

### Measurement and Adjustment of Truck Bed:

The very first thing that should be done in preparation for installing an Aluma Truck Bed is to take measurements on the truck which the bed will be installed on. The distance from the center of the frame on the driver's side to the outside of the frame on the passenger's side is critical. This distance will tell you where to set your adjustable supports found on the bottom of the truck bed. It will also keep the truck bed centered on the chassis of the truck. To adjust these supports, loosen the bolts on each runner, and then slide them to the desired distance from the side frame. Remember that the Adjustable U-Channel Support should be positioned so that the outside edge of the frame is even with the outside edge of the Adjustable U-Channel Supports (See Figure 4). Make sure that your supports are positioned correctly for your truck, and that they are evenly placed along the truck bed to make sure the bed sits centered on the frame of the truck.

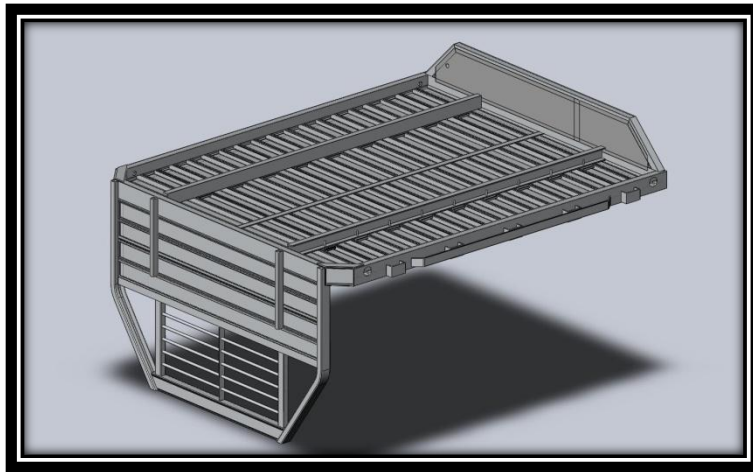


Figure 1: Underside of Truck Bed, Angle View

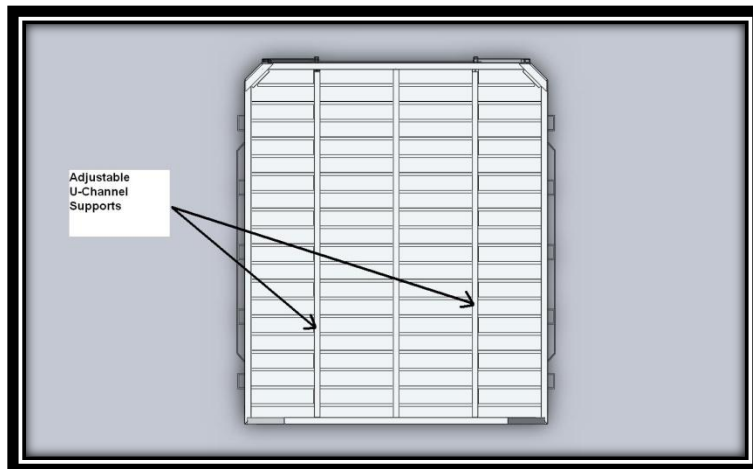
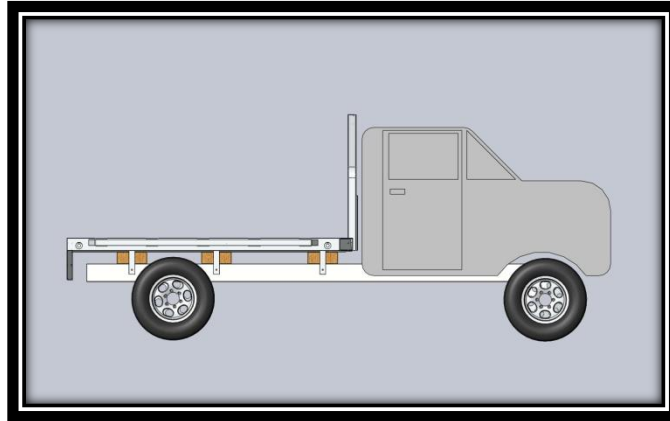


