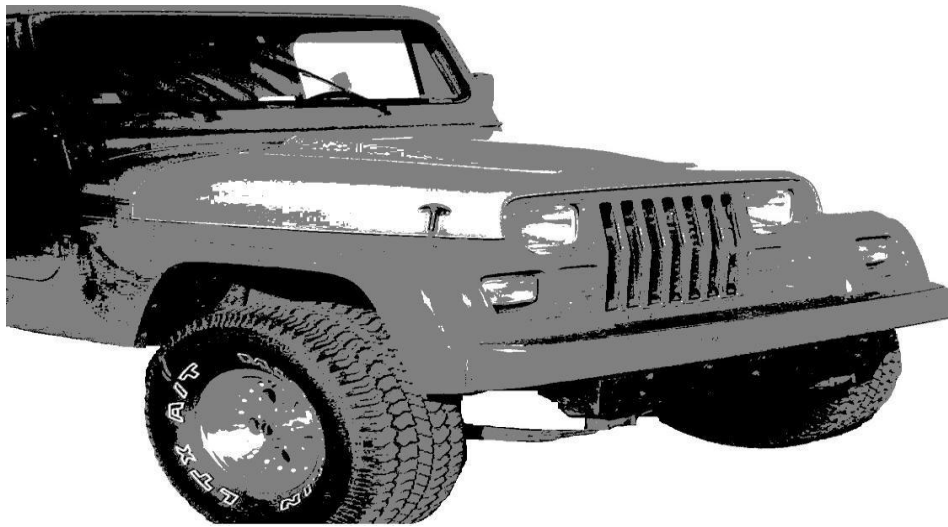


JEEP AIR

SPECIALIZING IN JEEP A/C COMPONENTS AND A/C KITS



1987-1995 Jeep Wrangler YJ

CK-8790..., CK-9195..., CK-8795YJSBC, CK-8795NC

Installation instructions

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IMPORTANT INFORMATION ABOUT THE INSTALLATION FOR THE YJ A/C KIT

****Evaporator / Blower Unit information**:**

Prior to installing your evaporator unit, make sure the blower motor spins without rubbing the case. The motor gets knocked around in shipping and may move. If the wheel is rubbing, loosen the clamp and re-center the motor.

Wiring information:

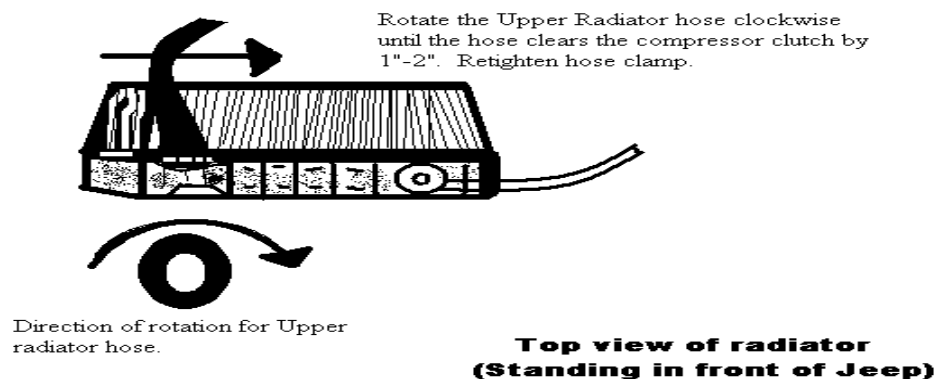
In order to make the installation process less complex we have simplified the wiring for this a/c system.

There are only three wires to hook up. A test light will be used to hook up one wire.

- 1) Wire with a fuse inline. This wire hooks into an ignition source, a hot wire with the key on. Use the test light to find this source (You can hook up to the heater-blower source as it's connected through the ignition switch).
- 2) Wire with an inline plug. The inline plug goes to the switch on the drier, from the plug in the drier to the compressor. **DON'T HOOK THIS UP UNTIL YOU CHARGE THE SYSTEM.**
- 3) Ground wire, there will be one wire on the blower motor that is not plugged in. Ground this wire to the chassis. (Normally Yellow or Red)

Radiator hose adjustment:

After installing the radiator and attaching the upper hose, it may hit the a/c compressor clutch. If this happens please rotate it an inch or two away from the compressor clutch, then retighten the clamp. See diagram below.



