



A/C Capacities: '90 Thru '98 Models

One of the worst things you can do when you're recharging an A/C system is add too much refrigerant. But with S/Ms giving refrigerant capacities in grams, and recovery-recycling-recharging units showing measurements in kilograms, pounds, or ounces, it's possible to miscalculate the amount of refrigerant you're adding.

This refrigerant capacity chart will help you to add the right amount of R-12 or R-134a. All '90 thru '98 models are included. For each system, refrigerant capacities are given in grams, kilograms, pounds, and ounces. Make a copy of this chart, and keep it handy when you're recharging A/Cs.

Year/Model	Refrigerant	Capacity:			
		Grams (g)	Kilograms (kg)	Pounds (lb)	Ounces (oz)
'90 Legend '90 Integra	R-12	850-950 g	.850-.950 kg	1.9-2.1 lb	29.9-33.4 oz
'91 NSX	R-12	950-1000 g	.950-1.000 kg	2.1-2.2 lb	33.4-35.2 oz
'91-92 Legend	R-12	700-750 g	.700-.750 kg	1.5-1.7 lb	24.6-26.4 oz
'91-93 Integra '92 NSX	R-12	900-950 g	.900-.950 kg	2.0-2.1 lb	31.7-33.4 oz
'92-94 Vigor	R-12	800-850 g	.800-.850 kg	1.8-1.9 lb	28.2-29.9 oz
'93 Legend '94-98 Integra	R-134a	650-700 g	.650-.700 kg	1.4-1.5 lb	22.1-24.6 oz
'93-98 NSX	R-134a	800-850 g	.800-.850 kg	1.8-1.9 lb	28.2-29.9 oz
'94-95 Legend '95-98 2.5TL '96-98 3.2TL '96-98 3.5RL	R-134a	700-750 g	.700-.750 kg	1.5-1.7 lb	24.6-26.4 oz
'96-97 SLX	R-134a	750 g	.750 kg	1.7 lb	26.4 oz
'97 2.2CL '98 2.3CL	R-134a	600-650 g	.600-.650 kg	1.3-1.4 lb	21.1-22.1 oz
'97-98 3.0CL	R-134a	650-700 g	.650-.700 kg	1.4-1.5 lb	22.1-24.6 oz
'98 SLX	R-134a	600 g	.600 kg	1.3 lb	21.1 oz

NOTE: On retrofitted systems, the refrigerant capacity is decreased by 50 grams (.050 kilograms, .11 pounds, or 1.76 ounces). This decrease is incorrectly listed in the retrofit kit instructions as 50 ml. Correct it to 50 g.



R-12 to R-134a: Retrofit Kit P/Ns



Here are the vehicles you can convert to R-134a and the retrofit kit P/Ns.

For retrofitting info, refer to the instructions in each kit and to S/B 95-008, *Converting R-12 A/C Systems to R-134a* (filed under Heater-A/C in your S/B binder).

Year/Model	R-134a Retrofit Kit P/N
'86-87 Legend '86-87 Integra	38020-SM4-A2AH
'88-92 Legend '88-93 Integra '91-92 NSX	38020-SM4-A1AH
'92-94 Vigor	38020-SM4-A3AH



Some Evaporator Noise Is Normal

All A/C evaporators produce a certain amount of noise; it's caused by the refrigerant running through the system. But if the noise is louder than on other identical vehicles, there may be too much moisture in the system, or it may be overcharged. Here's what you should do:

First, evacuate the refrigerant using your recovery-recycling-charging unit and a micron vacuum gauge. A micron gauge is useful because it lets you read vacuum within the 29-inch-range, and small changes in vacuum greatly affect the boiling point of moisture. (For more info on micron vacuum gauges, refer to the September '97 issue of S/N.)

If you don't have a micron vacuum gauge, you'll need to evacuate the system for 3 to 4 hours. Either way you do it (with or without a micron gauge), you can shorten the evacuation time and increase its effectiveness by running the engine, with the heater and blower on High, and Recirc on, during the evacuation.

After you recharge the A/C, confirm that the system pressures and temperatures are correct by comparing them with the A/C performance test chart used with S/B 96-004, *Air Conditioning System Performance Test* (filed under Heater-A/C in your S/B binder).



What to Do With R-12 Oil on Retrofits

So what do you do with R-12 oil when you retrofit an A/C to R-134a? Here are the two possible scenarios you'll face:

- When you reuse the compressor (what you'll do most of the time), follow the retrofit procedure in the retrofit kit and then add 120 cc of PAG oil before you recharge with R-134a. Any R-12 oil that's still in the system shouldn't cause any problems.
- If you need to replace the compressor, drain all the refrigerant oil out of the new one, and add 120 cc of PAG oil before you install it. New compressors are pre-filled with R-12 oil, even ones labeled "R-134a Retrofit."



