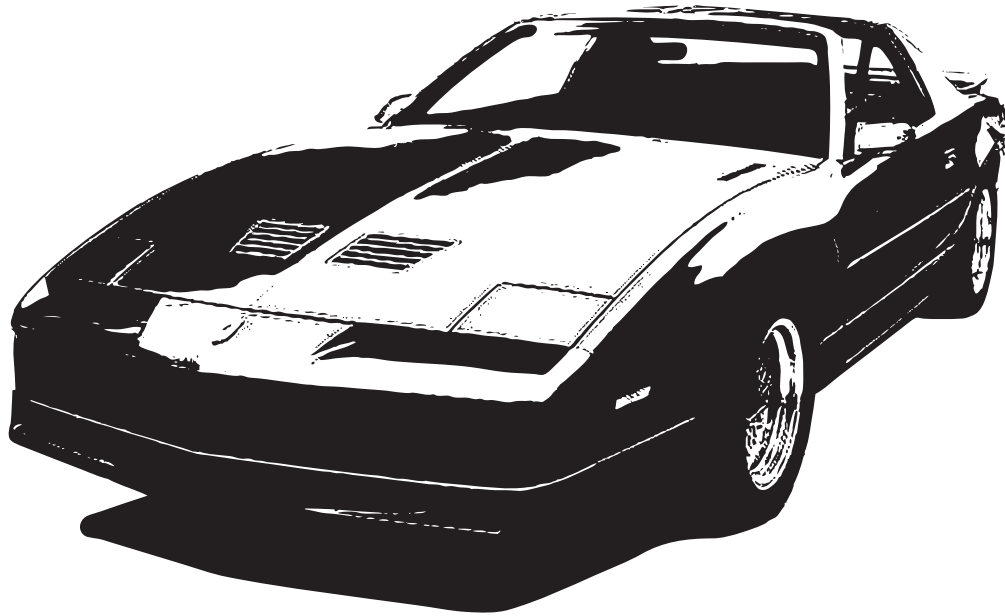




Installation Manual ***1986-87 F Body (TPI)***

Compressor Upgrade Kit - 23-262 Series





Congratulations...

You have just purchased the highest quality, best performing A/C system upgrade ever designed for your Classic Vehicle.

To obtain the high level of performance and dependability our systems are known for, please pay close attention to the following instructions. Our installation steps and procedures are derived from a long history of research and development and the combined experience achieved through thousands of successful installations (and feedback from customers like you). Please remember that our #1 goal is that you'll have a successful installation and a system that performs at a very high level for many years to come.

Before starting, read the instructions carefully, from beginning to end, and follow the proper sequence. On the next page you'll find a safety and general checklist that you should read before starting your installation.

Again, thank you from our entire staff.



PRE-INSTALLATION:

- Before beginning the installation, check the shipping box for the correct components.
- **If your vehicle has been or is being modified, some procedures will need to be adjusted to fit your particular application.**
- A basic cleaning of the engine compartment before beginning will make things go more smoothly.
- Check condition of engine mounts. Excessive engine movement can damage hoses to A/C and/or heater.
- **DISCONNECT THE BATTERY FIRST**
- **DISCHARGE THE SYSTEM NEXT;** You will want to have your system evacuated of all remaining refrigerant according to local laws. An A/C service shop can handle this for you.
- **TOOLS/MATERIALS REQUIRED:** 8mm, 13mm, 14mm, 15mm, 17mm Wrenches & Sockets, (A set of metric ratcheting wrenches is suggested for the compressor installation), Magnet (Reach Tool), (2x) Medium Adjustable Wrenches, Flat Screwdriver, Wire cutter w/ crimper, Flat Blade Scraper, Tape or Caps, Schrader valve removal tool, and Spray Adhesive or Contact Cement

PLEASE NOTE! IN ORDER TO PROTECT NEWLY INSTALLED PARTS, IT'S CRITICAL THAT THE CONDENSER, LIQUID LINE AND EVAPORATOR ARE CLEAN AND FREE OF CONTAMINATION. DAMAGE TO COMPONENTS AS A RESULT OF CONTAMINATION WILL NOT BE COVERED UNDER WARRANTY.

