

Installation Instructions

*Important information about your
new a/c system.*

*Please read the following directions prior to
installing this a/c system.*

IN-DASH A/C SYSTEMS
1973-1979 Ford Trucks
PN: CK-7379-1FD



Nostalgic AC Parts
"Keeping Your Classics Cool"

◆ Contact us by email or phone if you need any assistance or information regarding this a/c system.

888-977-8889
SALES@NACKITS.COM

Important information about your system, and warranty

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

This Kit is designed to work with R134a refrigerant, not any other refrigerant (freon). The system has been designed and tested using R134a refrigerant. The systems performance with this freon was as expected. Vent temperature of 37-45 F Degrees, and a high side pressure reading at 200-220psi.

The system should not exceed 250psi on the high side, and the low side will stabilize if all is installed correctly.

WE NEED THE HIGH SIDE GAUGE READING IN ORDER TO HELP WITH ANY PROBLEMS.

The system needs to be evacuated for maximum performance. The system will take 1.50 lbs of R134a refrigerant, or two cans. You want the high side to be 200-220psi when the system is on and the vehicle is idle.

DO NOT ADD DYE TO CHECK THE SYSTEM. WE HAVE HAD PROBLEMS WITH THE EXPANSION VALVES GETTING CLOGGED.

If you have a problem with the system we ask 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 prior to shipping any parts back.

OUR POLICY IS TO GET THE OLD PART BACK PRIOR TO SHIPPING ANY NEW PARTS OUT.

We are not responsible for the following:

Clogged expansion valve from too much oil, or dye

Cracked compressors from improper installation

Compressor with broken valves from overcharging of oil or refrigerant

Burned up clutches from too high of head pressure

We will be here to serve you seven days a week by phone and / or email
Please contact us if you need assistance.

888-977-8889

The Nostalgic AC Parts team would like to thank you for your recent purchase of a complete a/c kit for your car or truck. 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 220 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 NAC, **DO NOT ADD ANY OIL, DYE, LEAK SEALANTS OR OTHER ADDITIVES TO ANY PART OF THE SYSTEM.** If oil is required NAC will provide an additional sheet with directions on filling the system with oil.
- Be sure you have the correct pulleys for the engine prior to installing the kit. Pulleys are not included unless specified when the kit is ordered.
- Insulation is very important. Be sure to insulate the firewall and floorboard prior to installing the evaporator unit. It is very important to insulate the floor and firewall behind the evaporator unit.
- 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.
- Find the proper flow of the water prior to installing the heater control valve. Water should be turned off prior to entering the evaporator / heating unit. It should only be turned off when the heat is needed. If you are experiencing warm air out of the evaporator check the compressor low side fitting. If it is ice cold then the heater valve is not hooked up properly.
- **DO NOT USE THE SIGHT GLASS!** The system should be charged with R-134a ONLY. If you do not follow this instruction your warranty may be void and you may not be eligible for technical assistance. **EFFECTS OF OVERCHARGING:** Compressor is “noisy”, engine overheating, warm air only from the vents, 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.**

Parts Checklist

CK-7379-1FD 1973 – 1979 FORD TRUCK COMPLETE A/C KIT

- | | |
|---|--------------|
| <input type="checkbox"/> COMPRESSOR | PN: 15-5000 |
| <input type="checkbox"/> CONDENSER | PN: 44-1422 |
| <input type="checkbox"/> STANDARD ORING DRIER | PN: 4-1000 |
| <input type="checkbox"/> DRIER STRAP | PN: 999-1002 |
| <input type="checkbox"/> CONDENSER MOUNT KIT | PN: CS1000 |
| <input type="checkbox"/> HIGH LOW PRESSURE SWITCH | PN: 119-9900 |
| <input type="checkbox"/> R-134a HOSE KIT | PN: HK-920 |
| <input type="checkbox"/> COMPRESSOR MOUNT KIT (ENGINE SPECIFIC) | PN: _____ |
| <input type="checkbox"/> EVAPORATOR KIT | PN: ID-230 |
| <input type="checkbox"/> UNDERDASH SWITCH POD | PN: SWP-1003 |
| <input type="checkbox"/> A/C CONTROL BAG | PN: 77-4000 |
| <input type="checkbox"/> EVAPORATOR PARTS BAG | PN: 77-4010 |