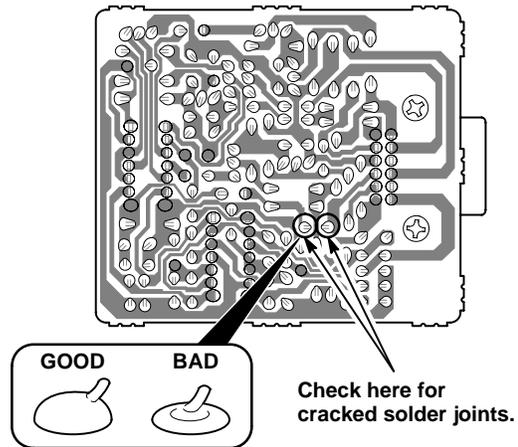
Fan Control Unit Causes Warm A/C

If a '91-'93 Legend blows warm air intermittently, do the procedure in S/B 95-020, *A/C Blows Warm Air Intermittently* (filed under Heater-A/C in your S/B binder). Here's a summary of the S/B procedure. For details (including VIN breaks and warranty info), refer to the S/B.

Remove the fan control unit from the ECM bracket, and look at its printed circuit board with a magnifying glass:

- If either of the solder joints (circled below) are cracked, replace the control unit (P/N 37735-PY3-901).
- If the solder joints are OK, do an A/C performance test to help you find and fix other possible causes of the problem.

PRINTED CIRCUIT BOARD



Reset the Outside Air Temp Display on RL

If a '96-98 3.5RL customer feels that the outside air temperature display isn't reading accurately, you can recalibrate it. Just follow the calibration procedure on page 23-78 of the '96-98 3.5RL S/M. The procedure lets you adjust the current reading 35F higher or lower, in 15F increments. You can even calibrate to a true temperature by removing the outside air temp sensor from under the glove box, placing the sensor (harness still connected) and a thermometer in a container of ice water, and then recalibrating it to the thermometer reading using the S/M procedure.

Brake Fluid Bleeding

NOTE: This subject was also covered in the March '94 issue of S/N.

The best way to bleed or flush the brake system is by using a pressure bleeder or vacuum bleeder. When used properly, either one will ensure that the old brake fluid is thoroughly flushed out.

Before You Bleed

1. Remove the master cylinder reservoir cap and strainer. Then stir the fluid in the reservoir to get any sediment in suspension, and remove it with a turkey baster. (If you're also replacing the brake pads, push the caliper pistons in to force more of the old fluid into the reservoir, and remove that fluid too.)
2. Refill the reservoir with clean brake fluid, and repeat the stirring and removal process until the reservoir is as clean as possible.
3. Refill the reservoir one more time, and continue with pressure or vacuum bleeding.

Pressure Bleeding

1. Install the appropriate Power Probe pressure bleeder adapter on the master cylinder. (You can order Power Probe adapters through the Acura Tool and Equipment program at 888-424-6857.
2. Use the bleeding sequence from section 19 of the appropriate S/M, and follow the bleeding instructions that come with your pressure bleeder.

Pressure bleeding is also covered in the Acura Technical Training Module BK-13, *Pressure Brake Fluid Replacement*.

Vacuum Bleeding

1. Open a full bottle of genuine Honda DOT 3 Brake Fluid (P/N 08798-9008), and then quickly turn it upside down into the master cylinder reservoir. (The reservoir won't overflow; it's the same principle as a bottled water dispenser.) This increases the reservoir capacity by 12 ounces and minimizes the chance of bleeding it dry.
2. Use the bleeding sequence from section 19 of the appropriate S/M, and follow the bleeding instructions that come with your vacuum bleeder.

Vacuum bleeding is also covered in the Acura Technical Training Module BK-12, *Vacuum Brake Fluid Replacement*.



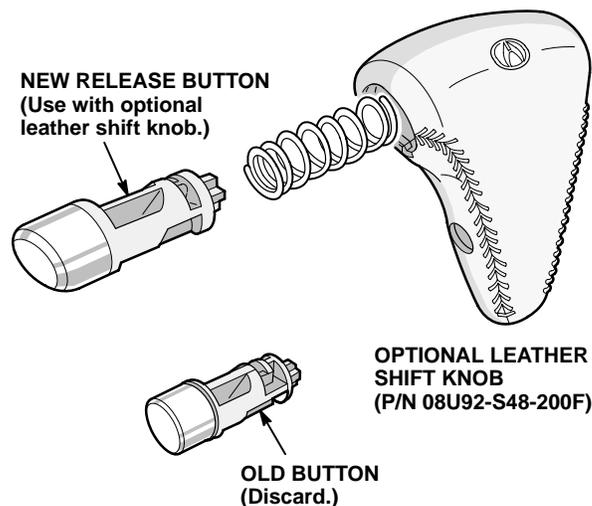
Don't Mess With Seat Belt Retractors

Whenever you work on a seat belt system, never take apart or lubricate the seat belt retractors. The retractors contain many small parts that are easily damaged. Using lubricants on these parts is a sure way to make them fail. If there's a problem with the retractor, don't mess around, replace it.