IMPORTANT NOTES:

- Use one or two drops of oil (supplied with your kit) on **ALL** O-rings, and threads.
- All capped fittings **MUST** remain covered until actual connection of the fitting to prevent contamination.
- Use two adjustable wrenches on all O-ring connections, these should be tightened to 10-15 ft/lbs which is hand tight plus ¼ turn. Over tightening could cause splitting of the O-ring.
- Carefully thread fittings. Fittings will thread easily, therefore if there is resistance, back off and re-align to avoid cross-threading. Be careful not to over tighten.

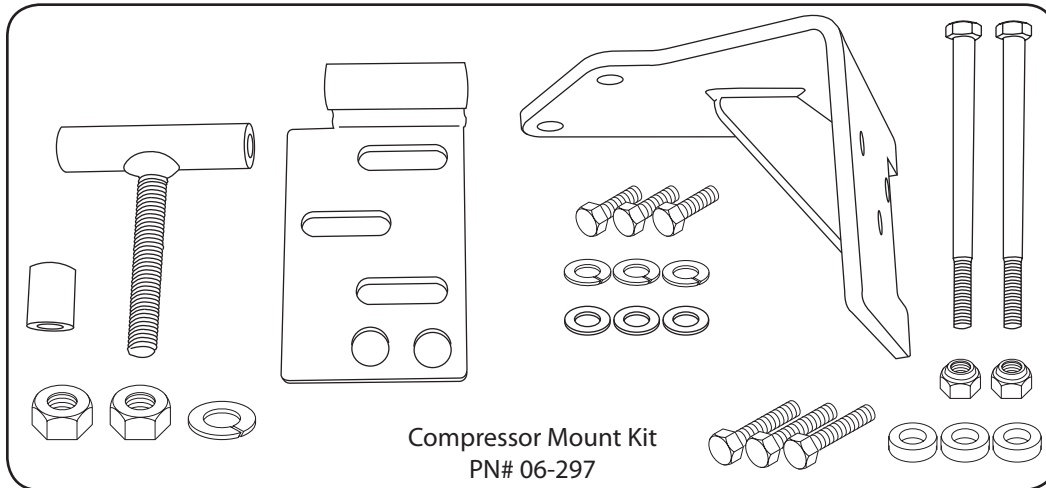
Should you have any technical questions, call us immediately, we will be glad to assist you.

Our toll-free number is listed on every page, we're here to help!

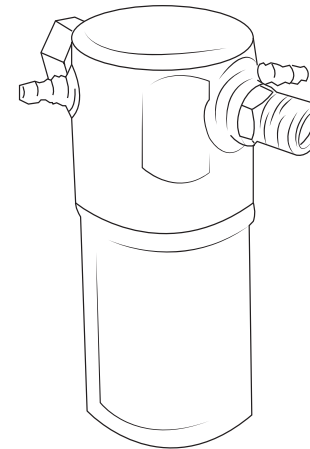
YOU CAN NOW BEGIN THE INSTALLATION...