Expansion Valve Adjustment:

If the expansion valve hits the heater box while installing the evaporator unit you will have to move the expansion valve. You can GENTLY bend the expansion valve, and evaporator fitting to fit in the vehicle. Move the fittings as necessary to fit the box. It is designed to fit, but may require an adjustment.

Important information about your system, and warranty

- **DO NOT ADD ANY OIL TO ANY PART OF THE SYSTEM.**
- **DO NOT OVERCHARGE THE SYSTEM**
- **DO NOT USE THE SIGHT CLASS TO CHARGE THE SYSTEM**

This is a brand new a/c kit that is capable of a vent temperature of 39-47 degrees. The kit is not designed for sealer, dye, or Freon substitutes. If these substances are used we are not responsible for the performance of the a/c system.

This kit was created with the customer in mind. It is the simplest kit on the market to install, and it can be done without any special tools. The kit will fit into the Jeep just as the factory designed it too. Follow the directions and you will have cold air conditioning in less than a day. Before beginning the installation please read the directions provided, to get familiar with the kit and installation process. Upon arrival please go through the checklist on page 4. If any parts are not included contact us immediately. We are not responsible for any missing parts after 4 business days.

The Jeep Air team would like to thank you for your recent purchase of a complete a/c kit. There are a few steps that must be followed in order for your a/c system to operate properly.

- The **HIGH SIDE** gauge reading should not exceed 250 PSI. We **MUST** have the **HIGH SIDE** gauge reading if you need any assistance in correcting a potential problem.
- If you purchased the a/c compressor from **Jeep Air**, **DO NOT ADD ANY OIL, DYE, LEAK SEALANTS, OR OTHER ADDITIVES TO ANY PART OF THE SYSTEM.** If oil is required, Jeep Air will provide an additional sheet with **directions on filling the system with oil.**
- There should be adequate airflow from the radiator fan, and a sufficient amount of room between the condenser and radiator. Make sure the **CONDENSER HAS A TUNNEL EFFECT OF AIRFLOW THAT FLOWS THROUGH THE CONDENSER AND RADIATOR.** Foam can be put in between condenser and the radiator edges to achieve a proper airflow effect. There should be ¼” to 1” gap in between the radiator and condenser. **EFFECTS OF INADEQUATE AIRFLOW:** the compressor may act like it is “locking up”; warm air only from the vents, overheating of the engine, high head pressure, air blows cold at idle and blows warm while driving, and more.

→ **If a problem exists after checking all these conditions you may call or email for technical assistance. IF YOU DO NOT HAVE THE HIGH SIDE GAUGE READING WE WILL NOT BE ABLE TO ASSIST YOU IN FIXING THE PROBLEM.**

Jeep Air highly recommends the system be evacuated and charged by a professional A/C shop in your local area if you've never done this type of work before. Though evacuating and charging is not difficult, specialty tools are required to perform the job. For the person with do-it-yourself capabilities, we've provided supplemental instructions so you can charge the system yourself with access to the right tools.

If you have a problem with the system we ask you to call before diagnosing or changing any parts. We can fix problems easier if the system is not tampered with. If you have a warranty claim you need to call or email prior to shipping any parts back. **OUR POLICY IS TO GET THE OLD PART BACK PRIOR TO SHIPPING ANY NEW PARTS OUT UNLESS A REPLACEMENT IS PURCHASED FROM US.**

Warranty Returns can be handled in two ways:

1. Ship the warrantied part back to us for inspection. Once the part is approved for warranty you will be shipped a replacement part. (For further clarification on why a part would not be approved for warranty please see below)
2. If you need a replacement part immediately, you can provide us with a credit card and you will be charged for a replacement part and one will be shipped out. Once the warrantied part is shipped back to us, inspected and approved for warranty you will be issued a refund on your credit card.