77-4010 IS LOCATED IN THE EVAPORATOR KIT BOX

Parts included in 77-4010:

77-9402 Drain tube two feet
 5086 Drain tube Tee
 5088 Drain Tube elbow
 G101 Grommets x 2
 Self tapping screws x 12
 2.5" duct hose x 3 feet
 2" duct hose x 4 feet
 5020 Vent x 1
 5022 Vent x 1
 5023 Vent x 1
 77-4005 Expansion valve kit

- KIT DIRECTIONS

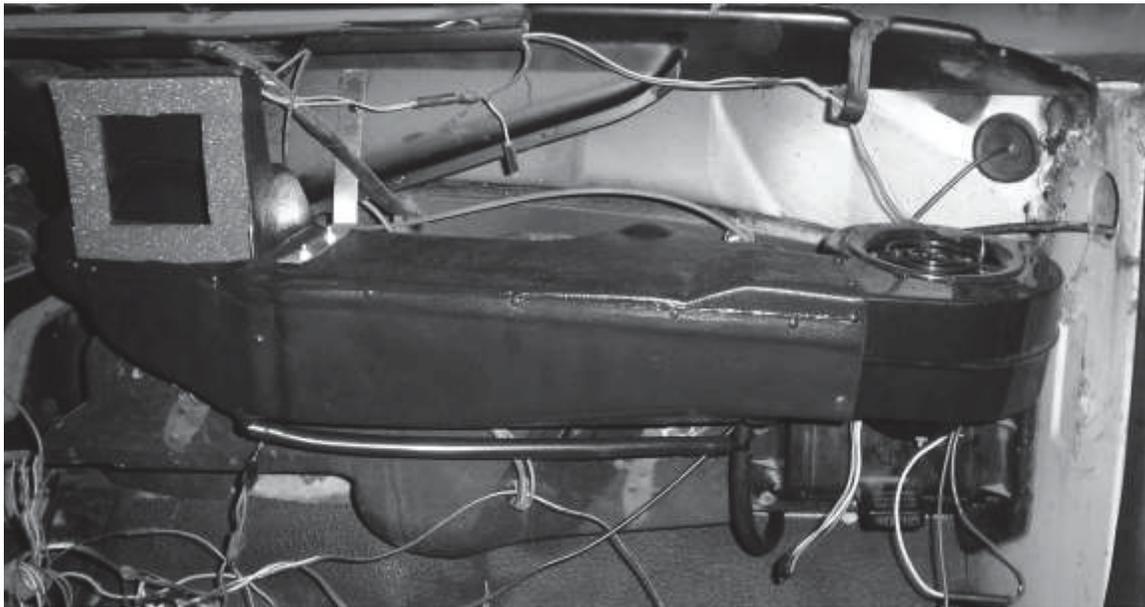
Checked by _____

*This checklist serves as a reference of all the parts included with this kit.

STEP ONE

Installing the Evaporator unit:

- 1) The evaporator unit is designed to sit above the heater box behind the dashboard. The large square cut-out on the unit will fit against the large center vent. The L bracket is used to keep the unit in place; it can be adjusted back and forth for better fitment. The picture below illustrates how the unit will sit in the truck. You do not have to remove the dash from the truck as the pictures shows.



- 2) Disconnect the battery before installing the a/c system.
- 3) Remove and retain the light and windshield wiper switch knobs.
- 4) Remove and retain the radio knobs and shaft nuts.
- 5) Remove and retain the drivers side dash bezel
- 6) Remove and retain the glove box door and liner.
- 7) Remove and retain the steering column cover
- 8) Remove and retain the bolts securing the bottom of the dash to the kick panels on the driver and passenger side.
- 9) Remove and retain the nuts suspending the steering column.
- 10) At this point the dash should pull out enough to fit the evaporator unit behind it onto the top of the heater box.
- 11) Using the directions located in the bag with the expansion valve install the expansion valve onto the evaporator unit. Follow all the steps in the directions including the cork tape. Save one roll of cork tape to wrap the a/c fittings after they are attached to the evaporator.