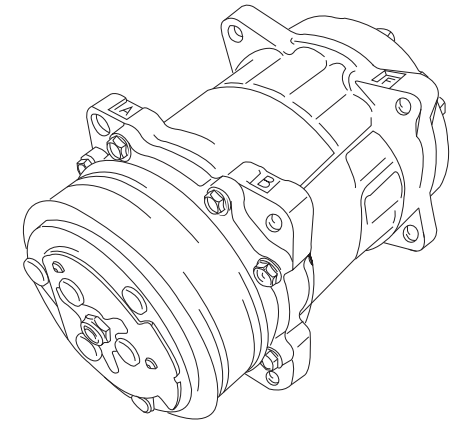
THESE ARE THE PARTS FOR YOUR ENGINE COMPARTMENT UPGRADE KIT



Compressor Mount Kit
PN# 06-297



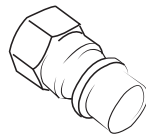
Accumulator
PN# 12-216



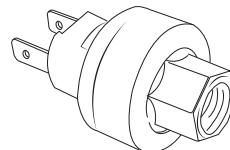
Compressor
PN# 5-151



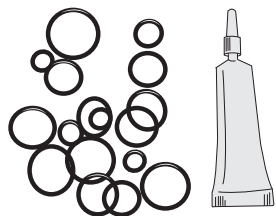
Orifice Tube
PN# 15-210



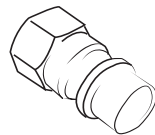
Straight (Low Side)
134a Adapter
PN# 14-122-2



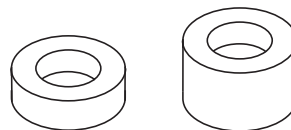
Clutch Cycling Switch
PN# 16-200



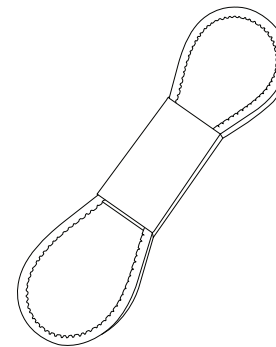
O-Rings and Lubricant Oil
PN# 05-400



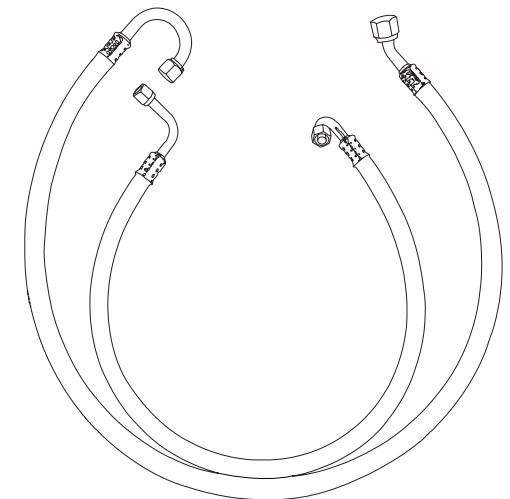
Straight (High Side)
134a Adapter
PN# 14-201-1