Reasons why a part would not be approved for a warranty claim:

- Cracked compressors from improper installation
- Compressor with broken valves from overcharging of oil or refrigerant
- Burned up clutches from too high of head pressure

If the technical department is unable to determine any defect with the part. If no defect is found, the part will be returned to the customer and a proper diagnosis will need to be done to find the real issue. If a part is not approved for a warranty claim we will do our best to offer you a replacement product at a fair discounted price.

Jeep Air will not refund your account if you purchase another part in replacement of the defective part.

We are available for support Monday through Friday. Please note when planning the installation we do observe all major holidays and are closed the last two weeks of December.

1-800-223-7167

sales@jeepair.com

Parts List

- Compressor with Oil
 - CK-8790.. PN: 91-4001
 - CK-9195.. PN: 91-4000
 - CK-8795SBC PN: 91-4001
 - CK-8795NC Compressor adapter only

- Evaporator Unit
 - PN: 96-7351
- Drier W/ Binary Switch
 - PN: 915-2320
- Condenser
 - PN: 93-7877
- Engine Mount kit with belt
 - CK-8790.. PN:8011
 - CK-8790SERP: PN: 80012 (No Belt)
 - CK-9195.. PN: 8017 or 8021 or 8023
 - CK-8795SBC (Depends on engine specs, per customers setup)100L or 100R or101L or 101R
 - CK-8795 NC No compressor bracket
- Hardware bag kit
 - PN: 920-1007
 - Includes:
 - Two grommets
 - Hose hold down
 - 10 self tapping screws #6,8,10 orings
 - Cork tape
 - Evap. Support Bracket Drain Tube
 - (4) 5/16" x 1" bolts, (4) 5/16" flat washers
 - (4) 5/16" lock washers, (4) 5/16" nuts

- Hose Kit
 - CK-8790 2.5 PN: HK-900
 - CK-8790 4.2 PN: HK-901
 - CK-9195 2.5 PN: HK-902
 - CK-9195 4.0 PN: HK-903
 - CK-8795SBC PN: HK-920
 - CK-8795NC PN:HK-920

- R-134a Sticker
 - PN: SZ100
- Directions

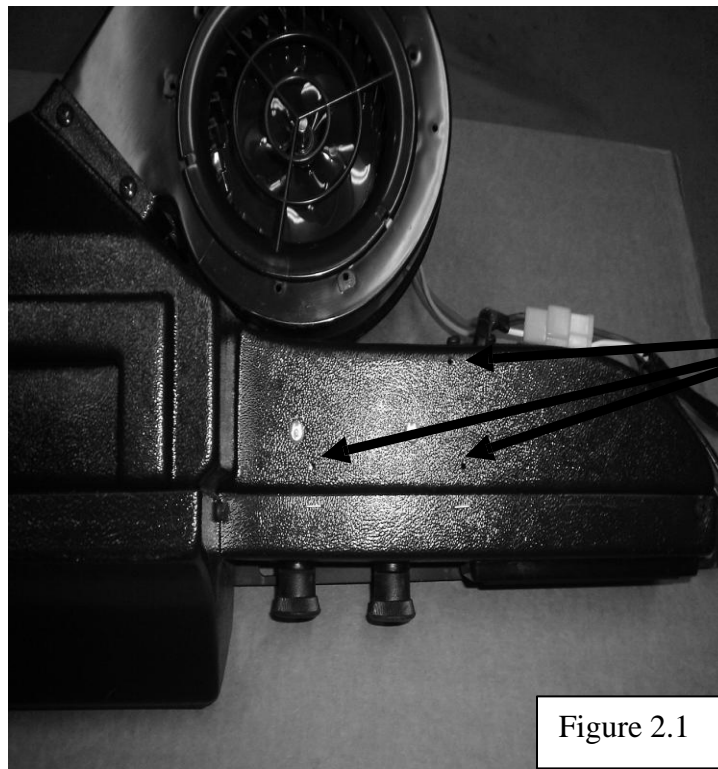
Step One

1. Disconnect the Negative cable first and then Positive Battery Cable.
2. Remove the Ashtray from underneath the dashboard. Slide the ashtray out of the holder in order to remove all the screws.
3. Leave all the wires going to the ashtray connected if possible, or disconnect and reconnect after the installation.

