

INSTALLATION INSTRUCTIONS

CAT 311/312 B & BL EXCAVATORS

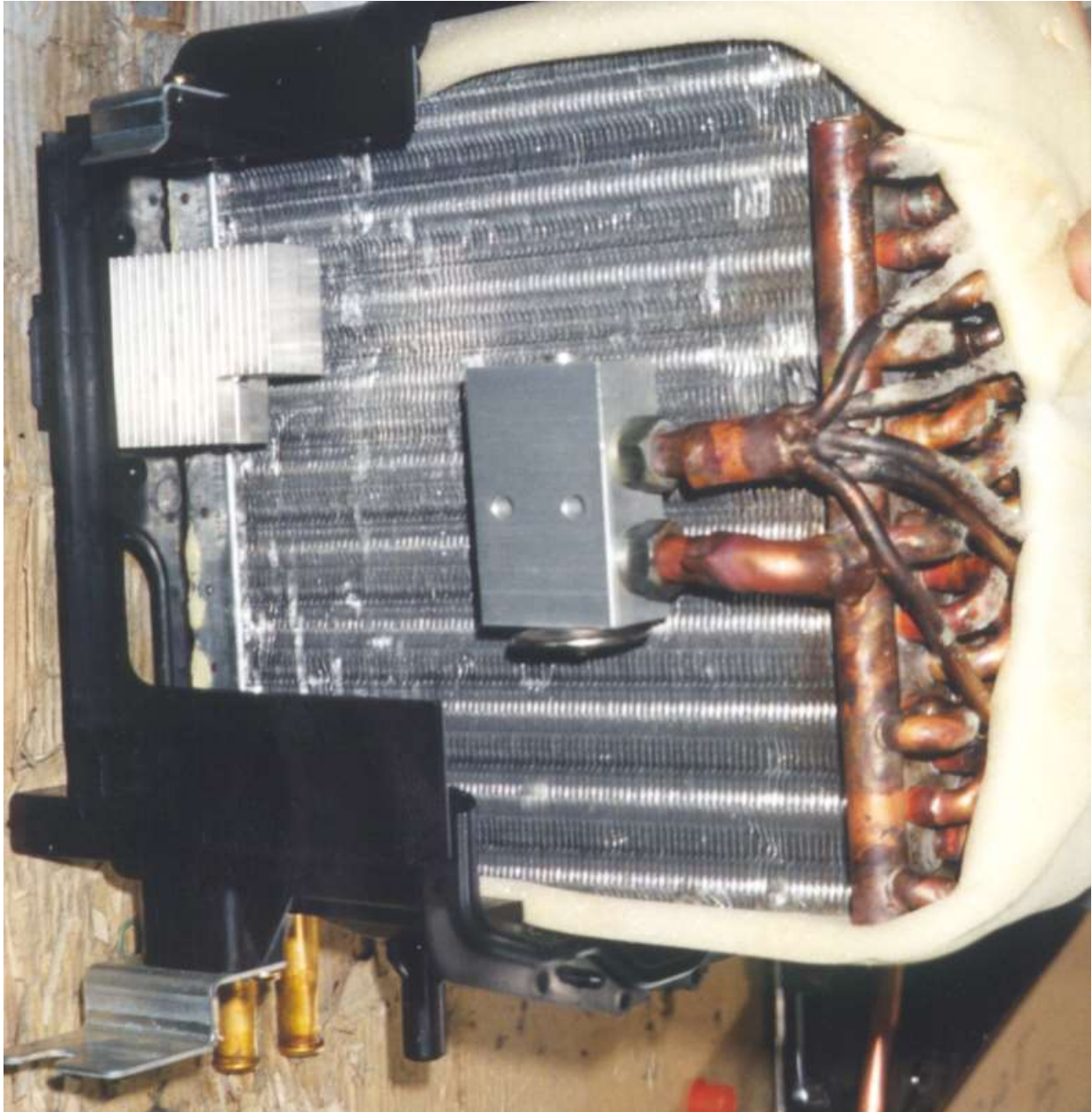
MODEL SEQUENCES: 8GR 462+, 2LS 204+, 9GR 413+, 2NS 156+,
8JR 1008+, 3FS 255+



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EVAPORATOR:

The evaporator is mounted inside the heater/blower housing found behind the seat and under the plastic moldings.



Evaporator inserted into one half of casing showing set-up.

Remove the plastic covers and shrouds from above the heater/blower box. Remove the assembly from the cab. It will be necessary too disconnect the heater lines under the cab. When the box has been removed from the cab, remove the blower motor

assembly and disassemble the casing to gain access to the heater core area. **IMPORTANT - when taking the box apart make sure to note the correct orientation of the door controller parts for reassembly.**

Before fitting the evaporator into the box alongside the heater core, remove any plugs from the drain holes and ensure they can drain outside properly. Mount the evaporator into place with the copper lines extending out through the knockouts in the plastic casing. The evaporator is held in place by friction fit, so ensure the foam is in place around the coil.



View of evaporator face showing expansion valve and supply lines out of box.