3/16 & 9/16 Spacer
for Fuel Injection
Bracket



V - Belt
PN# 10-200

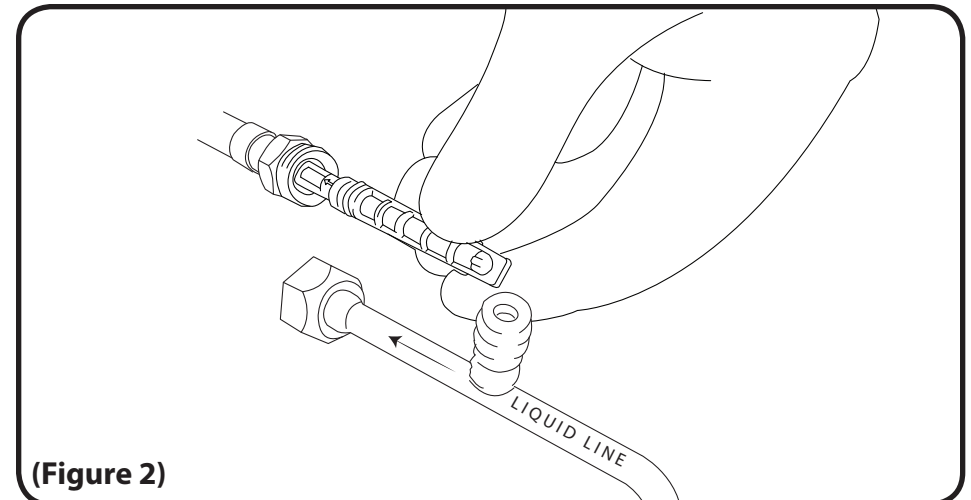
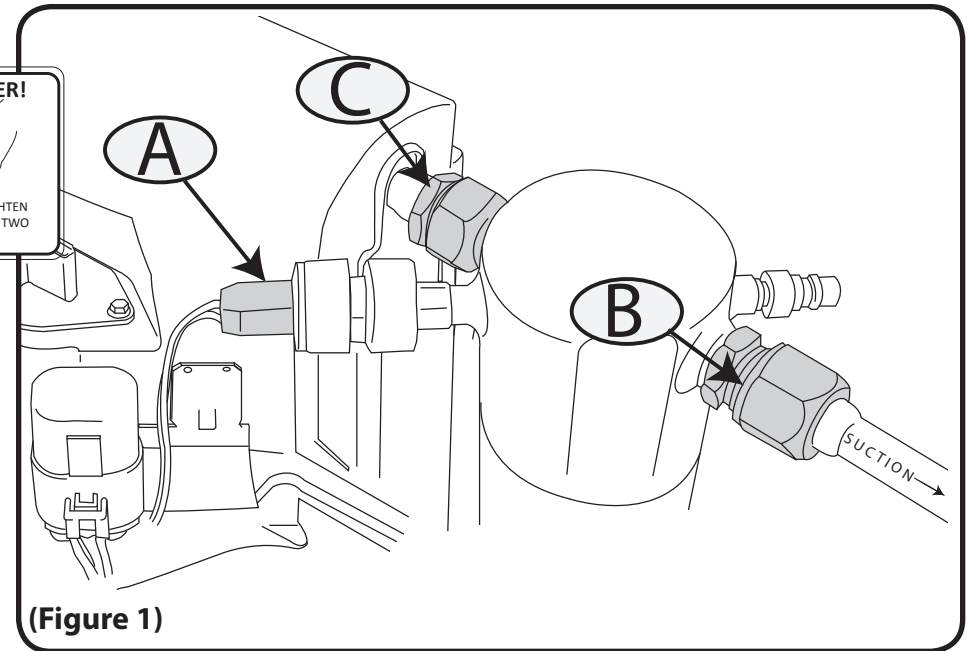


86-87 Camaro Hoses

ACCUMULATOR REMOVAL

- Disconnect the plug from the pressure cycling switch (**Figure 1A**).
- Disconnect Suction hose from accumulator (**Figure 1B**).
- Remove the accumulator bracket hardware and small clamp connecting to the liquid line
- Disconnect the accumulator to evaporator outlet fitting (**Figure 1C**)
- Remove accumulator and retain brackets for re-assembly
- **Cover ends of evaporator fittings with tape to prevent contamination.**
- Disconnect the liquid hose (solid tubing) from the inlet fitting of the evaporator core
- Once the tubing is disconnected you will see the orifice tube/ filter inside, this part will need to be removed (**Figure 2**).

Note the orientation of the orifice tube in the evaporator inlet, as the new tube will be installed in the same orientation. There is a tool made for removal of stuck orifice tubes, typically it can be carefully removed with a pair of needle nose pliers.

