

Off Road Only

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On Board Air JL/JT

Use in combination with JK 3.6L install doc

The lower radiator hose on the JL needs to be modified to clear the compressor.

Drain the coolant and remove the lower hose assembly. Capture the coolant in a clean bucket and you can reuse it.

Remove the retaining bolt that holds the tee assembly to the bottom of the crossmember. You will need to drill a hole and insert the self threading screw once the tee assembly is moved 4" to the passenger side.

Undo the clamps at the lower radiator connection, as well as the connection to the engine. Then also undo the connections to the 2 smaller hoses up near the air box. Then remove the tee assembly from the engine compartment.



To move the Tee to the passenger side by 4" we will need to shorten the hose from the radiator to the Tee as well as add to the hose from the tee to the engine side. We include a short chunk of hose and a 1.375" nipple to do the extension for the engine side. We recommend the spring clamp to hold the supplied hose to the Tee, and then the hose clamps on each hose end at the supplied nipple. Tighten the last clamp once the assembly is back in place and the engine hose is connected, to prevent kinks in the hose.

Next, we need to shorten the radiator side hose. This will be done by simply removing appx 1" of hose at each end of that hose. Once shortened, place hose on tee assembly and then install tee assembly back into the engine compartment. Ensure that the rotation doesn't leave a kink in the hose.

Place the clamps on the radiator side hose, ensuring that the Tee assembly can be rotated so that the tab can be placed against the bottom of the crossmember. Place the engine hose on the engine and install clamps.

Once that is all together, and the tab on the bottom of the Tee is able to be rotated against the crossmember, you will need to drill a new hole for the supplied self tapping 1/4" bolt. That hole should be 7/32" diameter for the supplied screw, and that hole should be appx 4" towards the pass side of the existing hole.



With the tee in place and the lower hoses connected and clamped to the radiator and engine, tighten the hose clamp you may have left loose, and the clamps on the radiator and engine sides, then we simply need to reattach the smaller hoses to the 2 lines at the top. These lines may need to be shortened slightly to get them to connect and not bind.

Once all the lines are connected, simply open the reservoir cap and replace the coolant. The system will automatically bleed itself, just keep adding until you replace all that was drained, and if you spilled, you will need to source some more to fill to appropriate level.

Remove the vacuum pump and bracket from the front of the engine. Disconnect the electrical connection and the hose by depressing the lock tab. Leave the hose hang in the engine compartment, careful not to kink it, you may move it out of the way and hook it upon a harness under the throttle body area to keep it from getting caught as you work.

The vacuum pump will be remounted to the side of the compressor with the supplice bracket. Position it as shown in the below image.



The harness and the hose can be routed back to the appropriate connections once this is installed as an assembly.

Last modification is the rubber inlet hose connection.



The rubber hose for the inlet tee is to be spliced into the hard plastic line between the intake tube and the engine. Run the hose to the area where you will splice into the hard line, cut the rubber line to length at this intersection. Then, remove a length of hard line the length of the plastic tee assembly. Then cut the rubber hose removed in the first cut into 2 pieces, slide each on each end of the hard line, with a hose clamp. Then place the tee in line, slide the rubber hoses onto the Tee, and then the main hose also connects to the Tee. Tighten the clamps and the inlet hose assembly is done.