

LIBERTY AUXILIARY COMPRESSOR REPLACEMENT

Some Liberty coaches use a Gast auxiliary air compressor. Over time it starts to sound bad, like it is on the verge of failure. Some Liberty conversions are very dependent on aux air so replacement is required.

The following applies to an XLII which originally used a 1/3 HP Gast two cylinder auxiliary compressor. When it needs replacement the best source for a replacement model appears to be this one.

https://www.zoro.com/gast-piston-air-compressor-12hp-115230v-1ph-4hcc-40-m450x/i/G2667086/?gclid=CjwKEAjwt6_q5BRCOp-Hj-IfHwncSJABMtDai-hp2pnI3ru-Fd6cwa3zKPtt0CqoZ5JUnR7a8g-gkWRoC-Hjw_wcB&gclsrc=aw.ds

It looked like the existing one, and does fit, but it is not without some additional work that goes beyond just removing and replacing.

The following procedure is required to make the change. Even if you as an owner do not do the actual work, whoever does the exchange will need to follow the following steps.

Removal

Start by unplugging the compressor from the outlet. The power cord will be removed from the old compressor and used on the new one.

Remove the 4 nuts securing the legs of the compressor to the rubber sound isolators. Do not remove the nuts beneath the isolators.

Disconnect the air line connection. Pull it out of the way and remove the compressor from the coach.

Remove the compressor support angle. Move it down one row of holes and using the lower holes at each end of the support angle as a guide, drill 2 new 5/16" holes in the leg of the framework that supports the compressor support angle. Leave the bolts holding the angle loose because when you install the new compressor it is easier if the angle is tilted to make it easier to set the compressor over the studs for the rubber sound isolators.

Compressor Preparation

The elongated holes in the compressor legs are slightly small. File or drill them a little larger near the center of the compressor. No need to widen the entire hole. I used a

3/8 drill bit and wobbled it sideways to open up the slotted hole, and then filed the slot to smooth out the rough spots.

Remove the power cord from the old compressor. Change the wires internal to the new compressor as shown on the diagram for low voltage operation and install the power cord and bushing on the new compressor. The white wire goes on the lower fitting and the black wire goes on the upper fitting, and the green ground wire goes at the green bolt.

Remove the 90 degree elbow from the old compressor and install it on the new compressor. Orient it so it points in the same direction as it was on the old compressor.

Installation

Maneuver the new compressor into place and set it on the mounts. Secure it with the 4 nuts previously removed. Tighten the 4 nuts and bolts that hold the compressor support angle to the frame.

Plug in the compressor.

Reattach the air line to the compressor.