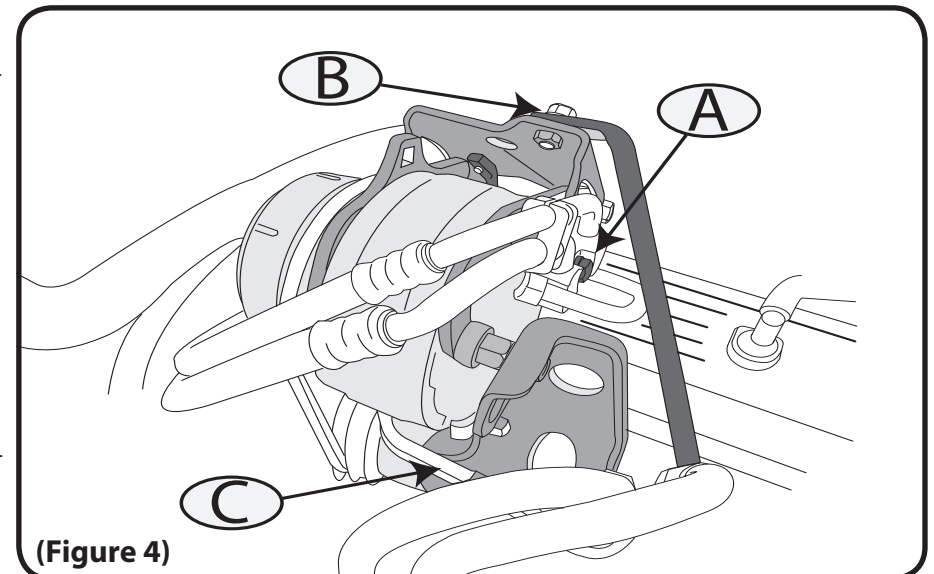
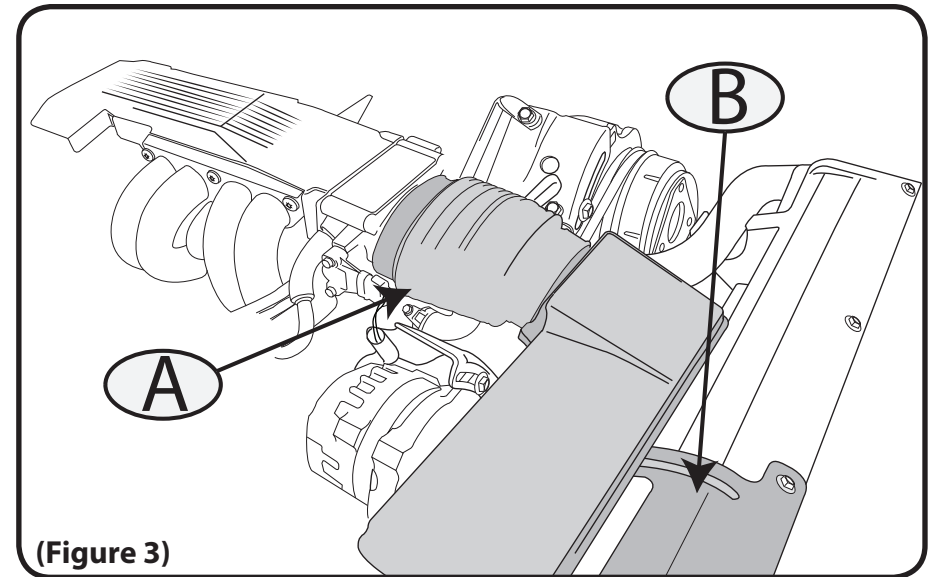


AIR PLENUM REMOVAL

- Loosen the screw clamps that attach the flexible hose to the throttle body unit on the injection manifold and to the rigid plenum that attaches to the radiator support cover. **(Figure 3A)**
- Remove the air filter box nut and remove the air filter cover and filter.
- Remove the rigid plenum brace that attaches to the radiator support cover. **(Figure 3B)**
- Loosen the screw clamps that attach the MAF (Mass Air Flow), to the air filter box, and to the rigid plenum.
- Unplug the wiring harness that attaches to the MAF
- Carefully remove the MAF and the complete air plenum assembly

COMPRESSOR REMOVAL

- Remove electrical plugs from compressor, move to side for later connection. In addition, you will need to remove block mounted sensor wire that is routed through the compressor bracket. It can be re-attached after the new compressor is attached.
- Loosen smog pump and alternator tensioner bolts and remove belts
- Remove compressor tensioner bolts and remove compressor belt
- Disconnect Discharge hose, (hose from compressor to condenser) from condenser.
- Detach hose manifold from rear of OEM compressor, **(Figure 4A)** by removing the bolt in the center of the manifold.
- Loosen the fan shroud clips to allow for hose release. Compressor hose assembly can be removed at this time. Clips will be re-used with new hoses.



