

## Building Battery Boxes

We removed the truck's bed to gain access. Ampmobiles had already welded frames into the truck chassis, but they needed sides and bottoms to keep road debris out. The frames are slightly larger than the batteries to allow room for plastic sides and to allow the batteries to slide in and out. We did not fully enclose batteries because none of them are in the passenger compartment. We cut pieces of ABS plastic to make the sides and bottoms. We found that the easiest way to make the sides was to make two L-shaped pieces (to become two sides each). How we did it:

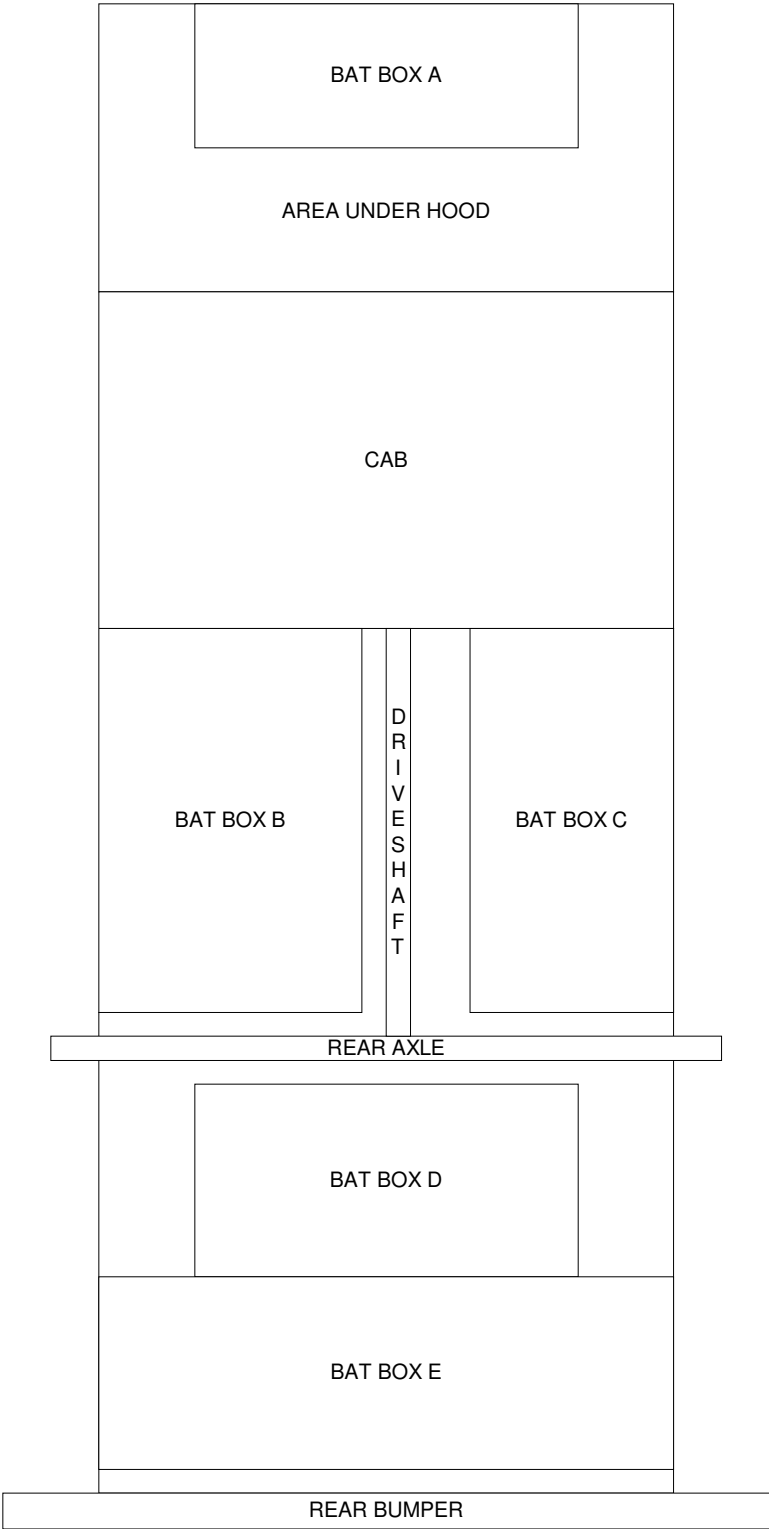
1. Lay batteries out on the floor in groups, as they will mount in their boxes.
2. Cut strips of ABS plastic wide enough to become box sides and floors.
3. Measure the battery case floor, and cut pieces to lay in there.
4. Measure around the outsides of the battery cases.
5. Cut off a section of strip slightly longer than half of the outside measurement.
6. Measure and mark the location of a bend in the section, to make an L.
7. Cut a groove along the mark to make the bend easier and straight.
8. Heat the bend area with a propane torch until it can be bent 90°. It will keep this shape when it cools.
9. Trial fit the section inside the battery box frame, trim as necessary.

This method was easier than trying to bend a longer section into a box or into a [ shape since you could trim and adjust as you went.

We did not make battery box tops, except for the batteries under the hood (that top did end up shaped like a [ ). Instead, after all batteries and cables were in place we cut sections of rubber mat to lay over groups of battery boxes. They will insulate the battery terminals from the truck bed, but can peel back easily for battery maintenance. The leading edges of each mat are screwed to the truck's frame.

Here is a diagram showing the layout of battery boxes in the truck's frame:

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BATTERY PLACEMENT