Side of evaporator housing assembly showing A/C tube routing out and down through seal material in floor.

The copper lines will extend through the hole in the side of the box and angle down through the floor. The clutch wire can be run out of the cab through the same holes. The thermostat probe should be inserted into the coil through one of the small knockouts in the casing of the box. Install drain assemblies re-installing the heater/evaporator assembly.

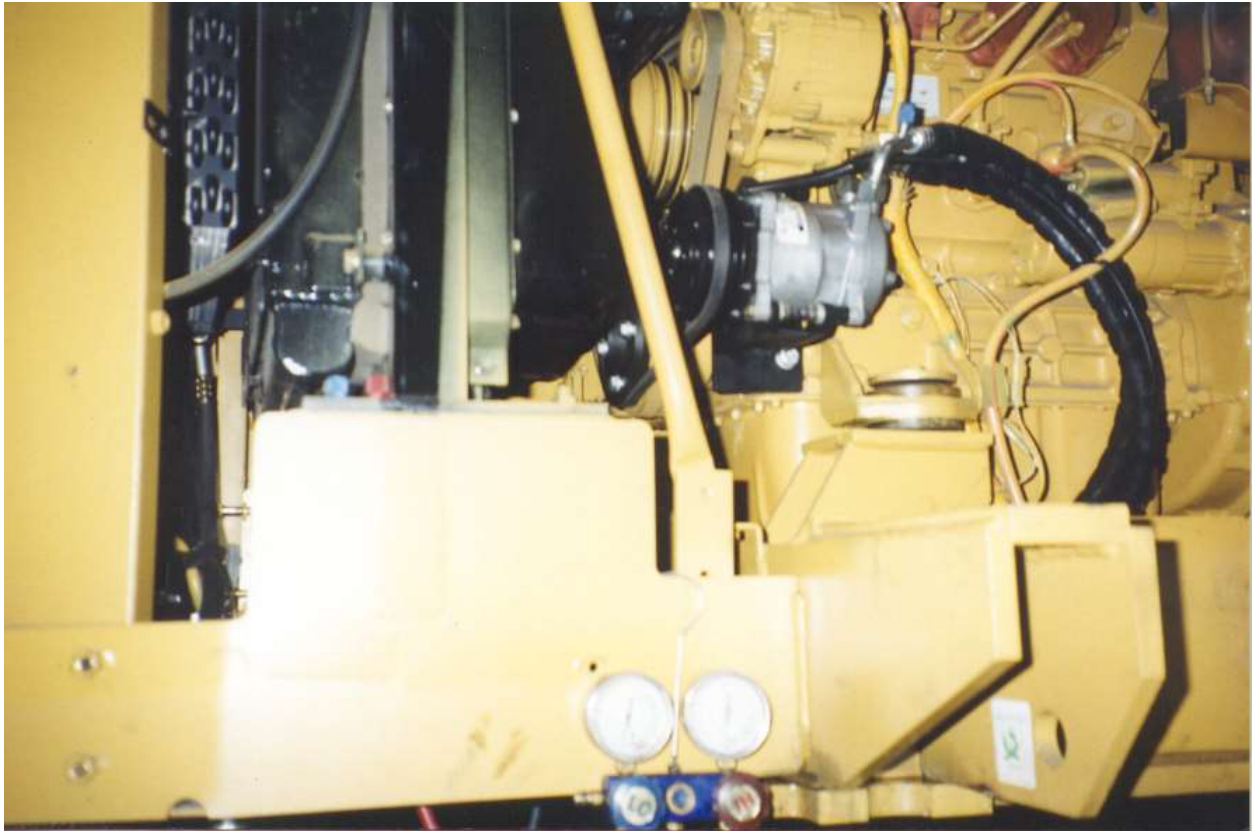
Re-assemble and re-install the assembly into the cab. Do not re-install plastic interior panels until the system has been tested for leaks and electrical performance. Also, test to make sure that all of the controller motors are operating properly.

COMPRESSOR:

The compressor mounts to the engine on the location shown in the pictures, on the lower left when facing down the engine toward the fan.