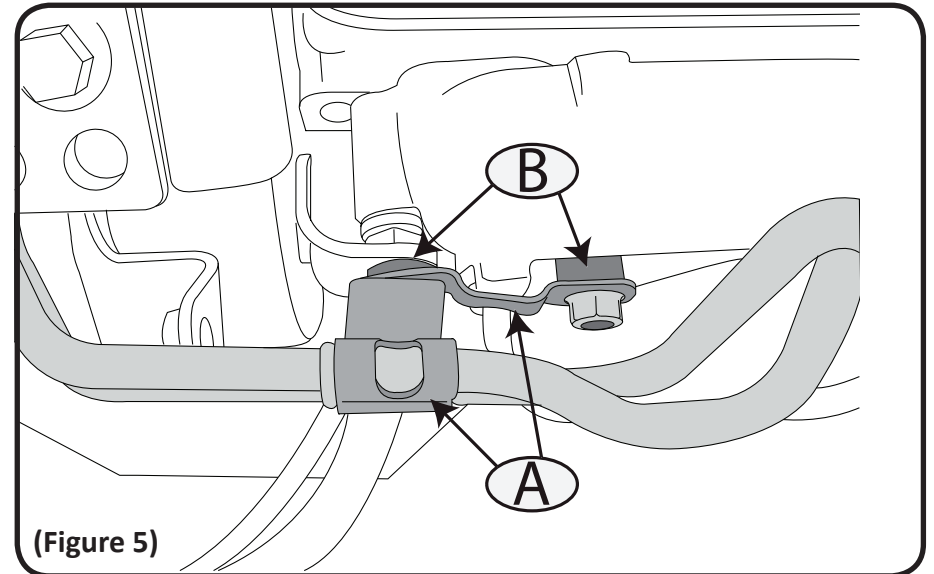


COMPRESSOR REMOVAL CONT.

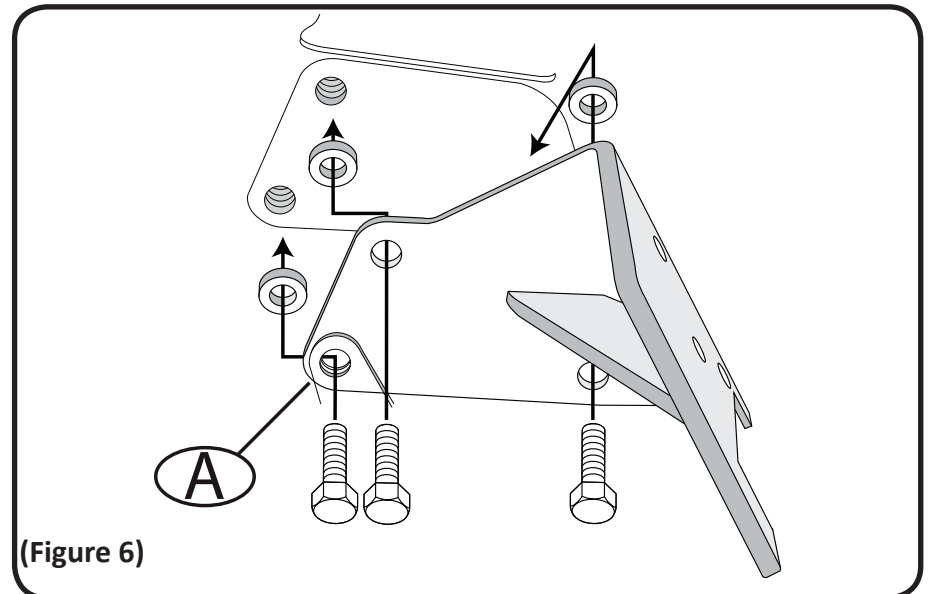
- Remove long brace that attaches to the exhaust manifold stud. **(Figure 4B)**
- Remove Compressor from factory brackets by removing tensioner bolts and lower pivot bolt on the front and back of the compressor.
- Remove tensioner bolts from power steering brackets. Loosen pivot bolt on bottom of steering pump.
- Remove fuel injection line brace from the exhaust manifold studs. This bracket will be re-attached in a later step. **(Figure 5A)**
- Remove three remaining brackets from engine

