches

If a vehicle has an airbag ON/OFF switch kit installed, follow this procedure if the SRS indicator comes on.

- 1. Make sure you have the anti-theft code for the radio, then write down your customer's radio station presets.
- 2. Disconnect the negative battery cable, and wait **3 minutes**.
- 3. Unplug the airbag ON/OFF switch harness from the front passenger SRS harness and the cable reel harness.
- 4. Plug the passenger airbag and cable reel into the SRS main harness. Leave the ON/OFF switch harness unplugged.
- 5. Use the PGM Tester to clear any stored DTCs.
- 6. Turn the ignition switch to LOCK (0) for **10 seconds**, then turn it to ON (II).
 - If the DTC resets, go to section 23 of the appropriate S/M and do the SRS troubleshooting procedure.
 - If the DTC *doesn't* reset, the airbag ON/OFF switch is faulty. Call Automobile Customer Relations at 800-999-1009 Ex 118045 or 118037, and order a replacement airbag ON/OFF switch kit. *Don't* reuse any parts from a faulty airbag ON/OFF switch kit.

A/C Doesn't Work After Fog Light Installation: '02 CR-V

If you're installing an accessory fog light kit on a '02 CR-V, it's really easy to knock loose the white 8P connector C502, or forget to plug it back in. If C502 *isn't* properly plugged in, it breaks the connection between the heater unit control panel and the A/C pressure switch. With this connection broken, the A/C *doesn't* work. So make sure C502 is properly connected when you're buttoning things up and, as an extra check, run the A/C when you're done to make sure it works.

RES DVD Demo Disc Available at Helm

If you need to order a DVD demo disc for the rear entertainment system, call Helm at **800-782-4256** and ask for **Y0610**. The dealer net price for this item is **\$20.00**. This disc is for the RES in '02 Odysseys *only*. The RES for the '03 Pilot *doesn't* come with a demo disc.

Replacement ATF Filters Now Available

Replacement ATF filters (the type you get with reman A/Ts) are now in Honda stock and available separately for all models except Passport. To order a replacement ATF filter, call the Reman ATR Order Desk at 888-997-7278. Use this handy chart when ordering.

Model/Year	Part Number	Honda Code
1986-89 Accord	25420-PF4-315	3828449
1990–93 Accord	25420-PX4-A00 (Large Type)	3828498
1990–02 Accord	25420-P24-A01 (Small Type)	3959574
1988–91 Civic	25420-PL4-305	3828456
1992–02 Civic	25420-P24-A01	3959574
1988–91 Prelude	25420-PF4-315	3828449
1992–02 Prelude	25420-P24-A01	3959574
1995–02 Odyssey	25420-P24-A01	3959574
1997–02 CR-V	25420-P24-A01	3959574

Clean Surfaces for Good Accessory Adhesion

For lasting installation, accessories that attach with double-sided tape or adhesives need a clean, dry mounting surface. When you're installing self-adhesive accessories, remember to first clean the surfaces you're going to stick the accessory to with isopropyl alcohol and a clean towel, then dry the area with a hair dryer set to low temperature. *Don't* use compressed air for this; compressed air and the air hoses can contain oil and moisture, and that defeats the purpose.

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