- 12) Set the evaporator unit into place, using one of the self tapping screws; screw the L-bracket on the unit to the defrost outlet above the heater box. The blower motor should be about 1/2" from the passenger side kick panel. (To fit the evaporator behind the dash lay the evaporator box on the passenger side floor. Pull the dashboard back and slide the evaporator behind the dash onto the top of the heater housing.)
- 13) Cut the center dash vent into the panel using the template provided. (Don't insert the vent until you fit the evaporator unit.) If you would like you can cut the passenger vent in at this time also.



- 14) Once the unit is installed line the square opening on the evaporator up with the hole for the center dash vent. Then use a black marker to make a mark for the hoses to exit. The large fitting will go straight out the firewall; the small fitting will require a 90 degree fitting, so it will be slightly lower than the large fitting. After your marks are made remove the unit, and drill two 1-1/4" holes for the grommets. Insert the two grommets.
- 15) At this time it might be beneficial to jump forward in the directions. If you install all the under hood parts you can have the hoses crimped, then attach them to the evaporator unit for the final install. If you can have the hoses crimped on the car you will only need to crimp the two fittings for the evaporator now then finish the evaporator install.
- 16) After the evaporator is mounted on top of the heater box you can run your drain tube through the firewall. We recommend running the drain under the heater box as seen in the picture. Use a 5/8" - 3/4" hole saw to make the hole for the drain.
- 17) Cut the square dash vent into the driver side vent location using the template included. Attach the 2.5 duct hose to the passenger side vent, and the 2" duct hose to the driver side vent. We recommend using a screw or two to secure the duct hose to the evaporator and vent.
- 18) Don't put the glove box back in until the thermostat is hooked up. After the controls are hooked up you can reassemble the dash board, and inside portion of the truck.



STEP TWO

Controls and wiring:

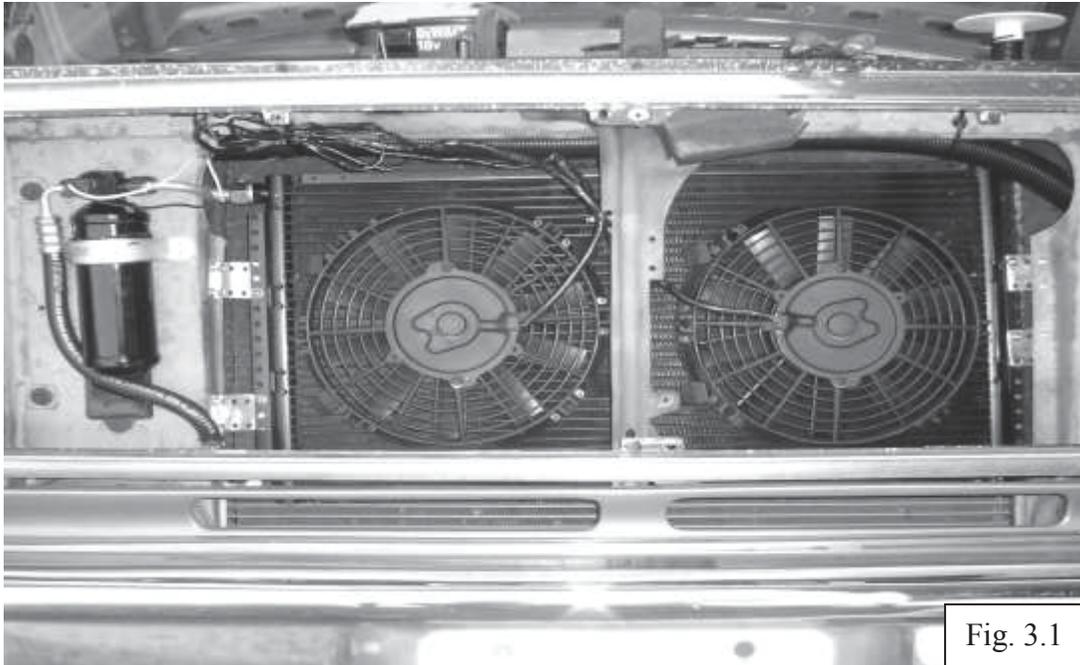
- 1) The controls can be mounted in the dash or under the dash with the included switch plates. The controls are two knobs the thermostat is used to control the temperature. If you turn this knob counter clockwise until it stops it will shut the compressor off. If you turn it clock wise until it stops you may freeze up the evaporator. The ideal setting is all the way clock wise, then back it off about $\frac{1}{4}$ " turn you should feel a notch it sits in. As you turn the thermostat counter clockwise it will make the a/c system blow warmer. The other switch is your a/c blower switch. The switch is a three speed switch with an off position.
- 2) The thermostat has a long silver tube, this tube is very fragile. Be gentle when routing it into place. The tube needs to be inserted into the top of the evaporator housing. There is a white sticker with a hole under it, insert the tube about 1-1/2" into this hole.
- 3) As stated earlier the controls can be mounted where ever you prefer. After you find your mounting location for the controls you can wire them to the vehicle.