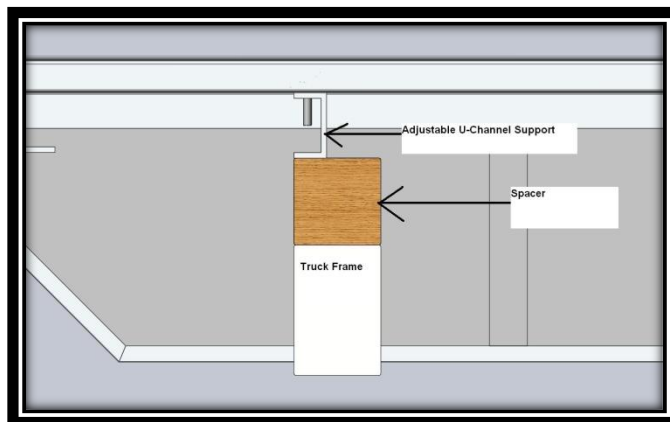
Figure 2: Underside of Truck Bed, Flat View

### Spacers:

A spacer will be used to ensure that the tires do not make contact with the underside of the truck bed. The size of this spacer will vary based on the make and model of each truck, but will typically be between 3 to 4 inches in height. The distance must be sufficient so that the tires will not make contact with the underside of the truck bed when the truck is fully loaded. The height of the spacer is determined by the amount of vertical travel the tire will be experiencing with the suspension of the truck and the loading it will undergo.



**Figure 3: Bed Mounted With 3 Spacers**



**Figure 4: Frame, Spacer, and Adjustable U-Channel**

For shorter truck beds, under 81 inches in length, only 2 spacers are needed for each side, but for longer truck beds Aluma recommends using at least 3 spacers per side, as these spacers also act as support for the truck bed. The location of these spacers will vary from model to model of truck, but generally there should be one placed near the cab, and one nearer to the rear on each side of the truck. For longer truck beds the third spacer shall be set between the other two. The spacer is shown here as wooden, but they can also be steel or aluminum. It should be noted that not all truck frames are straight all the way across, so spacers may have to be fabricated to properly fit the frame of the truck.

### Gas Fill:

A location will have to be chosen for the new location of the gas fill. Aluma has two recommended locations for the new position of the gas fill. The first is in the driver's side front corner of the truck bed (See Image 2), with the second being along the side frame of the truck bed. Installing the fuel port on the side of the truck bed may require additional cutting and removal of material (See Image 3) and may require reinforcement. Aluma recommends using the corner of the truck bed for the fuel port installation. A hole-saw should be used to make these cuts, sized appropriately in relation to the size of the gas fill of the truck. A new gas hose should also be purchased when installing the truck bed, a new breather hose is not always required, but may be needed. The location selection and preparation of the gas fill should be done prior to the actual attachment of the truck bed.

### Attachment:

Once the measurements have been taken, the adjustable supports moved into place and secured, spacers have been chosen, and the fuel port location chosen and prepared, you are ready to install the truck bed. This guide will go through two methods of attaching the truck bed to the frame of the truck.

**Recommended Method:** This method uses threaded rods, or U-Bolts to secure the truck bed to the frame. While using two threaded rods and two plates, arrange them as shown below, directly over the spacer with the plates going below the frame and above the adjustable support. This will also work if using a large U-Bolt. Once in place, tighten down the bed to the truck frame. Using this method it is possible to adjust the spacing between the truck bed and the frame of the truck in the event that more clearance is needed. Be sure to note that the Headache Rack of the Truck Bed should be about 2 inches from the back of the cab. See Figure 5 and Image 1.