COMPRESSOR INSTALLATION

- Re-attach the fuel injection line brace using the included 9/16" (rear) and 3/16" (front) spacers in place of the original bracket. **(Figure 5B)**
- Install the lower compressor mount to the head using (3x) 1" bolts and the (3x) 1/4" spacers. Spacers will mount between head and lower mount. **(Figure 6)**
- The left bracket bolt will fit through the factory power steering bracket, and then route through the new bracket and spacer. Now tighten the power steering pump and confirm belt has proper tension. **(Figure 6A)**
- Attach the upper compressor mount to the lower compressor mount using the (3x) 3/4" bolts with the lock washers and flat washers on top of the upper mount. **(Figure 7A)**
Attach loosely, this upper plate will need to be moved for belt alignment in future steps



(Figure 5)



(Figure 6)

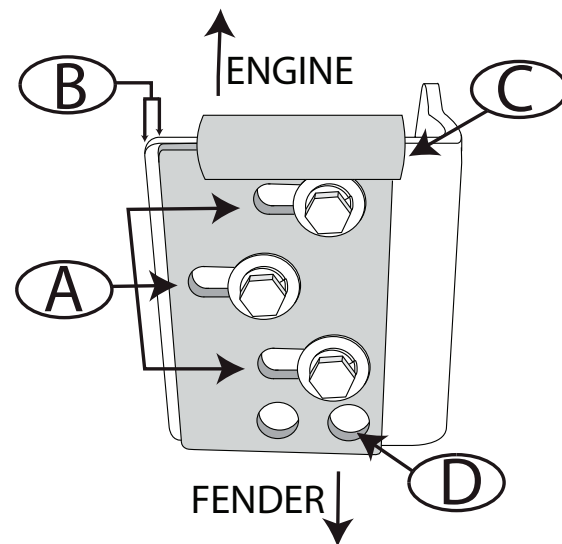


COMPRESSOR INSTALLATION CONT.

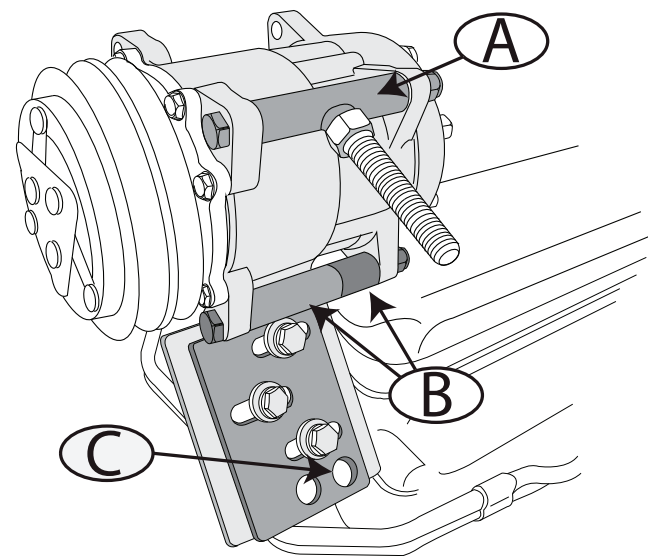
- Attach the T-adjuster to the right lower tabs (facing unit) of the compressor using the 5" bolt and nylock nut. **(Figure 8A) Do not tighten completely until later step.**

It is critical that the fill plug is mounted upwards once the compressor is mounted.