Step Two

Installing the Evaporator

1. Prior to installing your evaporator unit, make sure the blower motor spins without rubbing the case. The motor gets knocked around in shipping and may move. If the wheel is rubbing, loosen the clamp and re-center the motor.
2. Attach the Ashtray to the unit, using the three holes on the bottom side of the unit.



3. Place the evaporator inside the vehicle. Locate the mounting holes on the bottom of the dashboard. After locating all the holes use the self-tapping screws to mount the unit to the bottom of the dashboard. **BE SURE TO SECURE EVERY HOLE WITH A SCREW. MAKE SURE IT DOESN'T INTERFERE WITH THE LOWER GLOVE BOX LID**



Figure 2.2

4. The original wires on the ashtray will hookup, as they were before you added the a/c.
5. Attach the steel “L” shaped bracket to the firewall to support the unit. This bracket secures the unit from hitting the gas pedal.
6. There are four dimples in the firewall near the gas pedal arm, choose the two dimples closest to the pedal arm for attaching the “L” bracket. Use the two Self Tapping screws to fasten the bracket. If the gas pedal arm interferes with the blower housing you will have to cut it down. We recommend 3/16” above the large round hole. * See attached sheet



7. Pull the carpet back on the passenger side and locate the area for the hoses to go through the firewall. The holes will have to be drilled with a 1.25" hole saw. The center of the first hole will be two inches under the heater box and two inches two the right of the transmission tunnel curve. The second hole will be two inches to the right of the first hole.



8. Insert the two rubber grommets at this time. Lube may be needed to feed the larger a/c line through the grommet.

9. Attach the drain tube to the evaporator unit. A 5/8" hole will have to be drilled into the floor to the left of the first grommet. Put some tape around the drain tube at the point it goes through the floor, this will help to not sever the tube, from rubbing on the bare metal. BE SURE NOT TO DAMAGE THE TRANSMISSION.

Step Three

Installing the Drier

1. The pressure switch is already installed on the drier. If you ever have to remove the switch it gets installed hand tight.
2. On the passenger side inner fender well near the front of the jeep is where the drier will mount. Some YJ's have three dimples for mounting the drier. If the dimples are not present, be sure to mount the drier on the flat surface of the inner fender well. With three self tapping screws secure the drier to the inner fender well.

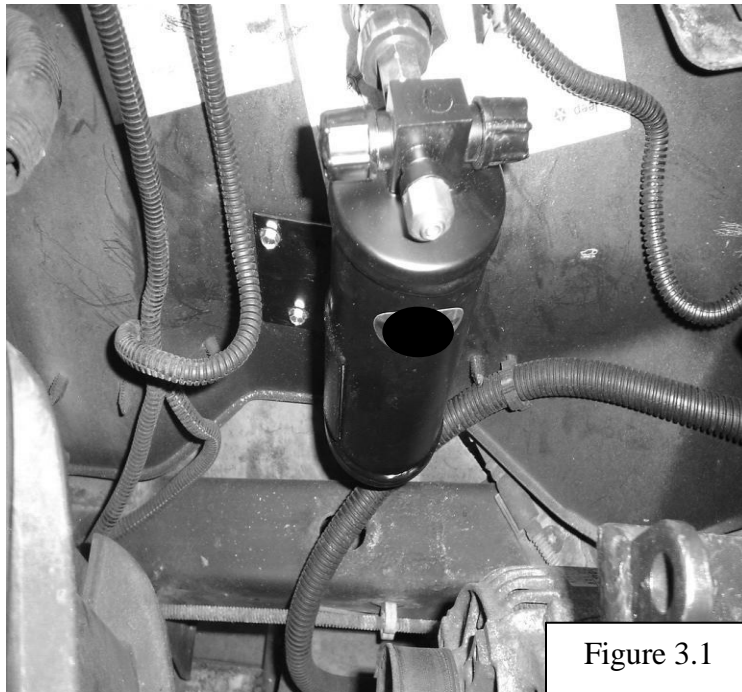


Figure 3.1

3. The switch of the drier will face the passenger side wheel, and the top of the drier will say "IN" that should face the radiator area of the vehicle.
4. If a universal drier is provided, attach the drier with the bracket provided with the "IN" facing the front of the vehicle, and the switch toward the passenger side tire.