Replace Shift Knob *and* Button on '98 CL

If you're installing an optional leather shift knob (P/N 08U92-SY8-200F) on a '98 CL with A/T, you need to replace the shift knob release button with P/N 54132-SV4-A81. The release button that comes standard on '98 CLs won't work.



No Ignition Switch Light on NSX

On '97-98 NSXs, the ignition switch light was removed to make room for the immobilizer receiver. The receiver is in the bezel around the ignition switch. It sends power to the transponder inside the key, and then sends the transponder's coded signal to the immobilizer control unit.

In '97 and '98 NSX owner's manuals, however, the ignition switch light is still shown (page 73 in the '97 and page 86 in the '98). Please let your customers know that the light isn't used anymore.



Use S/B for Audio Unit Error Codes

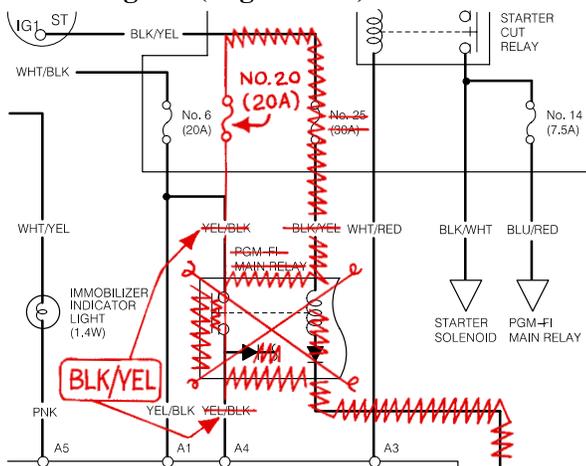
If an error code is displayed on the audio unit of any Acura with a CD player or changer, refer to S/B 90-010, *Audio Unit Error Codes* (filed under Accessories in your S/B binder). This S/B has troubleshooting charts for all error codes, including SLX. It also shows you how to remove a stuck CD magazine from the changer, and provides handling and inspection tips for CDs.



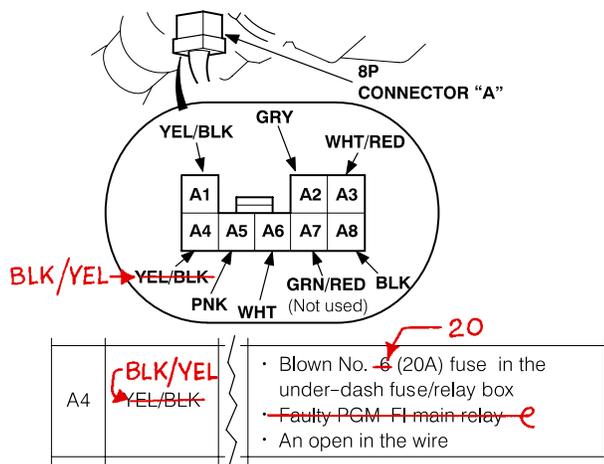
PGM-FI Relay Isn't in Immo System

The PGM-FI main relay isn't a part of the 3.5RL immobilizer system, even though it's shown that way in the '96-98 3.5RL S/M. Please correct the immobilizer circuit diagram and the control unit input test like this:

Circuit Diagram (Page 23-158):



Control Unit Input Test (Page 23-159):

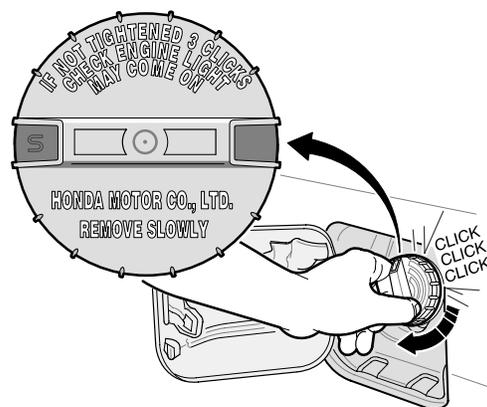


Loose Fuel Cap Can Cause DTC P1456

To prevent the MIL from coming on and storing DTC P1456 (Code 90), the fuel fill cap must be tight. The on-board diagnostic (OBD II) system on affected vehicles is sensitive to anything that might be considered a leak, including a loose cap.

Remind your customers to tighten the cap until it clicks at least three times. It's impossible to over-tighten the cap because it ratchets when it's tight. We suspect that when some customers tighten the cap after refueling, they hear it click, and then back it off (thinking that it's too tight).

On most '98 vehicles, a tightening precaution is printed right on the cap.



P/N Fix for Fog Light Kit

On page one of the '98 3.0CL fog light installation instructions, *the P/N for the fog light kit should be changed to 08V31-SS8-201*. Please see that all copies of the installation instructions are corrected at your dealership.

This error was also in Parts Information Bulletin (PIB) B97-0017. We reported the PIB error in the January '98 issue of S/N.

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