

55-57 T-Bird

AIR CONDITIONER INSTALLATION

RH = Passenger Side

LH = Driver Side

Compressor Installation

1. Remove fan shroud.
2. Drain radiator.
3. Remove upper radiator hose.
4. Remove lower hose from radiator.
5. Remove radiator.
6. Loosen and remove power steering belt if equipped.
7. Remove fan and fan pulley and fan belt.
8. Remove generator and generator bracket. Do not remove generator bracket to water pump brace.
9. Remove heater return hose from water pump to 45-degree fitting.
10. Adjust water pump heater fitting to point to oil fill pipe.
11. Install A/C compressor bracket to engine timing cover. Do not tighten bolts completely.
12. Install lower A/C bracket brace on top of existing old generator bracket brace to lower right water pump bolt position using new bolt supplied.
13. Install upper front compressor to water pump brace at upper right water pump position using new bolt supplied.
14. Tighten all brace and bracket attaching bolts evenly.
15. Install generator. Do not tighten completely.
16. Install compressor with service fittings parallel to oil filler pipe. Compressor is furnished with proper mounting holes reamed to 7/16".
17. Loosen front upper compressor brace at water pump and install compressor to brace bolt. Tighten both brace bolts evenly.
18. Install rear upper compressor brace to rear of compressor flange.
19. Center drill timing cover end of rear upper compressor brace using 3/8" drill thru brace. Drill 1" deep hole using 5/16" drill. Tap 3/8-16NC and install bolt and lock washer supplied. Tighten upper rear compressor brace evenly.
20. Install fan-generator-A/C belt loosely. Gates 9470 or 9476.
21. Slide fan pulley into position. '57 Pulley suggested due to 55-56 pulley design.
22. Install and tighten fan and fan spacer.
23. Tighten belt and secure generator.
24. Reinstall power steering belt if so equipped.
25. Reinstall heater return hose.

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

Condenser Installation

1. Loosen two lower radiator mount saddle bolts thru grille on each side. Do not remove bolts.
2. Install upper and lower condenser hoses. Lubricate fittings with refrigeration oil. Use oil from compressor if none other available.
3. Position condenser with return liquid (small) line at lower right hand position. *Tie wrap hoses at condenser for stress relief.*
4. Feed hoses thru right hand horn access triangular hole while positioning condenser. Early '55 will require holes to be cut for hose route if no access hole present.
5. Install condenser mounting straps into position between radiator mount saddle and front body panel. Slide RH straps over center to allow LH straps to go into position between body panel and radiator frame if straps are pre-attached. Adjust condenser to center straps behind radiator frame.
6. Adjust condenser position to upper left position and low enough for right hand hood hinge clearance of condenser hoses. Tighten 4 radiator mount saddle bolts thru grille. Some bolts may require use of open end wrench from behind due to hose position.
7. Install upper condenser hose to compressor discharge fitting. Route hose along lower right hand inner fender lip.
8. Route lower condenser hose along lower right hand fender lip below heater blower.
9. Remove metal heater duct from firewall and square duct as an assembly.
10. Cut two 1-1/4" holes in the firewall side by side using a hole saw from the inside of the car. Holes are to be below heater core, one on the left side of the body to frame brace and one on the right of the body to frame brace. Install anti-chafe grommets in firewall holes. Pilot hole may be drilled with 1/4" drill bit from engine compartment to help locate holes.
11. Install drier and clamp using the lower screw of the RH air cable bracket and a single new hole in inner fender panel. Position drier with sight glass up and inlet port to front of car. Insert drier clamp under cable bracket.
12. Attach condenser lower hose to drier inlet.
13. Route drier outlet hose thru left hand firewall hole to evaporator.
14. Install heater duct assembly.
15. Install radiator.
16. Install lower radiator hose.
17. Install fan shroud.
18. Install upper radiator hose.
19. Refill cooling system. Do not use more than 1 gallon of anti-freeze for summer operation.

Note: Compressor label denotes correct refrigerant to use in system. Correct oil is pre-charged in compressor.

Evaporator Installation

1. Install evaporator inlet and outlet freon hoses. Lubricate fittings with refrigeration oil.
2. Position evaporator centered under ash tray.
3. Loosen left hand hood cable bracket attaching bolt and remove right hand hood cable bracket bolt. Slide left hand evaporator bracket under hood cable bracket.
4. Shim evaporator in position and install right hand hood cable bracket bolt thru evaporator bracket. Note: Both brackets are turned 180° for pack.
5. Mark and drill right hand evaporator bracket bolt hole thru lower dash lip using 1/4" drill.
6. Install right hand evaporator bracket bolt and tighten both evaporator bracket bolts.
7. Route evaporator to compressor freon hose thru right hand 1-1/4" firewall hole and attach to compressor suction fitting using refrigeration oil lubricant to prevent galling. Use hand cleaner or light oil to lube grommet to make hose slide easily.
8. Secure freon hoses at evaporator to right hand under dash firewall brace using nylon filament tape.
9. Punch or drill 2 evaporator drain hose holes in floor pan with care not to cut any wire harness. Do not attempt to drill thru carpet. Install drain hoses.
10. Route evaporator to compressor clutch wire along freon hose and attach to drier ^{and then to the} compressor lead. Wrap exposed metal at evaporator suction line and expansion valve to prevent condensation, using pipe wrap supplied.
11. Attach liquid hose from evaporator to outlet of drier using refrigeration oil lubricant.
12. Route evaporator power lead under dash to accessory terminal of ignition switch.
13. Hook up air conditioner gauge set and evacuate system with vacuum pump to less than 25" mercury.
14. Close system and observe vacuum reading after 20 minutes. Repair leaks as required. Caulk all firewall holes to prevent hot air entry. RH and LH inside air vents should be also sealed above the kick panels.
- 15A. Charge system with approximately 1-1/2 pounds of R-12 freon. Caution - do not overcharge after all bubbles disappear from sight glass. Sight glass is in top of drier. No oil is to be added as compressor is precharged. R12 ONLY.

CAUTION: System charging must be done by qualified person to avoid compressor damage or personal injury from high pressure, liquified gas.

15B. Charge system with approximately 3/4 pound of R-134A. Do Not use sight glass. Use R134A gauge set.

Note: Use hose clamp to secure both hoses to inner apron shield using existing screw.

Some evaporator fittings use O-rings as furnished. Compressor may be O-Ring as well.



