



2010 43QGP Allegro Bus

6/5/2013

88 - FYI – TIFFIN'S ROOF ASSEMBLY. The following diagram is a breakdown of a **TYPICAL** Tiffin roof construction for all 101" wide coach models which excludes both Breeze models which have narrower roof tops.

As shown in the below diagram there are four half circle openings (approximately 1 1/2" wide) routed/cut into the top of the dense foam of the roof. All measurements are as accurate as possible given the circumstances under which the measurements were taken.

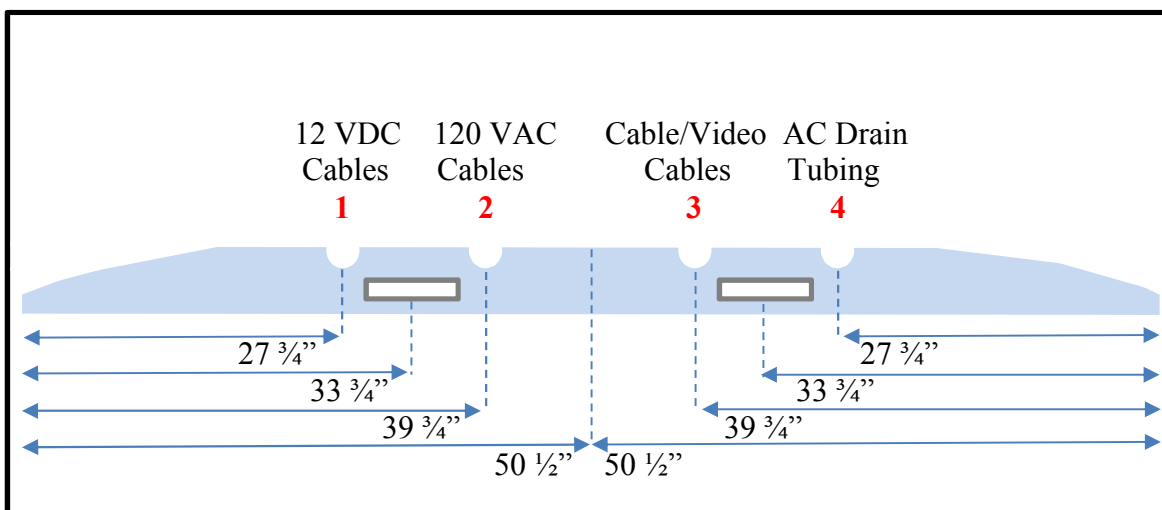
The diagram is shown looking from the rear of the ceiling/roof toward the front and from left to right:


The **1** routed raceway is centered at 27 3/4" from the **LEFT** roof edge, this opening contains most if not all 12 VDC wiring used to power DC devices in the front cap or the ceiling of the coach. Depending on the coach floor plan there are locations where the 12 volt wiring exits the ceiling and is routed to switch or lights inside the coach.

The **2** routed raceway is centered at 39 3/4" from the **LEFT** roof edge, this opening contains the 120 VAC wiring for the AC/HP units and possibly other 120 VAC components located in the front cap of the coach.

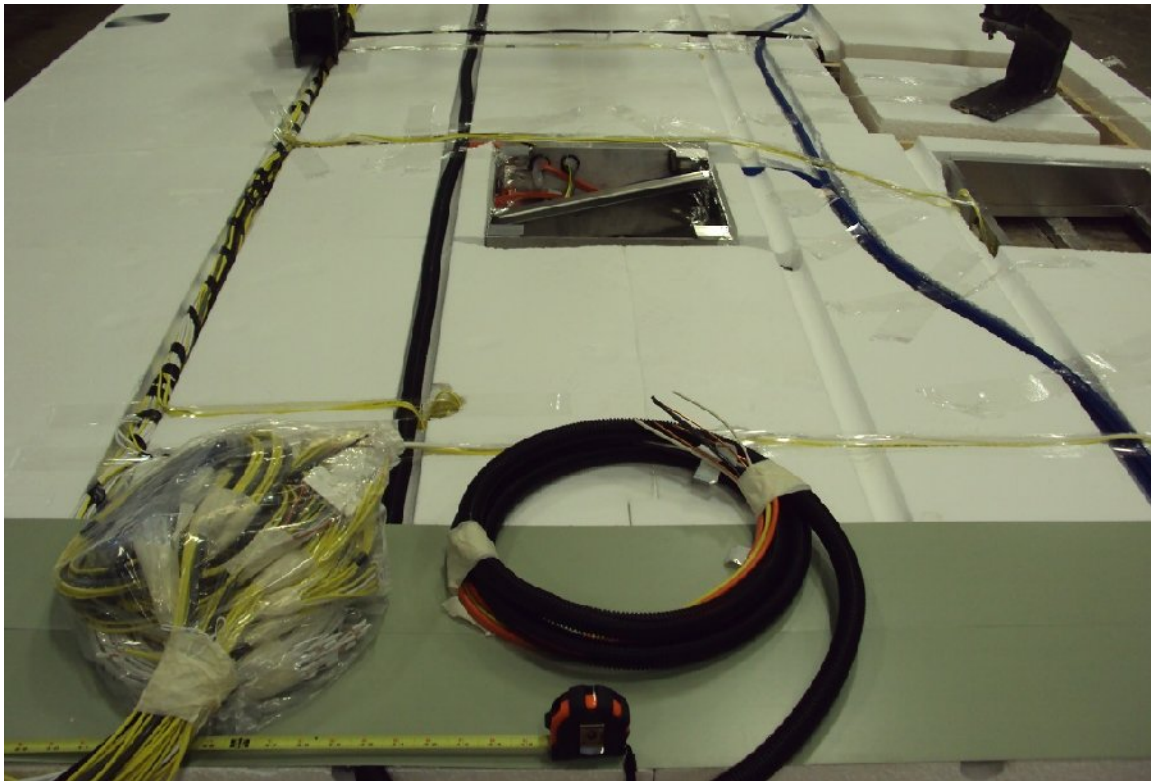
The **3** routed raceway centered at 39 3/4" from the **RIGHT** roof edge, this opening contains Cable TV and Video cables not routed thru the basement of the coach. Depending on the floor plan the cables will exit the ceiling routed to various components.