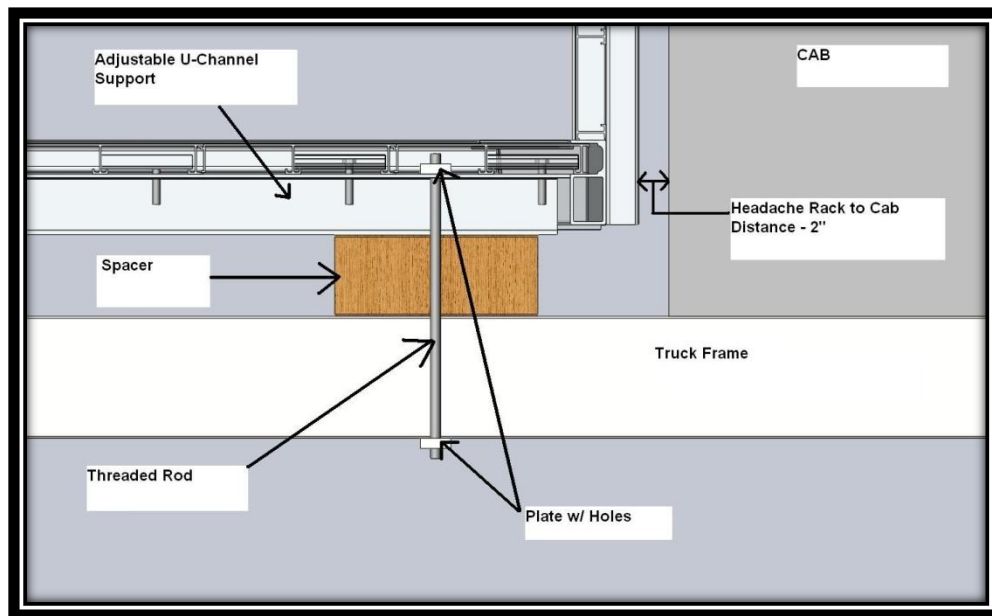
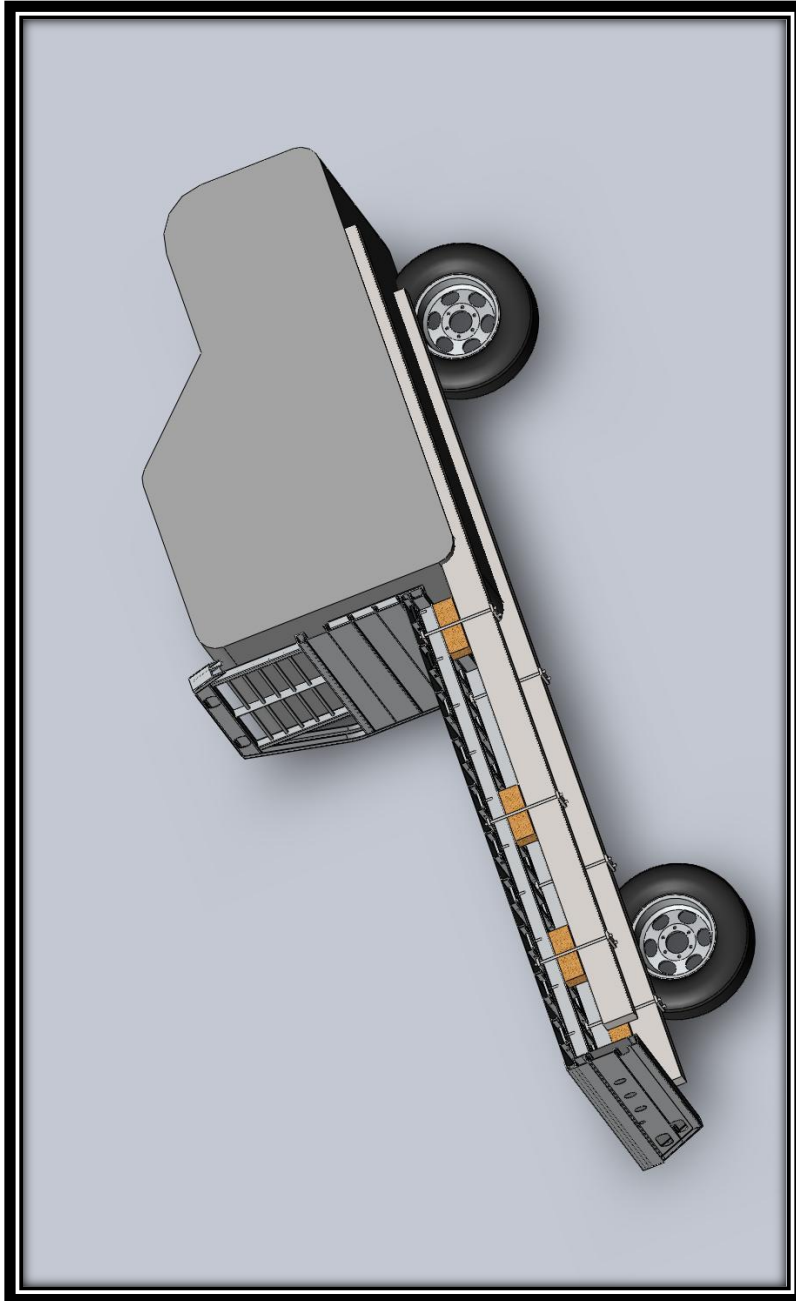


