Tama Collar 1.1A Assembly Notes

# Enclosure Shell Notes

1. Material- 2mm ABS 5”x5” sheets per shell
2. Machine- IDS Denmed Dental Vacuum Former
3. Forming bucks are machined from POM with silicone-based release spray.
4. A set of Dremel, tin snips, and flush cutters are used to cutout & clean the blanks.

# Assembly Order-

1. Prepare the PCB, Battery, Case shells and a 6” length of ball chain, and several magnets.
2. Use masking tape to secure a magnet to the reed switch, then solder the battery terminals to the PCB.
3. Tape another magnet over the upper shell to disable the reed switch, then insert the electronics into the upper shell. Peel away the first magnet when doing so.
4. Place the length of ball chain into the upper shell, ensuring it fits into the notches intended for it.
5. Close the lower shell over the upper shell, ensuring minimal gaps all around the seam.
6. Apply glue to seal the seams, avoid gluing the magnet or tape to the case while doing so.
7. Ensure disabling magnet is still firmly in place and pack the unit into it’s enclosure.

# Vacuum forming and Blank prep notes-

1. Ensure ABS is dehydrated prior to vacuum forming, minimum 12 hours at 60c.
2. Depending on whether the bucks are mounted to a backing board or not, it may help to use a screw to aid in extracting the buck from the pull. A gentle mist of silicone spray every 4 pulls is also recommended.
3. When cutting the case from the pull, ensure the edges are crisp but not sharp. Sand down sharp edges, and discard pulls with overly thin or translucent corners.
4. Once the case is cut from the pull, you will need to use a Dremel cutoff wheel (0.8-1mm thick) to cut two slots to allow the ballchain to sit inside the upper case.

## Exploded View