- 4) There are three wires for the entire system. The first wire is a black wire on the blower motor with a loop connector. This is to be grounded to any metal surface on the truck. The second wire is a black or blue wire with a female bullet connector. This wire needs to go through the firewall to the compressor. After hooking it up to the compressor cut the wire in half about 18" from the connector on the compressor. These two halves get hooked into the binary pressure switch in the drier. The switch cannot be hooked up incorrectly either wire can connect to either side of the switch.
- 5) The last wire is a blue or red wire with a fuse inline. This wire needs to be hooked up to an ignition source. The wire or fuse that you connect to needs to have power when the key is in the on or accessory position.
- 6) AFTER YOU WIRE UP THE ENTIRE SYSTEM. DISCONNECT THE COMPRESSOR WIRE FROM THE COMPRESSOR UNTIL THE SYSTEM IS CHARGED.

STEP THREE

Installing the condenser:

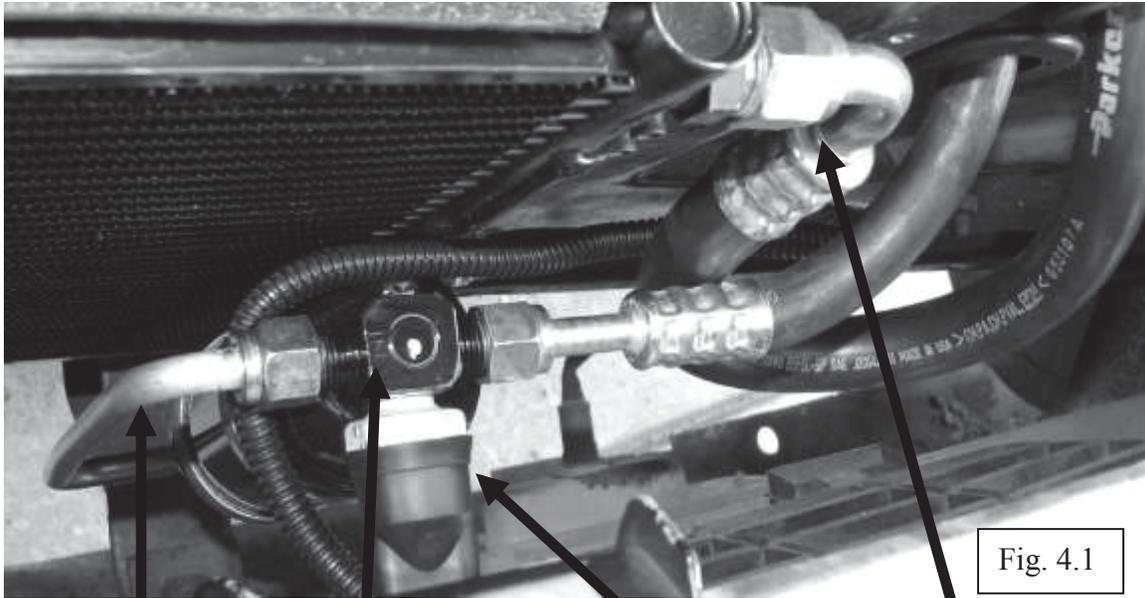
- 1) There are three different style condensers, a horizontal condenser that is used on most cars from 1951 and newer vehicles, a vertical condenser that is used on 1950 and older vehicles, and the remote condenser which is mounted in locations other than in front of the radiator. Any condenser, regardless of style will have to be mounted so the small fitting, #6, is on the bottom, and the large fitting is at the top. If you are mounting a remote condenser it must be on a slight angle so the refrigerant and oil can flow downward.
- 2) When mounting the condenser in front of the radiator, make sure the small fitting is on the bottom, and the large fitting is on the top. Use the flat brackets to install the condenser, with the included screws attach the brackets to the radiator core support and to the condenser.
- 3) DO NOT INSTALL THE CONDENSER ON THE INSIDE OF THE RADIATOR, between the motor and the radiator.
- 4) Please be sure not to puncture the condenser when installing it, there are holes designated for the mounting brackets.
- 5) Vertical condensers should be installed the same as the horizontal.
- 6) Remote condensers will require a trinary switch to run the fan. These condensers should be mounted on an angle, and in a location where damage from road debris is minimal and airflow is available.
- 7) The condenser should be a 1/4" to 1" away from the radiator, if more space is needed be sure to fill the sides of the condenser in with a foam fill. The object is to get a tunnel effect of air through the condenser and radiator; you do not want air to escape between the two.



STEP FOUR

Installing the drier and binary switch:

- 1) The drier can be installed in any location you choose, be sure to mount the drier so the fittings are on the top. The drier has to be vertical, if you would like a horizontal mount drier please contact us. The drier can lay on an angle, for example, on the inside of a fender well it will lay at a slight angle 10 to 20 degrees.
- 2) The drier says "IN" on the top, the "IN" should be facing the front of the car, the hoses will run from the condenser "IN" the drier and out to the expansion valve.
- 3) If you are using R-134a refrigerant DO NOT USE THE SIGHT GLASS.
- 4) The binary switch is to be mounted in the drier. There are two plugs (hex head bolts) on both sides of the drier (some driers only have one). Unscrew one plug and install the binary into the switch port. Be sure the o-ring is on the binary switch.
- 5) The binary switch should be tightened one quarter of a turn past snug.
- 6) The binary switch is a round switch with a green boot covering the threads. We put the binary in the bag with the fittings when you purchase one of our a/c kits. Remove the green boot to install it into the drier.



Hose to bottom
of condenser

“IN” on drier

Binary pressure switch
with binary plug

Large fitting on
the condenser

STEP FIVE

Installing the mount kit and compressor:

- 1) The mount kit will include directions for installation, please use those directions. Please note that mount kits are designed for specific engines, but many engines are built with components that do not match applications to the original setup. If the bracket does not fit exact please understand some minor fabrication may be required.
- 2) When installing the bracket, leave the bolts loose until the compressor is mounted. It is very easy to crack a compressor if the bracket is not installed properly. Please tighten the entire bracket in a random order, while tightening do not put strain any one point.
- 3) If a belt is not included, use a small diameter rope to measure the length of the belt, or refer to the mount kit directions for the belt size.
- 4) Pulleys are not included with kits, unless it is specified. Chevy engines require double groove water pump pulley, triple groove crank pulley if running power steering, and a double groove power steering pulley.
- 5) When mounting the compressor be sure to make sure the hoses and charging ports clear the hood and the inner fender.
- 6) The compressor can be mounted with the fittings pointing in any direction. If the fittings are pointed at any angle lower than 45 degrees be sure to attach the

crimped a/c hoses first. It is not recommended to mount the compressor on any angle over 45 degrees, only do so if the bracket is designed to fit the compressor at an odd angle. If the hoses are not attached first the oil can drain out, which can cause a system failure