Step Four

Installing the condenser

1. Drain the Radiator into a clean drain pan.
2. Remove the radiator fan shroud from the radiator.
3. Remove the top four bolts from the radiator and loosen the bottom two. Some Jeeps with aftermarket radiators may not have a slotted hole on the bottom of the radiator, if this is so, you will have to remove all six bolts.
4. With the radiator out of the Jeep place the condenser in the Jeep to find the four holes used to mount the condenser.
5. The top two holes have a lip that will not allow the U-nut to fit onto the core support. Take a grinder and smooth the core support so the U-nut will slide over the core support.

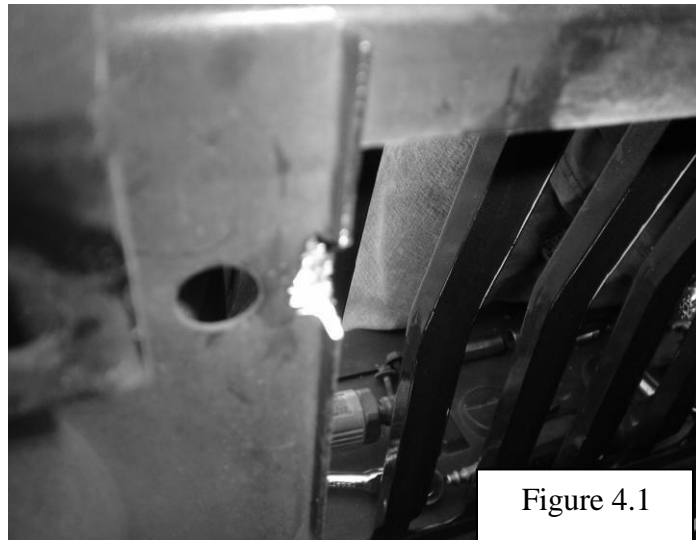


Figure 4.1

6. Slide the four U-nuts over the core support.

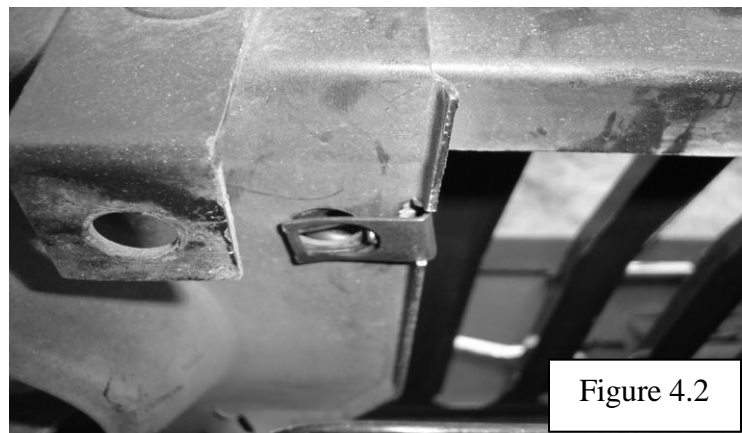


Figure 4.2

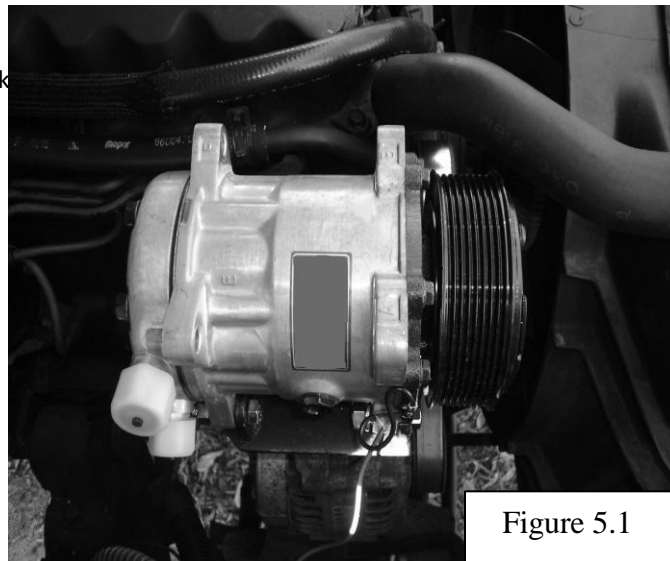
7. Sit the condenser into the core support, then bolt the condenser to the four U-nuts with the included 5/16 bolts and washers.
8. Reinstall the Radiator, and shroud
9. Fill the Radiator with the antifreeze and water. You may have to run the Jeep in order to fill the radiator to its full capacity.