- Place one of the T-adjuster 1/2" nuts on the adjuster to the end of the threads to allow for maximum adjustment. **(Figure 8A)**
- Align the compressor with the upper bracket fixed spacer. **(Figure 7C)** Attach using the 1" spacer at the rear of the fixed spacer using the 5" bolt and nylock nut. **(Figure 8B) Do not tighten completely until later step.**
- Lower the compressor and T-adjuster into the rear adjuster hole. **(Figure 7D, 8C)**
- Visually align the compressor pulley with the water pump pulley and the power steering pulley. Tighten one of the three 3/4" upper plate bolts.
- Raise the compressor, confirm that the leading edge of the upper and lower brackets are parallel. **(Figure 7B)** Tighten the remaining of the three bolts and lower compressor back into mount.
- Install the included belt, and then tension with the installed nut on the T-adjuster.
- Install the second 1/2" nut and lock washer to the bottom of the T-adjuster bolt to lock the compressor at the correctly tensioned setting.
- Tighten nylock nuts on 5" compressor mount bolts



(Figure 7)



(Figure 8)



COMPRESSOR INSTALLATION CONT.

- The compressor wire will need to be connected to the OEM wiring. Find the compressor wire that was originally connected to the OEM compressor and cut the connector off. Shave the insulation off the end of the green wire and crimp the female bullet connector, then connect the male bullet connector from the compressor.
- ***If the car was equipped with a switch mounted in the back of the compressor, it will be eliminated. Find the wiring and cut the connector off. Shave the insulation off the end of both wires and crimp together using the supplied butt connector. Place back in wire loom.***

ORIFICE TUBE/LIQUID LINE

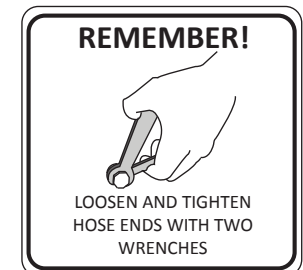
- Install new orifice tube into evaporator inlet fitting with **lubricated O-rings (Figure 2)**.
- With a Schrader valve removal tool, remove the Schrader valve from the liquid line. It will not be used with the 134a adapter.
- Screw the 134a adapter onto the R12 port on the liquid line without oil, (*adapter has thread-lock on threads*).
- Reattach Liquid Line - It may be necessary to manipulate the line slightly to fit into place.

ACCUMULATOR INSTALLATION

- With a Schrader valve removal tool, remove the Schrader valve from the accumulator. It will not be used with the 134a adapter.
- **Immediately**, screw the adapter onto the R12 port on the front of the accumulator.

- Screw provided pressure cycling switch into the rear port on the top of the accumulator. (**Figure 1A**)
- Slide the new accumulator into the brackets, but do not tighten screws until evaporator connection is complete.
- Tighten evaporator fitting to accumulator (**Figure 1C**).
- Tighten the two accumulator bracket screws. (Outlet fitting of accumulator will be attached to suction hose in a later step)
- Plug the pressure cycling switch harness into the installed switch

DO NOT remove cap until attaching suction hose!





HOSE CONNECTION

- Loosely attach the Discharge hose to the “D” port of the compressor and the other end to the inlet fitting of the condenser.
- Loosely attach the Suction hose to the “S” port of the compressor and the other end to the accumulator fitting.
- After proper routing of the hoses and checking for clearance, tighten fittings on compressor.

FINAL STEPS

Take a look around at your installation and check all fittings and bolts for tightness, and make sure nothing is routed in a way to obstruct any moving parts. You can reconnect the battery and re-install the belt at this time.

PLEASE NOTE! IN ORDER TO PROTECT NEWLY INSTALLED PARTS, IT'S CRITICAL THAT THE CONDENSER, LIQUID LINE AND EVAPORATOR ARE CLEAN AND FREE OF CONTAMINATION. DAMAGE TO COMPONENTS AS A RESULT OF CONTAMINATION WILL NOT BE COVERED UNDER WARRANTY.