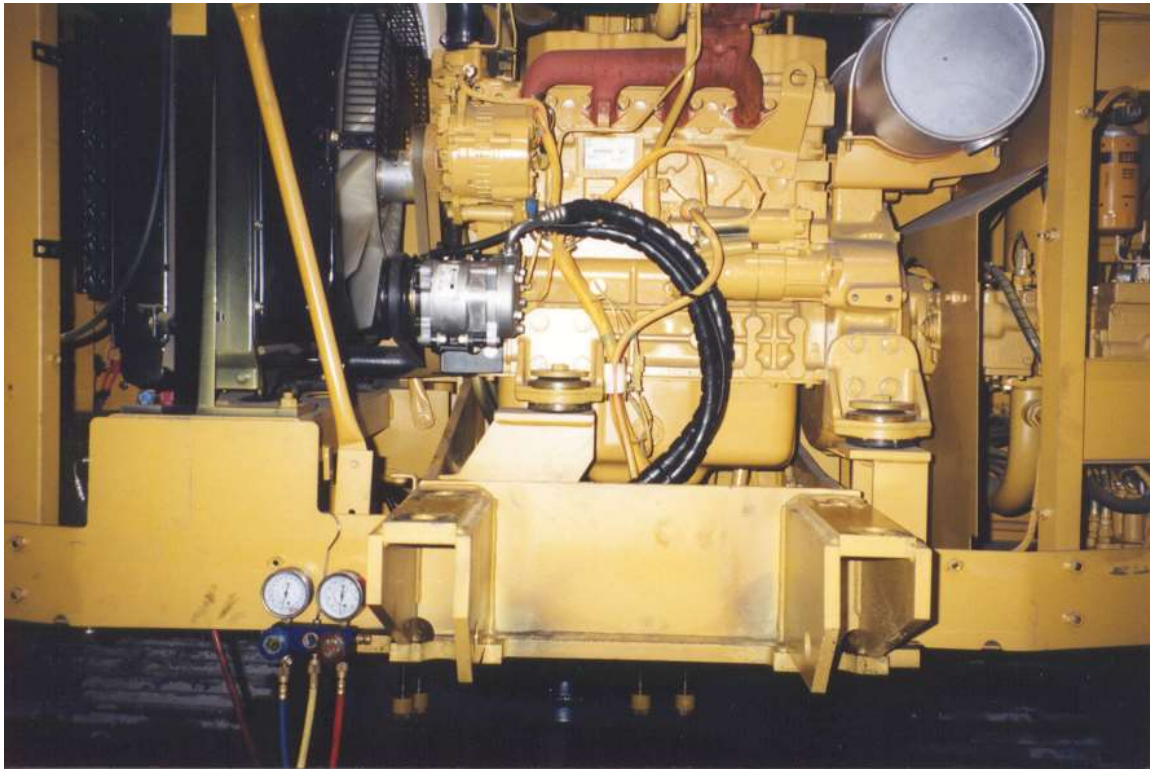
The first step is to mount the supplied add-on pulley to the crankshaft with the hardware provided. Use blue loktight on all pulley and compressor mount bolts.

Mount the compressor mount onto the location shown for the factory assembly using the metric hardware provided. Do not tighten the mounting hardware down completely until checking the alignment with the compressor in place. Once the alignment is checked, tighten down the bolts and mount the compressor. Place the drive belt in place and tighten up the compressor to take up the tension.



Compressor mount and drive in place on 311/312 Cat.
****NOTE** Counterweight does not have to be removed.**

Install the compressor mount onto the engine just below the alternator. This is the same mount location as the factory would use. Use the metric hardware provided in the kit. Set the compressor into the tightener ears on the mount. Loosely bolt the compressor in place with the fittings pointing up. Install the drive belt and use a straight edge across the pulley face to check the belt alignment. Tension the belt and tighten the compressor bolts.



Compressor in place with hoses routed.
****NOTE** Counterweight does not have to be removed.**

CONDENSER MOUNTING:

The condenser is configured for mounting on the radiator as shown in the pictures. The left (fitting side) brackets are designed to mount on 12ga stand off brackets bolted to existing holes using the existing hardware. The right side bracket bolts onto the flange, as shown in the picture, with the hardware provided. The receiver drier is mounted to the 90o bracket provided which is mounted on an existing bolt in the battery compartment below the radiator.



Fitting side of condenser in place.



View of condenser in place on radiator.

HOSE RUNS:

5/16" Hose Condenser to Drier:

The 5/16" hose runs from the lower fitting of the condenser to the inlet fitting of the drier. The 90o fitting is to be connected at the condenser and the straight fitting is for the inlet of the drier. The hose is complete with the end fittings already crimped in place.

5/16" Hose Drier to Evaporator:

The 5/16" hose runs from the drier mounted on the condenser brackets through under the cab to the fitting extending down from the evaporator.

13/32" Hose Compressor to Condenser:

The 13/32" hose is run from the compressor to the condenser out of the engine compartment alongside the radiator and out to the condenser as shown in the pictures.

The fittings are already crimped in place on the hose and the assembly has been pressure tested. The fitting with the charge port is installed at the compressor.

1/2" Hose Compressor to Evaporator

The 1/2" hose runs from the compressor to the evaporator through the engine compartment and under the cab to the fitting on the evaporator.

The fittings on the hose have already been crimped in place and the assembly pressure tested. The hose is run through the engine compartment with the 13/32" hose and then to the evaporator with the 5/16" hose. The fitting with the charge port is to be installed at the compressor.

Hose-wrap exposed sections and any places the hoses may rub. Secure using cable ties and clamps where necessary. Use refrigerant oil on the O-rings at the sealing surfaces to ensure a proper seal.



View showing underside of evaporator area with hose assemblies and drain tubes.

ELECTRICAL:

Power to control the thermostat and clutch comes off the heater power wire (#124). Hook into the wire using an instant power tap and connect to the thermostat switch. From the switch run down to the pressure switches and to the compressor. See the wiring diagram for the electrical hook ups.