Figure 5: Bed Secured to Frame with Spacer

Image 1: Truck Bed Attached, Cutaway View



Alternative Method: An alternative to the threaded rods with plates would be to use flat straps of steel with holes drilled in them and bolt these directly from the Adjustable U-Channel Supports to the frame of the truck. If this method is to be used, be sure to only use pre-existing holes in the frame of the truck. Drilling new holes into the frame can possibly damage electrical systems, or brake lines, routed through the frame and will damage the structural integrity of the frame. This method will also require that holes be drilled into the Adjustable U-Channel Supports. See Figure 6 and Figure 7. A spacer will also have to be added to go between the steel strap and the U-Channel Support.

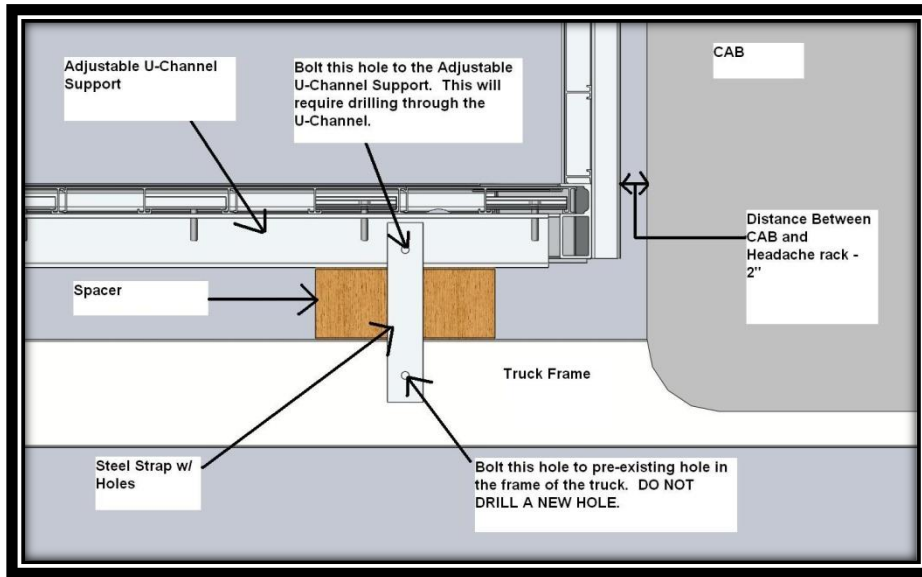


Figure 6: Flat Strap Attachment Method Cutaway View

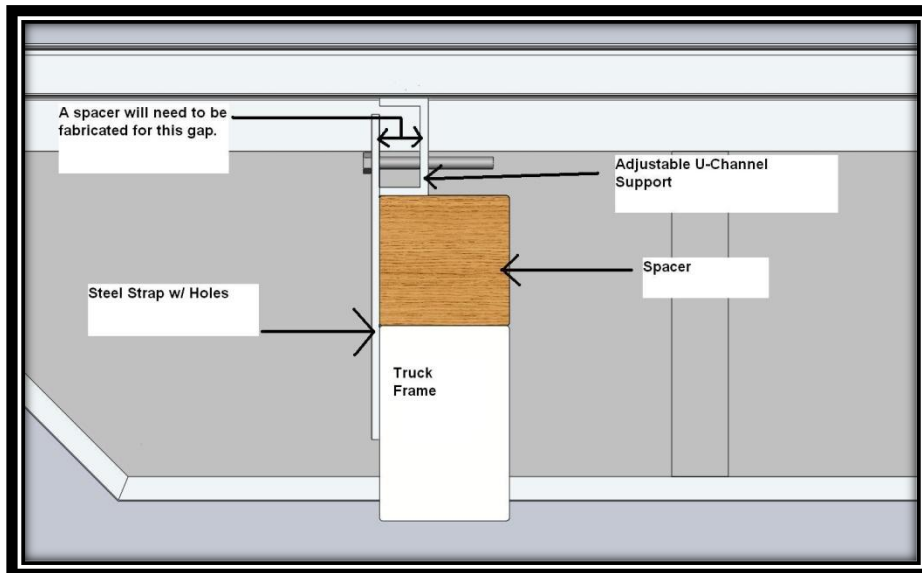


Figure 7: Flat Strap Method Cutaway View 2

Image 2: Gas Fill Location 1



Image 3: Gas Fill Location 2

