

Compressor and Blower-Motor

With the condenser unit installed, work can now begin on the installation of the a/c compressor and blower motor.

Important: Included below are the steps in this automotive procedure. These steps are general guidelines that are applicable to most vehicles. With any particular vehicle, there may be procedures, specifications, settings, tolerances, components, etc. that are specific to that vehicle. There are also variations according to the type and brand of a/c-kit you select. Always consult your vehicle's service manual when undertaking significant automotive repairs, and read and follow the manufacturer's directions and precautions that come with your kit or replacement parts.

Safety Alert: Always wear eye protection, and follow proper safety precautions, when working with power tools.

Safety Alert: As a standard safety precaution, always disconnect the vehicle's negative battery cable before you begin work on any electrical or mechanical components -- such as the wired a/c compressor.

- In order to install the compressor on this vehicle, the air-cleaner and duct assembly must be removed in order to gain access to the mounting location. Remove the screws and hose clamps holding the air-cleaner and duct assembly in place, and lift them out of the vehicle.
- Next, attach the belt-tensioner assembly to the compressor mounting-bracket. It is attached with two bolts, then a spacer and pulley assembly are installed and are then secured by an outside nut.
- In our case, a motor-mount bolt needed to be removed before installing the compressor bracket, since the bracket attaches to the motor-mount bolt, among others.
- With the bolt removed, position the bracket in place. To simplify installation, the bracket is made so that it will only fit one way and still align with the proper bolt-holes. Tighten the mounting bolts down until snug.
- The compressor then fits into the installed bracket where it is bolted in place.
- Next, the air-filter assembly needs to be removed . In most cases, it will simply be held in

place with a couple of bolts or hose-clamps.

- Remove the clamps that hold the radiator coolant hoses in place, then loosen and remove the coolant hoses.

Safety Alert: Radiator coolant is toxic. Be sure to dispose of it properly, and keep it away from children or pets.

- The next phase is to gain access to, and remove, the existing blower-motor assembly and replace it. The replacement will include a new blower-box that includes an evaporator. In our case, we first had to unbolt and remove the vacuum solenoid to gain access to the blower assembly.

- Next, disconnect the blower motor and remove it from the box. This part will be re-installed later, so it's a good idea to inspect it and clean it of any dirt or debris that has built up on it.

- Unbolt and remove the blower resistor.

- Next, unbolt and remove the blower box. The box is mounted to studs on the firewall. You may need to spray the nuts with penetrating oil in order to loosen and remove them.

- The old blower box can be discarded since it will be replaced with a new one as part of the upgrade. The new housing is designed to incorporate the evaporator core.

- Before installing the new blower housing, clean off the area around the gasket area around the duct-openings leading into your vehicle. (Any household cleaner will work for this.) A clean fit will ensure greater efficiency from your new a/c system.

- Since the new blower-box is larger than the old one, you may need to rearrange wiring harnesses in order to install it. Be sure that you don't catch any harnesses between the back of the housing and the firewall. Seat the housing securely on the studs, and tighten it into place.

- Install the old blower motor into the housing. Set the motor in place and attach the hose that leads from the box to the motor. Tighten down the mounting bolts to secure the motor in the housing.

- Next, install the blower-resistor.

Important: Before installing the resistor, bend the springs down so that there's no possibility that they'll contact the evaporator core. If this were to happen, it would cause a short.

- Route the blower-resistor assembly onto the box, and bolt it into place.

- With the blower-resistor installed, reconnect the power-supply to the blower motor.

RESOURCES :

The Complete Idiot's Guide to Trouble-Free Car Care

Author: Dan Ramsey

ISBN: 0028635833

Alpha Books

Auto Repair for Dummies

Author: Deanna Sclar

ISBN: 0764550896