The **4** routed raceway is centered at 27 3/4" from the **RIGHT** roof edge, this opening contains the PEX tubing used to drain AC condensate produced by the AC units.



The AC duct is depicted by the following symbol  there are two ducts enclosed inside each coach roof the outside dimensions of the ducts are 8" x 2". The two ducts run the length of the roof. The left duct (DS) is used for RETURNING inside coach air to the AC/HP units, while the right duct (PS) is used for SUPPLYING heated or cooled air from the AC/HP back into the coach.

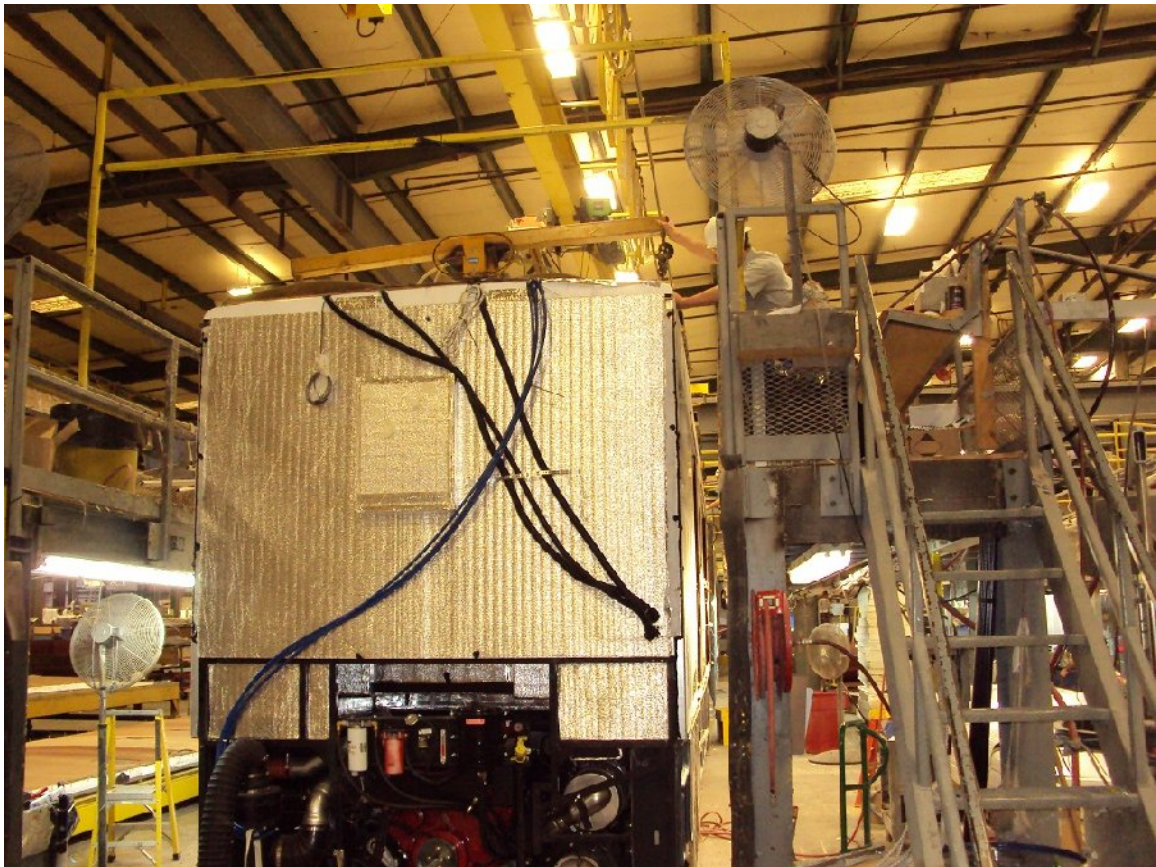
Depending on various rooftop penetrations for skylights, and fan vents the four routed raceways in the foam may be detoured around those penetrations.



As seen in the above photo, the left groove contains the 12 VDC wiring the second from the left contains the 120 VAC wiring for the AC/HPs the third from the left is vacant and the fourth from the left contains the condensate PEX piping. Note where the PEX piping was rerouted around the skylight and fan vent.



The previous photo shows the approximate 5 inch depth of the foam boards used by Tiffin in the roof construction. The photo was taken while the roof panel was lying upside down. After both ducts had been installed pieces of 1 inch foam board were glued over the ducts. The next step in the roof building process is to install the welded structural tubing into the open slots and perimeter of the roof. After that process the roof is turned over where the 12 VDC wiring harness, 120 VAC wiring harness, any auto/video cabling and the condensate piping are placed into the open grooves.



This photo shows the routing of the wiring and condensate piping on the rear of the coach. It also shows the new heat shield Tiffin is installing on the rear coach wall around the engine compartment. The same heat shield is shown on the rooftop near the upper right side of the roof near the Tiffin workman.