Step Five

Installing the compressor mount and compressor

1. This kit is designed to work with many different engine combinations; Please use the directions supplied with the mount kit to install the mount, compressor and belt.
2. The compressor can be mounted with the fittings on the side or straight up.
3. The compressor (if purchased with the kit) will be full of oil. **DO NOT ADD OIL TO THE SYSTEM.** If you ordered a no compressor kit you need to refer to the compressor manufacturer for your oil charge.

Please note this is a stock image and yours might be a v-belt depending on your year and engine size

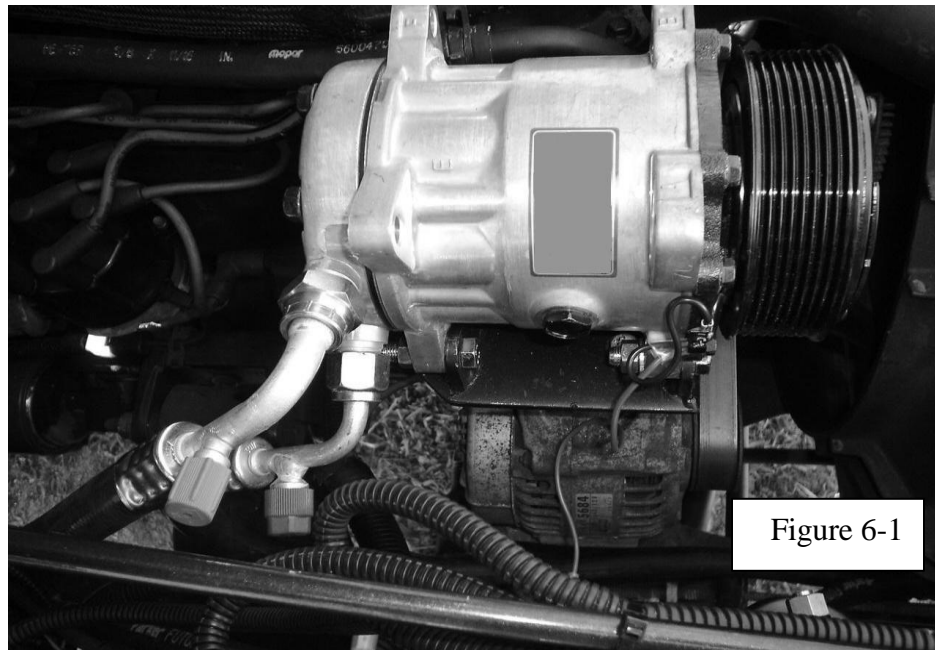


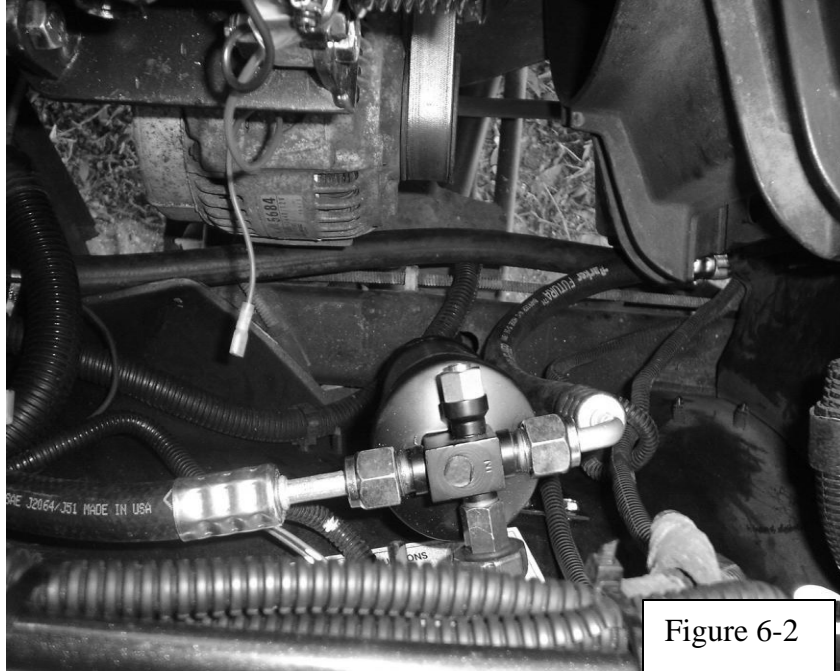
4. If the radiator hose is rubbing the compressor pulley, please see page 2 of the directions.

