A/C INSTALLATION
1957 FORD VE

LH = DRIVERS SIDE
RH = PASSENGER SIDE

COMPRESSOR INSTALLATION

1. Remove battery ground cable.
2. Remove radiator.
3. Remove power steering belt if equipped.
4. Loosen generator mount and adjust bolts.
5. Remove generator belt.
6. Remove generator adjust bracket.
7. Remove 2 bolts which hold generator front support to timing cover. Do not remove support.
8. Install compressor mount to timing cover using the two 5/16 x 4 3/4 inch bolts. Do not tighten the bolts.
9. Install generator adjust arm eye with lower inboard 3/8 x 1 3/4 inch bolt without lockwasher. This may be an allen head screw or a hex head bolt. If hex bolt is used, an open end wrench is required to turn bolt due to close tolerance to crank pulley. Install 1/2 inch spacer behind this lowest inboard bracket hole to space bracket off of generator adjust arm eye hole to maintain compressor bracket perpendicular to crank pulley.
10. Tighten the 3 compressor bracket attaching bolts and verify spacers filled the gap and bracket is perpendicular to crank pulley. Adjust spacers using washers if misalignment is noted.
11. Attach compressor, with fittings up, to bracket loosely using 3/8 x 1 1/2 inch bolts thru lower compressor front ears. Install bolts from front of compressor thru bracket with lockwashers and nuts on backside of bracket. Adjust angle of heater return fitting as needed for compressor clearance.
12. Remove generator mount to engine head bolt.
13. Install rear angled support bracket on top of...
nut and lockwasher on backside of support brace.

15. Tighten all compressor and brace bolts securely. Verify proper alignment of components and correct as required.

16. Install compressor drive belt around water pump, crank pulley rear groove, generator, and compressor rear groove. Adjust belt using generator. Tighten all generator mount and adjust bolts. Use 15475 belt. This is a replacement for 3/8 belt width and will drive compressor without slipping. A tight belt is necessary.

17. Check for fan to compressor and crank pulley clearance. A 6 blade fan may be added for extra cooling.

18. If unit has power steering, reinstall belt.

NOTES
Compressor is supplied with correct amount of oil. No additional oil charge required.

Due to variations in generator and water pump pulley diameters, belt lengths may have to be changed. Do not mix 3/8 and 1/2 inch pulleys.

Due to fan spacer variations and fan clearances, fan bolt lengths may have to be changed.

Do not operate compressor with clutch engaged without freon charged as compressor damage will result.

CONDENSER INSTALLATION

1. Drill 2 holes of 1 1/4 inch using hole saw through inside right hand radiator support. Locate holes below battery box one above the other. Install anti chafe grommets in each hole. This is the area adjacent to the RH radiator attach bolts and parallel to battery. It is not the panel under the battery box that faces the grill.

2. Remove LH horn. Swing lower condenser mount straps into position and install second screw.

3. Loosen (2) upper hood hinge bolts on each hinge.

4. Install short liquid hose from condenser lower fitting to drier inlet. Note marking of inlet on drier. Also remove sight glass cover on top of drier.

5. Install condenser with large fitting at RH top. Insert condenser LH end toward grill and hood hinge until RH condenser brackets pass in front of radiator support. Attach
liquid hose to the drier outlet noting proper 90 degree fitting (o-ring or flare). Route the small liquid hose through the lower grommeted hole in radiator support and along inner fender under battery and along heater hoses. Pass hose below the LH lower condenser strap to prevent hose damage.

6. Install lower condenser straps to factory A/C condenser holes in core support sides below hood hinges using 1/4 - 20 hardware. Pull slack from liquid hose to drier. Position RH upper condenser strap for insertion behind RH, hood hinge.

7. Swing each upper/condenser strap in place behind each hood hinge bracket. Tighten hood hinge bolts.

NOTE
Lubricate fittings with refrigeration oil. Use back up wrench on condenser, drier and evaporator fittings to prevent component damage. Stripped threads or damaged coils are not under warranty.

Use hand cleaner or liquid soap to lube hose at grommets to make hose slide easily.

Lubricate hose fittings with oil from compressor if none other available.

8. Install compressor discharge hose using 90 degree fitting at compressor and routing hose under battery adjacent to inner fender panel and thru top hose grommet in core support to upper fitting on condenser using 90 degree fitting. Check each end for flare or o-ring fittings. Use care to leave stress relief in hose to prevent condenser damage.


EVAPORATOR INSTALLATION

1. Drill two adjacent 1 1/4 inch holes using hole saw above RH kick panel. They will be near the firewall intersection near the inside heater box.

2. Install 2 anti chafe grommets.

3. Route small liquid line from the drier thru front grommeted hole in kick panel metal.

4. Route large suction line thru rear hole in RH kick panel
metal from inside car. Grommet may be removed from panel and positioned on tube portion of suction fitting to allow nut of suction fitting to pass thru panel hole easily. Replace grommet in panel before pulling hose thru grommet.

5. Attach 90 degree suction fitting to compressor after routing hose along inner fender to rear of battery. Lubricate fitting with refrigeration oil.

6. Attach double hose bracket supplied to inner fender near heater hoses to support the liquid and suction hoses.

7. Attach freon hoses to evaporator fittings using backup wrenches to prevent coil damage. Both hose fittings should be 90 degree for best fit.

8. Wrap exposed metal at evaporator hose connections and expansion valve to prevent condensation drip with insulation supplied.

9. Locate central position for evaporator under dash lip and use existing holes or 1/4 drill as needed to attach evaporator to dash. Slide to best fit under dash and tighten bolts. Blower ground wire must be attached to ground. The fresh air duct screws can be used if the brackets are attached to the evaporator case using the short legs down.

10. Attach fused power lead to accessory terminal of ignition switch.

11. Route clutch wire along small freon service hose thru grommet and then along hose to drier switch and then to clutch wire. Tape or tie wrap wire or hoses as needed. An extension lead for the clutch is included.

NOTE
Evaporator mount brackets may be turned 180 degree for packing.

Compressor, evaporator, drier, or condenser may have o-ring fittings. Lubricate o-ring before final connection. Do not over tighten o-ring.

12. Punch or drill 2 evaporator drain holes in floor under evaporator. Take care not to damage any front to rear wiring. Do not attempt to drill thru carpet. Install drain hoses with a angle cut 2 inch below floor pan.

13. Attach battery cables. Check blower low, medium, high and clutch function with accessory power. Note, the pressure safety switch on the drier will have to be jumpered temporarily to perform this test.
CAUTION - SYSTEM CHARGING MUST BE DONE BY QUALIFIED PERSON TO AVOID COMPRESSOR DAMAGE OR PERSONAL INJURY FROM HIGH PRESSURE LIQUIFIED GAS.

14. Hook up air conditioner service manifold gauge hoses correctly and evacuate system with vacuum pump to more than 27 inches mercury.

15. Close service valves and observe vacuum reading after 20 minutes. Repair leaks as required. Caulk all holes in firewall to prevent but air entry.

16. Charge the system with approximately 1 lb-pounds of R134A freon. Do not use any other refrigerant.

CAUTION

Do not overcharge after all bubbles disappear from sight glass. Sight glass is in front of drain.

No oil is to be added as compressor is precharged.

Do not use sight glass to charge.