

## Apollo Crawler Truck Arm – Assembly Instructions:

The truck arms consist of an arm that extends out from the main structure to hold the trucks that propel the crawler. Four of the truck arms need to be made. In addition to the printed parts, various sizes of wire is required to add detail piping and wiring. The part count is for one truck arm. To make the four truck arms, multiply each number by four. The truck arms consist of the following parts:

- 1 – Truck Arm Upper
- 1 – Truck Arm Lower
- 2 – Cable Tray Straight
- 2 – Cable Tray Angled
- 1 – CT Mounting Platform
- 1 – LUT Attachment Point
- 8 – LUT Clamp
- 4 – Truck Bellows
- 4 – Steering Arm Inner
- 8 – Inner Steering Cylinder Bracket
- 8 – Inner Steering Cylinder Bracket Big
- 8 – Outer Steering Bellows
- 8 – Outer Steering Bracket
- 8 – Outer Steering Center Cylinder Body
- 8 – Outer Steering Inner Cylinder
- 8 – American Flag decals
- 8 – NASA Symbol decals

The upper and lower truck arm parts are glued together to form the arm. Notice that about 5mm of one end of the triangle should be cut off where the arm mounts to the structure. This allows the arms to push out just a bit. Two of the arms have the right side cut off and two arms have the left side cut off. You could opt to edit the STL file to not print this portion.

The CT Mounting Platform is glued to the top of the arm above where the truck attaches. The straight cable trays are glued to the underside of the arm on the angled part and the angled trays are glued on the angled surface, extending the cable run. These trays will hold the wires coming from the truck motors and route them over and down to the main cable tray.

The LUT attachment point is a part that is glued to the underside of the LUT's Launcher. They were made here so the LUT clamps could be positioned correctly. With the LUT attachment points positioned over the CT mounting platforms, the LUT clamps can be positioned and glued. Notice that one arm has 4 clamps, one arm has none and the other two have 2 each, positioned in opposite directions. Reference the diagram for proper placement.

Now detailed wiring can be added to make the model more realistic. The LUT clamps are “piped” with a fine wire. The upper sides of the hydraulic cylinders have quite a bit of plumbing. Reference pictures to get an idea of how much plumbing is there.

Now the entire arm should be painted a light grey. Once that is done the round portion of the CT mounting platforms and the ends of the LUT clamps should be painted a dark grease color.

The truck bellows are not glued on until the trucks are glued to the arms as their orientation is critical.

Both sides of each arm have an American flag and a NASA symbol. Images of these can easily be found on the internet. These should be scaled to size and printed on vinyl decal material.

The steering arms are not attached until the arms are glued onto the structure.