Step Six

Connecting the Hoses

1. The hoses on some kits are not pre-made. If your kit has pre-made hoses, follow step two. If your hoses are not pre-made go to step Three. **There is a simulated parts diagram at the back of the instructions as well**
2. The smallest hose is # 6 (5/16"), the (13/32") hose is # 8, and the large hose (1/2") is # 10. The number 10 hose will run from the larger fitting on the compressor to the larger evaporator fitting. The number eight hose will go from the smaller fitting on the compressor to the large fitting on the condenser. The shorter number six hose will go from the smaller fitting on the condenser to the inlet of drier (marked "IN"), and the second hose will go from the outlet of the drier to the expansion valve installed on the evaporator unit. The 90 degree ends that have the blue and red caps are the ends that hook up to the compressor. **BE SURE TO PUT O-RINGS ON ALL CONNECTIONS.**
3. If your hoses are not pre-made you will be required to have the hose ends crimped to the hose. Any major a/c store, and some parts stores can do this, it requires a hose-crimping tool.
4. The hoses can be measured w/o crimping the fittings. When all the hoses are cut to length with the correct fittings attached, crimp the lines.
5. Be sure to install the o-rings on all the fittings, oil is not necessary on the o-rings.





Step Seven

Finishing the installation

1. Wiring the system: This system only needs three wires to hook up the system.
2. The first wire is a blue wire with an inline fuse. This is an ignition wire. Find a source that gets power with the key on, and splice / plug it into that connection.
3. The second wire is a ground wire on the blower motor. The ground wire will be yellow with a black wire plugged into it. The black wire has a loop connector on the end. Ground the loop connector to a screw on the firewall.
4. The last wire is the high-low pressure switch / compressor wire. This wire has a bullet connector that allows you to unplug it to get it through the firewall. Drill a 3/16 hole or find a spare hole in the firewall to run this wire out to the engine compartment. Route the wire behind the engine, plug the round plug onto the switch on the drier, any way you cannot hook it up wrong. Plug the other end to the compressor. **DO NOT TURN THE A/C ON UNTIL THE SYSTEM IS CHARGED. YOU CAN STILL DRIVE THE JEEP BEFORE HAVING THE SYSTEM CHARGED JUST DON'T TURN ON THE A/C SYSTEM.**
5. Use the supplied hose hold-downs to keep the hoses from rubbing on moving parts; this can cause a leak in the system.
6. Place the supplied a/c system sticker to the bottom of the hood.
7. The system requires 1.5 lbs of R-134a refrigerant. Do not use substitutes, dyes, or oil mixed refrigerants.

