

## Pre-class preparations

To save class time, Mike Moore picked the truck up early and:

- Pressure washed under the hood and along the chassis.
- Removed the gasoline engine. Did not cut any wires, and labeled where wires are disconnected. Later we will need some of them as sources of switched and unswitched 12 Vdc power.
- Removed the clutch and clutch linkage. (The clutch's master cylinder could also be removed, although it wasn't.)
- Temporarily supported the front of the transmission with a strap.
- Removed the exhaust system.
- Removed the radiator.
- Removed the gas tank and gas lines.
- Remounted back bumper to allow the truck bed to clear the bumper when it is tilted.
- Fabricated the truck bed hinges and its support structure. Reinstalled the bed, and installed strut rods to assist tilting it up.
- Measured for the motor / transmission mounting plate, and had it (along with adapting parts) fabricated. See the article "Electric Motor to Transmission Mount".
- Measured the batteries and decided how they could fit into the truck. This worked out to be three batteries under the hood and several groupings (totaling 17 batteries) under the bed. The groups under the bed are arranged to clear the rear axle, drive shaft and cross members.
- Fabricated battery box frames from angle iron. They are welded to the truck frame and to added support bars. To make room for batteries, one original frame cross member had to be cut out and replaced with tubing. Unneeded frame brackets were cut off. Bare metal was painted.
- Fabricated an electric motor support. It consists of two pieces that clamp together around the motor, and the bottom piece bolts to the original gasoline engine motor mounts. See the article "Electric Motor to Transmission Mount".
- Fabricated some brackets that will hold the Control Board, and welded them to the chassis under the hood.
- Fabricated the Control Board, which is a piece of plywood where we will mount the motor controller and most of the under hood components. He drilled holes for a cooling fan and some battery cable pass thrus. Then he coated the top and sides with fiberglass resin and painted it.