- 7) THE COMPRESSOR IS FULL OF OIL NO ADDITIONAL OIL IS REQUIRED TO ANY PART OF THE SYSTEM. Attach the hoses, and leave the oil alone, don't add any oil to any part of the system. If oil is added the system could have many problems. A few are a sour milk smell from the vents, improper cooling, low side pressure is low, expansion valve failure, and a noisy compressor.

STEP SIX

A/C hose routing and installation:

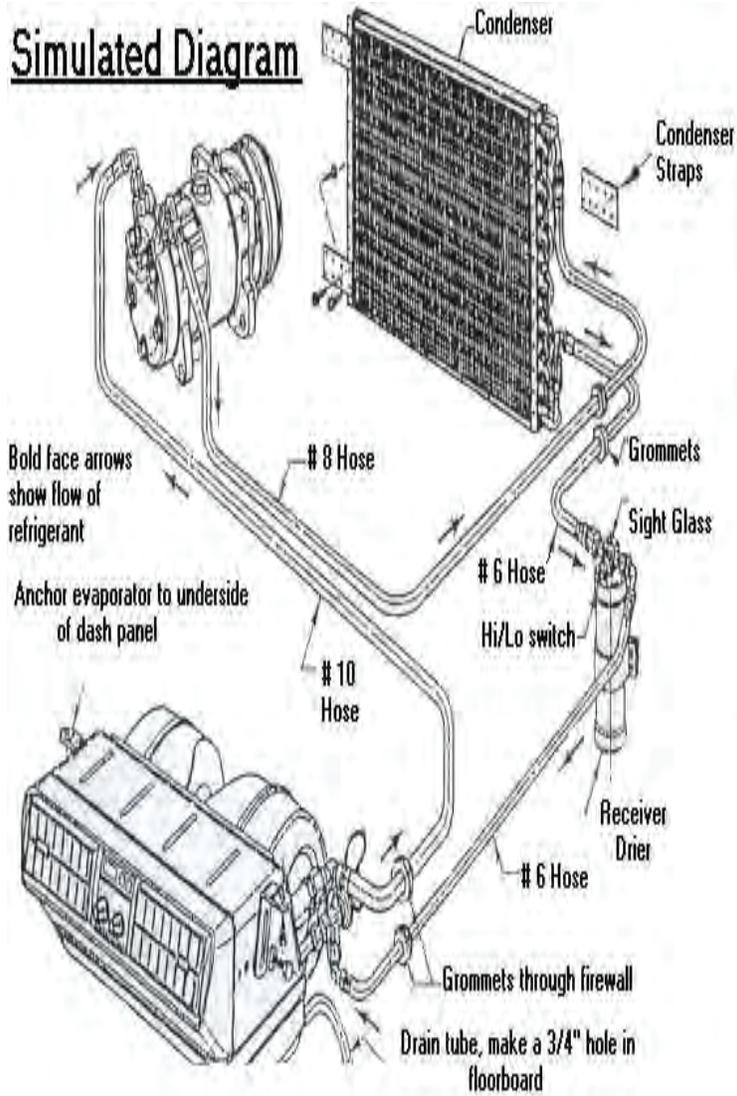
- 1) The a/c hoses are to be crimped with an a/c hose-crimping tool. Most a/c stores and some auto parts stores have crimping tools. The hoses can be hooked up in any order you choose. The hose kit is a universal hose kit there will be left over fittings and hose when the job is done. The charge ports are normally attached to the compressor fittings. They do not have to be put on the compressor; it is up to the installer. Prior to having the hoses crimped together. Put the fittings on the hose with masking tape around each end to mark with a marker for clocking. Do not crimp the fittings over the tape.
- 2) Starting with the large hose #10 or 1/2". This hose goes from the large fitting on the compressor to the evaporator unit. The compressor will get the fitting with the charging port, low side. This hose will run through the firewall so be sure to use a grommet, 1-1/4" hole required.
- 3) The next size hose is #8 or 13/32". This hose runs from the compressor to the condenser. The compressor will get the fitting with the high side charging port. The condenser fitting connects to the fitting at the top of the condenser. When running the hose through or around the core support make sure it is protected with loom. A hole can be rubbed into the hoses if the hose is against metal edges.
- 4) The third and fourth hose to install is the # 6 or 5/16" hose. Start with the # 6 hose that runs from the bottom fitting on the condenser to the "IN" fitting on the drier. From the drier the hose will go through the firewall and grommet, 1-1/4" hole, to the expansion valve on the evaporator. After this hose is attached, place the black insulation tape over the fittings that are attached to the evaporator. Keep the #10 and #6 hoses close together when routing through the firewall, it makes the evaporator installation process easier.
- 5) The fittings included with the hose kit can be used in any manner necessary to run the hoses without kinking the lines. Make sure the hoses do not rub on metal edges without protection, and be sure to put O-rings on all the fitting connections. Oil is not necessary on the O-rings, it can be added to the threads on the fittings to stop them from seizing. DO NOT USE TEFLON TAPE. Tie the hoses down from flopping around, and keep the hoses off of the exhaust.