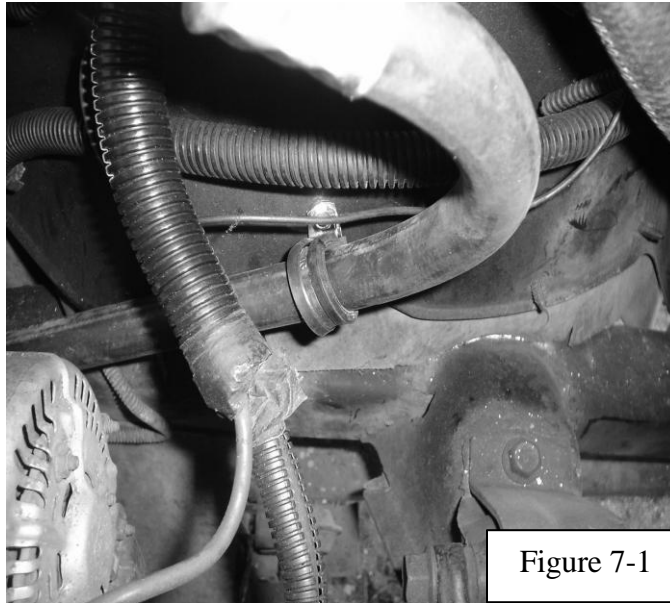


Figure 7-1

This completes the installation process. If you need any assistance please feel free to contact our technical support team by phone or email.

We thank you again for the business.

WWW.JEEPAIR.COM

Air Parts

Jeep Air

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Supplement

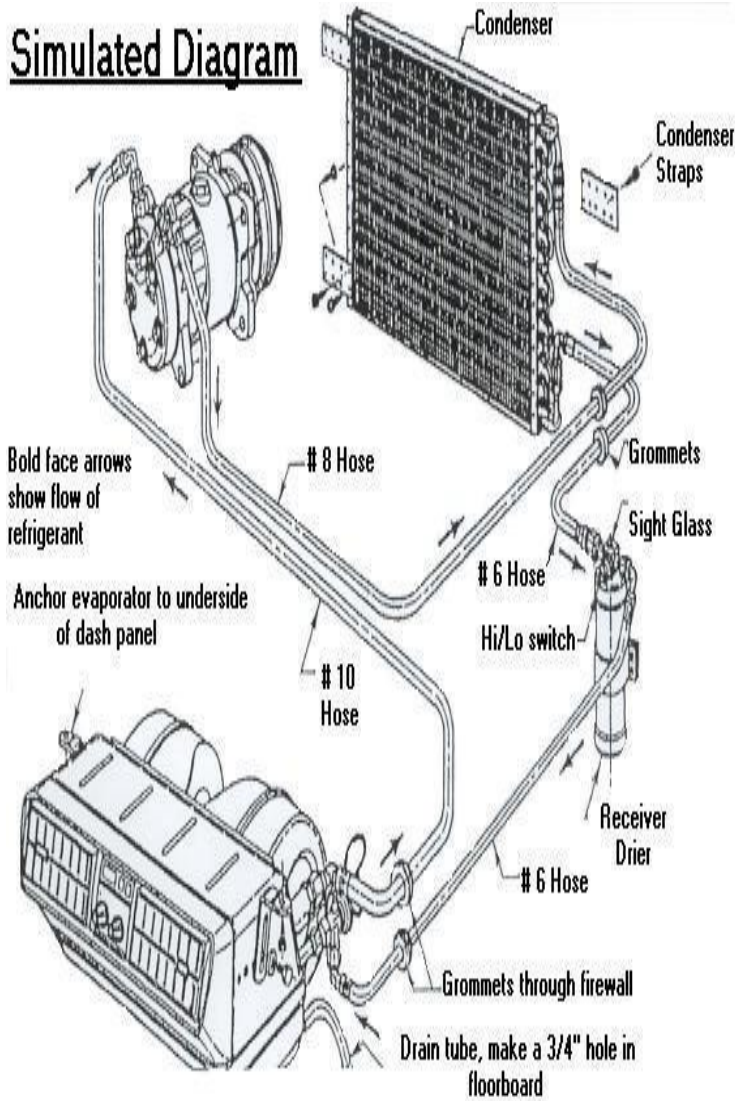
Gas Pedal Adjustment

* On some Wranglers the gas pedal has a tall piece of metal above the hole that the gas pedal cable goes through. If your Wrangler has this long pedal arm you are going to have to cut it down to clear the blower housing. We recommend cutting it down 3/16" above the large hole. See the attached pictures for a clear illustration.



PLEASE NOTE THIS IS MERELY A SIMULATED DIAGRAM TO SHOW PARTS PLACEMENT AND HOSE ROUTING. THE PART IMAGES ARE NOT ACCURATE FOR EVERY SYSTEM

Simulated Diagram



Wiring Diagram

