Upgrading your Atlas VO-1000 Locomotive

Below is a list of what you will need to convert your older Atlas VO-1000 locomotive to the latest (2007) production run of the VO-1000 locomotive. If you have already purchased a new VO-1000 locomotive and plan on swapping the shells, please skip this first section and go to the next page.

Bill of Materials

1x Previous Run VO-1000 Locomotive

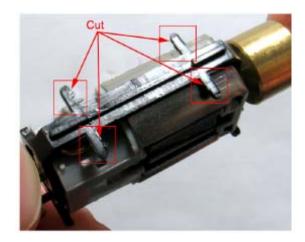
1x #501101 – Mainframe Right

1x #501102 - Mainframe Left

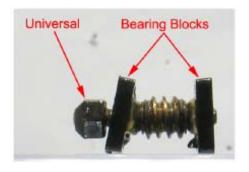
2x #501004 – Insulating Bushing

4x #501107 - Bearing

- 1. Disassemble your current VO-1000
- 2. Remove the motor (#500000) and motor saddle (#500100).
- 3. Using a sharp knife or a cutting tool, remove the four bottom tabs from the bottom of the motor saddle (#500100) as shown in photo below and insert the motor into the new left side mainframe (#501102).



- 4. Take both of the new insulating bushings (#501004) and insert them into the new left side main frame (#501102).
- 5. This next step will be completed twice. Take the worm gear assembly and remove both of the existing bearing blocks. The one closest to the motor will require you to remove the universal (#500109). Do this by using a pair of needle nose pliers and gently slide the universal off.



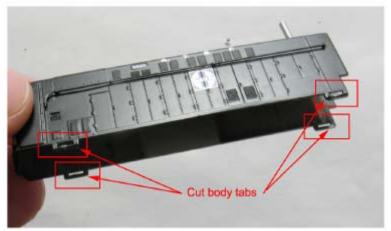
- 6. Place the new bearings (#501108) on either side of the worm gear and replace the universal.
- 7. Insert the new worm gear assemblies on either side of the motor. At this point, your assembly should look like the photo below.



- 8. On the old VO-1000, remove the fuel tanks and GENTLY and PATIENTLY pry the contact strips (#500307) from the mainframes. Please note that these are glued into place and can be removed, but only with great care, so TAKE YOUR TIME!
- 9. Take the contact strips that you just removed and place them on the new mainframes.
- 10. Now, insert the PC board on the left side mainframe and reassemble the right side mainframe to complete your conversion.

Placing an Older Run VO-1000 Locomotive Shell on a Newer Run (2007+) VO-1000 Mechanism

- 1. Remove shell from current VO-1000 locomotive
- 2. Locate the four tabs along the bottom of the long hood and remove them using a knife or other sharp cutting tool.



3. Reassemble shell and place on new mechanism