STEP SEVEN

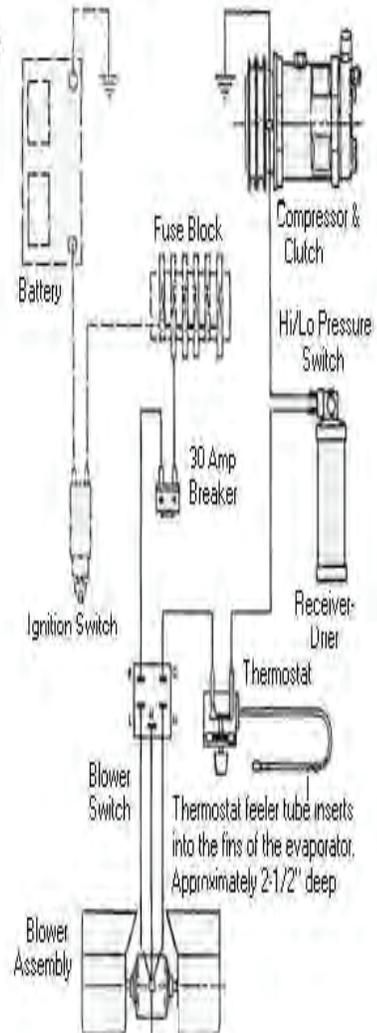
Charging the system:

- 1) DO NOT ADD OIL TO ANY PART OF THE SYSTEM. DO NOT USE DYE, LEAK SEALANTS, OR ALTERNATIVE REFRIGERANTS IN THE SYSTEM. We are not able to diagnose problems if the directions are not followed.
- 2) The system should be evacuated in order to achieve maximum cooling from the system. Evacuate the system for 45 – 60 minutes. If the system is not evacuated the system may not cool properly.
- 3) After the system is evacuated and ready to charge, plug the compressor wire in.
- 4) When charging the system start with 1.60 LBS of R-134a refrigerant. The ideal pressures of the system are 15-28 on the low side and 180-220 on the high side. If the system is not within this range with 1.60lbs of R-134a add more R-134a in .25LB increments. If the high side gets high, and the low side stays low you have a condenser-cooling problem. Please see the first page.

