MALKY'S S.A.R. MODELS

HO 8" Water Column



Blackwood Water Column

Photo Courtesy Ross Hurley

The Prototype: This 8" Automatic Water Column was used in many locations on the SAR. The model is based on SAR Drawing R24 10.

The Kit: The kit contains 3D printed parts to form the basis of a model. The parts can be purchased from Shapeways. There are four parts printed in Shapeways Smoothest Detail plastic: a baseplate with a circular collar attached by a sprue, a column base and the upper rotating portion of the column. You will require fine wire to suspend the counterbalance ring from the top of the column as seen in the photographs and also to add the handle and rigging to the moveable spout.

1. Clean the plastic parts thoroughly to remove any remaining wax from the printing process. This is essential to ensure good paint and glue adhesion. Cleaning can be by soaking in suitable solvent, such as isopropyl alcohol, assisted with a toothbrush. Further cleaning and/or sanding may be needed to produce an acceptable finish on the plastic parts. Check that the upper rotating part of the column fits into and turns in the column base. Polish with fine sandpaper if necessary.

2. Using sprue cutters or a sharp knife, separate the circular counterbalance collar from the baseplate and clean up where the sprue was attached.

3. Paint the parts. The baseplate should be concrete, with a metal or rust colour for the grate. The column parts should be either white or a suitable weathered black – check photographs of your particular prototype.

4. Glue the column base into the baseplate with cyanoacrylate superglue. Note the orientation of the flanged cover plate. Note that some columns had a different support foundation, with the grate and drain separate. If you wish to model such an installation, cut the grate from the base plate and locate it appropriately. Then either cut the portion of the base to provide the foundation, or build a separate foundation from styrene or similar.

5. Pass the leg of the upper column part through the counterbalance ring and then into the lower column. The counterbalance can be suspended from the top by fine wires, see photographs, or else fixed in a suitable location. Fine wires or chain can also be used to represent the rigging of the tilting spout.



Figure 1 Assembly Sequence

Figure 2 Completed Assembly

Acknowledgements

This project was originally inspired by Anthony Palmer and considerable advice and assistance came from Des Egan. Photos courtesy Ross Hurley and Des Egan.



Photo Courtesy Des Egan Collection