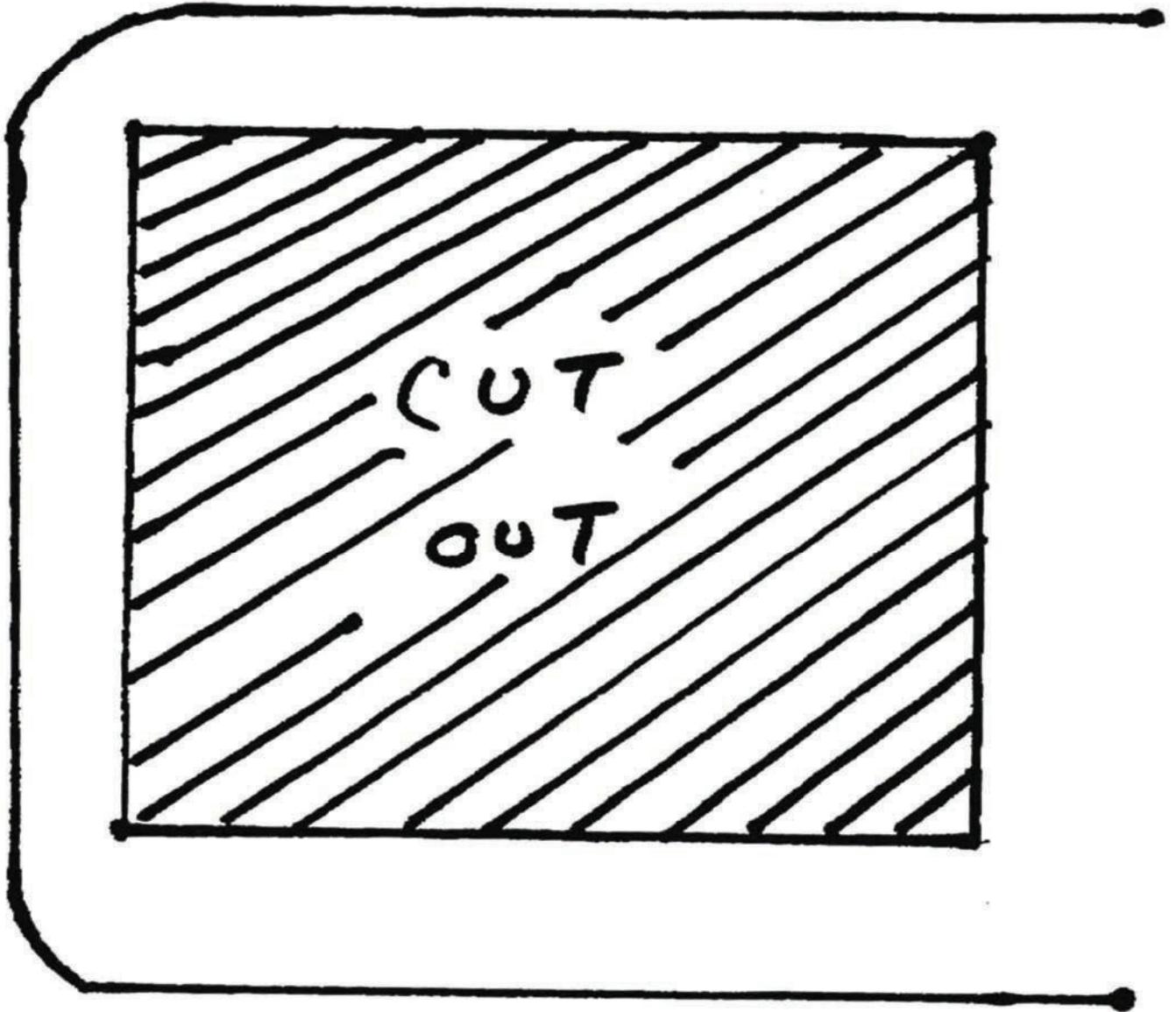
Simulated Diagram



Wiring Diagram



CK-7379-1FD & CK-7379-2FD
OEM VENT TEMPLATES



*CK-7379-1FD & CK-7379-2FD
OEM VENT TEMPLATES*

